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08-07-20	1:34 PM	07-28-20	Meeting Materials, Minutes and Resolutions for meetings held during the month of July 2020.*	Consolidated Commission on Utilities	35GL-20-2137

Sinseru yan Minagåhet,

Office of the Speaker • Tina Rose Muña Barnes
Committee on Public Accountability, Human Resources & the Guam Buildup

35th Guam Legislature
I Mina'trentai Singko na Liheslaturan Guåhan

Guam Congress Building | 163 Chalan Santo Papa | Hagatna, GU 96910
T: (671) 477-2520/1
speaker@guamlegislature.org

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Gumai pribilehu yan konfedensia este siha na mensåhi. Solo espesiåtmente para hågu ma entensioña pat ma aturisa para unrisibi. Sen prubidu kumu ti un ma aturisa para manribisa, na'setbe, pat mandespåtcha. Yanggen lachi rinisibu-mu nu este na mensåhi , put fabot ago' guatu gi I numa'huyong gi as speaker@guamlegislature.org yan despues destrosa todu siha I kopian mensåhi. Si Yu'os ma'åse'.

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Dear Governor & Speaker:

Pursuant to P.L. 31-233 attached are the meeting materials, Minutes and Resolutions that were discussed, and/or ratified at the CCU meetings and / or work sessions in July 2020.

Best,
B. Lou Sablan
CCU Board Secretary

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35GL-20-2137
Speaker Tina Rose Muña Barnes

AUG 07 2020
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CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671) 648-3002 | guamccu.org

GUAM POWER AUTHORITY WORK SESSION

CCU Conference Room
12:00 p.m., Thursday, July 23, 2020

AGENDA

1. **CALL TO ORDER**

2. **ISSUES FOR DECISION**
   - 2.1 Authorization for Contract Award for the Supply of Residual Fuel Oil No. 6 / Resolution 2020-16

3. **GM REPORT**
   - 3.1 Updates

4. **ISSUES FOR DISCUSSION**
   - 4.1 Update of GPA Personnel Rules and Regulations

5. **OTHER DISCUSSION**
   - 5.1 CCU Rules

6. **DIVISION REPORTS**
   - 6.1 Administration: Customer Service, HR, Procurement, Safety
   - 6.2 Communications
   - 63 Engineering & Technical: Engineering, IT, Planning & Regulatory, SPORD
   - 6.4 Finance
   - 6.5 Operations: Facilities, Generation, PSCC, T&D, Transportation

7. **ANNOUNCEMENTS**
   - 7.1 Next Meeting: CCU Meeting: July 28

8. **ADJOURNMENT**

GUAM POWER AUTHORITY
ATURIDÅT ILEKTRESEDÅT GUAHAN
P.O.BOX 2977 • AGANA, GUAM U.S.A. 96932-2977

Issues for Decision

Resolution No. 2020-16:

Relative to: Authorizing the Management of Guam Power Authority to Award the Contract for the Supply of Residual Fuel Oil No.6 to **HYUNDAI CORPORATION**.

What is the project's objective? Is it necessary and urgent?

The Guam Power Authority's current contract for Supply of Residual Fuel Oil No.6 for the Baseload Plants is expiring in August 31, 2020. The new fuel supply contract is necessary to provide uninterrupted supply of fuel for the Baseload plants.

Where is the location?

Residual Fuel Oil No.6 will be supplied to the baseload plants

1. Cabras 1&2
2. MEC 8&9

How much will it cost?

The 3-year contract is estimated to cost approximately **$276,779,088** requiring prior approval from the PUC.

When will it be completed?

The contract is planned for an initial period of three (3) years to commence on or about September 01, 2020 and to expire on August 31, 2023, with the option to extend for two (2) additional one-year terms.

What is its funding source?

Fuel revenue funds

The RFP/BID responses:

Three (3) bidders responded to the solicitation under IFB GPA-050-20. **HYUNDAI CORPORATION** was determined to the lowest responsive and responsible bidder.

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671) 648-3002 | guamccu.org

RESOLUTION NO. 2020-16

AUTHORIZING THE MANAGEMENT OF THE GUAM POWER AUTHORITY TO PETITION THE PUBLIC UTILITIES COMMISSION TO AWARD THE CONTRACT FOR THE SUPPLY OF RESIDUAL FUEL OIL NO.6

WHEREAS, GPA's current 2-Year contract with Mobil Oil Guam for the supply of Residual Fuel Oil No.6 (RFO No. 6) is expiring in August 31, 2020; and

WHEREAS, in anticipation of this expiration date, GPA was authorized by the CCU under GPA Resolution No. 2020-06 and approved by the PUC under Docket 20-11 to issue bids for the procurement of a new residual fuel oil supply contract; and

WHEREAS, the Procurement Officer has provided adequate public announcement for the need for such fuel supply services through Invitation for Multi-Step Bid No. GPA-050-20 describing the type of services required and specifying the type of information and data required of each offeror; and

WHEREAS, Hyundai Corporation, Mobil Oil Guam, and Hanwha Corporation, submitted bids for GPA consideration; and

WHEREAS, the results and evaluation of the bids are provided in **Exhibit A**; and

WHEREAS, HYUNDAI CORPORATION was determined to be the lowest, most responsive bidder meeting the requirements of the bid solicitation; and

WHEREAS, the estimated Fixed Premium Fee cost based on estimated supply quantities has a value of approximately $26,710,692 for the first year, $35,044,025 for the second year, and $29,408,019 for the third year, for a total of **$91,162,736** for the three-year contract base period as shown in **Exhibit A**; and

WHEREAS, the average Fixed Premium Fee for **HYUNDAI CORPORATION** of $105.417/MT ($16.575/bbl) for the 3-year contract period is approximately 44% higher than the current contract average Fixed Premium Fee of $73.227/MT ($11.514/bbl) for the same period**.** The estimated cost increase in Fixed Premium for the 3-year base period is approximately $27,837,264; and

WHEREAS, the Residual Fuel Oil No.6 Supply Contract with **HYUNDAI CORPORATION** shall be for an initial period of three (3) years and is anticipated to commence in September 01, 2020 and to expire in August 31, 2023 with two one-year extension options renewable annually upon mutual agreement of both parties; and

WHEREAS, the award of the contract to **HYUNDAI CORPORATION** based on estimated supply quantities has a value of approximately $94,207,547 for the first year, $102,540,881 for the second year, and $80,030,660 for the third year, for a total of **$276,779,088** for the three-year contract period.

NOW THEREFORE, BE IT RESOLVED, by the CONSOLIDATED COMMISSION ON UTILITIES as the governing body of GPA, and subject to the review and approval of the Public Utilities Commission as follows:

1. The General Manager of the Guam Power Authority is hereby authorized to enter into a three (3) year contract commencing September 01, 2020 and expiring August 31, 2023 for a total contract cost of **$276,779,088** with **HYUNDAI CORPORATION** for the supply of Residual Fuel Oil No.6.

2. The General Manager of the Guam Power Authority is hereby authorized an increase in obligating authority to the annual value of the contract and execute such agreements and documents necessary for a contract with **HYUNDAI CORPORATION**.

RESOLVED, that the Chairman of the Commission certifies and the Board Secretary attests the adoption of this Resolution.

DULY and REGULARY ADOPTED AND APPROVED THIS 23RD DAY of JULY, 2020

Certified by:

JOSEPH T. DUENAS
Chairperson
Consolidated Commission on Utilities

Attested by:

MICHAEL LIMTIACO
Secretary
Consolidated Commission on Utilities

I, Michael Limtiaco, Secretary for the Consolidated Commission on Utilities (CCU), as evidenced by my signature above do certify as follows:

The foregoing is a full, true, and correct copy of the resolution duly adopted at a regular meeting of the members of Guam Consolidated Commission on Utilities, duly and legally held at the meeting place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

Ayes: _____

Nays: _____

Absent: _____

Abstain: _____

EXHIBIT A- CONTRACT COST ANALYSIS

Basis: Conversion bbl/MT 6.360 (Reference: Petroleum Table 13)

	BASE CONTRACT- 1st of 3 YEARS			BASE CONTRACT- 2nd of 3 YEARS			BASE CONTRACT- 3rd of 3 YEARS			SUMMARY: 3-YEAR BASE CONTRACT PERIOD	
	bbls/yr	bbl/MT	mt/yr	bbls/yr	bbl/MT	mt/yr	bbls/yr	bbl/MT	mt/yr	**bbls/yr**	**mt**
LSFO	500,000	6.360	78,616	1,500,000	6.360	235,849	1,500,000	6.360	235,849	**3,500,000**	**550,314**
HSFO	1,500,000	6.360	235,849	500,000	6.360	78,616	0	6.360	0	**2,000,000**	**314,465**
Total RFO	2,000,000		**314,465**	2,000,000		**314,465**	1,500,000		**235,849**	**5,500,000**	**864,780**

MS IFB GPA-050-20 3-YEAR BASE PERIOD	**Bidder #1 Hyundai Corp.**	**Bidder #2 Mobil Oil Guam**	**Bidder #3 Hanwa**	**Bidder #1 Hyundai Corp.**	**Bidder #2 Mobil Oil Guam**	**Bidder #3 Hanwa**	**Bidder #1 Hyundai Corp.**	**Bidder #2 Mobil Oil Guam**	**Bidder #3 Hanwa**	**Bidder #1 Hyundai Corp.**	**Bidder #2 Mobil Oil Guam**	**Bidder #3 Hanwa**	**COMPARISON w/ CURRENT CONTRACT GPA-009-18 Mobil Oil Guam (Calculated for 3 Years)**
1. LSFO, 1.19% Sulfur max.													
Quantity (metric tons or "mt")	78,616	78,616	78,616	235,849	235,849	235,849	235,849	235,849	235,849	550,314	550,314	550,314	550,314
Bid Price (Bid Reference Price + Bid Fixed Premium Fee), $/mt	$339.330	$416.424	$341.570	$339.330	$516.101	$354.670	$339.330	$527.575	$365.270	$339.330	$506.779	$357.341	
ESTIMATED CONTRACT COST ($)	$26,676,886.79	$32,737,735.85	$26,852,987.42	$80,030,660.38	$121,721,933.96	$83,648,584.91	$80,030,660.38	$124,428,066.04	$86,148,584.91	$186,738,207.55	$278,887,735.85	$196,650,157.23	
Bid Reference Price ($/mt)	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	
Bid Fixed Premium Fee ($/mt)	$124.690	$201.784	$126.930	$124.690	$301.461	$140.030	$124.690	$312.935	$150.630	$124.690	$292.139	$142.701	$88.500
Variance with Current Premium Fees										($36.19)	($203.64)	($54.20)	
Fixed Premium Fee Cost ($/bbl)	$19.605	$31.727	$19.958	$19.605	$47.400	$22.017	$19.605	$49.204	$23.684	$19.605	$45.934	$22.437	$13.915
Variance with Current Premium Fees										($5.690)	($32.019)	($8.522)	
Fixed Premium Fee Cost (mt x $/mt), $	$9,802,673	$15,863,522	$9,978,774	$29,408,019	$71,099,292	$33,025,943	$29,408,019	$73,805,425	$35,525,943	$68,618,711	$160,768,239	$78,530,660	$48,702,830
Savings /(Additional Expense): Current Contract vs. New Bid										($19,915,881)	($112,065,409)	($29,827,830)	
2. HSFO, 2.00% Sulfur max.													
Quantity (metric tons or "mt")	235,849	235,849	235,849	78,616	78,616	78,616	0	0	0	314,465	314,465	314,465	314,465
Bid Price (Bid Reference Price + Bid Fixed Premium Fee), $/mt	$286.330	$356.866	$313.970	$286.330	$436.636	$327.970	$286.330	$448.128	$337.970	$286.330	$376.809	$317.470	
ESTIMATED CONTRACT COST ($)	$67,530,660.38	$84,166,509.43	$74,049,528.30	$22,510,220.13	$34,326,729.56	$25,783,805.03	$0.00	$0.00	$0.00	$90,040,880.50	$118,493,238.99	$99,833,333.33	
Reference Price ($/mt)	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	
Bid Fixed Premium Fee ($/mt)	$71.690	$142.226	$99.330	$71.690	$221.996	$113.330	$71.690	$233.488	$123.330	$71.690	$162.169	$102.830	$46.500
Variance with Current Premium Fees										($25.190)	($115.669)	($56.330)	
Fixed Premium Fee Cost ($/bbl)	$11.272	$22.363	$15.618	$11.272	$34.905	$17.819	$11.272	$36.712	$19.392	$11.272	$25.498	$16.168	$7.311
Variance with Current Premium Fees										($3.96)	($18.19)	($8.86)	
Fixed Premium Fee Cost (mt x $/mt), $	**$16,908,019**	**$33,543,868**	**$23,426,887**	**$5,636,006**	$17,452,516	$8,909,591	$0	$0	$0	$22,544,025	$50,996,384	$32,336,478	**$14,622,642**
Savings /(Additional Expense): Current Contract vs. New Bid										($7,921,384)	($36,373,742)	($17,713,836)	
3. Total RFO (LSFO + HSFO)													
Quantity (metric tons or "mt")	314,465	314,465	314,465	314,465	314,465	314,465	235,849	235,849	235,849	864,780	864,780	864,780	864,780
ESTIMATED CONTRACT COST ($)	**$94,207,547.17**	**$116,904,245.28**	**$100,902,515.72**	**$102,540,880.50**	**$156,048,663.52**	**$109,432,389.94**	**$80,030,660.38**	**$124,428,066.04**	**$86,148,584.91**	**$276,779,088.05**	**$397,380,974.84**	**$296,483,490.57**	
LEVELIZED UNIT COST ($/mt)	$299.58	$371.76	$320.87	$326.08	$496.23	$348.00	$339.33	$527.58	$365.27	$320.06	$459.52	$342.84	
Average Fixed Premium Fee Cost ($/mt)	$84.940	$157.116	$106.230	$111.440	$281.595	$133.355	$124.690	$312.935	$150.630	$105.417	$244.877	$128.203	$73.227
Variance with Current Premium Fees										($32.190)	($171.650)	($54.975)	
Average Fixed Premium Fee Cost ($/bbl)	$13.355	$24.704	$16.703	$17.522	$44.276	$20.968	$19.605	$49.204	$23.684	$16.575	$38.503	$20.158	$11.514
Variance with Current Premium Fees										($5.061)	($26.989)	($8.644)	
Fixed Premium Fee Cost ($)	**$26,710,692**	**$49,407,390**	**$33,405,660**	**$35,044,025**	**$88,551,808**	**$41,935,535**	**$29,408,019**	**$73,805,425**	**$35,525,943**	**$91,162,735.85**	**$211,764,622.64**	**$110,867,138.36**	**$63,325,472**
Savings /(Additional Expense): Current Contract vs. New Bid										**($27,837,264.15)**	**($148,439,150.94)**	**($47,541,666.67)**	
										-44%	-234%	-75%	
Ranking (1 as the Lowest Bidder)										**1**	**3**	**2**	

NUMBER OF MULTI-STEP INVITATIONS ISSUED: 3

NUMBER OF MS-IFB RECEIVED: 3

PROCUREMENT DIVISION

GUAM POWER AUTHORITY

ABSTRACT OF MULTI-STEP-IFB 'PHASE II'

MULTI-STEP INVITATION NUMBER: MS GPA-050-20

OPENING DATE: 06/26/2020 **OPENING TIME:** 9:30 AM

DESCRIPTION OF SUPPLIES OR SERVICES: SUPPLY OF RESIDUAL FUEL OIL NO. 6

BIDDER

No.: [1] Vendor Name: Hyundai Corporation

[ ] BID GUARANTEE:

[ ] Bid Bond #: _____ Amount: $_____

[ ] Certificate of Authority [ ] Power of Attorney

[ ] Standby Letter of Credit #_____ Amount $_____

[ ] Letter of Credit #_____ Amount $_____

[ ] Cashier's or Certified Check #_____ Amount $_____

[ ] Wire Transfer

[ ] Statement of Qualifications

[ ] Affidavits (Original Form)

[ ] Affidavits (Copy Form): Originals submitted with _____

[ ] Major Shareholders [ ] Non-Collusion [ ] No Gratuities or Kickbacks

[ ] Ethical Standards [ ] Wage Determination [ ] Restriction Against Sex Offendors

[ ] Business License [ ] Contractors License

[ ] Local Procurement Signed and Submitted

[ ] Literature

DESCRIPTION	LINE ITEM 1 1ST YEAR	LINE ITEM 2 2ND YEAR	LINE ITEM 3 3RD YEAR	LINE ITEM 4 1ST YR EXTENSION	LINE ITEM 5 2ND YR EXTENSION
~~QTY.~~					
~~UNIT~~					
~~DELIVERY~~					
	"LOW SULFUR FUEL OIL"				
BASIC	124.690	124.690	124.690	124.690	124.690
~~UNIT COST~~					
~~PART NUMBER~~					
~~CATALOG NUMBER~~					
~~MANUFACTURER~~					
~~DELIVERY~~					
~~TOTAL LUMP SUM~~					
	"HIGH SULFUR FUEL OIL"				
ALTERNATE	71.690	71.690	71.690	71.690	71.690
~~UNIT COST~~					
~~PART NUMBER~~					
~~CATALOG NUMBER~~					
~~MANUFACTURER~~					
~~DELIVERY~~					
~~TOTAL LUMP SUM~~					

I hereby certify that all bids received in response to this invitation were opened under my personal supervision, and that the names of all bidders have been entered herein.

SIGNATURE

TABULATED BY: _____ DATE: 6/26/20

Basis For Award

[ ] Lowest Responsive Bidder
[ ] Tie Bid
[ ] Only Bid
[ ] Other Than Lowest Responsive Bidder

PAGE 1 OF 3

NUMBER OF MULTI-STEP INVITATIONS ISSUED: 3

NUMBER OF MS-IFB RECEIVED: 3

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GUAM POWER AUTHORITY

MULTI-STEP INVITATION NUMBER: MS GPA-050-20

OPENING DATE: 06/26/2020 **OPENING TIME:** 9:30 A.M.

ABSTRACT OF MULTI-STEP-IFB 'PHASE II'

DESCRIPTION OF SUPPLIES OR SERVICES: SUPPLY OF RESIDUAL FUEL OIL NO. 6

BIDDER

No.: [2] Vendor Name: ~~Mobile~~ Mobil Oil Guam Inc.

[ ] BID GUARANTEE:

[ ] Bid Bond #: _____ Amount: $_____

[ ] Certificate of Authority [ ] Power of Attorney

[ ] Standby Letter of Credit #_____ Amount $_____

[ ] Letter of Credit #_____ Amount $_____

[ ] Cashier's or Certified Check #_____ Amount $_____

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[ ] Ethical Standards [ ] Wage Determination [ ] Restriction Against Sex Offendors

[ ] Business License [ ] Contractors License

[ ] Local Procurement Signed and Submitted

[ ] Literature

DESCRIPTION	LINE ITEM 1	LINE ITEM 2	LINE ITEM 3	LINE ITEM 4	LINE ITEM 5
	1ST YEAR	2ND YEAR	3RD YEAR	1ST YR. EXTENSION	2ND YR. EXTENSION
~~QTY.~~					
~~UNIT~~					
~~DELIVERY~~					
	" LOW SULFUR FUEL OIL "				
~~PRICE~~	201.784	301.461	312.935	312.723	313.696
~~UNIT COST~~					
~~PART NUMBER~~					
~~CATALOG NUMBER~~					
~~MANUFACTURER~~					
~~DELIVERY~~					
~~TOTAL LUMP SUM~~					
	" HIGH SULFUR FUEL OIL "				
~~ALTERNATE~~	142.226	221.996	233.488	204.069	235.044
~~UNIT COST~~					
~~PART NUMBER~~					
~~CATALOG NUMBER~~					
~~MANUFACTURER~~					
~~DELIVERY~~					
~~TOTAL LUMP SUM~~					

I hereby certify that all bids received in response to this invitation were opened under my personal supervision, and that the names of all bidders have been entered herein.

SIGNATURE

TABULATED BY: Aguinaldo DATE: 6/26/20

Basis For Award

[ ] Lowest Responsive Bidder
[ ] Tie Bid
[ ] Only Bid
[ ] Other Than Lowest Responsive Bidder

PAGE 2 OF 3

NUMBER OF MULTI-STEP INVITATIONS ISSUED: 3

NUMBER OF MS-IFB RECEIVED: 3

PROCUREMENT DIVISION

GUAM POWER AUTHORITY

ABSTRACT OF MULTI-STEP-IFB 'PHASE II'

MULTI-STEP INVITATION NUMBER: MSGPA-050-20

OPENING DATE: 06/26/2020 **OPENING TIME:** 9:30 AM

DESCRIPTION OF SUPPLIES OR SERVICES: SUPPLY OF RESIDUAL FUEL OIL NO. 6

BIDDER

No.: [3] Vendor Name: Hanwha Corporation

[ ] BID GUARANTEE:

[ ] Bid Bond #: _____ Amount: $_____

[ ] Certificate of Authority [ ] Power of Attorney

[ ] Standby Letter of Credit #_____ Amount $_____

[ ] Letter of Credit #_____ Amount $_____

[ ] Cashier's or Certified Check #_____ Amount $_____

[ ] Wire Transfer

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[ ] Affidavits (Original Form)

[ ] Affidavits (Copy Form): Originals submitted with _____

[ ] Major Shareholders [ ] Non-Collusion [ ] No Gratuities or Kickbacks

[ ] Ethical Standards [ ] Wage Determination [ ] Restriction Against Sex Offendors

[ ] Business License [ ] Contractors License

[ ] Local Procurement Signed and Submitted

[ ] Literature

DESCRIPTION	LINE ITEM 1	LINE ITEM 2	LINE ITEM 3	LINE ITEM 4	LINE ITEM 5
	1ST YEAR	2ND YEAR	3RD YEAR	1ST YR. EXTENTION	2ND YR. EXTENSION
~~QTY.~~					
~~UNIT~~					
~~DELIVERY~~					
	"LOW SULFUR FUEL OIL"				
~~BASIC~~	126.93D	140.03D	150.63D	M.33D	M.33D
~~UNIT COST~~					
~~PART NUMBER~~					
~~CATALOG NUMBER~~					
~~MANUFACTURER~~					
~~DELIVERY~~					
~~TOTAL LUMP SUM~~					
	"HIGH SULFUR FUEL OIL"				
~~ALTERNATE~~	99.33D	113.33D	123.33D	152.33D	152.33D
~~UNIT COST~~					
~~PART NUMBER~~					
~~CATALOG NUMBER~~					
~~MANUFACTURER~~					
~~DELIVERY~~					
~~TOTAL LUMP SUM~~					

I hereby certify that all bids received in response to this invitation were opened under my personal supervision, and that the names of all bidders have been entered herein.

SIGNATURE

Basis for Award

[ ] Lowest Responsive Bidder
[ ] Tie Bid
[ ] Only Bid
[ ] Other Than Lowest Responsive Bidder

TABULATED BY: _____ DATE: 6/26/20

PAGE 3 OF 3

Invitation For Multi-Step Bid

No. GPA-050-20

SUPPLY OF RESIDUAL FUEL OIL NO.6

Volume II

CONTRACT

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CONTRACT

CONTRACTOR

GUAM POWER AUTHORITY

IFB No. GPA-050-20

SUPPLY OF RESIDUAL FUEL OIL NO.6

FORMAL CONTRACT

This Agreement and Formal Contract ("Contract"), is made and entered into on the _____ day of _____, 2020 by and between:

_____, hereinafter referred to as CONTRACTOR, with its principal address at _____;

\- and –

GUAM POWER AUTHORITY, hereinafter referred to as the **"Authority"** or **"GPA"**, a Public Corporation with its office located at the Gloria Nelson Public Service Complex, Fadian Mangilao Guam;

R E C I T A L S

WHEREAS, GPA desires to maintain uninterrupted supply of Residual Fuel Oil No.6 (hereinafter referred to as "RFO") to its Baseload Power Plants; and

WHEREAS, the current contract for the supply of RFO will expire on August 31, 2020; and

WHEREAS, GPA seeks to procure a new Contractor for the supply of RFO; and

WHEREAS, the Consolidated Commission on Utilities has determined that the (CONTRACTOR) is a preferred option for GPA to supply the RFO requirements for the Authority; and

WHEREAS, the Guam Public Utilities Commission has, through stipulation, ordered GPA to proceed with the procurement of a CONTRACTOR for the Supply of RFO; and

WHEREAS, GPA has issued an Invitation For a Multi-Step Bid for the Supply of Residual Fuel Oil No.6 under IFB GPA-050-20; and

WHEREAS, **CONTRACTOR** submitted a bid in response to the Invitation for Bid for the Supply of RFO; and

WHEREAS, GPA, upon evaluation of the submitted bid proposals, determined that **CONTRACTOR**. is the lowest responsive and responsible bidder.

NOW, THEREFORE, in consideration of the above premises and the mutual promises set forth herein and the terms and conditions hereinafter set forth and for other good and valuable consideration, receipt of which is hereby acknowledged; **CONTRACTOR** and GPA hereby agree as follows:

SECTION 1. DEFINITIONS

**"$"** The term "$" refers to currency in U.S. dollars.

"ASTM" The term "ASTM" shall mean the American Society for Testing and Materials.

"API" The term "API" shall mean the American Petroleum Institute.

"Barrel" The term "Barrel" means a volume equivalent to 42 U.S. gallons.

"Contract" The term "Contract" means the Fuel Oil Supply Contract executed as a result of IFB GPA-050-20.

"Contract Agreement (Agreement)" The written agreement between GPA and CONTRACTOR covering the Supply of Fuel Oil any other Contract Documents either attached to the Agreement or made a part thereof by reference therein.

"Contract Documents" The Contract Agreement, Bonds (where required), these General Conditions, any Supplementary Conditions, the Specifications, and any other documents specifically identified in the Contract Agreement, together with all Modifications issued after execution of the Contract Agreement.

"Contracting Officer" The term "Contracting Officer" as used herein means the General

Manager of the Guam Power Authority and shall include his authorized representatives.

"CONTRACTOR" The term "CONTRACTOR" as used herein means the party or parties who or which shall have duly entered into a contract with the Guam Power Authority to perform the work herein contemplated or his or their authorized assignee.

"**Day"** A calendar day of twenty-four (24) hours measured from midnight to the next midnight.

"Delivery Time" The total number of days or the dates stated in the Agreement for furnishing the product.

"General Manager" The General Manager is the Chief Executive Officer of the Guam Power Authority. The office and title of General Manager shall apply to any person acting in a regular or in an acting capacity as the Chief Executive Officer of the Guam Power Authority.

"Notice" The term "Notice" as used herein shall mean and include all written notice demands, instructions, claims, approvals and disapprovals required to obtain compliance with contract requirements. Any written notice by either party to the contract shall be sufficiently given if delivered to or at the last known business address of the person, firm, or corporation constituting the other party to the contract, or to his, their, or its duly authorized agent, representative, or officers, or when enclosed in a postage prepaid envelope addressed to such last known business address and deposited in a United States mail box and file the same with the Contracting Officer.

"Procurement Officer" The General Manager of the Guam Power Authority or the General Manager's designee.

"PURCHASER" The Guam Power Authority with whom CONTRACTOR has entered into the Contract Agreement.

"Seller" The CONTRACTOR.

"Territory" The Territory of Guam.

"OPA'90" means the Oil Pollution Act of 1990 by the U.S. Congress.

"Platt's Asia-Pacific/ Arab Gulf Marketscan" refers to the source document for the ` fuel Contract pricing.

"Metric Ton" unit of mass equal to 1,000 kilograms (2,205 pounds)

"D.E.S." means Delivered Ex- Ship as set forth in Incoterms 2000, except as modified by the Contract.

"Fuel Oil" means "Residual Fuel Oil No. 6" or "RFO", a liquid hydrocarbon product satisfying the specifications in Schedule A.

"Gallon" shall mean a U.S. standard gallon of 231 cubic inches at sixty degrees Fahrenheit.

"Receiving facility" means any wharf, dock, jetty, pier, quay, sea terminal, buoy, lighter, barge, vessel, or other suitable apparatus capable of receiving fuel oil in bulk.

SECTION 2. FUEL OIL TO BE SUPPLIED

CONTRACTOR agrees to furnish and **GPA** agrees to accept and pay for all of **GPA**'s fuel oil requirements for power generating plants in Guam for the term of the Contract. Fuel Oil to be supplied to **GPA** shall conform to the product quality requirements specified in Schedule A and shall come from reputable sources not sanctioned by the United States government.

The **estimated** total fuel oil requirement is about TWO MILLION BARRELS PER YEAR (2,000,000 bbls/yr). The Minimum Purchase under the Contract is estimated at ONE MILLION BARRELS PER YEAR (1,000,000 bbls/yr).

The first delivery of fuel oil pursuant to the Contract is anticipated to be on or about **September 01, 2020**.

Estimated combined quantities:

MINIMUM: ONE MILLION BARRELS PER YEAR (1,000,000 bbls/yr)

MAXIMUM: TWO MILLION BARRELS PER YEAR (2,000,000 bbls/yr)

Estimated Annual Requirement (Barrels per Year)			
Fuel Grade	**First (1st) Year**	**Second (2nd) Year**	**Third (3rd) Year**
Low Sulfur Fuel Oil (LSFO), 1.19%w Sulfur (Maximum)	**500,000**	**1,500,000**	**1,500,000**
High Sulfur Fuel Oil (HSFO), 2.00%w Sulfur (Maximum)	**1,500,000**	**500,000**	**0**

This information is provided as reference material only. Although every attempt has been made to ensure its accuracy, **GPA** makes no guarantees that these quantities will be achieved but they may be exceeded. **GPA** expressly disclaims any liability whatsoever arising from reliance or non-reliance of the data provided.

SECTION 3. CONTRACT TERM

The Contract Term shall be for THREE (3) years and shall commence on or about after 0:00 hour on **September 01, 2020**, and shall continue until midnight of **August 31, 2023** with options to extend for TWO (2) additional One (1) year term, upon mutual agreement of both parties.

SECTION 4. CONTRACT PRICE

The total contract price in U.S. Dollars per Metric Ton ($/MT) for all residual fuel oil delivered D.E.S. Guam (discharge port) to **GPA** shall be inclusive of all costs and liabilities incurred prior to delivery at discharge port, Cabras Island, Guam.

DES (Delivered Ex- Ship) PROVISIONS:

Under this term, the **CONTRACTOR** quotes a price including the cost of the goods, the marine insurance, and all transportation charges to the designated point of destination (**GPA**). Under this quotation, the **CONTRACTOR** must:

(1) provide and pay for transportation to named point of destination (**GPA**);

(2) pay applicable taxes or charges levied on the cargo prior to passage of title to GPA;

(3)provide and pay for marine insurance;

(4)provide war risk insurance;

(5) obtain and dispatch promptly to **GPA,** or its agent, copies from the original document of a clean bill of lading, and also insurance policy or negotiable insurance certificate;

(6) provide **GPA** with copies from the original document of certificates of origin, or any documents issued in the country of origin, or of shipment, or both, which **GPA** may require for importation of goods and, where necessary, for their passage in transit into another country.

(7) where received-for-shipment ocean bill of lading may be tendered, be responsible for any loss or damage, or both, until the goods have been delivered into the custody of the ocean carrier to **GPA**;

(8) where on-board ocean bill of lading is required, be responsible for any loss or damage, or both, until the goods have been delivered on board the vessel to **GPA**;

The **CONTRACT PRICE** shall be the **BID PRICE OFFER** calculated as the **BID REFERENCE PRICE** plus the Contractor's **FIXED PREMIUM FEE** in U.S. dollars per Metric Ton ($/MT) for all residual fuel oil delivered to **GPA** at the Port of Guam.

The BID PRICE is the sum of the FIXED SERVICE FEE (per Metric Ton) and the BID REFERENCE PRICE as of December 2, 2019 as posted in the Platts' Asia-Pacific Marketscan Oil Prices.

BID REFERENCE PRICE:

The BID REFERENCE PRICE shall be based on the Platt's Singapore Products Assessment for Fuel Oil Cargoes "HSFO 180 CST**"** for December 2, 2019.

Reference date: December 2, 2019

	Low ($/MT)	High ($/MT)
HSFO 180 CST	$ 214.62	$ 214.66

The following is a sample calculation of the mean price for HSFO 180 cst published in the **Platt's Marketscan, Singapore Products Assessments** for Fuel Oil Cargoes for December 2, 2019.

Mean Singapore Spot = Low + High Price Assessments:

$$= \frac{\$\ 214.62 + \$\ 214.66}{2} \text{ per Metric Ton (MT)}$$

= $ 214.640 per Metric Ton (MT)

BID REFERENCE PRICE = $ 214.640 per Metric Ton

BID PRICE OFFERS (D.E.S. Ex-Ship Guam):

LSFO 1.19%$_w$ Sulfur Max	THREE (3)-YEAR CONTRACT BASE PERIOD US$/MT (3 decimals)			TWO (2) -YEAR CONTRACT EXTENSION OPTION US$/MT (3 decimals)	
	First (1st) Year Base Period	Second (2nd) Year Base Period	Third (3rd) Year Base Period	First (1st) Year Extension	Second (2nd) Year Extension
A. Bid Reference Price	$214.640	$214.64	$214.64	$214.64	$214.64
B. Fixed Premium Fee	$124.690	$124.690	$124.690	$124.690	$124.690
BID PRICE (A+B)	$339.330	$339.330	$339.330	$339.330	$339.330

HSFO 2.00%$_w$ Sulfur Max	THREE (3)-YEAR CONTRACT BASE PERIOD US$/MT (3 decimals)			TWO (2) -YEAR CONTRACT EXTENSION OPTION US$/MT (3 decimals)	
	First (1st) Year Base Period	Second (2nd) Year Base Period	Third (3rd) Year Base Period	First (1st) Year Extension	Second (2nd) Year Extension
A. Bid Reference Price	$214.64	$214.64	$214.64	$214.64	$214.64
B. Fixed Premium Fee	$ 71.690	$ 71.690	$ 71.690	$ 71.690	$ 71.690
BID PRICE (A+B)	$286.330	$286.330	$286.330	$286.330	$286.330

SECTION 5. INVOICE PRICE DETERMINATION

Price shall be based on the arithmetic average of the mean of the high/low quotations for "HSFO 180 CST" as published in Platts Asia Pacific/Arab Gulf Marketscan under the heading "FOB Singapore" priced for five (5) valid consecutive quotations immediately prior to B/L date and five (5) immediately after the B/L date plus the fixed premium fee.

In case of "No Posting" on the B/L date, no price will be used and the remaining 10-days average will be used. All price postings are at the prices effective dates.

Sample Calculation:

B/L date = December 2, 2019

Marketscan Postings HSFO 180cst ($/MT)

	Date	Low	High	Avg
5	November 25, 2019 (Monday)	239.99	240.03	240.010
4	November 26, 2019 (Tuesday)	236.69	236.73	236.710
3	November 27, 2019 (Wednesday)	241.33	241.37	241.350
2	November 28, 2019 (Thursday)	238.19	238.23	238.210
1	November 29, 2019 (Friday)	227.36	227.40	227.380
B/L	December 2, 2019 (Monday)	214.62	214.66	214.640
1	December 3, 2019 (Tuesday)	225.11	225.15	225.130
2	December 4, 2019 (Wednesday)	233.69	233.73	233.710
3	December 5, 2019 (Thursday)	240.37	240.41	240.390
4	December 6, 2019 (Friday)	250.10	250.14	250.120
5	December 9, 2019 (Monday)	258.55	250.14	254.450
		Mean Arithmetic Average ($/MT) =		**$236.454**

Invoice Reference Price = $236.454/MT

Invoice Price Calculation:

Product Grade	Invoice Reference Price ($/MT)	Fixed Premium Fee ($/MT)	**Invoice Price ($/MT)**
LSFO, 1.19%S	236.454	124.690	**361.144**
HSFO, 2.00%S	236.454	71.690	**308.144**

If for any reason the quotation "HSFO 180 CST" ceases to exist, the parties shall renegotiate a new price quotation and premium in order to continue the contract.

For invoice calculation purposes, quantity shall be reported in Metric Tons as declared in the Bill of Lading.

SECTION 6. TITLE, CUSTODY AND RISK OF LOSS

Title to the fuel oil and custody thereof shall pass from **CONTRACTOR** to **GPA** when the fuel oil has passed the vessel's permanent flange hose connection at the discharge port. All risk of loss, cost and liabilities prior to the time of passage of title of the fuel oil to shall be on the **CONTRACTOR**.

SECTION 7. TERMS OF PAYMENT

Documentary Letter of Credit shall be opened two (2) days prior to the beginning of loading.

Payment shall be made in U.S. Dollars Funds without off-set, deduction, or counter-claim within THIRTY (30) calendar days (30-days net term) after the Bill of Lading date provided vessel tenders its NOR within TWELVE (12) days after the B/L date, otherwise it extends day by day (B/L date inclusive). In case the payment due date falls on a Bank holiday or Saturday in Guam, payment shall be made immediately preceding banking day. However, should payment due falls on Sunday or Monday bank holiday in Guam, payment shall be made on the immediately following banking day.

Payment shall be available at Seller's account on Maturity Date. If Buyer fails to pay on the maturity date, Seller shall be reimbursed for the interests related to the time of delay. Interest Rate shall be calculated based on the one month London Interbank Offered Rate (LIBOR) for US Dollar Deposits offered by Bloomberg Publication at 11:00 A.M. London Time, as quoted on page BBAM in effect on the date buyer's payment was due, plus one and one-half percent (1.5%) per annum.

In the event that a duly executed Documentary Letter of Credit (L/C) is amended or cancelled due to error or adjustments caused by the **CONTRACTOR**, the **CONTRACTOR** shall reimburse **GPA** for any penalties for the amendment or cancellation of the LC.

The **CONTRACTOR** shall endeavor to assist **GPA** to revise the payment due dates if requested by **GPA** accordingly. GPA has the right to request for revision of the payment due dates and Contractor has the right to reject it at its sole discretion.

CONTRACTOR may provide GPA a Line of Credit, but it is not a requirement in the contract. If the amount due under this contract exceeds the **GPA**'s credit line of:

(Amount in Words _____)
(US$_____),

available at **CONTRACTOR** system, then as a loading condition, for the amount not covered under the credit line, **GPA** shall:

(i) Make advance payment not later than one day before the cargo is loaded; OR

(ii) Open a **DOCUMENTARY LETTER OF CREDIT (L/C)** at a first-class international bank mutually agreeable to both **GPA** and the **CONTRACTOR**

SECTION 8. PAYMENT OF TAXES AND OTHER GOVERNMENT CHARGES

All fuels under the terms of this Contract are exempt from the Government of Guam Liquid Fuel Tax and the Government of Guam Gross Receipts Tax as provided by 12 G.C.A., Section 8115.

In the event that any cargoes shall be liable to the payment of Import Duty such Import Duty shall be to the **CONTRACTOR's** account.

CONTRACTOR shall be responsible for filing appropriate tax returns or other filings and requesting rebates, credits, drawbacks or exemptions.

In the event any liquid fuel tax or gross receipts tax or other tax including, but not limited to, excise tax, duty, toll, fee, charge for other exaction or the amount equivalent thereto, and any increase thereof, now or hereafter imposed, levied or assessed by the United States Government, the Government of Guam, the Port Authority of Guam, or other instrumentality or agency thereof in connection with and as a result of the sale of fuel oil herein provided for is collectible or payable by **CONTRACTOR**, (except taxes, penalties, fees or other charges that may be imposed on **CONTRACTOR** because of **CONTRACTOR** 's failure to make proper tax filings including requests for credits, exemptions, drawbacks or rebates) it shall be paid by **GPA** as part of the fuel price set forth herein, on demand by **CONTRACTOR**. Any such payment shall be in addition to the price otherwise herein provided for.

Notwithstanding these provisions, should the payment of any such charges described in this section be unduly burdensome to **GPA**, it shall be grounds for renegotiation for an equitable adjustment in price.

CONTRACTOR shall be solely responsible for filings and payment of income tax or taxes measured on net income.

SECTION 9. WARRANTY AND CLAIMS

CONTRACTOR warrants that the fuel oil shall meet the specification prescribed herein under Section10 and other pertinent sections. If the fuel oil fails to meet the specifications herein, **CONTRACTOR** shall be liable for any direct damages resulting therefrom.

CONTRACTOR shall be solely responsible for any damages caused by the **CONTRACTOR** or its agents during the process of oil shipment and delivery.

Claims against the **CONTRACTOR** for direct costs incurred on account of their negligent actions shall be given in writing together with all supporting documents, invoices and correspondence by **GPA** within thirty days (30) from date of delivery of fuel oil as specified in Section 4.

SECTION 10. PRODUCT AND QUALITY

The fuel oil delivered hereunder shall have the physical and chemical characteristics as described in Schedule A.

SECTION 11. QUANTITY AND QUALITY ASSURANCE

Ship-to-Ship (STS) cargo loading is not allowed.

(a) Inspection of fuel oil cargo loading and discharge to determine quantity and quality shall be witnessed and or conducted by the appointed third party independent Inspector mutually acceptable to **GPA** and the **CONTRACTOR**. **CONTRACTOR** shall appoint the independent inspector at the loadport. **GPA** shall appoint the independent Inspector at the discharge port. Such independent inspector shall also perform or witness the required sampling, gauging, and inspection of vessel and shore tanks before and after loading at load port as well as discharge port, Guam. Final determination shall be based on the discharge port findings. All quantity calculations and correction to volume at sixty (60) degree (Fahrenheit) shall be in accordance with the ASTM-IP Petroleum Measurement Tables, Table 6- the latest edition published shall be applicable. All costs and charges for the inspections for the load port shall be borne by the **CONTRACTOR**, and costs at the discharge port shall be equally shared by **GPA** and the **CONTRACTOR**.

(b) Load port samples from each individual shore loading tanks shall be sampled by the independent inspector who shall perform or witness the required tests for quality certification prior to loading. Shore tank composite from each individual shore loading tanks shall be separately tested and the quality must conform to the specifications under Section 10 of the contract. Vessel's composite samples from all vessel's cargo compartments shall also be obtained by the inspector for the consignee, **GPA**, in care of the ship's master. All Samples shall be equally divided into THREE (3) parts, sealed, properly identified, and designated with the required "Chain of Custody of Samples" documentations.

(c) The quality of the cargo to be delivered shall be determined by an independent inspector mutually acceptable to GPA and the **CONTRACTOR** and is to be based on the ship composite samples taken at the port of discharge in such a manner as to secure samples which are representative of the entire cargo delivery. Discharge tanks samples and ship's composite samples shall be divided into THREE (3) parts. One part shall be for **CONTRACTOR** and TWO (2) parts shall be for **GPA**, and **GPA** shall utilize one sample for recertification and reserve the other sample as a retained referee sample. All discharge port samples shall be presented by the inspector for **GPA** in care of the Master of the ship. All samples shall be retained for not less than ONE HUNDRED TWENTY (120) days after delivery. In the event of dispute as to quality, analysis of the samples taken at the discharge port shall be made by an independent inspector, which analysis shall be final and binding upon both parties.

GPA reserves the right to reject any or all deliveries that fail to conform to the quality requirements specified in Schedule A.

GPA has the right to reject any cargo outside the specifications limits, as these are agreed in the context of this contract. In this respect, copies of the quality analysis certificate together with the other shipping documents (B/L, certificate of origin, cargo manifest, certificate of origin, certificate of quantity with shore tank measurement report, certificate of quantity, etc) must be transmitted by fax or e-mail to GPA immediately but no later than 3 days after completion of loading.

Copies of the originals of the ship’s “certificate of cleanliness” issued before loading, and the other shipping documents for the consignee (B/L, Certificate of Origin, Cargo Manifest, certificate of Quality, Certificate of Quantity with tank measurement report, Loadport surveyor’s

report, etc.) to be marked for the consignee and handed over upon arrival of vessel at discharge port.

It is understood that any delay as may be incurred in discharge due to unavailability of copy of the Bill of Lading will be for **CONTRACTOR's** account. Furthermore, the correct documentation in original format is required in order to establish to the full satisfaction of GPA.

GPA has the right to reject any cargo outside the specification limits. GPA shall notify the Contractor of any rejected delivery by fax or e-mail. Contractor shall promptly deploy a replacement vessel carrying on-spec products to Guam within 12 days from the date of GPA's notice of rejection.

Notwithstanding the above conditions, Contractor shall not be relieved of any responsibilities or penalties provided for in the Contract. In addition, GPA shall impose all applicable penalties for failure of the Contractor to provide the replacement cargoes in a timely manner. Contractor shall be liable for all direct expenses as a result of the delayed arrival of the shipment beyond the last day of the original 5 days ETA date.

SECTION 12. QUANTITY DETERMNATION

Latest edition of API Standard 2540 (and sub-sections) or its metric equivalent with conversions shall be the method used for quantity determination.

Quantity determination shall be performed by a third party independent inspector mutually acceptable to **GPA** and the **CONTRACTOR.** Quantity shall be based from the load port shore tanks gauges as to be reflected as Bill of Lading quantity NET barrels at sixty degrees Fahrenheit (60 ^{o}F). The Certificate of Quantity shall separately use the density from each individual shore loading tanks. All quantities shall be corrected to volume at sixty degrees Fahrenheit (60 ^{o}F) in accordance with the ASTM-IP Petroleum Measurement Table, Table 6B, the latest edition published shall be applicable. A copy of the load port shore tank measurements shall be included as supplemental documents.

Quantity certification prepared by independent inspector shall be final and binding upon both parties.

In the event of the variances between the B/L quantity and the discharge port (shore tanks) receipts, The **AUTHORITY** shall pay (absorb) a quantity shortfall up to ONE-HALF PERCENT (0.50 %) of the barrel established quantity; shortages beyond the 0.5% shall be covered by the **CONTRACTOR**.

SECTION 13. SECURITY OF SUPPLY

For security of supply, **CONTRACTOR** reserves the right to supply fuel oil meeting **GPA** specifications from any source. Fuel Oil to be supplied to **GPA** shall conform to the product quality requirements specified in Schedule A and shall come from reputable sources not sanctioned by the United States government.

In the event that supplies are taken from such other places, then the price to Guam will remain the same as established in Section 4 above.

SECTION 14. GOVERNMENT LAWS AND REGULATIONS

(a) If at any time during the term of the Contract the Government of the United States or the Territory of Guam enacts laws or issues regulations which would prevent **GPA** from burning the type of fuel oil to be supplied hereunder, **GPA** shall use its best efforts to obtain an exemption. In the event **GPA** cannot obtain an exemption from such laws and regulations, **CONTRACTOR** shall use his best efforts to furnish **GPA** substitute fuel oil which complies with such governmental laws and regulations at the same price set out herein, or if unreasonable, at a price to be renegotiated by the parties. If the substitute fuel oil causes an increase or decrease in **CONTRACTOR** 's cost of performance of the Contract, an equitable adjustment shall be made and the Contract modified in writing accordingly. Any claim of **CONTRACTOR** for adjustment under this section must be asserted in writing within thirty (30) days from date of receipt by **CONTRACTOR** of the notification of substitute fuel oil in compliance with Government laws, rules and regulations. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this Contract entitled "Governing Law and Disputes"(Section 22). However, nothing in this clause shall excuse the **CONTRACTOR** from proceeding with the Contract fuel oil specifications as changed in order to comply with Government laws, rules and regulations. Only in the event that the parties cannot mutually agree upon the price at which **CONTRACTOR** is to furnish such substitute fuel oil, and **CONTRACTOR** refuses to provide

such substitute fuel oil at the Contract price set out herein shall **GPA** then have the option of purchasing from other sources fuel oil at a lower price than that offered by **CONTRACTOR** in such negotiations which complies with such laws and regulations, but in any event, the **CONTRACTOR** shall have no recourse, other than those specified herein.

(b) **CONTRACTOR** shall at all times comply with all applicable laws and regulations of the Territory of Guam and the Federal Government and their respective agencies.

SECTION 15. PERMITS AND RESPONSIBILITIES

The **CONTRACTOR** shall, without additional expense to **GPA**, be responsible for obtaining any necessary licenses and permits, and for complying with any applicable Federal and Territorial laws, codes and regulations necessary for performance of the Contract by **CONTRACTOR**.

SECTION 16. FORCE MAJEURE

No failure or omission by either party to carry out or to observe any of the terms, provisions or conditions of the Contract shall, except in relation to obligations to make payments under the Contract, give rise to any claim by one party against the party in question or be deemed to be a breach of the Contract if such failure or omission arises from any cause reasonably beyond the control of the party, including but without prejudice to the generality of the foregoing:

(a) War, etc. War, hostilities, acts of public enemy or belligerents, sabotage, blockade, revolution, insurrection, riot or disorder;

(b) Restraints. Arrest or restraint of princes, rulers or peoples;

(c) Confiscation. Expropriation, requisition, confiscation or nationalization;

(d) Rationing. Embargoes, export or import restrictions or rationing or allocation, whether imposed by law, decree or regulation or by voluntary cooperation of industry at the insistence or request of any governmental authority or person purporting to act therefore;

(e) Regulations. Interference by restriction or onerous regulations imposed by civil or military authorities, whether legal or de facto and whether purporting to act under some constitution, decree, law or otherwise;

(f) Acts of God. Acts of God, fire, frost or ice, earthquake, storm, lightning, tide, tidal wave, or peril of the sea, accident of navigation or breakdown or injury of vessels;

(g) Loss for Tankers. Loss of tanker tonnage due to sinking by belligerents or to governmental taking whether or not by formal requisition;

(h) Accidents. Accidents to or adjuncts of shipping navigation;

(i) Strikes. Epidemics, quarantine, strikes or combination of workmen, lockouts, or other labor disturbances;

(j) Explosions. Explosion, accidents by fire or otherwise to wells, pipes, storage facilities, refineries, installations, machinery;

(k) Taking by Government. Unavailability of fuel because of the election of the government of the country of its origin to take royalty product in kind;

(l) Other Events. Any event, matter or thing wherever occurring and whether or not of the same class or kind as those set forth, which shall not be reasonably within the control and without the fault or negligence of the party affected thereby.

No failure or omissions to carry out or to observe any of the terms, provisions or conditions of the Contract shall give rise to any claim by one party against the other, or be deemed to be a breach of the Contract from the time of and to the extent occasioned by the Force Majeure, not from the date of notice of the Force Majeure is received.

SECTION 17. NOTICE TO OTHER PARTY

Either party whose obligations may be affected by any of the forces or causes set out in Section 16, supra, shall promptly notify the other party in writing, giving full particulars thereof as soon as possible after the occurrence of such force or cause. Such party shall exercise due diligence to remove such cause with all reasonable dispatch and to resume performance at the earliest practicable time.

SECTION 18. PAYMENT REQUIRED

Notwithstanding the provisions of Section 16, supra, **GPA** shall not be relieved of any obligation to make payments for any fuel delivered to Guam dock/**GPA** tanks hereunder; however, during the force majeure condition the obligation shall be suspended, except for fuel oil deliveries made prior to the force majeure condition.

SECTION 19. PRORATION OR EQUITABLE ALLOATION

If any of the events enumerated in Section 16, supra, have occurred, **CONTRACTOR** shall prorate or otherwise allocate in a fair and equitable manner among its customers, including **GPA**, the supplies of fuel oil **CONTRACTOR** has available for delivery at the time of the occurrence or for the duration of such event taking into account **GPA**'s unique situation as Guam's total dependence on fuel oil. **CONTRACTOR** shall also seek an alternative source of fuel oil to fulfill its contractual obligations.

SECTION 20. ALTERNATE SUPPLY

In the event **CONTRACTOR** is unable to fulfill its obligations under this Contract as a result of Section 16, supra, **GPA** may at its sole discretion seek an alternative source of fuel oil to include, but not limited to, a second contractor for the supply of fuel oil so long as such condition shall exist.

In the event **CONTRACTOR** is unable to fulfill its obligations under this Contract as a result of any negligence on the part of the Contractor, **GPA** may at its sole discretion seek an alternative source of fuel oil to include, but not limited to, a second contractor for the supply of fuel oil so long as such condition of negligence shall exist. If the cost of fuel during such period of negligence shall exceed the Contract price as provided in Section 4, the **CONTRACTOR** shall be liable to **GPA** for the difference, which may be taken from the Performance Bond.

For the purpose of this clause, preference for the second contractor shall be given to the next lowest bidder.

SECTION 21. RESUMPTION OF PERFORMANCE

If **CONTRACTOR** is prevented from delivering or **GPA** is prevented from receiving all or any fuel to be sold under the Contract for the reasons which fall within the provisions of Section 16, supra, then the party so prevented shall, as to the remainder of the fuel not affected thereby,

promptly resume performance of the Contract. No curtailment or suspension of deliveries or payment under the causes listed in Section 16, supra, shall operate to extend the term of or terminate the Contract unless the occurrence of force majeure will materially impair, for an indefinite period of time, the parties' ability to perform the Contract.

SECTION 22. GOVERNING LAW AND DISPUTES

This CONTRACT shall in all respects be governed by the Laws of Guam. The provisions of the United Nations Convention on Contracts for the International Sale of Goods are expressly excluded.

This CONTRACT shall not be construed to confer any benefit on any person not being a party to this Contract not shall it provide any rights to such person to enforce any of its provisions. The provisions of the English Contracts (Rights of Third Parties) Act 1999 are expressly excluded.

In the event of any controversies, dispute or difference of any nature (a "Dispute") between the parties arising from or in connection with this Contract, either party may give notice to the other in writing of the existence of such dispute specifying its nature and the points at issue. If the dispute shall not have been amicably resolved within thirty (30) days from the date of the said notice, then the same shall be exclusively and definitely resolved through final and binding arbitration in New York, by the AMERICAN ARBITRATION ASSOCIATION ('AAA'), in accordance with the rules of arbitration of such institution in effect as of the date the existence of the controversy is notified by one of the parties. The arbitration shall be conducted by three arbitrators, unless all parties to the dispute agree to a sole arbitrator within thirty (30) days after the filing of the arbitration. Each party to the dispute shall appoint one arbitrator within thirty (30) days of the filing of the arbitration, and the two arbitrators so appointed shall select the presiding arbitrator within thirty (30) days after the latter of the two arbitrators have been appointed by the parties to the dispute. If a party to the dispute fails to appoint its party-appointed arbitrators or if the two party-appointed arbitrators cannot reach an agreement on the presiding arbitrator within the applicable time period, then LCIA shall appoint the remainder of the three arbitrators. The arbitration proceedings shall be conducted in English and the arbitrator(s) shall be fluent in the English language. The award of the arbitral tribunal shall be final and binding. Judgment on the award of the arbitral tribunal may be entered and enforced in any court having jurisdiction thereof. The cost of the arbitration proceedings, including attorneys' fees, shall be borne in the manner determined by the arbitral tribunal. Any right to appeal or challenge any arbitral decision or award is hereby waived. The parties may seek a preliminary injunction or other preliminary judicial relief, if in its judgment such action is

necessary to avoid irreparable damage. It is expressly agreed that indirect, special, punitive and consequential damages shall not be awarded.

SECTION 23. CONTRACTOR'S INSURANCE

The **CONTRACTOR** shall maintain an insurance policy or ensure that vessel nominated have in place an insurance policy for oil pollution (throughout the entire period of the voyage to and from the discharge port) with coverage consistent with the provisions in compliance to the requirements of the U.S. Oil Pollution Act of 1990 (OPA 90) and any amendments thereto. This includes, but is not limited to, compliance with oil spill clean-up plan, financial responsibility, and all other provisions of OPA 90.

At a minimum, CONTRACTOR shall carry the following insurance coverages and shall provide evidence of these coverages in the form of a Certificate of Insurance with the applicable wordings and endorsements:

ENVIRONMENTAL POLLUTION LIABILITY

At a minimum, must carry and have in force Environmental Pollution Liability insurance with limits not less than CONTRACTOR $50,000,000 (USD FIFTY MILLION DOLLARS) each condition and in the aggregate to include coverage for First party clean-up costs. The carrier must be rated not less than AM Best A rated and minimum financial size of IX. This coverage must be primary and non-contributory. The Guam Power Authority must be named as an additional insured with a Waiver of Subrogation. On the Certificate of insurance, carrier must agree by endorsement, that in the event of any cancellation and/or material change in coverage the carrier will give minimum 60-day prior written notice to the Policy holder and the Guam Power Authority.

MARINE LIABILITY

At a minimum, must carry and have in force Marine Liability insurance with limits not less than $50,000,000 (USD CONTRACTOR FIFTY MILLION DOLLARS) each occurrence and in the aggregate. The carrier must be rated not less than AM Best A rated and minimum financial size of IX. This coverage must be primary and non-contributory. The Guam Power Authority must be named as an additional insured with a Waiver of Subrogation. On the Certificate of insurance, carrier must agree by endorsement, that in the event of any cancellation and/or material change in

coverage the carrier will give minimum 60-day prior written notice to the Policy holder and the Guam Power Authority.

SECTION 24. INDEMNITY

CONTRACTOR shall indemnify and hold **GPA** harmless from all damages to persons or property or to receiving facilities and delivery facilities, regardless of ownership, including the cost of enforcement of the indemnity, actually and proximately caused by **CONTRACTOR** or its agents in making deliveries hereunder. **CONTRACTOR** shall be responsible for cleaning up any oil spillage caused by it or its agent or **CONTRACTOR**s during the process of oil delivery. **CONTRACTOR** shall carry at all times appropriate levels of insurance as determined by **GPA** to cover any such damage. The **CONTRACTOR** shall ensure that any vessel owned or chartered by the Contractor for deliveries under this agreement shall meet the requirements of the U.S. Oil Pollution Act of 1990 (OPA 90).

SECTION 25. TRANSPORTATION

The Authority shall nominate and advise the **CONTRACTOR** of the 10-day delivery date range not later than 30 days before the 1st calendar day of the delivery date range. The **AUTHORITY** and **CONTRACTOR** shall mutually agree to narrow down to a 5-day delivery date range 21 days prior to the 1st day of the 5-day delivery date range.

(a) **CONTRACTOR** shall arrange for the transportation of the fuel oil from loading port to the Guam dock, and give **GPA** at least FIFTEEN (15) days prior notice of the approximate arrival date of each tanker.

All risk of loss, cost and liabilities prior to the time of passage of title of the fuel oil to shall be on the **CONTRACTOR**. **CONTRACTOR** or its agents shall further arrange for the use of pier receiving facilities owned by the Port Authority of Guam (PAG) or its Facility Manager, U.S. Coast Guard, U.S. Custom and Immigration inspections, Guam Commercial Port authorities, Guam tug services, Port Stevedores services, and others as necessary for the safe berthing of fuel tankers and obtaining clearance for the discharging of the cargo at the sole expense of the CONTRACTOR.

GPA shall exercise due diligence and make its best effort to assist the **CONTRACTOR** in arranging for safe berthing facilities to accommodate vessels at the F-1 dock with the following information:

Maximum LOA	259meters
Maximum Breadth	45 meters
Maximum Vessel Draft Alongside	16.4592 meters
Maximum Displacement	108,840 metric tons
Maximum Free Board	23 meters

The above information is subject to change and **CONTRACTOR** shall at all times abide by the requirements of latest edition of the Port and Terminal Information Handbook.

GPA shall provide the **CONTRACTOR** an estimated total cargo quantity to be delivered approximately THIRTY (30) days from estimated 10-day delivery date range.

GPA shall provide notification to the **CONTRACTOR** as to the final split cargo delivery quantity approximately TWENTY-ONE (21) days prior to the first (1st) day of the estimated 5-day delivery date range which will also be specified in this final notice. **GPA** estimates a single delivery requirement in the range of TWO HUNDRED THIRTY THOUSAND TO TWO HUNDRED EIGHTY THOUSAND BARRELS (230,000 -280,000 bbls). The delivery may be a single cargo of either LSFO or HSFO, or a split SEGREGATED cargo of both LSFO and HSFO, as determined by GPA.

For each delivery, the **CONTRACTOR** will have an operational tolerance of FIVE PERCENT (5%) on the cargo size, as well as the obligation to deliver the shipment within defined delivery date range, as has been notified by **GPA**.

GPA shall have the right to cancel or change the previously notified cargo size and/or delivery date within twenty-one (21) calendar days prior to the first day of the delivery range without penalty.

(b) **Tanker nomination procedures:**

The **AUTHORITY** shall advise the contractor of projected "tankers' schedule and quantities per slate" THIRTY (30) days before the commencement of the contract, and **CONTRACTOR** agrees to provide all fuel requirements of **GPA** as advised and all succeeding cargo requirements thereafter.

(i) **Vessel Specification**:

All vessels nominated by the **CONTRACTOR** for fuel oil deliveries to **GPA** shall meet the vessel vetting requirements and be pre-approved by the F-1 dock Facility Manager.

The **CONTRACTOR** or its agents shall be responsible in seeking vessel clearance from the F-1 dock Facility Manager. In the event that vessels owned or chartered by the **CONTRACTOR** do not meet the F-1 dock Facility Manager's specification, **CONTRACTOR** shall have the vessel shortfalls corrected or have another vessel nominated and ensure that a suitable vessel is cleared for timely delivery of cargo to **GPA**. The **CONTRACTOR** or its agents shall be responsible for the scheduling and reservation of the dock with the F-1 dock Facility Manager.

The **CONTRACTOR** shall ensure that the vessel assigned to perform the voyage should be rid of any slop before reaching the designated port and have adequate slops – storage capacity to ensure that unloading of any slops is avoided.

Cargo temperature shall be maintained between one hundred fifteen to one hundred thirty degrees Fahrenheit (115^{o}F -130^{o}F) on arrival and during the discharge at Guam Port.

(c) **Ship Lay time and Demurrage:**

Ship lay time at the discharge port shall commence six (6) hours after the tender of Notice of Readiness (NOR) or when the vessel berths whichever occurs first, and to cease upon last cargo hoses disconnection. Allowable ship laytime shall be thirty-six (36) hours for total cargo B/L quantities up to 240,000 bbls and shall extend by ONE (1) hour for every 10,000 bbls in excess of 240,000 bbls. Official NOR shall be tendered/ re-tendered after completion of inspection and clearance for conducting cargo discharging operations is granted by the Port Authorities.

However, if the vessel arrives before the first day of the agreed arrival date range, lay time shall not commence until 06:00 AM on the first day of the agreed arrival date range or the time discharge commences whichever is earlier. If the vessel arrives after the last day of the agreed arrival date range lay time shall commence at the time discharge commences.

If regulations of the Port Authorities prohibit the discharge of cargo at night, the time so lost shall not count as used lay time.

(i) **<u>Ship Demurrage</u>:**

If lay time allowed is exceeded, GPA shall be liable to pay the **CONTRACTOR** for applicable demurrage. However, any delay due to vessel inspection and clearance by Local and Federal Authorities, breakdown of the vessel's equipment, or failure by vessel to comply with the requirements of the discharge port with respect to equipment aboard, shall not be counted in the lay time used for calculating demurrage. Waiting period for berthing, port formalities, product sampling and testing for quality conformance shall be deducted in the lay time calculation.

The vessel must be able to attain a discharge pressure of up to one hundred (100) psi measured at the F-1 Dock manifold. Time lost for slow discharging shall be deducted from the lay time used for calculating demurrage.

Demurrage cost if payable by **GPA** shall be at the single voyage demurrage rate specified in the single voyage Charter Party of the vessel loading the cargo in question and the **CONTRACTOR** shall furnish **GPA** with a copy of such Charter Party. Such charges must be submitted to **GPA** within 90 days after Bill of Lading date.

CONTRACTOR 's and **GPA**'s rights and duties under Section 24 and Section 25 do not supersede or control the provisions of Section 16 Force Majeure.

(d) **Dock Use Lay time Charges**:

Dock lay time of thirty-six (36) hours at the discharge port, to commence upon commencement of cargo discharging, and to cease upon last cargo hose disconnection. Dock lay time charges in excess of the first thirty-six (36) hours are paid by GPA to the F-1 dock Facility Manager.

In the event that the allowable lay time of thirty-six (36) hours is exceeded due to delays caused by the vessel, the Contractor shall reimburse GPA for any charges in excess of the allowable lay time. Calculation for reimbursement shall be based on the Letter of Protest issued to the Vessel's Officer converted to time units multiplied by the dock excess lay time charge cost.

SECTION 26. COORDINATION – AMMUNITION LOADING

(a) The **CONTRACTOR** is hereby advised and agrees that the unloading of fuel oil is not permitted during the time that the unloading or loading of ammunition is taking place at the U.S. Navy's ammunition wharf.

(b) Coordination to prevent conflict in unloading between ammunition and fuel oil will be effected

jointly by responsible parties representing the U.S. Navy, the Port Authority, **GPA** and the **CONTRACTOR**. Any charges that may result because of demurrage caused by delay in discharge of fuel oil related to ammunition unloading or loading will be borne by the **GPA**, provided that notice of arrival of tanker is given to **GPA** by the **CONTRACTOR** at least FIFTEEN (15) days prior to ETA Guam. In absence of such notice any delay costs shall be borne solely by the **CONTRACTOR**.

SECTION 27. FAILURE TO SUPPLY

If the **CONTRACTOR** refuses or fails to perform any of the provisions of this Contract with such diligence as will ensure the timely delivery of fuel oil supply or commits any other substantial breach of this Contract, **GPA** may notify the **CONTRACTOR** in writing of the delay or non-performance and if not cured within THIRTY (30) days of the date of notification, **GPA** may terminate the Contract in whole or such part of the Contract as to which there has been a delay or a failure to properly perform. In the event of termination in whole or in part, **GPA** reserves the right to procure fuel oil supply from another source or a second contractor immediately upon issuance of such notification or whenever it deems appropriate.

SECTION 28. FAILUE TO PAY

Failure to pay an invoice and any late penalties, if any, within a period of THIRTY (30) days from the due date of such invoice, shall be a default and should such a default not be cured within THIRTY (30) days of default, **CONTRACTOR** may, at its option, do either of the following:

(a) Terminate the Contract forthwith or forthwith suspend delivery under the contract until further notice, on notifying GPA orally or by notice in writing; or

(b) Continue to supply fuel oil and bring suit in the Superior Court of Guam for amounts past due and as they become due.

SECTION 29. FAILURE TO COMPLY WITH LAWS

In the event the **CONTRACTOR** or any person or entity identified as principals in the offer submitted in connection with the bid shall be found by any court or administrative agency having jurisdiction over the subject matter of the violation, to have violated any law, rule or regulation in connection with **CONTRACTOR** 's performance of the obligations under the Contract in any

manner whatsoever directly or indirectly which violation shall constitute a breach of the peace, or an act involving moral turpitude or otherwise constitute endangerment of the health, safety and welfare of the citizens of the Territory of Guam, **GPA** may at its sole discretion terminate this Contract upon THRITY (30) days written notice.

SECTION 30. PENALTY CLAUSES

(a) **Late Deliveries**

(1) In case of five (5) delayed deliveries beyond the last day of the stipulated delivery date range on the discharge port, after the stipulated delivery date as set out in the nomination procedure, **GPA** reserves the right to terminate the present contract by his written notification, without obligation to indemnify the **CONTRACTOR**.

(2) **CONTRACTOR** accepts to pay **GPA** for every delayed delivery beyond the last day of the five (5) days stipulated delivery date range as set out in the nomination procedure, a penalty equivalent to:

- $0.30/MT multiplied by the Bill of Lading quantity for every day of delay if delivery is less than three days late.
- $0.60/MT multiplied by the Bill of Lading quantity for every day of delay if delivery is more than three days late.

In case of delay due to **GPA**'s fault or Force Majeure, the time of delivery shall be correspondingly extended, the **CONTRACTOR** waiving any respective claim against **GPA**.

(b) **Quality Outside Contractual Specifications**

In the event that any fuel, according to the analysis results of either the composite vessel sample or the "Umpire" sample has one or more quality characteristics outside the contractual specifications set in Section 10, then in addition to any other rights or remedies available to the **GPA** under this contract a penalty will be imposed according to the following:

(1) If the Asphaltenes content exceeds the specifications limits then for every ONE-HALF percent (0.5%) or part thereof will be a price reduction of zero point one percent (0.10%) on the price per metric ton.

(2) If the Vanadium content exceeds the specifications limits then for every 10 part per million (10 ppm) or part thereof there will be a price reduction of zero point one per cent (0.10%) on the price per metric ton.

(3) If the Sodium content exceeds the specifications limits then for every 10 part per million (10 ppm) or part thereof there will be a price reduction of zero point one per cent (0.10%) on the price per metric ton.

(4) If the Al+Si content exceeds the specification limit then for every one part per million (1 ppm) there will be a price reduction of zero point zero two per cent (0.02 %) on the price per metric ton.

(5) If the viscosity exceeds the specification limit then for every 10 cSt or part thereof, there will be a price reduction of zero point one per cent (0.10%) on the price per metric ton.

(6) If API exceeds the specification limit then for every zero point one degree (0.10^{o}) thereof, there will be a price reduction of zero point zero two per cent (0.02 %) on the price per metric ton.

(7) If the heating value is less than the specification limit, then there will be a price reduction calculated as the ratio of the Out-of- Specification heating value and the Guaranteed Heating Value specified in Section 10, multiplied by the Bill of Lading Quantity.

(8) If the bottom sediment and water exceeds the specification limit, then a price reduction shall be made for all water and non-petroleum sediment in excess of maximums specified in Section 10 multiplied by the Bill of Lading Quantity.

If any other quality parameter (besides the ones stated in) exceeds the specifications' limits, then a penalty will be agreed between **GPA** and **CONTRACTOR**.

It is expressly agreed that the present penalty clauses shall be imposed regardless of whether damages were or not suffered by the **GPA** due to the delay in delivering the fuel and fuel quality outside contractual specifications, and that the **GPA** reserves the right to claim cumulatively both the amount of the penalty clauses and indemnification for every direct damage suffered by him due to **CONTRACTOR** non-contractual actions or omissions. If during the period of this contract the **GPA** is forced to purchase fuel oil in order to maintain the **GPA**'s Power Stations on full commercial load as a result of failure on the part of the **CONTRACTOR** to deliver fuel oil in accordance with the terms of this contract (save for events of Force Majeure) any additional cost borne by the **GPA** over and above the price provided for in this Contract will be liable to be

refunded to the **GPA** either by payment from the **CONTRACTOR** or by way of reduction from his debts to the **CONTRACTOR** or from the Good Performance Bond of the Contract, or partially from both.

GPA reserves the right to retain the amount of the penalty clauses from his debts to the **CONTRACTOR** or from the Good Performance Bond of the Contract, or partially from both.

Notwithstanding the above conditions, **GPA** reserves the right to reject any or all deliveries that fail to conform to the quality requirements specified in Schedule A.

SECTION 31. DEFAULT

"If the PARTY refuses or fails to perform any of their obligations under this agreement, non-breaching PARTY shall notify the PARTY either by e-mail or in writing within thirty (30) days of the breach. If the PARTY does not remedy the breach within thirty (30) days after the date of notification, non-breaching PARTY may by giving notice to the other PARTY terminate the Agreement in whole or suspend taking of delivery under the Contract.

In the event of partial termination or suspension under this provision, GPA reserves the right to procure fuel supply from another source upon notification to CONTRACTOR either by e-mail or in writing. Fuel to be procured shall be at the prevailing market price at the time of partial termination or suspension.

In the event of termination because of GPA's default, the CONTRACTOR shall not be liable for the difference between the contract price and the prevailing market price at the time of termination.

SECTION 32. ATTORNEYS FEES

Should a default by either party result in litigation, the successful party shall be entitled to recover its reasonable attorney's fees from the defaulting party.

SECTION 33. TERMINATION FOR CONVENIENCE

(a) **Termination**.

The delivery of fuel oil supply under this Contract may be terminated by **GPA** in accordance with this clause in whole, or from time to time in part.

Any such termination shall be effected by delivery to the **CONTRACTOR** of a written Notice of Termination specifying the extent to which supply of fuel oil under the Contract is terminated.

In the case of termination of this Contract, GPA shall reimburse the CONTRACTOR of all the expenses related to the period of the Performance Bond that were not used.

(b) **CONTRACTOR's Obligations.**

The **CONTRACTOR** shall incur no further obligations in connection with the terminated fuel oil supply delivery and on the date set in the Notice of Termination the **CONTRACTOR** will stop delivery of fuel oil to the extent specified. The **CONTRACTOR** shall also terminate outstanding orders and Contracts, if any, as they relate to the terminated Contract for fuel oil supply. The **CONTRACTOR** shall settle the liabilities and claims arising out of the termination of orders and Contracts, if any, connected with the terminated fuel oil supply delivery. **GPA** may direct the **CONTRACTOR** to assign the Contractor's right, title and interest under the terminated orders or Contracts to **GPA**. The **CONTRACTOR** must still deliver fuel oil supply not terminated by the Notice of Termination and may incur obligations as are necessary to do so.

(c) **Right to Supplies.**

GPA may require the **CONTRACTOR** to transfer title of fuel oil cargo in transit to Guam at the time of receipt by Contractor of **GPA**'s Notice of Termination.

(d) **Compensation.**

(1) The **CONTRACTOR** shall submit a termination claim specifying the amounts due because of the termination for convenience. If the **CONTRACTOR** fails to file a termination claim within ONE (1) year from effective date of termination, **GPA** may pay the **CONTRACTOR**, if at all, an amount set in accordance with subparagraph (3) of this paragraph.

(2) **GPA** and the **CONTRACTOR** may agree to a settlement provided the **CONTRACTOR** has filed a termination claim supported by cost or pricing data to the extent required by Section 3-403 (Cost or Pricing Data) of the Guam Procurement Regulations and that the settlement does not exceed the total Contract price plus settlement costs reduced by

payments previously made by **GPA**, the proceeds of any sales of supplies and manufacturing materials under the Guam Uniform Commercial Code, and the Contract price of the fuel supply not terminated.

(3) Absent complete agreement under subparagraph (1) of this paragraph, **GPA** may pay the **CONTRACTOR** the following amounts, provided payments agreed to under subparagraph (2) shall not duplicate payments under this subparagraph:

(i) Fuel oil Contract prices for supplies or services accepted under the Contract by **GPA**;

(ii) Costs incurred in preparing to perform and performing the terminated portion of the delivery of fuel oil plus a fair and reasonable profit on such portion of the delivery (such profit shall not include anticipatory profit or consequential damages) less amounts paid or to be paid for accepted fuel oil supplies or services; provided, however, that if it appears that the **CONTRACTOR** would have sustained a loss if the entire Contract would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss;

(iii) Costs of settling and paying claims arising out of the termination of Contracts or orders pursuant to paragraph (2) of this clause. These costs must not include costs paid in accordance with subparagraph (3)(ii) of this paragraph;

(iv) The reasonable settlement costs of the **CONTRACTOR** including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the Contract for the termination and settlement of Contracts thereunder, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to the terminated portion of this Contract. The total sum to be paid the **CONTRACTOR** under this subparagraph shall not exceed the total Contract price plus the reasonable settlement costs of the **CONTRACTOR** reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and manufacturing materials under the Uniform Commercial Code.

SECTION 34. REMEDIES CUMMULATIVE

Each and all remedies available to a party in the event of the other party's failure to comply timely with any or all the terms and conditions of the Contract may be exercised independently or in combination (such rights being nonexclusive one with the other). The remedies set forth in the Contract are in addition to, and not in lieu of, all of the remedies available at law or in equity.

SECTION 35. COVENANT AGAINST CONTIGENT FEES

The **CONTRACTOR** warrants no person or selling agency has been employed or retained to solicit or secure the Contract upon agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agency maintained by the **CONTRACTOR** for the purpose of securing business. For breach or violation of this warranty, **GPA** shall have the right to annul the Contract without liability or, in its discretion, to deduct from the Contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

SECTION 36. NOTICE

Except as otherwise expressly specified herein, any notice to be given hereunder by either party to the other shall be deemed sufficiently given if in writing and enclosed in an envelope properly stamped and addressed to the party at the address set forth in this section, and deposited in the United States mail or by International courier. Either party may change its address by giving FIFTEEN (15) days prior written notice to the other party. Such address until further notice shall be:

GPA: General Manager
Guam Power Authority
Post Office Box 2977
Hagatna, Guam 96932-2977
TELEFAX: (671) 648-9225

CONTRACTOR: _____
_____
_____

_____

_____

SECTION 37. INTEREST OF OTHER PARTIES

CONTRACTOR warrants that no member of the governing body of **GPA**, and no other officer, employee, or agent of **GPA** who exercises any functions or responsibilities in connection with the work to which the Contract pertains, and no employee, agent or member of the Guam Legislature or other public official of the Government of Guam, has or shall have any personal economic or financial interest, direct or indirect, in the Contract.

SECTION 38. ASSIGNMENT

CONTRACTOR declares that the only persons or parties interested in the Contract as principals are named herein and that the Contract is made without participation by or benefit to any other person, firm or corporation, except as specified herein.

CONTRACTOR agrees that it will not assign to nor permit Contract participation in whole or in part by any other person, firm or corporation not specified as a principal without the prior written consent of **GPA**. If such assignment is permitted, **CONTRACTOR** will guarantee the performance of all terms and obligations of the Contract, and such assignment shall not alter **CONTRACTOR**'s obligations hereunder. No assignee of **CONTRACTOR** shall have the right to assign the Contract without **GPA**'s consent which may be given or refused at **GPA**'s absolute discretion.

CONTRACTOR and GPA shall not transfer or assign its rights and obligations under this contract, in whole or in part, without the prior written consent of the other party. Notwithstanding the foregoing, the CONTRACTOR may transfer or assign its rights and obligations under this contract, in whole or in part, to a US based affiliate (as defined hereinafter), with ninety (90) days prior notice to and at the consent of GPA. For the purpose of this contract, “US based affiliate” means any company or legal entity based in the United States of America which (a) controls either directly or indirectly a party hereto, or (b) is controlled directly or indirectly by such party, or (c) is directly or indirectly controlled by a company or entity which directly or indirectly controls such

party. “Control” for purposes of the previous sentence means the ability to direct the management and policies of a company or legal entity, whether through ownership of securities, by contract or otherwise.

SECTION 39. TIME

Time is of the essence in the Contract and in every part hereof.

SECTION 40. AMENDMENT AND WAIVER

Neither the Contract nor any provision hereof may be changed, waived, altered, amended, discharged or terminated orally, but only by an instrument in writing signed by the party against whom enforcement of the change, waiver, alteration, amendment, discharge or termination is sought. For purposes of this Contract, the signature of the Chairman or his designee, of the Consolidated Commission on Utilities is required to bind the **AUTHORITY**.

Failure by either party to object to any failure of performance by the other party of any provision of the Contract shall not constitute a waiver of, or estoppel against, the right of such party to require such performance by the other. Nor shall any such failure to object constitute a waiver or estoppel with respect to any succeeding failure of performance.

SECTION 41. DESCRIPTIVE HEADINGS

The descriptive headings of the several Sections and Subsections in this Invitation are inserted for convenience only and shall not be deemed to affect the meaning or construction of any provision hereof.

SECTION 42. RELATIONSHIP OF PARTIES

Nothing contained in the Contract shall be deemed or construed by the parties or by any third person to create the relationship of principal and agent or of partnership or of joint venture or of any association between **CONTRACTOR** and **GPA**, and no provisions contained in the Contract nor any acts of the parties shall be deemed to create any relationship between **GPA** and **CONTRACTOR**, other than the relationship of buyer and seller.

SECTION 43. NUMBER AND GENDER

In the Contract the masculine gender includes the feminine and neuter, the singular number includes the plural, and the word "person" includes corporation, partnership, firm or association wherever the context so requires.

SECTION 44. SUCCESSORS IN INTEREST

Each and all of the covenants, conditions, and restrictions in the Contract shall inure to the benefit of and shall be binding upon the permitted assignees and successors in interest of either party.

SECTION 45. PARTIAL INVALIDITY

Should any part of the Contract for any reason be declared to be invalid, such decision shall not affect the validity of any remaining portion thereof, which remaining portion shall remain in force and effect as if the Contract had been executed with the invalid portion thereof eliminated, and it is hereby declared the intention of the parties that they would have executed the remaining portion of the Contract without including any such part, parts, or portions which may, for any reason, be hereafter declared invalid.

SECTION 46. EQUAL OPPORTUNITY CLAUSE

During the performance of the Contract the **CONTRACTOR** agrees as follows:

(a) The **CONTRACTOR** will not discriminate against any employee or applicant for employment because of race, color, religion, sex, political opinion or affiliation, or national origin. The **CONTRACTOR** will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, political opinion or affiliation, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demoting, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The **CONTRACTOR** agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the **GPA** setting forth the provisions of this equal opportunity clause.

(b) The **CONTRACTOR** will, in all solicitations or advertisements for employees placed by or on behalf of the **CONTRACTOR**, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, political opinion or affiliation, or national origin.

SECTION 47. PROHIBITION AGAINST GRATUITIES, KICKBACKS, AND FAVORS TO THE TERRITORY

GCA 5 §5630(c) prohibits the CONSULTANT against gratuities, kickbacks, and favors to the Territory.

SECTION 48. RESTRICTION AGAINST CONTRACTOR EMPLOYING CONVICTED SEX OFFENDERS FROM WORKING AT GOVERNMENT OF GUAM VENUES

GCA 5 §5253(b) restricts the CONTRACTOR against employing convicted sex offenders from working at Government of Guam venues. It states:

> (b) All contracts for services to agencies listed herein shall include the following provisions: (1) warranties that no person providing services on behalf of the CONTRACTOR has been convicted of a sex offense under the provisions of Chapter 25 of Title 9 GCA or an offense as defined in Article 2 of Chapter 28, Title 9 GCA, or an offense in another jurisdiction with, at a minimum, the same elements as such offenses, or who is listed on the Sex Offender Registry; and (2) that if any person providing services on behalf of the CONTRACTOR is convicted of a sex offense under the provisions of Chapter 25 of Title 9 GCA or an offense as defined in Article 2 of Chapter 28, Title 9 GCA or an offense in another jurisdiction with, at a minimum, the same elements as such offenses, or who is listed on the Sex Offender Registry, that such person will be immediately removed from working at said agency and that the administrator of said agency be informed of such within twenty-four (24) hours of such conviction.

SECTION 49. CONTRACT BINDING EFFECT

All EXHIBITS attached hereto are incorporated herein by reference in its entirety.

This Contract is binding upon the **CONTRACTOR** only if **CONTRACTOR** has been awarded the Contract in response to the **IFB-GPA-050-20**. This Contract is subject to the approval of **GPA** and the Public Utilities Commission and it shall not be binding on part of **GPA** until such approval is made as evidenced by the signatories below.

For the **Guam Power Authority** (**GPA**):

_____ _____

John M. Benavente, P.E. **DATE**
General Manager

For **(CONTRACTOR)**:

(Company Name and Seal)

_____ _____

CONTRACTOR, Duly Authorized **DATE**
REPRESENTATIVE OF COMPANY

APPROVED AS TO FORM:

_____ _____

Graham Botha, Legal Counsel **DATE**
GUAM POWER AUTHORITY

SCHEDULE A: PRODUCT QUALITY SPECIFICATION

Item	Test Parameter	Unit of Measure	Approved Test Method	Acceptable Alternate Test Methods	Minimum Allowed Value	Maximum Allowed Value	Comments
1	**Sulphur Content**	% mass	ASTM D-4294	ASTM D-2622	N/A	LSFO = 1.19 HSFO = 2.00	
2	**Sulphur Mercaptan**	Ppm (g/kg)	ASTM D-3227	UOP 163		100	
3	**Pour Point**	Deg C	ASTM D-97	N/A	N/A	21	
4	**Flash Point**	Deg C	ASTM D-93	N/A	66	N/A	
5	**Kinematic Viscosity**	cSt at 50 ºC	ASTM D-445	ASTM D-2161		175	
6	**Sediment By Extraction**	% mass	ASTM D-473	N/A	N/A	0.10	
7	**Water By Distillation**	% by Volume	ASTM D-95	N/A	N/A	0.50	
8	**Vanadium Content**	Parts Per Million	ASTM D-5708	a)ASTM D-5184 b)ASTM D-5863 c) IP 501 d) IP 433 e) ISO 14597	N/A	90	
9a	**Silicon Content**	Parts Per Million	ASTM D-5184	a) IP 470 b) IP 377 c) ISO 10487 d) IP 501	N/A	Combined Al + Si Not to exceed 70 ppm. Al not to exceed 30 ppm.	Individual results to be reported separately
9b	**Aluminum Content**	Parts Per Million	ASTM D-5184	a) IP 470 b) IP 377 c) ISO 10487 d) IP 501	N/A		
10	**Guaranteed Gross Heating Value (HHV)**	Million BTU Per US Barrel	ASTM D-240	N/A	6.10	N/A	
11	**Micro- Carbon Residue**	% mass	ASTM D-4530	ASTM D-5245 ASTM D-189 (see comments)	N/A	13	
12	**Ash**	% mass	ASTM D-482	N/A	N/A	0.10	
13	**Asphaltenes**	% mass	ASTM D-6560	IP 143	N/A	5	
14	**Sodium**	Ppm	ASTM D-5863/B	ASTM D-5708/B IP288 IP 501	N/A	40	
15a	**Total Sediment (Existent)**	% mass	ISO 10307-2	ASTM D-4870 IP 377	N/A	0.10	
15b	**Total Sediment (Potential)**	% mass	ISO 10307-2	ASTM D-4870 IP 377	N/A	0.10	
15c	**Total Sediment (Accelerated)**	% mass	ISO 10307-2	ASTM D-4870 IP 377	N/A	0.10	
16	**Compatibility**	a) Cleanliness ratio b) Compatibility ratio	ASTM D-4740	N/A	N/A	a) 1 b) 1	a) to be reported from load port b) to be determined on arrival Guam unless otherwise notified in the specific instance. See Note.
17	**API Gravity**		ASTM D-287	ASTM D-1298 and conversion	12.1	23.0	
18	**Density @ 15 ºC**	Kg/L	ASTM D-287	ASTM D-1298 ASTM D-4052		0.9870	
19	**Odor**				Report		See Note
20	**Hydrogen Sulfide content (in liquid phase)**	Mg/kg	IP-399	IP-570	N/A	2.0	See Note
21	**Used lubricating Oil (ULO)**				The fuel shall be free of ULO		See note
	Zinc	Mg/kg	IP 501	IP 470		10	
	Phosphorus	Mg/kg	IP 501	IP 500		10	
	Calcium	Mg/kg	IP 501	IP 470		30	

The Authority reserves the right to require the supplier to add and to conduct additional tests as necessary.

Notes on Schedule A:

Item 16: **Compatibility**

CONTRACTOR shall ensure that each shipment of fuel oil is compatible with a representative sample of the previous shipment of the same grade. Testing for compatibility will be conducted at load port according to the test method ASTM D-4740 mutually agreed between both parties and the **CONTRACTOR** will guarantee spot rating of 1.

Item 19: Odour.

The odor shall be typical and characteristic of mild hydrocarbon smell, but must not be unusually strong, repulsive, or obnoxious. The fuel delivered shall be subject to inspection by regulatory agencies such as the United States Environmental Protection Agency (USEPA), or by an independent third party inspector, should issues related to odour arise. In the event that such unusually strong, repulsive, or obnoxious odor is detected and is deemed due to the quality of the product delivered by the Contractor, the product shall be replaced at the Contractor's expenses.

Item 20:

Hydrogen Sulfide in Liquid Phase. Individual samples shall be drawn on the ship compartments. Report shall be based on the mathematical average of the test results.

Hydrogen Sulfide in Vapour. The Contractor or its agent is required to disclose the Hydrogen Sulfide concentration for each cargo compartment on a daily basis upon sailing from the load port. The Contractor shall ensure that the Hydrogen Sulfide concentration in vapour phase on board the vessel does not exceed 80 ppm prior to cargo arrival on Guam. In the event that the Hydrogen Sulfide levels are exceeded on cargo arrival, the vessel will be required to leave the Guam port and de-gas to the required concentration and all costs shall be borne by the Contractor.

Item 21: Used Lubricating Oil.

A fuel shall be considered to be free of ULO if one or more of the elements zinc, phosphorus and calcium are below or at the specified limits.

All three elements shall exceed the same limits before a fuel shall be deemed to contain ULO.

SCHEDULE B: F-1 DOCK PORT AND TERMINAL INFORMATION HANDBOOK



TRISTAR TERMINALS GUAM, INC. TERMINAL & PORT INFORMATION HANDBOOK

Doc. Number	Doc. Description	Prepared By	Reviewed By
TTGI-PLN-PIH-01	Port Information Handbook	John Aflleje (Ops Manager)	KK Vikraman (General Manager)

This handbook is to provide a reference for Vessel Staff, Vessel Operators, Marine staff and Depot Staff for the safe conduct of Operations in the Terminal.

The contents of this handbook should be used with due consideration to Industry standards – IMO Conventions, ISGOTT, OCIMF and IPIECA Guidelines as well as National laws.

TRISTAR TERMINALS GUAM, INC. – TERMINAL AND PORT INFORMATION HANDBOOK 2019

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TRISTAR TERMINALS GUAM, INC. – TERMINAL AND PORT INFORMATION HANDBOOK 2019

REVISION LOG

Revision No.	Date of Revision	Revision Description	Revision Completed By
01	March 2019	New plan layout and various information updates	John Aflleje

LIST OF ABBREVIATIONS

ISGOTT	International Safety Guide for Oil Tankers and Terminals. Reference and basis for all standards and procedures
SIGTTO	Society of International Gas Tanker and Terminal Operators
API	API Gravity, numerical system used on petroleum products corrected to density and relative density.
ASA	American Standards Association
B/L	Bill of Lading. Document issued by the cargo supplier stating the quantity of material delivered to the vessel.
DWT	Dead-weight Tons
GRT	Gross-weight Tons
HHW	High High Water
OCIMF	Oil Companies International Marine Forum
KL	Kiloliters
LOA	Length Overall. Length of a vessel taken over all extremities
LOP	Letter Of Protest
MLLW	Mean Low Low Water
P2P	Product to Product
PIC	Person-in-Charge
SBT	Segregated Ballast Tanks
SDWT	Summer Dead-weight tons
UKC	Under Keel Clearance
UHF/VHF	Ultra High Frequency/Very High Frequency
USCG	United States Coast Guard

SECTION 1: EMERGENCY PROCEDURES

EMERGENCY CONTACTS

Any vessel on charter to Tristar and/or proceeding to any Tristar Terminals is required to give prompt notice of:

- Personnel injury
- Vessel grounding
- Cargo release
- Contamination or loss of cargo
- Collision, Fire or Explosion
- Breach of hull
- Damage to any Terminal
- Situations with the potential to become more serious
- Any request for assistance.

Notification should be per Charterer's instructions or Charter Party to the Charterer & Tristar Terminals Guam, Inc.

TERMINAL EMERGENCY CONTACTS

Contact	Primary/Work	Cell
General Manager / QI - KK Vikraman	565-2333	486-7648
Finance Controller / AQI – Vivek Kannan	565-3319	489-3336
Marine Ops Supervisor – Roland Latag	565-3331	486-9372
Terminal Supervisor / AFSO - John Sioco	565-3308	898-4542
Facility Security Officer – David Quitugua	565-3307	727-3338
Terminal Operations Manager- John Aflleje	565-3306	688-4633
USCG National Response Center	1-800-424-8802	
USCG Emergency After Hours	355-4824	
Harbor Master (PAG)	477-8697/ 5931 ext. 333	
USCG Sector Guam Prevention & Compliance	355-4835/4881	
OSROCo. - John Manibusan	477-1818/5038	688-5038
GFD/GPD/Ambulance – Emergency	911	
GEPA - Environmental Problems	300-4751	

EMERGENCY SIGNALS

INCIDENT ALARM (TERMINAL)

- By verbal advice over the radio or VHF.
- Continuous ringing of shore Siren.

VESSEL EMERGENCY (or reported from Vessel)

- By verbal advice over the radio.
- Tank ships - at least six blasts on the ship's whistle, each of not less than ten seconds duration, supplemented by a continuous sounding of the general alarm system.

BARGES

- By verbal advice over the radio.
- Visual and verbal signaling as appropriate.

TERMINAL EMERGENCY PROCEDURES

In case of any emergency, transfer operations are to be ceased immediately and equipment secured as appropriate.
Necessary notifications are to be made.
Emergency Response is to be mounted by the vessel per their procedures and by Terminal per their Emergency and Facility Response.

In all Cases – Ensure that Personnel Safety is the first priority

Brief reference of emergency response details from the Dock Operations Manual -

OIL SPILLS

- Cease Operations. Close all valves. Eliminate source of spill.
- Drain lines into containment systems. Stop any spill to water.
- Make external and internal notifications.
- Respond per Spill & Facility Response Plans for Marine Operations Spills/Leaks.

FIRE/ EXPLOSION

- Shut down transfer operations.
- Sound fire alarm; notify Fire Dept. Follow Emergency Response Plan for Fire/Explosion.
- Make external and internal notifications.
- Eliminate fire source if possible.

PERSONNEL INJURY

- Cease transfer Operations
- If prudent – Remove injured party to safe location. Give First aid.
- Make external and internal notifications. Follow Emergency Response Plan for Medical Emergency.
- Get medical assistance to injured person(s).

SEVERE WEATHER CONDITIONS

- Terminate transfer operations.
- Secure transfer valves and disconnect hoses.

- Comply with Weather Limitations notice.

TERRORIST ACTIVITY

- Terminate Transfer Operations.
- Secure the area.
- Follow Facility Response Plan.
- Make external and internal notifications.

SECTION 2: TERMINAL INFORMATION

LOCATION

The Tristar Guam waterfront facility (Wharf Foxtrot–1/ F-1 Dock) is located in Apra Harbor in the US Territory of Guam at Lat. 13° 27.5N Long 144°39.5E.

Apra Harbor is situated midway along the W coast of Guam and is the main berthing facility on the island, consists of a commercial harbor, a naval complex, and a repair facility. The harbor is comprised of two main areas; **Apra Inner Harbor** and Apra Outer Harbor. **Apra Outer Harbor** is the principal commercial port for the island. US Chart 81048 covers the area.

DESCRIPTION

The approaches to the harbor are free and deep, as is the channel between the breakwaters.

The facility is a T Head Jetty consisting of a concrete platform and with breasting and mooring dolphins that have 2 units of single 100 ton quick release hooks and 4 units of double 100 ton quick release hooks.

All operations in Apra Outer Harbor are under the jurisdiction of The Port Authority of Guam and The United States Coast Guard. Prior to entry all vessels must establish communications with Guam Port Control Harbormaster's office on VHF-FM channels 12, 13 or 16.

Vessels entering, leaving or shifting berth are required to give a minimum of 24 hours' notice to The Port Authority of Guam Harbor Master and US Coast Guard Captain of the Port. Failure to give such notice is a basis for denying entry. No vessel shall enter or leave the harbor without radio clearance from the Harbor Master. Vessels must be ISPS/MTSA compliant.

CARGO TRANSFER FACILITIES & MAXIMUM RECEIVING RATES

Product	Discharging Rate	Maximum Pressure
Mogas	7,000 barrels	100 psi
Gas Oil	7,000 barrels	100 psi
Jet A1	14,000 barrels	100 psi
Residual Fuel Oil	14,000 barrels	100 psi

Receiving rates are calculated at 7m/sec maximum flow rate on one pipeline to one receiving tank. During start of discharge and product changeover, receiving rates will be much lower to comply with the maximum allowable flow rate during initial pumping of 1m/sec. Actual receiving pressures will be agreed upon in the Ship/Shore Safety and Operational Agreement, which will be signed by the Ship's Officer and Shore Officer before cargo operations.

Cargo Line	Product	Manifold/Flange Specification	Hose String
A - line	Jet A1	2 X 150psi ANSI	2ea. - 3 X 10" X 35'
B - line	Residual Fuel Oil	2 X 150psi ANSI	2ea. - 3 X 10" X 35'
C - line	Mogas 91 and 95	1 X 150psi ANSI	1ea. - 3 X 10" X 35'
D - line	Ultra Low Sulfur Diesel	1 X 150psi ANSI	1ea. - 3 X 10" X 35'
LPG - line	Liquefied Petroleum Gas – Liquid	1 X 300psi ANSI	1ea. – 2 X 6" X 50'
LPG - line	Liquefied Petroleum Gas – Vapor	1 X 300psi ANSI	1ea. – 2 X 4" X 50'

PORT & BERTH RESTRICTIONS/ MAXIMUM & MINIMUM VESSEL CRITERIA

The berthing facility has a maximum depth of 15.8 meters at MLLW. A minimum Under Keel Clearance (UKC) in the channel of 1.0 m is required.

- Maximum LOA - 259 meters
- Minimum LOA – 100 meters
- Maximum breadth - 45 meters
- Maximum Vessel draft alongside - 16.4592 meters
- Maximum Displacement - 108,840 metric tons
- Maximum Freeboard - 23 meters

UNDERKEEL CLEARANCE

Vessels are required to maintain a minimum Under Keel Clearance of 1m at all times

ANCHORAGES & WAITING AREAS

Anchorages have been designated within Apra Outer Harbor. The Port of Guam Authority will assign the vessel's designated anchorage and waiting area.

PILOTAGE/ MOORING BOATS / TUGS

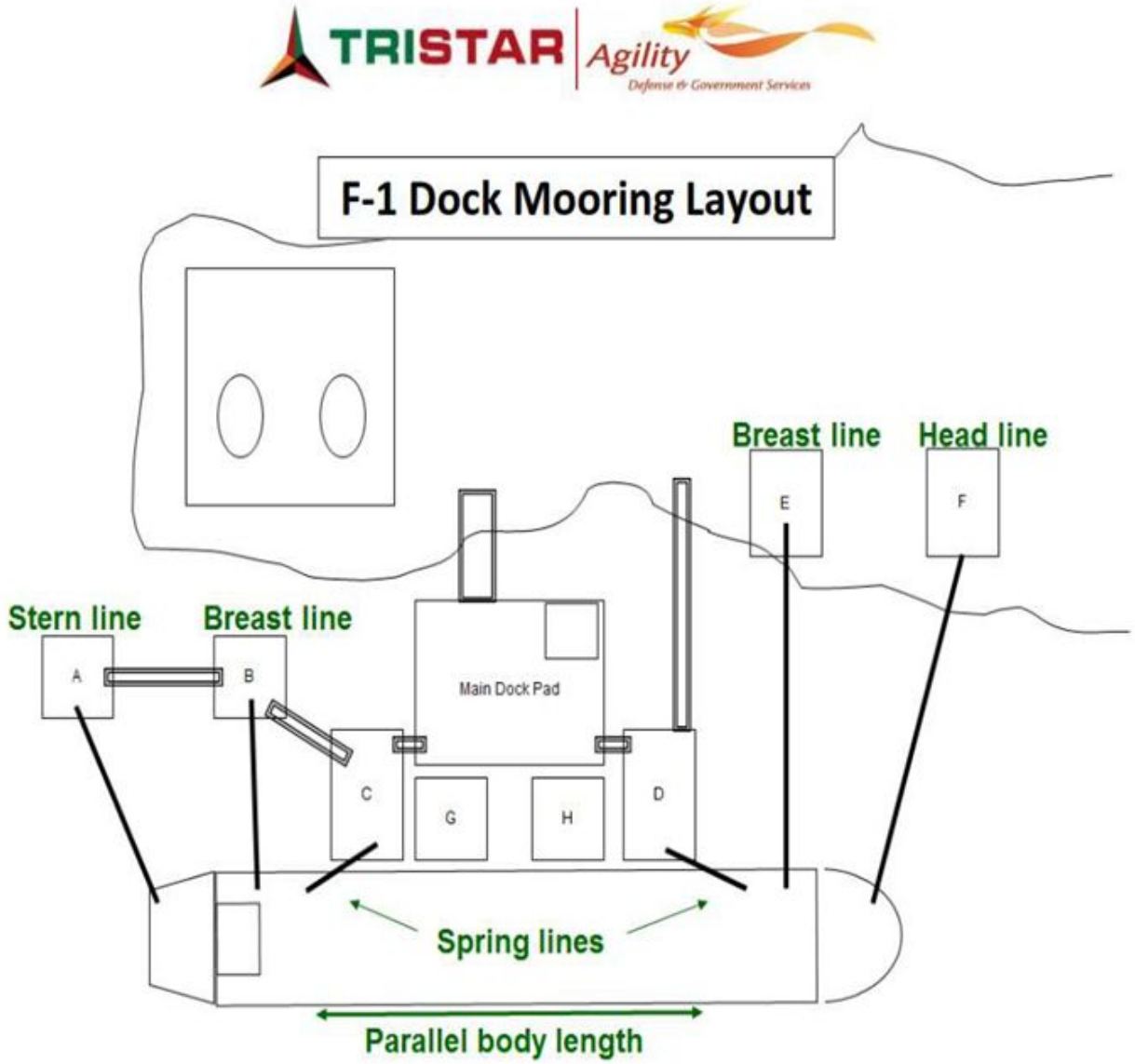
Pilotage is compulsory for vessels over 500 gross tons and all vessels entering the port for the first time and after daylight hours. Pilot services are available on a 24-hour basis for Apra Harbor. Pilots are required to board inbound vessels and leave outbound vessels at Alpha Hotel Pilot Station
Tugs of up to 3600 HP operate within Arpa Harbor. A Minimum of 2 tugs is required to be in attendance when berthing and un-berthing.
Arrangements may be made through the vessel agents.

MINIMUM MOORING ARRANGEMENTS

The Terminal requires the following minimum moorings:

A. 2ea. Stern Lines
B. 2ea. Aft Breast Lines
C. 2ea. Aft Spring Lines
D. 2ea. Forward Spring Lines
E. 2ea. Forward Breast Lines
F. 2ea. Bow/Head Lines

MINIMUM MOORING DIAGRAM:



COMMUNICATIONS PRIOR ARRIVAL

ETA's are to be advised regularly through Tristar Terminals Guam Inc. directly to the Terminal. The following communications are to be sent at the earliest opportunity.

INFORMATION REQUIRED FROM VESSELS PRIOR TO ARRIVAL

A) Vessel's Name and Port of Registry
B) Estimated time of arrival
C) Arrival draft and Displacement / Departure draft & Displacement.
D) Amount & Stowage Plan and preferred order of all cargo to be loaded or discharged.
E) Loading- Amount of freewater in cargo/ Discharging – Tank preparation & Last 3 cargoes.
F) Maximum freeboard measured from manifold to water surface during discharge.
G) Confirm maximum draft / max freeboard/ arrival displacement will not exceed;
   - Max draft 16.4592 meters
   - Maximum Freeboard 23 meters
   - Displacement 108,840 metric tons
H) Best estimate of discharge time and discharge rate basis average rates given.
I) Manifolds numbered from forward to be used for discharge.
J) Confirm all vessels Cargo, Navigational, Mooring equipment and Engines are in good working order. Give details if not.
K) Confirm vessel has received this Terminal Handbook and complies with all requirements noted.

The Terminal should note this exchange of information and confirm with Ship Officer/ PIC, upon boarding the vessel. Copies should be retained.

SECTION 3: ENVIRONMENTAL CONDITIONS

TIDES AND CURRENTS

The mean tidal range at Apra Harbor is 1.6 feet, while the spring range is 2.3 feet. Generally tidal currents in the harbor have little velocity. See Tide Tables for daily predictions at web site below.
http://www.prh.noaa.gov/guam/public.php
The prevalent set of the current at the harbor entrance is commonly S or SW regardless of the tidal currents, but a set to the N or NE may be experienced, especially during the summer months. The flood current in the harbor entrance sets N to NNE at a maximum rate of 1.5 knots. The ebb current sometimes attains a maximum rate of 3 knots.

CLIMATIC AND WEATHER CONDITIONS

Winds and seas in the vicinity of Guam are mostly easterly due to the NE Trades. Occasional westerly winds are experienced in the summer months. The rainy season in Guam is from July to November. Typhoons frequently pass in the vicinity of the Island during the summer months. Most pass off the island, however their associated heavy winds and rain affect the island.

WEATHER RESTRICTIONS

- **20 Kts (25 mph)** - If winds are constantly above this speed, vessels are requested to have additional deck watch in attendance.
- **25 Kts (30 mph)** - If sustained winds are experienced at this speed, all product movements are to be suspended.
- **30 Kts (35 mph)** - If sustained or higher winds are experienced or expected, dock hoses shall be drained and disconnected. Once hoses have been disconnected, the vessel shall prepare to vacate the berth and/or have tugs standing by to assist.

The Terminal and Master may allow a deviation from the above limits based on mutual agreement and subject to an assessment of current and forecast weather on the ability to conduct safe docking operations. (E.g. onshore wind blowing vessel onto the berth, etc.)

WEATHER PRECAUTIONS

In order to minimize the danger posed by severe weather conditions, the following precautions should be observed:

No berthing is allowed during electrical storm. For vessels already alongside, cargo operations must be stopped and if necessary, preparations made to un-berth.

Final responsibility for the safety of the ship and her cargo rests with the vessel Master and in case of emergency such as severe weather conditions; none of these regulations should prevent the master or responsible ship officer from taking any action he deems necessary.

SECTION 4: FACILITIES AT BERTH

SLOP/ DIRTY BALLAST / OILY WASTE RECEPTION

There are no facilities for dealing with Slop / Dirty Ballast / Oil Waste while at the berth. However, facilities are available in the port via approved contractors and by arrangement through agents.

AVAILABILITY OF BUNKERS

At this time bunkers are available through F-1 for ULSD and RFO.

AVAILABILITY OF FRESH WATER

Fresh water is available at this time.

GARBAGE RECEPTION

Approved garbage reception facilities are available in the port via approved contractors and by arrangement through agents.

ARRANGEMENTS FOR RECEIVING STORES

The handling of vessel's store and general cargo is not permitted during cargo transfer operations.

Store barges are not allowed to come alongside the vessel to deliver stores when alongside at the Terminal. Hand carried stores may be taken onboard subject to the usual security checks.

TANK CLEANING, PURGING AND GAS FREEING

Tank cleaning/washing and gas freeing operations are not permitted during vessel's stay alongside.

SECTION 5: TERMINAL ACCESS AND VISITOR SECURITY

PERSONNEL ACCESS

For entry and exit from the berthing facility, crewmembers may pass through the facility gate. However, the vessel master or agent must submit a crew list to the Facility Security Officer before any vessel crew or visitors is allowed to access through the Terminal.

Crewmembers shall traverse only through authorized areas and proceed directly to the facility gate when exiting. When returning to the vessel, crewmembers must traverse the same route and proceed directly to the vessel.

At no time will a crewmember or visitor be allowed to loiter within the facility. The Terminal reserves the right to refuse entry for any personnel transiting the Terminals.

UNAUTHORIZED OR INTOXICATED PERSONS

Unauthorized, disorderly or intoxicated persons shall not be allowed on Terminal grounds or on any vessel(s) alongside.

Visitors will only be allowed on board a vessel with the knowledge and approval of the Vessel Master and Terminal Facility Security Officer. Visitors passing through the facility to visit a vessel while at berth are required to comply with all Terminal regulations contained within this booklet.

SECTION 6: TRISTAR TERMINAL REGULATIONS

GENERAL SAFETY AND EMERGENCY

Except as otherwise provided, these regulations apply to all tanker vessels hereinafter referred to as **"vessel"**, calling at Foxtrot One (F-1) Dock.

The Terminal receives vessels alongside on the understanding that operations will be conducted safely and expeditiously and that berth will be vacated as soon as practicable after operations have been completed.

SAFETY/ ROLES AND RESPONSIBILITIES

Responsibility for the safe conduct of operations whilst a vessel at this Terminal rests jointly with the Master of the ship (Ship Officer) and a responsible Terminal representative (Shore Officer).

In an emergency, none of these regulations should prevent the master or responsible ship officer from taking measures that he deems are necessary for the safety of the vessel and crew.

CONDITIONS OF VESSEL ACCEPTANCE

Vessels are accepted at a Terminal on the understanding that operations will be conducted in accordance with all applicable legislation, together with practices contained in relevant Codes of Practice, in particular, the guidance contained within the latest edition of the International Safety Guide for Tankers and Terminals (ISGOTT).

Vessels found deficient on arrival may be subject to refusal until the deficiencies have been satisfactorily rectified.

EMERGENCY ACTIONS

On arrival, discuss with the shore officer actions to be taken in the event of an emergency. This shall include procedures to be followed and means of communications as stated in the handbook.

MINIMUM NUMBER OF CREW

There must be sufficient qualified crewmembers onboard at all times for vessel operations and/or berth evacuation in the event of an emergency.

SAFETY EQUIPMENT

Vessels must have all Life Saving and Fire Fighting equipment in good working condition and available for immediate use. For tankers/vessels, Fire Fighting equipment will include the following:

a) Two fire hoses, fitted with adjustable nozzles, uncoiled, connected to the tanker's fire main and laid out on the main deck near the cargo manifold in use.
b) Two portable fire extinguishers of foam or dry chemical type, placed near the vessel's manifold.
c) An International Shore Fire Connection clearly marked and available for use.
d) The vessel lifeboat shall be rigged, ready for immediate as means of escape in an emergency.
e) A pilot ladder or accommodation ladder shall be rigged on the seaside of the ship ready for immediate lowering as means of escape in an emergency.

Barges need to comply with all of above, as applicable.

Vessels staff must acquaint themselves with the safety arrangement ashore, particularly with the following:

a) Location of Fire Alarm/s
b) Location of Fire Extinguishers
c) Location of Cargo Emergency Stops and Shut down systems.

VESSEL STATE OF READINESS

While alongside a Terminal, a tank vessel must at all times be able to move under its own power at short notice. If, for any reason, the vessel cannot comply with this requirement, the Terminal representative must be advised immediately.

For tank barges, the tug assigned to a tank barge or a number of tank barges shall standby in the immediate vicinity of the barge(s) and shall maintain engines ready for maneuvering at short notice.

EMERGENCY SHUT DOWN

For LPG vessels, the vessel shall provide the shore with ESD control buttons prior to product receiving. These buttons are to be used by the shore representative when an emergency arises and should thus preferably be routed along shore. Upon activation, this emergency control button shall automatically shut down the product compressor and raise the alarm of the ship. The port should also be equipped with ESD and break-away coupling.

VESSEL SUITABILITY

Any vessel calling at the Terminal must be cleared under the applicable Tristar Nomination and Clearance process.

The Terminal receives a vessel alongside with the understanding that the vessel is in all respects ready to discharge cargo safely and efficiently; that the vessel is capable of operating within the physical limitations of the berth stated in this handbook.

SAFE ACCESS

The Ship and Shore officer should ensure that Safe Access is rigged and maintained throughout the vessels stay at the Terminal. The vessel is required to provide a suitable gangway to enable safe access between ship and shore with a Safety net rigged under to span any opening to the water below. Handrails /ropes must be provided on both sides and maintained taut. A person should be on watch in the vicinity of the gangway, especially when persons are embarking or disembarking.
Any alternative arrangements should be used only following a Risk Assessment to ensure Safe Access is always maintained.

ALCOHOL/DRUGS

Masters are advised that operations will cease when the actions of a person or persons involved in operations are not under proper control as a result of the use of alcohol, drugs and/or fatigue.
Access to the berths restricted area for persons similarly suspected of being affected by alcohol/drugs shall be denied.

CRAFT ALONGSIDE

No craft is permitted to come alongside or remain alongside a vessel without the prior permission of the Vessel Master and Terminal representative. Should a craft be given permission to come alongside, personnel on board the craft shall be required to comply with the vessel and terminal safety policies and procedures.

ENTRY INTO ENCLOSED SPACES

As a matter of general policy, any personnel entry into enclosed spaces on a vessel alongside a Terminal is prohibited unless necessary for the safety of the vessel and Terminal.
In certain trades involving Tristar Chemicals, tank entry may be required, for example, to check on tank preparation prior to loading particularly sensitive cargoes. Such tank entry should only be undertaken following recognized enclosed space entry procedures that include the issue of a written permit (ISGOTT/ NIOSH recommendations refer). The Terminal representative must be provided with a copy of the chemist's certificate confirming the suitability of the tank for entry.

MAINTENANCE AND REPAIR WORK

Readiness of vessel's engines and Safety equipment is to be maintained at all times when at the berth. Major repair work whether planned or unplanned is not permitted while at berth. Other repairs may be permitted on a case-by-case basis and may only commence once approval has been obtained from the Terminal representative.
Any repair involving hot work and welding shall not take place without the prior written permission of the Terminal representative (& USCG if applicable).

PROTECTIVE CLOTHING AND EQUIPMENT

Vessel personnel on board must adhere to the following minimum dress code while alongside a Tristar Terminal:

- Long pants
- Suitable shoes, preferably safety shoes or boots with steel toe cap (sandals or similar footwear is prohibited)
- Shirt with sleeves

- Approved life jacket or buoyant work vest when working aboard a barge without safety rails, or when working outboard of any safety rails.

Personnel engaged in vessel operations are actively encouraged to utilize PPE to the fullest during transfer, hose handling and mooring/unmooring operations. This includes the wearing of hard hats and safety goggles.

Attention must be given to the need for additional PPE when handling certain hazardous cargoes. In such circumstances, splash protective eye wear, face masks, chemical suits, rubber boots and gloves, respirators or fresh air breathing apparatus should be considered for use, as appropriate.

HOT WORK

No hot work permitted while vessel is alongside unless otherwise prior written permission is issued by the Terminal representative (& USCG if applicable).

The use of power-driven or manually operated devices, capable of producing sparks, is prohibited in the cargo area, cargo tanks, fuel tanks, cargo pump rooms or enclosed spaces immediately above or adjacent to cargo tanks, such as cofferdams. No chipping or other activities likely to produce sparks shall be permitted in these areas.

MOORING

All vessels must be securely moored alongside with sufficient ropes and/or wires in accordance with minimum mooring requirements established by the Terminal.

The effectiveness of the mooring system is dependent upon the sum total of all the mooring lines and therefore moorings must be properly tended throughout the vessel's stay.

The use of "mixed mooring", e.g. synthetic fiber ropes and steel wire ropes in the same service (Breast lines or Springs etc.) is not allowed. Lines in the same service shall be of similar material. In this context, it should be noted that moorings constructed of High Modulus Polyethylene (HMPE) have the same extension characteristics as wire and may be used in the same service.

Mooring lines shall be secured on board using the storage reel or, on vessels not equipped with reels, on bitts. The practice of securing lines on the warping drums of winches is not permitted.

Self-tensioning winches, if fitted, must not be used in the automatic mode.

Nylon pendants fitted to wire moorings shall be of sufficient length and strength and should be properly secured to the wire using a suitable shackle.

Tankers shall rig emergency towing wires of adequate strength secured to the offshore bow and quarter bollards with the towing eye maintained at, or about, the waterline.

All personnel must stay well clear of danger areas when lines are under tension.

GARBAGE

No garbage or refuse of any kind shall be dumped overboard from any vessel moored at a marine Terminal. Vessel-generated domestic garbage should be collected in suitable containers.

In US territories, Medical wastes, hazardous wastes and, for foreign flag vessels, waste regulated by the Animal and Plant Health Inspection Service (APHIS), is to be collected separately.

SMOKING

Smoking is strictly prohibited on vessels alongside except under controlled conditions in specifically designated areas, not having doors or ports that open directly onto the cargo deck. Smoking is prohibited on board any unmanned tank barge while at or in the vicinity of the Terminal.

Smoking in the Terminal is only permitted in designated smoking areas. Designated smoking areas should be conspicuously marked.

SOURCES OF IGNITION

The carrying and use of matches, lighters or other sources of ignition, which includes battery-operated equipment and cameras, is prohibited within the Terminal and on the deck of vessels alongside.

PORTABLE ELECTRICAL EQUIPMENT

All flashlights used shall be of a safe type, which is approved by a competent authority.
The use of portable electrical equipment on wandering leads is prohibited in hazardous zones during cargo transfer operations. The equipment should be disconnected from power and preferably removed from the hazardous zone. Only cellular phones and pagers of an intrinsically safe type are permitted on the deck of vessels while alongside a Terminal.

SECTION 7: CARGO OPERATIONS

PRE TRANSFER CONFERENCE & CHECKLIST

Before operations begin, the persons in charge of the transfer operations for vessel and shore (PIC/ Ship & Shore Officer) must conduct a Pre Transfer conference. As part of this conference they should jointly conduct and inspection and complete the latest edition (Ed. 5) of the ISGOTT Ship/Shore Safety Checklist (and USCG DOI, if applicable).
The shore officer, together with a responsible ship officer, will inspect the ship prior to start of operations, and from time to time thereafter at intervals not exceeding 6 hours, to ensure that the questions on the Ship/Shore Safety Checklist can be answered in the affirmative.
Where corrective action is needed, the Terminal may not agree to operations commencing nor should they have been started, may require them to be ceased. Similarly, if the master considers that safety is endangered by any action on the part of his or Terminal staff, he should request operations be ceased until the situation is rectified.

VESSEL INFORMATION

To facilitate pre transfer formalities, the vessel should have the following documentation readily available on arrival at the Terminal:

- Cargo stowage plan
- Cargo Loading/ Discharge Plan
- Other relevant information should be readily available, such as tank cleaning records, list of previous cargoes carried and vessel experience factor calculations.

DUTY PERSONNEL REQUIREMENTS

During the transfer of oil and/or hazardous material to or from a vessel, both the vessel and the dock are required to have a person-in-charge (PIC/Ship Officer/ Shore Officer). It is required that a PIC is designated for each vessel involved in a transfer. The PIC must be physically on board the vessel during all stages of the transfer operation. If the PIC needs to leave the vessel for any reason, he must be properly relieved by a qualified tanker man or the transfer must be halted.

WATCH SCHEDULE

The watch schedule for vessel personnel should be arranged to minimize fatigue. Working hours should be recorded to ensure that they do not exceed USCG or STCW 95 limits, as applicable.
Watch hand-overs involving the person-in-charge should be scheduled so as not to take place during critical phases of the transfer operation, such as 'topping off' etc.

CARGO PUMPROOMS

Cargo pump rooms should be well ventilated and gas free before arrival at the Terminal. While alongside, the ventilation system shall be kept running and the pump room kept free of cargo vapors. Atmosphere must be checked to ensure safe conditions are maintained.

ACCOMMODATION DOORS AND PORTS

All external doors and portholes shall be closed during operations. Accommodation boundary doors should preferably be fitted with self-closing or other control devices but at no time should they be locked.

ACCOMMODATION VENTILATION AND AIR CONDITIONING

The intakes of central air conditioning or mechanical ventilation systems should be adjusted to prevent the entry of petroleum vapors, if possible, by re-circulation of air within the accommodation spaces.
Window-type air conditioning units that are not certified, as safe for use in the presence of flammable gas or which draw in air from outside the accommodation must be electrically disconnected and any external vents or intakes closed.

COMMUNICATIONS

Clear communications must be agreed and established between the Ship and Shore representatives. Identification of the name of ship should always be included in ship to shore voice communications to avoid misunderstanding. In case of breakdown of communication, cargo operations should be ceased until communication is restored.

MAIN TRANSMITTING AERIALS

Radio transmissions on medium (MF) and high frequency (HF) during transfer operations are potentially dangerous and therefore are strictly prohibited while alongside. The main and reserve transmitting antenna shall be earthed while at the Terminal.

USE OF VHF AND SATCOM WHILE ALONGSIDE

Transmissions on permanently installed VHF/UHF equipment are acceptable provided the power output is reduced to one watt or less. Portable VHF/UHF equipment of an approved type may be used for intra-ship and ship/shore communications.
SATCOM equipment may be used while alongside the Terminal unless specifically prohibited under local regulations.

FLAME SCREENS/ DECK OPENINGS

All deck openings, tank hatches, butterworth plates, sounding pipes, etc., are to be kept closed while alongside the Terminal unless properly fitted with a flame screen.
During cargo transfers, the cargo tank venting system as designed for the particular vessel shall be

used. If necessary, ullage ports or other gauge points may be opened for short periods to enable ullaging or sampling to be undertaken.

SCUPPERS/DRAINS

Before any transfer of cargo, ballast, slops or bunkers takes place, deck scuppers and drain holes in save-alls and drip trays must be suitably plugged. If local regulations permit, accumulated water may be drained off as required and scupper plugs replaced immediately after the water has been run off. Oily water should be transferred to a slop tank or other suitable containment and it is recommended that a portable pump is rigged ready for this purpose. Air-operated pumps, such as Wilden pumps, must be securely grounded to the vessel's structure to prevent the generation of electrostatic charges.

DISCHARGE CONTAINMENT/DRIP PANS

Drip pans, manifold drip trays and other containment shall be kept empty while the vessel is alongside a Terminal. Plugs and valves shall be properly secured.

CARGO TRANSFER RATES

The maximum allowable loading rates shall be established and agreed by PIC's/ Ship & Shore officers during the pre-transfer conference. Rates shall be established for initial loading and will take into account the need for precautions when handling grades defined as static accumulators. Procedures for final topping-off will also be agreed.

CHECKS ON QUANTITIES TRANSFERRED

Preferably every hour, the vessel should provide the Terminal representative with information regarding the amount of cargo that has been discharged or loaded. The Terminal will provide the vessel with comparable shore figures. If the exchange of information reveals a sudden or significant difference between the Terminal and vessel figures on quantities transferred, operations should be stopped until a satisfactory explanation can be found.

MAXIMUM CARGO TANK FILLING LEVEL

The maximum cargo tank filling level shall not exceed any of the following limits:

- Six inches below the deck;
- 98 percent of tank capacity; or
- Three inches below the set point of the overfill control system for a tank barge. In the US this is required by 46 CFR 39.20-9(b) or the liquid overfill alarm for a tank ship required by 46 CFR 39.20-7(d), as applicable, when collecting vapors of crude oil, gasoline blends or benzene.

SUSPENSION OF OPERATION AND REMOVAL OF VESSEL ALONGSIDE

The Terminal reserves the right to suspend operations and/or require removal of vessel alongside the jetties for:

- Infringement, disregard or breach of all applicable regulations.
- Defects in the vessel, and/or her equipment, manning or operations, which in the reasonable opinion of the Terminal representative present a hazard to premises, personnel, environment, or operations.
- Operational performance that fails to utilize satisfactorily the available Terminal facilities and thereby, in the reasonable opinion of the Terminal representative constitutes an unacceptable constraint to Terminal operations.

VESSEL GAUGE POINTS

The appropriate tank opening or fitting to be used for custody transfer measurement should be identified as the "gauge point" and the corresponding reference height (the total height between the rim of the ullage port and the striking plate at the bottom of the tank) shall be clearly marked.

INSULATION MEANS BETWEEN SHIP AND SHORE

To provide effective electrical isolation between the ship and shore, Terminal systems are provided with insulating flanges. The use of bonding cables is not permitted.
With the protection provided by insulating flanges, the use of cathodic protection systems for vessel and jetty structures may be continued while a vessel is alongside.

TRANSFER MANIFOLD AND CONNECTIONS

Every mechanical loading arm or cargo hose must be properly supported to ensure that flange connections are not subjected to undue strain. In all cases, the points of connection between the vessel's manifold and the cargo transfer arm or hose must be completely over the manifold containment or drip tray.
All flanged connections must be fully bolted with a bolt in every hole.
The loading arm or hose must be blanked as soon as it is disconnected from the manifold. Manifold connections not in use are to be kept fully blanked with blind flanges, gaskets and a bolt in every hole.

SAFETY DATA SHEETS (SDS)

An SDS or Cargo Information Card should be available on request from the supplier of the product, i.e. a vessel loading cargo should receive the information from the Terminal and a vessel discharging cargo should, if requested, provide an SDS to the Terminal.

SECTION 8: CARGO TRANSFER PROCEDURES

TANK CLEANING

No tank cleaning operations shall be conducted alongside a Terminal without prior approval of the Terminal representative.

HANDLING STATIC ACCUMULATOR CARGOES

The precautions described in ISGOTT shall be adhered to when loading, ullaging or sampling cargoes defined as static accumulators in non-inerted tanks. This will include controls on initial flow rates and

restrictions on the use of metallic dipping, ullaging or sampling equipment.

INERT GAS OPERATIONS

As a general policy, it is required that if a vessel is equipped with an inert gas plant, it should be used. Inert gas operation should be conducted in accordance with procedures contained in the vessel's IGS manual. The Terminal representative may require random checks to be made to verify the oxygen content in cargo tanks prior to commencement of transfer operations.

SECTION 9: PROCEDURES FOR HAZARDOUS CARGOES

BENZENE

Benzene is a known hazard in Petroleum. The requirements of OSHA and the USCG must be adhered to when handling benzene or hydrocarbon mixtures containing in excess of 0.5% of benzene by volume. Vessel owners, operators and personnel on board must be familiar with all applicable regulations and adhere to them, including the requirements of 46 CFR Part 197.

In the event that airborne concentrations of benzene are likely to exceed accepted exposure limits (PEL of 1 ppm and STEL of 5 ppm) within any area, the area should be designated a 'regulated' area. It is the responsibility of the vessel to establish and clearly mark regulated areas with warning signs and to limit access only to authorized personnel

Ullaging and gauging should be undertaken through vapor lock valves.

An approved respirator must be used at all times when exposure limits are likely to be exceeded, for example, when sampling cargo, making or breaking cargo connections, opening a cargo tank or transferring cargo when tanks are vented at less than 12 feet above the working deck.

Impervious gloves and tight-fitting goggles or a facemask shall be worn during sampling, making or breaking a cargo connection and when gauging a tank through a restricted gauging tube.

HYDROGEN SULFIDE

Hydrogen Sulphide (H2S) may be present in significant concentrations in crude oils and refined products such as naphtha, fuel oil, bitumen's and gas oils and in the vapor spaces of tanks that have previously contained such cargoes. Vessels should be aware of the potential presence of H2S and should adopt appropriate monitoring procedures. Any concentration to exposures above 10 ppm should not be permitted without proper respiratory protection in the form of a supplied-air respirator or self-contained breathing apparatus.

Information on the presence of H2S must be exchanged during the pre-transfer conference. The vessel owner/operator or vessel PIC must inform the facility PIC if the previous cargo contained, or was suspected to contain, H2S.

SCHEDULE C: F-1 DOCK FACILITY- VESSEL VETTING PROCEDURE

March 9, 2019

Vessel Nomination & Clearance Procedures

General Information: All vessels with intentions to berth at the Tristar Terminals Guam, Inc. F-1 Dock Facility is required to meet the following:

Step I: Owners or Charterers to provide vessel's Q88 to Tristar Terminals Guam, Inc. no less than thirty days prior to vessel arrival.

Step II: Must have a current and satisfactory SIRE report.

Step III: Must in all respect comply with United States Coast Guard Regulations and Local Laws.

Step IV: Arrival conditions must be within the following F-1 Dock berthing restrictions:

MAXIMUM LOA	**259 meters**
MINIMUM LOA	**100 meters**
MAXIMUM BREADTH	**45 meters**
MAXIMUM VESSEL DRAFT ALONGSIDE	**16.4592 meters**
MAXIMUM DISPLACEMENT	**108,840 metric tons**
MAXIMUM FREEBOARD	**23 meters**

Step V: Upon receipt of vessel's nomination with all required documents, Tristar Terminals Guam, Inc. shall reply within three business days if the nominated vessel rating is:

1. Cleared – Meaning **"SUITABLE"**
2. Not Clear – Meaning **"UN-SUITABLE"**

Tristar Terminals Guam, Inc.
P.O. Box 8210, Agat, Guam 96928; Rt. 2A Sta. Rita, Industrial Drv. Agat, Guam 96915
Tel. +1 671.565.2300; Fax +1 671.565.3909; www.agilitylogistics.com/www.tristar-transport.com

RFO SUPPLY CONTRACT HISTORY

CONTRACT NO.	CONTRACTOR	CONTRACT PERIOD	REMARKS	PREMIUM FEE COST *				Differential cost LSFO vs HSFO		
				HSFO		LSFO				
				$/bbl	$/MT	$/bbl	$/MT	$/bbl	$/MT	
GPA-050-20	Hyundai Corporation	Sep 01, 2020-Aug31, 2023		$11.272	$71.690	$19.605	$124.690	$8.333	$53.000	43%
GPA-009-18	Mobil Oil Guam, Inc.	Dec 01, 2019-Aug31, 2020	2nd Yr of 2 Years base period	$7.311	$46.500	$13.915	$88.500	$6.604	$42.000	47%
GPA-009-18	Mobil Oil Guam, Inc.	Dec 01, 2018-Nov30, 2019	1st Yr of 2 Years base period	$6.211	$39.500	$11.871	$75.500	$5.660	$36.000	48%
GPA-068-12	Hyundai Corporation	Sep 01, 2015-Aug31, 2018	3 Years Extension Option	$6.555	$41.690	$12.530	$79.690	$5.975	$38.000	48%
GPA-068-12	Hyundai Corporation	Sep 01, 2013-Aug31, 2015	2 Years base period	$6.691	$43.690	$12.816	$83.690	$6.126	$40.000	48%
GPA-001-10	Petrobras (Singapore)	DEC 01, 2012 - DEC 31, 2014	6 Months Extension	$14.211	$92.800	$18.040	$117.800	$3.828	$25.000	21%
GPA-001-10	Petrobras (Singapore)	3 Yrs (Mar 01, 2010- Feb 28, 2013)	2 Yrs Renewable annually	$4.499	$29.828	$6.501	$42.452	$2.002	$12.623	31%
GPA-028-06	BP (Singapore)	Feb 01, 2007- Jan 31, 2010	2 Yrs Extension not exercised	$5.303	$35.000	$8.788	$58.001	$3.485	$23.001	40%
GPA-007-03	BP (Singapore)	AUG 01, 2003 - JUL 31, 2006	AUG 01, 2006 - JAN 31, 2007	$2.432	$16.051	$3.946	$26.044	$1.514	$9.992	38%
GPA-105-98	BP (Singapore)	AUG 01, 1998 - JUL 31, 2001	AUG 01, 2001 - JUL 31, 2003	$1.970	$13.002	$2.990	$19.734	$1.020	$6.732	34%
N/A	Daxin (Singapore)	1996 - 1998		$2.230	$14.718	$3.150	$20.790	$0.920	$6.072	29%
N/A	VITOL (Singapore)	1995 - 1996		$2.646	$17.464	$3.570	$23.562	$0.924	$6.098	26%
N/A	PEDCO	1991 - 1994		$3.070	$20.262	**				
N/A	PEDCO	1986 - 1991		$3.570	$23.562	**				
N/A	PETROMAR	1986 - 1991		$2.230	$14.718	**				
N/A	GORCO	1981 - 1986		N/A		**				

* Per Contract Premium Fee Schedule (In addition to direct fuel cost based on RFO MOPS average)

** LSFO supplied by the USN/PWC under Customer Service Agreement.

GM REPORT

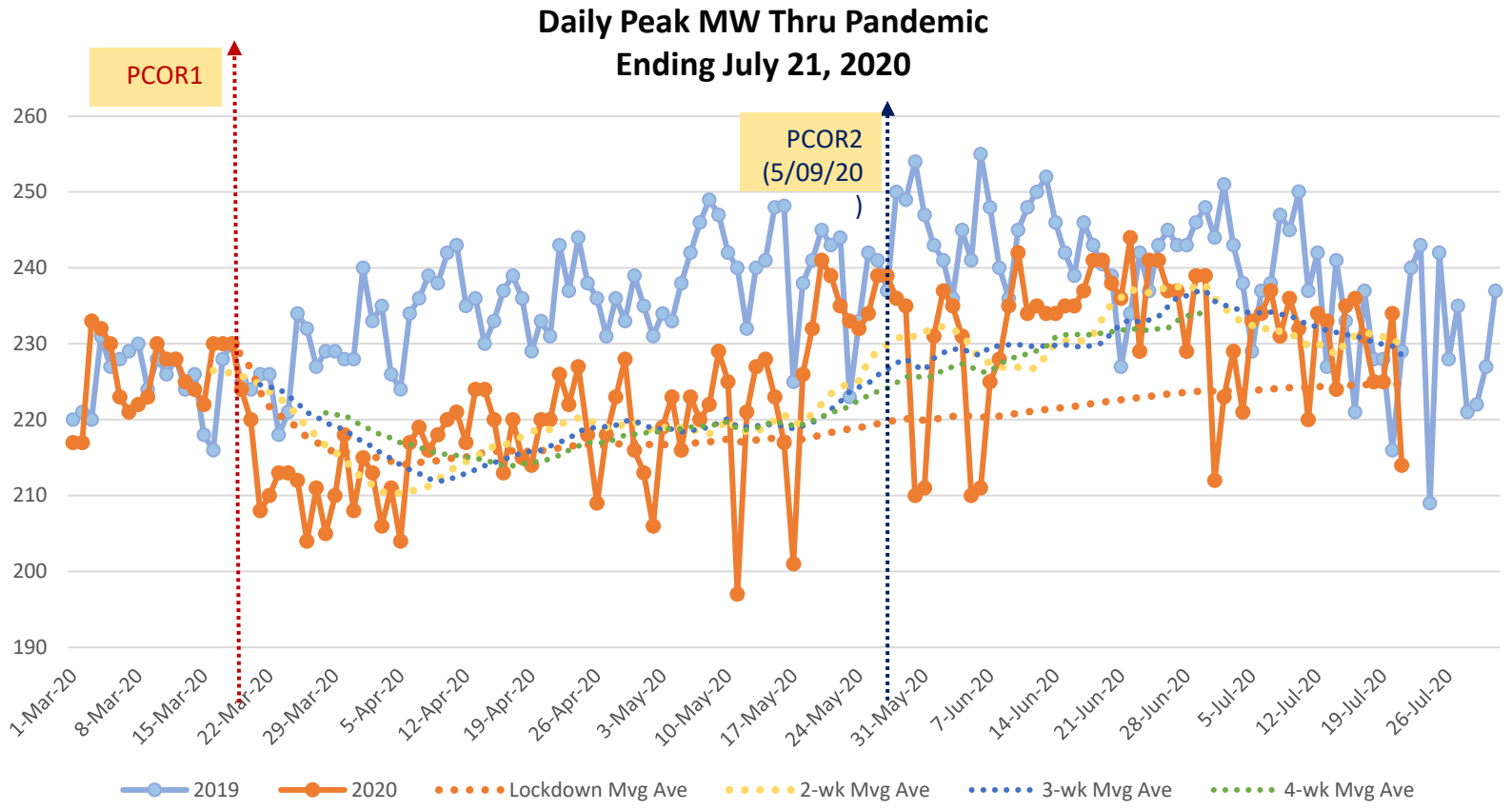
Presentation To:

Consolidated Commission on Utilities

July 23, 2020

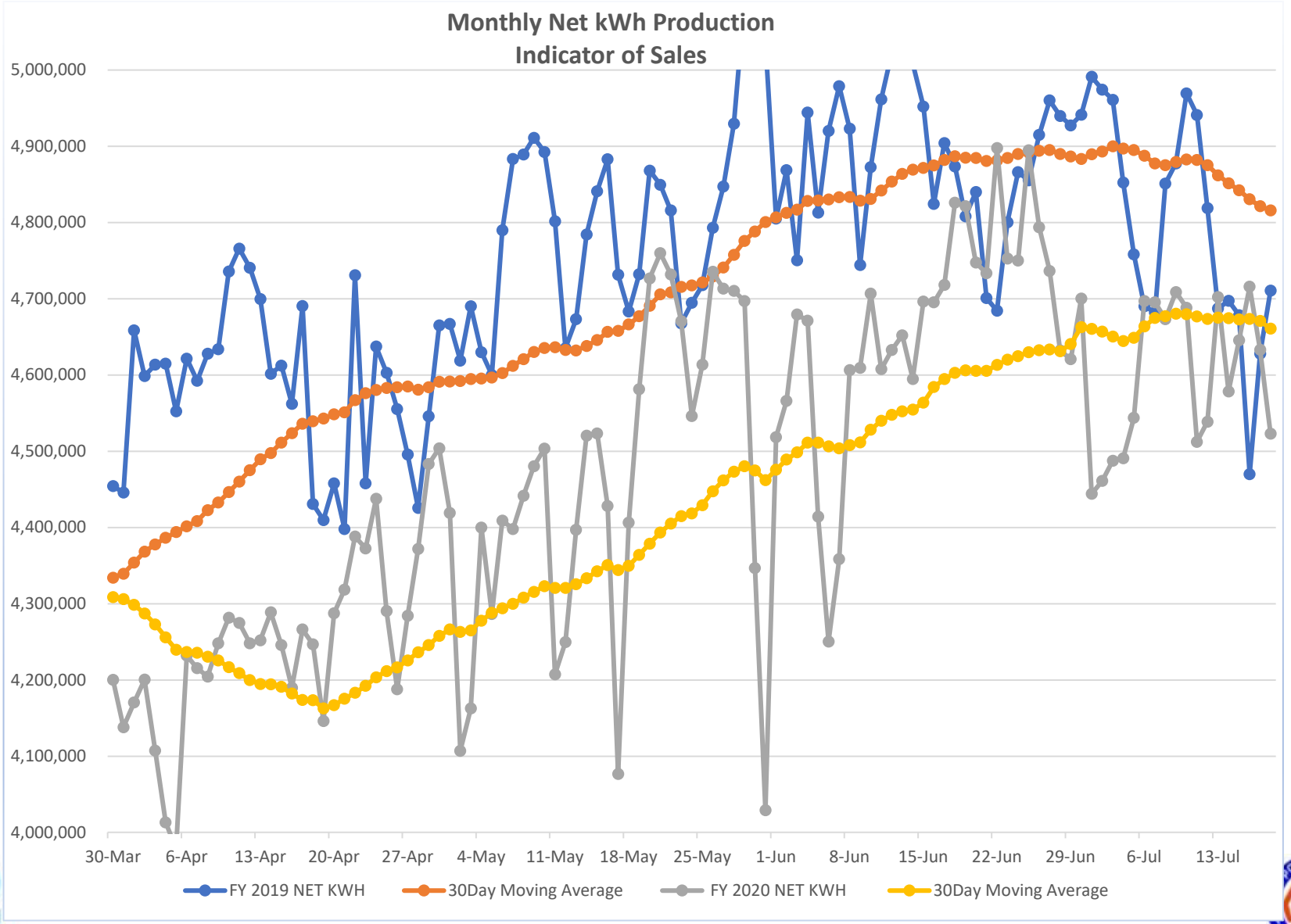
PEAK DEMAND RECOVERING TOWARDS 2019 LEVEL

1. **Generation System:** Reserve Margin forecast for August 2020:
   - Projected Available Capacity: 316 MW
   - Projected Demand: 242 MW
   - Anticipated Reserve Margin: 74 MW
   - MEC 9 to undergo 14 day overhaul

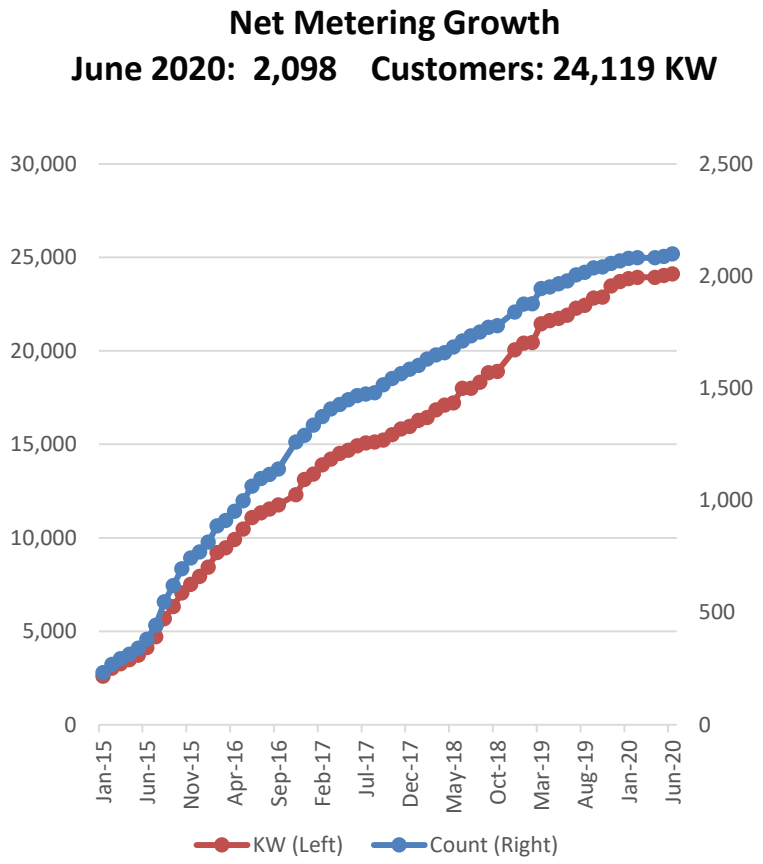


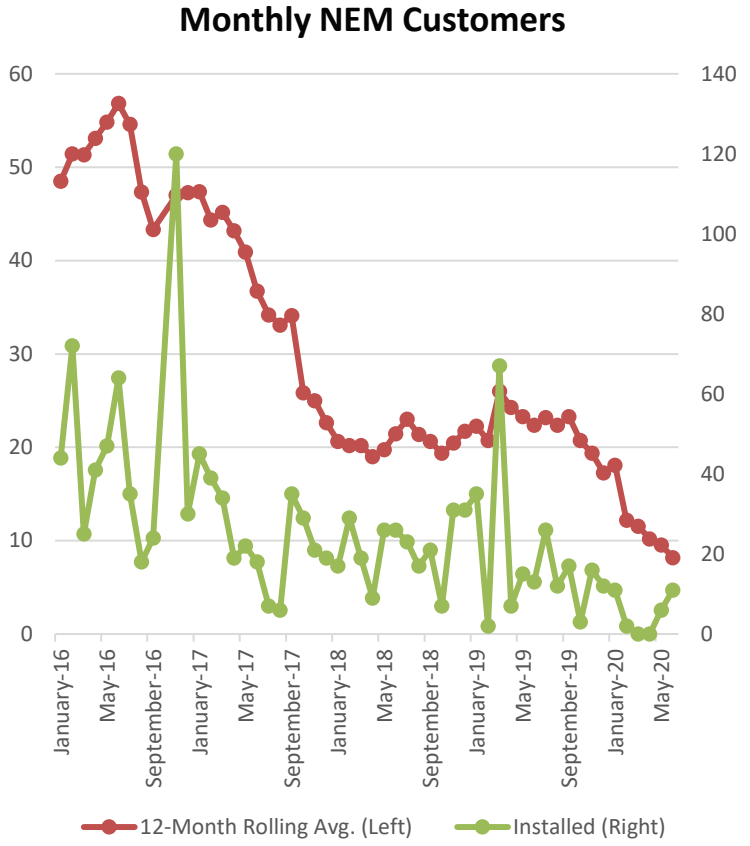
NET ENERGY PRODUCTION RECOVERING

Indicates sales recovering from 8.2% drop to now 3.2%



2. Net Metering (NEM) Growth Thru June 2020:





3. Demand Side Management

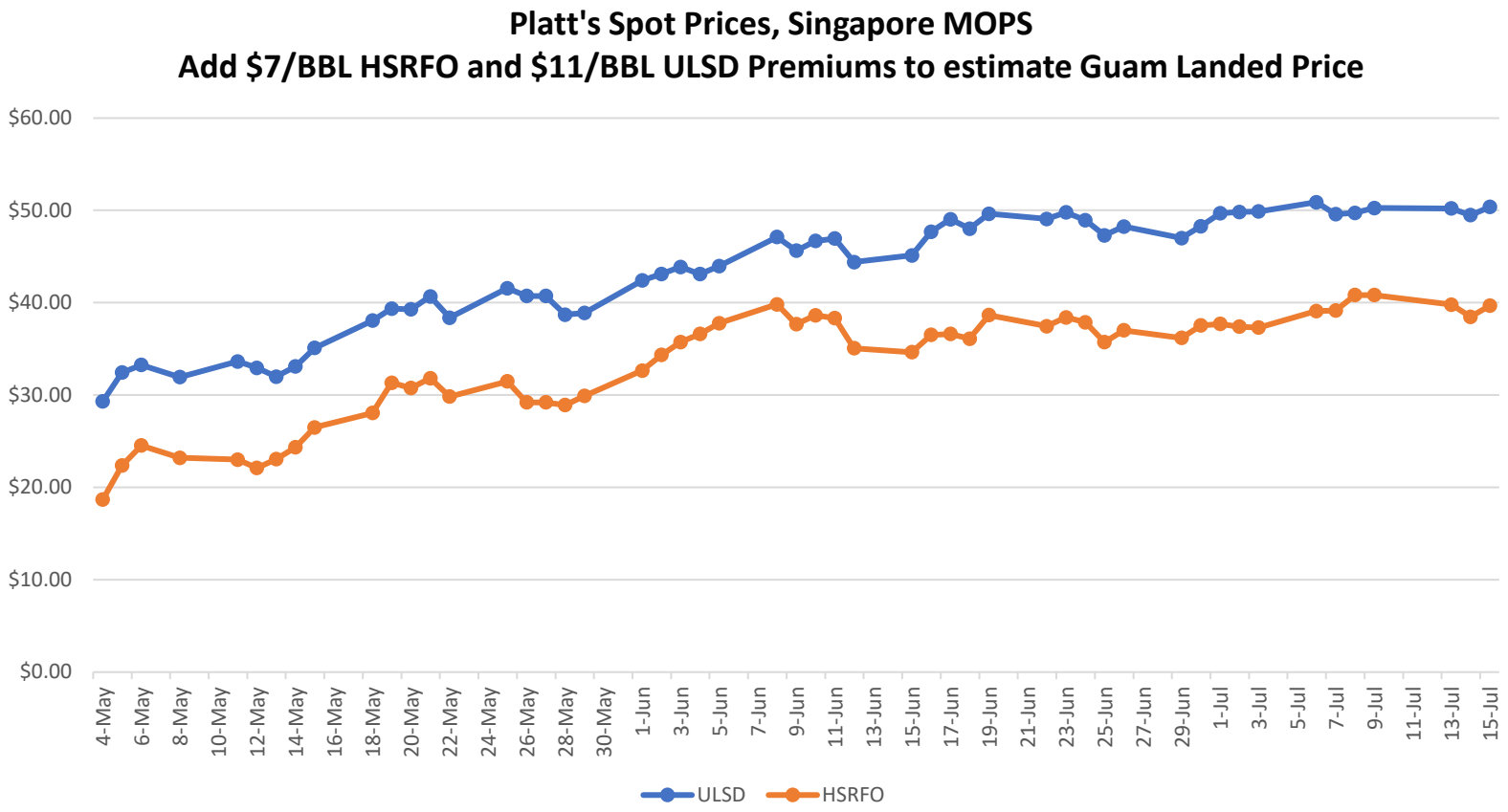
Description	FY16	FY17	FY18	FY19	FY20 As of 6/30/20	Total to Date
Regular/OT Pay	$11,348.80	$22,256.00	$26,121.83	$50,715.19	$20,714.99	$131,156.81
Other Contractual	$28,278.50	$85,550.05	$116,977.50	$3,025.00	-	$233,831.05
Ads & Radio Announcements	-	-	-	$7,500.00	-	$7,500.00
Paid Rebates-Split AC	$154,700.00	$557,275.00	$1,349,825.00	$1,374,650.00	$457,450.00	$3,893,900.00
Paid Rebates-Central AC	$3,400.00	$8,200.00	$4,400.00	$6,500.00	$500.00	$23,000.00
Paid Rebates-Washer/Dryer	$2,800.00	$7,425.00	$57,200.00	$110,800.00	$36,000.00	$214,225.00
Total Expenses	**$200,527.30**	**$680,706.05**	**$1,554,524.33**	**$1,553,190.19**	**$514,664.99**	**$4,503,612.86**
Bank Interest (+)	$1,676.42	$1,722.74	$1,222.29	$730.05	$353.44	$5,704.94
Bank Fees	$155.00	$1,032.06	$1,085.08	$1,247.54	$275.00	$3,794.68

Rebate Paid Monthly :

Month	CY 2019	CY 2020
Jan	$ 175,150	$ 38,650
Feb	$ 104,925	$ 64,250
Mar	$ 137,025	$ 94,675
Apr	$ 99,650	$ -
May	$ 80,950	$ 20,175
June	$ 120,525	$ 147,475
July	$ 162,350	
Aug	$ 191,175	
Sept	$ 124,200	
Oct	$ 131,300	
Nov	$ 14,050	
Dec	$ 114,775	
TOTAL	**$ 1,344,850**	**$ 365,225**

4. Fuel Prices (Per Barrel) Ending July 15, 2020

July Prices has increased greater than 40% since low point in May 2020



General Manager's Report (con't)

5. **PUC Update:**
   - GPA is providing the PUC ALJ with the updated average fuel price data for PUC to set the LEAC for the period August 1, 2020 to January 31, 2021.
   - **PUC approved GPA Docket 20-14**, Petition for Approval of Procurement for Aggreko Performance Management Contract (PMC) on June 25, 2020.
   - The following dockets are on PUC's agenda for their July 30, 2020 meeting:
     - **Docket 20-17**, Petition to Approve Performance Management Contract for Cabras 1 & 2 Generating Plants
     - **Docket 20-17**, Petition to Approve the Contract for Residual Fuel Oil No. 6 for the Baseload Power Generating Plants
     - **Docket 20-13**, LEAC Filing
6. **Phase III Renewables Project Update:**
   - The Phase III Intent to Award to Engie for 40 MW of Solar PV with full supply shifting Energy Storage System has been under appeal and initial OPA scheduling hearings were underway prior to the March shutdown. Formal hearings were held in early July. Closing arguments by the parties is set for July 30, 2020. A decision by the OPA may occur by late August.
7. **Accounts under Payment Plan due to Emergency Pandemic Period:**
   - GPA continues to work with customers on payment plans for accounts in arrears, with over 550 payment plans for post-paid residential accounts and more than 1,000 additional debt recovery arrangements for pre-paid residential accounts. GPA discontinued disconnections in mid-March and has not disconnected anyone for non-payment to this date. We continue to work with customers with disconnection as our last resort.

General Manager's Report (con't)

8. **Phase II 120MW Solar PV:** The scheduled commissioning dates (unadjusted during COVID-19 Pandemic) for the two projects:

Project Description	Adjusted Commercial Operation Date from Original Contract (unadjusted during COVID-19 Pandemic)
KEPCO – LG CNS, 2x30M Solar PV Projects (Mangilao, Guam)	January 21, 2022
HANWHA Energy Corp (HEC), 2x30M Solar PV Projects (Malojloj, Guam)	August 22, 2022

KEPCO has begun construction and this photo is a birds eye view when completed:



General Manager's Report (con't)

KEPCO 120MW Solar Project Site Clearing and Grading On-going:









General Manager's Report (con't)

9. Energy Storage System (ESS) Update:

- The contractor is restarting the ESS Commissioning process in Mid-August. The commissioning process would take two months and both the Talofofo 16MW ESS and the Hagatna 24MW ESS would be commissioned into full service by Mid-October 2020. Attached are the full project schedule for both Talofofo and Hagatna.

10. Ukudu Power Plant:

- Project is experiencing delays due to COVID-19 and other issues such as permitting, environmental impact assessments and historical preservation reviews. I am unable to provide a revised schedule at this time. GPA continues to work with KEPCO and other agencies in order to firm up a revised schedule.

11. Utility Articles:

- Attached for your readings are two articles on GPA. One was published by American Public Power Association titled: "**Riding the storm: Increasing resiliency for extreme weather events**". The second article will be published shortly by ENERGY, OIL & GAS international publication and is titled: **Guam Power Authority: "A powerful transformation".** GPA continues to achieve national and international recognition thru publications such as these.

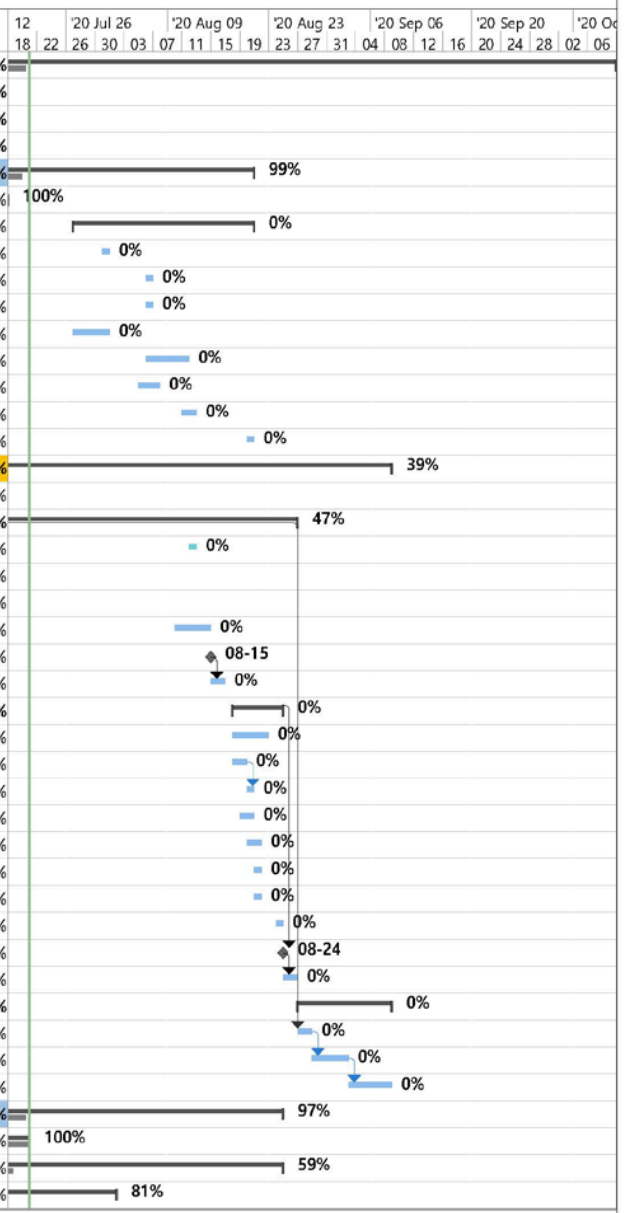
12. Generation KPI's:

- The following graphs show updated information through June 2020:

Energy Storage System (ESS) Full Project Schedule

[GPA ESS Phase 1] Project Schedule 20200720.mpp

ID	WBS	Tasks	Duration	Start	Finish	Actual Start	Actual Finish	% Complete
1	1	**Agana and Talofofo Substation ESS**	**1059 d**	**2017-05-15**	**2020-10-09**	**2017-05-15**	**NA**	**97%**
2	1.1	**Mobilization**	**59 d**	**2017-05-15**	**2017-07-21**	**2017-05-15**	**2017-07-21**	**100%**
10	1.2	**Design**	**604 d**	**2017-05-16**	**2019-05-01**	**2017-05-16**	**2019-05-01**	**100%**
36	1.3	**Equipment Cost, Procurement and Delivery**	**493 d**	**2017-07-10**	**2019-02-15**	**2017-07-10**	**2019-02-15**	**100%**
83	1.4	**On-Site Construction (Talofofo)**	**860 d**	**2017-11-13**	**2020-08-20**	**2017-11-13**	**NA**	**99%**
84	1.4.1	Completed Works for Talofofo	830 d	2017-11-13	2020-07-17	2017-11-13	2020-07-17	100%
404	1.4.2	Remaining Works and Punchlist Item	23 d	2020-07-27	2020-08-20	NA	NA	0%
405	1.4.2.1	1" Water line valve box installation	1 d	2020-07-31	2020-07-31	NA	NA	0%
406	1.4.2.2	Manhole Ladder Installation	1 d	2020-08-06	2020-08-06	NA	NA	0%
407	1.4.2.3	Cable Opening Sealing (ACB PNL Hole)	1 d	2020-08-06	2020-08-06	NA	NA	0%
408	1.4.2.4	34.5kV Transformer(LV) Vertical Duct	5 d	2020-07-27	2020-07-31	NA	NA	0%
409	1.4.2.5	Cable Labeling (HV Cable)	5 d	2020-08-06	2020-08-11	NA	NA	0%
410	1.4.2.6	Trench Wall & Manhole Sleeve Labeling (Name Plate)	3 d	2020-08-05	2020-08-07	NA	NA	0%
411	1.4.2.7	Ground Resistance Test & Connection	2 d	2020-08-11	2020-08-12	NA	NA	0%
412	1.4.2.8	Battery Container DC PNL Megger Test (Battery Rack to DC PNL)	1 d	2020-08-20	2020-08-20	NA	NA	0%
413	1.5	**Commissioning and Performance Testing (Talofofo)**	**165 d**	**2020-03-02**	**2020-09-08**	**2020-03-02**	**NA**	**39%**
414	1.5.1	Precommissioning Inspection (Walk-Through Site)	1 d	2020-03-02	2020-03-02	2020-03-02	2020-03-02	100%
415	1.5.2	**Commissioning Phase I**	**153 d**	**2020-03-03**	**2020-08-26**	**2020-03-03**	**NA**	**47%**
416	1.5.2.1	Testing Auxiliary Equipment(UPS, Rectifier Battery)	1 d	2020-08-12	2020-08-12	NA	NA	0%
417	1.5.2.2	Testing: Interconnection	11 d	2020-03-03	2020-03-14	2020-03-03	2020-03-14	100%
418	1.5.2.3	Testing: Grid Equipment	11 d	2020-03-03	2020-03-14	2020-03-03	2020-03-14	100%
419	1.5.2.4	Renovation, Rerouting, and Testing: 34.5kV Interconnection Equipr	5 d	2020-08-10	2020-08-14	NA	NA	0%
420	1.5.2.5	GPA's Test Result Report Review: Interconnection Equipment Testi	0 d	2020-08-15	2020-08-15	NA	NA	0%
421	1.5.2.6	Energization: 34.5kV Interconnection Equipment	2 d	2020-08-15	2020-08-16	NA	NA	0%
422	1.5.2.7	Testing ESS Equipment	**6 d**	**2020-08-18**	**2020-08-24**	**NA**	**NA**	**0%**
423	1.5.2.7.1	2MVA PCS	5 d	2020-08-18	2020-08-22	NA	NA	0%
424	1.5.2.7.2	DC Junction Panels of Battery Banks	2 d	2020-08-18	2020-08-19	NA	NA	0%
425	1.5.2.7.3	AC & DC Power Distribution Panels at Battery Container	1 d	2020-08-20	2020-08-20	NA	NA	0%
426	1.5.2.7.4	Battery Containers	2 d	2020-08-19	2020-08-20	NA	NA	0%
427	1.5.2.7.5	Li Batteries	2 d	2020-08-20	2020-08-21	NA	NA	0%
428	1.5.2.7.6	Battery Section Controllers(BSC)	1 d	2020-08-21	2020-08-21	NA	NA	0%
429	1.5.2.7.7	PMS' and HMI' Equipment and Softwares including site equipme	1 d	2020-08-21	2020-08-21	NA	NA	0%
430	1.5.2.7.8	PMS-SCADA Matching Test	1 d	2020-08-24	2020-08-24	NA	NA	0%
431	1.5.2.8	GPA's Test Result Report Review: Grid-Connection Equipment and	0 d	2020-08-24	2020-08-24	NA	NA	0%
432	1.5.2.9	Energization: Grid-Connection Equipment and ESS Equipment	2 d	2020-08-25	2020-08-26	NA	NA	0%
433	1.5.3	**Commissioning Phase II**	**11 d**	**2020-08-27**	**2020-09-08**	**NA**	**NA**	**0%**
434	1.5.3.1	Power Quality Measurement	2 d	2020-08-27	2020-08-28	NA	NA	0%
435	1.5.3.2	Performance and Basic Functions	4 d	2020-08-29	2020-09-02	NA	NA	0%
436	1.5.3.3	Operation Scenarios: Renewable Integration	5 d	2020-09-03	2020-09-08	NA	NA	0%
437	1.6	**On-Site Construction(Agana)**	**877 d**	**2017-10-27**	**2020-08-24**	**2017-10-27**	**NA**	**97%**
438	1.6.1	Completed Works for Agana	846 d	2017-10-27	2020-07-20	2017-10-27	2020-07-20	100%
829	1.6.2	Remaining Works and Punchlist Item	284 d	2019-09-30	2020-08-24	2019-09-30	NA	59%
830	1.6.2.6	Mobile Susbstation	264 d	2019-09-30	2020-08-01	2019-09-30	NA	81%

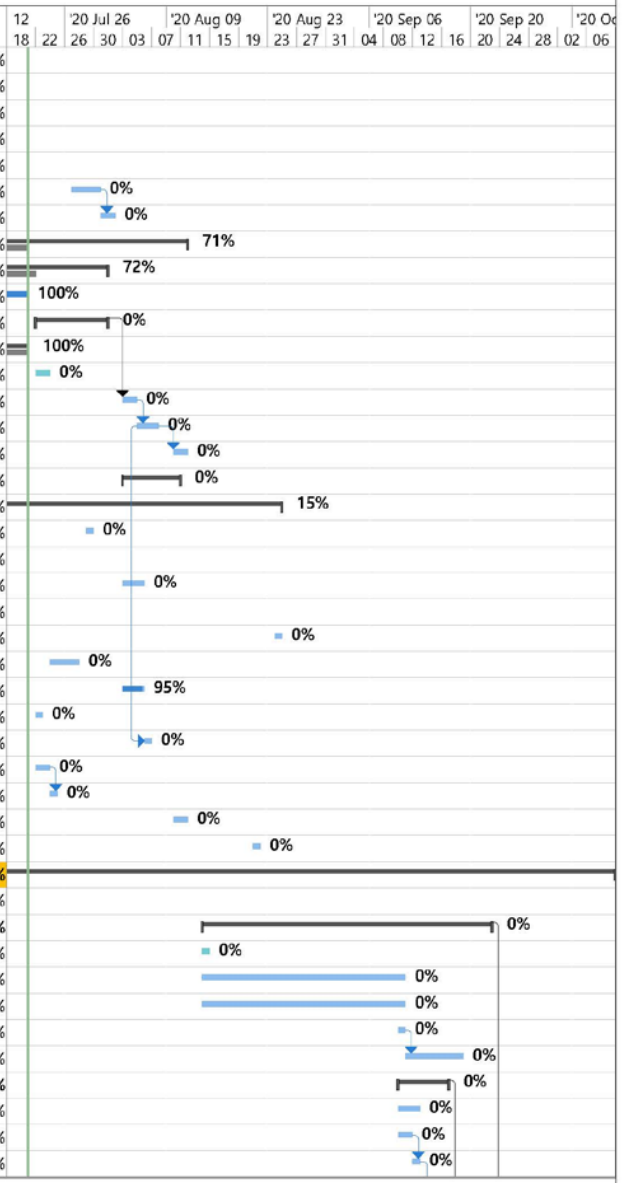


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Energy Storage System (ESS) Full Project Schedule

[GPA ESS Phase 1] Project Schedule 20200720.mpp

ID	WBS	Tasks	Duration	Start	Finish	Actual Start	Actual Finish	% Complete
831	1.6.2.6.2.1	UG conduit for mobile riser part 2	14 d	2019-11-14	2019-12-03	2019-11-14	2019-12-03	100%
832	1.6.2.6.2.2	Backfilling and Compaction	3 d	2019-12-04	2019-12-06	2019-12-04	2019-12-06	100%
833	1.6.2.6.2.3	Delivery Long Leed Materials	1 d	2019-09-30	2019-09-30	2019-09-30	2019-09-30	100%
834	1.6.2.6.2.4	Mobile Riser Cabling	4 d	2020-02-17	2020-02-20	2020-02-17	2020-02-20	100%
835	1.6.2.6.2.5	Mobile Riser 34.5kV Cable Termination	3 d	2020-02-18	2020-02-20	2020-02-18	2020-02-20	100%
836	1.6.2.1.6	Mobile Riser 13.8kV Cable Termination	4 d	2020-07-27	2020-07-30	NA	NA	0%
837	1.6.2.6.2.6	Test and Connection	2 d	2020-07-31	2020-08-01	NA	NA	0%
838	1.6.2.6	Emergency Generator and ATS	40 d	2020-06-26	2020-08-11	2020-06-26	NA	71%
839	1.6.2.2.1	Emergency Generator	31 d	2020-06-26	2020-07-31	2020-06-26	NA	72%
840	1.6.2.2.1.1	Conduit Pit	21 d	2020-06-26	2020-07-20	2020-06-26	2020-07-20	100%
841	1.6.2.2.1.2	Foundation	9 d	2020-07-22	2020-07-31	NA	NA	0%
846	1.6.2.2.2	ATS	21 d	2020-06-26	2020-07-20	2020-06-26	2020-07-20	100%
848	1.6.2.2.3	Underground conduit	2 d	2020-07-22	2020-07-23	NA	NA	0%
849	1.6.2.2.4	Backfill and compaction	2 d	2020-08-03	2020-08-04	NA	NA	0%
850	1.6.2.2.5	Cable Installation and Termination	3 d	2020-08-05	2020-08-07	NA	NA	0%
851	1.6.2.2.6	Test and Connection	2 d	2020-08-10	2020-08-11	NA	NA	0%
852	1.6.2.6	Extended Concrete Wall(at main gate)	7 d	2020-08-03	2020-08-10	NA	NA	0%
856	1.6.2.4	Punchlist Item	184 d	2020-01-24	2020-08-24	2020-01-24	NA	15%
857	1.6.2.4.1	H-401 Revise Cable Connection, Termination	1 d	2020-07-29	2020-07-29	NA	NA	0%
858	1.6.2.4.2	Gravel(Switch yard)	5 d	2020-01-24	2020-01-29	2020-01-24	NA	0%
859	1.6.2.4.3	34.5kV Transformer(LV) Vertical Duct	3 d	2020-08-03	2020-08-05	NA	NA	0%
860	1.6.2.4.4	115kV Transformer(LV) Vertical Duct	1 d	2020-03-18	2020-03-18	2020-03-18	NA	95%
861	1.6.2.4.5	Cable opening sealing (CTRL Container Hole)	1 d	2020-08-24	2020-08-24	NA	NA	0%
862	1.6.2.4.6	Gate Valve Cover Installation	3 d	2020-07-24	2020-07-27	NA	NA	0%
863	1.6.2.4.7	Battery Container Trench Cover Repair	3 d	2020-08-03	2020-08-05	2020-08-03	NA	95%
864	1.6.2.4.8	34.5kV Manhole Ladder Installation	1 d	2020-07-22	2020-07-22	NA	NA	0%
865	1.6.2.4.9	13.8kV Manhole Ladder Installation	1 d	2020-08-06	2020-08-06	NA	NA	0%
866	1.6.2.4.10	Cable Labeling	2 d	2020-07-22	2020-07-23	NA	NA	0%
867	1.6.2.4.11	Trench Wall Sleeve Labeling (Name Plate)	1 d	2020-07-24	2020-07-24	NA	NA	0%
868	1.6.2.4.12	Ground Resistance Test & Connection	2 d	2020-08-10	2020-08-11	NA	NA	0%
869	1.6.2.4.13	Battery Container DC PNL Megger Test (Battery Rack to DC PNL)	1 d	2020-08-21	2020-08-21	NA	NA	0%
870	**1.7**	**Commissioning and Performance Testing (Agana)**	**181 d**	**2020-03-14**	**2020-10-09**	**2020-03-14**	**NA**	**1%**
871	1.7.1	Precommissioning Inspection (Walk-Through Site)	1 d	2020-03-14	2020-03-14	2020-03-14	2020-03-14	100%
872	**1.7.2**	**Commissioning Phase I**	**35 d**	**2020-08-14**	**2020-09-22**	**NA**	**NA**	**0%**
873	1.7.2.1	Testing Auxiliary Equipment(UPS, Rectifier Battery)	1 d	2020-08-14	2020-08-14	NA	NA	0%
874	1.7.2.2	Testing: Interconnection	25 d	2020-08-14	2020-09-10	NA	NA	0%
875	1.7.2.3	Testing: Grid Equipment	25 d	2020-08-14	2020-09-10	NA	NA	0%
876	1.7.2.4	GPA's Test Result Report Review: Interconnection Equipment Testi	1 d	2020-09-10	2020-09-10	NA	NA	0%
877	1.7.2.5	Energization: 34.5kV Interconnection Equipment	7 d	2020-09-11	2020-09-18	NA	NA	0%
878	**1.7.2.6**	Testing ESS Equipment	**6 d**	**2020-09-10**	**2020-09-16**	**NA**	**NA**	**0%**
879	1.7.2.6.1	2MVA PCS	3 d	2020-09-10	2020-09-12	NA	NA	0%
880	1.7.2.6.2	DC Junction Panels of Battery Banks	2 d	2020-09-10	2020-09-11	NA	NA	0%
881	1.7.2.6.3	AC & DC Power Distribution Panels at Battery Container	1 d	2020-09-12	2020-09-12	NA	NA	0%

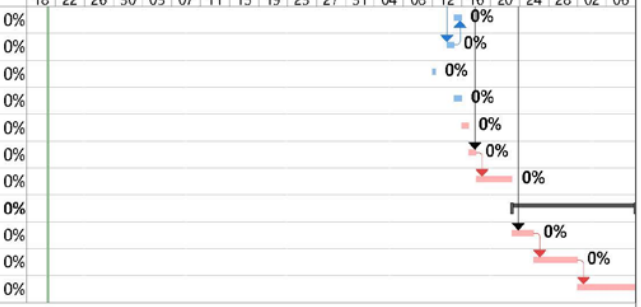


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Energy Storage System (ESS) Full Project Schedule

[GPA ESS Phase 1] Project Schedule 20200720.mpp

ID	WBS	Tasks	Duration	Start	Finish	Actual Start	Actual Finish	% Complete
882	1.7.2.6.4	Battery Containers	1 d	2020-09-15	2020-09-15	NA	NA	0%
883	1.7.2.6.5	Li Batteries	1 d	2020-09-14	2020-09-14	NA	NA	0%
884	1.7.2.6.6	Battery Section Controllers(BSC)	2 h	2020-09-12	2020-09-12	NA	NA	0%
885	1.7.2.6.7	PMS' and HMI' Equipment and Softwares including site equipme	1 d	2020-09-15	2020-09-15	NA	NA	0%
886	1.7.2.6.8	PMS-SCADA Matching Test	1 d	2020-09-16	2020-09-16	NA	NA	0%
887	1.7.2.7	GPA's Test Result Report Review: Grid-Connection Equipment and	1 d	2020-09-17	2020-09-17	NA	NA	0%
888	1.7.2.8	Energization: Grid-Connection Equipment and ESS Equipment	4 d	2020-09-18	2020-09-22	NA	NA	0%
889	**1.7.3**	**Commissioning Phase II**	**15 d**	**2020-09-23**	**2020-10-09**	**NA**	**NA**	**0%**
890	1.7.3.1	Power Quality Measurement	3 d	2020-09-23	2020-09-25	NA	NA	0%
891	1.7.3.2	Performance and Basic Functions	5 d	2020-09-26	2020-10-01	NA	NA	0%
892	1.7.3.3	Operation Scenarios: Frequency Regulation	7 d	2020-10-02	2020-10-09	NA	NA	0%



Published Magazine Articles: APPA and Energy, Oil & Gas

1. Reliability - *Riding the Storm: Increasing Resiliency for Extreme Weather Events* – Published in the APPA Public Power Magazine – March/April 2020 Issue

2. A Mammoth Operation, Guam Power Authority – "*A Powerful Transformation*" - The Article will Appear in the hardcopy magazine of Energy, Oil & Gas - August 2020 Issue

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RELIABILITY

Riding the Storm: Increasing Resiliency for Extreme Weather Events



Resilient Design

Pole replacement also is a component of the system hardening plan created by the **Guam Power Authority**, which serves approximately 52,000 customers on the Pacific island. Having a plan to prepare for extreme weather is key for Guam, which is located in "Typhoon Alley," a region notorious for being in the path of almost every storm headed toward Asia, according to John M. Benavente, PE, GPA's general manager. As a result, it regularly deals with typhoons (known as hurricanes in the Atlantic) that exceed a Category 5 rating.

"GPA has to resort to the solutions or fixes we've implemented for economic and sustainability reasons. Our customers include the U.S. military and federal government installations, which account for approximately 20% of our load," Benavente said. "National and homeland defense are of paramount importance, and, therefore, GPA continues to improve the system to ensure a reliable and sustainable energy environment."

GPA also is preparing to protect itself from rising sea level storm surges and tsunamis. In 2017, scientists visited GPA with concerns that a tsunami may hit the island in the next few decades.

Pole replacement helps prepare for increasing storms and weather events, but it's nothing new to the utility. GPA began replacing all wooden poles with spun concrete poles in the 1980s. It regularly replaces poles and uses concrete poles for all new line extension projects. Today, 90% of its more than 36,000 poles are concrete.

GPA also is working on moving to a hybrid system consisting of a primary distribution line that's an overhead concrete pole and a secondary system that's underground. Energy from the transformers mounted on concrete poles serves customers through an underground line connected to their homes and businesses.

"This hybrid system eliminates the aerial secondary line typically attached to customer homes through a weather head on their roofs. During a typhoon on Guam, this secondary line system typically gets damaged the most, and storm recovery then takes a substantial amount of time."

The utility recently converted an additional 500 customers to the secondary underground system. Approximately 20% of GPA's distribution system serves customers with underground lines. "In the last storm, once the main primary lines were repaired, those 500 customers were immediately restored."

GPA plans on installing underground systems on most of the island in the next 25 years, which should mitigate much of the damage from future typhoons. Moving systems from overhead to underground is not without complications. This process requires trenching, so GPA works with the Guam State Historic Preservation Office and other local government agencies for permits and clearances.

To fund this and other projects, GPA issued long-term bonds. "We don't have the ratepayers of today paying for the entire investment, which would last for decades," Benavente said. "Furthermore, additional funds generated as required by bond indentures in the form of debt service coverages are used on capital improvement projects."

Rethinking Old Ways

In addition to burying power lines to protect against future typhoons, GPA recently signed a contract with the Korea Electric Power Corp. to build a 198-megawatt baseload power plant, which is scheduled to go online in October 2022.

The new plant will be located 300 feet above sea level, which will protect generators and equipment from tsunamis and storm surges. Previously, GPA constructed all conventional baseload generating plants at or near sea level to take advantage of seawater for cooling.

Instead, the new Ukudu plant will be located close to the Guam Waterworks Authority's Northern Wastewater Treatment Plant, which will allow GPA to repurpose approximately 3 million gallons of sewer water to treat and use for cooling the steam turbine part of the combined-cycle units – without any impact to Guam's water aquifer. Working with the wastewater treatment plant will also reduce the sewage waste that currently flows into the ocean.

Siting the power plant adjacent to the wastewater facility will also increase reliability, as it is a large power load demand area and most of its transmission lines are underground. In addition, the plant will hold adequate water resources, as well as 30 days of fuel oil capability, in case a tsunami cuts out fuel supplies to the new plant.

The Ukudu power plant will be constructed by an independent power producer under a build-operate-transfer contract. The contract includes an option for the transfer of ownership to GPA in either 25 or 30 years.

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Energy, Oil & Gas Issue 182 July 2020



A powerful transformation



Located in the Western

Pacific, Guam is an unincorporated territory of the United States, a progressive Pacific island community, and a strategically important link between the US and Asia. There is a crucial relationship between energy and Guam's economic growth, and as the island continues to progress, there is a need for Guam's energy mix to evolve because power is an important catalyst for commercial and domestic advancement.

On the electricity side, energy is supplied by The Guam Power Authority (GPA), an electric utility that supplies monopoly electric services throughout Guam, including to all US Department of Defense military bases, various components of the Government of Guam, and a vibrant shopping and hotel industry. GPA serves an island population of approximately 170,000 (with around 52,000 of these as customers) with a 2019 peak demand of 254 megawatts and 2019 (fiscal year) energy sales of 1.57 billion in kilowatt hours.

As John M. Benavente, PE and General Manager at GPA explained, the Authority is a public corporation and autonomous component unit of the Government of Guam. "The Consolidated Commission on Utilities (CCU) - comprised of an elected five-member board of commissioners - provides governance over GPA, while the Guam Public Utilities Commission (GPUC) sets GPA rates and holds oversight of the authority, to include review and approval of all large GPA contracts impacting rates and charges," he said.

Owning assets of $935m, including 29 substations, and 1797 miles of combined transmission and distribution lines, GPA employs a workforce of 450 and supports Guam's economy with both conventional and renewable electrical energy. The island-wide power supply that comes from various fuel-oil based generating units has a gross capacity of over 420 megawatts. "Currently, GPA also has 25.3 megawatts of renewable capacity with an additional 160 megawatts of solar photovoltaic and 150 megawatts of energy storage systems coming online in the next three years," added John, "which is going to achieve a 25 per cent government-mandated Renewable Portfolio Standard (RPS)."

Further elaborating on the thinking behind the energy transition from fuel oil to renewables, John pointed out that GPA's energy has been generated by fossil fuels for the past five decades, which made Guam vulnerable and at the mercy of global fuel oil political changes. Fuel oil purchases also total more than half of GPA's budget. "It is a significant economic drain on Guam's economy because it lacks multiplication effects," he said. "By converting fuel oil purchases to alternative energy purchases such as photovoltaics, Guam is converting oil to jobs, while at the same time reducing its carbon footprint and impact on the planet."

Having already appreciably transformed how Guam generates its electric power, GPA is now working on a project that will result in a significant paradigm shift in how it supplies energy to the island. It has signed contracts with KEPCO for the construction and operation of the new Dededo Ukudu Combined Cycle Power Plant, which will replace its ageing and limited baseload power supply. This 198-megawatt combined cycle plant, with a 51 per cent thermal efficiency, is designed to be the cornerstone that helps to sustain Guam's energy needs. "We are investing in dual fired (Ultra-Low Sulfur Diesel and Natural Gas) high efficiency combined cycle technology, coupled with low and stable cost renewables (20-year, one per cent escalator contracts)," said John. "The plant will allow us to hedge against fluctuating fuel oil prices because over time we will continue to reduce the volume of fuel oil we use by substituting with photovoltaic energy sources. It will work well with renewables, and, in fact, will be the backup to renewable energy to ensure continuous power to the island, in the event of non-solar days and natural disasters."

As part of its commitment to transforming into a modern, sustainable power generation company, over the next few years GPA will be contracting for an additional 180 megawatts of renewables to be commissioned beginning in 2024 and beyond. "All renewables must have adequate storage systems for full capacity load shifting capability. All contracts will comprise a power purchase agreement for 25 years or more. The majority of this capacity will be utility-scale renewables, but the program would also include rooftop solar and small energy farms, perhaps in the one to five megawatt range," John detailed. "This plant, coupled with renewables, will allow GPA to achieve 50 per cent renewables, most likely before the end of this decade," he added.

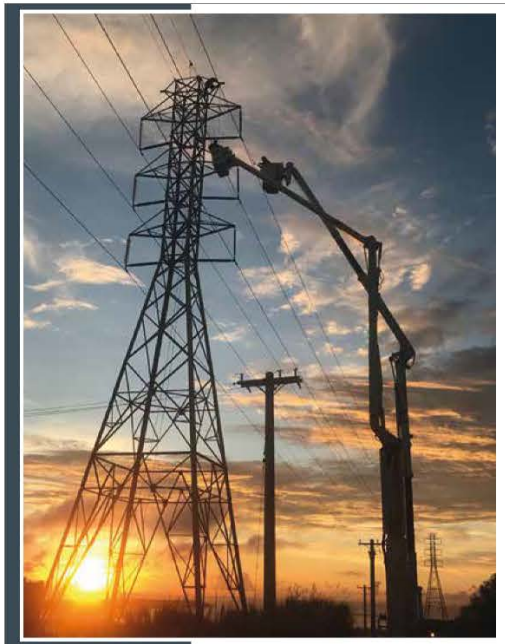
Alongside the investments that are being made on the solar energy side, GPA has also been incorporating other associated technologies to work with renewables, including Advanced Metering Infrastructure (AMI) systems, which were installed in 2012. "We have also been upgrading our billing systems in order to accommodate net metering customers, which now total about 2100, having a total photovoltaic capacity of 24 megawatts," added John.

"Additionally, GPA has an ongoing Demand Side Management (DSM) program to right-size customer consumption and assist them in lowering their total energy cost. Over the last four years, GPA has paid over $4m in customer cash rebates to over 10,000 customers. GPA's current budget is to provide $3m annually,

John M. Benavente
PE and General Manager



> Over the past 50 years, GPA, through its founding employees and today's team of professionals and staff, has striven for sustainability and an ever-improving quality of life for our extremely remote island. Today, we see light at the end of the tunnel and this truly is exciting and commendable



funded through its fuel adjustment rate component, in support of energy efficient projects. GPA estimates that for every $3m in rebates paid, this decreases fuel costs by about $21m over the typical seven-year estimated life of the equipment."

While it is apparent that GPA is very determined to move away from conventional fossil fuel based power and embrace modern, sustainable solutions, its overall mission always remains to deliver safe, reliable and quality electricity services to all customers. In fact, safety is a core value of the company's culture, not just for end-users, but for staff too. "I have been general manager of GPA for over 25 years, and in nearly all those years, GPA has consistently placed highly, in the top three safety categories for its utility workforce safety performance," remarked John. "The annual American Public Power Association's safety awards recognize utilities with the lowest safety incidence rate within their groups. Groups are determined by worker-hours of exposure. For 2019, GPA earned a third-place award in the 'Group F' category for utilities with 250,000 to 999,999 worker-hours of annual worker exposure.

"Safety is of primary importance to myself and my entire team and GPA provides significant resources and training to ensure safety first, across all areas of the power utility. The business will continue to strive to perform and be ranked among the safest electrical power utilities and do everything it can to send all workers safely home to their families each and every night."

Having mentioned his staff, John then went on to discuss the challenge of finding the qualified personnel and how GPA addresses this issue: "GPA makes certain it maintains a highly professional and technical group of employees having adopted a pay-for-performance employee pay structure, which rewards its employees and assures a competitive pay structure and benefits today, and into the future. GPA, through this pay structure, has become a premier employer of choice on Guam; always drawing a significant interest and numerous applicants for positions listed for hiring.

"The organization also runs apprenticeship and other training programs, especially in the transmission and distribution and power generation fields."

The responsibility that GPA feels for its employees also extends out further to the wider community across the territory, because as John succinctly puts it, 'everyone who lives and works on Guam depends on the Guam Power Authority to operate one of Guam's most critical resources, namely the island-wide power system.' "It is important to GPA to work with the local communities it serves," he confirmed. "From as far away as the US Virgin Islands to the nearer Commonwealth of the Northern Mariana Islands (CNMI)-Saipan, GPA is committed to, and has provided, mutual aid assistance for recovery and restoration following devastation caused by natural disasters. In 2019, GPA received a 'Mutual Aid Commendation' from the American Public Power Association for having answered the call for assistance and aided the devastated CNMI-Saipan community with restoring power to its customers and helping rebuild an entire island economy."

Furthermore, in 2019, GPA received a Smart Energy Provider (SEP) designation for best practices as an electric power utility that shows commitment to, and proficiency in, energy efficiency, distributed generation, renewable energy, and environmental initiatives. Additionally, achieving SEP designation allows GPA to benchmark and evaluate its work

MARIANAS ENERGY CO.

MEC-GPA Public-Private Partnership



PROJECT FACTS

- The power project is an 87.56MW combined cycle power plant. The plant consists of two slow-speed diesel No.6 residual fuel oil diesel engine generating units, and 2-megawatt steam turbine powered by wasteheat recovery steam generators.
- 22 June 1996: The Guam Legislature approved the Emergency Power Procurement Law authorizing GP to secure additional electric generation capacity on an expedited basis.
- 30 September 1996: The power project was awarded to MEC under an Energy Conversion Agreement, a build-operate-transfer agreement for a 20-year period.
- 29 January 1999: The power project commenced commercial operation of the plant in Piti, two months ahead of schedule.
- 29 January 2019: The power project celebrated the completion of its 20th year of successful Public-Private Partnership and ownership was transferred to GPA.
- 30 January 2019: The power project will continue to be managed and operated by MEC under a 5-year extension contract.
- The power project is Guam's leading power generation company in terms of consistent operational efficiency and reliability.
- The power project represents a more economic source of power for GPA and the Guam community.
- The power project is considered one of the best slow-speed generators globally as duly recognized by the original equipment manufacturer, Man B&W and BWSC.





Providing Safe, Efficient and Reliable Power 180 Cabras Highway, Piti, Guam 96915 (671) 477-3060 (671) 477-3154

PROFILE GUAM POWER AUTHORITY



against a set of industry best practices in defined areas.

Also in 2019, GPA was recognized as the first electric distribution utility to operate business critical functions on the Environmental Systems Research Institute (ESRI)'s Utility Network Data through tapping drones to digitally map GPA's power lines, poles and other hardware and help GPA with maintenance forecasting, deployment of manpower and equipment. This translates to GPA being able to deliver its ambitions of building a stable foundation of economic growth and quality of life for all its customers and the community on Guam.

Thanks to the steps it has already taken and the plans it has for the future, GPA is well on its way to becoming a modern, efficient energy provider, and John believes that within the next three to five years, the organization will achieve its goal in attaining an improved position of strength. "GPA will have significantly achieved the paradigm shift in energy supply to providing its ratepayers with reliable energy at an affordable and stable cost," he predicted. "It will also have begun its journey towards a fully underground system for the entire island, which could then be achieved in an affordable manner over the next 30 years. GPA's island-wide power system consists of 90 per cent concrete poles today, making it resilient and providing for quick recoveries following devastation caused by storms. I envision GPA will begin the journey forward to fully underground the electrical power system within the next few decades, so that Guam becomes an even more sustainable island, less vulnerable to economic and natural disasters."

John is understandably very proud of the transformation that GPA has gone through. "Over the past 50 years, GPA, through its founding employees and today's team of professionals and staff, has striven for sustainability and an ever-improving quality of life for our extremely remote island. Today, we see light at the end of the tunnel and this truly is exciting and commendable," he concluded.



Guam Power Authority
www.guampowerauthority.com

Services: Electric utility that provides monopoly electric services throughout Guam

Tristar is a global business, head-quartered in Dubai, which transports, stores and supplies liquid fuels to blue-chip clients including international and national oil companies and international NGOs. Its integrated energy logistics platform spans road and maritime transportation, specialized warehousing, fuel farms, commercial aviation refuelling and fuel supply operations.

Tristar operates in more than 20 countries across three continents and has a 20-year proven legacy of operational quality making it a partner of choice to its customers, with a track record of profitable growth. The company operates to the highest international health, safety, environmental and compliance standards and receives awards for its exemplary record of operational and safety excellence.

Its Guam fuel farm, Tristar Terminals Guam Inc (TTGI), is spread over 237 acres, and is one of the largest single storage fuel farms in the Mariana Islands. It consists of 26 tanks, ranging from 1000 to 500,000 barrels, with a total storage capacity of 4.2 million barrels and is connected to an oil jetty within the Port Authority of Guam by means of an eight-kilometer underground pipeline.

TTGI shares a decade long working relationship with the Guam Power Authority by supporting the authority with the following services:

- Storage/Supply Chain Planning
- Tank Cleaning and Refurbishment
- Power Generation Plant Delivery
- Product Quality Control
- Ship to Shore/Shore to Ship Management
- Fuel Blending and Injection
- Inventory Management
- Administrative Services

A major part of TTGI's progress in Guam is due to its long-standing relationship with GPA. With the growing demand for power and the constant change for a cleaner fuel source, TTGI has adapted and changed its business model with new technology to support GPA's requirements. As a long-standing partner of GPA, TTGI would like to congratulate GPA for its achievements and will strive to provide our best services and act as an agent for synergized growth.

TRISTAR | Agility

TRISTAR | Agility
Defense & Government Services



With years of experience, Tristar offers professional services customized to customer's demands and requirements.

Tristar Portfolio of Services Include:
- Surface Transport
- Specialized Warehousing
- Ship Owning and Chartering
- Aviation Fuel Supply
- Fuel Farm Management
- Turnkey Fuel Supply



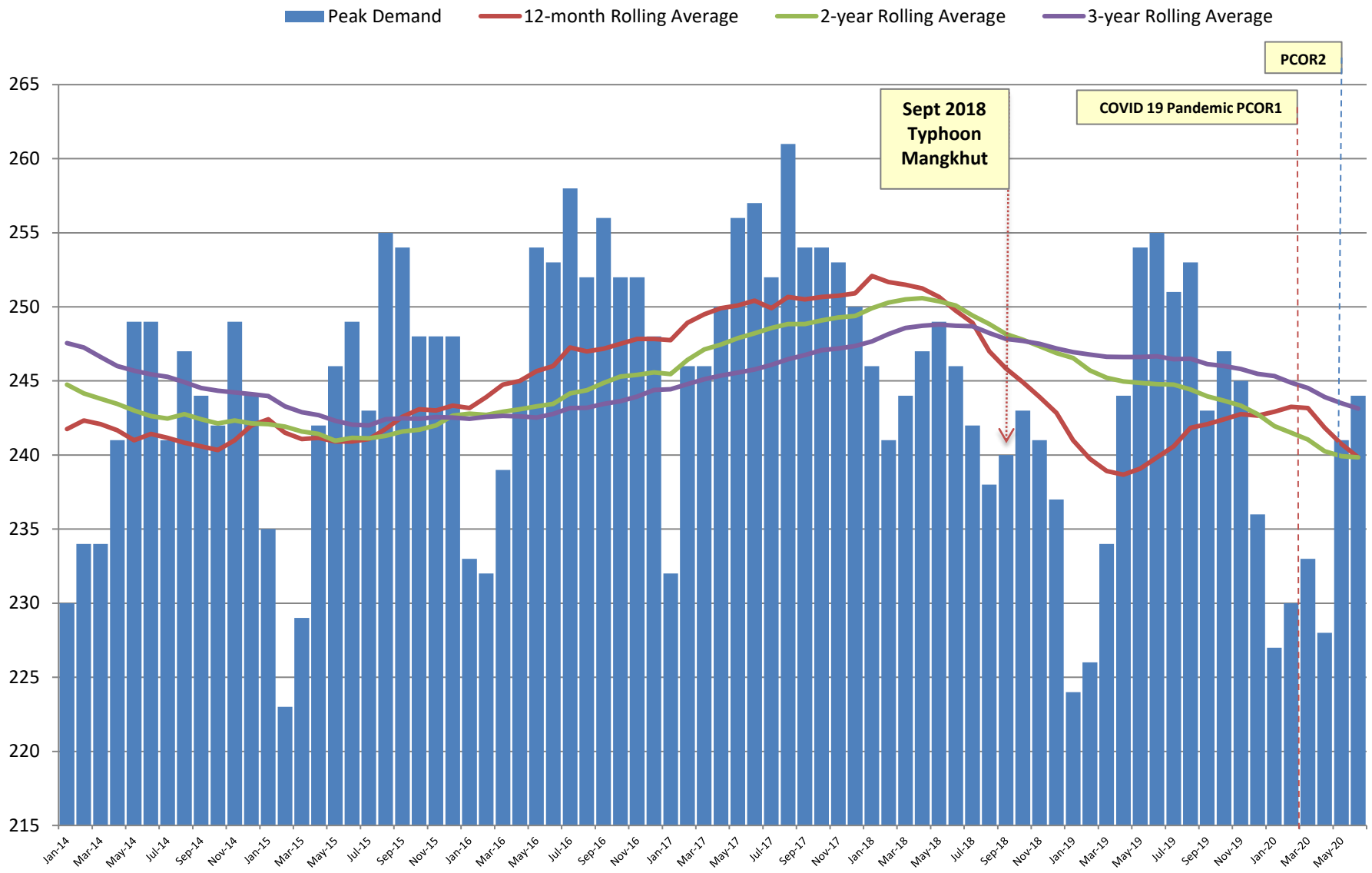
www.tristar-group.co

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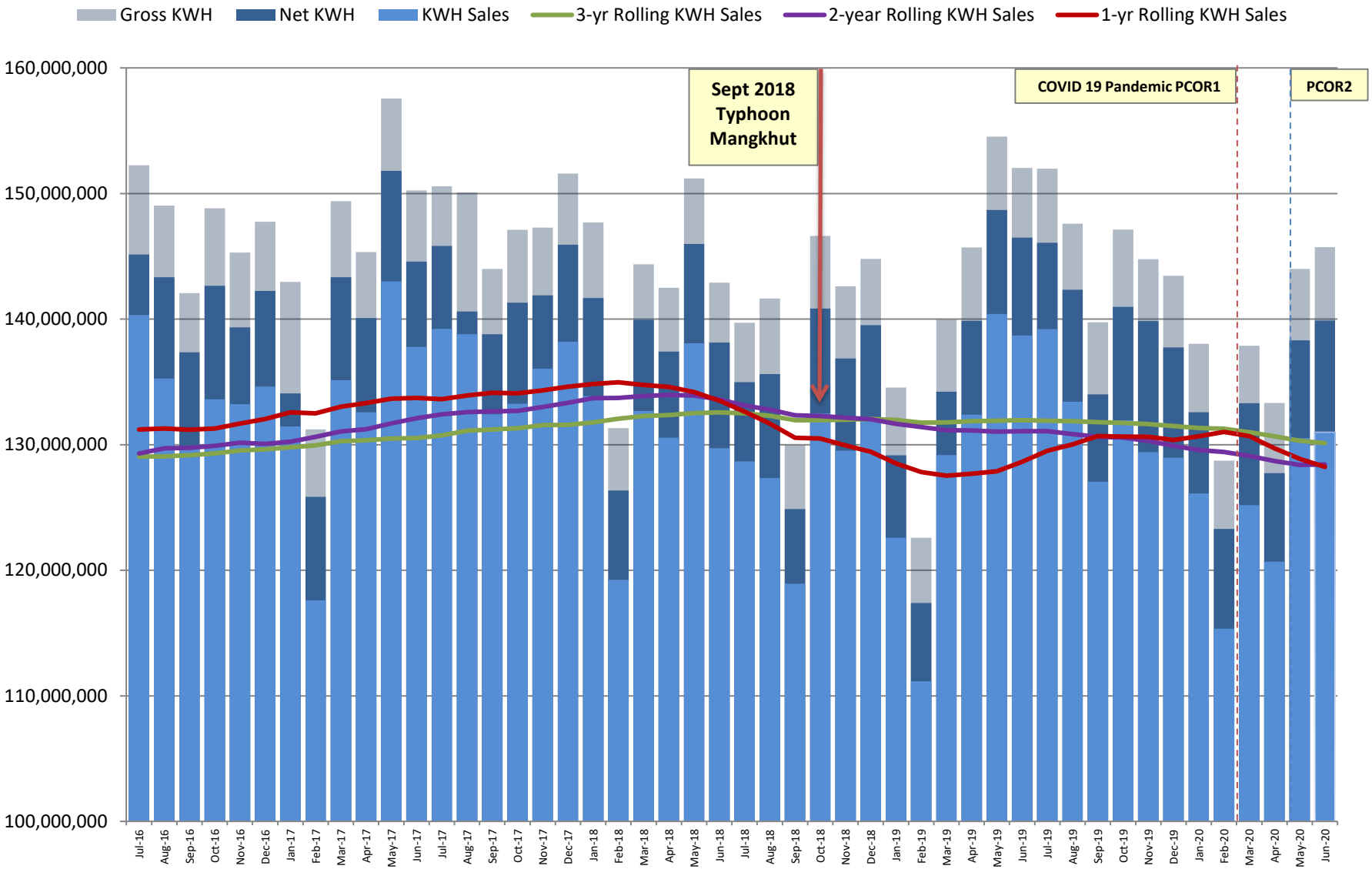
Tristar Guam
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Tel: +1671 5652300
Fax: +1671 56553909
Email: admin@tristar-guam.com

Generation KPIs

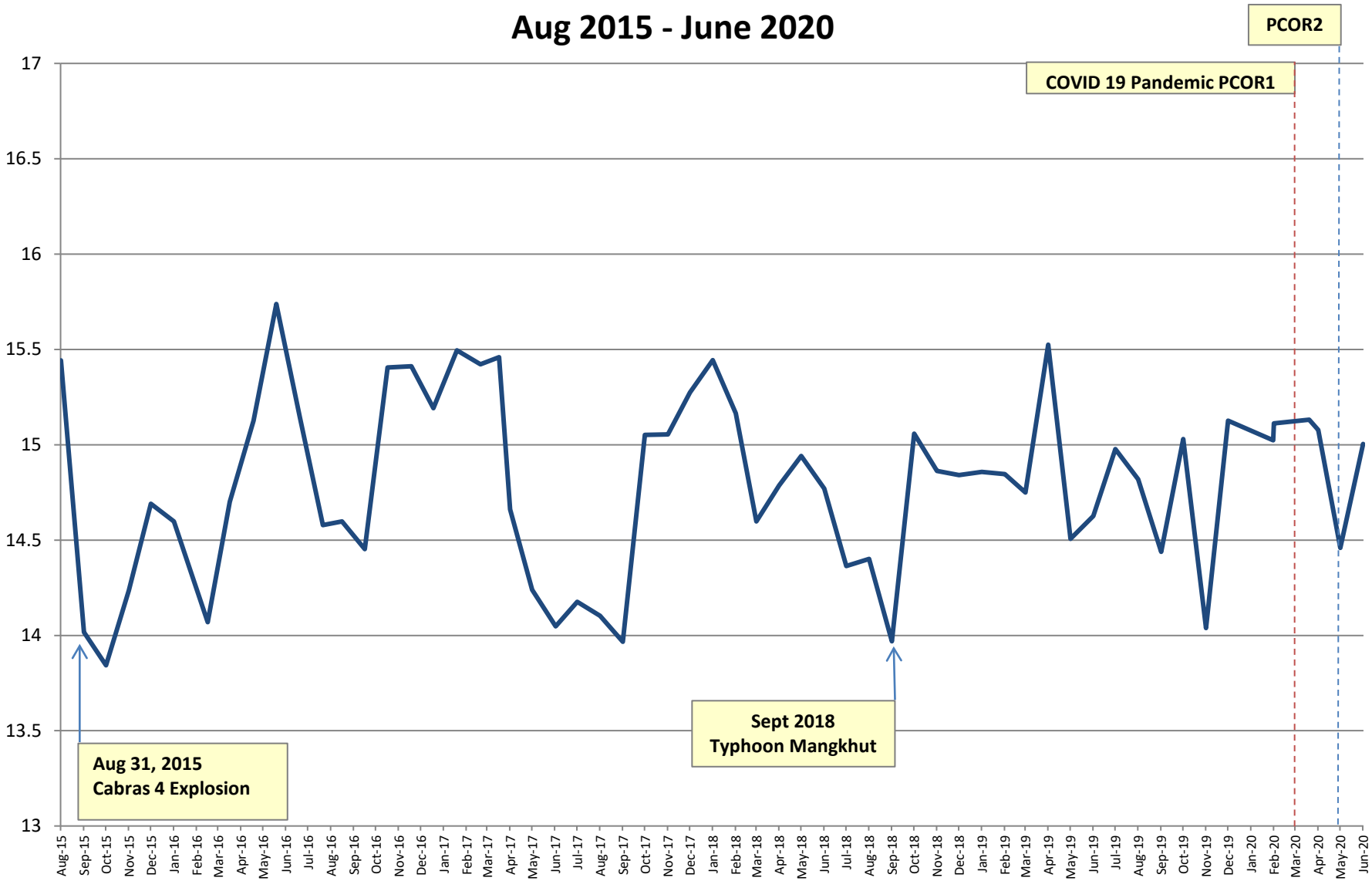
Historical Monthly Peak Demand
Jan 2014 - July 2020



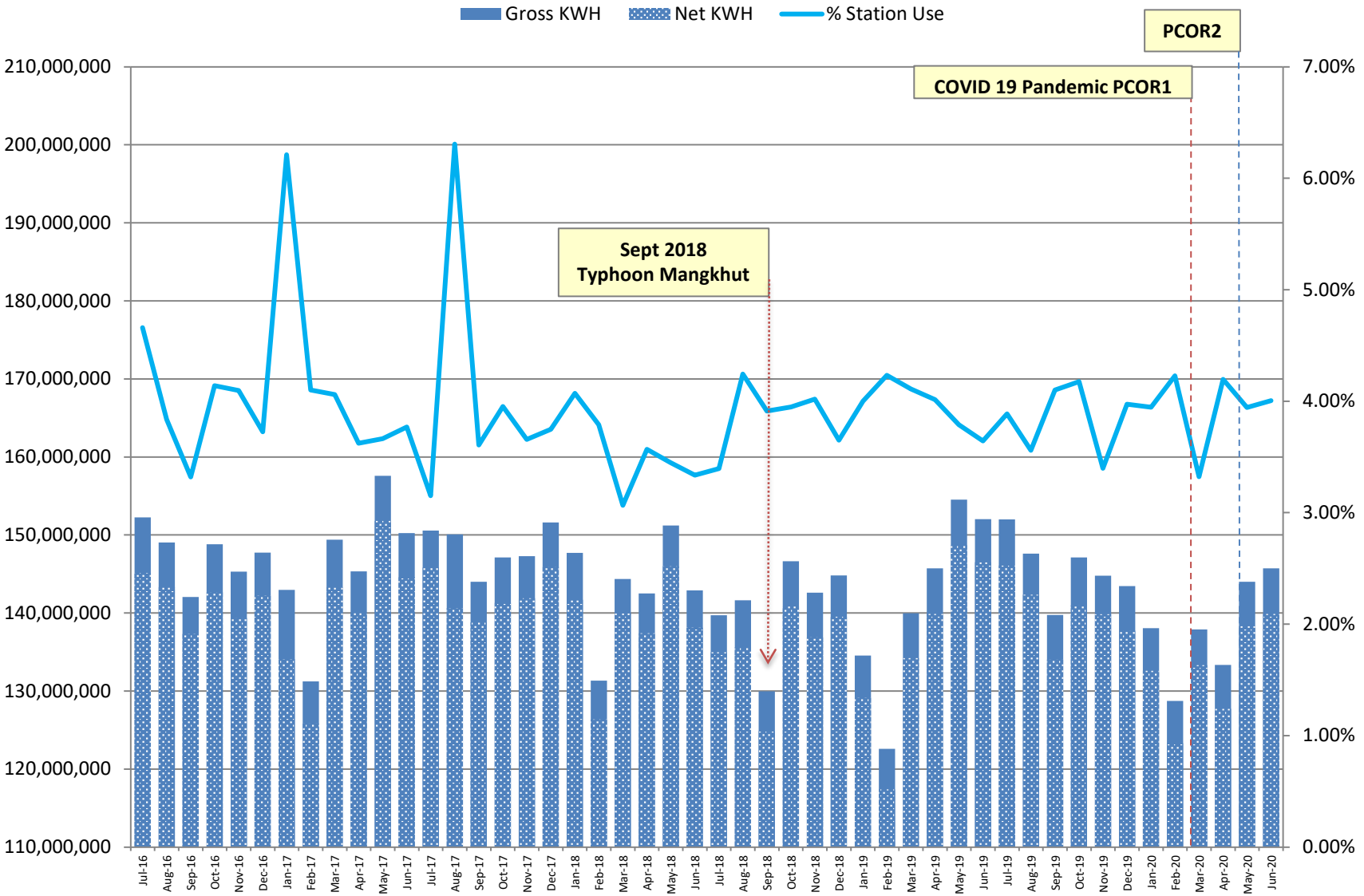
Historical KWH Sales
July 2016 - June 2020



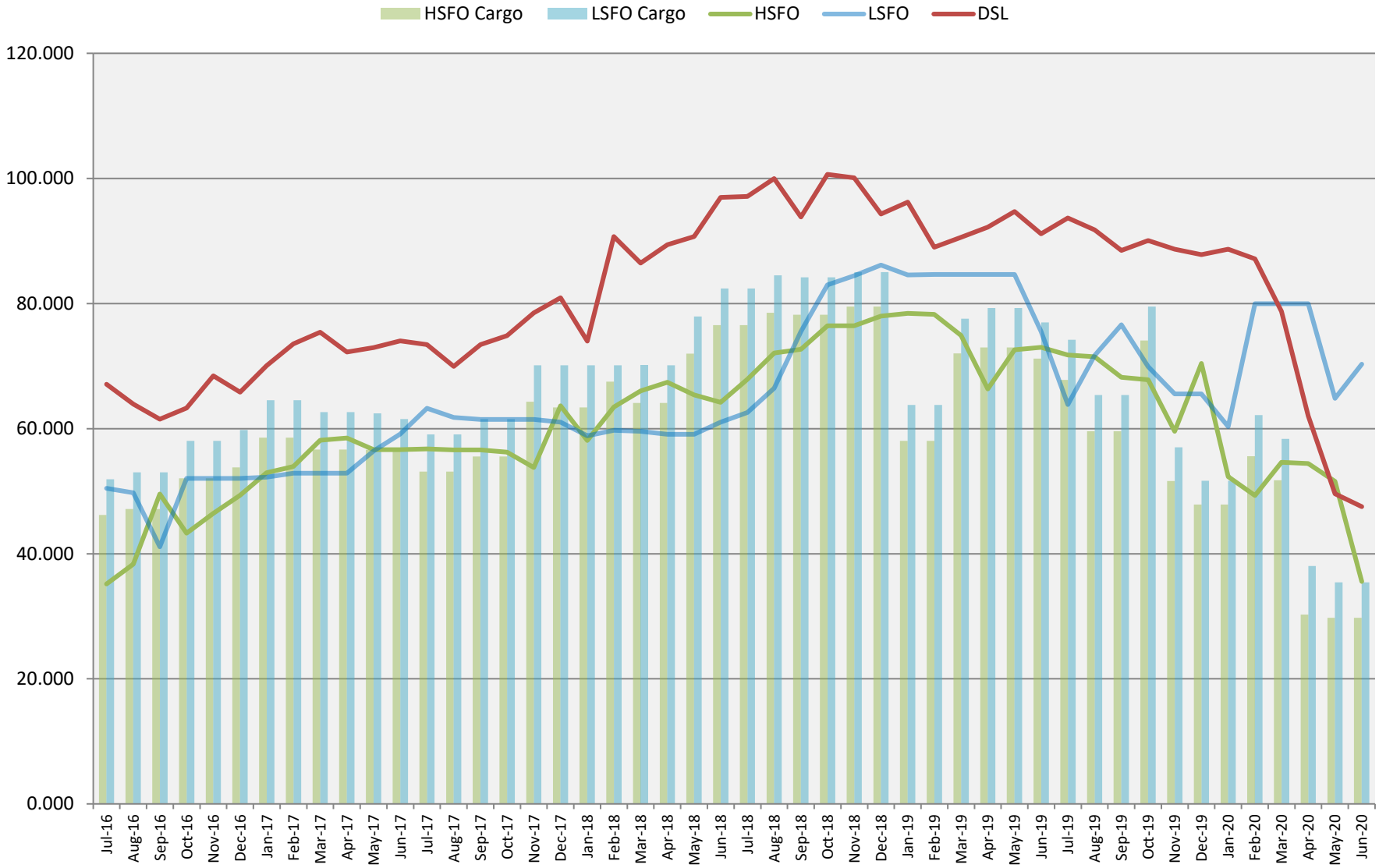
SYSTEM GROSS HEAT RATE
(KWH/Gal)
Aug 2015 - June 2020



Gross and Net Generation (KWH)
July 2016- June 2020

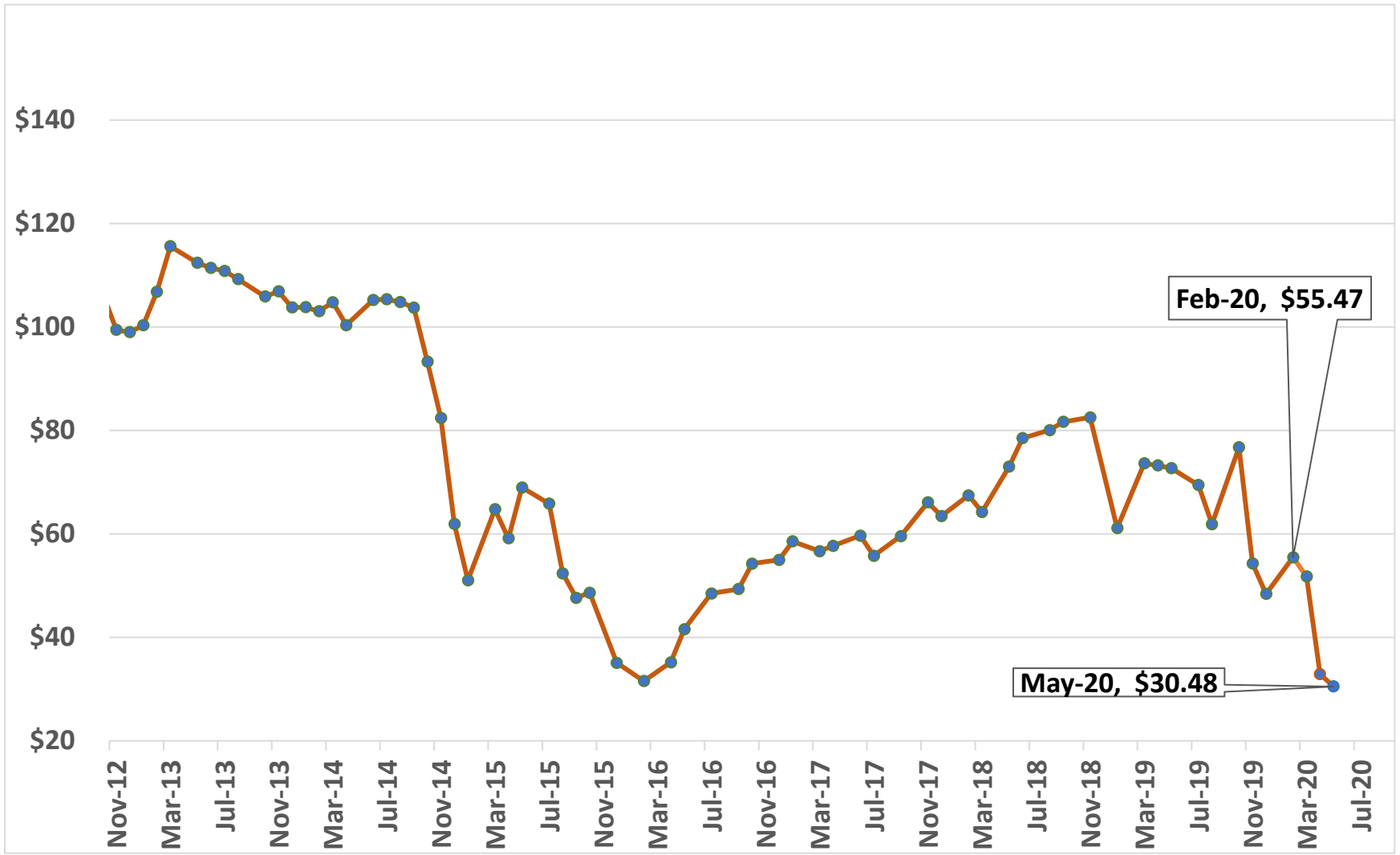


Fuel Cargo and Fuel Consumption Costs ($/bbl)
July 2016 - June 2020



LEAC UPDATE

LEAC Update – GPA Fuel Purchases (Per Barrel)



Note: No fuel purchase in June 2020.

Purchased

Ordered

LEAC Update – Morgan Stanley Asian Morning Call

Morgan Noon Call Pricing

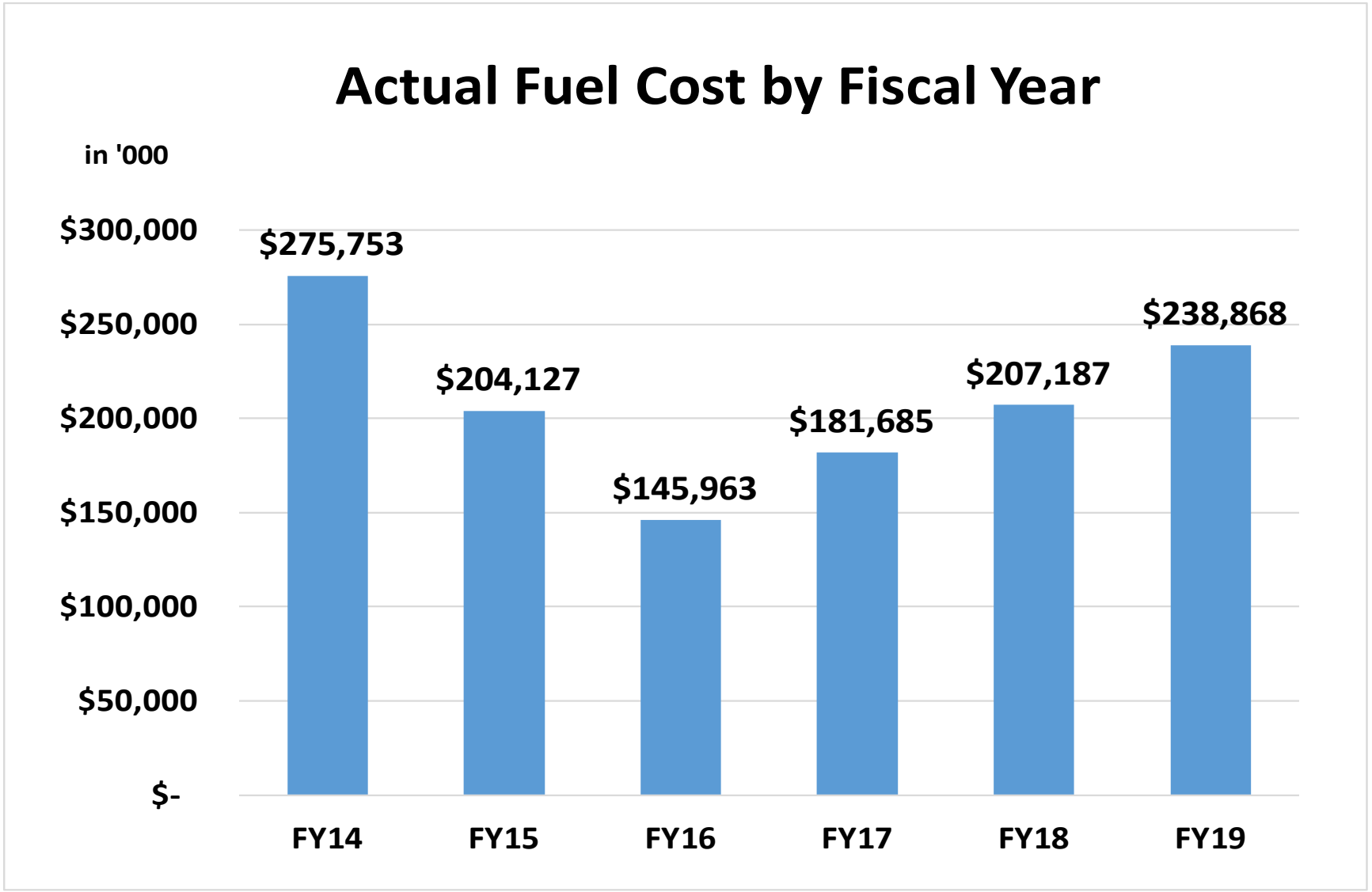
Sing HSFO 180 CST

Date	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21
7/9/2020	$ 260.73	$ 256.73	$ 257.73	$ 259.48	$ 261.57	$ 261.57	$ 266.90
7/13/2020	$ 241.68	$ 245.18	$ 248.93	$ 252.43	$ 255.35	$ 255.35	$ 261.10
7/14/2020	$ 253.62	$ 248.62	$ 249.62	$ 251.87	$ 254.21	$ 254.21	$ 260.71
7/15/2020	$ 254.83	$ 251.83	$ 253.58	$ 255.58	$ 257.91	$ 257.91	$ 264.74
7/16/2020	$ 256.64	$ 253.64	$ 255.39	$ 257.39	$ 259.72	$ 259.72	$ 266.56
Five-day average	$ 253.50	$ 251.20	$ 253.05	$ 255.35	$ 257.75	$ 257.75	$ 264.00

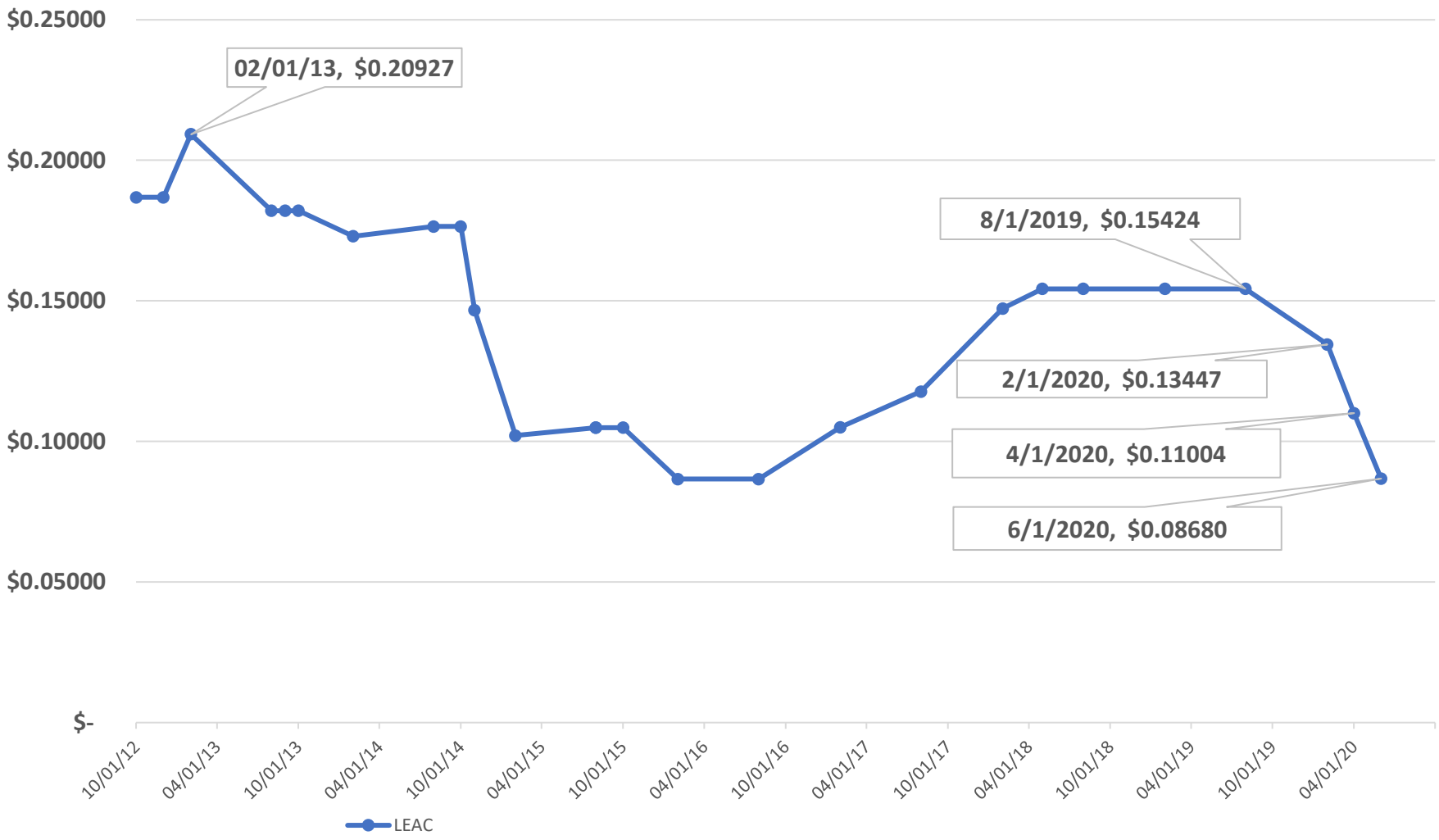
Gassoil 10ppm

7/9/2020	$ 49.53	$ 49.11	$ 49.11	$ 49.37	$ 49.65	$ 49.65	$ 50.70
7/13/2020	$ 49.71	$ 49.21	$ 49.17	$ 49.37	$ 49.62	$ 49.62	$ 50.53
7/14/2020	$ 48.86	$ 48.31	$ 48.23	$ 48.40	$ 48.66	$ 48.66	$ 49.71
7/15/2020	$ 49.51	$ 48.96	$ 48.81	$ 48.98	$ 49.24	$ 49.24	$ 50.34
7/16/2020	$ 50.02	$ 49.45	$ 49.31	$ 49.46	$ 49.72	$ 49.72	$ 50.73
Five-day average	$ 49.52	$ 49.01	$ 48.92	$ 49.11	$ 49.38	$ 49.38	$ 50.40

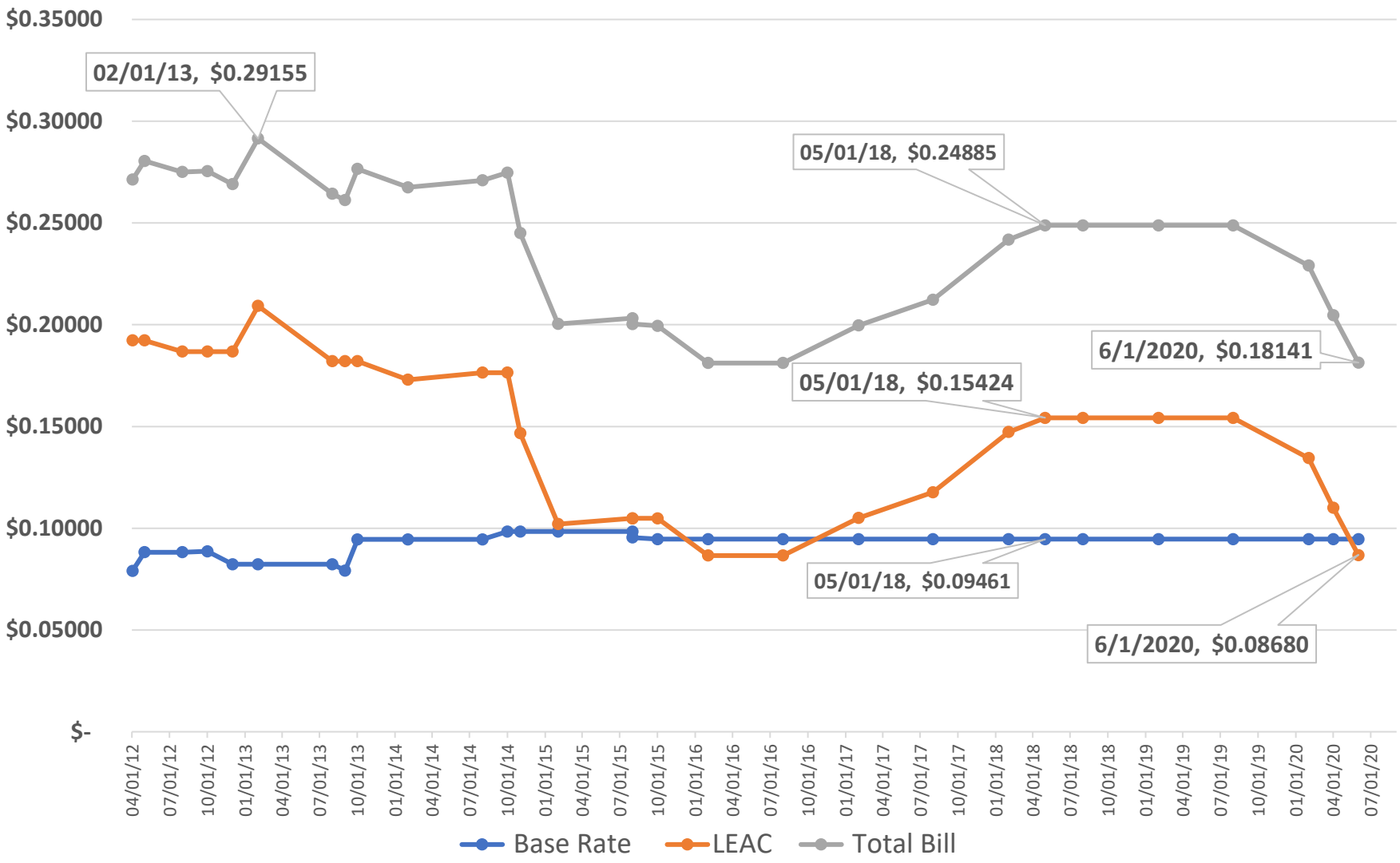
LEAC Update – Fuel Cost by Fiscal Year



Historical Residential LEAC Rate



Historical Residential Rate



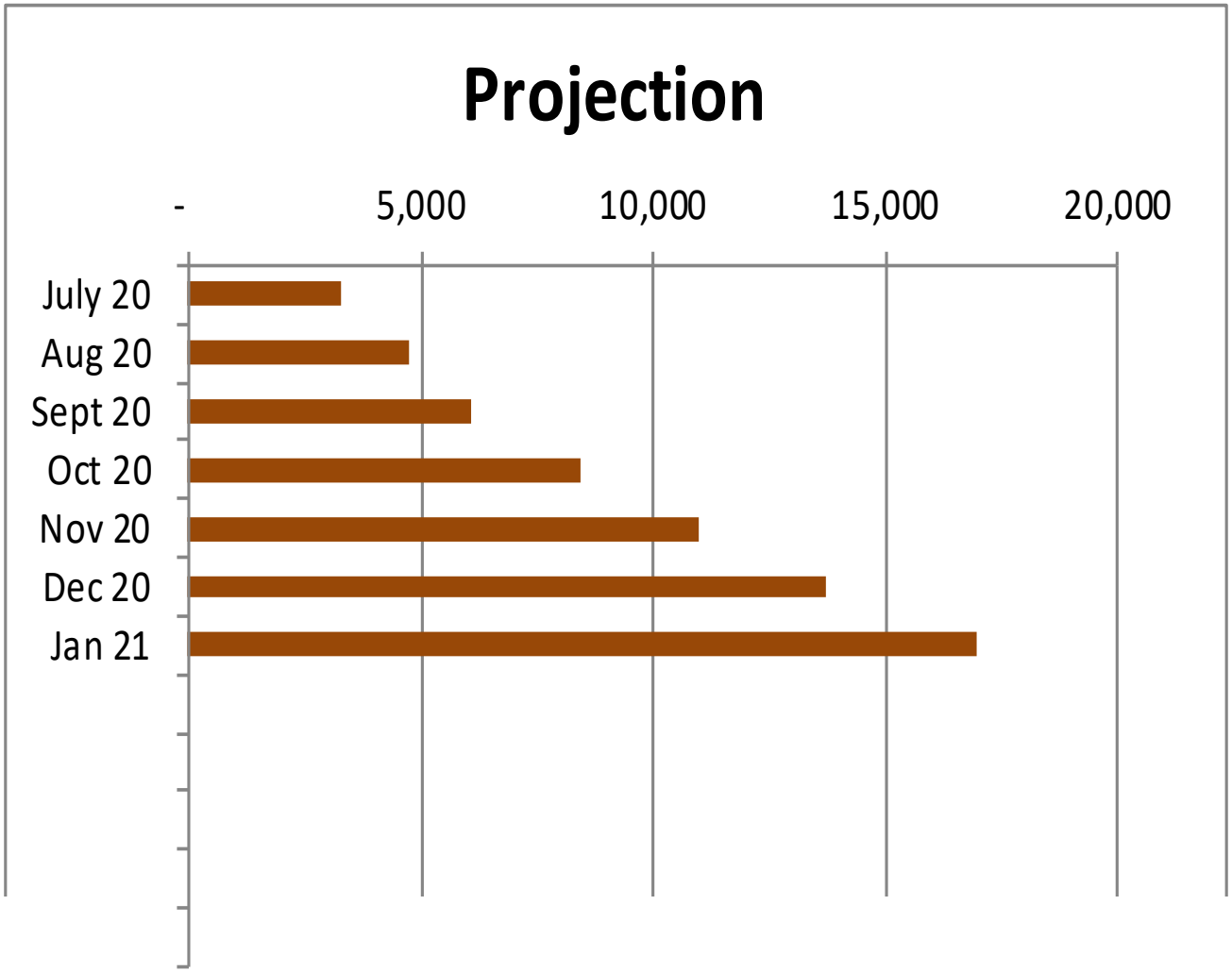
Historical LEAC Over (Under) Recovery

LEAC Period		Approved LEAC	Actual Over	
From	To	Rate	(Under) Recovery	
4/1/2012	7/31/2012	$ 0.192310	$ (3,040,418)	
8/1/2012	1/31/2013	$ 0.186834	$ (2,494,052)	
2/1/2013	7/31/2013	$ 0.209271	$ 1,345,259	
8/1/2013	10/31/2013	$ 0.182054	$ 1,300,093	
2/1/2014	7/31/2014	$ 0.172986	$ (1,137,034)	
8/1/2014	10/31/2014	$ 0.176441	$ (4,646,872)	
11/1/2014	1/31/2015	$ 0.146666	$ 661,428	
2/1/2015	7/31/2015	$ 0.102054	$ 1,757,878	
8/1/2015	1/31/2016	$ 0.104871	$ (2,467,151)	
2/1/2016	7/31/2016	$ 0.086613	$ (2,668,603)	
8/1/2016	1/31/2017	$ 0.086613	$ (9,915,360)	
			$ (5,315,360)	(a)
2/1/2017	7/31/2017	$ 0.105051	$ (14,050,504)	
8/1/2017	01/31/1018	$ 0.117718	$ (16,775,982)	
2/1/2018	4/30/2018	$ 0.147266	$ (13,005,689)	
5/1/2018	7/31/2018	$ 0.154242	$ (8,422,674)	
8/1/2018	1/31/2019	$ 0.154242	$ (13,336,698)	
2/1/2019	7/31/2019	$ 0.154242	$ (10,225,349)	
8/1/2019	1/31/2020	$ 0.154242	$ (2,193,618)	
2/1/2020	3/31/2020	$ 0.134474	$ (1,803,778)	
4/1/2020	5/31/2020	$ 0.110039	$ (2,981,023)	
6/1/2020	7/31/2020	$ 0.086800	$ (3,250,772)	Estimated

Notes:
(a) Under-recovery Balance after applying the $4.6 million from the Cabras 3&4 Extra Expense claim

LEAC Under Recovery Balances

LEAC



LEAC

(Unearned)/ Under Recovered	Projection [1]
July 20	3,251
Aug 20	4,739
Sept 20	6,087
Oct 20	8,435
Nov 20	10,971
Dec 20	13,734
Jan 21	16,962

LEAC - Update

	Current	Scenario A - Remain As Is			Scenario B - Full Recovery			Scenario C - 50% Recovery		
	June 1 to July 31	August 1 to Jan. 2021	Variance		August 1 to Jan. 2021	Variance		August 1 to Jan. 2021	Variance	
Rate	$ 0.086800	$ 0.086800	$ -	0.0%	$ 0.114568	$ 0.027768	32.0%	$ 0.100026	$ 0.013226	15.2%
(in '000)										
Under Recovery on July 31, 2020	$ 3,251									
Under Recovery on Jan. 31, 2021		$ 16,962			$ -			$ 8,481.00		
Average Price per Bbl-RFO	$ 37.51	$ 44.07			$ 44.07			$ 44.07		
Average Price per Bbl-Diesel	$ 66.51	$ 60.38			$ 60.38			$ 60.38		

LEAC – Sample Bill

	RATE SCHEDULE R							
	Current LEAC		Scenario A		Scenario B		Scenario C	
	Effective 06-01-20		Effective 08-01-20		Effective 08-01-20		Effective 08-01-20	
KWH		**1,000**		**1,000**		**1,000**		**1,000**
Monthly Charge	$ 15.00	$ 15.00	$ 15.00	$ 15.00	$ 15.00	$ 15.00	$ 15.00	$ 15.00
Non-Fuel Energy Charge								
First 500 KWH	0.069550	34.78	0.069550	34.78	0.069550	34.78	0.069550	34.78
Over 500 KWH	0.086870	43.44	0.086870	43.44	0.086870	43.44	0.086870	43.44
Emergency Water-well charge	0.002790	1.40	0.002790	1.40	0.002790	1.40	0.002790	1.40
Total Electric Charge before Fuel Recovery Charges		94.62		94.61		94.61		94.61
Fuel Recovery Charge	**0.086800**	86.80	**0.086800**	86.80	**0.114568**	114.57	**0.100026**	100.03
Total Electric Charge		$ 181.42		$ 181.41		$ 209.17		$ 194.63
Increase/(Decrease) in Total Bill						**$ 27.77**		**$ 13.23**
% Increase/(Decrease) in Total Bill						**15.3%**		**7.3%**
% Increase/(Decrease) in LEAC rate						**32.0%**		**15.2%**

Customer Service Division

Jun 2020

SITE	Less than 10 Mins.	%	10-15 Mins.	%	15-30 Mins.	%	30-45 Mins.	%	TOTAL	Location %
FADIAN	1,652	67%	294	12%	497	20%	20	1%	2,463	47%
HAGATNA	923	88%	74	7%	38	4%	17	2%	1,052	20%
UPPER TUMON	1,507	89%	91	5%	63	4%	24	1%	1,685	32%
TOTAL:	4,082	79%	459	9%	598	12%	61	1%	5,200	99%

Government Accounts Receivable: CSD reports invoices for the month of June 2020, for 75 active government accounts with an overall total of $3,529,491.57, and 51 accounts were current (68%), 24 accounts with arrears (32%). 24 fax/emails issued to government accounts totaling $3,384,995.85. May 2020 invoices, 0 accounts paid in full.

Credit and Collection

Delinquent Ratio: As of June 2020, the authority reported a total 48,296, active customers. The "Delinquent Ratio" was recorded at 10.93% with 5,277 total delinquent accounts, total arrears of 3,625,921.78; 1,991,607.82; 5,057(10.47% / 28-45 days) category; 887,974.75; 2,428(5.03% / 46-60 days); 300,368.94; 906(1.88% 61-90 days); and 445,970.27; 1,415(2.93% / Over 90 days).

Bankruptcy: The Authority reports no bankruptcy for the month of June 2020.

Damage Claim: The Damage claim committee received four (4) Damage claims at $2,102.28 for the month of June 2020.

ACTIVE DELINQUENT – NON-PAYMENT

Command Center / Disconnection / Reconnections

Single Phase Meters: Credit and Collection issued orders to Command Center to perform remote disconnect/reconnect for a total of 0 customers; 0(0%) were disconnected; 0(0%) deferred; 0(0%) incompletes.

3 Phase Meters: Credit and Collection issued orders to Disconnect Reconnect crew to perform truck roll out disconnect/reconnect for a total of 0 customers; 0(0%) were disconnected; 0(0%) deferred; 0(0%) incompletes.

FY 2020 (June 01- June 30, 2020)

	Scheduled	Disc	Deferred	Complete Vs. Scheduled	Incomplete Disconnections	Disc Vs. Scheduled	Deferred Vs. Scheduled	Incomplete Vs. Scheduled
Jun-20	----	----	----	----	----	----	----	----
May-20	----	----	----	----	----	----	----	----
2nd	3,351	1,746	1,583	3,329 99%	22	52%	47%	1%
1st	1,969	1,358	582	1,940 99%	29	69%	30%	1%
TOTAL:	5,320	3,104	2,165	5,269 99%	51	58%	41%	1%

FY 2019 (October 01, 2018 – September 30, 2019)

QTR	Scheduled	Disc	Deferred	Complete Vs. Scheduled	Incomplete Disconnections	Disc Vs. Scheduled	Deferred Vs. Scheduled	Incomplete Vs. Scheduled
4th	3,456	2,400	1,038	3,438 99%	18	69%	30%	1%
3rd	2,160	1,487	626	2,113 98%	44	69%	29%	2%
2nd	2,869	2,089	711	2,800 98%	69	73%	25%	2%
1st	8,855	2,720	6,013	8,733 99%	122	31%	68%	1%
TOTAL:	17,340	8,696	8,388	17,084 99%	253	50%	48%	2%

This concludes the Summary Report for the Customer Service Division for the month of June 2020.

Respectfully submitted,
Marissa Fernandez
Marissa Fernandez, Admin. Officer

Reviewed / Approved by:
Richard J. Bersamin, ACSM

Run Date: 7/7/2020 - Tues
Run Time: 12:01:24AM

Guam Power Authority
Delinquent Active Accounts Summary Report
As of - 07/07/2020

Report ID: DELRATIO

Rate Classification	Total Cust	Del Cust	Del 28-45	Del 46-60	Del 61-90	Over-90	Current Balance	28-45 Days	46-60 Days	61-90 Days	>90 Days	Total Arrears	Total D
Residential(ERES-R)	42,543	4,754	4,589	2,166	773	1,212	6,151,397.54	1,015,224.48	438,478.65	173,552.11	275,589.34	1,902,844.58	8,054,242
		11.17%	10.79%	5.09%	1.82%	2.85%							
Small Gen Non Demand(EGEN-G)	4,187	402	355	208	104	167	876,806.69	107,027.55	56,505.93	34,674.56	64,419.25	262,627.29	1,139,433
		9.60%	8.48%	4.97%	2.48%	3.99%							
Small Gen Demand(EGEND-J)	933	70	67	29	16	21	2,245,094.86	216,216.58	77,453.49	67,787.18	75,099.60	436,556.85	2,681,651
		7.50%	7.18%	3.11%	1.71%	2.25%							
Large General(ELPS-P)	120	17	17	8	1	2	4,580,941.46	651,787.69	314,962.69	23,964.04	25,581.28	1,016,295.70	5,597,237
		14.17%	14.17%	6.67%	0.83%	1.67%							
Private Streetlight(EPOL-H)	513	34	29	17	12	13	19,960.37	1,351.52	573.99	391.05	5,280.80	7,597.36	27,557
		6.63%	5.65%	3.31%	2.34%	2.53%							
Sub-Total (Private)	**48,296**	**5,277**	**5,057**	**2,428**	**906**	**1,415**	**13,874,200.92**	**1,991,607.82**	**887,974.75**	**300,368.94**	**445,970.27**	**3,625,921.78**	**17,500,122**
		10.93%	**10.47%**	**5.03%**	**1.88%**	**2.93%**							
Small Gov Non Demand(ESGS-S)	659	219	217	103	37	12	456,076.37	102,094.48	60,819.16	33,085.01	7,306.40	203,305.05	659,381
		33.23%	32.93%	15.63%	5.61%	1.82%							
Small Gov Demand(ESGSD-K)	359	133	133	115	72	4	3,139,158.96	544,245.36	478,898.02	366,091.02	22,120.03	1,411,354.43	4,550,513
		37.05%	37.05%	32.03%	20.06%	1.11%							
Large Government(ELGS-L)	44	26	26	24	17	0	2,432,220.96	481,552.00	477,491.78	419,944.92	0.00	1,378,988.70	3,811,209
		59.09%	59.09%	54.55%	38.64%	0.00%							
Gov Streetlight(ESTL-F)	619	455	455	150	4	15	947,924.07	385,460.43	129,333.03	176.16	35,875.16	550,844.78	1,498,768
		74%	73.51%	24.23%	0.65%	2.42%							
Sub-Total (Government)	**1,681**	**833**	**831**	**392**	**130**	**31**	**6,975,380.36**	**1,513,352.27**	**1,146,541.99**	**819,297.11**	**65,301.59**	**3,544,492.96**	**10,519,873**
		49.55%	**49.43%**	**23.32%**	**7.73%**	**1.84%**							
GRAND TOTAL	**49,977**	**6,110**	**5,888**	**2,820**	**1,036**	**1,446**	**20,849,581.28**	**3,504,960.09**	**2,034,516.74**	**1,119,666.05**	**511,271.86**	**7,170,414.74**	**28,019,996**
		12.23%	**11.78%**	**5.64%**	**2.07%**	**2.89%**							

Guam Power Authority

Customer Service Division

Employee Month-To-Date (MTD) Consolidated Report

June 2020

Date: 07/02/2020

Compiled by: RitaTC

Reviewed by: __EDMendiola_

Reason(s) for visit	Transaction type	Fadian	% MTD	Hagatna	% MTD	Tumon	% MTD	TOTAL
New Install - Permanent (NI1)	Application	21	1.4%	0	0.0%	3	0.2%	24
New Install - Temporary (NI2)	Application	8	0.5%	0	0.0%	0	0.0%	8
New Install - Street Light (NI3)	Application	1	0.1%	1	0.1%	0	0.0%	2
Reconnection - Install Meter (NI4)	Application	1	0.1%	3	0.2%	5	0.4%	9
Reconnection - Turn on Meter (NI5)	Application	21	1.4%	17	1.2%	100	8.0%	138
Name Change (NC1)	Application	198	13.0%	121	8.5%	168	13.5%	487
Name Change - Street Light (NC2)	Application	1	0.1%	1	0.1%	1	0.1%	3
Termination - Regular (TE1)	Termination	73	4.8%	71	5.0%	140	11.3%	284
Termination - Name Change (TE2)	Termination	1	0.1%	0	0.0%	5	0.4%	6
Termination - Non Payment (TE3)	Termination	0	0.0%	0	0.0%	0	0.0%	0
Termination - Typhoon (TE4)	Termination	0	0.0%	0	0.0%	0	0.0%	0
Termination - Removal (TE5)	Termination	0	0.0%	0	0.0%	1	0.1%	1
Termination - Streert (TE6)	Termination	0	0.0%	0	0.0%	0	0.0%	0
Work Clearance - Emergency (WCE)	Other	2	0.1%	1	0.1%	1	0.1%	4
Work Clearance - Underground (UG)	Other	14	0.9%	0	0.0%	1	0.1%	15
Work Clearance - Overhead (OH)	Other	6	0.4%	0	0.0%	4	0.3%	10
Meter Investigation (INV)	Other	0	0.0%	0	0.0%	0	0.0%	0
Meter Change Out / Calibration (MC1)	Other	1	0.1%	0	0.0%	0	0.0%	1
Meter Upgrade /Downgrade (MC3)	Other	0	0.0%	0	0.0%	1	0.1%	1
Misc Public Service (MPS)	Other	13	0.9%	4	0.3%	3	0.2%	20
Refund (RFD)	Other	4	0.3%	1	0.1%	5	0.4%	10
Relocation of Meter (RM1)	Other	13	0.9%	0	0.0%	3	0.2%	16
Street Light Repair (ST1)	Other	0	0.0%	1	0.1%	0	0.0%	1
Update Special Charge (USC)	Other	0	0.0%	23	1.6%	3	0.2%	26
Inspection Report (IR)	Other	9	0.6%	5	0.3%	5	0.4%	19
Copy of Bill (COB)	Other	260	17.1%	178	12.5%	160	12.9%	598
Bill Inquiry (BILL INQ)	Other	159	10.4%	107	7.5%	137	11.0%	403
Bill Adjustment (BILL ADJ)	Other	0	0.0%	3	0.2%	1	0.1%	4
Address Change (ADDR CHG)	Other	13	0.9%	40	2.8%	27	2.2%	80
Deferred Payment Agreement (DPA)	Other	7	0.5%	0	0.0%	2	0.2%	9
Prepaid	Other	18	1.2%	14	1.0%	17	1.4%	49
Rebate	Other	387	25.4%	233	16.3%	156	12.6%	776
ACH/EFT	Other	0	0.0%	0	0.0%	0	0.0%	0
No Answer	Other	8	0.5%	27	1.9%	14	1.1%	49
Inquiry Type Other	Other	213	14.0%	224	15.7%	143	11.5%	580
Inquiry (INQ)	Active Delinquent	9	0.6%	156	10.9%	14	1.1%	179
Payment in Full (PYMT)	Active Delinquent	0	0.0%	84	5.9%	29	2.3%	113
Do Not Disconnect (DND)	Active Delinquent	0	0.0%	0	0.0%	0	0.0%	0
Extension Pay Plan (EXT)	Active Delinquent	63	4.1%	98	6.9%	89	7.2%	250
Reconnect (REC)	Active Delinquent	0	0.0%	2	0.1%	0	0.0%	2
Inquiry (INQ)	Inactive	0	0.0%	13	0.9%	5	0.4%	18
Payment in Full (PYMT)	Inactive	0	0.0%	1	0.1%	0	0.0%	1
Transfer Balance (TRF BAL)	Inactive	0	0.0%	0	0.0%	0	0.0%	0
Total transactions by location		1,524		1,429		1,243		
Grand total for all locations								4,196

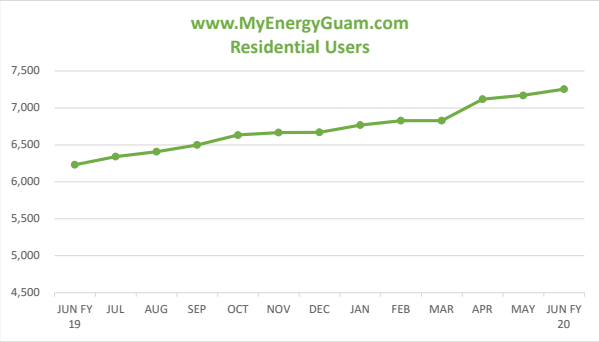
Duration of wait time for "Visit (V)" type customer contact	Fadian	%	Hagatna	%	Tumon	%
Less than 10 minutes	1,652	67%	923	88%	1,507	89%
10-15 minutes	294	12%	74	7%	91	5%
16-30 minutes	497	20%	38	4%	63	4%
More than 30 minutes	20	1%	17	2%	24	1%
Total "Visit (V)" customers contacts	**2,463**		**1,052**		**1,685**	

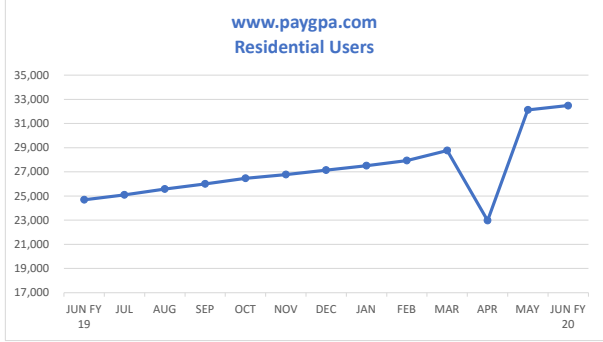
Guam Power Authority

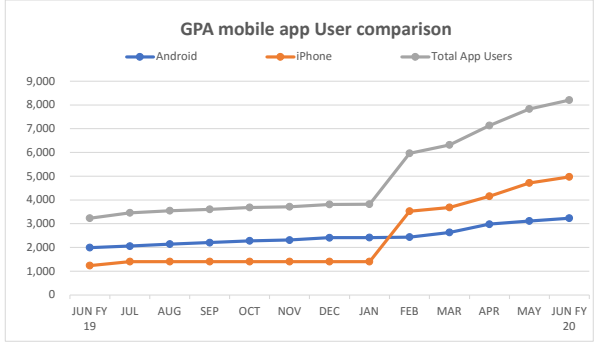
Customer Service Division

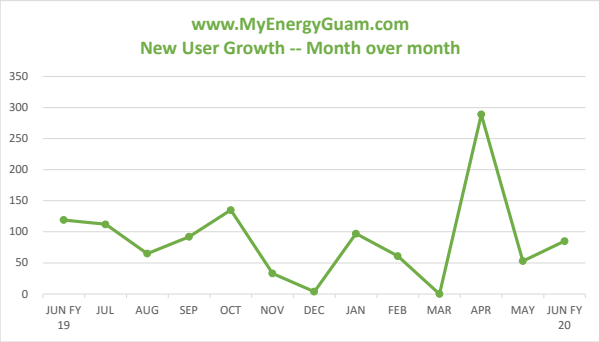
Online resources usage and growth - Residential Users

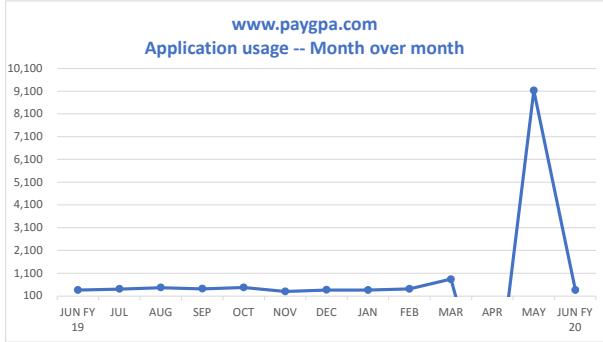
as of June 30, 2020











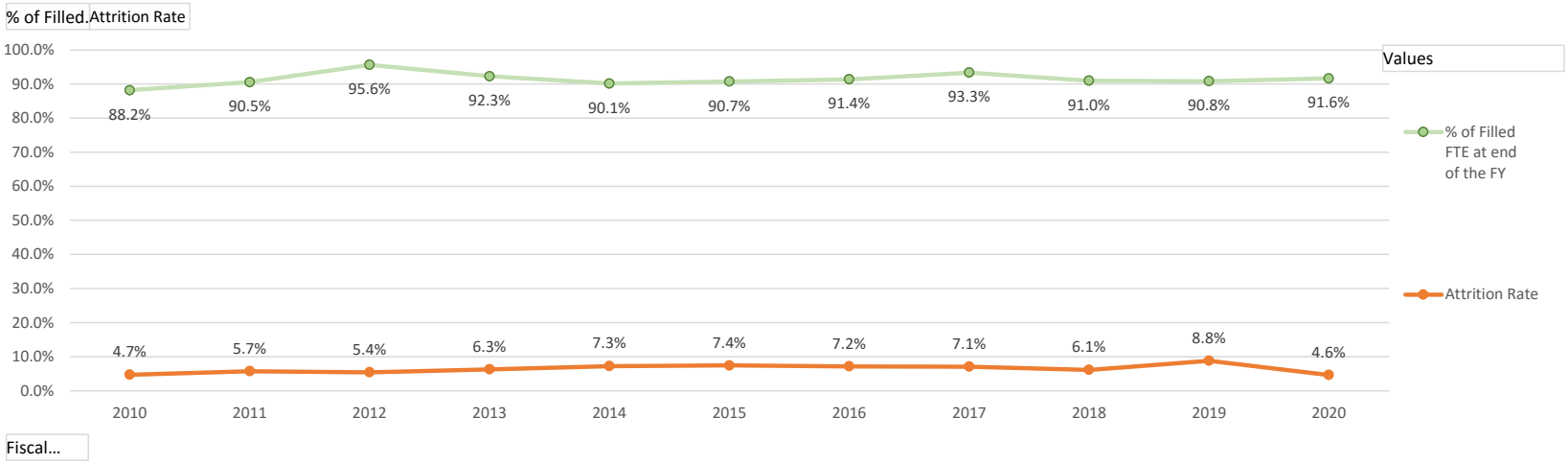


Guam Power Authority

Human Resources Division

FY 2020 Recruitment Analysis

as of June 30, 2020



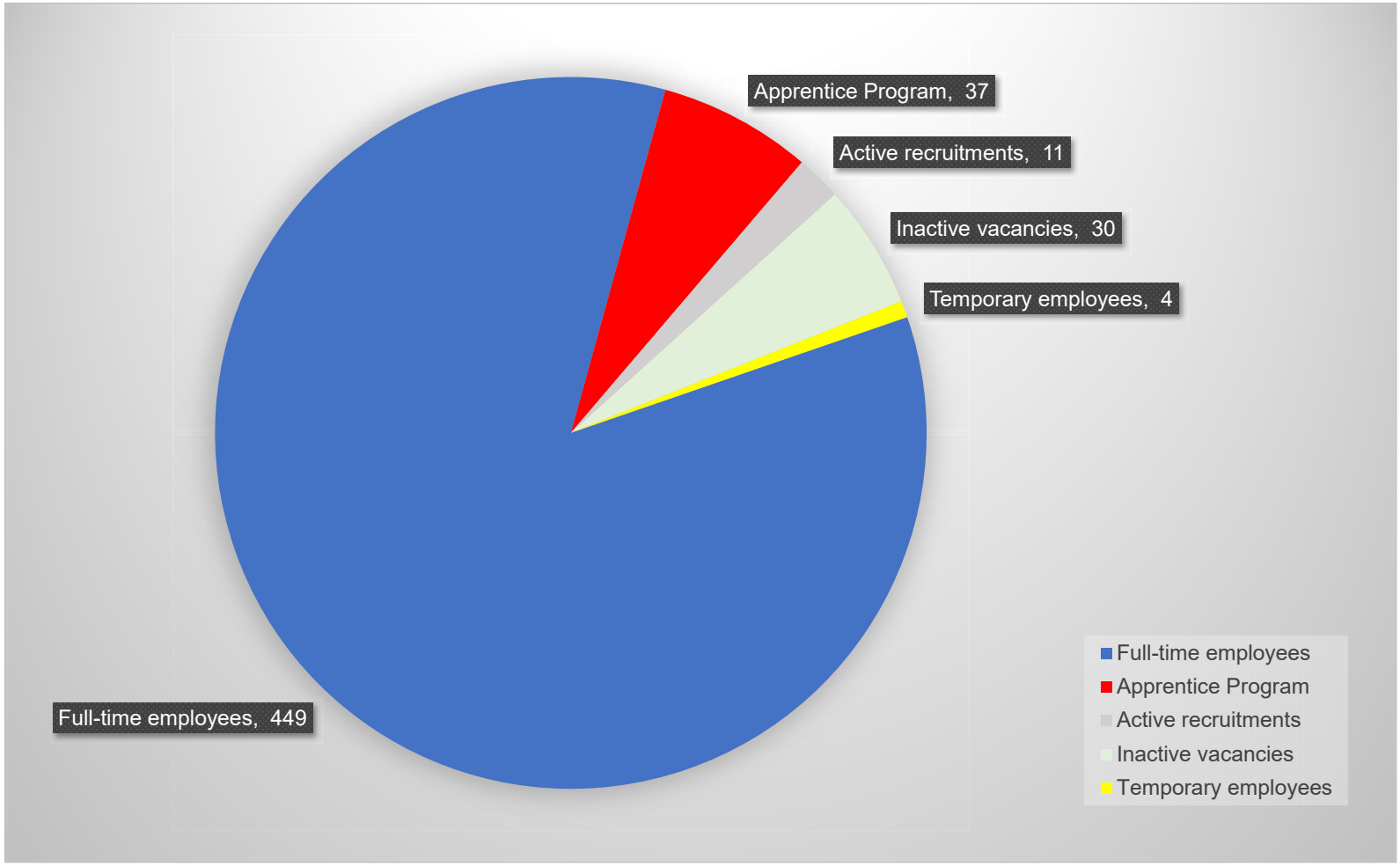
Fiscal Year	New Hire	Promotion	Reclass -ification	Termination	Death	Resignation	Retirement	Attrition Rate	Total Authorized FTE	Total Filled FTE at end of the FY	% of Filled FTE at end of the FY
2010	13	20	10	0	1	12	12	4.7%	592	522	88.2%
2011	44	23	6	4	0	14	12	5.7%	592	536	90.5%
2012	36	24	6	1	2	19	7	5.4%	568	543	95.6%
2013	15	26	9	1	3	14	16	6.3%	568	524	92.3%
2014	26	27	8	1	0	13	24	7.3%	568	512	90.1%
2015	15	25	12	2	1	19	16	7.4%	539	489	90.7%
2016	12	20	17	3	1	15	16	7.2%	510	466	91.4%
2017	42	15	21	0	1	13	19	7.1%	510	476	93.3%
2018	17	16	13	0	3	15	11	6.1%	510	464	91.0%
2019	31	20	3	3	3	18	17	8.8%	500	454	90.8%
2020	15	10	6	1	1	8	11	4.6%	490	449	91.6%

Guam Power Authority

Human Resources Division

FY 2020 Staffing Report

as of June 30, 2020



Guam Power Authority

Human Resources Division

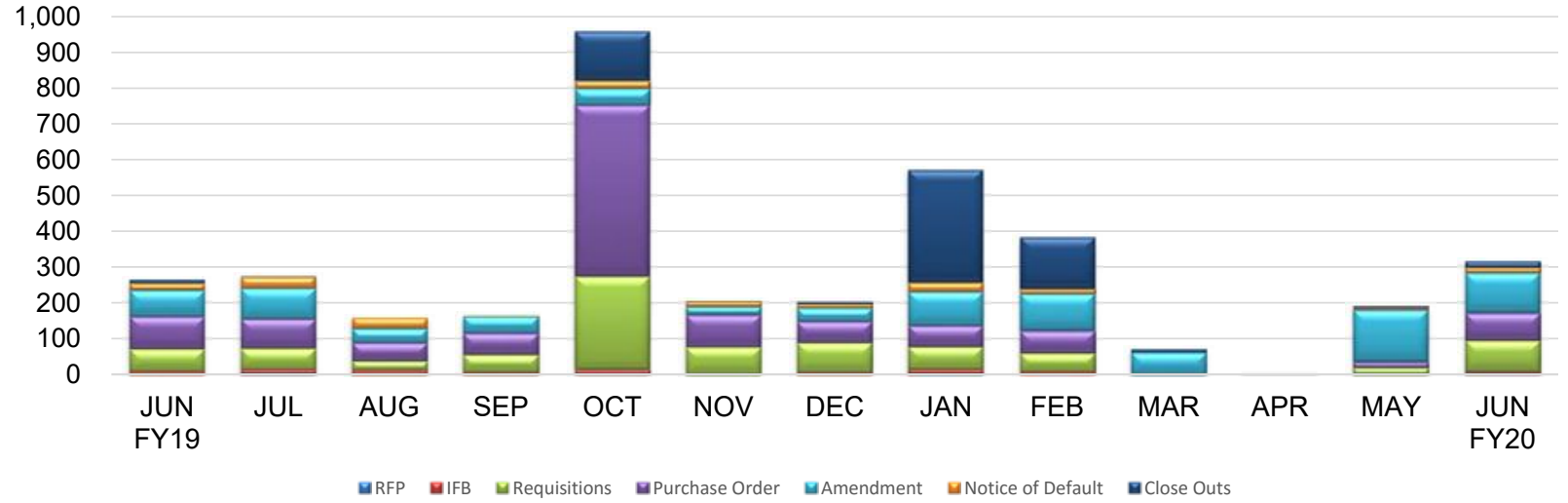
FY 2020 Staffing Report

as of June 30, 2020

Department / Division / Program	Prior Month Employee Count	Current Month Employee Count	No. of Vacancies Prior Month	No. of Vacancies Current Month	Total Staffing
Assistant GM - Administration	2	2	-	-	2
Assistant GM - Engineering & Technical Services	1	1	-	-	1
Assistant GM - Operations	2	2	-	-	2
Consolidated Commission on Utilities Board	2	2	-	-	2
Customer Service	31	31	3	3	34
Engineering	38	37	1	2	39
Facilities	8	8	1	1	9
Finance	41	41	3	3	44
General Manager (GM)	4	4	-	-	4
Generation	108	108	14	14	122
Human Resources	9	9	1	1	10
Information Technology	16	16	-	-	16
Internal Audit / Revenue Protection	3	3	-	-	3
Planning and Regulatory	8	8	-	-	8
Power System Control Center	27	27	3	3	30
Procurement	22	22	-	-	22
Public Information Office	2	2	-	-	2
Safety	7	7	-	-	7
Strategic Planning and Operations Research Division	10	10	1	1	11
Transmission and Distribution	98	98	13	13	111
Transportation	11	11	-	-	11
Total full-time permanent employees	**450**	**449**	**40**	**41**	**490**
Apprenticeship Program	37	37	-	-	37
JOBS Program / GETP / SCSEP*	-	-	-	-	-
Summer Engineering Internship Program	-	-	-	-	-
Temporary hires (Public Law 34-116)	3	3	-	-	3
Work Experience Program	1	1	-	-	1
Total contractual / temporary employees	**41**	**41**	**-**	**-**	**41**
Work Force Grand Total	**491**	**490**	**40**	**41**	**531**

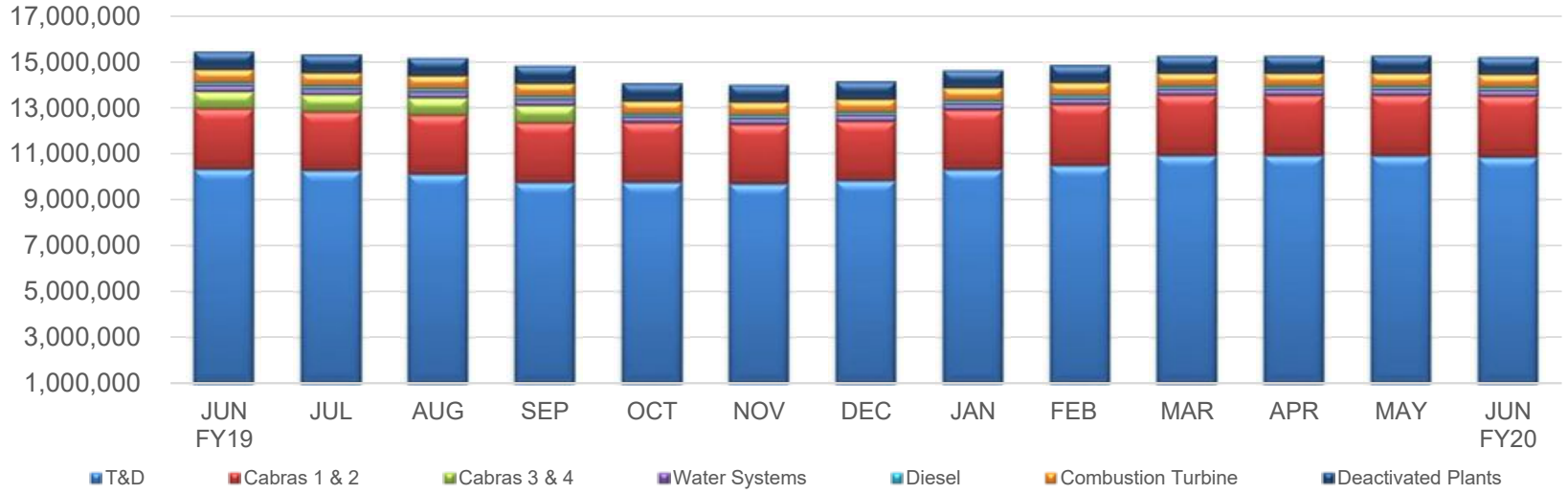
*Job Opportunities & Basic Skills (JOBS) Program, Guam Employment & Training Program (GETP), Senior Community Service Employment Program (SCSEP)

Guam Power Authority
Procurement Division
FY 2020 GPA Buyer's Monthly Report
as of June 30, 2020



Month	RFP	IFB	Requisitions	Purchase Order	Amendment	Notice of Default	Close Outs
JUN FY19	0	9	62	90	72	19	10
JUL	2	12	59	82	85	32	2
AUG	0	12	26	51	39	30	0
SEP	0	6	49	59	46	2	0
OCT	1	12	261	478	46	21	138
NOV	0	0	77	89	22	15	1
DEC	0	6	83	59	37	11	7
JAN	3	12	63	59	94	25	314
FEB	1	7	52	62	103	13	144
MAR	0	0	0	0	61	0	9
APR	0	0	0	0	0	0	0
MAY	0	0	19	16	143	6	5
JUN FY20	2	7	86	76	111	15	17

Guam Power Authority
Procurement Division
FY 2020 GPA Inventory Actuals
as of June 30, 2020

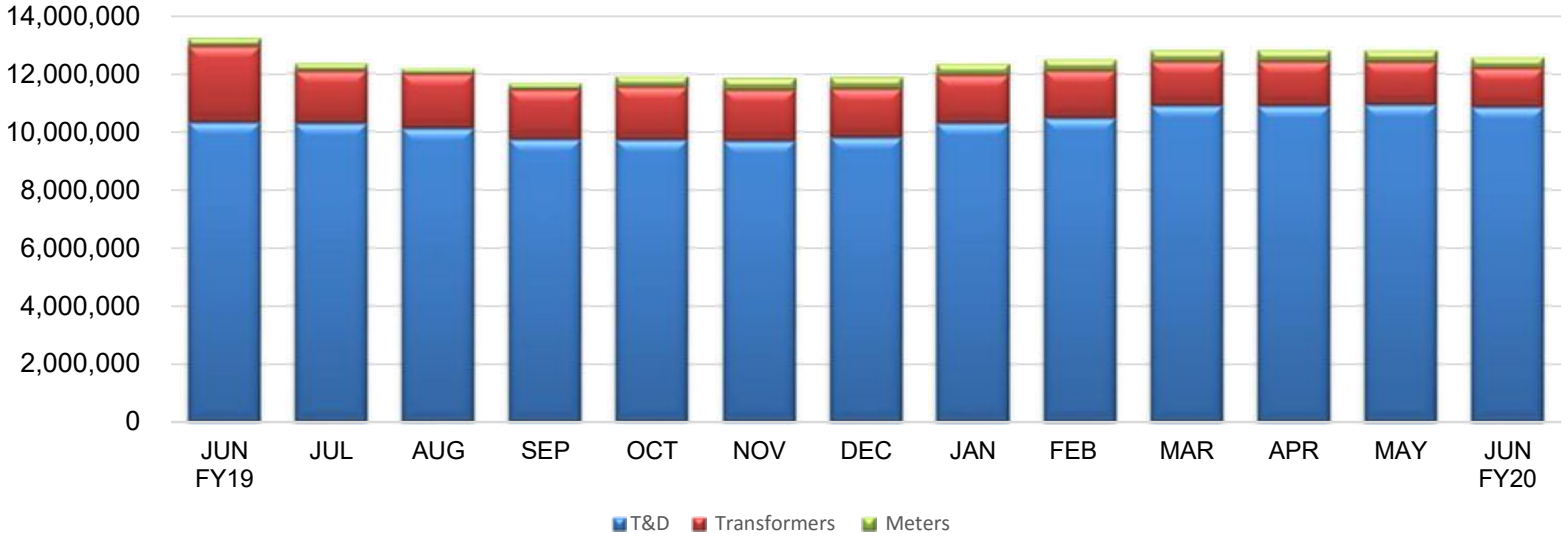


Month	T&D	Cabras 1 & 2	Cabras 3 & 4	Water Systems	Diesel	Combustion Turbine	Deactivated Plants
JUN FY19	10,331,617	2,637,035	747,587	240,915	144,680	573,375	788,101
JUL	10,272,739	2,547,074	747,587	240,126	144,680	573,330	788,101
AUG	10,110,637	2,574,558	747,587	239,171	144,680	573,330	788,101
SEP	9,726,986	2,599,288	757,587	240,153	144,680	573,330	788,096
OCT	9,725,666	2,600,172	0	241,993	131,155	573,454	768,924
NOV	9,676,653	2,583,555	0	241,595	144,680	573,454	768,924
DEC	9,816,091	2,589,773	0	239,124	144,680	573,454	768,924
JAN	10,287,509	2,590,587	0	239,324	144,680	573,454	768,924
FEB	10,474,802	2,648,042	0	234,786	144,680	571,918	767,388
MAR	10,901,323	2,630,656	0	234,869	144,680	571,918	767,388
APR	10,900,511	2,630,656	0	234,869	144,680	571,918	767,388
MAY	10,915,252	2,642,550	0	236,912	144,680	571,918	767,388
JUN FY20	10,842,710	2,653,604	0	231,635	144,680	571,918	767,388

Guam Power Authority

Procurement Division

FY 2020 T&D Inventory Actuals
as of June 30, 2020

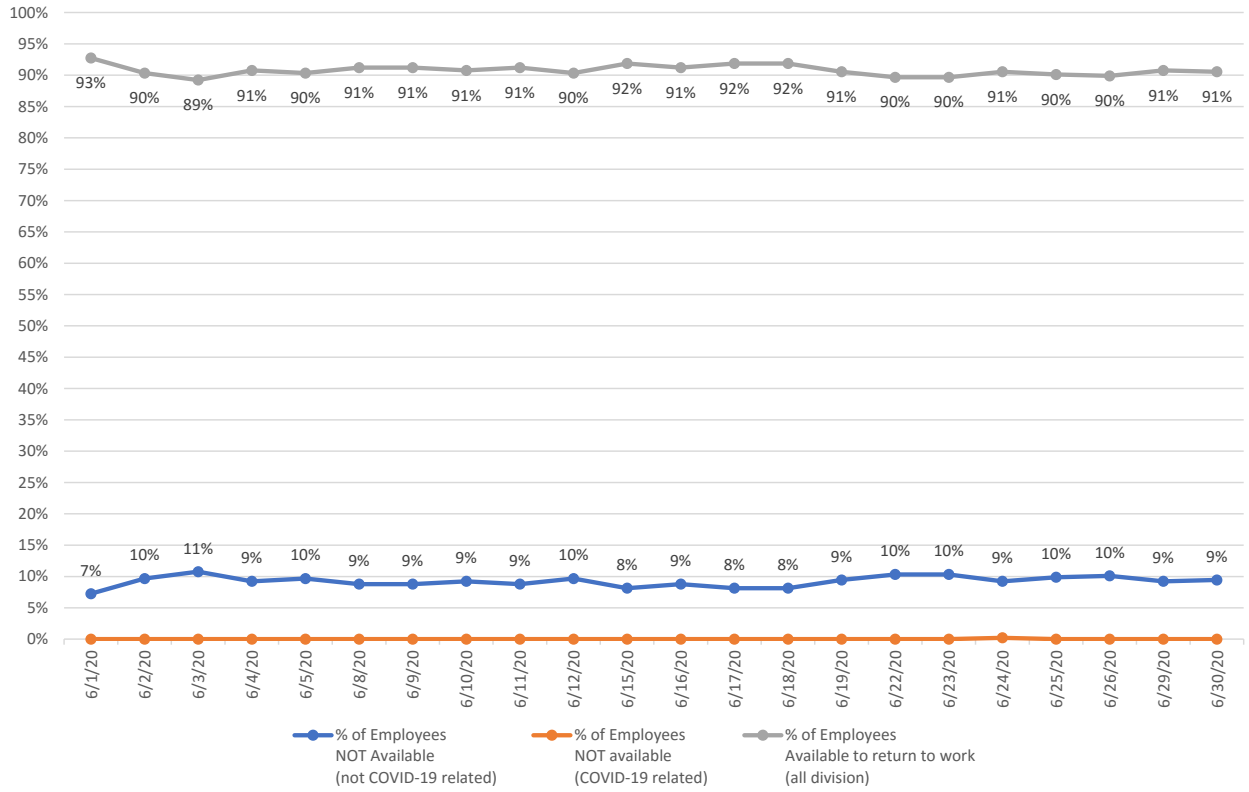


Month	T&D	Transformers	Meters
JUN FY19	10,331,617	2,637,035	277,964
JUL	10,272,739	1,802,361	268,948
AUG	10,110,637	1,881,402	190,612
SEP	9,726,986	1,715,305	214,728
OCT	9,725,666	1,835,760	358,344
NOV	9,673,653	1,773,932	409,344
DEC	9,816,091	1,687,896	401,032
JAN	10,287,509	1,661,509	384,712
FEB	10,474,802	1,638,253	384,712
MAR	10,901,323	1,536,917	384,712
APR	10,900,551	1,533,782	384,712
MAY	10,915,252	1,484,630	384,712
JUN FY20	10,842,710	1,344,312	366,216

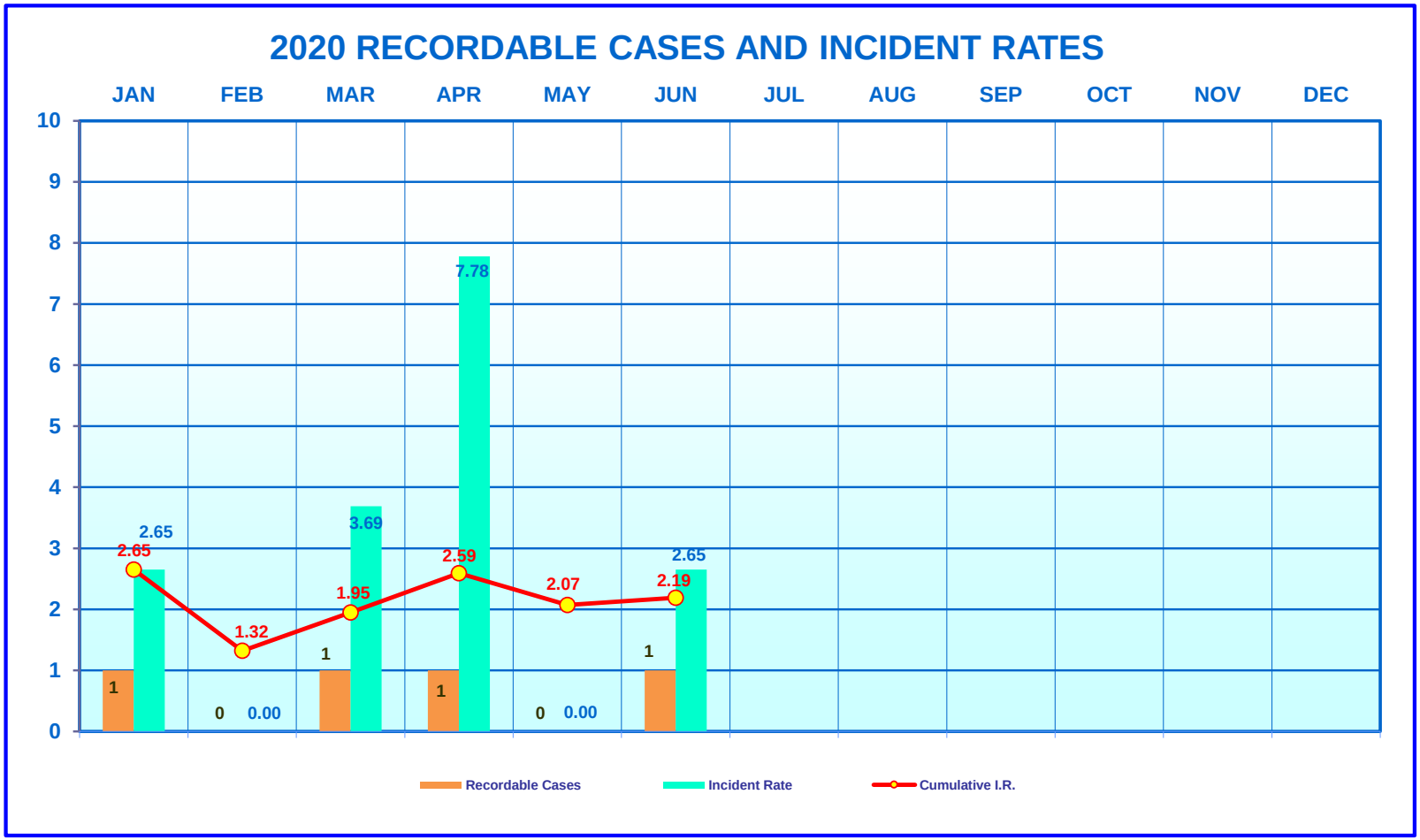
Daily Employee Availability Report

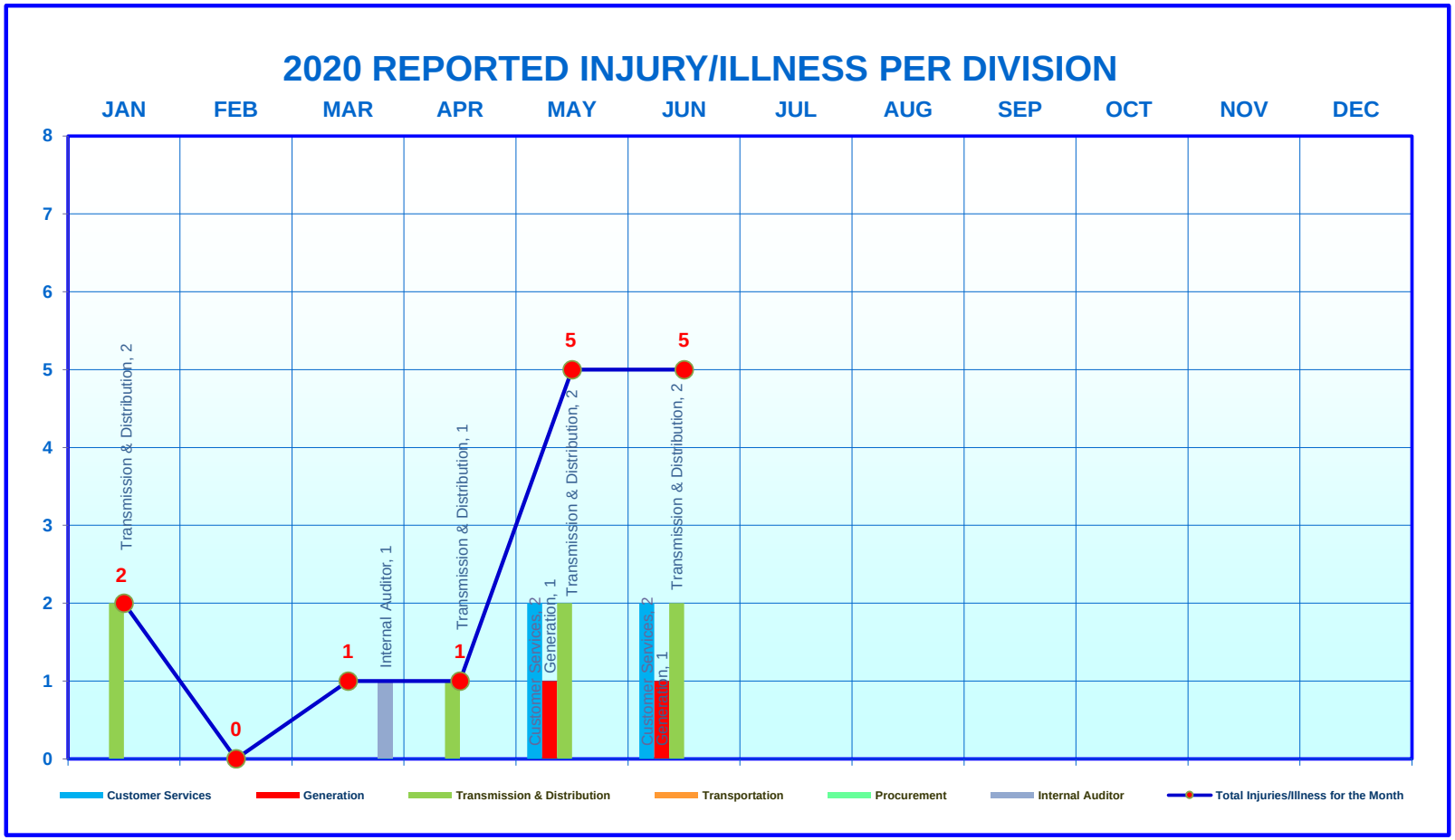
All Divisions

June 1 - June 30, 2020

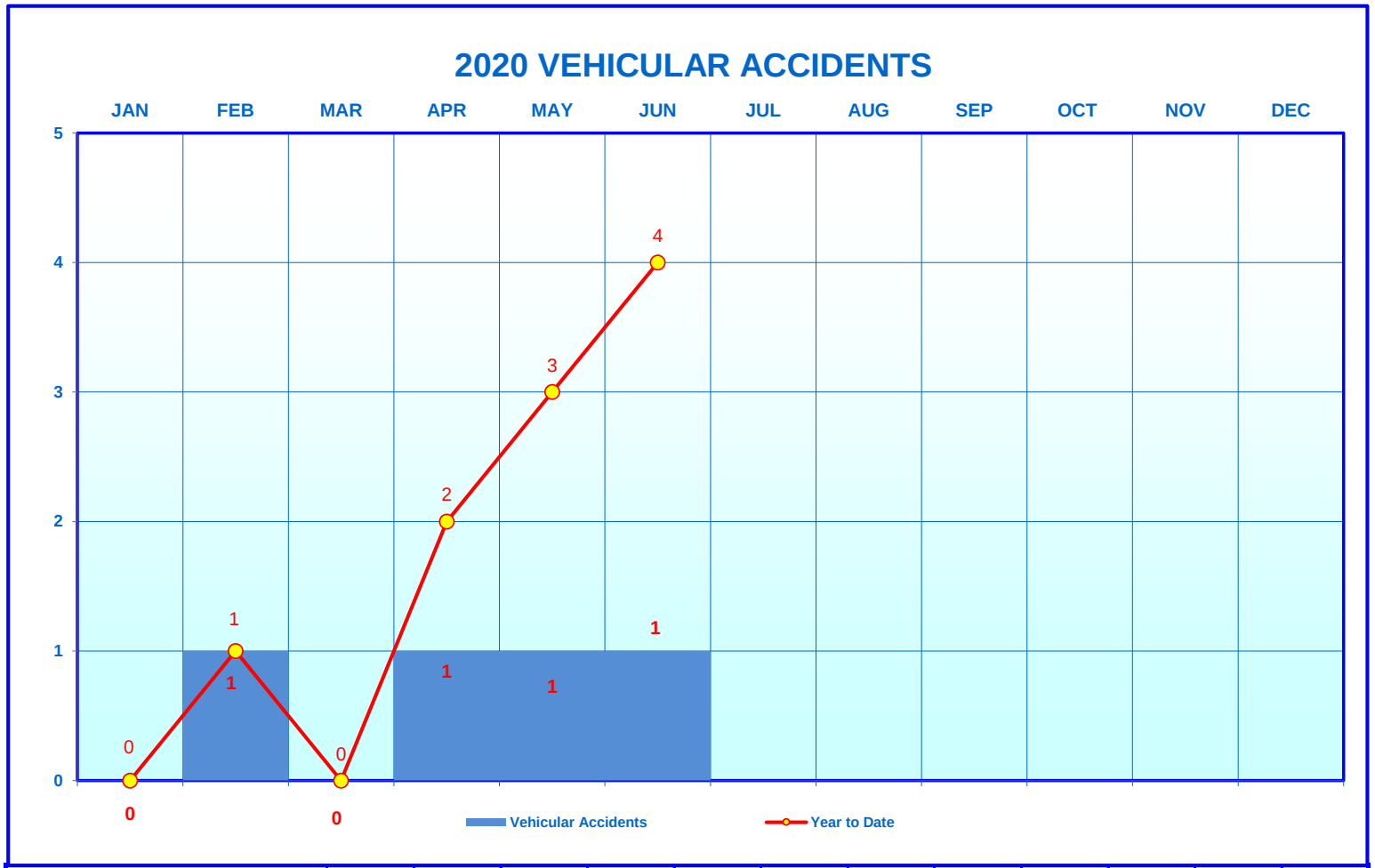


2020 Incident Rate




2020 REPORTED INJURY/ILLNESS PER DIVISION
JAN
FEB
MAR
APR
MAY
JUN
JUL
AUG
SEP
OCT
NOV
DEC
8
7
6
5
4
3
2
1
0
Transmission & Distribution, 2
Internal Auditor, 1
Transmission & Distribution, 1
Customer Services, 2
Generation, 1
Transmission & Distribution, 2
Customer Services, 2
Generation, 1
Transmission & Distribution, 2
2
0
1
1
5
5
Customer Services
Generation
Transmission & Distribution
Transportation
Procurement
Internal Auditor
Total Injuries/Illness for the Month

SAFETY DIVISION MONTHLY REPORT



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Vehicular Accidents	0	1	0	1	1	1						
Year to Date	0	1	0	2	3	4						

Accidents attributed to Employee fault	0	1	0	1	0	1						

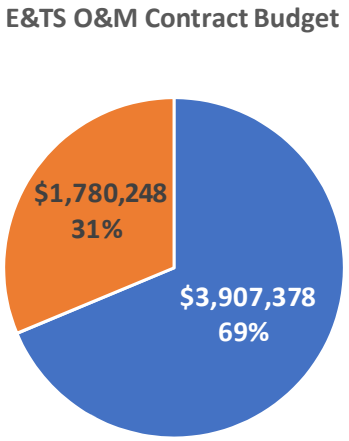
E&TS Divisional Report Summary

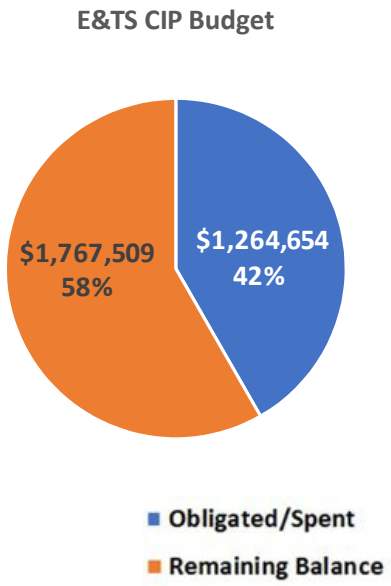
June 30, 2020

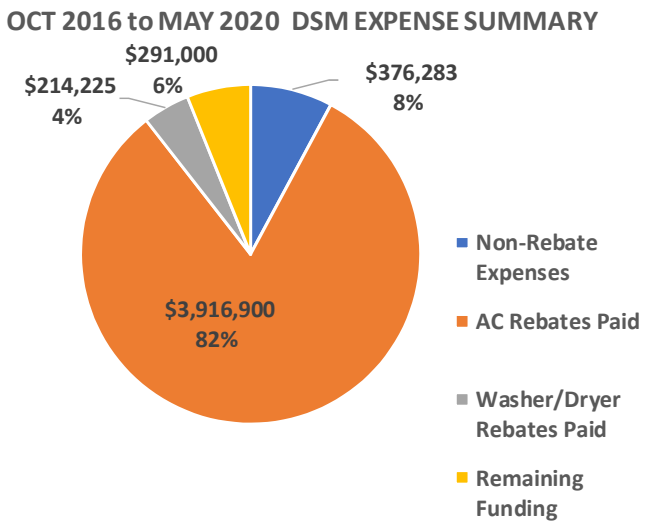
Contents

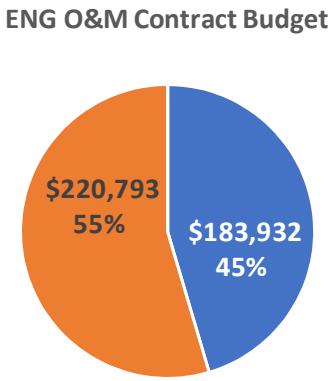
- E&TS Budget Execution Performance
  - O&M Contract Budget
  - CIP Budget
  - DSM Budget
- Environmental Compliance (SPCC and BMP Inspections)

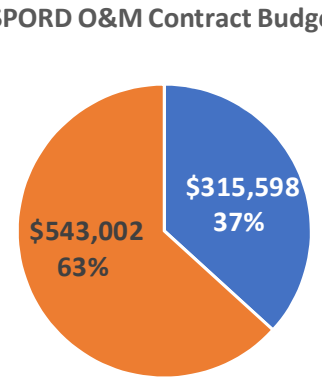
E&TS Budget Execution Performance

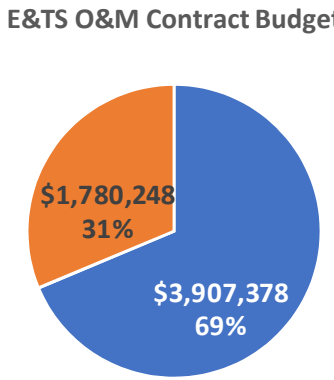


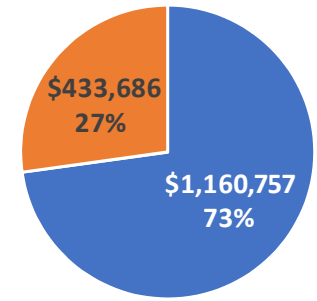


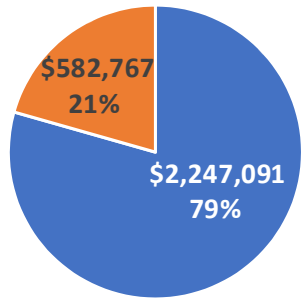


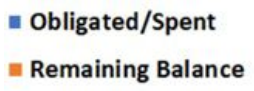

ENG O&M Contract Budget
$220,793
55%
$183,932
45%

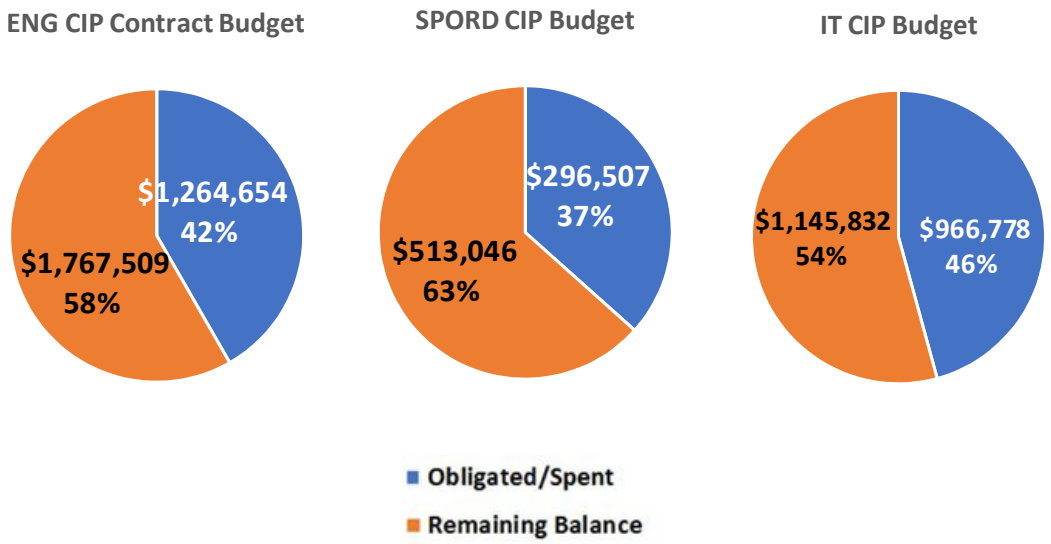

SPORD O&M Contract Budget
$315,598
37%
$543,002
63%


E&TS O&M Contract Budget
$1,780,248
31%
$3,907,378
69%


P&R O&M Contract Budget
$433,686
27%
$1,160,757
73%


IT O&M Contract Budget
$582,767
21%
$2,247,091
79%


Obligated/Spent
Remaining Balance


ENG CIP Contract Budget
$1,264,654
42%
$1,767,509
58%
SPORD CIP Budget
$296,507
37%
$513,046
63%
IT CIP Budget
$1,145,832
54%
$966,778
46%
Obligated/Spent
Remaining Balance

FY 2020 Procurement Status

Business Unit	Current Type					Current Status			Planned			
	RFP	Bid	Multistep Bid	Total	Resolicited	QBL Established	Evaluation Completed	Award/NTP	RFP	Bid	Multistep Bid	Total
SPORD			1	1			6	2	2		6	8
Engineering	3	24		27			7	7	2	10		12
SPORD/Engineering				0			0					0
IT	3	2	1	6	1				3	2	1	6
P&R		2	3	5		2	2			2		2
Total	**6**	**28**	**5**	**39**	**1**	**2**	**15**	**9**	**7**	**14**	**7**	**28**

Environmental Compliance

P&R Inspections Status Ending June 30, 2020

Inspection Type	Organization Responsibility	Violations Not Remediated	Number
Spill Prevention, Control, and Countermeasure (SPCC)	Generation	New Violation Notifications Issued	1
		Remediations Past Due	17
		Remediations Not Past Due	0
	T&D	New Violation Notifications Issued	1
		Remediations Past Due	2
		Remediations Not Past Due	0
Best Management Practices (BMPs)	Generation	New Violation Notifications Issued	1
		Remediations Past Due	7
		Remediations Not Past Due	0

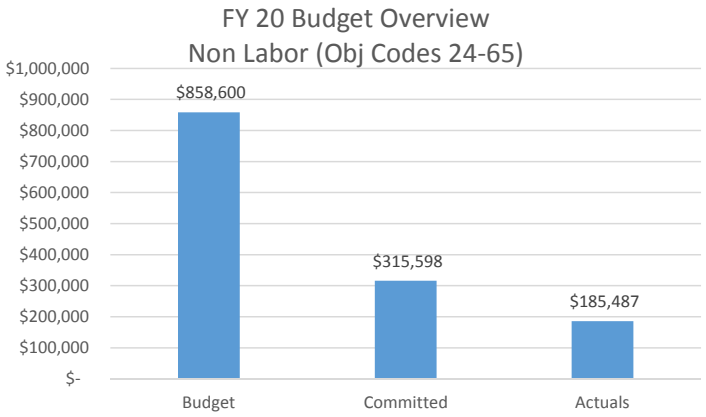
- SPCC rule purpose is to help facilities prevent oil discharges into navigable waters or adjoining shorelines
- BMP refers to a type of auxiliary pollution controls in the fields of industrial wastewater control and municipal sewage control, storm water management, and wetland management

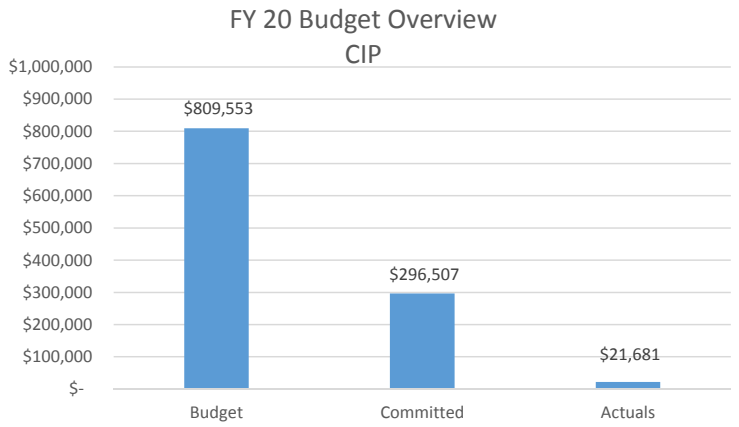
SPORD CCU Report

Update thru June 30, 2020

SPORD FY 2020 Budget Status

thru June 30, 2020





**Excludes DSM & Major Contracts (IPP, PPA, Fuel)*

SPORD FY 2020 Budget Status

- Major Contracts (Non-O&M) thru June 2020

Contract Description	Budgeted Amount	Committed Amount	Actuals	PO Balance
Aggreko Contract	$ 13,227,886	$ 13,227,886	$ 8,435,658	$ 4,792,228
Fuel Contracts	$ 270,418,228	$ 228,564,476	$ 118,929,434	$ 109,635,042
MEC IPP (Piti 8&9)	$ 18,446,737	$ 16,796,814	$ 11,093,549	$ 5,703,265
Glidepath Contract (Renewable)	$ 10,184,494	$ 10,184,494	$ 7,725,983	$ 2,458,511

SPORD FY 2020 Budget Status

Demand Side Management

Description	FY16	FY17	FY18	FY19	FY20 As of 6/30/20	Total to Date
Regular/OT Pay	$11,348.80	$22,256.00	$26,121.83	$50,715.19	$20,714.99	$131,156.81
Other Contractual	$28,278.50	$85,550.05	$116,977.50	$3,025.00	-	$233,831.05
Ads & Radio Announcements	-	-	-	$7,500.00	-	$7,500.00
Paid Rebates-Split AC	$154,700.00	$557,275.00	$1,349,825.00	$1,374,650.00	$457,450.00	$3,893,900.00
Paid Rebates-Central AC	$3,400.00	$8,200.00	$4,400.00	$6,500.00	$500.00	$23,000.00
Paid Rebates-Washer/Dryer	$2,800.00	$7,425.00	$57,200.00	$110,800.00	$36,000.00	$214,225.00
Total Expenses	**$200,527.30**	**$680,706.05**	**$1,554,524.33**	**$1,553,190.19**	**$514,664.99**	**$4,503,612.86**
Bank Interest (+)	$1,676.42	$1,722.74	$1,222.29	$730.05	$353.44	$5,704.94
Bank Fees	$155.00	$1,032.06	$1,085.08	$1,247.54	$275.00	$3,794.68

Expenses for June 20 are preliminary and may be subject to adjustment during reconciliation process.

Budget Balance*: $ 441,166.16

**Balance refer to O&M funds. Recent PUC Orders (Docket 20-05 & Docket 20-12) approved in May 2020 authorizes additional funding for DSM through LEAC beginning June 2020.*

Ongoing Activities

- Contract Performance Management (IPP, Aggreko)
- Generation Fuel Supply & Fuel Farm Management
- DSM Rebate Processing & UESC Program
- Renewables (Wind Turbine Maint & DOAg MOA, GPS Invoicing, Phase I, II & III Projects)
- Energy Storage System
- New Power Plant Procurement
- Smart Grid/Network Support
- Project Management
  - Procurement
  - *June Project Activities*

PROCUREMENT ACTIVITIES

PENDING AWARD / NTP

Responsible	PROJECT	Description	CCU Date Approved (Resolution No.)	PUC Date Approved (Docket No.)	Projected Start*	Projected Completion	Status
SPORD (RAC)	PLANNING	MV90 Integration Services		*not required*	TBD	TBD	Contract Negotiations - Pending GPA Legal contract response
SPORD (FJI)	NEW POWER PLANT	Build, Operate & Transfer Contract for 120-180MW of New Generation Capacity.	09/03/19 (2019-13)	10/31/19 (2019-13)	11/1/2019	10/31/2022	Permitting and EIA work is ongoing.

PROCUREMENT ACTIVITIES

ONGOING PROCUREMENT

Responsible	PROJECT	Description	Bid or RFP	Bid/RFP No	Announced	Bid Opening / Due	Notes
SPORD (RAC)	SCADA	DNP3 SA training			TBD	TBD	Vendor decline to povide price proposal - Re-Bid Plan
SPORD (MAT)	RENEWABLES	Renewable Energy Resource Phase III	MS Bid	GPA-007-18	11/16/2017	9/12/2019 (Price)	Currently under Protest. Hearings scheduled to start July 2020.
SPORD (RAC)	STUDIES	Consulting Services for Distribution Study using Smart Grid Analytics	RFP	RE-SOLICITATION RFP-19-002	Feb-19	3/28/2019	Price Negotiations - Pending L+G updated new price proposal
SPORD (RAC)	Tier 2 Network	ABB TropOs Network Services	RFP	GPA-RFP-19-010	Jul-19	Sep-19	PO Generated
SPORD (MAT)	SPORD Software	Utility Resource Planning Software	RFP	GPA-RFP-25-003	Jan-20	Jun-20	Evaluation of proposals completed. Price Proposal requested by 7/14/2020.
SPORD (MAT)	Cabras PMC	PMC for Cabras #1 and #2 Steam Power Plant	IFB	MS-GPA-035-20	Feb-20	May-20	CCU approval received, PUC approval pending. After PUC approval is received, will proceed to Contract Finalization.

DEVELOPING PROCUREMENT

Responsible	PROJECT	Description	Bid or RFP	Projected Start	Projected Completion	Status
SPORD (RAC)	ELECTRIC VEHICLE	Electric Vehicle Infrastructure	RFP	Oct-19	Jun-20	Developing Requirements (hold)
SPORD (ANF/MAT)	FUEL	GPA Bulk Fuel Storage Facility PMC	Bid	FY2020	Sep-20	Developing Specifications to convert to PMC
SPORD (ANF)	FUEL	Bulk ULSD Supply	MS Bid	Feb-20	Sep-20	Bid Package Prepared. Pending upper management advise on issuance date for the solicitation.
SPORD (MAT)	RENEWABLES	Phase IV Renewable Resource Acquisition	(TBD)	Jan-20	Dec-20	Developing Scope of Work & Bid Documents. For CCU approval July - August 2020.
SPORD (RAC)	SCADA	Replicated Database	RFP	May-20	Dec-20	Developing Scope of Work & RFP Documents
SPORD (MAT)	PMC	PMC for Yigo Diesel Generators (currently Aggreko Diesel Units)	IFB	Jul-20	Nov-20	CCU and PUC approval received; announcement scheduled for mid July.

PROJECT ACTIVITIES – June 2020

No.	Project Description	June 2020 Activities	Status / Est. Completion	RFP/Bid No
1	Energy Storage System (Phase I)	Final design completed. Clearing and grading permit work commenced in November 2017. Foundation permit work commenced in January 2018. Construction is 99% completed. Interconnection commissioning is pending remobilization after COVID-19 shutdown.	Oct-20	MS Bid GPA-082-15
2	Renewable Energy Resource Phase II	KEPCO submitted design drawings for permitting for review and approval. KEPCO has started construction - site clearing. Hanwha's design is ongoing.	KEPCO PV plant COD is extended to January 21, 2022. Hanwha's COD is also extended to Aug 22, 2022.	MS Bid GPA-070-16
3	New Power Plant Bid (EPCM)	Permitting and EIA work is ongoing. KEPCO will be pursuing Major Source Permitting. KEPCO has completed biological study and will be assessing wetlands. Area of Potential Effect documents were submitted to Navy in May and SHPO in June for cultural study scope. Requirements for air permitting are still being assessed. **Commissioning schedule will be updated once these requirements are firmed up.**	Project COD - Oct. 31, 2022	MS GPA-034-18
4	DSM Marketing	No additional activities funded for remaining of the year.	Continuous	
5	DSM Rebate Program	Processed 490 applications for rebates totaling $152k	Continuous	
6	Wireless Network Expansion	Commenced Southern Expansion in collaboration with GWA: 30% Dandan Substation Installation Apra Heights Installation	Feb-21 April 2021	GPA-RFP-19-010
7	Smartworks MDM and Eportal	Training being scheduled	Sep-20	GPA-RFP-19-007
8	GDOE BEST Schools	**FY 20 DOI Award Projects:** **1. Agueda Johnston Middle School LED Lighting Retrofit ($586,771)** **2. Maria Ulloa Elementary School LED Lighting Retrofit ($522,616)** These projects are pending review of environmental documents for issuance NTP notice which will allow purchasing of lighting. Currently evaluating scheduling of projects due to COVID impact on school operations for next fiscal year.	Ongoing	GPA-RFP-16-013

No.	Project Description	June 2020 Activities	Status / Est. Completion	RFP/Bid No
9	Supervisory Control and Data Acquisition (SCADA) System	Project Substantially completed Pending Punch-list item OMS to SCADA integration	Feb 2019 (Punchlist items by Sept 2020 due to COVID)	GPA-066-16
10	Mobile Workforce Management System	User Acceptance Test Dry Run completed Feb 2020. CIS to MWMS integration completed	Aug'20 (due to COVID delay)	GPA-RFP-18-013
11	Consulting Services for Smart Grid Analytics Enabled Distribution System Planning, Technical, and Economic Feasibility Studies	Price Negotiations - Pending L+G updated new price proposal	(contract negotaition completion) 7/2020	RE-SOLICITATION GPA-RFP-19-002
12	MEC Piti &8 and #9 - ECA Extension	Contract Extension commenced 12:00 Noon January 29, 2019. (No issues) Review and adjustment of Recapitalization Projects in-progress. (No issues) MEC provided BWSC Proposal for ULSD May/June 2020, currently under GPA review.	IN PROGRESS	(N/A)
13	Cabars 1&2 PMC Solicitation	CCU approval received, PUC approval pending. After PUC approval is received, will proceed to Contract Finalization.	Est. Contract Commencement 10/1/2020.	GPA-035-20
14	EV Infrastructure	Fast charge station scope for Mangilao offices. Developing fast charge station scope for Mangilao offices.	8/1/2020	
15	Renewable Energy Resource Phase III	Under Protest Period, currently filed with the OPA. Hearings have been rescheduled due to COVID pandemic. Trial hearing set to begin July 6, 2020.	TBD	GPA-007-18
16	Utility Energy Services Contract (UESC)	Continued work with GDOE on Best Schools Program (Grant & Pilot) Continued discussions with Navy on prelimary assessment and grant opportunities. Currently reviewing Basic Ordering Agreement with Navy for extension of UESC service.	Ongoing	
17	GPA Fuel Farm RFO Pipeline Repair & Upgrade	c/o Engineering Project Mgt. Repairs completed.	Substantially completed. Awaiting Contractor warranty bond for 1 year	IFB GPA-047-18
18	GPA Fuel Farm ULSD Pipeline Upgrade	c/o Engineering Project Mgt. Design in progress. Delays due to COVID will move project completion into Summer 2020.	Project Timeline: Estimated Start: Jan 2020 Est. Completion: Summer 2020	IFB GPA-027-19

No.	Project Description	June 2020 Activities	Status / Est. Completion	RFP/Bid No
19	Tk 1934 & Tk1935 API 653 Internal Inspection	c/o Engineering Project Mgt. Implementation in progress. Delays were experienced for Tank 1935 due to COVID however the total project schedule may still be within the projection completion date.	Project Timeline: Estimated Start: Feb 2020 Est. Completion: Dec 2022	IFB GPA-028-19
20	Milsoft Systems Software Services	Engineering Analysis Training -January 2020 Completed	Continuous	GPA-RFP-18-003
21	MV90 Integration Services	Contract Negotiations - Pending GPA Legal contract response		GPA-RFP-18-001
22	Grant Support	Continued grant development and execution. 1. Guam Energy Office EnergySmart School Grant - GPA working with Siemens to schedule audit of 4 schools under this grant. Schedule to be updated due to COVID delays and restrictions.	GEO MOA Finalize: Sept '19 Grant Scope Completion: Dec. '20	
23	Redesignation of Cabras-Piti / Guam	Re-designation received 12/2018. SIP Draft sent to Guam EPA week of 10/21/2019. Final clarifications and changes mde to Control Strategy and SIP Modeling Protocol and submitted by GPA Guam EPA via email and hand delivery of printed copy, week of February 10, 2020. Awaiting final decision on AAQM.	Start: October 2011 Est. Completion: April 2020 *Submitted to EPA week of Oct. 21, 2019. Final response from US EPA RIX on was expected by before April 20, 2020 but delayed due to COVID 19 Pandemic.	RFP-11-001
24	GPA Fuel Farm- OWS Upgrading	c/o Engineering Project Mgt. Scope included in Tk 1934 & Tk1935 API 653 Internal Inspection and repair. Implementation in progress	Project Timeline: Estimated Start: Feb 2020 Est. Completion: Dec 2020	IFB GPA-028-19
25	GPA Fuel Farm- LD System Upgrading	c/o Engineering Project Mgt. Scope included in Tk 1934 & Tk1935 API 653 Internal Inspection and repair. Implementation in progress	Project Timeline: Estimated Start: Feb 2020 Est. Completion: Dec 2022	IFB GPA-028-19
27	Integrated Resource Plan	Information continues to be obtained to support report development.	TBD	GPA-RFP-17-002 / UFS / S&P
28	Energy Storage Development Support	Consultant preparing proposal for third-party commissioning services	Sept/Oct 2020	GPA-RFP-13-007
29	Utility Resource Planning Software RFP.	Evaluation of proposals completed. Price Proposal requested by 7/14/2020.	Planned Completion: 9/30/2021	RFP-20-003

No.	Project Description	June 2020 Activities	Status / Est. Completion	RFP/Bid No
30	Power System Analyses and Studies	Signed contract and PO Acknowledgement received from S&C. System impact studies for Phase III are on hold Phase III Protest.	Estimated Start: Nov 2019 Est. Completion: TBD	
31	CT PMC Negotiations	Contract expires February 28, 2021. On-going discussions with TEMES, Guam Inc.	Estimated Start: Mar 2020 Est. Completion: Dec 2020	TBD
35	Diesel Supply to Tenjo Vista	Bid Package prepared. Approved by CCU (Resolution 2020-02) and PUC (Docket 20-07). For solicitation	Project Timeline: Estimated Start: May 2020 Est. Completion: Dec 2020	TBD
36	GPA Fuel Farm Mgt Contract	2nd & 3rd Year Contract Extension (10/01/20-09/30/22) approved by CCU (Resolution 2020-03) and PUC (Docket 20-08).	2-year base period: Completed 09/30/19 1st Year Extn: 10/01/19 to 09/30/20 2nd & 3rd Yr Extn: 10/01/20 to 09/30/22	MS IFB GPA-014-17
37	RFO Supply to Baseload Plants	Solicitation in progress . ContractTerm: 3-year base period: 09/01/20 to 08/31/23 w/ 2 Year Extn Option	Solicitation Timeline: Estimated Start: Apr 2020 Est. Completion: Aug 2020 (Solicitation)	MS IFB GPA-050-20
38	Reliability Studies	Completed evaluation and set-up of initial scenarios to determine options for maintaining reliability standard, after new power plant commences operation. Initial analysis focused on determining if Piti 8&9 can be retired.	Est. Completion: 10/31/2020 (same as IRP)	(No consultant)
39	RFO Testing Services Contract	Solicitation in progress	Estimated Start: Dec 2019 Est. Completion: Aug 2020	MS IFB GPA-013-20
40	PMC for Yigo Diesel Units (currently Aggreko Diesel Units)	CCU and PUC approval received; announcement scheduled for mid July.	Estimated Start: July 2020 Est. Completion: November 2020	TBD

CCU Report- DSM

As of June 30, 2020

All Expenses – Fiscal Year

Description	FY16	FY17	FY18	FY19	FY20 As of 6/30/20	Total to Date
Regular/OT Pay	$11,348.80	$22,256.00	$26,121.83	$50,715.19	$20,714.99	$131,156.81
Other Contractual	$28,278.50	$85,550.05	$116,977.50	$3,025.00	-	$233,831.05
Ads & Radio Announcements	-	-	-	$7,500.00	-	$7,500.00
Paid Rebates-Split AC	$154,700.00	$557,275.00	$1,349,825.00	$1,374,650.00	$457,450.00	$3,893,900.00
Paid Rebates-Central AC	$3,400.00	$8,200.00	$4,400.00	$6,500.00	$500.00	$23,000.00
Paid Rebates-Washer/Dryer	$2,800.00	$7,425.00	$57,200.00	$110,800.00	$36,000.00	$214,225.00
Total Expenses	**$200,527.30**	**$680,706.05**	**$1,554,524.33**	**$1,553,190.19**	**$514,664.99**	**$4,503,612.86**
Bank Interest (+)	$1,676.42	$1,722.74	$1,222.29	$730.05	$353.44	$5,704.94
Bank Fees	$155.00	$1,032.06	$1,085.08	$1,247.54	$275.00	$3,794.68

**Expenses for June 20 are preliminary and may be subject to adjustment during reconciliation process.*

DSM Funding

No.	Description	Amount
1	Initial DSM Budget FY 2016	$ 1,806,014.00
2	Interest Income	$ 5,704.94
3	Bank Fees	$ 3,794.68
4	Additional Budget: ▪ Bond Refinance 2017 ▪ Revenue Funds FY2019 ▪ Revenue Funds FY2020	 $ 1,139,189.00 $ 1,047,500.00 $ 800,000.00
5	Total Expense as of Report	$4,503,612.86
	DSM Ending Balance	**$ 291,000.40**

FY 2017- Rebate Amount Paid Monthly

Month	Total	Split A/C Units	Central A/C Units	Washers/ Dryers
OCT '16	$ 25,250.00	$ 23,450.00	$ 800.00	$ 1,000.00
NOV '16	$ 57,525.00	$ 55,625.00	$ 1,600.00	$ 300.00
DEC '16	$ 19,625.00	$ 18,225.00	$ 800.00	$ 600.00
JAN '17	$ 49,650.00	$ 48,050.00		$ 1,600.00
FEB '17	$ 43,175.00	$ 42,850.00	$ 325.00	
MAR '17	$ 25,550.00	$ 25,875.00	$ (325.00)	
APR '17	$ 33,875.00	$ 30,950.00	$ 800.00	$ 2,125.00
MAY '17	$ 57,675.00	$ 54,275.00	$ 2,400.00	$ 1,000.00
JUN '17	$ 76,175.00	$ 74,675.00	$ 1,300.00	$ 200.00
JUL '17	$ 30,975.00	$ 30,975.00		
AUG '17	$ 69,400.00	$ 69,200.00		$ 200.00
SEP '17	$ 84,025.00	$ 83,125.00	$ 500.00	$ 400.00
TOTALS	$ 572,900.00	$ 557,275.00	$ 8,200.00	$ 7,425.00

FY 2018- Rebate Amount Paid Monthly

Month	Total	Split A/C Units	Central A/C Units	Washers/ Dryers
OCT '17	$186,850.00	$185,850.00	$800.00	$200.00
NOV '17	$41,900.00	$41,700.00		$200.00
DEC '17	$109,875.00	$108,475.00		$1,400.00
JAN '18	$31,175.00	$31,175.00		
FEB '18	$69,825.00	$68,825.00		$1,000.00
MAR '18	$121,100.00	$120,100.00		$1,000.00
APR '18	$99,700.00	$94,400.00	$500.00	$4,800.00
MAY '18	$133,350.00	$127,150.00		$6,200.00
JUN '18	$82,800.00	$77,600.00		$5,200.00
JUL '18	$60,475.00	$56,475.00	$1,000.00	$3,000.00
AUG '18	$139,750.00	$129,650.00	$1,300.00	$8,800.00
SEP '18	$334,625.00	$308,425.00	$800.00	$25,400.00
TOTALS	$1,411,425.00	$1,349,825.00	$4,400.00	$57,200.00

FY 2019- Rebate Amount Paid Monthly

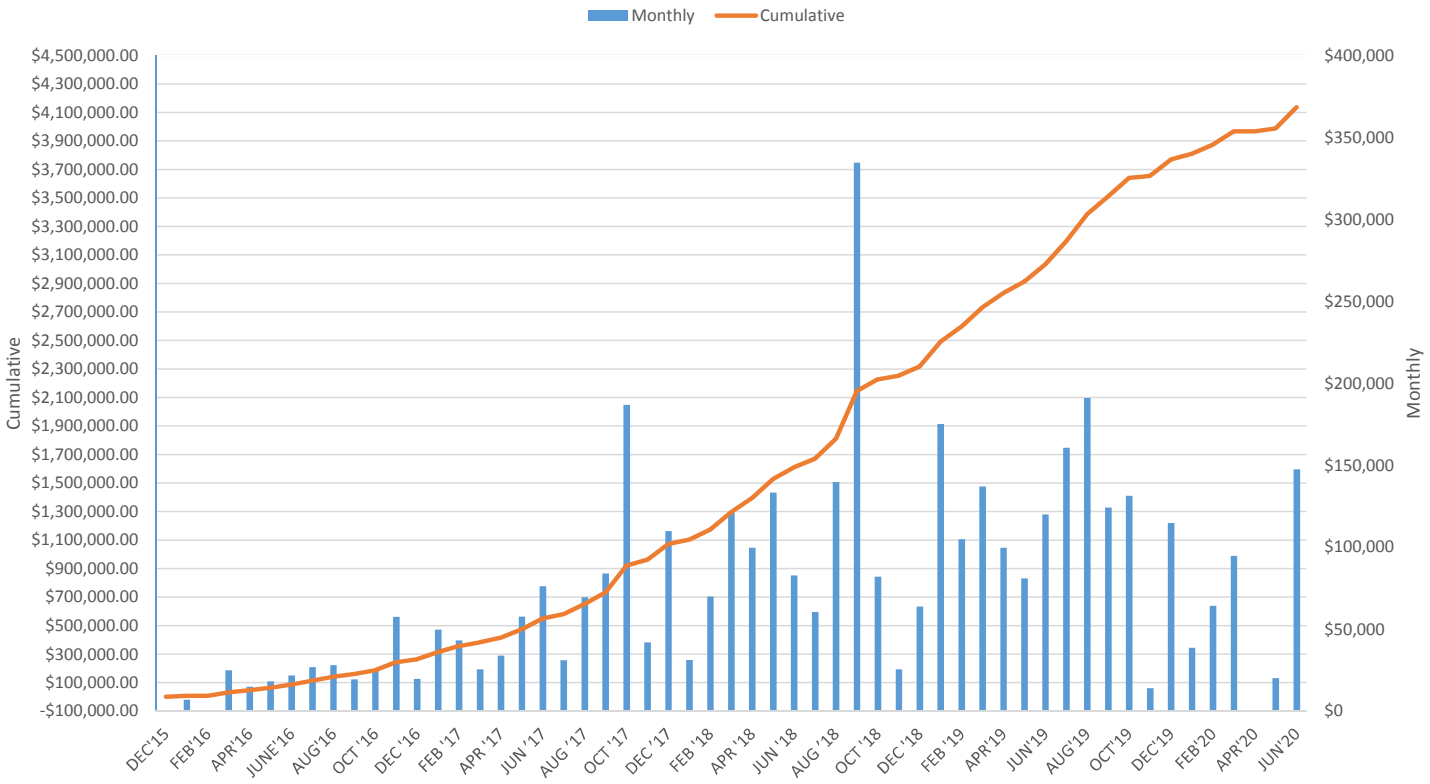
Month	Total	Split A/C Units	Central A/C Units	Washers/ Dryers
OCT '18	$ 82,000.00	$ 75,400.00	$ –	$ 6,600.00
NOV '18	$ 25,425.00	$ 23,425.00	$ –	$ 2,000.00
DEC '18	$ 63,925.00	$ 62,525.00	$ –	$ 1,400.00
JAN '19	$ 175,150.00	$ 158,150.00	$ –	$ 17,000.00
FEB '19	$ 104,925.00	$ 96,125.00	$ –	$ 8,800.00
MAR '19	$ 137,025.00	$ 119,825.00	$ 3,400.00	$ 13,800.00
APR '19	$ 99,650.00	$ 89,250.00	$ –	$ 10,400.00
*	$ (111,225.00)	$ (102,825.00)		$ (8,400.00)
MAY '19	$ 80,950.00	$ 72,950.00	$ –	$ 8,000.00
JUN '19	$ 120,525.00	$ 110,125.00	$ 800.00	$ 9,600.00
JUL '19	$ 162,350.00	$ 152,350.00	$ 800.00	$ 9,200.00
AUG '19	$ 191,175.00	$ 184,075.00	$ 500.00	$ 6,600.00
SEP '19	$ 124,200.00	$ 115,500.00	$ 500.00	$ 8,200.00
TOTALS	$ 1,255,475.00	$ 1,156,475.00	$ 6,000.00	$ 93,000.00

** FY18 Finance Adjustment*

FY 2020- Rebate Amount Paid Monthly

Month	Total	Split A/C Units	Central A/C Units	Washers/ Dryers
OCT '19	$131,300.00	$120,000.00	$500.00	$10,800.00
NOV '19	$14,050.00	$13,650.00	$0.00	$400.00
DEC '19	$114,775.00	$104,275.00	$500.00	$10,000.00
JAN '20	$38,650.00	$36,650.00	$0.00	$2,000.00
FEB '20	$64,250.00	$59,650.00	$0.00	$4,600.00
MAR '20	$94,675.00	$85,075.00	-	$9,600.00
APR '20	-	-	-	-
MAY '20	$20,175.00	$18,375.00	-	$1,800.00
JUN '20	$147,475.00	$139,875.00	-	$7,600.00
JUL '20	-	-	-	-
AUG '20	-	-	-	-
SEP '20	-	-	-	-
TOTALS	$625,350.00	$577,550.00	$1,000.00	$46,800.00

FY'17- FY'20 Rebate Amount Paid



FY 2017- Number of Applications Received By Customer Service and Paid Monthly

Month	Rec'd By CS	Paid By Finance
OCT '16	92	77
NOV '16	68	160
DEC '16	141	54
JAN '17	109	138
FEB '17	92	120
MAR '17	144	84
APR '17	147	104
MAY '17	215	178
JUN '17	322	252
JUL '17	295	105
AUG '17	339	224
SEP '17	270	282

FY 2018- Number of Applications Received By Customer Service and Paid Monthly

Month	Rec'd By CS	Paid By Finance
OCT '17	270	576
NOV '17	277	140
DEC '17	302	360
JAN '18	333	99
FEB '18	289	231
MAR '18	326	380
APR '18	256	325
MAY '18	298	417
JUN '18	353	260
JUL '18	449	197
AUG '18	451	445
SEP '18	343	717

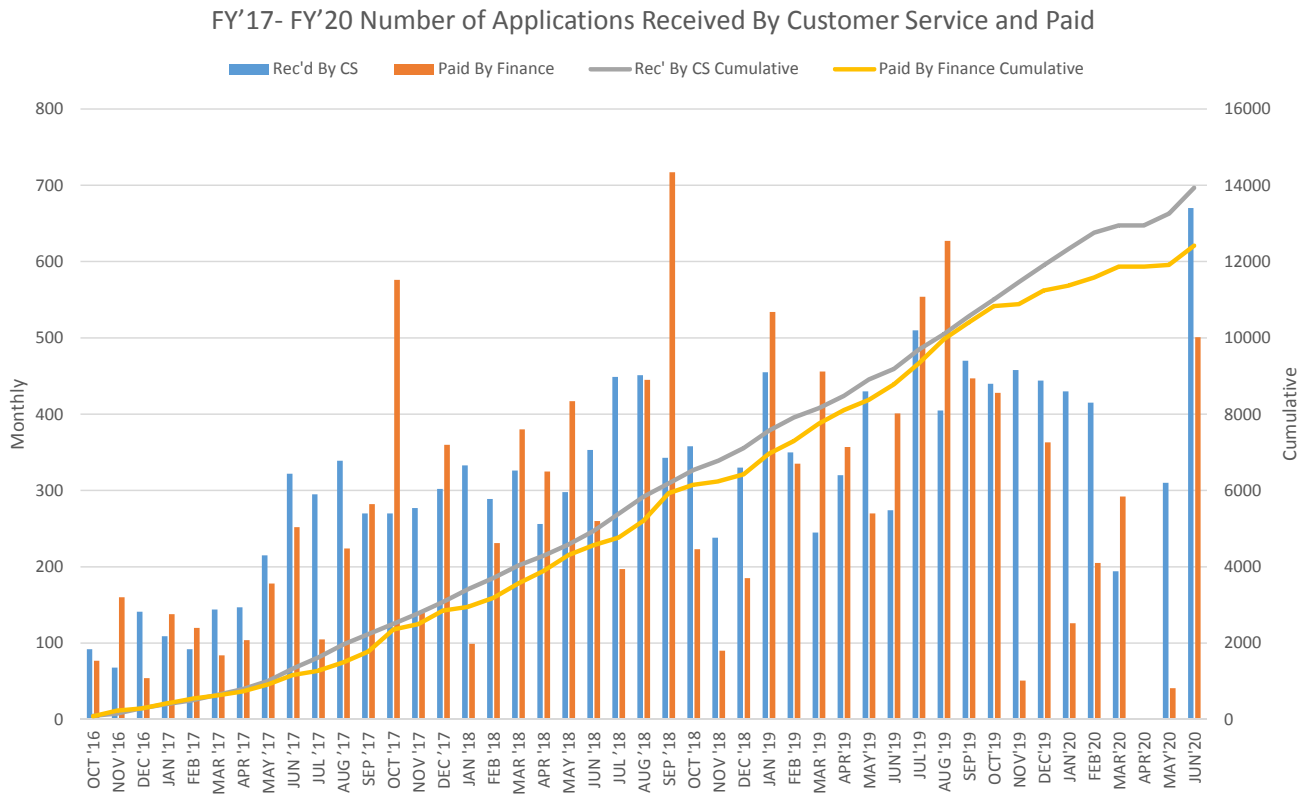
FY 2019 Number of Applications Received By Customer Service and Paid Monthly

Month	Rec'd By CS	Paid By Finance
OCT '18	358	223
NOV '18	238	90
DEC '18	330	185
JAN '19	455	534
FEB '19	350	335
MAR '19	245	456
APR '19	320	357
MAY '19	430	270
JUN '19	274	401
JUL '19	510	554
AUG '19	405	627
SEP '19	470	447

FY 2020 Number of Applications Received By Customer Service and Paid Monthly

Month	Rec'd By CS	Paid By Finance
OCT '19	440	428
NOV '19	458	51
DEC '19	318	363
JAN'20	430	126
FEB '20	415	205
MAR '20	194	292
APR '20	0	0
MAY '20	310	41
JUN '20	670	501
JUL '20		
AUG '20		
SEP '20		

FY’17- FY’20 Number of Applications Received By Customer Service and Paid

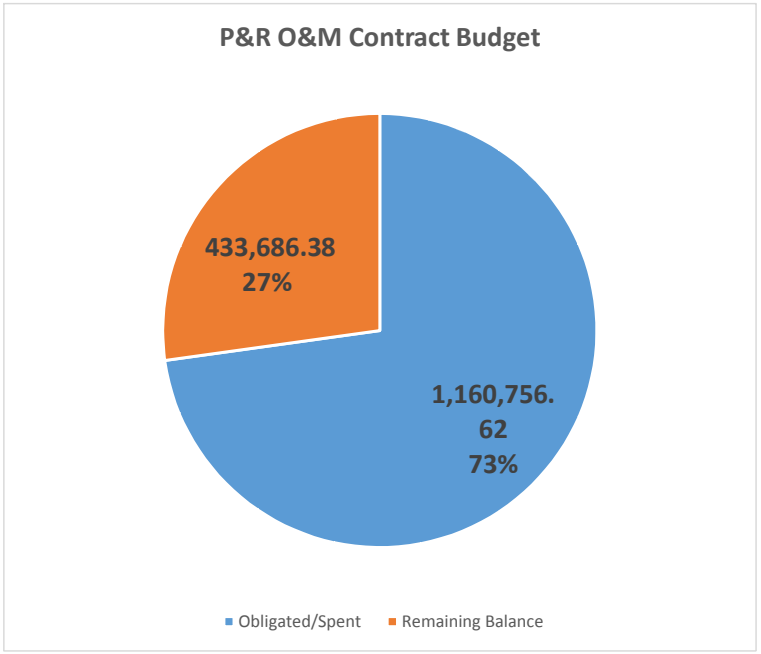


Planning & Regulatory CCU Report

June 30, 2020

Planning & Regulatory O&M Contract Budget

- Revenue Funded
- Target
  - 0.10% O&M Obligation as of October 31, 2019 (Actual)
  - 26.62% O&M Obligation as of December 31, 2019 (Actual)
  - 56.07% O&M Obligation as of January 31, 2020 (Actual)
  - 72.80% O&M Obligation as of June 30, 2020



P&R Weekly & Monthly Inspection Reports

- Best Management Practices (BMP) Report Summary [Weekly]
- Generation Spill Prevention, Control, and Countermeasures (SPCC) Report Summary [Monthly]
- T&D Spill Prevention, Control, and Countermeasures (SPCC) Report Summary [Monthly]

- GPA is responsible to employees, the island environment, and the community to take all reasonable steps necessary to prevent spills from its facilities in order to protect human health and the environment

P&R Inspection Report Purpose

- The purpose of these inspections is to catch discrepancies and violations internally and correct them before inspections by Guam EPA and US EPA
- Regulatory Agencies can conduct scheduled or un-scheduled (surprise) inspections any time
- Any major discrepancies or violations cited can lead to issuance of a Notice of Violation (NOV), possible fines, and/or other enforcement action
- P&R conducts routine SPCC inspections in compliance with the requirements of 40CFR 112.7(a)(3)(ii), Discharge Prevention Measures

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Weekly BMP Report

WEEKLY BMP REPORT SUMMARY
CABRAS POWER PLANT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Within Scheduled Remediation Period
- Completed
- Deadline is Past Due

INSPECTOR: MARVIN POLIARCO

LOCATION	WE 06/05/20 FINDINGS	WE 06/12/20 FINDINGS	WE 06/19/20 FINDINGS	WE 06/26/20 FINDINGS	RECOMMENDATION/ REMARKS	INITIAL FINDINGS DATE	DUE DATE	DATE COMPLETED	RESPONSE
Cabras Facility	Corroded metals on pipeline walkway	Corroded metals on pipeline walkway	Corroded metals on pipeline walkway	Corroded metals on pipeline walkway	Conduct cleanup	2/7/2020	ASAP		
	Oil spill in trench overflow at Cabras 3&4 generator area near the return tank	Oil spill in trench overflow at Cabras 3&4 generator area near the return tank	Oil spill in trench overflow at Cabras 3&4 generator area near the return tank	Oil spill in trench overflow at Cabras 3&4 generator area near the return tank	Remove oil and conduct cleanup	12/20/2019	ASAP		
	Pile of debris and green waste near the ponding basin & Cabras 3&4 OWS	Pile of debris and green waste near the ponding basin & Cabras 3&4 OWS	Pile of debris and growing vegetation around the ponding basin & Cabras 3&4 OWS	Pile of debris and growing vegetation around the ponding basin & Cabras 3&4 OWS	Remove vegetation asap	2/7/2020	ASAP		
	Metal debris structure near the outfall	Metal debris structure near the outfall	Metal debris structure near the outfall	Metal debris structure near the outfall	Dispose metal structure amd debris	2/7/2020	ASAP		

Weekly BMP Report

WEEKLY BMP REPORT SUMMARY
CABRAS POWER PLANT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Within Scheduled Remediation Period
- Completed
- Deadline is Past Due

INSPECTOR: MARVIN POLIARCO

LOCATION	WE 06/05/20 FINDINGS	WE 06/12/20 FINDINGS	WE 06/19/20 FINDINGS	WE 06/26/20 FINDINGS	RECOMMENDATION/ REMARKS	INITIAL FINDINGS DATE	DUE DATE	DATE COMPLETED	RESPONSE
Cabras Facility		Flooding in Cabras 3&4 generator building	CORRECTIVE ACTION COMPLETED		Drain water and conduct cleanup	6/12/2020	ASAP	6/26/2020	
		Oil in the pit of Cabras 3&4 generator building	Oil in the pit of Cabras 3&4 generator building	Oil in the pit of Cabras 3&4 generator building	Remove oil and conduct cleanup	6/12/2020	ASAP		
Outfall	Corroded cooling water discharge metal covers	Corroded cooling water discharge metal covers	Corroded cooling water discharge metal covers	Corroded cooling water discharge metal covers	Remove metal covers	5/29/2020	ASAP		
	Corroded recycle bin	Corroded recycle bin	Corroded recycle bin	CORRECTIVE ACTION COMPLETED	Replace recycle bin	5/29/2020	ASAP		
	Deteriorated containment booms	CORRECTIVE ACTION COMPLETED			Replace containment booms	5/29/2020	ASAP	6/19/2020	

Weekly BMP Report

WEEKLY BMP REPORT SUMMARY
CABRAS POWER PLANT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Within Scheduled Remediation Period
- Completed
- Deadline is Past Due

INSPECTOR: MARVIN POLIARCO

LOCATION	WE 06/05/20 FINDINGS	WE 06/12/20 FINDINGS	WE 06/19/20 FINDINGS	WE 06/26/20 FINDINGS	RECOMMENDATION/ REMARKS	INITIAL FINDINGS DATE	DUE DATE	DATE COMPLETED	RESPONSE
Chemical Storage Building (Cabras 1, 2, 3, & 4)	Sulfuric acid spill in chemical storage area	Sulfuric acid spill in chemical storage area	Sulfuric acid spill in chemical storage area	Sulfuric acid spill in chemical storage area	Conduct cleanup	12/20/2019	ASAP		

T&D SPCC Inspection Report

SUMMARY OF SPCC MONTHLY INSPECTION REPORT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Completed
- Within Scheduled Remediation
- Deadline is Past Due

SUBSTATIONS

LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
DEDEDO SUBSTATION	*T-191 & T-192 & T-55*	Rainwater in sec. containment	Remove/drain water				ASAP	February 2020
DEDEDO SUBSTATION WAREHOUSE	*Transformer Storage Area*	Scrap metal at transformer storage area	Schedule disposal/salvage of scrap metal				ASAP	December 2019
MACHECHE SUBSTATION	*Secondary Containment*	NO CORRECTIVE ACTION						
TALOFOFO SUBSTATION	*Secondary Containment*	Water inside containment	Drain water and secure drain valve				ASAP	June 2020
TENJO SUBSTATION	*Facility Area*	NO CORRECTIVE ACTION						
YIGO SUBSTATION	*Secondary Containment*	NO CORRECTIVE ACTION						

Generation SPCC Inspection Report

SUMMARY OF SPCC MONTHLY INSPECTION REPORT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Completed
- Within Scheduled Remediation
- Deadline is Past Due

POWER PLANT

LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
CABRAS POWER PLANT	*Supply line 8" from the tank farm*	No secondary containment	Regular monitoring is requred				ASAP	September 2019
	Cylinder and Lube Oil Storage Tanks	Corroded lines	Repair				ASAP	November 2019
	Used Oil Transfer Area	Tank covers of sludge tanks - heavily corroded	Replace sludge tank covers				ASAP	February 2020
	Diesel Tank Concrete Base Pad	Base pad is eroding	Conduct repair				ASAP	May 2020
	LS Pipe Flange and HS-LS Diesel Service Tanks Secondary Containment	Pipeis leaking and oil spill in secondary containment	Conduct repair and clean up				ASAP	May 2020
	Secondary Containment Wall	Damaged	Conduct repair				ASAP	May 2020
	Tank No. 2 By Pass Pipe on Supply Line	Heavily corroded	Replace pass pipe				ASAP	May 2020
	Tank No. 2 Over Fill Line	Corroded	Replace pipeline				ASAP	May 2020
	Pipeline Across Outfall	Corroded	Conduct repair				ASAP	May 2020
	HS, LS Diesel Service Tank Secondary Containment	Water accumulation	Conduct cleanup				ASAP	February 2020
	Tank No. 2	Gauge not secured, brackets are detached	Conduct cleanup				ASAP	June 2020
DEDEDO CT	*OWS Containment*	Rainwater in secondary containment	Drain rainwater				ASAP	May 2020

Generation SPCC Inspection Report (cont.)

SUMMARY OF SPCC MONTHLY INSPECTION REPORT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Completed
- Within Scheduled Remediation
- Deadline is Past Due

POWER PLANT

LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
MACHECHE CT	Facility Area	Rainwater in secondary containment	Drain rainwater					
YIGO CT	OWS Sec. Containment	Rainwater and sludge inside containment	Drain rainwater and remove sludge				ASAP	May 2020
MANENGGON DIESEL	Storage Tanks	No identification and label to indicate volume, capacity, etc.	Label and identify tanks	AST tank labelling ongoing			ASAP	May 2020
TALOFOFO DIESEL	Day Tank insidde Engine Room	Tank label missing after paint over	Re-label tanks	AST tank labelling ongoing			ASAP	May 2020
TENJO DIESEL	Generator Room - Day Tanks 1 - 6	Tanks have no label	Identify tanks with labels				ASAP	May 2020
PITI #7 POWER PLANT	Main Fuel Tank	No integrity testing	Integrity testing is required				ASAP	January 2018
	Old Piti Power Plant Area	Improper storage of wood pallets and various items inside storage container	Move or dispose wood pallets and other items				ASAP	February 2020

PLANNING & REGULATORY DIVISION REPORT

The following summarizes P&R's activities for the month of June 2020

INSPECTIONS/MONITORING

- Best Management Practices (BMP) Weekly Inspection/Report – Cabras Power Plant
- Monthly Spill Prevention, Control and Countermeasures (SPCC) Inspection/Report – Cabras Power Plant, Macheche, Dededo, Yigo CT, Talofofo, MDI, Tenjo Diesel, Piti 7 Power Plants, IP&E fuel Farm.
- Reviews monthly Continuous Emissions Monitoring System (CEMS) report and monitors TRC's O & M for Tenjo Diesel. Coordinates Operations and Maintenance with TRC.
- Emissions and Limits Tracking for GPA and Aggreko Power Plants
    - Monitoring CO and NOx emissions of the Aggreko generators not to exceed the allowable limit.
    - GPA Plants Limits based on Hours and/or Fuel Use
- Inspected Tanguisson power plant intake structure
- Conducted PCB oil test at Dededo substation Tank 2
- Island wide WSD facility inspection

CONSENT DECREE

- Prepping material for July 31, 2020 Semi-Annual Status report for US EPA

DIESEL RICE MACT

- Coordination with TRC on the purchase of new catalyst for Tenjo, MDI and Talofofo

ENVIRONEMENTAL RESPONSE

- Soil Remediation at Marbo Sub
- Spill response at Cabras WOF spill

NEW UKKUDU POWER PLANT

- Weekly update conference calls:
    - Air Permitting with contractors
    - All other Permitting with contractors
    - GPA Internal discussions with Stanley
- Other:
    - ConCall with Navy on NEPA Requirements
    - ConCall on Wastewater Treatment issues
    - Site Visit / Assessment at Borehole 129 in Maite
    - Review of Biological Survey from ARC / TG Eng'g

PROCUREMENT

Coordination with procurement on the following bids:

- OR# 33183 –Disposal of Transformer at Dededo Sub Warehouse-
- OR#33750 – Environmental Emergency Response Contractor
- OR#33845 – Remove and Degrade Soil at Marbo Sub
- OR#33280 – Closing of UIC Wells at Tango
- OR#33816 – Transfer of Used Oil from Piti Power Plant- Bid evaluation completed
- Bid Committee Review for RFO fuel testing
- GPA-RFP-19-002 Smart Grid Analytics Feasibility Studies – attended conference call with prospective contractor
- Member of evaluation committee for RFO 6 supply laboratory test contractor.
- BID GPA-057-19 Mobile Diesel Standby Generator with Trailer – provided guidance document on generator Tier requirements

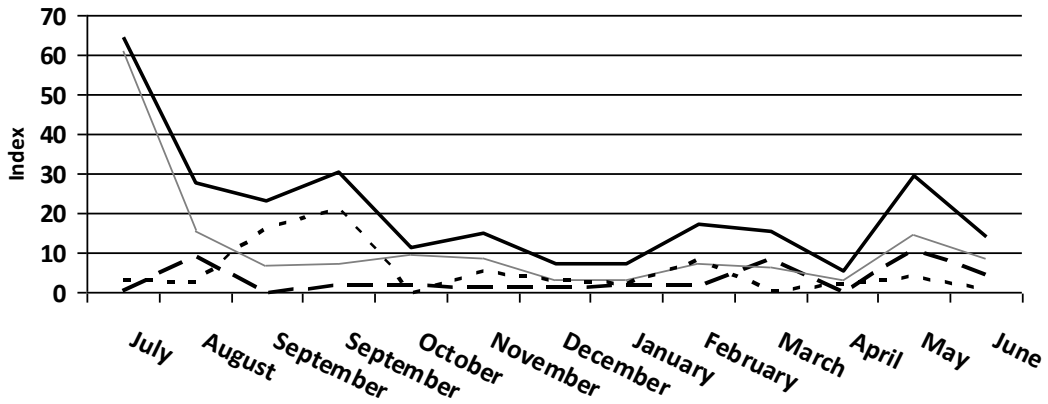
REPORTING

- Tier II Reporting – Submitted final reports to GEPA, Homeland Security, and Guam Fire Dept.
- Submitted Quarterly Fuel Switching Report to US EPA
- Finalizing Toxic Release Inventory submittal via US EPA web app TriMe Web
- Annual Emissions Inventory and Fees – Submitted calculations to Budget, Procurement, and Guam EPA

OTHERS

- For the GM
    - Prepping emission calculations for Piti 8 & 9 and Aggreko for use in CCU and US EPA R9 presentation on Piti 8&9 Retirement.
    - Prepped summary of emission limits of all GPA Power Plants
- Provide Permit Application info to Guam EPA
- Updating Permit Renewal Application Data for Piti Unit #7 to account for ownership transfer from TEMES to GPA

(Item 1.1,1.2,1.5) June 2020 SAIDI = 269.02 ↓ (279.05)



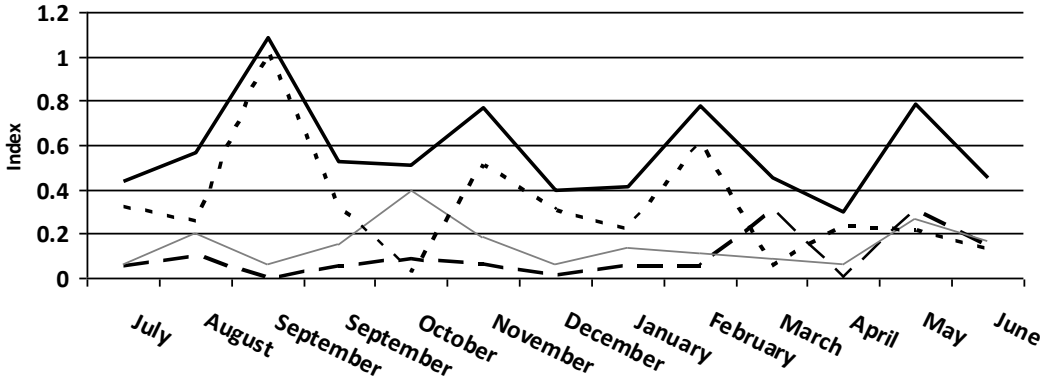
ALL

GEN=71.09 ↑ (70.99)

TRANS=43.06 ↓ (58.40)

DIST=154.87 ↑ (149.66)

(Item 1.1,1.2,1.5) June 2020 SAIFI = 7.49 ↓ (7.68)



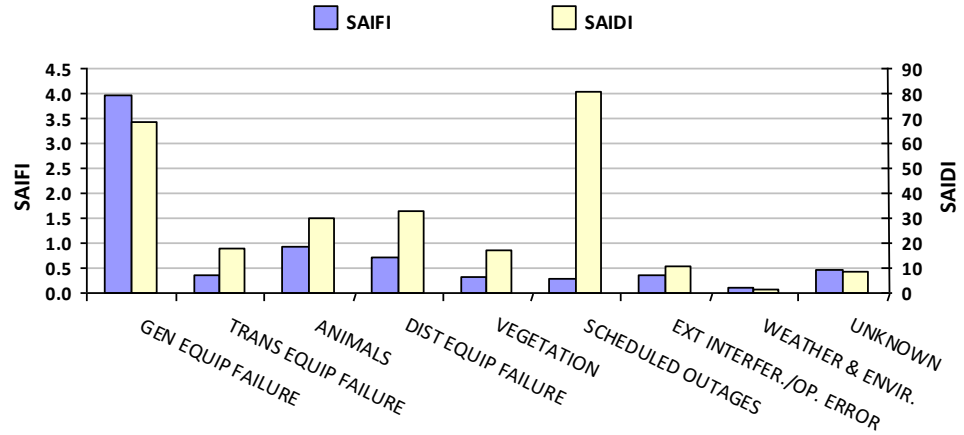
ALL

GEN=4.25 ↑ (4.20)

TRANS=1.26 ↓ (1.62)

DIST=1.97 ↑ (1.87)

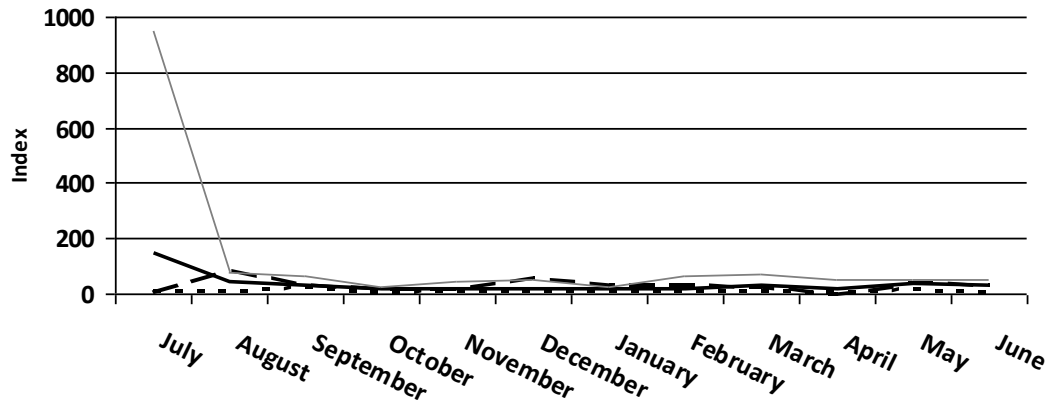
(Item 1.9) 12-Month Cause Contributions to Reliability



GEN EQUIP FAILURE
F:51.4% D:25.6%
TRANS EQUIP FAILURE
F:4.0% D:6.7%
ANIMALS
F:11.3% D:11.2%
DIST EQUIP FAILURE
F:9.1% D:12.4%
VEGETATION
F:4.2% D:6.4%
SCHEDULED OUTAGES
F:6.2% D:30.2%
EXT INTERFER./OP. ERROR
F:5.8% D:3.9%
WEATHER & ENVIR.
F:1.5% D:0.5%
UNKNOWN
F:6.7% D:3.1%

As of June 30, 2020

(Item 1.1,1.2,1.5) June 2020 CAIDI = 35.92 ↓ (36.32)



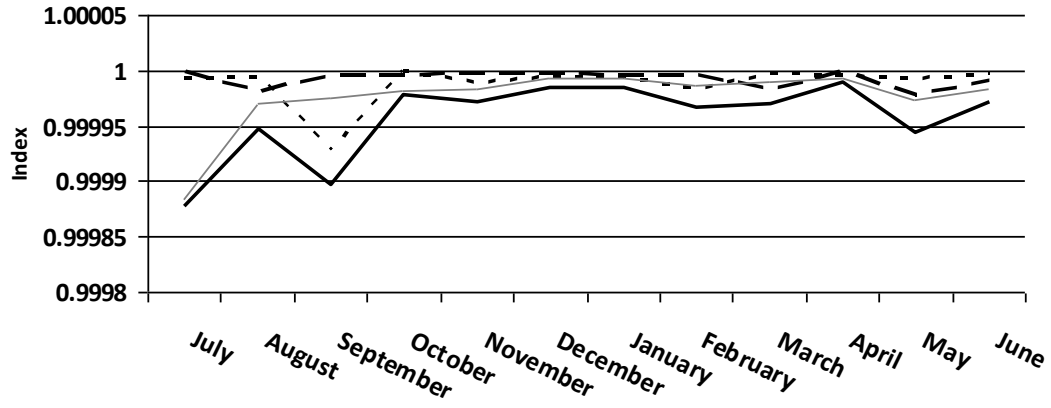
ALL

GEN=16.72 (16.92) ↓

TRANS=34.07 (36.13) ↓

DIST=78.47 (79.97) ↓

(Item 1.1,1.2,1.5) June 2020 ASAI = 0.9995 UNC* (0.9995)



ALL

GEN=0.9999 (0.9999) **UNC***

TRANS=0.9999 (0.9999) **UNC***

DIST=0.9997 (0.9997) **UNC***

(Item 1.4) Top 5 Worst Feeders Distribution Causes

#	Feeder	Outage Count
1	P340	14
2	P294	10
3	P271	9
4	P261	8
5	P301	7

(Item 1.4) Top 5 Distribution Outage Causes

#	Outage Cause	Count
1	Overhead Equipment	43
2	Vegetation	22
3	Wind	22
4	Snakes	19
5	Substation Equipment	7

(Item 1.3) Outage Count

TOTAL	UFLS	Non-UFLS
582	340	242

(Item 1.3) UFLS Contribution to Reliability

SAIDI	SAIFI	CAIDI
82.37	4.81	17.14

As of June 30, 2020

UNC* - Unchanged

ENGINEERING WORK ORDERS

Engineering Work Order Summary - June 2020	
Work Orders Received from CSR	120
Work Orders Processed & Released to T&D	91
Work Orders Processed & Released to CSR	22
Work Orders Cancelled	41
Work Orders Pending Survey	29
Total Pending WO at Engineering	415

Engineering Large Customer and Net Metering Tracking

Date Received	Customer Name	Work Worder Numbers	Location	KVA	Meter Qty	Status
12/20/2013	CoreTech International	Multiple	Dededo	300	48	Lada Estates, 450 kVA, Phase I, II and III are 100% Completed - 308 units energized. Phase IV currently in Construction phase, 80% completed.
1/27/2015	TG Engineers	422182-85, 90-93, 96-98	Agana Heights	100	11	10 Unit Apartment, 100 kVA, 80% Completed. Work currently on hold.
6/1/2017	New Underground Line (P-047)	466064	Tumon	1,500	1	New Undergound line 99% completed, Riser terminated. Mandrelling completed on completed sections. T&D started pulling wire and installing splices in August 2019. Peninge final outage at SV1A and SV1B.
3/1/2018	Docomo Pacific Inc., New Data Center	Pending Application	Talofofo	3,000	1	New Data Center. Planned to come off P-260 and P-262. 0% Completed. Still in Design Phase.
12/13/18	Simpson, Henry M	466907, 8, 466658	Santa Rita			New Subdivision. Design Ongoing. Demand load pending completion of subdivision design.
10/10/18	Don Sadwahni	465341	Harmon	2,000	1	New Industrial Subdivision, Inspection of civil work only, Proposed 12 Pad Mounted Xfmrs 95% Completed.
11/19/18	TNN Guam Primary Meter	466064	Tumon	1,500	1	Permanent primary meter for Tsubaki Hotel and Nikko Hotel (1500 + 3000kVA Nikko), 100% Completed and released to T&D. Perm power energized temp. for testing purposes. Partial Occupancy signed. Pending completed final occupancy.
10/01/19	Don Don Donkey "Don Quijote" Shopping Center	Pending Application	Tamuning	2,000	1	New Shopping Center at the intersection of Route 1 and10A. Permiitting phase.
12/01/19	Gateway Networks Connections LLC	475842	Piti	2,000	1	New Landing station, 90% completed, 2000 kVA, Clearance issues resolved.
12/01/19	Pacific Unlimited Inc. (Cold Storage)	471784	Tiyan	2,000	1	New Cold Storage, 10% Completed, Temp Power installed, 2000kVA.
12/01/19	Ironwood Villa Del Mar Phase II	Multiple Applications	Toto	440	88	New 88 Unit Apartment complex, 40% Completed, multiple xfmrs.
02/25/20	The Church of Jesus Christ LDS	474921	Yigo	750	1	New Church across Yigo Substation, 45% completed, 750 kVA.
03/11/20	Citi Development & Construction	478020-23,25,27-30	Tamuning	60	10	New 10 Unit Town Homes, 10% completed, 100 kVA.
07/07/20	Guam Waterworks Authority New Northern Wastewater Plant	479663	Dededo	3000	1	New Northern Wastewater Plant, 10% completed, 3000kVA.
Varies	Pending Net Metering Customers	Varies	Various Locations Islandwide		1	Pending Net Metering Customers as of June 30, 2020.
			Total	**18,650**	**167**	

NET METERING
June 2020

	Quantity	Connected kVA
Completed	2,098	24,119
Pending	1	7
Grand Total	2,099	24,126

Rate Class and Technology

Technology	Schedule	Customer Count	Total kW
Solar Energy	R - Residential	1,973	18,693.25
	J - Gen Service Dmd	49	2,829.13
	K - Small Gov Dmd	9	317.80
	L - Large Government	2	122.80
	P - Large Power	7	640.70
	G - Gen Serv Non-Dmd	49	1,432.96
	S - Sm Gov Non-Dmd	7	78.80
Wind Turbine	R - Residential	2	3.60
Grand Total		**2,098**	**24,119.04**

Projection Date Ending 12/31/2020

Customer Rate Class	Sum of Size (kW)	*Annual Projected kWh Generated	Non-Fuel Yield $/kWh	Estimated Annual Revenue Loss
R	18,696.85	30,738,700	0.087492	$ 2,689,391.26
J	2,829.13	4,666,005	0.125682	$ 586,432.96
K	317.80	518,889	0.133883	$ 69,470.44
L	122.80	203,743	0.129809	$ 26,447.73
P	640.70	1,056,495	0.109950	$ 116,161.70
G	1,432.96	2,355,179	0.145397	$ 342,436.05
S	78.80	125,245	0.147902	$ 18,524.03
Grand Total	**24,119.04**	**39,664,258**		**$ 3,848,864.17**

*Estimated number of hours from NREL for Guam (13.4 degrees North and 144 degrees East).

Estimated Annual Revenue Loss

Year	Estimated kWh	*Total Estimated Cost
2019	36,806,287	$ 3,546,649.04
2018	34,981,036	$ 3,521,130.12
2017	28,242,917	$ 2,828,834.71
2016	21,867,383	$ 2,200,794.56
2015	7,383,621	$ 856,921.27
2014	3,137,212	$ 410,558.94
2013	1,556,949	$ 178,996.00
2012	494,672	$ 58,545.89
2011	170,070	$ 18,177.13
2010	98,830	$ 8,483.27
2009	23,912	$ 1,656.87

*Source for effective yield rate from the Year End Revenue Reports (12 month Average Yield)

NET METERING

June 2020

Customer Count and Connected kW by Feeder

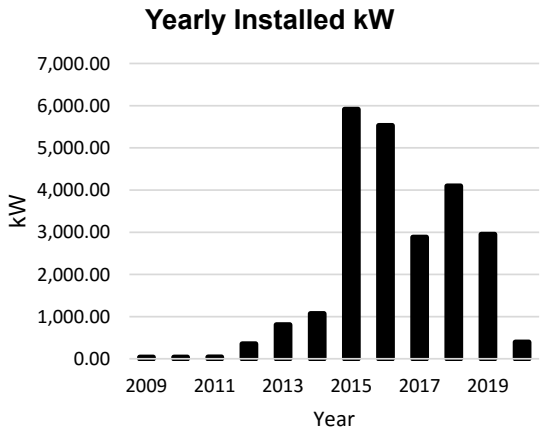
Status	Feeder	Net Metering Connected kW	Customer Count	% of Feeder Maximum kW	% of Feeder Minimum Daytime kW
Completed	P-005	302.73	27	17.5%	35.2%
	P-046	300.29	36	7.1%	10.8%
	P-088	746.60	79	12.4%	19.6%
	P-089	627.97	77	14.0%	33.8%
	P-111	190.00	3	3.5%	6.2%
	P-203	564.09	43	7.5%	21.4%
	P-204	150.38	17	3.2%	6.6%
	P-205	44.00	5	0.9%	1.6%
	P-210	629.69	59	12.3%	16.7%
	P-212	1,086.12	105	26.3%	68.0%
	P-213	322.13	13	12.3%	16.5%
	P-220	187.22	21	30.7%	96.5%
	P-221	598.28	61	13.6%	27.1%
	P-223	563.15	61	23.7%	33.8%
	P-240	58.55	2	0.9%	7.9%
	P-245	259.60	7	5.2%	11.1%
	P-250	1,389.55	128	21.4%	37.5%
	P-251	145.50	7	5.9%	9.0%
	P-253	611.03	61	13.6%	21.5%
	P-262	1,152.49	116	30.3%	72.6%
	P-270	490.47	42	9.6%	19.4%
	P-271	323.37	18	5.5%	11.7%
	P-272	280.91	20	11.0%	24.9%
	P-280	371.54	30	20.7%	38.4%
	P-281	204.90	5	7.3%	20.4%
	P-282	31.75	4	0.8%	2.6%
	P-283	666.95	59	18.4%	31.6%
	P-294	1,301.23	123	30.1%	59.5%
	P-301	233.76	24	16.5%	29.4%
	P-311	1,098.11	63	27.5%	47.1%
	P-322	2,108.43	118	27.8%	55.2%
	P-323	316.52	21	6.7%	20.8%
	P-330	708.31	88	13.0%	26.2%
	P-331	827.91	91	13.1%	21.2%
	P-332	712.74	74	12.6%	18.5%
	P-340	560.12	50	30.9%	68.0%
	P-087	1,512.52	151	38.5%	60.3%
	P-252	599.13	32	14.2%	29.0%
	P-321	389.86	36	7.0%	7.8%
	P-260	99.76	10	14.5%	49.9%
	P-067	86.20	10	1.0%	1.3%
	P-312	82.24	5	4.9%	5.7%
	P-206	26.08	3	2.7%	4.8%
	P-242	23.75	2	0.4%	1.1%
	P-310	181.57	8	6.6%	12.1%
	P-261	509.36	54	18.4%	31.6%
	P-201	115.86	10	3.3%	5.8%
	P-007	85.86	8	11.9%	25.3%
	P-244	36.56	2	2.1%	2.1%
	P-202	39.50	3	1.2%	2.9%
	P-341	4.30	1	0.4%	1.6%
	P-401	117.00	2	10.3%	17.3%
	P-400	43.14	3	4.5%	4.6%
Completed Total		**24,119.04**	**2,098**		
pending	Pending	7.31	1	0.0%	0.0%
pending Total		**7.31**	**1**	**0.0%**	**0.0%**
Grand Total		**24,126.35**	**2,099**		

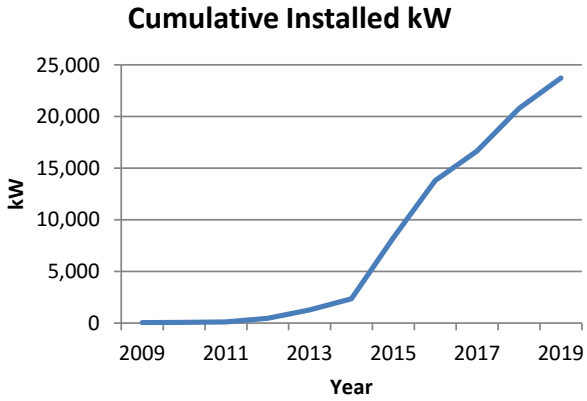
	Feeders highlighted in red indicates renewable energy capacity has exceeded 25% of feeder maximum load.
	Feeders highlighted in yellow indicates renewable energy capacity has reached 75% of minimum daytime load.

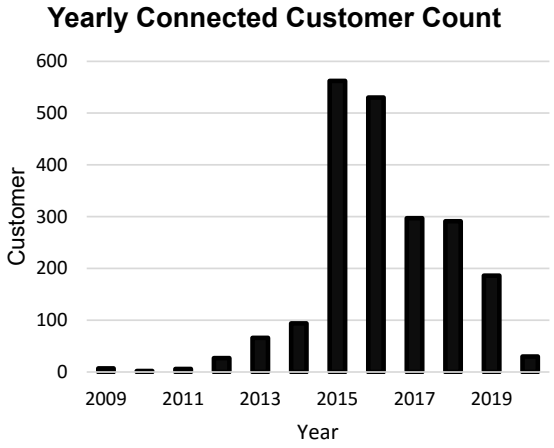
NET METERING
June 2020

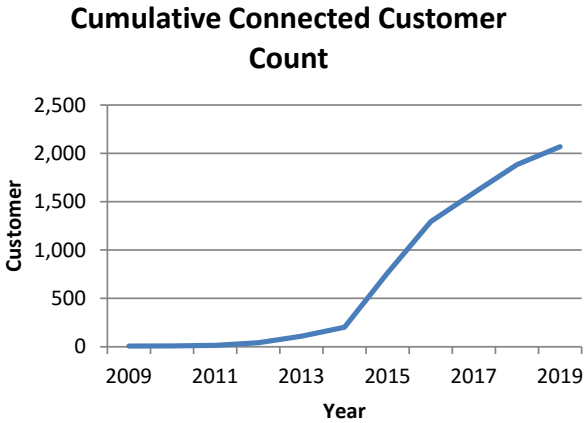
Installed kW by Year		
Year	Total	Cumulative
2009	39.46	39.46
2010	39.20	78.66
2011	41.61	120.27
2012	354.61	474.88
2013	808.15	1,283.03
2014	1,072.04	2,355.07
2015	5,915.06	8,270.13
2016	5,527.93	13,798.05
2017	2,880.40	16,678.45
2018	4,095.63	20,774.08
2019	2,949.09	23,723.17
2020	395.87	24,119.04
Grand Total	24,119.04	

Customer Count by Year		
Year	Total	Cumulative
2009	7	7
2010	2	9
2011	6	15
2012	27	42
2013	66	108
2014	94	202
2015	562	764
2016	530	1,294
2017	297	1,591
2018	291	1,882
2019	186	2,068
2020	30	2,098
Grand Total	2,098	







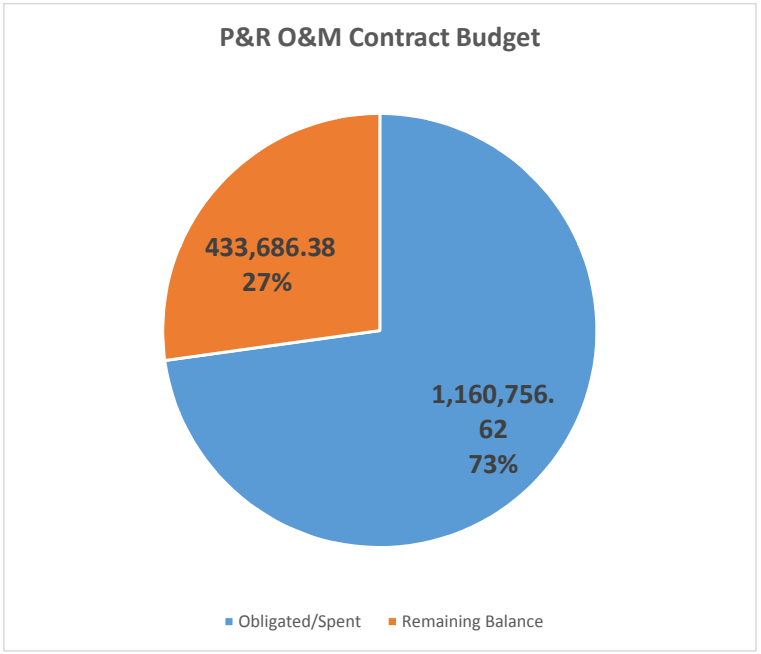


Planning & Regulatory CCU Report

June 30, 2020

Planning & Regulatory O&M Contract Budget

- Revenue Funded
- Target
  - 0.10% O&M Obligation as of October 31, 2019 (Actual)
  - 26.62% O&M Obligation as of December 31, 2019 (Actual)
  - 56.07% O&M Obligation as of January 31, 2020 (Actual)
  - 72.80% O&M Obligation as of June 30, 2020



P&R Weekly & Monthly Inspection Reports

- Best Management Practices (BMP) Report Summary [Weekly]
- Generation Spill Prevention, Control, and Countermeasures (SPCC) Report Summary [Monthly]
- T&D Spill Prevention, Control, and Countermeasures (SPCC) Report Summary [Monthly]

- GPA is responsible to employees, the island environment, and the community to take all reasonable steps necessary to prevent spills from its facilities in order to protect human health and the environment

P&R Inspection Report Purpose

- The purpose of these inspections is to catch discrepancies and violations internally and correct them before inspections by Guam EPA and US EPA
- Regulatory Agencies can conduct scheduled or un-scheduled (surprise) inspections any time
- Any major discrepancies or violations cited can lead to issuance of a Notice of Violation (NOV), possible fines, and/or other enforcement action
- P&R conducts routine SPCC inspections in compliance with the requirements of 40CFR 112.7(a)(3)(ii), Discharge Prevention Measures

Weekly BMP Report

WEEKLY BMP REPORT SUMMARY
CABRAS POWER PLANT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Within Scheduled Remediation Period
- Completed
- Deadline is Past Due

INSPECTOR: MARVIN POLIARCO

LOCATION	WE 06/05/20 FINDINGS	WE 06/12/20 FINDINGS	WE 06/19/20 FINDINGS	WE 06/26/20 FINDINGS	RECOMMENDATION/ REMARKS	INITIAL FINDINGS DATE	DUE DATE	DATE COMPLETED	RESPONSE
Cabras Facility	Corroded metals on pipeline walkway	Corroded metals on pipeline walkway	Corroded metals on pipeline walkway	Corroded metals on pipeline walkway	Conduct cleanup	2/7/2020	ASAP		
	Oil spill in trench overflow at Cabras 3&4 generator area near the return tank	Oil spill in trench overflow at Cabras 3&4 generator area near the return tank	Oil spill in trench overflow at Cabras 3&4 generator area near the return tank	Oil spill in trench overflow at Cabras 3&4 generator area near the return tank	Remove oil and conduct cleanup	12/20/2019	ASAP		
	Pile of debris and green waste near the ponding basin & Cabras 3&4 OWS	Pile of debris and green waste near the ponding basin & Cabras 3&4 OWS	Pile of debris and growing vegetation around the ponding basin & Cabras 3&4 OWS	Pile of debris and growing vegetation around the ponding basin & Cabras 3&4 OWS	Remove vegetation asap	2/7/2020	ASAP		
	Metal debris structure near the outfall	Metal debris structure near the outfall	Metal debris structure near the outfall	Metal debris structure near the outfall	Dispose metal structure amd debris	2/7/2020	ASAP		

Weekly BMP Report

WEEKLY BMP REPORT SUMMARY
CABRAS POWER PLANT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Within Scheduled Remediation Period
- Completed
- Deadline is Past Due

INSPECTOR: MARVIN POLIARCO

LOCATION	WE 06/05/20 FINDINGS	WE 06/12/20 FINDINGS	WE 06/19/20 FINDINGS	WE 06/26/20 FINDINGS	RECOMMENDATION/ REMARKS	INITIAL FINDINGS DATE	DUE DATE	DATE COMPLETED	RESPONSE
Cabras Facility		Flooding in Cabras 3&4 generator building	CORRECTIVE ACTION COMPLETED		Drain water and conduct cleanup	6/12/2020	ASAP	6/26/2020	
		Oil in the pit of Cabras 3&4 generator building	Oil in the pit of Cabras 3&4 generator building	Oil in the pit of Cabras 3&4 generator building	Remove oil and conduct cleanup	6/12/2020	ASAP		
Outfall	Corroded cooling water discharge metal covers	Corroded cooling water discharge metal covers	Corroded cooling water discharge metal covers	Corroded cooling water discharge metal covers	Remove metal covers	5/29/2020	ASAP		
	Corroded recycle bin	Corroded recycle bin	Corroded recycle bin	CORRECTIVE ACTION COMPLETED	Replace recycle bin	5/29/2020	ASAP		
	Deteriorated containment booms	CORRECTIVE ACTION COMPLETED			Replace containment booms	5/29/2020	ASAP	6/19/2020	

Weekly BMP Report

WEEKLY BMP REPORT SUMMARY
CABRAS POWER PLANT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Within Scheduled Remediation Period
- Completed
- Deadline is Past Due

INSPECTOR: MARVIN POLIARCO

LOCATION	WE 06/05/20 FINDINGS	WE 06/12/20 FINDINGS	WE 06/19/20 FINDINGS	WE 06/26/20 FINDINGS	RECOMMENDATION/ REMARKS	INITIAL FINDINGS DATE	DUE DATE	DATE COMPLETED	RESPONSE
Chemical Storage Building (Cabras 1, 2, 3, & 4)	Sulfuric acid spill in chemical storage area	Sulfuric acid spill in chemical storage area	Sulfuric acid spill in chemical storage area	Sulfuric acid spill in chemical storage area	Conduct cleanup	12/20/2019	ASAP		

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T&D SPCC Inspection Report

SUMMARY OF SPCC MONTHLY INSPECTION REPORT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Completed
- Within Scheduled Remediation
- Deadline is Past Due

SUBSTATIONS

LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
DEDEDO SUBSTATION	*T-191 & T-192 & T-55*	Rainwater in sec. containment	Remove/drain water				ASAP	February 2020
DEDEDO SUBSTATION WAREHOUSE	*Transformer Storage Area*	Scrap metal at transformer storage area	Schedule disposal/salvage of scrap metal				ASAP	December 2019
MACHECHE SUBSTATION	*Secondary Containment*	NO CORRECTIVE ACTION						
TALOFOFO SUBSTATION	*Secondary Containment*	Water inside containment	Drain water and secure drain valve				ASAP	June 2020
TENJO SUBSTATION	*Facility Area*	NO CORRECTIVE ACTION						
YIGO SUBSTATION	*Secondary Containment*	NO CORRECTIVE ACTION						

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Generation SPCC Inspection Report

SUMMARY OF SPCC MONTHLY INSPECTION REPORT
MONTH OF JUNE 2020

LEGEND OF TRACKING

Notification Date | Completed | Within Scheduled Remediation | Deadline is Past Due

POWER PLANT

LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
CABRAS POWER PLANT	*Supply line 8" from the tank farm*	No secondary containment	Regular monitoring is requred				ASAP	September 2019
	Cylinder and Lube Oil Storage Tanks	Corroded lines	Repair				ASAP	November 2019
	Used Oil Transfer Area	Tank covers of sludge tanks - heavily corroded	Replace sludge tank covers				ASAP	February 2020
	Diesel Tank Concrete Base Pad	Base pad is eroding	Conduct repair				ASAP	May 2020
	LS Pipe Flange and HS-LS Diesel Service Tanks Secondary Containment	Pipeis leaking and oil spill in secondary containment	Conduct repair and clean up				ASAP	May 2020
	Secondary Containment Wall	Damaged	Conduct repair				ASAP	May 2020
	Tank No. 2 By Pass Pipe on Supply Line	Heavily corroded	Replace pass pipe				ASAP	May 2020
	Tank No. 2 Over Fill Line	Corroded	Replace pipeline				ASAP	May 2020
	Pipeline Across Outfall	Corroded	Conduct repair				ASAP	May 2020
	HS, LS Diesel Service Tank Secondary Containment	Water accumulation	Conduct cleanup				ASAP	February 2020
	Tank No. 2	Gauge not secured, brackets are detached	Conduct cleanup				ASAP	June 2020
DEDEDO CT	*OWS Containment*	Rainwater in secondary containment	Drain rainwater				ASAP	May 2020

Generation SPCC Inspection Report (cont.)

SUMMARY OF SPCC MONTHLY INSPECTION REPORT
MONTH OF JUNE 2020

LEGEND OF TRACKING

- Notification Date
- Completed
- Within Scheduled Remediation
- Deadline is Past Due

POWER PLANT

LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
MACHECHE CT	Facility Area	Rainwater in secondary containment	Drain rainwater					
YIGO CT	OWS Sec. Containment	Rainwater and sludge inside containment	Drain rainwater and remove sludge				ASAP	May 2020
MANENGGON DIESEL	Storage Tanks	No identification and label to indicate volume, capacity, etc.	Label and identify tanks	AST tank labelling ongoing			ASAP	May 2020
TALOFOFO DIESEL	Day Tank insidde Engine Room	Tank label missing after paint over	Re-label tanks	AST tank labelling ongoing			ASAP	May 2020
TENJO DIESEL	Generator Room - Day Tanks 1 - 6	Tanks have no label	Identify tanks with labels				ASAP	May 2020
PITI #7 POWER PLANT	Main Fuel Tank	No integrity testing	Integrity testing is required				ASAP	January 2018
	Old Piti Power Plant Area	Improper storage of wood pallets and various items inside storage container	Move or dispose wood pallets and other items				ASAP	February 2020

Production Data
30-Jun-20

SYSTEM											
YEAR	MONTH	# of DAYS	GROSS GENERATION	FUEL CONSUMPTION		GROSS FUEL EFFICIENCY (Target ≥ 15.99 kWh/gal)	COST per GROSS kWh	GROSS HEAT RATE (Baseloads) PUC Target less than 9,600	GROSS HEAT RATE (Peaking) PUC Target less than 13,600	Ave. MW	Peak MW
				(gal)	(bbl)						
2018	Jan	31	147,704,057	9,563,641	227,706	15.44	$ 0.1078	9,755.40	11,029.21	199	246
	Feb	28	131,329,470	8,660,044	206,192	15.16	$ 0.1150	9,763.94	11,125.15	195	241
	Mar	31	144,370,550	9,889,634	235,467	14.60	$ 0.1345	9,183.77	11,853.09	194	244
	Apr	30	142,493,891	9,636,757	229,447	14.79	$ 0.1232	9,558.86	11,901.02	198	247
	May	31	151,201,454	10,120,017	240,953	14.94	$ 0.1342	9,549.70	11,703.13	203	249
	June	30	142,902,259	9,674,924	230,355	14.77	$ 0.1399	9,563.51	11,494.36	198	246
	July	31	139,718,862	9,726,750	231,589	14.36	$ 0.1468	9,647.53	11,909.20	188	242
	Aug	31	141,640,237	9,834,936	234,165	14.40	$ 0.1437	9,817.09	13,623.96	190	238
	Sept	30	129,965,486	9,303,709	221,517	13.97	$ 0.1526	9,383.54	13,625.29	181	240
	Oct	31	149,090,501	10,752,842	256,020	13.87	$ 0.1592	9,870.49	12,783.94	200	243
	Nov	30	139,840,706	9,348,494	222,583	14.96	$ 0.1446	9,772.22	12,091.07	194	241
	Dec	31	144,799,157	9,756,460	232,297	14.84	$ 0.1497	9,443.41	11,943.41	195	237
2019	Jan	31	134,551,799	9,056,271	215,626	14.86	$ 0.1172	9,677.80	11,506.72	181	224
	Feb	28	122,596,954	8,257,791	196,614	14.85	$ 0.1152	9,592.63	11,923.40	182	226
	Mar	31	139,964,506	9,489,626	225,943	14.75	$ 0.1309	9,586.39	12,331.54	188	234
	Apr	30	143,583,892	9,385,611	223,467	15.30	$ 0.1249	9,597.50	11,794.45	199	244
	May	31	154,541,037	10,653,233	253,648	14.51	$ 0.1378	9,854.93	12,008.47	208	254
	June	30	152,035,851	10,394,927	247,498	14.63	$ 0.1378	9,756.34	11,985.93	211	255
	July	31	151,991,559	10,148,056	241,620	14.98	$ 0.1230	9,789.72	11,505.06	204	251
	Aug	31	147,598,476	9,960,397	237,152	14.82	$ 0.1259	9,622.68	11,430.55	198	253
	Sept	30	139,744,390	9,678,417	230,438	14.44	$ 0.1259	10,019.86	11,676.24	194	243
	Oct	31	147,131,892	9,789,114	233,074	15.03	$ 0.1294	9,742.17	12,670.15	198	247
	Nov	30	144,772,854	10,312,356	245,532	14.04	$ 0.1437	9,631.16	12,353.82	201	245
	Dec	31	143,448,641	9,483,024	225,786	15.13	$ 0.0993	9,649.19	11,794.69	193	236
2020	Jan	31	138,041,863	9,188,575	218,776	15.02	$ 0.1286	9,706.87	11,592.61	186	227
	Feb	29	128,740,982	8,519,225	202,839	15.11	$ 0.1226	9,833.72	11,408.84	192	230
	Mar	31	137,889,276	9,112,959	216,975	15.13	$ 0.1034	9,421.93	11,671.89	185	233
	Apr	30	133,331,694	8,843,365	210,556	15.08	$ 0.0847	9,991.96	11,780.63	185	228
	May	31	143,999,526	9,958,957	237,118	14.46	$ 0.0623	10,067.47	12,493.35	194	241
	June	30	145,724,133	9,712,001	231,238	15.00	$ 0.0566	9,939.81	11,940.43	202	244

GUAM POWER AUTHORITY
GOVERNMENT ACCOUNTS RECEIVABLE
Billing up to June 30, 2020 and payments as of 07/17/2020

Current (06/20 Billing due 07/31/20)
30 days Arrears (5/31/20 due 06/30/20)
60 days and over Arrears (04/20 billing due 5/31/20)

CC&B New Acct Numer	DEPARTMENT	CC&B BALANCE 05/31/2020	CANCEL/REBILL/ SPEC CHARGE July 17, 2020	BILLING 06/30/2020	PAYMENT 07/17/2020	CC&B BALANCE 07/17/2020	AGING 0-30 Days	31-60 Days	61-90 Days	91-120 Days	>120 Days	Total
	Line Agencies											
1073430238	Dept. of Corrections	146,793.37	-	68,610.87	(146,793.37)	68,610.87	$ 68,610.87	$ -	$ -	$ -	$ -	$ 68,610.87
0040515913	Dept. of Parks & Rec.	37,509.42	-	12,245.30	(37,509.42)	12,245.30	$ 12,145.51	$ 99.79	$ -	$ -	$ -	$ 12,245.30
0453170939	Guam Fire Department	32,767.79	-	15,230.77	(32,767.79)	15,230.77	$ 15,230.77	$ -	$ -	$ -	$ -	$ 15,230.77
8564647941	DOA Supply Mgmt (NET METERED)	2,114.35	-	1,066.98	(2,114.35)	1,066.98	$ 1,066.98	$ -	$ -	$ -	$ -	$ 1,066.98
4211873236	Dept. of Administration	6,296.69	34.00	2,974.23	(6,296.69)	3,008.23	$ 3,008.23	$ -	$ -	$ -	$ -	$ 3,008.23
4554808900	Nieves Flores Library	16,933.16	-	9,980.81	(16,933.16)	9,980.81	$ 8,546.40	$ 1,434.41	$ -	$ -	$ -	$ 9,980.81
9541109130	General Services Agency	492.17	-	237.46	(492.17)	237.46	$ 237.46	$ -	$ -	$ -	$ -	$ 237.46
1621790133	DOA-Data Processing	16,997.66	-	7,871.13	(16,997.66)	7,871.13	$ 7,871.13	$ -	$ -	$ -	$ -	$ 7,871.13
1896187753	Dept. of PH&SS	71,708.51	-	36,737.76	(71,708.51)	36,737.76	$ 36,737.76	$ -	$ -	$ -	$ -	$ 36,737.76
7252821074	Dept. of Education	4,310,182.85	-	729,888.57	(2,041,277.63)	2,998,793.79	$ 729,888.57	$ 750,439.89	$ 757,591.18	$ 760,874.15	$ -	$ 2,998,793.79
0266069082	Guam Police Department	88,778.69	-	40,815.83	-	129,594.52	$ 40,815.83	$ 43,436.58	$ 45,342.11	$ -	$ -	$ 129,594.52
6069461950	Dept of Youth Affairs (Federal)	361.64	-	462.25	(120.78)	703.11	$ 462.25	$ 240.86	$ -	$ -	$ -	$ 703.11
2913461537	Dept. of Youth Affair* (Local)	23,308.65	-	11,432.83	(11,398.04)	23,343.44	$ 11,432.83	$ 11,910.61	$ -	$ -	$ -	$ 23,343.44
3404311949	Guam Environmental Protect	11,462.66	-	5,953.17	(5,307.11)	12,108.72	$ 5,953.17	$ 6,155.55	$ -	$ -	$ -	$ 12,108.72
3227759982	Mental Health/Subst.	80,482.39	-	37,444.47	(82,238.24)	35,688.62	$ 35,688.62	$ -	$ -	$ -	$ -	$ 35,688.62
6841080463	Guam Behavioral Health & Wellness	5,658.13	-	1,896.33	(3,902.28)	3,652.18	$ 1,896.33	$ 1,755.85	$ -	$ -	$ -	$ 3,652.18
0070861777	Veteran Affairs	3,436.35	-	1,770.47	(3,436.35)	1,770.47	$ 1,770.47	$ -	$ -	$ -	$ -	$ 1,770.47
6243861917	Guam Veterans Affairs Office	0.00				0.00						$ -
8300435373	Civil Defense (Military Affairs)	57,916.96	-	9,831.80	(57,916.96)	9,831.80	$ 9,831.80	$ -	$ -	$ -	$ -	$ 9,831.80
7813165805	Pacific Energy Resource Center	382.02	-	508.53	-	890.55	$ 508.53	$ 188.79	$ 193.23	$ -	$ -	$ 890.55
1595188609	Dept. of Agriculture	15,423.00	-	8,144.94	(15,423.00)	8,144.94	$ 8,144.94	$ -	$ -	$ -	$ -	$ 8,144.94
2535590089	DPW-FAC Adm Account	79,239.29	-	26,501.42	(73,404.27)	32,336.44	$ 26,501.42	$ 5,800.82	$ 34.20	$ -	$ -	$ 32,336.44
7928924534	Guam Visitors Bureau	10,293.42	-	3,708.07	(10,293.42)	3,708.07	$ 3,708.07	$ -	$ -	$ -	$ -	$ 3,708.07
7663706771	Yona Senior Citizen Center	1,293.41	-	616.05	-	1,909.46	$ 616.05	$ 592.33	$ 701.08	$ -	$ -	$ 1,909.46
4129948191	Dept of Chamorro Affairs/Chamorro Village	7,562.09	-	2,566.33	(2,811.41)	7,317.01	$ 2,566.33	$ 2,401.52	$ 2,326.98	$ 22.18	$ -	$ 7,317.01
3558733700	Dept of Chamorro Affairs/Chamorro Village (NET METER)	422.55	-	140.85	(140.85)	422.55	$ 140.85	$ 140.85	$ 140.85	$ -	$ -	$ 422.55
5247210000	Mayors Council	51,420.68	-	6,136.64	(51,420.68)	6,136.64	$ 6,136.64	$ -	$ -	$ -	$ -	$ 6,136.64
6293410000	Office of the Governor	43,557.55	-	21,088.47	(43,726.16)	20,919.86	$ 20,919.86	$ -	$ -	$ -	$ -	$ 20,919.86
8555858369	Dept of Chamorro Affairs (Guam Museum)	54,634.34	-	16,258.41	-	70,892.75	$ 16,258.41	$ 17,134.22	$ 17,579.76	$ 19,920.36	$ -	$ 70,892.75
1099514147	Dept of Chamorro Affairs/Repository	666.25	-	327.64	-	993.89	$ 327.64	$ 322.78	$ 343.47	$ -	$ -	$ 993.89
	Sub Total	**5,178,096.04**	**34.00**	**1,080,448.38**	**(2,734,430.30)**	**3,524,148.12**	**$ 1,077,023.72**	**$ 842,054.85**	**$ 824,252.86**	**$ 780,816.69**	**$ -**	**$ 3,524,148.12**
	MAYORS											
3832327736	Santa Rita Mayor	5,557.90	-	2,476.79	(5,557.90)	2,476.79	$ 2,476.79	$ -	$ -	$ -	$ -	$ 2,476.79
9351070242	Ordot/Chalan Pago Mayor	1,309.11	-	1,010.79	(1,309.11)	1,010.79	$ 1,010.79	$ -	$ -	$ -	$ -	$ 1,010.79
6393530237	Hagatna Mayor	1,068.98	-	911.23	(1,068.98)	911.23	$ 911.23	$ -	$ -	$ -	$ -	$ 911.23
3293808984	Piti Mayor	1,930.53	50.00	862.67	(1,930.53)	912.67	$ 912.67	$ -	$ -	$ -	$ -	$ 912.67
8715052935	Mongmong/Toto/Maite Mayor	2,444.64	-	1,394.75	(1,315.88)	2,523.51	$ 1,394.75	$ 1,128.76	$ -	$ -	$ -	$ 2,523.51
0492244686	Asan/Maina/Adelup Mayor	1,902.22	-	1,265.20	(1,902.22)	1,265.20	$ 1,265.20	$ -	$ -	$ -	$ -	$ 1,265.20
8433959204	Sinajana Mayor	4,432.70	-	2,648.74	(4,432.70)	2,648.74	$ 2,648.74	$ -	$ -	$ -	$ -	$ 2,648.74
8041715847	Dededo Mayor	9,693.28	-	5,190.79	(9,693.28)	5,190.79	$ 5,190.79	$ -	$ -	$ -	$ -	$ 5,190.79
7037924246	Yigo Mayor	5,344.75	-	2,750.75	(5,344.75)	2,750.75	$ 2,750.75	$ -	$ -	$ -	$ -	$ 2,750.75
7202265287	Umatac Mayor	2,102.06	0.06	1,021.75	(2,102.06)	1,021.81	$ 1,021.81	$ -	$ -	$ -	$ -	$ 1,021.81
8472200165	Agana Hts. Mayor	5,625.54		2,999.17	(5,636.40)	2,988.31	$ 2,988.31	$ -	$ -	$ -	$ -	$ 2,988.31
4469579998	Merizo Mayor	1,305.34	-	779.52	(1,305.34)	779.52	$ 779.52	$ -	$ -	$ -	$ -	$ 779.52
5763167341	Barrigada Mayors Office	3,519.76	-	2,101.70	(3,519.76)	2,101.70	$ 2,101.70	$ -	$ -	$ -	$ -	$ 2,101.70
7247791682	Agat Mayor	4,126.28	-	2,138.60	(4,126.28)	2,138.60	$ 1,956.91	$ 181.69	$ -	$ -	$ -	$ 2,138.60
6078244037	Inarajan Mayor	4,625.94	-	2,500.35	(4,625.94)	2,500.35	$ 2,500.35	$ -	$ -	$ -	$ -	$ 2,500.35
6957205325	Tamuning Mayor	9,969.12	-	4,774.79	(9,969.12)	4,774.79	$ 4,774.79	$ -	$ -	$ -	$ -	$ 4,774.79
1880297633	Talofofo Mayor	3,590.30	-	1,777.60	(3,590.30)	1,777.60	$ 1,777.60	$ -	$ -	$ -	$ -	$ 1,777.60
3631627996	Mangilao Mayor	7,131.24	-	3,620.90	(7,131.24)	3,620.90	$ 3,620.90	$ -	$ -	$ -	$ -	$ 3,620.90
1837525565	Yona Mayor	1,829.97	-	978.05	(1,829.97)	978.05	$ 978.05	$ -	$ -	$ -	$ -	$ 978.05
	Sub Total	**$ 77,509.66**	**$ 50.06**	**$ 41,204.14**	**$ (76,391.76)**	**$ 42,372.10**	**$ 41,061.65**	**$ 1,310.45**	**$ -**	**$ -**	**$ -**	**$ 42,372.10**
	DPW ACCOUNTS											
3045433600	DPW-Village St. Lights	985,598.59	(729.62)	301,651.36	(624,194.83)	662,325.50	$ 300,220.04	$ 304,595.47	$ 57,121.93	$ 388.06	$ -	$ 662,325.50
0930959866	DPW- Primary St. Lights	312,947.09	-	68,027.82	(136,962.58)	244,012.33	$ 68,127.82	$ 66,478.28	$ 70,384.30	$ 39,021.93	$ -	$ 244,012.33
3088040552	DPW-Sec/Coll St. Lights	64,157.31	-	18,396.02	(37,941.55)	44,611.78	$ 18,396.02	$ 18,520.69	$ 7,594.62	$ 100.45	$ -	$ 44,611.78
0832698062	DPW-Signal Lights	27,631.71	-	8,478.74	(27,631.71)	8,478.74	$ 8,478.74	$ -	$ -	$ -	$ -	$ 8,478.74
	Sub Total	**$ 1,390,334.70**	**$ (729.62)**	**$ 396,553.94**	**$ (826,730.67)**	**$ 959,428.35**	**$ 395,222.62**	**$ 389,594.44**	**$ 135,100.85**	**$ 39,510.44**	**$ -**	**$ 959,428.35**

GUAM POWER AUTHORITY
GOVERNMENT ACCOUNTS RECEIVABLE
Billing up to June 30, 2020 and payments as of 07/17/2020

Current (06/20 Billing due 07/31/20)
30 days Arrears (5/31/20 due 06/30/20)
60 days and over Arrears (04/20 billing due 5/31/20)

CC&B New Acct Numer	DEPARTMENT	CC&B BALANCE 05/31/2020	CANCEL/REBILL/ SPEC CHARGE July 17, 2020	BILLING 06/30/2020	PAYMENT 07/17/2020	CC&B BALANCE 07/17/2020
	(B) AUTONOMOUS/PUBLIC CORP					
1540692986	Retirement Fund	11,060.35	-	5,431.10	(11,106.97)	5,384.48
0563872892	Guam Housing Corp Rental Division	933.41	-	951.17	(933.41)	951.17
5434075703	University of Guam	144,902.32	-	136,371.41	(281,273.73)	-
7736362694	Guam Airport Authority	327,207.23	-	308,478.19	(327,207.23)	308,478.19
5357510000	University of Guam (NET METERED)	59,180.14	-	57,306.00	(116,486.14)	-
1699407298	G H U R A	11,020.31	-	22,066.86	-	33,087.17
6518220019	Guam Community College	37,774.09	-	37,127.08	(37,774.09)	37,127.08
8302337726	Guam Memorial Hospital	18,512.72	-	24,549.15	(18,512.72)	24,549.15
8426836906	Guam Memorial Hospital (NET METERED)	122,816.64	-	110,591.48	(122,816.64)	110,591.48
4474308144	Port Authority of Guam	77,609.09	-	71,377.15	(77,609.09)	71,377.15
9157510000	Guam Community College (NET METERED)	22,973.90	-	22,746.43	(22,973.90)	22,746.43
9173210000	Guam Solid Waste Authority	5,454.88	-	5,250.53	(5,454.88)	5,250.53
0838495949	Guam Waterworks Authority	1,100,543.71	50.00	998,251.35	(1,100,593.71)	998,251.35
4075914809	GPA	-	(73,477.17)	73,477.17		-
9699497595	GUAM POWER AUTHORITY - WAKE ST LT	$ 221.44	$ -	$ -	$ -	221.44
	Sub Total	**$ 1,940,210.23**	**$ (73,427.17)**	**$ 1,873,975.07**	**$ (2,122,742.51)**	**$ 1,618,015.62**
	(C) OTHERS					
7541928173	Guam Legislature	299.90	-	153.07	(452.97)	-
9503154359	Guam Legislature (NET METERED)	6,876.74	-	6,819.30	(13,696.04)	-
8353274954	Superior Court of Guam	45,867.05	25.00	45,798.74	(45,867.05)	45,823.74
8108458168	Guam Post Office (Agana)	4,478.82	-	4,823.95	(9,302.77)	-
8972267005	Customs & Quarantine Agency	1,262.04	-	691.61	(1,262.04)	691.61
4530787043	U.S. Post Office	32,498.80	-	32,718.18	(65,216.98)	-
8607446612	Dept. of Military Affairs	132,263.73	-	66,484.21	(132,263.73)	66,484.21
3209463043	Dept. of Military Affairs (NET METERED)	31,928.30	-	13,861.02	(31,928.30)	13,861.02
6000770566	KGTF	11,796.54	-	5,469.81	(5,930.52)	11,335.83
6602566745	Tamuning Post Office	4,766.57	-	4,610.11	(4,766.57)	4,610.11
	Sub Total	**$ 272,038.49**	**$ 25.00**	**$ 181,430.00**	**$ (310,686.97)**	**$ 142,806.52**
	GRAND TOTAL	**$ 8,858,189.12**	**$ (74,047.73)**	**$ 3,573,611.53**	**$ (6,070,982.21)**	**$ 6,286,770.71**

AGING

0-30 Days	31-60 Days	61-90 Days	91-120 Days	>120 Days	Total
$ 5,384.48	$ -	$ -	$ -	$ -	$ 5,384.48
$ 731.94	$ 219.23	$ -	$ -	$ -	$ 951.17
$ -	$ -	$ -	$ -	$ -	$ -
$ 305,069.43	$ 3,408.76	$ -	$ -	$ -	$ 308,478.19
$ -	$ -	$ -	$ -	$ -	$ -
$ 14,491.71	$ 18,468.59	$ 126.87	$ -	$ -	$ 33,087.17
$ 37,127.08	$ -	$ -	$ -	$ -	$ 37,127.08
$ 24,281.57	$ 267.58	$ -	$ -	$ -	$ 24,549.15
$ 109,638.07	$ 953.41	$ -	$ -	$ -	$ 110,591.48
$ 71,377.15	$ -	$ -	$ -	$ -	$ 71,377.15
$ 22,746.43	$ -	$ -	$ -	$ -	$ 22,746.43
$ 5,250.53	$ -	$ -	$ -	$ -	$ 5,250.53
$ 971,827.28	$ 26,424.07	$ -	$ -	$ -	$ 998,251.35
$ -	$ -	$ -	$ -	$ -	$ -
$ -	$ -	$ -	$ -	$ 221.44	$ 221.44
$ 1,567,925.67	**$ 49,741.64**	**$ 126.87**	**$ -**	**$ 221.44**	**$ 1,618,015.62**
$ -	$ -	$ -	$ -	$ -	$ -
$ -	$ -	$ -	$ -	$ -	$ -
$ 45,823.74	$ -	$ -	$ -	$ -	$ 45,823.74
$ -	$ -	$ -	$ -	$ -	$ -
$ 691.61	$ -	$ -	$ -	$ -	$ 691.61
$ -	$ -	$ -	$ -	$ -	$ -
$ 66,484.21	$ -	$ -	$ -	$ -	$ 66,484.21
$ 13,861.02	$ -	$ -	$ -	$ -	$ 13,861.02
$ 5,469.81	$ 5,832.73	$ 33.29	$ -	$ -	$ 11,335.83
$ 4,610.11				$ -	$ 4,610.11
$ 136,940.50	**$ 5,832.73**	**$ 33.29**	**$ -**	**$ -**	**$ 142,806.52**
$ 3,218,174.16	**$ 1,288,534.11**	**$ 959,513.87**	**$ 820,327.13**	**$ 221.44**	**$ 6,286,770.71**

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671) 648-3002 | guamccu.org

GUAM WATERWORKS AUTHORITY WORK SESSION

CCU Conference Room
12:00 p.m., Wed., July 22, 2020

AGENDA

1. **CALL TO ORDER**

2. **ISSUES FOR DECISION**
   - 2.1 **Relative to Approval of the 2010, 2013 and 2016 Bond Proceeds Reallocation / Resolution 31-FY2020**
   - 2.2 **Relative to Approval of Additional Funding to the Construction Management Contract for the Santa Rosa, Sinifa and Santa Rita Tank / Resolution 32-FY2020**
   - 2.3 **Relative to Approval of Additional Funding to the Design Contract for the Northern and Southern Tanks / Resolution 33-FY2020**
   - 2.4 **Relative to Approval of Fund Increase to the Construction Management Contract for the Route 4 Relief Sewerline Rehabilitation and Replacement Project S15-006-EPA / Resolution 34-FY2020**
   - 2.5 **Relative to Approval of Amendment for the Indefinite Delivery/Indefinite Quantity Professional Project/Construction Management Services Contract / Resolution 35-FY2020**

3. **GM REPORT**
   - 3.1 **GM Summary**

4. **ISSUES FOR DISCUSSION**

5. **OTHER DISCUSSION**
   - 5.1 **CCU Rules**

6. **DIVISION REPORTS**
   - 6.1 **Communications**
   - 6.2 **Compliance & Safety**
   - 6.3 **Customer Service**
   - 6.4 **Engineering**
   - 6.5 **Finance**
   - 6.6 **Operations**

7. **ANNOUNCEMENTS**
   - 7.1 **Next CCU Meetings: GPA Work Session: July 23 CCU Regular Monthly Mtg.: July 28**

8. **ADJOURNMENT**

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issues for Decision

Resolution No. 31-FY2020
Relative to Approval of the 2010, 2013 and 2016 Bond Proceeds Reallocation

What is the project's objective and is it necessary and urgent?
The objective of the bond proceed reallocation is to expend unobligated 2010, 2013 and 2016 Bond proceeds in an effort to maintain compliance with bond indenture requirements as well as focus available funding to on-going or active CIP projects or programs. Specifically, the reallocated funds will help address the PUC requirement for GWA to establish a Water Loss Reduction Program to improve the utility's water loss in an effort to save on operating cost, as well as fund anticipated USEPA Consent Decree projects associated with GWA's wastewater system.

Where is the location?
N/A

How much will it cost?
While there is no additional cost proposed over previously approved 2010, 2013, and 2016 bond expenditures, GWA management seeks to reallocate Seven Hundred Eighty-Three Thousand Seven Hundred Sixteen Dollars ($783,716.00) of 2010 Bond proceeds, One Million Sixty-Six Thousand Four Dollars ($1,066,004.00) of 2013 Bond proceeds, and Two Million Seven Hundred One Thousand Eight Hundred Seventy-Seven Dollars ($2,701,877.00) of 2016 Bond proceeds to on-going or active CIP projects.

When will it be completed?
N/A

What is the funding source?
2010, 2013 and 2016 Bond

The RFP/BID responses (if applicable):
N/A

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

RESOLUTION NO. 31–FY2020

RELATIVE TO APPROVAL OF THE 2010, 2013 AND 2016 BOND PROCEEDS REALLOCATION

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA management intends to expend unobligated 2010, 2013 and 2016 Bond proceeds in an effort to maintain compliance with bond indenture requirements by reallocating said bond proceeds to on-going or active CIP projects; and

WHEREAS, the PUC required via GWA Docket 19-08 "FY20 Rate Decision" that GWA establish a Water Loss Reduction Program to improve the utility's water loss in an effort to save on operating cost; and

WHEREAS, GWA is currently in negotiations with USEPA for a "Consent Decree" (CD) relative to wastewater system improvements at GWA sewer pump stations (SPS), force mains and gravity lines and as such GWA intends to focus engineering and financial resources to meet the anticipated CD priorities; and

WHEREAS, GWA finance has reconciled as of May 31, 2020 the 2010, 2013 and 2016 Bonds Capital Improvements Project (CIP) accounts and has determined there are several CIP line items with a remaining balance under the "Unobligated Project Cost" totaling Three Million Seven Hundred Seventeen Thousand Five Hundred Sixty-Eight Dollars ($3,717,568.00) (See

Exhibit A), Four Million One Hundred Twenty Thousand Five Hundred Thirty-Three Dollars ($4,120,533.00) (See Exhibit B), Seventeen Million Seven Hundred Forty-One Thousand Six Hundred Seventy Dollars ($17,741,670.00) (See Exhibit C), respectively; and

WHEREAS, GWA management seeks to reallocate Seven Hundred Eighty-Three Thousand Seven Hundred Sixteen Dollars ($783,716.00) of the 2010 Bond proceeds from various CIP line items to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", and PW 12-01 "Water Audit Program & Water Loss Control Plan" (See Exhibit D); and

WHEREAS, GWA management further seeks to reallocate One Million Sixty-Six Thousand Four Dollars ($1,066,004.00) of 2013 Bond proceeds from various CIP line items to the CIP line item WW 09-01 "Lift station upgrades" (See Exhibit E); and

WHEREAS, GWA management further seeks to reallocate Two Million Seven Hundred One Thousand Eight Hundred Seventy-Seven Dollars ($2,701,877.00) of 2016 Bond proceeds from various CIP line items to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", WW 09-01 "Lift station upgrades", WW 09-06 "Wastewater Collection System Repl/Rehab" and MP-Gen-Misc-05 "GWA Infrastructure Improvements" (See Exhibit F); and

WHEREAS, the reallocation of the 2010, 2013 and 2016 Bond as described above has caused the Capital Improvement Plan to be adjusted (See Exhibit G) to reflect the movement of funding as well as allow for CIP line items that had projected shortages in bond funding to reduce future bond borrowing for that CIP line item due to this reallocation; and

WHEREAS, GWA management seeks CCU approval to petition the PUC for approval to reallocate the 2010, 2013 and 2016 bond as indicated above; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve and authorize the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the justification for the 2010, 2013 and 2016 bond reallocation to be acceptable.
3. The CCU hereby approves Seven Hundred Eighty-Three Thousand Seven Hundred Sixteen Dollars ($783,716.00) of 2010 Bond proceeds from various CIP line items to be reallocated to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", and PW 12-01 "Water Audit Program & Water Loss Control Plan".
4. The CCU hereby further approves One Million Sixty-Six Thousand Four Dollars ($1,066,004.00) of 2013 Bond proceeds from various CIP line items to be reallocated to the CIP line item WW 09-01 "Lift station upgrades".
5. The CCU hereby further approves Two Million Seven Hundred One Thousand Eight Hundred Seventy-Seven Dollars ($2,701,877.00) of 2016 Bond proceeds from various CIP line items to be reallocated to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", WW 09-01 "Lift station upgrades", WW 09-06 "Wastewater Collection System Repl/Rehab" and MP-Gen-Misc-05 "GWA Infrastructure Improvements".
6. The CCU further approves the management of GWA seek PUC approval for the reallocation of 2010, 2013 and 2016 bond funds as indicated herein.

RESOLVED, that the Chairman certified, and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by:	Attested by:
_____	_____
JOSEPH T. DUENAS	**MICHAEL T. LIMTIACO**
Chairperson	Secretary

DRAFT

SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

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DRAFT

GUAM WATERWORKS AUTHORITY
2010 Series Bond Project Status
As of May 31, 2020

Exhibit A (page 1 of 1)

SCHEDULE M

	PROJECT NAME	BOND INTEREST	Adjusted Project Cost	EXPENDITURES AS OF 5/31/20	OUTSTANDING ENCUMBRANCES	FUNDING REQUEST	TOTAL EXPENDITURES ENCUMBRANCES & FUNDING REQUESTS	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 5/31/20
PW 05-01	Ground Water Disinfection		$ 500,000	$ 465,008	$ -		$ 465,008	34,992	34,992
PW 05-05	"A" Series Well Transmission Line		$ 475,709	$ 475,709	$ -		$ 475,709	-0	-0
PW 05-06	Water Booster Pump Station		$ 500,000	$ 500,000	$ -	$ -	$ 500,000	0	0
PW 05-07	Meter Replacement Program		$ 10,450,000	$ 10,174,513	$ 6,517	$ -	$ 10,181,030	268,970	275,487
PW 05-08	Barrigada Tank Repair/Replacement		$ 5,450,000	$ 5,371,011	$ 33,337		$ 5,404,348	45,652	78,989
PW 05-09	Leak Detection		$ 200,000	$ 17,037	$ -		$ 17,037	182,963	182,963
PW 05-10	Potable Water System Planning	10,487	$ 210,487	$ 210,487	$ 0		$ 210,487	0	0
PW 05-11	Implement Ground Water Rule		$ 1,699,999	$ 1,699,998	$ -		$ 1,699,998	1	1
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade		$ 1,900,000	$ 368,647	$ 5,914		$ 374,561	1,525,439	1,531,353
PW 05-13	Deep Well Rehabilitation		$ 548,000	$ 404,045	$ -		$ 404,045	143,955	143,955
PW 05-14	New Deep Wells at Down Hard		$ 485,743	$ 485,743	$ -		$ 485,743	0	0
PW 05-15	Rehabilitation of Asan Springs		$ 1,100,000	$ 251,593	$ 339,641		$ 591,234	508,766	848,407
PW 05-16	Master Meters		$ 1,489,957	$ 1,489,957	$ -		$ 1,489,957	0	0
PW 09-01	Ugum Water Treatment Plant Intake		$ 700,000	$ 610,234	$ 106	$ -	$ 610,340	89,660	89,766
PW 09-02	Water Wells		$ -	$ -			$ -	0	0
PW 09-03	Water Distribution System		$ 3,174,748	$ 3,152,725	$ 21,963		$ 3,174,688	60	22,023
PW 09-04	Pressure Zone Realignment /		$ -	$ -			$ -	0	0
PW 09-05	Northern System Water Distribution		$ -	$ -	$ -		$ -	0	0
PW 09-06	Central Water Distribution System 2005		$ 775,002	$ 709,031	$ 2	$ -	$ 709,033	65,969	65,971
PW 09-07	Southern Water Distribution System		$ -	$ -			$ -	0	0
PW 09-08	Mechanical/Electrical Equipment		$ 1,200,000	$ 1,200,000	$ -	$ -	$ 1,200,000	0	0
PW 09-09	Water Reservoir Internal/External		$ 2,150,000	$ 1,178,456	$ 930,928	$ -	$ 2,109,384	40,616	971,544
PW 09-10	Water Reservoir Internal/External		$ -	$ -			$ -	0	0
PW 09-11	Water System Reservoirs 2005 Improvements		$ 1,050,000	$ 1,033,925	$ 16,075		$ 1,050,000	0	16,075
PW 11-01	Distribution System Upgrades		$ 474,160	$ 449,046	$ -		$ 449,046	25,114	25,114
PW 11-02	Ugum Water Treatment Plant Reservoir		$ -	$ -			$ -	0	0
PW 12-01	Water Audit Program & Water Loss Control Plan		$ 78,459	$ 15,031	$ -	$ -	$ 15,031	63,429	63,429
PW 12-02	Production Plan / Reduce Navy Purchases		$ 100,000	$ 99,900	$ -		$ 99,900	100	100
PW 12-03	Hydraulic Asessment of Tank		$ 500,000	$ 489,161	$ 2,680		$ 491,841	8,159	10,839
PW 12-04	Agana Heights & Chaot Tanks		$ 4,700,000	$ 4,647,524	$ -		$ 4,647,524	52,476	52,476
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 1,848,013	$ 1,765,504	$ 77,283		$ 1,842,787	5,226	82,509
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ -	$ -			$ -	0	0
PW 12-07	Assessment of maloilol Elevetad & Yigo Elevated		$ 200,000	$ 200,000	$ -		$ 200,000	0	0
PW 12-08	Public Water System Asser Inventory/Condition Assesment		$ 100,000	$ 78,386	$ -		$ 78,386	21,614	21,614
PW 12-09	Public Water System GIS & Mapping		$ 50,000	$ 50,000	$ -		$ 50,000	0	0
			$ -	$ -			$ -	0	0
WW 05-04	Wastewater System Planning	18,857	$ 1,492,857	$ 1,492,857	$ -		$ 1,492,857	0	0
WW 05-05	Wastewater Vehicles		$ 235,000	$ 209,795	$ -		$ 209,795	25,205	25,205
WW 05-07	NDWWTP - Chlorine Tanks	207,982	$ 457,982	$ 457,982			$ 457,982	0	0
WW 09-07	Tumon Bay Sewer Upgrades		$ -	$ -			$ -	0	0
WW 09-06	Wastewater Collection System Repl/Rehab		$ 1,001,323	$ 904,432	$ -	$ -	$ 904,432	96,891	96,891
WW 09-08	Facilities Plan/Design for Baza Garde	16,757	$ 1,266,757	$ 1,198,678	$ 68,079		$ 1,266,757	0	68,079
WW 09-10	Facilities Plan/Design for Agat-Santa Rita WWTP		$ 899,630	$ 778,208	$ 121,422		$ 899,630	0	121,422
WW 11-02	Priority 1 Sewer Upgrades – Baza Gardens WWTP		$ -	$ -			$ -	0	0
WW 11-03	Baza Gardens STP Replacement		$ 1,488,378	$ 1,445,363	$ -		$ 1,445,363	43,015	43,015
WW 11-04	Facilities Plan/Design for Umatac Merizo WWTP		$ 853,858	$ 827,795	$ 26,063		$ 853,858	0	26,063
WW 11-08	Agat/Santa Rita STP Replacement		$ 2,217,700	$ 2,215,110	$ 1,363		$ 2,216,473	1,227	2,590
WW 12-01	Northern District WWTP Primary Treatment Upgrades		$ 11,743,514	$ 11,419,078	$ 177,322	$ -	$ 11,596,400	147,114	324,436
WW 12-02	Biosolids Management Plan		$ 200,000	$ 162,084	$ -		$ 162,084	37,916	37,916
WW 12-03	Agana WWTP Interim Measures	63,892	$ 11,363,892	$ 11,298,383	$ 23,595		$ 11,321,978	41,913	65,508
WW 12-04	I&I SSES Southern		$ 800,000	$ 793,717	$ 5,278		$ 798,995	1,005	6,283
WW 12-05	I&I SSES Central		$ 850,000	$ 792,566	$ 1,019		$ 793,585	56,415	57,434
WW 12-06	I&I SSES Northern		$ -	$ -			$ -	0	0
WW 12-07	Umatac Merizo Replacement		$ 250,000	$ 245,449	$ 2,569		$ 248,018	1,982	4,551
WW 17-02	Northern District WWTP Secondary Treatment Upgrades		$ 1,000,000	$ 1,000,000	$ -		$ 1,000,000	0	0
			$ -	$ -					
EE 05-01	Well Electrical Protection		$ -	$ -			$ -	0	0
EE 05-02	SCADA Pilot Project		$ 61,950	$ 19,812	$ -		$ 19,812	42,138	42,138
EE 09-02	Electrical Upgrade - Water Wells		$ 354,227	$ 350,291	$ 3,936		$ 354,227	0	3,936
EE 09-03	Electrical Upgrade - Water Booster		$ -	$ -			$ -	0	0
EE 09-04	Electrical Upgrade -Water Booster		$ -	$ -			$ -	0	0
EE 09-05	Electrical Upgrade - Other Water		$ -	$ -			$ -	0	0
EE 09-06	SCADA Improvements – Phase 1		$ 250,000	$ 202,894.23	$ 6,597		$ 209,492	40,508	47,106
EE 09-07	SCADA Improvements – Phase 2		$ 1,056,986	$ 1,026,782	$ 6,597		$ 1,033,380	23,606	30,204
EE 09-08	SCADA Improvements – Phase 3		$ 24,956	$ 24,956	$ -		$ 24,956	0	0
EE 09-09	SCADA Improvements – Phase 4		$ -	$ -			$ -	0	0
			$ -	$ -					
MC 05-01	Laboratory Modernization		$ -	$ -			$ -	0	0
MC 05-02	Land Survey		$ 499,688	$ 469,484	$ 6,597		$ 476,081	23,607	30,204
MC 09-01	General Plant Improvements / Water		$ 7,241,000	$ 7,202,237	$ -	$ -	$ 7,202,237	38,763	38,763
Interest	Interest Earned	$ 13,099	$ 13,099					13,099	13,099
	Total Construction Fund (2010 Se	**$ 331,073**	**$ 87,733,073**	**$ 82,130,622**	**$ 1,884,884**	**$ -**	**$ 84,015,506**	**$ 3,717,568**	**$ 5,602,451**

Exhibit B (page 1 of 1)

GUAM WATERWORKS AUTHORITY
2013 Series Bond Project Status
As of May 31, 2020

SCHEDULE J

	PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	BOND INTEREST	Adjusted Project Cost	EXPENDITURES AS OF 5/31/20	OUTSTANDING ENCUMBRANCES	FUNDING REQUEST	TOTAL EXPENDITURES ENCUMBRANCES & FUNDING REQUESTS	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 5/31/20
PW 05-03	Santa Rita Springs Booster Pu	$ 100,000	$ 100,000.00		$ 100,000	100,000	-		$ 100,000	$ -	$ -
PW 05-05	"A" Series Well Transmission I	$ 400,000	$ 400,000.00		$ 369,846	369,846	(0)		$ 369,846	$ 0	$ 0
PW 05-06	Water Booster Pump Station	$ 6,000,000	$ 6,000,000.00		$ 1,679,964	1,664,351	2,442	-	$ 1,666,793	$ 13,171	$ 15,613
PW 05-07	Meter Replacement Program		$ 1,500,000.00		$ 996,532	854,479	-		$ 854,479	$ 142,053	$ 142,053
PW 05-08	Barrigada Tank Repair/Replac	$ 6,000,000	$ 6,000,000.00		$ 4,987,000	4,779,897	16,000		$ 4,795,897	$ 191,103	$ 207,103
PW 05-09	Leak Detection	$ 100,000	$ 100,000.00		$ 16,916	-	(0)	-	$ (0)	$ 16,916	$ 16,916
PW 05-10	Potable Water System Planni	$ 800,000	$ 1,200,000.00		$ 624,000	593,939	30,061		$ 624,000	$ 0	$ 30,061
PW 05-11	Implement Ground Water Rul	$ 1,000,000	$ 1,000,000.00		$ 1,000,000	952,052	29,724		$ 981,776	$ 18,224	$ 47,948
PW 05-13	Deep Well Rehabilitation	$ 800,000	$ 800,000.00		$ 200,000	198,175	1,826		$ 200,000	$ (0)	$ 1,825
PW 05-14	New Deep Wells at Down Har	$ 2,000,000	$ 2,000,000.00		$ -	-	-		$ -	$ -	$ -
PW 05-16	Master Meters	$ 4,000,000	$ 4,000,000.00		$ 712,060	476,315	180,872		$ 657,187	$ 54,873	$ 235,745
PW 09-01	Ugum Water Treatment Plant	$ 1,000,000	$ 1,000,000.00		$ 859,801	354,136	14,512	414,684	$ 783,332	$ 76,469	$ 505,665
PW 09-02	Water Wells	$ 4,200,000	$ 4,200,000.00		$ 3,030,029	2,148,678	8,167		$ 2,156,845	$ 873,184	$ 881,351
PW 09-03	Water Distribution System	$ 12,000,000	$ 14,000,000.00		$ 10,912,453	10,001,340.93	540,687		$ 10,542,028	$ 370,425	$ 911,112
PW 09-04	Pressure Zone Realignment /	$ 1,000,000	$ 1,000,000.00		$ 337,110	336,036	1,074		$ 337,110	$ 0	$ 1,074
PW 09-08	Mechanical/Electrical Equipme	$ 430,000	$ 430,000.00		$ 426,799	309,784	-	111,522	$ 421,306	$ 5,493	$ 117,015
PW 09-10	Water Reservoir Internal/Exter	$ 800,000	$ 800,000.00		$ -	-	-		$ -	$ -	$ -
PW 09-11	Water System Reservoirs 200	$ 21,000,000	$ 18,000,000.00		$ 13,878,000	13,020,796	812,788		$ 13,833,584	$ 44,416	$ 857,204
PW 11-02	Ugum Water Treatment Plant	$ 7,000,000	$ 7,000,000.00		$ -	-	-		$ -	$ -	$ -
PW 12-04	Agana Heights & Chaot Tanks	$ 4,500,000	$ 4,500,000.00		$ 1,330,287	1,114,271	216,016		$ 1,330,287	$ (0)	$ 216,016
PW 12-05	Tank Major Repair Yigo#1 Ma	$ 13,500,000	$ 13,500,000.00		$ 11,605,000	10,713,256	891,369		$ 11,604,625	$ 375	$ 891,744
PW 12-06	Tank Major Repair Yigo#1 Ma	$ 8,000,000	$ 8,000,000.00		$ -	-	-		$ -	$ -	$ -
PW 12-07	Assessment of maloiloi Elevat	$ 500,000	$ 500,000.00		$ 485,117	461,813	23,304		$ 485,117	$ 0	$ 23,304
PW 14-01	Fire Hydrant Replacement Pro	$ -	$ 1,000,000.00		$ -	-	-		$ -	$ -	$ -
					$ -				$ -	$ -	
WW 05-04	Wastewater System Planning	$ 800,000	$ 800,000.00		$ 650,901	618,613	6,982		$ 625,595	$ 25,306	$ 32,288
WW 09-01	Lift Station Upgrades	$ 5,000,000	$ 2,000,000.00		$ 563,148	538,385	7,265		$ 545,650	$ 17,498	$ 24,763
WW 09-06	Wastewater Collection Systen	$ 6,500,000	$ 3,800,000.00	72,045	$ 732,358	575,303	75,152		$ 650,455	$ 81,903	$ 157,055
WW 11-03	Baza Gardens STP Replacement		$ 1,000,000.00		$ 9,656,874	7,890,391	1,429,611		$ 9,320,002	$ 336,872	$ 1,766,483
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP		$ 1,000,000.00		$ 371,699	369,613	2,086		$ 371,699	$ 0	$ 2,086
WW 11-08	Agat/Santa Rita STP Replace	$ 19,000,000	$ 19,000,000.00		$ 67,200,000	66,539,824	393,770		$ 66,933,594	$ 266,406	$ 660,176
WW 12-03	Agana WWTP Interim Measures		$ 1,500,000.00	45,076	$ 718,076	667,693	50,383		$ 718,076	$ 0	$ 50,383
WW 12-07	Umatac Merizo Replacement	$ 2,000,000	$ 1,000,000.00		$ -	-	-		$ -	$ -	$ -
					$ -				$ -	$ -	
EE 09-01	Wastewater Pump Station Ele	$ 620,000	$ 620,000.00		$ 99,861	99,087	774		$ 99,861	$ -	$ 774
EE 09-02	Electrical Upgrade - Water W	$ 1,500,000	$ 1,500,000.00		$ 1,500,000	1,487,105	2,599		$ 1,489,704	$ 10,296	$ 12,895
EE 09-03	Electrical Upgrade - Water Bo	$ 325,000	$ 325,000.00		$ -	-	-		$ -	$ -	$ -
EE 09-04	Electrical Upgrade -Water Boo	$ 350,000	$ 350,000.00		$ 977	977	-		$ 977	$ -	$ -
EE 09-05	Electrical Upgrade - Other Wa	$ 250,000	$ 250,000.00		$ 60,700	60,700	-		$ 60,700	$ -	$ -
EE 09-08	SCADA Improvements – Phas	$ 1,850,000	$ 1,850,000.00		$ 722,359	514,786	173,869	-	$ 688,655	$ 33,704	$ 207,573
EE 09-09	SCADA Improvements – Phas	$ 500,000	$ 1,200,000.00		$ -	-	-		$ -	$ -	$ -
					$ -				$ -	$ -	$ -
MC 05-01	Laboratory Modernization	$ 1,500,000	$ 1,500,000.00		$ 1,171,465	1,163,037	7,785		$ 1,170,822	$ 643	$ 8,428
MC 05-02	Land Survey	$ 2,000,000	$ 2,000,000.00		$ 1,052	1,038	15		$ 1,053	$ (1)	$ 15
MC 09-01	General Plant Improvements / Allowance for COI	$ 2,000,000	$ 2,600,000.00		$ 2,441,737	1,331,471	3,251	942,603	$ 2,277,325	$ 164,412	$ 1,110,266 $ 275,005
Interest	Interest Earned			$ 1,376,792	$ 1,376,792					$ 1,376,791.71	$ 1,376,792
	Total Construction Fund (2	**$ 139,325,000**	**$ 139,325,000**	**$ 1,493,913**	**$ 140,818,913**	**$ 130,307,188**	**$ 4,922,384**	**$ 1,468,808**	**$ 136,698,380**	**$ 4,120,533**	**$ 10,786,730**

Exhibit C (page 1 of 1)

GUAM WATERWORKS AUTHORITY
2016 Series Bond Project Status
As of May 31, 2020

SCHEDULE L

	PROJECT NAME	BOND INTEREST	Adjusted Project Cost	EXPENDITURES AS OF 5/31/20	OUTSTANDING ENCUMBRANCES	FUNDING REQUEST	TOTAL EXPENDITURES ENCUMBRANCES & FUNDING REQUESTS	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 5/31/20
PW 05-06	Water Booster Pump Station		$ -	-	-		$ -	$ -	$ -
PW 05-07	Meter Replacement Program		$ 1,400,000	149,970	1,250,030		$ 1,400,000	$ -	$ 1,250,030
PW 05-08	Barrigada Tank Repair/Replacement		$ -	-	-		$ -	$ -	$ -
PW 05-09	Leak Detection		$ 100,000	-	-		$ -	$ 100,000	$ 100,000
PW 05-10	Potable Water System Planning		$ 876,294	833,563	42,731		$ 876,294	$ -	$ 42,731
PW 05-13	Deep Well Rehabilitation		$ 250,000	203	109,810		$ 110,013	$ 139,987	$ 249,797
PW 05-14	New Deep Wells at Down Hard		$ 1,190,000	-			$ -	$ 1,190,000	$ 1,190,000
PW 05-16	Master Meters		$ 2,151,539	151,539	-		$ 151,539	$ 2,000,000	$ 2,000,000
PW 09-01	Ugum Water Treatment Plant Intake		$ -	-			$ -	$ -	$ -
PW 09-02	Water Wells		$ 2,500,000	77,520	92,480	39,703	$ 209,703	$ 2,290,297	$ 2,422,480
PW 09-03	Water Distribution System		$ -	-			$ -	$ -	$ -
PW 09-04	Pressure Zone Realignment /		$ 1,141,000	687,712	453,288		$ 1,141,000	$ (0)	$ 453,288
PW 09-08	Mechanical/Electrical Equipment		$ -	-	-		$ -	$ -	$ -
PW 09-10	Water Reservoir Internal/External		$ 800,000	661,188	138,812		$ 800,000	$ -	$ 138,812
PW 09-11	Water System Reservoirs 2005 Improvements		$ 58,830,170	11,810,679	41,432,227		$ 53,242,905	$ 5,587,265	$ 47,019,491
PW 11-02	Ugum Water Treatment Plant Reservoir		$ -	-			$ -	$ -	$ -
PW 12-01	Water Audit Program & Water Loss Control Plan		$ 550,000	-	326,134		$ 326,134	$ 223,867	$ 550,000
PW 12-04	Agana Heights & Chaot Tanks		$ 1,220,000	-	1,220,000		$ 1,220,000	$ -	$ 1,220,000
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 1,822,133	662,334	1,159,799		$ 1,822,133	$ 0	$ 1,159,799
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 7,300,000	6,650,000	650,000		$ 7,300,000	$ -	$ 650,000
PW 14-01	Fire Hydrant Replacement Program		$ 1,200,000	67,478	1,128,900		$ 1,196,377	$ 3,623	$ 1,132,523
			$ -	-			$ -	$ -	
WW 05-04	Wastewater System Planning		$ 312,983	312,983	-		$ 312,983	$ 0	$ 0
WW 09-01	Lift Station Upgrades		$ 1,714,755	414,748	783,659	278,745	$ 1,477,152	$ 237,603	$ 1,300,007
WW 09-06	Wastewater Collection System Repl/Rehab		$ 1,055,478	364,276	237,183		$ 601,459	$ 454,019	$ 691,202
WW 11-03	Baza Gardens STP Replacement	$ 2,384,747	$ 25,048,523	21,944,323	638,480		$ 22,582,803	$ 2,465,719	$ 3,104,200
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP		$ 252,105	239,065	13,040		$ 252,105	$ -	$ 13,040
WW 11-08	Agat/Santa Rita STP Replacement	$ 224,328	$ 2,226,659	1,966,308	36,023		$ 2,002,331	$ 224,328	$ 260,351
WW 12-03	Agana WWTP Interim Measures		$ -	-			$ -	$ -	$ -
WW 12-07	Umatac Merizo Replacement	$ 152,872	$ 20,952,872	20,160,515	792,356		$ 20,952,872	$ (0)	$ 792,356
			$ -	-			$ -	$ -	
EE 09-01	Wastewater Pump Station Electrical Upgrade		$ -	-			$ -	$ -	$ -
EE 09-02	Electrical Upgrade - Water Wells		$ -	-			$ -	$ -	$ -
EE 09-03	Electrical Upgrade - Water Booster		$ -	-			$ -	$ -	$ -
EE 09-08	SCADA Improvements – Phase 3		$ 1,077,497	802,003	-		$ 802,003	$ 275,494	$ 275,494
EE 09-09	SCADA Improvements – Phase 4		$ 4,378,118	1,829,698	1,794,928		$ 3,624,626	$ 753,492	$ 2,548,420
			$ -	-			$ -	$ -	
MC 05-01	Laboratory Modernization		$ 1,127,000	1,127,000	-		$ 1,127,000	$ -	$ -
MC 05-02	Land Survey		$ 1,260,524	540,053	712,264		$ 1,252,317	$ 8,207	$ 720,471
MC 09-01	General Plant Improvements / Water		$ 1,543,760	716,554	780,392	-	$ 1,496,947	$ 46,813	$ 827,206
MC 15-01	Information Technology Integration Improvements		$ 500,000	244,068	120,851		$ 364,919	$ 135,081	$ 255,932
	Interest Earned (unencumbered)	$ 1,605,874	$ 1,605,874					$ 1,605,874	$ 1,605,874
	Total Construction Fund (2016 Series Revenue Bon	**$ 4,367,821**	**$ 144,387,284**	**$ 72,413,780**	**$ 53,913,386**	**$ 318,448**	**$ 126,645,614**	**$ 17,741,670**	**$ 71,973,504**

Exhibit D (page 1 of 2)

2010 Bond Schedule and Reallocation					
CIP Number	CIP Name	Project Cost	Additional Funding	Reduction Funding	Adjusted Projec tCost
PW 05-01	Ground Water Disinfection	$ 500,000		$ (34,992)	$ 465,008
PW 05-05	"A" Series Well Transmission Line	$ 475,709			$ 475,709
PW 05-06	Water Booster Pump Station	$ 500,000			$ 500,000
PW 05-07	Meter Replacement Program	$ 10,450,000			$ 10,450,000
PW 05-08	Barrigada Tank Repair/Replacement	$ 5,450,000		$ (45,652)	$ 5,404,348
PW 05-09	Leak Detection	$ 200,000			$ 200,000
PW 05-10	Potable Water System Planning	$ 200,000			$ 200,000
PW 05-11	Implement Ground Water Rule	$ 1,699,999			$ 1,699,999
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade	$ 1,900,000			$ 1,900,000
PW 05-13	Deep Well Rehabilitation	$ 548,000			$ 548,000
PW 05-14	New Deep Wells at Down Hard	$ 485,743			$ 485,743
PW 05-15	Rehabilitation of Asan Springs	$ 1,100,000			$ 1,100,000
PW 05-16	Master Meters	$ 1,489,957			$ 1,489,957
PW 09-01	Ugum Water Treatment Plant Intake	$ 700,000	$ 250,000		$ 950,000
PW 09-02	Water Wells	$ -			$ -
PW 09-03	Water Distribution System	$ 3,174,748	$ 250,000		$ 3,424,748
PW 09-04	Pressure Zone Realignment /	$ -			$ -
PW 09-05	Northern System Water Distribution	$ -			$ -
PW 09-06	Central Water Distribution System 2005	$ 775,002		$ (65,969)	$ 709,033
PW 09-07	Southern Water Distribution System	$ -			$ -
PW 09-08	Mechanical/Electrical Equipment	$ 1,200,000			$ 1,200,000
PW 09-09	Water Reservoir Internal/External	$ 2,150,000			$ 2,150,000
PW 09-10	Water Reservoir Internal/External	$ -			$ -
PW 09-11	Water System Reservoirs 2005 Improvements	$ 1,050,000			$ 1,050,000
PW 11-01	Distribution System Upgrades	$ 474,160		$ (25,114)	$ 449,046
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -			$ -
PW 12-01	Water Audit Program & Water Loss Control Plan	$ 78,459	$ 283,716		$ 362,175
PW 12-02	Production Plan / Reduce Navy Purchases	$ 100,000		$ (100)	$ 99,900
PW 12-03	Hydraulic Asessment of Tank	$ 500,000		$ (8,159)	$ 491,841
PW 12-04	Agana Heights & Chaot Tanks	$ 4,700,000		$ (52,476)	$ 4,647,524
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 1,848,013		$ (5,226)	$ 1,842,787
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ -			$ -
PW 12-07	Assessment of malojloj Elevetad & Yigo Elevated	$ 200,000			$ 200,000
PW 12-08	Public Water System Asser Inventory/Condition Assesment	$ 100,000		$ (21,614)	$ 78,386
PW 12-09	Public Water System GIS & Mapping	$ 50,000			$ 50,000
WW 05-04	Wastewater System Planning	$ 1,474,000			$ 1,474,000
WW 05-05	Wastewater Vehicles	$ 235,000		$ (25,205)	$ 209,795
WW 05-07	NDWWTP - Chlorine Tanks	$ 250,000			$ 250,000
WW 09-07	Tumon Bay Sewer Upgrades	$ -			$ -
WW 09-06	Wastewater Collection System Repl/Rehab	$ 1,001,323			$ 1,001,323
WW 09-08	Facilities Plan/Design for Baza Gardens WWTP	$ 1,250,000			$ 1,250,000
WW 09-10	Facilities Plan/Design for Agat-Santa Rita WWTP	$ 899,630			$ 899,630
WW 11-02	Priority 1 Sewer Upgrades – Baza Gardens WWTP	$ -			$ -
WW 11-03	Baza Gardens STP Replacement	$ 1,488,378		$ (43,015)	$ 1,445,363
WW 11-04	Facilities Plan/Design for Umatac Merizo WWTP	$ 853,858			$ 853,858
WW 11-08	Agat/Santa Rita STP Replacement	$ 2,217,700		$ (1,227)	$ 2,216,473
WW 12-01	Northern District WWTP Primary Treatment Upgrades	$ 11,743,514		$ (147,114)	$ 11,596,400
WW 12-02	Biosolids Management Plan	$ 200,000		$ (37,916)	$ 162,084
WW 12-03	Agana WWTP Interim Measures	$ 11,300,000		$ (41,913)	$ 11,258,087
WW 12-04	I&I SSES Southern	$ 800,000		$ (1,005)	$ 798,995
WW 12-05	I&I SSES Central	$ 850,000		$ (56,415)	$ 793,585
WW 12-06	I&I SSES Northern	$ -			$ -
WW 12-07	Umatac Merizo Replacement	$ 250,000		$ (1,982)	$ 248,018
WW 17-02	Northern District WWTP Secondary Treatment Upgrades	$ 1,000,000			$ 1,000,000
EE 05-01	Well Electrical Protection	$ -			$ -
EE 05-02	SCADA Pilot Project	$ 61,950		$ (42,138)	$ 19,812
EE 09-02	Electrical Upgrade - Water Wells	$ 354,227			$ 354,227
EE 09-03	Electrical Upgrade - Water Booster	$ -			$ -
EE 09-04	Electrical Upgrade -Water Booster	$ -			$ -
EE 09-05	Electrical Upgrade - Other Water	$ -			$ -
EE 09-06	SCADA Improvements – Phase 1	$ 250,000		$ (40,508)	$ 209,492
EE 09-07	SCADA Improvements – Phase 2	$ 1,056,986		$ (23,606)	$ 1,033,380
EE 09-08	SCADA Improvements – Phase 3	$ 24,956			$ 24,956
EE 09-09	SCADA Improvements – Phase 4	$ -			$ -
MC 05-01	Laboratory Modernization	$ -			$ -
MC 05-02	Land Survey	$ 499,688		$ (23,607)	$ 476,081

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MC 09-01	General Plant Improvements / Water	$ 7,241,000		$ (38,763)	$ 7,202,237
	TOTALS	$ 87,402,000	$ 783,716	$ (783,716)	$ 87,402,000

Exhibit E (page 1 of 1)

2013 Bond Schedule and Reallocation					
CIP Number	CIP Name	Project Cost	Additional Funding	Reduction Funding	Adjusted Project Cost
PW 05-03	Santa Rita Springs Booster Pump Rehab Phase II	$ 100,000			$ 100,000
PW 05-05	"A" Series Well Transmission Line	$ 369,846			$ 369,846
PW 05-06	Water Booster Pump Station	$ 1,679,964		$ (13,171)	$ 1,666,793
PW 05-07	Meter Replacement Program	$ 996,532			$ 996,532
PW 05-08	Barrigada Tank Repair/Replacement	$ 4,987,000		$ (191,102)	$ 4,795,898
PW 05-09	Leak Detection	$ 16,916			$ 16,916
PW 05-10	Potable Water System Planning	$ 624,000			$ 624,000
PW 05-11	Implement Ground Water Rule	$ 1,000,000		$ (18,224)	$ 981,776
PW 05-13	Deep Well Rehabilitation	$ 200,000			$ 200,000
PW 05-14	New Deep Wells at Down Hard	$ -			$ -
PW 05-16	Master Meters	$ 712,060			$ 712,060
PW 09-01	Ugum Water Treatment Plant Intake	$ 859,801			$ 859,801
PW 09-02	Water Wells	$ 3,030,029			$ 3,030,029
PW 09-03	Water Distribution System	$ 10,912,453			$ 10,912,453
PW 09-04	Pressure Zone Realignment /	$ 337,110			$ 337,110
PW 09-08	Mechanical/Electrical Equipment	$ 426,799		$ (5,493)	$ 421,306
PW 09-10	Water Reservoir Internal/External	$ -			$ -
PW 09-11	Water System Reservoirs 2005 Improvements	$ 13,878,000			$ 13,878,000
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -			$ -
PW 12-04	Agana Heights & Chaot Tanks	$ 1,330,287			$ 1,330,287
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 11,605,000		$ (375)	$ 11,604,625
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ -			$ -
PW 12-07	Assessment of malojloj Elevetad & Yigo Elevated	$ 485,117			$ 485,117
PW 14-01	Fire Hydrant Replacement Program	$ -			$ -
WW 05-04	Wastewater System Planning	$ 650,901		$ (25,306)	$ 625,595
WW 09-01	Lift Station Upgrades	$ 563,148	$ 1,066,004		$ 1,629,152
WW 09-06	Wastewater Collection System Repl/Rehab	$ 660,313			$ 660,313
WW 11-03	Baza Gardens STP Replacement	$ 9,656,874		$ (336,872)	$ 9,320,002
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP	$ 371,699			$ 371,699
WW 11-08	Agat/Santa Rita STP Replacement	$ 67,200,000		$ (266,406)	$ 66,933,594
WW 12-03	Agana WWTP Interim Measures	$ 673,000			$ 673,000
WW 12-07	Umatac Merizo Replacement	$ -			$ -
EE 09-01	Wastewater Pump Station Electrical Upgrade	$ 99,861			$ 99,861
EE 09-02	Electrical Upgrade - Water Wells	$ 1,500,000		$ (10,296)	$ 1,489,704
EE 09-03	Electrical Upgrade - Water Booster	$ -			$ -
EE 09-04	Electrical Upgrade -Water Booster	$ 977			$ 977
EE 09-05	Electrical Upgrade - Other Water	$ 60,700			$ 60,700
EE 09-08	SCADA Improvements – Phase 3	$ 722,359		$ (33,704)	$ 688,655
EE 09-09	SCADA Improvements – Phase 4	$ -			$ -
MC 05-01	Laboratory Modernization	$ 1,171,465		$ (643)	$ 1,170,822
MC 05-02	Land Survey	$ 1,052			$ 1,052
MC 09-01	General Plant Improvements / Water	$ 2,441,737		$ (164,412)	$ 2,277,325
	TOTALS	$ 139,325,000	$ 1,066,004	$ (1,066,004)	$ 139,325,000

Exhibit E (page 1 of 1)

2016 Bond Schedule and Reallocation					
CIP Number	CIP Name	Project Cost	Additional Funding	Reduction Funding	Adjusted Project Cost
PW 05-06	Water Booster Pump Station	$ -			$ -
PW 05-07	Meter Replacement Program	$ 1,400,000			$ 1,400,000
PW 05-08	Barrigada Tank Repair/Replacement	$ -			$ -
PW 05-09	Leak Detection	$ 100,000			$ 100,000
PW 05-10	Potable Water System Planning	$ 876,294			$ 876,294
PW 05-13	Deep Well Rehabilitation	$ 250,000			$ 250,000
PW 05-14	New Deep Wells at Down Hard	$ 1,190,000			$ 1,190,000
PW 05-16	Master Meters	$ 2,151,539			$ 2,151,539
PW 09-01	Ugum Water Treatment Plant Intake	$ -	$ 267,881		$ 267,881
PW 09-02	Water Wells	$ 2,500,000			$ 2,500,000
PW 09-03	Water Distribution System	$ -	$ 750,000		$ 750,000
PW 09-04	Pressure Zone Realignment /	$ 1,141,000			$ 1,141,000
PW 09-08	Mechanical/Electrical Equipment	$ -			$ -
PW 09-10	Water Reservoir Internal/External	$ 800,000			$ 800,000
PW 09-11	Water System Reservoirs 2005 Improvements	$ 58,830,170			$ 58,830,170
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -			$ -
PW 12-01	Water Audit Program & Water Loss Control Plan	$ 550,000			$ 550,000
PW 12-04	Agana Heights & Chaot Tanks	$ 1,220,000			$ 1,220,000
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 1,822,133			$ 1,822,133
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 7,300,000			$ 7,300,000
PW 14-01	Fire Hydrant Replacement Program	$ 1,200,000		$ (3,623)	$ 1,196,377
WW 05-04	Wastewater System Planning	$ 312,983			$ 312,983
WW 09-01	Lift Station Upgrades	$ 1,714,755	$ 433,996		$ 2,148,751
WW 09-06	Wastewater Collection System Repl/Rehab	$ 1,055,478	$ 500,000		$ 1,555,478
WW 11-03	Baza Gardens STP Replacement	$ 22,663,776		$ (2,465,719)	$ 20,198,057
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP	$ 252,105			$ 252,105
WW 11-08	Agat/Santa Rita STP Replacement	$ 2,002,331		$ (224,328)	$ 1,778,003
WW 12-03	Agana WWTP Interim Measures	$ -			$ -
WW 12-07	Umatac Merizo Replacement	$ 20,800,000			$ 20,800,000
EE 09-01	Wastewater Pump Station Electrical Upgrade	$ -			$ -
EE 09-02	Electrical Upgrade - Water Wells	$ -			$ -
EE 09-03	Electrical Upgrade - Water Booster	$ -			$ -
EE 09-08	SCADA Improvements – Phase 3	$ 1,077,497			$ 1,077,497
EE 09-09	SCADA Improvements – Phase 4	$ 4,378,118			$ 4,378,118
MC 05-01	Laboratory Modernization	$ 1,127,000			$ 1,127,000
MC 05-02	Land Survey	$ 1,260,524		$ (8,207)	$ 1,252,317
MC 09-01	General Plant Improvements / Water	$ 1,543,760			$ 1,543,760
MC 15-01	Information Technology Integration Improvements	$ 500,000			$ 500,000
MP-Gen-Misc-05	GWA Infrastructure Improvements		$ 750,000		$ 750,000
	TOTALS	$ 140,019,463	$ 2,701,877	$ (2,701,877)	$ 139,269,463

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FS - Funding Source

		2020		2021		2022		2023		2024	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
PW 05-01	Ground Water Disinfection	B2010	-								
PW 05-03	Santa Rita Springs Booster Pump Rehab Phase II										
PW 05-05	"A" Series Well Transmission Line										
PW 05-06	Water Booster Pump Station	B2013	-	IFCIP	-	IFCIP	300				
		GRANTS	387	B2020	700						
		SRF	1,200					SRF	2,000		
PW 05-07	Meter Replacement Program	B2010	268.97								
		B2013	142.053								
PW 05-08	Barrigada Tank Repair/Replacement	B2010	-								
		B2013	-								
PW 05-09	Leak Detection	B2010	182.963	B2020	400						
		B2013	16.916								
		B2016	100	IFCIP	-					IFCIP	70
PW 05-10	Potable Water System Planning			B2020	400						
				IFCIP	-						
PW 05-11	Implement Ground Water Rule	B2013	-								
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade	B2010	1,525.439								
PW 05-13	Deep Well Rehabilitation	B2010	143.955								
		B2016	139.987								
		B2020	350								
		SRF	7,188			SRF	4,000				
PW 05-14	New Deep Wells at Down Hard	B2016	1,190								
		B2020	500								
PW 05-15	Rehabilitation of Asan Springs	B2010	508.766								
		B2020	550								
PW 05-16	Master Meters	B2013	54.873								
		B2016	2,000								
PW 09-01	Ugum Water Treatment Plant Intake	B2010	339.66	IFCIP	-	IFCIP	500				
		B2013	76.469	B2020	400						
		B2016	267.881								
		B2020	200								
PW 09-02	Water Wells	B2013	873.184	SDC	1,000						
		B2016	2,290.297								
		B2020	500								
		IFCIP	-	IFCIP	300			SRF	2,000		
		SDC	2,350								
PW 09-03	Water Distribution System Pipe Replacement and Upgrades	B2010	250.060	IFCIP	400	SDC	500	SDC	500	IFCIP	800
		B2013	370.425								
		B2016	750								
		B2020	500	B2020	500	B2020	1,250	B2022	-	B2022	-
		SDC	1,850			IFCIP	500	IFCIP	1,000	SDC	500
										IFCIP	500
PW 09-04	Pressure Zone Realignment / Development 2005 Improvements	GRANTS	561								
PW 09-06	Central Water Distribution System 2005 Improvements	B2010	-								
PW 09-08	Mechanical/Electrical Equipment	B2013	-								
PW 09-09	Water Reservoir Internal/External	B2010	40.616								
PW 09-10	Water Reservoir Internal/External										
PW 09-11	Water System Reservoirs 2005 Improvements	B2013	44.416			IFCIP	1,200	IFCIP	1,000		
		B2016	5,587.265								
		B2020	25,100	B2020	800						
		IFCIP	-	IFCIP	-						
PW 11-01	Distribution System Upgrade	B2010	-								
PW 11-02	Ugum Water Treatment Plant Reservoir	B2020	7,500								
PW 12-01	Water Audit Program & Water Loss Control Plan	B2010	347.145								
		B2016	223.867								
PW 12-02	Production Plan / Reduce Navy Purchases	B2010	-								
PW 12-03	Hydraulic Assessment of Tanks	B2010	-								
PW 12-04	Agana Heights & Chaot Tanks	B2010	-								
PW 12-05	Tank Major Repair Yigo #1, Mangilao #2, Astumbo #1	B2010	-								
		B2013	-								
PW 12-06	Tank Replacement Piti & Hyundai	B2020	6,500								
PW 12-07	Assessment/Replacement of Malojloj Elevated & Yigo Elevated										
PW 12-08	Public Water System Asset Inventory/ Condition Assessment	B2010	-								
PW 12-09	Public Water System GIS & Mapping										
PW 14-01	Fire Hydrant Replacement Program	B2016	-			B2022	500			B2022	500
MP-PW-Pipe-01	Astumbo Zone Piping					B2022	368	B2022	700		
								B2023	2,700		
								IFCIP	1,082		
MP-PW-Pipe-02	Route 1 Astumbo Zone Piping							B2022	545	B2023	3,000
										IFCIP	300
MP-PW-Pipe-03	Harmon Cliffline Piping to Route 1							B2022	424		
MP-PW-Pipe-04	Hyundai Well Piping	B2020	500								
MP-PW-Pipe-05	Kaiser Zone Looping	B2020	300								
MP-PW-Pipe-06	Mangilao Pressure Zone Realignment	B2020	300								
MP-PW-Pipe-07	Mataguac BPS Suction Piping			B2020	500						
MP-PW-Pipe-08	Nimitz Lower BPS Piping							B2022	121	B2023	1,000
										IFCIP	400
MP-PW-Pipe-09	Yigo, Santa Rosa Zone Realignment					B2022	178	B2022	1,800		
								IFCIP	364		
MP-PW-Pipe-10	Miscellaneous Piping Projects	B2020	100	B2020	100	B2022	694				
MP-PW-Pipe-11	Miscellaneous Piping Connections	B2020	100	B2020	100	B2022	194				
MP-PW-Pipe-12	Rehabilitation and Replacement Program	B2020	1,000	B2020	1,000	B2022	2,500	B2022	2,600	B2023	2,000
								IFCIP	800		
MP-PW-Pipe-13	2-Inch Pipe Replacement Program	IFCIP	-	IFCIP	-	IFCIP	1,850	IFCIP	1,750	IFCIP	1,300
		B2020	2,230	B2020	1,100						
MP-PW-Pipe-14	Asbestos Cement Pipe Replacement Program					B2022	3,850	IFCIP	3,850	IFCIP	3,200
MP-PW-Pipe-15	PRV Rehab and Replacement	IFCIP	-	B2020	1,300	B2022	1,000	B2022	1,000	B2023	900
		B2020	750	IFCIP	-			IFCIP	468	IFCIP	450
MP-PW-Pipe-16	Valve Exercise, Repair, and Replacement Program	B2020	250			B2022	250			B2023	200
										IFCIP	30
MP-PW-Pipe-17	Cross Island Highway Piping			B2020	100	B2022	1,401				
MP-PW-Tank-22	Existing Tank Inspections	B2020	150								
MP-PW-Tank-23	Recurring Tank Inspections	B2020	200	B2020	200	B2022	214	B2022	214	B2023	214
MP-PW-BPS-01	Rehabilitate and Replace BPSs	B2020	309	B2020	100	B2022	150	B2022	150	B2023	150
		IFCIP	-	IFCIP	-						
MP-PW-BPS-02	Nimitz Hill Upper BPS	B2020	48								
MP-PW-BPS-03	Route 15 BPS									B2023	86
MP-PW-SWTP-01	Ugum SWTP River Intake Cleaning Project	B2020	380								
MP-PW-SWTP-02	Ugum SWTP Intake Modifications	B2020	1,174								
MP-PW-SWTP-03	Ugum SWTP Reliability Improvements	B2020	1,150								
MP-PW-SWTP-04	Ugum SWTP 7-Year Improvement Project									B2023	3,000

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										IFCIP	150
MP-PW-Well-01	Well Rehabilitation Program	B2020	300	B2020	3,300	B2022	440	B2022	1,500	B2023	440
								B2023	3,000		
		IFCIP	-	IFCIP	-	IFCIP	1,900	IFCIP	868		
MP-PW-Well-02	Well Equipment Overhaul Program					B2022	1,000			B2023	750
										IFCIP	750
MP-PW-Well-03	Capacity Enhancement – Well Exploration Program	B2020	500							B2023	750
										IFCIP	400
MP-PW-Well-04	Capacity Enhancement – Well Development and Construction Program					B2022	379	B2023	3,000		
								IFCIP	1,622		
MP-PW-Well-05	Wellhead Protection Program	B2020	300					B2022	660		
		IFCIP	-								
MP-PW-Well-06	Well Repair Program	B2020	950	B2020	250	B2022	1,000	B2022	1,000	B2023	750
		IFCIP	-					IFCIP	274	IFCIP	500
MP-PW-Misc-01	South Guam Water Supply Study	IFCIP	-								
		B2020	100								
MP-PW-Misc-02	Master Meter Implementation and Ongoing Meter Replacement	B2020	500	B2020	250	B2022	734	B2023	500	B2023	500
								IFCIP	234	IFCIP	200
MP-PW-Misc-03	Hydrant Condition Assessment and Maintenance					B2022	970	B2023	500	B2023	500
								IFCIP	470	IFCIP	450
MP-PW-Misc-04	OneGuam Program	IFCIP	-	IFCIP	-	IFCIP	50	IFCIP	50	IFCIP	35
		B2020	50	B2020	50						
MP-PW-Misc-05	Leak Detection Assistance	IFCIP	-								
		B2020	150								
DoD-3	Rehabilitation and New NGLA Monitoring Wells	GRANTS	2,465,674								

TOTAL POTABLE WATER PROJECTS B2010	3,608	-	-	-	-	
TOTAL POTABLE WATER PROJECTS B2013/FY2014	1,578	-	-	-	-	
TOTAL POTABLE WATER PROJECTS B2016/FY2016	12,549	-	-	-	-	
TOTAL POTABLE WATER PROJECTS B2020/FY2020	53,491	11,550	1,250	-	-	
TOTAL POTABLE WATER PROJECTS B2022/FY2022	-	-	15,822	10,714	500	
TOTAL POTABLE WATER PROJECTS B2023/FY2023	-	-	-	9,700	14,240	
State Revolving Fund (SRF) Grant Funds	8,388	-	4,000	4,000	-	
System Development Charge (SDC)	4,200	1,000	500	500	500	
GRANTS	3,413	-	-	-	-	
IFCIP	-	700	6,300	13,832	9,535	
	87,227	13,250	27,872	38,746	24,775	

FS - Funding Source

		2020		2021		2022		2023		2024	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
WW 05-04	Wastewater System Planning	B2013	-								
		B2020	150		-						
WW 05-05	Wastewater Vehicles	B2010	-								
WW 09-01	Lift station upgrades	B2013	1,083,502	IFCIP	-					IFCIP	200
		B2016	671.599	B2020	1,050			SRF	2,000	SRF	2,000
		SRF	1,700								
WW 09-02	Moratorium										
WW 09-06	Wastewater Collection System Repl/ Rehabilitation	B2010	96.891								
		B2013	81.903								
		B2016	954.019								
		B2020	350	B2020	1,050						
		IFCIP	-	IFCIP	-						
		SRF	1,900	SRF	1,000			SRF	2,000	SRF	2,000
WW 09-08	Facilities Plan/Design/interim for Baza Gardens STP Impr.										
WW 09-10	Facilities Plan/Design/interim for Agat-Santa Rita STP Impr.										
WW 09-11	WWTP Priority 1 Upgrades	SDC	1,000								
WW 11-03	Baza Gardens STP Replacement	B2010	-	B2020							
		B2013	-	IFCIP	500						
		B2016	-								
WW 11-04	Facilities Plan/Design/Interim for Umatac-Merizo STP Impr.										
WW 11-08	Agat/ Santa Rita STP Replacement	B2010	-								
		B2013	-								
		B2016	-								
WW 12-01	Northern District WWTP Primary Treatment Upgrades	B2010	-								
WW 12-02	Bio Solids Management Plan	B2010	-								
WW 12-03	Agana WWTP Interim Measures	B2010	-								
WW 12-04	I&I SSES Southern	B2010	-								
WW 12-05	I&I SSES Central	B2010	-								
WW 12-06	I&I SSES Northern										
WW 12-07	Umatac Merizo STP Replacement	SDC	1,000								
		B2010	-								
WW 12-09	Wastewater Facility Back Up Power										
WW 17-01	Wastewater Sewer System Expansion	SDC	1,000								
WW 17-02	Northern District WWTP Secondary Treatment Upgrade										

MP-WW-Pipe-01	Gravity Pipe Rehabilitation/Replacement Program	B2020	170	IFCIP	-	IFCIP	1,400	B2022	750	IFCIP	2,200
				B2020	1,800	SRF	4,000			SRF	2,000
										B2023	1,000
MP-WW-Pipe-02	Barrigada Pump Station Pipe Rehabilitation/Replacement					B2022	411	B2022	1,200		
								B2023	2,000		
								IFCIP	18		
MP-WW-Pipe-03	Route 1 Piti Pipe Rehabilitation/Replacement	IFCIP	-								
		B2020	940								
MP-WW-Pipe-04	Southern Link Pump Station Pipe Rehabilitation/Replacement	B2020	657								
MP-WW-Pipe-05	Agana Heights Pipe Replacement					B2022	169	B2022	1,500		
								B2023	1,000		
MP-WW-Pipe-06	Northern District Route 1 Capacity Replacement - Phase 1									B2023	1,000
										IFCIP	150
MP-WW-Pipe-07	Northern District Route 1 Capacity Replacement - Phase 2										
MP-WW-Pipe-08	Northern District Route 1 Capacity Replacement - Phase 3										
MP-WW-Pipe-09	North Dededo Capacity Replacement - Phase 1										
MP-WW-Pipe-10	North Dededo Capacity Replacement - Phase 2										
MP-WW-Pipe-11	Route 16 Capacity Replacement									B2023	500
										IFCIP	50
MP-WW-Pipe-12	Barrigada Capacity Replacement									B2023	30
										IFCIP	15
MP-WW-Pipe-13	Mangilao Capacity Replacement										
MP-WW-Pipe-14	Dededo Capacity Replacement										
MP-WW-Pipe-16	Yigo Capacity Replacement										
MP-WW-Pipe-17	Mamajanao Capacity Replacement	B2020	400	IFCIP	686	B2022	2,000				
				B2020	414	IFCIP	600				
MP-WW-Pipe-18	Agat-Santa Rita Capacity Replacement - Phase 1										
MP-WW-Pipe-19	Agat-Santa Rita Capacity Replacement - Phase 2										
MP-WW-Pipe-20	Agat-Santa Rita Capacity Replacement - Phase 3										
MP-WW-Pipe-21	Baza Gardens Capacity Replacement - Phase 1									B2023	192
										IFCIP	100
MP-WW-Pipe-22	Baza Gardens Capacity Replacement - Phase 2										
MP-WW-Pipe-23	Baza Gardens Capacity Replacement - Phase 3										
MP-WW-Pipe-24	Umatac-Merizo Capacity Replacement									B2023	150
										IFCIP	50
MP-WW-Pipe-25	Piping Near Bayside Lift Station			SRF	2,000			B2022	250		
MP-WW-Pipe-26	Finile Drive Rehabilitation - Agat	B2020	813								

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MP-WW-Pipe-27	Septic/Cesspool System Reduction Program					B2020	350.27	IFCIP	3,000	B2022 IFCIP	4,800 400
MP-WW-MH-01	Manhole Rehabilitation Program	B2020	350			B2022	350			B2022	350
MP-WW-FM-01	Force Main Rehabilitation/Replacement Program			B2020	100	B2022	1,458			B2023	120
MP-WW-FM-02	Replace Yigo Lift Station Force Main			B2020	200	B2022 IFCIP	1,579 250				
MP-WW-FM-03	Route 1 Asan Force Main Rehabilitation/Replacement	B2020	2,124								
MP-WW-FM-04	Hagåtña WWTP Force Main Rehabilitation/Replacement	B2020 IFCIP	6,600 -								
MP-WW-Pump-01	Lift Station Rehabilitation/Replacement Program	B2020 IFCIP	1,820 -	B2020	6,500	IFCIP B2022	600 420	B2023	6,124	B2023 IFCIP	1,420 500
MP-WW-Pump-02	Tumon Basin - Fujita Lift Station Analysis	B2020 IFCIP	6,600 -	B2020	3,000						
MP-WW-Pump-03	Replacement of Former Navy Pump Station (Donut Hole)	B2020	1,301								
MP-WW-WWTP-01	Hagåtña WWTP Primary Treatment Repair/Rehabilitation Program										
MP-WW-WWTP-02	Hagåtña WWTP Secondary Treatment Upgrade										
MP-WW-WWTP-03	Inarajan WWTP Repair/Rehabilitation Program										
MP-WW-WWTP-04	Pago Socio WWTP Pump Station Conversion					B2022 IFCIP	1,200 500	B2022	1,000		
MP-WW-WWTP-05	Umatac-Merizo WWTP Repair/Rehabilitation Program										
MP-WW-WWTP-06	Agat-Santa Rita WWTP Repair/Rehabilitation Program										
MP-WW-WWTP-07	Baza Gardens Cross Island Pipeline - Preliminary Treatment Equipment Repair and Rehabilitation Program										
MP-WW-WWTP-08	Northern District WWTP Completion			B2020	7,500	B2022 IFCIP	800 7,000				
MP-WW-WWTP-09	Ocean Outfall Inspection Program	IFCIP B2020	- 100								
MP-WW-Misc-01A	Update Wastewater Collection System Model (Major Update)										
MP-WW-Misc-01B	Update Wastewater Collection System Model (Continued)	IFCIP B2020	- 50			IFCIP	100			IFCIP	100
MP-WW-Misc-02	I/I and SSES Assessments	IFCIP B2020	- 50					B2022	400		
MP-WW-Misc-03	Miscellaneous Wastewater Improvements	B2020	500	IFCIP	200	IFCIP	1,000	IFCIP	1,000		
MP-WW-Misc-04	Fats, Oils, and Grease Study	IFCIP B2020	- 50								
DoD-01	NDWWTP Secondary Treatment Capacity 12MGD	GRANTS	7,594.541								
DoD-02	Northern Systems Wastewater System	GRANTS	-								

TOTAL WASTEWATER PROJECTS B2010	97	-	-	-	-
TOTAL WASTEWATER PROJECTS B2013/FY2014	1,165	-	-	-	-
TOTAL WASTEWATER PROJECTS B2016/FY2016	1,626	-	-	-	-
TOTAL WASTEWATER PROJECTS B2020/FY2020	23,025	21,614	350	-	-
TOTAL WASTEWATER PROJECTS B2022/FY2022	-	-	8,387	5,100	5,150
TOTAL WASTEWATER PROJECTS B2023/FY2023	-	-	-	9,124	4,412
State Revolving Fund (SRF) Grant Funds	3,600	3,000	4,000	4,000	6,000
System Development Charge (SDC)	3,000	-	-	-	-
GRANTS	7,595	-	-	-	-
IFCIP	-	1,386	11,450	4,018	3,765
	40,107	26,000	24,187	22,242	19,327

FS - Funding Source		2020		2021		2022		2023		2024	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
EE 05-02	SCADA Pilot Project	B2010	-								
EE 09-01	Wastewater Pumping Station Electrical Upgrade										
EE 09-02	Electrical Upgrade - Water Wells	B2013 B2020	- 90								
EE 09-03	Electrical Upgrade - Water Booster										
EE 09-04	Electrical Upgrade -Water Booster	B2020	150								
EE 09-05	Electrical Upgrade - Other Water	B2020	100								
EE 09-06	SCADA Improvements – Phase 1	B2010	-								
EE 09-07	SCADA Improvements – Phase 2	B2010 B2020	- 45								
EE 09-08	SCADA Improvements – Phase 3	B2013 B2016 B2020 SRF	- 275.494 25 100							SRF	2,000
EE 09-09	SCADA Improvements – Phase 4	B2016	753.492								

MP-Gen-EE-01	SCADA Implementation Phase A2 – Initial Project Completion	B2020	2,000	IFCIP B2020	300 2,250	IFCIP	1,550	B2022	2,600	IFCIP B2023	1,800 200
MP-Gen-EE-02	SCADA Implementation Phase B – Additional Sites							IFCIP	600	IFCIP	400
MP-Gen-EE-03	SCADA Implementation Phase C – Additional Instruments										
MP-Gen-EE-04	SCADA System Improvement Program									IFCIP	200

TOTAL ELECTRICAL PROJECTS B2010	-	-	-	-	-
TOTAL ELECTRICAL PROJECTS B2013/FY2014	-	-	-	-	-
TOTAL ELECTRICAL PROJECTS B2016/FY2016	1,029	-	-	-	-
TOTAL ELECTRICAL PROJECTS B2020/FY2020	2,410	2,250	-	-	-
TOTAL ELECTRICAL PROJECTS B2022/FY2022	-	-	-	2,600	-
TOTAL ELECTRICAL PROJECTS B2023/FY2023	-	-	-	-	200
State Revolving Fund (SRF) Grant Funds	100	-	-	-	2,000
System Development Charge (SDC)	-	-	-	-	-
GRANTS	-	-	-	-	-
IFCIP	-	300	1,550	600	2,400
	3,539	2,550	1,550	3,200	4,600

FS - Funding Source		2020		2021		2022		2023		2024	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
MC 05-01	Laboratory Modernization	B2013	-								
MC 05-02	Land Survey	B2010 B2016	- -								
MC 09-01	General Plant Improvements	B2010 B2013 B2016	- - 46.813	IFCIP	100	IFCIP	500	IFCIP	800	IFCIP	1,500
MC 15-01	Information Tecnology Integration Improvements	B2016	135.081	IFCIP	100	IFCIP	500	IFCIP	500	IFCIP	400

MP-Gen-Misc-01	GWA Systems Planning	IFCIP B2020	- 550	IFCIP	500	IFCIP	100	IFCIP	250	IFCIP	600
MP-Gen-Misc-02A	WRMP Update (Comprehensive Update)					IFCIP	100				
MP-Gen-Misc-02B	WRMP Update (Interim Update)	B2020	200								
MP-Gen-Misc-03	Surveying and Property Delineation	B2020	250	IFCIP	250			IFCIP	250		
MP-Gen-Misc-04	Information Technology Improvements	B2020	1,650	IFCIP	200	IFCIP	100	IFCIP	100	IFCIP	150

Exhibit G (page 4 of 4)

[illegible]	[illegible]	IFCIP	-							
MP-Gen-Misc-05	GWA Infrastructure Improvements	B2020	500	B2020	2,000			IFCIP	250	
		B2016	750							
MP-Gen-Misc-06	GPWA Fleet Maintenance Facility	B2020	500							
MP-Gen-Misc-07	Mobile Equipment Replacement Program	B2020	800	IFCIP	200	IFCIP	100	IFCIP	100	IFCIP 300
MP-Gen-Misc-08	General Plant Improvements	B2020	1,000	IFCIP	400	IFCIP	200	IFCIP	200	IFCIP 300
MP-Gen-Misc-09	Security and Resilience Program	B2020	200	IFCIP	100	IFCIP	100	IFCIP	100	IFCIP 50

TOTAL MISCELLANEOUS PROJECTS B2010	-	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2013/FY2014	-	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2016/FY2016	932	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2020/FY2020	5,650	2,000	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2022/FY2022	-	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2023/FY2023	-	-	-	-	-
State Revolving Fund (SRF) Grant Funds	-	-	-	-	-
System Development Charge (SDC)	-	-	-	-	-
GRANTS	-	-	-	-	-
IFCIP	-	1,850	1,700	2,550	3,300
	6,582	3,850	1,700	2,550	3,300

	2020	2021	2022	2023	2024	TOTAL
2010 Bond Series	3,704	-	-	-	-	$ 3,704
2013 Bond Series	2,744	-	-	-	-	$ 2,744
2016 Bond Series	16,136	-	-	-	-	$ 16,136
2020 Bond Series	84,576	37,414	1,600	-	-	$ 123,590
2022 Bond Series	-	-	24,209	18,414	5,650	$ 48,273
2023 Bond Series	-	-	-	18,824	18,852	$ 37,676
State Revolving Fund (SRF)	12,088	3,000	8,000	8,000	8,000	$ 39,088
System Development Charge (SDC)	7,200	1,000	500	500	500	$ 9,700
GRANTS	11,008	-	-	-	-	$ 11,008
Internally Funded CIP	-	4,236	21,000	21,000	19,000	$ 65,236
	137,456	45,650	55,309	66,738	52,002	$ 357,155

Yellow shade cell indictaed fund reduction
Blue shade cell indictaes fund addition
Green shade cell indicates future bond borrowing reduction

GUAM WATERWORKS AUTHORITY
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Tel: (671) 300-6846

Issues for Decision

Resolution No. 32-FY2020
Relative to Approval of Additional Funding to the Construction Management Contract for the Santa Rosa, Sinifa, and Santa Rita Tanks and System Upgrades

What is the project's objective and is it necessary and urgent?
The project is part of the 2011 Court Order Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program. As a Court Order project, it is necessary and urgent to work towards meeting the Court Order deadlines. The project's objective is to provide construction management services for the construction of the Santa Rosa, Sinifa, and Santa Rita Tank and System Upgrade project, which includes new PRV's.

Site construction has not started due to construction permitting and COVID-19 pandemic delays. The main issue with the permitting delay is that the Engineer of Record (Designer) did complete the archaeological process with the Historic Preservation Office (SHPO) prior to construction bid. The design team submitted reports to SHPO during the design process, but did not respond back to SHPO's comments. The issue was brought up by SHPO when the contractor submitted the permits for approval in late 2019.

Updated archaeological reports addressing SHPO's comments have been submitted to SHPO. As of 07/20/2020, SHPO has signed the Santa Rosa site permit. Contractor is awaiting approval from SHPO for the Santa Rita and Sinifa sites. Approval is expected in the coming weeks.

The COVID-19 pandemic forced certain permitting agencies to halt permit review from March to June 2020.

A change order is required to continue the construction management construction phase services.

Where is the location?
Santa Rosa, Sinifa, and Santa Rita reservoir sites.

- Santa Rosa reservoir is located in Yigo.
- Sinifa and Santa Rita reservoirs are located in Santa Rita village.

How much will it cost?
GHD's fee proposal is $337,337.39. The fee includes the following:

1. Extend contract duration in line with the contractor's time extension.

2. Bring construction management's performance period in line with contactor's performance period. The difference is independent of any time extensions that GWA may award the contractor due to permit, COVID-19 pandemic delays or other reasons. The original scope of work performance period was not in line with contactor's work performance period due to bid timing.
3. Cost escalation for staff rates and QA testing services.

There is $297,723.47 contingency available in the current authorization. GWA is requesting $39,613.92 to supplement the available contingency to bring the available funding to $337,337.39.

When will it be completed?

- Santa Rosa site: 365 calendar days
- Sinifa site: 365 calendar days
- Santa Rita site: 410 calendar days

CM start is dependent on receiving construction permits.

What is the funding source?
The funding shall be from PW 09-11: Water System Reservoirs 2005 Improvements.

The RFP/BID responses (if applicable):
N/A

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 32-FY2020

RELATIVE TO APPROVAL OF ADDITIONAL FUNDING TO THE CONSTRUCTION MANAGEMENT CONTRACT FOR SANTA ROSA, SINIFA, AND SANTA RITA TANK AND SYSTEM UPGRADES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, the CCU approved Resolution No. 13-FY2018 authorized a funding of $2,977,234.69 along with a 10% contingency of $297,723.47 to bring the total authorized funding amount to a maximum of $3,274,958.16 (Exhibit A) for the construction management contract; and

WHEREAS, the construction management contract for the Santa Rosa, Santa Rita, and Sinifa tanks and system upgrade project was issued on April 2, 2018;

WHEREAS, the construction management team has completed pre-construction and limited construction task which included design document review, bid review and analysis, development of quality assurance plan, project document control software setup, meetings, and submittal review; and

WHEREAS, the construction contract for the Santa Rosa, Santa Rita, and Sinifa tanks and system upgrade project was issued on September 30, 2019;

WHEREAS, construction at the sites have not started due to the following reasons:

1. Engineer of Record (Designer) did not complete the archaeological survey process for the three sites before the bid, which led to the State Historic Preservation Office delay in reviewing the permit package;
2. Permitting agencies shut down due to the COVID-19 pandemic, which further extended the permit review process with the State Historic Preservation Office and Guam Environmental Protection Agency;

WHEREAS, the construction management construction performance period has expired due to no construction site activity;

WHEREAS, GWA and GHD has negotiated Change Order No. 1 scope and fee of Three Hundred Thirty-Seven Thousand Three Hundred Thirty-Seven Dollars and Thirty-Nine Cents ($337,337.39) to continue and extend the construction management period to match contractor's performance period and construction management cost escalation (Exhibit B); and

WHEREAS, GWA Management is seeking Thirty-Nine Thousand Six Hundred Thirteen Dollars and Ninety-Two Cents ($39,613.92) to supplement the available contingency of $297,723.47 to fund Change Order No. 1 in the amount of Three Hundred Thirty-Seven Thousand Three Hundred Thirty-Seven Dollars and Thirty-Nine Cents ($337,337.39); and

WHEREAS, funding for this project will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.

2. The CCU finds that the terms of the scope and fee proposal submitted by GHD are fair and reasonable.
3. The CCU hereby authorizes $36,613.92 in additional funding to bring the total authorized funding amount to $3,314,572.08.
4. The CCU hereby authorizes the management of GWA the option to issue Change Order No. 1 in the not-to-exceed amount of $337,337.39. (Exhibit "B")
5. The CCU hereby authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by: Attested by:

_____ _____

JOSEPH T. DUENAS **MICHAEL T. LIMTIACO**
Chairperson Secretary

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DRAFT

SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

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DRAFT

Exhibit A, pg. 1 of 50

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 13–FY2018

RELATIVE TO APPROVAL OF THE CONSTRUCTION MANAGEMENT CONTRACT FOR SANTA ROSA, SINIFA, AND SANTA RITA TANK AND SYSTEM UPGRADES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, the design of Santa Rosa, Sinifa, and Santa Rita Tank designs (RFP-09-ENG-2014) have been completed; and

WHEREAS, GWA has advertised the Request for Proposals (RFP-06-ENG-2017) soliciting statement of qualifications from experienced and qualified engineering firms to provide construction management services for the Santa Rosa, Sinifa, and Santa Rita Tank and System Upgrades project; and

WHEREAS, RFP packages were picked up by 19 interested parties, from which GWA received proposal submittals from 8 firms before the RFP submittal deadline; and

WHEREAS, the GWA A-E Selection committee reviewed and evaluated the 8 proposals (See Exhibit A – Score Summary) and generated a short list of the top 3 firms with a

recommendation to award a contract to the firm GHD (See Exhibit B – GM's Determination); and

WHEREAS, GHD and GWA negotiated the price for the construction management services (Santa Rosa, Sinifa, and Santa Rita tank and off-site system upgrades related to all three tank sites) to be provided in the total amount of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents ($2,977,234.69) (See Exhibit C – Scope of Work and Fees); and

WHEREAS, GWA management seeks approval of the fee proposal amount of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents ($2,977,234.69), along with a 10% contingency of Two Hundred Ninety-Seven Thousand Seven Hundred Twenty Three Dollars and Forty Seven Cents ($297,723.47), to bring the total authorized funding amount to a maximum of Three Million Two Hundred Seventy-Four Thousand Nine Hundred Fifty-Eight Dollars and Sixteen Cents ($3,274,958.16); and

WHEREAS, funding for this project will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by GHD are fair and reasonable (Exhibit C).
3. The CCU hereby authorizes the management to accept the fee proposal from GHD, which is also incorporated into this Resolution in its entirety.
4. The CCU hereby further authorizes the management of GWA to enter into a contract with GHD, in the amount of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents ($2,977,234.69).
5. The CCU hereby further approves the total funding amount for this project of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-

Four Dollars and Sixty-Nine Cents ($2,977,234.69), along with a 10% contingency of Two Hundred Ninety-Seven Thousand Seven Hundred Twenty-Three Dollars and Forty-Seven Cents ($297,723.47), to bring the total authorized funding amount to Three Million Two Hundred Seventy-Four Thousand Nine Hundred Fifty-Eight Dollars and Sixteen Cents ($3,274,958.16).

6. The CCU hereby further authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 23rd day of January 2018.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

SECRETARY'S CERTIFICATE

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 5

NAYS: 0

ABSTENTIONS: 0

ABSENT: 0



3

Exhibit A (1 of 1)

GUAM WATERWORKS AUTHORITY
Gloria B. Nelson Public Service Building • 688 Route 15 • Mangilao, Guam 96913

June 19, 2017

To: Thomas F. Cruz, P.E., Chief Engineer

From: Gloria P. Bensan
Chairperson, Consultant Selection Board9

Subject: RFP-06-ENG-2017
Construction Management Services for the Northern and Southern Guam Reservoirs (Santa Rosa, Sinifa, and Santa Rita) Tank and System Upgrades
GWA Project No. W14-007-BND

The following information is intended to document the evaluation process undertaken for the referenced solicitation.

EVALUATION COMMITTEE MEMBERS	
Name	**Title**
Brett Railey, P.E.	CIP Water Engineer Supervisor
Garrett Yeoh	Senior Engineer
Delfyn Quitlong	Engineer II
Vincent Pangelinan	Operations Manager

Consultant	Evaluation Score				Total	Rank
1. EMPSCO Engineering Consultants	75	65	90	74	304	7
2. HDR	90	80	95	86	351	2
3. LYON	65	72	89	80	306	6
4. SSFM International	86	82	94	85	347	3
5. Duenas, Camacho & Associates	79	74	92	80	325	4
6. E.M. Chen & Associates	71	67	88	70	296	8
7. AECOM	74	74	93	81	322	5
8. GHD	90	94	91	91	366	1

Scores were evaluated based on sum of the individual scores. The recommendation of the evaluation committee is shown in the ranking above.

Please review and approve at your earliest convenience so that we may proceed with the notification letters.

Exhibit B (1 of 1)

GUAM WATERWORKS AUTHORITY
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Gloria B. Nelson Public Service Building
688 Route 15, Mangilao, Guam 96913

MEMORANDUM

To: Miguel C. Bordallo, General Manager

From: Thomas F. Cruz, P.E., Chief Engineer

Subject: RFP-06-ENG-2017
Construction Management Services for the Northern and Southern Guam Reservoirs (Santa Rosa, Sinifa, and Santa Rita) Tank and System Upgrades
GWA Project No. W14-007-BND

Date: June 19, 2017

The Selection Committee has completed all necessary actions for selecting the most qualified consultant for the referenced solicitation. All proposals were reviewed and scored according to the conditions established in the solicitation. The evaluation summary sheet is attached for your information.

The committee recommends the following top three (3) firms in order of preference for the project:

1. GHD
2. HDR
3. SSFM International

Concurred:

VINCENT E. GUERRERO
Supply Management Administrator

6/20/2017
Date

GENERAL MANAGER'S DETERMINATION

Consultant Firm Selected:

GHD

Remarks:

MIGUEL C. BORDALLO, P.E.
General Manager

6.21.17
Date

Exhibit C

September 22, 2017

Mr. Miguel Bordallo
General Manager
688 Route 15
Mangilao, GU 96913

SUBJECT: FORMAL SUBMITTAL OF FINAL SCOPE OF WORK AND FEE PROPOSAL FOR NORTHERN AND SOUTHERN GUAM RESERVOIRS (SANTA ROSA, SINIFA, AND SANTA RITA) TANK AND SYSTEM UPGRADES CONSTRUCTION MANAGEMENT SERVICES RFP-06-ENG-2017, PROJECT NO. W14-007-BND

Dear Mr. Bordallo:

GHD is pleased to formally submit our final Scope of Work and Fee Proposal for the above referenced project. The scope of work and fee proposal is based upon detailed meetings we held with GWA staff and we believe it meets GWA's needs in an economically feasible manner by pooling project management and resident engineer resources between the three (3) projects. We look forward to working with GWA on this critical project for Guam. If you have any questions or need additional information, please do not hesitate to contact me directly by email or telephone.

Sincerely,

Paul K. Baron, PE
Principal

Attachments: Scope of Work (15 pages)
Fee Proposal (29 pages)

GHD Inc. 865 South Marine Corps Drive Suite 202 Tamuning Guam 96913

T 1 671 472 6792 **F** 1 671 477 6229 **E** guam@ghd.com **W** www.ghd.com

Guam Northern & Southern GWA Reservoirs
Construction Management Services Scope of Work & Fees

I. GENERAL

GHD, as the Construction Manager (CM) shall provide services relating to the daily field observation, inspection, testing, supervision, management, coordination, and compliance monitoring for the Guam Northern & Southern GWA Reservoirs (Projects) at the following project locations.

- **Santa Rita GWA Reservoir Replacement**
- **Santa Rosa GWA Reservoir Replacement**
- **Sinifa GWA Reservoir Replacement**

The projects generally consists of geo-technical ground improvements, demolition of existing tank structures, construction of pre-stressed concrete tanks conforming to AWWA/ANSI D110 for Type I Wire-and-Strand Wound, Circular Prestressed Concrete Water Tanks (site adapted for each location), installation of new water lines, construction and refurbishment of booster pump stations, chlorination systems, electrical, instrumentation and control, SCADA controls, plus associated utilities for each site. Additionally, the work includes preconstruction services including constructability review and value engineering of the project design.

Reports submitted to GWA by the CM shall be in a form approved by GWA's Chief Engineer.

II. PROJECT OVERVIEW

The construction management, testing, and field observation services for the projects will require general construction management and observation, as well as specialized inspection and testing. In addition to general construction management duties, the specialized inspection and testing will include, but not be limited to:

- Concrete placement
- Concrete anchors/Adhesive anchoring systems/Expansion bolts
- Grading
- Excavation
- Compaction grouting
- Compaction testing
- Pre-stressing operations
- Concrete cylinder testing
- Shotcrete application
- High strength bolting
- Earthwork/Soil analysis
- Instrumentation and SCADA
- Hydrostatic testing
- Disinfection

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In general, the CM shall function as Owner's representative whose primary function shall be to:

- Keep GWA advised and informed as to project progress and cost
- Manage the change process
- Disclose any information relevant to GWA's interest
- Make proactive recommendations to GWA for action to maintain progress and achieve the project schedule and budget
- Observing System Commissioning
- Act in the best interest of GWA

The CM shall administer the Contract, except that the CM is not authorized to make any decisions on the behalf of GWA that materially affect the intent of the design or financially obligate GWA in any manner.

III. TASK AND REQUIREMENTS

The following tasks are applicable to and will be provided to each of the Guam Northern & Southern GWA Reservoirs project locations.

A. PRE-CONSTRUCTION PHASE SERVICES:

In accordance with GWA's RFP, the purpose of this task is to obtain "a clear set of construction documents that will allow the perspective bidder to bid competitively, to build or install the designed facility in an efficient and timely manner, and reduce the number of change orders and delays." Under this task the CM will review the design documents; review the Contractor's Construction Management Quality Control Plan; prepare a Construction Quality Assurance Plan and a Construction Management Plan; provide contract bidding support; participate in meetings to discuss design documents; submit comments on design documents; and participate in meetings to discuss responses to comments as detailed in the following paragraphs.

Task A1: Design Document Review. The CM shall perform review of the design documents. The CM will provide redline mark-up of the plans and specifications and annotated comments. The review shall also verify that the design is clearly presented and potential construction related conflicts or deficiencies which may lead to substantive changes to the design, schedule, or cost of the project have been mitigated as practicable. Based upon our understanding of the current status of the design documents, we will undertake this at the 100% design stages.

Deliverables (electronic pdf files and hard copies)**:**

- Final Design Review Report

Task A2: CM Quality Assurance:

Task A2.1: Review Contractor Construction Management Quality Control Plan. The CM shall review, record, and comment on the Construction Management Quality Control Plan submitted by the Construction Contractor.

Task A2.2: Construction Quality Assurance Plan. The CM will develop, implement, and maintain a Quality Assurance Plan for civil, structural, electrical, mechanical, and instrumentation elements including specialized work related to the construction of concrete

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water reservoirs conforming to AWWA/ANSI D110 Type I Wire- and Strand- Wound, Circular Pre-stressed Concrete Water Tanks.

Content of the Quality Assurance Plan shall include, but not be limited to the following:

- Documentation of site conditions prior to beginning construction
- Review of approved submittals from the Contractor prior to fabrication or installation of materials and equipment
- Inspection, observation, and documentation of daily field work
- Monitoring of the Contractor's Quality Control Plan
- In-plant fabrication and/or witness testing at place of manufacture (where applicable)
- Reports and record keeping
- Non-conforming and deficient work resolution process
- Monitoring the Construction Contractor's implementation of their Quality Control Plan
- Complete list of specialized inspections for the tank structure and under tank

It is important to note that the CM is responsible for monitoring the Contractor's compliance with the Contract Documents, but is not responsible for the Contractor's means and methods the Contractor elects to use in performance of their work.

Deliverables (electronic pdf files and hardcopies):

- Quality Assurance Plan

Task A3: Construction Management Plan. The CM will develop and implement the Construction Management Plan (CM Plan) including guidelines for project organization and coordination in the field, standard daily operations, change order procedures, quality, schedule, and cost control. The CM Plan sets forth the procedures and approach for the construction of the project. The CM Plan will serve the CM, the Owner's Representative, and Contractors by defining the project, project team members and their roles, coordination among team members, procedure, key milestones, and schedule constraints. By establishing these parameters early in the project, the CM Plan will help control resources and costs, establish communication and coordination between the CM, Contractor, and GWA.

Deliverables (electronic pdf files and hardcopies):

- Construction Management Plan

Task A4: Contract Bidding:

The CM will review and perform an assessment of the 100% contract bid package (Parts A, B, & C) to assess their readiness, completeness, and suitability to solicit competitive bids. We will assist in the management of the bid documents, prepare for and conduct the pre-bid conference and site visit(s), manage and assist with RFI responses and addendums during the bid period.

After receipt of construction bid packages, the CM will perform an overall review of the bids received with a detailed emphasis on the apparent low bidder(s). The CM will work with GWA to perform the necessary follow-up with the bidders until the lowest responsible and responsive bidder is determined. Upon completion of this process, the CM will provide a technical memorandum summarizing the review and recommendation for award, and/or concurrence of

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the proposed selected contractor. Recommendation shall include document review to ensure compliance with all bid requirements and procurement regulations, bid analysis, and contractor selection.

Deliverables (electronic pdf files and hardcopies):

- Pre-Bid Meeting Agenda and Minutes
- Technical Memorandum(s) – Document Review, Bid Analysis, and Contractor Selection

B. CONSTRUCTION PHASE SERVICES:

Task B1.0: Project Records & Document Control. The CM shall provide services and tools to ensure that the project is efficiently managed and constructed according to the terms of the Contract. The primary function shall be the proper collection and organization of construction documents, gathering data regarding project progresses, producing progress reports, and monitoring time, cost, and quality.

The CM shall use Bentley EADOC for the Project Management Information System (PMIS) to track communication, design documents, construction documents, finances, and reporting. Our fee proposal shall include up to 15 users.

- Communication Documents: Memos, daily inspector logs for both contractor and CM, meeting minutes, and all other relevant documentation.
- Construction Documents: Submittals, RFIs, testing results, photo logs, special inspection, change orders, corrective actions, punch list, various construction logs, payment applications, wage rate reporting, and all other relevant documentation.
- Contract Documents: Specifications, drawings, permits, bid documents, contract documents, and all other relevant documentation.

Task B2.0: Daily Construction Reports. The onsite inspectors shall maintain daily reports of the general work performed, visitors to the site, daily production, weather and site condition, field orders, progress photos, material testing, special inspections, documentation of delays, non-conformance, punch lists, and other material and work facts and issues regarding the production of the work. The daily reports and logs shall be available to GWA project team for review at any time via the project management software.

Task B3.0: Progress Photo Log and Live Video Feed:

Task B3.1: Progress Photo Log. The CM shall prepare and retain a construction progress photo log in an album organized by year, month, and day. The photo log shall capture the different phases of the project – pre-construction, construction, and post-construction. The photo log shall be digital and provided to GWA at the end of the project.

Task B3.2: Live Video Feed. The CM shall provide 24 hour monitoring camera(s) to be installed at each project site to allow for regular monitoring of the project work. The camera system will allow for remote view and playback functions. A time-lapse video of the entire project shall be provided to GWA at the end of the project.

Task B4.0: Submittal and Shop Drawings. The CM shall review and act on (accept or reject) submittals required by the Contract documents. The CM shall review and provide comments

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regarding shop drawings, work drawings, material submittals, traffic control plan, safety plan, demolition plan, and other submittals for conformance with the Contract Documents. The CM reviewer shall be a competent person. In the event of a Contractor request for a time extension or material or equipment substitution, the CM shall make a recommendation to GWA regarding the substitution. The GWA Chief Engineer or his authorized representative will approve the substitution.

Task B5.0: Contractor Project Schedules. The CM shall review the Contractor's work schedule for accuracy and for efficient sequencing of the work. The CM shall provide recommendations to the Contractor to make changes deemed necessary and coordinate approval of the revised (recovery) schedule with GWA. Any delays shall be documented and notified to GWA and the Contractor when actual progress is behind schedule. The CM shall adhere to the requirements set forth in the Contract document for Contractor project schedule tracking and review.

Task B6.0: Payment Request. The CM shall receive and process payment requests from the Contractor. Payment requests shall be reviewed to be in compliance with the Contract documents and with the actual work completed. Upon completion of the review, the CM shall make any necessary adjustments, certify, and forward the request to GWA for processing of the payment. The CM shall submit their review, recommendation, acceptance, or rejection within five (5) working days of receipt from the Contractor. We assume the payment application will be a standard AIA or EJCDC.

Task B7.0: Payroll Report. The CM shall review any payroll submittals required by the Contract Documents including prevailing wage submissions. At the minimum, the Contractor and its subcontractors shall provide bi-weekly pay records for each of its employees on the project. The CM shall conduct two (2) random employee interviews every two (2) weeks to verify the pay request information. Upon completion of the review, the CM shall require the Contractor to make any necessary adjustments, certify, and forward the Payroll report along with the pay request to GWA for processing. Our review will be based on the wage rates provided in the bid package.

Task B8.0: Project Meetings. The CM shall schedule, arrange, and conduct conferences and meetings as required for clear communication of the Contract requirements and adherence to project schedules.

Task B8.1: Pre-construction Conference. The CM shall prepare for, chair, and provide meeting minutes for the pre-construction conference. The preconstruction conference shall be arranged to discuss mobilization, prosecution of work, safety, environmental protection, historic preservation, processing payments, material submittals, testing procedure, project schedules, inspections, and all other contract issues as necessary.

Task B8.2: Weekly Progress Meetings. The CM shall arrange for a weekly progress meeting with the Contractor and GWA to discuss progress of work, Contract requirements, and other issues related to the administration and prosecution of work. The CM shall prepare meeting minutes for all progress meetings with contractors, sub-contractors, GWA, and all other parties. The meeting minutes shall include action items from week to week until it has been completed.

Task B8.3: Special/Stakeholder Coordination Meetings. The CM shall arrange meetings between the Contractor and GWA, and other parties such as GEPA, DPW, GPA, etc. and other

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Stakeholders as necessary to address project issues that require decisions that cannot be made by the CM or to resolve regulatory concerns.

Task B9.0: As-Built Drawings:

Task B9.1: As-Built Drawing Review. After each weekly meeting, the CM shall review the Contractor's review drawings to ensure that they are current and capture any deviations from the original plan set.

Task B9.2: Maintain As-Built Drawing. The CM shall maintain a separate set of red-line as-built drawings on site. Drawings shall be available for GWA at any time. Monthly as-built documents shall be uploaded to the project management software system.

Task B10.0: Request for Information. The CM shall track Requests for Information (RFI) and maintain an RFI log; coordinate receipt of answers from other sources; and provide RFI responses with GWA's input regarding any aspect of the Contract documents, which includes the plans and technical specifications.

Task B11.0: General Compliance Monitoring. The CM shall evaluate and ensure Contractor compliance with all local and federal labor laws applicable to the Project. Any violations shall be immediately reported to GWA. Compliance monitoring shall include but not limited to the following:

Task B11.1: Regulations and Laws. The CM shall monitor compliance with Territorial and/or Federal laws, regulations, and rules.

Task B11.2: Labor Laws. The CM shall monitor Contractor and subcontractor procedures to verify legal status of employees on site. Verify bi-weekly compliance with labor requirements for federally funded projects including posting of wage rate schedules at the job site and safety requirements.

Task B11.3: Licensure. To the best of our ability, the CM shall confirm that the Contractor and its subcontractors and their workers have all required licenses and ensure that said licenses are valid throughout the terms of the Contract.

Task B11.4: Permit Compliance. To the best of our ability, the CM shall monitor and track Contractor's compliance in obtaining required permits and approvals.

Task B11.5: Insurance. To the best of our ability, the CM shall review the Contactor's insurance documents that are submitted to GWA for compliance with Contractor requirements. The CM shall track insurance documents, ensure insurance is valid throughout the term of Contract and maintain an insurance certificate log.

Task B12.0: Claims and Disputes. The CM shall promptly notify GWA regarding any issues that arise during construction of the project that could result in claims and/or disputes. The CM shall provide the following services to assist GWA with the resolution of claims and disputes:

Task B12.1: Claim Records. Maintain copies of all verbal and written communications, submittals, testimony, photos, and meetings regarding a potential dispute and promptly submit all originals to the Chief Engineer and Attorney for GWA.

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Task B12.2: Claims Reviews & Interpretation. Review claims submitted by the Contractor. Provide GWA with interpretation of Contract drawings and specifications and provide written recommendations to GWA regarding the solution of the dispute. At the outset of the Contract, the CM shall work with the Contractor to provide pricing for equipment, material, personnel, and other relevant considerations as specified in the bid. Prices agreed upon shall be used in any subsequent Change Order. No amounts shall be paid except for actual losses incurred by the Contractor through no fault of their own or for risks not allocated to the Contractor under the bid.

Task B13.0: Change Order Negotiations and Review:

Task B13.1: Change Order Review. Track all change orders and maintain a change order log. Provide change order evaluations, negotiations, and recommendations for approval by GWA. Change orders shall not be made when the Contractor has assumed such risk in the bid. Change orders may include requests for additional payments for differing site conditions and the CM shall utilize the bid documents to determine if a change order is warranted. The CM shall submit change order requests and supporting documentation to GWA for approval within ten (10) working days of receipt from the Contractor wherever practical.

Task B13.2: Change Order Negotiations with Contractor. Prepare independent cost estimates and negotiate change orders with the Contractor subject to GWA approval (final approval of negotiated change orders can only be made by the GWA General Manager).

Task B13.3: Change Order Documentation and Administration.
The CM shall maintain copies for all approved change orders (originals to be provided to GWA) and ensure that subsequent pay requests accurately represent these change orders. Approved change orders shall be administered by the CM along with other work elements according to the provisions of this scope of work.

Task B14.0: Design Changes and Verification Request:

As directed by GWA, prepare changes to the Contract technical documents (design and specifications) required to address a change order. GWA will direct the CM to make design changes only when changes are deemed by the GWA Chief Engineer and the Engineer of Record to have no material effect on the original intent of the design. All other design changes shall be forwarded to the Engineer of Record for processing.

If the request for change will materially change the original design, the CM shall coordinate with the Engineer of Record to accomplish the necessary design changes. The CM shall prepare a design change/verification request (DCVR) for submission to and for the approval of the Engineer of Record. If the required changes to the design are not covered within the original design scope of service, the CM will prepare a design scope amendment; solicit a fee proposal for the amendment on behalf of GWA, and assist with the negotiations.

Task B15.0: Construction Monitoring, Special Inspection, and Quality Control Monitoring.
The CM shall provide construction management and onsite inspection observation services to ensure that the work is accomplished in accordance with the Contract documents.
Project field staff shall review project documents, conduct daily observations, special inspections (where applicable), prepare and submit daily observation and special inspection reports; communicate deficiency issues and resolve with Contractor; and update a non-

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compliance log. It is anticipated that during peak construction as many as four (4) field staff may be present at the site during normal working hours.

Task B15.1: Project Manager. The CM will assign a part time Project Manager (PM) to the Guam Northern and Southern GWA Reservoir project. The PM will be responsible for general over-sight of the project, formal correspondence with GWA and the Contractor, and the professional and technical accuracy of all work and materials of the project.

Task B15.2: Resident Engineer. A full time Resident Engineer (RE) shall be assigned to manage all three (3) sites and will be at one (1) of the sites during normal working hours unless attending project related meetings or during holidays, vacation, or sick days. The Resident Engineer (RE) will determine along with the Project Manager (PM), which field staff will be onsite but it may be comprised of civil, structural, electrical, or mechanical field staff with the intent that there will be at least one (1) of them on site during normal working hours and will be supported by additional Special Inspectors as described in Task 15.4.

Task B15.3: Onsite Construction Inspector. The CM shall provide construction inspector staff at each of the three (3) sites to monitor the construction. The Resident Engineer and onsite field staff shall have demonstrable experience (satisfactory to GWA) relative to the discipline and type of work being performed. Project field staff shall review project documents, conduct daily observations, special inspections (where applicable), prepare and submit daily observation and special inspection reports, communicate deficiency issues and resolve with Contractor, and update a non-compliance log.

Task B15.4: Special Inspector. In addition to general compliance inspections, the CM shall provide special inspections services in accordance with IBC 2009, Chapter 17 by a person with demonstrable experience (satisfactory to GWA) related to concrete placement, structural field welding, field welding of reinforcement, concrete anchoring, expansion bolts, shotcrete application, high strength bolting, reinforcing steel placement, pre-stressing operations, grading, excavation, backfilling, foundation probing and injection, and other operations that require special inspections. The Special Inspections staff shall be accepted by DPW and approved by GWA before inspection.

SCADA, mechanical, and electrical inspections will be handled by competent staff on an "on-call" basis to periodically observe these phases of the construction. The same staff will be used to provide discipline specific submittal, shop drawing, and RFI review and response support. The staff shall have demonstrable experience relative to the discipline and type of work being performed.

Task B16.0: Testing (Quality Assurance).

Task B16.1: Contactor Testing. Schedule, observe, approve or reject, and document testing required under the Contract to be performed by the Contractor.

Task B16.2: Construction Quality Assurance Testing. The CM shall provide the following CQA testing to monitor the Contractor's independent testing firm:

SPECIAL TESTING	STANDARD	FREQUENCY
Concrete Compressive Testing: Water tank, structures, encasement, hand holds,	ASTM C-39	See attached QA Summary of Services

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electrical and communication vaults, pavement, retaining walls, drilled piles, etc.		
Backfill Compaction Testing: Over-excavation, tank foundation, structure foundations, manholes, vaults, electrical & communication hand holes, pavement, etc.	ASTM D-698 ASTM D-6938	See attached QA Summary of Services
Soil and Aggregate Analysis: Subgrade, limestone, base course, general fill, and structural fill, etc.	ASTM C-136 ASTM C-117 ASTM C-40 ASTM D-1140 ASTM D-1183 ASTM D-4318	See attached QA Summary of Services

Task B16.2: GWA Testing. Coordinate and monitor testing required to be performed by GWA.

Task B17.0: Acceptance. The CM shall promptly reject, orally, or in writing, any construction work that does not fully comply with Contract documents. Within 24 hours of notification to the Contractor that work elements have been rejected, the CM shall provide a written description of the deficiency to the GWA Chief Engineer for his/her concurrence. When concurrence has been obtained, the Contractor shall be directed to correct the work. The CM shall promptly advise the GWA Project Manager or the GWA Chief Engineer if the Contractor fails to correct or remove the defective work.

The CM shall issue written stop work orders to the Contractor and immediately provide GWA with a copy for a portion of or the entire Contract non-compliance issues as follows:

- If condition of work or Contractor actions threaten the health and safety of Contractor personnel, GWA representatives, or the public in such cases, stop work orders may be oral depending on the circumstances with written stop work order to follow.
- With prior notification and approval of the GWA Chief Engineer or Project Manager in all other cases.

Task B18.0: Construction QA Survey Services. The CM shall conduct survey and field measurements as necessary to verify that the work is located according to the plans and specifications. Changes to the horizontal and vertical alignments and elevations shall be made only with the approval of the GWA Chief Engineer.

- Pipeline Alignments and Location of Structures: Spot check Contractor's construction staking to verify the pipeline alignments and structure locations are as called for on the plan and specifications and in order to ensure that the work is in a location within lawful and approved Rights-of-Way and easements.
- Elevations: Spot check with Contractor's elevations for foundations, pads, pipe line inverts, backfill thickness, manholes, and other structures for which vertical elevations is a critical design element.
- Construction Survey Quality Assurance: The CM shall provide, at the minimum, the following CQA survey to monitor the Contractor's independent survey firm.
- See attached QA Summary of Services for a project specific list of those items to be verified. In general, the following work shall be provided: under-tank piping, over-excavation, tank foundation, vaults, pavement, water line, bench marks, etc.

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Task B19.0: Project Closeout (Punch List and Project Closeout Inspections). Throughout the construction of the project, the CM shall prepare and maintain a list of defects and deficiencies in the work which must be corrected by the Contractor prior to final acceptance of work. The list shall be provided to all members of the pre-final and final inspection team. The list shall be revised after inspections to reflect additional items identified during the inspection. Coordinate with the Contractor to ensure that all punch list items have been completed. When all items have been completed, inform GWA in writing recommending that the work be accepted.

Schedule, arrange, and conduct preliminary, pre-final, and final inspections of work with Contractor, GWA, GEPA, DPW, and other stakeholders in this project.

Task B19.1: Deficiency Log. Prepare and maintain a list of defects and deficiencies in the work which must be corrected by the Contractor prior to final acceptance of work.

Task B19.2: Preliminary Inspection. Preliminary inspections shall be arranged as necessary for specific work elements that require the certification and approval of other agencies.

Task B19.3: Pre-final Inspection. A pre-final inspection shall be conducted after substantial completion of the work.

Task B19.4: Final Inspection. The final inspection shall be conducted after correction of pre-final inspection punch list items.

Task B20.0: Train and Warranty Periods.

Task B20.1: Startup Training & Maintenance Procedures Coordination. The CM shall coordinate with the Contractor to schedule and conduct startup training and standard maintenance procedures required by the Contract documents.

Task B20.2: Master Warranty Package. The CM shall maintain a copy of the warranties and compile associated Manufacturer and Contractor warranty documents. Warranty information shall be included in the final project report. All original warranty documents shall be provided to GWA along with Lien Release Information from the Contractor.

Task B21.0: Equipment.

Task B21.1: Pressure Data Loggers. The CM shall provide GWA with 15 water pressure data loggers, batteries, lock boxes, chains, padlocks, and associated fittings. The water pressure data loggers shall contain USB downloading, water resistant case, delay start feature, and 0-300 PSI range. For the purposes of this proposal, the cost of five (5) data loggers has been carried in each of the three (3) projects. Product data for the above has been included as an attachment to this document.

Task B21.2: Equipment. The CM shall provide GWA with a Panasonic Toughbook 20 with Windows Pro operating system per the attached product data. For the purposes of this proposal, the cost of Toughbook has been divided equally and 1/3 of the cost was carried in each of the projects.

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Task B22.0: Expenses. The CM has summarized the costs associated with reports & reproduction, mileage, live video fee, website access & maintenance, project management information system (EADOC), QA soil & aggregate analysis, QA backfill compaction testing, QA concrete compressive strength testing, QA survey verification, etc. as a single total for all three (3) projects and carried the average amount equally in each of the projects.

C. POST-CONSTRUCTION SERVICES:

Task C1.0: Final Report. The CM shall prepare a final report after written acceptance of the work by GWA. The final report shall include a narrative documentation of all significant design and construction events and issues and shall become a historical record for the project. The Final Report shall include:

- All communication documentation
- All design documentation
- All construction documentation
- Warranty information
- Operation and maintenance information
- Asset management registry

Deliverables (electronic pdf files and 5 hard copies)**:**

- CM Final Report

Task C2.0: Record Drawings. After the conclusion of the project, the CM shall review and approve the official record drawings prepared by the Contractor.

Deliverables (electronic pdf files and 5 hard copies)**:**

- As-Built Record Drawings

IV. CLARIFICATIONS AND ASSUMPTIONS:

1) For this project, the CM's onsite presence shall consist of the following:

   a) ***One (1) part time Project Manager*** (assumed 45%) equally distributed to each of the three (3) project locations.
   b) ***One (1) full time Resident Engineer*** (assumed 100%) equally distributed to each of the three (3) project locations.
   c) ***Three (3) full time Civil/Structural Inspector*** (assume 100%), one at each of the three (3) project locations.
   d) ***One (1) part time Structural Special Inspector*** (assumed 24%), equally distributed to each of the three (3) project locations.
   e) ***One (1) part time SCADA Inspector*** (assume 21%), equally distributed to each of the three (3) project locations.
   f) ***One (1) part time equivalent of Mechanical Engineer/ Mechanical Inspector*** (assume 21%), equally distributed to each of the three (3) project locations.
   g) ***One (1) part time equivalent of Electrical Engineer/ Electrical Inspector*** (assume 21%), equally distributed to each of the three (3) project locations.

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h) ***One (1) part time equivalent of Submittal Manager/Project Manager Assistant*** (assume 45%) at each of the three (3) project locations, and various part time support as needed from the Principal, additional inspectors, engineers, etc.

2) Per the June 27, 2017 CM Services scoping meeting with GWA, the following project durations were used:

a) Santa Rosa GWA Reservoir Replacement ***(365 calendar days).***
b) Santa Rita GWA Reservoir Replacement ***(410 calendar days).***
c) Sinifa GWA Reservoir Replacement ***(365 calendar days).***

As requested by GWA, the CM shall provide limited close-out services for a period of 30 to 60 days after substantial completion provided all the construction work is complete and support is mainly at an administrative level (i.e. does not require full time staff to be assigned to the job site).

3) In an effort to reduce costs, the following assumptions have been made:

a) Preparation of Construction Management Plan (CMP) assumes a single document can be prepared for all three projects. One third effort carried in each fee proposal.
b) Contract Bidding effort assumes preparation if a single Pre-Bid Meeting, Contract Bidding Management effort, Bid Opening, Review of Bid Packages, Preparation of Recommendation Memorandum, and Technical Memorandums for all three (3) projects as a single bid package. One third of the effort has been carried in each fee proposal.
c) At the end of the project, the CM will turn-over each of the EarthCam - Construction Cam Lite HD to GWA. It is our understanding that GWA will have the cameras permanently installed at each of the three (3) sites by others. The cameras have an approximate value of ***$45,000.00*** excluding software support and archiving services which are excluded. Note, GHD access to the EarthCam environment is subject to compliance with their terms of use for the service. GHD is a subscriber to the service only and has no control over the performance of the EarthCam Service but will take all reasonable measures and actions within our power to ensure good performance of the system.

4) Inspection and testing of any existing steel storage reservoirs including draining and cleaning is excluded for this scope of services.

5) An amount of $18,930.00 for the Project Management Information System (PMIS), Bentley's ProjectWise Construction Management Service (EADOC), was budgeted for each project. Our fee assumes a total of 15 users for each project at a cost of approximately $180.00 per user per quarter as follows:

a) Client – **two (2)**
b) Construction Manager – **five (5)**
c) Contractor – **five (5)**
d) Spare – **three (3)**

Additional users can be provided at the request of GWA via Change Order. Note, GHD Access to the ProjectWise Construction Management environment is subject to compliance

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with the Bentley Systems terms of use for the service. GHD is a subscriber to the ProjectWise Construction Management service only and has no control over the performance of Bentley's ProjectWise Construction Management Service but will take all reasonable measures and actions within our power to ensure good performance of the system.

6) The CM will use Primavera P6 project management software to track the Contractor's project schedule, construction cost, resource tracking, and cost management.

7) The CM shall conduct random employee interviews every two (2) weeks for two (2) employees to verify the pay request information.

8) Job Site Safety is the sole responsibility of the Contractor. The CM assumes the Contractor shall perform all work in accordance with the requirements of the Contract Documents, applicable federal and local regulations, compliance with regulations of public agencies having jurisdiction, including safety and health requirements of the Territory of Guam and the Occupational Safety and Health Administration of the US Department of Labor (OSHA) as may be required.

   In the event that the GHD believes that the Contractor is not conducting their work in compliance with OSHA requirements, we may request GWA to bring in an independent third party safety expert to determine the extent of the Contractor's compliance and potential mitigation for non-compliance. We recommend that GWA include language in the contract documents requiring the contractor to pay for this additional cost in the event it is necessary.

9) ***Stop Work Orders:*** It is understood that the CM may issue written stop work orders to the Contractor in accordance with GWA policies for a portion of or the entire project for Contract non-compliance issues as follows:

   a) If in the opinion of the CM, the condition of work or Contractor actions threaten the health and safety of Contractor's personnel, GWA representatives, CM Staff, or the public in such cases, stop work orders may be oral depending on the circumstances (with written stop work order to follow).

   b) With prior notification and approval of the GWA Chief Engineer or GWA Project Manager in all other cases.

10) ***Authority to Direct Contractor Operations:*** The CM shall direct the Contractor's Operations under the following conditions:

   a) ***Safety and Public Convenience:*** In order to minimize inconvenience to the public and businesses, and in order to protect the safety of the public.

   b) ***Compliance:*** In order to affect compliance with local and federal regulations, such as those dealing with traffic control, environmental protection, cultural protection, and historic protection.

11) No formal Partnering Program will be provided but GHD will incorporate partnering to the extent practicable to ensure that environmental commitments are met; complete the

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project on time by resolving disputes quickly; finish within budget by proactively monitoring costs and facilitating creative solutions when faced with potential cost increases; ensure that quality is met by adequate oversight by the Contractor and CM.

12) An amount has been budgeted as detailed in the attached ***QA Services Summary*** to provide QA Testing. Material laboratory testing, Compaction testing, and Concrete Compressive Strength Testing shall be provided by a licensed geotechnical engineering firm. If additional services are required, it shall be brought to GWA's attention and a fee negotiated.

13) An amount has been budgeted as detailed in the attached ***QA Services Summary*** to provide QA Field Survey verification services. Survey verification services will be provided by a licensed land surveyor. If additional work is required it will be brought to GWA's attention and a fee negotiated.

14) No generator, fuel storage or pump systems are part of the project.

15) No project specific permitting services are included in this scope of work, but GHD will assist GWA, the designer, and the Contractor on a limited basis to help facilitate procurement of permits as expeditiously as possible.

16) No Archeological survey, Section 106 Historic Preservation, biological resource monitoring, Section 7 Endangered Species Act or related work is included.

17) Any and all permit fees are excluded.

18) The scope assumes the processing of up to ***100 RFIs*** (Task B10.0) per project, with the understanding that the EOR will provide responses to all design related RFIs. The scope also assumes ***five (5) change orders*** for (Task B13.0) and ***three (3) design changes*** for (Task B14.0). If additional work is required it will be brought to GWA's attention and a fee negotiated.

19) Warranty follow-up is not included in the scope. If required, a fee will be negotiated with GWA.

20) These CM Services are being provided for the construction of improvements shown on the ***90% Design package.*** If additional improvements are added to the construction contract then a fee for additional CM Services will be negotiated with GWA.

21) The Construction contract shall include requirements that the Construction Contractor pay for all overtime for inspection and special inspection requested by the Contractor outside of the normal 40 hour work week and this requirement will be strictly enforced and supported by GWA with payment coming out of the Contractor's Pay Request and then distributed to GHD by GWA via change order.

22) GWA agrees to negotiate with GHD for change orders for additional construction phase services due to construction delays, time extensions, additional work, adverse weather delays ***(in excess of 30 days),*** or any other reason not due to negligent acts of GHD until final acceptance of the project is achieved.

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VI. FEE SCHEDULE

TABLE 01 - SANTA RITA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$45,820.00
Construction	$905,939.38
Post-Construction	$31,802.00
SUBTOTAL	$983,561.38
GRT	$40,985.00
Santa Rita Total	**$1,024,546.39**

TABLE 02 - SANTA ROSA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Santa Rosa Total	**$976,344.15**

TABLE 03 - SINIFA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Sinifa Total	**$976,344.15**

TABLE 04 - SANTA RITA SANTA ROSA & SINIFA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$137,460.00
Construction	$2,625,270.15
Post-Construction	$95,406.00
SUBTOTAL	$2,858,136.15
GRT	$119,098.53
GRAND TOTAL	**$2,977,234.69**

See attached spreadsheets for detailed information. Note, work to be invoiced monthly based on prorated effort.

GHD Inc. 865 South Marine Corps Drive Suite 202 Tamuning Guam 96913
T 1 671 472 6792 **F** 1 671 477 6229 **E** guam@ghd.com **W** www.ghd.com

Santa Rosa, Sinifa, and Santa Rita Tank System Upgrades
Fee Summary
09/22/2017

	Amount
Pre-Construction	$45,820.00
Construction	$905,939.38
Post-Construction	$31,802.00
SUBTOTAL	$983,561.38
GRT	$40,985.00
Santa Rita TOTAL	**$1,024,546.39**

	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Santa Rosa TOTAL	**$976,344.15**

	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Sinifa TOTAL	**$976,344.15**

	Amount
Pre-Construction	$137,460.00
Construction	$2,625,270.15
Post-Construction	$95,406.00
SUBTOTAL	$2,858,136.15
GRT	$119,098.53
GRAND TOTAL	**$2,977,234.69**

		20		13	-	20	20				
		20		13							
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		9		239							
					-	497					
			108	13		-	80			40	
								12	12		12
					-	108					
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					-	24					
				18		54					
				18		54					
				18	-	54					
				8	-	8		8	8		8
				8	-	8		8	8		8
				8	-	8		8	8		8
				8	-	20					
				8		20					

		8		20		40					
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				4		40					
	-	8	-	104	-	80	-	-	-	-	-
	-	1,328	-	13,104	-	10,880	-	-	-	-	-
	-	1,328	-	13,104	-	10,880	-	-	-	-	-
	-	397	166	987	98	2,422	180	106	122	40	122
	-	65,902	37,516	124,362	12,348	329,392	35,280	18,550	18,910	5,000	18,910
	-	65,902	37,516	124,362	12,348	329,392	35,280	18,550	18,910	5,000	18,910

					-	240						
			108	13		-	80			40		
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				18		54						
				18		54						
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				8	-	20						
				8		20						
	-	342	112	695	-	2,085	180	106	122	40	122	
	0%	16%	5%	33%	0%	100%	9%	5%	6%	2%	6%	2
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	

-	388	166	909	98	2,165	180	106	122	40	122		
-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910		
-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910		

					-	240						
			108	13		-	80			40		
								12	12		12	
					-	108						
					-	108						
					-	24						
				18		54						
				18		54						
				18	-	54						
				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	20						
				8		20						
	-	342	112	695	-	2,085	180	106	122	40	122	
	0%	16%	5%	33%	0%	100%	9%	5%	6%	2%	6%	2
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	

	-	388	166	909	98	2,165	180	106	122	40	122
	-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910
	-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA RITA
Prepared by: B.Ryley

Attachment:
of:
Checked By: P.Baron
Date: 09/22/17

QA SURVEY ESTIMATE

	Quantity
Under Tank Piping:	
Inlet Piping & Top of Flange	$1,200
Outlet Piping & Top of Flange	$1,200
Over-Flow Piping & Top of Flange	$1,200
Drain Line Piping & Top of Flange	$1,200
Wash Down Piping	$1,200
Tank Foundation:	
Top of Formwork	$1,200
Control Building 1	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Control Building 2	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Manhole:	
Below Base	$800
Top of Manhole	$800
Bottom of Pipe	$800
Ponding Basin 1	
Subgrade	$800
Ponding Basin 2	
Subgrade	$800
Vaults:	
Top Outlet Meter Vault Footing Formwork	$800
Top Outlet Meter Vault Roof Slab Formwork	$800
Top Inlet Meter Vault Footing Formwork	$800
Top Inlet Meter Vault Roof Slab Formwork	$800
Top Electrical Handhole	$800
Pavement:	
Pavement Formwork	$800
Sidewalk Formwork	$800
Fencing	
Corners	$800

Drilled Piles		
Cast In Place Drilled Piles		$5,500
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.		$1,200
	Contingency 25%	$7,675
	TOTAL ESTIMATED BUDGET	**$38,375**

	Rate
Half Day	$800
Full Day	$1,200
Hourly	$150

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	Unit Cost	Quantity	Cost
Subgrade	$295.00	2	$590.00
Limestone	$295.00	2	$590.00
Base course	$295.00	2	$590.00
General Fill	$295.00	2	$590.00
		Contingency **25%**	$590.00
		TOTAL ESTIMATED BUDGET:	**$2,950.00**

Compaction Testing:

Control Building 1			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Control Building 2			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Reservoir Access Road			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	2	$148.00
Ponding Basin 1 Access Road			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
General Fill	$74.00	1	$74.00
Ponding Basin 2 Access Road			

Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Manhole			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Outlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Inlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Electrical Handhole (estimated)			
Below Foundation	$74.00	1	$74.00
Pavement:			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	2	$148.00
Base course	$74.00	1	$74.00
		Contingency **25%**	$573.50
		TOTAL ESTIMATED BUDGET:	**$2,867.50**

	Rate
1st Test	$55
2nd Test	$19
	$74

Concrete Testing:

Outlet Meter Vault:	Unit Cost	Quantity	Cost
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Inlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Encasement:			
Inlet Piping	$305.00	1	$305.00
Outlet Piping	$305.00	1	$305.00
Over-Flow Piping	$305.00	1	$305.00
Drain Line Piping	$305.00	1	$305.00
Wash Down Piping	$305.00	1	$305.00
Electrical & Communications Ducts	$305.00	1	$305.00

Handholes:				
Electrical	$305.00	1		$305.00
Pavement:				
Pavement	$305.00	1		$305.00
Control Building 1				
Footing	$305.00	1		$305.00
Building Corners	$305.00	1		$305.00
Control Building 2				
Footing	$305.00	1		$305.00
Building Corners	$305.00	1		$305.00
Manhole				
Pre-Cast Sections	$305.00	1		$305.00
Drilled Piles				
Cast In Drilled Piles	$305.00	77		$23,485.00
Water Tank:				
Foundation	$305.00	1		$305.00
Core Walls	$305.00	7		$2,135.00
Columns	$305.00	9		$2,745.00
Column Footings	$305.00	9		$2,745.00
Roof Slab	$305.00	1		$305.00
Shotcrete	$305.00	2		$610.00
		170		
			Contingency 15%	$5,718.75
			TOTAL ESTIMATED BUDGET:	**$43,843.75**

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00
SUBTOTAL:	**$305.00**

QA SPECIAL INSPECTIONS

Special Inspections:

Outlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Inlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220

Roof Slab	hours	2	110	$220
Encasement:				
Inlet Piping	hours	2	110	$210
Outlet Piping	hours	2	110	$210
Over-Flow Piping	hours	2	110	$210
Drain Line Piping	hours	2	110	$210
Wash Down Piping	hours	2	110	$210
Electrical & Communications Ducts	hours	2	110	$210
Handholes:				
Electrical	hours	2	110	$210
Pavement:				
Pavement	hours	4	110	$420
Manhole:				
Pre-Cast Sections	hours	2	110	$210
Drilled Piles				
Cast In Drilled Piles	hours	616	110	$67,760
Water Tank:				
Foundation	hours	8	110	$880
Core Walls	hours	14	110	$1,540
Columns	hours	18	110	$1,980
Column Footings	hours	18	110	$1,980
Roof Slab	hours	12	110	$1,320
Shotcrete	hours	24	110	$2,640
Vertical Post-tensioning	hours	8	110	$880
Circumferential Pre-stressing	hours	16	110	$1,760
		766		**$84,160**
		Contingency	10%	$8,416.00
		TOTAL ESTIMATED BUDGET:		**$92,576.00**
		GRAND TOTAL:		**$177,662.25**

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA ROSA
Prepared by: B.Ryley

Attachment:
of:
Checked By: P.Baron
Date: 09/22/17

QA SURVEY ESTIMATE

	Quantity
Under Tank Piping:	
Inlet Piping & Top of Flange	$1,200
Outlet Piping & Top of Flange	$1,200
Over-Flow Piping & Top of Flange	$1,200
Drain Line Piping & Top of Flange	$1,200
Wash Down Piping	$1,200
Over Excavation:	
Bottom of Over Excavation	$800
Top of Base course	$800
Top of Limestone	$800
Tank Foundation:	
Top of Formwork	$1,200
Hydropnuematic Tank Pad	
Top of Formwork	$800
Control and Pump Room Building	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Manhole:	
Below Base	$800
Top of Manhole	$800
Bottom of Pipe	$800
Ponding Basin	
Subgrade	$800
Vaults:	
Top Outlet Meter Vault Footing Formwork	$800
Top Outlet Meter Vault Roof Slab Formwork	$800
Top Inlet Meter Vault Footing Formwork	$800
Top Inlet Meter Vault Roof Slab Formwork	$800
Top Drain Vault Footing Formwork	$800
Top Drain Vault Roof Slab Formwork	$800
Top Outlet Check Valve Vault Footing Formwork	$800
Top Outlet Check Valve Vault Roof Slab Formwork	$800
Retaining Wall	
Top of Formwork	$1,200
Pavement:	
Pavement Formwork	$800

Sidewalk Formwork		$800
Fencing		
Corners		$800
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.		$1,200
	Contingency 25%	$7,000
	TOTAL ESTIMATED BUDGET	**$35,000**

	Rate
Half Day	$800
Full Day	$1,200
Hourly	$150

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	Unit Cost	Quantity	Cost
Subgrade	$295.00	2	$590.00
Limestone	$295.00	2	$590.00
Base course	$295.00	2	$590.00
General Fill	$295.00	2	$590.00
Structural Fill	$295.00	2	$590.00
		Contingency 25%	$737.50
		TOTAL ESTIMATED BUDGET:	**$3,687.50**

Compaction Testing:

Over-Excavation:			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Control and Pump Room Building			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Hydropnuematic Tank Pad			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Access Road			
Subgrade	$74.00	1	$74.00

Structural Fill	$74.00	2	$148.00
Limestone	$74.00	1	$74.00
Pond Access Road			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Ponding Basin			
General Fill	$74.00	1	$74.00
Off-Site Gravel Road			
Subgrade	$74.00	1	$74.00
General Fill	$74.00	1	$74.00
AC Pavement			
Subgrade	$74.00	1	$74.00
Structural Fill	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Concrete Sidewalk			
Subgrade	$74.00	1	$74.00
Structural Fill	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Outlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Inlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Drain Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Outlet Check Valve Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Retaining Wall			
Limestone	$74.00	1	$74.00
Electrical Handhole (estimated)			
Below Foundation	$74.00	1	$74.00
		Contingency 25%	$777.00
		TOTAL ESTIMATED BUDGET:	**$3,885.00**

	Rate
1st Test	$55
2nd Test	$19

$74

Concrete Testing:

	Unit Cost	Quantity	Cost
Outlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Inlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Drain Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Outlet Check Valve Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Encasement:			
Inlet Piping	$305.00	1	$305.00
Outlet Piping	$305.00	1	$305.00
Over-Flow Piping	$305.00	1	$305.00
Drain Line Piping	$305.00	1	$305.00
Wash Down Piping	$305.00	1	$305.00
Electrical & Communications Ducts	$305.00	1	$305.00
Handholes:			
Electrical	$305.00	1	$305.00
Pavement:			
Pavement	$305.00	1	$305.00
Retaining Wall			
Footing	$305.00	1	$305.00
Hydropnuematic Tank Pad			
Foundation	$305.00	1	$305.00
Water Tank:			
Foundation	$305.00	1	$305.00
Core Walls	$305.00	7	$2,135.00
Columns	$305.00	9	$2,745.00
Column Footings	$305.00	9	$2,745.00
Roof Slab	$305.00	1	$305.00
Shotcrete	$305.00	2	$610.00
		94	
		Contingency 15%	$2,333.25

TOTAL ESTIMATED BUDGET: $17,888.25

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00
SUBTOTAL:	**$305.00**

QA SPECIAL INSPECTIONS

Special Inspections:

Outlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Inlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Drain Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Outlet Check Valve Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Encasement:				
Inlet Piping	hours	2	110	$210
Outlet Piping	hours	2	110	$210
Over-Flow Piping	hours	2	110	$210
Drain Line Piping	hours	2	110	$210
Wash Down Piping	hours	2	110	$210
Electrical & Communications Ducts	hours	2	110	$210
Handholes:				
Electrical	hours	2	110	$210
Pavement:				
Pavement	hours	4	110	$420
Retaining Wall				
Footing	hours	2	110	$210
Walls	hours	2	110	$210
Water Tank:				

Foundation	hours	8	110	$880
Core Walls	hours	14	110	$1,540
Columns	hours	18	110	$1,980
Column Footings	hours	18	110	$1,980
Roof Slab	hours	12	110	$1,320
Shotcrete	hours	24	110	$2,640
Vertical Post-tensioning	hours	8	110	$880
Circumferential Pre-stressing	hours	16	110	$1,760
		164		**$17,930**
			Contingency 10%	$1,793.00
			TOTAL ESTIMATED BUDGET:	**$19,723.00**
			GRAND TOTAL:	**$76,496.25**

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SINIFA
Prepared by: B.Ryley

Attachment:
of:
Checked By: P.Baron
Date: 09/22/17

QA SURVEY ESTIMATE

	Quantity
Under Tank Piping:	
Inlet Piping & Top of Flange	$1,200
Outlet Piping & Top of Flange	$1,200
Over-Flow Piping & Top of Flange	$1,200
Drain Line Piping & Top of Flange	$1,200
Wash Down Piping	$1,200
Over Excavation:	
Bottom of Over Excavation	$800
Top of Base course	$800
Top of Limestone	$800
Tank Foundation:	
Top of Formwork	$1,200
Control Room	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Manhole:	
Below Base	$800
Top of Manhole	$800
Bottom of Pipe	$800
Ponding Basin	
Subgrade	$800
Vaults:	
Top Outlet Meter Vault Footing Formwork	$800
Top Outlet Meter Vault Roof Slab Formwork	$800
Top Inlet Meter Vault Footing Formwork	$800
Top Inlet Meter Vault Roof Slab Formwork	$800
Top Drain Vault Footing Formwork	$800
Top Drain Vault Roof Slab Formwork	$800
Retaining Wall	
Top of Formwork	$1,200
Pavement:	
Pavement Formwork	$800
Sidewalk Formwork	$800
Fencing	
Corners	$800

Bench Marks:

Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200
Contingency 25%	$6,400
TOTAL ESTIMATED BUDGET	**$32,000**

	Rate
Half Day	$800
Full Day	$1,200
Hourly	$150

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	Unit Cost	Quantity	Cost
Subgrade	$295.00	2	$590.00
Limestone	$295.00	2	$590.00
Base course	$295.00	2	$590.00
		Contingency **25%**	$442.50
		TOTAL ESTIMATED BUDGET:	**$2,212.50**

Compaction Testing:

Over-Excavation:			
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Control Room			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Ponding Basin Access Road			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Off-Site Gravel Road			
Subgrade	$74.00	1	$74.00
General Fill	$74.00	1	$74.00
AC Pavement			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Concrete Sidewalk			
Subgrade	$74.00	1	$74.00
Structural Fill	$74.00	1	$74.00

Limestone	$74.00	1	$74.00
Outlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Inlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Drain Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Retaining Wall			
Limestone	$74.00	1	$74.00
Manhole			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Electrical Handhole (estimated)			
Below Foundation	$74.00	1	$74.00
		Contingency 25%	$610.50
		TOTAL ESTIMATED BUDGET:	**$3,052.50**

	Rate
1st Test	$55
2nd Test	$19
	$74

Concrete Testing:

Outlet Meter Vault:	Unit Cost	Quantity	Cost
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Inlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Drain Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Control Room			
Footing	$305.00	1	$305.00
Building Corners	$305.00	1	$305.00

Encasement:			
Inlet Piping	$305.00	1	$305.00
Outlet Piping	$305.00	1	$305.00
Over-Flow Piping	$305.00	1	$305.00
Drain Line Piping	$305.00	1	$305.00
Wash Down Piping	$305.00	1	$305.00
Electrical & Communications Ducts	$305.00	1	$305.00
Pavement:			
Pavement	$305.00	1	$305.00
Retaining Wall			
Footing	$305.00	1	$305.00
Fencing			
Posts	$305.00	1	$305.00
Water Tank:			
Foundation	$305.00	1	$305.00
Core Walls	$305.00	7	$2,135.00
Columns	$305.00	9	$2,745.00
Column Footings	$305.00	9	$2,745.00
Roof Slab	$305.00	1	$305.00
Shotcrete	$305.00	2	$610.00
		90	
		Contingency 15%	$2,241.75
		TOTAL ESTIMATED BUDGET:	**$17,186.75**

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00
SUBTOTAL:	**$305.00**

QA SPECIAL INSPECTIONS

Special Inspections:

Outlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Inlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Drain Vault:				

Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Encasement:				
Inlet Piping	hours	2	110	$210
Outlet Piping	hours	2	110	$210
Over-Flow Piping	hours	2	110	$210
Drain Line Piping	hours	2	110	$210
Wash Down Piping	hours	2	110	$210
Electrical & Communications Ducts	hours	2	110	$210
Control Room				
Footing	hours	2	110	$210
Walls	hours	2	110	$210
Pavement:				
Pavement	hours	4	110	$420
Retaining Wall				
Footing	hours	2	110	$210
Walls	hours	2	110	$210
Water Tank:				
Foundation	hours	8	110	$880
Corewalls	hours	14	110	$1,540
Columns	hours	18	110	$1,980
Column Footings	hours	18	110	$1,980
Roof Slab	hours	12	110	$1,320
Shotcrete	hours	24	110	$2,640
Vertical Post-tensioning	hours	8	110	$880
Circumferential Pre-stressing	hours	16	110	$1,760
		160		**$17,480**
		Contingency	10%	$1,748.00
		TOTAL ESTIMATED BUDGET:		**$19,228.00**
		GRAND TOTAL:		**$71,467.25**

ID Project Number: of:
scription: EXPENSE SUMMARY Checked by: P.Baron
epared by: B.Ryley Date: 09/22/17

EXPENSE ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT	MARKUP at 10%	TOTAL
RECONSTRUCTION PHASE TASKS						
eport Reproduction, misc.	3	lump sum	1,000.00	3,000.00	300.00	3,300.
					-	
					-	
SUBTOTAL				**3,000.00**	**300.00**	**3,300.**
ONSTRUCTION PHASE TASKS						
leage (1.50 vehicles x 30 miles x 321 days)	43,335	mile	0.52	22,534.20	2,253.42	24,787.
eport Reproduction, misc	3	lump sum	3,000.00	9,000.00	900.00	9,900.
e Video Feed, Website Access & Maintenance	3	each	29,642.54	88,927.61	8,892.76	97,820.
oject Mangment Information Systems	3	lump sum	16,500.00	49,500.00	4,950.00	54,450.
ita Logger	3	lump sum	5,735.35	17,206.04	1,720.60	18,926.
nasonic Toughbook 20	1	ea.	2,399.00	2,399.00	239.90	2,638.
A Soil & Aggregate Analysis	3	lump sum	2,950.00	8,850.00	885.00	9,735.
A Compaction Testing	3	lump sum	3,268.33	9,805.00	980.50	10,785.
A Concrete Testing	3	lump sum	26,306.25	78,918.75	7,891.88	86,810.
A Survey Verification	3	lump sum	35,125.00	105,375.00	10,537.50	115,912.
SUBTOTAL				**392,515.59**	**39,251.56**	**431,767.**
OST CONSTRUCTION SERVICES						
eport Reproduction, misc.	3	lump sum	1,500.00	4,500.00	450.00	4,950.
			-			
			-			
SUBTOTAL				4,500.00	450.00	4,950.
GRAND TOTAL				**400,015.59**	**40,001.56**	**440,017.**

ID Project Number: of:
scription: VIDEO CAMERA EXPENSE BREAKDOWN Checked by: P.Baron
epared by: B.Ryley Date: 09/22/17

EXPENSE ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT	MARKUP at 10%	TOTAL
RECONSTRUCTION PHASE TASKS						
SUBTOTAL						
ONSTRUCTION PHASE TASKS						
rthCam - Construction Cam Lite HD	1	ea.	4,495.00	4,495.00	449.50	4,944.5
lar Power Upgrade	1	ea.	4,022.00	4,022.00	402.20	4,424.2
obal Modem	1	ea.	1,399.00	1,399.00	139.90	1,538.9
iiversal Pole Mount	1	ea.	99.00	99.00	9.90	108.9
ftware Support & Archiving Services	1	ea.	575.00	575.00	57.50	632.5
dEx International Economy S&H	1	ls.	2,722.76	2,722.76	272.28	2,995.0
eather Station w/shipping	1	ea.	1,200.00	1,200.00	120.00	1,320.0
rthCam Consulting Services	1	incl.	-	-	-	-
ebsite Development & MP Image Integration	1	incl.	-	-	-	-
nd Edited Time-Lapse Move	1	incl.	-	-	-	-
ivis 6250 Weather Station	1	ea.	465.00	465.00	46.50	511.5
ivis 7654 Repeater	1	ea.	353.00	353.00	35.30	388.3
ivis 6555 Weather Link IP software	1	ea.	347.00	347.00	34.70	381.7
adlepoint ARC MBR 1400 Series Router	1	ea.	850.00	850.00	85.00	935.0
GB high-speed HSPA data	18	mth.	140.00	2,520.00	252.00	2,772.0
" Telescoping Light Mast w/Shipping	1	ea.	4,400.00	4,400.00	440.00	4,840.0
C Foundation (5' x 5' x 1') w/single delivery	1	ea.	2,000.00	2,000.00	200.00	2,200.0
tallation & Start up	1	ls.	1,500.00	1,500.00	150.00	1,650.0
SUBTOTAL				26,947.76	2,694.78	29,642.5
OST CONSTRUCTION SERVICES						
SUBTOTAL						
TAL				26,947.76	2,694.78	29,642.5

ID Project Number: of:
scription: DATA LOGGER EXPENSE BREAKDOWN Checked by: P.Baron
epared by: B.Ryley Date: 09/22/17

EXPENSE ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT	MARKUP at 10%	TOTAL
RECONSTRUCTION PHASE TASKS						
SUBTOTAL						
ONSTRUCTION PHASE TASKS						
ckson PR325: Pressure Data Logger	15	ea.	499.00	7,485.00	748.50	8,233.5
ckson A016: Software w/USB Download Cable	15	ea.	89.00	1,335.00	133.50	1,468.5
ckson 721: Locking Case	15	ea.	79.00	1,185.00	118.50	1,303.5
ckson A220: Card Reader Kit	15	ea.	49.00	735.00	73.50	808.5
ckson R022: Pressure Filter Kit	15	ea.	30.00	450.00	45.00	495.(
ckson A061: USB Download Cable	15	ea.	19.00	285.00	28.50	313.5
ckson A125: 3 Volt (3V) Lithium Battery	15	ea.	16.00	240.00	24.00	264.(
ckson A791: Pressure Kit	15	ea.	149.00	2,235.00	223.50	2,458.5
t. Double Loop Cable w/ Padlock	15	ea.	12.79	191.85	19.19	211.(
dget for Miscellaneous, Fitting, Tubing, etc.	1	ls.	1,500.00	1,500.00	150.00	1,650.(
				-	-	-
				-	-	-
				-	-	-
				-	-	-
				-	-	-
				-	-	-
				-	-	-
SUBTOTAL				15,641.85	1,564.19	17,206.(
OST CONSTRUCTION SERVICES						
SUBTOTAL						
OTAL				15,641.85	1,564.19	17,206.(

June 11, 2020 (Revised July 13, 2020) Reference No. 11136961

Mr. Brett Railey, PE
Acting Chief Engineer
Guam Waterworks Authority
Gloria B. Nelson Public Service Building
688 Route 15
Mangilao, GU 96913

Re: Line1 GWA Project No: W14-007-BND, GWA Northern Southern Reservoir Project, Santa Rosa, Santa Rita, & Sinifa
Change Order #01 Extension of Contract Time

Dear Mr. Railey:

GHD is pleased to submit Change Order #01 to GWA for the extension of GHD's construction management contract for the above referenced project. As you are aware, GHD's contract is currently in expired as of July 23, 2019, which is the last construction management services completion date associated with the Santa Rita Reservoir. Since that date, GHD has continued to perform services in accordance with the contract terms in good faith and with GWA's awareness of the issue and with the understanding that GWA would issue a time extension and approve fair compensation for additional services in a timely manner.

As requested by you, Change Order #01 is submitted requesting the contract modifications as required to allow GHD to continue construction management services through the completion of Post Construction services stipulated in the CM contract and accounting for differences between the CM and Construction period of performance. This change order proposal addresses the following issues for the Northern Southern Reservoir Project construction management contract:

1. GHD's contract has expired and a contractual time extension is necessary to extend the contract duration and the performance period for construction management services through the revised construction contract period and in alignment with the time extension GWA is providing to the Contractor. GHD requests a time extension to the Construction Contractor end date for each reservoir site plus a minimum of 60 additional calendar days to complete Post Construction Services. GHD will start when GWA issues Notice to Proceed (NTP) to the CM to start work for each site. GWA will issue a separate NTP for each site.

2. GHD's CM period of performance is less than the Contractor's construction period of performance awarded by GWA. This difference is independent of any time extensions GWA may award the Contractor due to permit acquisition issues, COVID-19 pandemic delays, or other reasons. The time difference is summarized in the table below:

GHD
865 South Marine Corps Drive Suite 202 Orlean Pacific Plaza Tamuning Guam 96913
T 671 472 6792 F 671 477 6229 W www.ghd.com

REGISTERED COMPANY FOR ISO 9001 ENGINEERING DESIGN

Project	CM Performance Period (Days)	Contractor Performance Period (Days)	CM Performance Period Difference (Days)
Santa Rosa Reservoir	365	455	90 (64 working days)
Santa Rita Reservoir	410	485	75 (54 working days)
Sinifa Reservoir Project	365	425	60 (43 working days)

GHD's labor budget for CM and inspection services is based on the CM Performance Period. The cost of providing full-time CM and inspection services for this additional time is not included in GHD's budget for the project. We have identified two options to address this discrepancy. Option 1 is to increase GHD's budgeted labor effort to account for the difference and allow for the requested full-time CM and inspection services. Option 2 is GHD provides less than full-time CM and inspection services. The cost for Option 1 is included in this change order proposal using original labor rates with a 3% increase over two years. We are open to discussion on GWA's preferences to address this discrepancy.

3. As construction moves forward, GHD will incur additional unbudgeted QA expense cost associated with increased time for providing the services, and increased rates by our subconsultants since they were budgeted in 2017. We propose the following additional expense budget associated with rate increases and length of service:

    - Expense cost budget for the project management information system (ProjectWise) and the live video feed, website access and maintenance are pro-rated for an additional 6 months (180 calendar days) based on the original construction contract durations. If construction extends longer, GHD will invoice for the additional expense at cost plus a 10% markup.
    - Quality Assurance (QA) survey costs have increased significantly since 2017, and we are obligated to compensate our QA survey subconsultant at their current 2020 rates. The increase in QA survey costs due to the rate change is reflected in our fee proposal. Current survey rates and a calculation of the increase are included as an attachment to this proposal.
    - QA testing expenses have increased between 5% and 30% since 2017 depending on the specific test, and we are obligated to compensation our QA testing subconsultant at their current 2020 rates. The increase in QA testing costs due to the rate change is reflected in our fee proposal. Current QA testing rates and a calculation of the increase are included as an attachment to this proposal.

GHD proposes a lump sum fee of $337,337.39 for Change Order #01. Services not included in this proposal can be provided by a negotiated fee. Additional time and labor budget will be required if any additive bid items are included with the construction contract. We remain open to discussion with you on the specifics of our proposal. We welcome the opportunity to continue working with you on this important

project, and look forward to contributing to its successful completion. Should you have any questions about this proposal, please do not hesitate to contact me.

Very Respectfully,

GHD



Matthew G. Kennedy, PE
Principal Engineer

Attachments:

1. GHD Fee Proposal
2. GHD Revised Labor Rates
3. QA Cost Increase Documentation
4. 2020 QA Survey Rates
5. 2020 QA Testing Rates
6. Video Web Hosting Rates

cc: Bryan Ryley (GHD)
Nancy Heuman, PE (GHD)

Attachment 1

GHD - PROJECT FEE ESTIMATING SHEET

Project Name: North South Reservoir CM — Guam Waterworks Authority

Prepared by: Matt Kennedy — June 11, 2020

Job Number: 11136961

		LABOR COSTS							FEE COMPUTATION		
Task / Item	LABOR CATEGORY > RATE >	Prinp. Eng. $260.98 /Hr	Proj. Mngr. $176.11 /Hr	Civil Insp. $133.67 /Hr	Civil/Struct. Insp. $144.28 /Hr	Proj. Mngr. Asst $101.85 /Hr	Sbmtl/ RFI Mngr $126.00 /Hr	TOTAL HOURS	Project Expenses	Sub-con-sultant(s)	TOTAL FEE
Santa Rosa Reservoir											
B15.1 Project Manager			171					171	$0.00		$30,114.81
B15.3 Onsite Construction Inspector				256	256			512	$0.00		$71,155.20
B22.1 QA Soil & Aggregate Analysis								0	$1,250.00		$1,250.00
B22.2 QA Backfill Compaction & Testing								0	$346.50		$346.50
B22.3 QA Concrete Compressive Strength Testing								0	$1,081.00		$1,081.00
B22.4 QA Survey Verification								0	$11,825.00		$11,825.00
B22.5 Live Video Feed, Website Access & Maintenance								0	$1,501.10		$1,501.10
B22.6 Project Management Information System								0	$7,518.99		$7,518.99
	SUBTOTAL	**0**	**171**	**256**	**256**	**0**	**0**	**683**	**$23,522.59**	**$0.00**	**$124,792.60**
Santa Rita Reservoir											
B15.1 Project Manager			144					144	$0.00		$25,359.84
B15.3 Onsite Construction Inspector				216	216			432	$0.00		$60,037.20
B22.1 QA Soil & Aggregate Analysis								0	$1,000.00		$1,000.00
B22.2 QA Backfill Compaction & Testing								0	$255.75		$255.75
B22.3 QA Concrete Compressive Strength Testing								0	$2,649.00		$2,649.00
B22.4 QA Survey Verification								0	$10,588.00		$10,588.00
B22.5 Live Video Feed, Website Access & Maintenance								0	$1,501.10		$1,501.10
B22.6 Project Management Information System								0	$7,518.99		$7,518.99
	SUBTOTAL	**0**	**144**	**216**	**216**	**0**	**0**	**576**	**$23,512.84**	**$0.00**	**$108,909.88**
Sinifa Reservoir											
B15.1 Project Manager			115					115	$0.00		$20,252.65
B15.3 Onsite Construction Inspector				172	172			344	$0.00		$47,807.40
B22.1 QA Soil & Aggregate Analysis								0	$750.00		$750.00
B22.2 QA Backfill Compaction & Testing								0	$272.25		$272.25
B22.3 QA Concrete Compressive Strength Testing								0	$1,038.00		$1,038.00
B22.4 QA Survey Verification								0	$11,000.00		$11,000.00
B22.5 Live Video Feed, Website Access & Maintenance								0	$1,501.10		$1,501.10
B22.6 Project Management Information System								0	$7,518.99		$7,518.99
	SUBTOTAL	**0**	**115**	**172**	**172**	**0**	**0**	**459**	**$22,080.34**	**$0.00**	**$90,140.39**
Contingency											
2020 GRT (4.167%)								0	$0.00		$13,494.53
CHANGE ORDER TOTALS		**0**	**430**	**644**	**644**	**0**	**0**	**1,718**	**$69,115.76**	**$0.00**	**$337,337.39**

Attachment 2

Position	Class	2017 Approved Rates	2020 Proposed Rates (3% increase over 2 years)
Principal Engineer	Principal F3	$246.00	$260.98
Project Manager	Associate E3	$166.00	$176.11
QA Manager/Design Review	Associate F2	$226.00	$239.76
Resident Engineer	Enginner D1	$126.00	$133.67
Civil Inspector	Scientist B1	$126.00	$133.67
Civil/Structural Inspector	Engineer B2	$136.00	$144.28
Special Inspector	Engineer C1	$196.00	$207.94
SCADA Specialty	Sub consultant Budgetary	$175.00	$185.66
SR. Mechanical Engineer	Sub consultant Budgetary	$155.00	$164.44
Mechanical Inspector	Sub consultant Budgetary	$125.00	$132.61
SR. Electrical Engineer	Sub consultant Budgetary	$155.00	$164.44
Electrical Inspector	Sub consultant Budgetary	$125.00	$132.61
CADD Support	Technician/Technologist D1	$121.00	$128.37
Scheduler Mgmt	Sub consultant Budgetary	$150.00	$159.14
Submittal/RFI Manager	Engineer B2	$126.00	$133.67
Estimating Support	Engineer B1	$110.00	$116.70
Project Manager Ass't	Administrative Assistant A1	$96.00	$101.85

Attachment 3

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA RITA
Prepared by: B.Ryley

Attachment:
of:
Checked By: M.Kennedy
Date: 06/11/20

QA SURVEY ESTIMATE

	Cost (2017)	Cost (2020)
Under Tank Piping:		
Inlet Piping & Top of Flange	$1,200	$1,700
Outlet Piping & Top of Flange	$1,200	$1,700
Over-Flow Piping & Top of Flange	$1,200	$1,700
Drain Line Piping & Top of Flange	$1,200	$1,700
Wash Down Piping	$1,200	$1,700
Tank Foundation:		
Top of Formwork	$1,200	$1,700
Control Building 1		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Control Building 2		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Manhole:		
Below Base	$800	$1,000
Top of Manhole	$800	$1,000
Bottom of Pipe	$800	$1,000
Ponding Basin 1		
Subgrade	$800	$1,000
Ponding Basin 2		
Subgrade	$800	$1,000
Vaults:		
Top Outlet Meter Vault Footing Formwork	$800	$1,000
Top Outlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Inlet Meter Vault Footing Formwork	$800	$1,000
Top Inlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Electrical Handhole	$800	$1,000
Pavement:		
Pavement Formwork	$800	$1,000
Sidewalk Formwork	$800	$1,000
Fencing		
Corners	$800	$1,000
Drilled Piles		
Cast In Place Drilled Piles	$5,500	$5,500
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200	$1,700
Contingency 25%	$7,675	$9,600
2017 TOTAL ESTIMATED BUDGET	**$38,375**	**2020 TOTAL ESTIMATED BUDGET** **$48,000**
MARKUP AT 10 %	**$42,213**	**$52,800**

B22.4 COST INCREASE: $10,588

	2017 Rate		2020 Rate
Half Day	$800	Half Day	$1,000
Full Day	$1,200	Full Day	$1,700
Hourly	$150	Hourly	$250

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost		2020 Cost
Subgrade	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Limestone	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Base course	$295.00	2	$590.00	$ 395.00	2	$ 790.00
General Fill	$295.00	2	$590.00	$ 395.00	2	$ 790.00
		Contingency **25%**	$590.00		Contingency **25%**	$ 790.00
	2017 MATERIAL TESTING ESTIMATED BUDGET:		**$2,950.00**	**MATERIAL ESTIMATED BUDGET:**		**$ 3,950.00**

B22.1 COST INCREASE $ 1,000.00

Attachment 3

Compaction Testing:

	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Control Building 1					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Control Building 2					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Reservoir Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	2	$148.00	$ 80.00	$ 160.00
Ponding Basin 1 Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Ponding Basin 2 Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Manhole					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Outlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Inlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Electrical Handhole (estimated)					
Below Foundation	$74.00	1	$74.00	$ 80.00	$ 80.00
				$ 80.00	$ -
Pavement:					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	2	$148.00	$ 80.00	$ 160.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
		Contingency **25%**	$573.50		$ 620.00
		COMPACTION ESTIMATED BUDGET:	**$2,867.50**		**$ 3,100.00**
		TOTAL QA COMPACTION BUDGET:	**$2,867.50**		**$3,100.00**
		MARKUP AT 10 %	**$3,154**		**$3,410**

B22.2 COST INCREASE	**$255.75**

	2017 Rate
1st Test	$55
2nd Test	$19
	$74

	2020 Rate
1st Test	$57
2nd Test	$23
	$80

Attachment 3

Concrete Testing:

	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Outlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Inlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Encasement:					
Inlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Over-Flow Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Line Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Wash Down Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Electrical & Communications Ducts	$305.00	1	$305.00	$ 321.75	$ 321.75
Handholes:					
Electrical	$305.00	1	$305.00	$ 321.75	$ 321.75
Pavement:					
Pavement	$305.00	1	$305.00	$ 321.75	$ 321.75
Control Building 1					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Building Corners	$305.00	1	$305.00	$ 321.75	$ 321.75
Control Building 2					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Building Corners	$305.00	1	$305.00	$ 321.75	$ 321.75
Manhole					
Pre-Cast Sections	$305.00	1	$305.00	$ 321.75	$ 321.75
Drilled Piles					
Cast In Drilled Piles	$305.00	77	$23,485.00	$ 321.75	$ 24,774.75
Water Tank:					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Core Walls	$305.00	7	$2,135.00	$ 321.75	$ 2,252.25
Columns	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Column Footings	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Shotcrete	$305.00	2	$610.00	$ 321.75	$ 643.50
		170			
		Contingency 15%	$5,718.75	$ 1,254.83	$6,032.81
		TOTAL ESTIMATED BUDGET:	**$43,843.75**	**$ 9,620.33**	**$46,251.56**
		MARKUP AT 10 %	**$48,228**	**$10,582**	**$50,877**

	B22.3 COST INCREASE	$2,649
DESCRIPTION OF TESTS:		
Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00	$ 66.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00	$ 11.50
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00	$ 34.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00	$ 34.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00	$ 176.25
SUBTOTAL:	**$305.00**	**$321.75**

Attachment 3

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA ROSA
Prepared by: B.Ryley

Attachment:
of:
Checked By: M.Kennedy
Date: 06/11/20

QA SURVEY ESTIMATE

	Cost (2017)		Cost (2020)
Under Tank Piping:			
Inlet Piping & Top of Flange	$1,200		$1,700
Outlet Piping & Top of Flange	$1,200		$1,700
Over-Flow Piping & Top of Flange	$1,200		$1,700
Drain Line Piping & Top of Flange	$1,200		$1,700
Wash Down Piping	$1,200		$1,700
Over Excavation:			
Bottom of Over Excavation	$800		$1,000
Top of Base course	$800		$1,000
Top of Limestone	$800		$1,000
Tank Foundation:			
Top of Formwork	$1,200		$1,700
Hydropnuematic Tank Pad			
Top of Formwork	$800		$1,000
Control and Pump Room Building			
Subgrade	$800		$1,000
Footing	$800		$1,000
Building Corners	$800		$1,000
FFE	$800		$1,000
Manhole:			
Below Base	$800		$1,000
Top of Manhole	$800		$1,000
Bottom of Pipe	$800		$1,000
Ponding Basin			
Subgrade	$800		$1,000
Vaults:			
Top Outlet Meter Vault Footing Formwork	$800		$1,000
Top Outlet Meter Vault Roof Slab Formwork	$800		$1,000
Top Inlet Meter Vault Footing Formwork	$800		$1,000
Top Inlet Meter Vault Roof Slab Formwork	$800		$1,000
Top Drain Vault Footing Formwork	$800		$1,000
Top Drain Vault Roof Slab Formwork	$800		$1,000
Top Outlet Check Valve Vault Footing Formwork	$800		$1,000
Top Outlet Check Valve Vault Roof Slab Formwork	$800		$1,000
Retaining Wall			
Top of Formwork	$1,200		$1,700
Pavement:			
Pavement Formwork	$800		$1,000
Sidewalk Formwork	$800		$1,000
Fencing			
Corners	$800		$1,000
Bench Marks:			
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200		$1,700
Contingency 25%	$7,000		$9,150
2017 TOTAL ESTIMATED BUDGET	**$35,000**	**2020 TOTAL ESTIMATED BUDGET**	**$45,750**
MARKUP AT 10 %	**$38,500**		**$50,325**
		B22.4 COST INCREASE:	**$11,825**

2017 Rate	
Half Day	$800
Full Day	$1,200
Hourly	$150

2020 Rate	
Half Day	$1,000
Full Day	$1,700
Hourly	$250

Attachment 3

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	**2017 Unit Cost**	**Quantity**	**2017 Cost**	**2020 Unit Cost**		**2020 Cost**
Subgrade	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Limestone	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Base course	$295.00	2	$590.00	$ 395.00	2	$ 790.00
General Fill	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Structural Fill	$295.00	2	$590.00	$ 395.00	2	$ 790.00
		Contingency 25%	$737.50	Contingency 25%		$ 987.50
	2017 MATERIAL TESTING BUDGET:		**$3,687.50**	**2020 MATERIAL TESTING BUDGET:**		**$ 4,937.50**

B22.1 COST INCREASE: $ 1,250.00

Compaction Testing:

Over-Excavation:	**2017 Unit Cost**	**Quantity**	**2017 Cost**	**2020 Unit Cost**	**2020 Cost**
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Control and Pump Room Building					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Hydropnuematic Tank Pad					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	2	$148.00	$ 80.00	$ 160.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Pond Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Ponding Basin					
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Off-Site Gravel Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
AC Pavement					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Concrete Sidewalk					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Outlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Inlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Drain Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Outlet Check Valve Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Retaining Wall					
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Electrical Handhole (estimated)					
Below Foundation	$74.00	1	$74.00	$ 80.00	$ 80.00
		Contingency 25%	$777.00		$ 840.00
	COMPACTION ESTIMATED BUDGET:		**$3,885.00**		$ 4,200.00
B22.2 COST INCREASE: $346.50	**TOTAL QA COMPACTION BUDGET:**		$3,885.00		$ 4,200.00
		MARKUP AT 10 %	**$4,274**		**$4,620**

	2017 Rate
1st Test	$55
2nd Test	$19
	$74

	2020 Rate
1st Test	$57
2nd Test	$23
	$80

Concrete Testing:

	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Outlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Inlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Check Valve Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Encasement:					
Inlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Over-Flow Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Line Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Wash Down Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Electrical & Communications Ducts	$305.00	1	$305.00	$ 321.75	$ 321.75
Handholes:					
Electrical	$305.00	1	$305.00	$ 321.75	$ 321.75
Pavement:					
Pavement	$305.00	1	$305.00	$ 321.75	$ 321.75
Retaining Wall					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Hydropnuematic Tank Pad					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Water Tank:					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Core Walls	$305.00	7	$2,135.00	$ 321.75	$ 2,252.25
Columns	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Column Footings	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Shotcrete	$305.00	2	$610.00	$ 321.75	$ 643.50
		94			
		Contingency 15%	$2,333.25		$ 2,461.39
		TOTAL ESTIMATED BUDGET:	**$17,888.25**		**$ 18,870.64**
		MARKUP AT 10 %	**$19,677**		**$20,758**

B22.3 COST INCREASE: $1,081

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00	$ 66.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00	$ 11.50
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00	$ 34.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00	$ 34.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00	$ 176.25
SUBTOTAL:	**$305.00**	**$321.75**

Attachment 3

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SINIFA
Prepared by: B.Ryley

Attachment:
of:
Checked By: M.Kennedy
Date: 06/11/20

QA SURVEY ESTIMATE

	Cost (2017)	Cost (2020)
Under Tank Piping:		
Inlet Piping & Top of Flange	$1,200	$1,700
Outlet Piping & Top of Flange	$1,200	$1,700
Over-Flow Piping & Top of Flange	$1,200	$1,700
Drain Line Piping & Top of Flange	$1,200	$1,700
Wash Down Piping	$1,200	$1,700
Over Excavation:		
Bottom of Over Excavation	$800	$1,000
Top of Base course	$800	$1,000
Top of Limestone	$800	$1,000
Tank Foundation:		
Top of Formwork	$1,200	$1,700
Control Room		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Manhole:		
Below Base	$800	$1,000
Top of Manhole	$800	$1,000
Bottom of Pipe	$800	$1,000
Ponding Basin		
Subgrade	$800	$1,000
Vaults:		
Top Outlet Meter Vault Footing Formwork	$800	$1,000
Top Outlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Inlet Meter Vault Footing Formwork	$800	$1,000
Top Inlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Drain Vault Footing Formwork	$800	$1,000
Top Drain Vault Roof Slab Formwork	$800	$1,000
Retaining Wall		
Top of Formwork	$1,200	$1,700
Pavement:		
Pavement Formwork	$800	$1,000
Sidewalk Formwork	$800	$1,000
Fencing		
Corners	$800	$1,000
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200	$1,700
Contingency 25%	$6,400	$8,400
2017 TOTAL ESTIMATED BUDGET	**$32,000**	**2020 TOTAL ESTIMATED BUDGET** **$42,000**
MARKUP AT 10%	**$35,200**	**$46,200**

B22.4 COST INCREASE: $11,000

2017 Rate	
Half Day	$800
Full Day	$1,200
Hourly	$150

2020 Rate	
Half Day	$1,000
Full Day	$1,700
Hourly	$250

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	Quantity	2020 Cost
Subgrade	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Limestone	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Base course	$295.00	2	$590.00	$ 395.00	2	$ 790.00
		Contingency **25%**	$442.50	Contingency 25%		$ 592.50
		MATERIAL TESTING ESTIMATED BUDGET:	**$2,212.50**	**MATERIAL ESTIMATED BUDGET:**		**$ 2,962.50**

B22.1 COST INCREASE $750.00

Attachment 3

Compaction Testing:

	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Over-Excavation:					
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Control Room					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Ponding Basin Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Off-Site Gravel Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
AC Pavement					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Concrete Sidewalk					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Outlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Inlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Drain Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Retaining Wall					
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Manhole					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Electrical Handhole (estimated)					
Below Foundation	$74.00	1	$74.00	$ 80.00	$ 80.00
		Contingency 25%	$610.50		$660.00
		COMPACTION ESTIMATED BUDGET:	**$3,052.50**		**$3,300.00**
		TOTAL QA COMPACTION BUDGET:	**$3,052.50**		**$3,300.00**
		MARKUP AT 10%:	**$3,357.75**		**$3,630.00**

B22.2 COST INCREASE $272.25

2017 Rate		2020 Rate	
1st Test	$55	1st Test	$57
2nd Test	$19	2nd Test	$23
	$74		$80

Attachment 3

Concrete Testing:

	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Outlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Inlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Control Room					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Building Corners	$305.00	1	$305.00	$ 321.75	$ 321.75
Encasement:					
Inlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Over-Flow Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Line Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Wash Down Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Electrical & Communications Ducts	$305.00	1	$305.00	$ 321.75	$ 321.75
Pavement:					
Pavement	$305.00	1	$305.00	$ 321.75	$ 321.75
Retaining Wall					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Fencing					
Posts	$305.00	1	$305.00	$ 321.75	$ 321.75
Water Tank:					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Core Walls	$305.00	7	$2,135.00	$ 321.75	$ 2,252.25
Columns	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Column Footings	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Shotcrete	$305.00	2	$610.00	$ 321.75	$ 643.50
		90			
		Contingency 15%	$2,241.75		$2,364.86
		TOTAL ESTIMATED BUDGET:	**$17,186.75**		**$18,130.61**
		MARKUP AT 10%:	**$18,905.43**		**$19,943.67**

	B22.3 COST INCREASE	$1,038
DESCRIPTION OF TESTS:		
Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00	$ 66.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00	$ 11.50
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00	$ 34.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00	$ 34.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00	$ 176.25
SUBTOTAL:	**$305.00**	**$321.75**

GUAM SURVEYOR, LLC
STREET: 171 CHALAN PALE RAMON HAYA RT. 1 (MARINE DRIVE), YIGO, GUAM 96929
MAIL: P.O. BOX 6216, TAMUNING, GUAM 96931
P.671-637-2042/1 F.671-637-2041 M.688-0184
WWW.GUAMSURVEYOR.COM
SURVEYOR@GUAMSURVEYOR.COM

February 27, 2020

To Whom It May Concern,

RE: Rate Increase

Our unit rates have increased for 2020, please see new rates below:

Description	Quantity	Unit	Unit Price
Full Day - two man	1	LS	1700.00
Half Day - two man	1	LS	1000.00
Hourly	1	Hourly	250.00

Sincerely,

Dennis Balagtas
Vice President/Principal Land Surveyor

Attachment 6

WORK ZONE CAM

877-966-3101 www.workzonecam.com

Invoice # ZC0614196607

Arlyn Carpo
GHD Guam
865 South Marine Corps Drive Ste. 202
Tamuning, Guam 96913

Arlyn.Carpo@ghd.com
1 671 472 6792

Ship To:
Byan J Ryley
GHD Guam
865 South Marine Corps Drive Ste. 202
Tamuning, Guam 96913

bryan.ryley@ghd.com
+1671 472-6792

Invoice Date: June 14, 2019
Purchase Order: TBA
Payment Terms:
PREPAY

Make all checks payable to Work Zone Cam LLC:
Work Zone Cam LLC
Attn: Raymond Kuttner
650 East Crescent Avenue
Upper Saddle River, NJ 07458

Qty		Unit Price	Total
2	18 Megapixel Work Zone Cam Pro	$4,495.00	$8,990.00
	Live Video Burst		Included
1	Pole Mount Adapter		Included
1	Pole Mount Adapter		Included
1	18 Megapixel Work Zone Cam Pro		Included
	Live Video Burst		Included
1	Pole Mount Adapter		Included
1	Pole Mount Adapter		Included
2	Work Zone Cam Pro - 4K Fully Hosted Service (12 months)	$375	$9000.00
	Pro Services Package: • Custom client embeddable interface for public web page • Project Management Integration (Procore, PlanGrid, Aconex, SharePoint) • Professional HD time-lapse movie		Included
1	Work Zone Cam Pro - 4K Fully Hosted Service (12 months)	$375	$4500.00
	Pro Services Package: • Custom client embeddable interface for public web page • Project Management Integration (Procore, PlanGrid, Aconex, SharePoint) • Professional HD time-lapse movie		Included
	FedEx International Economy Shipping and Handling	$1,229.95	$1,229.95
	AMOUNT DUE		**$23,719.95**

Notes
Client to Provide Power & SIM Card with Data Plan

Available Options

Rentals *Multi-project discounts* *Insured installation* *Solar power upgrades*

PACIFIC SOILS ENGINEERING & TESTING

MATERIALS TESTING & FIELD SERVICES PRICE LISTS (UPDATE: JUNE 2019)

I. Laboratory Testing

TEST METHOD	DESCRIPTION	UNIT PRICE
AGGREGATES		
ASTM C-29/AASHTO T-19:	Standard Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate	$ 40.00
ASTM C-88/AASHTO T-104:	Standard Test Method for Soundness of Aggregates by Use of Magnesium Sulfate, 5 Cycles Maximum, per size:	$ 374.00
ASTM C-117/AASHTO T-11:	Standard Test Method for Materials Finer than 0.075 mm (No. 200) Sieve in Mineral Aggregates by Washing	$ 32.00
ASTM C-127/AASHTO T-85:	Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate	$ 32.00
ASTM C-128/AASHTO T-84:	Standard Test Method for Specific Gravity and Absorption of Fine Aggregate	$ 32.00
ASTM C-131/AASHTO T-96:	Standard Test Method for Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine (Los Angeles Abrasion Test)	$ 136.00
ASTM C-535:	Standard Test Method for Resistance to Degradation of Large Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine (Los Angeles Abrasion Test)	$ 175.50
ASTM C-136/AASHTO T-27:	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates	$ 57.00
ASTM D-2419/AASHTO T-176:	Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregates	$ 51.00
ASTM C-566:	Standard Test Method for Total Evaporable Moisture Content of Aggregate by Drying	$ 23.00
ASTM C-142:	Standard Test Method for Clay Lumps and Friable Particles in Aggregates	$ 257.50
ASTM D-5821:	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate	$ 281.50
ASTM D-4791:	Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate	$ 281.50
ASTM D-5711:	Standard Test Method for Determining the Adherent Coating on Coarse Aggregates	$ 93.00
ASTM C-40:	Standard Test Method for Organic Impurities in Fine Aggregates for Concrete	$ 93.00
AASHTO M-43:	Standard Specification for Sizes of Aggregate for Road and Bridge Construction	With Consultation

PACIFIC SOILS ENGINEERING & TESTING

TEST METHOD	DESCRIPTION	UNIT PRICE
AASHTO M-80:	Standard Specification for Coarse Aggregate for Portland Cement Concrete	With Consultation
AASHTO M-6:	Standard Specification for Fine Aggregate for Portland Cement Concrete	With Consultation
ASTM D-5240:	Standard Test Method for Testing Rock Slabs to Evaluate Soundness of Riprap by Use of Sodium Sulfate or Magnesium Sulfate	$ 391.50
ASTM D-3744:	Standard Test Method for Aggregate Durability Index per Fractions	$ 201.00

SOILS		
ASTM D-698/AASHTO T-99:	Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 KN-m/m3))	$ 118.50
ASTM D-1140:	Standard Test Method for Determining the Amount of Material in Soils Finer than the No. 200 (0.075 mm) Sieve in Soils by Washing	$ 32.00
ASTM D-1557/ AASHTO T-180:	Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 KN-m/m3))	$ 118.50
ASTM D-1883/ AASHTO T-193:	Standard Test Method for California Bearing Ratio (CBR) of Laboratory Compacted Soils	$ 170.00
ASTM D-2216/T-255/C-566:	Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass	$ 23.00
ASTM D-2487:	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)	$ 40.00
AASHTO M-145:	Recommended Practice for Classification of Soils and Soils-Aggregate Mixtures for Highway Construction Purposes	$ 40.00
ASTM D-4318/ AASHTO T-89 & T-96:	Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils	$ 180.50
ASTM D-854	Standard Test Method for Specific Gravity of Soil Solids by Water Pycnometer	$ 242.50

CONCRETE/CMU/MORTAR and GROUT		
ASTM C-39/AASHTO T-22:	Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens (Includes Curing, Standard Capping, and Handling)	$ 16.50
	Handling of Spare Cylinders (Curing and Handling)	$ 11.50
	Cylinders Supplied **by Others** (Includes Curing, Standard Capping and Handling)	$ 57.00

PACIFIC SOILS ENGINEERING & TESTING

TEST METHOD	DESCRIPTION	UNIT PRICE
ASTM C-42/AASHTO T-24:	Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete (Includes Trimming and Compressive Strength)	$ 34.00
ASTM C-78/AASHTO T-97:	Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Third Point Loading)	$ 40.00
	Handling of Spare Beams (Curing and Handling)	$ 27.50
ASTM C-109:	Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2 -inch (50 mm) Cube specimens)	$ 17.00
ASTM C-231/AASHTO T-152:	Standard Test Method for Air Content of Freshly Mixed Concrete by Pressure Method	$ 34.00
ASTM C-138:	Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete	$ 34.00
ASTM C-426:	Standard Test Method for Linear Drying Shrinkage of Concrete Masonry Units	Per hour
ASTM C-805:	Standard Test Method for Rebound Number of Hardened Concrete	Per hour
ASTM C-1019:	Standard Test Method for Sampling and Testing Grout (Prism Specimens)	$ 17.00

BITUMINOUS MIXTURES (ASPHALTIC CONCRETE)		
ASTM D-1559/AASHTO T245:	Standard Test Method for Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus with Voids Analysis	$ 312.00
ASTM D-2041/AASHTO T209:	Standard Test Method for Theoretical Maximum Specific Gravity of Bituminous Paving Mixtures	$ 77.50
ASTM D-2726/AASHTO T166:	Standard Test Method for Bulk Specific Gravity of Compacted Bituminous Mixtures Using SSD Specimens	$ 34.00
ASTM D-3549:	Standard Test Method for Thickness or Height of Compacted Bituminous Paving Mixture Specimens	$ 34.00
ASTM D-5444 (AASHTO T-30)	Standard Test Method for Mechanical Size Analysis of Extracted Aggregates	$ 89.00
ASTM D-6307 (AASHTO T-308)	Standard Test Method for Asphalt Content of Hot Mix Asphalt by Ignition Method, Method A	$ 309.00

PACIFIC SOILS ENGINEERING & TESTING

TEST METHOD	DESCRIPTION	UNIT PRICE
II. Field Testing Services:		
ASTM D-1556/AASHTO T-191:	Density of Soil in Place by the Sand-Cone Method (Minimum of three (3) tests per trip)	
	First Test	$ 68.00
	Subsequent Tests, same trip	$ 34.00
ASTM D-6938/AASHTO T-310:	Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth) (Minimum of three (3) tests per trip)	
	First Test	$ 51.00
	Subsequent Tests, same trip	$ 17.00
ASTM D-2950:	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods (Minimum of three (3) tests per trip)	
	First Test	$ 51.00
	Subsequent Tests, same trip	$ 17.00
Soils and Bituminous Mixtures Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 47.00
Concrete Testing and Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 47.00
Cancellation of Test Schedule, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 47.00
III. Consultation Services:		
Principal Engineer, per hour:		$ 180.00
Senior Civil Engineer, per hour:		$ 105.00
Field/Laboratory Technician, per hour:		$ 47.00
IV. Overtime, Weekend or Holiday Rates for Field Testing Services:		
ASTM D-6938/AASHTO T-310:	Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth) (Minimum of three (3) tests per trip)	
	First Test	$ 57.00
	Subsequent Tests, same trip	$ 23.00
ASTM D-2950:	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods (Minimum of three (3) tests per trip)	
	First Test	$ 57.00
	Subsequent Tests, same trip	$ 23.00

PACIFIC SOILS ENGINEERING & TESTING

TEST METHOD	DESCRIPTION	UNIT PRICE
Soils and Bituminous Mixtures Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 70.50
Concrete Testing and Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 70.50
Cancellation of Test Schedule, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 70.50

********UNIT PRICES SUBJECT TO CHANGE WITHOUT NOTICE********

V. Other Services Available--- Prices Subject to Negotiation:

1. Concrete coring for compressive strength determination.
2. Bituminous mixture coring for density and thickness determination.
3. Asphalt cement testing.
4. Rebar testing.
5. Top soil testing.
6. Field CBR testing.
7. Quality Control Services for concrete and asphalt batch plants.
8. Construction Inspection Services for Earthwork, Concrete and Bituminous Mixtures.
9. Pile Driving Monitoring Services.
10. Pile Load Testing Monitoring Services.
11. Field Percolation Testing Services.
12. Slope Stability Consultation.
13. Rock Core Drilling.
14. Foundation Probing Investigations.
15. Complete Foundation Investigation and Testing Services.
16. Concrete, Mortar or Bituminous Mixtures Mix Designs.

PACIFIC SOILS ENGINEERING & TESTING

***** SUMMARY OF BASIS OF CHARGES ****

1. Pacific Soils Engineering & Testing makes no warranty, either expressed or implied, as to its findings, recommendations, specifications, or professional advice except that they are prepared and issued in accordance with generally accepted professional engineering practices.

2. The prices listed on the preceding pages are typical prices for field and laboratory testing services frequently requested by Pacific soils Engineering & Testing's customers. Prices for other services will be given upon request.

3. Invoices will be issued on a monthly basis, or upon completion of a project, whichever is sooner. Billings are payable upon presentation, unless otherwise agree, and are past due 30 days from the invoice date. A finance charge of 1-1/2% per month, or the maximum amount allowed by law, will be charges to past due accounts. Any attorney's fees or other costs incurred in collecting any delinquent amount shall be paid by the client.

4. It was assumed that our company's current comprehensive insurance coverages are adequate for this project, including Worker's Compensation Insurance, Comprehensive General Liability, Errors and Omissions. Upon request, a copy of our company's Certificate of Insurance will be forwarded when received from our insurance company. Any changes to our current comprehensive coverage are subject to additional charges.

5. All field work was assumed to be performed during regular working hours 0800 - 1700 hours. All work performed in excess of 8 hours per day and weekend/holiday work will be charged at 1.5 times the hourly rate. Time worked in excess of 12 hours per day will be charges at 2 times the hourly rate.

6. Advance notification for field test schedules, typically 24 to 48 hours prior, is requested in order to better accommodate your firm's preferred time frame and allow PSE&T to adequately allocate our manpower resources. While it is also understood that field production and weather conditions may require tweaking of this request, every effort will be made to work with you company's designated representative to closely coordinate your request.

7. It is preferred that all field and laboratory test requests be emailed to our office at admin@pacificsoilsguam.com. Otherwise, please contact our office at (671) 646-1471/3278/5790. We ask that all field test schedules be made with our front office personnel instead of the field technicians visiting the project site.

8. Laboratory testing services are performed on a first come, first served basis. Clients are requested to coordinate with our front office through telephone or email (admin@pacificsoilsguam.com or our manager, danielsan@pacificsoilsguam.com) regarding their requested test program and expected completion time. Samples requiring special urgency will be charged additional handling and manhour rates.

9. All field testing services were considered to be ready upon the arrival of our company's field technician. Stand-by time or delays incurred during the test procedure because of external factors were not included in our pricing.

10. All field testing services are charged on a portal to portal basis.

11. A one-hour minimum charge per day will be made for any office services.

12. Outside services will include a 20% markup, unless otherwise noted.

13. In the event of above average increase of fuel costs, a fuel subcharge of up to 3% will be added to all invoices.

14. The proposed fee includes standard invoicing with daily summary charges. Additional administrative services will be invoiced if backup information (eg. daily field reports or work summaries, etc.) is requested.

15. Pacific Soils Engineering & Testing routinely disposes all test samples (soils, aggregates, cylinders and bituminous mixtures) after submission of our final report unless otherwise notified by client.

16. Cylindrical sampling requiring additional handling and preparation are charged on a per hour basis.

17. This price listing assumes our company's current International Accreditation Service (IAS) Accreditation, existing insurance coverages and drug testing program were assumed to be adequate for this project.

18. We assumed that our company's current eBIDs passes for military installations are adequate for this undertaking. Additional secured passes/badges are subject to additional fees.

19. Natural Recourses, Cultural Training, Biological Training, UXO/MEC Safety Training and other safety/training sessions were not included in the price structures.

20. Pacific Soils Engineering & Testing reserves the right to adjust fee schedule on project not completed within 180 days from the contract signature date. For time and material projects, any not to exceed amount will be similarly adjusted.

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issues for Decision

Resolution No. 33-FY2020
Relative to Approval of Additional Funding to the Design Contract for Northern and Southern Tanks

What is the project's objective and is it necessary and urgent?
The project is part of the 2011 Court Order Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program. As a Court Order project, it is necessary and urgent to work towards meeting the Court Order deadlines. The project's objective is to provide design services for the Northern and Southern reservoirs, which include the Santa Rosa, Santa Rita, Sinifa, Ugum, and Inarajan.

Where is the location?
- Santa Rosa reservoir: located off Route 15 in Yigo
- Santa Rita reservoir: located off Obispo Olaiz Street in Santa Rita
- Sinifa reservoir: located off Cross Island Road in Santa Rita
- Ugum: located off Paulino Street in Inarajan
- Inarajan: located off Belen Avenue in Inarajan

How much will it cost?
TGE's fee proposal is $128,415.00. The fee includes the following:

1. Ugum reservoir will require a pile foundation due to the poor soil quality. The proposal includes a pile foundation design.
2. Continuation of progress design meetings.

When will it be completed?
- Design completion: December 18, 2020.
- Construction support services will extend until contraction is complete.

What is the funding source?
The funding shall be from PW 09-11: Water System Reservoirs 2005 Improvements.

The RFP/BID responses (if applicable):
N/A

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 33–FY2020

RELATIVE TO APPROVAL OF ADDITIONAL FUNDING TO THE DESIGN CONTRACT FOR NORTHERN AND SOUTHERN TANKS

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, the CCU approved Resolution No. 12-FY2018 which authorized the total funding amount to a maximum of $3,624,912.25 (Exhibit A); and

WHEREAS, GWA issued Change Orders No. 1 through No. 4 to TG Engineers, P.C. for additional design task to bring the contract total to $3,624,912.25; and

WHEREAS, in the ongoing reservoir designs and the water system served by the noted reservoirs, further design services listed below were identified to move forward with improving the functionality of the water system:

(1) Ugum: The reservoir will require a pile foundation design due to the poor soil quality at the site;

(2) All sites (Ugum, Inarajan, Afgayan, Santa Rosa, Santa Rita, Sinifa): Continuation of progress design meetings;

WHEREAS, GWA engineering and TG Engineers, P.C. negotiated Change Order No. 5 scope and fee of One Hundred Twenty-Eight Thousand Four Hundred Fifteen Dollars ($128,415.00) for the above services (Exhibit B); and

WHEREAS, GWA Management is seeking One Hundred Twenty-Eight Thousand Four Hundred Fifteen Dollars ($128,415.00) to fund Change Order No. 5; and

WHEREAS, funding for this change order will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by TG Engineers, P.C. are fair and reasonable.
3. The CCU hereby authorizes $128,415.00 in additional funding to bring the total authorized funding amount to $3,753,327.25.
4. The CCU hereby authorizes the management of GWA the option to issue Change Order No. 5 in the not-to-exceed amount of $128,415.00 (Exhibit "B').
5. The CCU hereby authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by:

_____
JOSEPH T. DUENAS
Chairperson

Attested by:

_____
MICHAEL T. LIMTIACO
Secretary

DRAFT

SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

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DRAFT

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 12–FY2018

RELATIVE TO APPROVAL OF CHANGE ORDER NO. 4 FOR THE NORTHERN AND SOUTHERN GUAM RESERVOIR DESIGN SERVICES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, The CCU approved via Resolution No. 20-FY2015 (Exhibit A) for GWA management to enter into contract with TG Engineers, P.C. to provide design services for the Northern and Southern Guam Reservoirs, as well as Resolution No. 56-FY2016 (Exhibit B) that approved a Change Order to TG Engineers, P.C. for additional design services that totaled Three Million Eighty-Seven Thousand Thirty-Two Dollars ($3,087,032.00); and

WHEREAS, GWA issued Change Order No. 1 to No. 3 to TG Engineers, P.C. for additional services that were not identified in the original scope of work but subsequently required due to the following:

(1) land acquisition for various project sites;

(2) design for several additions and revisions to the pipe system to complete the pressure zone realignment which includes surveying and environmental service for Santa Rita and Santa Rosa Reservoirs;

(3) design for the new Unified Facilities Criteria ("UFC") structural code requirements for Ugum, Santa Rosa, Santa Rita, and Sinifa Reservoirs, and Inarajan Booster Pump Station that was not in effect at the time of contract execution;

(4) additional land acquisition support for the Government of Guam Chamorro Land Trust (CLTC) property, additional Archaeological and Unexploded Ordinances (UXO) monitoring, and design to include the new GWA-AAFB tank interconnection system for the Santa Rosa Reservoir;

(5) design for new Booster Pump Station and a new Pressure Reducing Valve (PRV) to be added into the system in the vicinity of Agfayan Subdivision in Inarajan as part of the Pressure Zone Realignment plan;

(6) percolation tests to be included at each project site location for drainage basins,

(7) design to incorporate the Siemens controls from the existing Ugum plant to be extended to the new Ugum Reservoir and facilities; and

WHEREAS, in the ongoing design and analysis of the reservoirs and the water system served by the noted reservoirs, further design services listed below were identified as being above and beyond original scope requirements but necessary to move forward with improving the functionality of the water system:

(1) Santa Rosa: design of new 4,120 LF of 12-inch pipe along Route No. 1 in Yigo;

(2) Santa Rosa: Identification and survey of easements for agreements with DoD;

(3) Agfayan Booster Pump Station: design of pressure reducing valve near original bps site;

(4) Agfayan Booster Pump Station: Investigate 4 lots as new alternatives for the new booster pump station location;

(5) Ugum Reservoir: Investigate a new alternative for the reservoir location. The new alternative involves consolidating 2 lots adjacent and south of the existing plant to provide the site needed for the new reservoir and facilities;

(6) Ugum Reservoir: Existing water treatment plant drainage will be corrected in the new design and plans;

(7) Santa Rita: Incorporate roadway repair in the design. New design to replace existing culvert;

(8) Sinifa: Prepare construction easements and construction support documents for 2 lots; and

WHEREAS, GWA engineering and TG Engineers, P.C. negotiated the price for the above services to be provided in the amount of Five Hundred Thirty-Seven Thousand Eight Hundred Eighty Dollars and Twenty-Five Cents ($537,880.25) (See Exhibit C); and

WHEREAS, GWA management is seeking CCU approval of additional funding in the amount of Five Hundred Thirty-Seven Thousand Eight Hundred Eighty Dollars and Twenty-Five Cents ($537,880.25); and

WHEREAS, the approval of the Five Hundred Thirty-Seven Thousand Eight Hundred Eighty Dollars and Twenty-Five Cents ($537,880.25), along with the prior authorized contract value of Three Million Eighty-Seven Thousand Thirty-Two Dollars ($3,087,032.00) will bring the total authorized funding for the design contract with TG Engineers, P.C. to Three Million Six Hundred Twenty-Four Thousand Nine Hundred Twelve Dollars and Twenty-Five Cents ($3,624,912.25); and

WHEREAS, funding for this change order will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by TG Engineers, P.C. are fair and reasonable (Exhibit C).
3. The CCU authorizes GWA management to execute Change Order No. 4 in the amount of Five Hundred Thirty-Seven Thousand Eight Hundred Eighty Dollars and Twenty-Five Cents ($537,880.25).
4. The CCU hereby further approves increasing the total authorized funding for the design contract with TG Engineers, P.C. to Three Million Six Hundred

Twenty-Four Thousand Nine Hundred Twelve Dollars and Twenty-Five Cents ($3,624,912.25).

5. The CCU hereby further authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED this 23rd day of January 2018.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

SECRETARY'S CERTIFICATE

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 5

NAYS: 0

ABSTENTIONS: 0

ABSENT: 6



4

Exhibit A (1 of 4)

GUAM CONSOLIDATED COMMISSION ON UTILITIES
RESOLUTION NO. 20 – FY2015

RELATIVE TO CONTRACT APPROVAL FOR THE NORTHERN AND SOUTHERN GUAM RESERVOIRS DESIGN SERVICES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, GWA has advertised the Request For Proposals (RFP-09-ENG-2014) soliciting statement of qualifications from experienced and qualified engineering firms for the preparation of design plans and specifications for the Northern and Southern Guam Reservoirs; and

WHEREAS, the Northern and Southern Guam Reservoir design project includes site investigations and system evaluations at the Santa Rita, Santa Rosa, Inarajan, Sinifa, and Ugum reservoir sites, development of design plans and specifications for various sized concrete reservoirs ranging from 0.2 MG to 2.0 MG nominal capacities, booster station upgrades, instrumentation and control upgrades, control valves upgrades, pipe upgrades, and other general site upgrades; and

WHEREAS, RFP packages were downloaded by forty five (45) interested parties, from which GWA received proposal submittals from ten (10) firms before the RFP submittal deadline; and

Exhibit A (2 of 4)

WHEREAS, the GWA A-E Selection committee reviewed and evaluated the ten (10) proposals (see EXHIBIT A – Evaluation Score) and generated a short list of the top four (4) firms with a recommendation to award a contract to the firm TG Engineers, P.C. and any successor at interest thereto (see EXHIBIT B – Evaluation Summary and GM Determination); and

WHEREAS, TG Engineers, P.C. and GWA negotiated the price for the services to be provided in the amount of Two Million Five Hundred Thirty Two Thousand Five Hundred Eighty Dollars ($2,532,580.00) (see EXHIBIT C – Fee Proposal); and

WHEREAS, GWA management seeks approval of the fee proposal amount of Two Million Five Hundred Thirty Two Thousand Five Hundred Eighty Dollars ($2,532,580.00), plus a ten percent (10%) contingency of Two Hundred Fifty Three Thousand Two Hundred Fifty Eight Dollars ($253,258.00) to bring the total authorized funding amount to a maximum of Two Million Seven Hundred Eighty Five Thousand Eight Hundred Thirty Eight Dollars ($2,785,838.00); and

WHEREAS, funding for this project will be from the 2010 and 2013 Bond Funds under the line items CIP PW 09-11 Water System Reservoirs 2005 Improvements and CIP PW 11-02 Ugum Water Treatment Plant Reservoir Replacement; and

WHEREAS, GWA management recommends that a contract be entered into with TG Engineers, P.C. in the aforementioned base contract amount.

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by TG Engineers, P.C. is fair and reasonable.

Exhibit A (3 of 4)

3. The CCU finds that the terms of the conditions set by GWA relative to commencement of subsequent work activities are fair and reasonable and serve as a measure of Quality Assurance/Quality Control (QA/QC).
4. The CCU hereby authorizes the management of GWA to enter into a contract with TG Engineers, P.C., in the amount of Two Million Five Hundred Thirty Two Thousand Five Hundred Eighty Dollars ($2,532,580.00).
5. The CCU hereby further approves the total funding amount for this project of Two Million Five Hundred Thirty Two Thousand Five Hundred Eighty Dollars ($2,532,580.00), plus a ten percent (10%) contingency of Two Hundred Fifty Three Thousand Two Hundred Fifty Eight Dollars ($253,258.00) to bring the total authorized funding amount to a maximum of Two Million Seven Hundred Eighty Five Thousand Eight Hundred Thirty Eight Dollars ($2,785,838.00).

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 24th day of March 2015.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

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Exhibit A (4 of 4)

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 5

NAYS: 0

ABSTENTIONS: 0

ABSENT: 0

Exhibit B (1 of 4)

GUAM CONSOLIDATED COMMISSION ON UTILITIES

RESOLUTION NO. 56-FY2016

RELATIVE TO APPROVAL OF CHANGE ORDER NO. 2 FOR THE NORTHERN AND SOUTHERN GUAM RESERVOIR DESIGN SERVICES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, Resolution No. 20-FY2015 (See Exhibit A) authorized GWA management to enter into a contract with TG Engineers, P.C. in the amount of Two Million Five Hundred Thirty Two Thousand Five Hundred Eighty Dollars ($2,532,580.00) to provide design services for the Northern and Southern Guam Reservoirs, which includes:

(1) site investigations and system evaluations at Santa Rosa, Santa Rita, Sinifa, Inarajan, and Ugum reservoir sites, and

(2) development of design plans and specifications for various sized concrete reservoirs ranging from 1.0 MG to 2.0 MG nominal capacities, instrumentation and control upgrades, control valves upgrades, pipe upgrades, new booster station, and other general site and system upgrades; and

WHEREAS, Resolution No. 20–FY2015 further authorized on top of the contract amount a ten percent (10%) contingency of Two Hundred Fifty Three Thousand Two Hundred Fifty Eight Dollars ($253,258.00) bringing the total authorized funding to a maximum of Two

Exhibit B (2 of 4)

Million Seven Hundred Eighty Five Thousand Eight Hundred Thirty Eight Dollars ($2,785,838.00); and

WHEREAS, GWA issued Change Order No. 1 to TG Engineers, P.C. for additional services that were required due to needs for land acquisition for various project sites using the approved contingency funding in the amount of Fifty One Thousand Three Hundred Forty One Dollars and Fifty Cents ($51,341.50) in which the total value of the Contract was increased to Two Million Five Hundred Eighty Three Thousand Nine Hundred Twenty One Dollars and Fifty Cents ($2,583,921.50); and

WHEREAS, in the course of the design and analysis of the reservoirs and the water system served by the noted reservoirs additional design services listed below was identified as being necessary to meet new building code requirement and to improve the functionality of the water systems (See Exhibit B – Scope of Work and Fees):

(1) design for several additions and revisions to the pipe system to complete the pressure zone realignment which includes surveying and environmental services for Santa Rita and Santa Rosa Reservoirs,

(2) design for the new UFC structural code requirements for Ugum, Santa Rosa, Santa Rita and Sinifa Reservoirs; and Inarajan Booster Pump Station,

(3) additional land acquisition support for the Government of Guam Chamorro Land Trust Commission (CLTC) property, additional Archaeological and Unexploded Ordinance (UXO) monitoring, and design to include the new GWA-AAFB tank interconnection system for the Santa Rosa Reservoir,

(4) design for new Booster Pump Station and a new Pressure Reducing Valve (PRV) to be added into the system in the vicinity of Agfayan Subdivision in Inarajan as part of the pressure zone realignment plan,

(5) percolation tests to be included at each project site location for drainage basins,

(6) design to incorporate the Siemens controls from the existing Ugum plant to be extended to the new Ugum Reservoir and facilities; and

Exhibit B (3 of 4)

WHEREAS, GWA engineering and TG Engineers, P.C. negotiated the price for the services to be provided in the amount of Five Hundred Three Thousand One Hundred Ten Dollars and Fifty Cents ($503,110.50); and

WHEREAS, GWA Management is seeking CCU approval of additional funding in the amount of Three Hundred One Thousand One Hundred Ninety Four Dollars ($301,194.00) which is the balance needed above the remaining contingency that will fund Change Order No. 2; and

WHEREAS, GWA Management further seeks CCU approval of the total authorized funding for the design contract with TG Engineers, P.C. to Three Million Eighty Seven Thousand Thirty Two Dollars ($3,087,032.00); and

WHEREAS, funding for this project will be from 2013 and/or 2015 Bond Funds under CIP line item PW 09-11 Water System Reservoirs 2005 Improvements; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve and authorize the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by TG Engineers, P.C. are fair and reasonable.
3. The CCU finds that the terms of the conditions set by GWA relative to commencement of subsequent work activities are fair and reasonable and serve as a measure of Quality Assurance/Quality Control (QA/QC).
4. The CCU hereby authorizes GWA management to execute Change Order No. 2 in the amount of Five Hundred Three Thousand One Hundred Ten Dollars and Fifty Cents ($503,110.50) (Exhibit B).
5. The CCU further approves increasing the total authorized funding for the design contract with TG Engineers, P.C to Three Million Eighty Seven Thousand Thirty Two Dollars ($3,087,032.00);

Exhibit B (4 of 4)

6. Funding source will be CIP PW 09-11 Water System Reservoir 2005 Improvements.

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 23rd day of August, 2016.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 4

NAYS: 0

ABSTENTIONS: 0

ABSENT: 1

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Exhibit C (1 of 2

TG ENGINEERS, PC

November 8, 2017

Mr. Miguel Bordallo, PE
General Manager
Guam Waterworks Authority
Gloria B. Nelson Public Service Building, Room 202
688 Route 15
Mangilao, Guam 96913

ATTN: Mr. Brett Railey, PE, Project Manager

RE: PW 09-11 Northern and Southern Guam Reservoirs: GWA Project No. W14-007-BND, Change Order No. 4 – Fee Proposal

Hafa adai Brett,

TG Engineers, PC (TGE) is pleased to submit our updated Scope of Work and Fee Proposal for the reservoir project Change Order No. 4. We are submitting the proposal file in pdf format by email.

Note we have followed the format from the original project proposal and created the general part of the Scope of Work and then have Attachments A – H with the specific scope for each tank and pump station project.

Based on the last review meeting, held with you and Mr. Garrett Yeoh, we have updated the proposal accordingly. The new task which is added is the new road and utility infrastructure that will be required for the Agfayan 4-alternate sites that will be investigated.

We look forward to your favorable review and reaching an agreement on the Scope and Fee. Let us know if we will schedule a final review meeting.

Please call Teena Barnes or myself directly at 647-0808 with any questions.

Si Yu'os Ma'ase,
TG Engineers, PC

Tor Gudmundsen, PE
President

GWA SOW & FEE
11/8/2017

Attachments:
Scope of Work
Dated 11/08/17, 15-pages

Fee Proposal Spreadsheets
Dated 11/08/17, 9-pages

EXHIBIT C (3 of 2

DESIGN OF NORTHERN AND SOUTHERN GUAM RESERVOIRS, PROJECT NO. 2
CHANGE ORDER NO. 4 – SCOPE OF WORK

1. INTRODUCTION

TG Engineers, PC (TGE) is under contract with the Guam Waterworks Authority (GWA) for the Design of Northern and Southern Guam Reservoirs. The work completed to date varies for each site and is listed as follows.

- Ugum – Basis of Design Report
- Santa Rita – 90% Design Submittal
- Santa Rosa – 100% Design Submittal (Dod Intertie at 60%)
- Sinifa – 90% Design Submittal
- Inarajan Reservoir – Cancelled
- Agfayan Booster Pump Station – New Facility
- Inarajan Booster Pump Station – BOD complete and pending the Agfayan BOD to combine projects

Change Orders 1.0 – 3.0 have been processed and include the following.

- Change Order No. 1 – processed for land acquisition support services. No schedule changes.
- Change Order No. 2 – processed for additional engineering services. Schedule extended 387-days to 4/14/2017.
- Change Order No. 3 – processed for a time extension. Schedule extended 630-days to 1/04/2019.

Change Order No. 4 is proposed with the Scope of Work as follows.

2. SCOPE OF SERVICES

2.1 GENERAL DESCRIPTION OF SERVICES

A. Project Management Services

Team members will join Bi-weekly progress meetings for the 21-month time extension, ending 1/04/2019.

B. Pressure Zone Re-alignment

The Brown & Caldwell Report, Pressure Zone Realignment and Pressure Improvement Report, June 2017 includes several additions and revisions to the pipe system to complete the pressure zone re-alignment within the project areas. The changes are described as follows.

B1 – Santa Rosa (note scope for Details 1 & 2 are included in CO#2)

1) Detail 4 - Install an 8-inch valve on the existing line approx. 500-ft NW of Chalan Bernadita and construct 1-jumper line to connect existing 8-inch lines at the Chalan

Bernadita / Route 9 intersection. The work is located in public ROW or utility easement areas.

2) Detail 5 – install an 8-inch valve on the existing 8-inch line along Route 9, near Chalan Bada.
3) Details 6 & 7 – Construct approx. 4,120-lf of 12-inch pipe along Route 1 in Yigo.

B2 – Agfayan BPS

1) Install 1-PRV at an appropriate site near the original 3-BPS site alternatives, as determined by the design team.

B3 – General

1) Team members have completed multiple reviews of the ongoing revisions by B&C to the PZR documents.

2.2 UGUM RESERVOIR SITE

Investigate a new alternative for the new reservoir location. The new alternative involves consolidating 2-lots adjacent and south of the existing plant to provide the site needed for the new reservoir and facilities. The 2-lots are Lot 3 & Lot 4, Block 4, Tract 3521.

2.3 UGUM EXISTING WATER TREATMENT PLANT & TANK

The existing plant site drainage will be corrected with a new design and plans.

2.4 SANTA ROSA RESERVOIR SITE – Dod Intertie

Easements were developed for use by GWA to reach operational agreements with Dod. There were 3-easement exhibits created as follows.

- Temporary Construction Easement
- GWA Access Easement
- Dod Access Easement

2.5 SANTA RITA RESERVOIR SITE

Review the access road flood damage and repair plans.

Confirm the road repair design interface with the road reconstruction plans

2.6 AGFAYAN BOOSTER PUMP STATION SITE

Investigate 4-lots as new alternatives for the new booster pump station location. The lots are along an existing Right-of-Way (ROW) and will require a new road, piping, electrical service and appurtenances. The estimated ROW length is 2,000-ft for the utility infrastructure required, this is approx. 1,000-ft of new road and utility infrastructure and another 1,000-ft of new pipeline in an existing paved road.

Refer to the following maps.

- LM Checked No. 086 FY92, sheet 1 of 3

Exhibit C (5 of 2

- LM Checked No. 485 FY97, sheet 1 of 3

2.7 SINIFA RESERVOIR SITE

Provide Temporary Construction Easements and construction support documents on 2-lots as follows.

- Lot 2, Bock 2, Tract 24404
- Lot 3, Block 2, Tract 24404

3 – 10. No change.

ATTACHMENTS:

A. Ugum Reservoir Site
B. Existing Ugum Water Plant Site Drainage
C. Santa Rosa 2-PZR Sites
D. Santa Rosa PZR Pipeline
E. Sinifa Reservoir Site
F. Agfayan BPS, 4-Alt Sites
G. Project Management

Exhibit C (6 of 2

Attachment A – Ugum Reservoir Site

A. Preliminary Design

1. Define design objective, design criteria, and methodology that shall be used to prepare the design. Identify all relevant codes, standards, environmental regulations, and all applicable local and federal laws that will be incorporated in the design.

2. Create a draft Property Map and Concept Site Plan for analysis. Combine the mapping of the 2-new lots to develop the consolidated lot site. This will be consolidated with the existing plant site.

3. Complete an Abbreviated Appraisal Report for the preliminary property value.

4. Complete the Construction Cost Estimate based on the Concept Site Plan developed.

5. Update the BOD Report for the combined lot development plan.

6. Open discussions with the property owner about the proposed land use, access for investigations and the acquisition process.

7. Provide surveying services, consisting of property boundary and topographic field survey and preparation of topographical mapping. These services include preparation of topographical and boundary mapping of the tank site including existing facilities above ground within the project area and adjacent sites which may be impacted. The consultant shall make all necessary research for determination of land ownership.

   The boundary survey and mapping scope will be expanded to include consolidation of the 2-new lots with the existing plant site. The topographic survey and mapping scope is expanded to include the 2nd parcel of the 2-new parcels.

8. Other services are included in the existing scope.

B. Design

1. Develop updated Basis of Design Report.

   The updated Basis of Design Report at a minimum shall address the following:

   a. Site Geometry and Access
   b. Site Grading & Drainage
   c. Site Piping
   d. Site Utilities

Exhibit C (7 of 2

Attachment B – Existing Ugum Water Plant Site Drainage

A. Preliminary Design

1. Define design objective, design criteria, and methodology that shall be used to prepare the design. Identify all relevant codes, standards, environmental regulations, and all applicable local and federal laws that will be incorporated in the design.

2. Provide surveying services, consisting of the topographic field survey and preparation of topographical mapping. These services include preparation of the topographical mapping of the plant site, including existing facilities above ground within the project area and adjacent sites which may be impacted.

3. Complete Concept Drainage system design. It is proposed to channel stormwater to a new basin or percolation facility on Lot 3, Block 4, Tract 3521.

4. Complete the Construction Cost Estimate based on the Concept Drainage Plan developed.

B. Design

1. Complete the Drainage Design and prep construction documents. The design will be developed through 30%, 60%, 90% and 100% design stages and submittals made for review and acceptance by GWA before continuing to the next submittal.
2. The Construction Document package will include the following at each design submittal

30% - Plans, Basis of Design and Draft Drainage Calculations
60% - Plans, Final Drainage Calculations, Specification TOC and Estimate.
90% - Plans, Specifications, Estimate and Construction Schedule.
100% - Plans, Specifications, Estimate and Construction Schedule.

Exhibit C (8 of 2(

Attachment C – Santa Rosa, 2-PZR Sites

A. Site List (2-sites)

1. Detail 4 - Install an 8-inch valve on the existing line approx. 500-ft NW of Chalan Bernadita and construct 1-jumper line to connect existing 8-inch lines at the Chalan Bernadita / Route 9 intersection. The work is located in public ROW or utility easement areas.
2. Detail 5 – install an 8-inch valve on the existing 8-inch line along Route 9, near Chalan Bada. The work is located in public ROW or utility easement areas.

3. Preliminary Design

   a. Perform site investigation to determine existing condition and system configuration, in accordance with existing contract scope terms.

   b. Provide surveying services, consisting of property boundary and topographic field survey and preparation of topographical mapping. These services include preparation of topographical and boundary mapping of the 2-facility sites including existing facilities above ground within the project area and adjacent sites which may be impacted. The consultant shall make all necessary research for determination of land ownership.

   c. Provide environmental services to determine any adverse impact of the project on cultural resources and to make recommendations regarding their historical properties. This shall include a technical report, which defines background research, field methodology, results of survey and mitigation recommendations. The archaeological party will conduct cultural resource inventory and evaluation of historic resources that might be affected by this project. This will require preparing and submitting an inventory survey plan, conducting inventory survey, and reporting to the Department of Parks and Recreation/Guam Historic Preservation Office and all other required agencies (which may include Department of Agriculture, Guam Environmental Protection Agency, U.S. Fish and Wildlife Services, and etc.) regarding the project and recommendations as to eligibility and effect from the undertaking.

B. Design

1. Develop the Basis of Design Report.

   a. Incorporate the UFC code and added facilities and issue an addendum to the BOD with the project design submittals.

2. Prepare construction drawings, specifications, cost estimates, construction schedule, supporting design calculations, list of required permits, and all other documents necessary for project construction.

3. Design Services:

   a. Civil Engineering:
      i. Site work at each facility site shall include demolition plans, site layout plans, grading, drainage, erosion control measures, underground utility plans, utility profiles, vault plans and sections, details.

Exhibit C (10 of 2(

Attachment D – Santa Rosa PZR Pipeline

A. Site List (1-site)

1. Details 6 & 7 – Construct approx. 4,120-lf of 12-inch pipe along Route 1 in Yigo.

2. Preliminary Design

   a. Perform site investigation to determine existing condition and system configuration, in accordance with existing contract scope terms.

   b. Provide surveying services, consisting of property boundary and topographic field survey and preparation of topographical mapping. These services include preparation of topographical and boundary mapping of the pipe line alignment including existing facilities above ground within the project area and adjacent sites which may be impacted. The consultant shall make all necessary research for determination of land ownership.

   c. Provide environmental services to determine any adverse impact of the project on cultural resources and to make recommendations regarding their historical properties. This shall include a technical report, which defines background research, field methodology, results of survey and mitigation recommendations. The archaeological party will conduct cultural resource inventory and evaluation of historic resources that might be affected by this project. This will require preparing and submitting an inventory survey plan, conducting inventory survey, and reporting to the Department of Parks and Recreation/Guam Historic Preservation Office and all other required agencies (which may include Department of Agriculture, Guam Environmental Protection Agency, U.S. Fish and Wildlife Services, and etc.) regarding the project and recommendations as to eligibility and effect from the undertaking.

3. Perform geotechnical investigations to assess the stability of the sub-grade and develop a soils report, including field exploration and laboratory tests and seismic investigations. The geotechnical investigations will assess the general conditions of the project site and provide design recommendations for the proposed pipeline and ancillary facilities including the following:

   a. Characterization of earth materials and ground water level
   b. Determination of bearing pressure and settlement
   c. Lateral earth pressures – static and seismic
   d. Assessment of liquefaction potential

B. Design

1. Develop Basis of Design Report.

2. Prepare construction drawings, specifications, cost estimates, construction schedule, supporting design calculations, list of required permits, and all other documents necessary for project construction.

3. Design Services:

    a. Civil Engineering:
        i. The 4,120-lf pipeline will include demolition plans, plan and profiles, erosion control measures, underground utility plans, utility profiles, vault plans and sections, details.

Attachment E – Sinifa Reservoir Site

A. Preliminary Design

1. The TGE team will obtain Temporary Construction Easements (TCE) from the private property owners for construction access at the new tank site. The TCE exhibit sketches will be created and issued for the following lots.

- Lot 2, Block 2, Tract 24404
- Lot 3, Block 2, Tract 24404

B. Lewis Property

1. Create the TCE Exhibit Drawing
2. Create the Perpetual Easement Exhibit Drawing
3. Complete the engineering design for the new driveway including geometry, grading and drainage.
4. Complete construction documents with a cost estimate for comparison of alternatives.

C. Paulino Property

1. Create the TCE Exhibit Drawing
2. Complete the concept retaining wall design and cost estimate for comparison of alternatives.

Exhibit C (13 of 2

Attachment F – Agfayan BPS 4-Site Alternatives Review

A. The 4-lots include the following.

- Lots 28 & 29, Subdivision Survey Map of TRACT 3734, Land for the Landless Project (Formerly Lot 8-3), LM Checked No. 086 FY92, sheet 1 of 3
- Lots 61-R2 and 106, Real Estate Requirement (Access Easement for Ija Subdivision) Lots 60, 61 and 64-1 thru 64-RII, LM Checked No. 485 FY97, sheet 1 of 3

B. Preliminary Design

1. Define design objective, design criteria, and methodology that shall be used to prepare the design. Identify all relevant codes, standards, environmental regulations, and all applicable local and federal laws that will be incorporated in the design.

2. Create 4-draft Property Maps and 4-Concept Site Plans for analysis.

3. Complete the 4-Abbreviated Appraisal Reports for the preliminary property values.

4. Complete the 4-Construction Cost Estimates based on the Concept Site Plans developed.

5. Update the BOD Report with the 4-alternative Site Plans.

6. Open discussions with the property owners about the proposed land use, access for investigations and the acquisition process.

C. Design

1. Develop updated Basis of Design Report.

   The updated Basis of Design Report at the minimum shall address the following:

   a. Site Geometry
   b. Site Grading & Drainage
   c. Site Piping
   d. Site Utilities

Exhibit C (14 of 2(

Attachment G – Agfayan BPS 4-Site Alternatives-Road & Offsite Utilities

A. Description of Road & Offsite Utilities

The lots being considered are the following.

- Lots 28 & 29, Subdivision Survey Map of TRACT 3734, Land for the Landless Project (Formerly Lot 8-3), LM Checked No. 086 FY92, sheet 1 of 3
- Lots 61-R2 and 106, Real Estate Requirement (Access Easement for Ija Subdivision) Lots 60, 61 and 64-1 thru 64-RII, LM Checked No. 485 FY97, sheet 1 of 3

Based on reviews of the mapping, we understand the new infrastructure as follows.

Part 1 – Approx. 1,400-ft of new road through the jungle along an existing coral road / trail. This section will have new road construction and new water pipeline.

Part 2 – Approx 1,000-ft of existing paved roads through part of Inarajan Village. This section will have a new waterline constructed in the existing paved roads and connect to the waterline in Route 4 in the Inarajan Village area.

Part 3 – Approx 500-ft of existing paved road in the Ija Subdivision. This section will have a new waterline constructed and the existing OH power line extended to the pump station site.

B. Preliminary Design

1. Define design objective, design criteria, and methodology that shall be used to prepare the design. Identify all relevant codes, standards, environmental regulations, and all applicable local and federal laws that will be incorporated in the design.

1. Perform site investigation to determine existing condition and system configuration, consisting of the following:

   a. Existing site conditions and facilities
   b. Proposed site improvement
   c. Preliminary site layout
   d. Research existing property map
   e. Demolition requirements
   f. Grading requirements
   g. Drainage requirements
   h. Piping and valving requirements
   i. Operational requirements
   j. Fire flow requirements
   k. Electrical power supply
   l. Construction access
   m. Construction sequencing

Exhibit C (15 of 2

2. Provide surveying services, consisting of ROW boundary and topographic field survey and preparation of topographical mapping. These services include preparation of topographical and boundary mapping of the roads including existing facilities above ground within the project area and adjacent sites which may be impacted. The consultant shall make all necessary research for determination of land ownership.

3. Provide environmental services to determine any adverse impact of the project on cultural resources and to make recommendations regarding their historical properties. This shall include a technical report, which defines background research, field methodology, results of survey and mitigation recommendations. The archaeological party will conduct cultural resource inventory and evaluation of historic resources that might be affected by this project. This will require preparing and submitting an inventory survey plan, conducting inventory survey, and reporting to the Department of Parks and Recreation/Guam Historic Preservation Office and all other required agencies (which may include Department of Agriculture, Guam Environmental Protection Agency, U.S. Fish and Wildlife Services, and etc.) regarding the project and recommendations as to eligibility and effect from the undertaking.

4. Perform geotechnical investigations to assess the stability of the sub-grade and develop a soils report, including field exploration and laboratory tests, corrosion, and seismic investigations. The geotechnical investigations will assess the general conditions of the project site and provide design recommendations for the proposed pump station and ancillary facilities including the following:

   a. Characterization of earth materials and ground water level
   b. Development of seismic design criteria for the pump station building per updated codes
   c. Determination of bearing pressure and settlement
   d. Lateral earth pressures – static and seismic
   e. Assessment of liquefaction potential
   f. Foundation design of the proposed pump station building and ancillary structures
   g. Earthwork requirements

C. Design

1. Develop updated Basis of Design Report.

   The updated Basis of Design Report at the minimum shall address the following:

   a. Site Geometry
   b. Site Grading & Drainage
   c. Site Piping
   d. Site Utilities

2. Prepare construction drawings, specifications, cost estimates, construction schedule, supporting design calculations, list of required permits, and all other documents necessary for project construction.

   a. The design plans for the offsite road and utility infrastructure will include the necessary piping, valving, fittings, and appurtenances to connect to the existing water system as indicated in the Basis of Design Report. The plan will also include necessary erosion control measures such as erosion control seeding, silt fencing, protection of stockpiled materials, and other necessary measures to mitigate the impact of erosion and sedimentation.

   b. Based on the Basis of Design report approved by GWA, the design consultant will prepare and submit the following:

      1. Multidiscipline plans to the 60%, 90%, and 100% completion levels. (60% will consist of an Over-the-Shoulder review with GWA.)
      2. Specifications at 60%, 90%, and 100% completion levels, which will include front end documents and technical specifications applicable to the indicated completion levels.
      3. Construction cost estimate update at 60% Completion level. This estimate will be a Class 3 estimate in accordance with the AACE International Cost Estimate Classification System. All costs will be in current dollars and escalated to the estimated midpoint of construction.
      4. Final construction cost estimate based on quantity takeoffs and the requirements of the 100% design plans and specifications. This estimate will be a Class 2 estimate in accordance with the AACE International Cost Estimate Classification System. All costs will be in current dollars and escalated to the estimated midpoint of construction.
      5. The design consultant shall coordinate with the relevant agencies such as Guam Environmental Protection Agency, Department of Public Works, and other relevant agencies at the 30%, 60%, 90%, and 100% submittals. This includes submitting design documents (full size plans and specifications at each phase) and maintaining communication throughout the duration of the project and incorporating any relevant regulation requirements in the design.

3. Design Services:
   a. Civil Engineering:
      i. Site work for the road and utility infrastructure shall include demolition plans, site layout plans, grading, paving, fencing, drainage, erosion control measures, retaining walls, underground utility plans, utility profiles, vault plans and sections, details. Demolition plans will be provided as required.

   b. Electrical Power/Lighting Engineering:
      i. Electrical standard details, one-line diagrams, electrical site plans, lighting plans and details

Attachment H – Project Management

A. Project Management – prep and complete bi-weekly Progress Meetings for 21-months.

1. Issue meeting minutes with ACTION items listed within 5-working days after the meeting and work to resolve any ACTION items prior to the next meeting.
2. The meeting minutes will be expanded to include any new items at the beginning of each meeting.

B. GWA - B&C PZR Report Reviews

1. TGE has completed multiple reviews and provided comments on the B&C PZR report relative to the project site areas.

Exhibit C (18 of 2

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
CHANGE ORDER NO. 4

11/8/2017
Page 1 of 1

A	UGUM RESERVOIR SITE		TOTAL
	Engineering Services	$	18,890.00
	Survey Services	$	16,715.00
	Subconsultants	$	8,021.00
	Direct Expenses	$	267.25
	TOTAL - UGUM RESERVOIR SITE	**$**	**43,893.25**

B	EXISTING UGUM WATER PLANT SITE DRAINAGE		TOTAL
	Engineering Services	$	21,100.00
	Survey Services	$	14,775.00
	Subconsultants	$	4,011.00
	Direct Expenses	$	559.50
	TOTAL - EXISTING UGUM WATER PLANT SITE DRAINAGE	**$**	**40,445.50**

C	SANTA ROSA 2-PZR SITES		TOTAL
	Engineering Services	$	18,660.00
	Survey Services	$	12,005.00
	Subconsultants	$	8,594.00
	Direct Expenses	$	245.00
	TOTAL - SANTA ROSA 2-PZR SITES	**$**	**39,504.00**

D	SANTA ROSA PZR PIPELINE		TOTAL
	Engineering Services	$	29,655.00
	Survey Services	$	20,000.00
	Subconsultants	$	18,907.00
	Engineering Services	$	573.00
	TOTAL - SANTA ROSA PZR PIPELINE	**$**	**69,135.00**

E	SINIFA RESERVOIR SITE		TOTAL
	Engineering Services	$	6,745.00
	Survey Services	$	4,635.00
	Subconsultants	$	-
	Direct Expenses	$	101.50
	TOTAL - SINIFA RESERVOIR SITE	**$**	**11,481.50**

F	AGFAYAN BPS 4-ALTERNATIVE SITE REVIEW		TOTAL
	Engineering Services	$	25,960.00
	Survey Services	$	21,900.00
	Subconsultants	$	29,793.00
	Direct Expenses	$	531.00
	TOTAL - AGFAYAN BPS 4-ALTERNATIVE SITE REVIEW	**$**	**78,184.00**

G	AGFAYAN BPS 4-ALTERNATIVE SITES ROAD		TOTAL
	Engineering Services	$	66,645.00
	Survey Services	$	33,585.00
	Subconsultants	$	40,105.00
	Direct Expenses	$	1,641.00
	TOTAL - AGFAYAN BPS 4-ALTERNATIVE SITES ROAD	**$**	**141,976.00**

H	PROJECT MANAGEMENT		TOTAL
	Engineering Services	$	88,990.00
	Survey Services	$	-
	Subconsultants	$	24,063.00
	Direct Expenses	$	208.00
	TOTAL - PROJECT MANAGEMENT	**$**	**113,261.00**

TOTAL FEE - CHANGE ORDER NO. 4	**$**	**537,880.25**

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
UGUM RESERVOIR SITE

Exhibit C (19 of 26

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DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
1. Coordinate Property Boundary & Topographic Survey Maps		1.0		5.0					
2. Develop Concept Site Plan		1.0		8.0		8.0	32.0		
3. Coordinate Abbreviated Appraisal Report		4.0							
4. Develop Construction Cost Estimate		2.0		2.0					
5. Open Discussions with Landowner		2.0				16.0			
C. Design									
1. Develop Basis of Design Report		2.0	5.0	20.0		20.0	40.0		
Subtotal Hours	0.0	12.0	5.0	35.0	0.0	44.0	72.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$2,040.00	$825.00	$4,725.00	$0.00	$3,740.00	$7,560.00	$0.00	**$18,890.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research	1.0	5.0							
Control Survey	1.0		8.0						
Boundary Survey	1.0		24.0	20.0					
Consolidation 3-lots	1.0		8.0	16.0					
Topographic Survey & Map	2.0		24.0	40.0					
2.0 Land Acquisition									
Subtotal Hours	6.0	5.0	64.0	76.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$870.00	$425.00	$8,960.00	$6,460.00	$0.00	$0.00	$0.00	$0.00	**$16,715.00**

SUBCONSULTANTS				
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**	
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00	
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00	
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00	
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00	
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00	
6.0 Rider Levett Bucknall *(Cost Estimating)*	$3,500.00	100%	$3,500.00	
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$3,500.00	100%	$3,500.00	
Subtotal - Subconsultants			$7,000.00	
TGE Sub Admin Fee (10%)			$700.00	
GRT (4.17%)			$321.00	**$8,021.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	25	5	125	$0.50	$62.50	
Documents (Letter Size - 8.5x11)	25	5	125	$0.15	$18.75	
CD				$1.00	$0.00	
Subtotal - Reproduction					$81.25	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	7	1	$25.00	$175.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
Subtotal - Task A Direct Expenses				$256.25		
GRT (4.17%)				$11.00		**$267.25**

TOTAL - UGUM RESERVOIR SITE	$43,893.25

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Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
EXIST UGUM WATER PLANT SD

11/8/2017
Page 1 of 1

DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
1. Review TGE Drainage Report			1.0	2.0					
2. Site Review				16.0		16.0			
3. Drainage Concept Development - Submittal - Approval		2.0	5.0	16.0					
4. Drainage System Cost Estimate									
C. Design									
1. Drainage Design with PS&E (90% / 100%)		2.0	16.0	24.0		40.0	40.0		
Subtotal Hours	0.0	4.0	22.0	58.0	0.0	56.0	40.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$680.00	$3,630.00	$7,830.00	$0.00	$4,760.00	$4,200.00	$0.00	**$21,100.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research	1.0	5.0							
Control Survey			8.0						
Boundary Survey			16.0	20.0					
Topographic Survey & Map	1.0		40.0	40.0					
2.0 Land Acquisition									
Subtotal Hours	2.0	5.0	64.0	60.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$290.00	$425.00	$8,960.00	$5,100.00	$0.00	$0.00	$0.00	$0.00	**$14,775.00**

SUBCONSULTANTS				
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**	
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00	
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00	
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00	
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00	
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00	
6.0 Rider Levett Bucknall *(Cost Estimating)*	$3,500.00	100%	$3,500.00	
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00	
Subtotal - Subconsultants			$3,500.00	
TGE Sub Admin Fee (10%)			$350.00	
GRT (4.17%)			$161.00	**$4,011.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	15	15	225	$0.50	$112.50	
Documents (Letter Size - 8.5x11)	100	15	1500	$0.15	$225.00	
CD				$1.00	$0.00	
Subtotal - Reproduction					$337.50	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	8	1	$25.00	$200.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
Subtotal - Task A Direct Expenses				$537.50		
GRT (4.17%)				$22.00		**$559.50**

TOTAL - EXISTING UGUM WATER PLANT SITE DRAINAGE	$40,445.50

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Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
SANTA ROSA 2-PZR SITES

11/8/2017
Page 1 of 1

DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
1. Detail 4 - Install 8-inch Valve		1.0		1.0		2.0			
2. Detail 4 - Construct 1-Jumper				1.0		3.0			
3. Detail 5 - Install 8-inch Valve		1.0		1.0		3.0			
C. Design									
1. Develop Basis of Design Report		1.0		5.0					
2. Prepare construction drawings, specifications, cost estimates, construction		1.0		40.0		40.0	40.0		
schedule, supporting design calculations, list of required permits, etc.									
3. Design Services									
a. Civil Engineering		1.0		10.0		20.0			
Subtotal Hours	0.0	5.0	0.0	58.0	0.0	68.0	40.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$850.00	$0.00	$7,830.00	$0.00	$5,780.00	$4,200.00	$0.00	**$18,660.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research		5.0							
Control Survey			24.0						
Boundary Survey			16.0	20.0					
Topographic Survey & Map			16.0	24.0					
2.0 Land Acquisition									
Subtotal Hours	0.0	5.0	56.0	44.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$425.00	$7,840.00	$3,740.00	$0.00	$0.00	$0.00	$0.00	**$12,005.00**

SUBCONSULTANTS					
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**		
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00		
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00		
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$5,000.00	100%	$5,000.00		
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00		
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00		
6.0 Rider Levett Bucknall *(Cost Estimating)*	$2,500.00	100%	$2,500.00		
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00		
Subtotal - Subconsultants			$7,500.00		
TGE Sub Admin Fee (10%)			$750.00		
GRT (4.17%)			$344.00		**$8,594.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	5	15	75	$0.50	$37.50	
Documents (Letter Size - 8.5x11)	10	15	150	$0.15	$22.50	
CD				$1.00	$0.00	
Subtotal - Reproduction					$60.00	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	7	1	$25.00	$175.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
Subtotal - Task A Direct Expenses				$235.00		
GRT (4.17%)				$10.00		**$245.00**

TOTAL - SANTA ROSA 2-PZR SITES	$39,504.00

Exhibit C (22 of 2

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
SANTA ROSA PZR PIPELINE

11/8/2017
Page 1 of 1

DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
4. Detail 6 & 7 - Install 4,120lf of 12-inch pipe, Rt 1 in Yigo		1.0	5.0	5.0		10.0	20.0		
C. Design									
1. Develop Basis of Design Report			2.0	5.0					
2. Prepare construction drawings, specifications, cost estimates, construction		2.0		50.0		50.0	50.0		
schedule, supporting design calculations, list of required permits, etc.									
3. Design Services									
a. Civil Engineering		2.0		40.0		20.0			
Subtotal Hours	0.0	5.0	7.0	100.0	0.0	80.0	70.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$850.00	$1,155.00	$13,500.00	$0.00	$6,800.00	$7,350.00	$0.00	**$29,655.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research		24.0							
Control Survey			24.0						
Boundary Survey			40.0	20.0					
Topographic Survey & Map			40.0	20.0					
2.0 Land Acquisition									
Subtotal Hours	0.0	24.0	104.0	40.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$2,040.00	$14,560.00	$3,400.00	$0.00	$0.00	$0.00	$0.00	**$20,000.00**

SUBCONSULTANTS				
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**	
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00	
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00	
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$5,500.00	100%	$5,500.00	
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$6,500.00	100%	$6,500.00	
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00	
6.0 Rider Levett Bucknall *(Cost Estimating)*	$4,500.00	100%	$4,500.00	
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00	
Subtotal - Subconsultants			$16,500.00	
TGE Sub Admin Fee (10%)			$1,650.00	
GRT (4.17%)			$757.00	**$18,907.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	15	15	225	$0.50	$112.50	
Documents (Letter Size - 8.5x11)	50	15	750	$0.15	$112.50	
CD				$1.00	$0.00	
Subtotal - Reproduction					$225.00	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	13	1	$25.00	$325.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
Subtotal - Task A Direct Expenses				$550.00		
GRT (4.17%)				$23.00		**$573.00**

TOTAL - SANTA ROSA PZR PIPELINE	$69,135.00

Exhibit C (23 of 2

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
SINIFA RESERVOIR

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DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
Lot 2, Block 2, Tract 24404									
1. Owner Negotiations		1.0		1.0					
2. D/W Design				5.0			10.0		
3. Cost Estimate / Alternative Comparisons		1.0		2.0		10.0			
4. TCE Exhibit Sketch				1.0		2.0	5.0		
5. Perpetual Easement Exhibit Sketch		1.0		1.0		2.0	5.0		
Lot 3, Block 2, Tract 24404									
1. Cost Estimate / Alternative Comparisons		1.0		2.0		10.0			
2. TCE Exhibit Sketch				1.0		2.0			
Subtotal Hours	0.0	4.0	0.0	13.0	0.0	26.0	20.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$680.00	$0.00	$1,755.00	$0.00	$2,210.00	$2,100.00	$0.00	**$6,745.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research		5.0							
Control Survey			8.0						
Boundary Survey		1.0	8.0	4.0					
Topographic Survey & Map		1.0	8.0	4.0					
2.0 Land Acquisition									
Subtotal Hours	0.0	7.0	24.0	8.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$595.00	$3,360.00	$680.00	$0.00	$0.00	$0.00	$0.00	**$4,635.00**

SUBCONSULTANTS					
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**		
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00		
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00		
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00		
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00		
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00		
6.0 Rider Levett Bucknall *(Cost Estimating)*	$0.00	0%	$0.00		
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00		
		Subtotal - Subconsultants	$0.00		
		TGE Sub Admin Fee (10%)	$0.00		
		GRT (4.17%)	$0.00		**$0.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	3	10	30	$0.50	$15.00	
Documents (Letter Size - 8.5x11)	5	10	50	$0.15	$7.50	
CD				$1.00	$0.00	
			Subtotal - Reproduction		$22.50	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	3	1	$25.00	$75.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
			Subtotal - Task A Direct Expenses	$97.50		
			GRT (4.17%)	$4.00		**$101.50**

TOTAL - SINIFA RESERVOIR SITE	$11,481.50

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
AGFAYAN BPS, 4-ALT SITES

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11/8/2017
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DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
1. Coordinate Property Boundary & Topographic Survey Maps (4-lots)			2.0			10.0	16.0		
2. Develop Concept Site Plans (4-lots)		2.0		8.0		40.0	40.0		
3. Develop Road and Utility Service Concepts / Cost Estimate		1.0		8.0		10.0	10.0		
3. Coordinate Abbreviated Appraisal Report (4-lots)		5.0							
4. Develop Construction Cost Estimate (4-lots)		4.0				4.0			
5. Open Discussions with Landowners		4.0				8.0			
6. Install PRV				2.0		5.0	2.0		
C. Design									
1. Develop Basis of Design Report			2.0	20.0		10.0	5.0		
2. PRV Construciton Documents		2.0		5.0		10.0	5.0		
Subtotal Hours	0.0	18.0	4.0	43.0	0.0	97.0	78.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$3,060.00	$660.00	$5,805.00	$0.00	$8,245.00	$8,190.00	$0.00	**$25,960.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research		20.0							
Control Survey			40.0						
Boundary Survey			40.0	20.0					
Topographic Survey & Map			40.0	20.0					
2.0 Land Acquisition									
Subtotal Hours	0.0	20.0	120.0	40.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$1,700.00	$16,800.00	$3,400.00	$0.00	$0.00	$0.00	$0.00	**$21,900.00**

SUBCONSULTANTS					
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**		
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00		
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00		
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00		
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00		
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00		
6.0 Rider Levett Bucknall *(Cost Estimating)*	$14,000.00	100%	$14,000.00		
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$12,000.00	100%	$12,000.00		
		Subtotal - Subconsultants	$26,000.00		
		TGE Sub Admin Fee (10%)	$2,600.00		
		GRT (4.17%)	$1,193.00		**$29,793.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	12	10	120	$0.50	$60.00	
Documents (Letter Size - 8.5x11)	50	10	500	$0.15	$75.00	
CD				$1.00	$0.00	
			Subtotal - Reproduction		$135.00	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	15	1	$25.00	$375.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
			Subtotal - Task A Direct Expenses	$510.00		
			GRT (4.17%)	$21.00		**$531.00**

TOTAL - AGFAYAN BPS 4-ALTERNATIVE SITE REVIEW	$78,184.00

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
AGFAYAN BPS, 4-ALT SITES

EXHIBIT C (42 OF 2(

11/8/2017
Page 1 of 1

DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
1. Coordinate Property Boundary & Topographic Survey Maps (4-lots)		4.0				4.0			
2. Develop 2,000-ft Road and Utility Service Concepts / Cost Estimate		2.0		4.0		24.0	24.0		
3. Coordinate Geotechnical Investigation		4.0				4.0			
4. Develop 2,900-lf Road & Utility Concepts		1.0		10.0		10.0	40.0		
C. Design									
1. Develop Basis of Design Report				4.0		10.0	5.0		
2. Road Engineering & Plans		4.0		20.0		40.0	40.0		
3. Water line Engineering & Plans		2.0		40.0		60.0	40.0		
4. Coordinate OH Power Enginering & Plans		4.0		10.0			5.0		
5. Develop Technical Specifications				10.0		20.0			
6. Develop Cost Estimate & Schedules				5.0		20.0			
7. Design & 60%, 90% and 100% Submittals		12.0		24.0		60.0	60.0		
Subtotal Hours	0.0	33.0	0.0	127.0	0.0	252.0	214.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$5,610.00	$0.00	$17,145.00	$0.00	$21,420.00	$22,470.00	$0.00	**$66,645.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research		40.0							
Control Survey		5.0	24.0	10.0					
Boundary Survey		10.0	60.0	10.0					
Topographic Survey & Map		10.0	80.0	40.0					
2.0 Land Acquisition									
Subtotal Hours	0.0	65.0	164.0	60.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$5,525.00	$22,960.00	$5,100.00	$0.00	$0.00	$0.00	$0.00	**$33,585.00**

SUBCONSULTANTS					
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**		
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00		
2.0 Wixon & Associates, LLC *(Electrical)*	$8,000.00	100%	$8,000.00		
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$12,500.00	100%	$12,500.00		
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$10,000.00	100%	$10,000.00		
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00		
6.0 Rider Levett Bucknall *(Cost Estimating)*	$4,500.00	100%	$4,500.00		
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	100%	$0.00		
Subtotal - Subconsultants			$35,000.00		
TGE Sub Admin Fee (10%)			$3,500.00		
GRT (4.17%)			$1,605.00		**$40,105.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)	50	5	250	$1.00	$250.00	
Drawings (Tabloid Size - 11x17)	50	15	750	$0.50	$375.00	
Documents (Letter Size - 8.5x11)	200	15	3000	$0.15	$450.00	
CD				$1.00	$0.00	
Subtotal - Reproduction					$1,075.00	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	20	1	$25.00	$500.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
Subtotal - Task A Direct Expenses				$1,575.00		
GRT (4.17%)				$66.00		**$1,641.00**

TOTAL - AGFAYAN BPS 4 ALTERNATIVE SITE REVIEW	**$141,976.00**

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
PROJECT MANAGEMENT

EXHIBIT C (49 of 70)

11/6/2019
Page 1 of 1

DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
Project Management									
1.0 Prep / Attend Bi-weekly Meetings / Webex (21-mos)	24.0	168.0	168.0			168.0	60.0	60.0	
2.0 Review B&C PZR Report / Provide Comments		20.0	10.0						
Subtotal Hours	24.0	188.0	178.0	0.0	0.0	168.0	60.0	60.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$4,200.00	$31,960.00	$29,370.00	$0.00	$0.00	$14,280.00	$6,300.00	$2,880.00	**$88,990.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research									
Control Survey									
Boundary Survey									
Topographic Survey & Map									
2.0 Land Acquisition									
Subtotal Hours	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**

SUBCONSULTANTS					
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**		
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$21,000.00	100%	$21,000.00		
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00		
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00		
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00		
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00		
6.0 Rider Levett Bucknall *(Cost Estimating)*	$0.00	0%	$0.00		
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00		
Subtotal - Subconsultants			$21,000.00		
TGE Sub Admin Fee (10%)			$2,100.00		
GRT (4.17%)			$963.00		**$24,063.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	5	50	250	$0.50	$125.00	
Documents (Letter Size - 8.5x11)	5	100	500	$0.15	$75.00	
CD				$1.00	$0.00	
Subtotal - Reproduction					$200.00	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	0	1	$25.00	$0.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
Subtotal - Task A Direct Expenses				$200.00		
GRT (4.17%)				$8.00		**$208.00**

TOTAL - PROJECT MANAGEMENT	$113,261.00

TG ENGINEERS, PC

July 1, 2020

Mr. Miguel Bordallo, PE
General Manager
Guam Waterworks Authority
Gloria B. Nelson Public Service Building, Room 202
688 Route 15
Mangilao, Guam 96913

ATTN: Mr. Brett Railey, P.E., Acting Chief Engineer

RE: PW 09-11 Northern and Southern Guam Reservoirs: GWA Project No. W14-007-BND, Change Order No. 5 – Fee Proposal

Hafa adai Brett,

TG Engineers, PC (TGE) is pleased to submit our updated Scope of Work and Fee Proposal for the reservoir project Change Order No. 5. We are submitting the proposal file in pdf format by email.

1.0 PROJECT DESCRIPTION

TG Engineers, PC (TGE) is under contract with the Guam Waterworks Authority (GWA) for the Design of Northern and Southern Guam Reservoirs. The work completed to date varies for each site and is listed as follows.

- Ugum – Basis of Design Report
- Santa Rita – Construction started
- Santa Rosa – Construction started
- Sinifa – Construction started
- Inarajan Reservoir – Cancelled
- Agfayan Booster Pump Station – New Facility, pending the site location
- Inarajan Booster Pump Station – BOD complete and pending the Agfayan BOD to combine projects

We note Change Orders 1.0 – 4.0 have been processed and include the following.

- Change Order No. 1 – processed for land acquisition support services.
  No schedule change.
- Change Order No. 2 – processed for additional engineering services.
  Schedule extended 387-days to 4/14/2017.
- Change Order No. 3 – processed for a time extension.
  Schedule extended 630-days to 1/04/2019.
- Change Order No. 4 – processed for additional engineering services.
- Change Order No. 5 (PRV Additions, March 2019) – cancelled.
- Change Order No. 5 is proposed with the Scope of Work as follows.

2.0 CONTRACT TIME EXTENSION

We propose to extend the contract 714-Calendar Days from Saturday 1/5/2019 to a new completion date of Friday 12/18/2020. It is estimated this duration will allow the completion of the Engineering Design Phase services included in the contract.

3.0 SCOPE OF SERVICES

The Ugum Reservoir will require a pile foundation based on the poor quality soils at the site. The scope to add the pile foundation to the design is included.

An additional 24-months of Progress Meetings are proposed for the contract extension to December 18, 2020.

See the TGE Scope of Services attached.

4.0 FEES

We propose to complete this work for the lump sum fee of $128,415.00. See the TGE Fee Spreadsheets attached.

TASK	FEE
Ugum Pile Foundations	$48,100.00
Progress Meetings (23-mos)	$80,315.00
GRAND TOTAL	$128,415.00

We will invoice monthly according to the percent completed.

5.0 SCHEDULE AND DELIVERABLES

The schedule is planned as follows.

- Ugum PS&E ready to bid by August 31, 2020
- Inarajan PS&E ready to bid by December 18, 2020
- Agfayan PS&E ready to bid by December 18, 2020

6.0 ASSUMPTIONS

6.1 The Scope of Work was defined through discussions in team Progress Meetings with GWA and email correspondence between Mr. Garrett Yeoh and the TGE Team in October 2019 – May 2020.

6.2 All other tasks remain unchanged.

We look forward to your favorable review and reaching an agreement on the Scope and Fee. Please call Shirley Itliong or myself directly at 647-0808 with any questions.

Si Yu'os Ma'ase,
TG Engineers, PC

Tor Gudmundsen, PE
President

Attachments:
Scope of Work
Dated 7/01/20, 1-page

TGE Fee Proposal Spreadsheet
Dated 7/01/20, 3-pages

MBI Fee Proposal Spreadsheet
Dated 5/31/20, 1-page

TG Engineers, PC

DESIGN OF NORTHERN AND SOUTHERN GUAM RESERVOIRS
CHANGE ORDER NO. 5 – SCOPE OF WORK

1. INTRODUCTION

TG Engineers, PC (TGE) is under contract with the Guam Waterworks Authority (GWA) for the Design of Northern and Southern Guam Reservoirs.

2. SCOPE OF SERVICES

2.1 PROJECT MANAGEMENT SERVICES

The current bi-weekly meeting task was completed on January 04, 2019. We propose extending the Bi-weekly progress meetings for a 24-month time extension, ending Friday, 12/18/2020. Based on meeting records, there were 19-meetings held in 2019 and we estimate 16-meetings to complete the contract scope by December 2020.

The scope includes the following tasks.

a. Meeting Agenda and document preparation.
b. Meeting attendance.
c. Writing and issuing the Meeting Minutes within 5-working days after the meeting.
d. Completing ACTION item tasks in preparation for the next meeting.

2.2 UGUM RESERVOIR SITE – PILE FOUNDATION

A concrete pile foundation will be added to the foundation design for the Ugum Reservoir. The pile foundation requirement was determined when the Geotechnical Investigation was completed and poor quality soils were found at the project site. The Geotechnical borings indicated deep, soft and weak subgrade soils. The large diameter tank is also close to existing slopes.

This results in a large stress influence area together with very high lateral loads requiring the loads to be transferred below the slope plane with the use of piles.

ATTACHMENTS: None

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
CHANGE ORDER NO. 5

7/1/2020
Page 1 of 1

A	UGUM RESERVOIR SITE		TOTAL
	Engineering Services	$	3,700.00
	Survey Services	$	-
	Subconsultants	$	44,058.00
	Direct Expenses	$	342.00
	TOTAL - UGUM RESERVOIR SITE	**$**	**48,100.00**

B	EXISTING UGUM WATER PLANT SITE DRAINAGE		TOTAL
	TOTAL - EXISTING UGUM WATER PLANT SITE DRAINAGE	**$**	-

C	SANTA ROSA 2-PZR SITES		TOTAL
	TOTAL - SANTA ROSA 2-PZR SITES	**$**	-

D	SANTA ROSA PZR PIPELINE		TOTAL
	TOTAL - SANTA ROSA PZR PIPELINE	**$**	-

E	SINIFA RESERVOIR SITE		TOTAL
	TOTAL - SINIFA RESERVOIR SITE	**$**	-

F	AGFAYAN BPS 4-ALTERNATIVE SITE REVIEW		TOTAL
	TOTAL - AGFAYAN BPS 4-ALTERNATIVE SITE REVIEW	**$**	-

G	AGFAYAN BPS 4-ALTERNATIVE SITES ROAD		TOTAL
	TOTAL - AGFAYAN BPS 4-ALTERNATIVE SITES ROAD	**$**	-

H	PROJECT MANAGEMENT		TOTAL
	Engineering Services	$	61,384.00
	Survey Services	$	-
	Subconsultants	$	18,526.00
	Direct Expenses	$	405.00
	TOTAL - PROJECT MANAGEMENT	**$**	**80,315.00**

TOTAL FEE - CHANGE ORDER NO. 5	**$**	**128,415.00**

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
CO#5 UGUM PILE FNDN

7/1/2020
Page 1 of 1

DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
Pile Foundation Design Management	2.0	10.0	10.0						
Subtotal Hours	2.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$350.00	$1,700.00	$1,650.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$3,700.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys (4-New Locations)									
Property Research									
Control Survey									
Boundary Survey									
Topographic Survey & Map									
Subtotal Hours	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**

SUBCONSULTANTS

	Subconsultant	Total Fee	% This Task	Task Fee	
1.0	MBI Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$38,050.00	100%	$38,050.00	
2.0	Wixon & Associates, LLC *(Electrical)*	$0.00	100%	$0.00	
3.0	Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00	
4.0	Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00	
5.0	PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00	
6.0	Rider Levett Bucknall *(Cost Estimating)*	$0.00	100%	$0.00	
7.0	Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	100%	$0.00	
			Subtotal - Subconsultants	$38,050.00	
			TGE Sub Admin Fee (10%)	$3,805.00	
			GRT (5.263%)	$2,203.00	**$44,058.00**

DIRECT EXPENSES

		Sheets	Sets	Total Pages	Unit Cost	Subtotal	
1.0	Reproduction						
	Drawings (Full Size - 24x36)				$1.00	$0.00	
	Drawings (Tabloid Size - 11x17)	20	8	160	$0.50	$80.00	
	Documents (Letter Size - 8.5x11)	100	8	800	$0.15	$120.00	
	CD				$1.00	$0.00	
				Subtotal - Reproduction		$200.00	

		Days	Crews	Rate	Subtotal		
2.0	Vehicles/Fuel						
	Survey Field Crews	5	1	$25.00	$125.00		
3.0	Miscellaneous	0	0	$0.00	$0.00		
				Subtotal - Task A Direct Expenses	$325.00		
				GRT (5.263%)	$17.00		**$342.00**

TOTAL: UGUM PILE FOUNDATION	**$48,100.00**

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
CO#5 PROJECT MANAGEMENT

7/1/2020
Page 1 of 1

	DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
	ENGINEERING SERVICES									
	Project Management									
1.0	Prep / Attend Bi-weekly Meetings / Webex (Jan 2019 - Nov 2020 = 23-mos)									
	Meetings (Jan - Dec) 2019 = 19	10.0	96.0	96.0			10.0	10.0	10.0	
	Meetings (Jan - Dec) 2020 = 16	10.0	64.0	64.0			8.0	8.0	8.0	
	Subtotal Hours	20.0	160.0	160.0	0.0	0.0	18.0	18.0	18.0	
	Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
	Subtotal Direct Labor	$3,500.00	$27,200.00	$26,400.00	$0.00	$0.00	$1,530.00	$1,890.00	$864.00	**$61,384.00**

	DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
	SURVEY SERVICES									
1.0	Site Surveys									
	Property Research									
	Control Survey									
	Boundary Survey									
	Topographic Survey & Map									
2.0	Land Acquisition									
	Subtotal Hours	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
	Subtotal Direct Labor	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**

	SUBCONSULTANTS				
	Subconsultant	**Total Fee**	**% This Task**	**Task Fee**	
1.0	MBI Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$16,000.00	100%	$16,000.00	
2.0	Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00	
3.0	Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00	
4.0	Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00	
5.0	PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00	
6.0	Rider Levett Bucknall *(Cost Estimating)*	$0.00	0%	$0.00	
7.0	Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00	
			Subtotal - Subconsultants	$16,000.00	
			TGE Sub Admin Fee (10%)	$1,600.00	
			GRT (5.263%)	$926.00	**$18,526.00**

	DIRECT EXPENSES						
1.0	Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
	Drawings (Full Size - 24x36)				$1.00	$0.00	
	Drawings (Tabloid Size - 11x17)	5	100	500	$0.50	$250.00	
	Documents (Letter Size - 8.5x11)	5	180	900	$0.15	$135.00	
	CD				$1.00	$0.00	
				Subtotal - Reproduction		$385.00	
2.0	Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
	Survey Field Crews	0	1	$25.00	$0.00		
3.0	Miscellaneous	0	0	$0.00	$0.00		
				Subtotal - Task A Direct Expenses	$385.00		
				GRT (5.263%)	$20.00		**$405.00**

TOTAL - PROJECT MANAGEMENT	**$80,315.00**

GWA - UGUM RESERVOIR 5.31.20				
PILE FOUNDATION DESIGN CHANGE ORDER				
Task Description	Project Mgr/Str Engineer	Structural Engineer	CAD Designer	Cost
Hourly Rate	$ 235.00	$ 210	$ 150	
Structural design/review/coordination	48	96	72	$ 42,240
Specifications	6			$ 1,410
Subtotal	54	96	72	$ 43,650
Deduction for continuous footing	8	12	8	$ (5,600)
			Total	$ 38,050

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issues for Decision

Resolution No. 34-FY2020
Relative to Approval of Fund Increase to the Construction Management Contract for the Route 4 Relief Sewerline Rehabilitation and Replacement Project S15-006-EPA

What is the project's objective and is it necessary and urgent?
The objective of this project is to improve the sewer collection system, which included repairing and/or replacing sewer manholes and over 4,200 linear feet of gravity sewer line along Route 4 and Route 1 in the village of Agana. These sewer infrastructure elements have been identified by GWA, through an SSES investigation, to be subjected to either inactivity due to incomplete construction work or excessive infiltration and inflow (I&I). Successful completion of this project will result in proper maintenance and operation of the sewer collection system and USEPA agrees that efforts to rehabilitate, repair or replace the sewer line are necessary. One of two construction contracts to fulfill the scope of work of this project has been completed as of March 2020. The second contract, that with PPBC, continues and is scheduled to be completed by the end of September with the bulk of construction completed by the end of August. The construction management services are required for the remainder of the project.

Where is the project located?
This project is located along Route 4 and Route 1, from the base of the Sinajaña hill in Hagatña to the Hagatña Main Pump Station. Construction activities will be limited to the government easements of the sewer infrastructure elements.

How much will it cost?
GWA management is seeking funding increase for the construction management services contract with EMPSCO for an additional not-to-exceed amount of Eighty-Two Thousand Forty-Two Dollars and Twenty Cents ($82,042.20), which brings the total authorized funding to a maximum not-to-exceed amount of One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95).

When will it be completed?
The construction is estimated to be completed by September 28, 2020.

What is the funding source?
The funding for this project will be from the USEPA Title 2 Construction Grants Program and, if necessary, GWA Bond Funds with a maximum project budget of One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95).

The RFP/BID responses (if applicable):
N/A

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 34-FY2020

RELATIVE TO APPROVAL OF FUND INCREASE TO THE CONSTRUCTION MANAGEMENT CONTRACT FOR THE ROUTE 4 RELIEF SEWERLINE REHABILITATION AND REPLACEMENT PROJECT S15-006-EPA

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA received a grant from USEPA under the Title 2 Construction Grants Program to improve the sewer collection system, which included over 4,200 linear feet of gravity sewer line along Route 4 and Route 1, from the base of the Sinajaña hill in Hagatña to the Hagatña Main Pump Station; and

WHEREAS, the gravity sewer line noted above has a section that has been inactive since its original installation due to incomplete construction work, and sections that need repair due to high infiltration and inflow (I/I), and the intent of this project is to rehabilitate, repair or replace these sections; and

WHEREAS, in September 2018 GWA management executed two separate construction contracts (Schedule A and Schedule B) to rehabilitate the Route 4 Relief Sewerline, the first (Schedule A) with ProPacific Builder Corporation (PPBC), and the second (Schedule B) with Insituform Technologies LLC (Insituform); and

WHEREAS, to provide construction management (CM) services on both construction contracts, in June 2018 GWA management entered into a contract with EMPSCO Engineering

Consultants (EMPSCO) in the amount of Seven Hundred Two Thousand Six Hundred Seventy-Eight Dollars and Thirteen Cents ($702,678.13); and

WHEREAS, while both construction contractors received the Notice to Proceed in September 2018, the start of construction was delayed due to complications with obtaining approvals during the permitting process; and

WHEREAS, construction by Insituform Technologies LLC was substantially completed in March 2020; and

WHEREAS, construction by ProPacific Builder Corporation continues but is scheduled to be completed by the end of September 2020, and the CM services are anticipated to be required through September 2020; and

WHEREAS, GWA has amended the CM contract with EPMSCO to provide continued construction management services on both construction contracts through June 2020 on a Time and Materials basis, as authorized by Resolution 14-FY2020; and

WHEREAS, GWA has negotiated Change Order No.2 with EPMSCO, shown in Exhibit A, to provide continued construction management services on both construction contracts through September 2020 on a Time and Materials basis; and

WHEREAS, GWA Management seeks CCU approval of EMPSCO's Change Order No. 2 fee proposal for additional construction management services funding with a not-to-exceed amount of Eighty-Two Thousand Forty Two Dollars and Twenty Cents ($82,042.20), to bring the total authorized funding amount to a maximum not-to-exceed amount of One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95); and

WHEREAS, funding for this project will be from the USEPA Title 2 Construction Grants Program and, if necessary, GWA Bond funds with an estimated project budget One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95);

DRAFT

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU hereby approves the funding increase for construction management services of an additional not-to-exceed amount of One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95).
3. The CCU hereby further approves the total funding authorization for the contract with EMPSCO to an amount not-to-exceed One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95).
4. The CCU hereby further approves management to duly notify the PUC that this contract will now exceed One Million Dollars ($1,000,000.00), funded primarily by USEPA grants and, if necessary, GWA Bond Funds.

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by: Attested by:

_____ _____

JOSEPH T. DUENAS **MICHAEL T. LIMTIACO**
Chairperson Secretary

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SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

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DRAFT

Exhibit A

ENGINEERING MANAGEMENT & PLANNING SERVICES CORPORATION
1998 Army Drive Route 16, 2/F EMPSCO Bldg., Dededo, Guam 96929 • P.O. Box 21794 GMF, Barrigada, Guam 96921 • Tel No. 1.671.638.4716/5716 • Fax No. 1.671. 638.2136 • Email:empsco@guam.net

June 30, 2020

Thomas F. Cruz, P.E.
Chief Engineer
Guam Waterworks Authority
Gloria B. Nelson Public Service Building
688 Route 15 Mangilao, Guam 96913

Attention: **John Riegel, P.E.**
Senior Manager
Brown & Caldwell

Project: **GWA Project no. S15-006-EPA, Route 4 Relief Sewer line Rehabilitation and Replacement**

Subject: **Proposed Change Order No.2 – Time Extension for Construction Management Services**

Gentlemen,

We would like to submit our fee proposal of **Eighty Two Thousand Forty Two and 20/100 U.S. Dollars ($82,042.20)** to cover the additional time extension of 90 calendar days based on projected PBBC's construction work completion.

The extended CM efforts will involve to the following Project Management, Project Engineering/Inspection and Administration tasks during the additional time period:

1. Prepare and continue project correspondence, reports and inspection documentation as required to monitor project activities and foresee issues during construction.
2. Continue conduct project meetings as required for clear communication of contract requirements and adherence to schedules.
3. Track all requests for information and continue to assist GWA with the development of a response to RFIs regarding any aspect of the contract documents.
4. Notify GWA regarding any issues that arise during construction of the project that could result in claims and/or disputes.
5. Provide and ensure that the project is efficiently managed and constructed according to the terms of the contract.
6. Provide a full time competent on-site inspector to observe all activities of other Contractor on-site to ensure that the work is accomplished by the Contract documents and applicable permits.

Please give us a call or contact us via email if you have questions regarding this proposal.
Thank you very much.

Very Truly,

Reynaldo M C. Arce, P.E.
Principal Engineer
EMPSCO Engineering Consultants
Attached: Fee Proposal Breakdown

EMPSCO ENGINEERING CONSULTANTS

GUAM WATERWORKS AUTHORITY

Construction Management Services for GWA Route 4 Sewerline Rehabilitation and Replacement Project
CM Proposed Change No. 2 - 90 CD Time Extension (from July 1, 2020 to September 30, 2020)
June 2020

SUMMARY

ORIGINAL CONTRACT AMOUNT	$	702,678.13
APPROVED CHANGE ORDER (CO No.1)	$	230,759.62
CURRENT CONTRACT PRICE INCLUDING APPROVED CO	$	933,437.75
PROPOSED CHANGE ORDER (CO No.2)	**$**	**82,042.20**
REVISED CONTRACT AMOUNT		

Item	Task Description	ORIGINAL CONTRACT AMOUNT	APPROVED CHANGE ORDER (CO No. 1)	PROPOSED CHANGE ORDER (PCO NO. 2)	
	CONSTRUCTION PHASE				
	Project Controls				
1	Project Correspondences	$ 27,158.28	$ 13,514.20	$ 5,728.71	
2	Submittals	$ 34,630.67	$ -	$ -	
3	Payment requests	$ 31,477.28	$ -	$ -	
4	Project Meetings	$ 58,458.00	$ 27,280.40	$ 2,909.76	
5	Request for Information	$ 25,078.88	$ 13,180.16	$ 5,585.55	
6	Claims and Disputes	$ 25,078.88	$ 14,453.60	$ 6,131.31	
7	Project Records	$ 26,898.08	$ 14,453.60	$ 6,131.31	
	subtotal	**$ 228,780.07**	**$ 82,881.96**	**$ 26,486.64**	
	Construction Inspection				
8	Onsite Inspections/Site Issues	$ 291,834.88	$ 137,325.86	$ 54,355.56	
9	Acceptance of Work	$ 11,569.28	$ 8,451.80	$ -	
10	Stop Work Order	$ -	$ -	$ -	
	subtotal	**$ 303,404.16**	**$ 145,777.66**	**$ 54,355.56**	
	Change Orders				
11	Change Order Review	$ 17,293.61	$ -	$ -	
12	Design Change	$ 13,734.50	$ -	$ -	
13	DCVR	$ 13,881.71	$ -	$ -	
14	Negotiations	$ 14,617.76	$ -	$ -	
15	Change Order Documents	$ 16,030.04	$ -	$ -	
	subtotal	**$ 75,557.62**	**$ -**	**$ -**	
	Construction Survey				
16	Pipeline Alignments	$ 4,842.92	$ -	$ -	
17	Elevations	$ 4,842.92	$ -	$ -	
	subtotal	**$ 9,685.84**	**$ -**	**$ -**	
	Project Close-out				
18	Timely/Substantial Completion	$ 19,692.62	$ -	$ -	
19	Punch List Development	$ 9,941.28	$ -	$ -	
20	Inspections	$ 14,409.72	$ -	$ -	
21	Training & Warranty	$ -	$ -	$ -	
	subtotal	**$ 44,043.62**	**$ -**	**$ -**	
	SUBTOTAL - CONSTRUCTION PHASE	**$ 661,471.31**	**$ 228,659.62**	**$ 80,842.20**	

EMPSCO ENGINEERING CONSULTANTS

GUAM WATERWORKS AUTHORITY

Construction Management Services for GWA Route 4 Sewerline Rehabilitation and Replacement Project
CM Proposed Change No. 2 - 90 CD Time Extension (from July 1, 2020 to September 30, 2020)
June 2020

SUMMARY

ORIGINAL CONTRACT AMOUNT	$	702,678.13
APPROVED CHANGE ORDER (CO No.1)	$	230,759.62
CURRENT CONTRACT PRICE INCLUDING APPROVED CO	$	933,437.75
PROPOSED CHANGE ORDER (CO No.2)	**$**	**82,042.20**
REVISED CONTRACT AMOUNT		

Item	Task Description	ORIGINAL CONTRACT AMOUNT	APPROVED CHANGE ORDER (CO No. 1)	PROPOSED CHANGE ORDER (PCO NO. 2)	
	POST CONSTRUCTION				
1	Final Report	$ 7,620.90	$ -	$ -	
2	Project Records	$ 7,257.06	$ -	$ -	
3	Record Drawings	$ 8,815.86	$ -	$ -	
	subtotal	**$ 23,693.82**	**$ -**	**$ -**	
	EXPENSE ITEMS				
	CONSTRUCTION PHASE				
1	Mailing & Expediting	$ -	$ -	$ -	
2	Report Reproduction	$ 2,800.00	$ -	$ -	
3	Drawing Reproduction	$ 1,000.00	$ -	$ -	
4	Photo film dev	$ -	$ -	$ -	
5	Fuel	$ 4,000.00	$ 2,100.00	$ 1,200.00	
6	Office Supplies	$ 600.00	$ -	$ -	
7	Digital Cameras	$ -	$ -	$ -	
8	Testing	$ 8,363.00	$ -	$ -	
	POST CONSTRUCTION				
1	Mailing & Expediting	$ -	$ -	$ -	
2	Report Reproduction	$ 250.00	$ -	$ -	
3	Record Drawing Reproduction	$ 500.00	$ -	$ -	
	subtotal	**$ 17,513.00**	**$ 2,100.00**	**$ 1,200.00**	
	Grand Total	**$ 702,678.13**	**$ 230,759.62**	**$ 82,042.20**	

Construction Management Services for GWA Route 4 Sewerline Rehabilitation and Replacement Project
CM Proposed Change No. 2 - 90 CD Time Extension

Item	Task Description	Principal Engineer	Project Manager	Project Engineer	Project Inspector	Secretary/Clerk	CADD Operator	3-man survey crew	PROPOSED CHANGE ORDER NO. 2 (From July 1, 2020 up to September 30, 2020)
		$ 147.21	$ 147.21	$ 112.58	$ 95.27	$ 45.48	$ 57.42	$ 1,210.73	
	CONSTRUCTION PHASE								
	Project Controls								
1	Project Correspondences	3.00	12.00	24.00		18.00			$ 5,728.71
2	Submittals								$ -
3	Payment requests								$ -
4	Project Meetings	-	12.00	-	12.00				$ 2,909.76
5	Request for Information	3.00	12.00	30.00					$ 5,585.55
6	Claims and Disputes	3.00	12.00	30.00		12.00			$ 6,131.31
7	Project Records	3.00	12.00	30.00		12.00			$ 6,131.31
	subtotal								**$ 26,486.64**
	Construction Inspection								
8	Onsite Inspection	-	12.00	-	552.0				$ 54,355.56
9	Acceptance of Work	-	-	-					$ -
10	Stop Work Order								$ -
	subtotal								**$ 54,355.56**
	Change Orders								
11	Change Order Review								$ -
12	Design Change								$ -
13	DCVR								$ -
14	Negotiations								$ -
15	Change Order Documents								$ -
	subtotal								**$ -**
	Construction Survey								
16	Pipeline Alignments								$ -
17	Elevations								$ -
	subtotal								**$ -**
	Project Close-out								
18	Timely Completion								$ -
19	PunchList Review & Verification								$ -
20	Inspections								$ -
21	Training & Warranty								$ -
	subtotal								**$ -**
	SUBTOTAL - CONSTRUCTION PHASE								**$ 80,842.20**
	POST CONSTRUCTION								

Item	Task Description	Principal Engineer	Project Manager	Project Engineer	Project Inspector	Secretary/Clerk	CADD Operator	3-man survey crew	PROPOSED CHANGE ORDER NO. 2 (From July 1, 2020 up to September 30, 2020)
		$ 147.21	$ 147.21	$ 112.58	$ 95.27	$ 45.48	$ 57.42	$ 1,210.73	
1	Final Report								$ -
2	Project Records								$ -
3	Record Drawings								$ -
	subtotal								$ -
	EXPENSE ITEMS								
	CONSTRUCTION PHASE								
1	Mailing & Expediting								$ -
2	Report Reproduction								$ -
3	Drawing Reproduction								$ -
4	Photo film dev								$ -
5	Fuel								$ 1,200.00
6	Office Supplies								$ -
7	Digital Cameras								$ -
8	Testing								$ -
	subtotal								**$ 1,200.00**
	Grand Total								**$ 82,042.20**

GUAM WATERWORKS AUTHORITY

Management Report
GWA CCU Work Session, July 22, 2020



Management Update

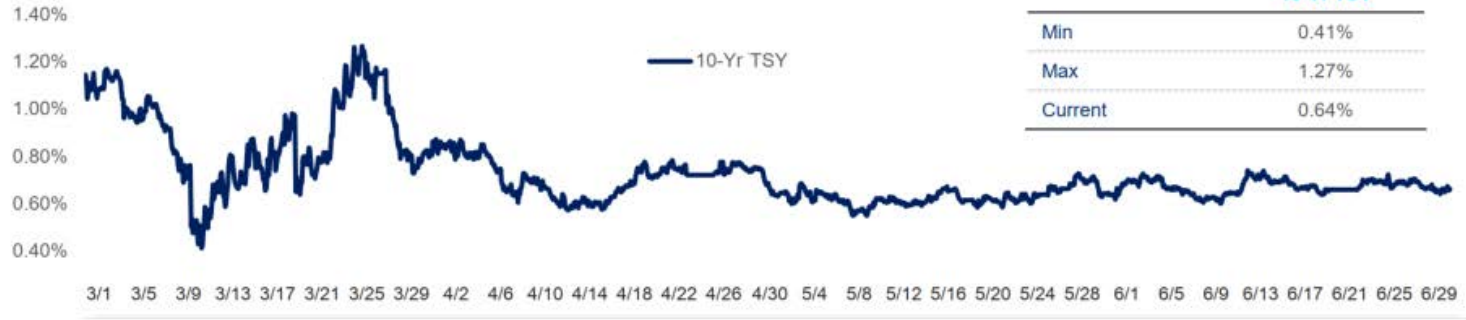
- **Series 2020B Bonds – Taxable Refunding Preliminary Information**
  - Estimated Refunding Par Amount: $142,595,000
  - Estimated PV Savings (as of Jul 16): $10,400,000
  - Estimated All-in TIC: 3.76%
  - Estimated Annual Debt Service Savings: $1,276,000 to $1,781,000 for FY2021 to FY2027
  - Projected Sale Date: August 11/12, 2020
  - Projected Closing Date: August 19/20, 2020
- Market Conditions (based on information from Citi)
  - COVID-19 pandemic closed the municipal bond market for several weeks
  - April saw signs of market stabilization, but all issuances were "AA" rated credits or higher
  - Corporate taxable issuers starting issuing debt in record amounts beginning in April 2020 to weather COVID-19 pandemic
  - Municipal markets were slower to recover, as investors were unsure how governments would be impacted by the pandemic
  - As corporate credit spreads tightened throughout April and May, investors starting buying municipal bonds, which helped drive the taxable municipal rates lower
  - This caused taxable municipal issuances to surge in June, which saw 800%+ increase in new issue taxable supply compared to 2019
  - Improvement in market conditions is projected to allow for savings similar to pre-COVID-19 estimates for GWA Refunding

Taxable Market Overview

Treasury rates have stabilized following the onset of the COVID-19 Pandemic

10-Year MMD and TSY

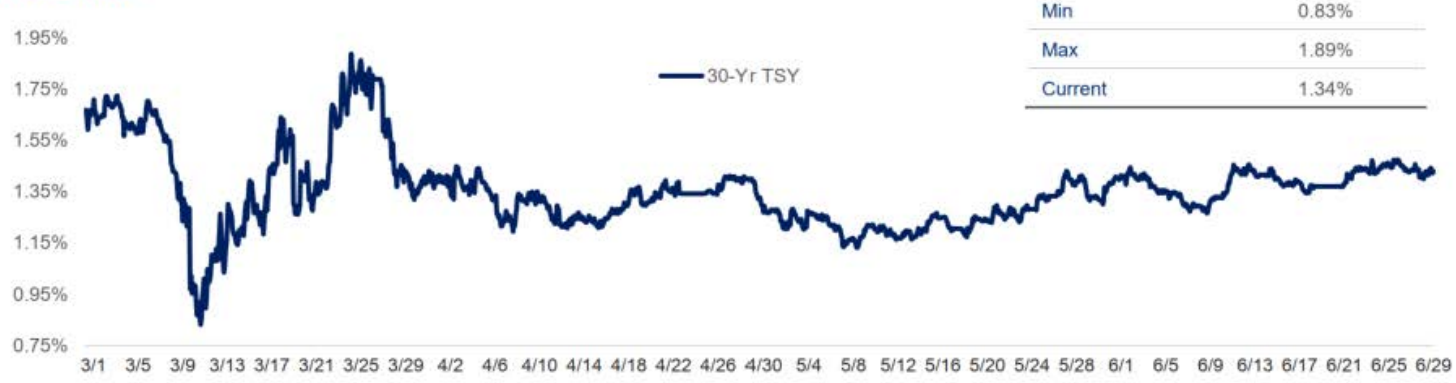
3/1/20 – 7/1/20



	10-Yr TSY
Min	0.41%
Max	1.27%
Current	0.64%

30-Year MMD and TSY

3/1/20 – 7/1/20



	30-Yr TSY
Min	0.83%
Max	1.89%
Current	1.34%

1. Citi Velocity as of market close on July 10, 2020

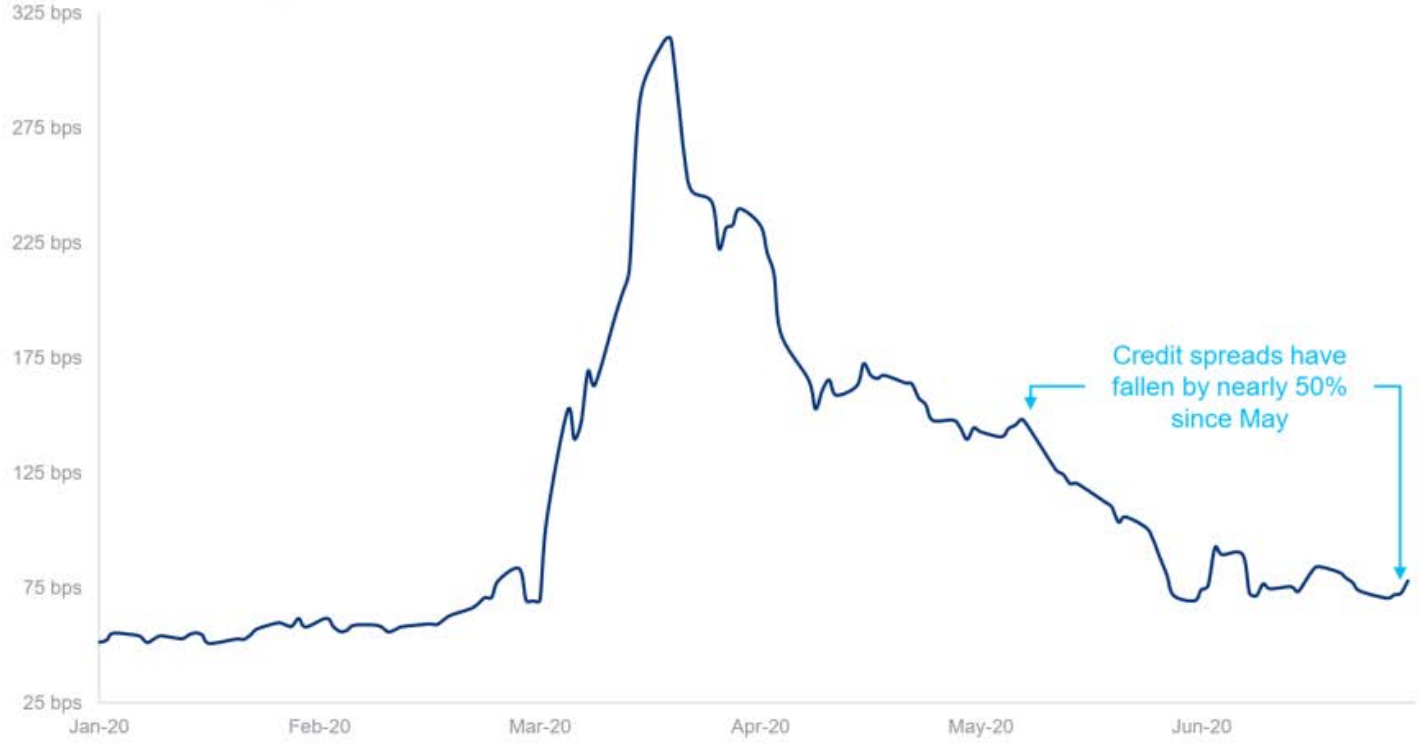
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Investment Grade Taxable Credit Spreads have Tightened

Since March 2020, taxable investment grade credit spreads have declined by more than 230 bps

USBIG Investment Grade Index Spread to 30-Year Treasury
April 10, 2020 to July 10, 2020



Source: Citi Velocity

3

Municipal Supply

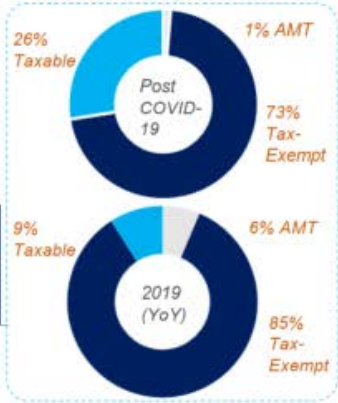
Municipal supply has returned to more normalized levels with June supply rising +34% YoY after the market effectively closed amid COVID-19 volatility.

Municipal Supply Returns to More Normalized Levels as Issuance Dynamics Improve

Past 6 Months Weekly Municipal Supply



Tax-Status Breakdown



Supply Summary ($MM)	2020 YTD	2019 YTD	YoY Change
Tax-Exempt	147,142	147,812	-0.5%
Taxable	56,222	15,928	+253.0%
AMT	2,239	10,004	-77.6%
Total	205,603	173,744	+18.3%

2020 Supply Outpaces 2019

Total Monthly Supply 2018-2020YTD

March 2020 supply dropped -33% YoY amid COVID-19 volatility

2020 YTD	$205.6bn
2019 Total	$422.1bn
Volume YoY	+18.3%

Supply driven by taxable volume



	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Δ '19	16%	47%	6%	-11%	-17%	10%	8%	16%	45%	52%	66%	80%
Δ '20	30%	59%	-33%	2%	1%	34%						

Taxable Supply Advances into 2020

Monthly Taxable Supply 2018-2020YTD

2020 YTD	$56.2bn
2019 Total	$70.8bn
Volume YoY	+253.0%



	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Δ '19	28%	171%	105%	-49%	-10%	3%	-3%	127%	225%	730%	173%	466%
Δ '20	171%	489%	-6%	222%	101%	848%						

Source: SDC as of July 02, 2020. Does not include Corporate CUSIP supply.

5

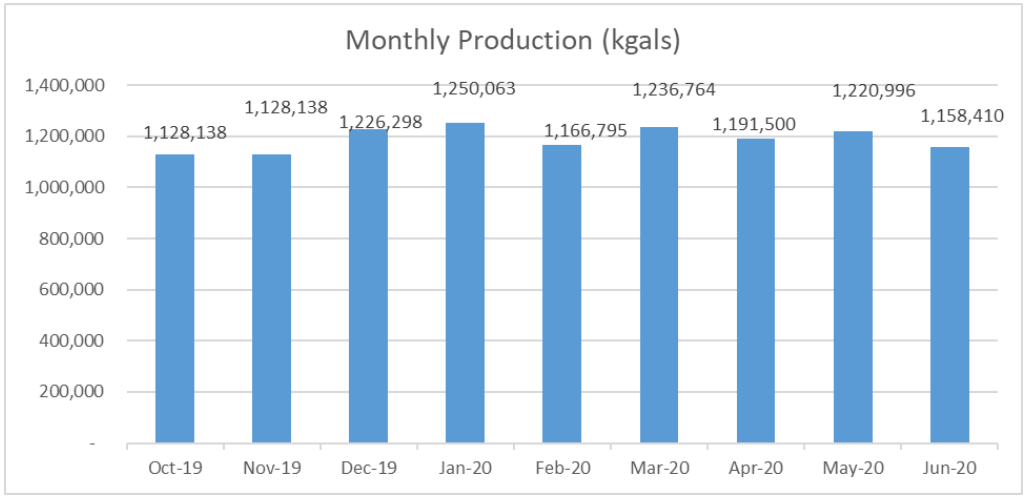
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Operations Update

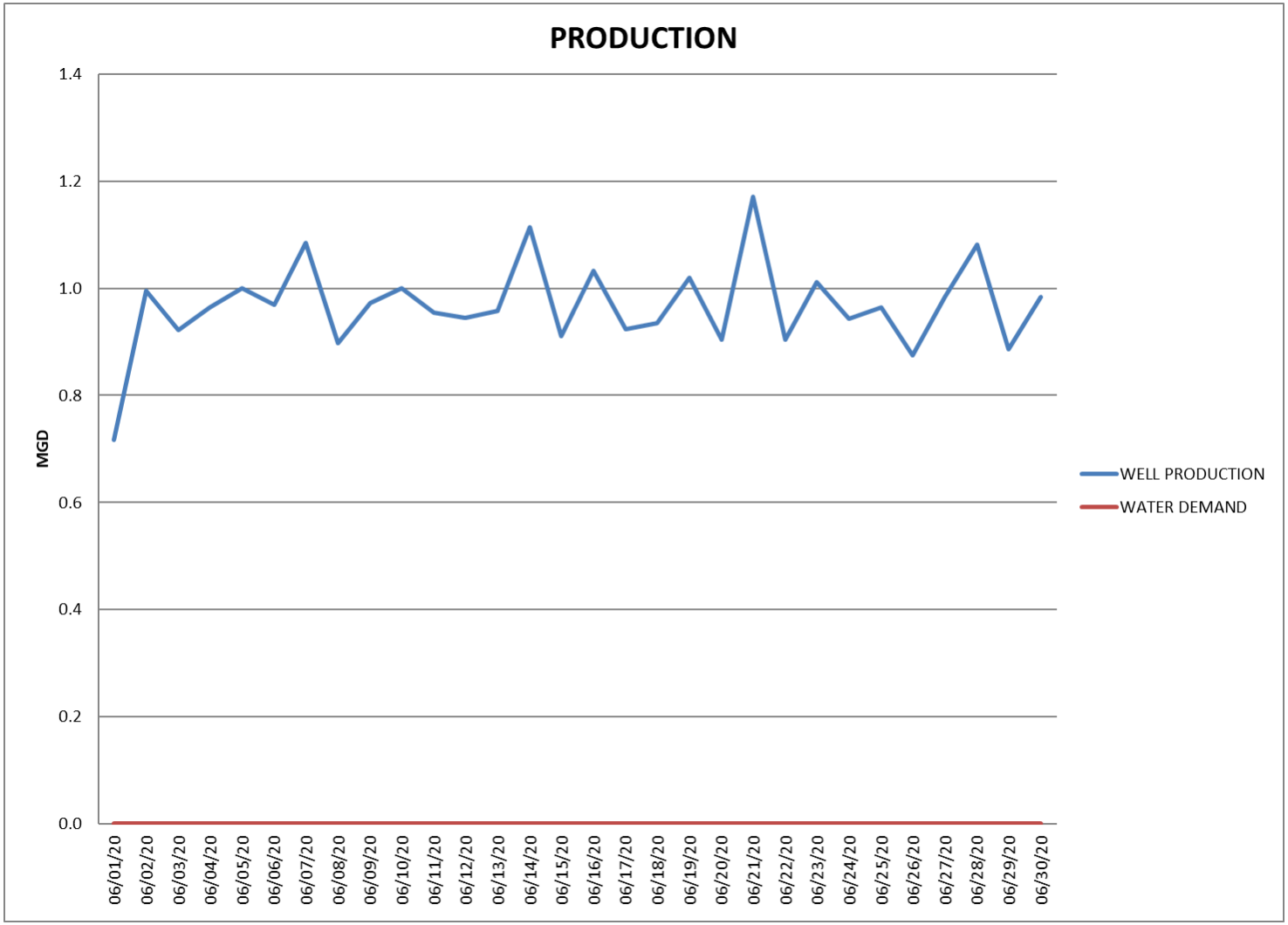
Production (June 2020)

Monthly Production Summary - JUNE 2020				
Deep Wells			35.3	MGD
	Active wells =	93 of 120		
	Avg days in operation =	30 days		
	Total Production =	1,057,586 Kgals		
Springs			0.18	MGD
	Avg days in operation =	30 days		
	Total Production =	5288 Kgals		
Ugum Surface Water Plant			2.2	MGD
	Avg days in operation =	30 days		
	Total Production =	66,508 Kgals		
Tumon Maui Well			0.97	MGD
	Avg days in operation =	30 days		
	Total Production =	29,028 Kgals		
		1,158,410 Kgals	38.6	MGD

DW Status as of 6/30/2020		
Active	93	
Grounded motor or Pump Failure	7	A26-D03-F01-F05-F06-F13-F20
Out of commission	8	A02-A07-A28-D05-D13-M14-MJ01-MJ05
Temporarily Secured	2	A23-A25
Standby	10	A10-A29-D01-D24-F04-F10-F16-M09-M12-M17A
TOTAL	120	

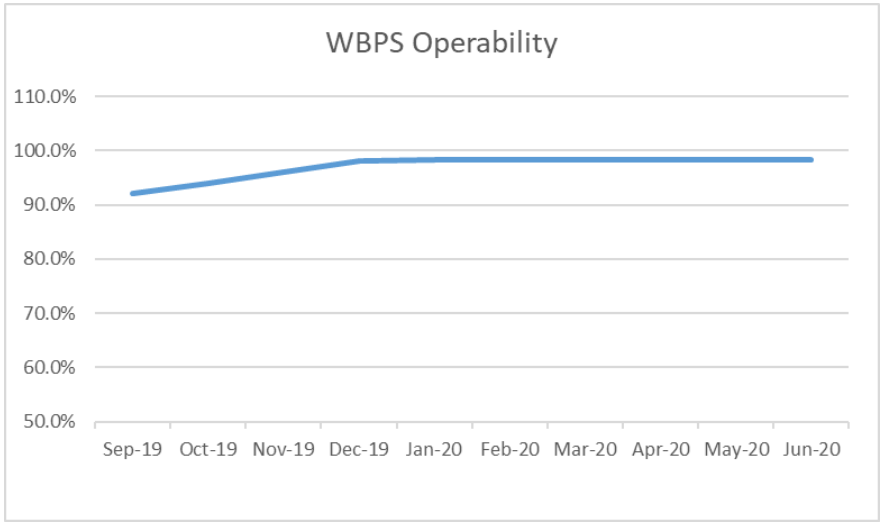


Tumon Maui Well Production (June 2020)

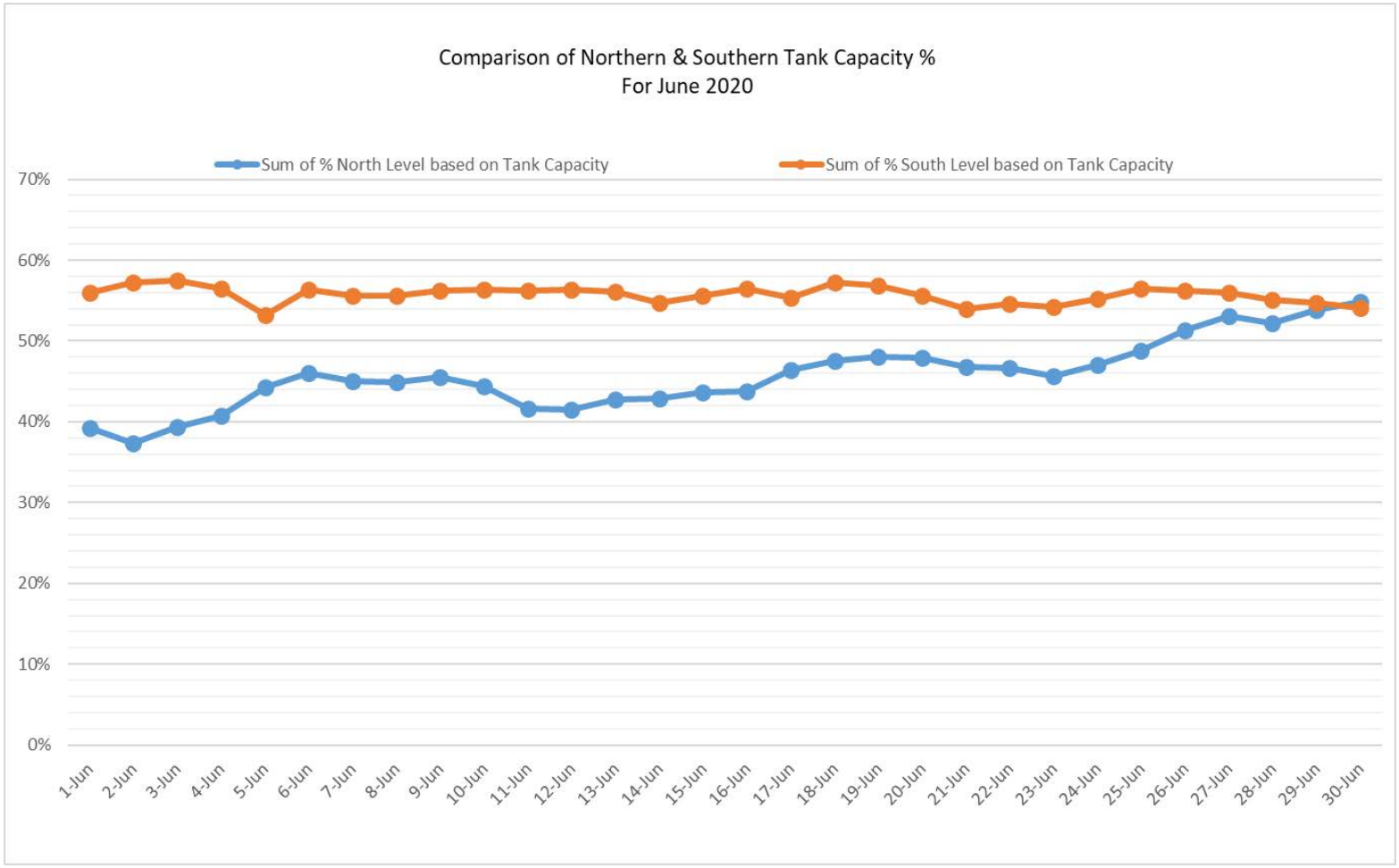


Distribution (June 2020)

Monthly Distribution Summary - JUNE 2020					
Water Booster Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	13	26	25	96.2%
	Central	7	15	15	100.0%
	Southern	7	15	15	100.0%
		27	56	55	98.2%

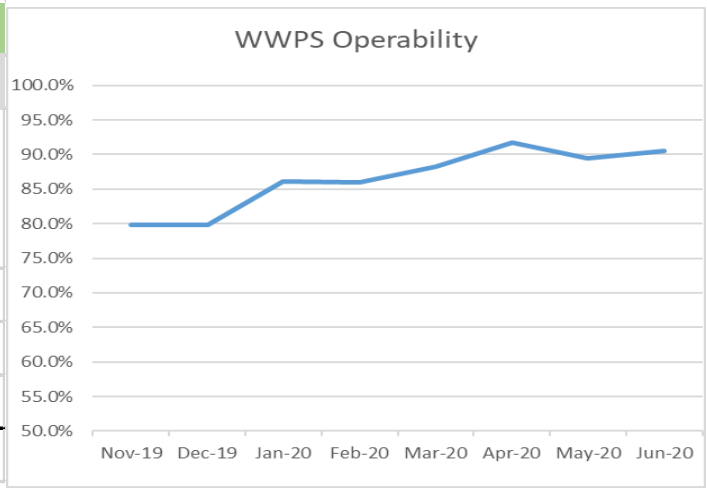


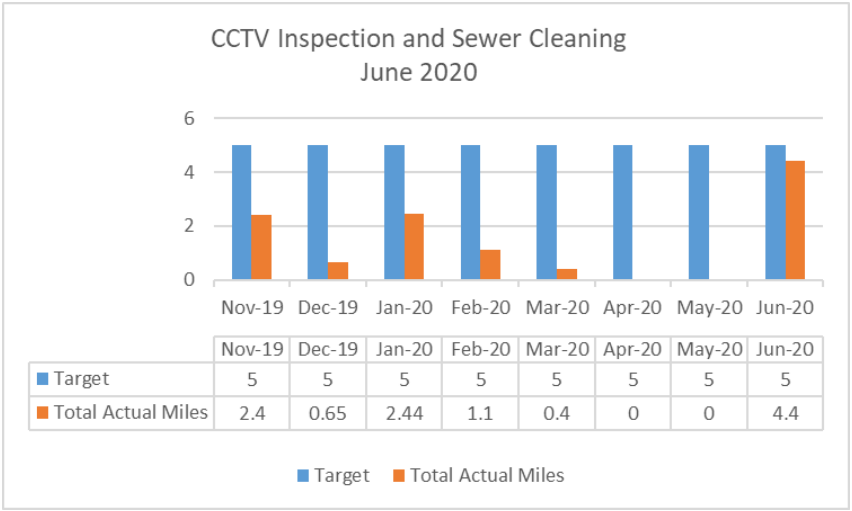
Distribution – Tank Levels (June 2020)



Wastewater Collections (June 2020)

Monthly Collections Summary - JUNE 2020					
Wastewater Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	22	52	46	88.5%
	Central	29	63	54	85.7%
	Southern	26	56	55	98.2%
		77	171	155	90.6%

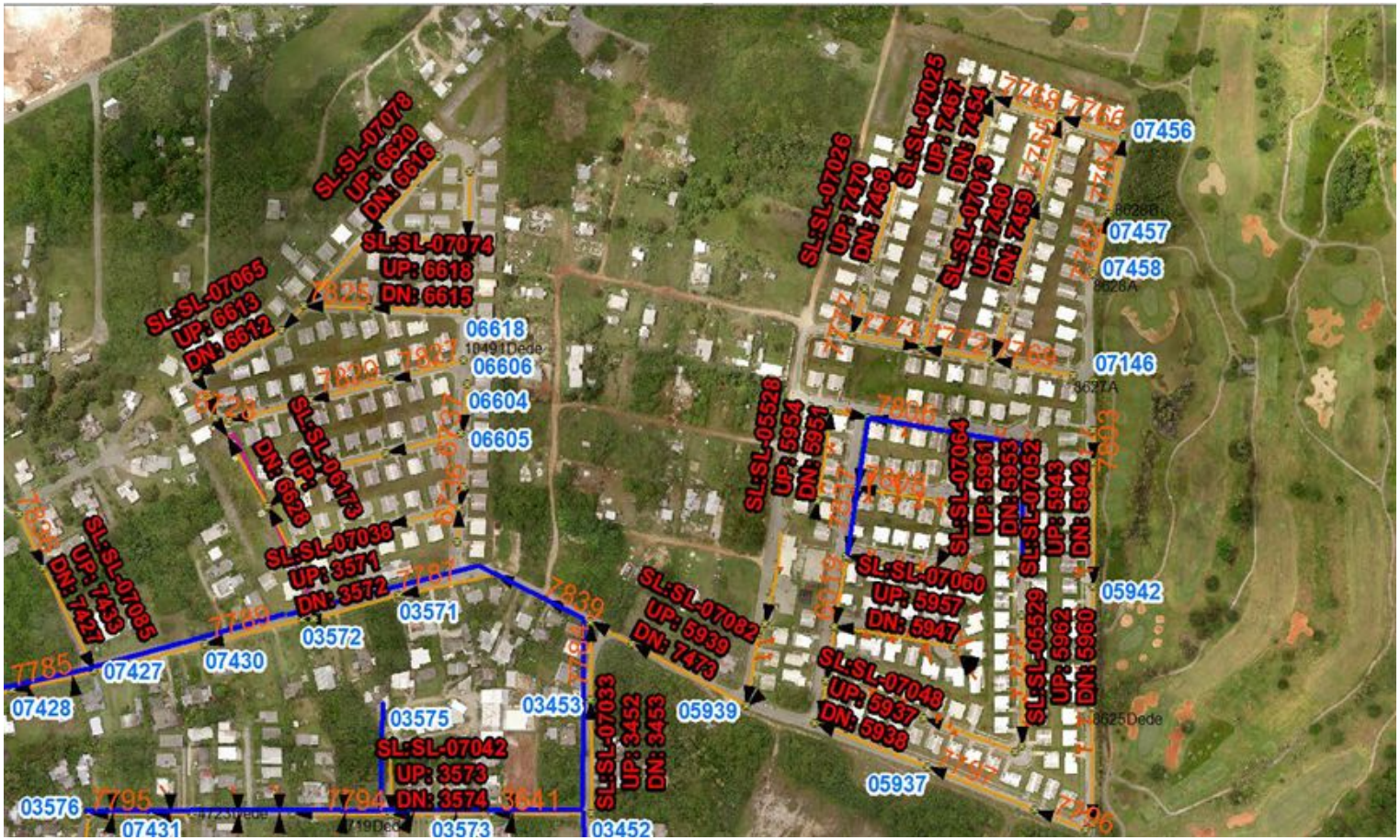




	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Target	5	5	5	5	5	5	5	5
Total Actual Miles	2.4	0.65	2.44	1.1	0.4	0	0	4.4

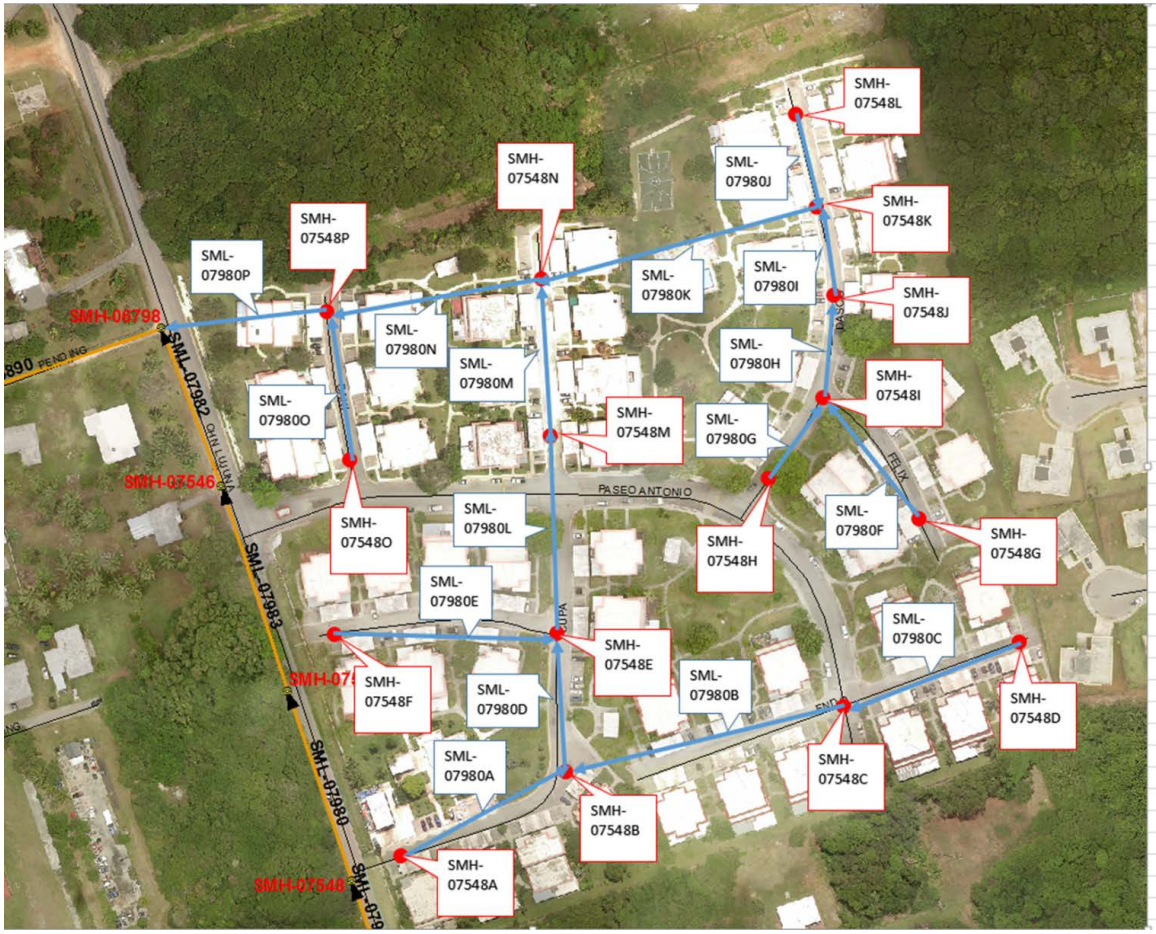
Wastewater Collections –Cleaning/Jetting (June 2020)

Iron Wood



Wastewater Collections –Cleaning/Jetting (June 2020)

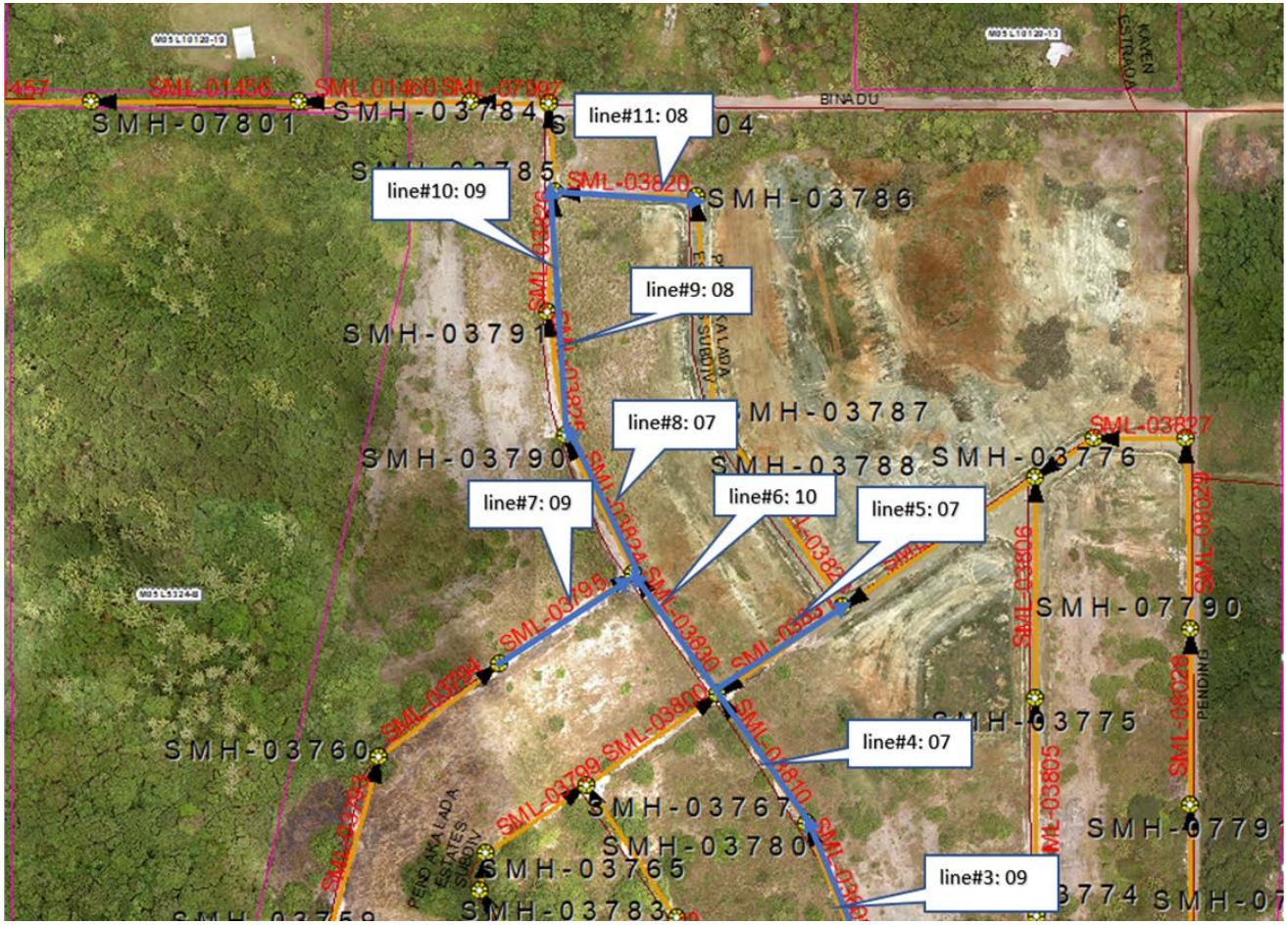
Perez Acres



SL RAT	PEREZ ACRES	2020 06 17
SML#	STATUS	SCORE
SML-07980A	GOOD	9
SML-07980B	GOOD	7
SML-07980C	FAIR	6
SML-07980D	GOOD	8
SML-07980E	GOOD	7
SML-07980F	GOOD	7
SML-07980G	GOOD	7
SML-07980H	GOOD	8
SML-07980I	GOOD	7
SML-07980J	FAIR	6
SML-07980K	FAIR	5
SML-07980L	GOOD	8
SML-07980M	GOOD	7
SML-07980N	GOOD	9
SML-07980O	GOOD	7
SML-07980P	GOOD	7
EST FOOTAGE	3582FT	
TRUCK 5029	BO TA	

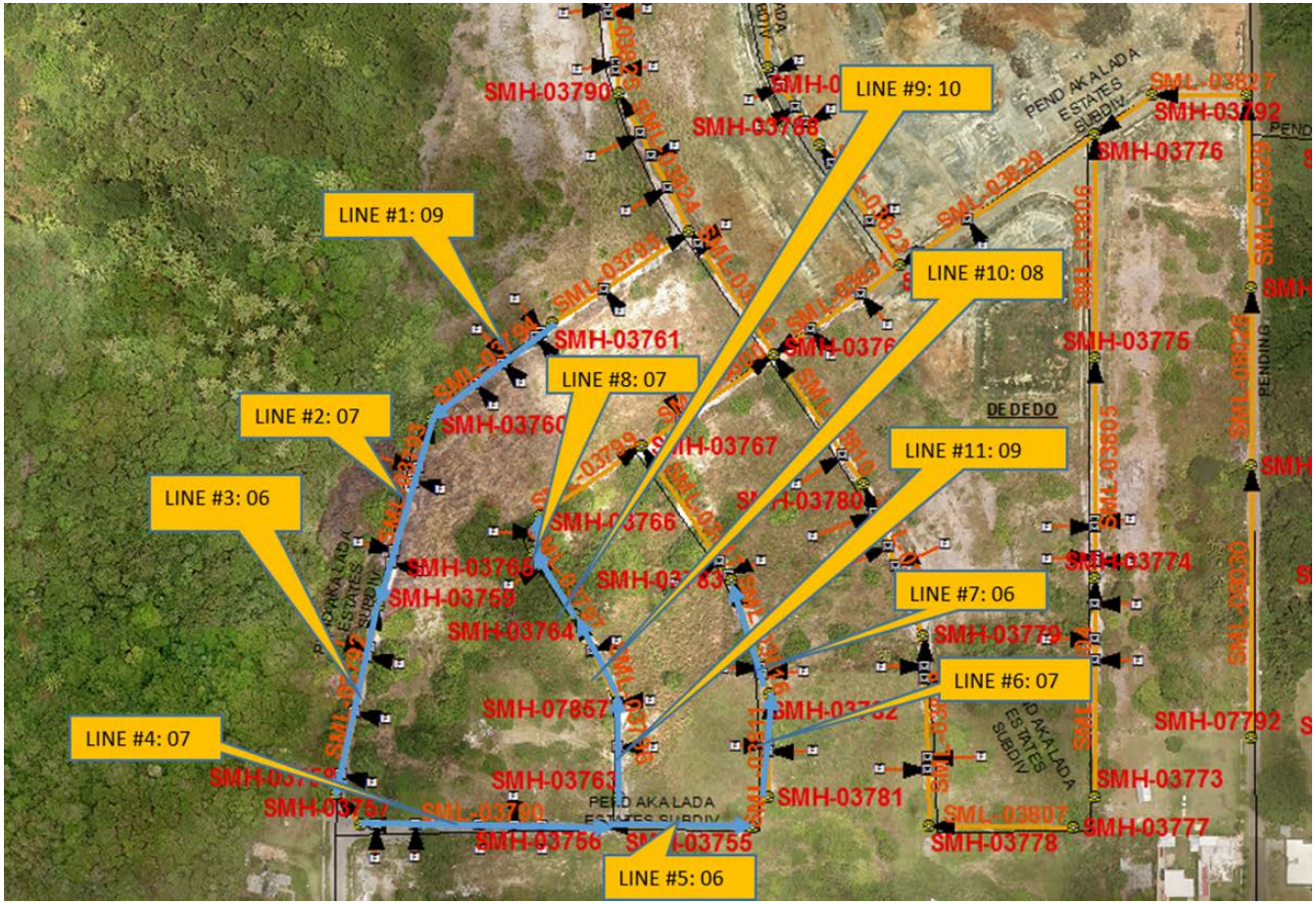
Wastewater Collections –Cleaning/Jetting (June 2020)

Lada Mapping photo 1



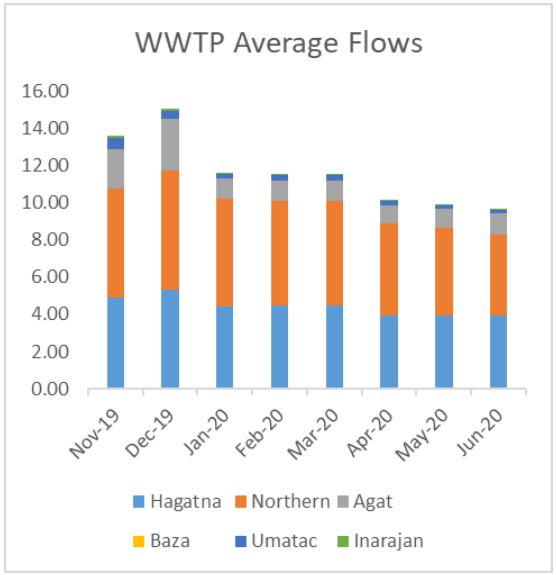
Wastewater Collections –Cleaning/Jetting (June 2020)

Lada Mapping photo 2



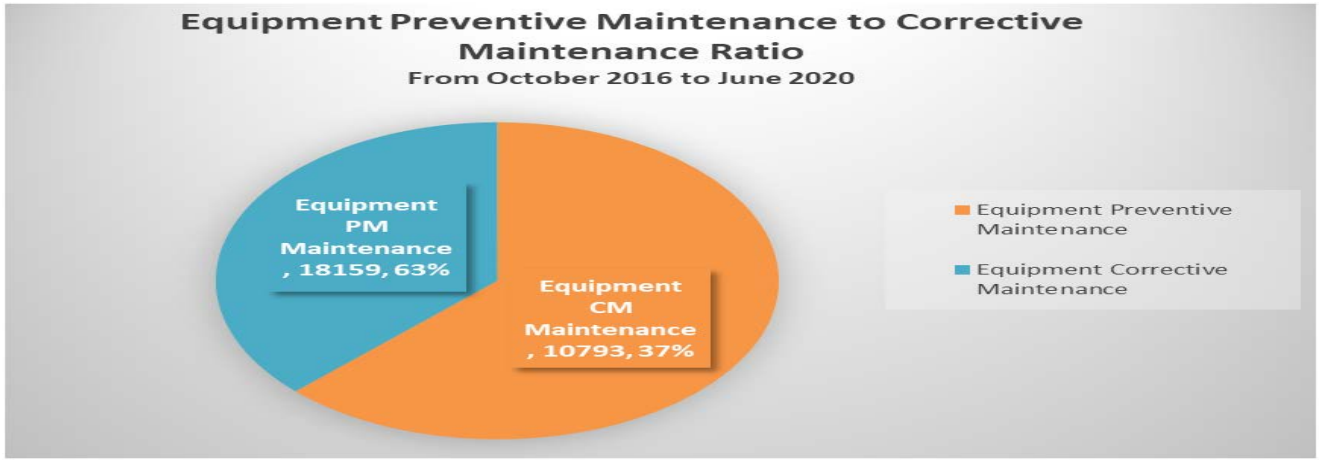
Wastewater Treatment (June 2020)

Monthly Wastewater Treatment Summary - June 2020				
WW Treatment Plants - Flows				
	Facility	**Avg. Daily Flows**	**Sludge (lbs)**	**Sludge Disp. ($)**
	Hagatna	3.94	240,180	$ 21,616
	Northern	4.32	1,204,995	$ 108,450
	Agat	1.16	62,260	$ 5,603
	Baza	0		
	Umatac	0.20		
	Inarajan	0.05		
		9.67	1,507,435	$ 135,669

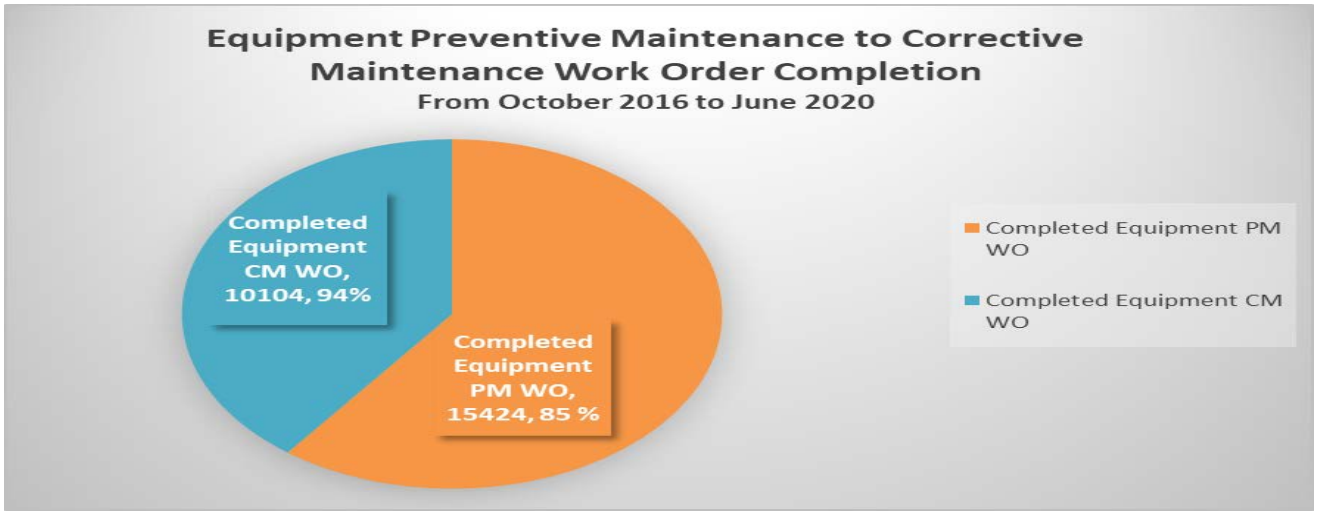


Asset Management (June 2020)

I. Equipment Preventive Maintenance to Corrective Maintenance ***Ratio***

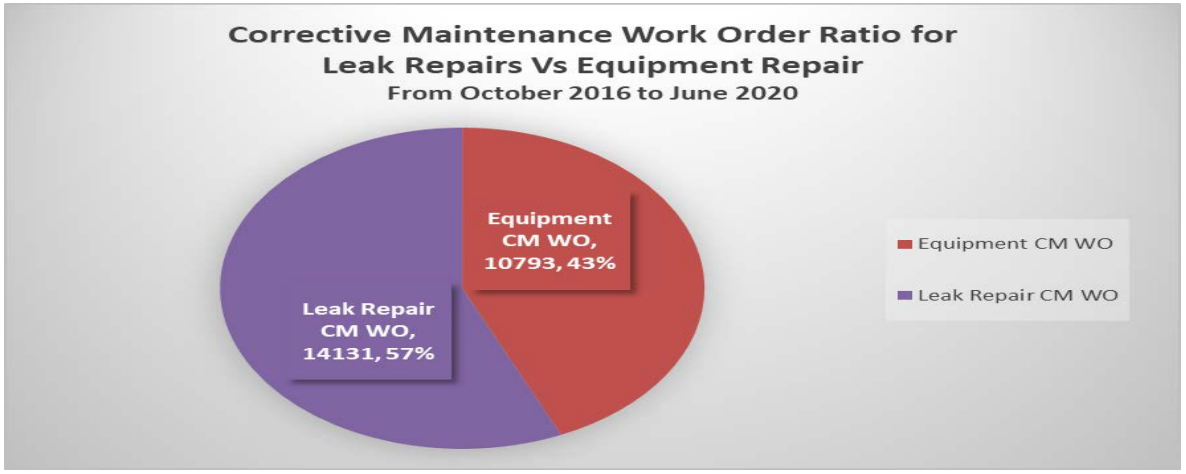


II. Equipment Preventive Maintenance to Corrective Maintenance ***Work Order Completion***

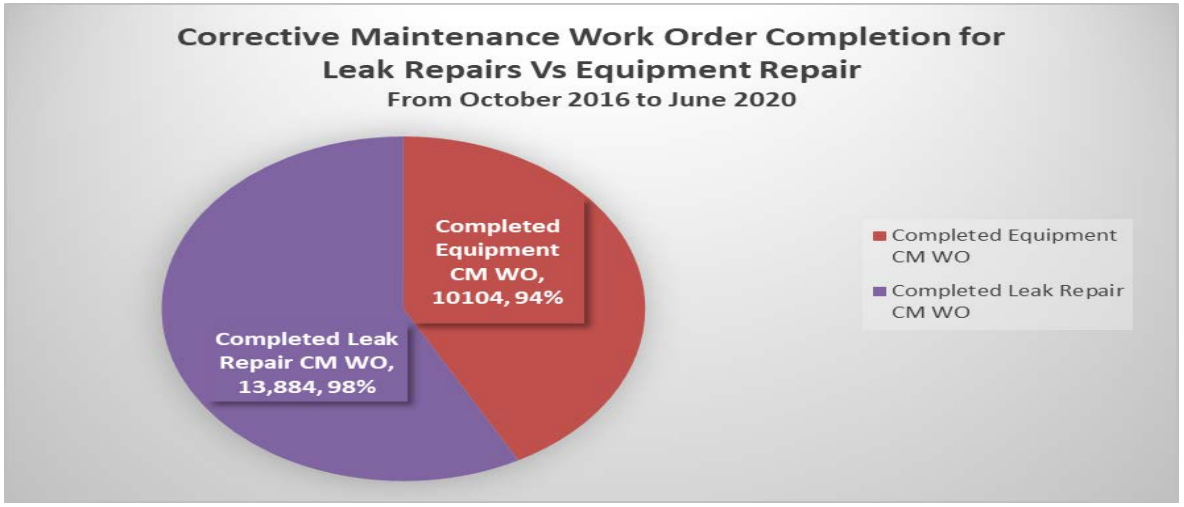


Asset Management (June 2020)

III. Corrective Maintenance Work Order ***Ratio*** for Leak Repairs vs. Equipment Repair



IV. Corrective Maintenance Work Order ***Completion*** for Leak Repairs vs. Equipment Repair



Meters from January 2017 through July 6, 2020

COMPLETED FIELD ACTIVITY JAN 2017 THRU JULY 06 2020 (POSTED IN CIS)	2017	2018	2019	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	TOTAL:	COMPLETED FIELD ACTIVITIES (IN PROCESS) TO BE POSTED IN CIS
GWA - Meter Exchange	6487	13353	10850	1079	714	548	117	44	59	3	33254	22

# OF METERS TESTED AS PER METER TEST FACILITY REPORTS:	6079	12259	9278	749	908	1116	341	662	635	720	32747
AVG # OF FIELD STAFF PERFORMING CHANGE OUTS (MON THRU FRI):	19	16	7	7	7	7	7	1	1	1	
# OF ADMIN STAFF TO CREATE AND POST FIELD ACTIVITIES IN CIS:	10	6.3	5	5	5	2	1	1	1	1	
TOTAL:	**29**	**22**	**12**	**12**	**12**	**9**	**8**	**2**	**2**	**2**	

*project suspended effective 04/13/20 and resumed 07/02/20.

REMAINING ACTIVE BADGER LP MODELS TO BE REPLACED AS OF 07/06/20: **459**

3/4" BADGER METERS IN STOCK AS OF July 06, 2020:

Size	Meter Description	New Meters Passed	New Meters Untested	Passed Field Meters	MMP	Meters Available
3/4"	METER, Badger AMR 5/8" X 3/4" RCDL Model M25 Disc Meter	239	0	278	0	517
3/4"	METER, Badger AMR 5/8" x 3/4" **WARRANTY** RCDL Model M25	0	0	0	0	0
3/4"	METER,Badger 5/8"x3/4" NSF61-G RCDL M25LL Disc Meter Integral	67	398	3	0	468
3/4"	METER, Badger AMR 5/8" x 3/4" RCDL Model M25 ***RMI***	0	0	0	0	0
3/4"	METER, Badger E-SERIES 5/8"X3/4" ULTRASONIC	960	0	1	0	961

Backbilling through June 2020

Guam Waterworks Authority

Collections Report[1] on Accounts Backbilled thru June 30, 2020

For fiscal years 2015 thru 2020 (Jun)

Accounts Billed			Collection Status											
			Amounts Collected[1]			Amounts Adjusted			Total Uncollected (Active)			Total Uncollected (Inactive)		
FY Billed	No. of Accounts	Amount	No. of Accounts	Amount	%	No. of Accounts	Amount	%	No. of Accounts	Amount	%	No. of Accounts	Amount	%
FY2015														
FY2016	17	$ 882	17	$ 882	100%	0	$ -		0	$ -		0	$ -	
FY2017	537	$ 397,450	466	302,049	76%	17	22,418	6%	28	48,302	12%	26	24,681	6%
FY2018	1,374	$ 742,109	1,198	565,312	76%	58	68,248	9%	69	66,606	9%	49	41,943	6%
FY2019	8,324	$ 3,064,384	7,507	2,081,179	68%	175	152,950	5%	419	720,052	23%	223	110,203	4%
FY2020	2,044	$ 580,566	1,641	297,714	51%	25	9,525	2%	342	264,611	46%	36	8,715	0%
Total	**12,296**	**$ 4,785,391**	**10,829**	**$ 3,247,136**	**68%**	**275**	**$ 253,142**	**5%**	**858**	**$ 1,099,571**	**23%**	**334**	**$ 185,542**	**4%**

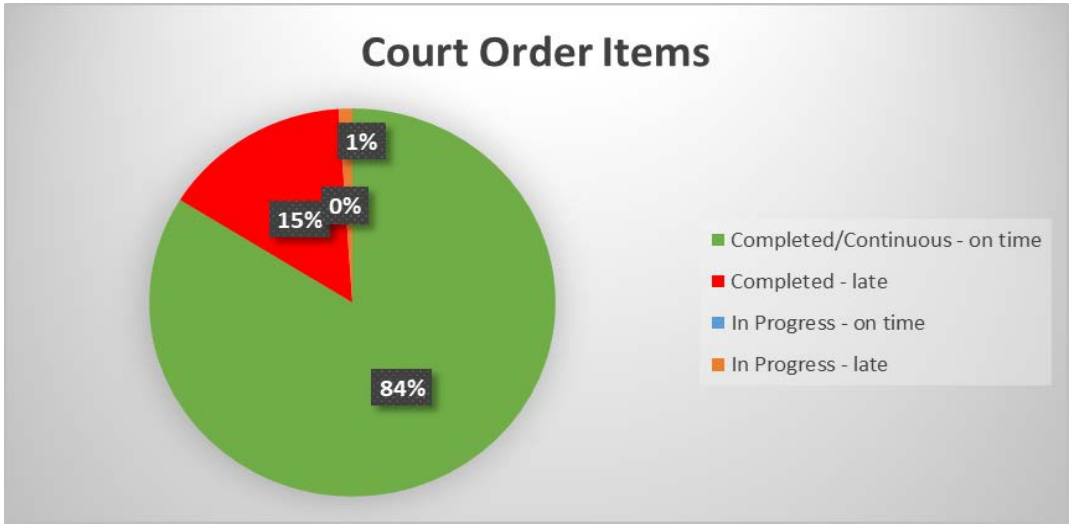
[1] Collections thru July 14, 2020

One Guam Update (June 2020)

- Tumon Maui Well
  - Quarterly Inspection & Reports
    - Maria Lewis received the remaining 1st quarter reports from Ron Topasna.
    - The next inspection is scheduled for August 12.
- OEA Projects
  - Observation Wells/NGLA
    - The request for proposals (RFP) for the new wells went out on June 22; the existing well refurbishment RFP will go out on June 29. The virtual pre-bid conference will be held July 15 for the new wells contract, and a week later (July 22) for existing well refurbishment. Notice to Proceed (NTP) is anticipated by the end of September.
  - Sewer Interceptor
    - Completed
  - Transfer of Navy Laterals at Murray Road to GWA
    - The transfer memo has gone to the ICO; looking forward to seeing if it is done on Monday, June 29.
- Property Transfers
  - Transfer of BPM-1: Navy advised GWA will move forward with transfer; WERI/USGS confirmed continued use of BPM-1 so GWA will need to maintain.
- Billing: GWA is working with Navy to streamline invoicing and payment timelines to address delays.
- Andersen AFB – Sewer Line Meters / Fence
  - For the sewer line meters, Maria Lewis remembered seeing an email that the project got pushed to 2021. Lance Reynolds states that the plan is maybe 2nd quarter 2021.

Court Order Summary (June 2020)

	Total Items	On-time Items Completed / Continuous	In Progress - late	Completed - Late	In Progress - on time	Performance %
Court order total	93	78	1	14	0	98.90%



	Court Order Items	%	Performance (on-time or completed)
Completed/Continuous - on time	78	84%	
Completed - late	14	15%	
In Progress - on time	0	0%	
In Progress - late	1	1%	98.9%
Totals	93	100%	

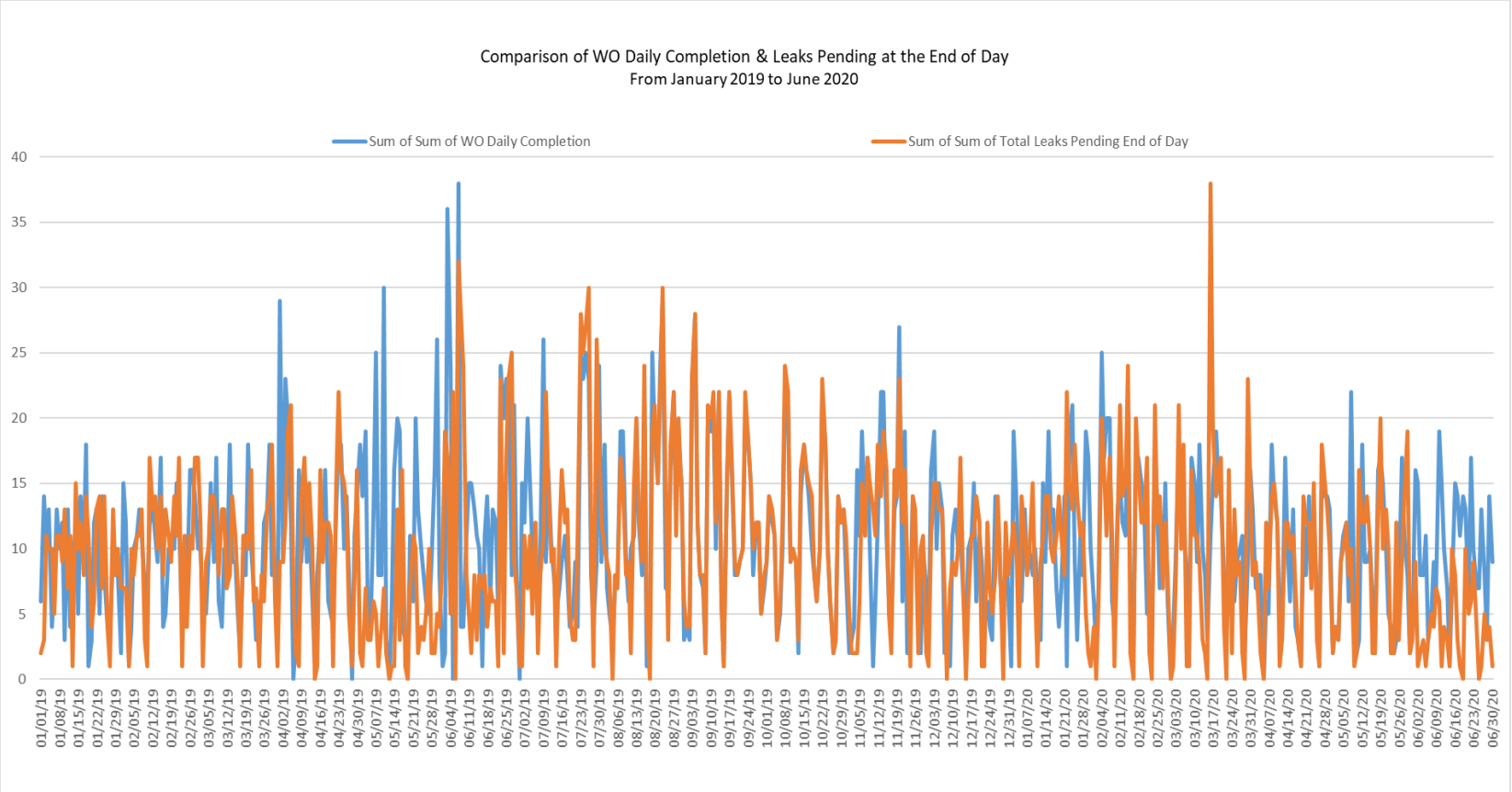
Court Order – Status Information (June 2020)

- 1 item delayed - The Court Order is down to one item remaining, § II, (C), (29) – Storage tank Repair. Restoration, Replacement or Relocation – which is the item that will take longer than the "end" of the court order. That makes us 98.9% done with the CO.
- Final Date to complete all Court Order items will be delayed past December 31, 2020.
    - CO 29(b) has been expanded by 31% beyond the original Court Order Requirements
    - General Counsel is reviewing filing requirements and content
    - Additional impact from 2020 Bond issuance delay is being assessed
- Overflow or Bypass events reported to USEPA:
    - 6-02-2020 Hernan Cortez Ave, Hagatna – FOG (reported in June CCU meeting)
    - 6-12-2020 Vietnam Veterans Memorial Highway – Pump Station Failure
    - 6-15-2020 Melindes Street, Dededo -FOG
    - 6-22-2020 Lalanghita Street, Santa Rita

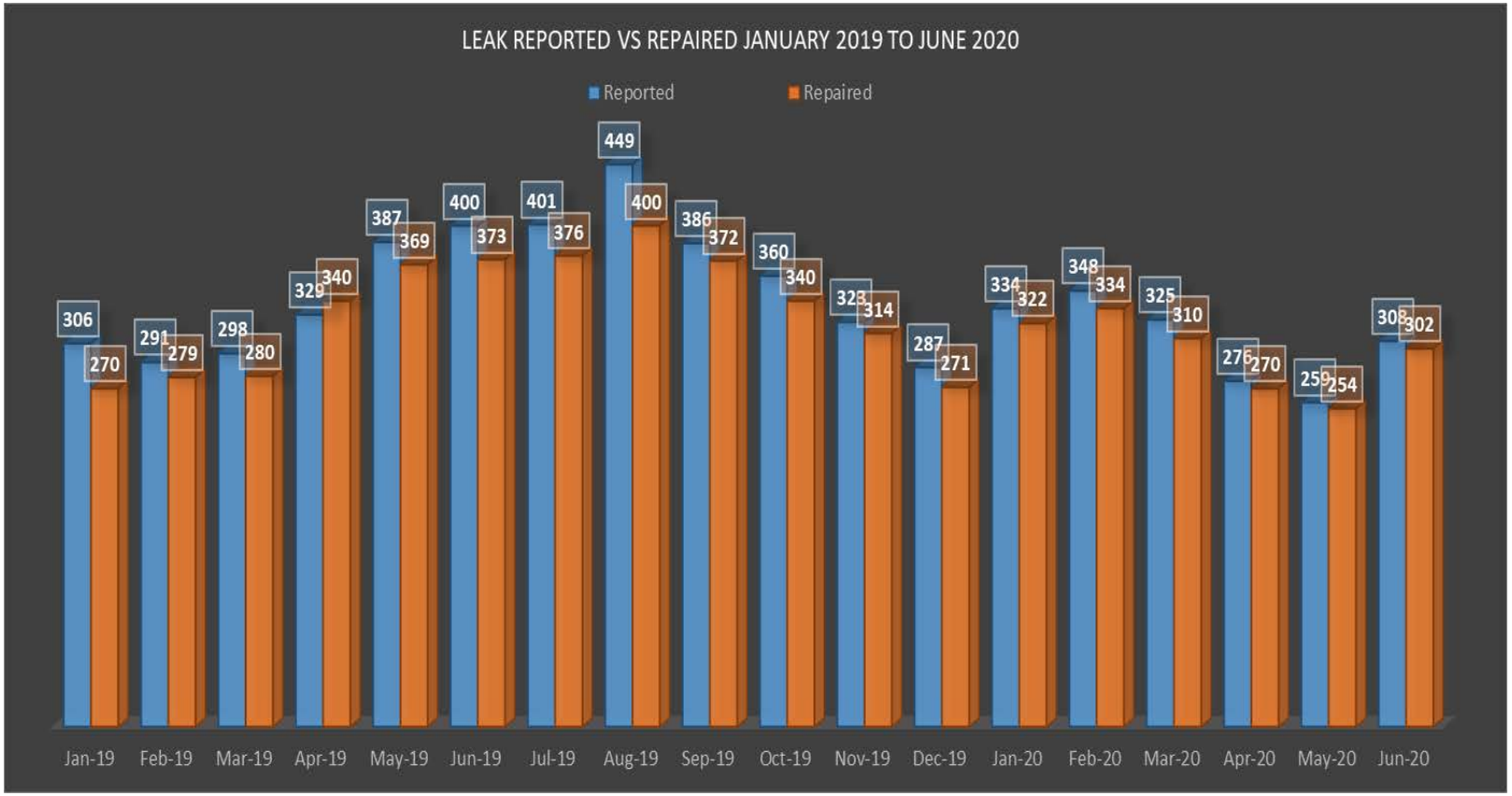
Land Acquisition Summary (June 2020)

GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Tanks	Astumbo	Gov't. - CLTC	Petition of Land Registration package forwarded to Attorney General by DLM 11/04/19. Follow up update status request emailed to DLM 05/14/2020.
	Piti	Private	Letter sent to DoAg on 5/28/2020 & No response within 30 days of receipt. Vangie and the GM's office are reaching out to DoAg.
	Airport	Private	Property owners need more time for discussion with family regarding GWA's Offer Letter 07/04/2020.
Deep Wells	AG-12	Dept. of Agriculture/Manhita Farms	Right of Entry Agreement sent to Dept of AG for signature 05/24/18. 2nd follow up sent on 09/12/18. 3rd follow up sent on 04/10/19. Retracement Survey Property Map filed and recorded at DLM 7/10/19.
Booster Pump Station	Agfayan	Private	TGE working on structural design for pump station area for L28, B19, T3734, Inarajan 11/07/19.
Asan Springs	Asan	Federal	Received remaining comments from Federal and GovGuam agencies in regards to Section 106 on 12/16/19. GWA and Designer negotiated on a Revised Change Order No. 2 submitted on 2/26/2020. CO. No. 2 is to address Federal and Local agencies concerns, specifically on developing an Environmental Assessment and performing Biological Survey work. Pending approval for revised CO. No.2 as of 3/3/2020. Negotiations with NPS on a ROW agreement is ongoing.

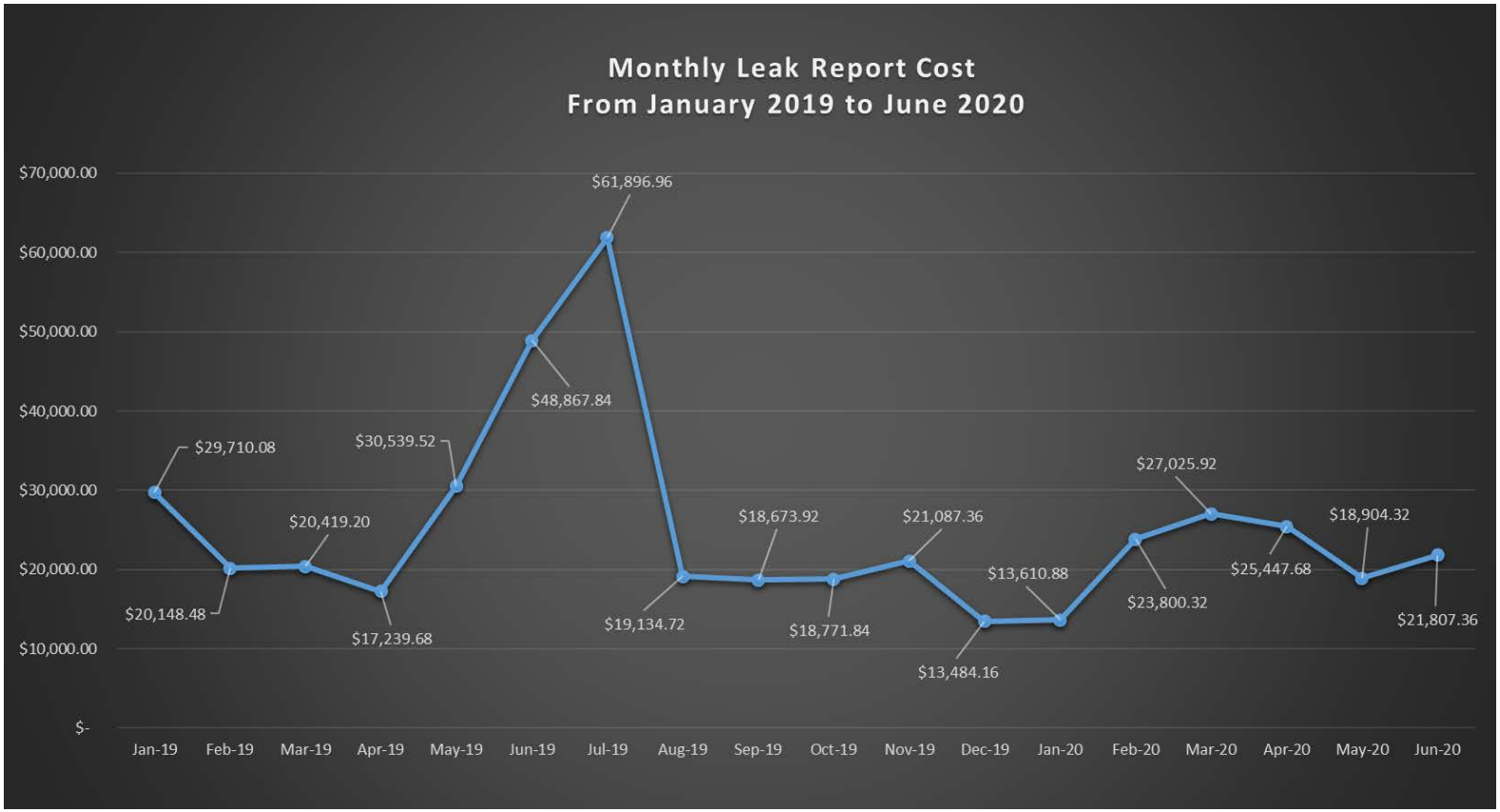
Leak Repair Summary (June 2020)



Comparison of Leaks Reported vs. Leaks Repaired (June 2020)



Monthly Leak Report Cost (June 2020)



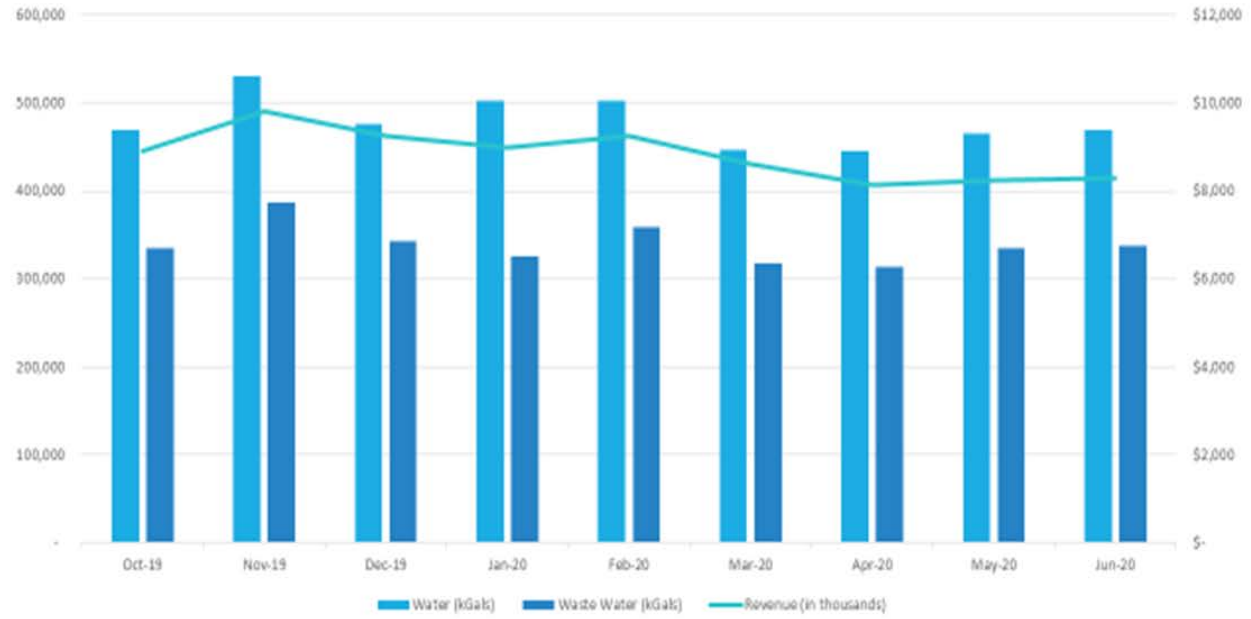
Assumptions:

1. Leak rate = 4 gpm
2. Cost per kgal = $4.00

GWA Financial Overview

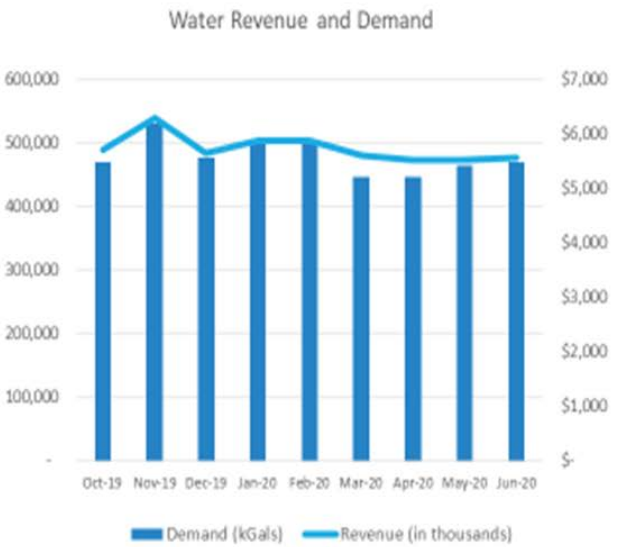
JUNE 2020

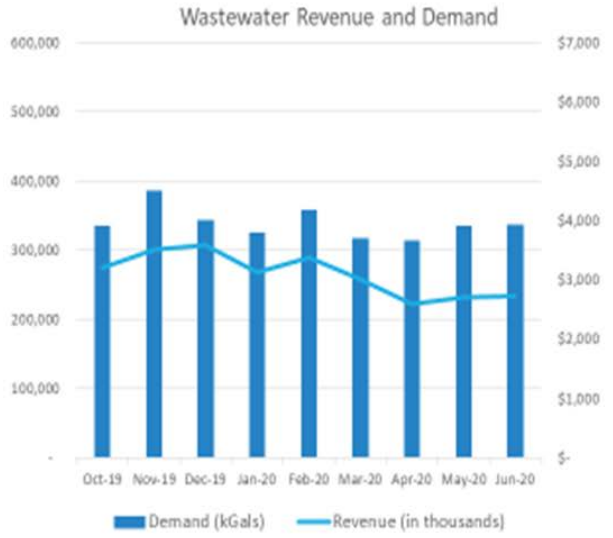
Overall Revenues and Demand



2

Overall Revenues and Demand





3

Overall Revenues and Collections



* Revenues include miscellaneous revenue

4

Income Statement FY2020



5

GWA Key Financial Indicators

Indicator	Target	May 2020	June 2020
DSC YTD			
• Per Section 6.12 of Indenture	1.25	1.28	1.27
• Per PUC / CCU	1.40	1.28	1.27
YTD Month to Month Change in Net Assets		10%	22%
Days – Cash on Hand	120 days	298 days	292 days
Collection Ratio			
• Month to Date	98%	100%	103%
• Year to Date	98%	97%	98%
Days Billed	30	30	31
Account Receivable Days	45	50	48
Account Payable Days	45	36	35
Employee Count	400 FTE	384 FTE	384 FTE
Water Demand			
• Month to Date	467,615	465,477	469,531
• Year to Date	3,740,923	3,837,672	4,306,513
Wastewater Demand			
• Month to Date	382,224	335,721	337,574
• Year to Date	2,775,095	2,718,351	3,055,924
Water Customers	42,724	42,889	42,838
Wastewater Customers	29,604	29,673	29,518

6

GWA Utility Services Division
Monthly Status Report
Month ending JUNE 2020

FY2020 **UTILITY SERVICES DIVISION ACTIVITIES**	**WEEK ENDING: 06/06/20**	**WEEK ENDING: 06/13/20**	**WEEK ENDING: 06/20/20**	**WEEK ENDING: 06/27/20**	**WEEK ENDING: 07/04/20**	**JUNE 2020 MONTHLY TOTAL**	**WEEKLY AVERAGE JUNE 2020**	***PREVIOUS MONTH*** **WEEKLY AVERAGE MAY 2020**	***PREVIOUS MONTH*** **MAY 2020 MONTHLY TOTAL**
Collections Activities:									
I. Number of accounts cut for nonpayment:	0	0	0	0	0	0	0	0	0
II. Number of accounts restored for nonpayment:	0	0	0	0	0	0	0	0	2
III. Number of No water reports responded to:	0	0	0	0	0	0	0	0	0
IV. Number of Secure/Unsecure valve reports responded to:	0	0	0	0	0	0	0	0	0
V. Number of Verify reads responded to:	0	0	0	0	0	0	0	0	0
VI. Number of new pay plans negotiated for active accounts:	126	90	111	164	275	766	153	55	276
VII. Number of active pay plans negotiated and ongoing:	431	443	463	576	786		540	367	
VIII. Number of inactive accounts with a payment arrangement:	0	0	0	0	0		0	0	
IX. Number of broken payment plans:	66	41	56	37	2	202	40	13	67
Customer Service Activities (lobby visits):									
A. GBN Public Service Building – Fadian									
i. Total Customers Assisted:	271	263	185	175	249	1143	229	101	504
ii. Total Abandoned Requests:	2	2	3	0	1	8	2	1	3
iii. Average Wait Time:	9 minutes	9 minutes	9 minutes	8 minutes	12 minutes		9.4 minutes	5 minutes	
iv. Average Service Time:	10 minutes	12 minutes	13 minutes	12 minutes	10 minutes		11.4 minutes	6.6 minutes	
v. Purpose of lobby visit:									
1. Apply for water:	93	73	67	43	55	331	66	28	141
2. Restore water cut for non payment:	2	2	2	0	0	6	1	2	8
3. Terminate Water:	25	23	7	9	12	76	15	7	36
4. Copy of Bill:	24	24	8	20	15	91	18	11	53
5. Billing Dispute:	55	48	45	35	57	240	48	30	150
6. Billing Dispute follow up:	0	0	0	0	0	0	0	0	0
7. General Questions & Other:	51	79	38	40	47	255	51	19	95
8. Report a water leak:	1	1	1	0	0	3	1	0	2
9. Report water theft:	0	0	0	0	0	0	0	0	0
10. Payment Arrangement:	13	20	17	28	63	141	28	5	25
B. Julale Satellite Office – Hagatna									
i. Total Customers Assisted:	0	0	56	161	219	436	87	0	0
ii. Total Abandoned Requests:	0	0	4	6	13	23	5	0	0
iii. Average Wait Time:	0 minutes	0 minutes	9 minutes	8 minutes	20 minutes		7.4 minutes	0 minutes	
iv. Average Service Time:	0 minutes	0 minutes	10 minutes	8 minutes	7 minutes		5 minutes	0 minutes	
v. Purpose of lobby visit:									
1. Apply for water:	0	0	16	40	62	118	24	0	0
2. Restore water cut for non payment:	0	0	0	1	1	2	0	0	0
3. Terminate Water:	0	0	6	15	25	46	9	0	0
4. Copy of Bill:	0	0	14	36	39	89	18	0	0
5. Billing Dispute:	0	0	11	29	50	90	18	0	0
6. Billing Dispute follow up:	0	0	1	4	0	5	1	0	0
7. General Questions & Other:	0	0	7	36	19	62	12	0	0
8. Report a water leak:	0	0	0	0	0	0	0	0	0
9. Report water theft:	0	0	0	0	0	0	0	0	0
10. Payment Arrangement:	0	0	5	32	73	110	22	0	0
C. Upper Tumon Satellite Office – Upper Tumon									
i. Total Customers Assisted:	163	163	109	128	205	768	154	87	434
ii. Total Abandoned Requests:	5	8	4	0	7	24	5	6	28
iii. Average Wait Time:	7 minutes	3 minutes	1 minute	2 minutes	4 minutes		3.4 minutes	3.8 minutes	
iv. Average Service Time:	14 minutes	13 minutes	12 minutes	13 minutes	11 minutes		12.6 minutes	9.8 minutes	
v. Purpose of lobby visit:									
1. Apply for water:	53	52	41	28	40	214	43	35	174
2. Restore water cut for non payment:	2	1	0	0	4	7	1	2	10
3. Terminate Water:	17	24	13	15	15	84	17	10	52
4. Copy of Bill:	35	10	8	10	13	76	15	8	38
5. Billing Dispute:	36	35	26	33	43	173	35	22	111
6. Billing Dispute follow up:	1	0	0	0	0	1	0	0	0
7. General Questions & Other:	15	31	13	12	17	88	18	7	33
8. Report a water leak:	0	0	0	0	0	0	0	0	0
9. Report water theft:	0	0	0	0	0	0	0	0	0
10. Payment Arrangement:	12	12	12	30	73	139	28	7	34

GWA Utility Services Division
Monthly Status Report
Month ending JUNE 2020

FY2020 **UTILITY SERVICES DIVISION ACTIVITIES**	**WEEK ENDING: 06/06/20**	**WEEK ENDING: 06/13/20**	**WEEK ENDING: 06/20/20**	**WEEK ENDING: 06/27/20**	**WEEK ENDING: 07/04/20**	**JUNE 2020 MONTHLY TOTAL**	**WEEKLY AVERAGE JUNE 2020**	***PREVIOUS MONTH*** **WEEKLY AVERAGE MAY 2020**	**MAY 2020 MONTHLY TOTAL**
Customer Service Activities (Electronic):									
i. Emails Recieved:									
1. customers@guamwaterworks.org:	250	155	255	169	291	1120	224	149	743
Request type (email):									
a. Apply for water:	39	34	26	32	36	167	33	45	226
b. Terminate Water:	15	22	16	12	23	88	18	26	131
c. Copy of Bill:	8	13	4	5	1	31	6	4	20
d. Billing Dispute & follow up:	16	25	13	14	10	78	16	12	59
e. General Questions & Other:	35	47	84	12	119	297	59	45	223
f. Report a water leak:	7	1	2	2	0	12	2	4	22
g. Report water theft:	0	0	0	12	0	12	2	0	0
h. Online services inquiry:	130	13	110	80	102	435	87	12	62
2. gwaservesme@guamwaterworks.org (realtors/prop	0	0	0	0	0	0	0	0	0
ii. Emails Replied (both):	229	204	165	176	161	935	187	152	760
Call Center Activities:									
i. Calls Recieved:	3243	1640	1881	2154	1018	9936	1987	1489	7447
ii. Calls Immediately Answered:	906	870	767	836	638	4017	803	666	3331
iii. Calls Abandoned:	141	54	73	94	139	501	100	74	370
iv. Calls Handled by Voice mail:	2196	716	1039	1221	241	5413	1083	763	3813
v. Average duration of call:	4 minutes	6 minutes	9 minutes	7 minutes	7 minutes		6.6 minutes	5.8 minutes	
vi. Breakdown by request type:									
1. Apply/Terminate info:	37	45	38	44	25	189	38	54	272
2. Automated Telphone Call:	0	0	0	0	1	1	0	0	2
3. Balance Inquiry:	118	64	84	90	49	405	81	129	643
4. Call Back:	52	29	33	25	27	166	33	16	79
5. Dispatch:	30	16	15	14	8	83	17	15	76
6. Dispute:	3	5	1	1	3	13	3	2	9
7. Follow-up:	25	46	41	47	24	183	37	29	147
8. General Questions & Other:	141	114	185	126	123	689	138	113	565
9. Route Calls to GWA Staff:	35	58	62	156	109	420	84	28	141
10. No Water:	123	12	17	7	7	166	33	8	40
11. Online/Phone App Help:	359	295	232	219	130	1235	247	34	169
12. Pay by Phone:	130	175	142	140	100	687	137	214	1070
13. Pay Plan:	15	14	30	49	83	191	38	24	121
14. Restore Non-payment:	0	0	0	0	0	0	0	0	2
15. Secure/Unsecure Valve:	6	17	14	14	12	63	13	11	55
16. Voice Mail:	199	91	167	195	310	962	192	71	356
17. Water leak:	17	10	12	6	7	52	10	8	41
Bill Dispute & Resolution Activities:									
i. Dispute Resolution:									
1. Number of disputed accounts resolved:	18	38	53	76	0	185	37	20	102
2. Number of disputed accounts under review:	1827	1899	1913	1933	1959		1906	2043	
Data Entry of Completed Field work in CIS:									
i. Document Control:									
1. Number of field activities posted:	452	398	326	341	373	1890	378	416	2082
2. Number of field activities pending:	465	349	293	163	360	1630	326	412	2061
Field Response Activities:									
I. Number of field activities assigned:	283	202	210	163	269	1127	225	142	709
II. Number of field activities completed:	375	282	270	211	400	1538	308	189	943
III. Number of field activities pending field action:	3	5	2	4	5	19	4	1	3

GWA Utility Services Division
Monthly Status Report
Month ending JUNE 2020

FY2020 UTILITY SERVICES DIVISION ACTIVITIES	WEEK ENDING: 06/06/20	WEEK ENDING: 06/13/20	WEEK ENDING: 06/20/20	WEEK ENDING: 06/27/20	WEEK ENDING: 07/04/20	JUNE 2020 MONTHLY TOTAL	WEEKLY AVERAGE JUNE 2020	*PREVIOUS MONTH* WEEKLY AVERAGE MAY 2020	*PREVIOUS MONTH* MAY 2020 MONTHLY TOTAL
Meter Reading Activities:									
I. Number of meters read:									
A. Electronically Read Meters:	7917	10857	14462	6387	2724	42347	8469	8183	40914
B. Manually Read Meters:	24	33	37	33	17	144	29	29	147
i. Unread meters (Meters scheduled but not read):	16	5	7	10	4	42	8	8	39
ii. Number of data logs received:	38	29	30	20	17	134	27	28	139
iii. Number of data logs retrieved:	38	28	22	35	9	132	26	24	122
iv. Number of data logs pending field action:	0	0	0	0	0	0	0	0	0
v. Communication Errors/Reprogramming requests:	6	0	0	0	0	6	1	4	18
vi. Number of estimated readings (for the week):	22	8	12	13	11	111	22	22	111
vii. Reasons for Estimations:									
1. Cant locate meter:	1	0	1	4	2	8	2	1	4
2. Temporary Obstruction:	0	0	0	0	0	0	0	0	0
3. Vicious Dog:	0	0	0	0	0	0	0	0	0
4. Flooded meter:	0	0	0	0	0	0	0	0	1
5. Corrective action to database requested:	5	3	4	3	7	22	4	7	36
6. Possible changed out meter:	15	4	7	4	1	31	6	5	27
7. Communication/Programming error (code 92's):	0	0	0	0	0	0	0	4	21
8. Other:	1	1	0	2	1	5	1	2	12
a. Leaks detected on customer's private line:	1132	1734	2476	998	330	6670	1334	1391	6953
b. Reverse Flow Detected:	83	662	136	257	53	1191	238	145	725
c. No Usage Detected:	291	317	363	258	143	1372	274	305	1527
d. Tamper Code:	10	13	15	7	8	53	11	8	39
C. Electronic Read Percentage:	99.7%	99.7%	99.7%	99.5%	99.4%		99.6%	99.6%	
Illegal Connection & Unauthorized Use of Water Activities:									
I. Number of Inactive Still Consuming Reports rec'd & investigated:	0	0	0	0	0	0	0	0	1
II. Number of Illegal Connection reports rec'd & investigated:	1	0	0	3	0	4	1	0	0

GUAM WATERWORKS AUTHORITY

Engineering Monthly Report
July 2020

Prepared By:
Brett E. Railey, P.E., Acting Chief Engineer

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A. Summary Table of 2010, 2013 and 2016 Bond

Potable Water

CIP #	CIP Description	2010 Bond Allotment	% encumbered	% available	2013 Bond Allotment	% encumbered	% available	2016 Bond Allotment	% encumbered	% available
PW 05-01	Ground Water Disinfection	$ 500,000.00	93.00%	7.00%	$ -	N/A	N/A	$ -	N/A	N/A
PW 05-03	Santa Rita Springs Booster Pump Rehab Phase II	$ -	N/A	N/A	$ 100,000.00	100.00%	0.00%	$ -	N/A	N/A
PW-05-05	"A Series Well Transmission Line	$ 475,709.00	100.00%	0.00%	$ 369,846.00	100.00%	0.00%	$ -	N/A	N/A
PW 05-06	Water Booster Pump Station	$ 500,000.00	100.00%	0.00%	$ 1,679,964.00	99.22%	0.78%	$ -	N/A	N/A
PW 05-07	Meter Replacement Program	$ 10,450,000.00	97.43%	2.57%	$ 996,532.00	85.75%	14.25%	$ 1,400,000.00	100.00%	0.00%
PW 05-08	Barrigada Tank Repair/Replacement	$ 5,450,000.00	99.16%	0.84%	$ 4,987,000.00	96.17%	3.83%	$ -	N/A	N/A
PW 05-09	Leak Detection	$ 200,000.00	8.52%	91.48%	$ 16,916.00	0.00%	100.00%	$ 100,000.00	0.00%	100.00%
PW 05-10	Potable Water System Planning	$ 210,487.45	100.00%	0.00%	$ 624,000.00	100.00%	0.00%	$ 876,294.00	100.00%	0.00%
PW 05-11	Implement Ground Water Rule	$ 1,699,999.00	100.00%	0.00%	$ 1,000,000.00	98.18%	1.82%	$ -	N/A	N/A
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade	$ 1,900,000.00	19.71%	80.29%	$ -	N/A	N/A	$ -	N/A	N/A
PW 05-13	Deep Well Rehabilitation	$ 548,000.00	73.73%	26.27%	$ 200,000.00	100.00%	0.00%	$ 250,000.00	44.01%	55.99%
PW 05-14	New Deep Wells at Dow n Hard	$ 485,743.00	100.00%	0.00%	$ -	N/A	N/A	$ 1,190,000.00	0.00%	100.00%
PW 05-15	Rehabilitation of Asan Springs	$ 1,100,000.00	53.75%	46.25%	$ -	N/A	N/A	$ -	N/A	N/A
PW 05-16	Master Meters	$ 1,489,957.00	100.00%	0.00%	$ 712,060.00	92.29%	7.71%	$ 2,151,539.00	90.70%	9.30%
PW 09-01	Ugum Water Treatment Plant Intake	$ 700,000.00	87.19%	12.81%	$ 859,801.00	42.88%	57.12%	$ -	N/A	N/A
PW 09-02	Water Wells	$ -	N/A	N/A	$ 3,030,029.00	53.03%	46.97%	$ 2,500,000.00	8.39%	91.61%
PW 09-03	Water Distribution System	$ 3,174,748.00	100.00%	0.00%	$ 10,912,453.00	95.87%	4.13%	$ -	N/A	N/A
PW 09-04	Pressure Zone Realignment	$ -	N/A	N/A	$ 337,110.00	100.00%	0.00%	$ 1,141,000.00	100.00%	0.00%
PW 09-06	Central Water Distribution System 2005	$ 775,002.00	91.49%	8.51%	$ -	N/A	N/A	$ -	N/A	N/A
PW 09-08	Mechanical/Electrical Equipment	$ 1,200,000.00	100.00%	0.00%	$ 426,799.00	98.71%	1.29%	$ -	N/A	N/A
PW 09-09	Water Reservoir Internal/External	$ 2,150,000.00	98.11%	1.89%	$ -	N/A	N/A	$ -	N/A	N/A
PW 09-10	Water Reservoir Internal/External	$ -	N/A	N/A	$ -	N/A	N/A	$ 800,000.00	100.00%	0.00%
PW 09-11	Water System Reservoirs 2005 Improvements	$ 1,050,000.00	100.00%	0.00%	$ 13,878,000.00	99.68%	0.32%	$ 58,830,170.00	90.32%	9.68%
PW 11-01	Distribution System Upgrades	$ 474,160.00	94.70%	5.30%	$ -	N/A	N/A	$ -	N/A	N/A
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -	N/A	N/A	$ -	N/A	N/A	$ -	N/A	N/A
PW 12-01	Water Audit Program & Water Loss Control Plan	$ 78,459.00	99.45%	0.55%	$ -	N/A	N/A	$ 550,000.00	38.59%	61.41%
PW 12-02	Production Plan / Reduce Navy Purchases	$ 100,000.00	99.90%	0.10%	$ -	N/A	N/A	$ -	N/A	N/A
PW 12-03	Hydraulic Assessment of Tanks	$ 500,000.00	98.37%	1.63%	$ -	N/A	N/A	$ -	N/A	N/A
PW 12-04	Agana Heights & Chaot Tanks	$ 4,700,000.00	98.88%	1.12%	$ 1,330,287.00	100.00%	0.00%	$ 1,220,000.00	100.00%	0.00%
PW 12-05	Tank Major Repair Yigo #1, Mangilao #2, Astumbo#1	$ 1,848,013.00	99.72%	0.28%	$ 11,605,000.00	100.00%	0.00%	$ 1,822,133.00	100.00%	0.00%
PW 12-06	Tank Replacement Piti & Hyundai	$ -	N/A	N/A	$ -	N/A	N/A	$ 7,300,000.00	100.00%	0.00%
PW 12-07	Assessment of Malojloj Elevated & Yigo Elevated	$ 200,000.00	100.00%	0.00%	$ 485,117.00	100.00%	0.00%	$ -	N/A	N/A
PW 12-08	Public Water System Asset Inventory/ Condition Assessment	$ 100,000.00	78.39%	21.61%	$ -	N/A	N/A	$ -	N/A	N/A
PW 12-09	Public Water System GIS & Mapping	$ 50,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
PW 14-01	Fire Hydrant Replacement Program	$ -	N/A	N/A	$ -	N/A	N/A	$ 1,200,000.00	99.70%	0.30%
		$ 42,110,277.45			$ 53,550,914.00			$ 81,331,136.00		

Wastewater

CIP #	CIP Description	2010 Bond Allotment	% encumbered	% available	2013 Bond Allotment	% encumbered	% available	2016 Bond Allotment	% encumbered	% available
WW 05-04	Wastew ater System Planning	$ 1,492,857.19	100.00%	0.00%	$ 650,901.00	84.61%	15.39%	$ 312,983.00	100.00%	0.00%
WW 05-05	Wastew ater Vehicles	$ 235,000.00	89.27%	10.73%	$ -	N/A	N/A	$ -	N/A	N/A
WW 05-07	NDWWTP - Chlorine Tanks	$ 457,981.68	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 09-01	Lift station upgrades	$ -	N/A	N/A	$ 563,148.00	96.89%	3.11%	$ 1,714,755.00	19.97%	80.03%
WW 09-06	Wastew ater Collection System Repl/ Rehabilitation	$ 1,001,323.00	90.32%	9.68%	$ 732,358.36	88.82%	11.18%	$ 1,055,478.00	37.16%	62.84%
WW 09-08	Facilities Plan/Design for Baza Gardens WWTP	$ 1,250,000.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 09-10	Facilities Plan/Design for Agat-Santa Rita WWTP	$ 899,630.00	100.00%	0.00%	$ -	N/A	N/A	$ -	N/A	N/A
WW 11-03	Baza Gardens STP Replacement	$ 1,488,378.00	97.11%	2.89%	$ 9,656,874.00	96.51%	3.49%	$ 25,048,522.50	90.16%	9.84%
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP	$ 853,858.00	100.00%	0.00%	$ 371,699.00	100.00%	0.00%	$ 252,105.00	100.00%	0.00%
WW 11-08	Agat/Santa Rita STP Replacement	$ 2,217,700.00	99.94%	0.06%	$ 67,200,000.00	99.60%	0.40%	$ 2,226,659.06	89.93%	10.07%
WW 12-01	Northern District WWTP Primary Treatment Upgrade	$ 11,743,514.00	98.75%	1.25%	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-02	Biosolids Management Plan	$ 200,000.00	81.04%	18.96%	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-03	Agana WWTP Interim Measures	$ 11,300,000.00	99.63%	0.37%	$ 718,075.68	100.00%	0.00%	$ -	N/A	N/A
WW 12-04	I&I SSES Southern	$ 800,000.00	99.87%	0.13%	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-05	I&I SSES Central	$ 850,000.00	93.36%	6.64%	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-06	I&I SSES Northern	$ -	N/A	N/A	$ -	N/A	N/A	$ -	N/A	N/A
WW 12 -07	Umatac Merizo Replacement	$ 250,000.00	99.21%	0.79%	$ -	N/A	N/A	$ 20,952,871.63	99.93%	0.07%
WW 12-08	Wastew ater System GIS & Mapping	$ -	N/A	N/A	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-09	Wastew ater Facility Back Up Pow er	$ -	N/A	N/A	$ -	N/A	N/A	$ -	N/A	N/A
WW 12-10	Wastew ater System Asset Inventory	$ -	N/A	N/A	$ -	N/A	N/A	$ -	N/A	N/A
WW 17-01	Wastew ater Sew er System Expansion	$ -	N/A	N/A						
WW 17-02	Northern District WWTP Secondary Treatment Upgrade	$ 948,250.00	100.00%	0.00%						
		$ 35,988,491.87			$ 79,893,056.04			$ 51,563,374.19		

Electrical Engineering Support

CIP #	CIP Description	2010 Bond Allotment	% encumbered	% available	2013 Bond Allotment	% encumbered	% available	2016 Bond Allotment	% encumbered	% available
EE 05-02	SCADA Pilot Project	$ 61,950.00	31.98%	68.02%	$ -	N/A	N/A	$ -	N/A	N/A
EE 09-01	Wastew ater Pumping Station Electrical Upgrade	$ -	N/A	N/A	$ 99,861.00	100.00%	0.00%	$ -	N/A	N/A
EE 09-02	Electrical Upgrade - Water Wells	$ 354,227.00	100.00%	0.00%	$ 1,500,000.00	99.31%	0.69%	$ -	N/A	N/A
EE 09-03	Electrical Upgrade - Water Booster	$ -	N/A	N/A	$ -	N/A	N/A	$ -	N/A	N/A
EE 09-04	Electrical Upgrade - Water Booster	$ -	N/A	N/A	$ 977.00	100.00%	0.00%	$ -	N/A	N/A
EE 09-05	Electrical Upgrade - Other Water	$ -	N/A	N/A	$ 60,700.00	100.00%	0.00%	$ -	N/A	N/A
EE 09-06	SCADA Improvements - Phase I	$ 250,000.00	83.80%	16.20%	$ -	N/A	N/A	$ -	N/A	N/A
EE 09-07	SCADA Improvements - Phase 2	$ 1,056,986.00	97.77%	2.23%	$ -	N/A	N/A	$ -	N/A	N/A
EE 09-08	SCADA Improvements - Phase 3	$ 74,955.00	100.00%	0.00%	$ 722,359.00	95.33%	4.67%	$ 1,077,497.00	48.86%	51.14%
EE 09-09	SCADA Improvements - Phase 4	$ -	N/A	N/A	$ -	N/A	N/A	$ 4,378,118.00	72.87%	27.13%
		$ 1,798,118.00			$ 2,383,897.00			$ 5,455,615.00		

Miscellaneous Engineering Support

CIP #	CIP Description	2010 Bond Allotment	% encumbered	% available	2013 Bond Allotment	% encumbered	% available	2016 Bond Allotment	% encumbered	% available
MC 05-01	Laboratory Modernization	$ -	N/A	N/A	$ 1,171,465.00	99.95%	0.05%	$ 1,127,000.00	100.00%	0.00%
MC 05-02	Land Survey	$ 499,688.00	95.28%	4.72%	$ 1,052.00	100.05%	-0.05%	$ 1,260,524.00	99.35%	0.65%
MC 09-01	General Plant Improvements	$ 7,241,000.00	99.46%	0.54%	$ 2,441,737.00	93.27%	6.73%	$ 1,543,760.00	96.97%	3.03%
MC 15-01	Information Technology Intergration Improvements							$ 500,000.00	49.24%	50.76%
		$ 7,740,688.00			$ 3,614,254.00			$ 4,431,284.00		

	2010 Bond Allotment	2013 Bond Allotment	2016 Bond Allotment
CIP Water	$ 42,110,277	$ 53,550,914	$ 81,331,136
CIP Wastewater	$ 35,988,492	$ 79,893,056	$ 51,563,374
CIP Electrical	$ 1,798,118	$ 2,383,897	$ 5,455,615
CIP Miscellaneous	$ 7,740,688	$ 3,614,254	$ 4,431,284
	$ 87,637,575	$ 139,442,121	$ 142,781,409

Bond Fund	Construction Fund Amount ($M)	Estimated # of months fund available for use		Total Funds encumbered to date ($M)	% of fund used	Rate of Spending: ($M) per year
2005	$82.930	82	*	$82.930	100.00%	12.14
2010	$87.402	113	**	$83.541	95.58%	8.87
2013	$139.325	76	**	$136.483	97.96%	21.55
2015	$140.019	46		$90.326	64.51%	23.56

* - End date November 2013 via CCU Resolution 06-FY2014

** - Includes month of June 2020

B. Projects Procurement

Percentage Key:

100%	Approved by GM
99%	Signature required from either Accounting/Legal/GM
98%	Processing engineering service or construction contract (with legal)
95%	Request for CCU approval (GM/engineering)
90%	A/E fee negotiation or contractor bid evaluation (engineering)
80%	Selected A/E or Conducted bid opening (engineering)
70%	Advertised RFP/IFB (engineering)
60%	RFP/IFB Package under legal review
50%	RFP/IFB Package completed (engineering)
Less than 50%	Project Scope of work development in progress

- Red text anywhere indicates a change from the last report.

BOX KEY FOR PROCUREMENT:

(Type of Procurement) (Relevant CIP NO. or Funding Source)	**(Project Title)**	
(Percentage complete for procurement)	**Activities/Notes:** (see percentage key above)	**Consultant** (listed when selected)
Project Description	Summary of project description	

BID PACKAGE PW 09-02	**New Well Construction (AG-10-Y-8 & AG-12)**	
<50% Complete	**Activities/Notes:** GWA engineering continuing discussion with Dept. of Agriculture and lessee on options of acquisition of property for well site at AG-12. Internal GWA discussions underway for survey and appraisal services. GWA executed Change Order with GHD to update the design plans specific to the new well locations.	
Project Description:	The project is to construct three new production wells for GWA as well as installation of a water main to connect the new production wells to the Ysengsong Reservoirs.	

RFP PW 09-02	**New Well Construction (Construction Management)**	
<50% Complete	**Activities/Notes:** SOW being developed	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the construction of up to three (3) new production wells for GWA. GWA plans to increase source water production to improve system redundancy that allows for operating the water production wells more effectively. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.	

RFP USEPA	**Design of Dungca Beach Sewer Relocation**	
<70% Complete	**Activities/Notes:** Project was advertised on June 9, 2020. RFP proposals are due on July 7, 2020.	
Project Description:	The work performed under this project procurement shall consist of replacement of a sewer main located along the shores of Dungca Beach, from the Bayside Sewer Pump Station (SPS) to an area north of Lagoon Drive. The new sewer main shall be located within the public right of way along Trankilo Road and Lagoon.	

RFP USEPA	**Design of Hagatna Main Sewage Pump Station Redundant Force Main**	
<60% Complete	**Activities/Notes:** RFP documents under legal review.	
Project Description:	The work to be performed under this project procurement shall consist of identifying redundant force main options and to investigate the current condition of the existing force main. If repair/relocation is needed, then identify options and provide the design for the selected options, including pump station upgrades, if necessary.	

BID PACKAGE WW 09-06	**Bayside Sewer Pump Station Improvements Project**	
100% Complete	**Activities/Notes:** Contract was approved on June 4, 2020. NTP issued on June 9, 2020.	
Project Description:	Work to be performed under this project shall consist of converting existing facility to pump station to house two submersible pumps along with improvements to the electrical system and the relocation of a power transformer located near the facility out to the nearest GPA power pole.	

BID PACKAGE USEPA	**Asan-Adelup-Hagatna, Route 1 Sewer Rehabilitation and Replacement – Phase II**	
70% Complete	**Activities/Notes:** Project was advertised on June 16, 2020. Bid opening is scheduled for August 14, 2020.	
Project Description:	Work to be performed under this project shall consist of cleaning and rehabilitating existing 16-inch, 24-inch and 27-inch diameter gravity sewer lines with cured-in-place pipe (CIPP) liner, reinstating sewer laterals after CIPP rehabilitation is complete, replacing sewer manhole concrete collars, and providing temporary bypassing and traffic control as necessary to complete the rehabilitation work.	

BID PACKAGE USEPA-SRF	**Groundwater Wells A-02, A-07, A-12, D-05 and F-03 Rehabilitation**	
70% Complete	**Activities/Notes:** No bid was submitted on December 13, 2019. Design consultant is revising the bid documents for re-bid of the project.	
Project Description:	Work to be performed under this project consist of rehabilitating four (4) existing production well sites including development, testing and permitting of a new production well.	

BID PACKAGE OEA GRANT	**Outfall Effluent Diffuser Installation Project for Upgrade of the Northern District Wastewater Treatment Plant (NDWWTP) to Secondary Treatment (Re-Bid)**	
100% Complete	**Activities/Notes:** Contract was approved on June 5, 2020. NTP issued on June 10, 2020.	
Project Description:	Work to be performed under this project consist of approximately 2,000 LF at a depth of 140 feet ocean-installation of an outfall diffuser.	

BID PACKAGE OEA GRANT	**Northern Guam Lens Aquifer (NGLA) Monitoring System Expansion Project for the Guam Water and Wastewater Infrastructure Improvements Program**	
70% Complete	**Activities/Notes:** Project was advertised on June 22, 2020. Bid opening is scheduled for August 7, 2020.	
Project Description:	Work to be performed under this project consist of installation of seven new monitoring wells and rehabilitation for two existing monitoring wells on Department of Defense (DoD) property.	

BID PACKAGE OEA GRANT	**Northern Guam Lens Aquifer (NGLA) Monitoring System Rehabilitation Project for the Guam Water and Wastewater Infrastructure Improvements Program**	
70% Complete	**Activities/Notes:** Project was advertised on June 30, 2020. Bid opening is scheduled for August 21, 2020.	
Project Description:	Work to be performed under this project consist of rehabilitation of ten existing monitoring wells located on GovGuam or private property. Upon construction completion, all wells will be used to monitor water level and other groundwater characteristics of the NGLA.	

BOX KEY FOR PROJECT:

(Type of Project) (Relevant CIP NO.)	**(Project Title)** **(Contractor or consultant)**	**Start Date:** (month and year)
(Percentage complete for project)	**Activities/Notes:** (brief description of activity)	**Completion Date:** (month and year)
(Court Order Paragraph No.)	(Project type)	
Project Description	Project Description Narrative	

C. CIP Water Section

INSPECTION CIP PW 05-02	**Inspection & Maintenance Repairs to GWA Island-Wide Steel Water Tank Reservoirs Phase 2 (DCA)**	**Start Date:** April 2010
75% Complete	**Activities/Notes:** Remaining work is construction management services for the Tank Repair and Bypass Construction. Meeting conducted with DCA to discuss CM plan for the Tank Repair/bypass construction project.	**Completion Date:** To be determined (TBD)
CO 38C	Engineering inspection services	
Project Description:	The Court Order requires GWA to inspect all active and in some cases inactive water reservoirs. The inspection results will allow GWA to determine if a reservoir requires repair or replacement.	

DESIGN CIP PW 05-12	**Brigade II BPS Upgrade (EM Chen)**	**Start Date:** April 2012
100% Complete (Basis of Design) 99% Complete (Design)	**Activities/Notes:** Design plans and specs continue to be reviewed and revised.	**Completion Date:** TBD
N/A	Engineering design services	
Project Description:	The design project is intended to assess system water supply feed from the north as well as Ugum WTP and the water demands downstream from the Brigade BPS so as to reconfigure the piping into the BPS and resize the pumps to me system head requirements.	

DESIGN PW 09-11	**Northern and Southern Guam Reservoir Design (TG Engineers)**	**Start Date:** May 2015
74% Complete	**Activities/Notes:** Ugum Reservoir Design is at approximately 50%. GWA and TGE is clarifying SCADA scope. TGE has submitted a change order for additional foundation design and meeting extension. Change order comments have been submitted to TGE. Biological Assessment report pending. Archaeological report completed.	**Completion Date:** None. (Expected 6 months after Agfayan property issue is resolved)

	<u>Inarajan and Agfayan Booster Pump Station</u> Meeting needs to be scheduled with GFD to discuss fire flow requirement before pumps can be sized for both sites. GWA called GFD to schedule, but no answer. GWA will follow up with GFD. Biological Assessment and Archaeological report are pending. <u>Santa Rosa, Santa Rita, and Sinifa Reservoir</u> Under construction. See Santa Rosa, Santa Rita, and Sinifa Construction for update.	
CO 29 (b)(4)	Engineering design services	
Project Description:	The design services will consist of preparation of plans, specifications, and estimates (PS&E), which includes Basis of Design, design calculations, hydraulic modeling (EPANET), computational fluid dynamic modeling (CFD), construction schedule, topographical survey, property research, property mapping, geotechnical engineering, cultural resource inventory and evaluation of historic resources, hazardous materials survey, construction documents, design drawings in Auto CAD, relevant permit, construction bid support service, and response to request for interpretation/information during construction. The tank locations are Ugum, Santa Rita, Santa Rosa, Inarajan and Sinifa.	

<u>DESIGN</u> PW 12-04	**Central Guam Reservoirs Design (GHD Inc.)**	**Start Date:** May 2015
88% Complete	**Activities/Notes:** <u>Tamuning No. 2 Reservoir and Tamuning Booster Pump Station</u> Design is at approximately 60%. Per Bobbie, property acquisition letter for Lot 1, Block 5, Tract 1427 has been signed by GM. Letter sent to property owner. GWA is waiting for a response on the land purchase. <u>Manenggon Reservoir and Access Booster Pump Station</u> Design is at 100% pre-final. Designer is performing QC checks before submitting to GWA for review. Biological Assessment report completed. Archaeological report completed. <u>Piti Reservoir</u> DCA and GHD are working to put the bid package together. DCA has already completed the major steel tank repair plan and specifications. GHD is working on site utility plan and specifications. GWA has not submitted the Right of Way application to National Parks Services yet. GWA is waiting for Dept. of Agriculture consultation response letter before applying. Biological Assessment report has been completed. Archaeological report is pending. DCA is wrapping up the structural	**Completion Date:** TBD

	repair plans. After plans have been completed, GWA will have the Tank Repair/Bypass contractor price out the work. <u>A23-A25 Deepwell (PFAS Treatment)</u> Water sampling test results received. Designer is working on finalizing site layout for A-23. Biological assessment will be scheduled for the sites. Layout sent to DPW for review and approval. DOI has approved grant funding transfer to this project. <u>Tumon No. 1, Hyundai, Chaot No. 2 Reservoir</u> Under construction. See Tumon No. 1, Hyundai, Chaot No. 2 Reservoir Construction for update.	
CO 29 (b)(4)	Engineering design services	
Project Description:	The design services will consist of preparation of plans, specifications, and estimates (PS&E), which includes Basis of Design, design calculations, hydraulic modeling (EPANET), computational fluid dynamic modeling (CFD), construction schedule, topographical survey, property research, property mapping, geotechnical engineering, cultural resource inventory and evaluation of historic resources, hazardous materials survey, construction documents, design drawings in Auto CAD, relevant permit, construction bid support service, and response to request for interpretation/information during construction The tank locations are Hyundai, Pulantat, Chaot #2, Tumon #2, Piti & Tumon #1.	

<u>DESIGN</u> PW 09-03	**ID/IQ for Professional Civil/Structural Services** **Task 1 – Tai Road/S-13 and Toto-Canada Road/Blas Street Waterline Replacement**	**Start Date:** January 20, 2020
60% Complete	**Activities/Notes:** Design consultant submitted the 60% design work for GWA review and comment on May 1, 2020.	**Completion Date:** December 30, 2020
Project Description:	The project is intended to replace existing water main approximately 4,500 LF along Toto-Canada Road; 3,200 LF along Tai Road; 800 LF along S-13 Road; and 900 LF along Blas Street.	

<u>CONSTRUCTION</u> PW 09-03	**Line Replacement Phase IV (Giant Construction)**	**Start Date:** February 14, 2016
98% Complete	**Activities/Notes:** Connection of new pipes to the existing waterline at Hahasu and Famha has been completed. Contractor applied for building permit for Assumption Drive.	**Completion Date:** October 28, 2020
	Construction Services	

Project Description:	The project is intended to replace existing water lines that have been found by operations to be leaking and/or are causing service delivery to less than what GWA is required to provide. The project will replace water mains at ten known locations throughout the island and a component within the bid where line replacement work for unknown locations is accounted for.

DESIGN PW 05-15	**Asan Spring Rehabilitation Design (HDR)**	**Start Date:** August 24, 2016
82% Complete	**Activities/Notes:** A CO no.2 has been routed to Finance for signature and pending GM's approval. The purpose for CO no.2 is to address the potential endangered species that may be located on the project site.	**Completion Date:** June 2022
	Engineering design services	
Project Description:	- Perform site visits and condition assessment for site conditions to determine demolition and rehabilitation requirement, process equipment condition, structural condition, and electrical system. Site condition assessment shall include all disciplines to execute the project. - Review and validate the current property boundary information to confirm the available space for the project development. - Perform an environmental impact study and prepare all required permits as needed. - Perform an archeological and historical resources study to identify potential impact to the project, prepare all required permits as needed. - Coordinate with Guam Historic Resources Division State Historic Preservation Office (SHPO) on historical resources study. Prepare all necessary reports and documents as required by SHPO. - Coordinate with Guam Department of Agriculture, Division of Aquatic and Wildlife Resources (DAWR) on vegetation clearance. Prepare all necessary reports and documents required by DAWR. - Identify the existing and projected service area, period of design. - Identify and recommend conceptual water treatment system. - Perform a Class 4 engineering cost estimate according to the American Association of Cost Engineers (AACE) International Cost Estimate Classification System for construction fee. Cost must include all disciplines, permit, construction and administration that are necessary to execute the project. All costs will be in current dollars and escalated to the estimated midpoint of construction.	

CONSTRUCTION PW 09-11, PW 12-05	**Yigo/Astumbo Tank Construction (Pernix)**	**Start Date:** December 1, 2016
99% Complete	**Activities/Notes:** Astumbo #1 (New Concrete): Contractor remaining work items include testing of instrumentation and electrical upgrade work. Electrical work is pending DPW permit. Follow up has been made by the Contractor to Pernix via email. Inspection was conducted 06/04/2020 for Astumbo site. Contractor still has pending items to address.	**Completion Date:** October 31, 2018 (LD are being totaled)
	Construction Services	
Project Description:	This project will involve construction of two (2) 2MG concrete tanks and Booster Pump Station at the Yigo site and a one (1) 2MG concrete tank at the Astumbo site. Work will involve new pipe line, valves, electrical controls, pumps and motors, site drainage, paving, generator for the BPS, SCADA, etc.	

CONSTRUCTION MANAGEMENT PW 09-11, PW 12-05	**Yigo/Astumbo Tank Construction Management (GHD)**	**Start Date:** December 2016
99% complete	**Activities/Notes:** Working to complete project close out requirements but due to additional time required by contractor the CM services required as well. GWA executed Change Order after CCU approval.	**Completion Date:** August 2019
N/A	Construction Management services	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the demolition of existing steel elevate and ground tanks as well as the construction of the 2MG concrete tanks at the Yigo tank location and Astumbo tank location. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.	

CONSTRUCTION MANAGEMENT PW 12-04, PW 12-06 AND PW 09-11	**Central Tank Phase I (Chaot #2, Tumon #2, Hyundai) Construction Management (TG Engineers, PC)**	**Start Date:** December 2017
80% complete	**Activities/Notes:** <u>Tumon No. 1</u> Contractor working on water line at Marine Drive, control building, and site vaults. Marine Drive HEP expired 05/03/2020. DPW has stopped AIC from working on the road. GWA operations is investigating how to secure 24 in. line for the contractor to connect new lines. But	**Completion Date:** None.

	as 06/15/2020, AIC received confirmation from DPW that HEP permit is approved for 3 months extension. <u>Hyundai</u> Contractor working on booster pump station, vaults, tank. DN Tanks was able to get shotcrete and prestressing team on island this week. Work stopped on 05/21/2020 on North Sabana Road. DPW inspector instructed AIC to stop work pending release of permit renewal. But as of 06/15/2020, AIC received confirmation from DPW that HEP permit is approved for 3 months extension. <u>Chaot No. 2</u> Contractor working on site vaults, PRV and well work. Tank inspection scheduled for 06/05/2020. Dero Road PRV in service. Stage area HEP expired 05/31/2020. Dero Road HEP expired 05/18/2020. Well HEP will expire 12/17/2020. DPW visited Dero Road jobsite on 05/25/20. Stop work order was issued by DPW, effective 05/31/2020. After the migration to the new PRV (05/28/20), AIC contacted DPW inspector to inform him of the unstable roadway due to the excavation for the new waterline. DPW inspector allowed AIC to proceed with only road restoration; however, no further excavation was allowed. Road restoration was completed on 06/11/20. As of 06/15/2020, AIC received confirmation from DPW that HEP permit is approved for 3 months extension. We can now proceed with the connection from the tank distribution line to the Leo Palace line at Dero Road.	
N/A	Construction Management services	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the construction of three water reservoirs; 0.5MG Chaot #2, 1MG Tumon #2 (Nissan) and 1MG Hyundai. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.	

CONSTRUCTION PW 12-04, PW 12-06 AND PW 09-11	**Central Tank Phase I (Chaot #2, Tumon #2, Hyundai) Construction (AIC)**	**Start Date:** February 8, 2018
80% Complete	**Activities/Notes:** Tumon No. 1 Contractor working on water line at Marine Drive, control building, and site vaults. Marine Drive HEP expired 05/03/2020. DPW has stopped AIC from working on the road. GWA operations is investigating how to secure 24 in. line for the contractor to connect new lines. But as 06/15/2020, AIC received confirmation from DPW that HEP permit is approved for 3 months extension. Hyundai Contractor working on booster pump station, vaults, tank. DN Tanks was able to get shotcrete and prestressing team on island this week. Work stopped on 05/21/2020 on North Sabana Road. DPW inspector instructed AIC to stop work pending release of permit renewal. But as of 06/15/2020, AIC received confirmation from DPW that HEP permit is approved for 3 months extension. Chaot No. 2 Contractor working on site vaults, PRV and well work. Tank inspection scheduled for 06/05/2020. Dero Road PRV in service. Stage area HEP expired 05/31/2020. Dero Road HEP expired 05/18/2020. Well HEP will expire 12/17/2020. DPW visited Dero Road jobsite on 05/25/20. Stop work order was issued by DPW, effective 05/31/2020. After the migration to the new PRV (05/28/20), AIC contacted DPW inspector to inform him of the unstable roadway due to the excavation for the new waterline. DPW inspector allowed AIC to proceed with only road restoration; however, no further excavation was allowed. Road restoration was completed on 06/11/20. As of 06/15/2020, AIC received confirmation from DPW that HEP permit is approved for 3 months extension. We can now proceed with the connection from the tank distribution line to the Leo Palace line at Dero Road.	**Completion Date:** TBD (Completion date has passed. Pending time extension for permit delays.)
	Construction Services	
Project Description:	The work performed under this project procurement shall consist of Construction of three water reservoirs; 0.5MG Chaot #2, 1MG Tumon #2 (Nissan) and 1MG Hyundai. Some piping work off site from the reservoir is also required to ensure the reservoirs function optimally.	

CONSTRUCTION MANAGEMENT PW 09-11	**Northern and Southern Tank Phase I (Santa Rosa, Sinifa, Santa Rita) Construction Management (GHD)**	**Start Date:** April 2018
0% Complete	**Activities/Notes:** NTP issued October 3, 2019. Pending permits with SHPO, GEPA and DPW. GWA is waiting on designer - TGE to provide archaeological port for Sinifa site. The remaining sites are still under review by SHPO. SHPO has responded on two sites. TGE/Search must address SHPO's comments. Stop order was issued for the CM until contract extension and fee negotiation. GWA has provided comments on 06/03/2020 to GHD regarding change order proposal. GWA coordinating RFI reviews with EOR.	**Completion Date:** TBD (currently February 21, 2021)
N/A	Construction Management services	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the construction of three water reservoirs: 1MG Santa Rosa, 1MG Sinifa and 1MG Santa Rita. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.	

CONSTRUCTION PW 09-11	**Northern and Southern Tank Phase I (Santa Rosa, Sinifa, Santa Rita) Construction (AIC)**	**Start Date:** October 2019
0% Complete	**Activities/Notes:** NTP issued October 3, 2019. Pending permits with SHPO, GEPA, and DPW.	**Completion Date:** TBD
	Construction Services	
Project Description:	The work performed under this project procurement shall consist of Construction Services of three water reservoirs: 1MG Santa Rosa, 1MG Sinifa and 1MG Santa Rita. Some piping work off site from the reservoir is also required to ensure the reservoirs function optimally.	

DESIGN PW 05-12	**Pressure Zone Realignment and Tank Repair-Replacement (GHD)**	**Start Date:** August 2018
Design will be done in Phases. Phase 1 - 100% (Design) Phase 2 - 30% (Design)	**Activities/Notes:** Designer is working on Phase II sites. Phase II sites approximately 30% complete. Ops has provided field investigation data for Phase II sites.	**Completion Date:**
N/A	Engineering design services	

Project Description:	The design project is intended to assess current and recommended pressure zones, and design and install control valves (PRVs, PRSVs) to properly control and measure system flow between zones. Scope also includes setting up pilot DMAs; and design for new or repaired water tanks needed to complete the court order tank requirements.

CONSTRUCTION	**Pressure Zone Realignment and Tank Repair-Replacement – Phase I (Sumitomo)**	**Start Date:** December 17, 2019 (Notification of Award)
0% Complete	**Activities/Notes:** Construction contract effective April 21, 2020. NTP issued May 1, 2020 with modified language for work starting onsite. Pre-construction meeting tentatively scheduled for Monday, May 11, 2020, at 9:00am. GWA reviewing submittals submitted by SMCC on week of May 4, 2020.	**Completion Date:** April 21, 2021
N/A	Construction Services	
Project Description:	The work performed under this project procurement shall consist of Construction Services for the installation of control valves (PRVs, PRSVs), piping, and related electrical upgrades to properly control and measure system flow between zones.	

DESIGN, CONSTRUCTION, CONSTRUCTION MANAGEMENT PW 09-11	**Tank Repair and Bypass (DCA, AIC, GWA)**	**Start Date:** May 1, 2020
0% Complete	**Activities/Notes:** Construction contract effective April 21, 2020. NTP issued May 1, 2020 with modified language for work starting onsite. Pre-Construction Meeting conducted. AIC has submitted permit to DPW. AIC, GWA, and DCA have been progressing with submittals and RFIs.	**Completion Date:**
Project Description:	The work to be performed under this project consist of installing by-pass piping, valves, etc. ahead of certain tank inspection work. The operation of the by-pass will allow the tank inspector to determine appropriate repairs after which the contractor will proceed to repair the tank.	

DESIGN PW 09-02	**New Well Site Development - Y-08, AG-10, AG-12 (GHD)**	**Start Date:** September 2018 (Extension)
99% Complete	**Activities/Notes:** Design plans and specs are expected to be submitted by GHD on the week of May 18, 2020.	**Completion Date:** TBD

N/A	Engineering Design Services	
Project Description:	The design project is intended to design 3 new wells to increase production capacity. The design services will consist of preparation of plans, specifications, and estimates (PS&E), which includes Basis of Design, design calculations, construction schedule, construction documents, design drawings in Auto CAD, relevant permit, construction bid support service, and response to request for interpretation/information during construction.	

CONSTRUCTION PW 14-01	**Fire Hydrant Replacement Phase I (Mega United Corporation, Ltd.)**	**Start Date:** October 19, 2019
0% Complete	**Activities/Notes:** DPR already signed the permit first week of March but still needs permit approval with other agencies and Mayor's Offices. The customer service for clearances of highway encroachment permit was temporarily suspended due to Covid-19. We can resume the permit processing once the operation is back to normal. Some of the materials ordered off island already arrived.	**Completion Date:** October 25, 2020
Project Description:	The work performed under this project consist of replacing the dry barrel fire hydrants with wet barrel type fire hydrants. The replacement will involve removal of defective fire hydrant laterals, gate valves, hydrant stem and barrel and other appurtenances necessary to complete the project.	

CONSTRUCTION PW 05-07	**Groundwater Well Production Meter Replacement Project (Giant Construction)**	**Start Date:** April 29, 2020
2% Complete	**Activities/Notes:** - Received/reviewed 109 submittal items, 101 items approved, 8 items to be resubmitted for approval. - Contractor submitted shop drawing for each well sites incorporating actual field measurement of discharge piping length to be replaced. Review in progress. - Contractor's permit still with GEPA, the remaining agency to sign.	**Completion Date:** June 28, 2021
	Construction services	
Project Description:	Work to be performed under this project shall consist of replacing the production well meters and associated well head piping. Construction management is performed in-house.	

D. CIP Wastewater Section

DESIGN WW 09-06	**Bayside SPS Improvements Design (EMPSCO)**	**Start Date:** July 29, 2016
100% Design 0% Construction Services	**Activities/Notes:** NTP issued on June 11, 2020. Building permit application on-going.	**Completion Date:** TBD
CO #3	Engineering design services	
Project Description:	The intent of this project for an engineering firm to prepare design drawings and specification to upgrade the Bayside Sewer Pump Station given the facility is in major disrepair and the adjacent river is eroding away the access road to the facility which is causing maintenance challenges and install underground power cable due to GPA's concern that existing power pole, located on the bank is at risk of being lost due to storm surges.	

CONSTRUCTION WW 11-04	**Umatac-Merizo WWTP Design Build Improvements Project (CoreTech)**	**Start Date:** June 2017
100% Design 100% Construction	Activities/Notes: - Final SCADA adjustment completed and verified July 2, 2020. Contractor preparing final invoice.	**Completion Date:** January 6, 2020
	Construction services	
Project Description:	The project is intended to improve the aeration basin, construct a new sewer pump station, regrade the overland field, construct a new effluent storage tank and disinfection facility. The overland percolation terraces are being regraded to ensure appropriate distribution of effluent through the entire terrace.	

CONSTRUCTION MANAGEMENT WW 11-04	**Umatac-Merizo WWTP Design Build Improvements Project (SSFM Inc)**	**Start Date:** September 7, 2017
100% Complete	**Activities/Notes:** CM checked As-Built drawings and made comments. Final payment submitted to GWA.	**Completion Date:** January 2020
	Construction Management services	
Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the improvements works at the aeration basin, new sewer pump station, overland field improvements, effluent storage tank. The overall goal of the On-Site Representative is to ensure materials are installed and installation conforms to the contract plans and specifications and that all required testing is performed and passes.	

E. CIP Engineering Support

DESIGN EE 09-08	**SCADA System for Water and Wastewater Facilities Phase A-1 (AECOM)**	**Start Date:** June 11, 2015
100% Complete (Design) 82% Services during construction	**Activities/Notes:** On standby to address any questions for DOR.	**Completion Date:** November 2017 - Design December 31, 2019 - (Bid and Construction Support)
N/A	Engineering design services	
Project Description:	The A/E firm will design an integrated, robust and secure Supervisory Control and Data Acquisition (SCADA) system for GWA's water and wastewater systems, and to provide support services during bid and construction. The 22 sites will consist of a combination of water facilities such as production wells, reservoirs, booster pump station and wastewater sites include sewer treatment plants and sewer pump stations. Executed by approved change orders, number of sites in original design scope has changed from 22 sites to 19 sites and design of High Water Alarm for 20 critical sewer pump stations has been added. Scope also includes bid and construction support of the design-build project of GPWA SCADA EMS project.	

CONSTRUCTION EE 09-08, EE 09-09	**SCADA Phase A1 Construction (G4S Security)**	**Start Date:** July 13, 2018
80% Construction	**Activities/Notes:** Based on legal counsel negotiation; July 7 is now the last day for contractor to complete any remaining work. Further negotiation and settlement process to follow. Payment No. 5 is submitted, pending review and processing.	**Completion Date:** December 31, 2019
	Construction services	
Project Description:	The work performed under this project procurement shall consist of Construction of SCADA ready instrumentation at several water and wastewater facilities throughout the island.	

CONSTRUCTION MANAGEMENT EE 09-08, EE 09-09	**SCADA Phase A1 Construction Management (GHD)**	**Start Date:** July 13, 2018
92% Complete (due to increased contract amount and unbilled balance)	**Activities/Notes:** Continuing to provide inspections, claims, and closeout support. A no-cost change order to be processed to extend completion date.	**Completion Date:** May 31, 2020
	Construction Management services	

Project Description:	The work performed under this project procurement shall consist of Construction Management and Inspection Services for the installation SCADA ready instrumentation at several water and wastewater facilities throughout the island. The overall goal of the Construction Manager (CM) is to manage the entire construction process so that the project can be delivered efficiently and professionally.

F. GIS Section

MAPPING MC 05-02	**Island Wide Survey-** **(Duenas, Camacho & Ass.)**	**Start Date:** December 2007
99% complete	**Activities/Notes:** Map regarding Airport Tank easement boundary is pending easement agreement with GIAA and final parceling map.	**Completion Date:** October 2019
	Survey services	
Project Description:	The contracted land surveyor is required to conduct title research, property valuation and mapping of property boundaries where GWA facilities are located, including the lots which are not registered under GWA's name.	

MAPPING MC 05-02	**Island Wide Survey PH II -** **(Duenas, Camacho & Ass.)**	**Start Date:** August 30, 2017
80% complete	**Activities/Notes:** First set of land registration maps (5): DCA performing field survey. First 2 land registration maps in GWA review process.	**Completion Date:** December 2019 - Request for extension sent to GM 10/29/2019 – due to myriad of reasons, extended periods of inclement weather, delays in DLM Survey review and approval of property maps and changes of additional scope of survey work.
	Survey services	
Project Description:	The work performed under this project procurement shall consist of a professional land surveyor conducting field work to mark corners of existing government properties as a means of severing out portions of the larger property to be deeded to GWA. Surveyor shall also prepare all necessary maps and documents for recording at DLM.	

G. Permits Section

PERMITS
MONTHLY REPORT 2020

	2020												
Description	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	TOTAL
Building Permit	23	22	23	1	1	8							78
Occupancy Permit	6	31	25	1	1	21							85
New Installation	4	17	15	0	0	9							45
Sewer Application	0	1	4	0	0	1							6
Sewer Inspection	0	0	1	0	0	3							4
Private Utility Acceptance	0	0	0	0	0	0							0
Relocation of Water Meter	0	2	0	0	0	0							2
Tapping-Water	1	5	3	0	0	0							9
Tapping-Sewer	1	5	3	0	0	0							9
Clearance-Water	14	10	20	12	12	18							86
Clearance-Sewer	14	10	20	12	12	18							86
Highway Encroachment	36	5	20	0	0	31							92
Verification of Utilities	6	6	1	1	1	1							16
Fire Flow Test	0	3	0	0	0	0							3
Schedule Water Outage	0	0	0	0	0	0							0

NOTE: Completed work orders for each calendar month are reported.

H. USEPA SRF Project Status Report

United States Environmental Protection Agency State Revolving Funds (USEPA SRF)

- Projects listed below that are noted to be in the procurement phase will follow the "Percentage Key" below.

  Percentage Key:

100%	Approved by GM
99%	Signature required from either Accounting/Legal/GM
98%	Processing engineering service or construction contract (with legal)
95%	Request for CCU approval (GM/engineering)
90%	A/E fee negotiation or contractor bid evaluation (engineering)
80%	Selected A/E or Conducted bid opening (engineering)
70%	Advertised RFP/IFB (engineering)
60%	RFP/IFB Package under legal review
50%	RFP/IFB Package completed (engineering)
Less than 50%	Project Scope of work development in progress

- Red text anywhere indicates a change from the last report.
- Cells highlighted in green indicate contract amount certified and project active.

NOTE: Table below only reflects SRF projects that are still active. All other projects previously shown are on prior reports

	Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount (+) change orders	Contractor	Status as of 06/18/2020
3	Asan-Adelup-Hagatna RT1 Sewer Line Rehabilitation and Replacement	Rehabilitation of sewer lines from the War in the Pacific Asan Park to the Governor's Complex in Adelup. This line is asbestos concrete that is dilapidated and some areas have disintegrated crowns.	Brown & Caldwell	Design	2	12/11/2015	3/30/2017 for Design requirements	$ 1,780,210.00	HDR	HDR assisting as needed. Working with CM to review CCTV, submittals as requested, and any variance requests. Also, Archaeological monitoring through HDR contract. HDR CO for archaeological monitoring and additional construction services services approved by GWA. This CO will include design services for Phase 2 (Adelup to Hagatna).
				Construction	2	11/9/2018	3/8/2020	$6,275,782.88	InfraTech	Infratech (via Allied Trenchless) completed Cleaning/CCTV for areas they were able to access. Contractor working on point repairs. Replacement of three manholes completed. Installed new 16-inch main replacing 12-inch main. Working on point repair near bridge. Contractor working on revising TCP for section crossing over to pump station to satisfy DPW to prevent closing down to one lane in both directions. Ongoing while other work is being done. CO3 for additional cleaning, abatement of 14" AC pipe, additional time and cost for traffic control signed approved by GWA. Contractor working on segment between MH20Aasan and MH20asan. Encountered large pipe encasement that is complicating installation. Solution determined – removing encasement and installing new pipe.
				Construction (Phase 2)				$4,000,000.00		Pre-solicitation notice drafted and submitted to GWA. Draft of revised contract package completed by HDR, reviewed by GWA and BC and comments given to HDR. Contract package delivered to GWA for advertisement.
				CM	2	8/3/2017	3/8/2020	$ 870,610.41	DCA	Working with Contractor on schedule, submittals, responding to RFIs, and assisting in the negotiations of PCO costs.
4	RT2 Agat War in the Pacific Sewer Line Rehabilitation and Replacement	Rehabilitation of a large segment of sewer line fronting the War in the Pacific Park in Agat that has collapsed.	Brown & Caldwell	Design	3	11/17/2015	3/30/2017 for Design requirements	$ 316,681.00	SSFM	Providing designer support during construction. Final invoice submitted to GWA on 05/01/2020. Project is completed.
				Construction	3	8/31/2017	10/1/2018 (Contractor in LD period)	$4,688,042.38	ProPacific	FOIA request. Currently gathering correspondence records and contract documents. PPBC needs to submit final CCTV and paperwork for review and acceptance of pipe between SMH 2 through 10. All work now completed. Instructed PPBC to submit a request for CO to resolve excess excavated materials, time extension, LD time, and other costs to BC. GWA issued certification of substantial completion to PPBC. Date is October 6, 2019.
				Construction (Phase 2)						B&C working with HDR to prepare bid documents for RT1 Asan-Adelup-Agana PH2.
				CM	3	9/19/2017	10/1/2018	$ 749,950.00	TG Engineers	Assembling close-out documentation.
5	Brown & Caldwell Project Management	Brown & Caldwell to provide program management services and support.	T. Cruz	Design	4	3/24/2015	2/28/2019	$ 2,640,220.00	B&C	Project underway.
				Construction				*The project does not involve construction.*		
				CM						

	Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount (+) change orders	Contractor	Status as of 06/18/2020
7	Groundwater Wells Rehabilitation (F-3, A-2, A-7, A-12, D-5)	Rehabilitation of existing deep wells and/or in cases where pipe column needs replacing, wells will be re-drilled. The deep wells to be rehabilitated are F-3, A-2, A-7, A-12 & D-5.	Brown & Caldwell	Design	6	5/27/2016	2/28/2018 (for design only)	$ 1,758,247.00	AECOM	Design services during construction on hold until construction IFB is issued
				Construction	4	8/15/2019	8/30/2020			Designer submitted revised bid package to GWA on 05/25/2020. Bid dvertised mid-June.
				CM	4	8/15/2019	8/30/2020			RFP advertised on July 30th, closing date August 16th. Pending notice of award. Negotiations have been attempted between GWA and the most qualified consultant, SSFM, for an acceptable and agreed fee proposal. Third Revised Fee Proposal (No.3) is expected by Friday, 03/13/2020.
8	Tumon Sewer Hot Spots	Investigation, evaluation, and repair of possible solutions, to long plaguing issues where sewer overflows are known to occur in Tumon San Vitores.	Brown & Caldwell	Design	7	6/24/2016	10/30/2017 for design only	$ 572,089.00	TG Engineers	TGE to provide engineering services during bid process.
				Construction	See Project 15	12/1/2018	12/31/2019	See Project 15	See Project 15	See Project 15
				CM	See Project 15	5/31/2019	5/31/2020	See Project 15	Am Orient	Procurement 100%: Contract fully executed. CM services to be on hold until bidding restarted.
12	RT4 Relief Sewer Line Rehabilitation and Replacement	Rehabilitation of sewer lines that are located from Agana McDonalds to Marine Drive that have been known to overflow due to structural issues.	Brown & Caldwell	Design	9	3/1/2016	4/22/2017	$ 794,000.00	AECOM	AECOM assisting as needed.
				Construction	5	9/3/2018	6/30/2020	$ 3,998,688.00	Insituform	Insituform/Mocon completed all CIPP and post-CCTV. GWA will not install "top hats" on the 4 reinstated service connections under this contract. This work will be added to Rt.1 phase 2 construction. CCU approved Change Order #5 to increase contingency authorization. Leaks from end of pipes in several manholes repaired by Mocon.
					6	9/25/2018	6/30/2020	$ 3,407,848.00	ProPacific	PPBC working on manhole rehab. Infiltration between pipe and liner entering the manholes has been fixed by Insituform. Installation of new main up- and down-stream from O'Brien intersection completed. Contractor repairing curbs and will repave in July. Contractor intends to submit a request for change order for additional work resulting from existing utilities encountered. Manhole rehab moving along nicely. Installation of new manhole at Rt.4/Rt.1 intersection started.
				CM	6	11/15/2018	12/31/2019	$ 702,678.13	EMPSCO	Working with contractors on schedules, submittals, permitting, and contractor's request for additional time and costs. Also working with contractors in the field.

	Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount (+) change orders	Contractor	Status as of 06/18/2020
14	Southern SSES Sewer Rehabilitation (Baza Gardens-Talofofo)	Rehabilitation of segments of sewer lines in Windward Hills, Talofofo area where the Sanitary Sewer Evaluation Study recommends rehabilitation.	Brown & Caldwell	Design				*The design was previously completed under bond funding.*		
				Construction	8	8/2/2016	Due to issue related to Santa Rita sewer project completion under analysis.	$ 1,189,815.00	ProPacific	Santa Rita • 401C application: wetland verification with GEPA and DoAG conducted on 5/18/2020. 401C public comment underway; advertisement published 6/13 and 6/14. • Federal Consistency approved 11/25/2019. • SHPO – BC sent contract to SEARCH for review and approval. Not yet received from SEARCH. • 404: New USACE PM (Albert Williams); now pursing an NWP3; willing to issue a provisional permit. Provided all requested documents. Will follow up. • GWA prepared legal easement document. Resistance from Guam AG's office. GWA and owner to execute a right of entry to proceed with project. GWA currently drafting document. • Design o Conditionally approved design documents; BC writing controls specifications. o PPBC started DPW building permit. Baza Gardens/Talofofo • PPBC completed work for Change Order 4 on 11/04/2019. Processed invoice ($2,845.36). • EMPSCO beginning closeout.
				CM	8	7/29/2016	5/28/2017	$ 425,756.09	EMPSCO	Will start close out process once invoice is processed. Pending PPBC submittal of construction photos. Negotiated Change Order for additional CM services covering project closeout amounts to $6,067.66. Change Order executed by GWA on 03/28/2019 and transmitted to CM on 03/29/2019. A deductive change order will be issued to PPBC for the final amount of this change order after all CM services are complete.
15	Tamuning Sewer Hot Spots	Sewer rehabilitation for lines at Winner Apartments, Segund Leon Guerrero, and behind Guam Premium Outlets.	G. Gattoc	Design	10	9/9/2016	10/31/2017 (for design only)	$ 663,629.00	TG Engineers	TGE to provide engineering services during bid process.
				Construction	9	1/30/2020	12/31/2020	$ 1,093,955.87	Ian Corporation	Contractor submitted documents/plans package to GEPA regarding building permit hold letter on 06/01/2020. Contractor continues to revise/re-submit material submittals in conjunction with CM review. EOR reviewed and responded to RFI-#2; under review by GWA pending Contractor shop drawings.
				CM	9	3/31/2019	3/31/2020	$ 531,000.75	Am Orient	CM acknowledged Notice to Proceed (NTP).

	Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount (+) change orders	Contractor	Status as of 06/18/2020
16	Talofofo Sewer Pump Stations (4 stations)	Design and construction of 4 sewer lift stations in the Talofofo village where sewer lines are installed but never completed.	J. Miller	Design (for Talofofo and Chalan Pago PS)	11	8/17/2016	11/30/2017	$ 493,818.86	EMPSCO	Design of Talofofo Lift Stations • Final Design completed June 2018. Design of Chalan Pago Wastewater Pump Station • Final design documents submitted June 8, 2020. • GWA currently reviewing. Thus far, the Basis of Design needed to be updated to reflect the updated mechanical calculations. Invoice also received June 8, 2020.
				Construction	10	12/27/2018	4/27/2020	$ 2,411,418.00	Giant Const.	Ladera 1: Electrical and fence work ongoing. Wet Well leak test passed. Wet well cover and CMU wall slab formwork complete. Ground filling and grading complete. Basin fence repair started. Tenorio: Electrical and fence work ongoing. Formwork for slab of CMU wall started. Ground filling and grading complete. Basin fence repair started. Taitague: Restoration of nearby ponding basin, electrical work, and fence work ongoing. Formwork for slab of CMU wall started. Ground filling and grading ongoing. Road pavement restoration started. Ladera 2: Electrical and fence work ongoing. Formwork for slab of CMU wall started. Ground filling and grading complete. Ayuyu: Electrical and fence work ongoing. Formwork for slab of CMU wall started. Ground filling and grading complete. Restoration of nearby ponding basin and fence ongoing. Pumps and electrical/control panels arrived on island 03/04/2020. Waiting on pump flush valve delivery. Giant disagreed with GWA's decision to award 27 calendar days, and issued additional claims. GWA currently working on a response. New correction required notice CRN-02, regarding force main not reaching the ARV at highest point in as-built submitted by Giant. Giant to verify actual condition or correct immediately. New CRN-03, pertaining to an offset joint discovered in the lamp test of the gravity line connecting the new terminal MH to the existing MH; Ayuyu station. Giant to correct and test prior to startup. No new invoice to date. Still pushing Giant to submit invoices. Giant said they will submit an invoice tomorrow, June 18, 2020.
				CM		12/1/2018	12/31/2019			GWA Engineering will management construction management tasks.
18	Water Hydraulic Model (SCADA ready instruments to update Model)	Design and construction of instrumentation at key water sites in the Barrigada service area necessary to update GWA Water hydraulic model.	Barbara Cruz	Design	12	8/3/2016	3/15/2017	$ 523,268.00	GHD	Design complete.
			J. Mendiola/G. Yeoh	Construction (Phase 1)	12	8/3/2016	6/30/2020	$ 4,532,000.00	Sumitomo	Project went out to bid October 2019. Contract with SMCC was approved by the CCU on 01/28/2020. PUC Notification sent out on 03/05/2020. Contract effective 04/21/2020. NTP made effective 5/6/2020. Kickoff/pre-construction meeting held 5/14/20. Permitting being run through DPW and will be routed to Parks and Recs. Authorization letter provided to SMCC for permitting on 6/10/20. Permit process ongoing.
				CM		6/15/2019	6/30/2020			

	Project	Project Description	Project Manager	Phase		Start Date (NTP Issued)	Anticipated Completion Date	Contract Amount (+) change orders	Contractor	Status as of 06/18/2020
23	Project Advertisement	Each IFB or RFP requires advertising	Engineering/ Procurement	MISC	1			$ 25,172.50	PDN/Post	On-going
24	Dungca Beach Sewer Improvements		GWA CIP Engr	Design						RFP advertised on June 9th. Proposals due July 7th.
25	Hagatna Sewer Pump Station Force Main		GWA CIP Engr	Design						Draft RFP with Mo for review and edits.
26	Fujita Sewer Pump Station Force Main		GWA CIP Engr	Design						Draft RFP with Mo for review and edits.
27	Well Rehab A-28, M-14, D-15 & F-7		GWA CIP Engr	Design						Draft scope of work with Chief Engineer for review.
								$ 65,741,613.02		

GUAM WATERWORKS AUTHORITY

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Financial Statement Overview
June 2020

Executive Order 2020-22 signed by Governor Leon Guerrero on June 29, 2020, extended the public health emergency through July 30, 2020. With the rise in COVID-19 cases in mid to late June, the Governor delayed opening flights to Guam and relaxing quarantine requirements. Quarantine policies were updated to ensure that travelers, particularly those coming from "COVID-19 High Risk Areas", are isolated from the community for an appropriate time.

The Guam Department of Labor (GDOL) began issuing Unemployment Compensation and paid $71.4M between June 12-30, 2020. GDOL expects to make payments weekly, announcing on July 14, 2020, the release of their 5th and largest batch totaling $54 million. Meanwhile, GWA customers who are facing financial hardships and are delinquent have been encouraged to sign up for payment plans before the end of June.

On April 28th, CCU Resolution 24-FY2020 granted a lifting of credit card limits on payments for non-residential accounts. For the months of April thru June, credit card payments averaged 42% of total payments, up from an average of 35% from October thru March. Below is a summary of payments made and related fees exceeding the limit.

Month	Customer Count	Amount Paid	Fees	% of Fees to Payments
May 2020	18	$22,011	$543	2.46%
June 2020	21	$34,919	$702	2.01%

On June 1st, GWA launched its new pay site and has joined the *Going Online Together* campaign with several other organizations. On-line payments and pay-by-phone, automated pay by phone (IVR), and payment on the mobile app as a percentage of total payments have increased by 10% to 36% from 26%. Collection rates have continued to improve for the month of June and were at 103% of revenues.

Year to Date consumption is slightly lower than last year (water consumption -1%, wastewater consumption +1%) and June 2020 consumption dipped below June 2019 (water consumption -5%, wastewater consumption -1%). Increases in residential demand continue to be offset by reductions in commercial demand. We continue to monitor bills as they drop in July to determine the impact of the reopening of the economy while quarantine measures for visitors stay in place and hotels remain empty except for military related stays, government quarantine sites and homeless shelters. See Schedule K for Water Demand for FY2015 to FY2020.

As revenues are monitored, a cost containment plan has been put into effect. While sufficient cash reserves are in place, management will continue to assess the situation and make any course corrections required to ensure continuity of services to our customers while keeping the safety of our staff the highest priority.

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As previously reported, GWA issued the Water and Wastewater System Revenue Bonds Series 2020A at a par value of $134M on May 28, 2020, with a settlement date of June 4, 2020. GWA received a record $2.9B in orders from nearly 70 investors and secured a 4.0% yield to the 10-year call date. The all-in TIC (Total Issuance Cost) was 4.59%, the second lowest TIC for new money GWA financing. A total of $123,590,268.65 was deposited into the construction fund as a result of this transaction.

GWA intends to refinance its Series 2013 Bonds given favorable market conditions in early August.

Balance Sheet

- Total Assets & Deferred Outflows of Resources of $915.7M in September 2019 grew by $172.5M or 19% to $1.1B in June 2020 largely due to funds from the sale of bonds which settled on June 4th. Current Assets decreased by $7.25M, Property, Plant and Equipment increased by $44.9M, and Other Noncurrent Assets increased by $135.4M. Schedule F contains a schedule of restricted and unrestricted cash and investments.
- Liabilities & Deferred Inflow of Resources of $714.2M in September 2019 similarly increased by $135.3M or 19% to $849.5M in June 2020 primarily due to the June bond sale, increasing Long Term Debt by 135.3M ($134M par and $8.3M in premium less cost of issuance).
- Accounts Receivable days were 48 in June 2020 as compared to 50 in September 2019 and Accounts Payable days were 35 in June 2020 as compared to 38 in September 2019.

Statement of Operations and Retained Earnings

- Total Operating Revenues for June 2020 of $8.5M were 6% or $551K less than budget and 8% or $741.4K less than June 2019 due to the impact of the COVID-19 public health emergency.
- Year to Date Operating Revenues as of June 2020 of $80.6M were $750.5K less or 1% less than budget and were $2.5M or 3% less than last year. Note that the budget, was adjusted in April to reflect the effects of the public health emergency.
- Total Operating Expenses for June 2020 of $6.8M were $248.1K or 4% below budget, with most expenses coming in below budget except for Depreciation and Retiree Expenses. Total Operating Expenses for June 2020 were 2% or $146.3K less than June 2019 with decreases in most expense categories except Water Purchases and Salaries and Wages.
- Year to Date Operating Expenses at June 2020 of $66.4M were $3.1M more than budget of $63.3M with Power, Claims, Training, Regulatory Expenses, Depreciation and Retiree Costs coming in higher than budget. Year to Date Operating Expenses at June 2020 were $3.6M or 6% more than last year's $62.8M with most categories showing increases except for contractual expenses which came in 12% less than the prior year.
- Earnings from Operations for June 2020 of $1.7M were 15% or $303K less than budget and 26% or $595.9K less than June 2019. Change in Net Assets for June 2020 of $6.8M

GUAM WATERWORKS AUTHORITY
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were $4.1M more than the $2.7M budget mainly due $4.9K more in Grants and $4.4M more than June 2019 due to $7.7M more in Grants offsetting the $2.6M decrease in Non-operating Revenues and Expenses.

- Year to Date Earnings from Operations as of June 2020 of $14.2M were 21% or $3.8M less than budget and 30% or $6M less than YTD Earnings as of June 2019. Year to Date Change in Net Assets as of June 2020 of $37.2M were $12.9M or 53% more than budget mainly due to $11.9M more in Grants from US Government than projected. Year to Date Change in Net Assets as of June 2020 were $10.2M or 38% more than YTD as of June 2019 mainly due to $30M more in US Government Grants and $10.4M less in AFUDC and $2.5M less in interest income.

Key Financial Indicators

Indicator	Target	May 2020	June 2020
DSC YTD			
• Per Section 6.12 of Indenture	1.25	1.28	1.27
• Per PUC / CCU	1.40	1.28	1.27
YTD Month to Month Change in Net Assets		10%	22%
Days – Cash on Hand	120 days	298 days	292 days
Collection Ratio			
• Month to Date	98%	100%	103%
• Year to Date	98%	97%	98%
Days Billed	30	30	31
Account Receivable Days	45	50	48
Account Payable Days	45	36	35
Employee Count	400 FTE	384 FTE	384 FTE
Water Demand			
• Month to Date	467,615	465,477	469,531
• Year to Date	3,740,923	3,837,672	4,306,513
Wastewater Demand			
• Month to Date	382,224	335,721	337,574
• Year to Date	2,775,095	2,718,351	3,055,924
Water Customers	42,724	42,889	42,838
Wastewater Customers	29,604	29,673	29,518

GUAM WATERWORKS AUTHORITY
JUNE 30, 2020
FINANCIAL AND RELATED REPORTS
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GUAM WATERWORKS AUTHORITY
Balance Sheet
June 30, 2020

SCHEDULE A

ASSETS AND DEFERRED OUTFLOWS of RESOURCES	Unaudited June 30, 2020	Audited September 30, 2019	Increase (Decrease)
Current Assets			
Cash			
Unrestricted (Schedule F)	41,326,383	36,140,182	5,186,201
Restricted Funds (Schedule F)	29,914,496	37,890,369	(7,975,873)
Accounts Receivable Trade, Net of Allowance for Doubtful Receivables of $7,539,104 at Jun 30, 2020 and $7,789,943 at Sep 30, 2019	13,729,199	14,346,247	(617,048)
Federal Receivable	313,454	3,711,435	(3,397,981)
Other Receivable	1,220,629	1,794,082	(573,452)
Materials & Supplies Inventory, Net of Allowance for Obsolescence of $64,131 at Jun 30, 2020 and $64,131 at Sep 30, 2019	4,085,773	3,897,352	188,421
Total Current Assets	90,589,935	97,779,668	(7,189,732)
Property, Plant and Equipment			
Utility plant in service			
Water system	383,040,264	381,484,623	1,555,641
Wastewater system	470,536,738	429,896,579	40,640,159
Non-utility property	24,269,962	23,200,625	1,069,337
Total property	877,846,964	834,581,827	43,265,137
Less: Accumulated Depreciation	(339,774,324)	(321,561,403)	(18,212,921)
Land	3,914,815	3,914,815	-
Construction Work in Progress	120,055,374	100,162,613	19,892,761
Property, Plant and Equipment, net	662,042,828	617,097,852	44,944,976
Other noncurrent assets and deferred charges			
Restricted cash (Schedule F)	223,460,862	109,937,511	113,523,351
Investments (Schedule F)	81,335,085	61,231,877	20,103,208
Other Prepaid Expenses	2,974,998	1,667,816	1,307,182
Regulatory Assets	427,230	-	427,230
Total other noncurrent assets and deferred charges	308,198,176	172,837,204	135,360,972
Total Assets	1,060,830,939	887,714,724	173,116,216
Deferred outflows of resources			
Debt defeasance due to bond refunding	11,355,600	11,976,380	(620,780)
Deferred outflows from pension	9,057,499	9,057,499	-
Deferred outflows from OPEB	6,982,196	6,982,196	-
Total Assets and Deferred Outflows of Resources	**1,088,226,234**	**915,730,799**	**172,495,436**
LIABILITIES, DEFERRED INFLOWS of RESOURCES AND NET ASSETS			
Current Liabilities			
Current maturities of long-term debt			
Series 2010 Revenue Bond	1,895,000	1,895,000	-
Series 2013 Revenue Bond	2,695,000	2,695,000	-
Series 2014 Refunding Bond	3,760,000	3,760,000	-
Series 2016 Revenue Bond	420,000	420,000	-
Notes Payable	-	2,319,108	(2,319,108)
Accounts Payable -Trade	3,021,269	4,121,364	(1,100,095)
Accrued and Other Liabilities	1,571,467	1,374,650	196,816
Interest Payable	13,205,094	6,359,303	6,845,791
Accrued Payroll and Employee Benefits	1,010,930	1,685,235	(674,305)
Accrued Annual Leave	1,054,545	1,054,545	-
Current portion of employee annual leave	584,204	584,204	-
Contractors' Payable	12,254,328	22,094,820	(9,840,491)
Customer and Other Deposits	2,210,342	2,349,490	(139,148)
Total Current Liabilities	43,682,179	50,712,718	(7,030,539)
Long Term Debt, less current maturities			
Series 2013 Revenue Bond	169,935,000	169,935,000	-
Series 2014 Refunding Bond	65,140,000	65,140,000	-
Series 2016 Revenue Bond	142,890,000	142,890,000	-
Series 2017 Refunding Bond	107,365,000	107,365,000	-
Series 2020A Revenue Bond	134,000,000	-	134,000,000
Unamortized Bond Premium/Discount	40,188,244	31,863,590	8,324,654
Net pension liability	49,593,171	49,593,171	-
Net OPEB obligation	62,656,405	62,656,405	-
Employee Annual Leave, Less Current Portion	838,545	838,545	-
Total Liabilities	816,288,544	680,994,429	135,294,115
Deferred inflows of resources:			
Deferred inflows from pension	1,444,744	1,444,744	-
Deferred inflows from OPEB	31,758,062	31,758,062	-
Total Liabilities and Deferred Inflows of Resources	849,491,350	714,197,235	135,294,115
Net Assets	**238,734,884**	**201,533,564**	**37,201,320**
Total Liabilities, Deferred Inflows of Resources and Net Assets	**1,088,226,234**	**915,730,799**	**172,495,435**

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings **SCHEDULE B**
Comparative Budget vs. Actual for the period ending June 30, 2020

	Month to Date		Variance
	Budget* June-20	Actual (Unaudited) June-20	Favorable / (Unfavorable)
OPERATING REVENUES			
Water Revenues	5,482,041	5,376,765	(105,277)
Wastewater Revenues	3,173,105	2,669,324	(503,782)
Legislative Surcharge	268,785	245,940	(22,845)
Other Revenues	35,994	41,787	5,793
System Development Charge	76,247	151,335	75,088
Total Operating Revenues	9,036,173	8,485,150	(551,023)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	625,000	578,822	46,178
Power Purchases	1,084,725	998,251	86,473
Total Utility Costs	1,709,725	1,577,073	132,651
Salaries and Wages	1,807,507	1,596,390	211,117
Pension and Benefits	546,381	545,768	613
Total Salaries and Benefits	2,353,889	2,142,159	211,730
Capitalized Labor and Benefits	(391,667)	(368,952)	(22,714)
Net Salaries and Benefits	1,962,222	1,773,206	189,016
Administrative and General Expenses			
Sludge removal	136,822	136,441	381
Chemicals	156,850	145,066	11,784
Materials & Supplies	147,478	134,924	12,553
Transportation	33,253	23,434	9,819
Communications	20,324	20,233	91
Claims	6,339	-	6,339
Insurance	80,405	79,910	495
Training & Travel	4,062	-	4,062
Advertising	5,392	5,157	235
Miscellaneous	92,591	92,267	324
Regulatory Expense	20,596	15,139	5,457
Bad Debts Provision	177,174	166,207	10,967
Total Administrative and General Expense	881,285	818,778	62,507
Depreciation Expense	1,830,222	2,037,338	(207,115)
Contractual Expense			
Audit & Computer Maintenance	81,148	70,204	10,944
Building rental	37,800	37,588	212
Equipment rental	71,130	41,714	29,416
Legal	3,616	-	3,616
Laboratory	48,948	48,535	413
Other	167,283	120,719	46,564
Total Contractual Expense	409,925	318,760	91,165
Retiree Supp. Annuities and health care costs	190,069	210,238	(20,170)
Contribution to Government of Guam	50,334	50,333	1
Total Retiree Benefits	240,402	260,571	(20,169)
Total Operating Expenses	7,033,782	6,785,726	248,055
Earnings (Loss) from Operations	2,002,392	1,699,424	(302,967)
Interest Income - 2010/13/14/16/17/20 Series Bond	112,563	952	(111,611)
Interest Income - Other Funds	18,048	818	(17,230)
Interest Income - SDC	2,131	6,868	4,738
Interest Expense - 2010/13/14/16/17/20 Series Bond	(2,675,432)	(2,619,599)	55,833
Interest Expense - ST BOG	(5,612)	-	5,612
Loss on Asset Disposal	-	-	-
AFUDC	-	-	-
Amortization of Discount, Premium and Issuance Costs	(33,637)	(425,083)	(391,447)
Defeasance due to bond refunding	(28,676)	(68,976)	(40,299)
Prior Year Adjustment	-	-	-
Total non-operating revenues (expenses)	(2,610,616)	(3,105,020)	(494,405)
Net Income (Loss) before capital contributions	(608,224)	(1,405,596)	(797,372)
Capital Contributions			
Grants from US Government	3,311,071	8,241,649	4,930,578
Grants from GovGuam & Others	-	-	-
Total Capital Contributions	3,311,071	8,241,649	4,930,578
Change in Net Assets	2,702,847	6,836,053	4,133,206
Debt Service Calculation			
Earnings From Operations	2,002,392	1,699,424	
System Development Charge	(76,247)	(151,335)	
Retiree COLA	50,334	50,333	
Interest/Investment Income	18,048	818	
Depreciation	1,830,222	2,037,338	
Balance Available for Debt Service per Section 6.12	3,824,749	3,636,577	
Working Capital Reserve Available for Debt Service	-	-	
Transfer to Working Capital - Debt Service Reserve	-	-	
Transfer to Working Capital - O&M Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	3,824,749	3,636,577	
Debt Service			
Principal	730,833	730,833	
Interest	2,117,099	2,117,099	
Total	2,847,932	2,847,932	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.34	1.28	
Debt Service Coverage (1.40X) inclusive of reserves (PUC)	1.34	1.28	

*Cost containment budget

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings
Comparative for the period ending June 30, 2020 and 2019

SCHEDULE C

	Month to Date Actual (Unaudited) June-20	Month to Date Actual (Audited) June-19	Variance Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	5,376,765	5,646,006	(269,241)
Wastewater Revenues	2,669,324	3,046,430	(377,106)
Legislative Surcharge	245,940	282,666	(36,727)
Other Revenues	41,787	146,631	(104,844)
System Development Charge	151,335	104,797	46,538
Total Operating Revenues	8,485,150	9,226,531	(741,381)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	578,822	485,164	93,658
Power Purchases	998,251	1,342,115	(343,864)
Total Utility Costs	1,577,073	1,827,280	(250,206)
Salaries and Wages	1,596,390	1,469,941	126,449
Pension and Benefits	545,768	458,463	87,306
Total Salaries and Benefits	2,142,159	1,928,404	213,755
Capitalized Labor and Benefits	(368,952)	(308,333)	(60,619)
Net Salaries and Benefits	1,773,206	1,620,071	153,136
Administrative and General Expenses			
Sludge removal	136,441	97,242	39,199
Chemicals	145,066	270,352	(125,286)
Materials & Supplies	134,924	194,509	(59,585)
Transportation	23,434	56,992	(33,559)
Communications	20,233	18,347	1,886
Claims	-	3,006	(3,006)
Insurance	79,910	77,860	2,050
Training & Travel	-	27,519	(27,519)
Advertising	5,157	25,059	(19,902)
Miscellaneous	92,267	67,935	24,332
Regulatory Expense	15,139	22,988	(7,849)
Bad Debts Provision	166,207	179,479	(13,272)
Total Administrative and General Expense	818,778	1,041,288	(222,510)
Depreciation Expense	2,037,338	1,759,065	278,273
Contractual Expense			
Audit & Computer Maintenance	70,204	72,800	(2,596)
Building rental	37,588	35,211	2,377
Equipment rental	41,714	88,007	(46,293)
Legal	-	4,438	(4,438)
Laboratory	48,535	18,489	30,046
Other	120,719	175,535	(54,816)
Total Contractual Expense	318,760	394,479	(75,719)
Retiree Supp. Annuities and health care costs	210,238	239,798	(29,560)
Contribution to Government of Guam	50,333	50,000	333
Total Retiree Benefits	260,571	289,798	(29,227)
Total Operating Expenses	6,785,726	6,931,981	(146,255)
Earnings (Loss) from Operations	1,699,424	2,295,280	(595,856)
Interest Income - 2010/13/14/16/17/20 Series Bond	952	355,724	(354,772)
Interest Income - Other Funds	818	77,212	(76,394)
Interest Income - SDC	6,868	11,657	(4,789)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(2,619,599)	(2,137,785)	(481,814)
Interest Expense - ST BOG	-	(15,194)	15,194
Loss on Asset Disposal	-	-	-
AFUDC	-	1,157,306	(1,157,306)
Amortization of Discount, Premium and Issuance Costs	(425,083)	119,709	(544,792)
Defeasance due to bond refunding	(68,976)	(69,534)	558
Prior Year Adjustment	-	5,316	(5,316)
Total non-operating revenues (expenses)	(3,105,020)	(495,588)	(2,609,432)
Net Income (Loss) before capital contributions	(1,405,596)	1,799,692	(3,205,288)
Capital Contributions			
Grants from US Government	8,241,649	584,537	7,657,113
Grants from GovGuam & Others	-	17,468	(17,468)
Total Capital Contributions	8,241,649	602,004	7,639,645
Change in Net Assets	6,836,053	2,401,696	4,434,357
Debt Service Calculation			
Earnings From Operations	1,699,424	2,295,280	
System Development Charge	(151,335)	(104,797)	
Retiree COLA	50,333	50,000	
Interest/Investment Income	818	77,212	
Depreciation	2,037,338	1,759,065	
Balance Available for Debt Service per Section 6.12	3,636,577	4,076,759	
Working Capital Reserve Available for Debt Service	-	958,951	
Transfer to Working Capital - Debt Service Reserve	-	-	
Transfer to Working Capital - O&M Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	3,636,577	5,035,710	
Debt Service			
Principal	730,833	476,250	
Interest	2,117,099	2,137,785	
Total	2,847,932	2,614,035	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.28	1.56	
Debt Service Coverage (1.40X) (PUC)	1.28		
Debt Service Coverage (1.75X) inclusive of reserves (PUC)		1.93	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings
Comparative Budget vs. Actual for the period ending June 30, 2020

SCHEDULE D

	Year to Date Budget* June-20	Year to Date Actual (Unaudited) June-20	Variance Favorable / (Unfavorable)
OPERATING REVENUES			
Water Revenues	49,338,373	49,888,396	550,023
Wastewater Revenues	28,557,948	27,152,533	(1,405,416)
Legislative Surcharge	2,419,064	2,441,458	22,394
Other Revenues	323,949	533,550	209,601
System Development Charge	686,223	559,143	(127,080)
Total Operating Revenues	81,325,558	80,575,080	(750,478)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	5,625,000	5,501,551	123,449
Power Purchases	9,762,521	11,124,966	(1,362,445)
Total Utility Costs	15,387,521	16,626,517	(1,238,996)
Salaries and Wages	16,267,567	15,332,666	934,901
Pension and Benefits	4,917,430	4,762,376	155,054
Total Salaries and Benefits	21,184,997	20,095,042	1,089,955
Capitalized Labor and Benefits	(3,525,000)	(2,701,012)	(823,988)
Net Salaries and Benefits	17,659,997	17,394,031	265,967
Administrative and General Expenses			
Sludge removal	1,143,396	1,143,124	272
Chemicals	1,597,647	1,596,897	750
Materials & Supplies	1,451,298	1,450,683	614
Transportation	410,078	409,583	495
Communications	121,112	114,999	6,113
Claims	57,047	105,354	(48,306)
Insurance	702,648	702,161	487
Training & Travel	95,061	142,539	(47,478)
Advertising	48,528	29,339	19,189
Miscellaneous	813,818	812,944	874
Regulatory Expense	185,366	259,655	(74,289)
Bad Debts Provision	1,594,568	1,590,167	4,400
Total Administrative and General Expense	8,220,566	8,357,445	(136,879)
Depreciation Expense	16,472,002	18,288,400	(1,816,398)
Contractual Expense			
Audit & Computer Maintenance	516,829	507,810	9,019
Building rental	331,700	329,534	2,166
Equipment rental	685,666	674,140	11,525
Legal	32,547	28,477	4,070
Laboratory	190,534	159,089	31,445
Other	1,643,051	1,640,937	2,113
Total Contractual Expense	3,400,326	3,339,986	60,340
Retiree Supp. Annuities and health care costs	1,710,617	1,909,224	(198,607)
Contribution to Government of Guam	453,004	453,001	3
Total Retiree Benefits	2,163,621	2,362,225	(198,604)
Total Operating Expenses	63,304,034	66,368,605	(3,064,570)
Earnings (Loss) from Operations	18,021,524	14,206,476	(3,815,048)
Interest Income - 2010/13/14/16/17/20 Series Bond	1,013,069	963,286	(49,782)
Interest Income - Other Funds	162,430	271,192	108,762
Interest Income - SDC	19,175	84,485	65,310
Interest Expense - 2010/13/14/16/17/20 Series Bond	(24,078,891)	(19,556,391)	4,522,500
Interest Expense - ST BOG	(50,509)	(38,188)	12,321
Loss on Asset Disposal	-	(254,364)	(254,364)
AFUDC	-	-	-
Amortization of Discount, Premium and Issuance Costs	(302,730)	534,675	837,405
Defeasance due to bond refunding	(258,086)	(620,780)	(362,694)
Prior Year Adjustment	-	(69,901)	(69,901)
Total non-operating revenues (expenses)	(23,495,541)	(18,685,984)	4,809,557
Net Income (Loss) before capital contributions	(5,474,018)	(4,479,509)	994,509
Capital Contributions			
Grants from US Government	29,799,643	41,666,579	11,866,936
Grants from GovGuam & Others	-	14,250	14,250
Total Capital Contributions	29,799,643	41,680,829	11,881,186
Change in Net Assets	24,325,625	37,201,320	12,875,695
Debt Service Calculation			
Earnings From Operations	18,021,524	14,206,476	
System Development Charge	(686,223)	(559,143)	
Retiree COLA	453,004	453,001	
Interest/Investment Income	162,430	271,192	
Depreciation	16,472,002	18,288,400	
Balance Available for Debt Service per Section 6.12	34,422,737	32,659,926	
Working Capital Reserve Available for Debt Service	-	-	
Transfer to Working Capital - Debt Service Reserve	-	-	
Transfer to Working Capital - O&M Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	34,422,737	32,659,926	
Debt Service			
Principal	6,577,500	6,577,500	
Interest	19,053,891	19,053,891	
Total	25,631,391	25,631,391	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.34	1.27	
Debt Service Coverage (1.40X) inclusive of reserves (PUC)	1.34	1.27	

*Cost containment budget

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings
Comparative for the period ending June 30, 2020 and 2019

SCHEDULE E

	Year to Date Actual (Unaudited) June-20	Year to Date Actual (Audited) June-19	Variance Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	49,888,396	50,284,853	(396,457)
Wastewater Revenues	27,152,533	28,967,919	(1,815,386)
Legislative Surcharge	2,441,458	2,626,732	(185,273)
Other Revenues	533,550	521,218	12,332
System Development Charge	559,143	655,509	(96,366)
Total Operating Revenues	80,575,080	83,056,231	(2,481,151)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	5,501,551	4,609,083	892,468
Power Purchases	11,124,966	11,165,974	(41,007)
Total Utility Costs	16,626,517	15,775,057	851,460
Salaries and Wages	15,332,666	14,873,095	459,571
Pension and Benefits	4,762,376	4,721,746	40,630
Total Salaries and Benefits	20,095,042	19,594,841	500,201
Capitalized Labor and Benefits	(2,701,012)	(2,775,000)	73,988
Net Salaries and Benefits	17,394,031	16,819,841	574,190
Administrative and General Expenses			
Sludge removal	1,143,124	1,104,701	38,423
Chemicals	1,596,897	1,543,410	53,487
Materials & Supplies	1,450,683	1,260,793	189,891
Transportation	409,583	455,774	(46,191)
Communications	114,999	111,859	3,140
Claims	105,354	44,432	60,921
Insurance	702,161	681,845	20,316
Training & Travel	142,539	179,021	(36,481)
Advertising	29,339	100,804	(71,465)
Miscellaneous	812,944	757,343	55,601
Regulatory Expense	259,655	137,850	121,805
Bad Debts Provision	1,590,167	1,632,509	(42,342)
Total Administrative and General Expense	8,357,445	8,010,342	347,103
Depreciation Expense	18,288,400	15,831,585	2,456,815
Contractual Expense			
Audit & Computer Maintenance	507,810	510,109	(2,299)
Building rental	329,534	316,897	12,637
Equipment rental	674,140	873,980	(199,840)
Legal	28,477	10,754	17,723
Laboratory	159,089	197,412	(38,324)
Other	1,640,937	1,871,210	(230,273)
Total Contractual Expense	3,339,986	3,780,362	(440,375)
Retiree Supp. Annuities and health care costs	1,909,224	2,137,223	(227,999)
Contribution to Government of Guam	453,001	450,000	3,001
Total Retiree Benefits	2,362,225	2,587,223	(224,998)
Total Operating Expenses	66,368,605	62,804,409	3,564,196
Earnings (Loss) from Operations	14,206,476	20,251,822	(6,045,346)
Interest Income - 2010/13/14/16/17/20 Series Bond	963,286	3,091,290	(2,128,004)
Interest Income - Other Funds	271,192	628,576	(357,384)
Interest Income - SDC	84,485	130,946	(46,460)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(19,556,391)	(19,240,061)	(316,330)
Interest Expense - ST BOG	(38,188)	(159,415)	121,227
Loss on Asset Disposal	(254,364)	-	(254,364)
AFUDC	-	10,415,750	(10,415,750)
Amortization of Discount, Premium and Issuance Costs	534,675	1,077,380	(542,705)
Defeasance due to bond refunding	(620,780)	(625,805)	5,026
Prior Year Adjustment	(69,901)	(279,392)	209,492
Total non-operating revenues (expenses)	(18,685,984)	(4,960,733)	(13,725,251)
Net Income (Loss) before capital contributions	(4,479,509)	15,291,089	(19,770,598)
Capital Contributions			
Grants from US Government	41,666,579	11,605,172	30,061,407
Grants from GovGuam & Others	14,250	78,779	(64,529)
Total Capital Contributions	41,680,829	11,683,951	29,996,878
Change in Net Assets	37,201,320	26,975,040	10,226,281
Debt Service Calculation			
Earnings From Operations	14,206,476	20,251,822	
System Development Charge	(559,143)	(655,509)	
Retiree COLA	453,001	450,000	
Interest/Investment Income	271,192	628,576	
Depreciation	18,288,400	15,831,585	
Balance Available for Debt Service per Section 6.12	32,659,926	36,506,474	
Working Capital Reserve Available for Debt Service	-	8,630,559	
Transfer to Working Capital - Debt Service Reserve	-	-	
Transfer to Working Capital - O&M Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	32,659,926	45,137,033	
Debt Service			
Principal	6,577,500	4,286,250	
Interest	19,053,891	19,240,061	
Total	25,631,391	23,526,311	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.27	1.55	
Debt Service Coverage (1.40X) (PUC)	1.27		
Debt Service Coverage (1.75X) inclusive of reserves (PUC)		1.92	

GUAM WATERWORKS AUTHORITY
Restricted and Unrestricted Cash Summary
FY2020

SCHEDULE F

Description	Unaudited June 30, 2020	Audited September 30, 2019	Increase (Decrease)
UNRESTRICTED			
Change Fund	2,000	2,000	-
Petty Cash	4,450	4,450	-
BOG Deposit Accounts	3,914,122	4,955,587	(1,041,465)
BOG O & M Reserve	25,688,456	13,933,323	11,755,133
BOG CapEx Fund	11,717,356	17,244,823	(5,527,467)
Sub-total Unrestricted	**41,326,383**	**36,140,182**	**5,186,201**
RESTRICTED			
ANZ Bank	44	19	26
Bank Pacific	19,710	12,321	7,389
Bank of Hawaii	231,202	220,158	11,044
Community First FCU	3,861	2,530	1,331
First Hawaiian Bank	32,153	11,761	20,392
Bank Pacific Surcharge	1,123,470	302,837	820,633
Bank Pacific Escrow Deposit	842,129	836,528	5,602
BOG Customer Refunds	2,025,187	1,871,553	153,634
BOG Emergency Reserve Fund	6,242	6,237	5
BOG Sewer Hookup Revolving Fund	67,561	67,094	467
BOG Subordinate Security Fund	-	859,233	(859,233)
BOG Operation and Maintenance Fund	3,083,482	3,083,482	-
BOG Revenue Trust	728,719	1,164,224	(435,504)
BOG Revenue Trust Fund	6,787,497	7,613,000	(825,503)
BOG Capital Improvement Revenue Fund	5,715,173	1,001,292	4,713,881
BOG Debt Service Reserve	189	11,563,736	(11,563,548)
	20,666,620	**28,616,004**	**(7,949,384)**
BOG - SDC Deposit	3,747,876	2,024,365	1,723,511
BOG - SDC CDs	5,500,000	7,250,000	(1,750,000)
Total SDC	**9,247,876**	**9,274,365**	**(26,489)**
Total Restricted	**29,914,496**	**37,890,369**	**(7,975,873)**
Reserve Funds			
BOG Series 2013 Construction Fund	9,675,096	14,170,759	(4,495,663)
BOG Series 2014 Refunding Construction Fund	219,093	217,448	1,644
BOG Series 2016 Construction Fund	71,336,736	89,235,554	(17,898,818)
BOG Series 2017 Refunding Construction Fund	6,242,455	6,313,750	(71,295)
BOG Series 2020A Construction Fund	123,590,269	-	123,590,269
BOG Series 2020A Capitalized Interest Fund	12,283,333	-	12,283,333
BOG Series 2020A Cost of Issuance Fund	113,880	-	113,880
Total Restricted - Held by Trustee	**223,460,862**	**109,937,511**	**(22,464,131)**
BOG OMRRRF Fund	17,423,213	17,423,213	-
USB Series 2013 Debt Service Fund	7,461,082	3,082,212	4,378,870
USB Series 2013 Debt Service Reserve Fund	12,031,688	12,031,688	-
USB Series 2014 Refunding Debt Service Fund	5,584,092	1,885,637	3,698,455
USB Series 2014 Refunding Debt Service Reserve Fund	7,738,731	7,798,212	(59,481)
USB Series 2016 Debt Service Fund	4,067,455	1,946,774	2,120,680
USB Series 2016 Debt Service Reserve Fund	7,591,999	7,591,999	-
USB Series 2010 Debt Service Fund	1,973,921	523,353	1,450,568
USB Series 2017 Refunding Debt Service Reserve Fund	7,566,460	7,566,460	-
USB Series 2017 Debt Service Fund	2,734,245	1,382,329	1,351,916
USB Series 2020A Debt Service Reserve Fund	7,162,200	-	7,162,200
Total Investments	**81,335,085**	**61,231,877**	**20,103,208**
Total Restricted and Unrestricted Cash	**376,036,827**	**245,199,940**	**(5,150,596)**

Guam Waterworks Authority
Accounts Receivable - Government (Active)
June 30, 2020

SCHEDULE G

Customer Name	No. of Accounts	AGING Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total
Autonomous Agencies (Active)							
Guam Int'l Airport Authority	8	$ 42,073	$ 32,574	$ 11,098	$ 9,145	$ 251,850	$ 346,741
Guam Power Authority	25	178,910	-	-	-	-	178,910
Guam Housing & Urban Renewal Authority	9	9,566	273	233	-	-	10,072
Guam Visitors Bureau	1	2,512	-	-	-	-	2,512
Port Authority of Guam	5	2,254	-	-	-	-	2,254
Guam Housing Corporation	1	36	-	-	-	-	36
Total Autonomous Agencies	**49**	**$ 235,350**	**$ 32,847**	**$ 11,331**	**$ 9,145**	**$ 251,850**	**$ 540,523**
		43.54%	**6.08%**	**2.10%**	**1.69%**	**46.59%**	**100.00%**
Department of Education	53	$ 311,109	$ 199,306	$ 214,119	$ 7,737	$ -	$ 732,272
Department of Corrections	8	97,798	84,373	-	-	-	182,170
Mayors Council of Guam	60	39,477	18,725	1,762	1,672	42,447	104,082
Department of Parks & Recreation	18	46,844	775	600	6,385	8,977	63,581
Department of Public Works	11	30,274	19,069	772	1,868	7,719	59,703
Guam Police Department	8	11,280	4,750	1,051	-	-	17,080
Department of Chamorro Affairs	7	7,933	6,951	220	-	-	15,105
Department of Agriculture	6	6,225	2,021	1,435	-	-	9,681
Department of Public Health & Social Services	8	1,942	3,618	1,323	261	-	7,143
Guam Fire Department	11	2,668	2,108	-	-	-	4,776
Department of Military Affairs/GUARNG	1	4,380	-	-	-	-	4,380
Department of Youth Affairs	3	2,065	1,480	29	-	-	3,573
University of Guam	44	2,842	-	-	-	-	2,842
Guam Solid Waste Authority	2	2,585	21	-	-	-	2,605
Sanctuary Inc	1	1,994	-	-	-	-	1,994
Office of The Governor	2	1,897	-	-	-	-	1,897
Office of Technology	1	157	94	156	730	734	1,872
Guam Police Department	1	250	294	770	324	133	1,772
Guam Energy Office	1	1,295	113	-	-	-	1,408
Guam Public Library	6	1,007	282	29	-	-	1,319
Division of Senior Citizens, DPHSS	2	309	361	193	237	114	1,213
Guam Veterans Affairs Office	2	259	157	187	108	201	912
Department of Customs & Quarantine	1	408	361	28	-	-	797
Department of Administration	2	340	433	-	-	-	774
Department of Mental Health	2	341	-	-	-	-	341
Guam Enviromental Protection Agency	2	248	-	-	-	-	248
Merizo Mayor	1	108	-	-	-	-	108
The Office of The Dededo Mayor	1	96	-	-	-	-	96
Department of Agriculture-Fisheries	1	80	-	-	-	-	80
Department of Mental Health And Substance	1	25	25	-	-	-	49
Total Line Agencies	**267**	**$ 576,236**	**$ 345,316**	**$ 222,674**	**$ 19,323**	**$ 60,325**	**$ 1,223,874**
		47.08%	**28.21%**	**18.19%**	**1.58%**	**4.93%**	**100.00%**
Total as of June 30, 2020 (Active)	**316**	**$ 811,587**	**$ 378,163**	**$ 234,004**	**$ 28,468**	**$ 312,176**	**$ 1,764,397**
		46.00%	**21.43%**	**13.26%**	**1.61%**	**17.69%**	**100.00%**
Total as of September 30, 2019	**156**	**$ 573,245**	**$ 177,040**	**$ 36,359**	**$ 13,784**	**$ 390,725**	**$ 1,191,308**
	103%	**42%**	**114%**	**544%**	**107%**	**-20%**	**48%**

GUAM WATERWORKS AUTHORITY
Accounts Receivable Aging Summary by Rate Class **SCHEDULE H**
As of June 30, 2020

		AGING						
Rate Class	**No. of Accounts**	**Current**	**31 - 60 days**	**61 - 90 days**	**91 - 120 days**	**Over 120 days**	**Total**	
Government	440	$ 2,622,831	$ 324,912	$ 283,653	$ 25,124	$ 417,568	$ 3,674,088	17%
Agriculture	388	45,461	10,375	4,798	3,045	56,420	120,098	1%
Commercial I	2,663	1,292,496	151,260	39,513	31,357	352,732	1,867,358	9%
Commercial II	25	168,252	14,342	624	1,966	246,738	431,922	2%
Commercial III	301	683,727	33,737	35,713	30,431	313,921	1,097,528	5%
Golf Course	16	5,219	225	273	200	-	5,917	0%
Hotel	57	1,878,127	234,921	133,994	93,926	237,366	2,578,334	12%
Irrigation	33	6,003	942	139	106	3,315	10,505	0%
Residential	49,130	4,591,642	916,894	561,623	414,600	4,997,793	11,482,552	54%
Total	**53,053**	**$11,293,758**	**$ 1,687,608**	**$ 1,060,329**	**$ 600,755**	**$ 6,625,852**	**$ 21,268,302**	**100%**
		53%	**8%**	**5%**	**3%**	**31%**	**100%**	

Less Allowance for Doubtful Accounts:	(7,539,104)
Net Accounts Receivable:	**13,729,199**

Days Receivables Outstanding	48

GUAM WATERWORKS AUTHORITY
Accounts Payable Aging
As of June 30, 2020

SCHEDULE I

AGING					
Current	31 - 60 Days	61 - 90 Days	91 - 120 Days	> 120 Days	**Total**
$ 1,918,387	$ 293,013	$ 401,262	$ 45,249	$ 363,358	**$ 3,021,269**
63%	10%	13%	1%	12%	**100%**

Days Payable Outstanding	35

Guam Waterworks Authority **SCHEDULE J**
System Development Charges Project Status
As of June 30, 2020

		Total
Funding Summary		
Total available project funds	$	12,979,509
Total project expenditures and encumbrances		10,217,522
Total unobligated project funds	**$**	**2,761,987**

Projects Funded

Project Description	**Expenditures**	**Outstanding Encumbrances**	**Expenditures and Encumbrances**
Agat-Santa Rita Wastewater Treatment Plant Replacement	1,166,075	35,931	1,202,006
Baza Gardens Wastewater Cross Island Pumping & Conveyance	1,150,881	3,090	1,153,971
Central Guam Reservoirs		280,040	280,040
Line Replacement Phase IV		256,937	256,937
Northern DWWTP	13,798	5,408,801	5,422,599
Northern DWWTP (Land Purchase)	1,000,000		1,000,000
Route 4 Relief Sewerline Rehab & Replacement		399,869	399,869
South Paulino Heights Waterline Upgrade	84,056	4,714	88,770
Talofofo Sewer Improvement		241,142	241,142
Umatac Merizo WWTP		42,783	42,783
Groundwater Well Production Meter Rep.		129,405	129,405
	$ 3,414,811	**$ 6,802,711**	**$ 10,217,522**

Future planned projects	**FY2020**
Water Wells	540,000
Water Dist Sys Pipe Replacement & Upgrades	540,000
WWTP Priority 1 Upgrades	300,000
Umatac Merizo STP Replacement	300,000
Wastewater Sewer System Expansion	300,000
	$ 1,980,000

GUAM WATERWORKS AUTHORITY
WATER DEMAND BY RATE CLASS
FY2015 - FY2020

SCHEDULE K

CLASS		AUDITED FY2015 TOTAL CONSUMPTION (kGal)	FY2016 TOTAL CONSUMPTION (kGal)	% Inc / (Dec.)	FY2017 TOTAL CONSUMPTION (kGal)	% Inc / (Dec.)	FY2018 TOTAL CONSUMPTION (kGal)	% Inc / (Dec.)	FY2019 TOTAL CONSUMPTION (kGal)	% Inc / (Dec.)	UNAUDITED FY2020 (9 Mos Annualized) TOTAL CONSUMPTION (kGal)
R	Residential	3,415,662	3,429,689	0%	3,206,811	-6%	3,313,613	3%	3,359,905	1%	3,584,895
C	Commercial	1,020,089	1,022,890	0%	964,639	-6%	910,905	-6%	906,192	-1%	842,474
F	Federal	1,168	1,180	1%	2,508	113%	1,813	-28%	1,602	-12%	1,293
G	Government	515,974	475,366	-8%	448,430	-6%	450,165	0%	405,980	-10%	389,058
H	Hotel	999,116	1,008,087	1%	1,004,525	0%	989,723	-1%	1,079,919	9%	820,646
G	Golf	6,850	6,770	-1%	5,252	-22%	2,741	-48%	2,793	2%	7,172
A	Agriculture	67,376	78,628	17%	69,482	-12%	81,127	17%	90,803	12%	87,906
I	Irrigation	10,385	11,351	9%	10,143	-11%	8,504	-16%	7,896	-7%	8,572
	GRAND TOTAL	6,036,620	6,033,960	0%	5,711,790	-5%	5,758,590	1%	5,855,091	2%	5,742,018

CCTV 2020

June

June. 01 - June. 07	Team #1	Team #2	Vendor	Total	REMARKS
Feet Scheduled	6,535	0		6,535	Assisting Rovers / Hot Spot Location Report /respond to trouble call outs
Feet Completed	0.00	0		0	
	0.00%	N/A	N/A	0%	

June. 08 – June. 14	Team #1	Team #2	Vendor	Total	REMARKS
Feet Scheduled	6,535			6,535	Iron Wood Manor / Iron wood Estates respond to trouble call outs
Feet Completed	9,775			9775	
	150%	N/A	N/A	150%	

June.15 – June. 21	Team #1	Team #2	Vendor	Total	REMARKS
Feet Scheduled	6,535			6,535	Perez Acres/ respond to trouble call outs
Feet Completed	7,985			7985	
	122%	N/A	N/A	122%	

June.22 – June. 28	Team #1	Team #2	Vendor	Total	REMARKS
Feet Scheduled	6,535			6,535	Lada Summer homes Estates / respond to trouble call outs
Feet Completed	5620			5620	
	86%	N/A	N/A	86%	

June. 29 – June. 30	Team #1	Team #2	Vendor	Total	REMARKS
Feet Scheduled	6,535			6,535	respond to trouble call outs /Hot Spot Cleaning Concentration
Feet Completed				0	
	0%	N/A	N/A	0%	

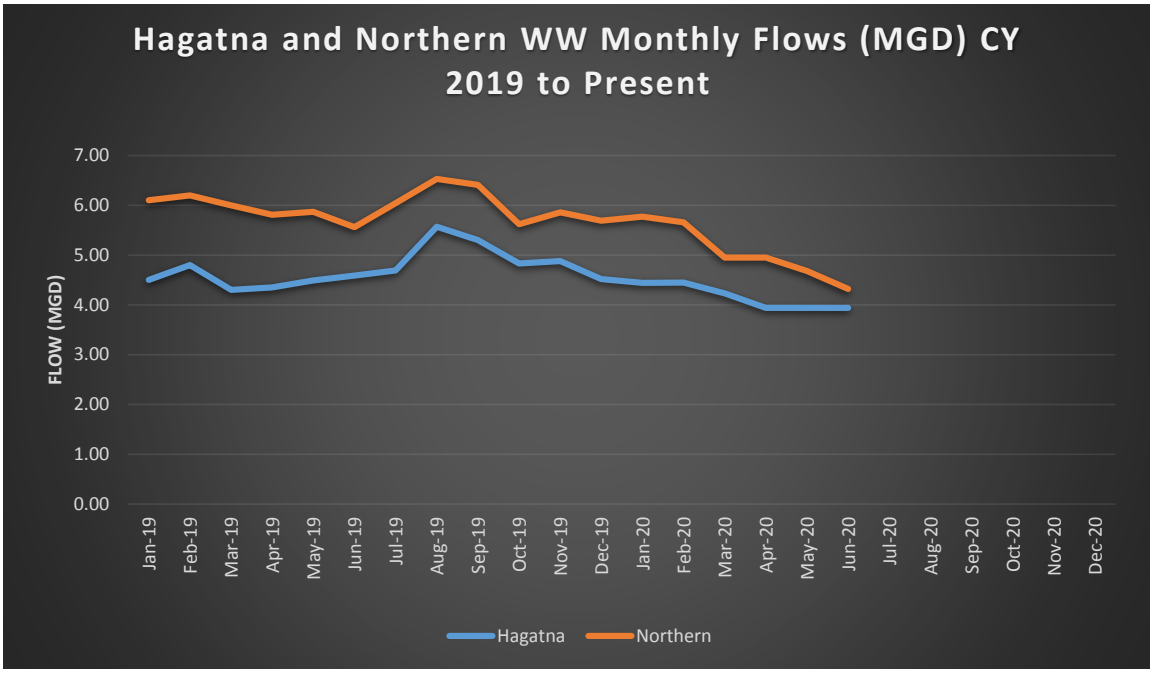
TOTAL FEET SCHEDULED	26,400
TOTAL FEET COMPLETED	23,380
TOTAL MILES FOR THE MONTH	4.4
TOTAL MILES SCHEDULED	5.0
PERCENTAGE COMPLETED	89%

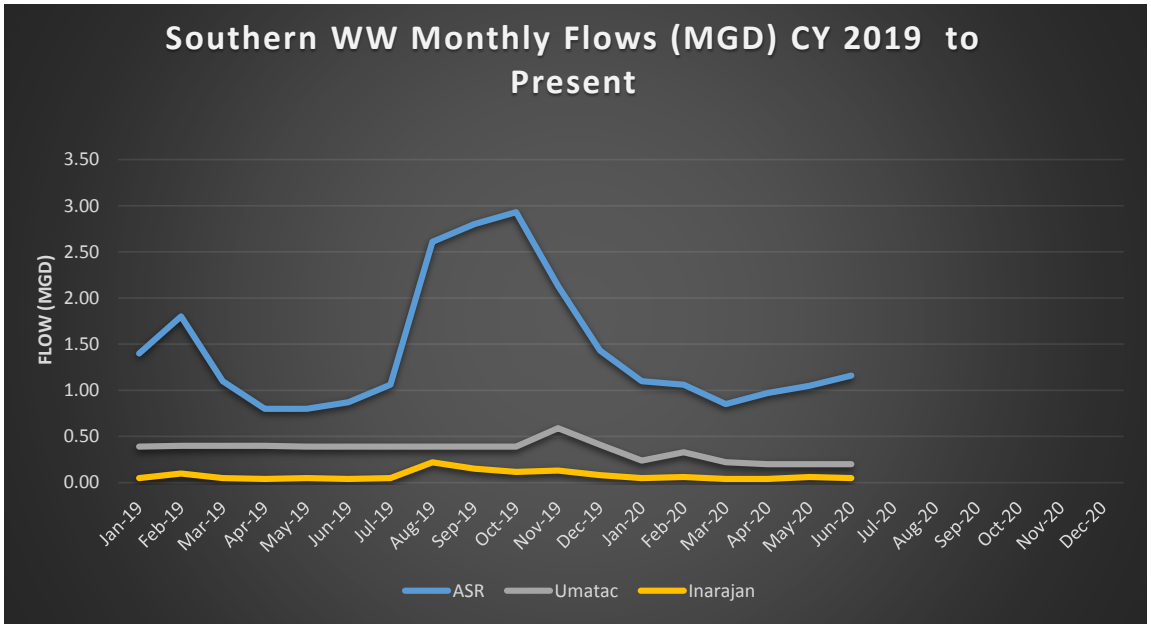
Wastewater Treatment Plant Average Monthy Flows Million Gallons Per Day

2019	Hagatna	Northern	ASR	Umatac	Inarajan
Jan-19	4.50	6.10	1.40	0.39	0.05
Feb-19	4.80	6.20	1.80	0.40	0.10
Mar-19	4.30	6.00	1.10	0.40	0.05
Apr-19	4.35	5.81	0.80	0.40	0.04
May-19	4.49	5.87	0.80	0.39	0.05
Jun-19	4.59	5.56	0.87	0.39	0.04
Jul-19	4.69	6.04	1.06	0.39	0.05
Aug-19	5.57	6.53	2.61	0.39	0.22
Sep-19	5.30	6.41	2.80	0.39	0.15
Oct-19	4.83	5.62	2.93	0.39	0.12
Nov-19	4.88	5.86	2.13	0.59	0.13
Dec-19	4.52	5.69	1.43	0.41	0.08
2019 Average MGD	**4.74**	**5.97**	**1.64**	**0.41**	**0.09**
2019 Total MGY	1,728	2,181	600	150	33

2020	Hagatna	Northern	ASR	Umatac	Inarajan
Jan-20	4.44	5.77	1.10	0.24	0.05
Feb-20	4.45	5.66	1.06	0.33	0.06
Mar-20	4.23	4.95	0.85	0.22	0.04
Apr-20	3.94	4.95	0.97	0.20	0.04
May-20	3.94	4.68	1.05	0.20	0.06
Jun-20	3.94	4.32	1.16	0.20	0.05
Jul-20					
Aug-20					
Sep-20					
Oct-20					
Nov-20					
Dec-20					
2020 Average MGD	**4.16**	**5.06**	**1.03**	**0.23**	**0.05**
2020 Total MGY	1,517	1,845	377	85	18

GWA WWT Flow Report 2019 to Present, prepared by kcog/df, 7/6/2020



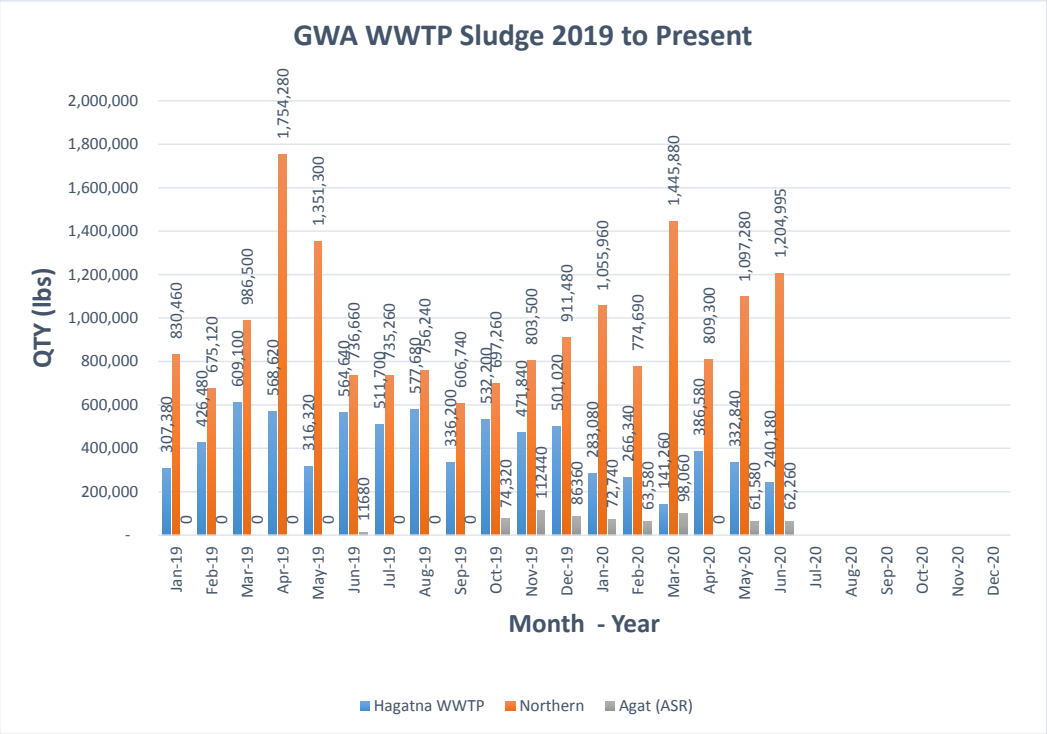


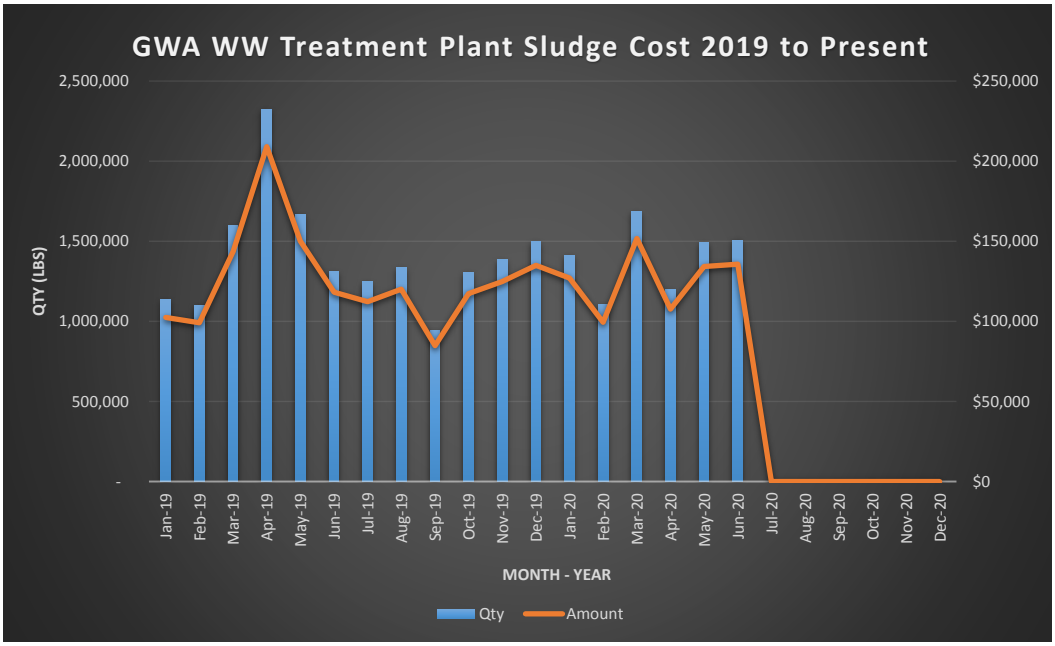
GWA WWT Flow Report 2019 to Present, prepared by kcog/df, 7/6/2020

	Hagatna WWTP		Northern		Agat (ASR)		Hagatna + Northern + Agat	
2019	Qty	Amount	Qty	Amount	Qty	Amount	Qty	Amount
Month- Yr	lbs	$	lbs	$	lbs	$	lbs	$
Jan-19	307,380	$27,664	830,460	$74,741	0	$0	1,137,840	$102,406
Feb-19	426,480	$38,383	675,120	$60,761	0	$0	1,101,600	$99,144
Mar-19	609,100	$54,819	986,500	$88,785	0	$0	1,595,600	$143,604
Apr-19	568,620	$51,176	1,754,280	$157,885	0	$0	2,322,900	$209,061
May-19	316,320	$28,469	1,351,300	$121,617	0	$0	1,667,620	$150,086
Jun-19	564,640	$50,818	736,660	$66,299	11680	$1,051	1,312,980	$118,168
Jul-19	511,700	$46,053	735,260	$66,173	0	$0	1,246,960	$112,226
Aug-19	577,680	$51,991	756,240	$68,062	0	$0	1,333,920	$120,053
Sep-19	336,200	$30,258	606,740	$54,607	0	$0	942,940	$84,865
Oct-19	532,200	$47,898	697,260	$62,753	74,320	$6,689	1,303,780	$117,340
Nov-19	471,840	$42,466	803,500	$72,315	112440	$10,120	1,387,780	$124,900
Dec-19	501,020	$45,092	911,480	$82,033	86360	$7,772	1,498,860	$134,897
Grand Total	5,723,180	$515,086	10,844,800	$976,032	284,800	$25,632	16,852,780	$1,516,750

	Hagatna WWTP		Northern		Agat (ASR)		Hagatna + Northern + Agat	
2020	Qty	Amount	Qty	Amount	Qty	Amount	Qty	Amount
Month- Yr	lbs	$	lbs	$	lbs	$	lbs	$
Jan-20	283,080	$25,477	1,055,960	$95,036	72,740	$6,547	1,411,780	$127,060
Feb-20	266,340	$23,971	774,690	$69,722	63,580	$5,722	1,104,610	$99,415
Mar-20	141,260	$12,713	1,445,880	$130,129	98,060	$8,825	1,685,200	$151,668
Apr-20	386,580	$34,792	809,300	$72,837	0	$0	1,195,880	$107,629
May-20	332,840	$29,956	1,097,280	$98,755	61,580	$5,542	1,491,700	$134,253
Jun-20	240,180	$21,616	1,204,995	$108,450	62,260	$5,603	1,507,435	$135,669
Jul-20		$0		$0		$0	-	$0
Aug-20		$0		$0		$0	-	$0
Sep-20		$0		$0		$0	-	$0
Oct-20		$0		$0		$0	-	$0
Nov-20		$0		$0		$0	-	$0
Dec-20		$0		$0		$0	-	$0
Grand Total	1,650,280	$148,525	6,388,105	$574,929	358,220	$32,240	8,396,605	$755,694

Hagatna and Northern WWTP Sludge Report 2019 to present, GWA Operations kcog / df, 7/6/2020





Hagatna and Northern WWTP Sludge Report 2019 to present, GWA Operations kcog / df, 7/6/2020

Guam Waterworks Authority		Date:	7/14/2020
		Time:	
REVIEWS			
TOTAL PUMPS INSTALLED	172	OVERAL AVERAGE	93%
TOTAL PUMPS OPERATIONAL	156	% OF OPERATING PUMPS	91%
TOTAL PUMP STATIONS	78		

GUAM WATERWORKS AUTHORITY

WASTEWATER FACILITIES REPORT

Northern District

NO:	FACILITY	PRIORITY LISTED	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/ AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	SOUTHERN LINK	1	4	2	50%	GPA	A	P#3: Needs Impeller @ Station; P#4: Needs Sensor @ Guam Motor		VFD#4: Awaiting Repairs			
2	FUJITA	1	4	3	75%	GPA	A						
3	YPAO	1	2	2	100%	GPA	A	P#2 In for repairs @ JMI; utilizing Machanao pump and volute on line 2.					
4	PASEO DE ORO	1	2	2	100%	GPA	A						
5	HARMON	2	2	2	100%	GPA	A						
6	ROUTE 16	1	4	2	50%	GPA	M	P#4 secured, P#3 secured due to flapper in check valve loose.					
7	LATTE DOUBLE TROUBLE	1	2	2	100%	GPA	A	P#2 Awaiting Repairs @ Shop, P#2 installed 04-22-2020 pump came from station 11					
8	LATTE SUN RISE	2	2	2	100%	GPA	A						
9	LATTE SUBMARINE	2	2	2	100%	GPA	A						
10	LATTE PLANTATION	2	2	2	100%	GPA	A						
11	PGD	2	2	2	100%	GPA	A						
12	MACHECHE	2	2	2	100%	GPA	A						
13	HAFA ADAI	2	2	2	100%	GPA	A						
14	YPAO/PAO	1	3	3	100%	GPA	N/A						
15	PACIFIC LATTE	2	2	2	100%	GPA	A	P#1 awaiting rewinding, new pump installed on 20-10-2019					
16	YIGO	1	3	3	100%	GPA	A	Electrician secured P#3 due to light on on mini CAS (Temperature).					
17	ZERO DOWN	2	2	2	100%	GPA	A						
18	SANTA ANA	2	2	1	50%	GPA	A	P#2 burnt, in for rewinding					
19	MACHANAONAO	1	2	2	100%	GPA	N/A	P#1 and volute being utilized at Ypao pump station, new pump installed					
20	FEMA 96	2	2	2	100%	GPA	A	Pumps 1&2 removed awaiting rewinding. Utilizing pumps from Hafa Adai and Old Station 13 pump (BIG BLUE)					
21	ASTUMBO 1	2	2	2	100%	GPA	A	P#1 removed awaiting repairs, new pump installed 01-04-2020 on line 2					
22	ASTUMBO 2	2	2	2	100%	GPA	A	New pump installed 01-16-2020					
Total	22		52	46	88%								

Central District

NO:	FACILITY	PRIORITY LISTED	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/ AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	CABRAS ISLAND	1	2	2	100%	Portable	M						
2	COMMERCIAL PORT	1	3	3	100%	OP	A	P# 3 pump works, Standby					
3	PITI	1	2	2	100%	GPA	A						
4	ASAN	1	2	2	100%	GPA	A						
5	SINAJANA	2	2	2	100%	GPA	A						
7	NEW CHAOT	1	3	3	100%	OP	A						
8	ORDOT	2	2	2	100%	OP	A						
29	DERO	1	2	2	100%	OP	A						
9	CHALAN PAGO #5	2	2	2	100%	OP	A						
10	CHALAN PAGO #3	2	2	2	100%	OP	A						
11	FLORA GARDENS	2	2	2	100%	INOP	A						
12	DOUBLE SHAFT	1	3	2	67%	OP	A	Pump 2 removed due to impeller broke					
13	NAMU	2	1	1	100%	OP	A						
14	TAI MANGILAO	1	3	2	67%	GPA	A	P3 secured due to moisture sensor.					
15	MANGILAO	1	2	2	100%	GPA	A			Sump pump burnt and the breaker is damaged			
30	FIDIAN	2	2	1	50%	GPA	A	6/30/20 Pump 1 removed due to grounded					
16	LEYANG	2	2	2	100%	OP	A						
27	SAGAN BONITA 1	2	2	1	50%	OP	A	P1 removed by maintenance Burnt					
28	SAGAN BONITA 2	2	2	1	50%	OP	A	P1 removed by maintenance Burnt					
17	DAIRY	1	2	1	50%	INOP	A	pump 1 secured due to check valve needed repairing by maint					
18	BARRIGADA	1	2	2	100%	GPA	A	P3 secured due to C/V not closing					
19	TOTO GARDENS	2	2	1	50%	INOP	A	Pump 2 removed awaiting repairs		Pump 2 breaker still secured tagged out.			
20	MONGMONG	2	2	2	100%	OP	A						
21	CASIMERU	2	2	1	50%	Portable	A	P#1 awaiting rewinding at RCG		GPA RELOCATED GENERATOR			
22	MAITE	2	2	2	100%	GPA	A						
23	BAYSIDE	2	1	1	100%	INOP	A						
24	ALUPANG	1	2	2	100%	OP	A						
25	MAMAJANAO	1	3	3	100%	OP	A						
26	Agana Main	1	4	3	75%	OP	A	P4 is on Line # 2 /awaiting line 4 riser to be cleaned					
Total	29		63	54	86%								

Southern District

NO:	FACILITY	PRIORITY LISTED	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/ AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	GAAN #1	1	4	4	100%	OP	MAN						
2	PUMP STATION #11	2	2	2	100%	INOP	AUTO						
3	PUMP STATION #12	1	2	2	100%	OP	AUTO						
4	PUMP STATION #14	2	2	2	100%	OP	AUTO			Pumps are alternated weekly			
5	PUMP STATION #15	1	2	2	100%	INOP	AUTO	Requested for electricians to replace P-1 defective hourly meter.	*20-05-1208*	Generator Secured By GPA 6/18/20 due to Oil Leak.			Generator Radiator Leaking Coolant ,GPA Was Informed.
6	PUMP STATION #16	2	2	2	100%	OP	AUTO						
7	PUMP STATION #17	2	2	2	100%	OP	AUTO						
8	PUMP STATION #18	2	2	2	100%	OP	AUTO						
9	INARAJAN MAIN	1	2	2	100%	OP	AUTO						
10	INARAJAN LIFT	1	2	2	100%	OP	AUTO						
11	TALAFOFO	1	2	2	100%	OP	AUTO	1-17-20 Electricians determined that the sump pump is grounded and was recommended to be replaced. Entered work order into Lucity requesting maintenance to replace.	*SUMP PUMP 20-01-0733*	6-6-19 Exhaust blower for wet well is defective and needs replacement. Requested for electricians to relocate the existing blower unit at the old Agat treatment plant wet well and install it at Talofofo.		11-5-19 $10,140.00 New M.W. ventilation repair quotation was sent to Mary. All ventilation ducts needs to be fabricated and installed.	
12	PAGACHAO	2	2	2	100%	NONE	NA						
13	CHALIGAN	2	2	2	100%	OP	MAN/INOP			Requesting for electricians to make assessments to ventilation system to make it operational.)	(Vent- 19-12-0390)	12-23-19 Fred is working on getting a lift to be able to go to the roof top to make assessments on the motor.	
14	EJECTOR #2	2	2	2	100%	PORTABLE /INOP	NA						
15	EJECTOR #3	2	2	2	100%	PORTABLE /INOP	NA						
16	EJECTOR #4	2	2	2	100%	PORTABLE /INOP	NA						
17	EJECTOR #5	2	2	2	100%	PORTABLE/INOP	NA						
18	EJECTOR #6	2	2	2	100%	PORTABLE/INOP	NA						
19	EJECTOR #7	2	2	2	100%	PORTABLE/INOP	NA						
20	NORTH REYES	2	2	2	100%	PORTABLE/INOP	NA						
21	LEYON #3 (DanDan)	2	2	2	100%	OP	MAN						
22	LEYON #4	2	2	2	100%	OP	AUTO						
23	MTL PUMP STATION	2	1	1	100%	PORTABLE/INOP	NA						
24	Baza P/S	1	3	3	100%	OP	AUTO			Sumitomo 7-14-2020 working on valve leaks and bleeder valve relacement for pump #1			
25	Windward Hills	1	3	2	67%	OP	AUTO	6-9-20 P-1 pulled out for cooling Jacket repair.	*20-06-0130*				
26	Aplacho	1	3	3	100%	OP	AUTO						
	26		**56**	**55**	**98%**								
pump availability =no of operational pumps/no of pumps*100%													
1	Asan By-pass	1	1	1	100%			Pump from Sinajana					
Total	**1**		**1**	**1**	**100%**								

GUAM WATERWORKS AUTHORITY

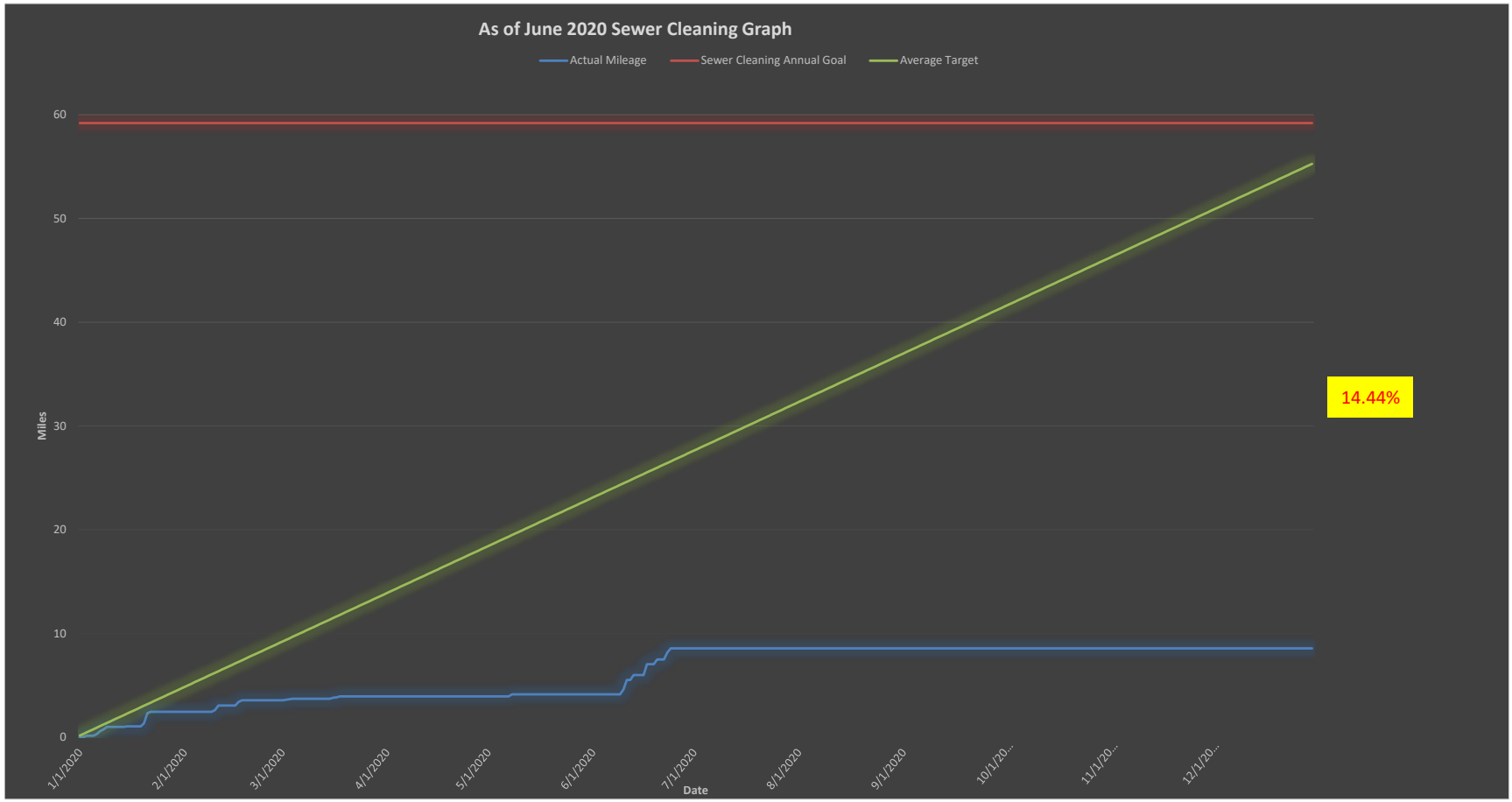
Guam Waterworks Authority
VEHICLE FLEET STATUS
7/15/2020

EQUIPMENT STATUS

Description	Number of Equipment	Number of Equipment Available	Number of Equipment Not Available	Percentage
Backhoe (Leased)	3	3	0	100%
Dump Truck (Leased)	3	3	0	100%
Trailer (Leased)	3	3	0	100%
Backhoe	3	2	1	67%
Boom Truck	2	0	2	0%
Crane	1	1	0	100%
Dump Truck	1	1	0	100%
Forklift	6	6	0	100%
Fuel Tanker	1	1	0	100%
Heavy Duty	8	7	1	88%
Hoist Rig	1	0	1	0%
Jetter	1	1	0	100%
Light	154	129	25	84%
Mini Backhoe	2	1	1	50%
Pumper Truck	1	0	1	0%
Skidster	1	0	1	0%
Sludge Truck	5	3	2	60%
Tractor	2	2	0	100%
Tractor Mower	1	1	0	100%
Trailer	15	13	2	87%
Trencher	1	0	1	0%
Vacuum Truck	5	2	3	40%
Water Buffalo	2	2	0	100%
Water Tanker	5	5	0	100%
Compressor	1	1	0	100%
Total	252	176	41	

SUMMARY

Operational	Operational w/Rprs Pending	Not in Operation-Accident (Docs Pending)	Not in Operation-Assessment Pending	Not in Operation-Repairs Pending	Not in Operation-Vendor Repairs	Recommend Survey
3	0	0	0	0	0	0
2	1	0	0	0	0	0
3	0	0	0	0	0	0
2	0	0	0	0	1	0
0	0	0	0	0	1	1
0	1	0	0	0	0	0
1	0	0	0	0	0	0
6	0	0	0	0	0	0
1	0	0	0	0	0	0
7	0	0	0	0	0	1
0	0	0	0	0	1	0
1	0	0	0	0	0	0
122	7	1	0	3	5	16
1	0	0	0	1	0	0
0	0	0	0	1	0	0
0	0	0	0	1	0	0
3	0	0	0	1	1	0
2	0	0	0	0	0	0
1	0	0	0	0	0	0
13	0	0	0	2	0	0
0	0	0	0	1	0	0
2	0	0	0	0	3	0
2	0	0	0	0	0	0
5	0	0	0	0	0	0
1	0	0	0	0	0	0
176	8	1	0	10	12	18



SEWER CLEANING	January	February	March	April	May	June	July	August	September	October	November	December	Miles Completed	Miles Remaining
SL-RAT	2.44	1.10	0.40	0.00	0.20	4.43							8.57	***50.63***

5 miles a month required, 59.2 miles a year to complete for 2019 (296 miles to complete in 5 years)

59.2 miles x 5 years = 296 miles
296 miles / 5yrs = 59.2 miles a year required to be completed
59.2 miles /12 months = 4.93 miles a month required to be completed
4.92 miles x 5,280 = 25,977.6ft. / 4 weeks = 6,494.4ft. Per week reqired to be completed
6,494.4ft / 5 days = 1,298.8ft required to be completed daily

Guam Waterworks Authority	Date: 6/30/2020 Time:

GUAM WATERWORKS AUTHORITY

WATER DISTRIBUTION FACILITIES REPORT

REVIEWS

TOTAL PUMPS INSTALLED	56	OVERAL AVERAGE	*99%*
TOTAL PUMPS OPERATIONAL	55	% OF OPERATING PUMPS	*98%*
TOTAL BOOSTER PUMP STATIONS	27		

Northern District

NO:	FACILITY	PUMP HP	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	PUMP AND MOTOR INVENTORY
1	Yigo	30	3	3	100%	OP	A						
2	Gaynero	20	2	2	100%	OP	A						
3	Mataguac	25	2	2	100%	OP	A						
4	Santa Rosa	15	2	2	100%	OP	A						
5	Hyundai	40	2	1	50%	OP	A	Pump # 1 requires pump and motor. Station undergoing renovation with new pumps installed.				Work ongoing. New pumps will be installed.	
6	Chln. Palauan	5	2	2	100%	N/A							
7	Access	60	2	2	100%	OP	A						
8	Agana Heights	30	3	3	100%		A						
9	Nimitz Hill	7.5	2	2	100%	N/A							
10	Adawag	1.5	1	1	100%	N/A							
11	Pale Kiren	1	1	1	100%	N/A							
12	Ulloa/Untalan	1	2	2	100%	OP	A						
13	Latte Heights	15	2	2	100%	OP	A						
	TOTAL = 13		**26**	**25**	**96%**								
pump availability =no of operational pumps/no of pumps*100%													

Central District

NO:	FACILITY	PUMP HP	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	Pago	150 / 100	3	3	100%	0P	A						
2	Brigade	60	3	3	100%	OP	A						
3	Windward Hills	200 / 75	3	3	100%	OP	A						
4	Santa Rita Spring	40	2	2	100%	OP	A						
5	Santa Ana (Lower)	25	2	2	100%	N/A		Station to undergo renovations for tanks inspections.					
6	Camacho	1	1	1	100%	N/A							
7	Tenorio	1.5	1	1	100%	N/A							
	Total=7		**15**	**15**	**100%**								
pump availability =no of operational pumps/no of pumps*100%													

Southern District

NO:	FACILITY	PUMP HP	NO OF INSTALLED PUMPS	NO OF OPERATIONAL PUMPS	PUMP AVAILABILITY %	GENERATOR OPERATIONAL FAULT	ATS MANUAL/AUTO	PUMP UNIT REMARKS	WORK ORDER NO:	VALVES, ELECTRICAL,STRUCTURAL REMARKS	WORK ORDER NO:	ESTIMATED REPAIR DATE	UPDATES
1	Malojloj Line	125 / 50	3	3	100%	OP	A						
2	Geus	25	2	2	100%	OP	A						
3	Pigua	7.5	2	2	100%	N/A							
4	Toguan	25	2	2	100%	OP	A						
5	WBP-2	25	2	2	100%	OP	A						
6	WBP-1	5	2	2	100%	OP	A						
7	Malojloj Elevated	15	2	2	100%	OP	A						
	Total=7		**15**	**15**	**100%**								
pump availability =no of operational pumps/no of pumps*100%													

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671) 648-3002 | guamccu.org

Regular Board Meeting
CCU Conference Room, Gloria B. Nelson Public Service Building
12:00 p.m., July 28, 2020

AGENDA

1. CALL TO ORDER

2. APPROVAL OF MINUTES

3. GWA
   - 3.1 GM Report
   - 3.2 Financials
   - 3.3 Resolution 31-FY2020 Relative to 2010, 2013 and 2016 Bond Proceeds Reallocation
   - 3.4 Resolution 32-FY2020 Additional Funding for ConstrMgmtContract for Santa Rosa, Sinifa and Santa Rita Tanks
   - 3.5 Resolution 33-FY2020 Additional Funding for DesignContr for Northern and Southern Tanks
   - 3.6 Resolution 34-FY2020 Fund Increase for ConstrMgmtContr for Rte4 Relief Sewerline Rehab Replacement Project

4. GPA
   - 4.1 GM Report
   - 4.2 Financials
   - 4.3 Resolution 2020-17 Extension of Mobil Oil Contract for Residual Fuel Oil #6

5 OTHER DISCUSSION
   - 5.1 CCU Rules Update

6 ANNOUNCEMENTS
   - 6.1 Next CCU Meetings: GWA WS – 8/19; GPA WS - 8/20; CCU Mtg – 8/25

7. ADJOURNMENT

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671) 648-3002 | guamccu.org

Regular Board Meeting
CCU Conference Room, Gloria B. Nelson Public Service Building
5:30 p.m., May 26, 2020

MINUTES

1. CALL TO ORDER
The CCU Chairman called the regular meeting of April 28, 2020 to order at 5:32 p.m. He said four [4] Commissioners were present – Comm. Santos was excused. Others in attendance include:

Commissioners:

Joseph T. Duenas	CCU Chairman
Michael T. Limtiaco	CCU Secretary
Judith P. Guthertz	CCU Treasurer
Simon A. Sanchez	Commissioner

Executive Mgmt.:

Miguel Bordallo	GM / GWA
John Benavente	GM / GPA
Melinda Mafnas	AGMP / GPA
Tricee Limtiaco	AGMA / GPA
Chris Budasi	AGMA / GWA
John Kim	CFO / GPA
Taling Taitano	CFO / GWA
Graham Botha	Legal Counsel / GPA
Kelly Clark	Legal Counsel / GWA

Management & Staff:

Vien Wong	IT Support / GPA
Vladimir Navaska	IT Support / GPA
Lou Sablan	Board Secretary / CCU, GPA, GWA
Ann Borja	Management Analyst, GM's Office / GWA

2. APPROVAL OF MINUTES
The Minutes of March 24, 2020 was presented for approval.

Comm. Guthertz motioned to approve the Minutes subject to verification and written correction, second by Comm. Limtiaco. There was no objection or discussion and the motion passed. The vote was 4 ayes, 1 absent.

3. GWA

3.1 GM Report

The GM submitted his usual GM Summary Report – highlights noted below.

Operations Update

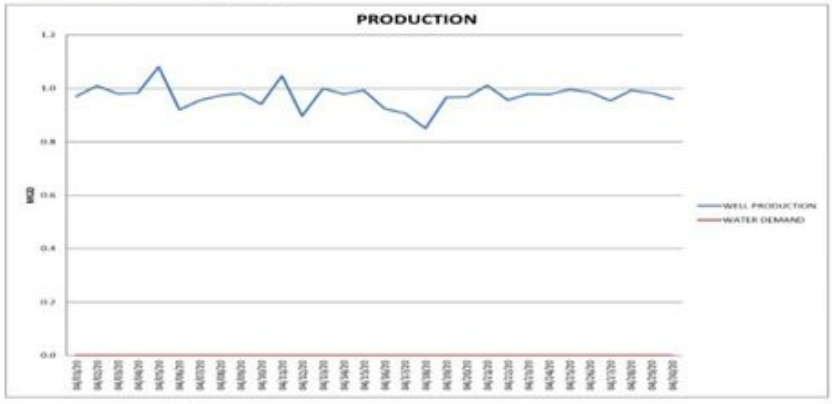
Production (updated for April 2020)

Monthly Production Summary - April 2020			
Deep Wells		36.3	MGD
Active wells =	98 of 120		
Avg days in operation =	30	days	
Total Production =	1,089,192	Kgals	
Springs		0.18	MGD
Avg days in operation =	30	days	
Total Production =	5,384	Kgals	
Ugum Surface Water Plant		2.3	MGD
Avg days in operation =	30	days	
Total Production =	67,804	Kgals	
Tumon Maui Well		0.97	MGD
Avg days in operation =	30	days	
Total Production =	29,120	Kgals	
	1,191,500	Kgals	39.7 MGD

DW Status as of 4/30/2020		
Active	98	
Grounded motor or Pump Failure	4	A26-D03-T06-M21
Out of commission	8	A02-A07-A26-D05-D13-W14-M01-M05
Temporarily Secured	2	A23-A25
Standby	8	A18-A29-D08-D28-F10-F18-F20-M12
TOTAL	120	



Tumon Maui Well Production (April 2020)



Distribution (April 2020)

Monthly Distribution Summary - April 2020					
Water Booster Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	13	26	25	96.2%
	Central	7	15	15	100.0%
	Southern	7	15	15	100.0%
		27	56	55	98.2%



Wastewater Collections (April 2020)

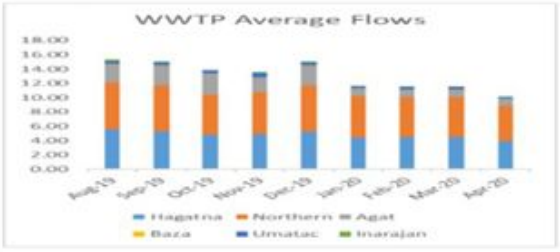
Monthly Collections Summary - April 2020					
Wastewater Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	22	52	46	88.5%
	Central	29	63	56	88.9%
	Southern	26	56	55	98.2%
		77	171	157	91.8%





Wastewater Treatment (April 2020)

Monthly Wastewater Treatment Summary - April 2020				
WW Treatment Plants - Flows				
	Facility	Avg. Daily Flows	Sludge (lbs)	Sludge Disp. ($)
	Hagatna	3.94	386,580	$ 34,792
	Northern	4.95	809,300	$ 72,837
	Agat	0.97	-	$ -
	Baza	0		
	Umatac	0.20		
	Inarajan	0.04		
		10.10	1,195,880	$ 107,629

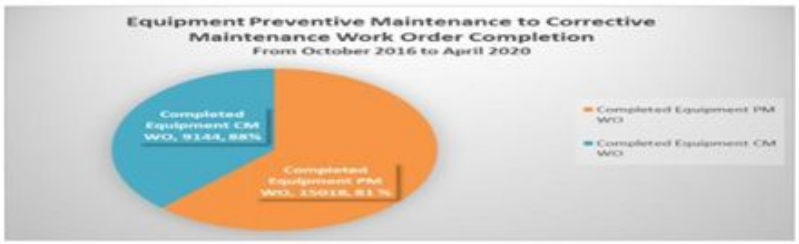


Asset Management (April 2020)

I. Equipment Preventive Maintenance to Corrective Maintenance ***Ratio***



II. Equipment Preventive Maintenance to Corrective Maintenance ***Work Order Completion***



Asset Management (April 2020)

III. Corrective Maintenance Work Order ***Ratio*** for Leak Repairs vs. Equipment Repair



IV. Corrective Maintenance Work Order ***Completion*** for Leak Repairs vs. Equipment Repair



Meters from January 2017 through May 12, 2020

COMPLETED FIELD ACTIVITY JAN 2017 THRU MAY 12 2020 (POSTED IN CIS)	2017	2018	2019	Jan-20	Feb-20	Mar-20	04/18/20	05/12/20	TOTAL:	COMPLETED FIELD ACTIVITIES (IN PROCESS) TO BE POSTED IN CIS
GWA - Meter Exchange	6487	13353	10850	1079	714	548	117	44	33192	0

# OF METERS TESTED AS PER METER TEST FAQ UTY REPORTS:	6079	12259	9278	749	906	1116	341	662	31392
AVG # OF FIELD STAFF PERFORMING CHANGE OUTS (MON THRU FRI):	16	16	7	7	7	7	7	1	
# OF ADMIN STAFF TO CREATE AND POST FIELD ACTIVITIES IN CIS:	10	6	5	5	5	2	1	1	
TOTAL:	**29**	**22**	**12**	**12**	**12**	**9**	**8**	**2**	

*Project was suspended effective 04/13/20

REMAINING ACTIVE BADGER LP MODELS TO BE REPLACED AS OF 04/18/20: **447**

3/4" BADGER METERS IN STOCK AS OF April 17, 2020:

Size	Meter Description	New Meters Passed	New Meters Untested	Passed Field Meters	MMI[1]	Meters Available
3/4"	METER, Badger AMR 5/8" X 3/4" RCDL Model M25 Disc Meter	381	0	246	0	627
3/4"	METER, Badger AMR 5/8" x 3/4" **WARRANTY** RCDL Model M25	0	0	0	0	0
3/4"	METER,Badger 5/8"x3/4" NSF61-G RCDL M25LL Disc Meter Integral	2	0	3	0	5
3/4"	METER, Badger AMR 5/8" x 3/4" RCDL Model M25 *** RMA***	0	0	0	0	0
3/4"	METER, Badger E-SERIES 5/8"X3/4" ULTRASONIC	960	0	0	0	960

Backbilling through April 2020

Guam Waterworks Authority
Collections Report[1] on Accounts Backbilled thru April 30, 2020
For fiscal years 2015 thru 2020 (Apr)

Accounts Billed			Collection Status											
			Amounts Collected[1]			Amounts Adjusted			Total Uncollected (Active)			Total Uncollected (Inactive)		
FY Billed	No. of Accounts	Amount	No. of Accounts	Amount	%	No. of Accounts	Amount	%	No. of Accounts	Amount	%	No. of Accounts	Amount	%
FY2015														
FY2016	17	$ 882	17	$ 882	100%	0	$ -		0	$ -		0	$ -	
FY2017	537	$ 397,450	473	301,732	76%	34	20,967	5%	23	48,869	12%	37	25,883	7%
FY2018	1,374	$ 742,109	1,208	564,906	76%	48	61,850	8%	68	74,137	10%	50	41,216	6%
FY2019	8,334	$ 3,064,384	7,473	2,426,146	79%	151	133,752	4%	407	401,807	13%	213	112,679	4%
FY2020	1,816	$ 506,622	1,344	359,234	71%	17	5,541	1%	426	265,229	56%	29	6,618	0%
Total	12,068	$ 4,711,447	10,515	$ 3,482,900	74%	230	$ 222,110	5%	1,004	$ 810,043	17%	319	$ 186,395	4%

[1] Collections thru May 12, 2020

One Guam Update

Meetings suspended due to COVID-19

Court Order Summary (April 2020)

	Total Items	On-time Items Completed / Continuous	In Progress - late	Completed - Late	In Progress - on time	Performance %
Court order total	93	78	1	14	0	98.90%



	Court Order Items	%	Performance (on-time or completed)
Completed/Continuous - on time	78	84%	
Completed - late	14	15%	
In Progress - on time	0	0%	
In Progress - late	1	1%	98.9%
Totals	93	100%	

Court Order

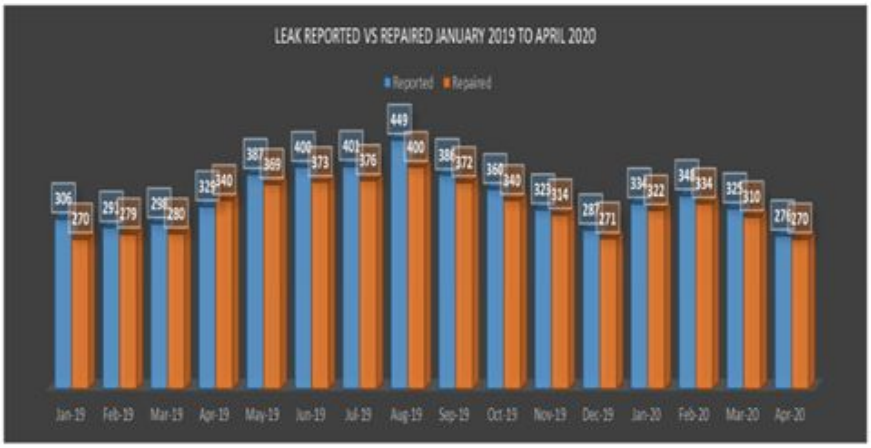
Status Information (for April and May 2020)

- 1 item delayed - The Court Order is down to one item remaining, § II, (C), (29) – Storage tank Repair. Restoration, Replacement or Relocation – which is the item that will take longer than the "end" of the court order. That makes us 98.9% done with the CO.
- Final Date to complete all Court Order items will be delayed past December 31, 2020.
  - CO 29(b) has been expanded by 31% beyond the original Court Order Requirements
  - General Counsel is reviewing filing requirements and content
  - Additional impact likely if 2020 Bond issuance is delayed due to COVID-19 impacts
- Overflow or Bypass events reported to USEPA:
  - 04-08-2020 Chalan Kanton Tasi, Sinajana – PS Controller Failure
  - 04-16-2020 Gills Apartment – Service Lateral (pipe) Failure
  - 04-20-2020 Chalan Goro Elena sewer backup – FOG
  - 04-20-2020 Tai Mangilao PS, Wetwell – PS Controller Failure
  - 04-21-2020 Carnation RD sewer backup – FOG
  - 04-28-2020 Aga Dr#126 – contractor bypass pump failure
  - 04-29-2020 Aga Dr#127 – contractor bypass pump failure
  - 05-04-2020 Aschena, Barrigada, Force Main break
  - 05-07-2020 SSO#132 Wusstig RD sewer overflow – damaged manhole allowed debris to get into the sewer line
  - 05-11-2020 Aga St#140 – contractor bypass pump failure
  - 05-12-2020 Aga St#140 – contractor bypass pump failure

Land Acquisition Summary (as of April 2020)

GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Tanks	Astumbo	Gov't. - CLTC	Petition of Land Registration package forwarded to Attorney General by DLM 11/04/19. Follow up update status request emailed to DLM 05/14/2020.
	Piti	Private	SHPO sect. 106 response received 1/2/20. GEPA Environmental Impact Review received 1/3/20. USFWS Environmental Consultation response received 12/12/19. Environmental Consultation from DOAg Aquatics and wildlife received 3/4/20. Response from DOAg Forestry & soils still pending.
	Airport	Private	Letter of 1st offer to property owner mailed out on May 8, 2020.
Deep Wells	AG-12	Dept. of Agriculture/Manhita Farms	Right of Entry Agreement sent to Dept of AG for signature 05/24/18. 2nd follow up sent on 09/12/18. 3rd follow up sent on 04/10/19. Retracement Survey Property Map filed and recorded at DLM 7/10/19.
Booster Pump Station	Agfayan	Private	TGE working on structural design for pump station area for L28, B19, T3734, Inarajan 11/07/19.
Asan Springs	Asan	Federal	Received remaining comments from Federal and GovGuam agencies in regards to Section 106 on 12/16/19. GWA and Designer negotiated on a Revised Change Order No. 2 submitted on 2/26/2020. CO. No. 2 is to address Federal and Local agencies concerns, specifically on developing an Environmental Assessment and performing Biological Survey work. Pending approval for revised CO. No.2 as of 3/3/2020. Negotiations with NPS on a ROW agreement is ongoing.

Comparison of Leaks Reported vs. Leaks Repaired (April 2020)



Monthly Leak Report Cost (April 2020)



Assumptions:

1. Leak rate = 4 gpm
2. Cost per kgal = $4.00

The Chair asked GM if any other updates - GM gave Insurance update

- Insurance renewal



- Series 2020 Bonds
  - S&P Affirmed "A-" rating and assessed stable outlook
  - Moody's Affirmed "Baa2" rating and removed "Review for Downgrade" but assessed negative outlook
  - Schedule moving forward
    - Investor calls this week Wed, Thu, Fri
    - On-Island retail period Wednesday 27th
    - Bond pricing Thursday 28th
    - Closing Thursday June 4th

Regarding Insurance GM Miguel updated that GWA's broker waa not able to place same amount of coverage for liability so GWA renewed for $25M and they are still working on proposal to reach $50M. Management met with bond counsel who said this was a minor issue so all is ok he just wanted to point this out to the Commission.

3.2 Financials

CFO Taitano gave update on Revenue & Collections wi [report was not loaded to board books but copies were provided to the Commission]. She said this is a picture to show what has been happening with collections. We saw a drop I collections and below average in April. CFO said last week collections increased slightly but overall revenue is down and collection is flat. There was a drop in demand from Commercial accounts in March and April. We are seeing impact to debt service coverage. Our collection ration is closer to 98% but dropped in April.

3.3 Resolution No. 18-FY2020 Relative to Approving the Charge-Off of Guam Waterworks Authority Receivables Deemed Uncollectible

It is good accounting practice to regularly review accounts receivable to ensure the Allowance for Doubtful Accounts is appropriate and to write off accounts that are deemed uncollectible. If uncollectible receivables are not written off regularly, eg annually, Accounts Receivable and the related Allowance become overstated. The proposed amounts to be charged off are $1,841,105.

The employee receivables included costs for lost or damaged equipment, uncleared travel expenses, amounts owed for insurance, and advanced salary payments. Trade receivables included billings as well as work order charges.

As receivables are written off, the Allowance is adjusted. The write off of receivables will not impact income as the amounts were expensed as the Allowance was adjusted, i.e., the write off will reduce the Accounts Receivable and the Allowance for Doubtful Accounts balances on the Statement of Net Position (aka Balance Sheet).

Note, if these receivables are eventually collected, the amounts will be recognized as Miscellaneous Income. The write off will take happen immediately after CCU approval.

Comm. Sanchez motioned to approve Resolution 18-FY2020 second by Comm. Guthertz.

There was discussion on employee receivables. Comm. Guthertz asked clarification of the type of charge and management gave some examples. Comm. Limtiaco asked management to review advanced funds in terms of procedure on payback and if the matter is addressed in the employee rules and regulations. The purpose of the review is to ascertain if these types of advances are allowable using ratepayer dollars in order to avoid this type of charge off in the future. Comm. Limtiaco recommended that the rules and regs be reviewed and matter brought back at the next meeting, Comm. Sanchez said another option is to hold back last paychecks pending clearance of any outstanding receivables.

Comm. Duenas pointed out correction on the year 2000-2016 in the resolved section.

On the motion the vote was 4 ayes and 1 absent – the Resolution carried.

3.4 Resolution No. 25-FY2020 Relative to Approving the Terms of the Settlement in the Claim Against the Guam Waterworks Authority by Ronald W. Blade and Mae K. Cruz Also Referenced as GWA Government Claim No. 2019-005

This resolution is to approve the proposed settlement of the government claim of Mr. Ronald W. Blade and Ms. Mae K. Cruz. On September 24, 2019, Mr. Blade and Ms. Cruz filed a government claim with the Guam Waterworks Authority for damage to their property when a GWA employee hit the Claimants aluminum "automatic" sliding gate while driving into Claimants driveway when responding to a report of a sewer line back-up. The recommendation for settlement is Thirteen Thousand Dollars ($13,000.00). Upon final review, approval and signature of the Release and Settlement Agreement by the Attorney General of Guam and the Governor of Guam. Funding source for this request will be revenue funds.

Comm. Sanchez motioned to approve Resolution 25-FY2020 second by Comm. Guthertz On the notion the vote was 4 ayes and 1 absent

3.5 Resolution No. 26-FY2020 Relative to Authorizing the General Manager the Authority to Settle Government Claims Against GWA

The objective of the Resolution is to authorize the General Manager the authority to settle government claims against GWA without having to get prior CCU approval up to the amount of $50,000.00.

Comm. Sanchez motioned to approve Resolution 26-FY2020 second by Comm. Guthertz

In discussion Comm. Sanchez stated that the resolution state that the GM must notify the Commission of any such action which is included in the resolved section.

On the motion, the vote was 4 ayes and 1 absent – the resolution passed. The vote was 4 ayes; 1 absent

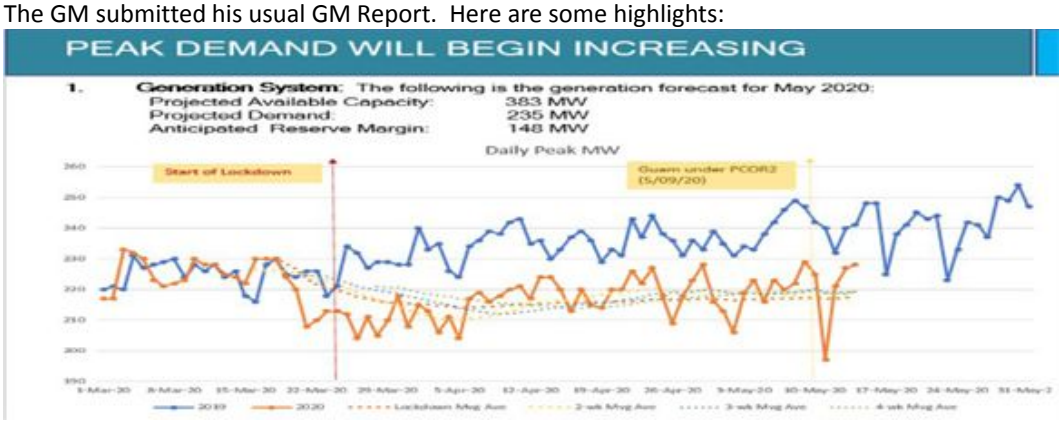
3.6 GWA Resolution No. 27FY2020 Recognizing GPWA Employees for Success in Providing Continuous Service for the Island Throughout the COVID-19 Pandemic

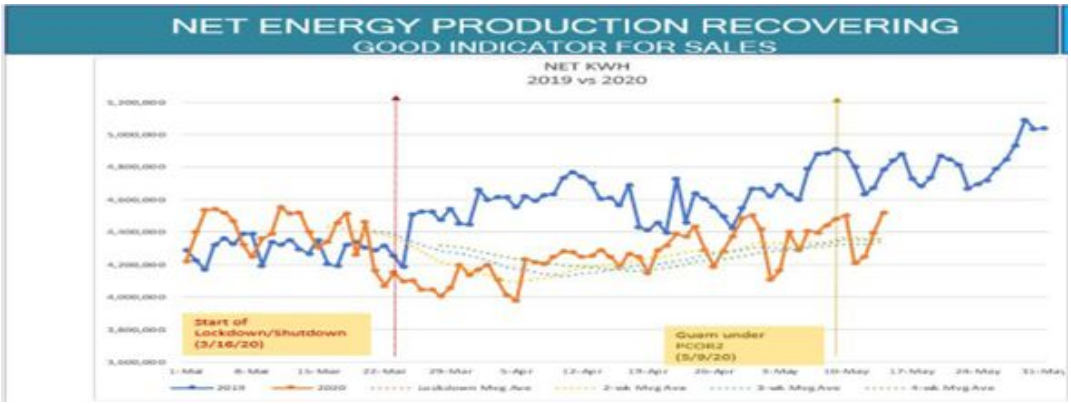
This is a joint resolution with GPA and was presented and discussed in Section 4.5.

4. GPA

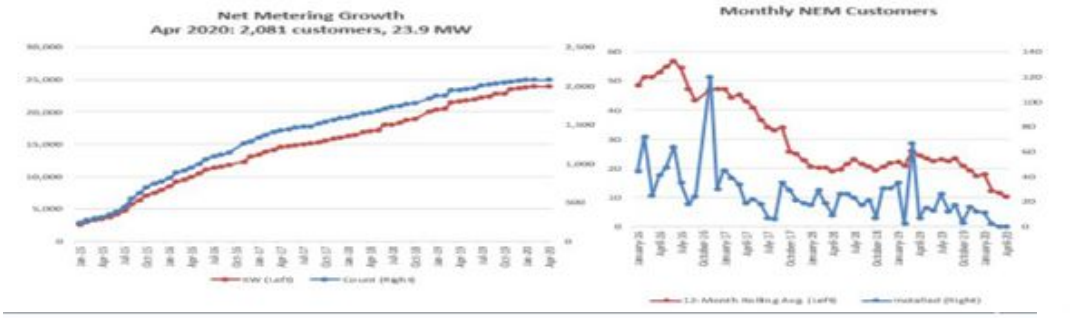
4.1 GM Report

The GM submitted his usual GM Report. Here are some highlights:





2. **Net Metering (NEM) Growth Thru April 2020:**



3. **DSM Program Expenses**

Description	FY16	FY17	FY18	FY19	FY20 As of 03/31/20	Total to Date
Regular/OT Pay	$11,348.80	$22,256.00	$26,121.83	$50,715.19	$17,610.32	$128,052.14
Other Contractual	$28,278.50	$85,550.05	$116,977.50	$3,025.00	-	$233,831.05
Ads & Radio Announcements	-	-	-	$7,500.00	$1,500.00	$9,000.00
Paid Rebates–Split AC	$154,700.00	$557,275.00	$1,349,825.00	$1,374,650.00	$ 299,300.00	$ 3,735,750.00
Paid Rebates– Central AC	$3,400.00	$8,200.00	$4,400.00	$6,500.00	$500.00	$23,000.00
Paid Rebates– Washer/Dryer	$2,800.00	$7,425.00	$57,200.00	$110,800.00	$26,600.00	$204,825.00
Total Expenses	**$200,527.30**	**$680,706.05**	**$1,554,524.33**	**$1,553,190.19**	**$345,510.32**	**$4,334,458.19**
Bank Interest (+)	$1,676.42	$1,722.74	$1,222.29	$730.05	$246.83	$5,598.33
Bank Fees	$155.00	$1,032.06	$1,085.08	$1,247.54	$210.00	$3,729.68

**Expenses for March '20 are preliminary and may be subject to adjustment during reconciliation process.*

4. **Energy Storage System (ESS) Update:** Project suspended until the moratorium on in-coming air transportation and the 14-day quarantine requirement are lifted. Commissioning parties consist of many off-island technical expertise required to complete commissioning work.

5. **KEPCO 60 MW Solar PV Project:** Project Financing has been achieved by KEPCO and their Security Development Deposit of $6,054,636 has been posted with GPA. Project Commercial Operational Date (COD) is Jan 21, 2022.

6. **HANWHA 60 MW Solar PV Project:** HANWHA posted their Security Development Deposit of $4,624,161 with GPA on September 11, 2019. Project Commercial Operational Date is August 22, 2022.

7. **Integrated Resource Plan (IRP) 2020:** Stakeholder meetings suspended until island pandemic emergency lifted. However, virtual stakeholder meetings are being planned which may allow this process to continue earlier.

MEETING	DATE	AGENDA
1	To be rescheduled	-Introduction to the IRP and Stakeholder Process -Demand and Fuel Price Forecasting -Existing Supply-side Resources -Environmental Regulations -Update on GPA's Power Plant -DSM, Net Metering and GPA's Smart Grid Network -Renewable Energy & Energy Storage Systems -Progress in Other Areas of Operation -[Open Session w/ Stakeholders]
2		Stakeholder Breakout Sessions & Feedback
3&4	Pending updated schedule	Results

8. **Credit Rating Agencies**: We have had conference calls with all three rating agencies. We have provided updates on the impact of COVID-19 on the utility. GPA is confident it will maintain its investment grade rating, although like many other utilities credit watches are in effect.

9. **FY 2019 Audit**: The audit has been completed and Issued. All publication and notification requirements have been done.

10. **Generation KPI's**: The following graphs show the updated system information through April 2020:

There was discussed relative to Govt. Receivables and status of those in arrears. The total AR is 4.059K and DOE alone is 3.449k. Comm. Limtiaco said for the next meeting to amend the report to record those accounts over 90 or 120 days in another color code and that management needs to give these agencies notice and start disconnecting their admin buildings.

4.2 Financials

CFO Kim gave his usual financial highlights to include these brief updates – revenues are 8.5% lower than prior year. MWh Sales are down by 8% compared to prior year. RE O&M budget is favorable by $346k vs. prior year. It was mentioned that residential and prepaid customers are being reminded weekly by text about their limits and other collection information.

4.3 Resolution 2020-10 PMC for GPA's Aggreko Temporary Power Units

GPA's contract with Aggreko expires on January 8, 2021. GPA's new Ukudu power plant and renewable energy contracts are not expected are expected to be commissioned until about 2022-2023. Therefore, to ensure adequate installed capacity to meet system demand, GPA needs to continue operating and maintaining the Aggreko Temporary Power Units. The term of the new contract is for a three-year base period beginning January 9, 2021 and two (2) additional 1-year extensions. During this period, the PMC will also assure that all necessary activities to ensure efficiency and reliability of the units are accomplished. The plant will be operated and maintained by GPA personnel and supplemented by PMC personnel as necessary.

The anticipated schedule is as follows:

Contract Commencement:	January 9, 2021
Contract Base Period End:	January 8, 2024
Optional Extension Year 1:	January 9, 2024 – January 10, 2025
Optional Extension Year 2:	January 9, 2025 – January 10, 2026

The project will be funded by revenue funds and the annual estimated cost is $3.8M. This will result in a $8.1M reduction in current cost for plant.

Actual	2016	2017	2018	2019	2020 (thru March)	2021 Estimated
Capacity Charge, $/kw/Month	8,447,280.00	$ 6,979,200.00	$ 6,979,200.00	$ 6,979,200.00	$ 1,744,800.00	
Transit (or Shipping) Charge, $/Month	1,274,363.20					
Fixed O&M, $/Month	2,264,686.00	$ 2,227,560.00	$ 2,227,560.00	$ 2,227,560.00	$ 556,890.00	$ 2,227,560.0
Emission Controls Monthly Charges		$ 220,162.50	$ 285,000.00	$ 285,000.00	$ 71,250.00	
Monthly Installment (Rent-to-Own)		$ 500,004.00	$ 500,004.00	$ 1,771,111.20	$ 492,778.63	
Total Fixed Charges:						
Energy Charge, $/MWh (Min. 8,098 MWH)	995,896.05	$ 794,517.37	$ 660,309.76	$ 649,326.48	$ 158,694.54	$ 701,384.54
DEF Charges,$/MWH (Min. 8,098 MWH/Month)		$ 932,898.05	$ 914,033.50	$ 901,526.32	$ 220,305.65	$ 916,152.62
Availability Penalty		$ (155,985.42)		$ (23,744.00)		
TOTAL ACTUAL COSTS:	$ 12,982,225.25	$ 11,498,356.49	$ 11,566,107.26	$ 12,789,980.00	$ 3,244,718.82	$ 3,845,097.16
5-YEAR TOTAL					**$ 52,081,387.82**	
Annual Cost Reduction						**$ 8,106,384.09**

Notes:

1. Energy Charges includes lube oil and maintenance spare parts.
2. Emission Control Monthly Charges include the supply, transport and installation of 39x SCR units and Urea shipping and piping system
3. DEF Charges the cost of urea
4. Fixed O&M include 24-hour staffing for 7 Aggreko and 12 local hires and availability with capacity factor of 50%

It was mentioned that the good news is GPA now owns the Units beginning Jan9th 2021. Huge Savings from 12M to 9M per year will be realized. These machines will be needed until Ukudu comes on line. Agrekko will be with GPA for a very long time. They fit right into plans for renewables.

GM Benavente confirmed that this matter needs to go to PUC for approval.

Comm. Guthertz motioned to approve Resolution 2020-10 second by Comm. Sanchez. The resolution passed; the vote was 4 ayes and 1 absent.

4.4 Resolution 2020-11 UKUDU Power Plant ECA Amendment

This Resolution was TABLED.

4.5 Resolution 2020-12 Recognizing GPWA Employees for Success in Providing Continuous Service for the Island Throughout the COVID-19 Pandemic

This is a dual resolution that applies to both GPA and GWA. Executive Order No. 2020-04, issued March 16, 2020, declared a public health emergency for the island of Guam due to the potential dangers posed by the Coronavirus (COVID-19), and ordered the closure of non-essential government of Guam services through March 30, 2020. Guam Power Authority and Guam Waterworks Authority (GPWA) were prepared to ensure continuity of essential utility services to the island community during the mandated two-week shutdown and beyond if necessary. GPWA developed a contingent operational plan, while the shutdown was extended. In addition to providing essential utility services, GPWA supported regular business functions to the extent practicable. To minimize exposure and spread of coronavirus, especially to and among employees in mission-critical positions, only approved key, essential employees were allowed entry into Fadian. Executive Order No. 2020-05 issued on March 19, 2020 mandated social isolation, prohibiting social gatherings and clarified status of non-essential government of Guam operations. The Government of Guam was operating in a limited capacity. It was expressed that one of the best courses of combat against community spread is through the reduction of face-to-face interaction with others and the practice of social distancing. In order to best deal with the ongoing Public Health Emergency, both Guam Power Authority (GPA) and Guam Waterworks Authority (GWA) coordinated and provided the following operational plan; I) Direction and Organization; II) Ensuring Essential Operations; III) Ensuring Customer Services; and IV) Supportive Efforts. On May 10, 2020, Governor Lou Leon Guerrero placed the island in Pandemic Condition of Readiness (PCOR) 2 under the Governor's Executive Order 2020-14. PCOR 2, expanded the categories of businesses and places authorized to reopen with moderate restrictions, including the public-facing functions of GPWA, signaling a positive movement toward normalcy.

In joint coordination, GPA & GWA General Managers ordered the full reopening of the utilities on Thursday, May 14, 2020 in compliance with PCOR 2 restrictions and requirements. To accommodate new health and safety requirements, work schedules were modified to incorporate continued telework and staggered shifts, where possible.

In addition to the Upper Tumon payment drive-thru, in-lobby and online payment options, a new, temporary payment drive-thru service was commissioned at Fadian location on May 14, 2020. Moving forward both utilities resumed full utility operations after a 2-month shutdown. As both agencies return to the business of the utility, employees were reminded to continue to do their part to slow the spread of COVID-19, and continue to promote good safety and health practices promoted by Guam Department of Public Health and Social Services, and the US Center for Disease Control and Prevention.

The coronavirus pandemic has changed our everyday lives and the way we interact with each other, moving individuals toward minimal human contact. Keeping safe, promoting healthy practices, working from home, wearing personal protective gear (mask) and practicing social distancing, is the new norm and for now part of our daily lives.

The CCU recognizes the hard work and dedication of the employees of the Guam Power Authority and Guam Waterworks Authority in providing uninterrupted power and water services to the island community during the pandemic public health emergency.

The CCU wishes to commend the employees of the Guam Power Authority and Guam Waterworks Authority for the successful efforts in providing continuous critical services to the ratepayers and people of Guam during this unprecedented emergency.

Comm. Guthertz motioned to approve GWA Resolution 27-FY2020 and GPA Resolution 2020-12 second by Comm. Sanchez. On the motion there was no further discussion or objection and the motion passed. The vote was 4 ayes and 1 absent.

5. OTHER DISCUSSION

5.1 Proposed CCU Rules

There was no discussion on this matter.

6. ANNOUNCEMENTS

6.1 Next CCU Meetings

The next CCU meeting would be on June 23. It was not mentioned whether or not a June work session would be held**.**

8. ADJOURNMENT

There being no other business to bring before the Commission, Comm. Sanchez motioned to adjourn the meeting second by Comm. Guthertz. There was no objection or discussion and the meeting adjourned at 6:16 p.m.

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Attested

_____	_____
JOSEPH T. DUENAS, Chairman	MICHAEL T. LIMTIACO Secretary

GUAM WATERWORKS AUTHORITY

Management Report
GPWA CCU Board Meeting, July 28, 2020



Management Update

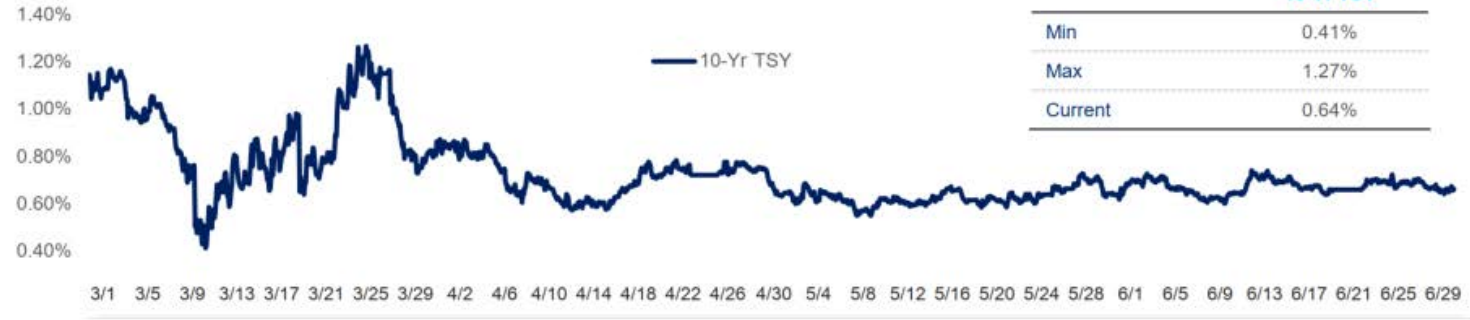
- **Series 2020B Bonds – Taxable Refunding Preliminary Information**
  - Estimated Refunding Par Amount: $142,595,000
  - Estimated PV Savings (as of Jul 16): $10,400,000
  - Estimated All-in TIC: 3.76%
  - Estimated Annual Debt Service Savings: $1,276,000 to $1,781,000 for FY2021 to FY2027
  - Projected Sale Date: August 11/12, 2020
  - Projected Closing Date: August 19/20, 2020

- Market Conditions (based on information from Citi)
  - COVID-19 pandemic closed the municipal bond market for several weeks
  - April saw signs of market stabilization, but all issuances were "AA" rated credits or higher
  - Corporate taxable issuers starting issuing debt in record amounts beginning in April 2020 to weather COVID-19 pandemic
  - Municipal markets were slower to recover, as investors were unsure how governments would be impacted by the pandemic
  - As corporate credit spreads tightened throughout April and May, investors starting buying municipal bonds, which helped drive the taxable municipal rates lower
  - This caused taxable municipal issuances to surge in June, which saw 800%+ increase in new issue taxable supply compared to 2019
  - Improvement in market conditions is projected to allow for savings similar to pre-COVID-19 estimates for GWA Refunding

Taxable Market Overview

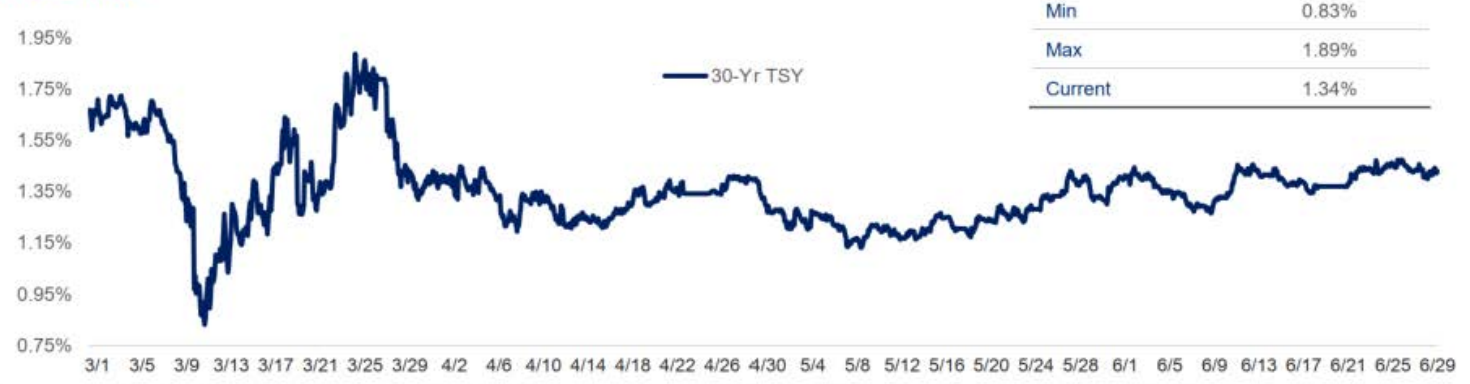
Treasury rates have stabilized following the onset of the COVID-19 Pandemic

10-Year MMD and TSY
3/1/20 – 7/1/20



	10-Yr TSY
Min	0.41%
Max	1.27%
Current	0.64%

30-Year MMD and TSY
3/1/20 – 7/1/20



	30-Yr TSY
Min	0.83%
Max	1.89%
Current	1.34%

1. Citi Velocity as of market close on July 10, 2020

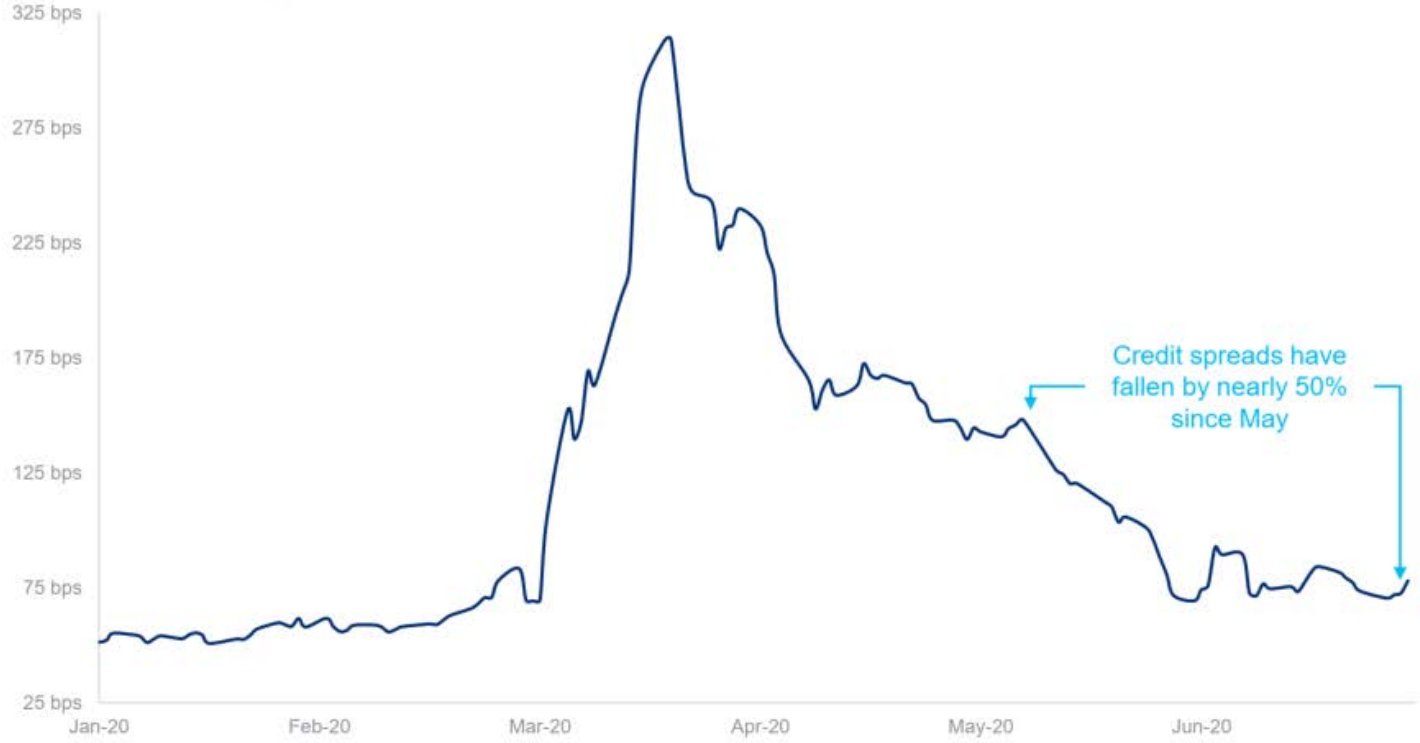
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Investment Grade Taxable Credit Spreads have Tightened

Since March 2020, taxable investment grade credit spreads have declined by more than 230 bps

USBIG Investment Grade Index Spread to 30-Year Treasury
April 10, 2020 to July 10, 2020



Source: Citi Velocity

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Municipal Supply

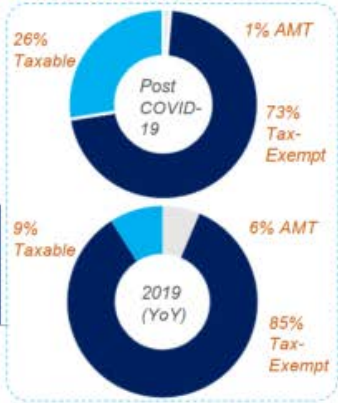
Municipal supply has returned to more normalized levels with June supply rising +34% YoY after the market effectively closed amid COVID-19 volatility.

Municipal Supply Returns to More Normalized Levels as Issuance Dynamics Improve

Past 6 Months Weekly Municipal Supply



Tax-Status Breakdown



Supply Summary ($MM)			
	2020 YTD	2019 YTD	YoY Change
Tax-Exempt	147,142	147,812	-0.5%
Taxable	56,222	15,928	+253.0%
AMT	2,239	10,004	-77.6%
Total	205,603	173,744	+18.3%

2020 Supply Outpaces 2019

Total Monthly Supply 2018-2020YTD

March 2020 supply dropped -33% YoY amid COVID-19 volatility

2020 YTD	$205.6bn
2019 Total	$422.1bn
Volume YoY	+18.3%

Supply driven by taxable volume →



	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Δ '19	16%	47%	6%	-11%	-17%	10%	8%	16%	45%	52%	66%	80%
Δ '20	30%	59%	-33%	2%	1%	34%						

Taxable Supply Advances into 2020

Monthly Taxable Supply 2018-2020YTD

2020 YTD	$56.2bn
2019 Total	$70.8bn
Volume YoY	+253.0%



	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Δ '19	28%	171%	105%	-49%	-10%	3%	-3%	127%	225%	730%	173%	466%
Δ '20	171%	489%	-6%	222%	101%	848%						

Source: SDC as of July 02, 2020. Does not include Corporate CUSIP supply.

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GWA Workforce availability as of July 18

Healthy	368	96.3%
Sick, not COVID-19 related	3	0.8%
COVID-19 Quarantined	2	0.5%
COVID-19 Medical Risk	1	0.3%
Military Leave	7	1.8%
LTD	1	0.3%
	382	100%

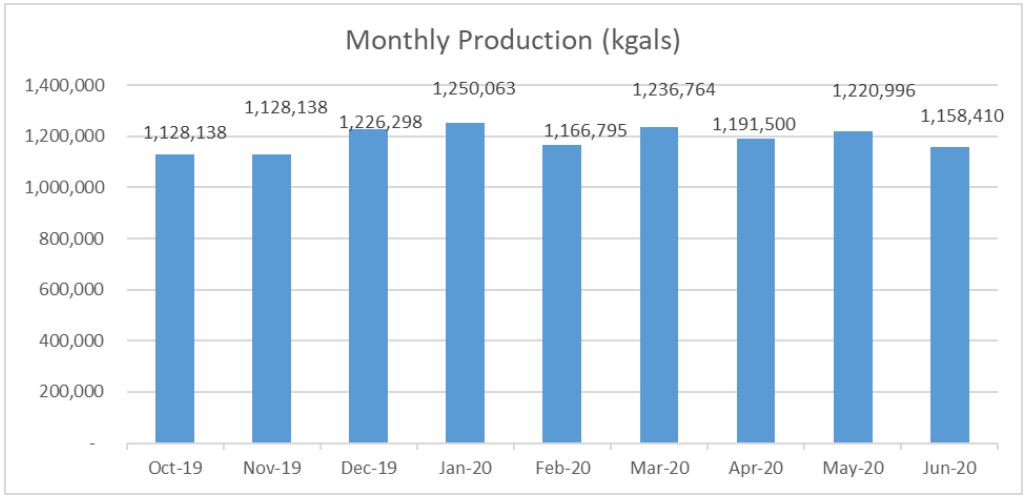
	Total	
Healthy/Reporting for duty at worksite	311	81.4%
Healthy/Reporting for duty - Part Teleworking and Part Reporting for duty at worksite	38	9.9%
Healthy/Reporting for duty - Teleworking	18	4.7%
Employee wants to electively self-quarantine; status not considered vulnerable - does not report for duty	1	0.3%
Employee sick - symptoms unrelated to COVID-19	3	0.8%
Employee (to be) tested for COVID-19 with results pending	1	0.3%
Employee's indirect exposure to individual that is: COVID-19 symptomatic, being tested for COVID-19 or confirmed COVID-19 (1+ person removed) - does not report for duty	1	0.3%
Employee or household member is at medical risk (i.e. COVID-19 vulnerable)	1	0.3%
Military Leave	7	1.8%
LTD/Workers Comp	1	0.3%
	382	100%

Operations Update

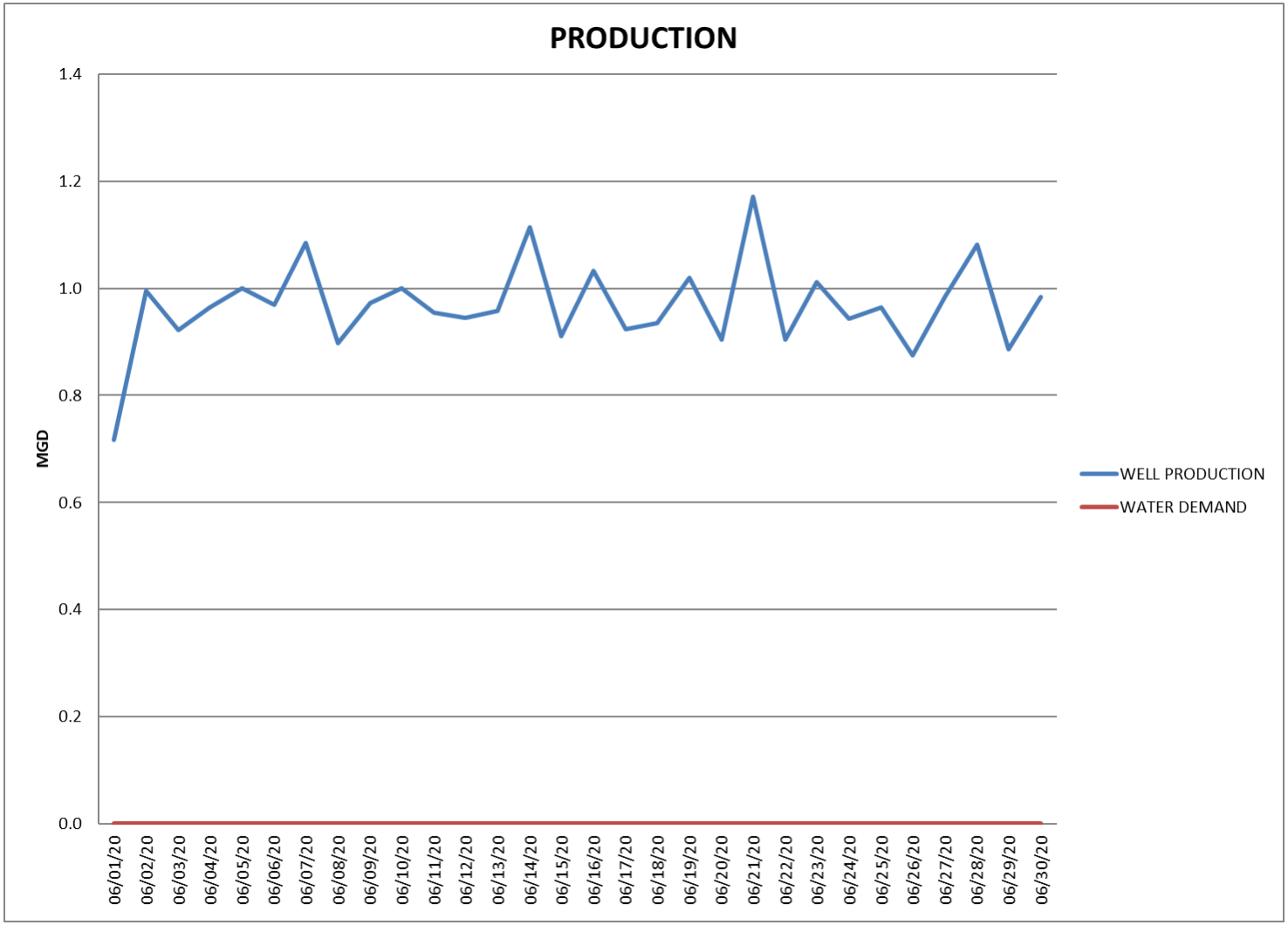
Production (June 2020)

Monthly Production Summary - JUNE 2020					
Deep Wells				35.3	MGD
	Active wells =	93	of 120		
	Avg days in operation =	30	days		
	Total Production =	1,057,586	Kgals		
Springs				0.18	MGD
	Avg days in operation =	30	days		
	Total Production =	5288	Kgals		
Ugum Surface Water Plant				2.2	MGD
	Avg days in operation =	30	days		
	Total Production =	66,508	Kgals		
Tumon Maui Well				0.97	MGD
	Avg days in operation =	30	days		
	Total Production =	29,028	Kgals		
		1,158,410	Kgals	38.6	MGD

DW Status as of 6/30/2020		
Active	93	
Grounded motor or Pump Failure	7	A26-D03-F01-F05-F06-F13-F20
Out of commission	8	A02-A07-A28-D05-D13-M14-MJ01-MJ05
Temporarily Secured	2	A23-A25
Standby	10	A10-A29-D01-D24-F04-F10-F16-M09-M12-M17A
TOTAL	120	

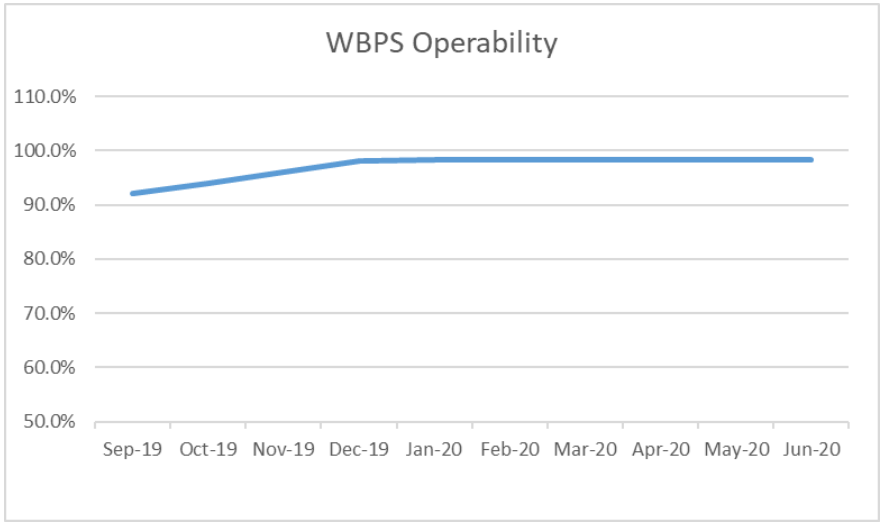


Tumon Maui Well Production (June 2020)

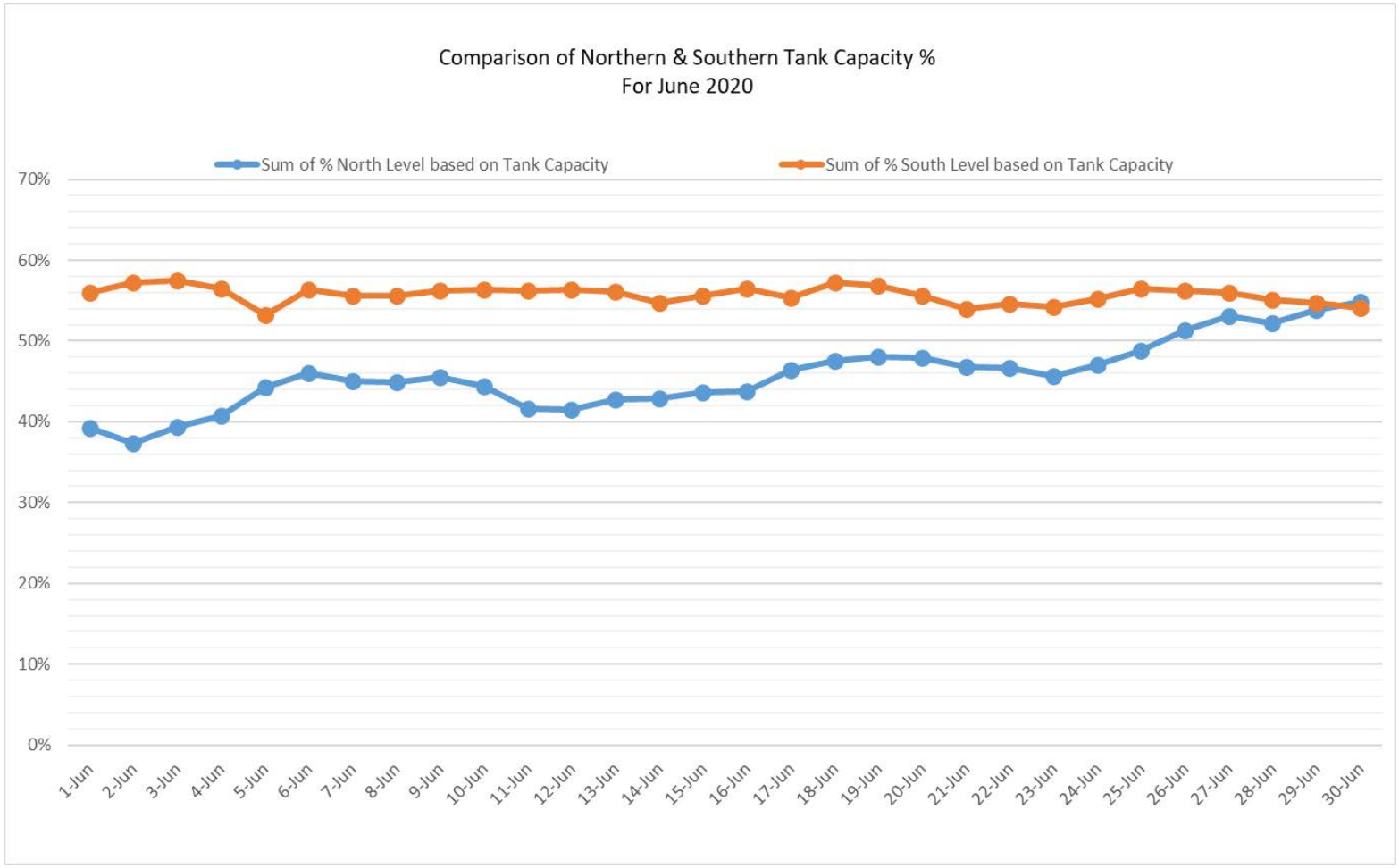


Distribution (June 2020)

Monthly Distribution Summary - JUNE 2020					
Water Booster Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	13	26	25	96.2%
	Central	7	15	15	100.0%
	Southern	7	15	15	100.0%
		27	56	55	98.2%

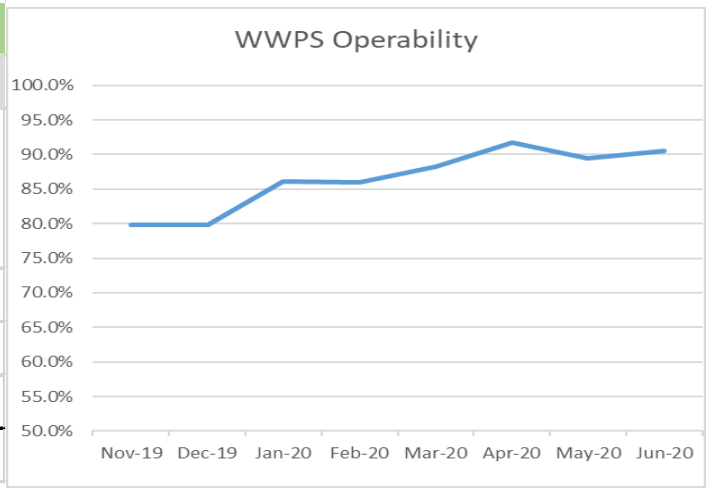


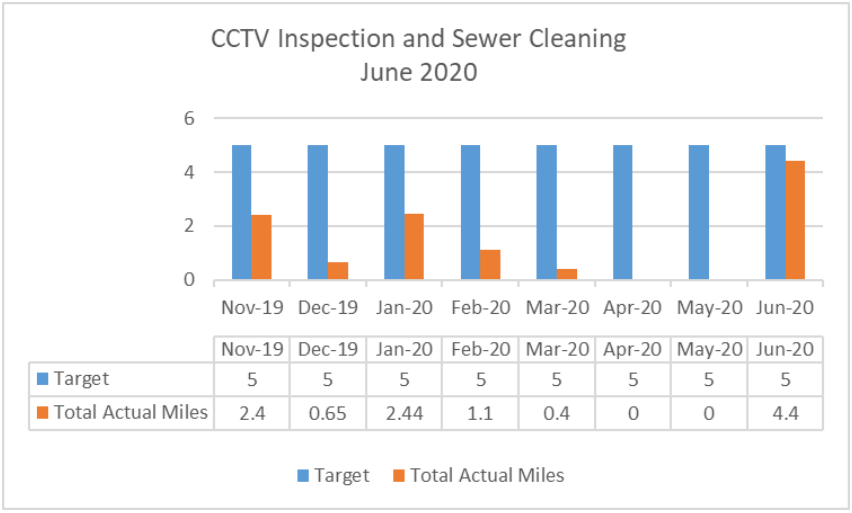
Distribution – Tank Levels (June 2020)



Wastewater Collections (June 2020)

Monthly Collections Summary - JUNE 2020					
Wastewater Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	22	52	46	88.5%
	Central	29	63	54	85.7%
	Southern	26	56	55	98.2%
		77	171	155	90.6%

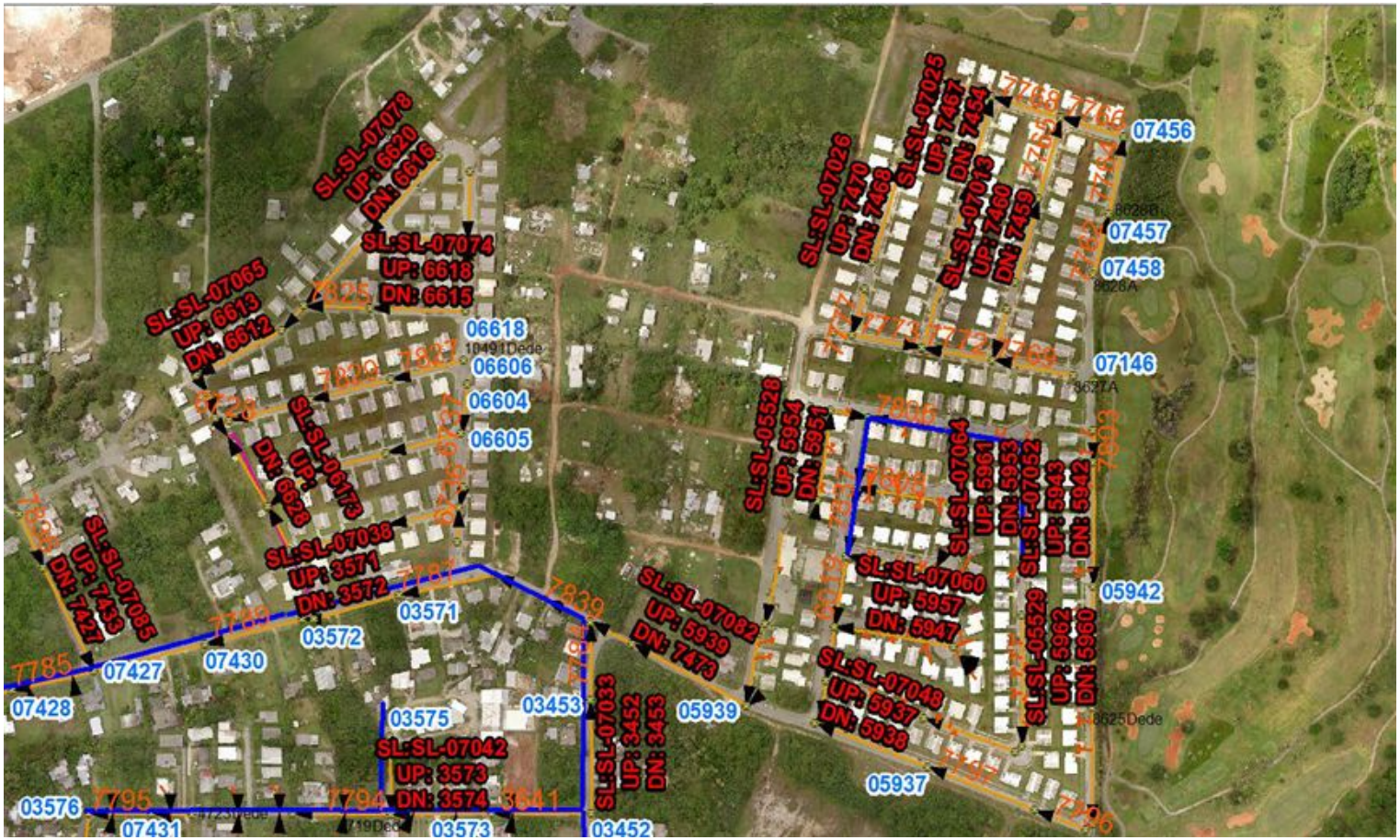




	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20
Target	5	5	5	5	5	5	5	5
Total Actual Miles	2.4	0.65	2.44	1.1	0.4	0	0	4.4

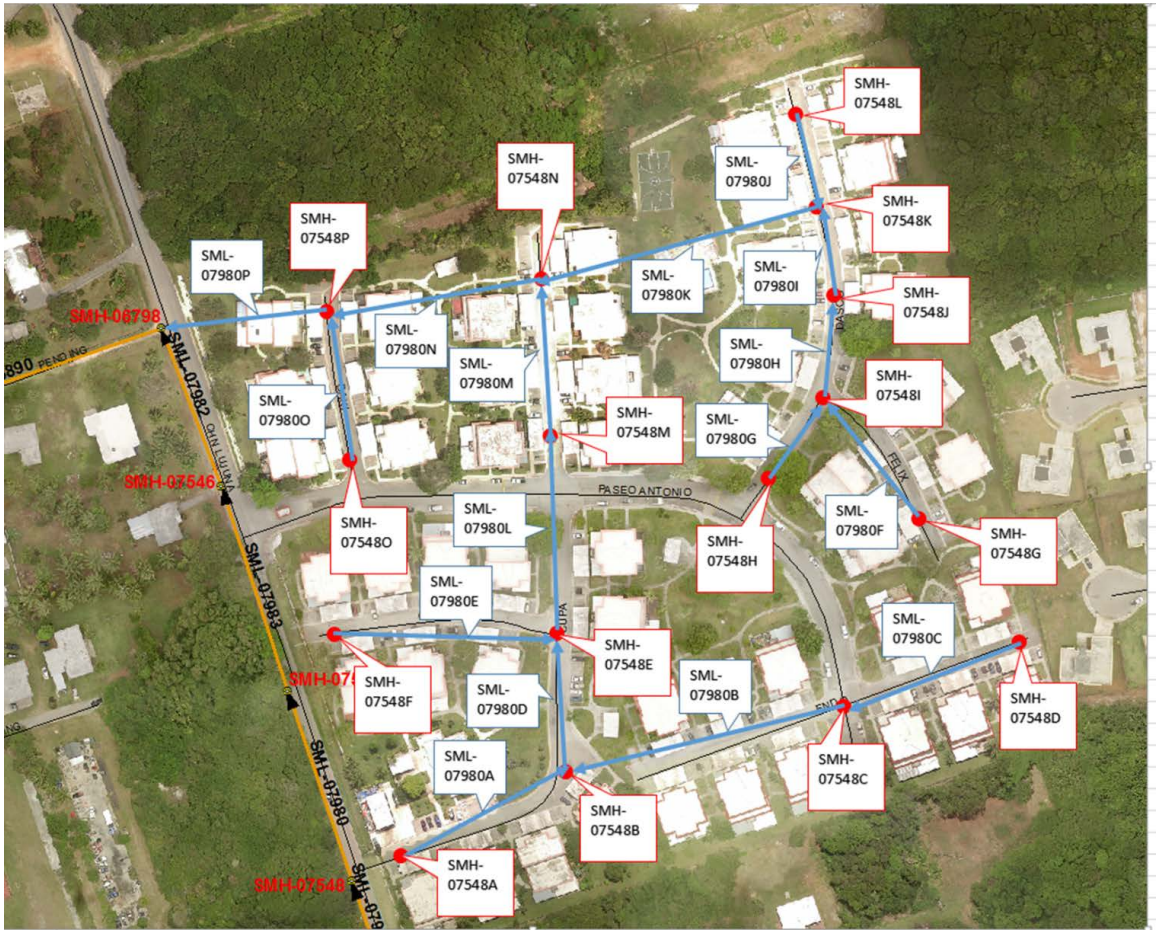
Wastewater Collections –Cleaning/Jetting (June 2020)

Iron Wood



Wastewater Collections –Cleaning/Jetting (June 2020)

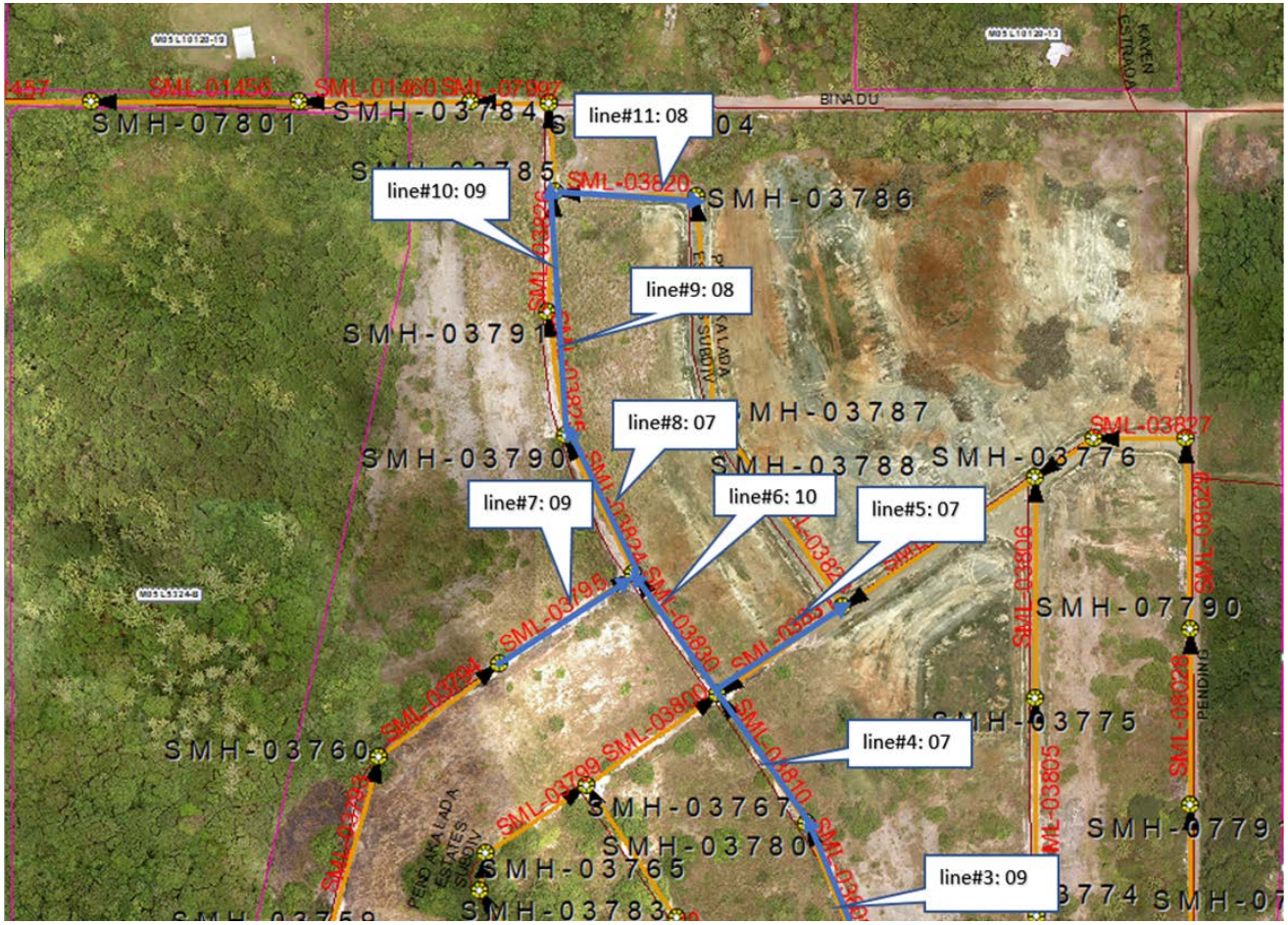
Perez Acres



SL RAT	PEREZ ACRES	2020 06 17
SML#	STATUS	SCORE
SML-07980A	GOOD	9
SML-07980B	GOOD	7
SML-07980C	FAIR	6
SML-07980D	GOOD	8
SML-07980E	GOOD	7
SML-07980F	GOOD	7
SML-07980G	GOOD	7
SML-07980H	GOOD	8
SML-07980I	GOOD	7
SML-07980J	FAIR	6
SML-07980K	FAIR	5
SML-07980L	GOOD	8
SML-07980M	GOOD	7
SML-07980N	GOOD	9
SML-07980O	GOOD	7
SML-07980P	GOOD	7
EST FOOTAGE	3582FT	
TRUCK 5029	BO TA	

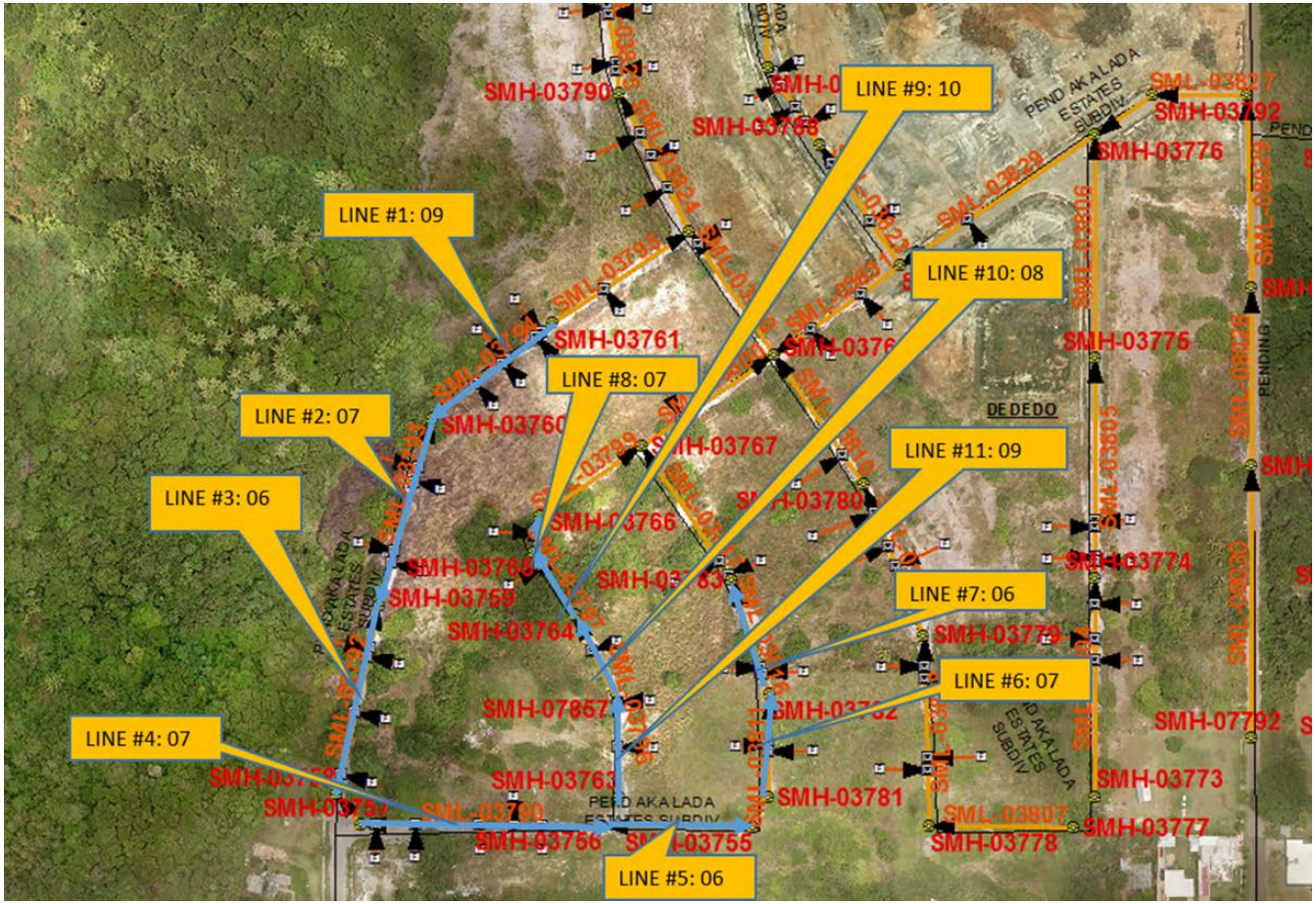
Wastewater Collections –Cleaning/Jetting (June 2020)

Lada Mapping photo 1



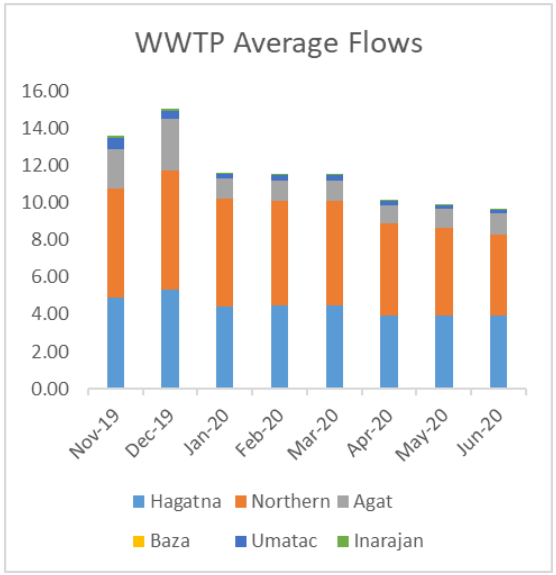
Wastewater Collections –Cleaning/Jetting (June 2020)

Lada Mapping photo 2



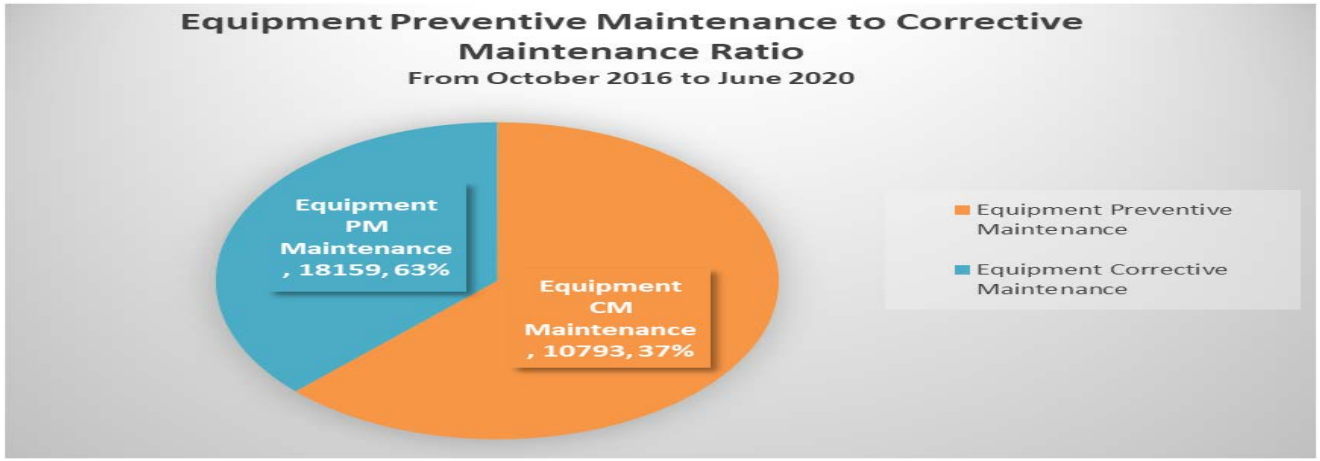
Wastewater Treatment (June 2020)

Monthly Wastewater Treatment Summary - June 2020				
WW Treatment Plants - Flows				
	Facility	**Avg. Daily Flows**	**Sludge (lbs)**	**Sludge Disp. ($)**
	Hagatna	3.94	240,180	$ 21,616
	Northern	4.32	1,204,995	$ 108,450
	Agat	1.16	62,260	$ 5,603
	Baza	0		
	Umatac	0.20		
	Inarajan	0.05		
		9.67	1,507,435	$ 135,669

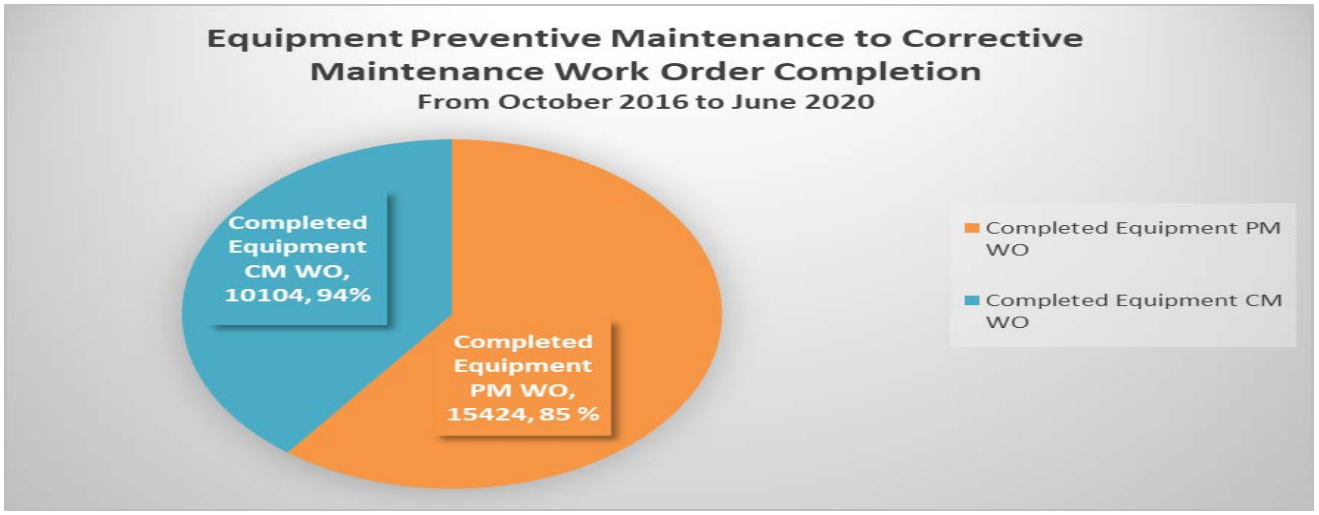


Asset Management (June 2020)

I. Equipment Preventive Maintenance to Corrective Maintenance ***Ratio***

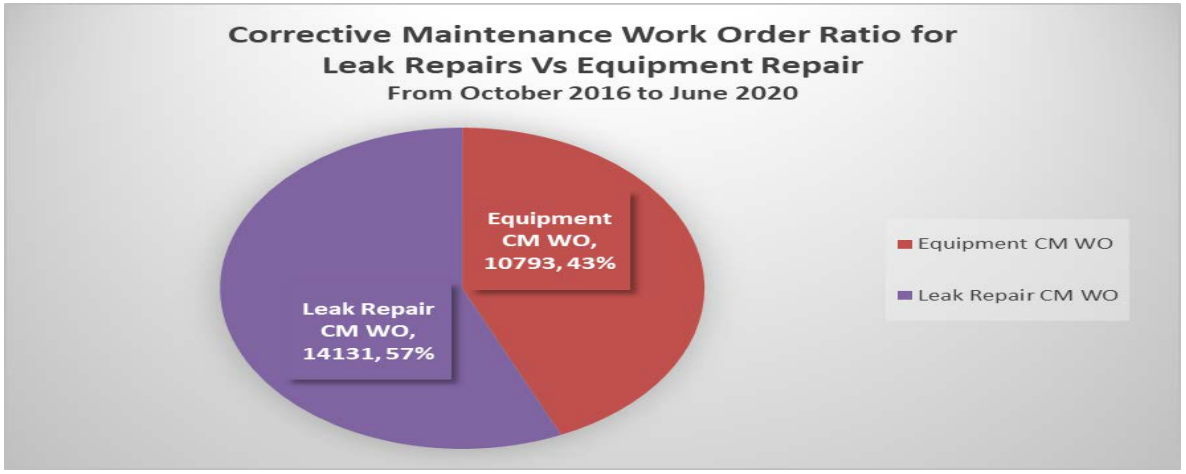


II. Equipment Preventive Maintenance to Corrective Maintenance ***Work Order Completion***

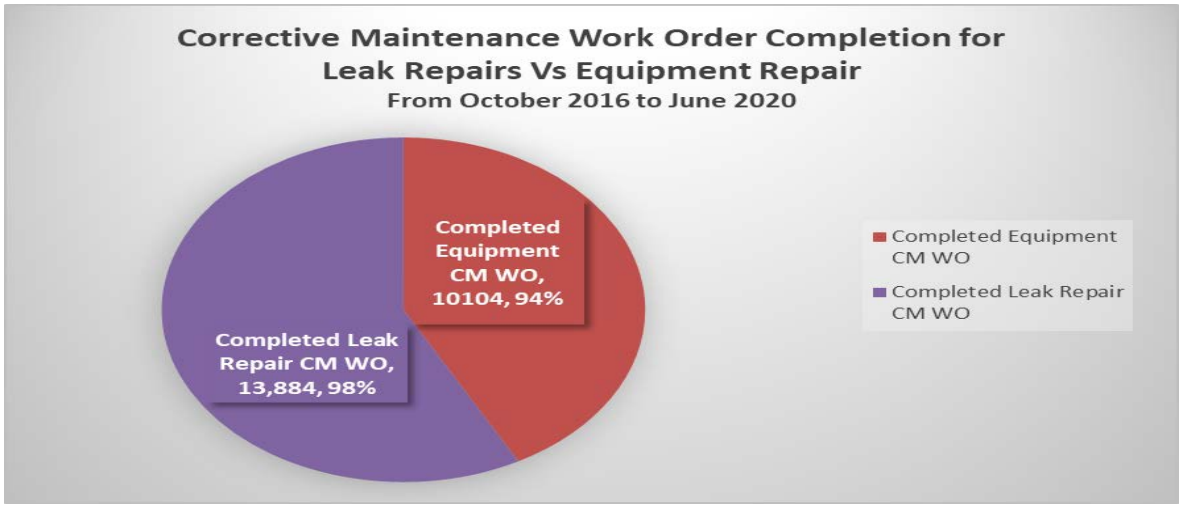


Asset Management (June 2020)

III. Corrective Maintenance Work Order ***Ratio*** for Leak Repairs vs. Equipment Repair



IV. Corrective Maintenance Work Order ***Completion*** for Leak Repairs vs. Equipment Repair



Meters from January 2017 through July 6, 2020

COMPLETED FIELD ACTIVITY JAN 2017 THRU JULY 06 2020 (POSTED IN CIS)	2017	2018	2019	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	TOTAL:	COMPLETED FIELD ACTIVITIES (IN PROCESS) TO BE POSTED IN CIS
GWA - Meter Exchange	6487	13353	10850	1079	714	548	117	44	59	3	33254	22

# OF METERS TESTED AS PER METER TEST FACILITY REPORTS:	6079	12259	9278	749	908	1116	341	662	635	720	32747
AVG # OF FIELD STAFF PERFORMING CHANGE OUTS (MON THRU FRI):	19	16	7	7	7	7	7	1	1	1	
# OF ADMIN STAFF TO CREATE AND POST FIELD ACTIVITIES IN CIS:	10	6.3	5	5	5	2	1	1	1	1	
TOTAL:	**29**	**22**	**12**	**12**	**12**	**9**	**8**	**2**	**2**	**2**	

*project suspended effective 04/13/20 and resumed 07/02/20.

REMAINING ACTIVE BADGER LP MODELS TO BE REPLACED AS OF 07/06/20: **459**

3/4" BADGER METERS IN STOCK AS OF July 06, 2020:

Size	Meter Description	New Meters Passed	New Meters Untested	Passed Field Meters	MMP	Meters Available
3/4"	METER, Badger AMR 5/8" X 3/4" RCDL Model M25 Disc Meter	239	0	278	0	517
3/4"	METER, Badger AMR 5/8" x 3/4" **WARRANTY** RCDL Model M25	0	0	0	0	0
3/4"	METER,Badger 5/8"x3/4" NSF61-G RCDL M25LL Disc Meter Integral	67	398	3	0	468
3/4"	METER, Badger AMR 5/8" x 3/4" RCDL Model M25 ***RMI***	0	0	0	0	0
3/4"	METER, Badger E-SERIES 5/8"X3/4" ULTRASONIC	960	0	1	0	961

Backbilling through June 2020

Guam Waterworks Authority

Collections Report[1] on Accounts Backbilled thru June 30, 2020

For fiscal years 2015 thru 2020 (Jun)

Accounts Billed			Collection Status											
			Amounts Collected[1]			Amounts Adjusted			Total Uncollected (Active)			Total Uncollected (Inactive)		
FY Billed	No. of Accounts	Amount	No. of Accounts	Amount	%	No. of Accounts	Amount	%	No. of Accounts	Amount	%	No. of Accounts	Amount	%
FY2015														
FY2016	17	$ 882	17	$ 882	100%	0	$ -		0	$ -		0	$ -	
FY2017	537	$ 397,450	466	302,049	76%	17	22,418	6%	28	48,302	12%	26	24,681	6%
FY2018	1,374	$ 742,109	1,198	565,312	76%	58	68,248	9%	69	66,606	9%	49	41,943	6%
FY2019	8,324	$ 3,064,384	7,507	2,081,179	68%	175	152,950	5%	419	720,052	23%	223	110,203	4%
FY2020	2,044	$ 580,566	1,641	297,714	51%	25	9,525	2%	342	264,611	46%	36	8,715	0%
Total	**12,296**	**$ 4,785,391**	**10,829**	**$ 3,247,136**	**68%**	**275**	**$ 253,142**	**5%**	**858**	**$ 1,099,571**	**23%**	**334**	**$ 185,542**	**4%**

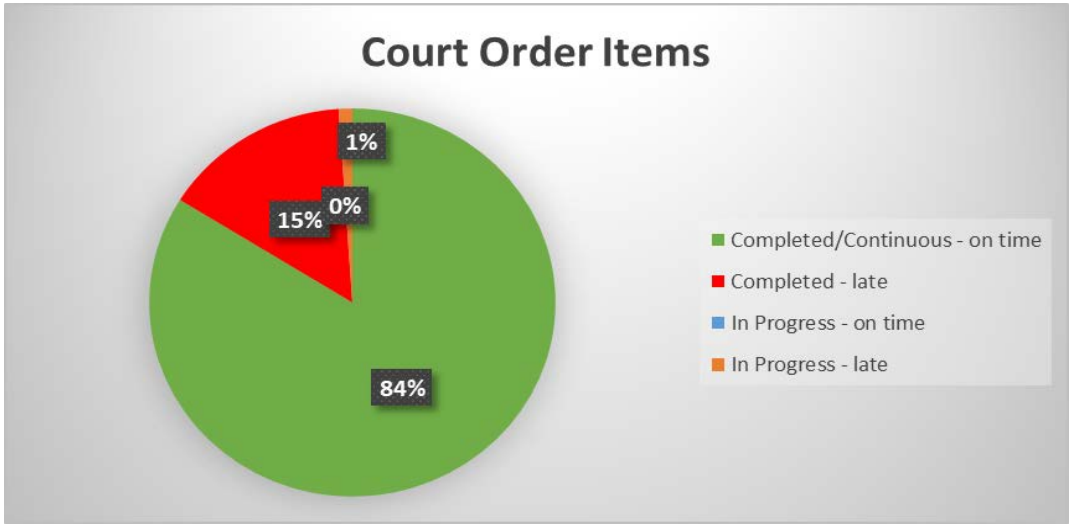
[1] Collections thru July 14, 2020

One Guam Update (June 2020)

- Tumon Maui Well
  - Quarterly Inspection & Reports
    - Maria Lewis received the remaining 1st quarter reports from Ron Topasna.
    - The next inspection is scheduled for August 12.
- OEA Projects
  - Observation Wells/NGLA
    - The request for proposals (RFP) for the new wells went out on June 22; the existing well refurbishment RFP will go out on June 29. The virtual pre-bid conference will be held July 15 for the new wells contract, and a week later (July 22) for existing well refurbishment. Notice to Proceed (NTP) is anticipated by the end of September.
  - Sewer Interceptor
    - Completed
  - Transfer of Navy Laterals at Murray Road to GWA
    - The transfer memo has gone to the ICO; looking forward to seeing if it is done on Monday, June 29.
- Property Transfers
  - Transfer of BPM-1: Navy advised GWA will move forward with transfer; WERI/USGS confirmed continued use of BPM-1 so GWA will need to maintain.
- Billing: GWA is working with Navy to streamline invoicing and payment timelines to address delays.
- Andersen AFB – Sewer Line Meters / Fence
  - For the sewer line meters, Maria Lewis remembered seeing an email that the project got pushed to 2021. Lance Reynolds states that the plan is maybe 2nd quarter 2021.

Court Order Summary (June 2020)

	Total Items	On-time Items Completed / Continuous	In Progress - late	Completed - Late	In Progress - on time	Performance %
Court order total	93	78	1	14	0	98.90%



	Court Order Items	%	Performance (on-time or completed)
Completed/Continuous - on time	78	84%	
Completed - late	14	15%	
In Progress - on time	0	0%	
In Progress - late	1	1%	98.9%
Totals	93	100%	

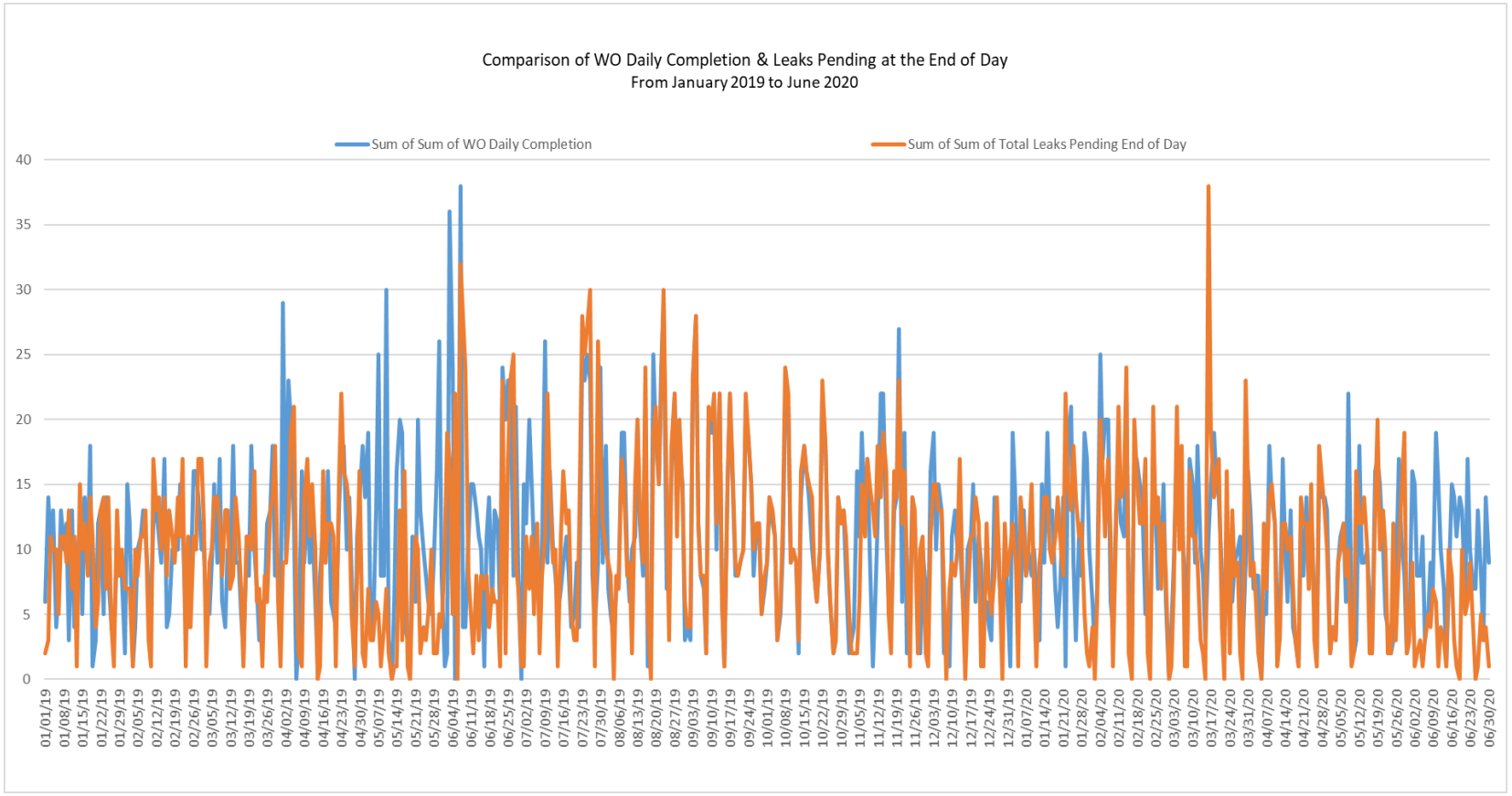
Court Order – Status Information (June 2020)

- 1 item delayed - The Court Order is down to one item remaining, § II, (C), (29) – Storage tank Repair. Restoration, Replacement or Relocation – which is the item that will take longer than the "end" of the court order. That makes us 98.9% done with the CO.
- Final Date to complete all Court Order items will be delayed past December 31, 2020.
    - CO 29(b) has been expanded by 31% beyond the original Court Order Requirements
    - General Counsel is reviewing filing requirements and content
    - Additional impact from 2020 Bond issuance delay is being assessed
- Overflow or Bypass events reported to USEPA:
    - 6-02-2020 Hernan Cortez Ave, Hagatna – FOG (reported in June CCU meeting)
    - 6-12-2020 Vietnam Veterans Memorial Highway – Pump Station Failure
    - 6-15-2020 Melindes Street, Dededo -FOG
    - 6-22-2020 Lalanghita Street, Santa Rita

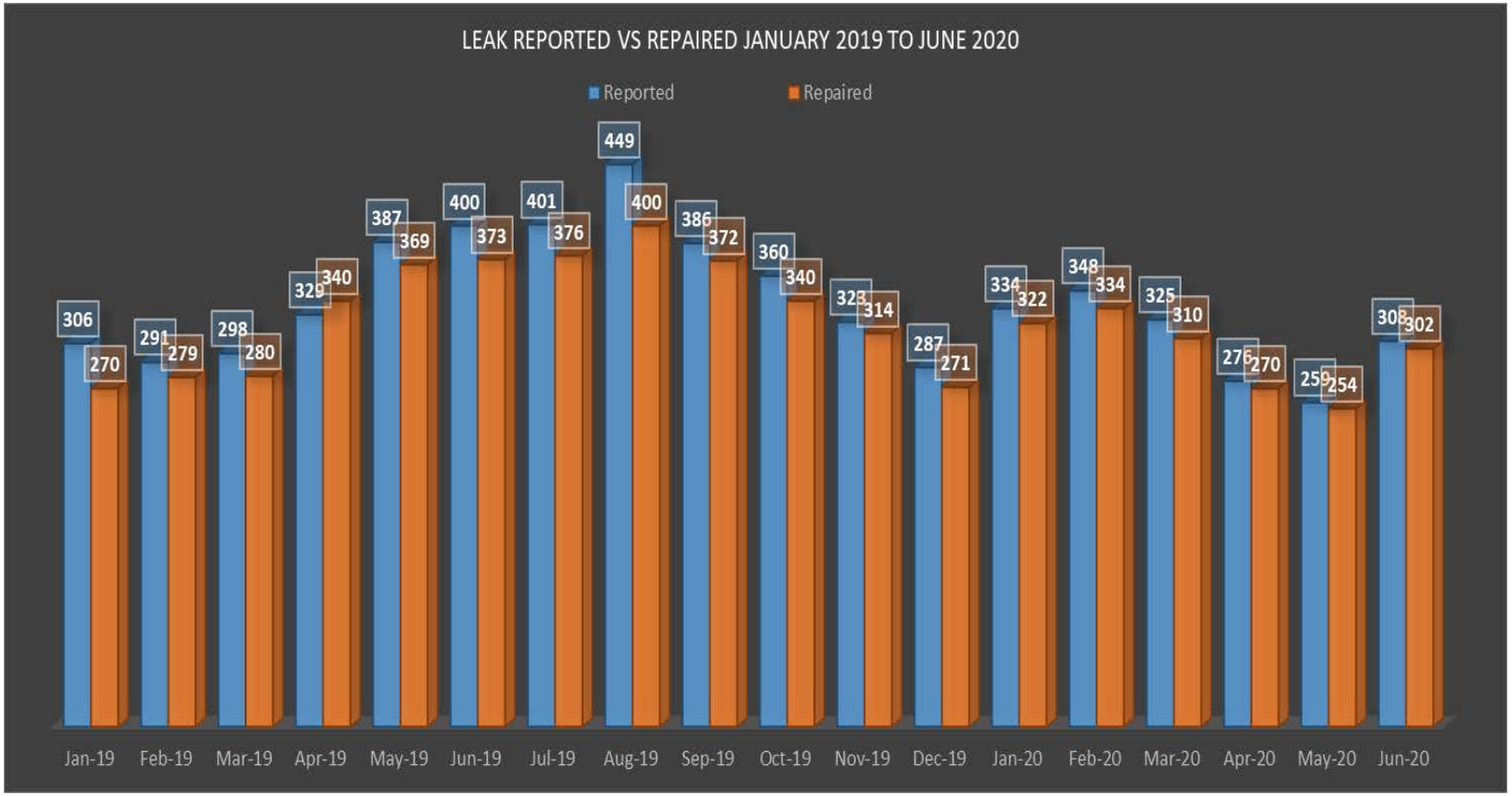
Land Acquisition Summary (June 2020)

GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Tanks	Astumbo	Gov't. - CLTC	Petition of Land Registration package forwarded to Attorney General by DLM 11/04/19. Follow up update status request emailed to DLM 05/14/2020.
	Piti	Private	Letter sent to DoAg on 5/28/2020 & No response within 30 days of receipt. Vangie and the GM's office are reaching out to DoAg.
	Airport	Private	Property owners need more time for discussion with family regarding GWA's Offer Letter 07/04/2020.
Deep Wells	AG-12	Dept. of Agriculture/Manhita Farms	Right of Entry Agreement sent to Dept of AG for signature 05/24/18. 2nd follow up sent on 09/12/18. 3rd follow up sent on 04/10/19. Retracement Survey Property Map filed and recorded at DLM 7/10/19.
Booster Pump Station	Agfayan	Private	TGE working on structural design for pump station area for L28, B19, T3734, Inarajan 11/07/19.
Asan Springs	Asan	Federal	Received remaining comments from Federal and GovGuam agencies in regards to Section 106 on 12/16/19. GWA and Designer negotiated on a Revised Change Order No. 2 submitted on 2/26/2020. CO. No. 2 is to address Federal and Local agencies concerns, specifically on developing an Environmental Assessment and performing Biological Survey work. Pending approval for revised CO. No.2 as of 3/3/2020. Negotiations with NPS on a ROW agreement is ongoing.

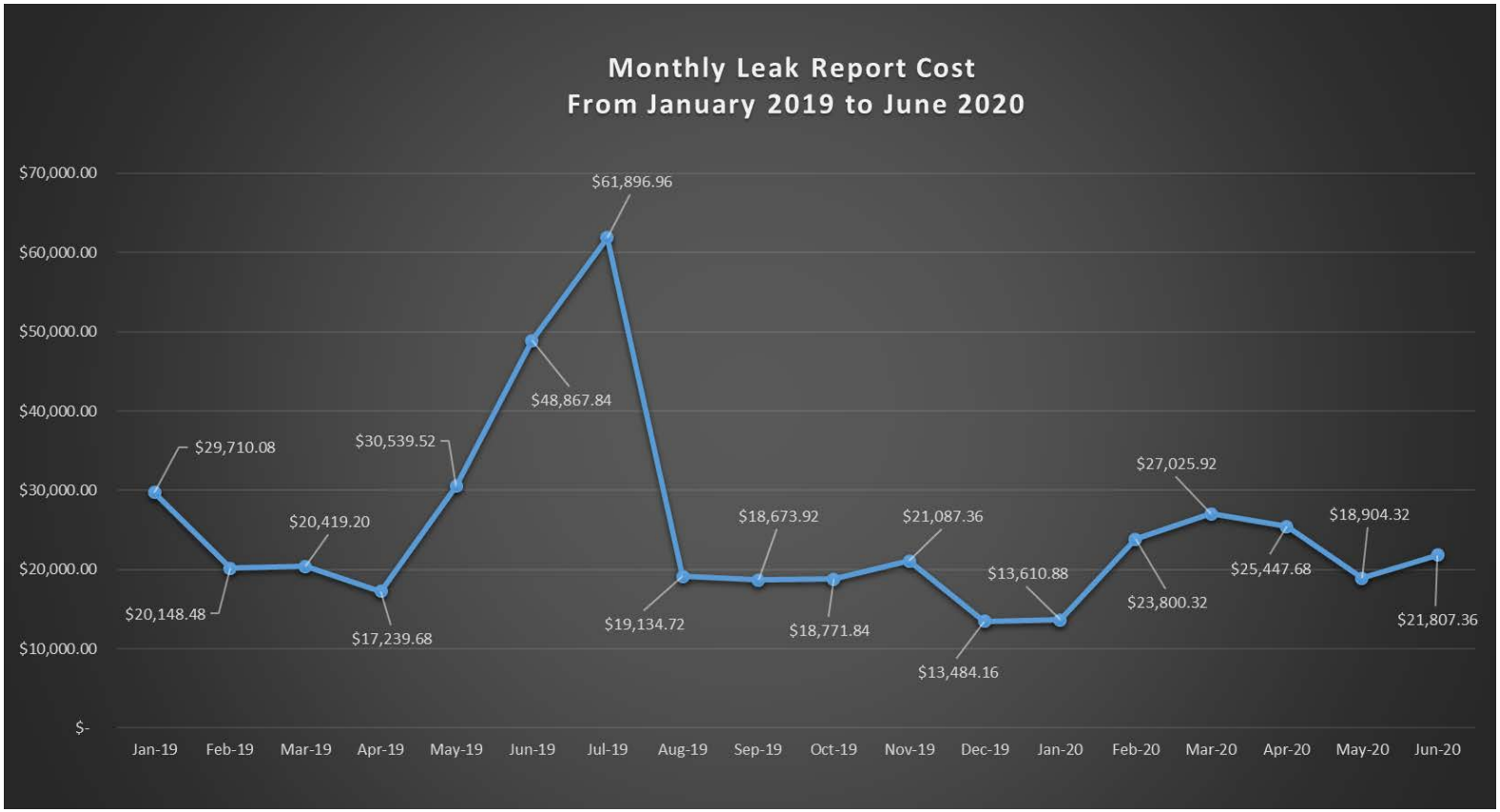
Leak Repair Summary (June 2020)



Comparison of Leaks Reported vs. Leaks Repaired (June 2020)



Monthly Leak Report Cost (June 2020)



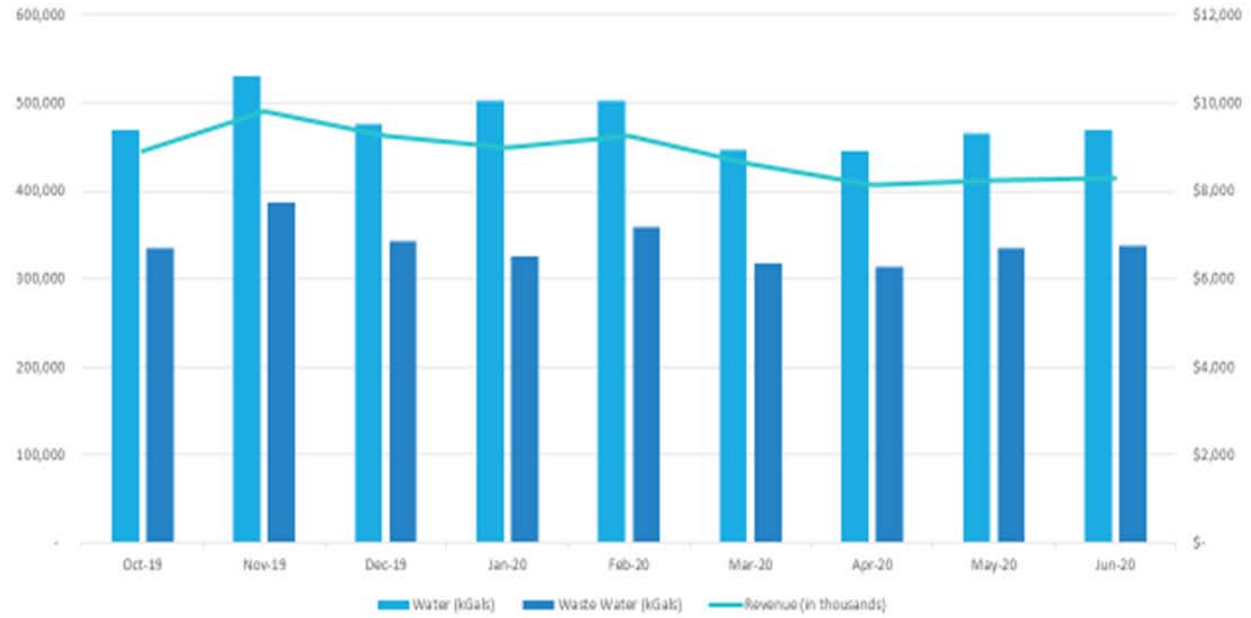
Assumptions:

1. Leak rate = 4 gpm
2. Cost per kgal = $4.00

GWA Financial Overview

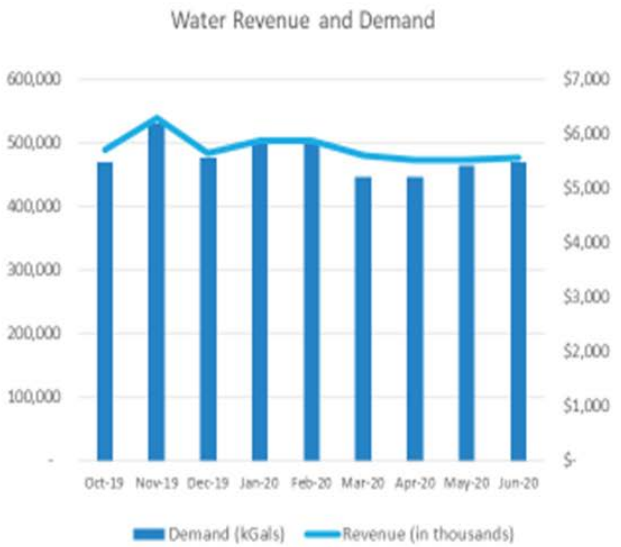
JUNE 2020

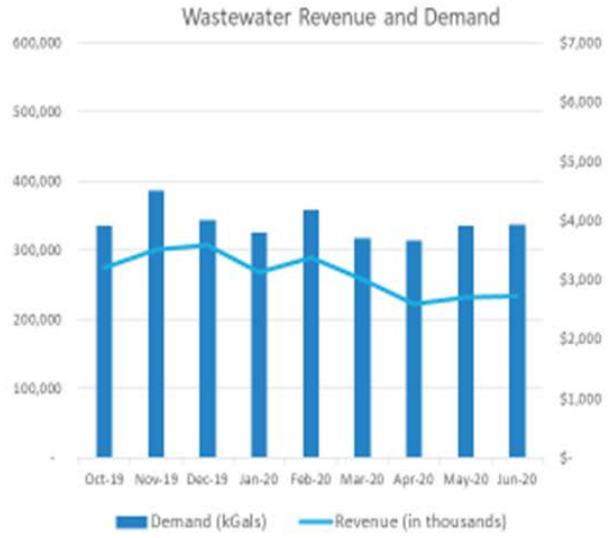
Overall Revenues and Demand



2

Overall Revenues and Demand





3

Overall Revenues and Collections



* Revenues include miscellaneous revenue

4

Income Statement FY2020



5

GWA Key Financial Indicators

Indicator	Target	May 2020	June 2020
DSC YTD			
• Per Section 6.12 of Indenture	1.25	1.28	1.27
• Per PUC / CCU	1.40	1.28	1.27
YTD Month to Month Change in Net Assets		10%	22%
Days – Cash on Hand	120 days	298 days	292 days
Collection Ratio			
• Month to Date	98%	100%	103%
• Year to Date	98%	97%	98%
Days Billed	30	30	31
Account Receivable Days	45	50	48
Account Payable Days	45	36	35
Employee Count	400 FTE	384 FTE	384 FTE
Water Demand			
• Month to Date	467,615	465,477	469,531
• Year to Date	3,740,923	3,837,672	4,306,513
Wastewater Demand			
• Month to Date	382,224	335,721	337,574
• Year to Date	2,775,095	2,718,351	3,055,924
Water Customers	42,724	42,889	42,838
Wastewater Customers	29,604	29,673	29,518

6

GUAM WATERWORKS AUTHORITY

"Better Water. Better Lives"

Financial Statement Overview
June 2020

With the rise in COVID-19 cases in mid to late June, the Governor delayed opening flights to Guam and relaxing quarantine requirements. Quarantine policies were updated to ensure that travelers, particularly those coming from "COVID-19 High Risk Areas", are isolated from the community for an appropriate time. Executive Order 2020-24 signed by Governor Leon Guerrero on July 19, 2020, extended the public health emergency through August 29, 2020 and moved Guam into Pandemic Condition of Readiness 3, allowing schools and most businesses to open.

The Guam Department of Labor (GDOL) began issuing Unemployment Compensation and paid $71.4M between June 12-30, 2020. GDOL expects to make payments weekly, announcing on July 14, 2020, the release of their 5th and largest batch totaling $54 million. Meanwhile, GWA customers who are facing financial hardships and are delinquent have been encouraged to sign up for payment plans before the end of June.

On April 28th, CCU Resolution 24-FY2020 granted a lifting of credit card limits on payments for non-residential accounts. For the months of April thru June, credit card payments averaged 42% of total payments, up from an average of 35% from October thru March. Below is a summary of payments made and related fees exceeding the limit.

Month	Customer Count	Amount Paid	Fees	% of Fees to Payments
May 2020	18	$22,011	$543	2.46%
June 2020	21	$34,919	$702	2.01%

On June 1st, GWA launched its new pay site and has joined the *Going Online Together* campaign with several other organizations. On-line payments and pay-by-phone, automated pay by phone (IVR), and payment on the mobile app as a percentage of total payments have increased by 10% to 36% from 26%. Collection rates have continued to improve for the month of June and were at 103% of revenues.

Year to Date consumption is slightly lower than last year (water consumption -1%, wastewater consumption +1%) and June 2020 consumption dipped below June 2019 (water consumption -5%, wastewater consumption -1%). Increases in residential demand continue to be offset by reductions in commercial demand. We continue to monitor bills as they drop in July to determine the impact of the reopening of the economy while quarantine measures for visitors stay in place and hotels remain empty except for military related stays, government quarantine sites and homeless shelters. See Schedule K for Water Demand for FY2015 to FY2020.

As revenues are monitored, a cost containment plan has been put into effect. While sufficient cash reserves are in place, management will continue to assess the situation and make any course corrections required to ensure continuity of services to our customers while keeping the safety of our staff the highest priority.

GUAM WATERWORKS AUTHORITY

"Better Water. Better Lives"

As previously reported, GWA issued the Water and Wastewater System Revenue Bonds Series 2020A at a par value of $134M on May 28, 2020, with a settlement date of June 4, 2020. GWA received a record $2.9B in orders from nearly 70 investors and secured a 4.0% yield to the 10-year call date. The all-in TIC (Total Issuance Cost) was 4.59%, the second lowest TIC for new money GWA financing. A total of $123,590,268.65 was deposited into the construction fund as a result of this transaction.

GWA intends to refinance its Series 2013 Bonds given favorable market conditions in early August.

Balance Sheet

- Total Assets & Deferred Outflows of Resources of $915.7M in September 2019 grew by $172.5M or 19% to $1.1B in June 2020 largely due to funds from the sale of bonds which settled on June 4th. Current Assets decreased by $7.25M, Property, Plant and Equipment increased by $44.9M, and Other Noncurrent Assets increased by $135.4M. Schedule F contains a schedule of restricted and unrestricted cash and investments.
- Liabilities & Deferred Inflow of Resources of $714.2M in September 2019 similarly increased by $135.3M or 19% to $849.5M in June 2020 primarily due to the June bond sale, increasing Long Term Debt by 135.3M ($134M par and $8.3M in premium less cost of issuance).
- Accounts Receivable days were 48 in June 2020 as compared to 50 in September 2019 and Accounts Payable days were 35 in June 2020 as compared to 38 in September 2019.

Statement of Operations and Retained Earnings

- Total Operating Revenues for June 2020 of $8.5M were 6% or $551K less than budget and 8% or $741.4K less than June 2019 due to the impact of the COVID-19 public health emergency.
- Year to Date Operating Revenues as of June 2020 of $80.6M were $750.5K less or 1% less than budget and were $2.5M or 3% less than last year. Note that the budget, was adjusted in April to reflect the effects of the public health emergency.
- Total Operating Expenses for June 2020 of $6.8M were $248.1K or 4% below budget, with most expenses coming in below budget except for Depreciation and Retiree Expenses. Total Operating Expenses for June 2020 were 2% or $146.3K less than June 2019 with decreases in most expense categories except Water Purchases and Salaries and Wages.
- Year to Date Operating Expenses at June 2020 of $66.4M were $3.1M more than budget of $63.3M with Power, Claims, Training, Regulatory Expenses, Depreciation and Retiree Costs coming in higher than budget. Year to Date Operating Expenses at June 2020 were $3.6M or 6% more than last year's $62.8M with most categories showing increases except for contractual expenses which came in 12% less than the prior year.
- Earnings from Operations for June 2020 of $1.7M were 15% or $303K less than budget and 26% or $595.9K less than June 2019. Change in Net Assets for June 2020 of $6.8M were $4.1M more than the $2.7M budget mainly due $4.9K more in Grants and $4.4M more than June 2019 due to $7.7M more in Grants offsetting the $2.6M decrease in Non-operating Revenues and Expenses.

GUAM WATERWORKS AUTHORITY

"Better Water. Better Lives"

- Year to Date Earnings from Operations as of June 2020 of $14.2M were 21% or $3.8M less than budget and 30% or $6M less than YTD Earnings as of June 2019. Year to Date Change in Net Assets as of June 2020 of $37.2M were $12.9M or 53% more than budget mainly due to $11.9M more in Grants from US Government than projected. Year to Date Change in Net Assets as of June 2020 were $10.2M or 38% more than YTD as of June 2019 mainly due to $30M more in US Government Grants and $10.4M less in AFUDC and $2.5M less in interest income.

Key Financial Indicators

Indicator	Target	May 2020	June 2020
DSC YTD			
• Per Section 6.12 of Indenture	1.25	1.28	1.27
• Per PUC / CCU	1.40	1.28	1.27
YTD Month to Month Change in Net Assets		10%	22%
Days – Cash on Hand	120 days	298 days	292 days
Collection Ratio			
• Month to Date	98%	100%	103%
• Year to Date	98%	97%	98%
Days Billed	30	30	31
Account Receivable Days	45	50	48
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Employee Count	400 FTE	384 FTE	384 FTE
Water Demand			
• Month to Date	467,615	465,477	469,531
• Year to Date	3,740,923	3,837,672	4,306,513
Wastewater Demand			
• Month to Date	382,224	335,721	337,574
• Year to Date	2,775,095	2,718,351	3,055,924
Water Customers	42,724	42,889	42,838
Wastewater Customers	29,604	29,673	29,518

GUAM WATERWORKS AUTHORITY
JUNE 30, 2020
FINANCIAL AND RELATED REPORTS
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GUAM WATERWORKS AUTHORITY
Balance Sheet
June 30, 2020

SCHEDULE A

ASSETS AND DEFERRED OUTFLOWS of RESOURCES	Unaudited June 30, 2020	Audited September 30, 2019	Increase (Decrease)
Current Assets			
Cash			
Unrestricted (Schedule F)	41,326,383	36,140,182	5,186,201
Restricted Funds (Schedule F)	29,914,496	37,890,369	(7,975,873)
Accounts Receivable Trade, Net of Allowance for Doubtful Receivables of $7,539,104 at Jun 30, 2020 and $7,789,943 at Sep 30, 2019	13,729,199	14,346,247	(617,048)
Federal Receivable	313,454	3,711,435	(3,397,981)
Other Receivable	1,220,629	1,794,082	(573,452)
Materials & Supplies Inventory, Net of Allowance for Obsolescence of $64,131 at Jun 30, 2020 and $64,131 at Sep 30, 2019	4,085,773	3,897,352	188,421
Total Current Assets	90,589,935	97,779,668	(7,189,732)
Property, Plant and Equipment			
Utility plant in service			
Water system	383,040,264	381,484,623	1,555,641
Wastewater system	470,536,738	429,896,579	40,640,159
Non-utility property	24,269,962	23,200,625	1,069,337
Total property	877,846,964	834,581,827	43,265,137
Less: Accumulated Depreciation	(339,774,324)	(321,561,403)	(18,212,921)
Land	3,914,815	3,914,815	-
Construction Work in Progress	120,055,374	100,162,613	19,892,761
Property, Plant and Equipment, net	662,042,828	617,097,852	44,944,976
Other noncurrent assets and deferred charges			
Restricted cash (Schedule F)	223,460,862	109,937,511	113,523,351
Investments (Schedule F)	81,335,085	61,231,877	20,103,208
Other Prepaid Expenses	2,974,998	1,667,816	1,307,182
Regulatory Assets	427,230	-	427,230
Total other noncurrent assets and deferred charges	308,198,176	172,837,204	135,360,972
Total Assets	1,060,830,939	887,714,724	173,116,216
Deferred outflows of resources			
Debt defeasance due to bond refunding	11,355,600	11,976,380	(620,780)
Deferred outflows from pension	9,057,499	9,057,499	-
Deferred outflows from OPEB	6,982,196	6,982,196	-
Total Assets and Deferred Outflows of Resources	**1,088,226,234**	**915,730,799**	**172,495,436**
LIABILITIES, DEFERRED INFLOWS of RESOURCES AND NET ASSETS			
Current Liabilities			
Current maturities of long-term debt			
Series 2010 Revenue Bond	1,895,000	1,895,000	-
Series 2013 Revenue Bond	2,695,000	2,695,000	-
Series 2014 Refunding Bond	3,760,000	3,760,000	-
Series 2016 Revenue Bond	420,000	420,000	-
Notes Payable	-	2,319,108	(2,319,108)
Accounts Payable -Trade	3,021,269	4,121,364	(1,100,095)
Accrued and Other Liabilities	1,571,467	1,374,650	196,816
Interest Payable	13,205,094	6,359,303	6,845,791
Accrued Payroll and Employee Benefits	1,010,930	1,685,235	(674,305)
Accrued Annual Leave	1,054,545	1,054,545	-
Current portion of employee annual leave	584,204	584,204	-
Contractors' Payable	12,254,328	22,094,820	(9,840,491)
Customer and Other Deposits	2,210,342	2,349,490	(139,148)
Total Current Liabilities	43,682,179	50,712,718	(7,030,539)
Long Term Debt, less current maturities			
Series 2013 Revenue Bond	169,935,000	169,935,000	-
Series 2014 Refunding Bond	65,140,000	65,140,000	-
Series 2016 Revenue Bond	142,890,000	142,890,000	-
Series 2017 Refunding Bond	107,365,000	107,365,000	-
Series 2020A Revenue Bond	134,000,000	-	134,000,000
Unamortized Bond Premium/Discount	40,188,244	31,863,590	8,324,654
Net pension liability	49,593,171	49,593,171	-
Net OPEB obligation	62,656,405	62,656,405	-
Employee Annual Leave, Less Current Portion	838,545	838,545	-
Total Liabilities	816,288,544	680,994,429	135,294,115
Deferred inflows of resources:			
Deferred inflows from pension	1,444,744	1,444,744	-
Deferred inflows from OPEB	31,758,062	31,758,062	-
Total Liabilities and Deferred Inflows of Resources	849,491,350	714,197,235	135,294,115
Net Assets	**238,734,884**	**201,533,564**	**37,201,320**
Total Liabilities, Deferred Inflows of Resources and Net Assets	**1,088,226,234**	**915,730,799**	**172,495,435**

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings **SCHEDULE B**
Comparative Budget vs. Actual for the period ending June 30, 2020

	Month to Date		Variance
	Budget* June-20	Actual (Unaudited) June-20	Favorable / (Unfavorable)
OPERATING REVENUES			
Water Revenues	5,482,041	5,376,765	(105,277)
Wastewater Revenues	3,173,105	2,669,324	(503,782)
Legislative Surcharge	268,785	245,940	(22,845)
Other Revenues	35,994	41,787	5,793
System Development Charge	76,247	151,335	75,088
Total Operating Revenues	9,036,173	8,485,150	(551,023)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	625,000	578,822	46,178
Power Purchases	1,084,725	998,251	86,473
Total Utility Costs	1,709,725	1,577,073	132,651
Salaries and Wages	1,807,507	1,596,390	211,117
Pension and Benefits	546,381	545,768	613
Total Salaries and Benefits	2,353,889	2,142,159	211,730
Capitalized Labor and Benefits	(391,667)	(368,952)	(22,714)
Net Salaries and Benefits	1,962,222	1,773,206	189,016
Administrative and General Expenses			
Sludge removal	136,822	136,441	381
Chemicals	156,850	145,066	11,784
Materials & Supplies	147,478	134,924	12,553
Transportation	33,253	23,434	9,819
Communications	20,324	20,233	91
Claims	6,339	-	6,339
Insurance	80,405	79,910	495
Training & Travel	4,062	-	4,062
Advertising	5,392	5,157	235
Miscellaneous	92,591	92,267	324
Regulatory Expense	20,596	15,139	5,457
Bad Debts Provision	177,174	166,207	10,967
Total Administrative and General Expense	881,285	818,778	62,507
Depreciation Expense	1,830,222	2,037,338	(207,115)
Contractual Expense			
Audit & Computer Maintenance	81,148	70,204	10,944
Building rental	37,800	37,588	212
Equipment rental	71,130	41,714	29,416
Legal	3,616	-	3,616
Laboratory	48,948	48,535	413
Other	167,283	120,719	46,564
Total Contractual Expense	409,925	318,760	91,165
Retiree Supp. Annuities and health care costs	190,069	210,238	(20,170)
Contribution to Government of Guam	50,334	50,333	1
Total Retiree Benefits	240,402	260,571	(20,169)
Total Operating Expenses	7,033,782	6,785,726	248,055
Earnings (Loss) from Operations	2,002,392	1,699,424	(302,967)
Interest Income - 2010/13/14/16/17/20 Series Bond	112,563	952	(111,611)
Interest Income - Other Funds	18,048	818	(17,230)
Interest Income - SDC	2,131	6,868	4,738
Interest Expense - 2010/13/14/16/17/20 Series Bond	(2,675,432)	(2,619,599)	55,833
Interest Expense - ST BOG	(5,612)	-	5,612
Loss on Asset Disposal	-	-	-
AFUDC	-	-	-
Amortization of Discount, Premium and Issuance Costs	(33,637)	(425,083)	(391,447)
Defeasance due to bond refunding	(28,676)	(68,976)	(40,299)
Prior Year Adjustment	-	-	-
Total non-operating revenues (expenses)	(2,610,616)	(3,105,020)	(494,405)
Net Income (Loss) before capital contributions	(608,224)	(1,405,596)	(797,372)
Capital Contributions			
Grants from US Government	3,311,071	8,241,649	4,930,578
Grants from GovGuam & Others	-	-	-
Total Capital Contributions	3,311,071	8,241,649	4,930,578
Change in Net Assets	2,702,847	6,836,053	4,133,206
Debt Service Calculation			
Earnings From Operations	2,002,392	1,699,424	
System Development Charge	(76,247)	(151,335)	
Retiree COLA	50,334	50,333	
Interest/Investment Income	18,048	818	
Depreciation	1,830,222	2,037,338	
Balance Available for Debt Service per Section 6.12	3,824,749	3,636,577	
Working Capital Reserve Available for Debt Service	-	-	
Transfer to Working Capital - Debt Service Reserve	-	-	
Transfer to Working Capital - O&M Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	3,824,749	3,636,577	
Debt Service			
Principal	730,833	730,833	
Interest	2,117,099	2,117,099	
Total	2,847,932	2,847,932	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.34	1.28	
Debt Service Coverage (1.40X) inclusive of reserves (PUC)	1.34	1.28	

*Cost containment budget

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings
Comparative for the period ending June 30, 2020 and 2019

SCHEDULE C

	Month to Date Actual (Unaudited) June-20	Month to Date Actual (Audited) June-19	Variance Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	5,376,765	5,646,006	(269,241)
Wastewater Revenues	2,669,324	3,046,430	(377,106)
Legislative Surcharge	245,940	282,666	(36,727)
Other Revenues	41,787	146,631	(104,844)
System Development Charge	151,335	104,797	46,538
Total Operating Revenues	8,485,150	9,226,531	(741,381)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	578,822	485,164	93,658
Power Purchases	998,251	1,342,115	(343,864)
Total Utility Costs	1,577,073	1,827,280	(250,206)
Salaries and Wages	1,596,390	1,469,941	126,449
Pension and Benefits	545,768	458,463	87,306
Total Salaries and Benefits	2,142,159	1,928,404	213,755
Capitalized Labor and Benefits	(368,952)	(308,333)	(60,619)
Net Salaries and Benefits	1,773,206	1,620,071	153,136
Administrative and General Expenses			
Sludge removal	136,441	97,242	39,199
Chemicals	145,066	270,352	(125,286)
Materials & Supplies	134,924	194,509	(59,585)
Transportation	23,434	56,992	(33,559)
Communications	20,233	18,347	1,886
Claims	-	3,006	(3,006)
Insurance	79,910	77,860	2,050
Training & Travel	-	27,519	(27,519)
Advertising	5,157	25,059	(19,902)
Miscellaneous	92,267	67,935	24,332
Regulatory Expense	15,139	22,988	(7,849)
Bad Debts Provision	166,207	179,479	(13,272)
Total Administrative and General Expense	818,778	1,041,288	(222,510)
Depreciation Expense	2,037,338	1,759,065	278,273
Contractual Expense			
Audit & Computer Maintenance	70,204	72,800	(2,596)
Building rental	37,588	35,211	2,377
Equipment rental	41,714	88,007	(46,293)
Legal	-	4,438	(4,438)
Laboratory	48,535	18,489	30,046
Other	120,719	175,535	(54,816)
Total Contractual Expense	318,760	394,479	(75,719)
Retiree Supp. Annuities and health care costs	210,238	239,798	(29,560)
Contribution to Government of Guam	50,333	50,000	333
Total Retiree Benefits	260,571	289,798	(29,227)
Total Operating Expenses	6,785,726	6,931,981	(146,255)
Earnings (Loss) from Operations	1,699,424	2,295,280	(595,856)
Interest Income - 2010/13/14/16/17/20 Series Bond	952	355,724	(354,772)
Interest Income - Other Funds	818	77,212	(76,394)
Interest Income - SDC	6,868	11,657	(4,789)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(2,619,599)	(2,137,785)	(481,814)
Interest Expense - ST BOG	-	(15,194)	15,194
Loss on Asset Disposal	-	-	-
AFUDC	-	1,157,306	(1,157,306)
Amortization of Discount, Premium and Issuance Costs	(425,083)	119,709	(544,792)
Defeasance due to bond refunding	(68,976)	(69,534)	558
Prior Year Adjustment	-	5,316	(5,316)
Total non-operating revenues (expenses)	(3,105,020)	(495,588)	(2,609,432)
Net Income (Loss) before capital contributions	(1,405,596)	1,799,692	(3,205,288)
Capital Contributions			
Grants from US Government	8,241,649	584,537	7,657,113
Grants from GovGuam & Others	-	17,468	(17,468)
Total Capital Contributions	8,241,649	602,004	7,639,645
Change in Net Assets	6,836,053	2,401,696	4,434,357
Debt Service Calculation			
Earnings From Operations	1,699,424	2,295,280	
System Development Charge	(151,335)	(104,797)	
Retiree COLA	50,333	50,000	
Interest/Investment Income	818	77,212	
Depreciation	2,037,338	1,759,065	
Balance Available for Debt Service per Section 6.12	3,636,577	4,076,759	
Working Capital Reserve Available for Debt Service	-	958,951	
Transfer to Working Capital - Debt Service Reserve	-	-	
Transfer to Working Capital - O&M Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	3,636,577	5,035,710	
Debt Service			
Principal	730,833	476,250	
Interest	2,117,099	2,137,785	
Total	2,847,932	2,614,035	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.28	1.56	
Debt Service Coverage (1.40X) (PUC)	1.28		
Debt Service Coverage (1.75X) inclusive of reserves (PUC)		1.93	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings
Comparative Budget vs. Actual for the period ending June 30, 2020

SCHEDULE D

	Year to Date Budget* June-20	Year to Date Actual (Unaudited) June-20	Variance Favorable / (Unfavorable)
OPERATING REVENUES			
Water Revenues	49,338,373	49,888,396	550,023
Wastewater Revenues	28,557,948	27,152,533	(1,405,416)
Legislative Surcharge	2,419,064	2,441,458	22,394
Other Revenues	323,949	533,550	209,601
System Development Charge	686,223	559,143	(127,080)
Total Operating Revenues	81,325,558	80,575,080	(750,478)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	5,625,000	5,501,551	123,449
Power Purchases	9,762,521	11,124,966	(1,362,445)
Total Utility Costs	15,387,521	16,626,517	(1,238,996)
Salaries and Wages	16,267,567	15,332,666	934,901
Pension and Benefits	4,917,430	4,762,376	155,054
Total Salaries and Benefits	21,184,997	20,095,042	1,089,955
Capitalized Labor and Benefits	(3,525,000)	(2,701,012)	(823,988)
Net Salaries and Benefits	17,659,997	17,394,031	265,967
Administrative and General Expenses			
Sludge removal	1,143,396	1,143,124	272
Chemicals	1,597,647	1,596,897	750
Materials & Supplies	1,451,298	1,450,683	614
Transportation	410,078	409,583	495
Communications	121,112	114,999	6,113
Claims	57,047	105,354	(48,306)
Insurance	702,648	702,161	487
Training & Travel	95,061	142,539	(47,478)
Advertising	48,528	29,339	19,189
Miscellaneous	813,818	812,944	874
Regulatory Expense	185,366	259,655	(74,289)
Bad Debts Provision	1,594,568	1,590,167	4,400
Total Administrative and General Expense	8,220,566	8,357,445	(136,879)
Depreciation Expense	16,472,002	18,288,400	(1,816,398)
Contractual Expense			
Audit & Computer Maintenance	516,829	507,810	9,019
Building rental	331,700	329,534	2,166
Equipment rental	685,666	674,140	11,525
Legal	32,547	28,477	4,070
Laboratory	190,534	159,089	31,445
Other	1,643,051	1,640,937	2,113
Total Contractual Expense	3,400,326	3,339,986	60,340
Retiree Supp. Annuities and health care costs	1,710,617	1,909,224	(198,607)
Contribution to Government of Guam	453,004	453,001	3
Total Retiree Benefits	2,163,621	2,362,225	(198,604)
Total Operating Expenses	63,304,034	66,368,605	(3,064,570)
Earnings (Loss) from Operations	18,021,524	14,206,476	(3,815,048)
Interest Income - 2010/13/14/16/17/20 Series Bond	1,013,069	963,286	(49,782)
Interest Income - Other Funds	162,430	271,192	108,762
Interest Income - SDC	19,175	84,485	65,310
Interest Expense - 2010/13/14/16/17/20 Series Bond	(24,078,891)	(19,556,391)	4,522,500
Interest Expense - ST BOG	(50,509)	(38,188)	12,321
Loss on Asset Disposal	-	(254,364)	(254,364)
AFUDC	-	-	-
Amortization of Discount, Premium and Issuance Costs	(302,730)	534,675	837,405
Defeasance due to bond refunding	(258,086)	(620,780)	(362,694)
Prior Year Adjustment	-	(69,901)	(69,901)
Total non-operating revenues (expenses)	(23,495,541)	(18,685,984)	4,809,557
Net Income (Loss) before capital contributions	(5,474,018)	(4,479,509)	994,509
Capital Contributions			
Grants from US Government	29,799,643	41,666,579	11,866,936
Grants from GovGuam & Others	-	14,250	14,250
Total Capital Contributions	29,799,643	41,680,829	11,881,186
Change in Net Assets	24,325,625	37,201,320	12,875,695
Debt Service Calculation			
Earnings From Operations	18,021,524	14,206,476	
System Development Charge	(686,223)	(559,143)	
Retiree COLA	453,004	453,001	
Interest/Investment Income	162,430	271,192	
Depreciation	16,472,002	18,288,400	
Balance Available for Debt Service per Section 6.12	34,422,737	32,659,926	
Working Capital Reserve Available for Debt Service	-	-	
Transfer to Working Capital - Debt Service Reserve	-	-	
Transfer to Working Capital - O&M Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	34,422,737	32,659,926	
Debt Service			
Principal	6,577,500	6,577,500	
Interest	19,053,891	19,053,891	
Total	25,631,391	25,631,391	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.34	1.27	
Debt Service Coverage (1.40X) inclusive of reserves (PUC)	1.34	1.27	

*Cost containment budget

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings
Comparative for the period ending June 30, 2020 and 2019

SCHEDULE E

	Year to Date Actual (Unaudited) June-20	Year to Date Actual (Audited) June-19	Variance Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	49,888,396	50,284,853	(396,457)
Wastewater Revenues	27,152,533	28,967,919	(1,815,386)
Legislative Surcharge	2,441,458	2,626,732	(185,273)
Other Revenues	533,550	521,218	12,332
System Development Charge	559,143	655,509	(96,366)
Total Operating Revenues	80,575,080	83,056,231	(2,481,151)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	5,501,551	4,609,083	892,468
Power Purchases	11,124,966	11,165,974	(41,007)
Total Utility Costs	16,626,517	15,775,057	851,460
Salaries and Wages	15,332,666	14,873,095	459,571
Pension and Benefits	4,762,376	4,721,746	40,630
Total Salaries and Benefits	20,095,042	19,594,841	500,201
Capitalized Labor and Benefits	(2,701,012)	(2,775,000)	73,988
Net Salaries and Benefits	17,394,031	16,819,841	574,190
Administrative and General Expenses			
Sludge removal	1,143,124	1,104,701	38,423
Chemicals	1,596,897	1,543,410	53,487
Materials & Supplies	1,450,683	1,260,793	189,891
Transportation	409,583	455,774	(46,191)
Communications	114,999	111,859	3,140
Claims	105,354	44,432	60,921
Insurance	702,161	681,845	20,316
Training & Travel	142,539	179,021	(36,481)
Advertising	29,339	100,804	(71,465)
Miscellaneous	812,944	757,343	55,601
Regulatory Expense	259,655	137,850	121,805
Bad Debts Provision	1,590,167	1,632,509	(42,342)
Total Administrative and General Expense	8,357,445	8,010,342	347,103
Depreciation Expense	18,288,400	15,831,585	2,456,815
Contractual Expense			
Audit & Computer Maintenance	507,810	510,109	(2,299)
Building rental	329,534	316,897	12,637
Equipment rental	674,140	873,980	(199,840)
Legal	28,477	10,754	17,723
Laboratory	159,089	197,412	(38,324)
Other	1,640,937	1,871,210	(230,273)
Total Contractual Expense	3,339,986	3,780,362	(440,375)
Retiree Supp. Annuities and health care costs	1,909,224	2,137,223	(227,999)
Contribution to Government of Guam	453,001	450,000	3,001
Total Retiree Benefits	2,362,225	2,587,223	(224,998)
Total Operating Expenses	66,368,605	62,804,409	3,564,196
Earnings (Loss) from Operations	14,206,476	20,251,822	(6,045,346)
Interest Income - 2010/13/14/16/17/20 Series Bond	963,286	3,091,290	(2,128,004)
Interest Income - Other Funds	271,192	628,576	(357,384)
Interest Income - SDC	84,485	130,946	(46,460)
Interest Expense - 2010/13/14/16/17/20 Series Bond	(19,556,391)	(19,240,061)	(316,330)
Interest Expense - ST BOG	(38,188)	(159,415)	121,227
Loss on Asset Disposal	(254,364)	-	(254,364)
AFUDC	-	10,415,750	(10,415,750)
Amortization of Discount, Premium and Issuance Costs	534,675	1,077,380	(542,705)
Defeasance due to bond refunding	(620,780)	(625,805)	5,026
Prior Year Adjustment	(69,901)	(279,392)	209,492
Total non-operating revenues (expenses)	(18,685,984)	(4,960,733)	(13,725,251)
Net Income (Loss) before capital contributions	(4,479,509)	15,291,089	(19,770,598)
Capital Contributions			
Grants from US Government	41,666,579	11,605,172	30,061,407
Grants from GovGuam & Others	14,250	78,779	(64,529)
Total Capital Contributions	41,680,829	11,683,951	29,996,878
Change in Net Assets	37,201,320	26,975,040	10,226,281
Debt Service Calculation			
Earnings From Operations	14,206,476	20,251,822	
System Development Charge	(559,143)	(655,509)	
Retiree COLA	453,001	450,000	
Interest/Investment Income	271,192	628,576	
Depreciation	18,288,400	15,831,585	
Balance Available for Debt Service per Section 6.12	32,659,926	36,506,474	
Working Capital Reserve Available for Debt Service	-	8,630,559	
Transfer to Working Capital - Debt Service Reserve	-	-	
Transfer to Working Capital - O&M Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	32,659,926	45,137,033	
Debt Service			
Principal	6,577,500	4,286,250	
Interest	19,053,891	19,240,061	
Total	25,631,391	23,526,311	
Debt Service Coverage (1.25X) - per Section 6.12 (Indenture)	1.27	1.55	
Debt Service Coverage (1.40X) (PUC)	1.27		
Debt Service Coverage (1.75X) inclusive of reserves (PUC)		1.92	

GUAM WATERWORKS AUTHORITY
Restricted and Unrestricted Cash Summary
FY2020

SCHEDULE F

Description	Unaudited June 30, 2020	Audited September 30, 2019	Increase (Decrease)
UNRESTRICTED			
Change Fund	2,000	2,000	-
Petty Cash	4,450	4,450	-
BOG Deposit Accounts	3,914,122	4,955,587	(1,041,465)
BOG O & M Reserve	25,688,456	13,933,323	11,755,133
BOG CapEx Fund	11,717,356	17,244,823	(5,527,467)
Sub-total Unrestricted	**41,326,383**	**36,140,182**	**5,186,201**
RESTRICTED			
ANZ Bank	44	19	26
Bank Pacific	19,710	12,321	7,389
Bank of Hawaii	231,202	220,158	11,044
Community First FCU	3,861	2,530	1,331
First Hawaiian Bank	32,153	11,761	20,392
Bank Pacific Surcharge	1,123,470	302,837	820,633
Bank Pacific Escrow Deposit	842,129	836,528	5,602
BOG Customer Refunds	2,025,187	1,871,553	153,634
BOG Emergency Reserve Fund	6,242	6,237	5
BOG Sewer Hookup Revolving Fund	67,561	67,094	467
BOG Subordinate Security Fund	-	859,233	(859,233)
BOG Operation and Maintenance Fund	3,083,482	3,083,482	-
BOG Revenue Trust	728,719	1,164,224	(435,504)
BOG Revenue Trust Fund	6,787,497	7,613,000	(825,503)
BOG Capital Improvement Revenue Fund	5,715,173	1,001,292	4,713,881
BOG Debt Service Reserve	189	11,563,736	(11,563,548)
	20,666,620	**28,616,004**	**(7,949,384)**
BOG - SDC Deposit	3,747,876	2,024,365	1,723,511
BOG - SDC CDs	5,500,000	7,250,000	(1,750,000)
Total SDC	**9,247,876**	**9,274,365**	**(26,489)**
Total Restricted	**29,914,496**	**37,890,369**	**(7,975,873)**
Reserve Funds			
BOG Series 2013 Construction Fund	9,675,096	14,170,759	(4,495,663)
BOG Series 2014 Refunding Construction Fund	219,093	217,448	1,644
BOG Series 2016 Construction Fund	71,336,736	89,235,554	(17,898,818)
BOG Series 2017 Refunding Construction Fund	6,242,455	6,313,750	(71,295)
BOG Series 2020A Construction Fund	123,590,269	-	123,590,269
BOG Series 2020A Capitalized Interest Fund	12,283,333	-	12,283,333
BOG Series 2020A Cost of Issuance Fund	113,880	-	113,880
Total Restricted - Held by Trustee	**223,460,862**	**109,937,511**	**(22,464,131)**
BOG OMRRRF Fund	17,423,213	17,423,213	-
USB Series 2013 Debt Service Fund	7,461,082	3,082,212	4,378,870
USB Series 2013 Debt Service Reserve Fund	12,031,688	12,031,688	-
USB Series 2014 Refunding Debt Service Fund	5,584,092	1,885,637	3,698,455
USB Series 2014 Refunding Debt Service Reserve Fund	7,738,731	7,798,212	(59,481)
USB Series 2016 Debt Service Fund	4,067,455	1,946,774	2,120,680
USB Series 2016 Debt Service Reserve Fund	7,591,999	7,591,999	-
USB Series 2010 Debt Service Fund	1,973,921	523,353	1,450,568
USB Series 2017 Refunding Debt Service Reserve Fund	7,566,460	7,566,460	-
USB Series 2017 Debt Service Fund	2,734,245	1,382,329	1,351,916
USB Series 2020A Debt Service Reserve Fund	7,162,200	-	7,162,200
Total Investments	**81,335,085**	**61,231,877**	**20,103,208**
Total Restricted and Unrestricted Cash	**376,036,827**	**245,199,940**	**(5,150,596)**

Guam Waterworks Authority
Accounts Receivable - Government (Active)
June 30, 2020

SCHEDULE G

Customer Name	No. of Accounts	AGING Current	31 - 60 days	61 - 90 days	91 - 120 days	Over 120 days	Total
Autonomous Agencies (Active)							
Guam Int'l Airport Authority	8	$ 42,073	$ 32,574	$ 11,098	$ 9,145	$ 251,850	$ 346,741
Guam Power Authority	25	178,910	-	-	-	-	178,910
Guam Housing & Urban Renewal Authority	9	9,566	273	233	-	-	10,072
Guam Visitors Bureau	1	2,512	-	-	-	-	2,512
Port Authority of Guam	5	2,254	-	-	-	-	2,254
Guam Housing Corporation	1	36	-	-	-	-	36
Total Autonomous Agencies	**49**	**$ 235,350**	**$ 32,847**	**$ 11,331**	**$ 9,145**	**$ 251,850**	**$ 540,523**
		43.54%	**6.08%**	**2.10%**	**1.69%**	**46.59%**	**100.00%**
Department of Education	53	$ 311,109	$ 199,306	$ 214,119	$ 7,737	$ -	$ 732,272
Department of Corrections	8	97,798	84,373	-	-	-	182,170
Mayors Council of Guam	60	39,477	18,725	1,762	1,672	42,447	104,082
Department of Parks & Recreation	18	46,844	775	600	6,385	8,977	63,581
Department of Public Works	11	30,274	19,069	772	1,868	7,719	59,703
Guam Police Department	8	11,280	4,750	1,051	-	-	17,080
Department of Chamorro Affairs	7	7,933	6,951	220	-	-	15,105
Department of Agriculture	6	6,225	2,021	1,435	-	-	9,681
Department of Public Health & Social Services	8	1,942	3,618	1,323	261	-	7,143
Guam Fire Department	11	2,668	2,108	-	-	-	4,776
Department of Military Affairs/GUARNG	1	4,380	-	-	-	-	4,380
Department of Youth Affairs	3	2,065	1,480	29	-	-	3,573
University of Guam	44	2,842	-	-	-	-	2,842
Guam Solid Waste Authority	2	2,585	21	-	-	-	2,605
Sanctuary Inc	1	1,994	-	-	-	-	1,994
Office of The Governor	2	1,897	-	-	-	-	1,897
Office of Technology	1	157	94	156	730	734	1,872
Guam Police Department	1	250	294	770	324	133	1,772
Guam Energy Office	1	1,295	113	-	-	-	1,408
Guam Public Library	6	1,007	282	29	-	-	1,319
Division of Senior Citizens, DPHSS	2	309	361	193	237	114	1,213
Guam Veterans Affairs Office	2	259	157	187	108	201	912
Department of Customs & Quarantine	1	408	361	28	-	-	797
Department of Administration	2	340	433	-	-	-	774
Department of Mental Health	2	341	-	-	-	-	341
Guam Enviromental Protection Agency	2	248	-	-	-	-	248
Merizo Mayor	1	108	-	-	-	-	108
The Office of The Dededo Mayor	1	96	-	-	-	-	96
Department of Agriculture-Fisheries	1	80	-	-	-	-	80
Department of Mental Health And Substance	1	25	25	-	-	-	49
Total Line Agencies	**267**	**$ 576,236**	**$ 345,316**	**$ 222,674**	**$ 19,323**	**$ 60,325**	**$ 1,223,874**
		47.08%	**28.21%**	**18.19%**	**1.58%**	**4.93%**	**100.00%**
Total as of June 30, 2020 (Active)	**316**	**$ 811,587**	**$ 378,163**	**$ 234,004**	**$ 28,468**	**$ 312,176**	**$ 1,764,397**
		46.00%	**21.43%**	**13.26%**	**1.61%**	**17.69%**	**100.00%**
Total as of September 30, 2019	**156**	**$ 573,245**	**$ 177,040**	**$ 36,359**	**$ 13,784**	**$ 390,725**	**$ 1,191,308**
	103%	**42%**	**114%**	**544%**	**107%**	**-20%**	**48%**

GUAM WATERWORKS AUTHORITY
Accounts Receivable Aging Summary by Rate Class **SCHEDULE H**
As of June 30, 2020

		AGING						
Rate Class	**No. of Accounts**	**Current**	**31 - 60 days**	**61 - 90 days**	**91 - 120 days**	**Over 120 days**	**Total**	
Government	440	$ 2,622,831	$ 324,912	$ 283,653	$ 25,124	$ 417,568	$ 3,674,088	17%
Agriculture	388	45,461	10,375	4,798	3,045	56,420	120,098	1%
Commercial I	2,663	1,292,496	151,260	39,513	31,357	352,732	1,867,358	9%
Commercial II	25	168,252	14,342	624	1,966	246,738	431,922	2%
Commercial III	301	683,727	33,737	35,713	30,431	313,921	1,097,528	5%
Golf Course	16	5,219	225	273	200	-	5,917	0%
Hotel	57	1,878,127	234,921	133,994	93,926	237,366	2,578,334	12%
Irrigation	33	6,003	942	139	106	3,315	10,505	0%
Residential	49,130	4,591,642	916,894	561,623	414,600	4,997,793	11,482,552	54%
Total	**53,053**	**11,293,758**	**1,687,608**	**1,060,329**	**600,755**	**6,625,852**	**21,268,302**	**100%**
		53%	**8%**	**5%**	**3%**	**31%**	**100%**	
						Less Allowance for Doubtful Accounts:	(7,539,104)	
						Net Accounts Receivable:	**13,729,199**	
						Days Receivables Outstanding	48	

As of May 31, 2020

		AGING						
Rate Class	**No. of Accounts**	**Current**	**31 - 60 days**	**61 - 90 days**	**91 - 120 days**	**Over 120 days**	**Total**	
Government	437	$ 2,817,922	$ 361,159	$ 311,108	$ 200,702	$ 411,315	$ 4,102,207	19%
Agriculture	386	46,690	9,212	4,558	2,415	56,718	119,593	1%
Commercial I	2,665	1,408,931	81,349	51,682	31,137	342,078	1,915,177	9%
Commercial II	25	214,384	822	2,228	1,763	253,760	472,957	2%
Commercial III	302	550,739	51,774	90,955	79,395	255,497	1,028,360	5%
Golf Course	16	4,963	273	200	-	-	5,437	0%
Hotel	57	1,867,312	341,105	206,188	51,905	231,705	2,698,216	12%
Irrigation	33	6,148	662	233	266	3,419	10,728	0%
Residential	48,940	4,554,519	981,827	631,744	444,861	4,953,095	11,566,046	53%
Total	**52,861**	**11,471,609**	**1,828,184**	**1,298,895**	**812,446**	**6,507,587**	**21,918,720**	**100%**
		52%	**8%**	**6%**	**4%**	**30%**	**100%**	
						Less Allowance for Doubtful Accounts:	(7,372,895)	
						Net Accounts Receivable:	**14,545,827**	
						Days Receivables Outstanding	50	

As of April 30, 2020

		AGING						
Rate Class	**No. of Accounts**	**Current**	**31 - 60 days**	**61 - 90 days**	**91 - 120 days**	**Over 120 days**	**Total**	
Government	446	$ 2,291,156	$ 421,789	$ 253,433	$ 152,500	$ 919,405	$ 4,038,282	18%
Agriculture	387	45,875	10,002	4,572	3,302	68,069	131,820	1%
Commercial I	2,696	1,327,045	129,303	44,363	39,722	373,633	1,914,066	8%
Commercial II	25	162,552	12,750	1,763	1,351	253,033	431,450	2%
Commercial III	303	609,237	119,534	145,730	14,948	250,916	1,140,365	5%
Golf Course	16	14,873	200	-	-	-	15,073	0%
Hotel	57	2,059,882	546,760	117,347	56,969	183,901	2,964,860	13%
Irrigation	33	6,581	460	360	239	3,724	11,364	0%
Residential	50,485	4,738,362	1,064,741	679,840	403,534	5,509,780	12,396,256	54%
Total	**54,448**	**11,255,563**	**2,305,541**	**1,247,406**	**672,565**	**7,562,462**	**23,043,537**	**100%**
		49%	**10%**	**5%**	**3%**	**33%**	**100%**	
						Less Allowance for Doubtful Accounts:	(9,049,169)	
						Net Accounts Receivable:	**13,994,369**	
						Days Receivables Outstanding	48	

GUAM WATERWORKS AUTHORITY
Accounts Payable Aging

SCHEDULE I

As of	**AGING**						Days Payable Outstanding
	Current	31 - 60 Days	61 - 90 Days	91 - 120 Days	> 120 Days	**Total**	
June 30, 2020	$ 1,918,387.32	$ 293,013.13	$ 401,261.62	$ 45,248.55	$ 363,358.39	**$ 3,021,269.01**	
	63%	10%	13%	1%	12%	**100%**	35
May 31, 2020	$ 2,934,384.83	$ 67,049.79	$ 43,840.47	$ 20,706.09	$ 236,163.06	**$ 3,302,144.24**	
	89%	2%	1%	1%	7%	**100%**	36
April 30, 2020	$ 3,154,911.15	$ 147,955.32	$ 107,551.40	$ 41,512.01	$ 322,231.15	**$ 3,774,161.03**	38
	84%	4%	3%	1%	9%	**100%**	

Guam Waterworks Authority **SCHEDULE J**
System Development Charges Project Status
As of June 30, 2020

Funding Summary		**Total**
Total available project funds	$	12,979,509
Total project expenditures and encumbrances		10,217,522
Total unobligated project funds	**$**	**2,761,987**

Projects Funded

Project Description	**Expenditures**	**Outstanding Encumbrances**	**Expenditures and Encumbrances**
Agat-Santa Rita Wastewater Treatment Plant Replacement	1,166,075	35,931	1,202,006
Baza Gardens Wastewater Cross Island Pumping & Conveyance	1,150,881	3,090	1,153,971
Central Guam Reservoirs		280,040	280,040
Line Replacement Phase IV		256,937	256,937
Northern DWWTP	13,798	5,408,801	5,422,599
Northern DWWTP (Land Purchase)	1,000,000		1,000,000
Route 4 Relief Sewerline Rehab & Replacement		399,869	399,869
South Paulino Heights Waterline Upgrade	84,056	4,714	88,770
Talofofo Sewer Improvement		241,142	241,142
Umatac Merizo WWTP		42,783	42,783
Groundwater Well Production Meter Rep.		129,405	129,405
	$ 3,414,811	**$ 6,802,711**	**$ 10,217,522**

Future planned projects	**FY2020**
Water Wells	540,000
Water Dist Sys Pipe Replacement & Upgrades	540,000
WWTP Priority 1 Upgrades	300,000
Umatac Merizo STP Replacement	300,000
Wastewater Sewer System Expansion	300,000
	$ 1,980,000

GUAM WATERWORKS AUTHORITY
WATER DEMAND BY RATE CLASS
FY2015 - FY2020

SCHEDULE K

CLASS		AUDITED FY2015 TOTAL CONSUMPTION (kGal)	FY2016 TOTAL CONSUMPTION (kGal)	% Inc / (Dec.)	FY2017 TOTAL CONSUMPTION (kGal)	% Inc / (Dec.)	FY2018 TOTAL CONSUMPTION (kGal)	% Inc / (Dec.)	FY2019 TOTAL CONSUMPTION (kGal)	% Inc / (Dec.)	UNAUDITED FY2020 (9 Mos Annualized) TOTAL CONSUMPTION (kGal)
R	Residential	3,415,662	3,429,689	0%	3,206,811	-6%	3,313,613	3%	3,359,905	1%	3,584,895
C	Commercial	1,020,089	1,022,890	0%	964,639	-6%	910,905	-6%	906,192	-1%	842,474
F	Federal	1,168	1,180	1%	2,508	113%	1,813	-28%	1,602	-12%	1,293
G	Government	515,974	475,366	-8%	448,430	-6%	450,165	0%	405,980	-10%	389,058
H	Hotel	999,116	1,008,087	1%	1,004,525	0%	989,723	-1%	1,079,919	9%	820,646
G	Golf	6,850	6,770	-1%	5,252	-22%	2,741	-48%	2,793	2%	7,172
A	Agriculture	67,376	78,628	17%	69,482	-12%	81,127	17%	90,803	12%	87,906
I	Irrigation	10,385	11,351	9%	10,143	-11%	8,504	-16%	7,896	-7%	8,572
	GRAND TOTAL	6,036,620	6,033,960	0%	5,711,790	-5%	5,758,590	1%	5,855,091	2%	5,742,018

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issues for Decision

Resolution No. 31-FY2020
Relative to Approval of the 2010, 2013 and 2016 Bond Proceeds Reallocation

What is the project's objective and is it necessary and urgent?
The objective of the bond proceed reallocation is to expend unobligated 2010, 2013 and 2016 Bond proceeds in an effort to maintain compliance with bond indenture requirements as well as focus available funding to on-going or active CIP projects or programs. Specifically, the reallocated funds will help address the PUC requirement for GWA to establish a Water Loss Reduction Program to improve the utility's water loss in an effort to save on operating cost, as well as fund anticipated USEPA Consent Decree projects associated with GWA's wastewater system.

Where is the location?
N/A

How much will it cost?
While there is no additional cost proposed over previously approved 2010, 2013, and 2016 bond expenditures, GWA management seeks to reallocate Seven Hundred Eighty-Three Thousand Seven Hundred Sixteen Dollars ($783,716.00) of 2010 Bond proceeds, One Million Sixty-Six Thousand Four Dollars ($1,066,004.00) of 2013 Bond proceeds, and Two Million Seven Hundred One Thousand Eight Hundred Seventy-Seven Dollars ($2,701,877.00) of 2016 Bond proceeds to on-going or active CIP projects.

When will it be completed?
N/A

What is the funding source?
2010, 2013 and 2016 Bond

The RFP/BID responses (if applicable):
N/A

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

RESOLUTION NO. 31–FY2020

RELATIVE TO APPROVAL OF THE 2010, 2013 AND 2016 BOND PROCEEDS REALLOCATION

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA management intends to expend unobligated 2010, 2013 and 2016 Bond proceeds in an effort to maintain compliance with bond indenture requirements by reallocating said bond proceeds to on-going or active CIP projects; and

WHEREAS, the PUC required via GWA Docket 19-08 "FY20 Rate Decision" that GWA establish a Water Loss Reduction Program to improve the utility's water loss in an effort to save on operating cost; and

WHEREAS, GWA is currently in negotiations with USEPA for a "Consent Decree" (CD) relative to wastewater system improvements at GWA sewer pump stations (SPS), force mains and gravity lines and as such GWA intends to focus engineering and financial resources to meet the anticipated CD priorities; and

WHEREAS, GWA finance has reconciled as of May 31, 2020 the 2010, 2013 and 2016 Bonds Capital Improvements Project (CIP) accounts and has determined there are several CIP line items with a remaining balance under the "Unobligated Project Cost" totaling Three Million Seven Hundred Seventeen Thousand Five Hundred Sixty-Eight Dollars ($3,717,568.00) (See

Exhibit A), Four Million One Hundred Twenty Thousand Five Hundred Thirty-Three Dollars ($4,120,533.00) (See Exhibit B), Seventeen Million Seven Hundred Forty-One Thousand Six Hundred Seventy Dollars ($17,741,670.00) (See Exhibit C), respectively; and

WHEREAS, GWA management seeks to reallocate Seven Hundred Eighty-Three Thousand Seven Hundred Sixteen Dollars ($783,716.00) of the 2010 Bond proceeds from various CIP line items to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", and PW 12-01 "Water Audit Program & Water Loss Control Plan" (See Exhibit D); and

WHEREAS, GWA management further seeks to reallocate One Million Sixty-Six Thousand Four Dollars ($1,066,004.00) of 2013 Bond proceeds from various CIP line items to the CIP line item WW 09-01 "Lift station upgrades" (See Exhibit E); and

WHEREAS, GWA management further seeks to reallocate Two Million Seven Hundred One Thousand Eight Hundred Seventy-Seven Dollars ($2,701,877.00) of 2016 Bond proceeds from various CIP line items to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", WW 09-01 "Lift station upgrades", WW 09-06 "Wastewater Collection System Repl/Rehab" and MP-Gen-Misc-05 "GWA Infrastructure Improvements" (See Exhibit F); and

WHEREAS, the reallocation of the 2010, 2013 and 2016 Bond as described above has caused the Capital Improvement Plan to be adjusted (See Exhibit G) to reflect the movement of funding as well as allow for CIP line items that had projected shortages in bond funding to reduce future bond borrowing for that CIP line item due to this reallocation; and

WHEREAS, GWA management seeks CCU approval to petition the PUC for approval to reallocate the 2010, 2013 and 2016 bond as indicated above; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve and authorize the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the justification for the 2010, 2013 and 2016 bond reallocation to be acceptable.
3. The CCU hereby approves Seven Hundred Eighty-Three Thousand Seven Hundred Sixteen Dollars ($783,716.00) of 2010 Bond proceeds from various CIP line items to be reallocated to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", and PW 12-01 "Water Audit Program & Water Loss Control Plan".
4. The CCU hereby further approves One Million Sixty-Six Thousand Four Dollars ($1,066,004.00) of 2013 Bond proceeds from various CIP line items to be reallocated to the CIP line item WW 09-01 "Lift station upgrades".
5. The CCU hereby further approves Two Million Seven Hundred One Thousand Eight Hundred Seventy-Seven Dollars ($2,701,877.00) of 2016 Bond proceeds from various CIP line items to be reallocated to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", WW 09-01 "Lift station upgrades", WW 09-06 "Wastewater Collection System Repl/Rehab" and MP-Gen-Misc-05 "GWA Infrastructure Improvements".
6. The CCU further approves the management of GWA seek PUC approval for the reallocation of 2010, 2013 and 2016 bond funds as indicated herein.

RESOLVED, that the Chairman certified, and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by:	Attested by:
_____	_____
JOSEPH T. DUENAS	**MICHAEL T. LIMTIACO**
Chairperson	Secretary

DRAFT

SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

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DRAFT

GUAM WATERWORKS AUTHORITY
2010 Series Bond Project Status
As of May 31, 2020

Exhibit A (page 1 of 1)

SCHEDULE M

	PROJECT NAME	BOND INTEREST	Adjusted Project Cost	EXPENDITURES AS OF 5/31/20	OUTSTANDING ENCUMBRANCES	FUNDING REQUEST	TOTAL EXPENDITURES ENCUMBRANCES & FUNDING REQUESTS	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 5/31/20
PW 05-01	Ground Water Disinfection		$ 500,000	$ 465,008	$ -		$ 465,008	34,992	34,992
PW 05-05	"A" Series Well Transmission Line		$ 475,709	$ 475,709	$ -		$ 475,709	-0	-0
PW 05-06	Water Booster Pump Station		$ 500,000	$ 500,000	$ -	$ -	$ 500,000	0	0
PW 05-07	Meter Replacement Program		$ 10,450,000	$ 10,174,513	$ 6,517	$ -	$ 10,181,030	268,970	275,487
PW 05-08	Barrigada Tank Repair/Replacement		$ 5,450,000	$ 5,371,011	$ 33,337		$ 5,404,348	45,652	78,989
PW 05-09	Leak Detection		$ 200,000	$ 17,037	$ -		$ 17,037	182,963	182,963
PW 05-10	Potable Water System Planning	10,487	$ 210,487	$ 210,487	$ 0		$ 210,487	0	0
PW 05-11	Implement Ground Water Rule		$ 1,699,999	$ 1,699,998	$ -		$ 1,699,998	1	1
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade		$ 1,900,000	$ 368,647	$ 5,914		$ 374,561	1,525,439	1,531,353
PW 05-13	Deep Well Rehabilitation		$ 548,000	$ 404,045	$ -		$ 404,045	143,955	143,955
PW 05-14	New Deep Wells at Down Hard		$ 485,743	$ 485,743	$ -		$ 485,743	0	0
PW 05-15	Rehabilitation of Asan Springs		$ 1,100,000	$ 251,593	$ 339,641		$ 591,234	508,766	848,407
PW 05-16	Master Meters		$ 1,489,957	$ 1,489,957	$ -		$ 1,489,957	0	0
PW 09-01	Ugum Water Treatment Plant Intake		$ 700,000	$ 610,234	$ 106	$ -	$ 610,340	89,660	89,766
PW 09-02	Water Wells		$ -	$ -			$ -	0	0
PW 09-03	Water Distribution System		$ 3,174,748	$ 3,152,725	$ 21,963		$ 3,174,688	60	22,023
PW 09-04	Pressure Zone Realignment /		$ -	$ -			$ -	0	0
PW 09-05	Northern System Water Distribution		$ -	$ -	$ -		$ -	0	0
PW 09-06	Central Water Distribution System 2005		$ 775,002	$ 709,031	$ 2	$ -	$ 709,033	65,969	65,971
PW 09-07	Southern Water Distribution System		$ -	$ -			$ -	0	0
PW 09-08	Mechanical/Electrical Equipment		$ 1,200,000	$ 1,200,000	$ -	$ -	$ 1,200,000	0	0
PW 09-09	Water Reservoir Internal/External		$ 2,150,000	$ 1,178,456	$ 930,928	$ -	$ 2,109,384	40,616	971,544
PW 09-10	Water Reservoir Internal/External		$ -	$ -			$ -	0	0
PW 09-11	Water System Reservoirs 2005 Improvements		$ 1,050,000	$ 1,033,925	$ 16,075		$ 1,050,000	0	16,075
PW 11-01	Distribution System Upgrades		$ 474,160	$ 449,046	$ -		$ 449,046	25,114	25,114
PW 11-02	Ugum Water Treatment Plant Reservoir		$ -	$ -			$ -	0	0
PW 12-01	Water Audit Program & Water Loss Control Plan		$ 78,459	$ 15,031	$ -	$ -	$ 15,031	63,429	63,429
PW 12-02	Production Plan / Reduce Navy Purchases		$ 100,000	$ 99,900	$ -		$ 99,900	100	100
PW 12-03	Hydraulic Asessment of Tank		$ 500,000	$ 489,161	$ 2,680		$ 491,841	8,159	10,839
PW 12-04	Agana Heights & Chaot Tanks		$ 4,700,000	$ 4,647,524	$ -		$ 4,647,524	52,476	52,476
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 1,848,013	$ 1,765,504	$ 77,283		$ 1,842,787	5,226	82,509
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ -	$ -			$ -	0	0
PW 12-07	Assessment of maloilol Elevetad & Yigo Elevated		$ 200,000	$ 200,000	$ -		$ 200,000	0	0
PW 12-08	Public Water System Asser Inventory/Condition Assesment		$ 100,000	$ 78,386	$ -		$ 78,386	21,614	21,614
PW 12-09	Public Water System GIS & Mapping		$ 50,000	$ 50,000	$ -		$ 50,000	0	0
			$ -	$ -			$ -	0	0
WW 05-04	Wastewater System Planning	18,857	$ 1,492,857	$ 1,492,857	$ -		$ 1,492,857	0	0
WW 05-05	Wastewater Vehicles		$ 235,000	$ 209,795	$ -		$ 209,795	25,205	25,205
WW 05-07	NDWWTP - Chlorine Tanks	207,982	$ 457,982	$ 457,982			$ 457,982	0	0
WW 09-07	Tumon Bay Sewer Upgrades		$ -	$ -			$ -	0	0
WW 09-06	Wastewater Collection System Repl/Rehab		$ 1,001,323	$ 904,432	$ -	$ -	$ 904,432	96,891	96,891
WW 09-08	Facilities Plan/Design for Baza Garde	16,757	$ 1,266,757	$ 1,198,678	$ 68,079		$ 1,266,757	0	68,079
WW 09-10	Facilities Plan/Design for Agat-Santa Rita WWTP		$ 899,630	$ 778,208	$ 121,422		$ 899,630	0	121,422
WW 11-02	Priority 1 Sewer Upgrades – Baza Gardens WWTP		$ -	$ -			$ -	0	0
WW 11-03	Baza Gardens STP Replacement		$ 1,488,378	$ 1,445,363	$ -		$ 1,445,363	43,015	43,015
WW 11-04	Facilities Plan/Design for Umatac Merizo WWTP		$ 853,858	$ 827,795	$ 26,063		$ 853,858	0	26,063
WW 11-08	Agat/Santa Rita STP Replacement		$ 2,217,700	$ 2,215,110	$ 1,363		$ 2,216,473	1,227	2,590
WW 12-01	Northern District WWTP Primary Treatment Upgrades		$ 11,743,514	$ 11,419,078	$ 177,322	$ -	$ 11,596,400	147,114	324,436
WW 12-02	Biosolids Management Plan		$ 200,000	$ 162,084	$ -		$ 162,084	37,916	37,916
WW 12-03	Agana WWTP Interim Measures	63,892	$ 11,363,892	$ 11,298,383	$ 23,595		$ 11,321,978	41,913	65,508
WW 12-04	I&I SSES Southern		$ 800,000	$ 793,717	$ 5,278		$ 798,995	1,005	6,283
WW 12-05	I&I SSES Central		$ 850,000	$ 792,566	$ 1,019		$ 793,585	56,415	57,434
WW 12-06	I&I SSES Northern		$ -	$ -			$ -	0	0
WW 12-07	Umatac Merizo Replacement		$ 250,000	$ 245,449	$ 2,569		$ 248,018	1,982	4,551
WW 17-02	Northern District WWTP Secondary Treatment Upgrades		$ 1,000,000	$ 1,000,000	$ -		$ 1,000,000	0	0
			$ -	$ -					
EE 05-01	Well Electrical Protection		$ -	$ -			$ -	0	0
EE 05-02	SCADA Pilot Project		$ 61,950	$ 19,812	$ -		$ 19,812	42,138	42,138
EE 09-02	Electrical Upgrade - Water Wells		$ 354,227	$ 350,291	$ 3,936		$ 354,227	0	3,936
EE 09-03	Electrical Upgrade - Water Booster		$ -	$ -			$ -	0	0
EE 09-04	Electrical Upgrade -Water Booster		$ -	$ -			$ -	0	0
EE 09-05	Electrical Upgrade - Other Water		$ -	$ -			$ -	0	0
EE 09-06	SCADA Improvements – Phase 1		$ 250,000	$ 202,894.23	$ 6,597		$ 209,492	40,508	47,106
EE 09-07	SCADA Improvements – Phase 2		$ 1,056,986	$ 1,026,782	$ 6,597		$ 1,033,380	23,606	30,204
EE 09-08	SCADA Improvements – Phase 3		$ 24,956	$ 24,956	$ -		$ 24,956	0	0
EE 09-09	SCADA Improvements – Phase 4		$ -	$ -			$ -	0	0
			$ -	$ -					
MC 05-01	Laboratory Modernization		$ -	$ -			$ -	0	0
MC 05-02	Land Survey		$ 499,688	$ 469,484	$ 6,597		$ 476,081	23,607	30,204
MC 09-01	General Plant Improvements / Water		$ 7,241,000	$ 7,202,237	$ -	$ -	$ 7,202,237	38,763	38,763
Interest	Interest Earned	$ 13,099	$ 13,099					13,099	13,099
	Total Construction Fund (2010 Se	**$ 331,073**	**$ 87,733,073**	**$ 82,130,622**	**$ 1,884,884**	**$ -**	**$ 84,015,506**	**$ 3,717,568**	**$ 5,602,451**

Exhibit B (page 1 of 1)

GUAM WATERWORKS AUTHORITY
2013 Series Bond Project Status
As of May 31, 2020

SCHEDULE J

	PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	BOND INTEREST	Adjusted Project Cost	EXPENDITURES AS OF 5/31/20	OUTSTANDING ENCUMBRANCES	FUNDING REQUEST	TOTAL EXPENDITURES ENCUMBRANCES & FUNDING REQUESTS	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 5/31/20
PW 05-03	Santa Rita Springs Booster Pu	$ 100,000	$ 100,000.00		$ 100,000	100,000	-		$ 100,000	$ -	$ -
PW 05-05	"A" Series Well Transmission I	$ 400,000	$ 400,000.00		$ 369,846	369,846	(0)		$ 369,846	$ 0	$ 0
PW 05-06	Water Booster Pump Station	$ 6,000,000	$ 6,000,000.00		$ 1,679,964	1,664,351	2,442	-	$ 1,666,793	$ 13,171	$ 15,613
PW 05-07	Meter Replacement Program		$ 1,500,000.00		$ 996,532	854,479	-		$ 854,479	$ 142,053	$ 142,053
PW 05-08	Barrigada Tank Repair/Replac	$ 6,000,000	$ 6,000,000.00		$ 4,987,000	4,779,897	16,000		$ 4,795,897	$ 191,103	$ 207,103
PW 05-09	Leak Detection	$ 100,000	$ 100,000.00		$ 16,916	-	(0)	-	$ (0)	$ 16,916	$ 16,916
PW 05-10	Potable Water System Planni	$ 800,000	$ 1,200,000.00		$ 624,000	593,939	30,061		$ 624,000	$ 0	$ 30,061
PW 05-11	Implement Ground Water Rul	$ 1,000,000	$ 1,000,000.00		$ 1,000,000	952,052	29,724		$ 981,776	$ 18,224	$ 47,948
PW 05-13	Deep Well Rehabilitation	$ 800,000	$ 800,000.00		$ 200,000	198,175	1,826		$ 200,000	$ (0)	$ 1,825
PW 05-14	New Deep Wells at Down Har	$ 2,000,000	$ 2,000,000.00		$ -	-	-		$ -	$ -	$ -
PW 05-16	Master Meters	$ 4,000,000	$ 4,000,000.00		$ 712,060	476,315	180,872		$ 657,187	$ 54,873	$ 235,745
PW 09-01	Ugum Water Treatment Plant	$ 1,000,000	$ 1,000,000.00		$ 859,801	354,136	14,512	414,684	$ 783,332	$ 76,469	$ 505,665
PW 09-02	Water Wells	$ 4,200,000	$ 4,200,000.00		$ 3,030,029	2,148,678	8,167		$ 2,156,845	$ 873,184	$ 881,351
PW 09-03	Water Distribution System	$ 12,000,000	$ 14,000,000.00		$ 10,912,453	10,001,340.93	540,687		$ 10,542,028	$ 370,425	$ 911,112
PW 09-04	Pressure Zone Realignment /	$ 1,000,000	$ 1,000,000.00		$ 337,110	336,036	1,074		$ 337,110	$ 0	$ 1,074
PW 09-08	Mechanical/Electrical Equipme	$ 430,000	$ 430,000.00		$ 426,799	309,784	-	111,522	$ 421,306	$ 5,493	$ 117,015
PW 09-10	Water Reservoir Internal/Exter	$ 800,000	$ 800,000.00		$ -	-	-		$ -	$ -	$ -
PW 09-11	Water System Reservoirs 200	$ 21,000,000	$ 18,000,000.00		$ 13,878,000	13,020,796	812,788		$ 13,833,584	$ 44,416	$ 857,204
PW 11-02	Ugum Water Treatment Plant	$ 7,000,000	$ 7,000,000.00		$ -	-	-		$ -	$ -	$ -
PW 12-04	Agana Heights & Chaot Tanks	$ 4,500,000	$ 4,500,000.00		$ 1,330,287	1,114,271	216,016		$ 1,330,287	$ (0)	$ 216,016
PW 12-05	Tank Major Repair Yigo#1 Ma	$ 13,500,000	$ 13,500,000.00		$ 11,605,000	10,713,256	891,369		$ 11,604,625	$ 375	$ 891,744
PW 12-06	Tank Major Repair Yigo#1 Ma	$ 8,000,000	$ 8,000,000.00		$ -	-	-		$ -	$ -	$ -
PW 12-07	Assessment of maloiloi Elevat	$ 500,000	$ 500,000.00		$ 485,117	461,813	23,304		$ 485,117	$ 0	$ 23,304
PW 14-01	Fire Hydrant Replacement Pro	$ -	$ 1,000,000.00		$ -	-	-		$ -	$ -	$ -
					$ -				$ -	$ -	
WW 05-04	Wastewater System Planning	$ 800,000	$ 800,000.00		$ 650,901	618,613	6,982		$ 625,595	$ 25,306	$ 32,288
WW 09-01	Lift Station Upgrades	$ 5,000,000	$ 2,000,000.00		$ 563,148	538,385	7,265		$ 545,650	$ 17,498	$ 24,763
WW 09-06	Wastewater Collection Systen	$ 6,500,000	$ 3,800,000.00	72,045	$ 732,358	575,303	75,152		$ 650,455	$ 81,903	$ 157,055
WW 11-03	Baza Gardens STP Replacement		$ 1,000,000.00		$ 9,656,874	7,890,391	1,429,611		$ 9,320,002	$ 336,872	$ 1,766,483
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP		$ 1,000,000.00		$ 371,699	369,613	2,086		$ 371,699	$ 0	$ 2,086
WW 11-08	Agat/Santa Rita STP Replace	$ 19,000,000	$ 19,000,000.00		$ 67,200,000	66,539,824	393,770		$ 66,933,594	$ 266,406	$ 660,176
WW 12-03	Agana WWTP Interim Measures		$ 1,500,000.00	45,076	$ 718,076	667,693	50,383		$ 718,076	$ 0	$ 50,383
WW 12-07	Umatac Merizo Replacement	$ 2,000,000	$ 1,000,000.00		$ -	-	-		$ -	$ -	$ -
					$ -				$ -	$ -	
EE 09-01	Wastewater Pump Station Ele	$ 620,000	$ 620,000.00		$ 99,861	99,087	774		$ 99,861	$ -	$ 774
EE 09-02	Electrical Upgrade - Water W	$ 1,500,000	$ 1,500,000.00		$ 1,500,000	1,487,105	2,599		$ 1,489,704	$ 10,296	$ 12,895
EE 09-03	Electrical Upgrade - Water Bo	$ 325,000	$ 325,000.00		$ -	-	-		$ -	$ -	$ -
EE 09-04	Electrical Upgrade -Water Boo	$ 350,000	$ 350,000.00		$ 977	977	-		$ 977	$ -	$ -
EE 09-05	Electrical Upgrade - Other Wa	$ 250,000	$ 250,000.00		$ 60,700	60,700	-		$ 60,700	$ -	$ -
EE 09-08	SCADA Improvements – Phas	$ 1,850,000	$ 1,850,000.00		$ 722,359	514,786	173,869	-	$ 688,655	$ 33,704	$ 207,573
EE 09-09	SCADA Improvements – Phas	$ 500,000	$ 1,200,000.00		$ -	-	-		$ -	$ -	$ -
					$ -				$ -	$ -	$ -
MC 05-01	Laboratory Modernization	$ 1,500,000	$ 1,500,000.00		$ 1,171,465	1,163,037	7,785		$ 1,170,822	$ 643	$ 8,428
MC 05-02	Land Survey	$ 2,000,000	$ 2,000,000.00		$ 1,052	1,038	15		$ 1,053	$ (1)	$ 15
MC 09-01	General Plant Improvements / Allowance for COI	$ 2,000,000	$ 2,600,000.00		$ 2,441,737	1,331,471	3,251	942,603	$ 2,277,325	$ 164,412	$ 1,110,266 $ 275,005
Interest	Interest Earned			$ 1,376,792	$ 1,376,792					$ 1,376,791.71	$ 1,376,792
	Total Construction Fund (2	**$ 139,325,000**	**$ 139,325,000**	**$ 1,493,913**	**$ 140,818,913**	**$ 130,307,188**	**$ 4,922,384**	**$ 1,468,808**	**$ 136,698,380**	**$ 4,120,533**	**$ 10,786,730**

Exhibit C (page 1 of 1)

GUAM WATERWORKS AUTHORITY
2016 Series Bond Project Status
As of May 31, 2020

SCHEDULE L

	PROJECT NAME	BOND INTEREST	Adjusted Project Cost	EXPENDITURES AS OF 5/31/20	OUTSTANDING ENCUMBRANCES	FUNDING REQUEST	TOTAL EXPENDITURES ENCUMBRANCES & FUNDING REQUESTS	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 5/31/20
PW 05-06	Water Booster Pump Station		$ -	-	-		$ -	$ -	$ -
PW 05-07	Meter Replacement Program		$ 1,400,000	149,970	1,250,030		$ 1,400,000	$ -	$ 1,250,030
PW 05-08	Barrigada Tank Repair/Replacement		$ -	-	-		$ -	$ -	$ -
PW 05-09	Leak Detection		$ 100,000	-	-		$ -	$ 100,000	$ 100,000
PW 05-10	Potable Water System Planning		$ 876,294	833,563	42,731		$ 876,294	$ -	$ 42,731
PW 05-13	Deep Well Rehabilitation		$ 250,000	203	109,810		$ 110,013	$ 139,987	$ 249,797
PW 05-14	New Deep Wells at Down Hard		$ 1,190,000	-			$ -	$ 1,190,000	$ 1,190,000
PW 05-16	Master Meters		$ 2,151,539	151,539	-		$ 151,539	$ 2,000,000	$ 2,000,000
PW 09-01	Ugum Water Treatment Plant Intake		$ -	-			$ -	$ -	$ -
PW 09-02	Water Wells		$ 2,500,000	77,520	92,480	39,703	$ 209,703	$ 2,290,297	$ 2,422,480
PW 09-03	Water Distribution System		$ -	-			$ -	$ -	$ -
PW 09-04	Pressure Zone Realignment /		$ 1,141,000	687,712	453,288		$ 1,141,000	$ (0)	$ 453,288
PW 09-08	Mechanical/Electrical Equipment		$ -	-	-		$ -	$ -	$ -
PW 09-10	Water Reservoir Internal/External		$ 800,000	661,188	138,812		$ 800,000	$ -	$ 138,812
PW 09-11	Water System Reservoirs 2005 Improvements		$ 58,830,170	11,810,679	41,432,227		$ 53,242,905	$ 5,587,265	$ 47,019,491
PW 11-02	Ugum Water Treatment Plant Reservoir		$ -	-			$ -	$ -	$ -
PW 12-01	Water Audit Program & Water Loss Control Plan		$ 550,000	-	326,134		$ 326,134	$ 223,867	$ 550,000
PW 12-04	Agana Heights & Chaot Tanks		$ 1,220,000	-	1,220,000		$ 1,220,000	$ -	$ 1,220,000
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 1,822,133	662,334	1,159,799		$ 1,822,133	$ 0	$ 1,159,799
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 7,300,000	6,650,000	650,000		$ 7,300,000	$ -	$ 650,000
PW 14-01	Fire Hydrant Replacement Program		$ 1,200,000	67,478	1,128,900		$ 1,196,377	$ 3,623	$ 1,132,523
			$ -	-			$ -	$ -	
WW 05-04	Wastewater System Planning		$ 312,983	312,983	-		$ 312,983	$ 0	$ 0
WW 09-01	Lift Station Upgrades		$ 1,714,755	414,748	783,659	278,745	$ 1,477,152	$ 237,603	$ 1,300,007
WW 09-06	Wastewater Collection System Repl/Rehab		$ 1,055,478	364,276	237,183		$ 601,459	$ 454,019	$ 691,202
WW 11-03	Baza Gardens STP Replacement	$ 2,384,747	$ 25,048,523	21,944,323	638,480		$ 22,582,803	$ 2,465,719	$ 3,104,200
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP		$ 252,105	239,065	13,040		$ 252,105	$ -	$ 13,040
WW 11-08	Agat/Santa Rita STP Replacement	$ 224,328	$ 2,226,659	1,966,308	36,023		$ 2,002,331	$ 224,328	$ 260,351
WW 12-03	Agana WWTP Interim Measures		$ -	-			$ -	$ -	$ -
WW 12-07	Umatac Merizo Replacement	$ 152,872	$ 20,952,872	20,160,515	792,356		$ 20,952,872	$ (0)	$ 792,356
			$ -	-			$ -	$ -	
EE 09-01	Wastewater Pump Station Electrical Upgrade		$ -	-			$ -	$ -	$ -
EE 09-02	Electrical Upgrade - Water Wells		$ -	-			$ -	$ -	$ -
EE 09-03	Electrical Upgrade - Water Booster		$ -	-			$ -	$ -	$ -
EE 09-08	SCADA Improvements – Phase 3		$ 1,077,497	802,003	-		$ 802,003	$ 275,494	$ 275,494
EE 09-09	SCADA Improvements – Phase 4		$ 4,378,118	1,829,698	1,794,928		$ 3,624,626	$ 753,492	$ 2,548,420
			$ -	-			$ -	$ -	
MC 05-01	Laboratory Modernization		$ 1,127,000	1,127,000	-		$ 1,127,000	$ -	$ -
MC 05-02	Land Survey		$ 1,260,524	540,053	712,264		$ 1,252,317	$ 8,207	$ 720,471
MC 09-01	General Plant Improvements / Water		$ 1,543,760	716,554	780,392	-	$ 1,496,947	$ 46,813	$ 827,206
MC 15-01	Information Technology Integration Improvements		$ 500,000	244,068	120,851		$ 364,919	$ 135,081	$ 255,932
	Interest Earned (unencumbered)	$ 1,605,874	$ 1,605,874					$ 1,605,874	$ 1,605,874
	Total Construction Fund (2016 Series Revenue Bon	**$ 4,367,821**	**$ 144,387,284**	**$ 72,413,780**	**$ 53,913,386**	**$ 318,448**	**$ 126,645,614**	**$ 17,741,670**	**$ 71,973,504**

Exhibit D (page 1 of 2)

2010 Bond Schedule and Reallocation					
CIP Number	CIP Name	Project Cost	Additional Funding	Reduction Funding	Adjusted Projec tCost
PW 05-01	Ground Water Disinfection	$ 500,000		$ (34,992)	$ 465,008
PW 05-05	"A" Series Well Transmission Line	$ 475,709			$ 475,709
PW 05-06	Water Booster Pump Station	$ 500,000			$ 500,000
PW 05-07	Meter Replacement Program	$ 10,450,000			$ 10,450,000
PW 05-08	Barrigada Tank Repair/Replacement	$ 5,450,000		$ (45,652)	$ 5,404,348
PW 05-09	Leak Detection	$ 200,000			$ 200,000
PW 05-10	Potable Water System Planning	$ 200,000			$ 200,000
PW 05-11	Implement Ground Water Rule	$ 1,699,999			$ 1,699,999
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade	$ 1,900,000			$ 1,900,000
PW 05-13	Deep Well Rehabilitation	$ 548,000			$ 548,000
PW 05-14	New Deep Wells at Down Hard	$ 485,743			$ 485,743
PW 05-15	Rehabilitation of Asan Springs	$ 1,100,000			$ 1,100,000
PW 05-16	Master Meters	$ 1,489,957			$ 1,489,957
PW 09-01	Ugum Water Treatment Plant Intake	$ 700,000	$ 250,000		$ 950,000
PW 09-02	Water Wells	$ -			$ -
PW 09-03	Water Distribution System	$ 3,174,748	$ 250,000		$ 3,424,748
PW 09-04	Pressure Zone Realignment /	$ -			$ -
PW 09-05	Northern System Water Distribution	$ -			$ -
PW 09-06	Central Water Distribution System 2005	$ 775,002		$ (65,969)	$ 709,033
PW 09-07	Southern Water Distribution System	$ -			$ -
PW 09-08	Mechanical/Electrical Equipment	$ 1,200,000			$ 1,200,000
PW 09-09	Water Reservoir Internal/External	$ 2,150,000			$ 2,150,000
PW 09-10	Water Reservoir Internal/External	$ -			$ -
PW 09-11	Water System Reservoirs 2005 Improvements	$ 1,050,000			$ 1,050,000
PW 11-01	Distribution System Upgrades	$ 474,160		$ (25,114)	$ 449,046
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -			$ -
PW 12-01	Water Audit Program & Water Loss Control Plan	$ 78,459	$ 283,716		$ 362,175
PW 12-02	Production Plan / Reduce Navy Purchases	$ 100,000		$ (100)	$ 99,900
PW 12-03	Hydraulic Asessment of Tank	$ 500,000		$ (8,159)	$ 491,841
PW 12-04	Agana Heights & Chaot Tanks	$ 4,700,000		$ (52,476)	$ 4,647,524
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 1,848,013		$ (5,226)	$ 1,842,787
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ -			$ -
PW 12-07	Assessment of malojloj Elevetad & Yigo Elevated	$ 200,000			$ 200,000
PW 12-08	Public Water System Asser Inventory/Condition Assesment	$ 100,000		$ (21,614)	$ 78,386
PW 12-09	Public Water System GIS & Mapping	$ 50,000			$ 50,000
WW 05-04	Wastewater System Planning	$ 1,474,000			$ 1,474,000
WW 05-05	Wastewater Vehicles	$ 235,000		$ (25,205)	$ 209,795
WW 05-07	NDWWTP - Chlorine Tanks	$ 250,000			$ 250,000
WW 09-07	Tumon Bay Sewer Upgrades	$ -			$ -
WW 09-06	Wastewater Collection System Repl/Rehab	$ 1,001,323			$ 1,001,323
WW 09-08	Facilities Plan/Design for Baza Gardens WWTP	$ 1,250,000			$ 1,250,000
WW 09-10	Facilities Plan/Design for Agat-Santa Rita WWTP	$ 899,630			$ 899,630
WW 11-02	Priority 1 Sewer Upgrades – Baza Gardens WWTP	$ -			$ -
WW 11-03	Baza Gardens STP Replacement	$ 1,488,378		$ (43,015)	$ 1,445,363
WW 11-04	Facilities Plan/Design for Umatac Merizo WWTP	$ 853,858			$ 853,858
WW 11-08	Agat/Santa Rita STP Replacement	$ 2,217,700		$ (1,227)	$ 2,216,473
WW 12-01	Northern District WWTP Primary Treatment Upgrades	$ 11,743,514		$ (147,114)	$ 11,596,400
WW 12-02	Biosolids Management Plan	$ 200,000		$ (37,916)	$ 162,084
WW 12-03	Agana WWTP Interim Measures	$ 11,300,000		$ (41,913)	$ 11,258,087
WW 12-04	I&I SSES Southern	$ 800,000		$ (1,005)	$ 798,995
WW 12-05	I&I SSES Central	$ 850,000		$ (56,415)	$ 793,585
WW 12-06	I&I SSES Northern	$ -			$ -
WW 12-07	Umatac Merizo Replacement	$ 250,000		$ (1,982)	$ 248,018
WW 17-02	Northern District WWTP Secondary Treatment Upgrades	$ 1,000,000			$ 1,000,000
EE 05-01	Well Electrical Protection	$ -			$ -
EE 05-02	SCADA Pilot Project	$ 61,950		$ (42,138)	$ 19,812
EE 09-02	Electrical Upgrade - Water Wells	$ 354,227			$ 354,227
EE 09-03	Electrical Upgrade - Water Booster	$ -			$ -
EE 09-04	Electrical Upgrade -Water Booster	$ -			$ -
EE 09-05	Electrical Upgrade - Other Water	$ -			$ -
EE 09-06	SCADA Improvements – Phase 1	$ 250,000		$ (40,508)	$ 209,492
EE 09-07	SCADA Improvements – Phase 2	$ 1,056,986		$ (23,606)	$ 1,033,380
EE 09-08	SCADA Improvements – Phase 3	$ 24,956			$ 24,956
EE 09-09	SCADA Improvements – Phase 4	$ -			$ -
MC 05-01	Laboratory Modernization	$ -			$ -
MC 05-02	Land Survey	$ 499,688		$ (23,607)	$ 476,081

Exhibit D (page 2 of 2)

MC 09-01	General Plant Improvements / Water	$ 7,241,000		$ (38,763)	$ 7,202,237
	TOTALS	$ 87,402,000	$ 783,716	$ (783,716)	$ 87,402,000

Exhibit E (page 1 of 1)

2013 Bond Schedule and Reallocation					
CIP Number	CIP Name	Project Cost	Additional Funding	Reduction Funding	Adjusted Project Cost
PW 05-03	Santa Rita Springs Booster Pump Rehab Phase II	$ 100,000			$ 100,000
PW 05-05	"A" Series Well Transmission Line	$ 369,846			$ 369,846
PW 05-06	Water Booster Pump Station	$ 1,679,964		$ (13,171)	$ 1,666,793
PW 05-07	Meter Replacement Program	$ 996,532			$ 996,532
PW 05-08	Barrigada Tank Repair/Replacement	$ 4,987,000		$ (191,102)	$ 4,795,898
PW 05-09	Leak Detection	$ 16,916			$ 16,916
PW 05-10	Potable Water System Planning	$ 624,000			$ 624,000
PW 05-11	Implement Ground Water Rule	$ 1,000,000		$ (18,224)	$ 981,776
PW 05-13	Deep Well Rehabilitation	$ 200,000			$ 200,000
PW 05-14	New Deep Wells at Down Hard	$ -			$ -
PW 05-16	Master Meters	$ 712,060			$ 712,060
PW 09-01	Ugum Water Treatment Plant Intake	$ 859,801			$ 859,801
PW 09-02	Water Wells	$ 3,030,029			$ 3,030,029
PW 09-03	Water Distribution System	$ 10,912,453			$ 10,912,453
PW 09-04	Pressure Zone Realignment /	$ 337,110			$ 337,110
PW 09-08	Mechanical/Electrical Equipment	$ 426,799		$ (5,493)	$ 421,306
PW 09-10	Water Reservoir Internal/External	$ -			$ -
PW 09-11	Water System Reservoirs 2005 Improvements	$ 13,878,000			$ 13,878,000
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -			$ -
PW 12-04	Agana Heights & Chaot Tanks	$ 1,330,287			$ 1,330,287
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 11,605,000		$ (375)	$ 11,604,625
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ -			$ -
PW 12-07	Assessment of malojloj Elevetad & Yigo Elevated	$ 485,117			$ 485,117
PW 14-01	Fire Hydrant Replacement Program	$ -			$ -
WW 05-04	Wastewater System Planning	$ 650,901		$ (25,306)	$ 625,595
WW 09-01	Lift Station Upgrades	$ 563,148	$ 1,066,004		$ 1,629,152
WW 09-06	Wastewater Collection System Repl/Rehab	$ 660,313			$ 660,313
WW 11-03	Baza Gardens STP Replacement	$ 9,656,874		$ (336,872)	$ 9,320,002
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP	$ 371,699			$ 371,699
WW 11-08	Agat/Santa Rita STP Replacement	$ 67,200,000		$ (266,406)	$ 66,933,594
WW 12-03	Agana WWTP Interim Measures	$ 673,000			$ 673,000
WW 12-07	Umatac Merizo Replacement	$ -			$ -
EE 09-01	Wastewater Pump Station Electrical Upgrade	$ 99,861			$ 99,861
EE 09-02	Electrical Upgrade - Water Wells	$ 1,500,000		$ (10,296)	$ 1,489,704
EE 09-03	Electrical Upgrade - Water Booster	$ -			$ -
EE 09-04	Electrical Upgrade -Water Booster	$ 977			$ 977
EE 09-05	Electrical Upgrade - Other Water	$ 60,700			$ 60,700
EE 09-08	SCADA Improvements – Phase 3	$ 722,359		$ (33,704)	$ 688,655
EE 09-09	SCADA Improvements – Phase 4	$ -			$ -
MC 05-01	Laboratory Modernization	$ 1,171,465		$ (643)	$ 1,170,822
MC 05-02	Land Survey	$ 1,052			$ 1,052
MC 09-01	General Plant Improvements / Water	$ 2,441,737		$ (164,412)	$ 2,277,325
	TOTALS	$ 139,325,000	$ 1,066,004	$ (1,066,004)	$ 139,325,000

Exhibit E (page 1 of 1)

2016 Bond Schedule and Reallocation					
CIP Number	CIP Name	Project Cost	Additional Funding	Reduction Funding	Adjusted Project Cost
PW 05-06	Water Booster Pump Station	$ -			$ -
PW 05-07	Meter Replacement Program	$ 1,400,000			$ 1,400,000
PW 05-08	Barrigada Tank Repair/Replacement	$ -			$ -
PW 05-09	Leak Detection	$ 100,000			$ 100,000
PW 05-10	Potable Water System Planning	$ 876,294			$ 876,294
PW 05-13	Deep Well Rehabilitation	$ 250,000			$ 250,000
PW 05-14	New Deep Wells at Down Hard	$ 1,190,000			$ 1,190,000
PW 05-16	Master Meters	$ 2,151,539			$ 2,151,539
PW 09-01	Ugum Water Treatment Plant Intake	$ -	$ 267,881		$ 267,881
PW 09-02	Water Wells	$ 2,500,000			$ 2,500,000
PW 09-03	Water Distribution System	$ -	$ 750,000		$ 750,000
PW 09-04	Pressure Zone Realignment /	$ 1,141,000			$ 1,141,000
PW 09-08	Mechanical/Electrical Equipment	$ -			$ -
PW 09-10	Water Reservoir Internal/External	$ 800,000			$ 800,000
PW 09-11	Water System Reservoirs 2005 Improvements	$ 58,830,170			$ 58,830,170
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -			$ -
PW 12-01	Water Audit Program & Water Loss Control Plan	$ 550,000			$ 550,000
PW 12-04	Agana Heights & Chaot Tanks	$ 1,220,000			$ 1,220,000
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 1,822,133			$ 1,822,133
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 7,300,000			$ 7,300,000
PW 14-01	Fire Hydrant Replacement Program	$ 1,200,000		$ (3,623)	$ 1,196,377
WW 05-04	Wastewater System Planning	$ 312,983			$ 312,983
WW 09-01	Lift Station Upgrades	$ 1,714,755	$ 433,996		$ 2,148,751
WW 09-06	Wastewater Collection System Repl/Rehab	$ 1,055,478	$ 500,000		$ 1,555,478
WW 11-03	Baza Gardens STP Replacement	$ 22,663,776		$ (2,465,719)	$ 20,198,057
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP	$ 252,105			$ 252,105
WW 11-08	Agat/Santa Rita STP Replacement	$ 2,002,331		$ (224,328)	$ 1,778,003
WW 12-03	Agana WWTP Interim Measures	$ -			$ -
WW 12-07	Umatac Merizo Replacement	$ 20,800,000			$ 20,800,000
EE 09-01	Wastewater Pump Station Electrical Upgrade	$ -			$ -
EE 09-02	Electrical Upgrade - Water Wells	$ -			$ -
EE 09-03	Electrical Upgrade - Water Booster	$ -			$ -
EE 09-08	SCADA Improvements – Phase 3	$ 1,077,497			$ 1,077,497
EE 09-09	SCADA Improvements – Phase 4	$ 4,378,118			$ 4,378,118
MC 05-01	Laboratory Modernization	$ 1,127,000			$ 1,127,000
MC 05-02	Land Survey	$ 1,260,524		$ (8,207)	$ 1,252,317
MC 09-01	General Plant Improvements / Water	$ 1,543,760			$ 1,543,760
MC 15-01	Information Technology Integration Improvements	$ 500,000			$ 500,000
MP-Gen-Misc-05	GWA Infrastructure Improvements		$ 750,000		$ 750,000
	TOTALS	$ 140,019,463	$ 2,701,877	$ (2,701,877)	$ 139,269,463

Exhibit G (page 1 of 4)

FS - Funding Source

		2020		2021		2022		2023		2024	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
PW 05-01	Ground Water Disinfection	B2010	-								
PW 05-03	Santa Rita Springs Booster Pump Rehab Phase II										
PW 05-05	"A" Series Well Transmission Line										
PW 05-06	Water Booster Pump Station	B2013	-	IFCIP	-	IFCIP	300				
		GRANTS	387	B2020	700						
		SRF	1,200					SRF	2,000		
PW 05-07	Meter Replacement Program	B2010	268.97								
		B2013	142.053								
PW 05-08	Barrigada Tank Repair/Replacement	B2010	-								
		B2013	-								
PW 05-09	Leak Detection	B2010	182.963	B2020	400						
		B2013	16.916								
		B2016	100	IFCIP	-					IFCIP	70
PW 05-10	Potable Water System Planning			B2020	400						
				IFCIP	-						
PW 05-11	Implement Ground Water Rule	B2013	-								
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade	B2010	1,525.439								
PW 05-13	Deep Well Rehabilitation	B2010	143.955								
		B2016	139.987								
		B2020	350								
		SRF	7,188			SRF	4,000				
PW 05-14	New Deep Wells at Down Hard	B2016	1,190								
		B2020	500								
PW 05-15	Rehabilitation of Asan Springs	B2010	508.766								
		B2020	550								
PW 05-16	Master Meters	B2013	54.873								
		B2016	2,000								
PW 09-01	Ugum Water Treatment Plant Intake	B2010	339.66	IFCIP	-	IFCIP	500				
		B2013	76.469	B2020	400						
		B2016	267.881								
		B2020	200								
PW 09-02	Water Wells	B2013	873.184	SDC	1,000						
		B2016	2,290.297								
		B2020	500								
		IFCIP	-	IFCIP	300			SRF	2,000		
		SDC	2,350								
PW 09-03	Water Distribution System Pipe Replacement and Upgrades	B2010	250.060	IFCIP	400	SDC	500	SDC	500	IFCIP	800
		B2013	370.425								
		B2016	750								
		B2020	500	B2020	500	B2020	1,250	B2022	-	B2022	-
		SDC	1,850			IFCIP	500	IFCIP	1,000	SDC	500
										IFCIP	500
PW 09-04	Pressure Zone Realignment / Development 2005 Improvements	GRANTS	561								
PW 09-06	Central Water Distribution System 2005 Improvements	B2010	-								
PW 09-08	Mechanical/Electrical Equipment	B2013	-								
PW 09-09	Water Reservoir Internal/External	B2010	40.616								
PW 09-10	Water Reservoir Internal/External										
PW 09-11	Water System Reservoirs 2005 Improvements	B2013	44.416			IFCIP	1,200	IFCIP	1,000		
		B2016	5,587.265								
		B2020	25,100	B2020	800						
		IFCIP	-	IFCIP	-						
PW 11-01	Distribution System Upgrade	B2010	-								
PW 11-02	Ugum Water Treatment Plant Reservoir	B2020	7,500								
PW 12-01	Water Audit Program & Water Loss Control Plan	B2010	347.145								
		B2016	223.867								
PW 12-02	Production Plan / Reduce Navy Purchases	B2010	-								
PW 12-03	Hydraulic Assessment of Tanks	B2010	-								
PW 12-04	Agana Heights & Chaot Tanks	B2010	-								
PW 12-05	Tank Major Repair Yigo #1, Mangilao #2, Astumbo #1	B2010	-								
		B2013	-								
PW 12-06	Tank Replacement Piti & Hyundai	B2020	6,500								
PW 12-07	Assessment/Replacement of Malojloj Elevated & Yigo Elevated										
PW 12-08	Public Water System Asset Inventory/ Condition Assessment	B2010	-								
PW 12-09	Public Water System GIS & Mapping										
PW 14-01	Fire Hydrant Replacement Program	B2016	-			B2022	500			B2022	500
MP-PW-Pipe-01	Astumbo Zone Piping					B2022	368	B2022	700		
								B2023	2,700		
								IFCIP	1,082		
MP-PW-Pipe-02	Route 1 Astumbo Zone Piping							B2022	545	B2023	3,000
										IFCIP	300
MP-PW-Pipe-03	Harmon Cliffline Piping to Route 1							B2022	424		
MP-PW-Pipe-04	Hyundai Well Piping	B2020	500								
MP-PW-Pipe-05	Kaiser Zone Looping	B2020	300								
MP-PW-Pipe-06	Mangilao Pressure Zone Realignment	B2020	300								
MP-PW-Pipe-07	Mataguac BPS Suction Piping			B2020	500						
MP-PW-Pipe-08	Nimitz Lower BPS Piping							B2022	121	B2023	1,000
										IFCIP	400
MP-PW-Pipe-09	Yigo, Santa Rosa Zone Realignment					B2022	178	B2022	1,800		
								IFCIP	364		
MP-PW-Pipe-10	Miscellaneous Piping Projects	B2020	100	B2020	100	B2022	694				
MP-PW-Pipe-11	Miscellaneous Piping Connections	B2020	100	B2020	100	B2022	194				
MP-PW-Pipe-12	Rehabilitation and Replacement Program	B2020	1,000	B2020	1,000	B2022	2,500	B2022	2,600	B2023	2,000
								IFCIP	800		
MP-PW-Pipe-13	2-Inch Pipe Replacement Program	IFCIP	-	IFCIP	-	IFCIP	1,850	IFCIP	1,750	IFCIP	1,300
		B2020	2,230	B2020	1,100						
MP-PW-Pipe-14	Asbestos Cement Pipe Replacement Program					B2022	3,850	IFCIP	3,850	IFCIP	3,200
MP-PW-Pipe-15	PRV Rehab and Replacement	IFCIP	-	B2020	1,300	B2022	1,000	B2022	1,000	B2023	900
		B2020	750	IFCIP	-			IFCIP	468	IFCIP	450
MP-PW-Pipe-16	Valve Exercise, Repair, and Replacement Program	B2020	250			B2022	250			B2023	200
										IFCIP	30
MP-PW-Pipe-17	Cross Island Highway Piping			B2020	100	B2022	1,401				
MP-PW-Tank-22	Existing Tank Inspections	B2020	150								
MP-PW-Tank-23	Recurring Tank Inspections	B2020	200	B2020	200	B2022	214	B2022	214	B2023	214
MP-PW-BPS-01	Rehabilitate and Replace BPSs	B2020	309	B2020	100	B2022	150	B2022	150	B2023	150
		IFCIP	-	IFCIP	-						
MP-PW-BPS-02	Nimitz Hill Upper BPS	B2020	48								
MP-PW-BPS-03	Route 15 BPS									B2023	86
MP-PW-SWTP-01	Ugum SWTP River Intake Cleaning Project	B2020	380								
MP-PW-SWTP-02	Ugum SWTP Intake Modifications	B2020	1,174								
MP-PW-SWTP-03	Ugum SWTP Reliability Improvements	B2020	1,150								
MP-PW-SWTP-04	Ugum SWTP 7-Year Improvement Project									B2023	3,000

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										IFCIP	150
MP-PW-Well-01	Well Rehabilitation Program	B2020	300	B2020	3,300	B2022	440	B2022	1,500	B2023	440
								B2023	3,000		
		IFCIP	-	IFCIP	-	IFCIP	1,900	IFCIP	868		
MP-PW-Well-02	Well Equipment Overhaul Program					B2022	1,000			B2023	750
										IFCIP	750
MP-PW-Well-03	Capacity Enhancement – Well Exploration Program	B2020	500							B2023	750
										IFCIP	400
MP-PW-Well-04	Capacity Enhancement – Well Development and Construction Program					B2022	379	B2023	3,000		
								IFCIP	1,622		
MP-PW-Well-05	Wellhead Protection Program	B2020	300					B2022	660		
		IFCIP	-								
MP-PW-Well-06	Well Repair Program	B2020	950	B2020	250	B2022	1,000	B2022	1,000	B2023	750
		IFCIP	-					IFCIP	274	IFCIP	500
MP-PW-Misc-01	South Guam Water Supply Study	IFCIP	-								
		B2020	100								
MP-PW-Misc-02	Master Meter Implementation and Ongoing Meter Replacement	B2020	500	B2020	250	B2022	734	B2023	500	B2023	500
								IFCIP	234	IFCIP	200
MP-PW-Misc-03	Hydrant Condition Assessment and Maintenance					B2022	970	B2023	500	B2023	500
								IFCIP	470	IFCIP	450
MP-PW-Misc-04	OneGuam Program	IFCIP	-	IFCIP	-	IFCIP	50	IFCIP	50	IFCIP	35
		B2020	50	B2020	50						
MP-PW-Misc-05	Leak Detection Assistance	IFCIP	-								
		B2020	150								
DoD-3	Rehabilitation and New NGLA Monitoring Wells	GRANTS	2,465,674								

TOTAL POTABLE WATER PROJECTS B2010	3,608	-	-	-	-	
TOTAL POTABLE WATER PROJECTS B2013/FY2014	1,578	-	-	-	-	
TOTAL POTABLE WATER PROJECTS B2016/FY2016	12,549	-	-	-	-	
TOTAL POTABLE WATER PROJECTS B2020/FY2020	53,491	11,550	1,250	-	-	
TOTAL POTABLE WATER PROJECTS B2022/FY2022	-	-	15,822	10,714	500	
TOTAL POTABLE WATER PROJECTS B2023/FY2023	-	-	-	9,700	14,240	
State Revolving Fund (SRF) Grant Funds	8,388	-	4,000	4,000	-	
System Development Charge (SDC)	4,200	1,000	500	500	500	
GRANTS	3,413	-	-	-	-	
IFCIP	-	700	6,300	13,832	9,535	
	87,227	13,250	27,872	38,746	24,775	

FS - Funding Source

		2020		2021		2022		2023		2024	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
WW 05-04	Wastewater System Planning	B2013	-								
		B2020	150		-						
WW 05-05	Wastewater Vehicles	B2010	-								
WW 09-01	Lift station upgrades	B2013	1,083,502	IFCIP	-					IFCIP	200
		B2016	671,599	B2020	1,050			SRF	2,000	SRF	2,000
		SRF	1,700								
WW 09-02	Moratorium										
WW 09-06	Wastewater Collection System Repl/ Rehabilitation	B2010	96.891								
		B2013	81.903								
		B2016	954.019								
		B2020	350	B2020	1,050						
		IFCIP	-	IFCIP	-						
		SRF	1,900	SRF	1,000			SRF	2,000	SRF	2,000
WW 09-08	Facilities Plan/Design/interim for Baza Gardens STP Impr.										
WW 09-10	Facilities Plan/Design/interim for Agat-Santa Rita STP Impr.										
WW 09-11	WWTP Priority 1 Upgrades	SDC	1,000								
WW 11-03	Baza Gardens STP Replacement	B2010	-	B2020							
		B2013	-	IFCIP	500						
		B2016	-								
WW 11-04	Facilities Plan/Design/Interim for Umatac-Merizo STP Impr.										
WW 11-08	Agat/ Santa Rita STP Replacement	B2010	-								
		B2013	-								
		B2016	-								
WW 12-01	Northern District WWTP Primary Treatment Upgrades	B2010	-								
WW 12-02	Bio Solids Management Plan	B2010	-								
WW 12-03	Agana WWTP Interim Measures	B2010	-								
WW 12-04	I&I SSES Southern	B2010	-								
WW 12-05	I&I SSES Central	B2010	-								
WW 12-06	I&I SSES Northern										
WW 12-07	Umatac Merizo STP Replacement	SDC	1,000								
		B2010	-								
WW 12-09	Wastewater Facility Back Up Power										
WW 17-01	Wastewater Sewer System Expansion	SDC	1,000								
WW 17-02	Northern District WWTP Secondary Treatment Upgrade										

MP-WW-Pipe-01	Gravity Pipe Rehabilitation/Replacement Program	B2020	170	IFCIP	-	IFCIP	1,400	B2022	750	IFCIP	2,200
				B2020	1,800	SRF	4,000			SRF	2,000
										B2023	1,000
MP-WW-Pipe-02	Barrigada Pump Station Pipe Rehabilitation/Replacement					B2022	411	B2022	1,200		
								B2023	2,000		
								IFCIP	18		
MP-WW-Pipe-03	Route 1 Piti Pipe Rehabilitation/Replacement	IFCIP	-								
		B2020	940								
MP-WW-Pipe-04	Southern Link Pump Station Pipe Rehabilitation/Replacement	B2020	657								
MP-WW-Pipe-05	Agana Heights Pipe Replacement					B2022	169	B2022	1,500		
								B2023	1,000		
MP-WW-Pipe-06	Northern District Route 1 Capacity Replacement - Phase 1									B2023	1,000
										IFCIP	150
MP-WW-Pipe-07	Northern District Route 1 Capacity Replacement - Phase 2										
MP-WW-Pipe-08	Northern District Route 1 Capacity Replacement - Phase 3										
MP-WW-Pipe-09	North Dededo Capacity Replacement - Phase 1										
MP-WW-Pipe-10	North Dededo Capacity Replacement - Phase 2										
MP-WW-Pipe-11	Route 16 Capacity Replacement									B2023	500
										IFCIP	50
MP-WW-Pipe-12	Barrigada Capacity Replacement									B2023	30
										IFCIP	15
MP-WW-Pipe-13	Mangilao Capacity Replacement										
MP-WW-Pipe-14	Dededo Capacity Replacement										
MP-WW-Pipe-16	Yigo Capacity Replacement										
MP-WW-Pipe-17	Mamajanao Capacity Replacement	B2020	400	IFCIP	686	B2022	2,000				
				B2020	414	IFCIP	600				
MP-WW-Pipe-18	Agat-Santa Rita Capacity Replacement - Phase 1										
MP-WW-Pipe-19	Agat-Santa Rita Capacity Replacement - Phase 2										
MP-WW-Pipe-20	Agat-Santa Rita Capacity Replacement - Phase 3										
MP-WW-Pipe-21	Baza Gardens Capacity Replacement - Phase 1									B2023	192
										IFCIP	100
MP-WW-Pipe-22	Baza Gardens Capacity Replacement - Phase 2										
MP-WW-Pipe-23	Baza Gardens Capacity Replacement - Phase 3										
MP-WW-Pipe-24	Umatac-Merizo Capacity Replacement									B2023	150
										IFCIP	50
MP-WW-Pipe-25	Piping Near Bayside Lift Station			SRF	2,000			B2022	250		
MP-WW-Pipe-26	Finile Drive Rehabilitation - Agat	B2020	813								

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MP-WW-Pipe-27	Septic/Cesspool System Reduction Program					B2020	350.27	IFCIP	3,000	B2022 IFCIP	4,800 400
MP-WW-MH-01	Manhole Rehabilitation Program	B2020	350			B2022	350			B2022	350
MP-WW-FM-01	Force Main Rehabilitation/Replacement Program			B2020	100	B2022	1,458			B2023	120
MP-WW-FM-02	Replace Yigo Lift Station Force Main			B2020	200	B2022 IFCIP	1,579 250				
MP-WW-FM-03	Route 1 Asan Force Main Rehabilitation/Replacement	B2020	2,124								
MP-WW-FM-04	Hagåtña WWTP Force Main Rehabilitation/Replacement	B2020 IFCIP	6,600 -								
MP-WW-Pump-01	Lift Station Rehabilitation/Replacement Program	B2020 IFCIP	1,820 -	B2020	6,500	IFCIP B2022	600 420	B2023	6,124	B2023 IFCIP	1,420 500
MP-WW-Pump-02	Tumon Basin - Fujita Lift Station Analysis	B2020 IFCIP	6,600 -	B2020	3,000						
MP-WW-Pump-03	Replacement of Former Navy Pump Station (Donut Hole)	B2020	1,301								
MP-WW-WWTP-01	Hagåtña WWTP Primary Treatment Repair/Rehabilitation Program										
MP-WW-WWTP-02	Hagåtña WWTP Secondary Treatment Upgrade										
MP-WW-WWTP-03	Inarajan WWTP Repair/Rehabilitation Program										
MP-WW-WWTP-04	Pago Socio WWTP Pump Station Conversion					B2022 IFCIP	1,200 500	B2022	1,000		
MP-WW-WWTP-05	Umatac-Merizo WWTP Repair/Rehabilitation Program										
MP-WW-WWTP-06	Agat-Santa Rita WWTP Repair/Rehabilitation Program										
MP-WW-WWTP-07	Baza Gardens Cross Island Pipeline - Preliminary Treatment Equipment Repair and Rehabilitation Program										
MP-WW-WWTP-08	Northern District WWTP Completion			B2020	7,500	B2022 IFCIP	800 7,000				
MP-WW-WWTP-09	Ocean Outfall Inspection Program	IFCIP B2020	- 100								
MP-WW-Misc-01A	Update Wastewater Collection System Model (Major Update)										
MP-WW-Misc-01B	Update Wastewater Collection System Model (Continued)	IFCIP B2020	- 50			IFCIP	100			IFCIP	100
MP-WW-Misc-02	I/I and SSES Assessments	IFCIP B2020	- 50					B2022	400		
MP-WW-Misc-03	Miscellaneous Wastewater Improvements	B2020	500	IFCIP	200	IFCIP	1,000	IFCIP	1,000		
MP-WW-Misc-04	Fats, Oils, and Grease Study	IFCIP B2020	- 50								
DoD-01	NDWWTP Secondary Treatment Capacity 12MGD	GRANTS	7,594.541								
DoD-02	Northern Systems Wastewater System	GRANTS	-								

TOTAL WASTEWATER PROJECTS B2010	97	-	-	-	-
TOTAL WASTEWATER PROJECTS B2013/FY2014	1,165	-	-	-	-
TOTAL WASTEWATER PROJECTS B2016/FY2016	1,626	-	-	-	-
TOTAL WASTEWATER PROJECTS B2020/FY2020	23,025	21,614	350	-	-
TOTAL WASTEWATER PROJECTS B2022/FY2022	-	-	8,387	5,100	5,150
TOTAL WASTEWATER PROJECTS B2023/FY2023	-	-	-	9,124	4,412
State Revolving Fund (SRF) Grant Funds	3,600	3,000	4,000	4,000	6,000
System Development Charge (SDC)	3,000	-	-	-	-
GRANTS	7,595	-	-	-	-
IFCIP	-	1,386	11,450	4,018	3,765
	40,107	26,000	24,187	22,242	19,327

FS - Funding Source		2020		2021		2022		2023		2024	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
EE 05-02	SCADA Pilot Project	B2010	-								
EE 09-01	Wastewater Pumping Station Electrical Upgrade										
EE 09-02	Electrical Upgrade - Water Wells	B2013 B2020	- 90								
EE 09-03	Electrical Upgrade - Water Booster										
EE 09-04	Electrical Upgrade -Water Booster	B2020	150								
EE 09-05	Electrical Upgrade - Other Water	B2020	100								
EE 09-06	SCADA Improvements – Phase 1	B2010	-								
EE 09-07	SCADA Improvements – Phase 2	B2010 B2020	- 45								
EE 09-08	SCADA Improvements – Phase 3	B2013 B2016 B2020 SRF	- 275.494 25 100							SRF	2,000
EE 09-09	SCADA Improvements – Phase 4	B2016	753.492								

MP-Gen-EE-01	SCADA Implementation Phase A2 – Initial Project Completion	B2020	2,000	IFCIP B2020	300 2,250	IFCIP	1,550	B2022	2,600	IFCIP B2023	1,800 200
MP-Gen-EE-02	SCADA Implementation Phase B – Additional Sites							IFCIP	600	IFCIP	400
MP-Gen-EE-03	SCADA Implementation Phase C – Additional Instruments										
MP-Gen-EE-04	SCADA System Improvement Program									IFCIP	200

TOTAL ELECTRICAL PROJECTS B2010	-	-	-	-	-
TOTAL ELECTRICAL PROJECTS B2013/FY2014	-	-	-	-	-
TOTAL ELECTRICAL PROJECTS B2016/FY2016	1,029	-	-	-	-
TOTAL ELECTRICAL PROJECTS B2020/FY2020	2,410	2,250	-	-	-
TOTAL ELECTRICAL PROJECTS B2022/FY2022	-	-	-	2,600	-
TOTAL ELECTRICAL PROJECTS B2023/FY2023	-	-	-	-	200
State Revolving Fund (SRF) Grant Funds	100	-	-	-	2,000
System Development Charge (SDC)	-	-	-	-	-
GRANTS	-	-	-	-	-
IFCIP	-	300	1,550	600	2,400
	3,539	2,550	1,550	3,200	4,600

FS - Funding Source		2020		2021		2022		2023		2024	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
MC 05-01	Laboratory Modernization	B2013	-								
MC 05-02	Land Survey	B2010 B2016	- -								
MC 09-01	General Plant Improvements	B2010 B2013 B2016	- - 46.813	IFCIP	100	IFCIP	500	IFCIP	800	IFCIP	1,500
MC 15-01	Information Tecnology Integration Improvements	B2016	135.081	IFCIP	100	IFCIP	500	IFCIP	500	IFCIP	400

MP-Gen-Misc-01	GWA Systems Planning	IFCIP B2020	- 550	IFCIP	500	IFCIP	100	IFCIP	250	IFCIP	600
MP-Gen-Misc-02A	WRMP Update (Comprehensive Update)					IFCIP	100				
MP-Gen-Misc-02B	WRMP Update (Interim Update)	B2020	200								
MP-Gen-Misc-03	Surveying and Property Delineation	B2020	250	IFCIP	250			IFCIP	250		
MP-Gen-Misc-04	Information Technology Improvements	B2020	1,650	IFCIP	200	IFCIP	100	IFCIP	100	IFCIP	150

Exhibit G (page 4 of 4)

[illegible]	[illegible]	IFCIP	-							
MP-Gen-Misc-05	GWA Infrastructure Improvements	B2020	500	B2020	2,000			IFCIP	250	
		B2016	750							
MP-Gen-Misc-06	GPWA Fleet Maintenance Facility	B2020	500							
MP-Gen-Misc-07	Mobile Equipment Replacement Program	B2020	800	IFCIP	200	IFCIP	100	IFCIP	100	IFCIP 300
MP-Gen-Misc-08	General Plant Improvements	B2020	1,000	IFCIP	400	IFCIP	200	IFCIP	200	IFCIP 300
MP-Gen-Misc-09	Security and Resilience Program	B2020	200	IFCIP	100	IFCIP	100	IFCIP	100	IFCIP 50

TOTAL MISCELLANEOUS PROJECTS B2010	-	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2013/FY2014	-	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2016/FY2016	932	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2020/FY2020	5,650	2,000	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2022/FY2022	-	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2023/FY2023	-	-	-	-	-
State Revolving Fund (SRF) Grant Funds	-	-	-	-	-
System Development Charge (SDC)	-	-	-	-	-
GRANTS	-	-	-	-	-
IFCIP	-	1,850	1,700	2,550	3,300
	6,582	3,850	1,700	2,550	3,300

	2020	2021	2022	2023	2024	TOTAL
2010 Bond Series	3,704	-	-	-	-	$ 3,704
2013 Bond Series	2,744	-	-	-	-	$ 2,744
2016 Bond Series	16,136	-	-	-	-	$ 16,136
2020 Bond Series	84,576	37,414	1,600	-	-	$ 123,590
2022 Bond Series	-	-	24,209	18,414	5,650	$ 48,273
2023 Bond Series	-	-	-	18,824	18,852	$ 37,676
State Revolving Fund (SRF)	12,088	3,000	8,000	8,000	8,000	$ 39,088
System Development Charge (SDC)	7,200	1,000	500	500	500	$ 9,700
GRANTS	11,008	-	-	-	-	$ 11,008
Internally Funded CIP	-	4,236	21,000	21,000	19,000	$ 65,236
	137,456	45,650	55,309	66,738	52,002	$ 357,155

Yellow shade cell indictaed fund reduction
Blue shade cell indictaes fund addition
Green shade cell indicates future bond borrowing reduction

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Issues for Decision

Resolution No. 32-FY2020
Relative to Approval of Additional Funding to the Construction Management Contract for the Santa Rosa, Sinifa, and Santa Rita Tanks and System Upgrades

What is the project's objective and is it necessary and urgent?
The project is part of the 2011 Court Order Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program. As a Court Order project, it is necessary and urgent to work towards meeting the Court Order deadlines. The project's objective is to provide construction management services for the construction of the Santa Rosa, Sinifa, and Santa Rita Tank and System Upgrade project, which includes new PRV's.

Site construction has not started due to construction permitting and COVID-19 pandemic delays. The main issue with the permitting delay is that the Engineer of Record (Designer) did complete the archaeological process with the Historic Preservation Office (SHPO) prior to construction bid. The design team submitted reports to SHPO during the design process, but did not respond back to SHPO's comments. The issue was brought up by SHPO when the contractor submitted the permits for approval in late 2019.

Updated archaeological reports addressing SHPO's comments have been submitted to SHPO. As of 07/20/2020, SHPO has signed the Santa Rosa site permit. Contractor is awaiting approval from SHPO for the Santa Rita and Sinifa sites. Approval is expected in the coming weeks.

The COVID-19 pandemic forced certain permitting agencies to halt permit review from March to June 2020.

A change order is required to continue the construction management construction phase services.

Where is the location?
Santa Rosa, Sinifa, and Santa Rita reservoir sites.

- Santa Rosa reservoir is located in Yigo.
- Sinifa and Santa Rita reservoirs are located in Santa Rita village.

How much will it cost?
GHD's fee proposal is $337,337.39. The fee includes the following:

1. Extend contract duration in line with the contractor's time extension.

2. Bring construction management's performance period in line with contactor's performance period. The difference is independent of any time extensions that GWA may award the contractor due to permit, COVID-19 pandemic delays or other reasons. The original scope of work performance period was not in line with contactor's work performance period due to bid timing.
3. Cost escalation for staff rates and QA testing services.

There is $297,723.47 contingency available in the current authorization. GWA is requesting $39,613.92 to supplement the available contingency to bring the available funding to $337,337.39.

When will it be completed?

- Santa Rosa site: 365 calendar days
- Sinifa site: 365 calendar days
- Santa Rita site: 410 calendar days

CM start is dependent on receiving construction permits.

What is the funding source?
The funding shall be from PW 09-11: Water System Reservoirs 2005 Improvements.

The RFP/BID responses (if applicable):
N/A

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 32-FY2020

RELATIVE TO APPROVAL OF ADDITIONAL FUNDING TO THE CONSTRUCTION MANAGEMENT CONTRACT FOR SANTA ROSA, SINIFA, AND SANTA RITA TANK AND SYSTEM UPGRADES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, the CCU approved Resolution No. 13-FY2018 authorized a funding of $2,977,234.69 along with a 10% contingency of $297,723.47 to bring the total authorized funding amount to a maximum of $3,274,958.16 (Exhibit A) for the construction management contract; and

WHEREAS, the construction management contract for the Santa Rosa, Santa Rita, and Sinifa tanks and system upgrade project was issued on April 2, 2018;

WHEREAS, the construction management team has completed pre-construction and limited construction task which included design document review, bid review and analysis, development of quality assurance plan, project document control software setup, meetings, and submittal review; and

WHEREAS, the construction contract for the Santa Rosa, Santa Rita, and Sinifa tanks and system upgrade project was issued on September 30, 2019;

WHEREAS, construction at the sites have not started due to the following reasons:

1. Engineer of Record (Designer) did not complete the archaeological survey process for the three sites before the bid, which led to the State Historic Preservation Office delay in reviewing the permit package;
2. Permitting agencies shut down due to the COVID-19 pandemic, which further extended the permit review process with the State Historic Preservation Office and Guam Environmental Protection Agency;

WHEREAS, the construction management construction performance period has expired due to no construction site activity;

WHEREAS, GWA and GHD has negotiated Change Order No. 1 scope and fee of Three Hundred Thirty-Seven Thousand Three Hundred Thirty-Seven Dollars and Thirty-Nine Cents ($337,337.39) to continue and extend the construction management period to match contractor's performance period and construction management cost escalation (Exhibit B); and

WHEREAS, GWA Management is seeking Thirty-Nine Thousand Six Hundred Thirteen Dollars and Ninety-Two Cents ($39,613.92) to supplement the available contingency of $297,723.47 to fund Change Order No. 1 in the amount of Three Hundred Thirty-Seven Thousand Three Hundred Thirty-Seven Dollars and Thirty-Nine Cents ($337,337.39); and

WHEREAS, funding for this project will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.

2. The CCU finds that the terms of the scope and fee proposal submitted by GHD are fair and reasonable.
3. The CCU hereby authorizes $36,613.92 in additional funding to bring the total authorized funding amount to $3,314,572.08.
4. The CCU hereby authorizes the management of GWA the option to issue Change Order No. 1 in the not-to-exceed amount of $337,337.39. (Exhibit "B")
5. The CCU hereby authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by:	Attested by:
_____	_____
JOSEPH T. DUENAS	**MICHAEL T. LIMTIACO**
Chairperson	Secretary

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SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

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CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 13–FY2018

RELATIVE TO APPROVAL OF THE CONSTRUCTION MANAGEMENT CONTRACT FOR SANTA ROSA, SINIFA, AND SANTA RITA TANK AND SYSTEM UPGRADES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, the design of Santa Rosa, Sinifa, and Santa Rita Tank designs (RFP-09-ENG-2014) have been completed; and

WHEREAS, GWA has advertised the Request for Proposals (RFP-06-ENG-2017) soliciting statement of qualifications from experienced and qualified engineering firms to provide construction management services for the Santa Rosa, Sinifa, and Santa Rita Tank and System Upgrades project; and

WHEREAS, RFP packages were picked up by 19 interested parties, from which GWA received proposal submittals from 8 firms before the RFP submittal deadline; and

WHEREAS, the GWA A-E Selection committee reviewed and evaluated the 8 proposals (See Exhibit A – Score Summary) and generated a short list of the top 3 firms with a

recommendation to award a contract to the firm GHD (See Exhibit B – GM's Determination); and

WHEREAS, GHD and GWA negotiated the price for the construction management services (Santa Rosa, Sinifa, and Santa Rita tank and off-site system upgrades related to all three tank sites) to be provided in the total amount of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents ($2,977,234.69) (See Exhibit C – Scope of Work and Fees); and

WHEREAS, GWA management seeks approval of the fee proposal amount of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents ($2,977,234.69), along with a 10% contingency of Two Hundred Ninety-Seven Thousand Seven Hundred Twenty Three Dollars and Forty Seven Cents ($297,723.47), to bring the total authorized funding amount to a maximum of Three Million Two Hundred Seventy-Four Thousand Nine Hundred Fifty-Eight Dollars and Sixteen Cents ($3,274,958.16); and

WHEREAS, funding for this project will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by GHD are fair and reasonable (Exhibit C).
3. The CCU hereby authorizes the management to accept the fee proposal from GHD, which is also incorporated into this Resolution in its entirety.
4. The CCU hereby further authorizes the management of GWA to enter into a contract with GHD, in the amount of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents ($2,977,234.69).
5. The CCU hereby further approves the total funding amount for this project of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-

Four Dollars and Sixty-Nine Cents ($2,977,234.69), along with a 10% contingency of Two Hundred Ninety-Seven Thousand Seven Hundred Twenty-Three Dollars and Forty-Seven Cents ($297,723.47), to bring the total authorized funding amount to Three Million Two Hundred Seventy-Four Thousand Nine Hundred Fifty-Eight Dollars and Sixteen Cents ($3,274,958.16).

6. The CCU hereby further authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 23rd day of January 2018.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

SECRETARY'S CERTIFICATE

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 5

NAYS: 0

ABSTENTIONS: 0

ABSENT: 0



3

Exhibit A (1 of 1)

GUAM WATERWORKS AUTHORITY
Gloria B. Nelson Public Service Building • 688 Route 15 • Mangilao, Guam 96913

June 19, 2017

To: Thomas F. Cruz, P.E., Chief Engineer

From: Gloria P. Bensan
Chairperson, Consultant Selection Board9

Subject: RFP-06-ENG-2017
Construction Management Services for the Northern and Southern Guam Reservoirs (Santa Rosa, Sinifa, and Santa Rita) Tank and System Upgrades
GWA Project No. W14-007-BND

The following information is intended to document the evaluation process undertaken for the referenced solicitation.

EVALUATION COMMITTEE MEMBERS	
Name	**Title**
Brett Railey, P.E.	CIP Water Engineer Supervisor
Garrett Yeoh	Senior Engineer
Delfyn Quitlong	Engineer II
Vincent Pangelinan	Operations Manager

Consultant	Evaluation Score				Total	Rank
1. EMPSCO Engineering Consultants	75	65	90	74	304	7
2. HDR	90	80	95	86	351	2
3. LYON	65	72	89	80	306	6
4. SSFM International	86	82	94	85	347	3
5. Duenas, Camacho & Associates	79	74	92	80	325	4
6. E.M. Chen & Associates	71	67	88	70	296	8
7. AECOM	74	74	93	81	322	5
8. GHD	90	94	91	91	366	1

Scores were evaluated based on sum of the individual scores. The recommendation of the evaluation committee is shown in the ranking above.

Please review and approve at your earliest convenience so that we may proceed with the notification letters.

Exhibit B (1 of 1)

GUAM WATERWORKS AUTHORITY
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688 Route 15, Mangilao, Guam 96913

MEMORANDUM

To: Miguel C. Bordallo, General Manager

From: Thomas F. Cruz, P.E., Chief Engineer

Subject: RFP-06-ENG-2017
Construction Management Services for the Northern and Southern Guam Reservoirs (Santa Rosa, Sinifa, and Santa Rita) Tank and System Upgrades
GWA Project No. W14-007-BND

Date: June 19, 2017

The Selection Committee has completed all necessary actions for selecting the most qualified consultant for the referenced solicitation. All proposals were reviewed and scored according to the conditions established in the solicitation. The evaluation summary sheet is attached for your information.

The committee recommends the following top three (3) firms in order of preference for the project:

1. GHD
2. HDR
3. SSFM International

Concurred:

VINCENT E. GUERRERO
Supply Management Administrator

6/20/2017
Date

GENERAL MANAGER'S DETERMINATION

Consultant Firm Selected:

GHD

Remarks:

MIGUEL C. BORDALLO, P.E.
General Manager

6.21.17
Date

Exhibit C

September 22, 2017

Mr. Miguel Bordallo
General Manager
688 Route 15
Mangilao, GU 96913

SUBJECT: FORMAL SUBMITTAL OF FINAL SCOPE OF WORK AND FEE PROPOSAL FOR NORTHERN AND SOUTHERN GUAM RESERVOIRS (SANTA ROSA, SINIFA, AND SANTA RITA) TANK AND SYSTEM UPGRADES CONSTRUCTION MANAGEMENT SERVICES RFP-06-ENG-2017, PROJECT NO. W14-007-BND

Dear Mr. Bordallo:

GHD is pleased to formally submit our final Scope of Work and Fee Proposal for the above referenced project. The scope of work and fee proposal is based upon detailed meetings we held with GWA staff and we believe it meets GWA's needs in an economically feasible manner by pooling project management and resident engineer resources between the three (3) projects. We look forward to working with GWA on this critical project for Guam. If you have any questions or need additional information, please do not hesitate to contact me directly by email or telephone.

Sincerely,

Paul K. Baron, PE
Principal

Attachments: Scope of Work (15 pages)
Fee Proposal (29 pages)

GHD Inc. 865 South Marine Corps Drive Suite 202 Tamuning Guam 96913

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Guam Northern & Southern GWA Reservoirs
Construction Management Services Scope of Work & Fees

I. GENERAL

GHD, as the Construction Manager (CM) shall provide services relating to the daily field observation, inspection, testing, supervision, management, coordination, and compliance monitoring for the Guam Northern & Southern GWA Reservoirs (Projects) at the following project locations.

- **Santa Rita GWA Reservoir Replacement**
- **Santa Rosa GWA Reservoir Replacement**
- **Sinifa GWA Reservoir Replacement**

The projects generally consists of geo-technical ground improvements, demolition of existing tank structures, construction of pre-stressed concrete tanks conforming to AWWA/ANSI D110 for Type I Wire-and-Strand Wound, Circular Prestressed Concrete Water Tanks (site adapted for each location), installation of new water lines, construction and refurbishment of booster pump stations, chlorination systems, electrical, instrumentation and control, SCADA controls, plus associated utilities for each site. Additionally, the work includes preconstruction services including constructability review and value engineering of the project design.

Reports submitted to GWA by the CM shall be in a form approved by GWA's Chief Engineer.

II. PROJECT OVERVIEW

The construction management, testing, and field observation services for the projects will require general construction management and observation, as well as specialized inspection and testing. In addition to general construction management duties, the specialized inspection and testing will include, but not be limited to:

- Concrete placement
- Concrete anchors/Adhesive anchoring systems/Expansion bolts
- Grading
- Excavation
- Compaction grouting
- Compaction testing
- Pre-stressing operations
- Concrete cylinder testing
- Shotcrete application
- High strength bolting
- Earthwork/Soil analysis
- Instrumentation and SCADA
- Hydrostatic testing
- Disinfection

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In general, the CM shall function as Owner's representative whose primary function shall be to:

- Keep GWA advised and informed as to project progress and cost
- Manage the change process
- Disclose any information relevant to GWA's interest
- Make proactive recommendations to GWA for action to maintain progress and achieve the project schedule and budget
- Observing System Commissioning
- Act in the best interest of GWA

The CM shall administer the Contract, except that the CM is not authorized to make any decisions on the behalf of GWA that materially affect the intent of the design or financially obligate GWA in any manner.

III. TASK AND REQUIREMENTS

The following tasks are applicable to and will be provided to each of the Guam Northern & Southern GWA Reservoirs project locations.

A. PRE-CONSTRUCTION PHASE SERVICES:

In accordance with GWA's RFP, the purpose of this task is to obtain "a clear set of construction documents that will allow the perspective bidder to bid competitively, to build or install the designed facility in an efficient and timely manner, and reduce the number of change orders and delays." Under this task the CM will review the design documents; review the Contractor's Construction Management Quality Control Plan; prepare a Construction Quality Assurance Plan and a Construction Management Plan; provide contract bidding support; participate in meetings to discuss design documents; submit comments on design documents; and participate in meetings to discuss responses to comments as detailed in the following paragraphs.

Task A1: Design Document Review. The CM shall perform review of the design documents. The CM will provide redline mark-up of the plans and specifications and annotated comments. The review shall also verify that the design is clearly presented and potential construction related conflicts or deficiencies which may lead to substantive changes to the design, schedule, or cost of the project have been mitigated as practicable. Based upon our understanding of the current status of the design documents, we will undertake this at the 100% design stages.

Deliverables (electronic pdf files and hard copies)**:**

- Final Design Review Report

Task A2: CM Quality Assurance:

Task A2.1: Review Contractor Construction Management Quality Control Plan. The CM shall review, record, and comment on the Construction Management Quality Control Plan submitted by the Construction Contractor.

Task A2.2: Construction Quality Assurance Plan. The CM will develop, implement, and maintain a Quality Assurance Plan for civil, structural, electrical, mechanical, and instrumentation elements including specialized work related to the construction of concrete

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water reservoirs conforming to AWWA/ANSI D110 Type I Wire- and Strand- Wound, Circular Pre-stressed Concrete Water Tanks.

Content of the Quality Assurance Plan shall include, but not be limited to the following:

- Documentation of site conditions prior to beginning construction
- Review of approved submittals from the Contractor prior to fabrication or installation of materials and equipment
- Inspection, observation, and documentation of daily field work
- Monitoring of the Contractor's Quality Control Plan
- In-plant fabrication and/or witness testing at place of manufacture (where applicable)
- Reports and record keeping
- Non-conforming and deficient work resolution process
- Monitoring the Construction Contractor's implementation of their Quality Control Plan
- Complete list of specialized inspections for the tank structure and under tank

It is important to note that the CM is responsible for monitoring the Contractor's compliance with the Contract Documents, but is not responsible for the Contractor's means and methods the Contractor elects to use in performance of their work.

Deliverables (electronic pdf files and hardcopies):

- Quality Assurance Plan

Task A3: Construction Management Plan. The CM will develop and implement the Construction Management Plan (CM Plan) including guidelines for project organization and coordination in the field, standard daily operations, change order procedures, quality, schedule, and cost control. The CM Plan sets forth the procedures and approach for the construction of the project. The CM Plan will serve the CM, the Owner's Representative, and Contractors by defining the project, project team members and their roles, coordination among team members, procedure, key milestones, and schedule constraints. By establishing these parameters early in the project, the CM Plan will help control resources and costs, establish communication and coordination between the CM, Contractor, and GWA.

Deliverables (electronic pdf files and hardcopies):

- Construction Management Plan

Task A4: Contract Bidding:

The CM will review and perform an assessment of the 100% contract bid package (Parts A, B, & C) to assess their readiness, completeness, and suitability to solicit competitive bids. We will assist in the management of the bid documents, prepare for and conduct the pre-bid conference and site visit(s), manage and assist with RFI responses and addendums during the bid period.

After receipt of construction bid packages, the CM will perform an overall review of the bids received with a detailed emphasis on the apparent low bidder(s). The CM will work with GWA to perform the necessary follow-up with the bidders until the lowest responsible and responsive bidder is determined. Upon completion of this process, the CM will provide a technical memorandum summarizing the review and recommendation for award, and/or concurrence of

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the proposed selected contractor. Recommendation shall include document review to ensure compliance with all bid requirements and procurement regulations, bid analysis, and contractor selection.

Deliverables (electronic pdf files and hardcopies):

- Pre-Bid Meeting Agenda and Minutes
- Technical Memorandum(s) – Document Review, Bid Analysis, and Contractor Selection

B. CONSTRUCTION PHASE SERVICES:

Task B1.0: Project Records & Document Control. The CM shall provide services and tools to ensure that the project is efficiently managed and constructed according to the terms of the Contract. The primary function shall be the proper collection and organization of construction documents, gathering data regarding project progresses, producing progress reports, and monitoring time, cost, and quality.

The CM shall use Bentley EADOC for the Project Management Information System (PMIS) to track communication, design documents, construction documents, finances, and reporting. Our fee proposal shall include up to 15 users.

- Communication Documents: Memos, daily inspector logs for both contractor and CM, meeting minutes, and all other relevant documentation.
- Construction Documents: Submittals, RFIs, testing results, photo logs, special inspection, change orders, corrective actions, punch list, various construction logs, payment applications, wage rate reporting, and all other relevant documentation.
- Contract Documents: Specifications, drawings, permits, bid documents, contract documents, and all other relevant documentation.

Task B2.0: Daily Construction Reports. The onsite inspectors shall maintain daily reports of the general work performed, visitors to the site, daily production, weather and site condition, field orders, progress photos, material testing, special inspections, documentation of delays, non-conformance, punch lists, and other material and work facts and issues regarding the production of the work. The daily reports and logs shall be available to GWA project team for review at any time via the project management software.

Task B3.0: Progress Photo Log and Live Video Feed:

Task B3.1: Progress Photo Log. The CM shall prepare and retain a construction progress photo log in an album organized by year, month, and day. The photo log shall capture the different phases of the project – pre-construction, construction, and post-construction. The photo log shall be digital and provided to GWA at the end of the project.

Task B3.2: Live Video Feed. The CM shall provide 24 hour monitoring camera(s) to be installed at each project site to allow for regular monitoring of the project work. The camera system will allow for remote view and playback functions. A time-lapse video of the entire project shall be provided to GWA at the end of the project.

Task B4.0: Submittal and Shop Drawings. The CM shall review and act on (accept or reject) submittals required by the Contract documents. The CM shall review and provide comments

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regarding shop drawings, work drawings, material submittals, traffic control plan, safety plan, demolition plan, and other submittals for conformance with the Contract Documents. The CM reviewer shall be a competent person. In the event of a Contractor request for a time extension or material or equipment substitution, the CM shall make a recommendation to GWA regarding the substitution. The GWA Chief Engineer or his authorized representative will approve the substitution.

Task B5.0: Contractor Project Schedules. The CM shall review the Contractor's work schedule for accuracy and for efficient sequencing of the work. The CM shall provide recommendations to the Contractor to make changes deemed necessary and coordinate approval of the revised (recovery) schedule with GWA. Any delays shall be documented and notified to GWA and the Contractor when actual progress is behind schedule. The CM shall adhere to the requirements set forth in the Contract document for Contractor project schedule tracking and review.

Task B6.0: Payment Request. The CM shall receive and process payment requests from the Contractor. Payment requests shall be reviewed to be in compliance with the Contract documents and with the actual work completed. Upon completion of the review, the CM shall make any necessary adjustments, certify, and forward the request to GWA for processing of the payment. The CM shall submit their review, recommendation, acceptance, or rejection within five (5) working days of receipt from the Contractor. We assume the payment application will be a standard AIA or EJCDC.

Task B7.0: Payroll Report. The CM shall review any payroll submittals required by the Contract Documents including prevailing wage submissions. At the minimum, the Contractor and its subcontractors shall provide bi-weekly pay records for each of its employees on the project. The CM shall conduct two (2) random employee interviews every two (2) weeks to verify the pay request information. Upon completion of the review, the CM shall require the Contractor to make any necessary adjustments, certify, and forward the Payroll report along with the pay request to GWA for processing. Our review will be based on the wage rates provided in the bid package.

Task B8.0: Project Meetings. The CM shall schedule, arrange, and conduct conferences and meetings as required for clear communication of the Contract requirements and adherence to project schedules.

Task B8.1: Pre-construction Conference. The CM shall prepare for, chair, and provide meeting minutes for the pre-construction conference. The preconstruction conference shall be arranged to discuss mobilization, prosecution of work, safety, environmental protection, historic preservation, processing payments, material submittals, testing procedure, project schedules, inspections, and all other contract issues as necessary.

Task B8.2: Weekly Progress Meetings. The CM shall arrange for a weekly progress meeting with the Contractor and GWA to discuss progress of work, Contract requirements, and other issues related to the administration and prosecution of work. The CM shall prepare meeting minutes for all progress meetings with contractors, sub-contractors, GWA, and all other parties. The meeting minutes shall include action items from week to week until it has been completed.

Task B8.3: Special/Stakeholder Coordination Meetings. The CM shall arrange meetings between the Contractor and GWA, and other parties such as GEPA, DPW, GPA, etc. and other

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Stakeholders as necessary to address project issues that require decisions that cannot be made by the CM or to resolve regulatory concerns.

Task B9.0: As-Built Drawings:

Task B9.1: As-Built Drawing Review. After each weekly meeting, the CM shall review the Contractor's review drawings to ensure that they are current and capture any deviations from the original plan set.

Task B9.2: Maintain As-Built Drawing. The CM shall maintain a separate set of red-line as-built drawings on site. Drawings shall be available for GWA at any time. Monthly as-built documents shall be uploaded to the project management software system.

Task B10.0: Request for Information. The CM shall track Requests for Information (RFI) and maintain an RFI log; coordinate receipt of answers from other sources; and provide RFI responses with GWA's input regarding any aspect of the Contract documents, which includes the plans and technical specifications.

Task B11.0: General Compliance Monitoring. The CM shall evaluate and ensure Contractor compliance with all local and federal labor laws applicable to the Project. Any violations shall be immediately reported to GWA. Compliance monitoring shall include but not limited to the following:

Task B11.1: Regulations and Laws. The CM shall monitor compliance with Territorial and/or Federal laws, regulations, and rules.

Task B11.2: Labor Laws. The CM shall monitor Contractor and subcontractor procedures to verify legal status of employees on site. Verify bi-weekly compliance with labor requirements for federally funded projects including posting of wage rate schedules at the job site and safety requirements.

Task B11.3: Licensure. To the best of our ability, the CM shall confirm that the Contractor and its subcontractors and their workers have all required licenses and ensure that said licenses are valid throughout the terms of the Contract.

Task B11.4: Permit Compliance. To the best of our ability, the CM shall monitor and track Contractor's compliance in obtaining required permits and approvals.

Task B11.5: Insurance. To the best of our ability, the CM shall review the Contactor's insurance documents that are submitted to GWA for compliance with Contractor requirements. The CM shall track insurance documents, ensure insurance is valid throughout the term of Contract and maintain an insurance certificate log.

Task B12.0: Claims and Disputes. The CM shall promptly notify GWA regarding any issues that arise during construction of the project that could result in claims and/or disputes. The CM shall provide the following services to assist GWA with the resolution of claims and disputes:

Task B12.1: Claim Records. Maintain copies of all verbal and written communications, submittals, testimony, photos, and meetings regarding a potential dispute and promptly submit all originals to the Chief Engineer and Attorney for GWA.

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Task B12.2: Claims Reviews & Interpretation. Review claims submitted by the Contractor. Provide GWA with interpretation of Contract drawings and specifications and provide written recommendations to GWA regarding the solution of the dispute. At the outset of the Contract, the CM shall work with the Contractor to provide pricing for equipment, material, personnel, and other relevant considerations as specified in the bid. Prices agreed upon shall be used in any subsequent Change Order. No amounts shall be paid except for actual losses incurred by the Contractor through no fault of their own or for risks not allocated to the Contractor under the bid.

Task B13.0: Change Order Negotiations and Review:

Task B13.1: Change Order Review. Track all change orders and maintain a change order log. Provide change order evaluations, negotiations, and recommendations for approval by GWA. Change orders shall not be made when the Contractor has assumed such risk in the bid. Change orders may include requests for additional payments for differing site conditions and the CM shall utilize the bid documents to determine if a change order is warranted. The CM shall submit change order requests and supporting documentation to GWA for approval within ten (10) working days of receipt from the Contractor wherever practical.

Task B13.2: Change Order Negotiations with Contractor. Prepare independent cost estimates and negotiate change orders with the Contractor subject to GWA approval (final approval of negotiated change orders can only be made by the GWA General Manager).

Task B13.3: Change Order Documentation and Administration.
The CM shall maintain copies for all approved change orders (originals to be provided to GWA) and ensure that subsequent pay requests accurately represent these change orders. Approved change orders shall be administered by the CM along with other work elements according to the provisions of this scope of work.

Task B14.0: Design Changes and Verification Request:

As directed by GWA, prepare changes to the Contract technical documents (design and specifications) required to address a change order. GWA will direct the CM to make design changes only when changes are deemed by the GWA Chief Engineer and the Engineer of Record to have no material effect on the original intent of the design. All other design changes shall be forwarded to the Engineer of Record for processing.

If the request for change will materially change the original design, the CM shall coordinate with the Engineer of Record to accomplish the necessary design changes. The CM shall prepare a design change/verification request (DCVR) for submission to and for the approval of the Engineer of Record. If the required changes to the design are not covered within the original design scope of service, the CM will prepare a design scope amendment; solicit a fee proposal for the amendment on behalf of GWA, and assist with the negotiations.

Task B15.0: Construction Monitoring, Special Inspection, and Quality Control Monitoring.
The CM shall provide construction management and onsite inspection observation services to ensure that the work is accomplished in accordance with the Contract documents.
Project field staff shall review project documents, conduct daily observations, special inspections (where applicable), prepare and submit daily observation and special inspection reports; communicate deficiency issues and resolve with Contractor; and update a non-

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compliance log. It is anticipated that during peak construction as many as four (4) field staff may be present at the site during normal working hours.

Task B15.1: Project Manager. The CM will assign a part time Project Manager (PM) to the Guam Northern and Southern GWA Reservoir project. The PM will be responsible for general over-sight of the project, formal correspondence with GWA and the Contractor, and the professional and technical accuracy of all work and materials of the project.

Task B15.2: Resident Engineer. A full time Resident Engineer (RE) shall be assigned to manage all three (3) sites and will be at one (1) of the sites during normal working hours unless attending project related meetings or during holidays, vacation, or sick days. The Resident Engineer (RE) will determine along with the Project Manager (PM), which field staff will be onsite but it may be comprised of civil, structural, electrical, or mechanical field staff with the intent that there will be at least one (1) of them on site during normal working hours and will be supported by additional Special Inspectors as described in Task 15.4.

Task B15.3: Onsite Construction Inspector. The CM shall provide construction inspector staff at each of the three (3) sites to monitor the construction. The Resident Engineer and onsite field staff shall have demonstrable experience (satisfactory to GWA) relative to the discipline and type of work being performed. Project field staff shall review project documents, conduct daily observations, special inspections (where applicable), prepare and submit daily observation and special inspection reports, communicate deficiency issues and resolve with Contractor, and update a non-compliance log.

Task B15.4: Special Inspector. In addition to general compliance inspections, the CM shall provide special inspections services in accordance with IBC 2009, Chapter 17 by a person with demonstrable experience (satisfactory to GWA) related to concrete placement, structural field welding, field welding of reinforcement, concrete anchoring, expansion bolts, shotcrete application, high strength bolting, reinforcing steel placement, pre-stressing operations, grading, excavation, backfilling, foundation probing and injection, and other operations that require special inspections. The Special Inspections staff shall be accepted by DPW and approved by GWA before inspection.

SCADA, mechanical, and electrical inspections will be handled by competent staff on an "on-call" basis to periodically observe these phases of the construction. The same staff will be used to provide discipline specific submittal, shop drawing, and RFI review and response support. The staff shall have demonstrable experience relative to the discipline and type of work being performed.

Task B16.0: Testing (Quality Assurance).

Task B16.1: Contactor Testing. Schedule, observe, approve or reject, and document testing required under the Contract to be performed by the Contractor.

Task B16.2: Construction Quality Assurance Testing. The CM shall provide the following CQA testing to monitor the Contractor's independent testing firm:

SPECIAL TESTING	STANDARD	FREQUENCY
Concrete Compressive Testing: Water tank, structures, encasement, hand holds,	ASTM C-39	See attached QA Summary of Services

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electrical and communication vaults, pavement, retaining walls, drilled piles, etc.		
Backfill Compaction Testing: Over-excavation, tank foundation, structure foundations, manholes, vaults, electrical & communication hand holes, pavement, etc.	ASTM D-698 ASTM D-6938	See attached QA Summary of Services
Soil and Aggregate Analysis: Subgrade, limestone, base course, general fill, and structural fill, etc.	ASTM C-136 ASTM C-117 ASTM C-40 ASTM D-1140 ASTM D-1183 ASTM D-4318	See attached QA Summary of Services

Task B16.2: GWA Testing. Coordinate and monitor testing required to be performed by GWA.

Task B17.0: Acceptance. The CM shall promptly reject, orally, or in writing, any construction work that does not fully comply with Contract documents. Within 24 hours of notification to the Contractor that work elements have been rejected, the CM shall provide a written description of the deficiency to the GWA Chief Engineer for his/her concurrence. When concurrence has been obtained, the Contractor shall be directed to correct the work. The CM shall promptly advise the GWA Project Manager or the GWA Chief Engineer if the Contractor fails to correct or remove the defective work.

The CM shall issue written stop work orders to the Contractor and immediately provide GWA with a copy for a portion of or the entire Contract non-compliance issues as follows:

- If condition of work or Contractor actions threaten the health and safety of Contractor personnel, GWA representatives, or the public in such cases, stop work orders may be oral depending on the circumstances with written stop work order to follow.
- With prior notification and approval of the GWA Chief Engineer or Project Manager in all other cases.

Task B18.0: Construction QA Survey Services. The CM shall conduct survey and field measurements as necessary to verify that the work is located according to the plans and specifications. Changes to the horizontal and vertical alignments and elevations shall be made only with the approval of the GWA Chief Engineer.

- Pipeline Alignments and Location of Structures: Spot check Contractor's construction staking to verify the pipeline alignments and structure locations are as called for on the plan and specifications and in order to ensure that the work is in a location within lawful and approved Rights-of-Way and easements.
- Elevations: Spot check with Contractor's elevations for foundations, pads, pipe line inverts, backfill thickness, manholes, and other structures for which vertical elevations is a critical design element.
- Construction Survey Quality Assurance: The CM shall provide, at the minimum, the following CQA survey to monitor the Contractor's independent survey firm.
- See attached QA Summary of Services for a project specific list of those items to be verified. In general, the following work shall be provided: under-tank piping, over-excavation, tank foundation, vaults, pavement, water line, bench marks, etc.

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Task B19.0: Project Closeout (Punch List and Project Closeout Inspections). Throughout the construction of the project, the CM shall prepare and maintain a list of defects and deficiencies in the work which must be corrected by the Contractor prior to final acceptance of work. The list shall be provided to all members of the pre-final and final inspection team. The list shall be revised after inspections to reflect additional items identified during the inspection. Coordinate with the Contractor to ensure that all punch list items have been completed. When all items have been completed, inform GWA in writing recommending that the work be accepted.

Schedule, arrange, and conduct preliminary, pre-final, and final inspections of work with Contractor, GWA, GEPA, DPW, and other stakeholders in this project.

Task B19.1: Deficiency Log. Prepare and maintain a list of defects and deficiencies in the work which must be corrected by the Contractor prior to final acceptance of work.

Task B19.2: Preliminary Inspection. Preliminary inspections shall be arranged as necessary for specific work elements that require the certification and approval of other agencies.

Task B19.3: Pre-final Inspection. A pre-final inspection shall be conducted after substantial completion of the work.

Task B19.4: Final Inspection. The final inspection shall be conducted after correction of pre-final inspection punch list items.

Task B20.0: Train and Warranty Periods.

Task B20.1: Startup Training & Maintenance Procedures Coordination. The CM shall coordinate with the Contractor to schedule and conduct startup training and standard maintenance procedures required by the Contract documents.

Task B20.2: Master Warranty Package. The CM shall maintain a copy of the warranties and compile associated Manufacturer and Contractor warranty documents. Warranty information shall be included in the final project report. All original warranty documents shall be provided to GWA along with Lien Release Information from the Contractor.

Task B21.0: Equipment.

Task B21.1: Pressure Data Loggers. The CM shall provide GWA with 15 water pressure data loggers, batteries, lock boxes, chains, padlocks, and associated fittings. The water pressure data loggers shall contain USB downloading, water resistant case, delay start feature, and 0-300 PSI range. For the purposes of this proposal, the cost of five (5) data loggers has been carried in each of the three (3) projects. Product data for the above has been included as an attachment to this document.

Task B21.2: Equipment. The CM shall provide GWA with a Panasonic Toughbook 20 with Windows Pro operating system per the attached product data. For the purposes of this proposal, the cost of Toughbook has been divided equally and 1/3 of the cost was carried in each of the projects.

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Task B22.0: Expenses. The CM has summarized the costs associated with reports & reproduction, mileage, live video fee, website access & maintenance, project management information system (EADOC), QA soil & aggregate analysis, QA backfill compaction testing, QA concrete compressive strength testing, QA survey verification, etc. as a single total for all three (3) projects and carried the average amount equally in each of the projects.

C. POST-CONSTRUCTION SERVICES:

Task C1.0: Final Report. The CM shall prepare a final report after written acceptance of the work by GWA. The final report shall include a narrative documentation of all significant design and construction events and issues and shall become a historical record for the project. The Final Report shall include:

- All communication documentation
- All design documentation
- All construction documentation
- Warranty information
- Operation and maintenance information
- Asset management registry

Deliverables (electronic pdf files and 5 hard copies)**:**

- CM Final Report

Task C2.0: Record Drawings. After the conclusion of the project, the CM shall review and approve the official record drawings prepared by the Contractor.

Deliverables (electronic pdf files and 5 hard copies)**:**

- As-Built Record Drawings

IV. CLARIFICATIONS AND ASSUMPTIONS:

1) For this project, the CM's onsite presence shall consist of the following:

   a) ***One (1) part time Project Manager*** (assumed 45%) equally distributed to each of the three (3) project locations.
   b) ***One (1) full time Resident Engineer*** (assumed 100%) equally distributed to each of the three (3) project locations.
   c) ***Three (3) full time Civil/Structural Inspector*** (assume 100%), one at each of the three (3) project locations.
   d) ***One (1) part time Structural Special Inspector*** (assumed 24%), equally distributed to each of the three (3) project locations.
   e) ***One (1) part time SCADA Inspector*** (assume 21%), equally distributed to each of the three (3) project locations.
   f) ***One (1) part time equivalent of Mechanical Engineer/ Mechanical Inspector*** (assume 21%), equally distributed to each of the three (3) project locations.
   g) ***One (1) part time equivalent of Electrical Engineer/ Electrical Inspector*** (assume 21%), equally distributed to each of the three (3) project locations.

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h) ***One (1) part time equivalent of Submittal Manager/Project Manager Assistant*** (assume 45%) at each of the three (3) project locations, and various part time support as needed from the Principal, additional inspectors, engineers, etc.

2) Per the June 27, 2017 CM Services scoping meeting with GWA, the following project durations were used:

a) Santa Rosa GWA Reservoir Replacement ***(365 calendar days).***
b) Santa Rita GWA Reservoir Replacement ***(410 calendar days).***
c) Sinifa GWA Reservoir Replacement ***(365 calendar days).***

As requested by GWA, the CM shall provide limited close-out services for a period of 30 to 60 days after substantial completion provided all the construction work is complete and support is mainly at an administrative level (i.e. does not require full time staff to be assigned to the job site).

3) In an effort to reduce costs, the following assumptions have been made:

a) Preparation of Construction Management Plan (CMP) assumes a single document can be prepared for all three projects. One third effort carried in each fee proposal.
b) Contract Bidding effort assumes preparation if a single Pre-Bid Meeting, Contract Bidding Management effort, Bid Opening, Review of Bid Packages, Preparation of Recommendation Memorandum, and Technical Memorandums for all three (3) projects as a single bid package. One third of the effort has been carried in each fee proposal.
c) At the end of the project, the CM will turn-over each of the EarthCam - Construction Cam Lite HD to GWA. It is our understanding that GWA will have the cameras permanently installed at each of the three (3) sites by others. The cameras have an approximate value of ***$45,000.00*** excluding software support and archiving services which are excluded. Note, GHD access to the EarthCam environment is subject to compliance with their terms of use for the service. GHD is a subscriber to the service only and has no control over the performance of the EarthCam Service but will take all reasonable measures and actions within our power to ensure good performance of the system.

4) Inspection and testing of any existing steel storage reservoirs including draining and cleaning is excluded for this scope of services.

5) An amount of $18,930.00 for the Project Management Information System (PMIS), Bentley's ProjectWise Construction Management Service (EADOC), was budgeted for each project. Our fee assumes a total of 15 users for each project at a cost of approximately $180.00 per user per quarter as follows:

a) Client – **two (2)**
b) Construction Manager – **five (5)**
c) Contractor – **five (5)**
d) Spare – **three (3)**

Additional users can be provided at the request of GWA via Change Order. Note, GHD Access to the ProjectWise Construction Management environment is subject to compliance

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with the Bentley Systems terms of use for the service. GHD is a subscriber to the ProjectWise Construction Management service only and has no control over the performance of Bentley's ProjectWise Construction Management Service but will take all reasonable measures and actions within our power to ensure good performance of the system.

6) The CM will use Primavera P6 project management software to track the Contractor's project schedule, construction cost, resource tracking, and cost management.

7) The CM shall conduct random employee interviews every two (2) weeks for two (2) employees to verify the pay request information.

8) Job Site Safety is the sole responsibility of the Contractor. The CM assumes the Contractor shall perform all work in accordance with the requirements of the Contract Documents, applicable federal and local regulations, compliance with regulations of public agencies having jurisdiction, including safety and health requirements of the Territory of Guam and the Occupational Safety and Health Administration of the US Department of Labor (OSHA) as may be required.

   In the event that the GHD believes that the Contractor is not conducting their work in compliance with OSHA requirements, we may request GWA to bring in an independent third party safety expert to determine the extent of the Contractor's compliance and potential mitigation for non-compliance. We recommend that GWA include language in the contract documents requiring the contractor to pay for this additional cost in the event it is necessary.

9) ***Stop Work Orders:*** It is understood that the CM may issue written stop work orders to the Contractor in accordance with GWA policies for a portion of or the entire project for Contract non-compliance issues as follows:

   a) If in the opinion of the CM, the condition of work or Contractor actions threaten the health and safety of Contractor's personnel, GWA representatives, CM Staff, or the public in such cases, stop work orders may be oral depending on the circumstances (with written stop work order to follow).

   b) With prior notification and approval of the GWA Chief Engineer or GWA Project Manager in all other cases.

10) ***Authority to Direct Contractor Operations:*** The CM shall direct the Contractor's Operations under the following conditions:

   a) ***Safety and Public Convenience:*** In order to minimize inconvenience to the public and businesses, and in order to protect the safety of the public.

   b) ***Compliance:*** In order to affect compliance with local and federal regulations, such as those dealing with traffic control, environmental protection, cultural protection, and historic protection.

11) No formal Partnering Program will be provided but GHD will incorporate partnering to the extent practicable to ensure that environmental commitments are met; complete the

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project on time by resolving disputes quickly; finish within budget by proactively monitoring costs and facilitating creative solutions when faced with potential cost increases; ensure that quality is met by adequate oversight by the Contractor and CM.

12) An amount has been budgeted as detailed in the attached ***QA Services Summary*** to provide QA Testing. Material laboratory testing, Compaction testing, and Concrete Compressive Strength Testing shall be provided by a licensed geotechnical engineering firm. If additional services are required, it shall be brought to GWA's attention and a fee negotiated.

13) An amount has been budgeted as detailed in the attached ***QA Services Summary*** to provide QA Field Survey verification services. Survey verification services will be provided by a licensed land surveyor. If additional work is required it will be brought to GWA's attention and a fee negotiated.

14) No generator, fuel storage or pump systems are part of the project.

15) No project specific permitting services are included in this scope of work, but GHD will assist GWA, the designer, and the Contractor on a limited basis to help facilitate procurement of permits as expeditiously as possible.

16) No Archeological survey, Section 106 Historic Preservation, biological resource monitoring, Section 7 Endangered Species Act or related work is included.

17) Any and all permit fees are excluded.

18) The scope assumes the processing of up to ***100 RFIs*** (Task B10.0) per project, with the understanding that the EOR will provide responses to all design related RFIs. The scope also assumes ***five (5) change orders*** for (Task B13.0) and ***three (3) design changes*** for (Task B14.0). If additional work is required it will be brought to GWA's attention and a fee negotiated.

19) Warranty follow-up is not included in the scope. If required, a fee will be negotiated with GWA.

20) These CM Services are being provided for the construction of improvements shown on the ***90% Design package.*** If additional improvements are added to the construction contract then a fee for additional CM Services will be negotiated with GWA.

21) The Construction contract shall include requirements that the Construction Contractor pay for all overtime for inspection and special inspection requested by the Contractor outside of the normal 40 hour work week and this requirement will be strictly enforced and supported by GWA with payment coming out of the Contractor's Pay Request and then distributed to GHD by GWA via change order.

22) GWA agrees to negotiate with GHD for change orders for additional construction phase services due to construction delays, time extensions, additional work, adverse weather delays ***(in excess of 30 days),*** or any other reason not due to negligent acts of GHD until final acceptance of the project is achieved.

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VI. FEE SCHEDULE

TABLE 01 - SANTA RITA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$45,820.00
Construction	$905,939.38
Post-Construction	$31,802.00
SUBTOTAL	$983,561.38
GRT	$40,985.00
Santa Rita Total	**$1,024,546.39**

TABLE 02 - SANTA ROSA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Santa Rosa Total	**$976,344.15**

TABLE 03 - SINIFA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Sinifa Total	**$976,344.15**

TABLE 04 - SANTA RITA SANTA ROSA & SINIFA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$137,460.00
Construction	$2,625,270.15
Post-Construction	$95,406.00
SUBTOTAL	$2,858,136.15
GRT	$119,098.53
GRAND TOTAL	**$2,977,234.69**

See attached spreadsheets for detailed information. Note, work to be invoiced monthly based on prorated effort.

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Santa Rosa, Sinifa, and Santa Rita Tank System Upgrades
Fee Summary
09/22/2017

	Amount
Pre-Construction	$45,820.00
Construction	$905,939.38
Post-Construction	$31,802.00
SUBTOTAL	$983,561.38
GRT	$40,985.00
Santa Rita TOTAL	**$1,024,546.39**

	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Santa Rosa TOTAL	**$976,344.15**

	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Sinifa TOTAL	**$976,344.15**

	Amount
Pre-Construction	$137,460.00
Construction	$2,625,270.15
Post-Construction	$95,406.00
SUBTOTAL	$2,858,136.15
GRT	$119,098.53
GRAND TOTAL	**$2,977,234.69**

		20		13	-	20	20				
		20		13							
		20		13							
		20		13		40		6	6		6
		20		13		20					
ring											
		9		239							
					-	497					
			108	13		-	80			40	
								12	12		12
					-	108					
					-	108					
					-	24					
				18		54					
				18		54					
				18	-	54					
				8	-	8		8	8		8
				8	-	8		8	8		8
				8	-	8		8	8		8
				8	-	20					
				8		20					

		8		20		40					
				80							
				4		40					
	-	8	-	104	-	80	-	-	-	-	-
	-	1,328	-	13,104	-	10,880	-	-	-	-	-
	-	1,328	-	13,104	-	10,880	-	-	-	-	-
	-	397	166	987	98	2,422	180	106	122	40	122
	-	65,902	37,516	124,362	12,348	329,392	35,280	18,550	18,910	5,000	18,910
	-	65,902	37,516	124,362	12,348	329,392	35,280	18,550	18,910	5,000	18,910

	-	8	16	24	-	-	-	-	-	-	-	
	-	2	4	8	-	-	-	-	-	-	-	
	-	4	4	4	8	-	-	-	-	-	-	
	-	8	16	20	60	-	-	-	-	-	-	
	-	4	4	8	4	-	-	-	-	-	-	
	-	2	2	12	8	-	-	-	-	-	-	
	-	2	2	20	4	-	-	-	-	-	-	
	-	2	2	2	2	-	-	-	-	-	-	
	-	2	2	4	4	-	-	-	-	-	-	
	-	2		4	4	-	-	-	-	-	-	
	-	2	2	4	4	-	-	-	-	-	-	
	-	38	54	110	98	-	-	-	-	-	-	
	-	6,308	12,204	13,860	12,348	-	-	-	-	-	-	
	-	6,308	12,204	13,860	12,348	-	-	-	-	-	-	

		68		44		405						
						270						
				29	-	150	-	16	24		24	
				6		75	60	16	24		24	
				6	-	40						
		13		8								
		8		8								
				8		52						
						108						
		4	4	4		4						

					-	240						
			108	13		-	80			40		
								12	12		12	
					-	108						
					-	108						
					-	24						
				18		54						
				18		54						
				18	-	54						
				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	20						
				8		20						
	-	342	112	695	-	2,085	180	106	122	40	122	
	0%	16%	5%	33%	0%	100%	9%	5%	6%	2%	6%	2
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	

	-	388	166	909	98	2,165	180	106	122	40	122	
	-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910	
	-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910	

					-	240						
			108	13		-	80			40		
								12	12		12	
					-	108						
					-	108						
					-	24						
				18		54						
				18		54						
				18	-	54						
				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	20						
				8		20						
	-	342	112	695	-	2,085	180	106	122	40	122	
	0%	16%	5%	33%	0%	100%	9%	5%	6%	2%	6%	2
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	

	-	388	166	909	98	2,165	180	106	122	40	122
	-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910
	-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA RITA
Prepared by: B.Ryley

Attachment:
of:
Checked By: P.Baron
Date: 09/22/17

QA SURVEY ESTIMATE

	Quantity
Under Tank Piping:	
Inlet Piping & Top of Flange	$1,200
Outlet Piping & Top of Flange	$1,200
Over-Flow Piping & Top of Flange	$1,200
Drain Line Piping & Top of Flange	$1,200
Wash Down Piping	$1,200
Tank Foundation:	
Top of Formwork	$1,200
Control Building 1	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Control Building 2	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Manhole:	
Below Base	$800
Top of Manhole	$800
Bottom of Pipe	$800
Ponding Basin 1	
Subgrade	$800
Ponding Basin 2	
Subgrade	$800
Vaults:	
Top Outlet Meter Vault Footing Formwork	$800
Top Outlet Meter Vault Roof Slab Formwork	$800
Top Inlet Meter Vault Footing Formwork	$800
Top Inlet Meter Vault Roof Slab Formwork	$800
Top Electrical Handhole	$800
Pavement:	
Pavement Formwork	$800
Sidewalk Formwork	$800
Fencing	
Corners	$800

Drilled Piles		
Cast In Place Drilled Piles		$5,500
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.		$1,200
	Contingency 25%	$7,675
	TOTAL ESTIMATED BUDGET	**$38,375**

	Rate
Half Day	$800
Full Day	$1,200
Hourly	$150

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	Unit Cost	Quantity	Cost
Subgrade	$295.00	2	$590.00
Limestone	$295.00	2	$590.00
Base course	$295.00	2	$590.00
General Fill	$295.00	2	$590.00
		Contingency **25%**	$590.00
		TOTAL ESTIMATED BUDGET:	**$2,950.00**

Compaction Testing:

Control Building 1			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Control Building 2			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Reservoir Access Road			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	2	$148.00
Ponding Basin 1 Access Road			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
General Fill	$74.00	1	$74.00
Ponding Basin 2 Access Road			

Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Manhole			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Outlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Inlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Electrical Handhole (estimated)			
Below Foundation	$74.00	1	$74.00
Pavement:			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	2	$148.00
Base course	$74.00	1	$74.00
		Contingency **25%**	$573.50
		TOTAL ESTIMATED BUDGET:	**$2,867.50**

	Rate
1st Test	$55
2nd Test	$19
	$74

Concrete Testing:

Outlet Meter Vault:	Unit Cost	Quantity	Cost
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Inlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Encasement:			
Inlet Piping	$305.00	1	$305.00
Outlet Piping	$305.00	1	$305.00
Over-Flow Piping	$305.00	1	$305.00
Drain Line Piping	$305.00	1	$305.00
Wash Down Piping	$305.00	1	$305.00
Electrical & Communications Ducts	$305.00	1	$305.00

Handholes:				
Electrical	$305.00	1		$305.00
Pavement:				
Pavement	$305.00	1		$305.00
Control Building 1				
Footing	$305.00	1		$305.00
Building Corners	$305.00	1		$305.00
Control Building 2				
Footing	$305.00	1		$305.00
Building Corners	$305.00	1		$305.00
Manhole				
Pre-Cast Sections	$305.00	1		$305.00
Drilled Piles				
Cast In Drilled Piles	$305.00	77		$23,485.00
Water Tank:				
Foundation	$305.00	1		$305.00
Core Walls	$305.00	7		$2,135.00
Columns	$305.00	9		$2,745.00
Column Footings	$305.00	9		$2,745.00
Roof Slab	$305.00	1		$305.00
Shotcrete	$305.00	2		$610.00
		170		
			Contingency 15%	$5,718.75
			TOTAL ESTIMATED BUDGET:	**$43,843.75**

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):		$68.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:		$12.00
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:		$50.00
Unit Weight and Yield of Fresh Concrete, each:		$50.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):		$125.00
	SUBTOTAL:	**$305.00**

QA SPECIAL INSPECTIONS

Special Inspections:

Outlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Inlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220

Roof Slab	hours	2	110	$220
Encasement:				
Inlet Piping	hours	2	110	$210
Outlet Piping	hours	2	110	$210
Over-Flow Piping	hours	2	110	$210
Drain Line Piping	hours	2	110	$210
Wash Down Piping	hours	2	110	$210
Electrical & Communications Ducts	hours	2	110	$210
Handholes:				
Electrical	hours	2	110	$210
Pavement:				
Pavement	hours	4	110	$420
Manhole:				
Pre-Cast Sections	hours	2	110	$210
Drilled Piles				
Cast In Drilled Piles	hours	616	110	$67,760
Water Tank:				
Foundation	hours	8	110	$880
Core Walls	hours	14	110	$1,540
Columns	hours	18	110	$1,980
Column Footings	hours	18	110	$1,980
Roof Slab	hours	12	110	$1,320
Shotcrete	hours	24	110	$2,640
Vertical Post-tensioning	hours	8	110	$880
Circumferential Pre-stressing	hours	16	110	$1,760
		766		**$84,160**
		Contingency	10%	$8,416.00
		TOTAL ESTIMATED BUDGET:		**$92,576.00**
		GRAND TOTAL:		**$177,662.25**

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA ROSA
Prepared by: B.Ryley

Attachment:
of:
Checked By: P.Baron
Date: 09/22/17

QA SURVEY ESTIMATE

	Quantity
Under Tank Piping:	
Inlet Piping & Top of Flange	$1,200
Outlet Piping & Top of Flange	$1,200
Over-Flow Piping & Top of Flange	$1,200
Drain Line Piping & Top of Flange	$1,200
Wash Down Piping	$1,200
Over Excavation:	
Bottom of Over Excavation	$800
Top of Base course	$800
Top of Limestone	$800
Tank Foundation:	
Top of Formwork	$1,200
Hydropnuematic Tank Pad	
Top of Formwork	$800
Control and Pump Room Building	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Manhole:	
Below Base	$800
Top of Manhole	$800
Bottom of Pipe	$800
Ponding Basin	
Subgrade	$800
Vaults:	
Top Outlet Meter Vault Footing Formwork	$800
Top Outlet Meter Vault Roof Slab Formwork	$800
Top Inlet Meter Vault Footing Formwork	$800
Top Inlet Meter Vault Roof Slab Formwork	$800
Top Drain Vault Footing Formwork	$800
Top Drain Vault Roof Slab Formwork	$800
Top Outlet Check Valve Vault Footing Formwork	$800
Top Outlet Check Valve Vault Roof Slab Formwork	$800
Retaining Wall	
Top of Formwork	$1,200
Pavement:	
Pavement Formwork	$800

Sidewalk Formwork		$800
Fencing		
Corners		$800
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.		$1,200
	Contingency 25%	$7,000
	TOTAL ESTIMATED BUDGET	**$35,000**

	Rate
Half Day	$800
Full Day	$1,200
Hourly	$150

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	Unit Cost	Quantity	Cost
Subgrade	$295.00	2	$590.00
Limestone	$295.00	2	$590.00
Base course	$295.00	2	$590.00
General Fill	$295.00	2	$590.00
Structural Fill	$295.00	2	$590.00
		Contingency 25%	$737.50
		TOTAL ESTIMATED BUDGET:	**$3,687.50**

Compaction Testing:

Over-Excavation:			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Control and Pump Room Building			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Hydropnuematic Tank Pad			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Access Road			
Subgrade	$74.00	1	$74.00

Structural Fill	$74.00	2	$148.00
Limestone	$74.00	1	$74.00
Pond Access Road			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Ponding Basin			
General Fill	$74.00	1	$74.00
Off-Site Gravel Road			
Subgrade	$74.00	1	$74.00
General Fill	$74.00	1	$74.00
AC Pavement			
Subgrade	$74.00	1	$74.00
Structural Fill	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Concrete Sidewalk			
Subgrade	$74.00	1	$74.00
Structural Fill	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Outlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Inlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Drain Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Outlet Check Valve Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Retaining Wall			
Limestone	$74.00	1	$74.00
Electrical Handhole (estimated)			
Below Foundation	$74.00	1	$74.00
		Contingency 25%	$777.00
		TOTAL ESTIMATED BUDGET:	**$3,885.00**

	Rate
1st Test	$55
2nd Test	$19

$74

Concrete Testing:

Outlet Meter Vault:	Unit Cost	Quantity	Cost
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Inlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Drain Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Outlet Check Valve Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Encasement:			
Inlet Piping	$305.00	1	$305.00
Outlet Piping	$305.00	1	$305.00
Over-Flow Piping	$305.00	1	$305.00
Drain Line Piping	$305.00	1	$305.00
Wash Down Piping	$305.00	1	$305.00
Electrical & Communications Ducts	$305.00	1	$305.00
Handholes:			
Electrical	$305.00	1	$305.00
Pavement:			
Pavement	$305.00	1	$305.00
Retaining Wall			
Footing	$305.00	1	$305.00
Hydropnuematic Tank Pad			
Foundation	$305.00	1	$305.00
Water Tank:			
Foundation	$305.00	1	$305.00
Core Walls	$305.00	7	$2,135.00
Columns	$305.00	9	$2,745.00
Column Footings	$305.00	9	$2,745.00
Roof Slab	$305.00	1	$305.00
Shotcrete	$305.00	2	$610.00
		94	
		Contingency 15%	$2,333.25

TOTAL ESTIMATED BUDGET:	**$17,888.25**

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00
SUBTOTAL:	**$305.00**

QA SPECIAL INSPECTIONS

Special Inspections:

Outlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Inlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Drain Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Outlet Check Valve Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Encasement:				
Inlet Piping	hours	2	110	$210
Outlet Piping	hours	2	110	$210
Over-Flow Piping	hours	2	110	$210
Drain Line Piping	hours	2	110	$210
Wash Down Piping	hours	2	110	$210
Electrical & Communications Ducts	hours	2	110	$210
Handholes:				
Electrical	hours	2	110	$210
Pavement:				
Pavement	hours	4	110	$420
Retaining Wall				
Footing	hours	2	110	$210
Walls	hours	2	110	$210
Water Tank:				

Foundation	hours	8	110	$880
Core Walls	hours	14	110	$1,540
Columns	hours	18	110	$1,980
Column Footings	hours	18	110	$1,980
Roof Slab	hours	12	110	$1,320
Shotcrete	hours	24	110	$2,640
Vertical Post-tensioning	hours	8	110	$880
Circumferential Pre-stressing	hours	16	110	$1,760
		164		**$17,930**
			Contingency 10%	$1,793.00
			TOTAL ESTIMATED BUDGET:	**$19,723.00**
			GRAND TOTAL:	**$76,496.25**

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SINIFA
Prepared by: B.Ryley

Attachment:
of:
Checked By: P.Baron
Date: 09/22/17

QA SURVEY ESTIMATE

	Quantity
Under Tank Piping:	
Inlet Piping & Top of Flange	$1,200
Outlet Piping & Top of Flange	$1,200
Over-Flow Piping & Top of Flange	$1,200
Drain Line Piping & Top of Flange	$1,200
Wash Down Piping	$1,200
Over Excavation:	
Bottom of Over Excavation	$800
Top of Base course	$800
Top of Limestone	$800
Tank Foundation:	
Top of Formwork	$1,200
Control Room	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Manhole:	
Below Base	$800
Top of Manhole	$800
Bottom of Pipe	$800
Ponding Basin	
Subgrade	$800
Vaults:	
Top Outlet Meter Vault Footing Formwork	$800
Top Outlet Meter Vault Roof Slab Formwork	$800
Top Inlet Meter Vault Footing Formwork	$800
Top Inlet Meter Vault Roof Slab Formwork	$800
Top Drain Vault Footing Formwork	$800
Top Drain Vault Roof Slab Formwork	$800
Retaining Wall	
Top of Formwork	$1,200
Pavement:	
Pavement Formwork	$800
Sidewalk Formwork	$800
Fencing	
Corners	$800

Bench Marks:

Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200
Contingency 25%	$6,400
TOTAL ESTIMATED BUDGET	**$32,000**

	Rate
Half Day	$800
Full Day	$1,200
Hourly	$150

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	Unit Cost	Quantity	Cost
Subgrade	$295.00	2	$590.00
Limestone	$295.00	2	$590.00
Base course	$295.00	2	$590.00
		Contingency **25%**	$442.50
		TOTAL ESTIMATED BUDGET:	**$2,212.50**

Compaction Testing:

Over-Excavation:			
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Control Room			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Ponding Basin Access Road			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Off-Site Gravel Road			
Subgrade	$74.00	1	$74.00
General Fill	$74.00	1	$74.00
AC Pavement			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Concrete Sidewalk			
Subgrade	$74.00	1	$74.00
Structural Fill	$74.00	1	$74.00

Limestone	$74.00	1	$74.00
Outlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Inlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Drain Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Retaining Wall			
Limestone	$74.00	1	$74.00
Manhole			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Electrical Handhole (estimated)			
Below Foundation	$74.00	1	$74.00
		Contingency 25%	$610.50
		TOTAL ESTIMATED BUDGET:	**$3,052.50**

	Rate
1st Test	$55
2nd Test	$19
	$74

Concrete Testing:

Outlet Meter Vault:	Unit Cost	Quantity	Cost
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Inlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Drain Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Control Room			
Footing	$305.00	1	$305.00
Building Corners	$305.00	1	$305.00

Encasement:			
Inlet Piping	$305.00	1	$305.00
Outlet Piping	$305.00	1	$305.00
Over-Flow Piping	$305.00	1	$305.00
Drain Line Piping	$305.00	1	$305.00
Wash Down Piping	$305.00	1	$305.00
Electrical & Communications Ducts	$305.00	1	$305.00
Pavement:			
Pavement	$305.00	1	$305.00
Retaining Wall			
Footing	$305.00	1	$305.00
Fencing			
Posts	$305.00	1	$305.00
Water Tank:			
Foundation	$305.00	1	$305.00
Core Walls	$305.00	7	$2,135.00
Columns	$305.00	9	$2,745.00
Column Footings	$305.00	9	$2,745.00
Roof Slab	$305.00	1	$305.00
Shotcrete	$305.00	2	$610.00
		90	
		Contingency 15%	$2,241.75
		TOTAL ESTIMATED BUDGET:	**$17,186.75**

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00
SUBTOTAL:	**$305.00**

QA SPECIAL INSPECTIONS

Special Inspections:

Outlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Inlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Drain Vault:				

Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Encasement:				
Inlet Piping	hours	2	110	$210
Outlet Piping	hours	2	110	$210
Over-Flow Piping	hours	2	110	$210
Drain Line Piping	hours	2	110	$210
Wash Down Piping	hours	2	110	$210
Electrical & Communications Ducts	hours	2	110	$210
Control Room				
Footing	hours	2	110	$210
Walls	hours	2	110	$210
Pavement:				
Pavement	hours	4	110	$420
Retaining Wall				
Footing	hours	2	110	$210
Walls	hours	2	110	$210
Water Tank:				
Foundation	hours	8	110	$880
Corewalls	hours	14	110	$1,540
Columns	hours	18	110	$1,980
Column Footings	hours	18	110	$1,980
Roof Slab	hours	12	110	$1,320
Shotcrete	hours	24	110	$2,640
Vertical Post-tensioning	hours	8	110	$880
Circumferential Pre-stressing	hours	16	110	$1,760
		160		**$17,480**
		Contingency	10%	$1,748.00
		TOTAL ESTIMATED BUDGET:		**$19,228.00**
		GRAND TOTAL:		**$71,467.25**

ID Project Number: of:
scription: EXPENSE SUMMARY Checked by: P.Baron
epared by: B.Ryley Date: 09/22/17

EXPENSE ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT	MARKUP at 10%	TOTAL
RECONSTRUCTION PHASE TASKS						
eport Reproduction, misc.	3	lump sum	1,000.00	3,000.00	300.00	3,300.
					-	
					-	
SUBTOTAL				**3,000.00**	**300.00**	**3,300.**
ONSTRUCTION PHASE TASKS						
leage (1.50 vehicles x 30 miles x 321 days)	43,335	mile	0.52	22,534.20	2,253.42	24,787.
eport Reproduction, misc	3	lump sum	3,000.00	9,000.00	900.00	9,900.
e Video Feed, Website Access & Maintenance	3	each	29,642.54	88,927.61	8,892.76	97,820.
oject Mangment Information Systems	3	lump sum	16,500.00	49,500.00	4,950.00	54,450.
ita Logger	3	lump sum	5,735.35	17,206.04	1,720.60	18,926.
nasonic Toughbook 20	1	ea.	2,399.00	2,399.00	239.90	2,638.
A Soil & Aggregate Analysis	3	lump sum	2,950.00	8,850.00	885.00	9,735.
A Compaction Testing	3	lump sum	3,268.33	9,805.00	980.50	10,785.
A Concrete Testing	3	lump sum	26,306.25	78,918.75	7,891.88	86,810.
A Survey Verification	3	lump sum	35,125.00	105,375.00	10,537.50	115,912.
SUBTOTAL				**392,515.59**	**39,251.56**	**431,767.**
OST CONSTRUCTION SERVICES						
eport Reproduction, misc.	3	lump sum	1,500.00	4,500.00	450.00	4,950.
			-			
			-			
SUBTOTAL				4,500.00	450.00	4,950.
GRAND TOTAL				**400,015.59**	**40,001.56**	**440,017.**

ID Project Number: of:
scription: VIDEO CAMERA EXPENSE BREAKDOWN Checked by: P.Baron
epared by: B.Ryley Date: 09/22/17

EXPENSE ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT	MARKUP at 10%	TOTAL
RECONSTRUCTION PHASE TASKS						
SUBTOTAL						
ONSTRUCTION PHASE TASKS						
rthCam - Construction Cam Lite HD	1	ea.	4,495.00	4,495.00	449.50	4,944.5
lar Power Upgrade	1	ea.	4,022.00	4,022.00	402.20	4,424.2
obal Modem	1	ea.	1,399.00	1,399.00	139.90	1,538.9
iiversal Pole Mount	1	ea.	99.00	99.00	9.90	108.9
ftware Support & Archiving Services	1	ea.	575.00	575.00	57.50	632.5
dEx International Economy S&H	1	ls.	2,722.76	2,722.76	272.28	2,995.0
eather Station w/shipping	1	ea.	1,200.00	1,200.00	120.00	1,320.0
rthCam Consulting Services	1	incl.	-	-	-	-
ebsite Development & MP Image Integration	1	incl.	-	-	-	-
nd Edited Time-Lapse Move	1	incl.	-	-	-	-
ivis 6250 Weather Station	1	ea.	465.00	465.00	46.50	511.5
ivis 7654 Repeater	1	ea.	353.00	353.00	35.30	388.3
ivis 6555 Weather Link IP software	1	ea.	347.00	347.00	34.70	381.7
adlepoint ARC MBR 1400 Series Router	1	ea.	850.00	850.00	85.00	935.0
GB high-speed HSPA data	18	mth.	140.00	2,520.00	252.00	2,772.0
" Telescoping Light Mast w/Shipping	1	ea.	4,400.00	4,400.00	440.00	4,840.0
C Foundation (5' x 5' x 1') w/single delivery	1	ea.	2,000.00	2,000.00	200.00	2,200.0
tallation & Start up	1	ls.	1,500.00	1,500.00	150.00	1,650.0
SUBTOTAL				26,947.76	2,694.78	29,642.5
OST CONSTRUCTION SERVICES						
SUBTOTAL						
OTAL				26,947.76	2,694.78	29,642.5

ID Project Number: of:
scription: DATA LOGGER EXPENSE BREAKDOWN Checked by: P.Baron
epared by: B.Ryley Date: 09/22/17

EXPENSE ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT	MARKUP at 10%	TOTAL
RECONSTRUCTION PHASE TASKS						
SUBTOTAL						
ONSTRUCTION PHASE TASKS						
ckson PR325: Pressure Data Logger	15	ea.	499.00	7,485.00	748.50	8,233.5
ckson A016: Software w/USB Download Cable	15	ea.	89.00	1,335.00	133.50	1,468.5
ckson 721: Locking Case	15	ea.	79.00	1,185.00	118.50	1,303.5
ckson A220: Card Reader Kit	15	ea.	49.00	735.00	73.50	808.5
ckson R022: Pressure Filter Kit	15	ea.	30.00	450.00	45.00	495.(
ckson A061: USB Download Cable	15	ea.	19.00	285.00	28.50	313.5
ckson A125: 3 Volt (3V) Lithium Battery	15	ea.	16.00	240.00	24.00	264.(
ckson A791: Pressure Kit	15	ea.	149.00	2,235.00	223.50	2,458.5
t. Double Loop Cable w/ Padlock	15	ea.	12.79	191.85	19.19	211.(
dget for Miscellaneous, Fitting, Tubing, etc.	1	ls.	1,500.00	1,500.00	150.00	1,650.(
				-	-	-
				-	-	-
				-	-	-
				-	-	-
				-	-	-
				-	-	-
				-	-	-
SUBTOTAL				15,641.85	1,564.19	17,206.(
OST CONSTRUCTION SERVICES						
SUBTOTAL						
OTAL				15,641.85	1,564.19	17,206.(

June 11, 2020 (Revised July 13, 2020) Reference No. 11136961

Mr. Brett Railey, PE
Acting Chief Engineer
Guam Waterworks Authority
Gloria B. Nelson Public Service Building
688 Route 15
Mangilao, GU 96913

Re: Line1 GWA Project No: W14-007-BND, GWA Northern Southern Reservoir Project, Santa Rosa, Santa Rita, & Sinifa
Change Order #01 Extension of Contract Time

Dear Mr. Railey:

GHD is pleased to submit Change Order #01 to GWA for the extension of GHD's construction management contract for the above referenced project. As you are aware, GHD's contract is currently in expired as of July 23, 2019, which is the last construction management services completion date associated with the Santa Rita Reservoir. Since that date, GHD has continued to perform services in accordance with the contract terms in good faith and with GWA's awareness of the issue and with the understanding that GWA would issue a time extension and approve fair compensation for additional services in a timely manner.

As requested by you, Change Order #01 is submitted requesting the contract modifications as required to allow GHD to continue construction management services through the completion of Post Construction services stipulated in the CM contract and accounting for differences between the CM and Construction period of performance. This change order proposal addresses the following issues for the Northern Southern Reservoir Project construction management contract:

1. GHD's contract has expired and a contractual time extension is necessary to extend the contract duration and the performance period for construction management services through the revised construction contract period and in alignment with the time extension GWA is providing to the Contractor. GHD requests a time extension to the Construction Contractor end date for each reservoir site plus a minimum of 60 additional calendar days to complete Post Construction Services. GHD will start when GWA issues Notice to Proceed (NTP) to the CM to start work for each site. GWA will issue a separate NTP for each site.

2. GHD's CM period of performance is less than the Contractor's construction period of performance awarded by GWA. This difference is independent of any time extensions GWA may award the Contractor due to permit acquisition issues, COVID-19 pandemic delays, or other reasons. The time difference is summarized in the table below:

GHD
865 South Marine Corps Drive Suite 202 Orlean Pacific Plaza Tamuning Guam 96913
T 671 472 6792 F 671 477 6229 W www.ghd.com

REGISTERED COMPANY FOR ISO 9001 ENGINEERING DESIGN

Project	CM Performance Period (Days)	Contractor Performance Period (Days)	CM Performance Period Difference (Days)
Santa Rosa Reservoir	365	455	90 (64 working days)
Santa Rita Reservoir	410	485	75 (54 working days)
Sinifa Reservoir Project	365	425	60 (43 working days)

GHD's labor budget for CM and inspection services is based on the CM Performance Period. The cost of providing full-time CM and inspection services for this additional time is not included in GHD's budget for the project. We have identified two options to address this discrepancy. Option 1 is to increase GHD's budgeted labor effort to account for the difference and allow for the requested full-time CM and inspection services. Option 2 is GHD provides less than full-time CM and inspection services. The cost for Option 1 is included in this change order proposal using original labor rates with a 3% increase over two years. We are open to discussion on GWA's preferences to address this discrepancy.

3. As construction moves forward, GHD will incur additional unbudgeted QA expense cost associated with increased time for providing the services, and increased rates by our subconsultants since they were budgeted in 2017. We propose the following additional expense budget associated with rate increases and length of service:

    - Expense cost budget for the project management information system (ProjectWise) and the live video feed, website access and maintenance are pro-rated for an additional 6 months (180 calendar days) based on the original construction contract durations. If construction extends longer, GHD will invoice for the additional expense at cost plus a 10% markup.
    - Quality Assurance (QA) survey costs have increased significantly since 2017, and we are obligated to compensate our QA survey subconsultant at their current 2020 rates. The increase in QA survey costs due to the rate change is reflected in our fee proposal. Current survey rates and a calculation of the increase are included as an attachment to this proposal.
    - QA testing expenses have increased between 5% and 30% since 2017 depending on the specific test, and we are obligated to compensation our QA testing subconsultant at their current 2020 rates. The increase in QA testing costs due to the rate change is reflected in our fee proposal. Current QA testing rates and a calculation of the increase are included as an attachment to this proposal.

GHD proposes a lump sum fee of $337,337.39 for Change Order #01. Services not included in this proposal can be provided by a negotiated fee. Additional time and labor budget will be required if any additive bid items are included with the construction contract. We remain open to discussion with you on the specifics of our proposal. We welcome the opportunity to continue working with you on this important

project, and look forward to contributing to its successful completion. Should you have any questions about this proposal, please do not hesitate to contact me.

Very Respectfully,

GHD



Matthew G. Kennedy, PE
Principal Engineer

Attachments:

1. GHD Fee Proposal
2. GHD Revised Labor Rates
3. QA Cost Increase Documentation
4. 2020 QA Survey Rates
5. 2020 QA Testing Rates
6. Video Web Hosting Rates

cc: Bryan Ryley (GHD)
Nancy Heuman, PE (GHD)

Attachment 1

GHD - PROJECT FEE ESTIMATING SHEET

Project Name: North South Reservoir CM — Guam Waterworks Authority

Prepared by: Matt Kennedy — June 11, 2020

Job Number: 11136961

		LABOR COSTS							FEE COMPUTATION		
Task / Item	LABOR CATEGORY > RATE >	Prinp. Eng. $260.98 /Hr	Proj. Mngr. $176.11 /Hr	Civil Insp. $133.67 /Hr	Civil/Struct. Insp. $144.28 /Hr	Proj. Mngr. Asst $101.85 /Hr	Sbmtl/ RFI Mngr $126.00 /Hr	TOTAL HOURS	Project Expenses	Sub-con-sultant(s)	TOTAL FEE
Santa Rosa Reservoir											
B15.1 Project Manager			171					171	$0.00		$30,114.81
B15.3 Onsite Construction Inspector				256	256			512	$0.00		$71,155.20
B22.1 QA Soil & Aggregate Analysis								0	$1,250.00		$1,250.00
B22.2 QA Backfill Compaction & Testing								0	$346.50		$346.50
B22.3 QA Concrete Compressive Strength Testing								0	$1,081.00		$1,081.00
B22.4 QA Survey Verification								0	$11,825.00		$11,825.00
B22.5 Live Video Feed, Website Access & Maintenance								0	$1,501.10		$1,501.10
B22.6 Project Management Information System								0	$7,518.99		$7,518.99
	SUBTOTAL	**0**	**171**	**256**	**256**	**0**	**0**	**683**	**$23,522.59**	**$0.00**	**$124,792.60**
Santa Rita Reservoir											
B15.1 Project Manager			144					144	$0.00		$25,359.84
B15.3 Onsite Construction Inspector				216	216			432	$0.00		$60,037.20
B22.1 QA Soil & Aggregate Analysis								0	$1,000.00		$1,000.00
B22.2 QA Backfill Compaction & Testing								0	$255.75		$255.75
B22.3 QA Concrete Compressive Strength Testing								0	$2,649.00		$2,649.00
B22.4 QA Survey Verification								0	$10,588.00		$10,588.00
B22.5 Live Video Feed, Website Access & Maintenance								0	$1,501.10		$1,501.10
B22.6 Project Management Information System								0	$7,518.99		$7,518.99
	SUBTOTAL	**0**	**144**	**216**	**216**	**0**	**0**	**576**	**$23,512.84**	**$0.00**	**$108,909.88**
Sinifa Reservoir											
B15.1 Project Manager			115					115	$0.00		$20,252.65
B15.3 Onsite Construction Inspector				172	172			344	$0.00		$47,807.40
B22.1 QA Soil & Aggregate Analysis								0	$750.00		$750.00
B22.2 QA Backfill Compaction & Testing								0	$272.25		$272.25
B22.3 QA Concrete Compressive Strength Testing								0	$1,038.00		$1,038.00
B22.4 QA Survey Verification								0	$11,000.00		$11,000.00
B22.5 Live Video Feed, Website Access & Maintenance								0	$1,501.10		$1,501.10
B22.6 Project Management Information System								0	$7,518.99		$7,518.99
	SUBTOTAL	**0**	**115**	**172**	**172**	**0**	**0**	**459**	**$22,080.34**	**$0.00**	**$90,140.39**
Contingency											
2020 GRT (4.167%)								0	$0.00		$13,494.53
CHANGE ORDER TOTALS		**0**	**430**	**644**	**644**	**0**	**0**	**1,718**	**$69,115.76**	**$0.00**	**$337,337.39**

Attachment 2

Position	Class	2017 Approved Rates	2020 Proposed Rates (3% increase over 2 years)
Principal Engineer	Principal F3	$246.00	$260.98
Project Manager	Associate E3	$166.00	$176.11
QA Manager/Design Review	Associate F2	$226.00	$239.76
Resident Engineer	Enginner D1	$126.00	$133.67
Civil Inspector	Scientist B1	$126.00	$133.67
Civil/Structural Inspector	Engineer B2	$136.00	$144.28
Special Inspector	Engineer C1	$196.00	$207.94
SCADA Specialty	Sub consultant Budgetary	$175.00	$185.66
SR. Mechanical Engineer	Sub consultant Budgetary	$155.00	$164.44
Mechanical Inspector	Sub consultant Budgetary	$125.00	$132.61
SR. Electrical Engineer	Sub consultant Budgetary	$155.00	$164.44
Electrical Inspector	Sub consultant Budgetary	$125.00	$132.61
CADD Support	Technician/Technologist D1	$121.00	$128.37
Scheduler Mgmt	Sub consultant Budgetary	$150.00	$159.14
Submittal/RFI Manager	Engineer B2	$126.00	$133.67
Estimating Support	Engineer B1	$110.00	$116.70
Project Manager Ass't	Administrative Assistant A1	$96.00	$101.85

Attachment 3

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA RITA
Prepared by: B.Ryley

Attachment:
of:
Checked By: M.Kennedy
Date: 06/11/20

QA SURVEY ESTIMATE

	Cost (2017)	Cost (2020)
Under Tank Piping:		
Inlet Piping & Top of Flange	$1,200	$1,700
Outlet Piping & Top of Flange	$1,200	$1,700
Over-Flow Piping & Top of Flange	$1,200	$1,700
Drain Line Piping & Top of Flange	$1,200	$1,700
Wash Down Piping	$1,200	$1,700
Tank Foundation:		
Top of Formwork	$1,200	$1,700
Control Building 1		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Control Building 2		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Manhole:		
Below Base	$800	$1,000
Top of Manhole	$800	$1,000
Bottom of Pipe	$800	$1,000
Ponding Basin 1		
Subgrade	$800	$1,000
Ponding Basin 2		
Subgrade	$800	$1,000
Vaults:		
Top Outlet Meter Vault Footing Formwork	$800	$1,000
Top Outlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Inlet Meter Vault Footing Formwork	$800	$1,000
Top Inlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Electrical Handhole	$800	$1,000
Pavement:		
Pavement Formwork	$800	$1,000
Sidewalk Formwork	$800	$1,000
Fencing		
Corners	$800	$1,000
Drilled Piles		
Cast In Place Drilled Piles	$5,500	$5,500
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200	$1,700
Contingency 25%	$7,675	$9,600
2017 TOTAL ESTIMATED BUDGET	**$38,375**	**2020 TOTAL ESTIMATED BUDGET** **$48,000**
MARKUP AT 10 %	**$42,213**	**$52,800**

B22.4 COST INCREASE: $10,588

2017 Rate		2020 Rate	
Half Day	$800	Half Day	$1,000
Full Day	$1,200	Full Day	$1,700
Hourly	$150	Hourly	$250

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost		2020 Cost
Subgrade	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Limestone	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Base course	$295.00	2	$590.00	$ 395.00	2	$ 790.00
General Fill	$295.00	2	$590.00	$ 395.00	2	$ 790.00
		Contingency **25%**	$590.00		Contingency **25%**	$ 790.00
	2017 MATERIAL TESTING ESTIMATED BUDGET:		**$2,950.00**	**MATERIAL ESTIMATED BUDGET:**		**$ 3,950.00**

B22.1 COST INCREASE $ 1,000.00

Attachment 3

Compaction Testing:

	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Control Building 1					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Control Building 2					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Reservoir Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	2	$148.00	$ 80.00	$ 160.00
Ponding Basin 1 Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Ponding Basin 2 Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Manhole					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Outlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Inlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Electrical Handhole (estimated)					
Below Foundation	$74.00	1	$74.00	$ 80.00	$ 80.00
				$ 80.00	$ -
Pavement:					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	2	$148.00	$ 80.00	$ 160.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
		Contingency **25%**	$573.50		$ 620.00
		COMPACTION ESTIMATED BUDGET:	**$2,867.50**		**$ 3,100.00**
		TOTAL QA COMPACTION BUDGET:	**$2,867.50**		**$3,100.00**
		MARKUP AT 10 %	**$3,154**		**$3,410**

B22.2 COST INCREASE	**$255.75**

	2017 Rate
1st Test	$55
2nd Test	$19
	$74

	2020 Rate
1st Test	$57
2nd Test	$23
	$80

Attachment 3

Concrete Testing:

	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Outlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Inlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Encasement:					
Inlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Over-Flow Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Line Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Wash Down Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Electrical & Communications Ducts	$305.00	1	$305.00	$ 321.75	$ 321.75
Handholes:					
Electrical	$305.00	1	$305.00	$ 321.75	$ 321.75
Pavement:					
Pavement	$305.00	1	$305.00	$ 321.75	$ 321.75
Control Building 1					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Building Corners	$305.00	1	$305.00	$ 321.75	$ 321.75
Control Building 2					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Building Corners	$305.00	1	$305.00	$ 321.75	$ 321.75
Manhole					
Pre-Cast Sections	$305.00	1	$305.00	$ 321.75	$ 321.75
Drilled Piles					
Cast In Drilled Piles	$305.00	77	$23,485.00	$ 321.75	$ 24,774.75
Water Tank:					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Core Walls	$305.00	7	$2,135.00	$ 321.75	$ 2,252.25
Columns	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Column Footings	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Shotcrete	$305.00	2	$610.00	$ 321.75	$ 643.50
		170			
		Contingency 15%	$5,718.75	$ 1,254.83	$6,032.81
		TOTAL ESTIMATED BUDGET:	**$43,843.75**	**$ 9,620.33**	**$46,251.56**
		MARKUP AT 10 %	**$48,228**	**$10,582**	**$50,877**

	B22.3 COST INCREASE	$2,649
DESCRIPTION OF TESTS:		
Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00	$ 66.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00	$ 11.50
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00	$ 34.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00	$ 34.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00	$ 176.25
SUBTOTAL:	**$305.00**	**$321.75**

Attachment 3

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA ROSA
Prepared by: B.Ryley

Attachment:
of:
Checked By: M.Kennedy
Date: 06/11/20

QA SURVEY ESTIMATE

	Cost (2017)	Cost (2020)
Under Tank Piping:		
Inlet Piping & Top of Flange	$1,200	$1,700
Outlet Piping & Top of Flange	$1,200	$1,700
Over-Flow Piping & Top of Flange	$1,200	$1,700
Drain Line Piping & Top of Flange	$1,200	$1,700
Wash Down Piping	$1,200	$1,700
Over Excavation:		
Bottom of Over Excavation	$800	$1,000
Top of Base course	$800	$1,000
Top of Limestone	$800	$1,000
Tank Foundation:		
Top of Formwork	$1,200	$1,700
Hydropnuematic Tank Pad		
Top of Formwork	$800	$1,000
Control and Pump Room Building		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Manhole:		
Below Base	$800	$1,000
Top of Manhole	$800	$1,000
Bottom of Pipe	$800	$1,000
Ponding Basin		
Subgrade	$800	$1,000
Vaults:		
Top Outlet Meter Vault Footing Formwork	$800	$1,000
Top Outlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Inlet Meter Vault Footing Formwork	$800	$1,000
Top Inlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Drain Vault Footing Formwork	$800	$1,000
Top Drain Vault Roof Slab Formwork	$800	$1,000
Top Outlet Check Valve Vault Footing Formwork	$800	$1,000
Top Outlet Check Valve Vault Roof Slab Formwork	$800	$1,000
Retaining Wall		
Top of Formwork	$1,200	$1,700
Pavement:		
Pavement Formwork	$800	$1,000
Sidewalk Formwork	$800	$1,000
Fencing		
Corners	$800	$1,000
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200	$1,700
Contingency 25%	$7,000	$9,150
2017 TOTAL ESTIMATED BUDGET	**$35,000**	**2020 TOTAL ESTIMATED BUDGET** **$45,750**
MARKUP AT 10 %	**$38,500**	**$50,325**
		B22.4 COST INCREASE: **$11,825**

2017 Rate	
Half Day	$800
Full Day	$1,200
Hourly	$150

2020 Rate	
Half Day	$1,000
Full Day	$1,700
Hourly	$250

Attachment 3

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	**2017 Unit Cost**	**Quantity**	**2017 Cost**	**2020 Unit Cost**		**2020 Cost**
Subgrade	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Limestone	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Base course	$295.00	2	$590.00	$ 395.00	2	$ 790.00
General Fill	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Structural Fill	$295.00	2	$590.00	$ 395.00	2	$ 790.00
		Contingency 25%	$737.50	Contingency 25%		$ 987.50
	2017 MATERIAL TESTING BUDGET:		**$3,687.50**	**2020 MATERIAL TESTING BUDGET:**		**$ 4,937.50**

B22.1 COST INCREASE: $ 1,250.00

Compaction Testing:

Over-Excavation:	**2017 Unit Cost**	**Quantity**	**2017 Cost**	**2020 Unit Cost**	**2020 Cost**
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Control and Pump Room Building					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Hydropnuematic Tank Pad					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	2	$148.00	$ 80.00	$ 160.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Pond Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Ponding Basin					
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Off-Site Gravel Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
AC Pavement					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Concrete Sidewalk					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Outlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Inlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Drain Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Outlet Check Valve Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Retaining Wall					
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Electrical Handhole (estimated)					
Below Foundation	$74.00	1	$74.00	$ 80.00	$ 80.00
		Contingency 25%	$777.00		$ 840.00
	COMPACTION ESTIMATED BUDGET:		**$3,885.00**		$ 4,200.00
B22.2 COST INCREASE: $346.50	**TOTAL QA COMPACTION BUDGET:**		$3,885.00		$ 4,200.00
		MARKUP AT 10 %	**$4,274**		**$4,620**

Attachment 3

	2017 Rate
1st Test	$55
2nd Test	$19
	$74

	2020 Rate
1st Test	$57
2nd Test	$23
	$80

Concrete Testing:

	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Outlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Inlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Check Valve Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Encasement:					
Inlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Over-Flow Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Line Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Wash Down Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Electrical & Communications Ducts	$305.00	1	$305.00	$ 321.75	$ 321.75
Handholes:					
Electrical	$305.00	1	$305.00	$ 321.75	$ 321.75
Pavement:					
Pavement	$305.00	1	$305.00	$ 321.75	$ 321.75
Retaining Wall					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Hydropnuematic Tank Pad					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Water Tank:					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Core Walls	$305.00	7	$2,135.00	$ 321.75	$ 2,252.25
Columns	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Column Footings	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Shotcrete	$305.00	2	$610.00	$ 321.75	$ 643.50
		94			
		Contingency 15%	$2,333.25		$ 2,461.39
		TOTAL ESTIMATED BUDGET:	**$17,888.25**		**$ 18,870.64**
		MARKUP AT 10 %	**$19,677**		**$20,758**

B22.3 COST INCREASE: $1,081

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00	$ 66.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00	$ 11.50
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00	$ 34.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00	$ 34.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00	$ 176.25
SUBTOTAL:	**$305.00**	**$321.75**

Attachment 3

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SINIFA
Prepared by: B.Ryley
Attachment:
of:
Checked By: M.Kennedy
Date: 06/11/20

QA SURVEY ESTIMATE

	Cost (2017)	Cost (2020)
Under Tank Piping:		
Inlet Piping & Top of Flange	$1,200	$1,700
Outlet Piping & Top of Flange	$1,200	$1,700
Over-Flow Piping & Top of Flange	$1,200	$1,700
Drain Line Piping & Top of Flange	$1,200	$1,700
Wash Down Piping	$1,200	$1,700
Over Excavation:		
Bottom of Over Excavation	$800	$1,000
Top of Base course	$800	$1,000
Top of Limestone	$800	$1,000
Tank Foundation:		
Top of Formwork	$1,200	$1,700
Control Room		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Manhole:		
Below Base	$800	$1,000
Top of Manhole	$800	$1,000
Bottom of Pipe	$800	$1,000
Ponding Basin		
Subgrade	$800	$1,000
Vaults:		
Top Outlet Meter Vault Footing Formwork	$800	$1,000
Top Outlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Inlet Meter Vault Footing Formwork	$800	$1,000
Top Inlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Drain Vault Footing Formwork	$800	$1,000
Top Drain Vault Roof Slab Formwork	$800	$1,000
Retaining Wall		
Top of Formwork	$1,200	$1,700
Pavement:		
Pavement Formwork	$800	$1,000
Sidewalk Formwork	$800	$1,000
Fencing		
Corners	$800	$1,000
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200	$1,700
Contingency 25%	$6,400	$8,400
2017 TOTAL ESTIMATED BUDGET	**$32,000**	**2020 TOTAL ESTIMATED BUDGET** **$42,000**
MARKUP AT 10%	**$35,200**	**$46,200**

B22.4 COST INCREASE: $11,000

2017 Rate	
Half Day	$800
Full Day	$1,200
Hourly	$150

2020 Rate	
Half Day	$1,000
Full Day	$1,700
Hourly	$250

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	Quantity	2020 Cost
Subgrade	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Limestone	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Base course	$295.00	2	$590.00	$ 395.00	2	$ 790.00
		Contingency **25%**	$442.50	Contingency	25%	$ 592.50
		MATERIAL TESTING ESTIMATED BUDGET:	**$2,212.50**	**MATERIAL ESTIMATED BUDGET:**		**$ 2,962.50**

B22.1 COST INCREASE $750.00

Attachment 3

Compaction Testing:

Over-Excavation:	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Control Room					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Ponding Basin Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Off-Site Gravel Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
AC Pavement					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Concrete Sidewalk					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Outlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Inlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Drain Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Retaining Wall					
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Manhole					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Electrical Handhole (estimated)					
Below Foundation	$74.00	1	$74.00	$ 80.00	$ 80.00
		Contingency 25%	$610.50		$660.00
		COMPACTION ESTIMATED BUDGET:	**$3,052.50**		**$3,300.00**
		TOTAL QA COMPACTION BUDGET:	**$3,052.50**		**$3,300.00**
		MARKUP AT 10%:	**$3,357.75**		**$3,630.00**

B22.2 COST INCREASE $272.25

	2017 Rate
1st Test	$55
2nd Test	$19
	$74

	2020 Rate
1st Test	$57
2nd Test	$23
	$80

Attachment 3

Concrete Testing:

Outlet Meter Vault:	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Inlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Control Room					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Building Corners	$305.00	1	$305.00	$ 321.75	$ 321.75
Encasement:					
Inlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Over-Flow Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Line Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Wash Down Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Electrical & Communications Ducts	$305.00	1	$305.00	$ 321.75	$ 321.75
Pavement:					
Pavement	$305.00	1	$305.00	$ 321.75	$ 321.75
Retaining Wall					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Fencing					
Posts	$305.00	1	$305.00	$ 321.75	$ 321.75
Water Tank:					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Core Walls	$305.00	7	$2,135.00	$ 321.75	$ 2,252.25
Columns	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Column Footings	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Shotcrete	$305.00	2	$610.00	$ 321.75	$ 643.50
		90			
		Contingency 15%	$2,241.75		$2,364.86
		TOTAL ESTIMATED BUDGET:	**$17,186.75**		**$18,130.61**
		MARKUP AT 10%:	**$18,905.43**		**$19,943.67**

	B22.3 COST INCREASE	$1,038
DESCRIPTION OF TESTS:		
Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00	$ 66.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00	$ 11.50
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00	$ 34.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00	$ 34.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00	$ 176.25
SUBTOTAL:	**$305.00**	**$321.75**

GUAM SURVEYOR, LLC
STREET: 171 CHALAN PALE RAMON HAYA RT. 1 (MARINE DRIVE), YIGO, GUAM 96929
MAIL: P.O. BOX 6216, TAMUNING, GUAM 96931
P.671-637-2042/1 F.671-637-2041 M.688-0184
WWW.GUAMSURVEYOR.COM
SURVEYOR@GUAMSURVEYOR.COM

February 27, 2020

To Whom It May Concern,

RE: Rate Increase

Our unit rates have increased for 2020, please see new rates below:

Description	Quantity	Unit	Unit Price
Full Day - two man	1	LS	1700.00
Half Day - two man	1	LS	1000.00
Hourly	1	Hourly	250.00

Sincerely,

Dennis Balagtas
Vice President/Principal Land Surveyor

Attachment 6

WORK ZONE CAM

877-966-3101 www.workzonecam.com

Invoice # ZC0614196607

Arlyn Carpo
GHD Guam
865 South Marine Corps Drive Ste. 202
Tamuning, Guam 96913

Arlyn.Carpo@ghd.com
1 671 472 6792

Ship To:
Byan J Ryley
GHD Guam
865 South Marine Corps Drive Ste. 202
Tamuning, Guam 96913

bryan.ryley@ghd.com
+1671 472-6792

Invoice Date: June 14, 2019
Purchase Order: TBA
Payment Terms:
PREPAY

Make all checks payable to Work Zone Cam LLC:
Work Zone Cam LLC
Attn: Raymond Kuttner
650 East Crescent Avenue
Upper Saddle River, NJ 07458

Qty		Unit Price	Total
2	18 Megapixel Work Zone Cam Pro	$4,495.00	$8,990.00
	Live Video Burst		Included
1	Pole Mount Adapter		Included
1	Pole Mount Adapter		Included
1	18 Megapixel Work Zone Cam Pro		Included
	Live Video Burst		Included
1	Pole Mount Adapter		Included
1	Pole Mount Adapter		Included
2	Work Zone Cam Pro - 4K Fully Hosted Service (12 months)	$375	$9000.00
	Pro Services Package: • Custom client embeddable interface for public web page • Project Management Integration (Procore, PlanGrid, Aconex, SharePoint) • Professional HD time-lapse movie		Included
1	Work Zone Cam Pro - 4K Fully Hosted Service (12 months)	$375	$4500.00
	Pro Services Package: • Custom client embeddable interface for public web page • Project Management Integration (Procore, PlanGrid, Aconex, SharePoint) • Professional HD time-lapse movie		Included
	FedEx International Economy Shipping and Handling	$1,229.95	$1,229.95
	AMOUNT DUE		**$23,719.95**

Notes
Client to Provide Power & SIM Card with Data Plan

Available Options

Rentals *Multi-project discounts* *Insured installation* *Solar power upgrades*

PACIFIC SOILS ENGINEERING & TESTING

MATERIALS TESTING & FIELD SERVICES PRICE LISTS (UPDATE: JUNE 2019)

I. Laboratory Testing

TEST METHOD	DESCRIPTION	UNIT PRICE
AGGREGATES		
ASTM C-29/AASHTO T-19:	Standard Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate	$ 40.00
ASTM C-88/AASHTO T-104:	Standard Test Method for Soundness of Aggregates by Use of Magnesium Sulfate, 5 Cycles Maximum, per size:	$ 374.00
ASTM C-117/AASHTO T-11:	Standard Test Method for Materials Finer than 0.075 mm (No. 200) Sieve in Mineral Aggregates by Washing	$ 32.00
ASTM C-127/AASHTO T-85:	Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate	$ 32.00
ASTM C-128/AASHTO T-84:	Standard Test Method for Specific Gravity and Absorption of Fine Aggregate	$ 32.00
ASTM C-131/AASHTO T-96:	Standard Test Method for Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine (Los Angeles Abrasion Test)	$ 136.00
ASTM C-535:	Standard Test Method for Resistance to Degradation of Large Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine (Los Angeles Abrasion Test)	$ 175.50
ASTM C-136/AASHTO T-27:	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates	$ 57.00
ASTM D-2419/AASHTO T-176:	Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregates	$ 51.00
ASTM C-566:	Standard Test Method for Total Evaporable Moisture Content of Aggregate by Drying	$ 23.00
ASTM C-142:	Standard Test Method for Clay Lumps and Friable Particles in Aggregates	$ 257.50
ASTM D-5821:	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate	$ 281.50
ASTM D-4791:	Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate	$ 281.50
ASTM D-5711:	Standard Test Method for Determining the Adherent Coating on Coarse Aggregates	$ 93.00
ASTM C-40:	Standard Test Method for Organic Impurities in Fine Aggregates for Concrete	$ 93.00
AASHTO M-43:	Standard Specification for Sizes of Aggregate for Road and Bridge Construction	With Consultation

PACIFIC SOILS ENGINEERING & TESTING

TEST METHOD	DESCRIPTION	UNIT PRICE
AASHTO M-80:	Standard Specification for Coarse Aggregate for Portland Cement Concrete	With Consultation
AASHTO M-6:	Standard Specification for Fine Aggregate for Portland Cement Concrete	With Consultation
ASTM D-5240:	Standard Test Method for Testing Rock Slabs to Evaluate Soundness of Riprap by Use of Sodium Sulfate or Magnesium Sulfate	$ 391.50
ASTM D-3744:	Standard Test Method for Aggregate Durability Index per Fractions	$ 201.00
SOILS		
ASTM D-698/AASHTO T-99:	Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 KN-m/m3))	$ 118.50
ASTM D-1140:	Standard Test Method for Determining the Amount of Material in Soils Finer than the No. 200 (0.075 mm) Sieve in Soils by Washing	$ 32.00
ASTM D-1557/ AASHTO T-180:	Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 KN-m/m3))	$ 118.50
ASTM D-1883/ AASHTO T-193:	Standard Test Method for California Bearing Ratio (CBR) of Laboratory Compacted Soils	$ 170.00
ASTM D-2216/T-255/C-566:	Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass	$ 23.00
ASTM D-2487:	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)	$ 40.00
AASHTO M-145:	Recommended Practice for Classification of Soils and Soils-Aggregate Mixtures for Highway Construction Purposes	$ 40.00
ASTM D-4318/ AASHTO T-89 & T-96:	Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils	$ 180.50
ASTM D-854	Standard Test Method for Specific Gravity of Soil Solids by Water Pycnometer	$ 242.50
CONCRETE/CMU/MORTAR and GROUT		
ASTM C-39/AASHTO T-22:	Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens (Includes Curing, Standard Capping, and Handling)	$ 16.50
	Handling of Spare Cylinders (Curing and Handling)	$ 11.50
	Cylinders Supplied **by Others** (Includes Curing, Standard Capping and Handling)	$ 57.00

PACIFIC SOILS ENGINEERING & TESTING

TEST METHOD	DESCRIPTION	UNIT PRICE
ASTM C-42/AASHTO T-24:	Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete (Includes Trimming and Compressive Strength)	$ 34.00
ASTM C-78/AASHTO T-97:	Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Third Point Loading)	$ 40.00
	Handling of Spare Beams (Curing and Handling)	$ 27.50
ASTM C-109:	Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2 -inch (50 mm) Cube specimens)	$ 17.00
ASTM C-231/AASHTO T-152:	Standard Test Method for Air Content of Freshly Mixed Concrete by Pressure Method	$ 34.00
ASTM C-138:	Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete	$ 34.00
ASTM C-426:	Standard Test Method for Linear Drying Shrinkage of Concrete Masonry Units	Per hour
ASTM C-805:	Standard Test Method for Rebound Number of Hardened Concrete	Per hour
ASTM C-1019:	Standard Test Method for Sampling and Testing Grout (Prism Specimens)	$ 17.00

BITUMINOUS MIXTURES (ASPHALTIC CONCRETE)		
ASTM D-1559/AASHTO T245:	Standard Test Method for Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus with Voids Analysis	$ 312.00
ASTM D-2041/AASHTO T209:	Standard Test Method for Theoretical Maximum Specific Gravity of Bituminous Paving Mixtures	$ 77.50
ASTM D-2726/AASHTO T166:	Standard Test Method for Bulk Specific Gravity of Compacted Bituminous Mixtures Using SSD Specimens	$ 34.00
ASTM D-3549:	Standard Test Method for Thickness or Height of Compacted Bituminous Paving Mixture Specimens	$ 34.00
ASTM D-5444 (AASHTO T-30)	Standard Test Method for Mechanical Size Analysis of Extracted Aggregates	$ 89.00
ASTM D-6307 (AASHTO T-308)	Standard Test Method for Asphalt Content of Hot Mix Asphalt by Ignition Method, Method A	$ 309.00

PACIFIC SOILS ENGINEERING & TESTING

TEST METHOD	DESCRIPTION	UNIT PRICE
II. Field Testing Services:		
ASTM D-1556/AASHTO T-191:	Density of Soil in Place by the Sand-Cone Method (Minimum of three (3) tests per trip)	
	First Test	$ 68.00
	Subsequent Tests, same trip	$ 34.00
ASTM D-6938/AASHTO T-310:	Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth) (Minimum of three (3) tests per trip)	
	First Test	$ 51.00
	Subsequent Tests, same trip	$ 17.00
ASTM D-2950:	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods (Minimum of three (3) tests per trip)	
	First Test	$ 51.00
	Subsequent Tests, same trip	$ 17.00
Soils and Bituminous Mixtures Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 47.00
Concrete Testing and Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 47.00
Cancellation of Test Schedule, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 47.00
III. Consultation Services:		
Principal Engineer, per hour:		$ 180.00
Senior Civil Engineer, per hour:		$ 105.00
Field/Laboratory Technician, per hour:		$ 47.00
IV. Overtime, Weekend or Holiday Rates for Field Testing Services:		
ASTM D-6938/AASHTO T-310:	Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth) (Minimum of three (3) tests per trip)	
	First Test	$ 57.00
	Subsequent Tests, same trip	$ 23.00
ASTM D-2950:	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods (Minimum of three (3) tests per trip)	
	First Test	$ 57.00
	Subsequent Tests, same trip	$ 23.00

PACIFIC SOILS ENGINEERING & TESTING

TEST METHOD	DESCRIPTION	UNIT PRICE
Soils and Bituminous Mixtures Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 70.50
Concrete Testing and Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 70.50
Cancellation of Test Schedule, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 70.50

********UNIT PRICES SUBJECT TO CHANGE WITHOUT NOTICE********

V. Other Services Available--- Prices Subject to Negotiation:

1. Concrete coring for compressive strength determination.
2. Bituminous mixture coring for density and thickness determination.
3. Asphalt cement testing.
4. Rebar testing.
5. Top soil testing.
6. Field CBR testing.
7. Quality Control Services for concrete and asphalt batch plants.
8. Construction Inspection Services for Earthwork, Concrete and Bituminous Mixtures.
9. Pile Driving Monitoring Services.
10. Pile Load Testing Monitoring Services.
11. Field Percolation Testing Services.
12. Slope Stability Consultation.
13. Rock Core Drilling.
14. Foundation Probing Investigations.
15. Complete Foundation Investigation and Testing Services.
16. Concrete, Mortar or Bituminous Mixtures Mix Designs.

PACIFIC SOILS ENGINEERING & TESTING

***** SUMMARY OF BASIS OF CHARGES ****

1. Pacific Soils Engineering & Testing makes no warranty, either expressed or implied, as to its findings, recommendations, specifications, or professional advice except that they are prepared and issued in accordance with generally accepted professional engineering practices.

2. The prices listed on the preceding pages are typical prices for field and laboratory testing services frequently requested by Pacific soils Engineering & Testing's customers. Prices for other services will be given upon request.

3. Invoices will be issued on a monthly basis, or upon completion of a project, whichever is sooner. Billings are payable upon presentation, unless otherwise agree, and are past due 30 days from the invoice date. A finance charge of 1-1/2% per month, or the maximum amount allowed by law, will be charges to past due accounts. Any attorney's fees or other costs incurred in collecting any delinquent amount shall be paid by the client.

4. It was assumed that our company's current comprehensive insurance coverages are adequate for this project, including Worker's Compensation Insurance, Comprehensive General Liability, Errors and Omissions. Upon request, a copy of our company's Certificate of Insurance will be forwarded when received from our insurance company. Any changes to our current comprehensive coverage are subject to additional charges.

5. All field work was assumed to be performed during regular working hours 0800 - 1700 hours. All work performed in excess of 8 hours per day and weekend/holiday work will be charged at 1.5 times the hourly rate. Time worked in excess of 12 hours per day will be charges at 2 times the hourly rate.

6. Advance notification for field test schedules, typically 24 to 48 hours prior, is requested in order to better accommodate your firm's preferred time frame and allow PSE&T to adequately allocate our manpower resources. While it is also understood that field production and weather conditions may require tweaking of this request, every effort will be made to work with you company's designated representative to closely coordinate your request.

7. It is preferred that all field and laboratory test requests be emailed to our office at admin@pacificsoilsguam.com. Otherwise, please contact our office at (671) 646-1471/3278/5790. We ask that all field test schedules be made with our front office personnel instead of the field technicians visiting the project site.

8. Laboratory testing services are performed on a first come, first served basis. Clients are requested to coordinate with our front office through telephone or email (admin@pacificsoilsguam.com or our manager, danielsan@pacificsoilsguam.com) regarding their requested test program and expected completion time. Samples requiring special urgency will be charged additional handling and manhour rates.

9. All field testing services were considered to be ready upon the arrival of our company's field technician. Stand-by time or delays incurred during the test procedure because of external factors were not included in our pricing.

10. All field testing services are charged on a portal to portal basis.

11. A one-hour minimum charge per day will be made for any office services.

12. Outside services will include a 20% markup, unless otherwise noted.

13. In the event of above average increase of fuel costs, a fuel subcharge of up to 3% will be added to all invoices.

14. The proposed fee includes standard invoicing with daily summary charges. Additional administrative services will be invoiced if backup information (eg. daily field reports or work summaries, etc.) is requested.

15. Pacific Soils Engineering & Testing routinely disposes all test samples (soils, aggregates, cylinders and bituminous mixtures) after submission of our final report unless otherwise notified by client.

16. Cylindrical sampling requiring additional handling and preparation are charged on a per hour basis.

17. This price listing assumes our company's current International Accreditation Service (IAS) Accreditation, existing insurance coverages and drug testing program were assumed to be adequate for this project.

18. We assumed that our company's current eBIDs passes for military installations are adequate for this undertaking. Additional secured passes/badges are subject to additional fees.

19. Natural Recourses, Cultural Training, Biological Training, UXO/MEC Safety Training and other safety/training sessions were not included in the price structures.

20. Pacific Soils Engineering & Testing reserves the right to adjust fee schedule on project not completed within 180 days from the contract signature date. For time and material projects, any not to exceed amount will be similarly adjusted.

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issues for Decision

Resolution No. 33-FY2020
Relative to Approval of Additional Funding to the Design Contract for Northern and Southern Tanks

What is the project's objective and is it necessary and urgent?
The project is part of the 2011 Court Order Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program. As a Court Order project, it is necessary and urgent to work towards meeting the Court Order deadlines. The project's objective is to provide design services for the Northern and Southern reservoirs, which include the Santa Rosa, Santa Rita, Sinifa, Ugum, and Inarajan.

Where is the location?
- Santa Rosa reservoir: located off Route 15 in Yigo
- Santa Rita reservoir: located off Obispo Olaiz Street in Santa Rita
- Sinifa reservoir: located off Cross Island Road in Santa Rita
- Ugum: located off Paulino Street in Inarajan
- Inarajan: located off Belen Avenue in Inarajan

How much will it cost?
TGE's fee proposal is $128,415.00. The fee includes the following:

1. Ugum reservoir will require a pile foundation due to the poor soil quality. The proposal includes a pile foundation design.
2. Continuation of progress design meetings.

When will it be completed?
- Design completion: December 18, 2020.
- Construction support services will extend until contraction is complete.

What is the funding source?
The funding shall be from PW 09-11: Water System Reservoirs 2005 Improvements.

The RFP/BID responses (if applicable):
N/A

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 33–FY2020

RELATIVE TO APPROVAL OF ADDITIONAL FUNDING TO THE DESIGN CONTRACT FOR NORTHERN AND SOUTHERN TANKS

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, the CCU approved Resolution No. 12-FY2018 which authorized the total funding amount to a maximum of $3,624,912.25 (Exhibit A); and

WHEREAS, GWA issued Change Orders No. 1 through No. 4 to TG Engineers, P.C. for additional design task to bring the contract total to $3,624,912.25; and

WHEREAS, in the ongoing reservoir designs and the water system served by the noted reservoirs, further design services listed below were identified to move forward with improving the functionality of the water system:

(1) Ugum: The reservoir will require a pile foundation design due to the poor soil quality at the site;

(2) All sites (Ugum, Inarajan, Afgayan, Santa Rosa, Santa Rita, Sinifa): Continuation of progress design meetings;

WHEREAS, GWA engineering and TG Engineers, P.C. negotiated Change Order No. 5 scope and fee of One Hundred Twenty-Eight Thousand Four Hundred Fifteen Dollars ($128,415.00) for the above services (Exhibit B); and

WHEREAS, GWA Management is seeking One Hundred Twenty-Eight Thousand Four Hundred Fifteen Dollars ($128,415.00) to fund Change Order No. 5; and

WHEREAS, funding for this change order will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by TG Engineers, P.C. are fair and reasonable.
3. The CCU hereby authorizes $128,415.00 in additional funding to bring the total authorized funding amount to $3,753,327.25.
4. The CCU hereby authorizes the management of GWA the option to issue Change Order No. 5 in the not-to-exceed amount of $128,415.00 (Exhibit "B').
5. The CCU hereby authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by:

_____
JOSEPH T. DUENAS
Chairperson

Attested by:

_____
MICHAEL T. LIMTIACO
Secretary

DRAFT

SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

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DRAFT

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 12–FY2018

RELATIVE TO APPROVAL OF CHANGE ORDER NO. 4 FOR THE NORTHERN AND SOUTHERN GUAM RESERVOIR DESIGN SERVICES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, The CCU approved via Resolution No. 20-FY2015 (Exhibit A) for GWA management to enter into contract with TG Engineers, P.C. to provide design services for the Northern and Southern Guam Reservoirs, as well as Resolution No. 56-FY2016 (Exhibit B) that approved a Change Order to TG Engineers, P.C. for additional design services that totaled Three Million Eighty-Seven Thousand Thirty-Two Dollars ($3,087,032.00); and

WHEREAS, GWA issued Change Order No. 1 to No. 3 to TG Engineers, P.C. for additional services that were not identified in the original scope of work but subsequently required due to the following:

(1) land acquisition for various project sites;

(2) design for several additions and revisions to the pipe system to complete the pressure zone realignment which includes surveying and environmental service for Santa Rita and Santa Rosa Reservoirs;

(3) design for the new Unified Facilities Criteria ("UFC") structural code requirements for Ugum, Santa Rosa, Santa Rita, and Sinifa Reservoirs, and Inarajan Booster Pump Station that was not in effect at the time of contract execution;

(4) additional land acquisition support for the Government of Guam Chamorro Land Trust (CLTC) property, additional Archaeological and Unexploded Ordinances (UXO) monitoring, and design to include the new GWA-AAFB tank interconnection system for the Santa Rosa Reservoir;

(5) design for new Booster Pump Station and a new Pressure Reducing Valve (PRV) to be added into the system in the vicinity of Agfayan Subdivision in Inarajan as part of the Pressure Zone Realignment plan;

(6) percolation tests to be included at each project site location for drainage basins,

(7) design to incorporate the Siemens controls from the existing Ugum plant to be extended to the new Ugum Reservoir and facilities; and

WHEREAS, in the ongoing design and analysis of the reservoirs and the water system served by the noted reservoirs, further design services listed below were identified as being above and beyond original scope requirements but necessary to move forward with improving the functionality of the water system:

(1) Santa Rosa: design of new 4,120 LF of 12-inch pipe along Route No. 1 in Yigo;

(2) Santa Rosa: Identification and survey of easements for agreements with DoD;

(3) Agfayan Booster Pump Station: design of pressure reducing valve near original bps site;

(4) Agfayan Booster Pump Station: Investigate 4 lots as new alternatives for the new booster pump station location;

(5) Ugum Reservoir: Investigate a new alternative for the reservoir location. The new alternative involves consolidating 2 lots adjacent and south of the existing plant to provide the site needed for the new reservoir and facilities;

(6) Ugum Reservoir: Existing water treatment plant drainage will be corrected in the new design and plans;

(7) Santa Rita: Incorporate roadway repair in the design. New design to replace existing culvert;

(8) Sinifa: Prepare construction easements and construction support documents for 2 lots; and

WHEREAS, GWA engineering and TG Engineers, P.C. negotiated the price for the above services to be provided in the amount of Five Hundred Thirty-Seven Thousand Eight Hundred Eighty Dollars and Twenty-Five Cents ($537,880.25) (See Exhibit C); and

WHEREAS, GWA management is seeking CCU approval of additional funding in the amount of Five Hundred Thirty-Seven Thousand Eight Hundred Eighty Dollars and Twenty-Five Cents ($537,880.25); and

WHEREAS, the approval of the Five Hundred Thirty-Seven Thousand Eight Hundred Eighty Dollars and Twenty-Five Cents ($537,880.25), along with the prior authorized contract value of Three Million Eighty-Seven Thousand Thirty-Two Dollars ($3,087,032.00) will bring the total authorized funding for the design contract with TG Engineers, P.C. to Three Million Six Hundred Twenty-Four Thousand Nine Hundred Twelve Dollars and Twenty-Five Cents ($3,624,912.25); and

WHEREAS, funding for this change order will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by TG Engineers, P.C. are fair and reasonable (Exhibit C).
3. The CCU authorizes GWA management to execute Change Order No. 4 in the amount of Five Hundred Thirty-Seven Thousand Eight Hundred Eighty Dollars and Twenty-Five Cents ($537,880.25).
4. The CCU hereby further approves increasing the total authorized funding for the design contract with TG Engineers, P.C. to Three Million Six Hundred

Twenty-Four Thousand Nine Hundred Twelve Dollars and Twenty-Five Cents ($3,624,912.25).

5. The CCU hereby further authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED this 23rd day of January 2018.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

SECRETARY'S CERTIFICATE

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 5

NAYS: 0

ABSTENTIONS: 0

ABSENT: 6



4

Exhibit A (1 of 4)

GUAM CONSOLIDATED COMMISSION ON UTILITIES
RESOLUTION NO. 20 – FY2015

RELATIVE TO CONTRACT APPROVAL FOR THE NORTHERN AND SOUTHERN GUAM RESERVOIRS DESIGN SERVICES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, GWA has advertised the Request For Proposals (RFP-09-ENG-2014) soliciting statement of qualifications from experienced and qualified engineering firms for the preparation of design plans and specifications for the Northern and Southern Guam Reservoirs; and

WHEREAS, the Northern and Southern Guam Reservoir design project includes site investigations and system evaluations at the Santa Rita, Santa Rosa, Inarajan, Sinifa, and Ugum reservoir sites, development of design plans and specifications for various sized concrete reservoirs ranging from 0.2 MG to 2.0 MG nominal capacities, booster station upgrades, instrumentation and control upgrades, control valves upgrades, pipe upgrades, and other general site upgrades; and

WHEREAS, RFP packages were downloaded by forty five (45) interested parties, from which GWA received proposal submittals from ten (10) firms before the RFP submittal deadline; and

Exhibit A (2 of 4)

WHEREAS, the GWA A-E Selection committee reviewed and evaluated the ten (10) proposals (see EXHIBIT A – Evaluation Score) and generated a short list of the top four (4) firms with a recommendation to award a contract to the firm TG Engineers, P.C. and any successor at interest thereto (see EXHIBIT B – Evaluation Summary and GM Determination); and

WHEREAS, TG Engineers, P.C. and GWA negotiated the price for the services to be provided in the amount of Two Million Five Hundred Thirty Two Thousand Five Hundred Eighty Dollars ($2,532,580.00) (see EXHIBIT C – Fee Proposal); and

WHEREAS, GWA management seeks approval of the fee proposal amount of Two Million Five Hundred Thirty Two Thousand Five Hundred Eighty Dollars ($2,532,580.00), plus a ten percent (10%) contingency of Two Hundred Fifty Three Thousand Two Hundred Fifty Eight Dollars ($253,258.00) to bring the total authorized funding amount to a maximum of Two Million Seven Hundred Eighty Five Thousand Eight Hundred Thirty Eight Dollars ($2,785,838.00); and

WHEREAS, funding for this project will be from the 2010 and 2013 Bond Funds under the line items CIP PW 09-11 Water System Reservoirs 2005 Improvements and CIP PW 11-02 Ugum Water Treatment Plant Reservoir Replacement; and

WHEREAS, GWA management recommends that a contract be entered into with TG Engineers, P.C. in the aforementioned base contract amount.

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by TG Engineers, P.C. is fair and reasonable.

Exhibit A (3 of 4)

3. The CCU finds that the terms of the conditions set by GWA relative to commencement of subsequent work activities are fair and reasonable and serve as a measure of Quality Assurance/Quality Control (QA/QC).
4. The CCU hereby authorizes the management of GWA to enter into a contract with TG Engineers, P.C., in the amount of Two Million Five Hundred Thirty Two Thousand Five Hundred Eighty Dollars ($2,532,580.00).
5. The CCU hereby further approves the total funding amount for this project of Two Million Five Hundred Thirty Two Thousand Five Hundred Eighty Dollars ($2,532,580.00), plus a ten percent (10%) contingency of Two Hundred Fifty Three Thousand Two Hundred Fifty Eight Dollars ($253,258.00) to bring the total authorized funding amount to a maximum of Two Million Seven Hundred Eighty Five Thousand Eight Hundred Thirty Eight Dollars ($2,785,838.00).

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 24th day of March 2015.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

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Exhibit A (4 of 4)

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES:	5
NAYS:	0
ABSTENTIONS:	0
ABSENT:	0

Exhibit B (1 of 4)

GUAM CONSOLIDATED COMMISSION ON UTILITIES

RESOLUTION NO. 56-FY2016

RELATIVE TO APPROVAL OF CHANGE ORDER NO. 2 FOR THE NORTHERN AND SOUTHERN GUAM RESERVOIR DESIGN SERVICES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, Resolution No. 20-FY2015 (See Exhibit A) authorized GWA management to enter into a contract with TG Engineers, P.C. in the amount of Two Million Five Hundred Thirty Two Thousand Five Hundred Eighty Dollars ($2,532,580.00) to provide design services for the Northern and Southern Guam Reservoirs, which includes:

(1) site investigations and system evaluations at Santa Rosa, Santa Rita, Sinifa, Inarajan, and Ugum reservoir sites, and

(2) development of design plans and specifications for various sized concrete reservoirs ranging from 1.0 MG to 2.0 MG nominal capacities, instrumentation and control upgrades, control valves upgrades, pipe upgrades, new booster station, and other general site and system upgrades; and

WHEREAS, Resolution No. 20–FY2015 further authorized on top of the contract amount a ten percent (10%) contingency of Two Hundred Fifty Three Thousand Two Hundred Fifty Eight Dollars ($253,258.00) bringing the total authorized funding to a maximum of Two

Exhibit B (2 of 4)

Million Seven Hundred Eighty Five Thousand Eight Hundred Thirty Eight Dollars ($2,785,838.00); and

WHEREAS, GWA issued Change Order No. 1 to TG Engineers, P.C. for additional services that were required due to needs for land acquisition for various project sites using the approved contingency funding in the amount of Fifty One Thousand Three Hundred Forty One Dollars and Fifty Cents ($51,341.50) in which the total value of the Contract was increased to Two Million Five Hundred Eighty Three Thousand Nine Hundred Twenty One Dollars and Fifty Cents ($2,583,921.50); and

WHEREAS, in the course of the design and analysis of the reservoirs and the water system served by the noted reservoirs additional design services listed below was identified as being necessary to meet new building code requirement and to improve the functionality of the water systems (See Exhibit B – Scope of Work and Fees):

(1) design for several additions and revisions to the pipe system to complete the pressure zone realignment which includes surveying and environmental services for Santa Rita and Santa Rosa Reservoirs,

(2) design for the new UFC structural code requirements for Ugum, Santa Rosa, Santa Rita and Sinifa Reservoirs; and Inarajan Booster Pump Station,

(3) additional land acquisition support for the Government of Guam Chamorro Land Trust Commission (CLTC) property, additional Archaeological and Unexploded Ordinance (UXO) monitoring, and design to include the new GWA-AAFB tank interconnection system for the Santa Rosa Reservoir,

(4) design for new Booster Pump Station and a new Pressure Reducing Valve (PRV) to be added into the system in the vicinity of Agfayan Subdivision in Inarajan as part of the pressure zone realignment plan,

(5) percolation tests to be included at each project site location for drainage basins,

(6) design to incorporate the Siemens controls from the existing Ugum plant to be extended to the new Ugum Reservoir and facilities; and

Exhibit B (3 of 4)

WHEREAS, GWA engineering and TG Engineers, P.C. negotiated the price for the services to be provided in the amount of Five Hundred Three Thousand One Hundred Ten Dollars and Fifty Cents ($503,110.50); and

WHEREAS, GWA Management is seeking CCU approval of additional funding in the amount of Three Hundred One Thousand One Hundred Ninety Four Dollars ($301,194.00) which is the balance needed above the remaining contingency that will fund Change Order No. 2; and

WHEREAS, GWA Management further seeks CCU approval of the total authorized funding for the design contract with TG Engineers, P.C. to Three Million Eighty Seven Thousand Thirty Two Dollars ($3,087,032.00); and

WHEREAS, funding for this project will be from 2013 and/or 2015 Bond Funds under CIP line item PW 09-11 Water System Reservoirs 2005 Improvements; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve and authorize the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by TG Engineers, P.C. are fair and reasonable.
3. The CCU finds that the terms of the conditions set by GWA relative to commencement of subsequent work activities are fair and reasonable and serve as a measure of Quality Assurance/Quality Control (QA/QC).
4. The CCU hereby authorizes GWA management to execute Change Order No. 2 in the amount of Five Hundred Three Thousand One Hundred Ten Dollars and Fifty Cents ($503,110.50) (Exhibit B).
5. The CCU further approves increasing the total authorized funding for the design contract with TG Engineers, P.C to Three Million Eighty Seven Thousand Thirty Two Dollars ($3,087,032.00);

Exhibit B (4 of 4)

6. Funding source will be CIP PW 09-11 Water System Reservoir 2005 Improvements.

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 23rd day of August, 2016.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 4

NAYS: 0

ABSTENTIONS: 0

ABSENT: 1

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Exhibit C (1 of 2

TG ENGINEERS, PC

November 8, 2017

Mr. Miguel Bordallo, PE
General Manager
Guam Waterworks Authority
Gloria B. Nelson Public Service Building, Room 202
688 Route 15
Mangilao, Guam 96913

ATTN: Mr. Brett Railey, PE, Project Manager

RE: PW 09-11 Northern and Southern Guam Reservoirs: GWA Project No. W14-007-BND, Change Order No. 4 – Fee Proposal

Hafa adai Brett,

TG Engineers, PC (TGE) is pleased to submit our updated Scope of Work and Fee Proposal for the reservoir project Change Order No. 4. We are submitting the proposal file in pdf format by email.

Note we have followed the format from the original project proposal and created the general part of the Scope of Work and then have Attachments A – H with the specific scope for each tank and pump station project.

Based on the last review meeting, held with you and Mr. Garrett Yeoh, we have updated the proposal accordingly. The new task which is added is the new road and utility infrastructure that will be required for the Agfayan 4-alternate sites that will be investigated.

We look forward to your favorable review and reaching an agreement on the Scope and Fee. Let us know if we will schedule a final review meeting.

Please call Teena Barnes or myself directly at 647-0808 with any questions.

Si Yu'os Ma'ase,
TG Engineers, PC

Tor Gudmundsen, PE
President

GWA SOW & FEE
11/8/2017

Attachments:
Scope of Work
Dated 11/08/17, 15-pages

Fee Proposal Spreadsheets
Dated 11/08/17, 9-pages

EXHIBIT C (3 of 2

TG Engineers, PC

DESIGN OF NORTHERN AND SOUTHERN GUAM RESERVOIRS, PROJECT NO. 2
CHANGE ORDER NO. 4 – SCOPE OF WORK

1. INTRODUCTION

TG Engineers, PC (TGE) is under contract with the Guam Waterworks Authority (GWA) for the Design of Northern and Southern Guam Reservoirs. The work completed to date varies for each site and is listed as follows.

- Ugum – Basis of Design Report
- Santa Rita – 90% Design Submittal
- Santa Rosa – 100% Design Submittal (Dod Intertie at 60%)
- Sinifa – 90% Design Submittal
- Inarajan Reservoir – Cancelled
- Agfayan Booster Pump Station – New Facility
- Inarajan Booster Pump Station – BOD complete and pending the Agfayan BOD to combine projects

Change Orders 1.0 – 3.0 have been processed and include the following.

- Change Order No. 1 – processed for land acquisition support services. No schedule changes.
- Change Order No. 2 – processed for additional engineering services. Schedule extended 387-days to 4/14/2017.
- Change Order No. 3 – processed for a time extension. Schedule extended 630-days to 1/04/2019.

Change Order No. 4 is proposed with the Scope of Work as follows.

2. SCOPE OF SERVICES

2.1 GENERAL DESCRIPTION OF SERVICES

A. Project Management Services

Team members will join Bi-weekly progress meetings for the 21-month time extension, ending 1/04/2019.

B. Pressure Zone Re-alignment

The Brown & Caldwell Report, Pressure Zone Realignment and Pressure Improvement Report, June 2017 includes several additions and revisions to the pipe system to complete the pressure zone re-alignment within the project areas. The changes are described as follows.

B1 – Santa Rosa (note scope for Details 1 & 2 are included in CO#2)

1) Detail 4 - Install an 8-inch valve on the existing line approx. 500-ft NW of Chalan Bernadita and construct 1-jumper line to connect existing 8-inch lines at the Chalan

Bernadita / Route 9 intersection. The work is located in public ROW or utility easement areas.

2) Detail 5 – install an 8-inch valve on the existing 8-inch line along Route 9, near Chalan Bada.
3) Details 6 & 7 – Construct approx. 4,120-lf of 12-inch pipe along Route 1 in Yigo.

B2 – Agfayan BPS

1) Install 1-PRV at an appropriate site near the original 3-BPS site alternatives, as determined by the design team.

B3 – General

1) Team members have completed multiple reviews of the ongoing revisions by B&C to the PZR documents.

2.2 UGUM RESERVOIR SITE

Investigate a new alternative for the new reservoir location. The new alternative involves consolidating 2-lots adjacent and south of the existing plant to provide the site needed for the new reservoir and facilities. The 2-lots are Lot 3 & Lot 4, Block 4, Tract 3521.

2.3 UGUM EXISTING WATER TREATMENT PLANT & TANK

The existing plant site drainage will be corrected with a new design and plans.

2.4 SANTA ROSA RESERVOIR SITE – Dod Intertie

Easements were developed for use by GWA to reach operational agreements with Dod. There were 3-easement exhibits created as follows.

- Temporary Construction Easement
- GWA Access Easement
- Dod Access Easement

2.5 SANTA RITA RESERVOIR SITE

Review the access road flood damage and repair plans.

Confirm the road repair design interface with the road reconstruction plans

2.6 AGFAYAN BOOSTER PUMP STATION SITE

Investigate 4-lots as new alternatives for the new booster pump station location. The lots are along an existing Right-of-Way (ROW) and will require a new road, piping, electrical service and appurtenances. The estimated ROW length is 2,000-ft for the utility infrastructure required, this is approx. 1,000-ft of new road and utility infrastructure and another 1,000-ft of new pipeline in an existing paved road.

Refer to the following maps.

- LM Checked No. 086 FY92, sheet 1 of 3

Exhibit C (5 of 2

- LM Checked No. 485 FY97, sheet 1 of 3

2.7 SINIFA RESERVOIR SITE

Provide Temporary Construction Easements and construction support documents on 2-lots as follows.

- Lot 2, Bock 2, Tract 24404
- Lot 3, Block 2, Tract 24404

3 – 10. No change.

ATTACHMENTS:

A. Ugum Reservoir Site
B. Existing Ugum Water Plant Site Drainage
C. Santa Rosa 2-PZR Sites
D. Santa Rosa PZR Pipeline
E. Sinifa Reservoir Site
F. Agfayan BPS, 4-Alt Sites
G. Project Management

Attachment A – Ugum Reservoir Site

A. Preliminary Design

1. Define design objective, design criteria, and methodology that shall be used to prepare the design. Identify all relevant codes, standards, environmental regulations, and all applicable local and federal laws that will be incorporated in the design.

2. Create a draft Property Map and Concept Site Plan for analysis. Combine the mapping of the 2-new lots to develop the consolidated lot site. This will be consolidated with the existing plant site.

3. Complete an Abbreviated Appraisal Report for the preliminary property value.

4. Complete the Construction Cost Estimate based on the Concept Site Plan developed.

5. Update the BOD Report for the combined lot development plan.

6. Open discussions with the property owner about the proposed land use, access for investigations and the acquisition process.

7. Provide surveying services, consisting of property boundary and topographic field survey and preparation of topographical mapping. These services include preparation of topographical and boundary mapping of the tank site including existing facilities above ground within the project area and adjacent sites which may be impacted. The consultant shall make all necessary research for determination of land ownership.

   The boundary survey and mapping scope will be expanded to include consolidation of the 2-new lots with the existing plant site. The topographic survey and mapping scope is expanded to include the 2nd parcel of the 2-new parcels.

8. Other services are included in the existing scope.

B. Design

1. Develop updated Basis of Design Report.

   The updated Basis of Design Report at a minimum shall address the following:

   a. Site Geometry and Access
   b. Site Grading & Drainage
   c. Site Piping
   d. Site Utilities

Attachment B – Existing Ugum Water Plant Site Drainage

A. Preliminary Design

1. Define design objective, design criteria, and methodology that shall be used to prepare the design. Identify all relevant codes, standards, environmental regulations, and all applicable local and federal laws that will be incorporated in the design.

2. Provide surveying services, consisting of the topographic field survey and preparation of topographical mapping. These services include preparation of the topographical mapping of the plant site, including existing facilities above ground within the project area and adjacent sites which may be impacted.

3. Complete Concept Drainage system design. It is proposed to channel stormwater to a new basin or percolation facility on Lot 3, Block 4, Tract 3521.

4. Complete the Construction Cost Estimate based on the Concept Drainage Plan developed.

B. Design

1. Complete the Drainage Design and prep construction documents. The design will be developed through 30%, 60%, 90% and 100% design stages and submittals made for review and acceptance by GWA before continuing to the next submittal.
2. The Construction Document package will include the following at each design submittal

30% - Plans, Basis of Design and Draft Drainage Calculations
60% - Plans, Final Drainage Calculations, Specification TOC and Estimate.
90% - Plans, Specifications, Estimate and Construction Schedule.
100% - Plans, Specifications, Estimate and Construction Schedule.

Attachment C – Santa Rosa, 2-PZR Sites

A. Site List (2-sites)

1. Detail 4 - Install an 8-inch valve on the existing line approx. 500-ft NW of Chalan Bernadita and construct 1-jumper line to connect existing 8-inch lines at the Chalan Bernadita / Route 9 intersection. The work is located in public ROW or utility easement areas.
2. Detail 5 – install an 8-inch valve on the existing 8-inch line along Route 9, near Chalan Bada. The work is located in public ROW or utility easement areas.

3. Preliminary Design

   a. Perform site investigation to determine existing condition and system configuration, in accordance with existing contract scope terms.

   b. Provide surveying services, consisting of property boundary and topographic field survey and preparation of topographical mapping. These services include preparation of topographical and boundary mapping of the 2-facility sites including existing facilities above ground within the project area and adjacent sites which may be impacted. The consultant shall make all necessary research for determination of land ownership.

   c. Provide environmental services to determine any adverse impact of the project on cultural resources and to make recommendations regarding their historical properties. This shall include a technical report, which defines background research, field methodology, results of survey and mitigation recommendations. The archaeological party will conduct cultural resource inventory and evaluation of historic resources that might be affected by this project. This will require preparing and submitting an inventory survey plan, conducting inventory survey, and reporting to the Department of Parks and Recreation/Guam Historic Preservation Office and all other required agencies (which may include Department of Agriculture, Guam Environmental Protection Agency, U.S. Fish and Wildlife Services, and etc.) regarding the project and recommendations as to eligibility and effect from the undertaking.

B. Design

1. Develop the Basis of Design Report.

   a. Incorporate the UFC code and added facilities and issue an addendum to the BOD with the project design submittals.

2. Prepare construction drawings, specifications, cost estimates, construction schedule, supporting design calculations, list of required permits, and all other documents necessary for project construction.

3. Design Services:

    a. Civil Engineering:
        i. Site work at each facility site shall include demolition plans, site layout plans, grading, drainage, erosion control measures, underground utility plans, utility profiles, vault plans and sections, details.

Attachment D – Santa Rosa PZR Pipeline

A. Site List (1-site)

1. Details 6 & 7 – Construct approx. 4,120-lf of 12-inch pipe along Route 1 in Yigo.

2. Preliminary Design

   a. Perform site investigation to determine existing condition and system configuration, in accordance with existing contract scope terms.

   b. Provide surveying services, consisting of property boundary and topographic field survey and preparation of topographical mapping. These services include preparation of topographical and boundary mapping of the pipe line alignment including existing facilities above ground within the project area and adjacent sites which may be impacted. The consultant shall make all necessary research for determination of land ownership.

   c. Provide environmental services to determine any adverse impact of the project on cultural resources and to make recommendations regarding their historical properties. This shall include a technical report, which defines background research, field methodology, results of survey and mitigation recommendations. The archaeological party will conduct cultural resource inventory and evaluation of historic resources that might be affected by this project. This will require preparing and submitting an inventory survey plan, conducting inventory survey, and reporting to the Department of Parks and Recreation/Guam Historic Preservation Office and all other required agencies (which may include Department of Agriculture, Guam Environmental Protection Agency, U.S. Fish and Wildlife Services, and etc.) regarding the project and recommendations as to eligibility and effect from the undertaking.

3. Perform geotechnical investigations to assess the stability of the sub-grade and develop a soils report, including field exploration and laboratory tests and seismic investigations. The geotechnical investigations will assess the general conditions of the project site and provide design recommendations for the proposed pipeline and ancillary facilities including the following:

   a. Characterization of earth materials and ground water level
   b. Determination of bearing pressure and settlement
   c. Lateral earth pressures – static and seismic
   d. Assessment of liquefaction potential

B. Design

1. Develop Basis of Design Report.

2. Prepare construction drawings, specifications, cost estimates, construction schedule, supporting design calculations, list of required permits, and all other documents necessary for project construction.

3. Design Services:

    a. Civil Engineering:
        i. The 4,120-lf pipeline will include demolition plans, plan and profiles, erosion control measures, underground utility plans, utility profiles, vault plans and sections, details.

Attachment E – Sinifa Reservoir Site

A. Preliminary Design

1. The TGE team will obtain Temporary Construction Easements (TCE) from the private property owners for construction access at the new tank site. The TCE exhibit sketches will be created and issued for the following lots.

- Lot 2, Block 2, Tract 24404
- Lot 3, Block 2, Tract 24404

B. Lewis Property

1. Create the TCE Exhibit Drawing
2. Create the Perpetual Easement Exhibit Drawing
3. Complete the engineering design for the new driveway including geometry, grading and drainage.
4. Complete construction documents with a cost estimate for comparison of alternatives.

C. Paulino Property

1. Create the TCE Exhibit Drawing
2. Complete the concept retaining wall design and cost estimate for comparison of alternatives.

Exhibit C (13 of 2

Attachment F – Agfayan BPS 4-Site Alternatives Review

A. The 4-lots include the following.

- Lots 28 & 29, Subdivision Survey Map of TRACT 3734, Land for the Landless Project (Formerly Lot 8-3), LM Checked No. 086 FY92, sheet 1 of 3
- Lots 61-R2 and 106, Real Estate Requirement (Access Easement for Ija Subdivision) Lots 60, 61 and 64-1 thru 64-RII, LM Checked No. 485 FY97, sheet 1 of 3

B. Preliminary Design

1. Define design objective, design criteria, and methodology that shall be used to prepare the design. Identify all relevant codes, standards, environmental regulations, and all applicable local and federal laws that will be incorporated in the design.

2. Create 4-draft Property Maps and 4-Concept Site Plans for analysis.

3. Complete the 4-Abbreviated Appraisal Reports for the preliminary property values.

4. Complete the 4-Construction Cost Estimates based on the Concept Site Plans developed.

5. Update the BOD Report with the 4-alternative Site Plans.

6. Open discussions with the property owners about the proposed land use, access for investigations and the acquisition process.

C. Design

1. Develop updated Basis of Design Report.

   The updated Basis of Design Report at the minimum shall address the following:

   a. Site Geometry
   b. Site Grading & Drainage
   c. Site Piping
   d. Site Utilities

Attachment G – Agfayan BPS 4-Site Alternatives-Road & Offsite Utilities

A. Description of Road & Offsite Utilities

The lots being considered are the following.

- Lots 28 & 29, Subdivision Survey Map of TRACT 3734, Land for the Landless Project (Formerly Lot 8-3), LM Checked No. 086 FY92, sheet 1 of 3
- Lots 61-R2 and 106, Real Estate Requirement (Access Easement for Ija Subdivision) Lots 60, 61 and 64-1 thru 64-RII, LM Checked No. 485 FY97, sheet 1 of 3

Based on reviews of the mapping, we understand the new infrastructure as follows.

Part 1 – Approx. 1,400-ft of new road through the jungle along an existing coral road / trail. This section will have new road construction and new water pipeline.

Part 2 – Approx 1,000-ft of existing paved roads through part of Inarajan Village. This section will have a new waterline constructed in the existing paved roads and connect to the waterline in Route 4 in the Inarajan Village area.

Part 3 – Approx 500-ft of existing paved road in the Ija Subdivision. This section will have a new waterline constructed and the existing OH power line extended to the pump station site.

B. Preliminary Design

1. Define design objective, design criteria, and methodology that shall be used to prepare the design. Identify all relevant codes, standards, environmental regulations, and all applicable local and federal laws that will be incorporated in the design.

1. Perform site investigation to determine existing condition and system configuration, consisting of the following:

   a. Existing site conditions and facilities
   b. Proposed site improvement
   c. Preliminary site layout
   d. Research existing property map
   e. Demolition requirements
   f. Grading requirements
   g. Drainage requirements
   h. Piping and valving requirements
   i. Operational requirements
   j. Fire flow requirements
   k. Electrical power supply
   l. Construction access
   m. Construction sequencing

2. Provide surveying services, consisting of ROW boundary and topographic field survey and preparation of topographical mapping. These services include preparation of topographical and boundary mapping of the roads including existing facilities above ground within the project area and adjacent sites which may be impacted. The consultant shall make all necessary research for determination of land ownership.

3. Provide environmental services to determine any adverse impact of the project on cultural resources and to make recommendations regarding their historical properties. This shall include a technical report, which defines background research, field methodology, results of survey and mitigation recommendations. The archaeological party will conduct cultural resource inventory and evaluation of historic resources that might be affected by this project. This will require preparing and submitting an inventory survey plan, conducting inventory survey, and reporting to the Department of Parks and Recreation/Guam Historic Preservation Office and all other required agencies (which may include Department of Agriculture, Guam Environmental Protection Agency, U.S. Fish and Wildlife Services, and etc.) regarding the project and recommendations as to eligibility and effect from the undertaking.

4. Perform geotechnical investigations to assess the stability of the sub-grade and develop a soils report, including field exploration and laboratory tests, corrosion, and seismic investigations. The geotechnical investigations will assess the general conditions of the project site and provide design recommendations for the proposed pump station and ancillary facilities including the following:

   a. Characterization of earth materials and ground water level
   b. Development of seismic design criteria for the pump station building per updated codes
   c. Determination of bearing pressure and settlement
   d. Lateral earth pressures – static and seismic
   e. Assessment of liquefaction potential
   f. Foundation design of the proposed pump station building and ancillary structures
   g. Earthwork requirements

C. Design

1. Develop updated Basis of Design Report.

   The updated Basis of Design Report at the minimum shall address the following:

   a. Site Geometry
   b. Site Grading & Drainage
   c. Site Piping
   d. Site Utilities

2. Prepare construction drawings, specifications, cost estimates, construction schedule, supporting design calculations, list of required permits, and all other documents necessary for project construction.

   a. The design plans for the offsite road and utility infrastructure will include the necessary piping, valving, fittings, and appurtenances to connect to the existing water system as indicated in the Basis of Design Report. The plan will also include necessary erosion control measures such as erosion control seeding, silt fencing, protection of stockpiled materials, and other necessary measures to mitigate the impact of erosion and sedimentation.

   b. Based on the Basis of Design report approved by GWA, the design consultant will prepare and submit the following:

      1. Multidiscipline plans to the 60%, 90%, and 100% completion levels. (60% will consist of an Over-the-Shoulder review with GWA.)
      2. Specifications at 60%, 90%, and 100% completion levels, which will include front end documents and technical specifications applicable to the indicated completion levels.
      3. Construction cost estimate update at 60% Completion level. This estimate will be a Class 3 estimate in accordance with the AACE International Cost Estimate Classification System. All costs will be in current dollars and escalated to the estimated midpoint of construction.
      4. Final construction cost estimate based on quantity takeoffs and the requirements of the 100% design plans and specifications. This estimate will be a Class 2 estimate in accordance with the AACE International Cost Estimate Classification System. All costs will be in current dollars and escalated to the estimated midpoint of construction.
      5. The design consultant shall coordinate with the relevant agencies such as Guam Environmental Protection Agency, Department of Public Works, and other relevant agencies at the 30%, 60%, 90%, and 100% submittals. This includes submitting design documents (full size plans and specifications at each phase) and maintaining communication throughout the duration of the project and incorporating any relevant regulation requirements in the design.

3. Design Services:
   a. Civil Engineering:
      i. Site work for the road and utility infrastructure shall include demolition plans, site layout plans, grading, paving, fencing, drainage, erosion control measures, retaining walls, underground utility plans, utility profiles, vault plans and sections, details. Demolition plans will be provided as required.

   b. Electrical Power/Lighting Engineering:
      i. Electrical standard details, one-line diagrams, electrical site plans, lighting plans and details

Attachment H – Project Management

A. Project Management – prep and complete bi-weekly Progress Meetings for 21-months.

1. Issue meeting minutes with ACTION items listed within 5-working days after the meeting and work to resolve any ACTION items prior to the next meeting.
2. The meeting minutes will be expanded to include any new items at the beginning of each meeting.

B. GWA - B&C PZR Report Reviews

1. TGE has completed multiple reviews and provided comments on the B&C PZR report relative to the project site areas.

Exhibit C (18 of 2

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
CHANGE ORDER NO. 4

11/8/2017
Page 1 of 1

A	UGUM RESERVOIR SITE		TOTAL
	Engineering Services	$	18,890.00
	Survey Services	$	16,715.00
	Subconsultants	$	8,021.00
	Direct Expenses	$	267.25
	TOTAL - UGUM RESERVOIR SITE	**$**	**43,893.25**

B	EXISTING UGUM WATER PLANT SITE DRAINAGE		TOTAL
	Engineering Services	$	21,100.00
	Survey Services	$	14,775.00
	Subconsultants	$	4,011.00
	Direct Expenses	$	559.50
	TOTAL - EXISTING UGUM WATER PLANT SITE DRAINAGE	**$**	**40,445.50**

C	SANTA ROSA 2-PZR SITES		TOTAL
	Engineering Services	$	18,660.00
	Survey Services	$	12,005.00
	Subconsultants	$	8,594.00
	Direct Expenses	$	245.00
	TOTAL - SANTA ROSA 2-PZR SITES	**$**	**39,504.00**

D	SANTA ROSA PZR PIPELINE		TOTAL
	Engineering Services	$	29,655.00
	Survey Services	$	20,000.00
	Subconsultants	$	18,907.00
	Engineering Services	$	573.00
	TOTAL - SANTA ROSA PZR PIPELINE	**$**	**69,135.00**

E	SINIFA RESERVOIR SITE		TOTAL
	Engineering Services	$	6,745.00
	Survey Services	$	4,635.00
	Subconsultants	$	-
	Direct Expenses	$	101.50
	TOTAL - SINIFA RESERVOIR SITE	**$**	**11,481.50**

F	AGFAYAN BPS 4-ALTERNATIVE SITE REVIEW		TOTAL
	Engineering Services	$	25,960.00
	Survey Services	$	21,900.00
	Subconsultants	$	29,793.00
	Direct Expenses	$	531.00
	TOTAL - AGFAYAN BPS 4-ALTERNATIVE SITE REVIEW	**$**	**78,184.00**

G	AGFAYAN BPS 4-ALTERNATIVE SITES ROAD		TOTAL
	Engineering Services	$	66,645.00
	Survey Services	$	33,585.00
	Subconsultants	$	40,105.00
	Direct Expenses	$	1,641.00
	TOTAL - AGFAYAN BPS 4-ALTERNATIVE SITES ROAD	**$**	**141,976.00**

H	PROJECT MANAGEMENT		TOTAL
	Engineering Services	$	88,990.00
	Survey Services	$	-
	Subconsultants	$	24,063.00
	Direct Expenses	$	208.00
	TOTAL - PROJECT MANAGEMENT	**$**	**113,261.00**

TOTAL FEE - CHANGE ORDER NO. 4	**$**	**537,880.25**

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
UGUM RESERVOIR SITE

Exhibit C (19 of 26

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DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
1. Coordinate Property Boundary & Topographic Survey Maps		1.0		5.0					
2. Develop Concept Site Plan		1.0		8.0		8.0	32.0		
3. Coordinate Abbreviated Appraisal Report		4.0							
4. Develop Construction Cost Estimate		2.0		2.0					
5. Open Discussions with Landowner		2.0				16.0			
C. Design									
1. Develop Basis of Design Report		2.0	5.0	20.0		20.0	40.0		
Subtotal Hours	0.0	12.0	5.0	35.0	0.0	44.0	72.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$2,040.00	$825.00	$4,725.00	$0.00	$3,740.00	$7,560.00	$0.00	**$18,890.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research	1.0	5.0							
Control Survey	1.0		8.0						
Boundary Survey	1.0		24.0	20.0					
Consolidation 3-lots	1.0		8.0	16.0					
Topographic Survey & Map	2.0		24.0	40.0					
2.0 Land Acquisition									
Subtotal Hours	6.0	5.0	64.0	76.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$870.00	$425.00	$8,960.00	$6,460.00	$0.00	$0.00	$0.00	$0.00	**$16,715.00**

SUBCONSULTANTS

	Subconsultant	Total Fee	% This Task	Task Fee	
1.0	RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00	
2.0	Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00	
3.0	Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00	
4.0	Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00	
5.0	PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00	
6.0	Rider Levett Bucknall *(Cost Estimating)*	$3,500.00	100%	$3,500.00	
7.0	Cornerstone Valuation Guam, Inc. *(Appraisal)*	$3,500.00	100%	$3,500.00	
			Subtotal - Subconsultants	$7,000.00	
			TGE Sub Admin Fee (10%)	$700.00	
			GRT (4.17%)	$321.00	**$8,021.00**

DIRECT EXPENSES

		Sheets	Sets	Total Pages	Unit Cost	Subtotal	
1.0	Reproduction						
	Drawings (Full Size - 24x36)				$1.00	$0.00	
	Drawings (Tabloid Size - 11x17)	25	5	125	$0.50	$62.50	
	Documents (Letter Size - 8.5x11)	25	5	125	$0.15	$18.75	
	CD				$1.00	$0.00	
					Subtotal - Reproduction	$81.25	

		Days	Crews	Rate	Subtotal		
2.0	Vehicles/Fuel						
	Survey Field Crews	7	1	$25.00	$175.00		
3.0	Miscellaneous	0	0	$0.00	$0.00		
				Subtotal - Task A Direct Expenses	$256.25		
				GRT (4.17%)	$11.00		**$267.25**

TOTAL - UGUM RESERVOIR SITE	$43,893.25

Exhibit C (20 of 26

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
EXIST UGUM WATER PLANT SD

11/8/2017
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DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
1. Review TGE Drainage Report			1.0	2.0					
2. Site Review				16.0		16.0			
3. Drainage Concept Development - Submittal - Approval		2.0	5.0	16.0					
4. Drainage System Cost Estimate									
C. Design									
1. Drainage Design with PS&E (90% / 100%)		2.0	16.0	24.0		40.0	40.0		
Subtotal Hours	0.0	4.0	22.0	58.0	0.0	56.0	40.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$680.00	$3,630.00	$7,830.00	$0.00	$4,760.00	$4,200.00	$0.00	**$21,100.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research	1.0	5.0							
Control Survey			8.0						
Boundary Survey			16.0	20.0					
Topographic Survey & Map	1.0		40.0	40.0					
2.0 Land Acquisition									
Subtotal Hours	2.0	5.0	64.0	60.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$290.00	$425.00	$8,960.00	$5,100.00	$0.00	$0.00	$0.00	$0.00	**$14,775.00**

SUBCONSULTANTS				
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**	
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00	
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00	
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00	
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00	
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00	
6.0 Rider Levett Bucknall *(Cost Estimating)*	$3,500.00	100%	$3,500.00	
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00	
Subtotal - Subconsultants			$3,500.00	
TGE Sub Admin Fee (10%)			$350.00	
GRT (4.17%)			$161.00	**$4,011.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	15	15	225	$0.50	$112.50	
Documents (Letter Size - 8.5x11)	100	15	1500	$0.15	$225.00	
CD				$1.00	$0.00	
Subtotal - Reproduction					$337.50	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	8	1	$25.00	$200.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
Subtotal - Task A Direct Expenses				$537.50		
GRT (4.17%)				$22.00		**$559.50**

TOTAL - EXISTING UGUM WATER PLANT SITE DRAINAGE	**$40,445.50**

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Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
SANTA ROSA 2-PZR SITES

11/8/2017
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DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
1. Detail 4 - Install 8-inch Valve		1.0		1.0		2.0			
2. Detail 4 - Construct 1-Jumper				1.0		3.0			
3. Detail 5 - Install 8-inch Valve		1.0		1.0		3.0			
C. Design									
1. Develop Basis of Design Report		1.0		5.0					
2. Prepare construction drawings, specifications, cost estimates, construction		1.0		40.0		40.0	40.0		
schedule, supporting design calculations, list of required permits, etc.									
3. Design Services									
a. Civil Engineering		1.0		10.0		20.0			
Subtotal Hours	0.0	5.0	0.0	58.0	0.0	68.0	40.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$850.00	$0.00	$7,830.00	$0.00	$5,780.00	$4,200.00	$0.00	**$18,660.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research		5.0							
Control Survey			24.0						
Boundary Survey			16.0	20.0					
Topographic Survey & Map			16.0	24.0					
2.0 Land Acquisition									
Subtotal Hours	0.0	5.0	56.0	44.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$425.00	$7,840.00	$3,740.00	$0.00	$0.00	$0.00	$0.00	**$12,005.00**

SUBCONSULTANTS					
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**		
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00		
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00		
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$5,000.00	100%	$5,000.00		
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00		
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00		
6.0 Rider Levett Bucknall *(Cost Estimating)*	$2,500.00	100%	$2,500.00		
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00		
Subtotal - Subconsultants			$7,500.00		
TGE Sub Admin Fee (10%)			$750.00		
GRT (4.17%)			$344.00		**$8,594.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	5	15	75	$0.50	$37.50	
Documents (Letter Size - 8.5x11)	10	15	150	$0.15	$22.50	
CD				$1.00	$0.00	
Subtotal - Reproduction					$60.00	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	7	1	$25.00	$175.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
Subtotal - Task A Direct Expenses				$235.00		
GRT (4.17%)				$10.00		**$245.00**

TOTAL - SANTA ROSA 2-PZR SITES	$39,504.00

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Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
SANTA ROSA PZR PIPELINE

11/8/2017
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DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
4. Detail 6 & 7 - Install 4,120lf of 12-inch pipe, Rt 1 in Yigo		1.0	5.0	5.0		10.0	20.0		
C. Design									
1. Develop Basis of Design Report			2.0	5.0					
2. Prepare construction drawings, specifications, cost estimates, construction		2.0		50.0		50.0	50.0		
schedule, supporting design calculations, list of required permits, etc.									
3. Design Services									
a. Civil Engineering		2.0		40.0		20.0			
Subtotal Hours	0.0	5.0	7.0	100.0	0.0	80.0	70.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$850.00	$1,155.00	$13,500.00	$0.00	$6,800.00	$7,350.00	$0.00	**$29,655.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research		24.0							
Control Survey			24.0						
Boundary Survey			40.0	20.0					
Topographic Survey & Map			40.0	20.0					
2.0 Land Acquisition									
Subtotal Hours	0.0	24.0	104.0	40.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$2,040.00	$14,560.00	$3,400.00	$0.00	$0.00	$0.00	$0.00	**$20,000.00**

SUBCONSULTANTS				
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**	
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00	
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00	
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$5,500.00	100%	$5,500.00	
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$6,500.00	100%	$6,500.00	
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00	
6.0 Rider Levett Bucknall *(Cost Estimating)*	$4,500.00	100%	$4,500.00	
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00	
Subtotal - Subconsultants			$16,500.00	
TGE Sub Admin Fee (10%)			$1,650.00	
GRT (4.17%)			$757.00	**$18,907.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	15	15	225	$0.50	$112.50	
Documents (Letter Size - 8.5x11)	50	15	750	$0.15	$112.50	
CD				$1.00	$0.00	
Subtotal - Reproduction					$225.00	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	13	1	$25.00	$325.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
Subtotal - Task A Direct Expenses				$550.00		
GRT (4.17%)				$23.00		**$573.00**

TOTAL - SANTA ROSA PZR PIPELINE	$69,135.00

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
SINIFA RESERVOIR

EXHIBIT C (23 of 2

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DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
Lot 2, Block 2, Tract 24404									
1. Owner Negotiations		1.0		1.0					
2. D/W Design				5.0			10.0		
3. Cost Estimate / Alternative Comparisons		1.0		2.0		10.0			
4. TCE Exhibit Sketch				1.0		2.0	5.0		
5. Perpetual Easement Exhibit Sketch		1.0		1.0		2.0	5.0		
Lot 3, Block 2, Tract 24404									
1. Cost Estimate / Alternative Comparisons		1.0		2.0		10.0			
2. TCE Exhibit Sketch				1.0		2.0			
Subtotal Hours	0.0	4.0	0.0	13.0	0.0	26.0	20.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$680.00	$0.00	$1,755.00	$0.00	$2,210.00	$2,100.00	$0.00	**$6,745.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research		5.0							
Control Survey			8.0						
Boundary Survey		1.0	8.0	4.0					
Topographic Survey & Map		1.0	8.0	4.0					
2.0 Land Acquisition									
Subtotal Hours	0.0	7.0	24.0	8.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$595.00	$3,360.00	$680.00	$0.00	$0.00	$0.00	$0.00	**$4,635.00**

SUBCONSULTANTS					
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**		
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00		
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00		
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00		
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00		
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00		
6.0 Rider Levett Bucknall *(Cost Estimating)*	$0.00	0%	$0.00		
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00		
		Subtotal - Subconsultants	$0.00		
		TGE Sub Admin Fee (10%)	$0.00		
		GRT (4.17%)	$0.00		**$0.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	3	10	30	$0.50	$15.00	
Documents (Letter Size - 8.5x11)	5	10	50	$0.15	$7.50	
CD				$1.00	$0.00	
			Subtotal - Reproduction		$22.50	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	3	1	$25.00	$75.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
			Subtotal - Task A Direct Expenses	$97.50		
			GRT (4.17%)	$4.00		**$101.50**

TOTAL - SINIFA RESERVOIR SITE	$11,481.50

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
AGFAYAN BPS, 4-ALT SITES

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Page 1 of 1

DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Sr Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
1. Coordinate Property Boundary & Topographic Survey Maps (4-lots)			2.0			10.0	16.0		
2. Develop Concept Site Plans (4-lots)		2.0		8.0		40.0	40.0		
3. Develop Road and Utility Service Concepts / Cost Estimate		1.0		8.0		10.0	10.0		
3. Coordinate Abbreviated Appraisal Report (4-lots)		5.0							
4. Develop Construction Cost Estimate (4-lots)		4.0				4.0			
5. Open Discussions with Landowners		4.0				8.0			
6. Install PRV				2.0		5.0	2.0		
C. Design									
1. Develop Basis of Design Report			2.0	20.0		10.0	5.0		
2. PRV Construciton Documents		2.0		5.0		10.0	5.0		
Subtotal Hours	0.0	18.0	4.0	43.0	0.0	97.0	78.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$3,060.00	$660.00	$5,805.00	$0.00	$8,245.00	$8,190.00	$0.00	**$25,960.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research		20.0							
Control Survey			40.0						
Boundary Survey			40.0	20.0					
Topographic Survey & Map			40.0	20.0					
2.0 Land Acquisition									
Subtotal Hours	0.0	20.0	120.0	40.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$1,700.00	$16,800.00	$3,400.00	$0.00	$0.00	$0.00	$0.00	**$21,900.00**

SUBCONSULTANTS					
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**		
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00		
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00		
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00		
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00		
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00		
6.0 Rider Levett Bucknall *(Cost Estimating)*	$14,000.00	100%	$14,000.00		
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$12,000.00	100%	$12,000.00		
		Subtotal - Subconsultants	$26,000.00		
		TGE Sub Admin Fee (10%)	$2,600.00		
		GRT (4.17%)	$1,193.00		**$29,793.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)				$1.00	$0.00	
Drawings (Tabloid Size - 11x17)	12	10	120	$0.50	$60.00	
Documents (Letter Size - 8.5x11)	50	10	500	$0.15	$75.00	
CD				$1.00	$0.00	
			Subtotal - Reproduction		$135.00	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	15	1	$25.00	$375.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
			Subtotal - Task A Direct Expenses	$510.00		
			GRT (4.17%)	$21.00		**$531.00**

TOTAL - AGFAYAN BPS 4-ALTERNATIVE SITE REVIEW	$78,184.00

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
AGFAYAN BPS, 4-ALT SITES

EXHIBIT C (42 OF 2(

11/8/2017
Page 1 of 1

DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
A./B. Site List/Preliminary Design									
1. Coordinate Property Boundary & Topographic Survey Maps (4-lots)		4.0				4.0			
2. Develop 2,000-ft Road and Utility Service Concepts / Cost Estimate		2.0		4.0		24.0	24.0		
3. Coordinate Geotechnical Investigation		4.0				4.0			
4. Develop 2,900-lf Road & Utility Concepts		1.0		10.0		10.0	40.0		
C. Design									
1. Develop Basis of Design Report				4.0		10.0	5.0		
2. Road Engineering & Plans		4.0		20.0		40.0	40.0		
3. Water line Engineering & Plans		2.0		40.0		60.0	40.0		
4. Coordinate OH Power Enginering & Plans		4.0		10.0			5.0		
5. Develop Technical Specifications				10.0		20.0			
6. Develop Cost Estimate & Schedules				5.0		20.0			
7. Design & 60%, 90% and 100% Submittals		12.0		24.0		60.0	60.0		
Subtotal Hours	0.0	33.0	0.0	127.0	0.0	252.0	214.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$0.00	$5,610.00	$0.00	$17,145.00	$0.00	$21,420.00	$22,470.00	$0.00	**$66,645.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys									
Property Research		40.0							
Control Survey		5.0	24.0	10.0					
Boundary Survey		10.0	60.0	10.0					
Topographic Survey & Map		10.0	80.0	40.0					
2.0 Land Acquisition									
Subtotal Hours	0.0	65.0	164.0	60.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$5,525.00	$22,960.00	$5,100.00	$0.00	$0.00	$0.00	$0.00	**$33,585.00**

SUBCONSULTANTS					
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**		
1.0 RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$0.00	0%	$0.00		
2.0 Wixon & Associates, LLC *(Electrical)*	$8,000.00	100%	$8,000.00		
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$12,500.00	100%	$12,500.00		
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$10,000.00	100%	$10,000.00		
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00		
6.0 Rider Levett Bucknall *(Cost Estimating)*	$4,500.00	100%	$4,500.00		
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	100%	$0.00		
Subtotal - Subconsultants			$35,000.00		
TGE Sub Admin Fee (10%)			$3,500.00		
GRT (4.17%)			$1,605.00		**$40,105.00**

DIRECT EXPENSES						
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
Drawings (Full Size - 24x36)	50	5	250	$1.00	$250.00	
Drawings (Tabloid Size - 11x17)	50	15	750	$0.50	$375.00	
Documents (Letter Size - 8.5x11)	200	15	3000	$0.15	$450.00	
CD				$1.00	$0.00	
Subtotal - Reproduction					$1,075.00	
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
Survey Field Crews	20	1	$25.00	$500.00		
3.0 Miscellaneous	0	0	$0.00	$0.00		
Subtotal - Task A Direct Expenses				$1,575.00		
GRT (4.17%)				$66.00		**$1,641.00**

TOTAL - AGFAYAN BPS 4 ALTERNATIVE SITE REVIEW	**$141,976.00**

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
PROJECT MANAGEMENT

EXHIBIT C (40.01 20

11/6/2017
Page 1 of 1

	DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
	ENGINEERING SERVICES									
	Project Management									
1.0	Prep / Attend Bi-weekly Meetings / Webex (21-mos)	24.0	168.0	168.0			168.0	60.0	60.0	
2.0	Review B&C PZR Report / Provide Comments		20.0	10.0						
	Subtotal Hours	24.0	188.0	178.0	0.0	0.0	168.0	60.0	60.0	
	Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
	Subtotal Direct Labor	$4,200.00	$31,960.00	$29,370.00	$0.00	$0.00	$14,280.00	$6,300.00	$2,880.00	**$88,990.00**

	DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
	SURVEY SERVICES									
1.0	Site Surveys									
	Property Research									
	Control Survey									
	Boundary Survey									
	Topographic Survey & Map									
2.0	Land Acquisition									
	Subtotal Hours	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
	Subtotal Direct Labor	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**

	SUBCONSULTANTS				
	Subconsultant	**Total Fee**	**% This Task**	**Task Fee**	
1.0	RBF Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$21,000.00	100%	$21,000.00	
2.0	Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00	
3.0	Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00	
4.0	Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00	
5.0	PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00	
6.0	Rider Levett Bucknall *(Cost Estimating)*	$0.00	0%	$0.00	
7.0	Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00	
			Subtotal - Subconsultants	$21,000.00	
			TGE Sub Admin Fee (10%)	$2,100.00	
			GRT (4.17%)	$963.00	**$24,063.00**

	DIRECT EXPENSES						
1.0	Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
	Drawings (Full Size - 24x36)				$1.00	$0.00	
	Drawings (Tabloid Size - 11x17)	5	50	250	$0.50	$125.00	
	Documents (Letter Size - 8.5x11)	5	100	500	$0.15	$75.00	
	CD				$1.00	$0.00	
				Subtotal - Reproduction		$200.00	
2.0	Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
	Survey Field Crews	0	1	$25.00	$0.00		
3.0	Miscellaneous	0	0	$0.00	$0.00		
				Subtotal - Task A Direct Expenses	$200.00		
				GRT (4.17%)	$8.00		**$208.00**

TOTAL - PROJECT MANAGEMENT	**$113,261.00**

TG ENGINEERS, PC

July 1, 2020

Mr. Miguel Bordallo, PE
General Manager
Guam Waterworks Authority
Gloria B. Nelson Public Service Building, Room 202
688 Route 15
Mangilao, Guam 96913

ATTN: Mr. Brett Railey, P.E., Acting Chief Engineer

RE: PW 09-11 Northern and Southern Guam Reservoirs: GWA Project No. W14-007-BND, Change Order No. 5 – Fee Proposal

Hafa adai Brett,

TG Engineers, PC (TGE) is pleased to submit our updated Scope of Work and Fee Proposal for the reservoir project Change Order No. 5. We are submitting the proposal file in pdf format by email.

1.0 PROJECT DESCRIPTION

TG Engineers, PC (TGE) is under contract with the Guam Waterworks Authority (GWA) for the Design of Northern and Southern Guam Reservoirs. The work completed to date varies for each site and is listed as follows.

- Ugum – Basis of Design Report
- Santa Rita – Construction started
- Santa Rosa – Construction started
- Sinifa – Construction started
- Inarajan Reservoir – Cancelled
- Agfayan Booster Pump Station – New Facility, pending the site location
- Inarajan Booster Pump Station – BOD complete and pending the Agfayan BOD to combine projects

We note Change Orders 1.0 – 4.0 have been processed and include the following.

- Change Order No. 1 – processed for land acquisition support services.
  No schedule change.
- Change Order No. 2 – processed for additional engineering services.
  Schedule extended 387-days to 4/14/2017.
- Change Order No. 3 – processed for a time extension.
  Schedule extended 630-days to 1/04/2019.
- Change Order No. 4 – processed for additional engineering services.
- Change Order No. 5 (PRV Additions, March 2019) – cancelled.
- Change Order No. 5 is proposed with the Scope of Work as follows.

2.0 CONTRACT TIME EXTENSION

We propose to extend the contract 714-Calendar Days from Saturday 1/5/2019 to a new completion date of Friday 12/18/2020. It is estimated this duration will allow the completion of the Engineering Design Phase services included in the contract.

3.0 SCOPE OF SERVICES

The Ugum Reservoir will require a pile foundation based on the poor quality soils at the site. The scope to add the pile foundation to the design is included.

An additional 24-months of Progress Meetings are proposed for the contract extension to December 18, 2020.

See the TGE Scope of Services attached.

4.0 FEES

We propose to complete this work for the lump sum fee of $128,415.00. See the TGE Fee Spreadsheets attached.

TASK	FEE
Ugum Pile Foundations	$48,100.00
Progress Meetings (23-mos)	$80,315.00
GRAND TOTAL	$128,415.00

We will invoice monthly according to the percent completed.

5.0 SCHEDULE AND DELIVERABLES

The schedule is planned as follows.

- Ugum PS&E ready to bid by August 31, 2020
- Inarajan PS&E ready to bid by December 18, 2020
- Agfayan PS&E ready to bid by December 18, 2020

6.0 ASSUMPTIONS

6.1 The Scope of Work was defined through discussions in team Progress Meetings with GWA and email correspondence between Mr. Garrett Yeoh and the TGE Team in October 2019 – May 2020.

6.2 All other tasks remain unchanged.

We look forward to your favorable review and reaching an agreement on the Scope and Fee. Please call Shirley Itliong or myself directly at 647-0808 with any questions.

Si Yu'os Ma'ase,
TG Engineers, PC

Tor Gudmundsen, PE
President

Attachments:
Scope of Work
Dated 7/01/20, 1-page

TGE Fee Proposal Spreadsheet
Dated 7/01/20, 3-pages

MBI Fee Proposal Spreadsheet
Dated 5/31/20, 1-page

TG Engineers, PC

DESIGN OF NORTHERN AND SOUTHERN GUAM RESERVOIRS
CHANGE ORDER NO. 5 – SCOPE OF WORK

1. INTRODUCTION

TG Engineers, PC (TGE) is under contract with the Guam Waterworks Authority (GWA) for the Design of Northern and Southern Guam Reservoirs.

2. SCOPE OF SERVICES

2.1 PROJECT MANAGEMENT SERVICES

The current bi-weekly meeting task was completed on January 04, 2019. We propose extending the Bi-weekly progress meetings for a 24-month time extension, ending Friday, 12/18/2020. Based on meeting records, there were 19-meetings held in 2019 and we estimate 16-meetings to complete the contract scope by December 2020.

The scope includes the following tasks.

a. Meeting Agenda and document preparation.
b. Meeting attendance.
c. Writing and issuing the Meeting Minutes within 5-working days after the meeting.
d. Completing ACTION item tasks in preparation for the next meeting.

2.2 UGUM RESERVOIR SITE – PILE FOUNDATION

A concrete pile foundation will be added to the foundation design for the Ugum Reservoir. The pile foundation requirement was determined when the Geotechnical Investigation was completed and poor quality soils were found at the project site. The Geotechnical borings indicated deep, soft and weak subgrade soils. The large diameter tank is also close to existing slopes.

This results in a large stress influence area together with very high lateral loads requiring the loads to be transferred below the slope plane with the use of piles.

ATTACHMENTS: None

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
CHANGE ORDER NO. 5

7/1/2020
Page 1 of 1

A	UGUM RESERVOIR SITE		TOTAL
	Engineering Services	$	3,700.00
	Survey Services	$	-
	Subconsultants	$	44,058.00
	Direct Expenses	$	342.00
	TOTAL - UGUM RESERVOIR SITE	**$**	**48,100.00**

B	EXISTING UGUM WATER PLANT SITE DRAINAGE		TOTAL
	TOTAL - EXISTING UGUM WATER PLANT SITE DRAINAGE	**$**	-

C	SANTA ROSA 2-PZR SITES		TOTAL
	TOTAL - SANTA ROSA 2-PZR SITES	**$**	-

D	SANTA ROSA PZR PIPELINE		TOTAL
	TOTAL - SANTA ROSA PZR PIPELINE	**$**	-

E	SINIFA RESERVOIR SITE		TOTAL
	TOTAL - SINIFA RESERVOIR SITE	**$**	-

F	AGFAYAN BPS 4-ALTERNATIVE SITE REVIEW		TOTAL
	TOTAL - AGFAYAN BPS 4-ALTERNATIVE SITE REVIEW	**$**	-

G	AGFAYAN BPS 4-ALTERNATIVE SITES ROAD		TOTAL
	TOTAL - AGFAYAN BPS 4-ALTERNATIVE SITES ROAD	**$**	-

H	PROJECT MANAGEMENT		TOTAL
	Engineering Services	$	61,384.00
	Survey Services	$	-
	Subconsultants	$	18,526.00
	Direct Expenses	$	405.00
	TOTAL - PROJECT MANAGEMENT	**$**	**80,315.00**

TOTAL FEE - CHANGE ORDER NO. 5	**$**	**128,415.00**

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
CO#5 UGUM PILE FNDN

7/1/2020
Page 1 of 1

DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
ENGINEERING SERVICES									
Pile Foundation Design Management	2.0	10.0	10.0						
Subtotal Hours	2.0	10.0	10.0	0.0	0.0	0.0	0.0	0.0	
Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
Subtotal Direct Labor	$350.00	$1,700.00	$1,650.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$3,700.00**

DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
SURVEY SERVICES									
1.0 Site Surveys (4-New Locations)									
Property Research									
Control Survey									
Boundary Survey									
Topographic Survey & Map									
Subtotal Hours	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
Subtotal Direct Labor	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**

SUBCONSULTANTS					
Subconsultant	**Total Fee**	**% This Task**	**Task Fee**		
1.0 MBI Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$38,050.00	100%	$38,050.00		
2.0 Wixon & Associates, LLC *(Electrical)*	$0.00	100%	$0.00		
3.0 Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00		
4.0 Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00		
5.0 PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00		
6.0 Rider Levett Bucknall *(Cost Estimating)*	$0.00	100%	$0.00		
7.0 Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	100%	$0.00		
Subtotal - Subconsultants			$38,050.00		
TGE Sub Admin Fee (10%)			$3,805.00		
GRT (5.263%)			$2,203.00		**$44,058.00**
DIRECT EXPENSES					
1.0 Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**
Drawings (Full Size - 24x36)				$1.00	$0.00
Drawings (Tabloid Size - 11x17)	20	8	160	$0.50	$80.00
Documents (Letter Size - 8.5x11)	100	8	800	$0.15	$120.00
CD				$1.00	$0.00
Subtotal - Reproduction					$200.00
2.0 Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**	
Survey Field Crews	5	1	$25.00	$125.00	
3.0 Miscellaneous	0	0	$0.00	$0.00	
Subtotal - Task A Direct Expenses				$325.00	
GRT (5.263%)				$17.00	**$342.00**

TOTAL: UGUM PILE FOUNDATION	**$48,100.00**

Guam Waterworks Authority
Design of Northern and Southern Guam Reservoirs

Fee Proposal Spreadsheet
CO#5 PROJECT MANAGEMENT

7/1/2020
Page 1 of 1

	DESIGN TASK	Principal	Project Mgr	Sr Civil Engr II	Sr Civil Engr I	Stf Civil Engr	Jr Civil Engr	CAD	Clerical	TOTAL COST
	ENGINEERING SERVICES									
	Project Management									
1.0	Prep / Attend Bi-weekly Meetings / Webex (Jan 2019 - Nov 2020 = 23-mos)									
	Meetings (Jan - Dec) 2019 = 19	10.0	96.0	96.0			10.0	10.0	10.0	
	Meetings (Jan - Dec) 2020 = 16	10.0	64.0	64.0			8.0	8.0	8.0	
	Subtotal Hours	20.0	160.0	160.0	0.0	0.0	18.0	18.0	18.0	
	Hourly Rate	$175.00	$170.00	$165.00	$135.00	$105.00	$85.00	$105.00	$48.00	
	Subtotal Direct Labor	$3,500.00	$27,200.00	$26,400.00	$0.00	$0.00	$1,530.00	$1,890.00	$864.00	**$61,384.00**

	DESIGN TASK	PLS	Survey Tech	Field Crew	CAD					TOTAL COST
	SURVEY SERVICES									
1.0	Site Surveys									
	Property Research									
	Control Survey									
	Boundary Survey									
	Topographic Survey & Map									
2.0	Land Acquisition									
	Subtotal Hours	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
	Hourly Rate	$145.00	$85.00	$140.00	$85.00	$0.00	$0.00	$0.00	$0.00	
	Subtotal Direct Labor	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	**$0.00**

	SUBCONSULTANTS				
	Subconsultant	**Total Fee**	**% This Task**	**Task Fee**	
1.0	MBI Consulting *(Reservoir Design/Structural/Piping/Hydraulics/Modeling)*	$16,000.00	100%	$16,000.00	
2.0	Wixon & Associates, LLC *(Electrical)*	$0.00	0%	$0.00	
3.0	Southeastern Archaeological Research, Inc. *(Archaeological)*	$0.00	0%	$0.00	
4.0	Geo-Engineering & Testing, Inc. *(Geotechnical)*	$0.00	0%	$0.00	
5.0	PCR Environmental, LLC *(Environmental)*	$0.00	0%	$0.00	
6.0	Rider Levett Bucknall *(Cost Estimating)*	$0.00	0%	$0.00	
7.0	Cornerstone Valuation Guam, Inc. *(Appraisal)*	$0.00	0%	$0.00	
			Subtotal - Subconsultants	$16,000.00	
			TGE Sub Admin Fee (10%)	$1,600.00	
			GRT (5.263%)	$926.00	**$18,526.00**

	DIRECT EXPENSES						
1.0	Reproduction	**Sheets**	**Sets**	**Total Pages**	**Unit Cost**	**Subtotal**	
	Drawings (Full Size - 24x36)				$1.00	$0.00	
	Drawings (Tabloid Size - 11x17)	5	100	500	$0.50	$250.00	
	Documents (Letter Size - 8.5x11)	5	180	900	$0.15	$135.00	
	CD				$1.00	$0.00	
				Subtotal - Reproduction		$385.00	
2.0	Vehicles/Fuel	**Days**	**Crews**	**Rate**	**Subtotal**		
	Survey Field Crews	0	1	$25.00	$0.00		
3.0	Miscellaneous	0	0	$0.00	$0.00		
				Subtotal - Task A Direct Expenses	$385.00		
				GRT (5.263%)	$20.00		**$405.00**

TOTAL - PROJECT MANAGEMENT	**$80,315.00**

GWA - UGUM RESERVOIR 5.31.20				
PILE FOUNDATION DESIGN CHANGE ORDER				
Task Description	Project Mgr/Str Engineer	Structural Engineer	CAD Designer	Cost
Hourly Rate	$ 235.00	$ 210	$ 150	
Structural design/review/coordination	48	96	72	$ 42,240
Specifications	6			$ 1,410
Subtotal	54	96	72	$ 43,650
Deduction for continuous footing	8	12	8	$ (5,600)
			Total	$ 38,050

GUAM WATERWORKS AUTHORITY
"Better Water, Better Lives."
Gloria B. Nelson Public Service Building| 688 Route 15 | Mangilao, Guam 96913
Tel: (671) 300-6846

Issues for Decision

Resolution No. 34-FY2020
Relative to Approval of Fund Increase to the Construction Management Contract for the Route 4 Relief Sewerline Rehabilitation and Replacement Project S15-006-EPA

What is the project's objective and is it necessary and urgent?
The objective of this project is to improve the sewer collection system, which included repairing and/or replacing sewer manholes and over 4,200 linear feet of gravity sewer line along Route 4 and Route 1 in the village of Agana. These sewer infrastructure elements have been identified by GWA, through an SSES investigation, to be subjected to either inactivity due to incomplete construction work or excessive infiltration and inflow (I&I). Successful completion of this project will result in proper maintenance and operation of the sewer collection system and USEPA agrees that efforts to rehabilitate, repair or replace the sewer line are necessary. One of two construction contracts to fulfill the scope of work of this project has been completed as of March 2020. The second contract, that with PPBC, continues and is scheduled to be completed by the end of September with the bulk of construction completed by the end of August. The construction management services are required for the remainder of the project.

Where is the project located?
This project is located along Route 4 and Route 1, from the base of the Sinajaña hill in Hagatña to the Hagatña Main Pump Station. Construction activities will be limited to the government easements of the sewer infrastructure elements.

How much will it cost?
GWA management is seeking funding increase for the construction management services contract with EMPSCO for an additional not-to-exceed amount of Eighty-Two Thousand Forty-Two Dollars and Twenty Cents ($82,042.20), which brings the total authorized funding to a maximum not-to-exceed amount of One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95).

When will it be completed?
The construction is estimated to be completed by September 28, 2020.

What is the funding source?
The funding for this project will be from the USEPA Title 2 Construction Grants Program and, if necessary, GWA Bond Funds with a maximum project budget of One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95).

The RFP/BID responses (if applicable):
N/A

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 34-FY2020

RELATIVE TO APPROVAL OF FUND INCREASE TO THE CONSTRUCTION MANAGEMENT CONTRACT FOR THE ROUTE 4 RELIEF SEWERLINE REHABILITATION AND REPLACEMENT PROJECT S15-006-EPA

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA received a grant from USEPA under the Title 2 Construction Grants Program to improve the sewer collection system, which included over 4,200 linear feet of gravity sewer line along Route 4 and Route 1, from the base of the Sinajaña hill in Hagatña to the Hagatña Main Pump Station; and

WHEREAS, the gravity sewer line noted above has a section that has been inactive since its original installation due to incomplete construction work, and sections that need repair due to high infiltration and inflow (I/I), and the intent of this project is to rehabilitate, repair or replace these sections; and

WHEREAS, in September 2018 GWA management executed two separate construction contracts (Schedule A and Schedule B) to rehabilitate the Route 4 Relief Sewerline, the first (Schedule A) with ProPacific Builder Corporation (PPBC), and the second (Schedule B) with Insituform Technologies LLC (Insituform); and

WHEREAS, to provide construction management (CM) services on both construction contracts, in June 2018 GWA management entered into a contract with EMPSCO Engineering

Consultants (EMPSCO) in the amount of Seven Hundred Two Thousand Six Hundred Seventy-Eight Dollars and Thirteen Cents ($702,678.13); and

WHEREAS, while both construction contractors received the Notice to Proceed in September 2018, the start of construction was delayed due to complications with obtaining approvals during the permitting process; and

WHEREAS, construction by Insituform Technologies LLC was substantially completed in March 2020; and

WHEREAS, construction by ProPacific Builder Corporation continues but is scheduled to be completed by the end of September 2020, and the CM services are anticipated to be required through September 2020; and

WHEREAS, GWA has amended the CM contract with EPMSCO to provide continued construction management services on both construction contracts through June 2020 on a Time and Materials basis, as authorized by Resolution 14-FY2020; and

WHEREAS, GWA has negotiated Change Order No.2 with EPMSCO, shown in Exhibit A, to provide continued construction management services on both construction contracts through September 2020 on a Time and Materials basis; and

WHEREAS, GWA Management seeks CCU approval of EMPSCO's Change Order No. 2 fee proposal for additional construction management services funding with a not-to-exceed amount of Eighty-Two Thousand Forty Two Dollars and Twenty Cents ($82,042.20), to bring the total authorized funding amount to a maximum not-to-exceed amount of One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95); and

WHEREAS, funding for this project will be from the USEPA Title 2 Construction Grants Program and, if necessary, GWA Bond funds with an estimated project budget One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95);

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU hereby approves the funding increase for construction management services of an additional not-to-exceed amount of One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95).
3. The CCU hereby further approves the total funding authorization for the contract with EMPSCO to an amount not-to-exceed One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95).
4. The CCU hereby further approves management to duly notify the PUC that this contract will now exceed One Million Dollars ($1,000,000.00), funded primarily by USEPA grants and, if necessary, GWA Bond Funds.

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by: Attested by:

_____ _____

JOSEPH T. DUENAS **MICHAEL T. LIMTIACO**
Chairperson Secretary

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SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: _____

NAYS: _____

ABSENT: _____

ABSTAIN: _____

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DRAFT

Exhibit A

ENGINEERING MANAGEMENT & PLANNING SERVICES CORPORATION
1998 Army Drive Route 16, 2/F EMPSCO Bldg., Dededo, Guam 96929 • P.O. Box 21794 GMF, Barrigada, Guam 96921 • Tel No. 1.671.638.4716/5716 • Fax No. 1.671. 638.2136 • Email:empsco@guam.net

June 30, 2020

Thomas F. Cruz, P.E.
Chief Engineer
Guam Waterworks Authority
Gloria B. Nelson Public Service Building
688 Route 15 Mangilao, Guam 96913

Attention: **John Riegel, P.E.**
Senior Manager
Brown & Caldwell

Project: **GWA Project no. S15-006-EPA, Route 4 Relief Sewer line Rehabilitation and Replacement**

Subject: **Proposed Change Order No.2 – Time Extension for Construction Management Services**

Gentlemen,

We would like to submit our fee proposal of **Eighty Two Thousand Forty Two and 20/100 U.S. Dollars ($82,042.20)** to cover the additional time extension of 90 calendar days based on projected PBBC's construction work completion.

The extended CM efforts will involve to the following Project Management, Project Engineering/Inspection and Administration tasks during the additional time period:

1. Prepare and continue project correspondence, reports and inspection documentation as required to monitor project activities and foresee issues during construction.
2. Continue conduct project meetings as required for clear communication of contract requirements and adherence to schedules.
3. Track all requests for information and continue to assist GWA with the development of a response to RFIs regarding any aspect of the contract documents.
4. Notify GWA regarding any issues that arise during construction of the project that could result in claims and/or disputes.
5. Provide and ensure that the project is efficiently managed and constructed according to the terms of the contract.
6. Provide a full time competent on-site inspector to observe all activities of other Contractor on-site to ensure that the work is accomplished by the Contract documents and applicable permits.

Please give us a call or contact us via email if you have questions regarding this proposal.
Thank you very much.

Very Truly,

Reynaldo M C. Arce, P.E.
Principal Engineer
EMPSCO Engineering Consultants
Attached: Fee Proposal Breakdown

EMPSCO ENGINEERING CONSULTANTS

GUAM WATERWORKS AUTHORITY

Construction Management Services for GWA Route 4 Sewerline Rehabilitation and Replacement Project
CM Proposed Change No. 2 - 90 CD Time Extension (from July 1, 2020 to September 30, 2020)
June 2020

SUMMARY

ORIGINAL CONTRACT AMOUNT	$	702,678.13
APPROVED CHANGE ORDER (CO No.1)	$	230,759.62
CURRENT CONTRACT PRICE INCLUDING APPROVED CO	$	933,437.75
PROPOSED CHANGE ORDER (CO No.2)	**$**	**82,042.20**
REVISED CONTRACT AMOUNT		

Item	Task Description	ORIGINAL CONTRACT AMOUNT	APPROVED CHANGE ORDER (CO No. 1)	PROPOSED CHANGE ORDER (PCO NO. 2)
	CONSTRUCTION PHASE			
	Project Controls			
1	Project Correspondences	$ 27,158.28	$ 13,514.20	$ 5,728.71
2	Submittals	$ 34,630.67	$ -	$ -
3	Payment requests	$ 31,477.28	$ -	$ -
4	Project Meetings	$ 58,458.00	$ 27,280.40	$ 2,909.76
5	Request for Information	$ 25,078.88	$ 13,180.16	$ 5,585.55
6	Claims and Disputes	$ 25,078.88	$ 14,453.60	$ 6,131.31
7	Project Records	$ 26,898.08	$ 14,453.60	$ 6,131.31
	subtotal	**$ 228,780.07**	**$ 82,881.96**	**$ 26,486.64**
	Construction Inspection			
8	Onsite Inspections/Site Issues	$ 291,834.88	$ 137,325.86	$ 54,355.56
9	Acceptance of Work	$ 11,569.28	$ 8,451.80	$ -
10	Stop Work Order	$ -	$ -	$ -
	subtotal	**$ 303,404.16**	**$ 145,777.66**	**$ 54,355.56**
	Change Orders			
11	Change Order Review	$ 17,293.61	$ -	$ -
12	Design Change	$ 13,734.50	$ -	$ -
13	DCVR	$ 13,881.71	$ -	$ -
14	Negotiations	$ 14,617.76	$ -	$ -
15	Change Order Documents	$ 16,030.04	$ -	$ -
	subtotal	**$ 75,557.62**	**$ -**	**$ -**
	Construction Survey			
16	Pipeline Alignments	$ 4,842.92	$ -	$ -
17	Elevations	$ 4,842.92	$ -	$ -
	subtotal	**$ 9,685.84**	**$ -**	**$ -**
	Project Close-out			
18	Timely/Substantial Completion	$ 19,692.62	$ -	$ -
19	Punch List Development	$ 9,941.28	$ -	$ -
20	Inspections	$ 14,409.72	$ -	$ -
21	Training & Warranty	$ -	$ -	$ -
	subtotal	**$ 44,043.62**	**$ -**	**$ -**
	SUBTOTAL - CONSTRUCTION PHASE	**$ 661,471.31**	**$ 228,659.62**	**$ 80,842.20**

EMPSCO ENGINEERING CONSULTANTS

GUAM WATERWORKS AUTHORITY

Construction Management Services for GWA Route 4 Sewerline Rehabilitation and Replacement Project
CM Proposed Change No. 2 - 90 CD Time Extension (from July 1, 2020 to September 30, 2020)
June 2020

SUMMARY

ORIGINAL CONTRACT AMOUNT	$	702,678.13
APPROVED CHANGE ORDER (CO No.1)	$	230,759.62
CURRENT CONTRACT PRICE INCLUDING APPROVED CO	$	933,437.75
PROPOSED CHANGE ORDER (CO No.2)	**$**	**82,042.20**
REVISED CONTRACT AMOUNT		

Item	Task Description	ORIGINAL CONTRACT AMOUNT	APPROVED CHANGE ORDER (CO No. 1)	PROPOSED CHANGE ORDER (PCO NO. 2)	
	POST CONSTRUCTION				
1	Final Report	$ 7,620.90	$ -	$ -	
2	Project Records	$ 7,257.06	$ -	$ -	
3	Record Drawings	$ 8,815.86	$ -	$ -	
	subtotal	**$ 23,693.82**	**$ -**	**$ -**	
	EXPENSE ITEMS				
	CONSTRUCTION PHASE				
1	Mailing & Expediting	$ -	$ -	$ -	
2	Report Reproduction	$ 2,800.00	$ -	$ -	
3	Drawing Reproduction	$ 1,000.00	$ -	$ -	
4	Photo film dev	$ -	$ -	$ -	
5	Fuel	$ 4,000.00	$ 2,100.00	$ 1,200.00	
6	Office Supplies	$ 600.00	$ -	$ -	
7	Digital Cameras	$ -	$ -	$ -	
8	Testing	$ 8,363.00	$ -	$ -	
	POST CONSTRUCTION				
1	Mailing & Expediting	$ -	$ -	$ -	
2	Report Reproduction	$ 250.00	$ -	$ -	
3	Record Drawing Reproduction	$ 500.00	$ -	$ -	
	subtotal	**$ 17,513.00**	**$ 2,100.00**	**$ 1,200.00**	
	Grand Total	**$ 702,678.13**	**$ 230,759.62**	**$ 82,042.20**	

Construction Management Services for GWA Route 4 Sewerline Rehabilitation and Replacement Project
CM Proposed Change No. 2 - 90 CD Time Extension

Item	Task Description	Principal Engineer	Project Manager	Project Engineer	Project Inspector	Secretary/Clerk	CADD Operator	3-man survey crew	PROPOSED CHANGE ORDER NO. 2 (From July 1, 2020 up to September 30, 2020)
		$ 147.21	$ 147.21	$ 112.58	$ 95.27	$ 45.48	$ 57.42	$ 1,210.73	
	CONSTRUCTION PHASE								
	Project Controls								
1	Project Correspondences	3.00	12.00	24.00		18.00			$ 5,728.71
2	Submittals								$ -
3	Payment requests								$ -
4	Project Meetings	-	12.00	-	12.00				$ 2,909.76
5	Request for Information	3.00	12.00	30.00					$ 5,585.55
6	Claims and Disputes	3.00	12.00	30.00		12.00			$ 6,131.31
7	Project Records	3.00	12.00	30.00		12.00			$ 6,131.31
	subtotal								**$ 26,486.64**
	Construction Inspection								
8	Onsite Inspection	-	12.00	-	552.0				$ 54,355.56
9	Acceptance of Work	-	-	-					$ -
10	Stop Work Order								$ -
	subtotal								**$ 54,355.56**
	Change Orders								
11	Change Order Review								$ -
12	Design Change								$ -
13	DCVR								$ -
14	Negotiations								$ -
15	Change Order Documents								$ -
	subtotal								**$ -**
	Construction Survey								
16	Pipeline Alignments								$ -
17	Elevations								$ -
	subtotal								**$ -**
	Project Close-out								
18	Timely Completion								$ -
19	PunchList Review & Verification								$ -
20	Inspections								$ -
21	Training & Warranty								$ -
	subtotal								**$ -**
	SUBTOTAL - CONSTRUCTION PHASE								**$ 80,842.20**
	POST CONSTRUCTION								

Item	Task Description	Principal Engineer	Project Manager	Project Engineer	Project Inspector	Secretary/Clerk	CADD Operator	3-man survey crew	PROPOSED CHANGE ORDER NO. 2 (From July 1, 2020 up to September 30, 2020)
		$ 147.21	$ 147.21	$ 112.58	$ 95.27	$ 45.48	$ 57.42	$ 1,210.73	
1	Final Report								$ -
2	Project Records								$ -
3	Record Drawings								$ -
	subtotal								$ -
	EXPENSE ITEMS								
	CONSTRUCTION PHASE								
1	Mailing & Expediting								$ -
2	Report Reproduction								$ -
3	Drawing Reproduction								$ -
4	Photo film dev								$ -
5	Fuel								$ 1,200.00
6	Office Supplies								$ -
7	Digital Cameras								$ -
8	Testing								$ -
	subtotal								**$ 1,200.00**
	Grand Total								**$ 82,042.20**

GM REPORT

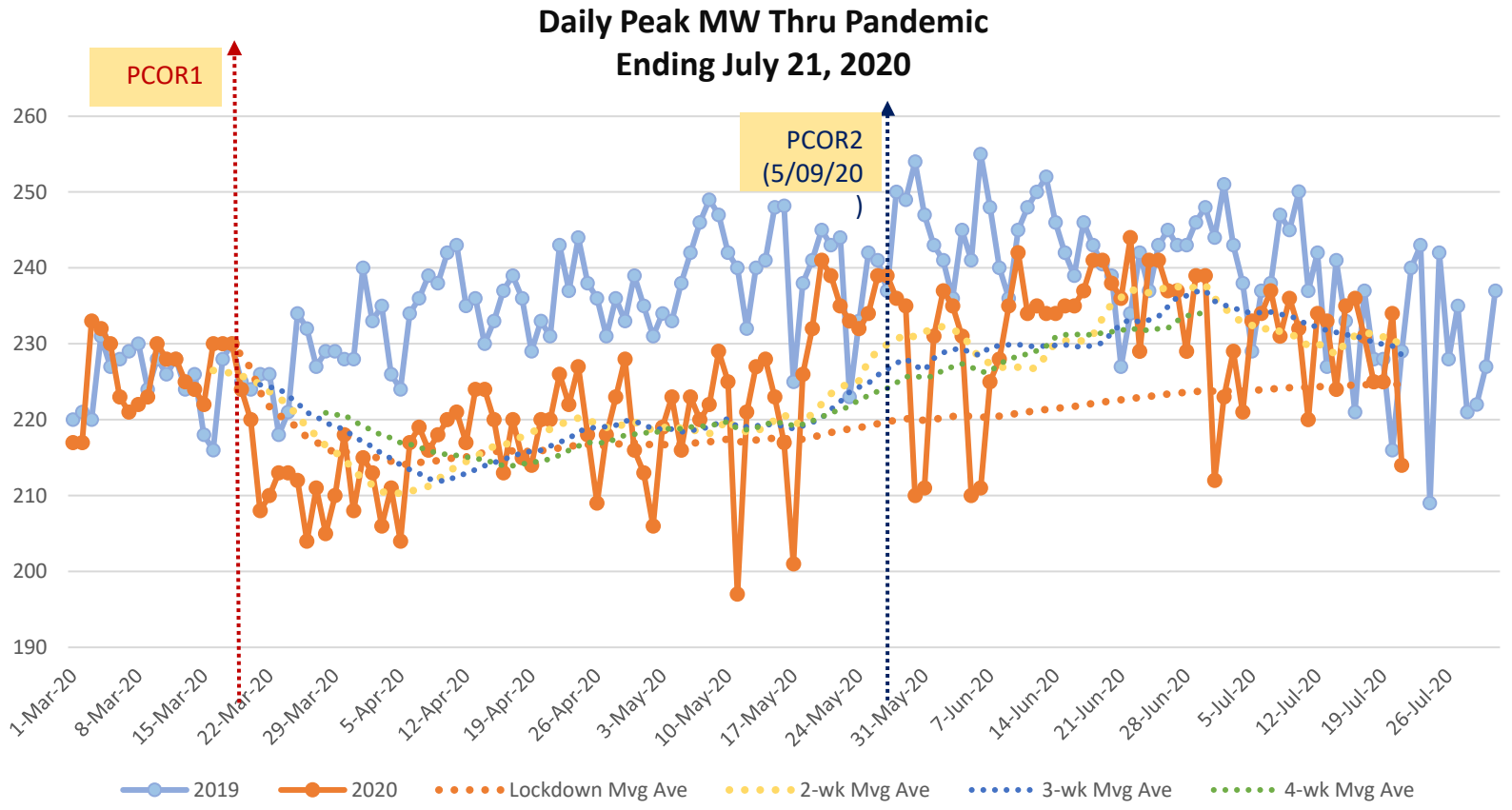
Presentation To:

Consolidated Commission on Utilities

July 28, 2020

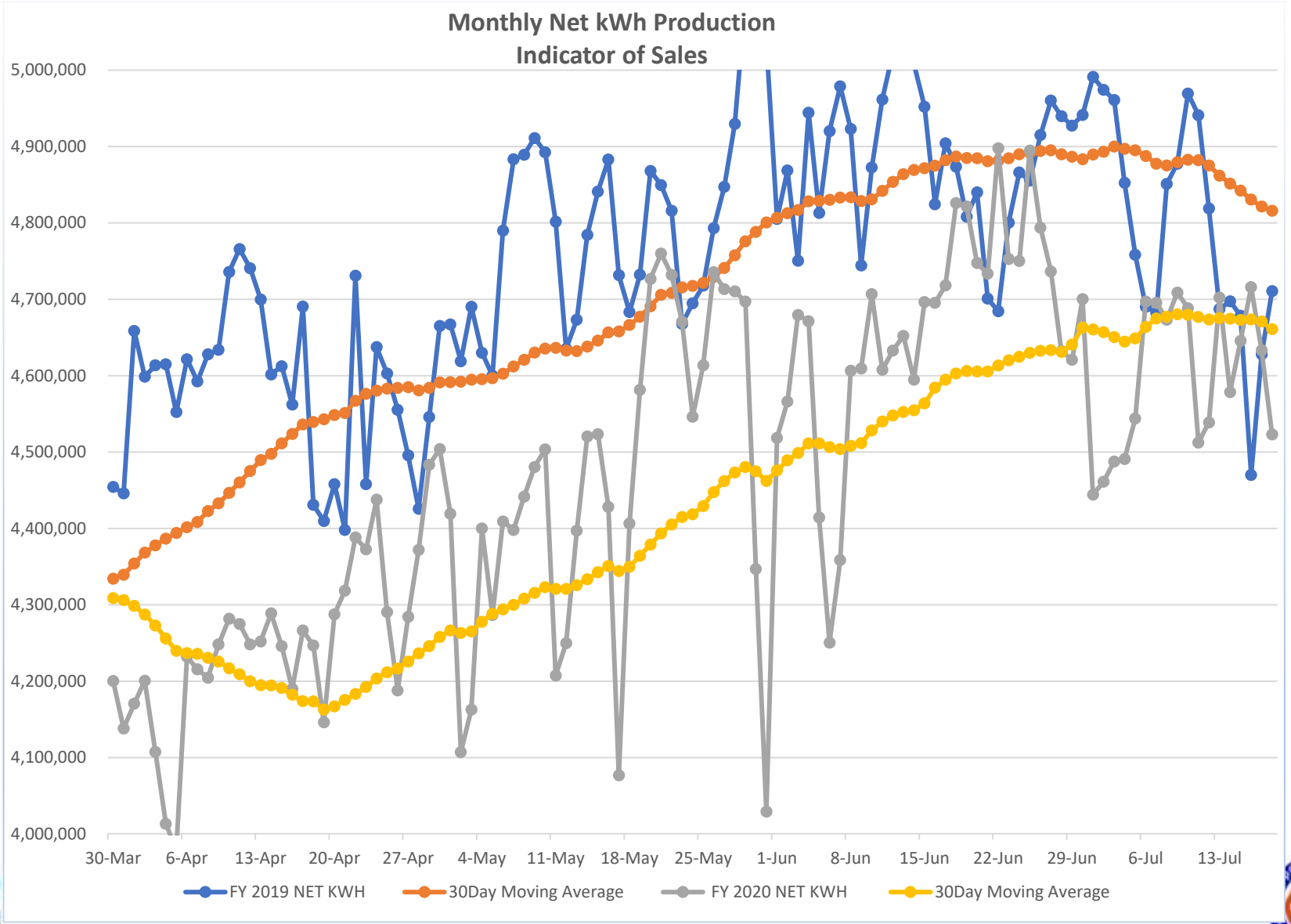
PEAK DEMAND RECOVERING TOWARDS 2019 LEVEL

1. **Generation System:** Reserve Margin forecast for August 2020:
   - Projected Available Capacity: 316 MW
   - Projected Demand: 242 MW
   - Anticipated Reserve Margin: 74 MW
   - MEC 9 to undergo 14 day overhaul

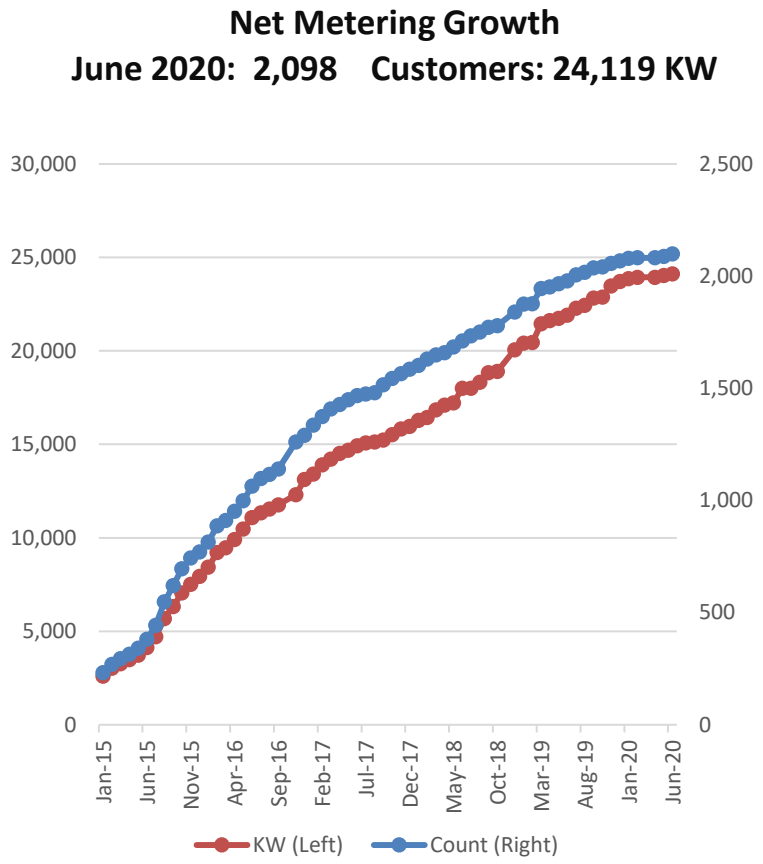


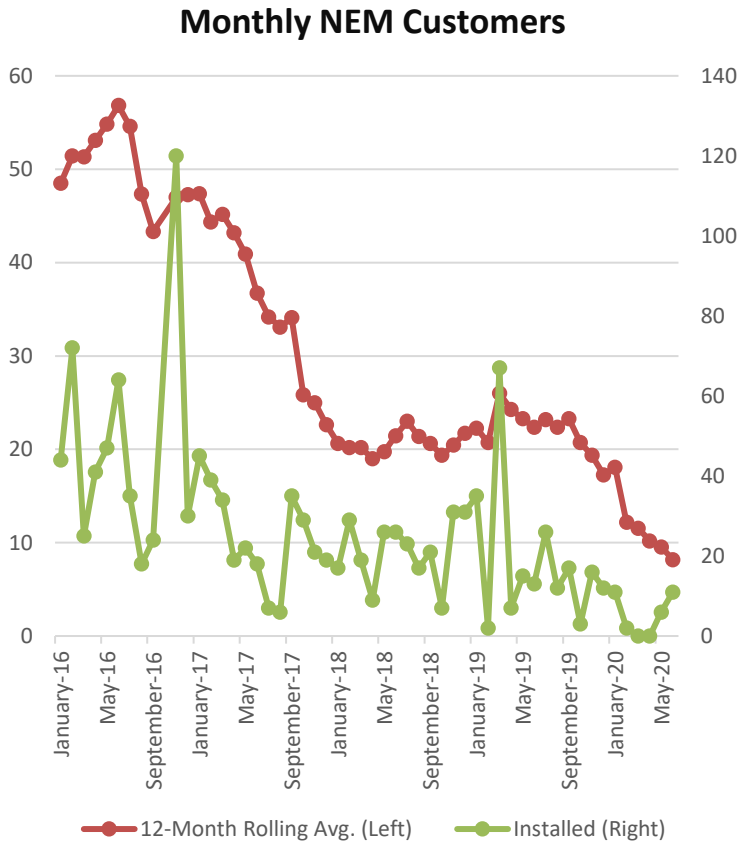
NET ENERGY PRODUCTION RECOVERING

Indicates sales recovering from 8.2% drop to now 3.2%



2. Net Metering (NEM) Growth Thru June 2020:





3. Demand Side Management

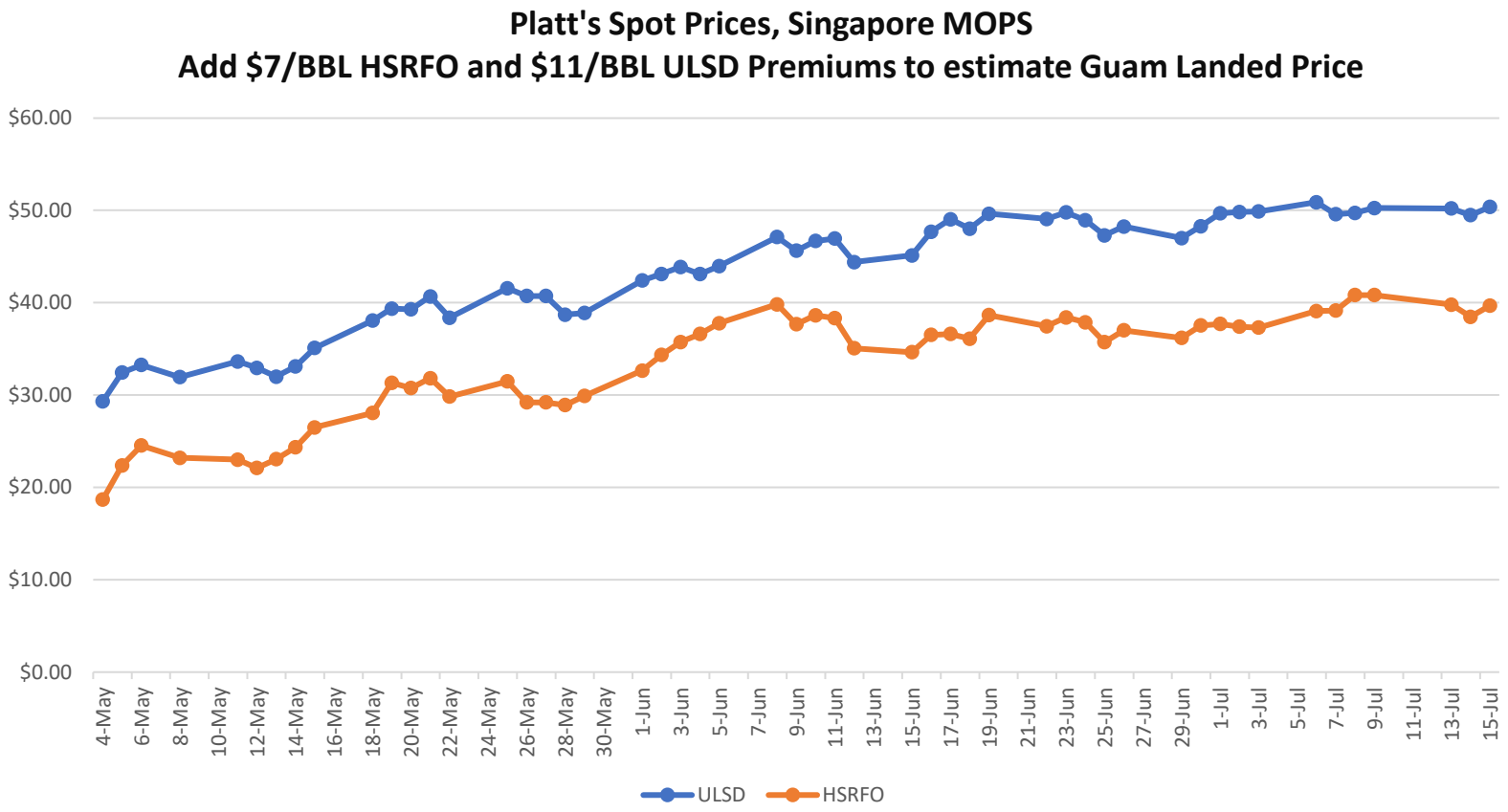
Description	FY16	FY17	FY18	FY19	FY20 As of 6/30/20	Total to Date
Regular/OT Pay	$11,348.80	$22,256.00	$26,121.83	$50,715.19	$20,714.99	$131,156.81
Other Contractual	$28,278.50	$85,550.05	$116,977.50	$3,025.00	-	$233,831.05
Ads & Radio Announcements	-	-	-	$7,500.00	-	$7,500.00
Paid Rebates-Split AC	$154,700.00	$557,275.00	$1,349,825.00	$1,374,650.00	$457,450.00	$3,893,900.00
Paid Rebates-Central AC	$3,400.00	$8,200.00	$4,400.00	$6,500.00	$500.00	$23,000.00
Paid Rebates-Washer/Dryer	$2,800.00	$7,425.00	$57,200.00	$110,800.00	$36,000.00	$214,225.00
Total Expenses	**$200,527.30**	**$680,706.05**	**$1,554,524.33**	**$1,553,190.19**	**$514,664.99**	**$4,503,612.86**
Bank Interest (+)	$1,676.42	$1,722.74	$1,222.29	$730.05	$353.44	$5,704.94
Bank Fees	$155.00	$1,032.06	$1,085.08	$1,247.54	$275.00	$3,794.68

Rebate Paid Monthly :

Month	CY 2019	CY 2020
Jan	$ 175,150	$ 38,650
Feb	$ 104,925	$ 64,250
Mar	$ 137,025	$ 94,675
Apr	$ 99,650	$ -
May	$ 80,950	$ 20,175
June	$ 120,525	$ 147,475
July	$ 162,350	
Aug	$ 191,175	
Sept	$ 124,200	
Oct	$ 131,300	
Nov	$ 14,050	
Dec	$ 114,775	
TOTAL	**$ 1,344,850**	**$ 365,225**

4. Fuel Prices (Per Barrel) Ending July 15, 2020

July Prices has increased greater than 40% since low point in May 2020



General Manager's Report (con't)

5. **PUC Update:**
   - GPA is providing the PUC ALJ with the updated average fuel price data for PUC to set the LEAC for the period August 1, 2020 to January 31, 2021.
   - **PUC approved GPA Docket 20-14**, Petition for Approval of Procurement for Aggreko Performance Management Contract (PMC) on June 25, 2020.
   - The following dockets are on PUC's agenda for their July 30, 2020 meeting:
     - **Docket 20-17**, Petition to Approve Performance Management Contract for Cabras 1 & 2 Generating Plants
     - **Docket 20-17**, Petition to Approve the Contract for Residual Fuel Oil No. 6 for the Baseload Power Generating Plants
     - **Docket 20-13**, LEAC Filing
6. **Phase III Renewables Project Update:**
   - The Phase III Intent to Award to Engie for 40 MW of Solar PV with full supply shifting Energy Storage System has been under appeal and initial OPA scheduling hearings were underway prior to the March shutdown. Formal hearings were held in early July. Closing arguments by the parties is set for July 30, 2020. A decision by the OPA may occur by late August.
7. **Accounts under Payment Plan due to Emergency Pandemic Period:**
   - GPA continues to work with customers on payment plans for accounts in arrears, with over 550 payment plans for post-paid residential accounts and more than 1,000 additional debt recovery arrangements for pre-paid residential accounts. GPA discontinued disconnections in mid-March and has not disconnected anyone for non-payment to this date. We continue to work with customers with disconnection as our last resort.

General Manager's Report (con't)

8. **Phase II 120MW Solar PV:** The scheduled commissioning dates (unadjusted during COVID-19 Pandemic) for the two projects:

Project Description	Adjusted Commercial Operation Date from Original Contract (unadjusted during COVID-19 Pandemic)
KEPCO – LG CNS, 2x30M Solar PV Projects (Mangilao, Guam)	January 21, 2022
HANWHA Energy Corp (HEC), 2x30M Solar PV Projects (Malojloj, Guam)	August 22, 2022

KEPCO has begun construction and this photo is a birds eye view when completed:



General Manager's Report (con't)

KEPCO 120MW Solar Project Site Clearing and Grading On-going:









General Manager's Report (con't)

9. Energy Storage System (ESS) Update:

- The contractor is restarting the ESS Commissioning process in Mid-August. The commissioning process would take two months and both the Talofofo 16MW ESS and the Hagatna 24MW ESS would be commissioned into full service by Mid-October 2020. Attached are the full project schedule for both Talofofo and Hagatna.

10. Ukudu Power Plant:

- Project is experiencing delays due to COVID-19 and other issues such as permitting, environmental impact assessments and historical preservation reviews. I am unable to provide a revised schedule at this time. GPA continues to work with KEPCO and other agencies in order to firm up a revised schedule.

11. Utility Articles:

- Attached for your readings are two articles on GPA. One was published by American Public Power Association titled: "**Riding the storm: Increasing resiliency for extreme weather events**". The second article will be published shortly by ENERGY, OIL & GAS international publication and is titled: **Guam Power Authority: "A powerful transformation".** GPA continues to achieve national and international recognition thru publications such as these.

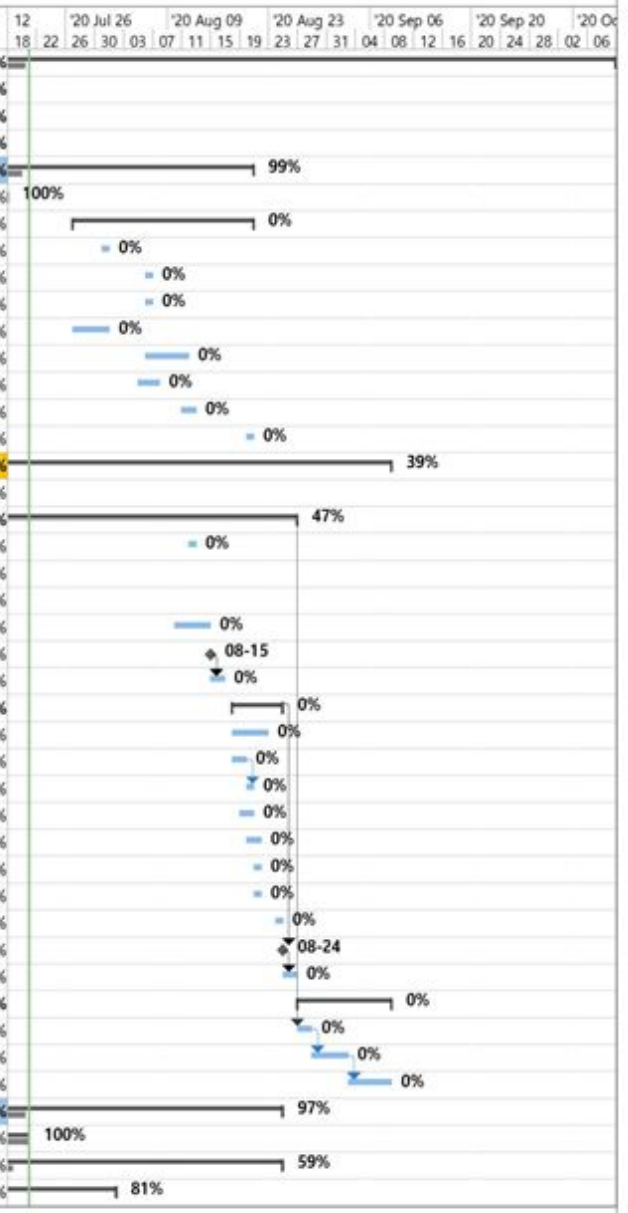
12. Generation KPI's:

- The following graphs show updated information through June 2020:

Energy Storage System (ESS) Full Project Schedule

[GPA ESS Phase 1] Project Schedule 20200720.mpp

ID	WBS	Tasks	Duration	Start	Finish	Actual Start	Actual Finish	% Complete
1	1	**Agana and Talofofo Substation ESS**	**1059 d**	**2017-05-15**	**2020-10-09**	**2017-05-15**	**NA**	**97%**
2	1.1	**Mobilization**	**59 d**	**2017-05-15**	**2017-07-21**	**2017-05-15**	**2017-07-21**	**100%**
10	1.2	**Design**	**604 d**	**2017-05-16**	**2019-05-01**	**2017-05-16**	**2019-05-01**	**100%**
36	1.3	**Equipment Cost, Procurement and Delivery**	**493 d**	**2017-07-10**	**2019-02-15**	**2017-07-10**	**2019-02-15**	**100%**
83	1.4	**On-Site Construction (Talofofo)**	**860 d**	**2017-11-13**	**2020-08-20**	**2017-11-13**	**NA**	**99%**
84	1.4.1	Completed Works for Talofofo	830 d	2017-11-13	2020-07-17	2017-11-13	2020-07-17	100%
404	1.4.2	Remaining Works and Punchlist Item	23 d	2020-07-27	2020-08-20	NA	NA	0%
405	1.4.2.1	1" Water line valve box installation	1 d	2020-07-31	2020-07-31	NA	NA	0%
406	1.4.2.2	Manhole Ladder Installation	1 d	2020-08-06	2020-08-06	NA	NA	0%
407	1.4.2.3	Cable Opening Sealing (ACB PNL Hole)	1 d	2020-08-06	2020-08-06	NA	NA	0%
408	1.4.2.4	34.5kV Transformer(LV) Vertical Duct	5 d	2020-07-27	2020-07-31	NA	NA	0%
409	1.4.2.5	Cable Labeling (HV Cable)	5 d	2020-08-06	2020-08-11	NA	NA	0%
410	1.4.2.6	Trench Wall & Manhole Sleeve Labeling (Name Plate)	3 d	2020-08-05	2020-08-07	NA	NA	0%
411	1.4.2.7	Ground Resistance Test & Connection	2 d	2020-08-11	2020-08-12	NA	NA	0%
412	1.4.2.8	Battery Container DC PNL Megger Test (Battery Rack to DC PNL)	1 d	2020-08-20	2020-08-20	NA	NA	0%
413	1.5	**Commissioning and Performance Testing (Talofofo)**	**165 d**	**2020-03-02**	**2020-09-08**	**2020-03-02**	**NA**	**39%**
414	1.5.1	Precommissioning Inspection (Walk-Through Site)	1 d	2020-03-02	2020-03-02	2020-03-02	2020-03-02	100%
415	1.5.2	**Commissioning Phase I**	**153 d**	**2020-03-03**	**2020-08-26**	**2020-03-03**	**NA**	**47%**
416	1.5.2.1	Testing Auxiliary Equipment(UPS, Rectifier Battery)	1 d	2020-08-12	2020-08-12	NA	NA	0%
417	1.5.2.2	Testing: Interconnection	11 d	2020-03-03	2020-03-14	2020-03-03	2020-03-14	100%
418	1.5.2.3	Testing: Grid Equipment	11 d	2020-03-03	2020-03-14	2020-03-03	2020-03-14	100%
419	1.5.2.4	Renovation, Rerouting, and Testing: 34.5kV Interconnection Equipr	5 d	2020-08-10	2020-08-14	NA	NA	0%
420	1.5.2.5	GPA's Test Result Report Review: Interconnection Equipment Testi	0 d	2020-08-15	2020-08-15	NA	NA	0%
421	1.5.2.6	Energization: 34.5kV Interconnection Equipment	2 d	2020-08-15	2020-08-16	NA	NA	0%
422	1.5.2.7	Testing ESS Equipment	6 d	2020-08-18	2020-08-24	NA	NA	0%
423	1.5.2.7.1	2MVA PCS	5 d	2020-08-18	2020-08-22	NA	NA	0%
424	1.5.2.7.2	DC Junction Panels of Battery Banks	2 d	2020-08-18	2020-08-19	NA	NA	0%
425	1.5.2.7.3	AC & DC Power Distribution Panels at Battery Container	1 d	2020-08-20	2020-08-20	NA	NA	0%
426	1.5.2.7.4	Battery Containers	2 d	2020-08-19	2020-08-20	NA	NA	0%
427	1.5.2.7.5	Li Batteries	2 d	2020-08-20	2020-08-21	NA	NA	0%
428	1.5.2.7.6	Battery Section Controllers(BSC)	1 d	2020-08-21	2020-08-21	NA	NA	0%
429	1.5.2.7.7	PMS' and HMI' Equipment and Softwares including site equipme	1 d	2020-08-21	2020-08-21	NA	NA	0%
430	1.5.2.7.8	PMS-SCADA Matching Test	1 d	2020-08-24	2020-08-24	NA	NA	0%
431	1.5.2.8	GPA's Test Result Report Review: Grid-Connection Equipment and	0 d	2020-08-24	2020-08-24	NA	NA	0%
432	1.5.2.9	Energization: Grid-Connection Equipment and ESS Equipment	2 d	2020-08-25	2020-08-26	NA	NA	0%
433	1.5.3	**Commissioning Phase II**	**11 d**	**2020-08-27**	**2020-09-08**	**NA**	**NA**	**0%**
434	1.5.3.1	Power Quality Measurement	2 d	2020-08-27	2020-08-28	NA	NA	0%
435	1.5.3.2	Performance and Basic Functions	4 d	2020-08-29	2020-09-02	NA	NA	0%
436	1.5.3.3	Operation Scenarios: Renewable Integration	5 d	2020-09-03	2020-09-08	NA	NA	0%
437	1.6	**On-Site Construction(Agana)**	**877 d**	**2017-10-27**	**2020-08-24**	**2017-10-27**	**NA**	**97%**
438	1.6.1	Completed Works for Agana	846 d	2017-10-27	2020-07-20	2017-10-27	2020-07-20	100%
829	1.6.2	Remaining Works and Punchlist Item	284 d	2019-09-30	2020-08-24	2019-09-30	NA	59%
830	1.6.2.6	Mobile Susbstation	264 d	2019-09-30	2020-08-01	2019-09-30	NA	81%

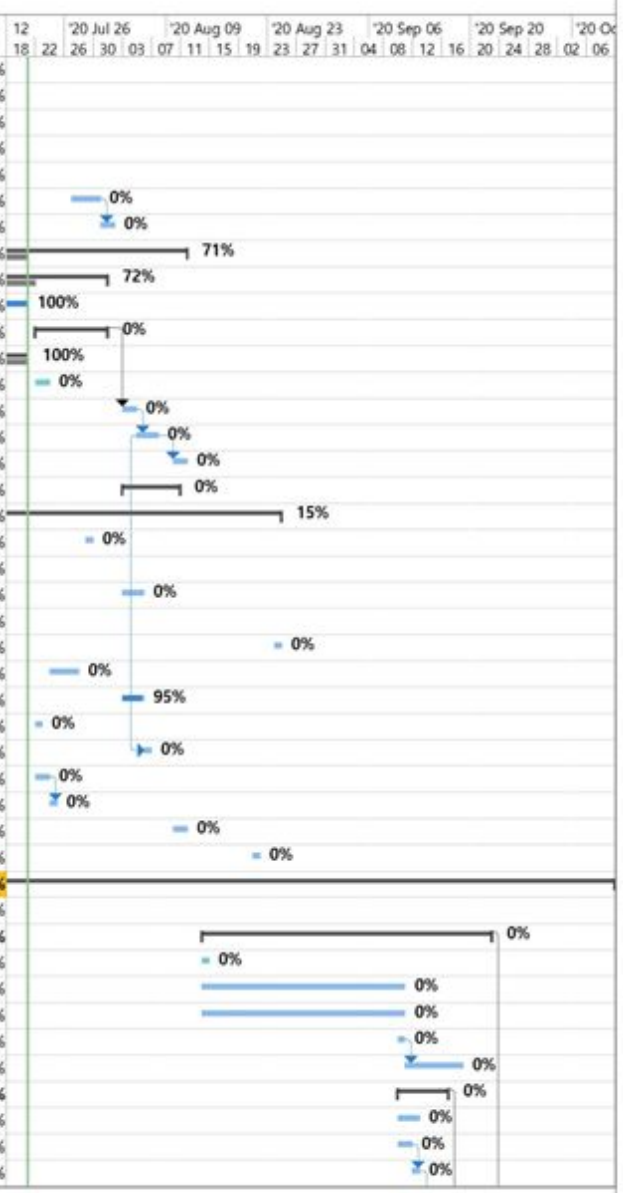


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Energy Storage System (ESS) Full Project Schedule

[GPA ESS Phase 1] Project Schedule 20200720.mpp

ID	WBS	Tasks	Duration	Start	Finish	Actual Start	Actual Finish	% Complete
831	1.6.2.6.2.1	UG conduit for mobile riser part 2	14 d	2019-11-14	2019-12-03	2019-11-14	2019-12-03	100%
832	1.6.2.6.2.2	Backfilling and Compaction	3 d	2019-12-04	2019-12-06	2019-12-04	2019-12-06	100%
833	1.6.2.6.2.3	Delivery Long Leed Materials	1 d	2019-09-30	2019-09-30	2019-09-30	2019-09-30	100%
834	1.6.2.6.2.4	Mobile Riser Cabling	4 d	2020-02-17	2020-02-20	2020-02-17	2020-02-20	100%
835	1.6.2.6.2.5	Mobile Riser 34.5kV Cable Termination	3 d	2020-02-18	2020-02-20	2020-02-18	2020-02-20	100%
836	1.6.2.1.6	Mobile Riser 13.8kV Cable Termination	4 d	2020-07-27	2020-07-30	NA	NA	0%
837	1.6.2.6.2.6	Test and Connection	2 d	2020-07-31	2020-08-01	NA	NA	0%
838	1.6.2.6	Emergency Generator and ATS	40 d	2020-06-26	2020-08-11	2020-06-26	NA	71%
839	1.6.2.2.1	Emergency Generator	31 d	2020-06-26	2020-07-31	2020-06-26	NA	72%
840	1.6.2.2.1.1	Conduit Pit	21 d	2020-06-26	2020-07-20	2020-06-26	2020-07-20	100%
841	1.6.2.2.1.2	Foundation	9 d	2020-07-22	2020-07-31	NA	NA	0%
846	1.6.2.2.2	ATS	21 d	2020-06-26	2020-07-20	2020-06-26	2020-07-20	100%
848	1.6.2.2.3	Underground conduit	2 d	2020-07-22	2020-07-23	NA	NA	0%
849	1.6.2.2.4	Backfill and compaction	2 d	2020-08-03	2020-08-04	NA	NA	0%
850	1.6.2.2.5	Cable Installation and Termination	3 d	2020-08-05	2020-08-07	NA	NA	0%
851	1.6.2.2.6	Test and Connection	2 d	2020-08-10	2020-08-11	NA	NA	0%
852	1.6.2.6	Extended Concrete Wall(at main gate)	7 d	2020-08-03	2020-08-10	NA	NA	0%
856	1.6.2.4	Punchlist Item	184 d	2020-01-24	2020-08-24	2020-01-24	NA	15%
857	1.6.2.4.1	H-401 Revise Cable Connection, Termination	1 d	2020-07-29	2020-07-29	NA	NA	0%
858	1.6.2.4.2	Gravel(Switch yard)	5 d	2020-01-24	2020-01-29	2020-01-24	NA	0%
859	1.6.2.4.3	34.5kV Transformer(LV) Vertical Duct	3 d	2020-08-03	2020-08-05	NA	NA	0%
860	1.6.2.4.4	115kV Transformer(LV) Vertical Duct	1 d	2020-03-18	2020-03-18	2020-03-18	NA	95%
861	1.6.2.4.5	Cable opening sealing (CTRL Container Hole)	1 d	2020-08-24	2020-08-24	NA	NA	0%
862	1.6.2.4.6	Gate Valve Cover Installation	3 d	2020-07-24	2020-07-27	NA	NA	0%
863	1.6.2.4.7	Battery Container Trench Cover Repair	3 d	2020-08-03	2020-08-05	2020-08-03	NA	95%
864	1.6.2.4.8	34.5kV Manhole Ladder Installation	1 d	2020-07-22	2020-07-22	NA	NA	0%
865	1.6.2.4.9	13.8kV Manhole Ladder Installation	1 d	2020-08-06	2020-08-06	NA	NA	0%
866	1.6.2.4.10	Cable Labeling	2 d	2020-07-22	2020-07-23	NA	NA	0%
867	1.6.2.4.11	Trench Wall Sleeve Labeling (Name Plate)	1 d	2020-07-24	2020-07-24	NA	NA	0%
868	1.6.2.4.12	Ground Resistance Test & Connection	2 d	2020-08-10	2020-08-11	NA	NA	0%
869	1.6.2.4.13	Battery Container DC PNL Megger Test (Battery Rack to DC PNL)	1 d	2020-08-21	2020-08-21	NA	NA	0%
870	**1.7**	**Commissioning and Performance Testing (Agana)**	**181 d**	**2020-03-14**	**2020-10-09**	**2020-03-14**	**NA**	**1%**
871	1.7.1	Precommissioning Inspection (Walk-Through Site)	1 d	2020-03-14	2020-03-14	2020-03-14	2020-03-14	100%
872	**1.7.2**	**Commissioning Phase I**	**35 d**	**2020-08-14**	**2020-09-22**	**NA**	**NA**	**0%**
873	1.7.2.1	Testing Auxiliary Equipment(UPS, Rectifier Battery)	1 d	2020-08-14	2020-08-14	NA	NA	0%
874	1.7.2.2	Testing: Interconnection	25 d	2020-08-14	2020-09-10	NA	NA	0%
875	1.7.2.3	Testing: Grid Equipment	25 d	2020-08-14	2020-09-10	NA	NA	0%
876	1.7.2.4	GPA's Test Result Report Review: Interconnection Equipment Testi	1 d	2020-09-10	2020-09-10	NA	NA	0%
877	1.7.2.5	Energization: 34.5kV Interconnection Equipment	7 d	2020-09-11	2020-09-18	NA	NA	0%
878	**1.7.2.6**	Testing ESS Equipment	**6 d**	**2020-09-10**	**2020-09-16**	**NA**	**NA**	**0%**
879	1.7.2.6.1	2MVA PCS	3 d	2020-09-10	2020-09-12	NA	NA	0%
880	1.7.2.6.2	DC Junction Panels of Battery Banks	2 d	2020-09-10	2020-09-11	NA	NA	0%
881	1.7.2.6.3	AC & DC Power Distribution Panels at Battery Container	1 d	2020-09-12	2020-09-12	NA	NA	0%

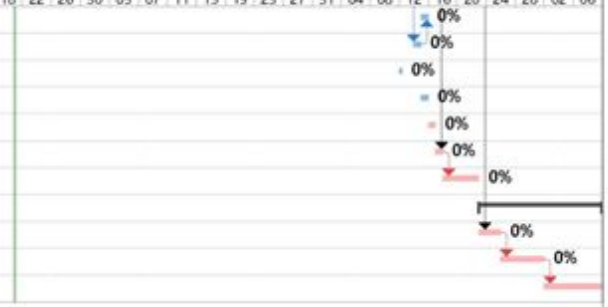


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Energy Storage System (ESS) Full Project Schedule

[GPA ESS Phase 1] Project Schedule 20200720.mpp

ID	WBS	Tasks	Duration	Start	Finish	Actual Start	Actual Finish	% Complete
882	1.7.2.6.4	Battery Containers	1 d	2020-09-15	2020-09-15	NA	NA	0%
883	1.7.2.6.5	Li Batteries	1 d	2020-09-14	2020-09-14	NA	NA	0%
884	1.7.2.6.6	Battery Section Controllers(BSC)	2 h	2020-09-12	2020-09-12	NA	NA	0%
885	1.7.2.6.7	PMS' and HMI' Equipment and Softwares including site equipme	1 d	2020-09-15	2020-09-15	NA	NA	0%
886	1.7.2.6.8	PMS-SCADA Matching Test	1 d	2020-09-16	2020-09-16	NA	NA	0%
887	1.7.2.7	GPA's Test Result Report Review: Grid-Connection Equipment and	1 d	2020-09-17	2020-09-17	NA	NA	0%
888	1.7.2.8	Energization: Grid-Connection Equipment and ESS Equipment	4 d	2020-09-18	2020-09-22	NA	NA	0%
889	**1.7.3**	**Commissioning Phase II**	**15 d**	**2020-09-23**	**2020-10-09**	**NA**	**NA**	**0%**
890	1.7.3.1	Power Quality Measurement	3 d	2020-09-23	2020-09-25	NA	NA	0%
891	1.7.3.2	Performance and Basic Functions	5 d	2020-09-26	2020-10-01	NA	NA	0%
892	1.7.3.3	Operation Scenarios: Frequency Regulation	7 d	2020-10-02	2020-10-09	NA	NA	0%



Published Magazine Articles: APPA and Energy, Oil & Gas

1. Reliability - *Riding the Storm: Increasing Resiliency for Extreme Weather Events* – Published in the APPA Public Power Magazine – March/April 2020 Issue

2. A Mammoth Operation, Guam Power Authority – "*A Powerful Transformation*" - The Article will Appear in the hardcopy magazine of Energy, Oil & Gas - August 2020 Issue

AMERICAN PUBLIC POWER ASSOCIATION
80 Years of Powering Strong Communities

RELIABILITY

Riding the Storm: Increasing Resiliency for Extreme Weather Events



Resilient Design

Pole replacement also is a component of the system hardening plan created by the **Guam Power Authority**, which serves approximately 52,000 customers on the Pacific island. Having a plan to prepare for extreme weather is key for Guam, which is located in "Typhoon Alley," a region notorious for being in the path of almost every storm headed toward Asia, according to John M. Benavente, PE, GPA's general manager. As a result, it regularly deals with typhoons (known as hurricanes in the Atlantic) that exceed a Category 5 rating.

"GPA has to resort to the solutions or fixes we've implemented for economic and sustainability reasons. Our customers include the U.S. military and federal government installations, which account for approximately 20% of our load," Benavente said. "National and homeland defense are of paramount importance, and, therefore, GPA continues to improve the system to ensure a reliable and sustainable energy environment."

GPA also is preparing to protect itself from rising sea level storm surges and tsunamis. In 2017, scientists visited GPA with concerns that a tsunami may hit the island in the next few decades.

Pole replacement helps prepare for increasing storms and weather events, but it's nothing new to the utility. GPA began replacing all wooden poles with spun concrete poles in the 1980s. It regularly replaces poles and uses concrete poles for all new line extension projects. Today, 90% of its more than 36,000 poles are concrete.

GPA also is working on moving to a hybrid system consisting of a primary distribution line that's an overhead concrete pole and a secondary system that's underground. Energy from the transformers mounted on concrete poles serves customers through an underground line connected to their homes and businesses.

"This hybrid system eliminates the aerial secondary line typically attached to customer homes through a weather head on their roofs. During a typhoon on Guam, this secondary line system typically gets damaged the most, and storm recovery then takes a substantial amount of time."

The utility recently converted an additional 500 customers to the secondary underground system. Approximately 20% of GPA's distribution system serves customers with underground lines. "In the last storm, once the main primary lines were repaired, those 500 customers were immediately restored."

GPA plans on installing underground systems on most of the island in the next 25 years, which should mitigate much of the damage from future typhoons. Moving systems from overhead to underground is not without complications. This process requires trenching, so GPA works with the Guam State Historic Preservation Office and other local government agencies for permits and clearances.

To fund this and other projects, GPA issued long-term bonds. "We don't have the ratepayers of today paying for the entire investment, which would last for decades," Benavente said. "Furthermore, additional funds generated as required by bond indentures in the form of debt service coverages are used on capital improvement projects."

Rethinking Old Ways

In addition to burying power lines to protect against future typhoons, GPA recently signed a contract with the Korea Electric Power Corp. to build a 198-megawatt baseload power plant, which is scheduled to go online in October 2022.

The new plant will be located 300 feet above sea level, which will protect generators and equipment from tsunamis and storm surges. Previously, GPA constructed all conventional baseload generating plants at or near sea level to take advantage of seawater for cooling.

Instead, the new Ukudu plant will be located close to the Guam Waterworks Authority's Northern Wastewater Treatment Plant, which will allow GPA to repurpose approximately 3 million gallons of sewer water to treat and use for cooling the steam turbine part of the combined-cycle units – without any impact to Guam's water aquifer. Working with the wastewater treatment plant will also reduce the sewage waste that currently flows into the ocean.

Siting the power plant adjacent to the wastewater facility will also increase reliability, as it is a large power load demand area and most of its transmission lines are underground. In addition, the plant will hold adequate water resources, as well as 30 days of fuel oil capability, in case a tsunami cuts out fuel supplies to the new plant.

The Ukudu power plant will be constructed by an independent power producer under a build-operate-transfer contract. The contract includes an option for the transfer of ownership to GPA in either 25 or 30 years.

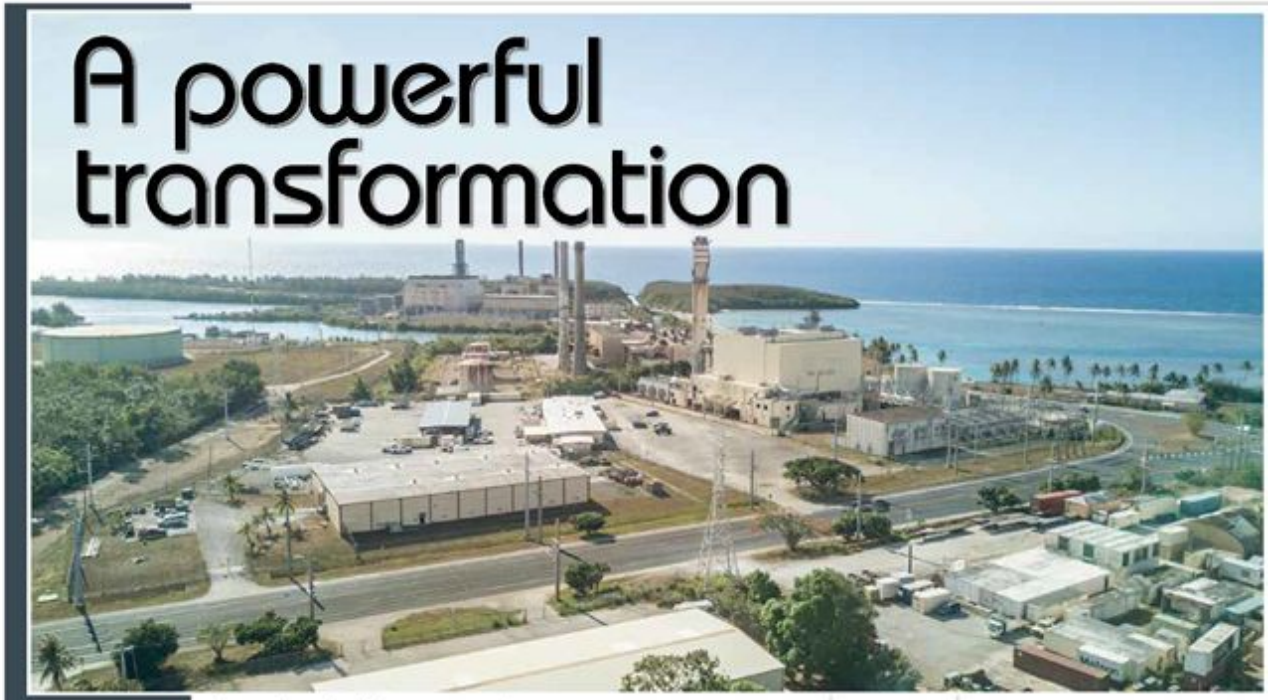
ENERGY, OIL & GAS

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Energy, Oil & Gas Issue 182 July 2020



A powerful transformation



Located in the Western

Pacific, Guam is an unincorporated territory of the United States, a progressive Pacific island community, and a strategically important link between the US and Asia. There is a crucial relationship between energy and Guam's economic growth, and as the island continues to progress, there is a need for Guam's energy mix to evolve because power is an important catalyst for commercial and domestic advancement.

On the electricity side, energy is supplied by The Guam Power Authority (GPA), an electric utility that supplies monopoly electric services throughout Guam, including to all US Department of Defense military bases, various components of the Government of Guam, and a vibrant shopping and hotel industry. GPA serves an island population of approximately 170,000 (with around 52,000 of these as customers) with a 2019 peak demand of 254 megawatts and 2019 (fiscal year) energy sales of 1.57 billion in kilowatt hours.

As John M. Benavente, PE and General Manager at GPA explained, the Authority is a public corporation and autonomous component unit of the Government of Guam. "The Consolidated Commission on Utilities (CCU) - comprised of an elected five-member board of commissioners - provides governance over GPA, while the Guam Public Utilities Commission (GPUC) sets GPA rates and holds oversight of the authority, to include review and approval of all large GPA contracts impacting rates and charges," he said.

Owning assets of $955m, including 29 substations, and 1797 miles of combined transmission and distribution lines, GPA employs a workforce of 450 and supports Guam's economy with both conventional and renewable electrical energy. The island-wide power supply that comes from various fuel-oil based generating units has a gross capacity of over 420 megawatts. "Currently, GPA also has 25.3 megawatts of renewable capacity with an additional 160 megawatts of solar photovoltaic and 150 megawatts of energy storage systems coming online in the next three years," added John, "which is going to achieve a 25 per cent government-mandated Renewable Portfolio Standard (RPS)."

Further elaborating on the thinking behind the energy transition from fuel oil to renewables, John pointed out that GPA's energy has been generated by fossil fuels for the past five decades, which made Guam vulnerable and at the mercy of global fuel oil political changes. Fuel oil purchases also total more than half of GPA's budget. "It is a significant economic drain on Guam's economy because it lacks multiplication effects," he said. "By converting fuel oil purchases to alternative energy purchases such as photovoltaics, Guam is converting oil to jobs, while at the same time reducing its carbon footprint and impact on the planet."

Having already appreciably transformed how Guam generates its electric power, GPA is now working on a project that will result in a significant paradigm shift in how it supplies energy to the island. It has signed contracts with KEPCO for the construction and operation of the new Dededo Ukudu Combined Cycle Power Plant, which will replace its ageing and limited baseload power supply. This 198-megawatt combined cycle plant, with a 51 per cent thermal efficiency, is designed to be the cornerstone that helps to sustain Guam's energy needs. "We are investing in dual fired (Ultra-Low Sulfur Diesel and Natural Gas) high efficiency combined cycle technology, coupled with low and stable cost renewables (20-year, one per cent escalator contracts)," said John. "The plant will allow us to hedge against fluctuating fuel oil prices because over time we will continue to reduce the volume of fuel oil we use by substituting with photovoltaic energy sources. It will work well with renewables, and, in fact, will be the backup to renewable energy to ensure continuous power to the island, in the event of non-solar days and natural disasters."

As part of its commitment to transforming into a modern, sustainable power generation company, over the next few years GPA will be contracting for an additional 180 megawatts of renewables to be commissioned beginning in 2024 and beyond. "All renewables must have adequate storage systems for full capacity load shifting capability. All contracts will comprise a power purchase agreement for 25 years or more. The majority of this capacity will be utility-scale renewables, but the program would also include rooftop solar and small energy farms, perhaps in the one to five megawatt range," John detailed. "This plant, coupled with renewables, will allow GPA to achieve 50 per cent renewables, most likely before the end of this decade," he added.

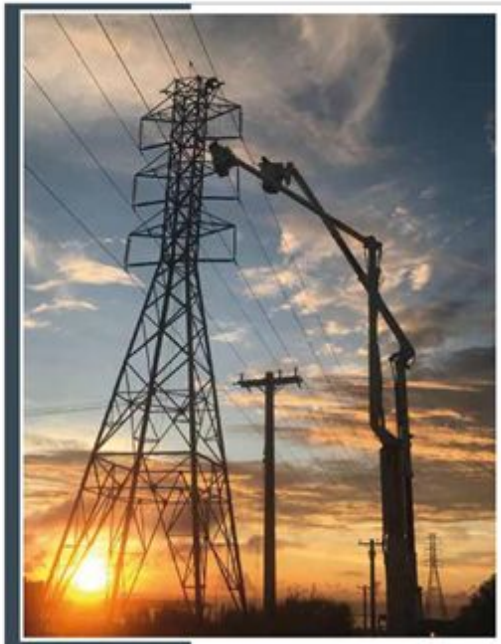
Alongside the investments that are being made on the solar energy side, GPA has also been incorporating other associated technologies to work with renewables, including Advanced Metering Infrastructure (AMI) systems, which were installed in 2012. "We have also been upgrading our billing systems in order to accommodate net metering customers, which now total about 2100, having a total photovoltaic capacity of 24 megawatts," added John.

"Additionally, GPA has an ongoing Demand Side Management (DSM) program to right-size customer consumption and assist them in lowering their total energy cost. Over the last four years, GPA has paid over $4m in customer cash rebates to over 10,000 customers. GPA's current budget is to provide $3m annually.

John M. Benavente
PE and General Manager



> "Over the past 50 years, GPA, through its founding employees and today's team of professionals and staff, has striven for sustainability and an ever-improving quality of life for our extremely remote island. Today, we see light at the end of the tunnel and this truly is exciting and commendable."



funded through its fuel adjustment rate component, in support of energy efficient projects. GPA estimates that for every $3m in rebates paid, this decreases fuel costs by about $21m over the typical seven-year estimated life of the equipment."

While it is apparent that GPA is very determined to move away from conventional fossil fuel based power and embrace modern, sustainable solutions, its overall mission always remains to deliver safe, reliable and quality electricity services to all customers. In fact, safety is a core value of the company's culture, not just for end-users, but for staff too. "I have been general manager of GPA for over 25 years, and in nearly all those years, GPA has consistently placed highly, in the top three safety categories for its utility workforce safety performance," remarked John. "The annual American Public Power Association's safety awards recognize utilities with the lowest safety incidence rate within their groups. Groups are determined by worker-hours of exposure. For 2019, GPA earned a third-place award in the 'Group F' category for utilities with 250,000 to 999,999 worker-hours of annual worker exposure.

"Safety is of primary importance to myself and my entire team and GPA provides significant resources and training to ensure safety first, across all areas of the power utility. The business will continue to strive to perform and be ranked among the safest electrical power utilities and do everything it can to send all workers safely home to their families each and every night."

Having mentioned his staff, John then went on to discuss the challenge of finding the qualified personnel and how GPA addresses this issue: "GPA makes certain it maintains a highly professional and technical group of employees having adopted a pay-for-performance employee pay structure, which rewards its employees and assures a competitive pay structure and benefits today, and into the future. GPA, through this pay structure, has become a premier employer of choice on Guam; always drawing a significant interest and numerous applicants for positions listed for hiring.

"The organization also runs apprenticeship and other training programs, especially in the transmission and distribution and power generation fields."

The responsibility that GPA feels for its employees also extends out further to the wider community across the territory, because as John succinctly puts it, 'everyone who lives and works on Guam depends on the Guam Power Authority to operate one of Guam's most critical resources, namely the island-wide power system.' "It is important to GPA to work with the local communities it serves," he confirmed. "From as far away as the US Virgin Islands to the nearer Commonwealth of the Northern Mariana Islands (CNMI)-Saipan, GPA is committed to, and has provided, mutual aid assistance for recovery and restoration following devastation caused by natural disasters. In 2019, GPA received a 'Mutual Aid Commendation' from the American Public Power Association for having answered the call for assistance and aided the devastated CNMI-Saipan community with restoring power to its customers and helping rebuild an entire island economy."

Furthermore, in 2019, GPA received a Smart Energy Provider (SEP) designation for best practices as an electric power utility that shows commitment to, and proficiency in, energy efficiency, distributed generation, renewable energy, and environmental initiatives. Additionally, achieving SEP designation allows GPA to benchmark and evaluate its work

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MEC-GPA Public-Private Partnership



PROJECT FACTS

- The power project is an 87.56MW combined cycle power plant. The plant consists of two slow-speed diesel No.6 residual fuel oil diesel engine generating units, and 2-megawatt steam turbine powered by wasteheat recovery steam generators.
- 22 June 1996: The Guam Legislature approved the Emergency Power Procurement Law authorizing GP to secure additional electric generation capacity on an expedited basis.
- 30 September 1996: The power project was awarded to MEC under an Energy Conversion Agreement, a build-operate-transfer agreement for a 20-year period.
- 29 January 1999: The power project commenced commercial operation of the plant in Piti, two months ahead of schedule.
- 29 January 2019: The power project celebrated the completion of its 20th year of successful Public-Private Partnership and ownership was transferred to GPA.
- 30 January 2019: The power project will continue to be managed and operated by MEC under a 5-year extension contract.
- The power project is Guam's leading power generation company in terms of consistent operational efficiency and reliability.
- The power project represents a more economic source of power for GPA and the Guam community.
- The power project is considered one of the best slow-speed generators globally as duly recognized by the original equipment manufacturer, Man B&W and BWSC.





Providing Safe, Efficient and Reliable Power 180 Cabras Highway, Piti, Guam 96915 (671) 477-3060 (671) 477-3154

PROFILE GUAM POWER AUTHORITY



against a set of industry best practices in defined areas.

Also in 2019, GPA was recognized as the first electric distribution utility to operate business critical functions on the Environmental Systems Research Institute (ESRI)'s Utility Network Data through tapping drones to digitally map GPA's power lines, poles and other hardware and help GPA with maintenance forecasting, deployment of manpower and equipment. This translates to GPA being able to deliver its ambitions of building a stable foundation of economic growth and quality of life for all its customers and the community on Guam.

Thanks to the steps it has already taken and the plans it has for the future, GPA is well on its way to becoming a modern, efficient energy provider, and John believes that within the next three to five years, the organization will achieve its goal in attaining an improved position of strength. "GPA will have significantly achieved the paradigm shift in energy supply to providing its ratepayers with reliable energy at an affordable and stable cost," he predicted. "It will also have begun its journey towards a fully underground system for the entire island, which could then be achieved in an affordable manner over the next 30 years. GPA's island-wide power system consists of 90 per cent concrete poles today, making it resilient and providing for quick recoveries following devastation caused by storms. I envision GPA will begin the journey forward to fully underground the electrical power system within the next few decades, so that Guam becomes an even more sustainable island, less vulnerable to economic and natural disasters."

John is understandably very proud of the transformation that GPA has gone through. "Over the past 50 years, GPA, through its founding employees and today's team of professionals and staff, has striven for sustainability and an ever-improving quality of life for our extremely remote island. Today, we see light at the end of the tunnel and this truly is exciting and commendable," he concluded.



Guam Power Authority
www.guampowerauthority.com

Services: Electric utility that provides monopoly electric services throughout Guam

Tristar is a global business, head-quartered in Dubai, which transports, stores and supplies liquid fuels to blue-chip clients including international and national oil companies and international NGOs. Its integrated energy logistics platform spans road and maritime transportation, specialized warehousing, fuel farms, commercial aviation refuelling and fuel supply operations.

Tristar operates in more than 20 countries across three continents and has a 20-year proven legacy of operational quality making it a partner of choice to its customers, with a track record of profitable growth. The company operates to the highest international health, safety, environmental and compliance standards and receives awards for its exemplary record of operational and safety excellence.

Its Guam fuel farm, Tristar Terminals Guam Inc (TTGI), is spread over 237 acres, and is one of the largest single storage fuel farms in the Mariana Islands. It consists of 26 tanks, ranging from 1000 to 500,000 barrels, with a total storage capacity of 4.2 million barrels and is connected to an oil jetty within the Port Authority of Guam by means of an eight-kilometer underground pipeline.

TTGI shares a decade long working relationship with the Guam Power Authority by supporting the authority with the following services:

- Storage/Supply Chain Planning
- Tank Cleaning and Refurbishment
- Power Generation Plant Delivery
- Product Quality Control
- Ship to Shore/Shore to Ship Management
- Fuel Blending and Injection
- Inventory Management
- Administrative Services

A major part of TTGI's progress in Guam is due to its long-standing relationship with GPA. With the growing demand for power and the constant change for a cleaner fuel source, TTGI has adapted and changed its business model with new technology to support GPA's requirements. As a long-standing partner of GPA, TTGI would like to congratulate GPA for its achievements and will strive to provide our best services and act as an agent for synergized growth.

TRISTAR | Agility

TRISTAR | Agility



With years of experience, Tristar offers professional services customized to customer's demands and requirements.

Tristar Portfolio of Services Include:

- Surface Transport
- Specialized Warehousing
- Ship Owning and Chartering
- Aviation Fuel Supply
- Fuel Farm Management
- Turnkey Fuel Supply



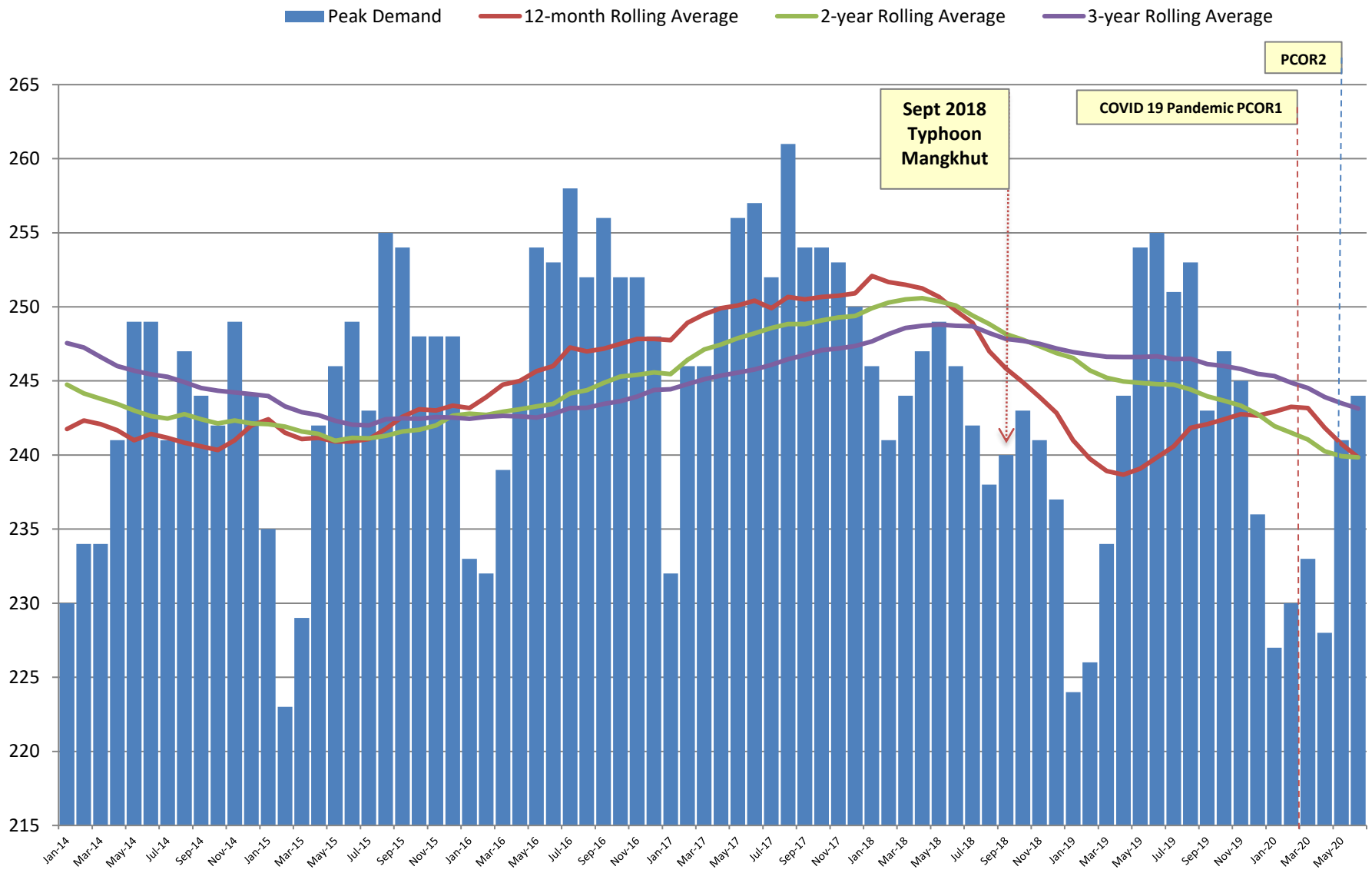
www.tristar-group.co

Tristar Group
Jebel Ali Industrial Area No. 2
PO Box 51328
Dubai, UAE
Tel: +9714 8997900
Fax: +9714 8841589
Email: info@tristar-group.co

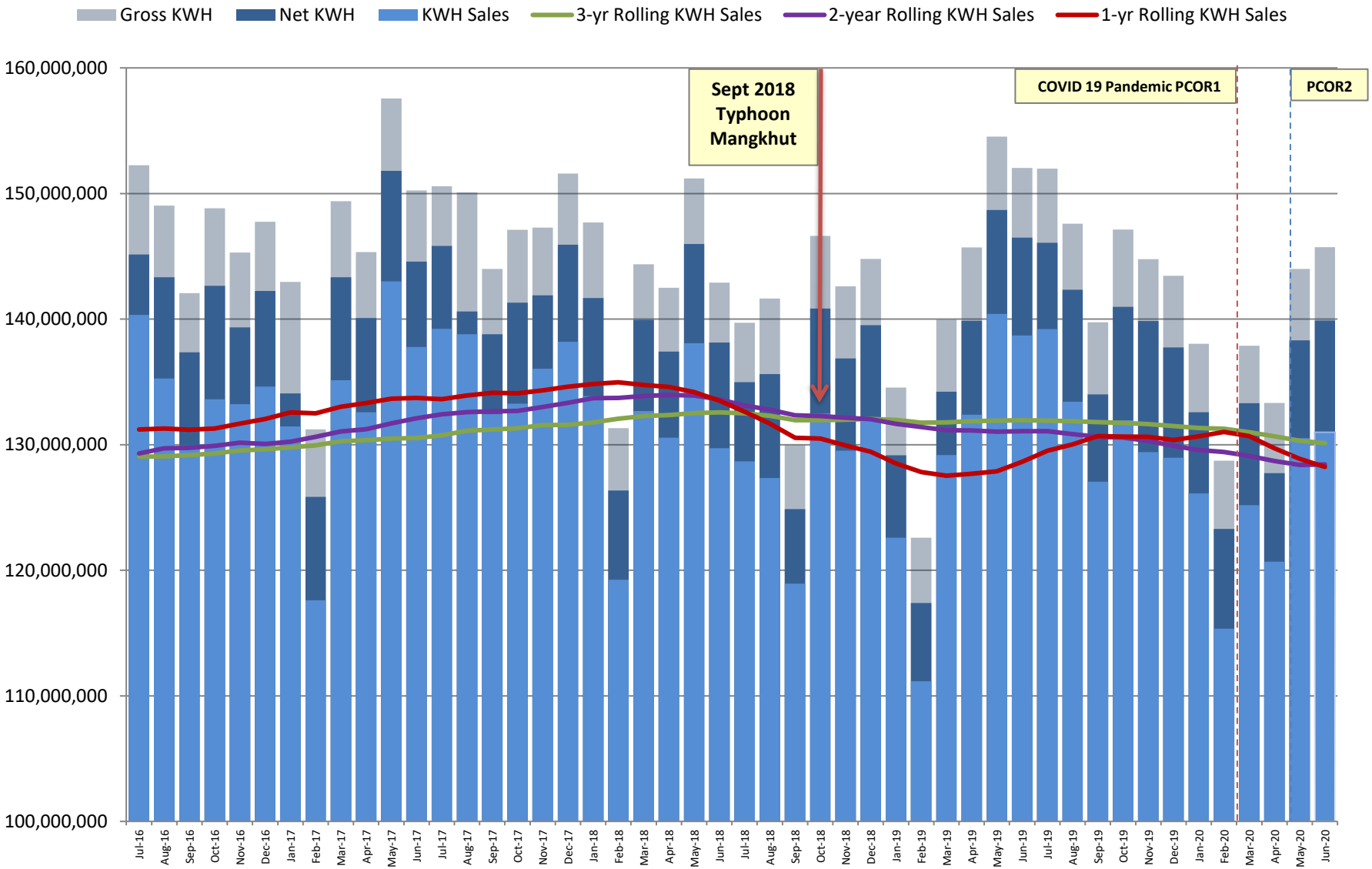
Tristar Guam
Tristar Terminals Guam Inc.
Agat Terminal, Route 2A
Sta. Rita Industrial Drive
PO Box 8210
Agat, Guam 96928, USA
Tel: +1671 5652300
Fax: +1671 56553909
Email: admin@tristar-guam.com

Generation KPIs

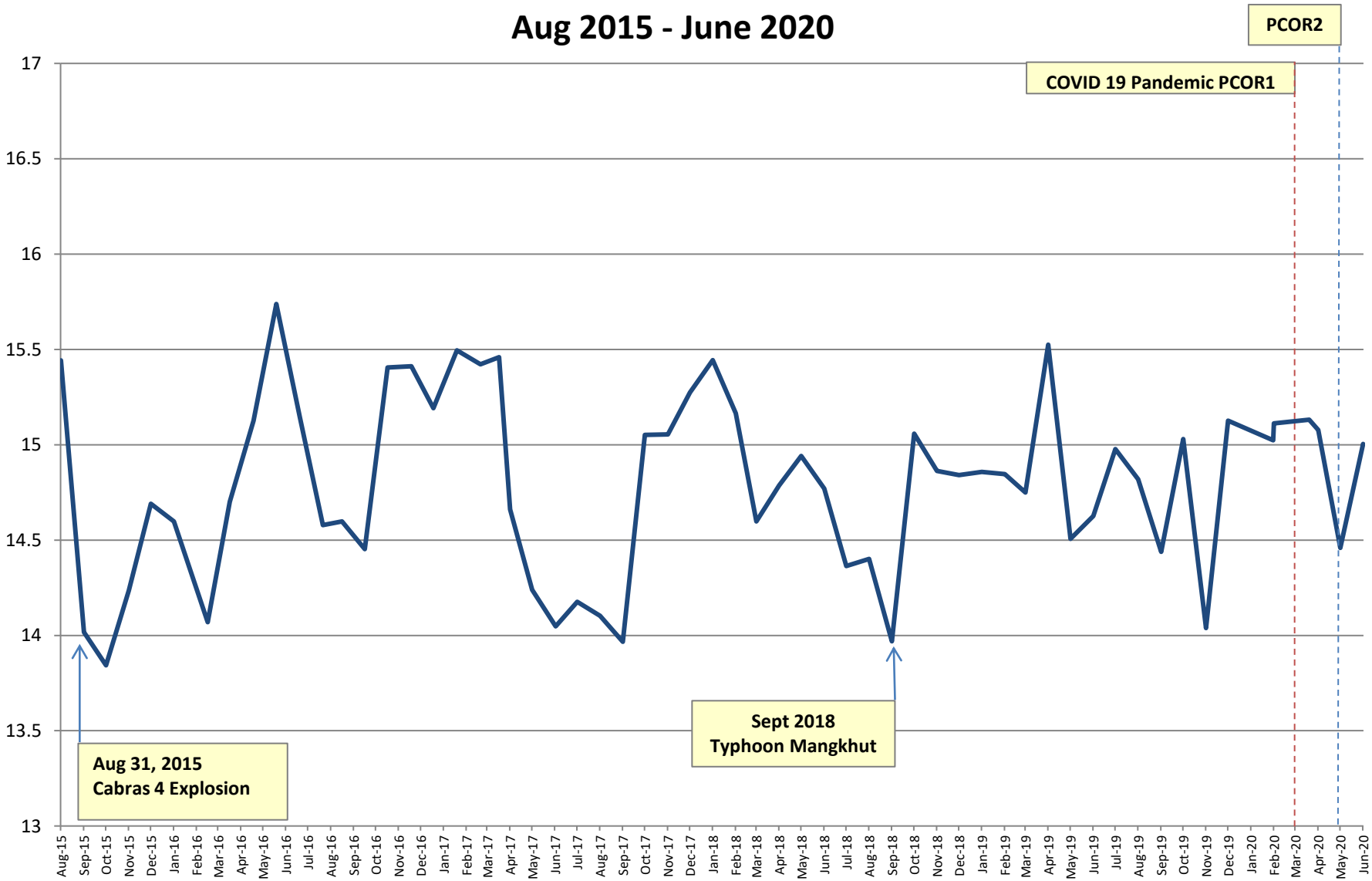
Historical Monthly Peak Demand
Jan 2014 - July 2020



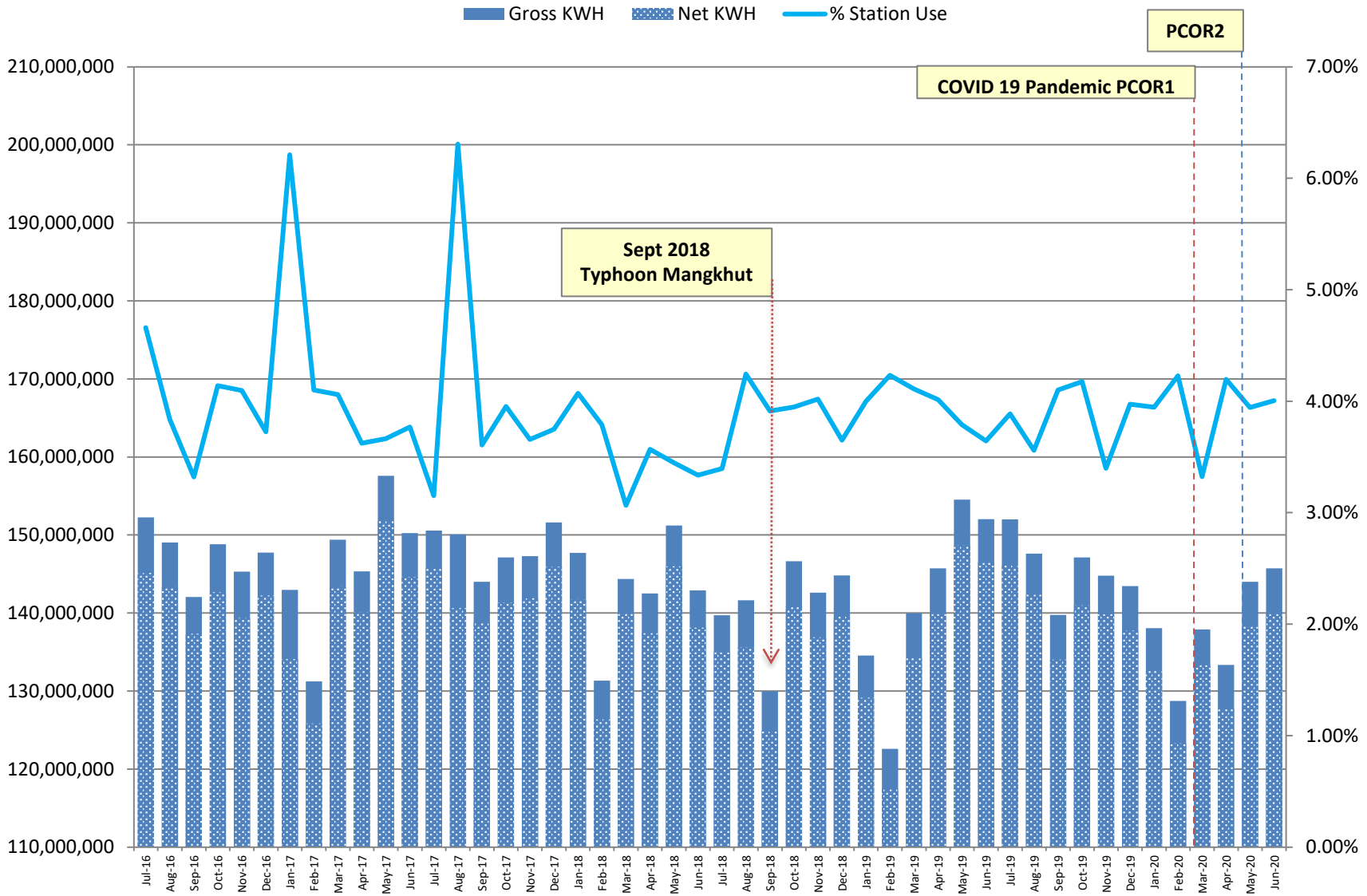
Historical KWH Sales
July 2016 - June 2020



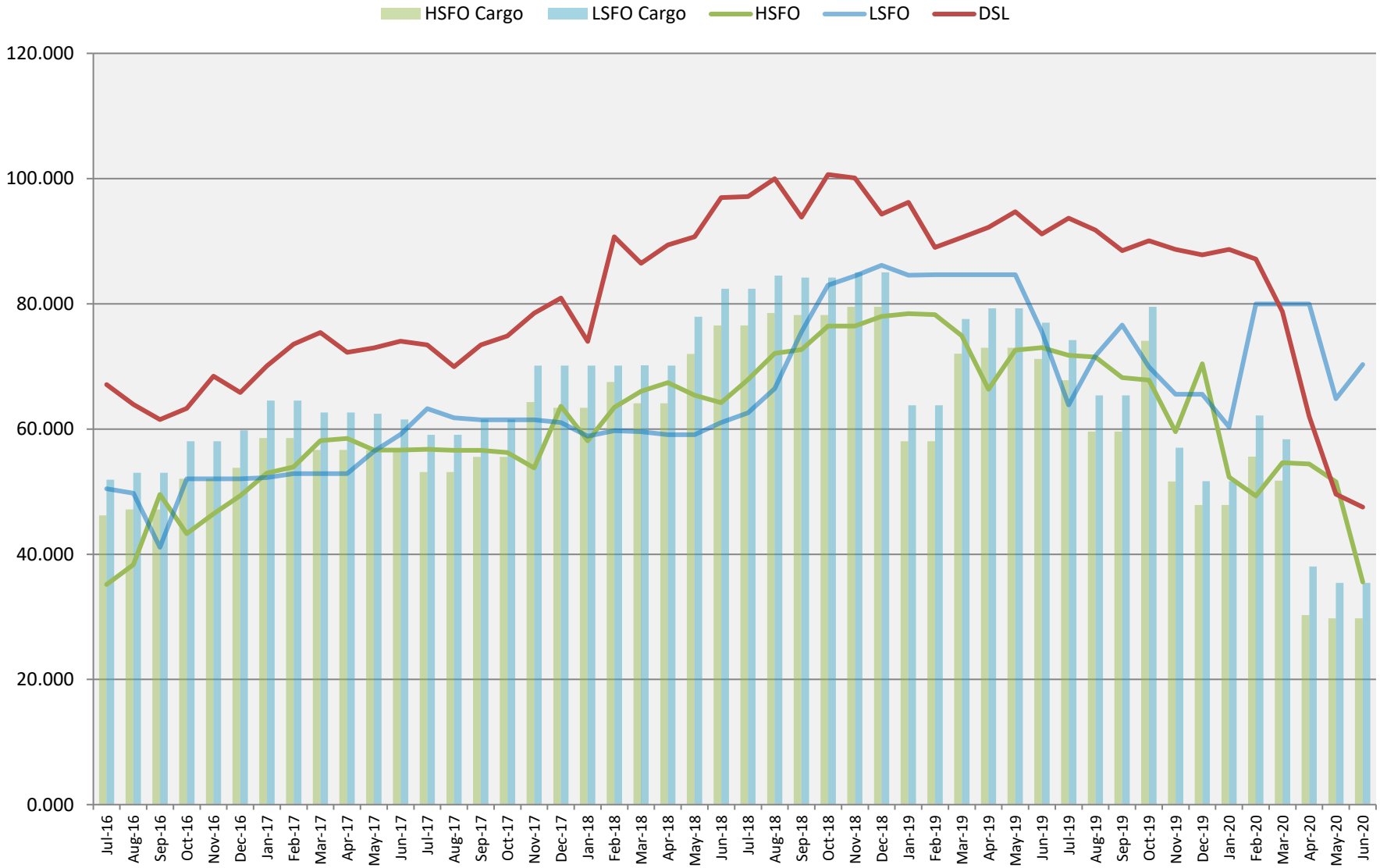
SYSTEM GROSS HEAT RATE
(KWH/Gal)
Aug 2015 - June 2020



Gross and Net Generation (KWH)
July 2016- June 2020

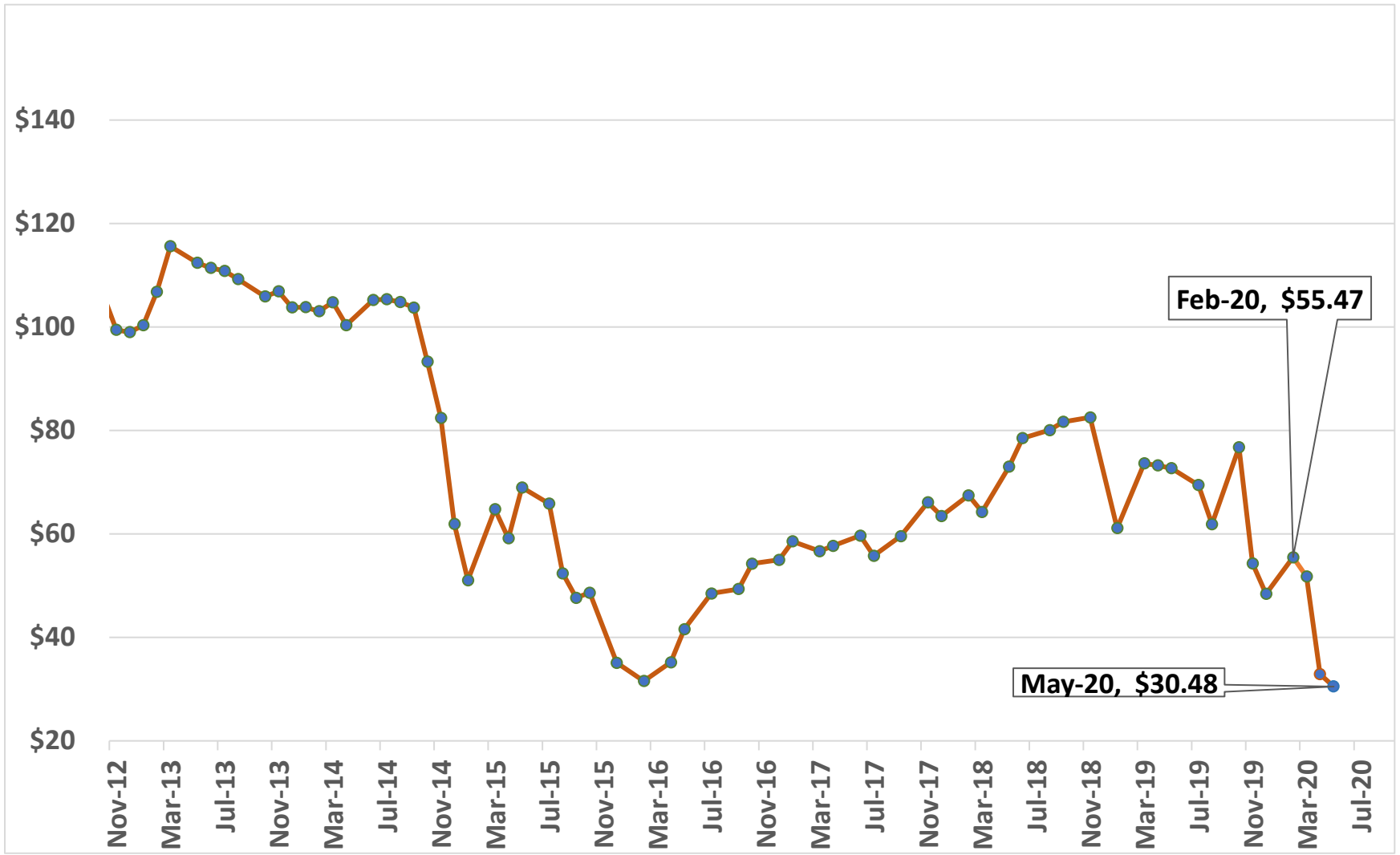


Fuel Cargo and Fuel Consumption Costs ($/bbl)
July 2016 - June 2020



LEAC UPDATE

LEAC Update – GPA Fuel Purchases (Per Barrel)



Note: No fuel purchase in June 2020.

Purchased

Ordered

LEAC Update – Morgan Stanley Asian Morning Call

Morgan Noon Call Pricing

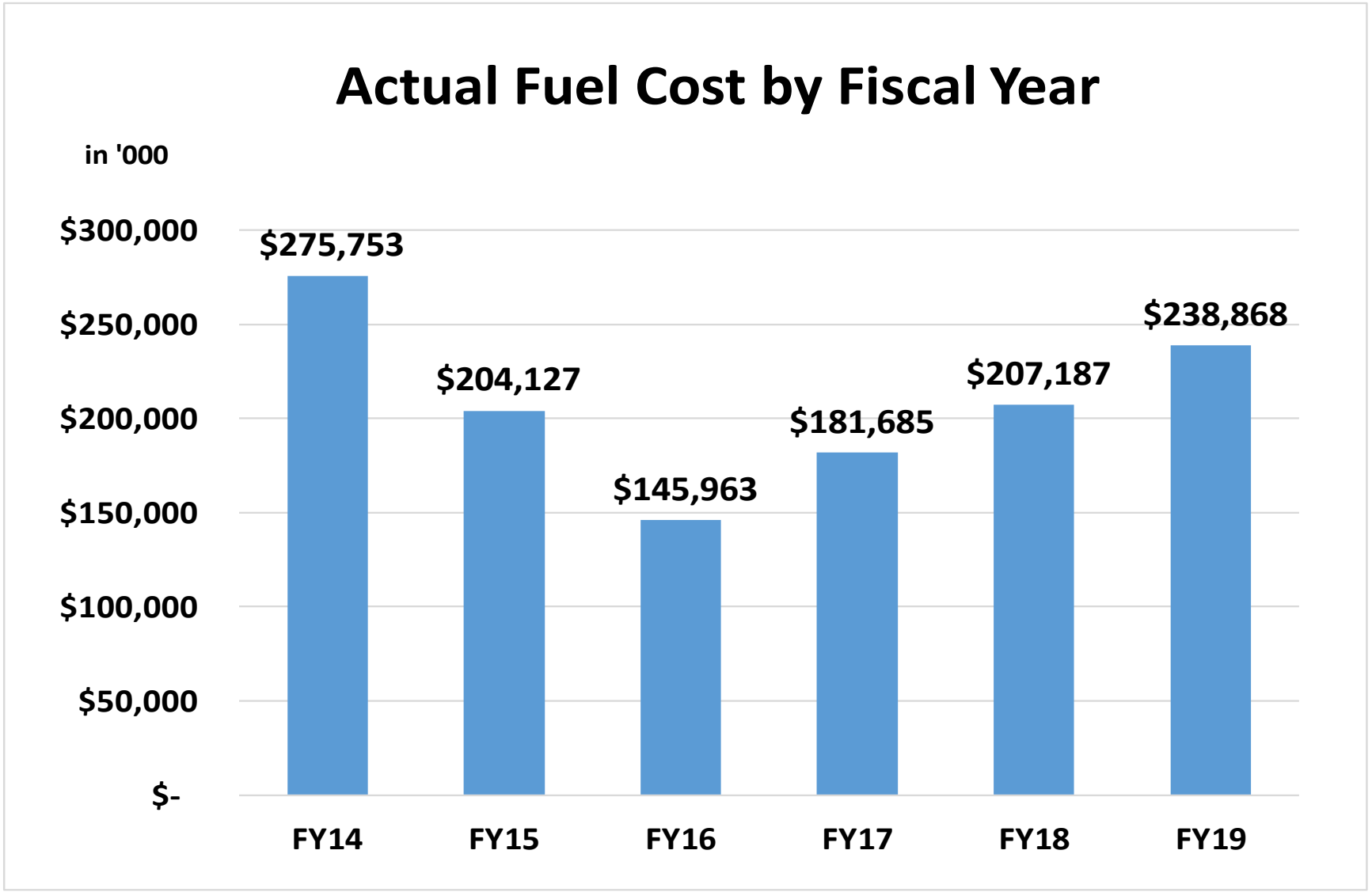
Sing HSFO 180 CST

Date	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21
7/9/2020	$ 260.73	$ 256.73	$ 257.73	$ 259.48	$ 261.57	$ 261.57	$ 266.90
7/13/2020	$ 241.68	$ 245.18	$ 248.93	$ 252.43	$ 255.35	$ 255.35	$ 261.10
7/14/2020	$ 253.62	$ 248.62	$ 249.62	$ 251.87	$ 254.21	$ 254.21	$ 260.71
7/15/2020	$ 254.83	$ 251.83	$ 253.58	$ 255.58	$ 257.91	$ 257.91	$ 264.74
7/16/2020	$ 256.64	$ 253.64	$ 255.39	$ 257.39	$ 259.72	$ 259.72	$ 266.56
Five-day average	$ 253.50	$ 251.20	$ 253.05	$ 255.35	$ 257.75	$ 257.75	$ 264.00

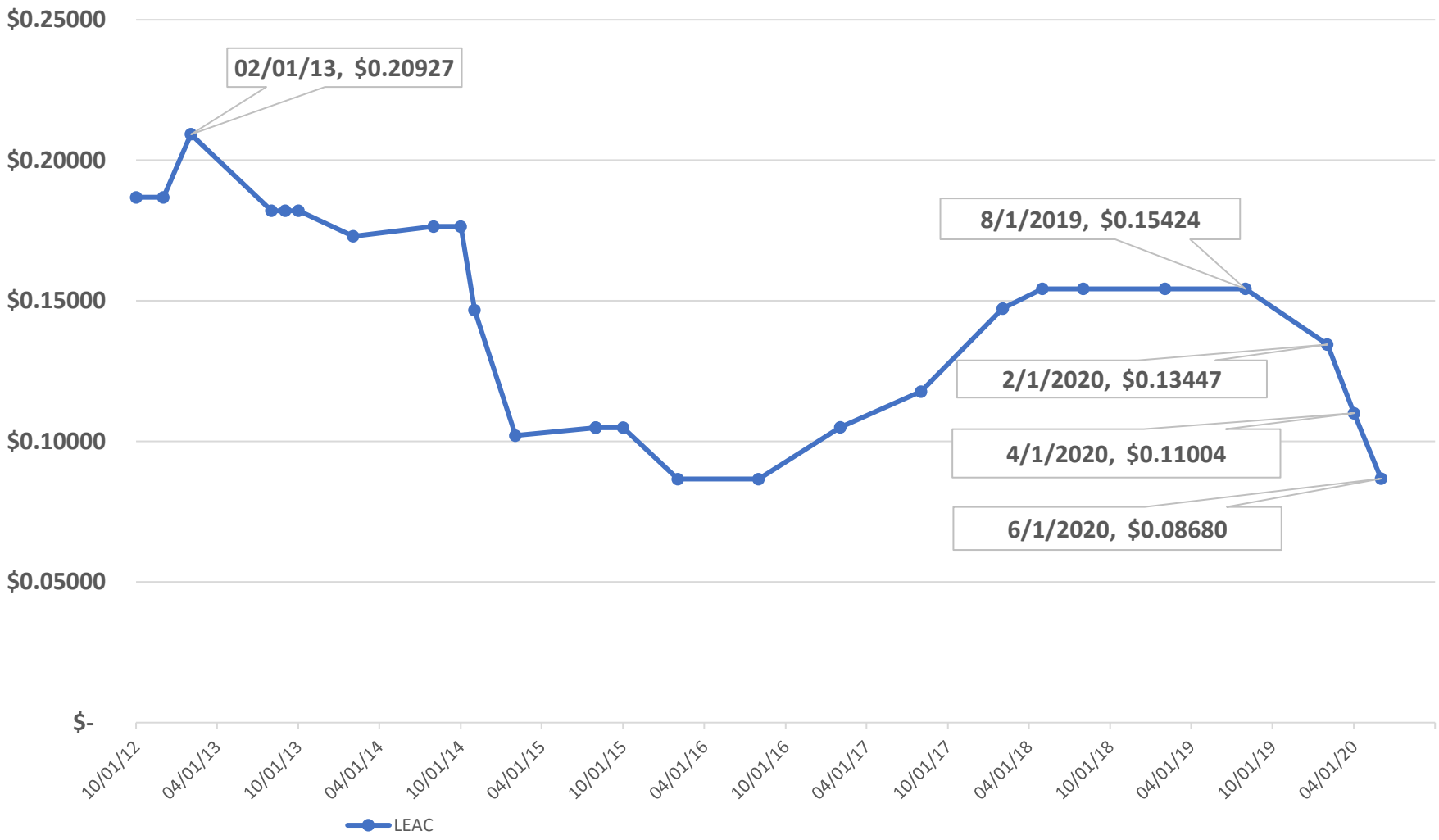
Gassoil 10ppm

7/9/2020	$ 49.53	$ 49.11	$ 49.11	$ 49.37	$ 49.65	$ 49.65	$ 50.70
7/13/2020	$ 49.71	$ 49.21	$ 49.17	$ 49.37	$ 49.62	$ 49.62	$ 50.53
7/14/2020	$ 48.86	$ 48.31	$ 48.23	$ 48.40	$ 48.66	$ 48.66	$ 49.71
7/15/2020	$ 49.51	$ 48.96	$ 48.81	$ 48.98	$ 49.24	$ 49.24	$ 50.34
7/16/2020	$ 50.02	$ 49.45	$ 49.31	$ 49.46	$ 49.72	$ 49.72	$ 50.73
Five-day average	$ 49.52	$ 49.01	$ 48.92	$ 49.11	$ 49.38	$ 49.38	$ 50.40

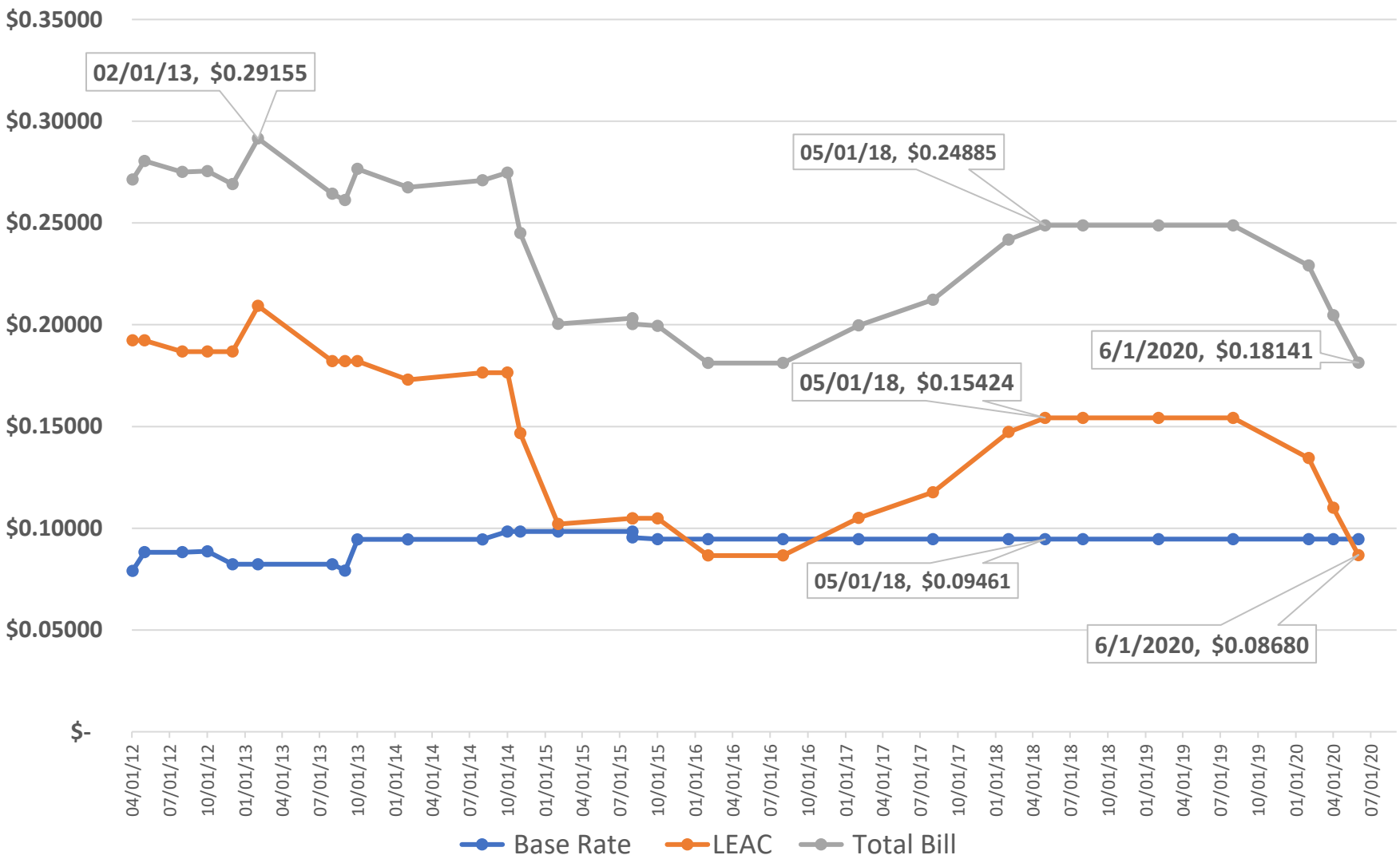
LEAC Update – Fuel Cost by Fiscal Year



Historical Residential LEAC Rate



Historical Residential Rate



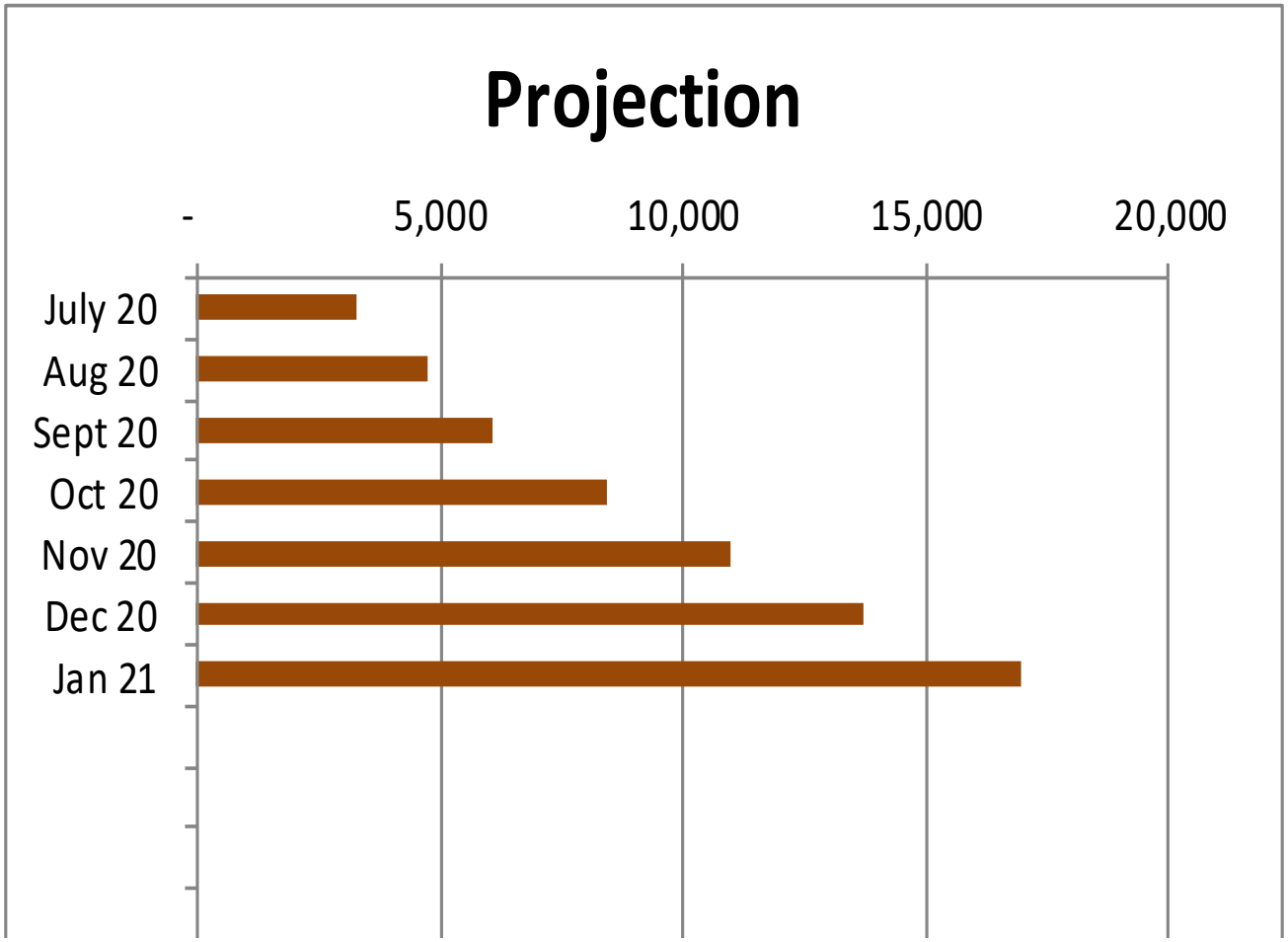
Historical LEAC Over (Under) Recovery

LEAC Period		Approved LEAC	Actual Over	
From	To	Rate	(Under) Recovery	
4/1/2012	7/31/2012	$ 0.192310	$ (3,040,418)	
8/1/2012	1/31/2013	$ 0.186834	$ (2,494,052)	
2/1/2013	7/31/2013	$ 0.209271	$ 1,345,259	
8/1/2013	10/31/2013	$ 0.182054	$ 1,300,093	
2/1/2014	7/31/2014	$ 0.172986	$ (1,137,034)	
8/1/2014	10/31/2014	$ 0.176441	$ (4,646,872)	
11/1/2014	1/31/2015	$ 0.146666	$ 661,428	
2/1/2015	7/31/2015	$ 0.102054	$ 1,757,878	
8/1/2015	1/31/2016	$ 0.104871	$ (2,467,151)	
2/1/2016	7/31/2016	$ 0.086613	$ (2,668,603)	
8/1/2016	1/31/2017	$ 0.086613	$ (9,915,360)	
			$ (5,315,360)	(a)
2/1/2017	7/31/2017	$ 0.105051	$ (14,050,504)	
8/1/2017	01/31/1018	$ 0.117718	$ (16,775,982)	
2/1/2018	4/30/2018	$ 0.147266	$ (13,005,689)	
5/1/2018	7/31/2018	$ 0.154242	$ (8,422,674)	
8/1/2018	1/31/2019	$ 0.154242	$ (13,336,698)	
2/1/2019	7/31/2019	$ 0.154242	$ (10,225,349)	
8/1/2019	1/31/2020	$ 0.154242	$ (2,193,618)	
2/1/2020	3/31/2020	$ 0.134474	$ (1,803,778)	
4/1/2020	5/31/2020	$ 0.110039	$ (2,981,023)	
6/1/2020	7/31/2020	$ 0.086800	$ (3,250,772)	Estimated

Notes:
(a) Under-recovery Balance after applying the $4.6 million from the Cabras 3&4 Extra Expense claim

LEAC Under Recovery Balances

LEAC



LEAC

(Unearned)/ Under Recovered	Projection [1]
July 20	3,251
Aug 20	4,739
Sept 20	6,087
Oct 20	8,435
Nov 20	10,971
Dec 20	13,734
Jan 21	16,962

LEAC - Update

	Current	Scenario A - Remain As Is		Scenario B - Full Recovery		Scenario C - 50% Recovery	
	June 1 to July 31	August 1 to Jan. 2021	Variance	August 1 to Jan. 2021	Variance	August 1 to Jan. 2021	Variance
Rate	$ 0.086800	$ 0.086800	$ - 0.0%	$ 0.114568	$ 0.027768 32.0%	$ 0.100026	$ 0.013226 15.2%
(in '000)							
Under Recovery on July 31, 2020	$ 3,251						
Under Recovery on Jan. 31, 2021		$ 16,962		$ -		$ 8,481.00	
Average Price per Bbl-RFO	$ 37.51	$ 44.07		$ 44.07		$ 44.07	
Average Price per Bbl-Diesel	$ 66.51	$ 60.38		$ 60.38		$ 60.38	

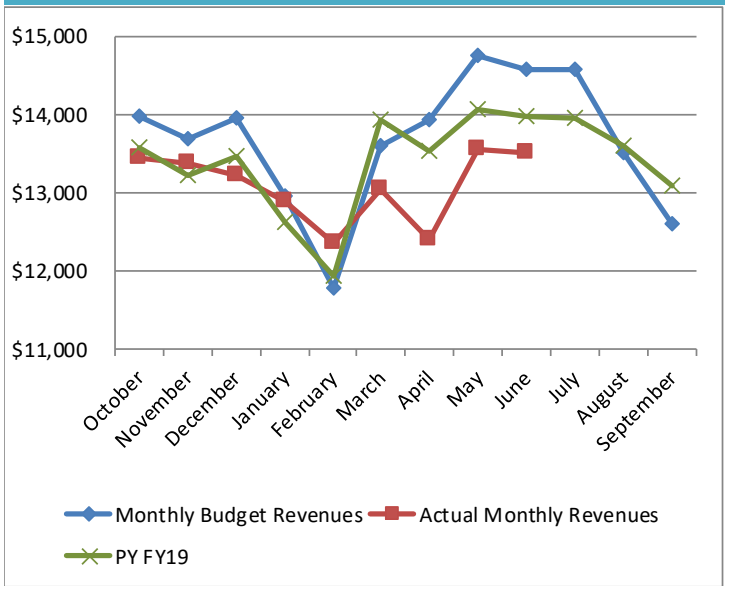
LEAC – Sample Bill

	RATE SCHEDULE R							
	Current LEAC		Scenario A		Scenario B		Scenario C	
	Effective 06-01-20		Effective 08-01-20		Effective 08-01-20		Effective 08-01-20	
KWH		**1,000**		**1,000**		**1,000**		**1,000**
Monthly Charge	$ 15.00	$ 15.00	$ 15.00	$ 15.00	$ 15.00	$ 15.00	$ 15.00	$ 15.00
Non-Fuel Energy Charge								
First 500 KWH	0.069550	34.78	0.069550	34.78	0.069550	34.78	0.069550	34.78
Over 500 KWH	0.086870	43.44	0.086870	43.44	0.086870	43.44	0.086870	43.44
Emergency Water-well charge	0.002790	1.40	0.002790	1.40	0.002790	1.40	0.002790	1.40
Total Electric Charge before Fuel Recovery Charges		94.62		94.61		94.61		94.61
Fuel Recovery Charge	**0.086800**	86.80	**0.086800**	86.80	**0.114568**	114.57	**0.100026**	100.03
Total Electric Charge		$ 181.42		$ 181.41		$ 209.17		$ 194.63
Increase/(Decrease) in Total Bill						**$ 27.77**		**$ 13.23**
% Increase/(Decrease) in Total Bill						**15.3%**		**7.3%**
% Increase/(Decrease) in LEAC rate						**32.0%**		**15.2%**

CFO
FINANCIAL HIGHLIGHTS
June 2020

June 2020 Monthly Financial Highlights

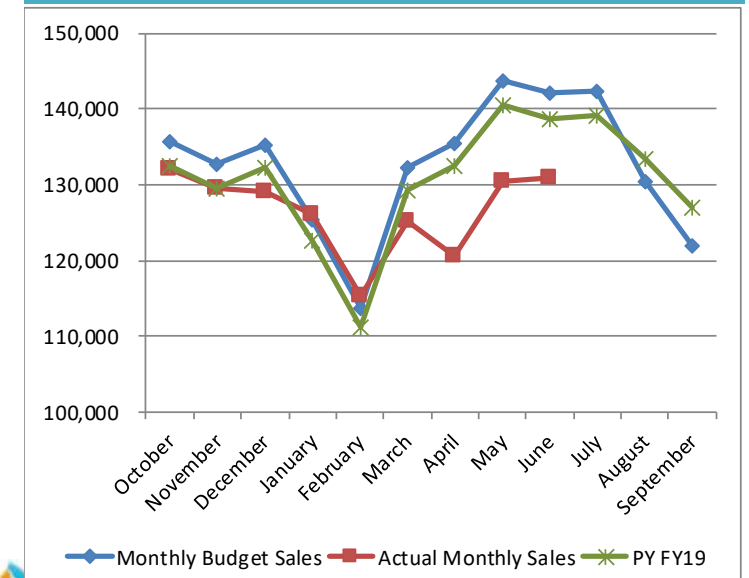
Base Rate Revenue $000



Through June 30, 2020

$000	Monthly Budget Revenues	Actual Monthly Revenues	Variance		PY FY19	CY vs PY Variance	
October	$ 13,968	$ 13,440	$ (528)	↓	$ 13,564	$ (125)	↓
November	13,682	13,358	$ (324)	↓	13,203	$ 155	↑
December	13,940	13,216	$ (724)	↓	13,467	$ (251)	↓
January	12,940	12,888	$ (52)	↓	12,616	$ 272	↑
February	11,772	12,357	$ 585	↑	11,915	$ 442	↑
March	13,587	13,039	$ (548)	↓	13,926	$ (887)	↓
April	13,915	12,385	$ (1,530)	↓	13,520	$ (1,135)	↓
May	14,755	13,550	$ (1,205)	↓	14,057	$ (507)	↓
June	14,558	13,498	$ (1,060)	↓	13,977	$ (480)	↓
July	14,563				13,951		
August	13,499				13,595		
September	12,585				13,073		
Total	**$ 163,763**	**$ 117,730**	**$ (5,386)**		**$ 160,865**	**$ (2,516)**	

MWh Sales

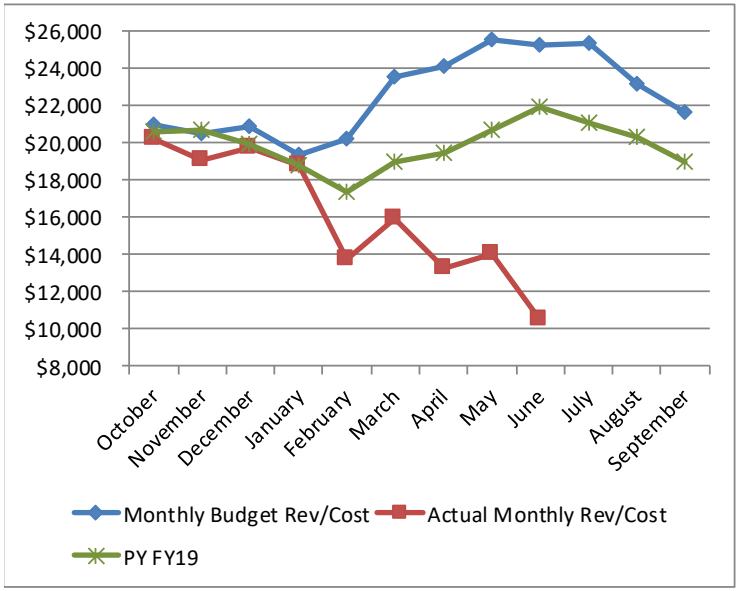


Through June 30, 2020

mwh	Monthly Budget Sales	Actual Monthly Sales	Variance		PY FY19	CY vs PY Variance	
October	135,650	131,953	(3,697)	↓	132,489	(536)	↓
November	132,721	129,421	(3,300)	↓	129,537	(116)	↓
December	135,343	128,958	(6,385)	↓	132,190	(3,232)	↓
January	125,456	126,130	674	↑	122,590	3,540	↑
February	113,726	115,346	1,620	↑	111,159	4,187	↑
March	132,206	125,185	(7,020)	↓	129,170	(3,985)	↓
April	135,521	120,688	(14,833)	↓	132,396	(11,708)	↓
May	143,721	130,531	(13,191)	↓	140,412	(9,881)	↓
June	142,093	130,987	(11,106)	↓	138,704	(7,717)	↓
July	142,383				139,204		
August	130,434				133,422		
September	121,840				127,050		
Total	**1,591,092**	**1,139,199**	**(57,237)**		**1,568,322**	**(29,447)**	

June 2020 Monthly Financial Highlights (Continued)

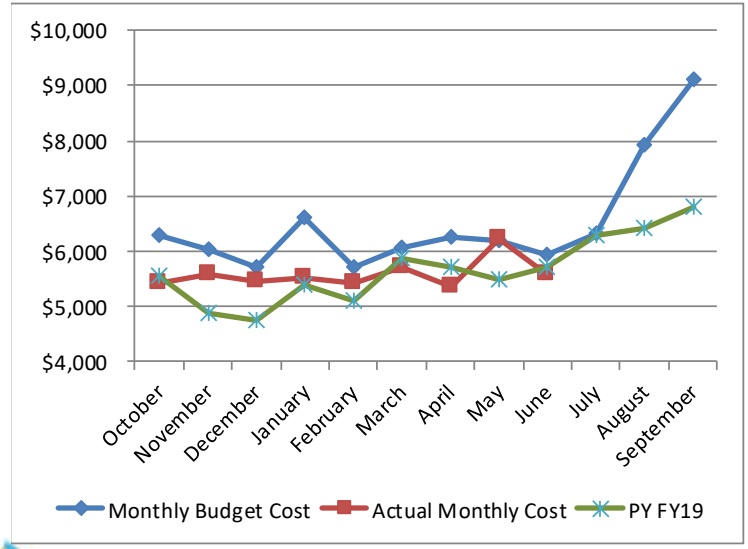
Fuel Revenue/ Cost $000



Through June 30, 2020

$000	Monthly Budget Rev/Cost	Actual Monthly Rev/Cost	Variance		PY FY19	CY vs PY Variance	
October	$ 20,923	$ 20,165	$ (758)	↓	$ 20,550	$ (385)	↓
November	20,471	19,088	$ (1,383)	↓	20,711	$ (1,622)	↓
December	20,876	19,697	$ (1,179)	↓	19,969	$ (272)	↓
January	19,351	18,820	$ (531)	↓	18,822	$ (2)	↓
February	20,219	13,701	$ (6,518)	↓	17,368	$ (3,667)	↓
March	23,505	15,968	$ (7,537)	↓	19,017	$ (3,049)	↓
April	24,094	13,254	$ (10,840)	↓	19,442	$ (6,188)	↓
May	25,552	14,001	$ (11,551)	↓	20,711	$ (6,709)	↓
June	25,263	10,546	$ (14,717)	↓	21,932	$ (11,386)	↓
July	25,314				21,082		
August	23,190				20,331		
September	21,662				18,935		
Total	**$ 270,418**	**$ 145,240**	**$ (55,012)**		**$ 238,868**	**$ (33,281)**	

O&M Cost $000



Through June 30, 2020

$000	Monthly Budget Cost	Actual Monthly Cost	Variance		PY FY19	CY vs PY Variance	
October	$ 6,290	5,421	869	↑	5,551	131	↑
November	6,016	5,572	444	↑	4,875	(697)	↓
December	5,725	5,460	265	↑	4,762	(698)	↓
January	6,607	5,521	1,086	↑	5,399	(122)	↓
February	5,701	5,417	284	↑	5,114	(303)	↓
March	6,050	5,723	327	↑	5,869	145	↑
April	6,258	5,357	900	↑	5,704	346	↑
May	6,179	6,215	(36)	↓	5,485	(731)	↓
June	5,922	5,578	344	↑	5,703	125	↑
July	6,321				6,276		
August	7,908				6,421		
September	9,102				6,797		
Total	**$ 78,079**	**$ 50,265**	**$ 4,482**		**$ 67,956**	**$ (1,804)**	

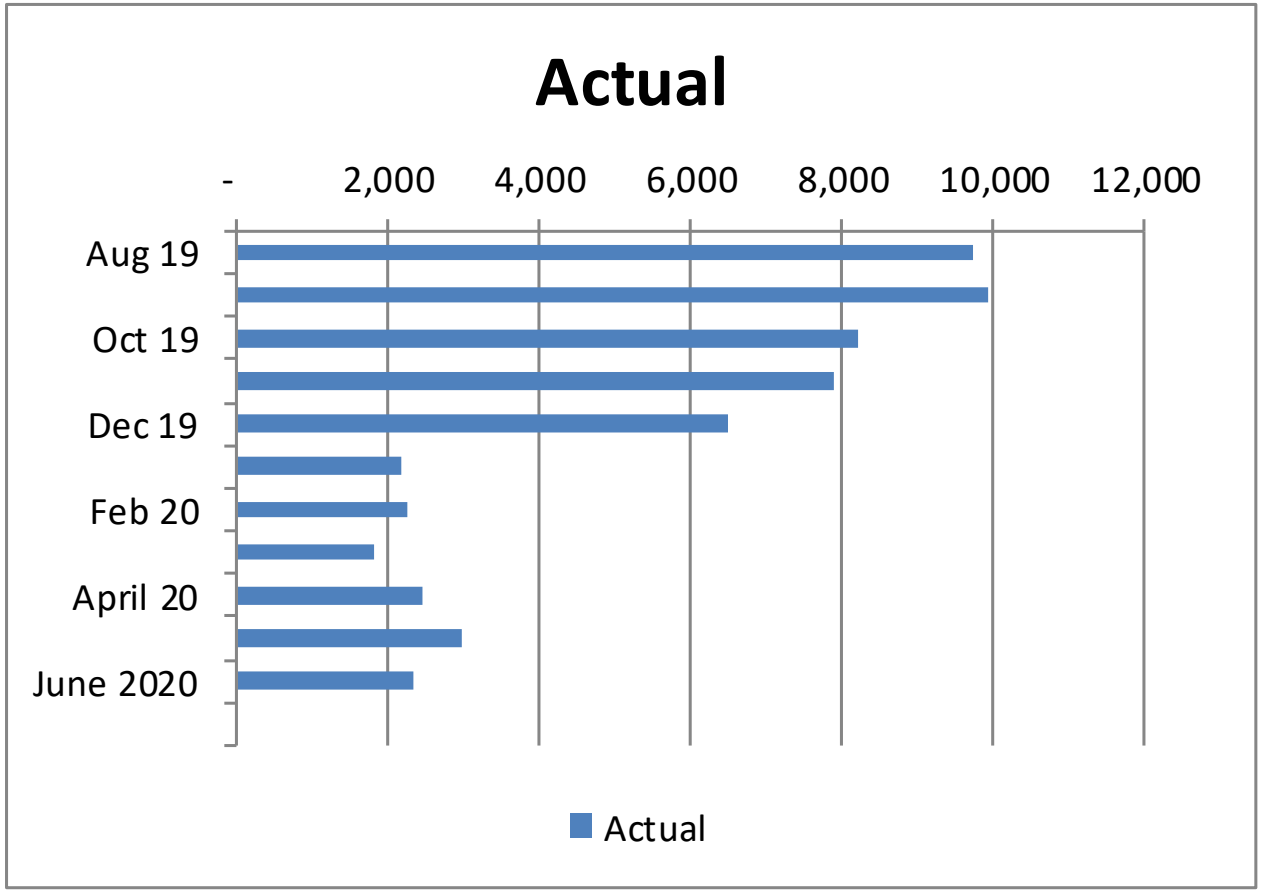
June 2020 Monthly Financial Highlights (Continued)

Through June 30, 2020								
	4Q2018	1Q2019	2Q2019	3Q2019	4Q2019	1Q2020	2Q2020	3Q2020
Residential	43,887	43,920	44,144	44,329	44,479	44,203	44,509	45,069
Commercial	5,261	5,273	5,291	5,303	5,289	5,154	5,352	5,309
Government	1,077	1,090	1,074	1,075	1,070	1,072	1,059	1,061
Streetlights	1,152	1,151	1,152	1,138	1,138	1,135	1,128	1,139
Navy	1	1	1	1	1	1	1	1
Total	51,378	51,435	51,662	51,846	51,977	51,565	52,049	52,579

Debt service coverage (DSC) calculation-indenture	2015	2016	2017	2018	2019	2020
Senior lien coverage	3.62	3.28	2.65	2.53	1.97	1.70
Aggregate debt service coverage	2.62	3.28	2.65	2.53	1.97	1.70
Debt service coverage (DSC) calculation-IPP as O&M						
Senior lien coverage	2.56	2.45	1.79	1.65	1.64	1.52
Aggregate debt service coverage	1.85	2.45	1.79	1.65	1.64	1.52

June 2020 Monthly Financial Highlights (Continued)

LEAC



LEAC

(Unearned)/ Under Recovered	'000 Actual
Aug 19	9,722
Sept 19	9,944
Oct 19	8,210
Nov 19	7,887
Dec 19	6,473
Jan 20	2,194
Feb 20	2,243
March 20	1,804
April 20	2,435
May 20	2,981
June 2020	2,346

Information Requested

Prepaid Customer - Inactive

As of July 23, 2020

Aging	# of customers	Average kWh Monthly Usage	Average Monthly Bill
0 to 30 days	370	1,135	$ 205
31 to 60 days	221	1,275	$ 230
61 to 90 days	88	1,167	$ 211
91 to 120 days	57	946	$ 172
Greater than 121 days	224	1,025	$ 186
Total	960		

GUAM POWER AUTHORITY
ATURIDÅT ILEKTRESEDÅT GUAHAN
P O BOX 2977, HAGÅTÑA, GUAM 96932-2977
Telephone: (671) 648-3066 Fax: (671) 648-3168

GUAM POWER AUTHORITY
FINANCIAL STATEMENT OVERVIEW
June 2020

Attached are the financial statements and supporting schedules for the month and fiscal year ended June 30, 2020.

Summary
The increase in net assets for the month ended was $1.5 million as compared to the anticipated net increase of $2.0 million projected at the beginning of the year. The total kWh sales for the month was 7.82% less than projected and non-fuel revenues were $1.4 million less than the estimated amounts. O & M expenses for the month were $5.5 million which was $0.3 million less than our projections for this year. Other expenses for the month such as interest expense, IPP costs, (net of interest income and other income) totaled to $3.5 million, which was $0.4 million over than projected amounts. There were no other significant departures from the budget during the period.

Analysis

Description	Previous Month	Current Month	Target
Quick Ratio	3.14	3.51	2
Days in Receivables	42	41	52
Days in Payables	20	13	30
LEAC (Over)/Under Recovery Balance -YTD	$2,434,863	$2,981,020	$723,402
T&D Losses	5.42%	5.52%	<7.00%
Debt Service Coverage	1.51	1.52	1.75
Long-term equity ratio	1.43%	1.70%	30 – 40%
Days in Cash	201	211	60

The Quick Ratio has been a challenge for GPA historically. However, the influx of cash from insurance proceeds continued to keep this ratio steady. GPA has current obligations of approximately $57 million and approximately $198 million in cash and current receivables. The LEAC over-recovery for the month was $0.6 million. Debt Service Coverage ratio is calculated using the methodology in use before the Fiscal Year 2002 change in accounting practice.

Financial Statements
June 2020

Significant Assumptions

The significant assumptions in the financial statements are as follows:

- Accrual cutoff procedures were performed at month end
- An inventory valuation is performed at year-end only
- Accounts Receivable includes accruals based on prior months' usage.

Prepared by:	Reviewed by:	Approved by:
Lenora M. Sanz Controller	John J.E. Kim Chief Financial Officer	John M. Benavente, P.E. General Manager

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)
Statements of Net Position
June 30, 2020 and September 30, 2019

	Unaudited June 2020	Audited September 2019	Change from Sept 30 2019
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES			
Current assets:			
Cash and cash equivalents:			
Held by trustee for restricted purposes:			
Interest and principal funds	$ 25,502,582	$ 33,053,886	$ (7,551,304)
Bond indenture funds	23,164,560	29,168,116	(6,003,556)
Held by Guam Power Authority:			
Bond indenture funds	157,776,414	154,027,791	3,748,623
Self insurance fund-restricted	19,466,685	19,383,963	82,722
Energy sense fund	275,468	333,528	(58,060)
Total cash and cash equivalents	226,185,709	235,967,284	(9,781,575)
Accounts receivable, net	39,541,349	42,550,451	(3,009,102)
Total current receivables	39,541,349	42,550,451	(3,009,102)
Materials and supplies inventory	14,549,256	12,521,306	2,027,950
Fuel inventory	29,880,610	41,214,022	(11,333,412)
Prepaid expenses	6,421,988	2,115,084	4,306,904
Total current assets	316,578,912	334,368,147	(17,789,235)
Utility plant, at cost:			
Electric plant in service	1,092,077,730	1,084,434,067	7,643,663
Construction work in progress	44,649,154	37,648,145	7,001,009
Total	1,136,726,884	1,122,082,212	14,644,672
Less: Accumulated depreciation	(660,250,100)	(632,845,925)	(27,404,175)
Total utility plant	476,476,784	489,236,287	(12,759,503)
Other non-current assets:			
Investment - bond reserve funds held by trustee	48,524,043	48,599,853	(75,810)
Unamortized debt issuance costs	2,019,902	2,221,160	(201,258)
Total other non-current assets	50,543,945	50,821,013	(277,068)
Total assets	843,599,641	874,425,447	(30,825,806)
Deferred outflow of resources:			
Deferred fuel revenue	2,346,346	9,943,732	(7,597,386)
Unamortized loss on debt refunding	23,022,834	24,733,104	(1,710,270)
Pension	12,264,214	12,264,214	0
Other post employment benefits	19,869,789	19,869,789	0
Unamortized forward delivery contract costs	199,118	318,638	(119,520)
Total deferred outflows of resources	57,702,301	67,129,477	(9,427,176)
	$ 901,301,942	$ 941,554,924	$ (40,252,982)

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)
Statement of Net Position, Continued
June 30, 2020 and September 30, 2019

	Unaudited June 2020	Audited September 2019	Change from Sept 30 2019
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION			
Current liabilities:			
Current maturities of long-term debt	$ 20,515,000	$ 16,130,000	$ 4,385,000
Current obligations under capital leases	4,424,847	8,582,729	(4,157,882)
Accounts payable			
Operations	11,115,227	27,385,428	(16,270,201)
Others	655,218	695,392	(40,174)
Accrued payroll and employees' benefits	1,167,929	1,844,658	(676,729)
Current portion of employees' annual leave	2,728,617	2,153,583	575,034
Interest payable	7,563,244	14,733,265	(7,170,021)
Customer deposits	8,438,674	8,918,087	(479,413)
Total current liabilities	56,608,756	80,443,142	(23,834,386)
Regulatory liabilities:			
Provision for self insurance	19,345,291	19,345,291	0
Total regulatory liabilities	19,345,291	19,345,291	0
Long term debt, net of current maturities	561,543,890	584,892,990	(23,349,100)
Obligations under capital leases, net of current portion	0	2,226,222	(2,226,222)
Net Pension liability	79,228,434	81,801,102	(2,572,668)
Other post employment benefits liability	120,278,682	120,278,682	0
DCRS sick leave liability	1,331,151	1,331,151	0
Employees' annual leave net of current portion	1,204,085	1,204,085	0
Customer advances for construction	407,766	394,540	13,226
Total liabilities	839,948,055	891,917,205	(51,969,150)
Deferred inflows of resources:			
Unearned forward delivery contract revenue	730,022	1,168,036	(438,014)
Pension	2,371,109	2,371,109	0
Other post employment benefits	49,240,169	49,240,169	0
Total deferred inflows of resources	52,341,300	52,779,314	(438,014)
Commitments and contigencies			
Net Position:			
Net investment in capital assets	(38,726,116)	(45,222,226)	6,496,110
Restricted	41,062,525	51,357,358	(10,294,834)
Unrestricted	6,676,178	(9,276,728)	15,952,906
Total net position	9,012,586	(3,141,595)	12,154,183
	$ 901,301,942	$ 941,554,924	$ (40,252,982)

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM
Statement of Revenues, Expenses and Changes in Net Assets

	June 30			Nine Months Ending June 30		
	Unaudited 2020	Audited 2019	% of change Inc (dec)	Unaudited 2020	Audited 2019	% of change Inc (dec)
Revenues						
Sales of electricity	$ 24,043,491	$ 35,909,269	(33)	$ 262,969,582	$ 298,767,040	(12)
DSM-Rebates	326,179	0		326,179	0	0
Miscellaneous	176,752	184,650	(4)	1,475,543	2,462,576	(40)
Total	24,546,422	36,093,919	(32)	264,771,304	301,229,616	(12)
Bad debt expense	(90,917)	(91,500)	(1)	(818,253)	(823,500)	(1)
Total revenues	24,455,505	36,002,419	(32)	263,953,051	300,406,116	(12)
Operating and maintenance expenses						
Production fuel	10,867,399	21,931,788	(50)	145,562,260	178,520,894	(18)
Other production	1,223,000	1,475,936	(17)	13,049,947	11,535,941	13
	12,090,399	23,407,724	(48)	158,612,207	190,056,835	(17)
Depreciation	3,140,679	3,154,763	(0)	28,198,624	28,072,897	0
Energy conversion cost	1,070,021	1,014,878	5	9,634,812	10,881,268	(11)
Transmission & distribution	1,090,456	1,294,227	(16)	9,510,567	9,083,632	5
Customer accounting	586,845	464,330	26	3,909,771	3,950,639	(1)
Administrative & general	2,586,837	2,376,864	9	22,976,936	23,067,965	(0)
Total operating and maintenance expenses	20,565,237	31,712,786	(35)	232,842,917	265,113,236	(12)
Operating income	3,890,268	4,289,633	(9)	31,110,134	35,292,880	(12)
Other income (expenses)						
Interest income	67,694	484,131	(86)	2,342,347	3,406,121	(31)
Interest expense and amortization	(2,298,057)	(2,417,791)	(5)	(20,798,431)	(21,786,248)	(5)
Bond issuance costs	89,228	88,022	1	803,052	791,198	1
Bid bond forfeiture	0	0	0	0	(1,245,000)	0
Pandemic-COVID19	(290,805)	0	0	(1,096,207)	0	0
Expenses due to typhoon/grant projects	(80,066)	16,584	0	(248,167)	(688,612)	0
Other expense	(4,289)	(4,291)	(0)	(38,613)	(38,619)	(0)
		0				
Total other income (expenses)	(2,516,295)	(1,833,345)	37	(19,036,019)	(19,561,160)	(3)
Income (loss) before capital contributions	1,373,973	2,456,288	(44)	12,074,115	15,731,720	(23)
Capital contributions	80,066	0	0	80,066	215,537	(63)
Increase (decrease) in net assets	1,454,039	2,456,288	(41)	12,154,181	15,947,257	(24)
Total net assets at beginning of period (restated)	7,558,547	(4,817,681)	(257)	(3,141,595)	(18,308,650)	(83)
Total net assets at end of period	$ 9,012,586	$ (2,361,393)	(482)	$ 9,012,586	$ (2,361,393)	(482)

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)
Statements of Cash Flows
Period Ended June 30, 2020

	Month Ending 6/30/2020	YTD Ending 6/30/2020
Increase(decrease) in cash and cash equivalents		
Cash flows from operating activities:		
Cash received from customers	$26,774,805	$ 266,914,162
Cash payments to suppliers and employees for goods and services	16,783,527	209,283,917
Net cash provided by operating activities	$9,991,278	57,630,245
Cash flows from investing activities:		
Interest and dividends on investments and bank accounts	67,694	2,342,347
Net cash provided by investing activities	67,694	2,342,347
Cash flows from non-capital financing activities		
Interest paid on short term debt	5,512	(23,626)
Provision for self insurance funds	(4,898)	(82,722)
Net cash provided by noncapital financing activities	614	(106,348)
Cash flows from capital and related financing activities		
Acquisition of utility plant	(1,785,650)	(15,439,120)
Principal paid on bonds and other long-term debt	-	(16,130,000)
Interest paid on bonds(net of capitalized interest)	(290,805)	(28,720,957)
Interest paid on capital lease obligations	(21,466)	(320,076)
Interest & principal funds held by trustee	(3,978,067)	7,551,304
Reserve funds held by trustee	(5,655)	75,810
Bond funds held by trustee	201,770	6,003,556
Principal payment on capital lease obligations	(726,801)	(6,384,104)
Grant from DOI/FEMA	80,066	80,066
Debt issuance costs/loss on defeasance	(314,900)	(2,834,100)
Net cash provided by (used in) capital and related financing activities	(6,841,508)	(56,117,621)
Net (decrease) increase in cash and cash equivalents	3,218,078	3,748,623
Cash and cash equivalents, beginning	154,558,336	154,027,791
Cash and cash equivalents-Funds held by GPA, June 30, 2020	**$ 157,776,414**	**$ 157,776,414**

-

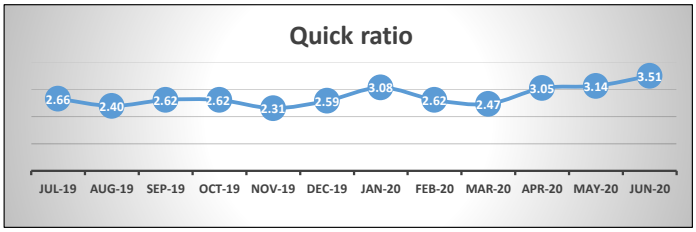
GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)
Statements of Cash Flows, continued
Period Ended June 30, 2020

	Month Ending 6/30/2020	YTD Ending 6/30/2020
Reconciliation of operating earnings to net cash provided by operating activities:		
Operating earnings net of depreciation expense and excluding interest income	$3,890,268	$31,110,134
Adjustments to reconcile operating earnings to net cash provided by operating activities:		
Depreciation and amortization	3,140,679	28,198,624
Other expense	4,873	516,272
(Increase) decrease in assets:		
Accounts receivable	2,348,016	3,009,102
Materials and inventory	80,959	(2,027,950)
Fuel inventory	7,217,786	11,333,412
Prepaid expenses	565,109	(4,306,904)
Unamortized debt issuance cost	22,362	201,258
Deferred fuel revenue	634,674	7,597,386
Unamortized loss on debt refunding	190,030	1,710,270
Unamortized forward delivery contract costs	13,280	119,520
Increase (decrease) in liabilities:		
Accounts payable-operations	(8,407,614)	(16,270,201)
Accounts payable-others	272,057	17,886
Accrued payroll and employees' benefits	285,113	(676,729)
Net pension liability	(259,871)	(2,572,668)
Employees' annual leave	29,935	575,034
Customers deposits	(13)	(479,413)
Customer advances for construction	12,304	13,226
Unearned forward delivery contract revenue	(48,669)	(438,014)
Net cash provided by operating activities	**$9,991,278**	**$ 57,630,245**

Guam Power Authority
Financial Analysis
06/30/20

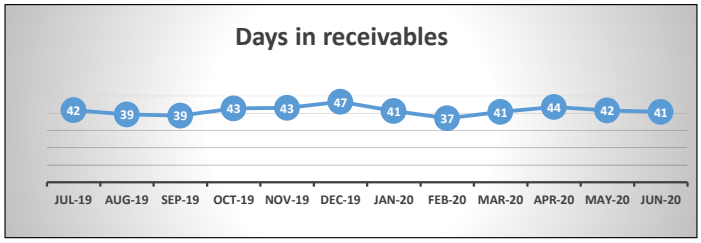
Quick Ratio

A	Reserve Funds Held by GPA	157,776,414
B	Current Accounts Receivable	40,719,139
C	Total Cash and A/R (A+B)	198,495,553
D	Total Current Liabilities	56,608,756
E	**Quick Ratio (F/G)**	**3.51**



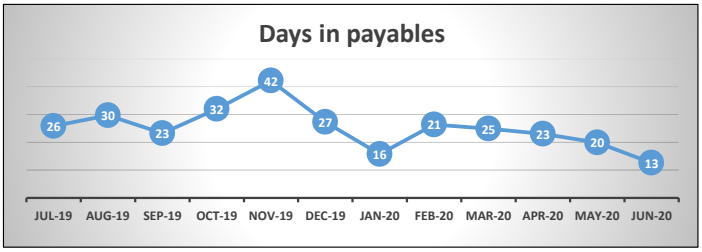
Days in Receivables

A	FY 20 Moving 12 Mos.-Actual	363,935,356
B	No. of Days	365
C	Average Revenues per day (A/B)	997,083
D	Current Accounts Receivable	40,719,139
E	**Days in Receivables (D/C)**	**41**



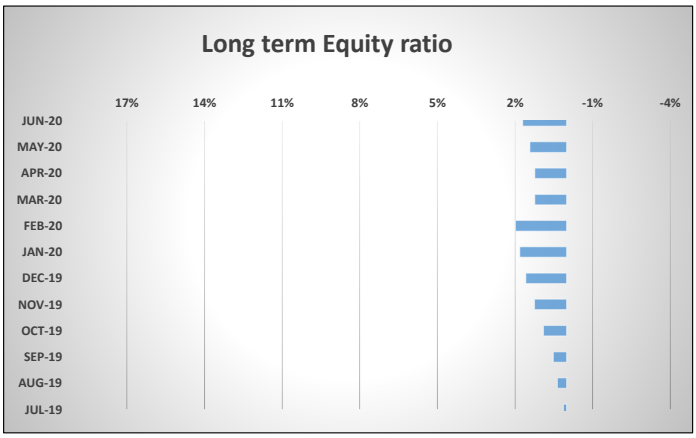
Days in Payables

A	FY 20 Moving 12 Months-Actual	340,911,390
B	No. of Days	365
C	Average Payables per day (A/B)	934,004
D	Current Accounts Payables	11,770,444
E	**Days in Payables (D/C)**	**13**



Long term equity ratio

A	Equity	$	9,012,586.00
B	Total Long term Liability	$	520,020,356.00
C	Total Equity and liability	$	529,032,942.00
D	**Long term equity ratio (A/C)**		**1.70%**

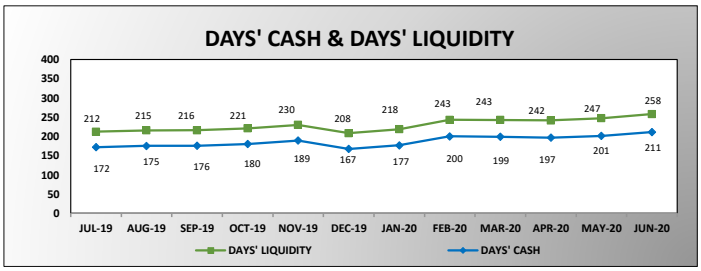


Days cash on hand

A	Unresctricted cash & cash equivalents	157,776
B	No. of Days -YTD	274
C	A x B	43,230,737
D	Total Operating expenses excluding depreciation	204,644
E	**Days cash on hand**	**211**

Days' Liquidity

A	Unresctricted cash , cash equivalents & revolving	192,776
B	No. of Days -YTD	274
C	A x B	52,820,737
D	Total Operating expenses excluding depreciation	204,644
E	**Days liquidity**	**258**



GPA 302

GUAM POWER AUTHORITY
ACCRUED REVENUE
JUNE 2020

	FOR THE MONTH ENDED JUNE		NINE MONTHS ENDED JUNE	
	2020	2019	2020	2019
KWH SALES:				
Residential	49,198,510	46,454,816	387,446,028	369,561,477
Small Gen. Non Demand	5,162,411	7,135,817	45,483,423	59,583,506
Small Gen. Demand	14,741,087	16,196,923	136,797,604	137,926,578
Large General	19,721,335	25,905,882	201,201,728	225,016,484
Auxillary/Standby	27,636	33,644	290,130	284,404
Private St. Lights	34,682	34,779	296,526	297,543
Sub-total	88,885,660	95,761,862	771,515,439	792,669,993
Government Service:				
Small Non Demand	688,682	1,225,034	6,245,830	10,498,494
Small Demand	7,975,765	7,970,826	74,557,491	71,596,876
Large	4,947,321	5,952,146	49,732,409	53,601,653
Street Lighting	578,122	710,958	5,291,218	6,901,833
Sub-total	14,189,891	15,858,964	135,826,949	142,598,856
Total	103,075,551	111,620,826	907,342,387	935,268,850
U. S. Navy	27,911,363	27,082,742	231,856,755	233,377,122
GRAND TOTAL	130,986,913	138,703,568	1,139,199,142	1,168,645,972
REVENUE:				
Residential	8,214,601	11,569,285	86,144,765	92,589,975
Small Gen. Non Demand	1,104,294	2,060,263	12,479,419	17,397,807
Small Gen. Demand	2,846,493	4,374,426	34,572,223	37,807,746
Large General	3,759,470	6,673,278	48,556,531	57,980,742
Auxillary/Standby	5,546	8,701	73,113	78,866
Private St. Lights	24,011	26,200	224,313	232,642
Sub-total	15,954,415	24,712,154	182,050,364	206,087,778
Government Service:				
Small Non Demand	169,968	373,461	1,862,805	3,199,673
Small Demand	1,732,843	2,319,401	19,922,586	20,618,280
Large	1,056,309	1,659,702	12,980,220	14,881,717
Street Lighting	391,487	471,543	3,784,753	4,352,052
Sub-total	3,350,607	4,824,107	38,550,364	43,051,723
Total	19,305,022	29,536,261	220,600,728	249,139,500
U. S. Navy	4,738,469	6,373,008	42,368,854	49,627,538
GRAND TOTAL	24,043,491	35,909,269	262,969,582	298,767,038
NUMBER OF CUSTOMERS:				
Residential	44,166	44,329	44,358	44,148
Small Gen. Non Demand	4,246	4,211	4,154	4,186
Small Gen. Demand	942	971	1,032	983
Large General	119	119	120	119
Auxillary/Standby	2	2	2	2
Private St. Lights	522	520	514	522
Sub-total	49,997	50,152	50,180	49,960
Government Service:				
Small Non Demand	633	676	640	677
Small Demand	384	356	384	353
Large	44	43	44	43
Street Lighting	617	618	617	625
Sub-total	1,678	1,693	1,685	1,698
Total	51,675	51,845	51,865	51,657
US Navy	1	1	1	1
	51,676	51,846	51,866	51,658

GPA403

GUAM POWER AUTHORITY
ACCRUED REVENUE

	TWELVE MONTHS ENDING	JUNE 2020	MAY 2020	APRIL 2020	MARCH 2020	FEBRUARY 2020	JANUARY 2020	DECEMBER 2019	NOVEMBER 2019	OCTOBER 2019	SEPTEMBER 2019	AUGUST 2019	JULY 2019
KWH SALES:													
Residential	514,657,177	49,198,510	50,104,381	45,696,841	43,576,314	35,110,181	38,780,579	41,139,080	41,832,586	42,007,555	39,850,588	41,847,978	45,512,584
Small General Non Demand	62,000,867	5,162,411	4,878,549	4,175,437	5,015,822	4,778,920	5,360,912	5,151,158	5,409,659	5,550,556	5,281,337	5,043,909	6,192,199
Small General Demand	186,511,100	14,741,087	14,574,000	13,085,335	14,883,043	14,757,497	16,008,372	16,007,245	16,236,716	16,504,309	16,034,273	16,546,802	17,132,421
Large General	277,464,172	19,721,335	19,502,429	18,150,138	21,597,825	22,344,580	24,478,138	25,153,208	24,973,240	25,280,835	24,400,150	25,901,704	25,960,590
Private Outdoor Lighting	395,441	34,682	31,190	33,692	31,198	32,183	34,228	31,725	33,968	33,660	32,707	34,326	31,882
Auxillary/Standby	403,983	27,636	37,503	28,802	29,018	40,116	29,711	34,266	33,926	29,151	47,591	31,920	34,342
Sub-Total	1,041,432,740	88,885,660	89,128,052	81,170,246	85,133,221	77,063,477	84,691,941	87,516,681	88,520,094	89,406,066	85,646,645	89,406,638	94,864,018
Government Service:													
Small Non Demand	8,517,691	688,682	667,053	614,102	667,442	669,590	688,336	732,098	739,934	778,594	733,348	792,642	745,870
Small Demand	100,861,676	7,975,765	8,146,861	7,757,273	8,360,160	8,059,004	8,429,943	8,610,483	8,287,162	8,930,840	8,706,945	8,790,473	8,806,768
Large	68,118,135	4,947,321	5,002,187	4,644,794	5,578,414	5,396,114	5,741,099	5,917,603	6,140,795	6,364,082	6,031,079	6,328,596	6,026,050
Street Lighting (Agencies)	7,630,982	578,122	557,564	634,494	540,956	576,839	615,219	270,787	652,963	864,275	711,804	864,386	763,574
Sub-Total	185,128,483	14,189,891	14,373,665	13,650,663	15,146,971	14,701,547	15,474,596	15,530,972	15,820,854	16,937,791	16,183,177	16,776,096	16,342,261
Total	1,226,561,223	103,075,551	103,501,717	94,820,909	100,280,192	91,765,024	100,166,537	103,047,653	104,340,948	106,343,856	101,829,822	106,182,735	111,206,280
U.S. Navy	312,277,699	27,911,363	27,028,828	25,867,160	24,905,070	23,581,439	25,963,769	25,910,039	25,080,100	25,608,987	25,184,246	27,239,150	27,997,548
Grand Total	1,538,838,922	130,986,913	130,530,545	120,688,068	125,185,262	115,346,464	126,130,305	128,957,692	129,421,048	131,952,844	127,014,068	133,421,884	139,203,828
REVENUE:													
Residential	118,020,907	8,214,601	10,292,144	8,809,987	10,095,552	7,812,393	9,600,770	10,333,720	10,464,359	10,521,241	10,007,200	10,470,951	11,397,991
Small General Non Demand	17,387,076	1,104,294	1,268,804	1,024,880	1,415,097	1,295,574	1,582,611	1,544,644	1,595,257	1,648,259	1,579,415	1,492,266	1,835,976
Small General Demand	48,232,388	2,846,493	3,427,018	2,911,833	3,842,607	3,663,368	4,444,883	4,451,665	4,449,885	4,534,471	4,422,371	4,572,505	4,665,289
Large General	68,119,102	3,759,470	4,394,446	4,024,701	5,298,941	5,323,864	6,364,878	6,436,132	6,456,820	6,497,279	6,283,768	6,671,085	6,607,718
Private Outdoor Lighting	301,379	24,011	23,692	24,175	24,414	25,151	25,787	25,341	25,875	25,867	25,616	26,038	25,412
Auxillary/Standby	104,435	5,546	9,424	6,463	6,916	10,647	7,776	9,864	8,849	7,628	13,738	9,248	8,337
Sub-Total	252,165,287	15,954,415	19,415,530	16,802,039	20,683,525	18,130,996	22,026,703	22,801,366	23,001,043	23,234,746	22,332,107	23,242,093	24,540,723
Government Service:													
Small Non Demand	2,581,901	169,968	184,693	169,814	201,532	200,103	221,791	232,560	236,107	246,239	232,567	250,901	235,628
Small Demand	27,435,994	1,732,843	2,004,367	1,895,149	2,256,934	2,164,921	2,445,544	2,461,603	2,407,924	2,553,302	2,491,735	2,527,222	2,494,451
Large	18,061,802	1,056,309	1,214,020	1,129,057	1,461,575	1,404,994	1,608,235	1,642,284	1,709,248	1,754,498	1,671,314	1,754,837	1,655,430
Street Lighting (Agencies)	5,242,244	391,487	402,336	414,838	412,839	419,563	438,899	342,012	459,553	503,228	471,713	503,316	482,461
Sub-Total	53,321,941	3,350,607	3,805,415	3,608,857	4,332,879	4,189,580	4,714,468	4,678,460	4,812,832	5,057,267	4,867,330	5,036,276	4,867,971
Total	305,487,228	19,305,022	23,220,945	20,410,896	25,016,404	22,320,576	26,741,172	27,479,826	27,813,875	28,292,013	27,199,437	28,278,369	29,408,694
U.S. Navy	58,448,128	4,738,469	4,330,362	5,228,169	3,990,233	3,736,819	4,966,520	5,433,030	4,632,403	5,312,849	4,808,157	5,647,382	5,623,735
Grand Total	363,935,356	24,043,491	27,551,306	25,639,065	29,006,637	26,057,395	31,707,692	32,912,856	32,446,278	33,604,862	32,007,594	33,925,751	35,032,429
NUMBER OF CUSTOMERS:													
Residential	44,384	44,166	43,948	43,707	44,509	44,748	44,755	44,203	44,602	44,584	44,479	44,497	44,408
Small General Non Demand	4,149	4,246	4,255	4,245	4,233	4,156	4,115	3,953	4,092	4,091	4,087	4,122	4,197
Small General Demand	1,039	942	946	948	998	1,109	1,098	1,079	1,085	1,082	1,080	1,086	1,014
Large General	120	119	120	120	119	120	121	120	120	121	120	121	120
Private Outdoor Lighting	515	522	512	511	512	512	510	517	515	517	520	518	519
Auxillary/Standby	2	2	2	2	2	2	2	2	2	2	3	3	3
Sub-Total	50,210	49,997	49,783	49,533	50,373	50,647	50,601	49,874	50,416	50,397	50,289	50,347	50,261
Government Service:													
Small Non Demand	644	633	634	636	630	643	650	644	644	645	644	648	671
Small Demand	384	384	385	385	385	385	385	384	383	383	382	382	381
Large	44	44	45	45	44	44	44	44	44	44	44	44	43
Street Lighting (Agencies)	617	617	616	616	616	616	616	618	618	618	618	618	619
Sub-Total	1,688	1,678	1,680	1,682	1,675	1,688	1,695	1,690	1,689	1,690	1,688	1,692	1,714
Total	51,898	51,675	51,463	51,215	52,048	52,335	52,296	51,564	52,105	52,087	51,977	52,039	51,975
U.S. Navy	1	1	1	1	1	1	1	1	1	1	1	1	1
Grand Total	51,899	51,676	51,464	51,216	52,049	52,336	52,297	51,565	52,106	52,088	51,978	52,040	51,976

GPA303

GUAM POWER AUTHORITY
ACCRUED REVENUE
JUNE 2020

RATE	NUMBER OF CUSTOMERS	KWH SALES	TOTAL REVENUE AMOUNT	TOTAL REVENUE C/KWH	BASE RATE REVENUE C/KWH	BASE RATE REVENUE AMOUNT	AVERAGE PER CUSTOMER KWH	AVERAGE PER CUSTOMER REVENUE	NON-FUEL C/KWH	NON-FUEL AMOUNT	0.0836910 OIL C/KWH	0.0836910 OIL AMOUNT
Month												
R Residential	44,166	49,198,510	$ 8,214,601	$ 16.6968	$ 16.6968	$ 8,214,601	1,114	$ 186	$ 9.6991	$ 4,771,818	$ 6.9977	$ 3,442,783
G Small Gen. Non Demand	4,246	5,162,411	$ 1,104,294	$ 21.3911	$ 21.3911	$ 1,104,294	1,216	$ 260	$ 14.3715	$ 741,916	$ 7.0196	$ 362,378
J Small Gen. Demand	942	14,741,087	$ 2,846,493	$ 19.3099	$ 19.3099	$ 2,846,493	15,649	$ 3,022	$ 12.0684	$ 1,779,007	$ 7.2416	$ 1,067,486
P Large General	119	19,721,335	$ 3,759,470	$ 19.0630	$ 19.0630	$ 3,759,470	165,726	$ 31,592	$ 11.1382	$ 2,196,604	$ 7.9247	$ 1,562,866
I Independent Power Producer	2	27,636	$ 5,546	$ 20.0666	$ 20.0666	$ 5,546	13,818	$ 2,773	$ 11.7947	$ 3,260	$ 8.2719	$ 2,286
H Private St. Lights	522	34,682	$ 24,011	$ 69.2334	$ 69.2334	$ 24,011	66	$ 46	$ 60.8643	$ 21,109	$ 8.3691	$ 2,903
Sub-Total	49,997	88,885,660	$ 15,954,415	$ 17.9494	$ 17.9494	$ 15,954,415	1,778	$ 319	$ 10.7033	$ 9,513,713	$ 7.2461	$ 6,440,702
Government Service:												
S Small Non Demand	633	688,682	$ 169,968	$ 24.6802	$ 24.6802	$ 169,968	1,088	$ 269	$ 16.3853	$ 112,843	$ 8.2949	$ 57,125
K Small Demand	384	7,975,765	$ 1,732,843	$ 21.7264	$ 21.7264	$ 1,732,843	20,770	$ 4,513	$ 13.4408	$ 1,072,005	$ 8.2856	$ 660,838
L Large	44	4,947,321	$ 1,056,309	$ 21.3511	$ 21.3511	$ 1,056,309	112,439	$ 24,007	$ 13.0561	$ 645,926	$ 8.2951	$ 410,384
F Street Lighting (Agencies)	617	578,122	$ 391,487	$ 67.7169	$ 67.7169	$ 391,487	937	$ 635	$ 59.3478	$ 343,103	$ 8.3691	$ 48,384
Sub-Total	1,678	14,189,891	$ 3,350,607	$ 23.6126	$ 23.6126	$ 3,350,607	8,456	$ 1,997	$ 15.3199	$ 2,173,876	$ 8.2927	$ 1,176,731
	51,675	103,075,551	$ 19,305,022	$ 18.7290	$ 18.7290	$ 19,305,022	1,995	$ 374	$ 11.3389	$ 11,687,589	$ 7.3901	$ 7,617,433
U.S. Navy	1	27,911,363	$ 4,738,469	$ 16.9768	$ 16.9768	$ 4,738,469			$ 6.4857	$ 1,810,235	$ 10.4912	$ 2,928,233
TOTAL	**51,676**	**130,986,913**	**$ 24,043,491**	**$ 18.3556**	**$ 18.3556**	**$ 24,043,491**	**2,535**	**$ 465**	**$ 10.3047**	**$ 13,497,824**	**$ 8.0509**	**$ 10,545,666.35**
						$ -						
Nine Months Ended June 2020												
R Residential	44,358	387,446,028	$ 86,144,765	$ 22.2340	$ 22.2340	$ 86,144,765	8,735	$ 1,942	$ 9.5803	$ 37,118,370	$ 12.6537	$ 49,026,395
G Small Gen. Non Demand	4,154	45,483,423	$ 12,479,419	$ 27.4373	$ 27.4373	$ 12,479,419	10,949	$ 3,004	$ 14.4845	$ 6,588,043	$ 12.9528	$ 5,891,376
J Small Gen. Demand	1,032	136,797,604	$ 34,572,223	$ 25.2725	$ 25.2725	$ 34,572,223	132,570	$ 33,504	$ 12.2340	$ 16,735,882	$ 13.0385	$ 17,836,342
P Large General	120	201,201,728	$ 48,556,531	$ 24.1333	$ 24.1333	$ 48,556,531	1,676,681	$ 404,638	$ 10.8080	$ 21,745,824	$ 13.3253	$ 26,810,707
I Independent Power Producer	2	290,130	$ 73,113	$ 25.2000	$ 25.2000	$ 73,113	145,065	$ 36,556	$ 12.4337	$ 36,074	$ 12.7663	$ 37,039
H Private St. Lights	514	296,526	$ 224,313	$ 75.6468	$ 75.6468	$ 224,313	577	$ 436	$ 62.3899	$ 185,002	$ 13.2569	$ 39,310
Sub-Total	50,180	771,515,439	$ 182,050,364	$ 23.5965	$ 23.5965	$ 182,050,364	15,375	$ 3,628	$ 10.6815	$ 82,409,195	$ 12.9150	$ 99,641,169
Government Service:												
S Small Non Demand	644	6,245,830	$ 1,862,805	$ 29.8248	$ 29.8248	$ 1,862,805	9,706	$ 2,895	$ 16.4221	$ 1,025,698	$ 13.4027	$ 837,107
K Small Demand	384	74,557,491	$ 19,922,586	$ 26.7211	$ 26.7211	$ 19,922,586	194,329	$ 51,927	$ 13.4047	$ 9,994,232	$ 13.3164	$ 9,928,353
L Large	44	49,732,409	$ 12,980,220	$ 26.1001	$ 26.1001	$ 12,980,220	1,128,145	$ 294,447	$ 12.8269	$ 6,379,103	$ 13.2733	$ 6,601,117
F Street Lighting (Agencies)	617	5,291,218	$ 3,784,753	$ 71.5290	$ 71.5290	$ 3,784,753	8,573	$ 6,132	$ 58.2541	$ 3,082,351	$ 13.2749	$ 702,402
Sub-Total	1,688	135,826,949	$ 38,550,364	$ 28.3820	$ 28.3820	$ 38,550,364	80,446	$ 22,832	$ 15.0790	$ 20,481,385	$ 13.3029	$ 18,068,979
U.S. Navy	1	231,856,755	$ 42,368,854	$ 18.2737	$ 18.2737	$ 42,368,854			$ 6.2611	$ 14,516,745	$ 12.0126	$ 27,852,109
TOTAL	**51,870**	**1,139,199,142**	**$ 262,969,582**	**$ 23.0837**	**$ 23.0837**	**$ 262,969,582**	**21,963**	**$ 5,070**	**$ 10.3061**	**$ 117,407,324**	**$ 12.7776**	**$ 145,562,257**
Twelve Months Ended June 2020												
R Residential	44,384	514,657,177	$ 118,020,907	$ 22.9319	$ 22.9319	$ 118,020,907	11,596	$ 2,659	$ 9.6233	$ 49,527,220	$ 13.3086	$ 68,493,687
G Small Gen. Non Demand	4,149	62,000,867	$ 17,387,076	$ 28.0433	$ 28.0433	$ 17,387,076	14,942	$ 4,190	$ 14.4588	$ 8,964,553	$ 13.5845	$ 8,422,524
J Small Gen. Demand	1,039	186,511,100	$ 48,232,388	$ 25.8603	$ 25.8603	$ 48,232,388	179,525	$ 46,426	$ 12.2125	$ 22,777,687	$ 13.6478	$ 25,454,700
P Large General	120	277,464,172	$ 68,119,102	$ 24.5506	$ 24.5506	$ 68,119,102	2,310,597	$ 567,265	$ 10.6885	$ 29,656,803	$ 13.8621	$ 38,462,299
I Independent Power Producer	2	403,983	$ 104,435	$ 25.8513	$ 25.8513	$ 104,435	179,548	$ 46,415	$ 12.9062	$ 50,464	$ 12.9450	$ 52,296
H Private St. Lights	515	395,441	$ 301,379	$ 76.2132	$ 76.2132	$ 301,379	767	$ 585	$ 62.0263	$ 246,953	$ 14.1869	$ 56,101
Sub-Total	50,210	1,041,432,740	$ 252,165,287	$ 24.2133	$ 24.2133	$ 252,165,287	20,742	$ 5,022	$ 10.6799	$ 111,223,680	$ 13.5334	$ 140,941,607
Government Service:												
S Small Non Demand	644	8,517,691	$ 2,581,901	$ 30.3122	$ 30.3122	$ 2,581,901	13,237	$ 4,012	$ 16.4034	$ 1,397,191	$ 13.9088	$ 1,184,710
K Small Demand	384	100,861,676	$ 27,435,994	$ 27.2016	$ 27.2016	$ 27,435,994	262,889	$ 71,510	$ 13.3729	$ 13,488,128	$ 13.8287	$ 13,947,866
L Large	44	68,118,135	$ 18,061,802	$ 26.5154	$ 26.5154	$ 18,061,802	1,545,213	$ 409,720	$ 12.7252	$ 8,668,141	$ 13.7903	$ 9,393,661
F Street Lighting (Agencies)	617	7,630,982	$ 5,242,244	$ 68.6968	$ 68.6968	$ 5,242,244	12,365	$ 8,494	$ 54.7872	$ 4,180,802	$ 13.9096	$ 1,061,442
Sub-Total	1,688	185,128,483	$ 53,321,941	$ 28.8027	$ 28.8027	$ 53,321,941	109,646	$ 31,581	$ 14.9811	$ 27,734,262	$ 13.8216	$ 25,587,679
	51,898	1,226,561,223	$ 305,487,228	$ 24.9060	$ 24.9060	$ 305,487,228	23,634	$ 36,603	$ 11.3291	$ 138,957,942	$ 13.5769	$ 166,529,286
U.S. Navy	1	312,277,699	$ 58,448,128	$ 18.7167	$ 18.7167	$ 58,448,128			$ 6.2091	$ 19,389,633	$ 12.5076	$ 39,058,495
TOTAL	**51,899**	**1,538,838,922**	**$ 363,935,356**	**$ 23.6500**	**$ 23.6500**	**$ 363,935,356**	**29,651**	**$ 7,012**	**$ 10.2901**	**$ 158,347,575**	**$ 13.3599**	**$ 205,587,781**

GPA-318 **ENERGY ACCOUNT** **FOR INTERNAL USE ONLY**

318Jun20 **FY 2020 Versus FY 2019**

	June 2020		June 2019		Y T D 2020		Y T D 2019		MOVING TWELVE MONTHS	
Gross Generation										
Number of days in Period	**30**		**30**		**274**		**274**		**366**	
Peak demand	**244**		**255**		**247**		**255**		**247**	
Date	**06/22/20**		**06/06/19**		**10/23/19**		**06/06/19**		**10/23/19**	
	KWH	**% change**	**KWH**	**% change**	**KWH**	**% change**	**KWH**	**% change**	**KWH**	**% change**
Energy Account:										
Kilowatt hours GPA:										
Cabras 1 & 2	67,259,000		62,215,000		520,821,000		562,021,000		716,616,000	
Cabras No. 3	0		0		0		0		0	
Cabras No. 4	0		0		0		0		0	
MEC (ENRON) Piti 8 (IPP)	28,176,400		23,319,000		246,545,400		197,763,300		327,230,300	
MEC (ENRON) Piti 9 (IPP)	29,286,100		27,410,100		236,625,100		229,326,300		298,380,170	
TEMES Piti 7 (IPP)	552,847		2,963,612		25,864,346		42,787,036		32,434,505	
Tanguisson 2	0		0		0		0		0	
Tanguisson 1	0		0		0		0		0	
Diesels/CT's & Others:							0			
MDI 10MW	0		79,301		118,137		702,690		118,137	
NRG Solar Dandan	4,544,784		4,568,477		38,377,623		37,173,024		49,175,124	
Dededo CT #1	0		236,870		1,577,940		4,816,370		1,653,380	
Dededo CT #2	0		998,630		3,222,990		7,414,970		3,486,260	
Macheche CT	3,256,425		5,786,071		40,772,842		41,020,151		53,626,876	
Yigo CT (Leased)	2,740,519		5,719,152		35,295,583		40,019,632		44,546,376	
Tenjo	1,382,810		2,142,790		29,206,570		20,197,360		37,252,580	
Talofofo 10 MW	0		622,900		1,121,170		5,773,030		4,164,030	
Aggreko	8,582,870		15,808,673		80,315,106		99,575,548		130,159,203	
Wind Turbine*	8,117		35		167,541		123,182		189,157	
Orote	0		0		0		0		0	
Marbo	0		0		0		0		0	
	145,789,873		**151,870,611**		**1,260,031,348**		**1,288,713,592**		**1,699,032,098**	
Ratio to last year		96.00		106.32		97.77		**98.63**		**99.91**
Station use	5,837,183		5,477,621		49,139,078		49,752,379		66,277,162	
Ratio to Gross generation		4.00		3.61		3.90		3.86		**3.90**
Net send out	139,952,690		146,392,990		1,210,892,270		1,238,961,213		1,632,754,936	
Ratio to last year		95.60		106.02		97.73		**98.39**		**99.83**
KWH deliveries:										
Sales to Navy (@34.5kv)	**27,911,363**		**27,082,742**		**231,856,755**		**233,377,123**		**312,277,699**	
Ratio to last year		103.06		108.81		99.35		**100.04**		**101.87**
GPA-metered	**112,041,327**		**119,310,248**		**979,035,515**		**1,005,584,090**		**1,320,477,237**	
Ratio to last year		93.91		105.41		97.36		**98.01**		**99.37**
Power factor adj.	0		0		0		0		0	
Adjusted	112,041,327		119,310,248		979,035,515		1,005,584,090		1,320,477,237	
GPA KWH Accountability:										
Sales to civilian customers-										
accrual basis	**103,075,551**		**111,620,826**		**907,342,387**		**935,268,850**		**1,226,561,224**	
Ratio to last year		92.34		106.47		97.01		**97.55**		**99.15**
GPA use-KWH	346,235		336,259		3,006,566		3,057,119		4,089,240	
Unaccounted For	8,619,541		7,353,163		68,686,562		67,258,122		89,826,773	
Ratio to deliveries		7.69		6.16		7.02		6.69		6.80
Ratio to Gross Generation		5.91		4.84		5.45		5.22		5.29
Ratio to Net Send Out		6.17		5.02		5.67		5.43		5.52

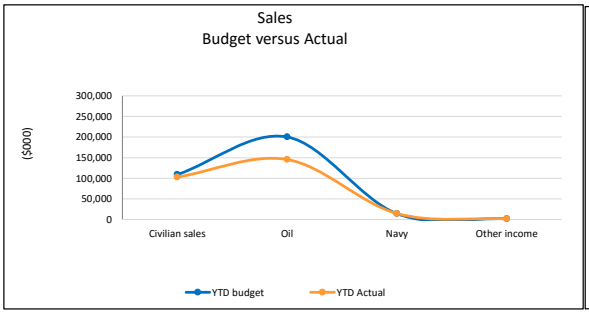
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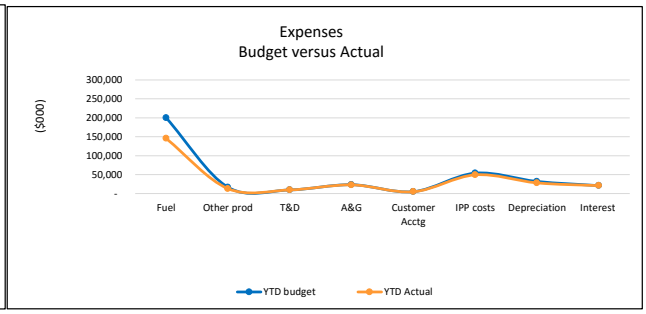
Guam Power Authority
Fuel Consumption
FY 2020

Description	June 2020 BARRELS	June 2020 AMOUNT	YEAR-TO-DATE BARRELS	YEAR-TO-DATE AMOUNT	MOVING 12 MONTHS BARREL S	MOVING 12 MONTHS AMOUNT
FUEL FURNISHED:						
NAVY:						
Diesel	0	0	0	0	0	0
Low Sulfur	0	0	0	0	0	0
	0	**0**	**0**	**0**	**0**	**0**
GPA:						
RFO	197,825	$7,036,892	1,308,480	$ 70,917,603	1,590,852	$ 90,886,319
Diesel	33,323	$1,584,610	453,721	$ 35,343,195	634,596	$ 51,848,276
Low Sulfur	244	$17,187	248,871	$ 17,331,548	492,109	$ 34,611,564
Deferred Fuel Costs	0	$634,674	0	$ 7,597,386	0	$ 9,673,375
Fuel Adjustments	0	$0		$ 96,786	0	$ 279,082
Fuel Handling Costs	0	$1,594,036	0	$ 14,275,740	0	$ 18,610,898
	231,392	**$10,867,399**	**2,011,071**	**$ 145,562,258**	**2,717,557**	**$ 205,909,514**
IWPS:						
GPA RFO	197,825	$7,036,892	1,308,480	$ 70,917,603	1,590,852	$ 90,886,319
Diesel	33,323	$1,584,610	453,721	$ 35,343,195	634,596	$ 51,848,276
Low Sulfur	244	$17,187	248,871	$ 17,331,548	492,109	$ 34,611,564
Deferred Fuel Costs	0	$634,674	0	$ 7,597,386	0	$ 9,673,375
Fuel Variance	0	$0	0	$ 96,786		$ 279,082
Fuel Handling Costs	0	$1,594,036	0	$ 14,275,740	0	$ 18,610,898
	231,392	**$10,867,399**	**2,011,071**	**$ 145,562,258**	**2,717,557**	**$ 205,909,514**
AVERAGE COST/Bbl.						
GPA RFO		**$35.57**		**$54.20**		**$57.13**
Diesel		**$47.55**		**$77.90**		**$81.70**
Low Sulfur		**$70.33**		**$69.64**		**$70.33**
AS BURNED						
Cabras 1 & 2						
RFO	118,475	$ 4,081,302	792,559	$ 42,430,255	963,261	$ 54,456,282
Low Sulfur	139	$ 11,141	106,281	$ 7,526,053	271,750	$ 19,386,607
Diesel	0	$ -	569	$ 52,885	957	$ 86,871
	118,614	$ 4,092,443	899,409	$ 50,009,193	1,235,969	$ 73,929,759
Cabras 3 & 4						
RFO	0	$ -	0	$ -	0	$ -
Low Sulfur	0	$ -	0	$ -	0	$ -
Diesel	0	$ -	0	$ -	0	$ -
	0	$ -	0	$ -	0	$ -
MEC (Piti Units 8&9)						
RFO	79,349	$ 2,955,590	515,921	$ 28,487,348	627,590	$ 36,430,037
Low Sulfur	105	$ 6,046	142,590	$ 9,805,495	220,359	$ 15,224,958
Diesel	4	$ 269	39	$ 2,755	52	$ 3,655
	79,458	$ 2,961,905	658,550	$ 38,295,598	848,001	$ 51,658,649
Diesel & CT's - GPA:						
MDI Dsl	0	$ -	169	$ 15,925	169	$ 15,925
Macheche CT	7,024	$ 299,599	90,058	$ 6,828,068	118,541	$ 9,415,208
Yigo CT	6,251	$ 278,316	77,882	$ 5,767,465	98,971	$ 7,662,800
Talofofo 10 MW	0	$ -	1,893	$ 165,227	7,296	$ 656,340
Aggreko	16,076	$ 724,696	149,704	$ 11,001,245	242,002	$ 19,195,235
Tenjo	2,370	$ 216,093	50,187	$ 4,639,932	64,148	$ 6,155,624
TEMES (IPP)	1,589	$ 64,258	68,266	$ 5,514,605	86,253	$ 7,180,447
GWA Generators	10	$ 1,379	239	$ 32,020	352	$ 46,553
	33,319	$ 1,584,341	453,113	$ 35,287,555	633,587	$ 51,757,751
Deferred Fuel Costs	0	$ 634,674		$ 7,597,386		$ 9,673,375
Adjustment		$ -		$ 96,786		$ 279,082
Fuel Handling Costs	0	$ 1,594,036		$ 14,275,740		$ 18,610,898
TOTAL	**231,391**	**$ 10,867,399**	**2,011,071**	**$ 145,562,258**	**2,717,557**	**$ 205,909,514**

Statement of operations
Comparison-Budget versus Actual
For the month and year to date ended June 30, 2020

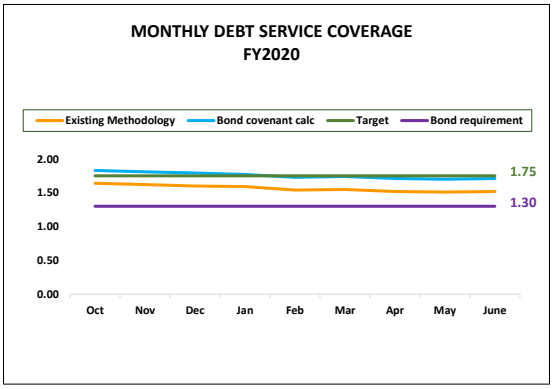
	Budget	Actual June-20	Variance	YTD Budget	YTD Actual	Variance
KwH Sales-Civilian	**115,832**	**103,076**	**12,756**	**970,144**	**907,343**	**62,801**
Non-fuel yield	**$ 0.111525**	**$ 0.110268**	**$ 0.001256**	**$ 0.112338**	**$ 0.113398**	**$ (0.001060)**
KwH Sales-Navy	**26,260**	**27,911**	**-1,651**	**226,292**	**231,857**	**-5,565**
Non-fuel yield	**$ 0.062452**	**$ 0.064849**	**$ (0.002397)**	**$ 0.062452**	**$ 0.062616**	**$ (0.000165)**
Operating revenue						
Civilian sales	12,918	11,366	1,552	108,984	102,891	6,093
Oil	25,263	10,867	14,396	200,253	145,561	54,692
Navy	1,640	1,810	-170	14,132	14,518	-386
DSM-Rebates	0	326	-326	0	326	-326
Other income	180	177	3	1,620	1,476	144
	40,001	24,546	15,455	324,989	264,772	60,217
Bad debts expense	91	91	0	818	818	0
Total operating revenues	39,910	24,455	15,455	324,171	263,953	60,217
Operating expenses:						
Production fuel	25,263	10,867	14,395	200,253	145,562	54,690
O & M expenses:						
Other production	1,716	1,223	493	16,831	13,050	3,782
Transmission distribution	1,192	1,090	101	9,567	9,511	56
Administrative expense	2,441	2,587	-146	23,375	22,977	398
Customer accounting	482	587	-105	4,157	3,910	247
	5,831	5,487	344	53,930	49,447	4,483
IPP costs	1,246	1,070	176	11,215	9,635	1,580
Depreciation	3,543	3,141	402	31,889	28,199	3,690
	35,883	20,565	15,317	297,286	232,843	64,443
Operating income	4,027	3,890	137	26,885	31,111	-4,226
Other revenue (expenses):						
Investment income	167	68	99	1,503	2,342	-839
Interest expense	(2,315)	(2,298)	(17)	(20,836)	(20,798)	(38)
Pandemic -COVID19	0	(291)	291	0	(1,096)	1,096
Losses due to typhoon	0	(80)	80	0	(248)	248
Bond issuance costs/Other expenses	139	85	54	1,250	763	487
Net income before capital contribution	2,018	1,373	643	8,802	12,074	(3,273)
Grants from the U.S. Government	-	80	(80)	-	80	(80)
Increase (decrease) in net assets	2,018	1,454	563	8,802	12,154	(3,353)





Guam Power Authority
Debt service coverage
June 30, 2020

	2016	Restated 2017	Audited 2018	YTD Audited 2019	YTD Unaudited 2020
Funds Available for Debt Service					
Earnings from Operations	$37,981	$36,522	$38,164	$39,053	$31,110
Interest Income	$57	$122	$620	$2,746	1,657
Depreciation Expense	44,240	44,292	37,184	36,999	28,199
Balance Available for Debt Service	$82,278	$80,936	$75,968	$87,170	$60,966
IPP - Capital Costs					
Principal	$14,819	$20,796	$23,210	$13,470	$6,299
Interest	5,970	5,609	3,159	1,068	398
Total IPP Payments	$20,789	$26,400	$26,369	$14,538	$6,698
Bond Debt Service					
Principal (1993 & 1999 Revenue Bond)	$0	$0	$0	$0	$0
Interest (1993 & 1999 Revenue Bond)	0	0	0	0	0
Principal and Interest (2010 Subordinate Bond)	0	0	0	0	0
Principal and Interest (2010 Senior TE Bond)	7,999	7,999	2,000	0	0
Principal and Interest (2012 Senior TE Bond)	17,098	17,449	17,086	31,467	26,424
Principal and Interest (2014 Senior TE Bond)	10	5,084	5,083	5,084	3,816
Principal and Interest (2017 Senior TE Bond)			5,916	7,607	5,562
Total	$25,107	$30,532	$30,086	$44,158	$35,802
Debt Service Coverage (DSC) Calculation					
Existing DSC Methodology (Senior)	2.45 x	1.79 x	1.65 x	1.64 x	1.52 x
Existing DSC Methodology (Senior+Subordinate)	2.45 x	1.79 x	1.65 x	1.64 x	1.52 x
Bond Covenant DSC	3.28 x	2.65 x	2.53 x	1.97 x	1.70 x
Debt Service Coverage Requirements					
Existing Ratemaking DSC Target	1.75 x	1.75 x	1.75 x	1.75 x	1.75 x
Minimum Bond Covenant Requirement (Senior Bond)	1.30 x	1.30 x	1.30 x	1.30 x	1.30 x
Minimum Bond Covenant Requirement (Subordinate Bond)	1.20 x	1.20 x	1.20 x	1.20 x	1.20 x

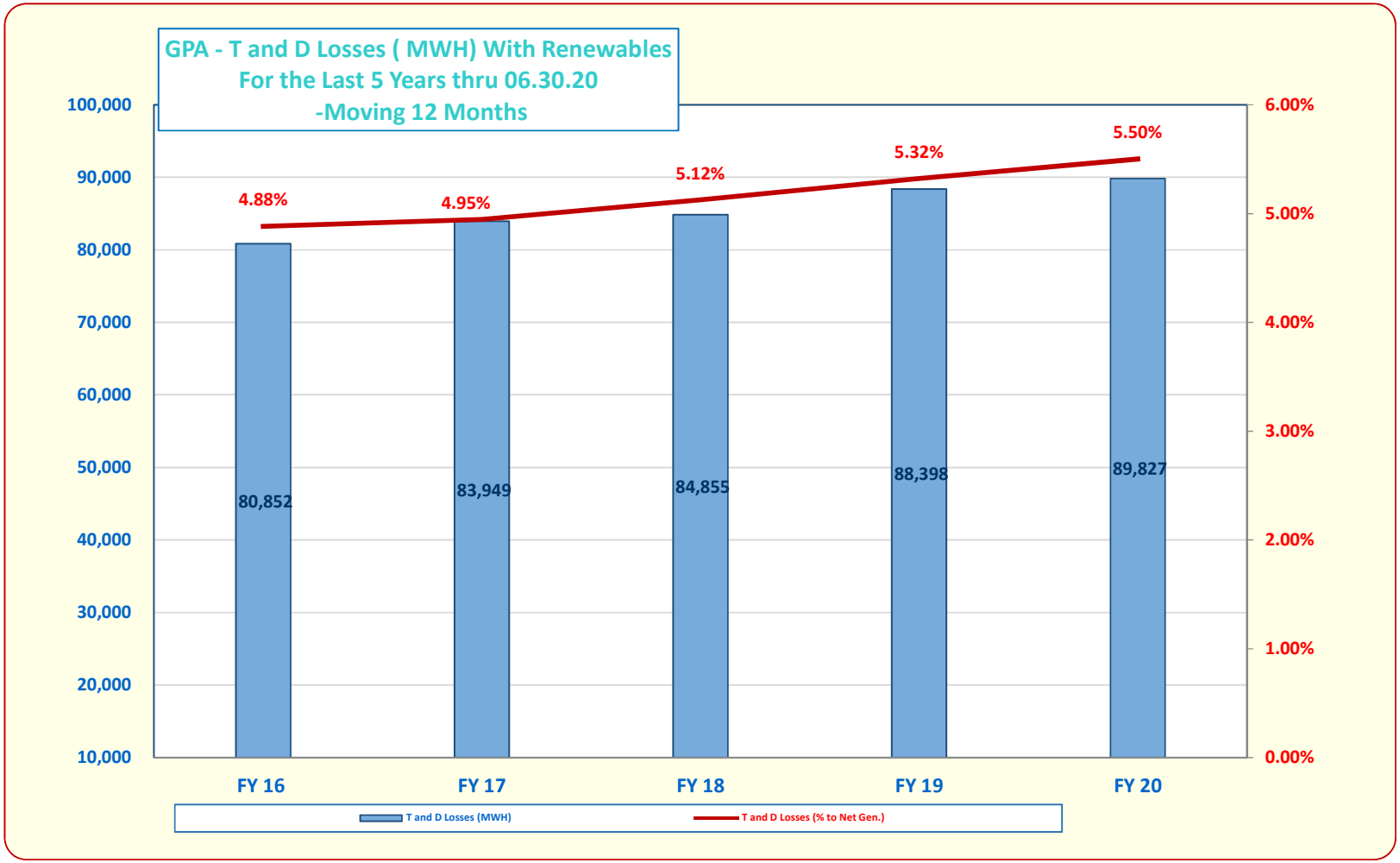


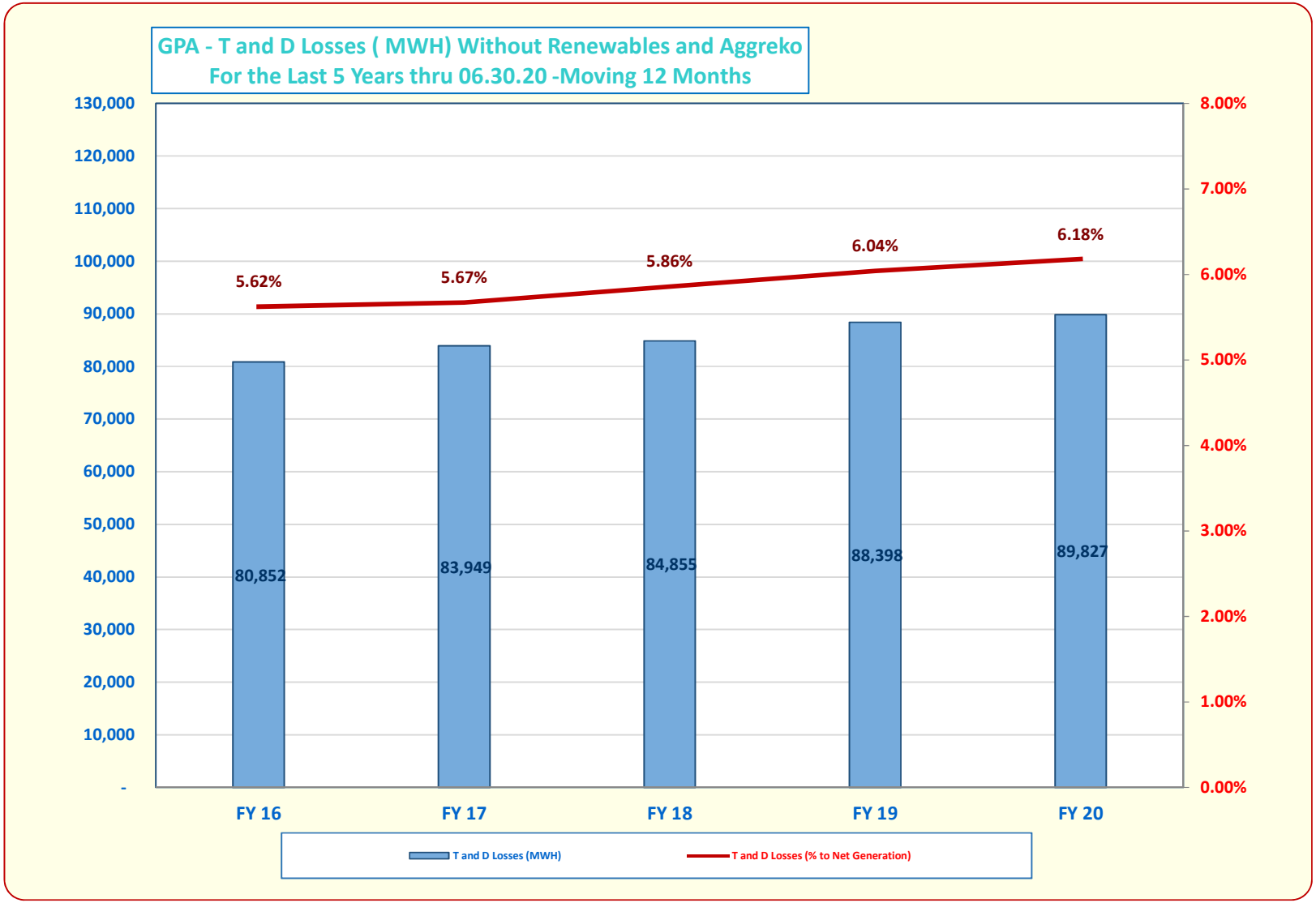
Notes:
(1) Source: Guam Power Authority, 2014 - 2019 Audited Financial Statements
(2) Interest income is net of interest earnings in the Construction Fund and the amortization of deferred credit
(3) Existing DSC Methodology (Rating Agency Method):
(Operating Earnings + Depreciation Expense - IPP Principal & Interest Payments)/
(Senior and Subordinate Bond Principal & Interest Payments)
(4) Bond Covenant DSC Methodology: (Operating Earnings + Depreciation Expense)/
(Senior and Subordinate Bond Principal & Interest Payments)

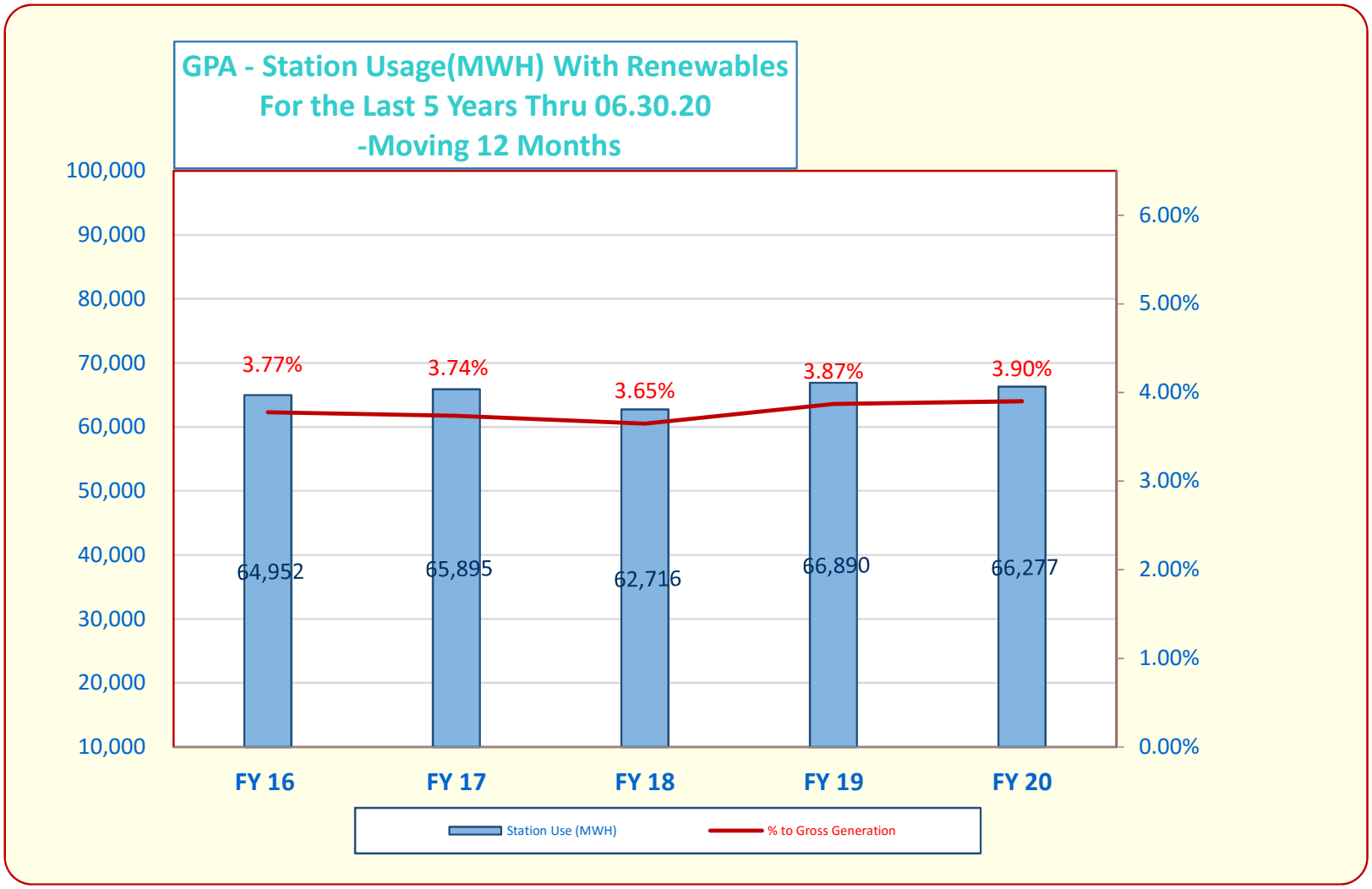
REVENUES-ACTUAL VS PROJECTIONS

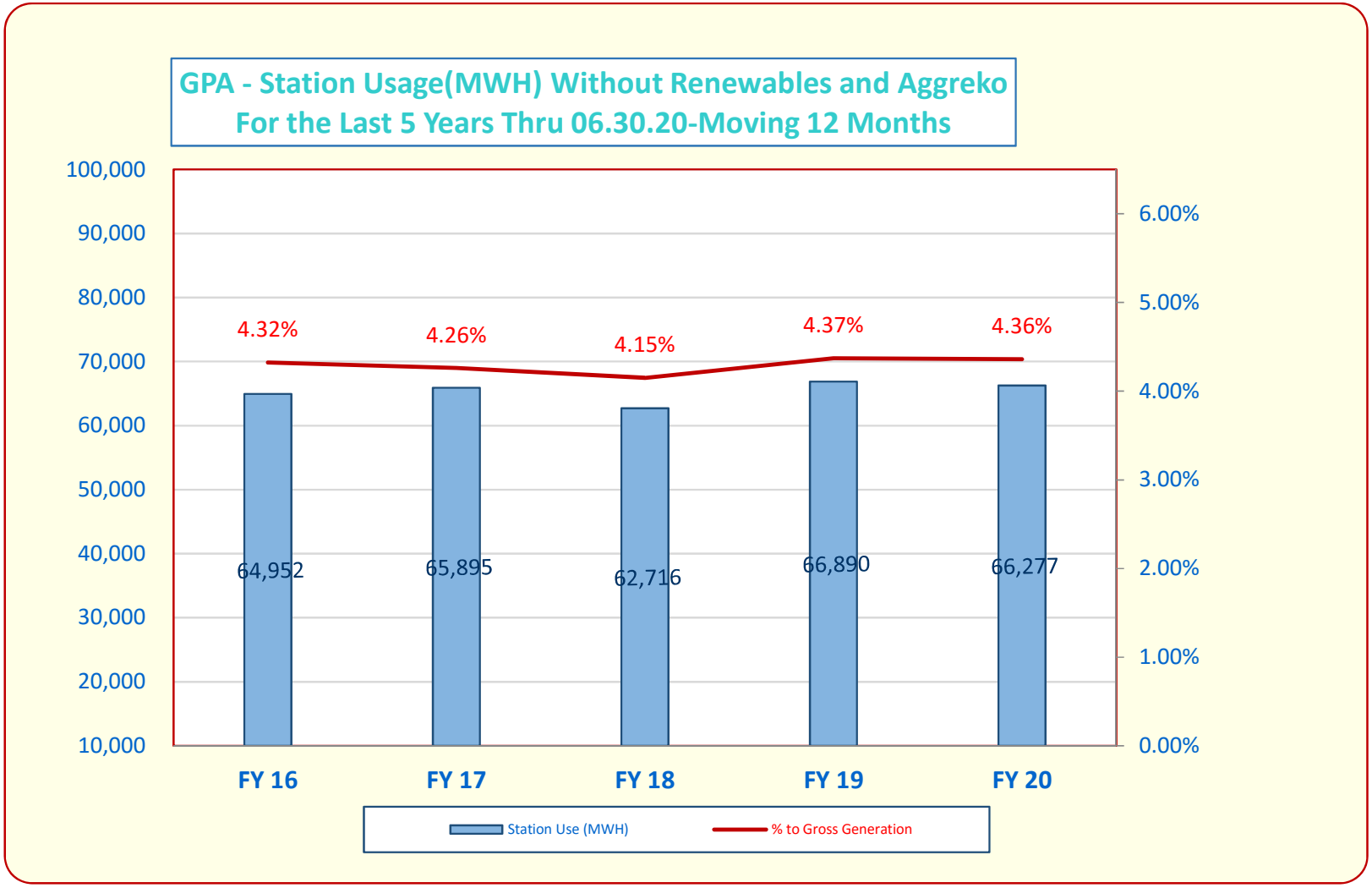
	MONTHLY - JUNE 2020				YTD THRU 06/30/20			
	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE
KWH								
Residential	48,647,376	49,198,510	551,134	1.13%	387,003,924	387,446,028	442,104	0.11%
Small General-Non-Demand	7,787,453	5,162,411	(2,625,042)	-33.71%	65,024,615	45,483,423	(19,541,192)	-30.05%
Small General-Demand	16,059,589	14,741,087	(1,318,502)	-8.21%	136,757,096	136,797,604	40,508	0.03%
Large	27,053,494	19,721,335	(7,332,160)	-27.10%	234,984,554	201,201,728	(33,782,826)	-14.38%
Independent Power Producers	34,166	27,636	(6,529)	-19.11%	296,760	290,130	(6,630)	-2.23%
Private St. Lites	5,361	34,682	29,320	546.87%	45,868	296,526	250,658	546.48%
Sub-total	**99,587,439**	**88,885,660**	**(10,701,779)**	**-10.75%**	**824,112,816**	**771,515,439**	**(52,597,378)**	**-6.38%**
Government								
Small_Non Demand	1,300,275	688,682	(611,593)	-47.04%	11,143,306	6,245,830	(4,897,476)	-43.95%
Small-Demand	7,742,651	7,975,765	233,113	3.01%	69,547,325	74,557,491	5,010,165	7.20%
Large	6,513,888	4,947,321	(1,566,567)	-24.05%	58,660,382	49,732,409	(8,927,972)	-15.22%
Public St. Lites	688,126	578,122	(110,004)	-15.99%	6,680,189	5,291,218	(1,388,970)	-20.79%
Sub-total	**16,244,941**	**14,189,891**	**(2,055,050)**	**-12.65%**	**146,031,201**	**135,826,949**	**(10,204,253)**	**-6.99%**
Total-Civilian	**115,832,380**	**103,075,551**	**(12,756,829)**	**-11.01%**	**970,144,018**	**907,342,387**	**(62,801,631)**	**-6.47%**
USN	26,260,493	27,911,363	1,650,869	6.29%	226,291,650	231,856,755	5,565,104	2.46%
Grand Total	**142,092,873**	**130,986,913**	**(11,105,960)**	**-7.82%**	**1,196,435,668**	**1,139,199,142**	**(57,236,526)**	**-4.78%**
					-	-		
Non-Oil Yield								
Residential	0.096264	0.093861	(0.002404)	-2.50%	0.096264	0.095803	(0.000462)	-0.48%
Small General-Non-Demand	0.136877	0.140512	0.003635	2.66%	0.136877	0.144845	0.007968	5.82%
Small General-Demand	0.120054	0.117559	(0.002495)	-2.08%	0.120054	0.122340	0.002287	1.90%
Large	0.104208	0.108632	0.004424	4.25%	0.104208	0.108080	0.003872	3.72%
Independent Power Producers	0.626461	0.117947	(0.508515)	0.00%	0.626461	0.124337	(0.502124)	0.00%
Private St. Lites	0.114929	0.604575	0.489646	426.04%	0.114929	0.623899	0.508970	442.86%
Sub-total	**0.105617**	**0.103984**	**(0.001633)**	**-1.55%**	**0.105873**	**0.106815**	**0.000941**	**0.89%**
Government					-			
Small_Non Demand	0.150486	0.159768	0.009282	6.17%	0.150486	0.164221	0.013736	9.13%
Small-Demand	0.135060	0.129681	(0.005378)	-3.98%	0.135060	0.134047	(0.001013)	-0.75%
Large	0.127855	0.128865	0.001010	0.79%	0.127855	0.128269	0.000414	0.32%
Public St. Lites	0.473421	0.590278	0.116858	24.68%	0.473421	0.582541	0.109120	23.05%
Sub-total	**0.147738**	**0.149623**	**0.001884**	**1.28%**	**0.148821**	**0.150790**	**0.001969**	**1.32%**
Total-Civilian	**0.111525**	**0.110267**	**(0.001257)**	**-1.13%**	**0.167358**	**0.113398**	**(0.053960)**	**-32.24%**
USN	0.062452	0.064857	0.002405	3.85%	0.062452	0.062611	0.000159	0.25%
Grand Total	**0.102455**	**0.100591**	**(0.001864)**	**-1.82%**	**0.102903**	**0.103061**	**0.000159**	**0.15%**
Non-Oil Revenues								
Residential	4,683,015	4,617,808	(65,206)	-1.39%	37,254,734	37,118,370	(136,364)	-0.37%
Small General-Non-Demand	1,065,920	725,379	(340,541)	-31.95%	8,900,351	6,588,043	(2,312,308)	-25.98%
Small General-Demand	1,928,011	1,732,943	(195,067)	-10.12%	16,418,175	16,735,882	317,707	1.94%
Large	2,819,187	2,142,369	(676,818)	-24.01%	24,487,243	21,745,824	(2,741,419)	-11.20%
Independent Power Producers	21,403	3,260	(18,144)	-84.77%	185,908	36,074	(149,835)	-80.60%
Private St. Lites	616	20,968	20,352	3302.84%	5,272	185,002	179,731	3409.45%
Sub-total	**10,518,153**	**9,242,727**	**(1,275,425)**	**-12.13%**	**87,251,683**	**82,409,195**	**(4,842,488)**	**-5.55%**
Government								
Small_Non Demand	195,673	110,029	(85,644)	-43.77%	1,676,908	1,025,698	(651,210)	-38.83%
Small-Demand	1,045,721	1,034,308	(11,413)	-1.09%	9,393,050	9,994,232	601,182	6.40%
Large	832,833	637,539	(195,294)	-23.45%	7,500,022	6,379,103	(1,120,920)	-14.95%
Public St. Lites	325,773	341,253	15,480	4.75%	3,162,539	3,082,351	(80,188)	-2.54%
Sub-total	**2,400,000**	**2,123,129**	**(276,871)**	**-11.54%**	**21,732,519**	**20,481,385**	**(1,251,135)**	**-5.76%**
Total-Civilian	**12,918,153**	**11,365,856**	**(1,552,297)**	**-12.02%**	**108,984,202**	**102,890,579**	**(6,093,623)**	**-5.59%**
USN	1,640,011	1,810,235	170,225	10.38%	14,132,282	14,516,745	384,463	2.72%
Grand Total	**14,558,163**	**13,176,092**	**(1,382,072)**	**-9.49%**	**123,116,484**	**117,407,324**	**(5,709,160)**	**-4.64%**
% of Total Revenues	36.56%	54.80%			38.07%	44.65%		
Oil Revenues								
Residential	8,648,964	3,596,793	(5,052,171)	-58.41%	64,827,736	49,026,395	(15,801,341)	-24.37%
Small General-Non-Demand	1,384,523	378,915	(1,005,608)	-72.63%	10,876,481	5,891,376	(4,985,104)	-45.83%
Small General-Demand	2,855,217	1,113,549	(1,741,667)	-61.00%	22,888,808	17,836,342	(5,052,466)	-22.07%
Large	4,809,811	1,617,101	(3,192,710)	-66.38%	39,278,076	26,810,707	(12,467,370)	-31.74%
Independent Power Producers	6,074	2,286	(3,788)	-62.36%	49,604	37,039	(12,565)	-25.33%
Private St. Lites	953	3,044	2,090	219.30%	7,669	39,310	31,641	412.58%
Sub-total	**17,705,542**	**6,711,687**	**(10,993,854)**	**-62.09%**	**137,928,374**	**99,641,169**	**(38,287,205)**	**-27.76%**
Government								
Small_Non Demand	231,175	59,939	(171,236)	-74.07%	1,866,180	837,107	(1,029,073)	-55.14%
Small-Demand	1,376,558	698,535	(678,022)	-49.25%	11,641,876	9,928,353	(1,713,522)	-14.72%
Large	1,158,097	418,771	(739,326)	-63.84%	9,807,269	6,601,117	(3,206,152)	-32.69%
Public St. Lites	122,341	50,233	(72,108)	-58.94%	1,117,341	702,402	(414,939)	-37.14%
Sub-total	**2,888,170**	**1,227,478**	**(1,660,692)**	**-57.50%**	**24,432,666**	**18,068,979**	**(6,363,687)**	**-26.05%**
Total-Civilian	**20,593,712**	**7,939,166**	**(12,654,546)**	**-61.45%**	**162,361,041**	**117,710,148**	**(44,650,892)**	**-27.50%**
USN	4,668,824	2,928,233	(1,740,591)	-37.28%	37,891,651	27,852,109	(10,039,542)	-26.50%
Grand Total	**25,262,536**	**10,867,399**	**(14,395,137)**	**-56.98%**	**200,252,692**	**145,562,257**	**(54,690,434)**	**-27.31%**
% of Total Revenues	63.44%	45.20%			61.93%	55.35%		
Grand Total								
Residential	13,331,978	8,214,601	(5,117,378)	-38.38%	102,082,470	86,144,765	(15,937,705)	-15.61%
Small General-Non-Demand	2,450,443	1,104,294	(1,346,149)	-54.93%	19,776,832	12,479,419	(7,297,412)	-36.90%
Small General-Demand	4,783,227	2,846,493	(1,936,735)	-40.49%	39,306,983	34,572,223	(4,734,760)	-12.05%
Large	7,628,998	3,759,470	(3,869,528)	-50.72%	63,765,320	48,556,531	(15,208,789)	-23.85%
Independent Power Producers	27,478	5,546	(21,932)	-79.82%	235,512	73,113	(162,400)	-68.96%
Private St. Lites	1,569	24,011	22,442	1429.98%	12,941	224,313	211,372	1633.39%
Sub-total	**28,223,695**	**15,954,415**	**(12,269,280)**	**-43.47%**	**225,180,057**	**182,050,364**	**(43,129,694)**	**-19.15%**
Government					-			
Small_Non Demand	426,847	169,968	(256,879)	-60.18%	3,543,088	1,862,805	(1,680,283)	-47.42%
Small-Demand	2,422,279	1,732,843	(689,435)	-28.46%	21,034,926	19,922,586	(1,112,340)	-5.29%
Large	1,990,930	1,056,309	(934,621)	-46.94%	17,307,291	12,980,220	(4,327,071)	-25.00%
Public St. Lites	448,114	391,487	(56,628)	-12.64%	4,279,880	3,784,753	(495,127)	-11.57%
Sub-total	**5,288,170**	**3,350,607**	**(1,937,563)**	**-36.64%**	**46,165,186**	**38,550,364**	**(7,614,822)**	**-16.49%**
Total-Civilian	**33,511,865**	**19,305,022**	**(14,206,843)**	**-42.39%**	**271,345,243**	**220,600,728**	**(50,744,515)**	**-18.70%**
USN	6,308,835	4,738,469	(1,570,366)	-24.89%	52,023,933	42,368,854	(9,655,079)	-18.56%
Grand Total	**39,820,700**	**24,043,491**	**(15,777,209)**	**-39.62%**	**323,369,176**	**262,969,582**	**(60,399,595)**	**-18.68%**
	-	-	-					

	YTD REVENUES - CURRENT YEAR VS PRIOR YEAR				MTD REVENUES - CURRENT YEAR VS PRIOR YEAR			
	ACTUALS - 9 MONTHS ENDED JUNE 30				ACTUALS - MONTH ENDED JUNE 30			
	2020	2019	VARIANCE	% VARIANCE	2020	2019	VARIANCE	% VARIANCE
KWH								
Residential	387,446,028	369,561,477	17,884,551	4.84%	49,198,510	46,454,816	2,743,694	5.91%
Small General-Non-Demand	45,483,423	59,583,506	(14,100,084)	-23.66%	5,162,411	7,135,817	(1,973,407)	-27.65%
Small General-Demand	136,797,604	137,926,578	(1,128,974)	-0.82%	14,741,087	16,196,923	(1,455,836)	-8.99%
Large	201,201,728	225,016,484	(23,814,756)	-10.58%	19,721,335	25,905,882	(6,184,547)	-23.87%
Independent Power Producers	290,130	284,404	5,725	2.01%	27,636	33,644	(6,007)	-17.86%
Private St. Lites	296,526	297,543	(1,017)	-0.34%	34,682	34,779	(98)	-0.28%
Sub-total	**771,515,439**	**792,669,993**	**(21,154,555)**	**-2.67%**	**88,885,660**	**95,761,862**	**(6,876,201)**	**-7.18%**
Government								
Small_Non Demand	6,245,830	10,498,494	(4,252,664)	-40.51%	688,682	1,225,034	(536,352)	-43.78%
Small-Demand	74,557,491	71,596,876	2,960,614	4.14%	7,975,765	7,970,826	4,938	0.06%
Large	49,732,409	53,601,653	(3,869,244)	-7.22%	4,947,321	5,952,146	(1,004,825)	-16.88%
Public St. Lites	5,291,218	6,901,833	(1,610,614)	-23.34%	578,122	710,958	(132,835)	-18.68%
Sub-total	**135,826,949**	**142,598,856**	**(6,771,908)**	**-4.75%**	**14,189,891**	**15,858,964**	**(1,669,074)**	**-10.52%**
Total-Civilian	**907,342,387**	**935,268,850**	**(27,926,463)**	**-2.99%**	**103,075,551**	**111,620,826**	**(8,545,275)**	**-7.66%**
USN	231,856,755	233,377,122	(1,520,367)	-0.65%	27,911,363	27,082,742	828,621	3.06%
Grand Total	**1,139,199,142**	**1,168,645,972**	**(29,446,830)**	**-2.52%**	**130,986,913**	**138,703,568**	**(7,716,654)**	**-5.56%**
Non-Oil Yield								
Residential	0.095803	0.096298	-0.000495	-0.51%	0.093861	0.094802	-0.000941	-0.99%
Small General-Non-Demand	0.144845	0.137748	0.007097	5.15%	0.140512	0.134479	0.006032	4.49%
Small General-Demand	0.122340	0.119940	0.002400	2.00%	0.117559	0.115898	0.001661	1.43%
Large	0.108080	0.104151	0.003929	3.77%	0.108632	0.104030	0.004602	4.42%
Independent Power Producers	0.124337	0.128500	-0.004162	-3.24%	0.117947	0.109929	0.008017	7.29%
Private St. Lites	0.623899	0.627633	-0.003733	-0.59%	0.604575	0.599093	0.005482	0.92%
Sub-total	**0.106815**	**0.105968**	**0.000847**	**0.80%**	**0.103984**	**0.104012**	**-0.000027**	**-0.03%**
Government								
Small_Non Demand	0.164221	0.150532	0.013689	9.09%	0.159768	0.150616	0.009152	6.08%
Small-Demand	0.134047	0.133735	0.000312	0.23%	0.129681	0.136744	-0.007063	-5.17%
Large	0.128269	0.125252	0.003016	2.41%	0.128865	0.126497	0.002369	1.87%
Public St. Lites	0.582541	0.476323	0.106218	22.30%	0.590278	0.509008	0.081270	15.97%
Sub-total	**0.150790**	**0.148365**	**0.002426**	**1.63%**	**0.149623**	**0.150658**	**-0.001036**	**-0.69%**
Total-Civilian	**0.113398**	**0.112432**	**0.000966**	**0.86%**	**0.110267**	**0.110639**	**-0.000372**	**-0.34%**
USN	0.062611	0.064668	-0.002057	-3.18%	0.064857	0.060107	0.004750	7.90%
Grand Total	**0.103061**	**0.102894**	**0.000168**	**0.16%**	**0.100591**	**0.100772**	**-0.000181**	**-0.18%**
Non-Oil Revenues								
Residential	37,118,370	35,588,074	1,530,296	4.30%	4,617,808	4,404,001	213,807	4.85%
Small General-Non-Demand	6,588,043	8,207,528	(1,619,485)	-19.73%	725,379	959,621	(234,241)	-24.41%
Small General-Demand	16,735,882	16,542,910	192,972	1.17%	1,732,943	1,877,194	(144,251)	-7.68%
Large	21,745,824	23,435,632	(1,689,808)	-7.21%	2,142,369	2,694,996	(552,627)	-20.51%
Independent Power Producers	36,074	36,546	(472)	-1.29%	3,260	3,698	(439)	-11.86%
Private St. Lites	185,002	186,748	(1,746)	-0.93%	20,968	20,836	132	0.63%
Sub-total	**82,409,195**	**83,997,437**	**(1,588,243)**	**-1.89%**	**9,242,727**	**9,960,346**	**(717,619)**	**-7.20%**
Government								
Small_Non Demand	1,025,698	1,580,364	(554,666)	-35.10%	110,029	184,510	(74,480)	-40.37%
Small-Demand	9,994,232	9,575,035	419,198	4.38%	1,034,308	1,089,965	(55,657)	-5.11%
Large	6,379,103	6,713,723	(334,620)	-4.98%	637,539	752,927	(115,388)	-15.33%
Public St. Lites	3,082,351	3,287,500	(205,148)	-6.24%	341,253	361,883	(20,630)	-5.70%
Sub-total	**20,481,385**	**21,156,621**	**(675,237)**	**-3.19%**	**2,123,129**	**2,389,284**	**(266,155)**	**-11.14%**
Total-Civilian	**102,890,579**	**105,154,059**	**(2,263,479)**	**-2.15%**	**11,365,856**	**12,349,631**	**(983,774)**	**-7.97%**
USN	14,516,745	15,092,085	(575,340)	-3.81%	1,810,235	1,627,850	182,385	11.20%
Grand Total	**117,407,324**	**120,246,144**	**(2,838,820)**	**-2.36%**	**13,176,092**	**13,977,481**	**(801,389)**	**-5.73%**
% of Total Revenues								
Oil Revenues								
Residential	49,026,395	57,001,901	(7,975,506)	-13.99%	3,596,793	7,165,284	(3,568,491)	-49.80%
Small General-Non-Demand	5,891,376	9,190,279	(3,298,903)	-35.90%	378,915	1,100,643	(721,728)	-65.57%
Small General-Demand	17,836,342	21,264,836	(3,428,494)	-16.12%	1,113,549	2,497,232	(1,383,683)	-55.41%
Large	26,810,707	34,545,109	(7,734,402)	-22.39%	1,617,101	3,978,282	(2,361,181)	-59.35%
Independent Power Producers	37,039	42,321	(5,283)	-12.48%	2,286	5,003	(2,717)	-54.30%
Private St. Lites	39,310	45,894	(6,584)	-14.35%	3,044	5,364	(2,321)	-43.26%
Sub-total	**99,641,169**	**122,090,341**	**(22,449,172)**	**-18.39%**	**6,711,687**	**14,751,808**	**(8,040,120)**	**-54.50%**
Government								
Small_Non Demand	837,107	1,619,309	(782,202)	-48.30%	59,939	188,952	(129,013)	-68.28%
Small-Demand	9,928,353	11,043,245	(1,114,892)	-10.10%	698,535	1,229,436	(530,901)	-43.18%
Large	6,601,117	8,167,994	(1,566,877)	-19.18%	418,771	906,775	(488,004)	-53.82%
Public St. Lites	702,402	1,064,553	(362,151)	-34.02%	50,233	109,660	(59,426)	-54.19%
Sub-total	**18,068,979**	**21,895,101**	**(3,826,122)**	**-17.47%**	**1,227,478**	**2,434,822**	**(1,207,344)**	**-49.59%**
Total-Civilian	**117,710,148**	**143,985,442**	**(26,275,294)**	**-18.25%**	**7,939,166**	**17,186,630**	**(9,247,465)**	**-53.81%**
USN	27,852,109	34,535,452	(6,683,344)	-19.35%	2,928,233	4,745,158	(1,816,924)	-38.29%
Grand Total	**145,562,257**	**178,520,894**	**(32,958,637)**	**-18.46%**	**10,867,399**	**21,931,788**	**(11,064,389)**	**-50.45%**
% of Total Revenues								
Grand Total								
Residential	86,144,765	92,589,975	(6,445,210)	-6.96%	8,214,601	11,569,285	(3,354,684)	-29.00%
Small General-Non-Demand	12,479,419	17,397,807	(4,918,388)	-28.27%	1,104,294	2,060,263	(955,969)	-46.40%
Small General-Demand	34,572,223	37,807,746	(3,235,523)	-8.56%	2,846,493	4,374,426	(1,527,934)	-34.93%
Large	48,556,531	57,980,742	(9,424,211)	-16.25%	3,759,470	6,673,278	(2,913,808)	-43.66%
Independent Power Producers	73,113	78,867	(5,754)	-7.30%	5,546	8,701	(3,156)	-36.27%
Private St. Lites	224,313	232,642	(8,329)	-3.58%	24,011	26,200	(2,189)	-8.36%
Sub-total	**182,050,364**	**206,087,778**	**(24,037,415)**	**-11.66%**	**15,954,415**	**24,712,154**	**(8,757,739)**	**-35.44%**
Government								
Small_Non Demand	1,862,805	3,199,673	(1,336,868)	-41.78%	169,968	373,461	(203,493)	-54.49%
Small-Demand	19,922,586	20,618,280	(695,694)	-3.37%	1,732,843	2,319,401	(586,557)	-25.29%
Large	12,980,220	14,881,717	(1,901,497)	-12.78%	1,056,309	1,659,702	(603,393)	-36.36%
Public St. Lites	3,784,753	4,352,052	(567,299)	-13.04%	391,487	471,543	(80,056)	-16.98%
Sub-total	**38,550,364**	**43,051,722**	**(4,501,358)**	**-10.46%**	**3,350,607**	**4,824,107**	**(1,473,499)**	**-30.54%**
Total-Civilian	**220,600,728**	**249,139,501**	**(28,538,773)**	**-11.45%**	**19,305,022**	**29,536,261**	**(10,231,239)**	**-34.64%**
USN	42,368,854	49,627,538	(7,258,684)	-14.63%	4,738,469	6,373,008	(1,634,539)	-25.65%
Grand Total	**262,969,582**	**298,767,039**	**(35,797,457)**	**-11.98%**	**24,043,491**	**35,909,269**	**(11,865,778)**	**-33.04%**
	-	-				-		


GPA - T and D Losses (MWH) With Renewables
For the Last 5 Years thru 06.30.20
-Moving 12 Months
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
4.88%
4.95%
5.12%
5.32%
5.50%
80,852
83,949
84,855
88,398
89,827
FY 16
FY 17
FY 18
FY 19
FY 20
T and D Losses (MWH)
T and D Losses (% to Net Gen.)

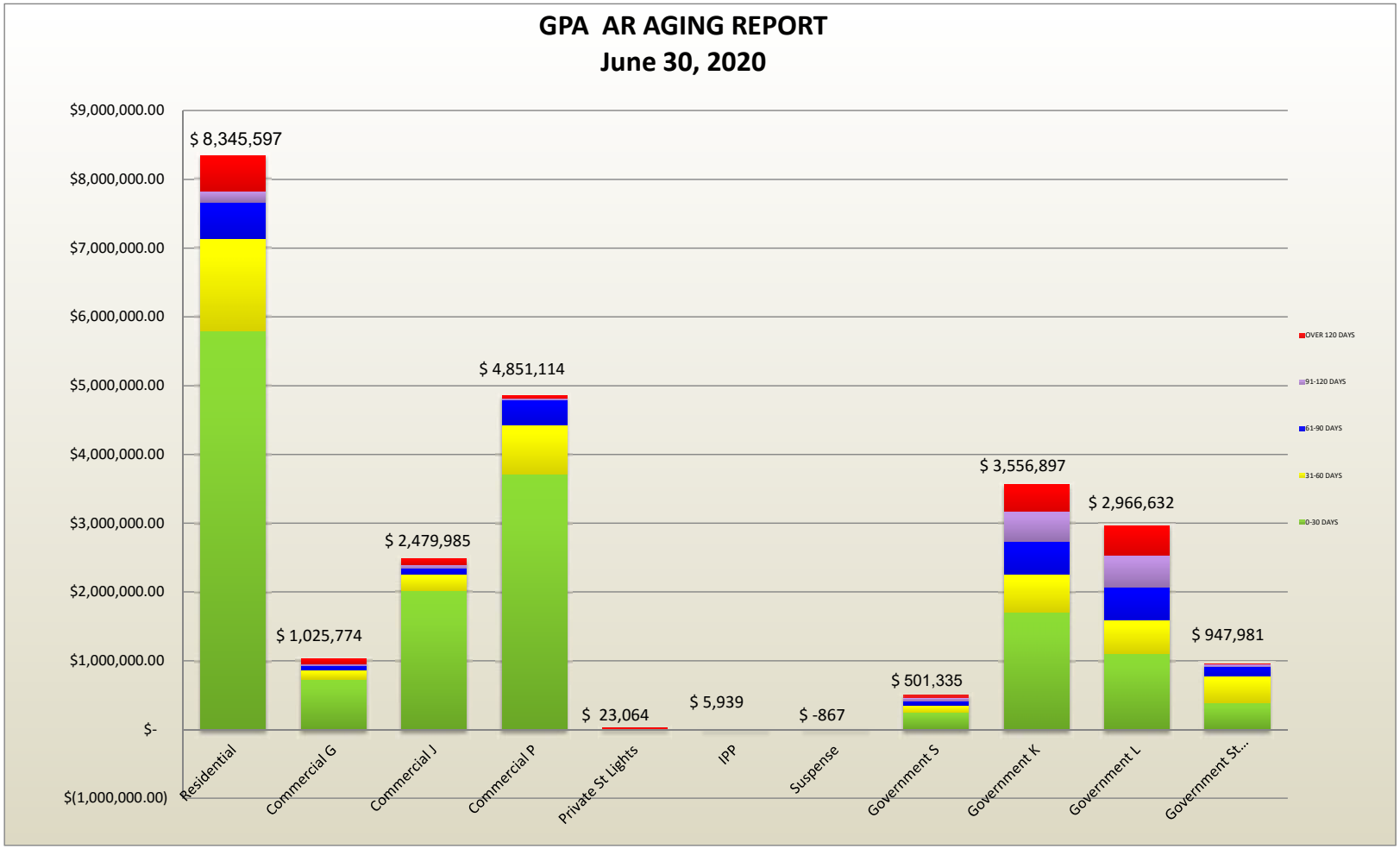

GPA - T and D Losses (MWH) Without Renewables and Aggreko
For the Last 5 Years thru 06.30.20 -Moving 12 Months
130,000
120,000
110,000
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
8.00%
7.00%
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
5.62%
5.67%
5.86%
6.04%
6.18%
80,852
83,949
84,855
88,398
89,827
FY 16
FY 17
FY 18
FY 19
FY 20
T and D Losses (MWH)
T and D Losses (% to Net Generation)


GPA - Station Usage(MWH) With Renewables
For the Last 5 Years Thru 06.30.20
-Moving 12 Months
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
3.77%
3.74%
3.65%
3.87%
3.90%
64,952
65,895
62,716
66,890
66,277
FY 16
FY 17
FY 18
FY 19
FY 20
Station Use (MWH)
% to Gross Generation


GPA - Station Usage(MWH) Without Renewables and Aggreko
For the Last 5 Years Thru 06.30.20-Moving 12 Months
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
4.32%
4.26%
4.15%
4.37%
4.36%
64,952
65,895
62,716
66,890
66,277
FY 16
FY 17
FY 18
FY 19
FY 20
Station Use (MWH)
% to Gross Generation

ACCOUNTS RECEIVABLE BY RATE - ACTIVE
AR AGING REPORT
AS OF June 30, 2020

GL ACCOUNT	RATE	TOTAL DUE	0-30 DAYS	31-60 DAYS	61-90 DAYS	91-120 DAYS	OVER 120 DAYS
1000.142000.10	Residential	$ 8,084,050.93	5,740,875.80	1,338,022.64	526,412.80	157,092.93	321,646.76
1000.142000.11	Residential	$ 261,546.20	54,940.69	-	6,825.76	10,309.32	189,470.43
1000.142000.12	Commercial G	$ 1,025,773.74	732,951.35	127,897.20	63,434.81	34,432.64	67,057.74
1000.142000.13	Commercial J	$ 2,479,985.33	2,013,119.43	249,789.23	81,415.79	56,150.54	79,510.34
1000.142000.14	Commercial P	$ 4,851,114.37	3,713,846.38	713,839.19	366,299.77	23,964.04	33,164.99
1000.142000.15	Private St Lights	$ 23,064.37	14,594.64	2,042.71	674.57	415.91	5,336.54
1000.142000.16	IPP	$ 5,939.39	952.37	167.54	-	-	4,819.48
1000.142000.98	Suspense	$ (867.11)	(867.11)				
	TOTAL PRIVATE	**$ 16,730,607.22**	**$ 12,270,413.55**	**$ 2,431,758.51**	**$ 1,045,063.50**	**$ 282,365.38**	**$ 701,006.28**
1000.142000.19	Government S	$ 501,335.41	$ 252,598.17	$ 102,977.97	$ 61,586.94	$ 41,745.54	$ 42,426.79
1000.142000.20	Government K	$ 3,556,896.58	$ 1,708,516.42	$ 544,245.36	$ 479,830.66	$ 437,421.57	$ 386,882.57
1000.142000.21	Government L	$ 2,966,631.55	$ 1,105,111.66	$ 483,399.25	$ 480,924.66	$ 469,468.17	$ 427,727.81
1000.142000.22	Government St Lights	$ 947,980.96	$ 393,283.94	$ 387,709.93	$ 130,377.85	$ 36,189.93	$ 419.31
	TOTAL GOVERNMENT	**$ 7,972,844.50**	**$ 3,459,510.19**	**$ 1,518,332.51**	**$ 1,152,720.11**	**$ 984,825.21**	**$ 857,456.48**
	GRAND TOTAL	**$ 24,703,451.72**	**$ 15,729,923.74**	**$ 3,950,091.02**	**$ 2,197,783.61**	**$ 1,267,190.59**	**$ 1,558,462.76**


GPA AR AGING REPORT
June 30, 2020
$9,000,000.00
$8,000,000.00
$7,000,000.00
$6,000,000.00
$5,000,000.00
$4,000,000.00
$3,000,000.00
$2,000,000.00
$1,000,000.00
$-
$(1,000,000.00)
$ 8,345,597
$ 1,025,774
$ 2,479,985
$ 4,851,114
$ 23,064
$ 5,939
$ -867
$ 501,335
$ 3,556,897
$ 2,966,632
$ 947,981
Residential
Commercial G
Commercial J
Commercial P
Private St Lights
IPP
Suspense
Government S
Government K
Government L
Government St...
OVER 120 DAYS
91-120 DAYS
61-90 DAYS
31-60 DAYS
0-30 DAYS

GUAM POWER AUTHORITY
GOVERNMENT ACCOUNTS RECEIVABLE
Billing up to June 30, 2020 and payments as of 07/17/2020

Current (06/20 Billing due 07/31/20)
30 days Arrears (5/31/20 due 06/30/20)
60 days and over Arrears (04/20 billing due 5/31/20)

CC&B New Acct Numer	DEPARTMENT	CC&B BALANCE 05/31/2020	CANCEL/REBILL/ SPEC CHARGE July 17, 2020	BILLING 06/30/2020	PAYMENT 07/17/2020	CC&B BALANCE 07/17/2020	AGING 0-30 Days	31-60 Days	61-90 Days	91-120 Days	>120 Days	Total
	Line Agencies											
1073430238	Dept. of Corrections	146,793.37	-	68,610.87	(146,793.37)	68,610.87	$ 68,610.87	$ -	$ -	$ -	$ -	$ 68,610.87
0040515913	Dept. of Parks & Rec.	37,509.42	-	12,245.30	(37,509.42)	12,245.30	$ 12,145.51	$ 99.79	$ -	$ -	$ -	$ 12,245.30
0453170939	Guam Fire Department	32,767.79	-	15,230.77	(32,767.79)	15,230.77	$ 15,230.77	$ -	$ -	$ -	$ -	$ 15,230.77
8564647941	DOA Supply Mgmt (NET METERED)	2,114.35	-	1,066.98	(2,114.35)	1,066.98	$ 1,066.98	$ -	$ -	$ -	$ -	$ 1,066.98
4211873236	Dept. of Administration	6,296.69	34.00	2,974.23	(6,296.69)	3,008.23	$ 3,008.23	$ -	$ -	$ -	$ -	$ 3,008.23
4554808900	Nieves Flores Library	16,933.16	-	9,980.81	(16,933.16)	9,980.81	$ 8,546.40	$ 1,434.41	$ -	$ -	$ -	$ 9,980.81
9541109130	General Services Agency	492.17	-	237.46	(492.17)	237.46	$ 237.46	$ -	$ -	$ -	$ -	$ 237.46
1621790133	DOA-Data Processing	16,997.66	-	7,871.13	(16,997.66)	7,871.13	$ 7,871.13	$ -	$ -	$ -	$ -	$ 7,871.13
1896187753	Dept. of PH&SS	71,708.51	-	36,737.76	(71,708.51)	36,737.76	$ 36,737.76	$ -	$ -	$ -	$ -	$ 36,737.76
7252821074	Dept. of Education	4,310,182.85	-	729,888.57	(2,041,277.63)	2,998,793.79	$ 729,888.57	$ 750,439.89	$ 757,591.18	$ 760,874.15	$ -	$ 2,998,793.79
0266069082	Guam Police Department	88,778.69	-	40,815.83	-	129,594.52	$ 40,815.83	$ 43,436.58	$ 45,342.11	$ -	$ -	$ 129,594.52
6069461950	Dept of Youth Affairs (Federal)	361.64	-	462.25	(120.78)	703.11	$ 462.25	$ 240.86	$ -	$ -	$ -	$ 703.11
2913461537	Dept. of Youth Affair* (Local)	23,308.65	-	11,432.83	(11,398.04)	23,343.44	$ 11,432.83	$ 11,910.61	$ -	$ -	$ -	$ 23,343.44
3404311949	Guam Environmental Protect	11,462.66	-	5,953.17	(5,307.11)	12,108.72	$ 5,953.17	$ 6,155.55	$ -	$ -	$ -	$ 12,108.72
3227759982	Mental Health/Subst.	80,482.39	-	37,444.47	(82,238.24)	35,688.62	$ 35,688.62	$ -	$ -	$ -	$ -	$ 35,688.62
6841080463	Guam Behavioral Health & Wellness	5,658.13	-	1,896.33	(3,902.28)	3,652.18	$ 1,896.33	$ 1,755.85	$ -	$ -	$ -	$ 3,652.18
0070861777	Veteran Affairs	3,436.35	-	1,770.47	(3,436.35)	1,770.47	$ 1,770.47	$ -	$ -	$ -	$ -	$ 1,770.47
6243861917	Guam Veterans Affairs Office	0.00				0.00						$ -
8300435373	Civil Defense (Military Affairs)	57,916.96	-	9,831.80	(57,916.96)	9,831.80	$ 9,831.80	$ -	$ -	$ -	$ -	$ 9,831.80
7813165805	Pacific Energy Resource Center	382.02	-	508.53	-	890.55	$ 508.53	$ 188.79	$ 193.23	$ -	$ -	$ 890.55
1595188609	Dept. of Agriculture	15,423.00	-	8,144.94	(15,423.00)	8,144.94	$ 8,144.94	$ -	$ -	$ -	$ -	$ 8,144.94
2535590089	DPW-FAC Adm Account	79,239.29	-	26,501.42	(73,404.27)	32,336.44	$ 26,501.42	$ 5,800.82	$ 34.20	$ -	$ -	$ 32,336.44
7928924534	Guam Visitors Bureau	10,293.42	-	3,708.07	(10,293.42)	3,708.07	$ 3,708.07	$ -	$ -	$ -	$ -	$ 3,708.07
7663706771	Yona Senior Citizen Center	1,293.41	-	616.05	-	1,909.46	$ 616.05	$ 592.33	$ 701.08	$ -	$ -	$ 1,909.46
4129948191	Dept of Chamorro Affairs/Chamorro Village	7,562.09	-	2,566.33	(2,811.41)	7,317.01	$ 2,566.33	$ 2,401.52	$ 2,326.98	$ 22.18	$ -	$ 7,317.01
3558733700	Dept of Chamorro Affairs/Chamorro Village (NET METER)	422.55	-	140.85	(140.85)	422.55	$ 140.85	$ 140.85	$ 140.85	$ -	$ -	$ 422.55
5247210000	Mayors Council	51,420.68	-	6,136.64	(51,420.68)	6,136.64	$ 6,136.64	$ -	$ -	$ -	$ -	$ 6,136.64
6293410000	Office of the Governor	43,557.55	-	21,088.47	(43,726.16)	20,919.86	$ 20,919.86	$ -	$ -	$ -	$ -	$ 20,919.86
8555858369	Dept of Chamorro Affairs (Guam Museum)	54,634.34	-	16,258.41	-	70,892.75	$ 16,258.41	$ 17,134.22	$ 17,579.76	$ 19,920.36	$ -	$ 70,892.75
1099514147	Dept of Chamorro Affairs/Repository	666.25	-	327.64	-	993.89	$ 327.64	$ 322.78	$ 343.47	$ -	$ -	$ 993.89
	Sub Total	**5,178,096.04**	**34.00**	**1,080,448.38**	**(2,734,430.30)**	**3,524,148.12**	**$ 1,077,023.72**	**$ 842,054.85**	**$ 824,252.86**	**$ 780,816.69**	**$ -**	**$ 3,524,148.12**
	MAYORS											
3832327736	Santa Rita Mayor	5,557.90	-	2,476.79	(5,557.90)	2,476.79	$ 2,476.79	$ -	$ -	$ -	$ -	$ 2,476.79
9351070242	Ordot/Chalan Pago Mayor	1,309.11	-	1,010.79	(1,309.11)	1,010.79	$ 1,010.79	$ -	$ -	$ -	$ -	$ 1,010.79
6393530237	Hagatna Mayor	1,068.98	-	911.23	(1,068.98)	911.23	$ 911.23	$ -	$ -	$ -	$ -	$ 911.23
3293808984	Piti Mayor	1,930.53	50.00	862.67	(1,930.53)	912.67	$ 912.67	$ -	$ -	$ -	$ -	$ 912.67
8715052935	Mongmong/Toto/Maite Mayor	2,444.64	-	1,394.75	(1,315.88)	2,523.51	$ 1,394.75	$ 1,128.76	$ -	$ -	$ -	$ 2,523.51
0492244686	Asan/Maina/Adelup Mayor	1,902.22	-	1,265.20	(1,902.22)	1,265.20	$ 1,265.20	$ -	$ -	$ -	$ -	$ 1,265.20
8433959204	Sinajana Mayor	4,432.70	-	2,648.74	(4,432.70)	2,648.74	$ 2,648.74	$ -	$ -	$ -	$ -	$ 2,648.74
8041715847	Dededo Mayor	9,693.28	-	5,190.79	(9,693.28)	5,190.79	$ 5,190.79	$ -	$ -	$ -	$ -	$ 5,190.79
7037924246	Yigo Mayor	5,344.75	-	2,750.75	(5,344.75)	2,750.75	$ 2,750.75	$ -	$ -	$ -	$ -	$ 2,750.75
7202265287	Umatac Mayor	2,102.06	0.06	1,021.75	(2,102.06)	1,021.81	$ 1,021.81	$ -	$ -	$ -	$ -	$ 1,021.81
8472200165	Agana Hts. Mayor	5,625.54		2,999.17	(5,636.40)	2,988.31	$ 2,988.31	$ -	$ -	$ -	$ -	$ 2,988.31
4469579998	Merizo Mayor	1,305.34	-	779.52	(1,305.34)	779.52	$ 779.52	$ -	$ -	$ -	$ -	$ 779.52
5763167341	Barrigada Mayors Office	3,519.76	-	2,101.70	(3,519.76)	2,101.70	$ 2,101.70	$ -	$ -	$ -	$ -	$ 2,101.70
7247791682	Agat Mayor	4,126.28	-	2,138.60	(4,126.28)	2,138.60	$ 1,956.91	$ 181.69	$ -	$ -	$ -	$ 2,138.60
6078244037	Inarajan Mayor	4,625.94	-	2,500.35	(4,625.94)	2,500.35	$ 2,500.35	$ -	$ -	$ -	$ -	$ 2,500.35
6957205325	Tamuning Mayor	9,969.12	-	4,774.79	(9,969.12)	4,774.79	$ 4,774.79	$ -	$ -	$ -	$ -	$ 4,774.79
1880297633	Talofofo Mayor	3,590.30	-	1,777.60	(3,590.30)	1,777.60	$ 1,777.60	$ -	$ -	$ -	$ -	$ 1,777.60
3631627996	Mangilao Mayor	7,131.24	-	3,620.90	(7,131.24)	3,620.90	$ 3,620.90	$ -	$ -	$ -	$ -	$ 3,620.90
1837525565	Yona Mayor	1,829.97	-	978.05	(1,829.97)	978.05	$ 978.05	$ -	$ -	$ -	$ -	$ 978.05
	Sub Total	**$ 77,509.66**	**$ 50.06**	**$ 41,204.14**	**$ (76,391.76)**	**$ 42,372.10**	**$ 41,061.65**	**$ 1,310.45**	**$ -**	**$ -**	**$ -**	**$ 42,372.10**
	DPW ACCOUNTS											
3045433600	DPW-Village St. Lights	985,598.59	(729.62)	301,651.36	(624,194.83)	662,325.50	$ 300,220.04	$ 304,595.47	$ 57,121.93	$ 388.06	$ -	$ 662,325.50
0930959866	DPW- Primary St. Lights	312,947.09	-	68,027.82	(136,962.58)	244,012.33	$ 68,127.82	$ 66,478.28	$ 70,384.30	$ 39,021.93	$ -	$ 244,012.33
3088040552	DPW-Sec/Coll St. Lights	64,157.31	-	18,396.02	(37,941.55)	44,611.78	$ 18,396.02	$ 18,520.69	$ 7,594.62	$ 100.45	$ -	$ 44,611.78
0832698062	DPW-Signal Lights	27,631.71	-	8,478.74	(27,631.71)	8,478.74	$ 8,478.74	$ -	$ -	$ -	$ -	$ 8,478.74
	Sub Total	**$ 1,390,334.70**	**$ (729.62)**	**$ 396,553.94**	**$ (826,730.67)**	**$ 959,428.35**	**$ 395,222.62**	**$ 389,594.44**	**$ 135,100.85**	**$ 39,510.44**	**$ -**	**$ 959,428.35**

GUAM POWER AUTHORITY
GOVERNMENT ACCOUNTS RECEIVABLE
Billing up to June 30, 2020 and payments as of 07/17/2020

Current (06/20 Billing due 07/31/20)
30 days Arrears (5/31/20 due 06/30/20)
60 days and over Arrears (04/20 billing due 5/31/20)

CC&B New Acct Numer	DEPARTMENT	CC&B BALANCE 05/31/2020	CANCEL/REBILL/ SPEC CHARGE July 17, 2020	BILLING 06/30/2020	PAYMENT 07/17/2020	CC&B BALANCE 07/17/2020
	(B) AUTONOMOUS/PUBLIC CORP					
1540692986	Retirement Fund	11,060.35	-	5,431.10	(11,106.97)	5,384.48
0563872892	Guam Housing Corp Rental Division	933.41	-	951.17	(933.41)	951.17
5434075703	University of Guam	144,902.32	-	136,371.41	(281,273.73)	-
7736362694	Guam Airport Authority	327,207.23	-	308,478.19	(327,207.23)	308,478.19
5357510000	University of Guam (NET METERED)	59,180.14	-	57,306.00	(116,486.14)	-
1699407298	G H U R A	11,020.31	-	22,066.86	-	33,087.17
6518220019	Guam Community College	37,774.09	-	37,127.08	(37,774.09)	37,127.08
8302337726	Guam Memorial Hospital	18,512.72	-	24,549.15	(18,512.72)	24,549.15
8426836906	Guam Memorial Hospital (NET METERED)	122,816.64	-	110,591.48	(122,816.64)	110,591.48
4474308144	Port Authority of Guam	77,609.09	-	71,377.15	(77,609.09)	71,377.15
9157510000	Guam Community College (NET METERED)	22,973.90	-	22,746.43	(22,973.90)	22,746.43
9173210000	Guam Solid Waste Authority	5,454.88	-	5,250.53	(5,454.88)	5,250.53
0838495949	Guam Waterworks Authority	1,100,543.71	50.00	998,251.35	(1,100,593.71)	998,251.35
4075914809	GPA	-	(73,477.17)	73,477.17		-
9699497595	GUAM POWER AUTHORITY - WAKE ST LT	$ 221.44	$ -	$ -	$ -	221.44
	Sub Total	**$ 1,940,210.23**	**$ (73,427.17)**	**$ 1,873,975.07**	**$ (2,122,742.51)**	**$ 1,618,015.62**
	(C) OTHERS					
7541928173	Guam Legislature	299.90	-	153.07	(452.97)	-
9503154359	Guam Legislature (NET METERED)	6,876.74	-	6,819.30	(13,696.04)	-
8353274954	Superior Court of Guam	45,867.05	25.00	45,798.74	(45,867.05)	45,823.74
8108458168	Guam Post Office (Agana)	4,478.82	-	4,823.95	(9,302.77)	-
8972267005	Customs & Quarantine Agency	1,262.04	-	691.61	(1,262.04)	691.61
4530787043	U.S. Post Office	32,498.80	-	32,718.18	(65,216.98)	-
8607446612	Dept. of Military Affairs	132,263.73	-	66,484.21	(132,263.73)	66,484.21
3209463043	Dept. of Military Affairs (NET METERED)	31,928.30	-	13,861.02	(31,928.30)	13,861.02
6000770566	KGTF	11,796.54	-	5,469.81	(5,930.52)	11,335.83
6602566745	Tamuning Post Office	4,766.57	-	4,610.11	(4,766.57)	4,610.11
	Sub Total	**$ 272,038.49**	**$ 25.00**	**$ 181,430.00**	**$ (310,686.97)**	**$ 142,806.52**
	GRAND TOTAL	**$ 8,858,189.12**	**$ (74,047.73)**	**$ 3,573,611.53**	**$ (6,070,982.21)**	**$ 6,286,770.71**

AGING

0-30 Days	31-60 Days	61-90 Days	91-120 Days	>120 Days	Total
$ 5,384.48	$ -	$ -	$ -	$ -	$ 5,384.48
$ 731.94	$ 219.23	$ -	$ -	$ -	$ 951.17
$ -	$ -	$ -	$ -	$ -	$ -
$ 305,069.43	$ 3,408.76	$ -	$ -	$ -	$ 308,478.19
$ -	$ -	$ -	$ -	$ -	$ -
$ 14,491.71	$ 18,468.59	$ 126.87	$ -	$ -	$ 33,087.17
$ 37,127.08	$ -	$ -	$ -	$ -	$ 37,127.08
$ 24,281.57	$ 267.58	$ -	$ -	$ -	$ 24,549.15
$ 109,638.07	$ 953.41	$ -	$ -	$ -	$ 110,591.48
$ 71,377.15	$ -	$ -	$ -	$ -	$ 71,377.15
$ 22,746.43	$ -	$ -	$ -	$ -	$ 22,746.43
$ 5,250.53	$ -	$ -	$ -	$ -	$ 5,250.53
$ 971,827.28	$ 26,424.07	$ -	$ -	$ -	$ 998,251.35
$ -	$ -	$ -	$ -	$ -	$ -
$ -	$ -	$ -	$ -	$ 221.44	$ 221.44
$ 1,567,925.67	**$ 49,741.64**	**$ 126.87**	**$ -**	**$ 221.44**	**$ 1,618,015.62**
$ -	$ -	$ -	$ -	$ -	$ -
$ -	$ -	$ -	$ -	$ -	$ -
$ 45,823.74	$ -	$ -	$ -	$ -	$ 45,823.74
$ -	$ -	$ -	$ -	$ -	$ -
$ 691.61	$ -	$ -	$ -	$ -	$ 691.61
$ -	$ -	$ -	$ -	$ -	$ -
$ 66,484.21	$ -	$ -	$ -	$ -	$ 66,484.21
$ 13,861.02	$ -	$ -	$ -	$ -	$ 13,861.02
$ 5,469.81	$ 5,832.73	$ 33.29	$ -	$ -	$ 11,335.83
$ 4,610.11				$ -	$ 4,610.11
$ 136,940.50	**$ 5,832.73**	**$ 33.29**	**$ -**	**$ -**	**$ 142,806.52**
$ 3,218,174.16	**$ 1,288,534.11**	**$ 959,513.87**	**$ 820,327.13**	**$ 221.44**	**$ 6,286,770.71**

GUAM POWER AUTHORITY
ATURIDÅT ILEKTRESEDÅT GUAHAN
P.O.BOX 2977 • AGANA, GUAM U.S.A. 96932-2977

Issues for Decision

Resolution No. 2020-17:

Relative to Authorizing the Management of Guam Power Authority to extend the existing Contract for One (1) Month for the Supply of Residual Fuel Oil No.6 with MOBIL OIL GUAM, INC (MOGI).

What is the project's objective? Is it necessary and urgent?

The Guam Power Authority's current contract with **MOBIL OIL GUAM, INC (MOGI)** for the Supply of Residual Fuel Oil No.6 for the Baseload Plants is expiring on August 31, 2020.

The new fuel supply contract is anticipated to commence on October 1, 2020.

The extension of the current contract is necessary to provide uninterrupted supply of fuel for the Baseload plants for the period from September 1, 2020 thru September 30, 2020.

Where is the location?

Residual Fuel Oil No.6 will be supplied to the baseload plants

1. Cabras 1&2
2. MEC 8&9

How much will it cost?

The one (1) month contract extension is estimated to cost approximately **$12M** requiring prior approval from the PUC.

One (1) month contract extension with MOGI has an **estimated savings of about $317,355** in premium fees compared to the new Hyundai Corporation contract.

Cost Savings for Extension of Mobil Contract for One Month in Order to receive a shipment in September:

HSRFO	Mobil Oil Current	Mobil Oil Amendment One-Month	New Contract Award 3-years Hyundai Corp	Variance	Estimated BBLS Sept Order	Savings:
Mobil Price:	$7.31	$7.31	11.272			
Add $20/MT @6.5 BBL/MT		$3.15				
Total:		$10.46	11.272	-$0.82	155,000	-$126,480.00

LSRFO	Mobil Oil Current	Mobil Oil Amendment One-Month	New Contract Award 3-years Hyundai Corp	Variance	Estimated BBLS Sept Order	Savings:
Mobil Price:	$13.92	$13.92	19.605			
Add $20/MT @6.5 BBL/MT		$3.15				
Total:		$17.06	19.605	-$2.55	75,000	-$190,875.00

Total Savings of One Month Extension of Mobil Contract:					**-$317,355**

When will it be completed?

The contract extension shall be for a period of one (1) month to commence on or about September 01, 2020 and to expire on September 30, 2020.

What is its funding source?

Fuel revenue funds

The RFP/BID responses:

MOBIL OIL GUAM, INC ("MOGI") was determined to the lowest responsive and responsible bidder under MS IFB GPA-009-18.

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

RESOLUTION NO. 2020-17

AUTHORIZING MANAGEMENT OF THE GUAM POWER AUTHORITY (GPA) TO PROCEED WITH A ONE (1) MONTH EXTENSION OF THE EXISTING CONTRACT FOR THE SUPPLY OF RESIDUAL FUEL OIL NO. 6

WHEREAS, the two-year (2-year) Contract Base Period with Mobil Oil Guam, Inc. (MOGI) under GPA-009-18 is expiring on August 31, 2020; and

WHEREAS, the Authority released an Invitation for Bid for the Supply of Residual Fuel Oil No. 6 under MS IFB GPA-050-20 as approved by the Consolidated Commission on Utilities on February 21, 2020 through adoption of GPA Resolution No. 2020-06; and

WHEREAS, GPA Resolution No. 2020-16 was approved on July 23, 2020 awarding the new Residual Fuel Oil No. 6 contract for three (3) years to Hyundai Corporation; and

WHEREAS, the Authority would need to provide adequate mobilization period for the new supplier and anticipates awarding the new contract to commence on October 1, 2020; and

WHEREAS, GPA and MOGI have negotiated and agreed to a one (1) extension of the existing contract up to September 30, 2020, at a fixed premium fee of $66.500/MT for HSFO and $108.500/MT for LSFO; and

WHEREAS, the one (1) month contract extension with MOGI has an estimated value of approximately $12M; and

WHEREAS, the one (1) month contract extension with MOGI has an estimated savings of about $317,355 in premium fees compared to the new Hyundai Corporation contract as shown in **Attachment A;** and

WHEREAS, GPA management considers the price to be reasonable and in the best interests of GPA and its customers; and

WHEREAS, GPA requests the Consolidated Commission on Utilities to allow a one (1) month extension of the current contract.

NOW THEREFORE, BE IT RESOLVED, by the Consolidated Commission on Utilities, subject to the review and approval of the Guam Public Utilities Commission, as follows:

1. The Consolidated Commission on Utilities finds the negotiated contract price for the one (1) month extension to be reasonable, prudent and beneficial to GPA and its customers.

2. GPA is hereby authorized to proceed with the extension of contract under GPA-009-18 for the Supply of Residual Fuel Oil No. 6 with Mobil Oil Guam, Inc., for a period of one (1) month, from September 1, 2020 to September 30, 2020, at a fixed premium fee of $66.500/MT for HSFO and $108.500/MT for LSFO with an estimated value of approximately $12M, respectively.

RESOLVED, that the Chairman of the Commission certifies and the Board Secretary attests the adoption of this Resolution.

DULY and REGULARY ADOPTED AND APPROVED THIS 28th DAY of JULY, 2020

Certified by:	**Attested by:**
JOSEPH T. DUENAS Chairperson Consolidated Commission on Utilities	**MICHAEL LIMTIACO** Secretary Consolidated Commission on Utilities

I, Michael Limtiaco, Secretary for the Consolidated Commission on Utilities (CCU), as evidenced by my signature above do certify as follows:

The foregoing is a full, true, and correct copy of the resolution duly adopted at a regular meeting of the members of Guam Consolidated Commission on Utilities, duly and legally held at the meeting place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

Ayes: _____

Nays: _____

Absent: _____

Abstain: _____

Mobil Oil Guam Inc.
642 East Marine Corps Drive
Hagatna, Guam 96910
Telephone: (671) 648-3500
Facsimile: (671) 648-3585

ExxonMobil

July 24, 2020

Jennifer Sablan
SPORD Manager
Guam Power Authority
P.O. Box 2977
Hagatna, Guam 96932-2977

Subject: Price Proposal for Spot Fuel Oil Delivery in Sept 2020

Dear Ms. Sablan,

Further to our telephone conversation today Mobil Oil Guam Inc (MOGI) is pleased to provide the Guam Power of Authority (GPA) the following price proposal to meet your Fuel Oil supply delivery requirement in September 2020.

FIXED PREMIUM FEE $/MT (in 3 decimals)	Low Sulfur Fuel Oil (LSFO), 1.19% by wt Sulfur	High Sulfur Fuel Oil (HSFO), 2.00% by wt Sulfur
Fixed Premium Fee	108.500	66.500

The proposed premium is given on the following basis:

- An estimated minimum single delivery quantity requirement of TWO HUNDRED THIRTY THOUSAND (230,000 BBLS) (exact quantity to be confirmed by GPA as soon as possible, including the respective quantities of LSFO and HSFO)
- The Price formula for the Invoice Price determination, shall remain as per Section 5 of GPA009-18 supply agreement expiring 31 Aug 2020 ("Existing Contract").
- Other terms and conditions shall be as per the Existing Contract.
- Subject to contract.

We look forward to your favorable response and prompt confirmation of your Fuel Oil supply requirement in order to meet delivery time of Sept 2020.

Should you have further questions, please do not hesitate to contact me or Rose Garcia.

Sincerely,

Mr. Tim Chau Hau
President
Mobil Oil Guam Inc.

"Attachment A"

Cost Savings for Extension of Mobil Contract for One Month in Order to receive a shipment in September:

HSRFO	Mobil Oil Current	Mobil Oil Amendment One-Month	New Contract Award 3-years Hyundai Corp	Variance	Estimated BBLS Sept Order	Savings:
Mobil Price:	$7.31	$7.31	11.272			
Add $20/MT @6.5 BBL/MT		$3.15				
Total:		$10.46	11.272	-$0.82	155,000	-$126,480.00

LSRFO	Mobil Oil Current	Mobil Oil Amendment One-Month	New Contract Award 3-years Hyundai Corp	Variance	Estimated BBLS Sept Order	Savings:
Mobil Price:	$13.92	$13.92	19.605			
Add $20/MT @6.5 BBL/MT		$3.15				
Total:		$17.06	19.605	-$2.55	75,000	-$190,875.00

Total Savings of One Month Extension of Mobil Contract:					**-$317,355**

Consolidated Commission On Utilities (CCU)

Standing Rules

Doc. No. 35GL-20-2137.*

CCU STANDING RULES

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CCU STANDING RULES

1 Rule I - Governing Procedure

1.1 Convening of Consolidated Commission on Utilities ("CCU") – Newly Elected Commissioners

CCU shall first convene in Regular Meeting in Fadian, Guam at the hour of 10:00 a.m. on the second Monday in January. In accordance with, and pursuant to, the provisions of 12 GCA Chapter 79 of the Guam Code Annotated and these Standing Rules, the Order of Business of the First Regular Meeting of CCU shall be as follows:

The Temporary Presiding Officer, who shall be the Chief Justice of the Guam Supreme Court, or in such Chief Justice's absence or inability to act, a designated Associate Justice of the Guam Supreme Court, shall:

A. First, call the current Commissioners-to order;
B. Second, call in alphabetical order the roll of the Commissioners-elect who shall present their Certificates of Election and assume their seats as their names are called; and
C. Third, administer the following Oath-of-Office to the Commissioners-elect:
   (1) "I SOLEMNLY SWEAR (OR AFFIRM) IN THE PRESENCE OF ALMIGHTY GOD THAT I WILL WELL AND FAITHFULLY SUPPORT THE CONSTITUTION OF THE UNITED STATES, THE LAWS OF THE UNITED STATES APPLICABLE TO GUAM, AND THE LAWS OF GUAM, AND THAT I WILL CONSCIENTIOUSLY AND IMPARTIALLY DISCHARGE MY DUTIES AS A COMMISSIONER OF THE CONSOLIDATED COMMISSION ON UTILITIES."

1.1.1 Election of Chairperson

After the administration of the oath, the Temporary Presiding Officer shall conduct an election among the Commissioners for the Office of the Chairperson of Consolidated Commission on Utilities, and upon the election of such Chairperson, the Temporary Presiding Officer shall thereupon relinquish the Chair to the Commissioner so elected.

1.1.2 Election of Other Officers and Chairpersons

Consolidated Commission on Utilities shall elect the following Officers from among the Commissioners:

A. Vice-Chairperson
B. Secretary

1.1.3 Adoption of Standing Rules

Upon the assumption of the Chairperson by the newly-elected Commissioners, the Chairperson shall forthwith call for the adoption of the proposed changes to the Standing Rules of CCU, which Rules shall require the affirmative vote of three (3) Commissioners present.

1.1.4 Election of Committee Chairpersons; Temporary Chairpersons

After the administration of the oath, the Chairperson shall call for the election of Chairpersons of the Standing Committees of CCU in the order listed below. In the event the Consolidated Commission on

Utilities fails to elect a Chairperson of a Standing Committee, the Chairperson shall appoint a temporary Chairperson until the Consolidated Commission on Utilities fills the position by election.

A. Rules Committee
B. Finance and Budget Committee
C. Audit Committee
D. Cyber Security Committee
E. Communications Committee
F. Select Committee

1.1.5 Removal of Officers

Three (3) votes of the CCU shall be required for the removal of the Chairperson, the Vice-Chairperson, Secretary, or any Standing Committee Chairperson.

1.1.6 Results of Election; Roll Call.

The results of each election of Officers and Committee Chairpersons shall be recorded. Both the election and removal of Officers and Committee Chairpersons shall be by roll call vote if requested by any Commissioner.

1.2 Meetings of Consolidated Commission on Utilities.

1.2.1 Regular Meetings of Consolidated Commission on Utilities.

The CCU shall first convene in Regular Meeting in accordance with Section 2.1 of the CCU Rules. Guam Power Authority (GPA) and Guam Waterworks Authority (GWA) Working Session Meetings may be held on the 3rd Tuesday and Thursday of every month and Regular Meetings may be held on the 4th Tuesday of every month. The Chairperson may change the dates for working sessions and the regular monthly meetings, with verbal or written notice to each Commissioner. Any changes in meeting times or dates shall be provided to the public in compliance with the Open Government Law.

1.2.2 Convening Meeting

Except when Meeting is convened in accordance with Section 2.1 of the CCU Rules, the Consolidated Commission on Utilities shall convene at the times determined by the Chairperson or the Consolidated Commission on Utilities and in compliance with the Open Government Law.

1.2.3 Call by the Chairperson.

1.2.3.1 Regular Meetings.

At any time when Consolidated Commission on Utilities is in recess or has adjourned, the Chairperson, or the Acting Chairperson, may summon the Consolidated Commission on Utilities to convene at a properly called and noticed Meeting. The Chairperson shall give notice in accordance with the Open Government Law.

1.2.3.2 Executive Session

The CCU is not prohibited from holding executive sessions with the Attorney General, Chief of Police or the respective designated representatives of each on a matter which poses a threat to the public health, safety or welfare or from holding executive sessions during a regular or special meeting to consider the appointment, employment or dismissal of a public officer or employee or to hear complaints or charges brought against such officer or employee by another public officer, person or employee unless such officer or employee requests a public hearing.

Under no circumstances, however, shall the CCU hold an executive or closed meeting to discuss salaries, salary levels or salary adjustments of any employee or officer. All such discussions or decisions must be held in a public meeting and minutes and recordings shall be kept and opened to the public. The CCU may exclude from any public or private meeting, during the examination of a witness, any or all other witnesses in the matter being investigated by the public agency, but may not exclude a party, complainant, or the subject of an adverse action.

A. Notwithstanding any other provision of law, the CCU may hold executive sessions with its staff to consider matters with the scope of the Public Employee-Management Relations Act.
B. Under no circumstances shall the CCU hold an executive or closed meeting to discuss legal matters, impending legal matters, or legal strategies with an attorney, except as herein provided below. All such discussions must be held in a public meeting and minutes and recordings shall be kept and opened to the public, except as herein provided:
    1. No such meeting may be closed except on the written recommendation of the attorney, and an affirmative vote of a majority of the members of the Board of the Public Agency to go into executive session.
    2. Only matters directly relating to ongoing litigation or litigation which has been threatened as is reasonably expected may be discussed. Only the attorney(s), court reporter, board members, and the General Manager of the agency may attend such a meeting.
    3. A verbatim transcript by an authorized court reporter must be taken of all meetings which are closed to discuss litigation or possible litigation and such transcript shall promptly be reduced to writing.
    4. Notice of the meeting shall be given as required for any other meeting. The notice shall indicate the place and time of the meeting and shall indicate the general subject matter to be discussed, (if not confidential) as well as the specific exemption permitting an executive or closed meeting.
    5. After such meeting, the attorney or attorneys involved must file an affidavit with the Agency, which shall be a public document, that only matter relating to litigation or pending litigation have been discussed.
    6. There shall be public minutes made of all such executive sessions indicating the existence of the transcript, the subject matter of the meeting (if not confidential), the

names of all persons attending the closed meeting, their capacities and the date and times the meeting started and closed.

7. The transcript of such meeting shall be sealed for a period of six (6) months, and shall thereafter be a public document unless there is a court order, further sealing the transcript. Before issuing such an order, the court must read the transcript in camera and determine that the Agency would be unduly prejudiced by the release of the transcript, taking into account the public's right to know. In such event, the court may order the transcript released and made public, or may order the transcript sealed for a period not exceeding six (6) months only if there is ongoing litigation over the matters discussed and release would prejudice the Agency, or if the court finds there is a strong likelihood of litigation concerning the subject matters within six (6) months. Unless the court orders otherwise all transcripts concerning litigation or potential litigation shall become public immediately upon the termination of litigation or the threat of litigation. Under no circumstances may a matter concerning litigation be sealed for more than three (3) months after the conclusion of the litigation. In the case of expected litigation, all such transcripts cannot be sealed for more than one (1) year after the closed hearing if no litigation results.

C. Under no circumstances shall a public agency vote on any matter before it during an executive or closed meeting. All voting must be held in a public meeting and minutes shall be kept and opened to the public.

1.2.3.3 Call to Order by the Chairperson.

The Chairperson shall call the Consolidated Commission on Utilities to order during each properly noticed meeting, in accordance with the open government laws.

1.2.3.4 Quorum.

The Chairperson shall call the Consolidated Commission on Utilities to order at the hour stated and if a quorum of three (3) Commissioners be present, shall proceed with the daily order of business and properly noticed agenda.

1.2.3.5 Daily Order of Business

Unless some other order is adopted by the Committee on Rules or the Body, the Daily Order of Business of Consolidated Commission on Utilities shall be as follows:

A. Call to Order;
B. Roll Call;
C. Properly noticed agenda items;
D. Adjournment.

1.2.3.6 Hours of Meeting

Convening of Meetings and Continuation of Meeting meetings shall be after 7:00 a.m. each calendar day, and each Meeting shall be recessed or adjourned on each calendar day no later than 11:00 p.m., considering finishing the immediate matter at hand. The hours shall be set by the chairperson.

1.2.3.7 Decorum and Debate

No motion shall be debated until the same be distinctly announced.

1.2.3.8 Addressing Consolidated Commission on Utilities

When a Commissioner desires to address the Consolidated Commission on Utilities, the Commissioner shall raise that Commissioner's hand. When the Chairperson recognizes the Commissioner by calling the Commissioner by name or by indicating that they are recognized, the Commissioner is entitled to the Floor and may address the Consolidated Commission on Utilities.

1.2.3.9 Amendments

When an amendment is offered, or any other motion is made, the amendment or other motion then becomes the question under consideration. The right to debate, such a question is treated as a new question. A Commissioner who has spoken once on the Main Question may speak again on an amendment.

1.2.3.10 Debate Confined

Debate must be confined to the question before the CCU

1.2.3.11 Calls to Order

A Commissioner who resorts to persistent irrelevance, or to persistent repetition after the attention of Consolidated Commission on Utilities has been called to the matter, may be directed to discontinue that Commissioner's speech by the Chairperson.

1.2.3.12 Amendment to Main Question

When a question is under debate and an amendment is proposed, the amendment then becomes the question under consideration. When an amendment is pending, the debate must be confined to the merits of the amendment, unless it is of such a nature that its decision practically decides the Main Question.

1.2.3.13 Division

When a question has been divided, general discussion continues on the first division, but brief debate should be permitted on the remaining divisions.

1.2.3.14 Votes Required

Any action(s) that can be taken by Consolidated Commission on Utilities requires the affirmative vote of three (3) Commissioners.

1.2.3.15 Interruption Not Permitted

No Commissioner shall be interrupted when speaking.

1.2.3.16 Closing Debate

Even if he or she has spoken previously, the Author of the motion or resolution shall have the privilege of closing the debate.

1.2.4 On Points of Order, Inquiry, and Information

1.2.4.1 Points of Order

It is the right of every Commissioner who notices a breach of order or of a Rule to insist upon its enforcement. This is called "raising a point of order" because the Commissioner puts to the Presiding Officer the question as to whether there has been a breach of order or of the Rules, it being the duty of the Presiding Officer to maintain order and enforce the Rules. A point of order must be raised at the time the particular question is pending, and specific reference must be made to the particular Rule being violated. A point of order is decided by the Presiding Officer without debate, unless in doubtful cases the question is submitted to the Body for advice or decision. It is not debatable, unless submitted to the Body. A point of order may not be used to debate an issue or to attack any Commissioner of Consolidated Commission on Utilities.

1.2.4.1.1 Decisions on Points of Order

When a Commissioner shall be called to order, he shall not be recognized until the Chairperson shall have determined whether he is in order or not, and every question of order shall be decided by the Chairperson, subject to an appeal by a Commissioner. Any such appeal to overrule the decision of the Chairperson or Presiding Officer shall require three (3) votes to pass.

1.2.4.1.2 Points of Inquiry or Information

A point of inquiry is a request for information from the Presiding Officer with respect to procedure concerning some question before the Body, or which may be immediately brought before the Body. Occasions frequently arise when one (1) Commissioner desires information from another. Such requests are not technically parliamentary inquiries but are generally subject to the same Rules. A Commissioner desiring information concerning a question before the Body may raise their hand, and without waiting to be recognized say:

"I rise to a point of inquiry," or may say "I rise to a point of information."

When a point of inquiry relates to a question which requires immediate attention, it may be made while a Commissioner has the Floor and may even interrupt a speech. A point of inquiry is not a motion, but is simply a request for information and is, therefore, not debatable or amendable nor subject to any other motion, nor may it be used to debate an issue or to attack any Commissioner of Consolidated Commission on Utilities.

Whenever a Commissioner rises to a point of information, the Commissioner must confine the Commissioner's remarks to a request for information necessary to enable the Commissioner to

understand the subject or question under debate. A point of inquiry may not be used by the Commissioner raising it to debate the issue but must be a legitimate point of inquiry necessary to clarify an ambiguity of a factual matter which the Commissioner to whom the question is addressed could reasonably be expected to answer.

1.2.4.1.3 Explaining Vote

After the result of a vote has been announced, a Commissioner may be permitted by three (3) votes to explain that Commissioner's vote on roll call upon any question, and such explanation shall be captured in the meeting minutes.

1.2.4.1.4 Attire

At all Meetings of Consolidated Commission on Utilities, for all those admitted attire shall be appropriate.

1.2.4.1.5 Firearms and Deadly Weapons Prohibited

No firearms or deadly weapons are permitted at CCU meetings.

1.2.4.1.6 Cell Phones and Electronic Devices

Cell phones and other electronic devices used shall not cause any audio disturbance during Meeting. Persons receiving or making calls shall remove themselves from the meeting.

1.2.4.2 Questions

1.2.4.2.1 Division of a Question

If a question in debate contains more than one (1) distinct proposition, any Commissioner may move to have the question divided.

1.2.4.2.2 The Previous Question

The previous question shall be put in the following form:

"On the previous question?"

It shall require a majority vote of the Commissioners present; and its effect shall be to put an end to all debate, except that the Author of the bill or the amendment shall have the right to close, and the question under the discussion shall thereupon be immediately put to a vote.

1.2.4.2.3 Questions of Privilege

Questions of privilege shall be raised at any time. They shall be first, those affecting the rights of Consolidated Commission on Utilities collectively, its safety, dignity, and the integrity of its proceedings; and second, the rights, reputations and conduct of Commissioners in their representative capacities only.

1.2.4.2.4 Motions

When a motion is offered from the Floor, it may be offered verbally. Any commissioner may request that such motion be submitted in writing.

1.2.4.2.5 Motions Received When Questions are Under Debate

When a question is under debate, no motion shall be received, except the following:

A. to recess (not debatable procedural motion; except as to time to return);
B. to adjourn (not debatable procedural motion, except as to time);
C. to divide a question (not debatable procedural motion);
D. for the previous question (not debatable procedural motion);
E. to postpone to a time certain (not debatable procedural motion, except as to time);
F. to commit or to refer (not debatable procedural motion);
G. to amend (debatable).

Such motions shall have precedence in the order in which they are set out; provided, that any of the other motions listed in this Section may be renewed after sixty (60) minutes if not made for purposes of delay, as determined by the Chairperson, if earlier renewal of the motion is not otherwise allowed for by the CCU Standing Rules or by Robert's Rules of Parliamentary Procedure.

1.2.4.2.6 Precedence of Motion to Adjourn and Effect of Adjournment

A "Motion to Adjourn," or a "Motion to Fix the Day to Which Consolidated Commission on Utilities Shall Adjourn," shall always be in order, except:

A. while another Commissioner is speaking;
B. when a "Motion to Adjourn" has been defeated;
C. when a "Motion to Fix the Day to Which Consolidated Commission on Utilities Shall Adjourn" has just been defeated; or

Unless otherwise specified, an adjournment while a motion is under consideration shall have the effect of deleting all amendments made to the motion which are under consideration or have been adopted prior to the adoption of the motion as a whole.

1.2.4.2.7 Motion to Adjourn Pending Motion to Suspend Rules

Pending a "Motion to Suspend the Rules," the Presiding Officer may entertain one (1) "Motion to Adjourn," but after the result is announced the Presiding Officer shall entertain no other motion until the vote has been taken on suspension.

1.2.4.2.8 Motion for Reconsideration

Any Commissioner may, on the day on which a vote has been taken on any question:

A. make a "Motion to Reconsider a Vote"; or
B. make a "Motion to Reconsider a Vote on any day the meeting is recessed to"

Three (3) affirmative votes shall be required to pass either Motion to Reconsider. The reconsideration of the vote must be acted upon by Consolidated Commission on Utilities.

1.2.5 Voting

1.2.5.1 Voting on Roll Call

Every Commissioner within Consolidated Commission on Utilities should without debate answer “aye” or “nay” when the Commissioner’s name is called.

1.2.5.2 No Objections

If the Presiding Officer asks if there are “objections” or “no objections” to a proposed motion or other matters, and any Commissioner objects before the announcement of the vote, or immediately after the vote is announced, then a vote shall be taken of the Commissioners by show of hands or by roll call vote, as appropriate.

1.2.5.3 Declining to Vote

When a Commissioner declines or fails to vote, the Commissioner shall be required, without debate, to assign that Commissioner’s reasons therefore; and having assigned them, the Chairperson shall submit the question to Consolidated Commission on Utilities:

A. “Shall the Commissioner for the reasons assigned by the Commissioner be excused from voting?”

which shall be decided without debate. Unless the Commissioner is excused from voting by three (3) votes of the Commissioners present, he shall be required to vote. Revise language that says any commissioner that declines to vote will be considered a “nay” vote. Combine with Failing to Vote. The only reason you. Link all sections to 1.6

1.2.5.4 Failing to Vote

If any Commissioner fails to vote for a period of over two (2) minutes, or “passes,” or refuses to vote, the Commissioner shall be construed as declining to vote, and the Commissioner’s vote shall be entered as a “nay” vote by the Secretary of the CCU. If any Commissioner refuses to vote after being ordered to by the Body, that Commissioner’s vote shall be entered as a “nay” vote by the Secretary of the CCU.

1.2.5.5 Other Reasons to Excuse from Voting

A Commissioner who has a conflict of interest, is ill, has serious sickness or death in the family, or is on official business abroad may be excused from voting.

1.2.5.6 Compliance with 4 GCA § 15205(h)

A Commissioner who casts a vote with respect to any motion or resolution in which the Commissioner has a financial interest shall make an oral statement that identifies the motion or resolution, the Commissioners’ vote, and the nature of the commissioners’ financial interest. The oral statement shall be posted on CCU website.

1.2.5.7 Voting by the Presiding Officer

The Presiding Officer shall vote in the same manner as others.

1.2.5.8 Electronic Voting

The Committee on Rules may establish a procedure for the establishment of electronic voting by members of the CCU that are not physically present but able to participate. Ask Legal Counsel.

1.2.5.9 Votes Required for Adjournment

Adjournment subject to the call of the Chairperson, to a time certain shall requires three (3) votes.

1.2.6 Accreditation of the Press

Employees of the press and employees of newspapers and radio and television stations shall be allowed at all Meetings except during Executive Session. Photographers or cameramen may be present during meetings and remain therein, except during Executive Session, as long as they do not interfere with the business of Consolidated Commission on Utilities.

1.2.7 Extension of Remarks

Any Commissioner shall be permitted the privilege of extending the Commissioner's remarks on any subject with proper decorum. Remarks shall be made orally. This privilege shall be used only with proper decorum and shall not be used to breach the order of the meeting, for the use of personal criticisms, or for the extension of personal disputes between or among Commissioners.

2 RULE II - Duties of CCU Commissioner and Officers

2.1 Duties of Commissioners

All Commissioners shall follow all laws of Guam. No commissioner shall unilaterally direct any employee of either utility. The Consolidated Commission on Utilities may only direct those employees under their direct authority of which are listed below:

A. General Managers
B. Chief Financial Officer (CFO)
C. Legal Counsel
D. CCU Secretary

2.1.1 Exceptions

A Commissioner may request information, analysis, legal opinions from an employee of the utility when performing duties associated with a committee for the sole purpose of accomplishing the duties of that committee.

2.1.2 Performance Evaluations

Any performance evaluation of the General Managers directly hired by the CCU shall be performed in an Open Session of the CCU, transcribed and published, in accordance with 5 GCA 43202. With the written permission of the Chief Financial Officers, Legal Counsel, or other staff or personnel directly hired by the CCU a report of their performance evaluations shall be disclosed in an Open Session of the CCU, transcribed, and published. Pursuant to CCU Rules and Guam Law all evaluations shall be made public and posted on the CCU website.

Performance evaluations shall be conducted annually within 90 days of the end of the Fiscal Year. Evaluations Forms shall be reviewed annually and indicate the performance indicators that each position will be evaluated on. A plan and agree meeting shall be held with each individual to ensure expectations are understood. The Evaluation Forms are provided in Rule XI.

Any pay adjustments shall take effect on January 1st of the proceeding year.

2.2 DUTIES OF CCU OFFICERS

2.2.1 Duties of the Chairperson

The Chairperson is the Presiding Officer of Consolidated Commission on Utilities and shall possess the powers and perform the duties prescribed in this Section. The Chairperson:

A. shall preside at meetings of Consolidated Commission on Utilities and preserve order and decorum thereat;
B. shall decide all questions of order, matters relating to temporary expulsion of disorderly Commissioners, subject to appeal to the Presiding Officer by any Commissioner of Consolidated Commission on Utilities; on every appeal, the Presiding Officer shall assign his/her reason for the decision and put the question as:
    a. "Shall the decision of the Presiding Officer be overruled?"
C. no roll call vote may be called during a period when a Commissioner is temporarily expelled under this Section for disorderly conduct;
D. shall chair the meeting each day at the hour duly noticed , and call the Consolidated Commission on Utilities to order, and, a quorum being present, proceed in the manner and order prescribed by the Rules;
E. shall sign all resolutions passed by Consolidated Commission on Utilities;
F. may appoint Special Committees to assist the Chairperson in the performance of the Chairperson's official duties;
G. shall enforce all laws and regulations applicable to the Body;
H. shall administer the oath provided in Rule , to any Commissioner absent from the first Meeting, or to a Commissioner elected to fill a vacancy;
I. may remove Commissioners or observers for breaches of decorum;
J. may at any time order a Call of the Commission at the Presiding Officer's discretion; a Call of the Commission may be made by motion at any time by a Commissioner when Commissioners not off-island are absent; to pass, such motion must receive a majority vote of Commissioners present, even if a quorum is not present; and
K. may call recess on the Presiding Officer's own initiative, and sua sponte for periods deemed appropriate.
L. Shall perform administerial duties as required.

2.2.2 Duties of the Vice-Chairperson

The Vice-Chairperson shall have the powers and duties of the Chairperson during the latter's temporary absence or vacancy.

2.2.3 Duties of the Presiding Officer

If the Presiding Officer is not the Chairperson, that Commissioner shall have full powers of the Presiding Officer and Chairperson prescribed by Section 1.01(b). Any Presiding Officer shall have the power to designate a Commissioner to perform the duties of a Presiding Officer on a temporary basis.

2.2.4 Duties of the Secretary

The Secretary shall:

A. cause records to be kept of the attendance at the meetings of all Commissioners and cause to be prepared on a quarterly basis a compilation of the attendance of such Commissioners at meetings of Consolidated Commission on Utilities, and a compilation of the voting record of each Commissioner of Consolidated Commission on Utilities on the passage of motions, resolutions, and other matters, where a roll call was held before Consolidated Commission on Utilities. Such quarterly report shall be made part of the meeting minutes of the day on which it is submitted to Consolidated Commission on Utilities;
B. attest by signature all resolutions, orders, proceedings, contracts, or documents issued by order of Consolidated Commission on Utilities;

2.3 Vacancies

2.3.1 Permanent Vacancies

In case of a permanent vacancy of an officer, such vacancy shall be filled for the un-expired term of Office from among the other Commissioners of Consolidated Commission on Utilities by election by a majority vote of the Commissioners.

2.3.2 Temporary Absence or Vacancy

For purposes of the CCU Standing Rules, a temporary absence or vacancy occurs when a Commissioner, in his or her capacity as an Officer or Chairperson of a Standing Committee, is unable or unavailable to serve in such capacity for a limited period of time due to illness, off-island travel, or other reasons declared by such Commissioner.

2.3.2.1 Temporary Absence or Vacancy of the Chairperson

If a temporary absence occurs in the office of the Chairperson, then the order of succession of the Officers who shall be eligible to serve as Acting Chairperson shall be the Vice-Chairperson, the Secretary and the Chairperson of the Committee on Rules, except that no person shall serve as both Acting Chairperson and Secretary or Acting Secretary at the same time.

2.3.2.2 Temporary Absence or Vacancy of the Secretary

If a temporary absence or vacancy occurs in the office of the Secretary, then the Chairperson of the Committee on Rules shall serve as Acting Secretary. If the Chairperson of the Committee on Rules is unable to serve as Acting Secretary, then the Acting Chairperson shall serve as the Acting Secretary.

2.3.2.3 Temporary Absence or Vacancy of a Committee Chairperson

If a temporary absence or vacancy occurs in the office of a Chairperson, the Vice-Chairperson of the Committee involved shall serve as the Acting Chairperson. If the Vice-Chairperson is unable or unavailable to serve as Acting Chairperson, then the Chairperson or Acting Chairperson shall designate some other Commissioner of the Committee to serve as Acting Chairperson. Failing this, the Chairperson of Consolidated Commission on Utilities shall act as Acting Chairperson of the Committee in question until the Vice-Chairperson or Chairperson returns and assumes their duties.

3 RULE III - COMMUNICATIONS

3.1 Delivery of Communications.

All communications, petitions and messages addressed to Consolidated Commission on Utilities shall be delivered to the Chairperson, who shall promptly transmit them to all Commissioners. The Chairperson may respond to any communication in which a topic was discussed and voted on that clearly demonstrates the position of the Consolidate Commission on Utilities.

A Commissioner may respond to all communications, petitions, and messages from the general public in which a topic was discussed and voted on that clearly demonstrates the position of the Consolidate Commission on Utilities.

Under no circumstance shall a Commissioner unilaterally respond to any communications if the positions of Consolidated Commission on Utilities are unclear or contrary to a previous decision. However, Commissioners are free to express their opinions on any matter provided they clearly indicate it is their opinion on not that of the CCU.

3.2 Compliance with 5 GCA § 10103 (d)

The Chairperson shall promptly notify all Commissioners of FOIA requests directed to the CCU and shall direct the General Manager, Attorney or Administrative Secretary of the CCU to comply with such request. The following procedure shall be followed in response to FOIA request.

3.3 FOIA Standard Operating Procedure

3.3.1 Policy

FOIA provides every person the right to inspect and take a copy of any public document on Guam, except as otherwise expressly prohibited in law, and except as provided in 5 GCA § 10108. The CCU FOIA Coordinator shall prepare a response to all requests and determine any fee charged for responding

to a request. All CCU/GPA/GWA employees shall cooperate with the FOIA Coordinator by providing electronic or hard copies of existing public records requested by any person.

3.3.2 Definitions

3.3.2.1 Freedom of Information Act (FOIA) - Guam law that gives the public right to inspect and take a copy of any public records on Guam with the exception of those expressly provided under the same law

3.3.2.2 Person- any natural person, corporation, partnership, limited liability company, firm, or association

3.3.2.3 Public Records – any writing containing information relating to the conduct of the public's business prepared, owned, used, or retained by any state or local agency in any format, including an electronic format

3.3.2.4 Magnetic Media - CD ROM, DVD-ROM discs

3.3.2.5 FOIA Coordinator – The Board Secretary shall be responsible for preparing all CCU FOIA requests and the Legal Counsels for GPA or GWA will be responsible for ensuring compliance with time standards, where applicable. This will provide organizational clarity about the employee responsible for all duties related to responding to FOIA requests.

3.3.2.6 FOIA Officer – The Legal Counsel of GPA and GWA, respectively, are the FOIA Officers for the CCU relative to each respective agency.

3.3.3 Procedure Description

3.3.3.1 Filing of FOIA Request - all FOIA request for CCU's records shall be processed during regular hours of operation which is Monday to Friday from 8:00 a.m. to 5:00 p.m. Any oral or written FOIA request for information, including by mail, fax, email, or other electronic means, received by CCU / GPA / GWA staff for public information is treated as a FOIA request and responded to consistent with this policy. A copy of this policy must be posted on the CCU website. The request may be received by filling out the CCU FOIA Request Form available at the CCU office or CCU's website.

3.3.3.2 The request must be labeled as "Sunshine Reform Act / Freedom of Information Act Request," address to the CCU Chairman and sent to:

CCU STANDING RULES

Mail

CCU FOIA Coordinator

3rd Floor, Gloria B. Nelson Public Service Building

688 Route 15 Fadian, Mangilao, Guam

Fax

(671) 648-3290

Email

l.sablan@gpagwa.com

3.3.3.3 Receipt of FOIA Request - Any FOIA request for information received by CCU / GPA / GWA employees must be delivered to the FOIA Coordinator within one business day. The FOIA Officer shall be consulted if there is any doubt whether to process a request as a FOIA request

3.3.3.4 Processing FOIA Request – the FOIA Coordinator shall receive FOIA request or CCU FOIA Request Form (FRF), stamp it "RECEIVED" and indicate date and time of receipt.

3.3.3.5 If the FOIA request is not received on FRF, the FOIA Coordinator shall complete an FRF with information received. If necessary, the FOIA Coordinator shall contact the Person making the FOIA request to obtain or clarify FRF required information.

3.3.3.6 Thereafter, the FOIA Coordinator shall assign a FOIA request work order number and create an electronic filing folder in the CCU electronic document management filing system using that number.

3.3.3.7 The FOIA Coordinator shall collate FRF and any supporting documents and file in FOIA folder (red folder marked "urgent") and immediately bring it to the attention of the Chairman and FOIA Officer.

3.3.3.8 For FOIA requests sent to the CCU during non-working hours (5:00 p.m. to 8:00 a.m., Saturday, Sunday, or Government of Guam holidays), the date to be indicated as its date of receipt shall be the date of the next working day.

3.3.3.9 The FOIA Coordinator shall ensure that the labor cost required for CCU / GPA /GWA employees to respond to the request is properly recorded in said employees time records using the FOIA request work order number.

3.3.3.10 Review of FOIA Request – The FOIA Officer shall review the FOIA request and take note of the date of its receipt and the date it falls due. He/she shall monitor observance of the deadline to respond provided by the law and shown under 3.3.9 of this SOP.

3.3.3.11 After noting the date of receipt and its due date, the FOIA Officer shall forward the request to the FOIA Coordinator who shall arrange obtaining the requested records/documents. The FOIA Officer shall prepare the response.

3.3.3.12 Preparation of Requested Records – FOIA Coordinator shall gather the records subject of FOIA request within three (3) working days, from the date stamped on the request as date of receipt or the date appearing on the FRF.

3.3.3.13 In case the request does not clearly identify the records, the FOIA Coordinator shall immediately contact the Person making FOIA request and ask for specification or details of the records sought.

3.3.3.14 In this case, the running of the period provided under 3.3.9 and its subparagraphs shall be stopped and shall commence the run again only once the requested records have been clearly identified. In this regard, the FOIA Coordinator shall note on the received copy of the FRF the date and time of communication and its brief description.

3.3.3.15 In the event the documents requested requires extra-ordinary effort to gather or assemble, the FOIA Coordinator shall notify the FOIA Officer who shall prepare a notice from the CCU Chairman to the Person requesting the FOIA in accordance with 3.3.9.2.1 of this SOP

3.3.3.16 Preparing the FOIA Information – The FOIA Coordinator shall review the gathered records, coordinate, and confirm with FOIA Officer on the documents to be released and redact the following exempt records

3.3.3.17 Exempted records from FOIA - the following records shall be exempted from the coverage of FOIA. "If the records being requested partially contain information exempted from disclosure by this Chapter or by another law, the agency shall redact the exempt information only and release the non-exempt information in the records, citing the exemption in law that requires the information to be redacted

3.3.3.17.1 Records pertaining to pending litigation to which the authority is a party, until the pending litigation has been finally adjudicated or otherwise settled

3.3.3.17.2 Records of complaints to, or investigations conducted by, or records of intelligence information, or security procedures or information, of an agency or its personnel

3.3.3.17.3 Personnel, medical, or similar files, the disclosure of which would constitute an unwarranted invasion of personal privacy. All information regarding salary, and the name, age, and mailing address of each employee and public official shall be public record.

3.3.3.17.4 The home address and telephone number of any person whose occupation is subject to regulation or licensure by the government of Guam, or of any public official or government employee, or of any member of a government board, commission, or council, unless such person gives express permission to disclose such information

3.3.3.17.5 All existing privileges or confidential records or other information expressly protected under the law

3.3.3.17.6 Records specifically pertaining to security procedures, passwords, combinations, access codes, electronic or computer user I.D.s, policies, or procedures on security

3.3.4 Draft documents.

3.3.4.1 Billing – the FOIA Coordinator shall count the number of pages covered by the FOIA request and may bill its cost for ten cents (10¢) for the first page and two cents (2¢) for the succeeding pages. For magnetic media, fifteen dollars ($15.00) per CD or DVD-ROM disc may be charged. Any branch, department, or agency of the government of Guam shall not be charged for any FOIA requests.

3.3.4.2 Review of Records for Release - before the requested records are released and within the 3-day period to prepare it, the FOIA Coordinator shall forward the gathered records to the FOIA Officer. The FOIA Officer shall:

3.3.4.3 Review its contents and make sure that all exempt documents have been removed and all exempted information have been redacted, as specified in section 3336.1 from the records to be released to the requestor.

3.3.4.4 Identify legal citations to exemptions to FOIA law that require redaction or prohibit disclosure of records and provide to FOIA Coordinator.

3.3.4.5 Draft a transmittal letter to the Person making the FOIA request upon completion of his review.

3.3.4.6 Release of Requested Records - the FOIA Coordinator shall release to the requestor the records, observing the time prescribed by the law within which to release it, to wit:

3.3.4.7 Four (4) working days, from receipt of the request, if what is requested is information in writing

3.3.4.8 Five (5) working days, from receipt of the request, if the information requested is stored on or to be stored on magnetic media

3.3.4.9 Exception - the time limit prescribed by the law may be extended up to ten (10) consecutive days, including Saturdays, Sundays and legal holidays; provided, the extension is due to unusual circumstances; and provided further, a written notice by the GM was sent to the requestor stating the reason for the extension and a date on which the records will be expected to be released.

3.3.4.9.1 For this purpose, unusual circumstances mean:

3.3.4.9.1.1 the need to search for and collect the requested records from field facilities or other establishments that are separate from the office processing the request; or

3.3.4.9.1.2 the need to search for, collect and appropriately examine more than ten (10) separate and distinct records which are demanded in a single request, or records that in total, are contained in five hundred (500) or more pages, or contain about two hundred fifty thousand (250,000) words, whichever is more.

3.3.4.9.1.3 Keeping of FOIA Request - FOIA Coordinator shall keep all records of FOIA request in an envelope labeled "FOIA REQUEST FY- YEAR.", and in the CCU Chairman's electronic document management filing system. Records of FOIA request shall include:

3.3.4.9.1.4 written request filed by the requestor or FRF

3.3.4.9.1.5 proof of receipt of requested records by the requestor; and

3.3.4.9.1.6 proof of payment of the cost. After filing the Annual Report to the Attorney General of Guam, the FOIA Coordinator shall place it in the FOIA Request envelope and in the CCU Chairman's electronic document management filing system

3.3.4.9.2 Annual Report - FOIA Coordinator shall prepare annual report, which report shall be reviewed by the FOIA Officer and CCU Chairman and submitted to the Attorney General of Guam on or before February 1 every year. After submission of the report, the FOIA Coordinator shall post its stamped "Received" electronic copy on the CCU website. The report must cover the preceding year and contain the following information

3.3.4.9.2.1 the number of determinations made by the agency not to comply with requests for records made to such agency under §10108 of this Chapter and the reasons for each such determination

3.3.4.9.2.2 the number of requests for records pending before the agency as of September 30 of the preceding year, and the median number of days that such requests had been pending before the agency as of that date;

3.3.4.9.2.3 the number of requests for records received by the agency and the number of requests which the agency processed;

3.3.4.9.2.4 the median number of days taken by the agency to process different types of requests; and the number of full-time staff of the agency devoted to processing requests for records under this Section, and the total amount expended by the agency for processing such requests

4 RULE IV - AMENDMENT, SUSPENSION, OR REPEAL OF RULES

4.1 Amending, Suspending, or Repealing the Standing Rules.

4.1.1 Any Standing Rule may be amended or repealed by a vote of at least three (3) of the Commissioners of Consolidated Commission on Utilities. Under no circumstances shall a temporary suspension of the rules be allowed.

5 RULE V - PARLIAMENTARY LAW GOVERNING PROCEDURES

The rules and procedures contained in the 11th edition of Roberts Rules of Order shall govern Consolidated Commission on Utilities in all areas to which they are applicable, and which are not inconsistent with the CCU Standing Rules.

6 RULE VI - PROCESSING OF RESOLUTIONS

6.1 General Rules.

All resolutions are to be proposed or processed (including, but not limited to, preparation, introduction, adoption, printing, presentation) by the CCU or each utility for presentation, discussion, and action during regularly scheduled and properly notice meetings.

6.1.1 Technical Amendments and Corrections Authorized

Legal counsel for the respective utility shall be authorized to make technical corrections, which shall include, but not be limited to, the following: incorporating amendments passed by the CCU, correcting spelling, correcting grammar, changing the citation, changing the title, correcting formatting, correcting punctuation, renumbering sections, and correcting section sequence. Technical amendments or corrections may be done before and after adoption by the CCU.

7 RULE VII – Committees

7.1 Composition of Committees

No committee shall be comprised of more than two Commissioners.

7.2 CHAIRPERSONS AND JURISDICTION

Chairpersons. Any Commissioner may be a Chairperson of more than one (1) Standing Committee. A Chairperson of a Standing Committee shall be solely responsible for calling all meetings of the Standing Committee and establishing agendas for such meetings, as well as producing Committee Reports and resolutions, and may act in place of the Committee in all matters.

7.2.1 Committees and Jurisdiction

7.2.1.1 Committee on Rules

7.2.1.1.1 Jurisdiction

The Committee shall have general oversight over all matters pertaining to:

A. proposed amendments to the Standing Rules;
B. resolutions relating to the standing rules, and budget of Consolidated Commission on Utilities;

7.2.1.2 Committee on Audits. general oversight jurisdiction

The Committee shall have general oversight over all matters pertaining to audits of both utilities;

7.2.1.3 Committee on Budget.

7.2.1.3.1 Jurisdiction

The Committee shall have general oversight over all matters pertaining to Budgets of both utilities;

7.2.1.4 Committee on Physical and Cybersecurity

7.2.1.4.1 Jurisdiction

The Committee shall have general oversight over all matters pertaining to Physical and cyber security of both utilities;

7.2.1.5 Committee on Communications

7.2.1.5.1 Jurisdiction

The Committee shall have over all matters pertaining to Public communications and outreach of both utilities;

8 RULE VIII - POWERS, AUTHORITY, AND COMPOSITION OF STANDING COMMITTEES

8.1 General Authority

Each Standing Committee is authorized to study and analyze information relating to the subjects that fall within its jurisdiction, including, but not limited to, a need for revision of the process relating to that subject.

8.2 Powers

Each Standing Committee may meet and do any and all things necessary and convenient to enable it to exercise the powers and perform the duties granted to it, and may authorize the utility to expend such money our resources as may be made available for such purpose.

8.3 Committee Meetings

In order for any recommendation of any Standing Committee of Consolidated Commission on Utilities to be valid, such recommendations must be taken at a regularly scheduled and properly noticed CCU meeting. For the purposes of this Section, a Committee meeting is a meeting that is called by the Chairperson of the Standing Committee in accordance with the Standing Rules.

8.4 Rules of Standing Committees

Each Standing Committee may organize rules and regulations for the conduct of its business, adopting such supplementary rules and regulations, not inconsistent with the CCU Standing Rules, as may from time to time be required in connection therewith.

8.5 Commissioners of Standing Committees

Except as otherwise provided in the CCU Standing Rules, Commissioners of a Standing Committee or Subcommittee shall be appointed by the CCU Chairperson. Except as otherwise provided in the CCU Standing Rules, the Chairperson shall determine the number of Commissioners of the Standing Committee, which may not be greater than two (2) Commissioners, including the Chairperson.

9 RULE IV

9.1 CODE OF ETHICS AND STANDARDS

9.1.1 AUTHORITY

In accordance with 12 GCA §79101, the Consolidated Commission on Utilities (CCU) hereby adopts, as a policy, the following Code of Ethics to assist it in the conduct of its affairs.

9.1.2 PREAMBLE

The CCU commits itself and its actions to ethical, business like, and lawful conduct including the proper use of authority and appropriate decorum when acting as Commissioners. Commissioners must avoid actual impropriety or the appearance of impropriety to ensure and maintain public confidence in the CCU and the agencies it governs, the Guam Power Authority (GPA) and the Guam Waterworks Authority (GWA).

9.1.3 GENERAL PRINCIPALS

A. The effective administration of the laws applicable to the CCU depends to a great extent on the public confidence in those individuals who administer and execute the laws. The reputation of the CCU can best be maintained when those individuals obey not only the literal requirements of the laws of Guam governing their conduct, but when their conduct supports the moral and ethical principles behind those laws.
B. Commissioners shall conduct themselves with civility and respect at all times with one another, with the staff, management, and personnel of GPA and GWA, and with Guam's ratepayers and the public.
C. Guam's Ethics in Public Contracting Statutes and their implementing regulations, as respectively codified in 5 GCA §5601 et. seq., and 2 GAR, Div. 4, Chap. 11, §11101 et. seq., establishes

specific standards of conduct for Commissioners. This Code of Ethics is made in conjunction with those statutes and regulations and is intended to establish general standards of conduct necessary for the proper and efficient operation of the CCU.

D. Commissioners hold positions that involve a degree of trust and responsibility. To ensure the effective regulation of the public utility laws and to maintain public confidence in the CCU, it is imperative that Commissioners avoid conduct which is in violation of their public trust or which creates a justifiable impression among the public that such trust is being violated. It is recognized that there might be questions of interpretation and judgement which enter into the application of this Code of Ethics, and that some Commissioners may have questions from time to time which they may like to discuss regarding the situation. Any Commissioner who has a question about his or her situation should discuss it with the CCU or its designee. Commissioners may also request an opinion from the Commission's attorney.

E. Commissioners may not attempt to exercise individual authority over the CCU, or GPA, or GWA, except as permitted by Guam Law and Commission policies and resolutions.
    a. Commission members must recognize the lack of authority vested in them as individuals in their interactions with Commission employees and the staff, management, and personnel of GPA and GWA, except where authorized by the CCU.
    b. In their interactions with the public, the press, or other entities, Commissioners must recognize the same limitation as set forth in Section 3(e)(l) above, and Commissioners must not speak for the CCU unless authorized by the CCU or when describing an existing CCU decision, action, or plan.
    c. Commissioners shall express their individual opinions in a responsible manner without causing harm to the CCU, GPA, or GWA, or to their relationships with other Commissioners, and the staff, management, and personnel of GPA and GWA.
    d. Commissioners must comply with Guam's Open Government Law and shall not meet outside of publicly noticed meetings to make decisions concerning the CCU, GPA, or GWA. However, Commissioners may meet individually or in small groups (less than the number required for a quorum of the CCU) with the staff, management, and personnel of GPA and GWA, for the purposes of gathering information or for any other purpose authorized by law. Commissioners may also attend public hearings legally called by the Guam Legislature or the oversight Committee for GPA and/or GWA duly called by the Legislature in its compliance with the Open Government Law. Commissioners may also attend ceremonial events such as groundbreakings and employee recognition events, but any no time shall Commissioners discuss nor decide upon any matter of business normally bought before the CCU that requires a majority decision as to its disposal.
    e. As required by Guam Law, Commissioners shall respect the confidentiality appropriate to issues regarding attorney-client privileged communications.
    f. Commissioners shall be prepared for CCU meetings, activities, and deliberations in order to exercise good business judgement in the business and affairs of GPA and GWA.

g. Commissioners shall not willfully and intentionally make statements solely for the purpose of demeaning, humiliating, or otherwise publicly embarrassing or insulting other Commissioners during CCU meetings or events, GPA or GWA activities, or at other public forums, meetings, or events, or via the media.
h. Commissioners are vested with the duty to manage the business and affairs of GPA and GWA to the best of their ability and Commissioners shall have the duty to use good business judgement. The Commissioners shall have the fiduciary duties of due care, and the duty of loyalty, which shall be owed to GPA and GWA, and the duty to protect the interests of the ratepayers concerning the efficient management and use of the assets of GPA and GWA
    i. Commissioners shall disclose any conflicts of interest they may have in managing the business and affairs of GPA and GWA. Conflicts of interest may include but are not limited to instances where a Commissioner will personally profit from a transaction, or when a close family member of the Commissioner will profit from the transaction, or when the Commissioner serves on the board of a corporation that is transacting business with the CCU, GPA, or GWA Commissioners shall disclose any conflicts of interests or potential conflicts of interest, to include all material facts concerning the Commissioner's relationship or interest in the transaction involved, to the CCU in the official deliberations of such transactions.

9.1.4 APPLICABILITY

This Code is applicable to the Commissioners. If any section, subsection, paragraph, sentence or other part of this Code is adjudged unconstitutional or invalid, such judgement shall not affect, impair, or invalidate the remainder of this Code, but shall be confined in its effect to that part of the Code ruled unconstitutional or invalid.

9.1.5 USE OF OFFICIAL POSITION OR INFORMATION

No Commissioner shall use or attempt to use his or her official position to secure unwarranted privileges or advantages for himself or herself or others. This provision shall include, but not be limited to, a prohibition on the use for private purposes of Board Personnel, including secretarial services, during working hours. No employee shall be coerced into performing any services for private purposes even outside of normal working hours.

No Commissioner shall willfully disclose to any person, whether or not for pecuniary gain, any information not generally available to a member of the public which he or she acquires in the course of and by reason of his official duties. No Commissioner shall use for the purpose of pecuniary gain, whether directly or indirectly, any information not generally available to members of the public which he receives or acquires in the course of and by reason of his official duties.

No Commissioner shall use his or her official position or authority to influence or control, in any manner whatsoever, either directly or indirectly, any information not generally available to members of the public which he receives or acquires in the course of and by reason of his official duties.

9.1.6 DISSEMINATION

A copy of this Code shall be delivered to every member of the CCU no later than two weeks after such new member takes office.

10 RULE X

10.1 TRAVEL AND TRANSPORTATION

10.1.1 General Rule

Shall exercise the same care in incurring expenses that a prudent person would if traveling on personal business.

10.1.2 Purpose and Scope

The purpose and scope of this Rule is to provide standard travel policies and written procedures and controls governing off-island travel of Commissioners. Prior to travel Commissioners shall provide an explanation of the reason for travel and upon return shall post a travel report on the CCU website within 30 days of the date of return.

10.1.3 General Policy

The policy of Consolidated Commission on Utilities is that all off-island travel must be performed for the direct benefit of GPA and GWA. It is the policy of Consolidated Commission on Utilities to permit travel off-island of Commissioners to keep abreast of new and recent developments in utility related proceedings, techniques, administration and procedures in the various state, national and international bodies. The CCU shall follow the travel policies of each utility.

11 Rule XI

11.1 Performance Evaluation Forms

11.1.1 GPA Performance Evaluation Forms

11.1.1.1 General Manager

GUAM POWER AUTHORITY

WORK PLANNING AND PERFORMANCE EVALUATION FORM

MANAGERS

NAME OF EMPLOYEE	
POSITION TITLE	General Manager
DIVISION	General Manger
DEPARTMENT	Executive
EVALUATION PERIOD	

NAME OF DIRECT SUPERVISOR	CCU

CCU STANDING RULES

POSITION TITLE	CCU
DIVISION	
DEPARTMENT	
EVALUATION PERIOD	

INTRODUCTION

Whilst this form provides a structured framework for documenting and assessing work performance its success as a management / supervisory tool is to facilitate an open and honest discussion on performance. Whilst ongoing performance feedback, particularly against the key performance indicators (KPI's) outlined in Section A should be occurring on a regular basis (throughout the review period) the benefits of positive and constructive feedback are well documented, and with this in mind, it is important to ensure that the agreed ratings are an accurate reflection of the employees' performance over the review period. Inaccurate assessments are counter-productive (for both the company and the employee) as both the link to training and development and compensation becomes distorted and the implications far reaching, not only internally but externally in terms of the company's ability to consistently meet the expectations of customers.

Rating Scale

5	**Significantly Exceeds Expectations / Outstanding**
	Performance significantly exceeds expectations in all essential areas of responsibility. An outstanding result qualified by an exceptional or unique contribution in support of the section, department or division or the successful completion of a major goal or project. This rating is achievable by any employee although given infrequently. Note : a rating of 5 requires qualification.
	Exceeds Expectations / Above Satisfactory

4	Above standard performance with results exceeding expectations in all essential areas of responsibility.
3	**Meets Expectations / Satisfactory** Performance consistently meets expectations in all essential areas of responsibility.
2	**Inconsistently Meets Expectations / Marginal** Performance inconsistently meets expectations in one or more essential areas of responsibility. A less than satisfactory result requiring improvement(s) to come up to standard.
1	**Fails To Meet Expectations / Unsatisfactory** Performance consistently below expectations. Significant improvement is needed in one or more essential areas. Results may also reflect / demonstrate counter-productive behaviors that have negative outcomes or consequences. A plan to correct performance, including timelines, must be developed and monitored to improve and measure progress. Note : a rating of 1 requires qualification.
SECTION A	**KEY PERFORMANCE INDICATORS (KPI's)**

Overview

Research has shown that the functions managers undertake can be grouped into four key generic roles : Managing Operations, Managing Finance, Managing People and Managing Information. Within each role a small number of agreed KPI's should be identified (where possible) as a basis for assessing and improving the performance of managers on an annual basis. Please note that the identification of KPI's may be difficult with some positions resulting in broader job statements or job standards being documented. This however should not detract from the primary goal of quantifying the work required wherever possible. In brief, the KPI's refer to personal targets for managers to focus their performance (i.e. over the review period) in order to fulfill their responsibilities and to maximize their contribution to the organization.

Performance Allocation

Performance against the key roles (see below) accounts for 70% of the total performance score :

CCU STANDING RULES

1.0	**Managing Operations**	**30% of total performance score**
2.0	**Managing Finance**	**15% of total performance score**
3.0	**Managing People**	**15% of total performance score**
4.0	**Managing Information**	**10% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

Key Performance Indicators (KPI's)

1.0	**Managing Operations**	**30% of total performance score**

Annual Rating Score

1.1	Enforce all rules and regulations of the Guam Power Authority	
1.1.1	Administer the daily business affairs to ensure electricity customers are receiving the highest level of service.	
1.1.2	Set annual short-term goals and objectives in order to constantly improve the efficiency, reliability, and customer satisfaction of all services.	
1.1.3	Define GPA's visionary position by assisting in all planning functions or developing and pursuing new business strategies and defining key strategic initiatives for long term growth, financial security, safety, efficiency and reliability of all GPA operations.	
1.1.4		
1.1.5		

Annual Rating

1.2	Attend all CCU meetings	
1.2.1	Prepare and present general and/or specialized reports of the affairs of the Guam Power Authority	
1.2.2		

1.2.3		
1.2.4		
1.2.5		

Annual Rating

1.3	Plan and develop the structure of the Authority's organization and provide for its staffing by qualified individuals.

1.3.1	Administer and approve all employee recruitment, reclassifications, terminations and promotions.	
1.3.2	Establish and preserve working conditions which are conducive to the health, safety and productive motivation of the Authority's personnel.	
1.3.3		
1.3.4		
1.3.5		

Annual Rating

1.4	Provide for the determination of the Authority's costs of electric services.

1.4.1	Recommends compensatory and competitive rates and service regulations to the Board.	
1.4.2		
1.4.3		
1.4.4		
1.4.5		

Annual Rating

1.5	Devote entire time to the business of the Authority.

1.5.1	Plan, organize, coordinate and control the services of such employees in the exercise of the powers of the Authority under the general direction of the Board.	
1.5.2		
1.5.3		
1.5.4		

CCU STANDING RULES

1.5.5		

2.0	**Managing Finance**	**15% of total performance score**

Annual Rating

2.1	Provide for the development of the Authority's financing program and present to the Board recommendations for the sale of bonds, the use of bonds proceeds and the investments of surplus funds.	
2.2	Makes oral and written reports periodically to the Board concerning the operating and financial results of the Authority.	
2.3	Published a financial report within 120 days from the end of the fiscal year the financial status of the Authority.	
2.4	Review the financial and system operational reports to ensure the integrity of GPA assets, their protection and ensure the IWPS is functioning safely and to the highest efficiency and effectiveness possible.	
2.5		

3.0	**Managing People**	**15% of total performance score**

Annual Rating

3.1	Define performance targets and conduct performance monitoring against performance targets or standards regularly.	
3.2	Conducts supervisory reviews and performance evaluations for Executive staff.	
3.3		
3.4		
3.5		

4.0	**Managing Information**	**10% of total performance score**

Annual Rating

CCU STANDING RULES

4.1	Attends all meetings of the Board and submit a general report of the affairs of the Authority.	
4.2	Advises the Board as to the needs of the Authority and approve demands for the payment of obligations of the Authority within the purposes and amounts authorized by the Board.	
4.3	Perform other and additional duties as required by the Board.	
4.4		
4.5		

CCU STANDING RULES

SECTION B	PERSONAL COMPETENCIES

Overview

The personal competencies listed below are those used by effective managers to make decisions and achieve results and can be observed through the key behaviors outlined. The competencies work together to achieve results. One competency may be dominant in a particular situation or event, but it will usually be supported by other competencies. As the event unfolds, another competency will become dominant. Some competencies are about independent action, others are about working closely with colleagues, some call for analytical and logical thinking, whilst others are about creativity.

It is important to remember that the behaviors and competencies outlined are not valuable on their own. They are valuable only insofar as they help managers achieve results. Effective managers use their judgment to apply the right competency at the right time although they tend not to be strong in every competency but display a variety of different profiles with regards strengths, styles and preferences. Across management teams it is valuable to understand the profiles of individual team members and exploit those skills accordingly.

Performance Allocation

Performance against the key personal competencies (see below) accounts for 30% of the total performance score :

1.0	**Strategic Perspective**	**5% of total performance score**
2.0	**Building Teams**	**5% of total performance score**
3.0	**Communication**	**5% of total performance score**
4.0	**Information Search**	**5% of total performance score**
5.0	**Achievement Focus**	**5% of total performance score**
6.0	**Judgment**	**5% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

1.0	**Strategic Perspective**	**5% of total performance score**	

This competence concerns the manager being able to place immediate goals and activities in a strategic context. This involves seeing how one area of activity is affected by, and affects, other parts of the organization or its environment. The competence involves taking a longer term perspective, considering what will happen several years hence, and establishing a vision of the future. An important part of the competence lies in managers setting out their vision of the future to others in such a way as to gain acceptance and support.

Behavior Indicators - An Effective Manager :

- works towards a vision of the future based on a strategic perspective
- acts with good understanding of how different parts, needs or functions of the organization and its environment fit together
- clearly relates goals and actions to the strategic aims of the business
- takes opportunities when they arise to achieve longer term aims or needs
- demonstrates competence in goal setting, identifying possible courses of action, implementing and monitoring them
- can disseminate strategic goals into KPI's for subordinate staff
- has highly developed skills in analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors
- demonstrates foresight (predicting / forecasting)

Annual Rating

2.0	**Building Teams**	**5% of total performance score**	

This competence concerns working effectively with others at the same level or more junior level with the organization. The manager may use the key behavior in the context of a loose team or a coalition of peers from other parts of the organization and/or in the context of an immediate group of direct reports. The first two behaviors are about encouraging co-operative working. Depending on the circumstances, this can be achieved either formally or informally and the team may be well defined and established or a loose group of managers who do not necessarily see themselves as a "team". The third behavior is an aspect of empowerment, where the manager involves others in the process of making difficult decisions, and takes time to involve others in order to explore the problem and to contribute solutions. The final behavior is about evaluating the capabilities of the people who report to the manager.

Behavior Indicators - An Effective Manager :

- keeps others informed about plans and progress
- builds a desire to work together and builds co-operation within a team
- builds ownership of controversial decisions by involving others in the decision making process
- evaluates people's capability to do the job and takes action
- is very capable of balancing self and team interests to meet collective goals
- contributes positively by sharing information and listening and accepting others' points of view
- respects the thoughts and opinions of other team members
- positively influences the way the team works together
- facilitates and influences positive outcomes that focus on organizational goals
- recognizes conflicts that arise within the team and acts to bring these out into the open

Annual Rating

3.0	**Communication**	**5% of total performance score**	

This competence concerns communicating clearly with others. It may be used in a wide range of circumstances, from formal presentations to day-to-day meetings. A feature of managers with this competence is that they carefully consider what message they wish to communicate and then decide how best to do so. This may involve thorough planning of a presentation, the use of different media to reinforce a message, or even the establishment of systems to ensure good communication within the department or organization. Effective managers use this competence to achieve results. They communicate to inform, instruct, persuade and encourage others to communicate with them. Managers who are particularly competent in this area exhibit conviction and belief in what they have to say, which is closely linked to the self-confidence competency.

Behavior Indicators - An Effective Manager :

- conveys difficult ideas and problems in a way that aids understanding
- recognizes and responds to the needs and feelings of others
- demonstrates excellent verbal and written communication skills
- is very confident and competent in describing situations and actions
- effectively conveys and receives ideas, information and directions
- receives, interprets, understands and responds very well to verbal messages and other cues
- is assertive while being open minded and adaptable to difference of opinions
- has the ability to be very concise and clear when communicating
- confronts difficult issues openly

Annual Rating

4.0	**Information Search**	**5% of total performance score**	

This competence concerns gathering information to inform decision making. Effective managers seek facts and informed opinion in order to understand new or complex situations. Sometimes the manager will remain open-minded and suspend judgment until all the relevant facts are known. In other cases, the manager reaches a conclusion on the basis of an insight or limited personal knowledge, and then seeks more factual data to confirm or refute this conclusion.

Behavior Indicators - An Effective Manager :

- pushes for concrete information in an ambiguous situation
- seeks information from multiple sources to clarify a situation
- checks validity of own thinking with others
- excellent at gathering and assessing information to determine the optimum way to perform
- is very competent with personal planning and organizational skills
- has highly developed skills at analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors

Annual Rating

5.0	**Achievement Focus**	**5% of total performance score**	

Managers with this competence are geared towards achieving results and they will set ambitious goals and objectives for themselves and others. They will also deal with problems as they arise, and take advantage of any emerging opportunities. Recognizing and evaluating the risks that may lie ahead, and then taking firm action, is an aspect of this competence.

Behavior Indicators - An Effective Manager :

- sets high quality goals that are demanding of self and others
- sets key performance indicators and priorities in uncertain and complex situations
- tackles problems or takes advantage of opportunities as they arise
- calculates risks and takes decisive action
- focuses personal attention on specific details that are critical to the success of a key event
- is an energetic self-starter, highly motivated and results driven
- generates enthusiasm and energy by maintaining a positive attitude
- expresses confidence in the success of plans or initiatives (this includes showing commitment to a course of action)
- takes personal responsibility for making things happen
- is persistent in pursuing goals despite obstacles and setbacks
- is very competent with personal planning and organizational skills
- is very capable at gathering and assessing information to determine the optimum way to perform
- uses time and resources very effectively

Annual Rating

6.0	**Judgment**	**5% of total performance score**	

This competence concerns using a range of skills to evaluate situations and people and to develop plans and approaches for actions. Effective managers use analytical and logical approaches to understand people and events and to establish priorities and connections. They also use creative and intuitive approaches to assessing situations and problems and to producing solutions. Effective managers may demonstrate different profiles within this competence, some being more creative and intuitive, or they may be strong in all aspects.

Behavior Indicators - An Effective Manager :

- identifies the most important issues in a complex situation
- identifies implications, consequences or casual relationships in a situation
- uses a range of ideas to explain the actions, needs and motives of others
- focuses on facts, problems and solutions when handling an emotional situation
- approaches the decision making process with a positive attitude and views the situation as an opportunity / challenge
- can explain decision(s) to those involved and affected and will follow up to ensure implementation

- uses instinct and intuition to assess situations and people
- identifies new patterns and interprets events in new ways
- has an excellent understanding of processes and quality improvement
- can prioritize problems and deal with them one at a time

SECTION C	PERFORMANCE COMMENTS

Note : In Sections A & B all performance ratings of 1 or 5 must be individually substantiated with comments. This section can also be used for general comments concerning the employee's performance.

Section

SECTION D	DEVELOPMENTAL RECOMMENDATIONS

Use this section to record training and development goals over the next review period

SECTION E	PERSONAL DEVELOPMENT

Overview

Personal development focuses on initiatives taken by the employee or with the Authority's support that demonstrates a positive and proactive approach to personal growth and development. The intent here is to both recognize and reward employees for relevant achievements in excess of the minimum educational requirements of the position e.g. this may be in the form of a higher educational qualification(s), professional qualification(s), certification(s), license(s) etc.

Performance Allocation

Having achieved higher educational qualification(s), professional qualification(s), certification(s), license(s) etc (in excess of the minimum educational requirements of the position) the financial benefits (see table example below) will take the form of additional sub-steps being awarded in excess of those received from this appraisal process.

Please note that where the Authority's compensation model is being adjusted to a higher market percentile(s) the additional sub-steps awarded in this section will be applied with each adjustment and will continue until such time the Authority has reached its targeted position in the market.

Number of additional sub-steps awarded	EXAMPLE
3	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take in excess of two (2) years to obtain**
2	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take one (1) to two (2) years to obtain**
1	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take two (2) to twelve (12) months to obtain**

Notes :

The awarding of sub-step(s) following the attainment of multiple achievements or individual achievements taking less than two (2) months to obtain or any decision to include a particular achievement will be at the discretion of the General Manager.

All achievements must be current and valid (where required) for the additional sub-step(s) to be awarded.

Where progression towards a higher qualification sees an employee firstly achieving an interim qualification e.g. Engineer In Training (EIT) and then goes on to pass the Professional Engineer (PE) qualification the employee will be awarded the appropriate sub-steps for achieving the EIT qualification and then the balance of the sub-steps for achieving the PE.

Rating

Human Resources will initially assess (and score in the space provided) the proposed number of sub-steps awarded for higher educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Endorsement of this score (or otherwise) will be made by the General Manager (subject to discretionary and budget constraints) in reviewing the results of this form.

Personal Achievements

Please indicate below all relevant educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Please note that these will be subject to verification if no record of their achievement is included in the employee's personal file held with Human Resources.

	Personal Achievements	Authorizing Institution	Pass Grade (where provided)
1.0			
2.0			
3.0			
4.0			
5.0			
6.0			
7.0			
8.0			
9.0			

CCU STANDING RULES

10.0			

Proposed Increase (number of sub-steps)

CCU STANDING RULES

(CCU to Complete)

SECTION F	CONFIRMATION / SIGNATURES

Conclusion of Evaluation

To the Employee : I have reviewed this performance evaluation on the date indicated below and have had the opportunity to discuss it with my supervisor. My signature does not necessarily mean that I agree with the rating.

Employee :Name : _____ *Signature :* _____ *Date :* _____

CCU

*CCU:*_____ *Date:*_____
(authorization) CCU Chairperson

Comments :

Employee : (amendments sighted)Signature : _____ *Date :* _____

11.1.1.2 CFO

GUAM POWER AUTHORITY

WORK PLANNING AND PERFORMANCE EVALUATION FORM

MANAGERS

NAME OF EMPLOYEE	
POSITION TITLE	Chief Financial Officer
DIVISION	CFO
DEPARTMENT	Finance
EVALUATION PERIOD	

NAME OF DIRECT SUPERVISOR	CCU
POSITION TITLE	CCU

CCU STANDING RULES

DIVISION	
DEPARTMENT	
EVALUATION PERIOD	

INTRODUCTION

Whilst this form provides a structured framework for documenting and assessing work performance its success as a management / supervisory tool is to facilitate an open and honest discussion on performance. Whilst ongoing performance feedback, particularly against the key performance indicators (KPI's) outlined in Section A should be occurring on a regular basis (throughout the review period) the benefits of positive and constructive feedback are well documented, and with this in mind, it is important to ensure that the agreed ratings are an accurate reflection of the employees' performance over the review period. Inaccurate assessments are counter-productive (for both the company and the employee) as both the link to training and development and compensation becomes distorted and the implications far reaching, not only internally but externally in terms of the company's ability to consistently meet the expectations of customers.

Rating Scale

5	**Significantly Exceeds Expectations / Outstanding**
	Performance significantly exceeds expectations in all essential areas of responsibility. An outstanding result qualified by an exceptional or unique contribution in support of the section, department or division or the successful completion of a major goal or project. This rating is achievable by any employee although given infrequently. Note : a rating of 5 requires qualification.
4	**Exceeds Expectations / Above Satisfactory**
	Above standard performance with results exceeding expectations in all essential areas of responsibility.

3	**Meets Expectations / Satisfactory**
	Performance consistently meets expectations in all essential areas of responsibility.
2	**Inconsistently Meets Expectations / Marginal**
	Performance inconsistently meets expectations in one or more essential areas of responsibility. A less than satisfactory result requiring improvement(s) to come up to standard.
1	**Fails To Meet Expectations / Unsatisfactory**
	Performance consistently below expectations. Significant improvement is needed in one or more essential areas. Results may also reflect / demonstrate counter-productive behaviors that have negative outcomes or consequences. A plan to correct performance, including timelines, must be developed and monitored to improve and measure progress. Note : a rating of 1 requires qualification.

SECTION A	**KEY PERFORMANCE INDICATORS (KPI's)**

Overview

Research has shown that the functions managers undertake can be grouped into four key generic roles : Managing Operations, Managing Finance, Managing People and Managing Information. Within each role a small number of agreed KPI's should be identified (where possible) as a basis for assessing and improving the performance of managers on an annual basis. Please note that the identification of KPI's may be difficult with some positions resulting in broader job statements or job standards being documented. This however should not detract from the primary goal of quantifying the work required wherever possible. In brief, the KPI's refer to personal targets for managers to focus their performance (i.e. over the review period) in order to fulfill their responsibilities and to maximize their contribution to the organization.

Performance Allocation

Performance against the key roles (see below) accounts for 70% of the total performance score :

1.0	**Managing Operations**	**30% of total performance score**
2.0	**Managing Finance**	**15% of total performance score**
3.0	**Managing People**	**15% of total performance score**

CCU STANDING RULES

4.0	**Managing Information**	**10% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

Key Performance Indicators (KPI's)

1.0	**Managing Operations**	**30% of total performance score**

		Annual Rating
1.1	Plan, organize, staff, direct and coordinate all accounting activities of the Authority.	
1.1.1	Establishes and maintains accounting policies and practices and conduct of work consistent with Board and the Authority.	
1.1.2	Conducts an internal audit of the Authority's accounting and fiscal activities to ensure compliance with established policies and procedures and regulatory guidelines.	
1.1.3	Provides for the proper billing of rate payers for electrical services, the proper maintenance of accounts receivable and the collection of all revenue due in protection of the Authority's credit standing and other interests.	
1.1.4	Provide an audit of the payment of vendors and contractor's invoices for services and supplies rendered in a manner designed to protect the Authority's credit standings and ensure the steady flow of necessary supplies and materials.	
1.1.5		

		Annual Rating
1.2	Establish and apply proper and timely accounting procedures for services and supplies used by the Authority in the provision of electrical services.	
1.2.1	Ensures accounting of charges and credits to proper object codes in accordance with established Federal Energy Regulatory Commission (FERC) Uniform Chart of Accounts.	

CCU STANDING RULES

1.2.2		
1.2.3		
1.2.4		
1.2.5		

Annual Rating

1.3	Monitor the financial interests of the Authority.

1.3.1	Provides recommendations to the General Manager for the investment of funds and the sale of bonds.	
1.3.2	Purpose rule changes required as necessary for the implementation of policy for financial operations.	
1.3.3	Provides reports on financial operations as required by the CCU.	
1.3.4	Execute effective planning, asset management and monitor the overall financial health of the Authority.	
1.3.5		

Annual Rating

1.4	Coordinates the assembly and presentation of the Authority's annual budget for the review by the General Manager and the CCU.

1.4.1	Review budget performance on a monthly basis to determine shortfall or surpluses	
1.4.2	Review budget performance with division managers to ensure fiscal accountability and responsibility.	
1.4.3		
1.4.4		
1.4.5		

Annual Rating

1.5	Serves as financial advisor to the General Manager and the CCU.

1.5.1	Participates in decision-making and strategic planning sessions with other GPA management officials.	
1.5.2	Makes suggestions and recommendations that effectively contribute to decision and/or policy making process.	
1.5.3	Provide reports on financial operations as required by the CCU.	

1.5.4		
1.5.5		

2.0	**Managing Finance**	**15% of total performance score**

Annual Rating

2.1	Develops, reports, and analyzes the Authority's cash flow trends, cash forecasts, revenue projections, expenditure patterns and estimates, and other similar accounting data.	
2.2	Maintains the Authority's general ledger and subsidiary ledgers.	
2.3	Prepares monthly and annual financial statements and reports and interprets the results for guidance for the General Manager and Board.	
2.4	Implement budgeted CIP projects.	
2.5		

3.0	**Managing People**	**15% of total performance score**

Annual Rating

3.1	Conducts supervisory reviews and performance evaluations for CFO staff.	
3.2		
3.3		
3.4		
3.5		

4.0	**Managing Information**	**10% of total performance score**

Annual Rating

CCU STANDING RULES

4.1	Maintain and update the Authority's rate setting model to ensure proper allocation of costs and the appropriate setting of rates to ensure cost recovery.	
4.2	Provide written annual reports of the affairs of GPA no later than four (4) months after the financial audit is complete for the fiscal year.	
4.3	Performs other duties as required.	
4.4		
4.5		

CCU STANDING RULES

SECTION B	PERSONAL COMPETENCIES

Overview

The personal competencies listed below are those used by effective managers to make decisions and achieve results and can be observed through the key behaviors outlined. The competencies work together to achieve results. One competency may be dominant in a particular situation or event, but it will usually be supported by other competencies. As the event unfolds, another competency will become dominant. Some competencies are about independent action, others are about working closely with colleagues, some call for analytical and logical thinking, whilst others are about creativity.

It is important to remember that the behaviors and competencies outlined are not valuable on their own. They are valuable only insofar as they help managers achieve results. Effective managers use their judgment to apply the right competency at the right time although they tend not to be strong in every competency but display a variety of different profiles with regards strengths, styles and preferences. Across management teams it is valuable to understand the profiles of individual team members and exploit those skills accordingly.

Performance Allocation

Performance against the key personal competencies (see below) accounts for 30% of the total performance score :

1.0	**Strategic Perspective**	**5% of total performance score**
2.0	**Building Teams**	**5% of total performance score**
3.0	**Communication**	**5% of total performance score**
4.0	**Information Search**	**5% of total performance score**
5.0	**Achievement Focus**	**5% of total performance score**
6.0	**Judgment**	**5% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

			Annual Rating
1.0	**Strategic Perspective**	**5% of total performance score**	

This competence concerns the manager being able to place immediate goals and activities in a strategic context. This involves seeing how one area of activity is affected by, and affects, other parts of the organization or its environment. The competence involves taking a longer term perspective, considering what will happen several years hence, and establishing a vision of the future. An important part of the competence lies in managers setting out their vision of the future to others in such a way as to gain acceptance and support.

Behavior Indicators - An Effective Manager :

- works towards a vision of the future based on a strategic perspective
- acts with good understanding of how different parts, needs or functions of the organization and its environment fit together
- clearly relates goals and actions to the strategic aims of the business
- takes opportunities when they arise to achieve longer term aims or needs
- demonstrates competence in goal setting, identifying possible courses of action, implementing and monitoring them
- can disseminate strategic goals into KPI's for subordinate staff
- has highly developed skills in analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors
- demonstrates foresight (predicting / forecasting)

Annual Rating

2.0	**Building Teams**	**5% of total performance score**	

This competence concerns working effectively with others at the same level or more junior level with the organization. The manager may use the key behavior in the context of a loose team or a coalition of peers from other parts of the organization and/or in the context of an immediate group of direct reports. The first two behaviors are about encouraging co-operative working. Depending on the circumstances, this can be achieved either formally or informally and the team may be well defined and established or a loose group of managers who do not necessarily see themselves as a "team". The third behavior is an aspect of empowerment, where the manager involves others in the process of making difficult decisions, and takes time to involve others in order to explore the problem and to contribute solutions. The final behavior is about evaluating the capabilities of the people who report to the manager.

Behavior Indicators - An Effective Manager :

- keeps others informed about plans and progress
- builds a desire to work together and builds co-operation within a team
- builds ownership of controversial decisions by involving others in the decision making process
- evaluates people's capability to do the job and takes action
- is very capable of balancing self and team interests to meet collective goals
- contributes positively by sharing information and listening and accepting others' points of view
- respects the thoughts and opinions of other team members
- positively influences the way the team works together
- facilitates and influences positive outcomes that focus on organizational goals
- recognizes conflicts that arise within the team and acts to bring these out into the open

Annual Rating

3.0	**Communication**	**5% of total performance score**	

This competence concerns communicating clearly with others. It may be used in a wide range of circumstances, from formal presentations to day-to-day meetings. A feature of managers with this competence is that they carefully consider what message they wish to communicate and then decide how best to do so. This may involve thorough planning of a presentation, the use of different media to reinforce a message, or even the establishment of systems to ensure good communication within the department or organization. Effective managers use this competence to achieve results. They communicate to inform, instruct, persuade and encourage others to communicate with them. Managers who are particularly competent in this area exhibit conviction and belief in what they have to say, which is closely linked to the self-confidence competency.

Behavior Indicators - An Effective Manager :

- conveys difficult ideas and problems in a way that aids understanding
- recognizes and responds to the needs and feelings of others
- demonstrates excellent verbal and written communication skills
- is very confident and competent in describing situations and actions
- effectively conveys and receives ideas, information and directions
- receives, interprets, understands and responds very well to verbal messages and other cues
- is assertive while being open minded and adaptable to difference of opinions
- has the ability to be very concise and clear when communicating
- confronts difficult issues openly

Annual Rating

4.0	**Information Search**	**5% of total performance score**	

This competence concerns gathering information to inform decision making. Effective managers seek facts and informed opinion in order to understand new or complex situations. Sometimes the manager will remain open-minded and suspend judgment until all the relevant facts are known. In other cases, the manager reaches a conclusion on the basis of an insight or limited personal knowledge, and then seeks more factual data to confirm or refute this conclusion.

Behavior Indicators - An Effective Manager :

- pushes for concrete information in an ambiguous situation
- seeks information from multiple sources to clarify a situation
- checks validity of own thinking with others
- excellent at gathering and assessing information to determine the optimum way to perform
- is very competent with personal planning and organizational skills
- has highly developed skills at analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors

Annual Rating

5.0	**Achievement Focus**	**5% of total performance score**	

Managers with this competence are geared towards achieving results and they will set ambitious goals and objectives for themselves and others. They will also deal with problems as they arise, and take advantage of any emerging opportunities. Recognizing and evaluating the risks that may lie ahead, and then taking firm action, is an aspect of this competence.

Behavior Indicators - An Effective Manager :

- sets high quality goals that are demanding of self and others
- sets key performance indicators and priorities in uncertain and complex situations
- tackles problems or takes advantage of opportunities as they arise
- calculates risks and takes decisive action
- focuses personal attention on specific details that are critical to the success of a key event
- is an energetic self-starter, highly motivated and results driven
- generates enthusiasm and energy by maintaining a positive attitude
- expresses confidence in the success of plans or initiatives (this includes showing commitment to a course of action)
- takes personal responsibility for making things happen
- is persistent in pursuing goals despite obstacles and setbacks
- is very competent with personal planning and organizational skills
- is very capable at gathering and assessing information to determine the optimum way to perform
- uses time and resources very effectively

Annual Rating

6.0	**Judgment**	**5% of total performance score**	

This competence concerns using a range of skills to evaluate situations and people and to develop plans and approaches for actions. Effective managers use analytical and logical approaches to understand people and events and to establish priorities and connections. They also use creative and intuitive approaches to assessing situations and problems and to producing solutions. Effective managers may demonstrate different profiles within this competence, some being more creative and intuitive or they may be strong in all aspects.

Behavior Indicators - An Effective Manager :

- identifies the most important issues in a complex situation
- identifies implications, consequences or casual relationships in a situation
- uses a range of ideas to explain the actions, needs and motives of others
- focuses on facts, problems and solutions when handling an emotional situation
- approaches the decision making process with a positive attitude and views the situation as an opportunity / challenge
- can explain decision(s) to those involved and affected and will follow up to ensure implementation

- uses instinct and intuition to assess situations and people
- identifies new patterns and interprets events in new ways
- has an excellent understanding of processes and quality improvement
- can prioritize problems and deal with them one at a time

SECTION C	PERFORMANCE COMMENTS

Note : In Sections A & B all performance ratings of 1 or 5 must be individually substantiated with comments. This section can also be used for general comments concerning the employee's performance.

Section

SECTION D	DEVELOPMENTAL RECOMMENDATIONS

Use this section to record training and development goals over the next review period

SECTION E	PERSONAL DEVELOPMENT

Overview

Personal development focuses on initiatives taken by the employee or with the Authority's support that demonstrates a positive and proactive approach to personal growth and development. The intent here is to both recognize and reward employees for relevant achievements in excess of the minimum educational requirements of the position e.g. this may be in the form of a higher educational qualification(s), professional qualification(s), certification(s), license(s) etc.

Performance Allocation

Having achieved higher educational qualification(s), professional qualification(s), certification(s), license(s) etc (in excess of the minimum educational requirements of the position) the financial benefits (see table example below) will take the form of additional sub-steps being awarded in excess of those received from this appraisal process.

Please note that where the Authority's compensation model is being adjusted to a higher market percentile(s) the additional sub-steps awarded in this section will be applied with each adjustment and will continue until such time the Authority has reached its targeted position in the market.

Number of additional sub-steps awarded	**EXAMPLE**
3	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take in excess of two (2) years to obtain**
2	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take one (1) to two (2) years to obtain**
1	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take two (2) to twelve (12) months to obtain**

Notes :

The awarding of sub-step(s) following the attainment of multiple achievements or individual achievements taking less than two (2) months to obtain or any decision to include a particular achievement will be at the discretion of the General Manager.

All achievements must be current and valid (where required) for the additional sub-step(s) to be awarded.

Where progression towards a higher qualification sees an employee firstly achieving an interim qualification e.g. Engineer In Training (EIT) and then goes on to pass the Professional Engineer (PE) qualification the employee will be awarded the appropriate sub-steps for achieving the EIT qualification and then the balance of the sub-steps for achieving the PE.

Rating

Human Resources will initially assess (and score in the space provided) the proposed number of sub-steps awarded for higher educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Endorsement of this score (or otherwise) will be made by the General Manager (subject to discretionary and budget constraints) in reviewing the results of this form.

Personal Achievements

Please indicate below all relevant educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Please note that these will be subject to verification if no record of their achievement is included in the employee's personal file held with Human Resources.

	Personal Achievements	**Authorizing Institution**	**Pass Grade (where provided)**
1.0			
2.0			
3.0			
4.0			
5.0			
6.0			
7.0			

CCU STANDING RULES

8.0			
9.0			
10.0			

Proposed Increase (number of sub-steps)

(CCU to Complete)

SECTION F	**CONFIRMATION / SIGNATURES**

Conclusion of Evaluation

To the Employee : I have reviewed this performance evaluation on the date indicated below and have had the opportunity to discuss it with my supervisor. My signature does not necessarily mean that I agree with the rating.

Employee :Name : _____ *Signature :* _____ *Date :* _____

CCU

*CCU:*_____ *Date:*_____
(authorization) CCU Chairperson

Comments :

Employee : (amendments sighted)Signature : _____ *Date :* _____

11.1.1.3 Legal Counsel

GUAM POWER AUTHORITY

WORK PLANNING AND PERFORMANCE EVALUATION FORM

MANAGERS

NAME OF EMPLOYEE	
POSITION TITLE	Staff Attorney
DIVISION	Board
DEPARTMENT	Executive
EVALUATION PERIOD	

NAME OF DIRECT SUPERVISOR	CCU
POSITION TITLE	CCU

CCU STANDING RULES

DIVISION	
DEPARTMENT	
EVALUATION PERIOD	

INTRODUCTION

Whilst this form provides a structured framework for documenting and assessing work performance its success as a management / supervisory tool is to facilitate an open and honest discussion on performance. Whilst ongoing performance feedback, particularly against the key performance indicators (KPI's) outlined in Section A should be occurring on a regular basis (throughout the review period) the benefits of positive and constructive feedback are well documented, and with this in mind, it is important to ensure that the agreed ratings are an accurate reflection of the employees' performance over the review period. Inaccurate assessments are counter-productive (for both the company and the employee) as both the link to training and development and compensation becomes distorted and the implications far reaching, not only internally but externally in terms of the company's ability to consistently meet the expectations of customers.

Rating Scale

5	**Significantly Exceeds Expectations / Outstanding**
	Performance significantly exceeds expectations in all essential areas of responsibility. An outstanding result qualified by an exceptional or unique contribution in support of the section, department or division or the successful completion of a major goal or project. This rating is achievable by any employee although given infrequently. Note : a rating of 5 requires qualification.
4	**Exceeds Expectations / Above Satisfactory**
	Above standard performance with results exceeding expectations in all essential areas of responsibility.

3	**Meets Expectations / Satisfactory**
	Performance consistently meets expectations in all essential areas of responsibility.
2	**Inconsistently Meets Expectations / Marginal**
	Performance inconsistently meets expectations in one or more essential areas of responsibility. A less than satisfactory result requiring improvement(s) to come up to standard.
1	**Fails To Meet Expectations / Unsatisfactory**
	Performance consistently below expectations. Significant improvement is needed in one or more essential areas. Results may also reflect / demonstrate counter-productive behaviors that have negative outcomes or consequences. A plan to correct performance, including timelines, must be developed and monitored to improve and measure progress. Note : a rating of 1 requires qualification.

SECTION A	**KEY PERFORMANCE INDICATORS (KPI's)**

Overview

Research has shown that the functions managers undertake can be grouped into four key generic roles : Managing Operations, Managing Finance, Managing People and Managing Information. Within each role a small number of agreed KPI's should be identified (where possible) as a basis for assessing and improving the performance of managers on an annual basis. Please note that the identification of KPI's may be difficult with some positions resulting in broader job statements or job standards being documented. This however should not detract from the primary goal of quantifying the work required wherever possible. In brief, the KPI's refer to personal targets for managers to focus their performance (i.e. over the review period) in order to fulfill their responsibilities and to maximize their contribution to the organization.

Performance Allocation

Performance against the key roles (see below) accounts for 70% of the total performance score :

1.0	**Managing Operations**	**30% of total performance score**
2.0	**Managing Finance**	**15% of total performance score**

3.0	**Managing People**	**15% of total performance score**
4.0	**Managing Information**	**10% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

Key Performance Indicators (KPI's)

1.0	**Managing Operations**	**30% of total performance score**

		Annual Rating
1.1	Serve as legal advisor to the CCU, when acting as the governing board for GPA, the GPA General Manager or designee.	
1.1.1	Assists the CCU and General Manager in determining the policies, procedures, rules, and regulations of GPA.	
1.1.2	Prepare and track documents for filing for the CCU, when acting as the governing board for GPA.	
1.1.3		
1.1.4		
1.1.5		

		Annual Rating
1.2	Confers with the CCU and GPA personnel on varies administrative legal matters concerning GPA.	
1.2.1	Review for legal soundness and accuracy, program materials originating from different GPA divisions.	
1.2.2	Review for legal soundness, procurement procedures, contracts, and land condemnation processes and procedures for GPA.	
1.2.3		
1.2.4		

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1.2.5		

Annual Rating

1.3	Represent GPA in administrative hearings.	
1.3.1	Represent GPA in connection with legal matters before the Guam Legislature, boards and other agencies of Guam.	
1.3.2	Review, draft, or present testimony to the Legislature concerning GPA.	
1.3.3		
1.3.4		
1.3.5		

Annual Rating

1.4		
1.4.1		
1.4.2		
1.4.3		
1.4.4		
1.4.5		

Annual Rating

1.5		
1.5.1		
1.5.2		
1.5.3		
1.5.4		
1.5.5		

2.0	**Managing Finance**	**15% of total performance score**

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		Annual Rating
2.1	Collect past due amounts owed to GPA.	
2.2		
2.3		
2.4		
2.5		

3.0	**Managing People**	**15% of total performance score**

		Annual Rating
3.1	Review, draft and participate in the disposition of adverse action cases and other personnel matters for GPA.	
3.2	Conduct research and provide legal advice on personnel-related matters for GPA.	
3.3		
3.4		
3.5		

4.0	**Managing Information**	**10% of total performance score**

		Annual Rating
4.1	Assists GPA in all environmental matters concerning the interpretation and implementation of environmental regulations affecting GPA.	
4.2		
4.3		
4.4		
4.5		

CCU STANDING RULES

CCU STANDING RULES

SECTION B	PERSONAL COMPETENCIES

Overview

The personal competencies listed below are those used by effective managers to make decisions and achieve results and can be observed through the key behaviors outlined. The competencies work together to achieve results. One competency may be dominant in a particular situation or event, but it will usually be supported by other competencies. As the event unfolds, another competency will become dominant. Some competencies are about independent action, others are about working closely with colleagues, some call for analytical and logical thinking, whilst others are about creativity.

It is important to remember that the behaviors and competencies outlined are not valuable on their own. They are valuable only insofar as they help managers achieve results. Effective managers use their judgment to apply the right competency at the right time although they tend not to be strong in every competency but display a variety of different profiles with regards strengths, styles and preferences. Across management teams it is valuable to understand the profiles of individual team members and exploit those skills accordingly.

Performance Allocation

Performance against the key personal competencies (see below) accounts for 30% of the total performance score :

1.0	**Strategic Perspective**	**5% of total performance score**
2.0	**Building Teams**	**5% of total performance score**
3.0	**Communication**	**5% of total performance score**
4.0	**Information Search**	**5% of total performance score**
5.0	**Achievement Focus**	**5% of total performance score**
6.0	**Judgment**	**5% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

			Annual Rating
1.0	**Strategic Perspective**	**5% of total performance score**	

This competence concerns the manager being able to place immediate goals and activities in a strategic context. This involves seeing how one area of activity is affected by, and affects, other parts of the organization or its environment. The competence involves taking a longer term perspective, considering what will happen several years hence, and establishing a vision of the future. An important part of the competence lies in managers setting out their vision of the future to others in such a way as to gain acceptance and support.

Behavior Indicators - An Effective Manager :

- works towards a vision of the future based on a strategic perspective
- acts with good understanding of how different parts, needs or functions of the organization and its environment fit together
- clearly relates goals and actions to the strategic aims of the business
- takes opportunities when they arise to achieve longer term aims or needs
- demonstrates competence in goal setting, identifying possible courses of action, implementing and monitoring them
- can disseminate strategic goals into KPI's for subordinate staff
- has highly developed skills in analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors
- demonstrates foresight (predicting / forecasting)

Annual Rating

2.0	**Building Teams**	**5% of total performance score**	

This competence concerns working effectively with others at the same level or more junior level with the organization. The manager may use the key behavior in the context of a loose team or a coalition of peers from other parts of the organization and/or in the context of an immediate group of direct reports. The first two behaviors are about encouraging co-operative working. Depending on the circumstances, this can be achieved either formally or informally and the team may be well defined and established or a loose group of managers who do not necessarily see themselves as a "team". The third behavior is an aspect of empowerment, where the manager involves others in the process of making difficult decisions, and takes time to involve others in order to explore the problem and to contribute solutions. The final behavior is about evaluating the capabilities of the people who report to the manager.

Behavior Indicators - An Effective Manager :

- keeps others informed about plans and progress
- builds a desire to work together and builds co-operation within a team
- builds ownership of controversial decisions by involving others in the decision making process
- evaluates people's capability to do the job and takes action
- is very capable of balancing self and team interests to meet collective goals
- contributes positively by sharing information and listening and accepting others' points of view
- respects the thoughts and opinions of other team members
- positively influences the way the team works together
- facilitates and influences positive outcomes that focus on organizational goals
- recognizes conflicts that arise within the team and acts to bring these out into the open

			Annual Rating
3.0	**Communication**	**5% of total performance score**	

This competence concerns communicating clearly with others. It may be used in a wide range of circumstances, from formal presentations to day-to-day meetings. A feature of managers with this competence is that they carefully consider what message they wish to communicate and then decide how best to do so. This may involve thorough planning of a presentation, the use of different media to reinforce a message, or even the establishment of systems to ensure good communication within the department or organization. Effective managers use this competence to achieve results. They communicate to inform, instruct, persuade and encourage others to communicate with them. Managers who are particularly competent in this area exhibit conviction and belief in what they have to say, which is closely linked to the self-confidence competency.

Behavior Indicators - An Effective Manager :

- conveys difficult ideas and problems in a way that aids understanding
- recognizes and responds to the needs and feelings of others
- demonstrates excellent verbal and written communication skills
- is very confident and competent in describing situations and actions
- effectively conveys and receives ideas, information and directions
- receives, interprets, understands and responds very well to verbal messages and other cues
- is assertive while being open minded and adaptable to difference of opinions
- has the ability to be very concise and clear when communicating
- confronts difficult issues openly

			Annual Rating
4.0	**Information Search**	**5% of total performance score**	

This competence concerns gathering information to inform decision making. Effective managers seek facts and informed opinion in order to understand new or complex situations. Sometimes the manager will remain open-minded and suspend judgment until all the relevant facts are known. In other cases, the manager reaches a conclusion on the basis of an insight or limited personal knowledge, and then seeks more factual data to confirm or refute this conclusion.

Behavior Indicators - An Effective Manager :

- pushes for concrete information in an ambiguous situation
- seeks information from multiple sources to clarify a situation
- checks validity of own thinking with others
- excellent at gathering and assessing information to determine the optimum way to perform
- is very competent with personal planning and organizational skills
- has highly developed skills at analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors

			Annual Rating
5.0	**Achievement Focus**	**5% of total performance score**	

Managers with this competence are geared towards achieving results and they will set ambitious goals and objectives for themselves and others. They will also deal with problems as they arise, and take advantage of any emerging opportunities. Recognizing and evaluating the risks that may lie ahead, and then taking firm action, is an aspect of this competence.

Behavior Indicators - An Effective Manager :

- sets high quality goals that are demanding of self and others
- sets key performance indicators and priorities in uncertain and complex situations
- tackles problems or takes advantage of opportunities as they arise
- calculates risks and takes decisive action
- focuses personal attention on specific details that are critical to the success of a key event
- is an energetic self-starter, highly motivated and results driven
- generates enthusiasm and energy by maintaining a positive attitude
- expresses confidence in the success of plans or initiatives (this includes showing commitment to a course of action)
- takes personal responsibility for making things happen
- is persistent in pursuing goals despite obstacles and setbacks
- is very competent with personal planning and organizational skills
- is very capable at gathering and assessing information to determine the optimum way to perform
- uses time and resources very effectively

			Annual Rating
6.0	**Judgment**	**5% of total performance score**	

This competence concerns using a range of skills to evaluate situations and people and to develop plans and approaches for actions. Effective managers use analytical and logical approaches to understand people and events and to establish priorities and connections. They also use creative and intuitive approaches to assessing situations and problems and to producing solutions. Effective managers may demonstrate different profiles within this competence, some being more creative and intuitive or they may be strong in all aspects.

Behavior Indicators - An Effective Manager :

- identifies the most important issues in a complex situation
- identifies implications, consequences or casual relationships in a situation
- uses a range of ideas to explain the actions, needs and motives of others
- focuses on facts, problems and solutions when handling an emotional situation
- approaches the decision making process with a positive attitude and views the situation as an opportunity / challenge
- can explain decision(s) to those involved and affected and will follow up to ensure implementation

- uses instinct and intuition to assess situations and people
- identifies new patterns and interprets events in new ways
- has an excellent understanding of processes and quality improvement
- can prioritize problems and deal with them one at a time

SECTION C	PERFORMANCE COMMENTS

Note : In Sections A & B all performance ratings of 1 or 5 must be individually substantiated with comments. This section can also be used for general comments concerning the employee's performance.

Section

SECTION D	DEVELOPMENTAL RECOMMENDATIONS

Use this section to record training and development goals over the next review period

SECTION E	PERSONAL DEVELOPMENT

Overview

Personal development focuses on initiatives taken by the employee or with the Authority's support that demonstrates a positive and proactive approach to personal growth and development. The intent here is to both recognize and reward employees for relevant achievements in excess of the minimum educational requirements of the position e.g. this may be in the form of a higher educational qualification(s), professional qualification(s), certification(s), license(s) etc.

Performance Allocation

Having achieved higher educational qualification(s), professional qualification(s), certification(s), license(s) etc (in excess of the minimum educational requirements of the position) the financial benefits (see table example below) will take the form of additional sub-steps being awarded in excess of those received from this appraisal process.

Please note that where the Authority's compensation model is being adjusted to a higher market percentile(s) the additional sub-steps awarded in this section will be applied with each adjustment and will continue until such time the Authority has reached its targeted position in the market.

Number of additional sub-steps awarded	**EXAMPLE**
3	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take in excess of two (2) years to obtain**
2	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take one (1) to two (2) years to obtain**
1	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take two (2) to twelve (12) months to obtain**

Notes :

The awarding of sub-step(s) following the attainment of multiple achievements or individual achievements taking less than two (2) months to obtain or any decision to include a particular achievement will be at the discretion of the General Manager.

All achievements must be current and valid (where required) for the additional sub-step(s) to be awarded.

Where progression towards a higher qualification sees an employee firstly achieving an interim qualification e.g. Engineer In Training (EIT) and then goes on to pass the Professional Engineer (PE) qualification the employee will be awarded the appropriate sub-steps for achieving the EIT qualification and then the balance of the sub-steps for achieving the PE.

Rating

Human Resources will initially assess (and score in the space provided) the proposed number of sub-steps awarded for higher educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Endorsement of this score (or otherwise) will be made by the General Manager (subject to discretionary and budget constraints) in reviewing the results of this form.

Personal Achievements

Please indicate below all relevant educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Please note that these will be subject to verification if no record of their achievement is included in the employee's personal file held with Human Resources.

	Personal Achievements	**Authorizing Institution**	**Pass Grade (where provided)**
1.0			
2.0			
3.0			
4.0			
5.0			
6.0			
7.0			

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8.0			
9.0			
10.0			

Proposed Increase (number of sub-steps)

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(CCU to Complete)

SECTION F	CONFIRMATION / SIGNATURES

Conclusion of Evaluation

To the Employee : I have reviewed this performance evaluation on the date indicated below and have had the opportunity to discuss it with my supervisor. My signature does not necessarily mean that I agree with the rating.

Employee :Name : _____ *Signature :* _____ *Date :* _____

CCU

*CCU:*_____ *Date:*_____
(authorization) CCU Chairperson

Comments :

Employee : (amendments sighted)Signature : _____ *Date :* _____

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11.1.2 GWA Performance Evaluation Forms

11.1.2.1 General Manager

GUAM WATERWORKS AUTHORITY

GUAM WATERWORKS AUTHORITY

WORK PLANNING AND PERFORMANCE EVALUATION FORM

EXECUTIVE MANAGEMENT

NAME OF EMPLOYEE	
POSITION TITLE	General Manager
DIVISION	GM's Office
DEPARTMENT	
EVALUATION PERIOD	

NAME OF DIRECT SUPERVISOR	Joseph T. Duenas
POSITION TITLE	Chairman

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DIVISION	Consolidated Commission on Utilities
DEPARTMENT	
EVALUATION PERIOD	

INTRODUCTION

Whilst this form provides a structured framework for documenting and assessing work performance its success as a management / supervisory tool is to facilitate an open and honest discussion on performance. Whilst ongoing performance feedback, particularly against the key performance indicators (KPI's) outlined in Section A should be occurring on a regular basis (throughout the review period) the benefits of positive and constructive feedback are well documented, and with this in mind, it is important to ensure that the agreed ratings are an accurate reflection of the employees' performance over the review period. Inaccurate assessments are counter-productive (for both the company and the employee) as both the link to training and development and compensation becomes distorted and the implications far reaching, not only internally but externally in terms of the company's ability to consistently meet the expectations of customers.

Rating Scale

5	**Significantly Exceeds Expectations / Outstanding**
	Performance significantly exceeds expectations in all essential areas of responsibility. An outstanding result qualified by an exceptional or unique contribution in support of the section, department or division or the successful completion of a major goal or project. This rating is achievable by any employee although given infrequently. Note : a rating of 5 requires qualification.
4	**Exceeds Expectations / Above Satisfactory**
	Above standard performance with results exceeding expectations in all essential areas of responsibility.
3	**Meets Expectations / Satisfactory**
	Performance consistently meets expectations in all essential areas of responsibility.

2	**Inconsistently Meets Expectations / Marginal** Performance inconsistently meets expectations in one or more essential areas of responsibility. A less than satisfactory result requiring improvement(s) to come up to standard.
1	**Fails To Meet Expectations / Unsatisfactory** Performance consistently below expectations. Significant improvement is needed in one or more essential areas. Results may also reflect / demonstrate counter-productive behaviors that have negative outcomes or consequences. A plan to correct performance, including timelines, must be developed and monitored to improve and measure progress. Note : a rating of 1 requires qualification.

SECTION A	**KEY PERFORMANCE INDICATORS (KPI's)**

Overview

Research has shown that the functions managers undertake can be grouped into four key generic roles : Managing Operations, Managing Finance, Managing People and Managing Information. Within each role a small number of agreed KPI's should be identified (where possible) as a basis for assessing and improving the performance of managers on an annual basis. Please note that the identification of KPI's may be difficult with some positions resulting in broader job statements or job standards being documented. This however should not detract from the primary goal of quantifying the work required wherever possible. Please note that the review period may eventually be reduced to six-monthly or even quarterly. In brief, the KPI's refer to personal targets for managers to focus their performance (i.e. over the review period) in order to fulfill their responsibilities and to maximize their contribution to the organization.

Performance Allocation

Performance against the key roles (see below) accounts for 70% of the total performance score :

1.0	**Managing Operations**	**30% of total performance score**
2.0	**Managing Finance**	**15% of total performance score**

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3.0	**Managing People**	**15% of total performance score**
4.0	**Managing Information**	**10% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

Key Performance Indicators (KPI's)

1.0	**Managing Operations**	**30% of total performance score**

		Annual Rating
1.1	Reliability of Water and Wastewater Systems	
1.1.1	Reduction in frequency and duration of water service outages	
1.1.2	Improvement in water pump station reliability	
1.1.3	Reduction in frequency and duration of SSOs	
1.1.4	Improvement in wastewater pump station reliability	
1.1.5	Improve/maintain WTP/Wells reliability	
1.1.6	Improve/maintain WWTP reliability	
1.1.7	Maintain minimum/maximum service pressure levels (water)	

		Annual Rating
1.2	Compliance of Water and Wastewater Systems	
1.2.1	Maintain compliance with drinking water quality standards	
1.2.2	Maintain compliance with wastewater effluent permit requirements	
1.2.3	Maintain internal QA/QC process	
1.2.4	Improve customer compliance programs (cross-connection, source control)	
1.2.5	Meet Court Order and Consent Decree requirements	

		Annual Rating
1.3	Systems Safety, Security, and Resiliency	

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1.3.1	Improve systems physical security	
1.3.2	Improve systems cybersecurity	
1.3.3	Ensure safe work environment	
1.3.4	Maintain Emergency Response Plan and readiness	
1.3.5	Maintain Continuity of Operations Plan and readiness	
1.3.6	Improve water resources/aquifer protection	

Annual Rating

1.4	Capital Improvement Program (CIP) / System Renewals

1.4.1	Update/maintain Water Resources Master Plan and 5-Year CIP	
1.4.2	Achieve target CIP spending plan / annual renewals	
1.4.3	Achieve water system expansion goals	
1.4.4	Achieve wastewater system expansion goals	
1.4.5	Achieve NRW / water loss reduction goals	

Annual Rating

1.5	Long Term Strategic Objectives

1.5.1	Advance GWA/DoD System Integration	
1.5.2	Improve/maintain investment-grade credit ratings	
1.5.3	Balance long-term debt financing and revenue financing	
1.5.4	Improve/maintain affordability of service	
1.5.5	Improve/maintain liquidity and reserves	
1.5.6	Achieve personnel compensation migration (percentile) objectives	

2.0	**Managing Finance**	**15% of total performance score**

Annual Rating

2.1	Maintain financial capacity to meet operational needs	

2.2	Manage operational expenses to meet budgeted levels	
2.3	Meet/exceed minimum debt service coverage ratio requirements/targets	
2.4	Maintain all cash reserve fund requirements/targets	
2.5	Identify cost efficiencies / eliminate waste	

3.0	**Managing People**	**15% of total performance score**

Quarterly Rating

3.1	Improve recruitment and retention of qualified staff	
3.2	Improve/maintain succession planning for management/supervisory personnel	
3.3	Improve employee satisfaction and pride	
3.4	Enhance employee training and development programs	
3.5		

4.0	**Managing Information**	**10% of total performance score**

Annual Rating

2.1	Meet publication deadlines for all required public report filings (Annual Report, EPA Annual WQR, Citizen Centric Report, etc.)	
2.2	Improve accuracy of public / media communications	
2.3	Broaden public outreach for GWA CIP and System Improvements	
2.4	Maintain/enhance management reporting to CCU	
2.5	Meet all compliance reporting requirements (Court Order, Consent Decree)	

CCU STANDING RULES

SECTION B	PERSONAL COMPETENCIES

Overview

The personal competencies listed below are those used by effective managers to make decisions and achieve results and can be observed through the key behaviors outlined. The competencies work together to achieve results. One competency may be dominant in a particular situation or event, but it will usually be supported by other competencies. As the event unfolds, another competency will become dominant. Some competencies are about independent action, others are about working closely with colleagues, some call for analytical and logical thinking, whilst others are about creativity.

It is important to remember that the behaviors and competencies outlined are not valuable on their own. They are valuable only insofar as they help managers achieve results. Effective managers use their judgment to apply the right competency at the right time although they tend not to be strong in every competency but display a variety of different profiles with regards strengths, styles and preferences. Across management teams it is valuable to understand the profiles of individual team members and exploit those skills accordingly.

Performance Allocation

Performance against the key personal competencies (see below) accounts for 30% of the total performance score :

1.0	**Strategic Perspective**	**5% of total performance score**
2.0	**Building Teams**	**5% of total performance score**
3.0	**Communication**	**5% of total performance score**
4.0	**Information Search**	**5% of total performance score**
5.0	**Achievement Focus**	**5% of total performance score**
6.0	**Judgment**	**5% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

CCU STANDING RULES

Annual **Quarterly**

Rating

1.0	**Strategic Perspective**	**5% of total performance score**	

This competence concerns the manager being able to place immediate goals and activities in a strategic context. This involves seeing how one area of activity is affected by, and affects, other parts of the organization or its environment. The competence involves taking a longer term perspective, considering what will happen several years hence, and establishing a vision of the future. An important part of the competence lies in managers setting out their vision of the future to others in such a way as to gain acceptance and support.

Behavior Indicators - An Effective Manager :

- works towards a vision of the future based on a strategic perspective
- acts with good understanding of how different parts, needs or functions of the organization and its environment fit together
- clearly relates goals and actions to the strategic aims of the business
- takes opportunities when they arise to achieve longer term aims or needs
- demonstrates competence in goal setting, identifying possible courses of action, implementing and monitoring them
- can disseminate strategic goals into KPI's for subordinate staff
- has highly developed skills in analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors
- demonstrates foresight (predicting / forecasting)

Annual Rating

2.0	**Building Teams**	**5% of total performance score**	

This competence concerns working effectively with others at the same level or more junior level with the organization. The manager may use the key behavior in the context of a loose team or a coalition of peers from other parts of the organization and/or in the context of an immediate group of direct reports. The first two behaviors are about encouraging co-operative working. Depending on the circumstances, this can be achieved either formally or informally and the team may be well defined and established or a loose group of managers who do not necessarily see themselves as a "team". The third behavior is an aspect of empowerment, where the manager involves others in the process of making difficult decisions, and takes time to involve others in order to explore the problem and to contribute solutions. The final behavior is about evaluating the capabilities of the people who report to the manager.

Behavior Indicators - An Effective Manager :

- keeps others informed about plans and progress
- builds a desire to work together and builds co-operation within a team
- builds ownership of controversial decisions by involving others in the decision making process
- evaluates people's capability to do the job and takes action

- is very capable of balancing self and team interests to meet collective goals
- contributes positively by sharing information and listening and accepting others' points of view
- respects the thoughts and opinions of other team members
- positively influences the way the team works together
- facilitates and influences positive outcomes that focus on organizational goals
- recognizes conflicts that arise within the team and acts to bring these out into the open

Annual Rating

3.0	**Communication**	**5% of total performance score**	

This competence concerns communicating clearly with others. It may be used in a wide range of circumstances, from formal presentations to day-to-day meetings. A feature of managers with this competence is that they carefully consider what message they wish to communicate and then decide how best to do so. This may involve thorough planning of a presentation, the use of different media to reinforce a message, or even the establishment of systems to ensure good communication within the department or organization. Effective managers use this competence to achieve results. They communicate to inform, instruct, persuade and encourage others to communicate with them. Managers who are particularly competent in this area exhibit conviction and belief in what they have to say, which is closely linked to the self-confidence competency.

Behavior Indicators - An Effective Manager :

- conveys difficult ideas and problems in a way that aids understanding
- recognizes and responds to the needs and feelings of others
- demonstrates excellent verbal and written communication skills
- is very confident and competent in describing situations and actions
- effectively conveys and receives ideas, information and directions
- receives, interprets, understands and responds very well to verbal messages and other cues
- is assertive while being open minded and adaptable to difference of opinions
- has the ability to be very concise and clear when communicating
- confronts difficult issues openly

Annual Rating

4.0	**Information Search**	**5% of total performance score**	

This competence concerns gathering information to inform decision making. Effective managers seek facts and informed opinion in order to understand new or complex situations. Sometimes the manager will remain open-minded and suspend judgment until all the relevant facts are known. In other cases, the manager reaches a conclusion on the basis of an insight or limited personal knowledge, and then seeks more factual data to confirm or refute this conclusion.

Behavior Indicators - An Effective Manager :

- pushes for concrete information in an ambiguous situation
- seeks information from multiple sources to clarify a situation
- checks validity of own thinking with others
- excellent at gathering and assessing information to determine the optimum way to perform
- is very competent with personal planning and organizational skills
- has highly developed skills at analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors

Annual Rating

5.0	**Achievement Focus**	**5% of total performance score**	

Managers with this competence are geared towards achieving results and they will set ambitious goals and objectives for themselves and others. They will also deal with problems as they arise, and take advantage of any emerging opportunities. Recognizing and evaluating the risks that may lie ahead, and then taking firm action, is an aspect of this competence.

Behavior Indicators - An Effective Manager :

- sets high quality goals that are demanding of self and others
- sets key performance indicators and priorities in uncertain and complex situations
- tackles problems or takes advantage of opportunities as they arise
- calculates risks and takes decisive action
- focuses personal attention on specific details that are critical to the success of a key event
- is an energetic self-starter, highly motivated and results driven
- generates enthusiasm and energy by maintaining a positive attitude
- expresses confidence in the success of plans or initiatives (this includes showing commitment to a course of action)
- takes personal responsibility for making things happen
- is persistent in pursuing goals despite obstacles and setbacks
- is very competent with personal planning and organizational skills
- is very capable at gathering and assessing information to determine the optimum way to perform
- uses time and resources very effectively

Annual Rating

6.0	**Judgment**	**5% of total performance score**	

This competence concerns using a range of skills to evaluate situations and people and to develop plans and approaches for actions. Effective managers use analytical and logical approaches to understand people and events and to establish priorities and connections. They also use creative and intuitive approaches to assessing situations and problems and to producing solutions. Effective managers may demonstrate different profiles within this competence, some being more creative and intuitive or they may be strong in all aspects.

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Behavior Indicators - An Effective Manager :

- identifies the most important issues in a complex situation
- identifies implications, consequences or casual relationships in a situation
- uses a range of ideas to explain the actions, needs and motives of others
- focuses on facts, problems and solutions when handling an emotional situation
- approaches the decision making process with a positive attitude and views the situation as an opportunity / challenge
- can explain decision(s) to those involved and affected and will follow up to ensure implementation
- uses instinct and intuition to assess situations and people
- identifies new patterns and interprets events in new ways
- has an excellent understanding of processes and quality improvement
- can prioritize problems and deal with them one at a time

SECTION C	PERFORMANCE COMMENTS

Note : In Sections A & B all performance ratings of 1 or 5 must be individually substantiated with comments.
This section can also be used for general comments concerning the employee's performance.

Section

CCU STANDING RULES

SECTION D	DEVELOPMENTAL RECOMMENDATIONS

Use this section to record training and development goals over the next review period

SECTION E	PERSONAL DEVELOPMENT

Overview

Personal development focuses on initiatives taken by the employee or with the Authority's support that demonstrates a positive and proactive approach to personal growth and development. The intent here is to both recognize and reward employees for relevant achievements in excess of the minimum educational requirements of the position e.g. this may be in the form of a higher educational qualification(s), professional qualification(s), certification(s), license(s) etc.

Performance Allocation

Having achieved higher educational qualification(s), professional qualification(s), certification(s), license(s) etc (in excess of the minimum educational requirements of the position) the financial benefits (see table example below) will take the form of additional sub-steps being awarded in excess of those received from this appraisal process.

Please note that where the Authority's compensation model is being adjusted to a higher market percentile(s) the additional sub-steps awarded in this section will be applied with each adjustment and will continue until such time the Authority has reached its targeted position in the market.

Number of additional **EXAMPLE**

sub-steps awarded

3	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take in excess of two (2) years to obtain**
2	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take one (1) to two (2) years to obtain**
1	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take two (2) to twelve (12) months to obtain**

Notes :

The awarding of sub-step(s) following the attainment of multiple achievements or individual achievements taking less than two (2) months to obtain or any decision to include a particular achievement will be at the discretion of the General Manager.

All achievements must be current and valid (where required) for the additional sub-step(s) to be awarded.

Where progression towards a higher qualification sees an employee firstly achieving an interim qualification e.g. Engineer In Training (EIT) and then goes on to pass the Professional Engineer (PE) qualification the employee will be awarded the appropriate sub-steps for achieving the EIT qualification and then the balance of the sub-steps for achieving the PE.

Rating

Human Resources will initially assess (and score in the space provided) the proposed number of sub-steps awarded for higher educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Endorsement of this score (or otherwise) will be made by the General Manager (subject to discretionary and budget constraints) in reviewing the results of this form.

Personal Achievements

Please indicate below all relevant educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Please note that these will be subject to verification if no record of their achievement is included in the employee's personal file held with Human Resources.

	Personal Achievements	Authorizing Institution	Pass Grade (where provided)
1.0			
2.0			
3.0			
4.0			
5.0			
6.0			
7.0			
8.0			
9.0			
10.0			

Proposed Increase (number of sub-steps)

(HR to Complete)

SECTION F	CONFIRMATION / SIGNATURES

Conclusion of Evaluation

To the Employee : I have reviewed this performance evaluation on the date indicated below and have had the opportunity to discuss it with my supervisor. My signature does not necessarily mean that I agree with the rating.

Employee : *Name :* _____ *Signature :* _____ *Date :* _____

Immediate Sup : *Name :* _____ *Signature :* _____ *Date :* _____

CCU STANDING RULES

Division Head : *Name :* _____ *Signature :* _____ *Date :* _____
(where applicable)

Administration (Human Resources / GM's Office)

HR Comp & Benefits : *Name :* _____ *Signature :* _____ *Date :* _____
(increment & achievements calculated - sheet attached)

HR Administrator : *Name :* _____ *Signature :* _____ *Date :* _____

General Manager : *Name :* _____ *Signature :* _____ *Date :* _____
(authorization)

General Manager's Comments :

Employee : (amendments sighted) *Signature :* _____ *Date :* _____

HR Comp & Benefits : *Name :* _____ *Signature :* _____ *Date :* _____
(payroll amended)

11.1.2.2 CFO

GUAM WATERWORKS AUTHORITY

WORK PLANNING AND PERFORMANCE EVALUATION FORM

MANAGERS

NAME OF EMPLOYEE	
POSITION TITLE	Chief Fiscal Officer
DIVISION	Finance
DEPARTMENT	Guam Waterworks Authority
EVALUATION PERIOD	

NAME OF DIRECT SUPERVISOR	CCU
POSITION TITLE	CCU

CCU STANDING RULES

DIVISION	
DEPARTMENT	
EVALUATION PERIOD	

INTRODUCTION

Whilst this form provides a structured framework for documenting and assessing work performance its success as a management / supervisory tool is to facilitate an open and honest discussion on performance. Whilst ongoing performance feedback, particularly against the key performance indicators (KPI's) outlined in Section A should be occurring on a regular basis (throughout the review period) the benefits of positive and constructive feedback are well documented, and with this in mind, it is important to ensure that the agreed ratings are an accurate reflection of the employees' performance over the review period. Inaccurate assessments are counter-productive (for both the company and the employee) as both the link to training and development and compensation becomes distorted and the implications far reaching, not only internally but externally in terms of the company's ability to consistently meet the expectations of customers.

Rating Scale

5	**Significantly Exceeds Expectations / Outstanding**
	Performance significantly exceeds expectations in all essential areas of responsibility. An outstanding result qualified by an exceptional or unique contribution in support of the section, department or division or the successful completion of a major goal or project. This rating is achievable by any employee although given infrequently. Note: a rating of 5 requires qualification.
4	**Exceeds Expectations / Above Satisfactory**
	Above standard performance with results exceeding expectations in all essential areas of responsibility.
3	**Meets Expectations / Satisfactory**
	Performance consistently meets expectations in all essential areas of responsibility.

2	**Inconsistently Meets Expectations / Marginal** Performance inconsistently meets expectations in one or more essential areas of responsibility. A less than satisfactory result requiring improvement(s) to come up to standard.
1	**Fails To Meet Expectations / Unsatisfactory** Performance consistently below expectations. Significant improvement is needed in one or more essential areas. Results may also reflect / demonstrate counter-productive behaviors that have negative outcomes or consequences. A plan to correct performance, including timelines, must be developed and monitored to improve and measure progress. Note: a rating of 1 requires qualification.

CCU STANDING RULES

SECTION A	KEY PERFORMANCE INDICATORS (KPI's)

Overview

Research has shown that the functions managers undertake can be grouped into four key generic roles : Managing Operations, Managing Finance, Managing People and Managing Information. Within each role a small number of agreed KPI's should be identified (where possible) as a basis for assessing and improving the performance of managers on an annual basis. Please note that the identification of KPI's may be difficult with some positions resulting in broader job statements or job standards being documented. This however should not detract from the primary goal of quantifying the work required wherever possible. In brief, the KPI's refer to personal targets for managers to focus their performance (i.e. over the review period) in order to fulfill their responsibilities and to maximize their contribution to the organization.

Performance Allocation

Performance against the key roles (see below) accounts for 70% of the total performance score :

1.0	**Managing Operations**	**30% of total performance score**
2.0	**Managing Finance**	**15% of total performance score**
3.0	**Managing People**	**15% of total performance score**
4.0	**Managing Information**	**10% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

Key Performance Indicators (KPI's)

1.0	**Managing Operations (Finance)**	**30% of total performance score**

		Annual Rating
1.1	Plan, organize, staff, direct and coordinate all accounting activities	
1.1.1	Effectively develops, updates and implements accounting procedures and practices in accordance with generally accepted accounting principles (GAAP), water utility accounting standards, and CCU policies	
1.1.2	Develop and implement effective internal controls to ensure compliance with GAAP; work with IA to document controls and SOPs	
1.1.3	Effectively manage cash flow, prompt payment of obligations, prompt collection of revenue	
1.1.4	Maintain required reserves and debt service coverage requirements	

CCU STANDING RULES

1.1.5	Prepare, present regular financial reports to the GM and the CCU at regular monthly meetings and as requested/required	
1.1.6	Prepare special financial analyses as required to support GM and management team in addressing any operational, maintenance or capital improvement issues	

Annual Rating

1.2	Organize, staff, coordinate and direct financial planning activities for GWA	
1.2.1	Oversee and direct the development and preparation of annual budgets	
1.2.2	Prepare Five-year budgets and financial plan to support regular O&M and GWA's Capital Improvement Program	
1.2.3	Work with GM and management team to develop 20-year master plan, and oversee/direct the development of the financial model needed to support to Capital Improvement Program	
1.2.4	Oversee/direct the development, preparation and publication of Rate case filings; work with GM, Counsel and management team in the approval and defense of the rate case before the CCU and the PUC	
1.2.5	Coordinate and work with the GM and management team in the implementation of GWA's Asset Management System; develop and implement financial procedures to support the asset management program	

Annual Rating

1.3	Organize, staff, coordinate and direct financing for GWA	
1.3.1	Work with GM and management team to develop, secure approval and implement plan of finance to support CIP, to include IFCIP, grants and bonds	
1.3.2	Prepare supporting financial information for financing approval by CCU, PUC and the Legislature	
1.3.3	Work with GM and Counsel to develop required documentation for grant applications, credit ratings, indenture, investment statements, marketing and sales efforts	
1.3.4	Oversee and direct the preparation and reporting required tax, arbitrage and financial performance filings and disclosures, etc.	
1.3.5	Work with GM and management team to periodically review financial plan to reduce the cost of borrowing, maximize Grant funding	

CCU STANDING RULES

		Annual Rating
1.4	Financial Management	
1.4.1	Implement, maintain and effectively utilize enterprise financial management system	
1.4.2	Promptly close the Fiscal Year's books and coordinate the timely performance of GWA's annual audit with favorable findings	
1.4.3	Effectively identify, assess, and manage GWA's financial risk and oversee, in coordination with the management team, the procurement of required insurances to address identified risks	
1.4.4	Effectively coordinate with GM and management team to assure the proper financial resources are in place to implement and maintain GWA's Asset Management program	
1.4.5	Work with GM and management team to improve efficiency and economy of all procurements	

		Annual Rating
1.5	Management of Personnel / Administrative Matters	
1.5.1	Effectively coordinates and works with GM and management team to process recruitments, promotions and other personnel actions to ensure staffing levels are maintained	
1.5.2	Effectively coordinates and works with GM and management team to prioritize and process procurements to ensure critical inventory levels are maintained	
1.5.3	Regularly reviews and evaluates business processes with GM and management team to identify and recommend improvements	
1.5.4		
1.5.5		

2.0	**Managing Finance**	**15% of total performance score**

		Annual Rating
2.1	Plan, develop and establish reasonable budget for Finance Division administration	
2.2	Track actual expenditures and monitor actual vs budget to assess and guide Finance/accounting administrative activities	

2.3	Properly plan, monitor and control procurements and administrative activities to prevent shortfalls and overages in materials, services and resources needed for Finance/accounting operations	
2.4	Assess and manage labor resources to minimize overtime and adjust staffing for appropriate levels for Finance/Accounting Division administration requirements	
2.5		

3.0	**Managing People**	**15% of total performance score**

Annual Rating

3.1	Apply personnel rules, regulations, policies, procedures and mandates fairly amongst assigned employees	
3.2	Develop, track and report on annual operational and professional goals and objectives with assigned staff	
3.3	Demonstrate as role model, and foster the qualities, skills and values expected of GWA employees; promote and demonstrate ethical behavior, fairness and honesty	
3.4	Provide training and mentorship throughout the organizational unit	
3.5	Motivate, lead and encourage assigned staff toward excellence	

4.0	**Managing Information**	**10% of total performance score**

Annual Rating

4.1	Gather, analyze and report division performance data regularly to CCU and GM.	
4.2	Analyze financing, procurement, regulatory and other issues as assigned and develop recommendations with supporting data justification	
4.3	Ensure all governance (CCU) and regulatory (PUC, Bond, Investor etc.) reports, resolutions, petitions, filings, and other documents are posted and/or submitted timely, and maintained for proper compliance recordkeeping	
4.4	Provide relevant financial and accounting data and supporting information to other divisions in timely manner	

4.5	Manage and disseminate feedback on activities and management directives both up and down the chain of command	
SECTION B	**PERSONAL COMPETENCIES**	

Overview

The personal competencies listed below are those used by effective managers to make decisions and achieve results and can be observed through the key behaviors outlined. The competencies work together to achieve results. One competency may be dominant in a particular situation or event, but it will usually be supported by other competencies. As the event unfolds, another competency will become dominant. Some competencies are about independent action, others are about working closely with colleagues, some call for analytical and logical thinking, whilst others are about creativity.

It is important to remember that the behaviors and competencies outlined are not valuable on their own. They are valuable only insofar as they help managers achieve results. Effective managers use their judgment to apply the right competency at the right time although they tend not to be strong in every competency but display a variety of different profiles with regards strengths, styles and preferences. Across management teams it is valuable to understand the profiles of individual team members and exploit those skills accordingly.

Performance Allocation

Performance against the key personal competencies (see below) accounts for 30% of the total performance score :

1.0	**Strategic Perspective**	**5% of total performance score**
2.0	**Building Teams**	**5% of total performance score**
3.0	**Communication**	**5% of total performance score**
4.0	**Information Search**	**5% of total performance score**
5.0	**Achievement Focus**	**5% of total performance score**
6.0	**Judgment**	**5% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

CCU STANDING RULES

CCU STANDING RULES

			Annual Rating
1.0	**Strategic Perspective**	**5% of total performance score**	

This competence concerns the manager being able to place immediate goals and activities in a strategic context. This involves seeing how one area of activity is affected by, and affects, other parts of the organization or its environment. The competence involves taking a longer term perspective, considering what will happen several years hence, and establishing a vision of the future. An important part of the competence lies in managers setting out their vision of the future to others in such a way as to gain acceptance and support.

Behavior Indicators - An Effective Manager :

- works towards a vision of the future based on a strategic perspective
- acts with good understanding of how different parts, needs or functions of the organization and its environment fit together
- clearly relates goals and actions to the strategic aims of the business
- takes opportunities when they arise to achieve longer term aims or needs
- demonstrates competence in goal setting, identifying possible courses of action, implementing and monitoring them
- can disseminate strategic goals into KPI's for subordinate staff
- has highly developed skills in analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors
- demonstrates foresight (predicting / forecasting)

			Annual Rating
2.0	**Building Teams**	**5% of total performance score**	

This competence concerns working effectively with others at the same level or more junior level with the organization. The manager may use the key behavior in the context of a loose team or a coalition of peers from other parts of the organization and/or in the context of an immediate group of direct reports. The first two behaviors are about encouraging co-operative working. Depending on the circumstances, this can be achieved either formally or informally and the team may be well defined and established or a loose group of managers who do not necessarily see themselves as a "team". The third behavior is an aspect of empowerment, where the manager involves others in the process of making difficult decisions, and takes time to involve others in order to explore the problem and to contribute solutions. The final behavior is about evaluating the capabilities of the people who report to the manager.

Behavior Indicators - An Effective Manager :

- keeps others informed about plans and progress
- builds a desire to work together and builds co-operation within a team
- builds ownership of controversial decisions by involving others in the decision making process
- evaluates people's capability to do the job and takes action

- is very capable of balancing self and team interests to meet collective goals
- contributes positively by sharing information and listening and accepting others' points of view
- respects the thoughts and opinions of other team members
- positively influences the way the team works together
- facilitates and influences positive outcomes that focus on organizational goals
- recognizes conflicts that arise within the team and acts to bring these out into the open

Annual Rating

3.0	**Communication**	**5% of total performance score**	

This competence concerns communicating clearly with others. It may be used in a wide range of circumstances, from formal presentations to day-to-day meetings. A feature of managers with this competence is that they carefully consider what message they wish to communicate and then decide how best to do so. This may involve thorough planning of a presentation, the use of different media to reinforce a message, or even the establishment of systems to ensure good communication within the department or organization. Effective managers use this competence to achieve results. They communicate to inform, instruct, persuade and encourage others to communicate with them. Managers who are particularly competent in this area exhibit conviction and belief in what they have to say, which is closely linked to the self-confidence competency.

Behavior Indicators - An Effective Manager :

- conveys difficult ideas and problems in a way that aids understanding
- recognizes and responds to the needs and feelings of others
- demonstrates excellent verbal and written communication skills
- is very confident and competent in describing situations and actions
- effectively conveys and receives ideas, information and directions
- receives, interprets, understands and responds very well to verbal messages and other cues
- is assertive while being open minded and adaptable to difference of opinions
- has the ability to be very concise and clear when communicating
- confronts difficult issues openly

Annual Rating

4.0	**Information Search**	**5% of total performance score**	

This competence concerns gathering information to inform decision making. Effective managers seek facts and informed opinion in order to understand new or complex situations. Sometimes the manager will remain open-minded and suspend judgment until all the relevant facts are known. In other cases, the manager reaches a conclusion on the basis of an insight or limited personal knowledge, and then seeks more factual data to confirm or refute this conclusion.

Behavior Indicators - An Effective Manager :

- pushes for concrete information in an ambiguous situation
- seeks information from multiple sources to clarify a situation
- checks validity of own thinking with others
- excellent at gathering and assessing information to determine the optimum way to perform
- is very competent with personal planning and organizational skills
- has highly developed skills at analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors

Annual Rating

5.0	**Achievement Focus**	**5% of total performance score**	

Managers with this competence are geared towards achieving results and they will set ambitious goals and objectives for themselves and others. They will also deal with problems as they arise, and take advantage of any emerging opportunities. Recognizing and evaluating the risks that may lie ahead, and then taking firm action, is an aspect of this competence.

Behavior Indicators - An Effective Manager :

- sets high quality goals that are demanding of self and others
- sets key performance indicators and priorities in uncertain and complex situations
- tackles problems or takes advantage of opportunities as they arise
- calculates risks and takes decisive action
- focuses personal attention on specific details that are critical to the success of a key event
- is an energetic self-starter, highly motivated and results driven
- generates enthusiasm and energy by maintaining a positive attitude
- expresses confidence in the success of plans or initiatives (this includes showing commitment to a course of action)
- takes personal responsibility for making things happen
- is persistent in pursuing goals despite obstacles and setbacks
- is very competent with personal planning and organizational skills
- is very capable at gathering and assessing information to determine the optimum way to perform
- uses time and resources very effectively

Annual Rating

6.0	**Judgment**	**5% of total performance score**	

This competence concerns using a range of skills to evaluate situations and people and to develop plans and approaches for actions. Effective managers use analytical and logical approaches to understand people and events and to establish priorities and connections. They also use creative and intuitive approaches to assessing situations and problems and to producing solutions. Effective managers may demonstrate different profiles within this competence, some being more creative and intuitive or they may be strong in all aspects.

CCU STANDING RULES

Behavior Indicators - An Effective Manager :

- identifies the most important issues in a complex situation
- identifies implications, consequences or casual relationships in a situation
- uses a range of ideas to explain the actions, needs and motives of others
- focuses on facts, problems and solutions when handling an emotional situation
- approaches the decision making process with a positive attitude and views the situation as an opportunity / challenge
- can explain decision(s) to those involved and affected and will follow up to ensure implementation
- uses instinct and intuition to assess situations and people
- identifies new patterns and interprets events in new ways
- has an excellent understanding of processes and quality improvement
- can prioritize problems and deal with them one at a time

SECTION C	PERFORMANCE COMMENTS

Note : In Sections A & B all performance ratings of 1 or 5 must be individually substantiated with comments.
This section can also be used for general comments concerning the employee's performance.

Section

CCU STANDING RULES

SECTION D	DEVELOPMENTAL RECOMMENDATIONS

Use this section to record training and development goals over the next review period

SECTION E	PERSONAL DEVELOPMENT

Overview

Personal development focuses on initiatives taken by the employee or with the Authority's support that demonstrates a positive and proactive approach to personal growth and development. The intent here is to both recognize and reward employees for relevant achievements in excess of the minimum educational requirements of the position e.g. this may be in the form of a higher educational qualification(s), professional qualification(s), certification(s), license(s) etc.

Performance Allocation

Having achieved higher educational qualification(s), professional qualification(s), certification(s), license(s) etc (in excess of the minimum educational requirements of the position) the financial benefits (see table example below) will take the form of additional sub-steps being awarded in excess of those received from this appraisal process.

Please note that where the Authority's compensation model is being adjusted to a higher market percentile(s) the additional sub-steps awarded in this section will be applied with each adjustment and will continue until such time the Authority has reached its targeted position in the market.

Number of additional **EXAMPLE**

sub-steps awarded

3	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take in excess of two (2) years to obtain**
2	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take one (1) to two (2) years to obtain**
1	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take two (2) to twelve (12) months to obtain**

Notes :

The awarding of sub-step(s) following the attainment of multiple achievements or individual achievements taking less than two (2) months to obtain or any decision to include a particular achievement will be at the discretion of the General Manager.

All achievements must be current and valid (where required) for the additional sub-step(s) to be awarded.

Where progression towards a higher qualification sees an employee firstly achieving an interim qualification e.g. Engineer In Training (EIT) and then goes on to pass the Professional Engineer (PE) qualification the employee will be awarded the appropriate sub-steps for achieving the EIT qualification and then the balance of the sub-steps for achieving the PE.

Rating

Human Resources will initially assess (and score in the space provided) the proposed number of sub-steps awarded for higher educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Endorsement of this score (or otherwise) will be made by the General Manager (subject to discretionary and budget constraints) in reviewing the results of this form.

Personal Achievements

Please indicate below all relevant educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Please note that these will be subject to verification if no record of their achievement is included in the employee's personal file held with Human Resources.

CCU STANDING RULES

	Personal Achievements	Authorizing Institution	Pass Grade (where provided)
1.0			
2.0			
3.0			
4.0			
5.0			
6.0			
7.0			
8.0			
9.0			
10.0			

Proposed Increase (number of sub-steps)

(CCU to Complete)

(CCU to Complete)

SECTION F	CONFIRMATION / SIGNATURES

Conclusion of Evaluation

To the Employee : I have reviewed this performance evaluation on the date indicated below and have had the opportunity to discuss it with my supervisor. My signature does not necessarily mean that I agree with the rating.

Employee :Name : _____ *Signature :* _____ *Date :* _____

CCU

*CCU:*_____ *Date:*_____
(authorization) CCU Chairperson

Comments :

Employee : (amendments sighted)Signature : _____ *Date :* _____

CCU STANDING RULES

11.1.2.4 Legal Counsel

GUAM WATERWORKS AUTHORITY

WORK PLANNING AND PERFORMANCE EVALUATION FORM

MANAGERS

NAME OF EMPLOYEE	
POSITION TITLE	General Counsel
DIVISION	Legal
DEPARTMENT	Guam Waterworks Authority
EVALUATION PERIOD	

NAME OF DIRECT SUPERVISOR	CCU
POSITION TITLE	CCU

CCU STANDING RULES

DIVISION	
DEPARTMENT	
EVALUATION PERIOD	

INTRODUCTION

Whilst this form provides a structured framework for documenting and assessing work performance its success as a management / supervisory tool is to facilitate an open and honest discussion on performance. Whilst ongoing performance feedback, particularly against the key performance indicators (KPI's) outlined in Section A should be occurring on a regular basis (throughout the review period) the benefits of positive and constructive feedback are well documented, and with this in mind, it is important to ensure that the agreed ratings are an accurate reflection of the employees' performance over the review period. Inaccurate assessments are counter-productive (for both the company and the employee) as both the link to training and development and compensation becomes distorted and the implications far reaching, not only internally but externally in terms of the company's ability to consistently meet the expectations of customers.

Rating Scale

5	**Significantly Exceeds Expectations / Outstanding**
	Performance significantly exceeds expectations in all essential areas of responsibility. An outstanding result qualified by an exceptional or unique contribution in support of the section, department or division or the successful completion of a major goal or project. This rating is achievable by any employee although given infrequently. Note: a rating of 5 requires qualification.
4	**Exceeds Expectations / Above Satisfactory**
	Above standard performance with results exceeding expectations in all essential areas of responsibility.
3	**Meets Expectations / Satisfactory**
	Performance consistently meets expectations in all essential areas of responsibility.

2	**Inconsistently Meets Expectations / Marginal** Performance inconsistently meets expectations in one or more essential areas of responsibility. A less than satisfactory result requiring improvement(s) to come up to standard.
1	**Fails To Meet Expectations / Unsatisfactory** Performance consistently below expectations. Significant improvement is needed in one or more essential areas. Results may also reflect / demonstrate counter-productive behaviors that have negative outcomes or consequences. A plan to correct performance, including timelines, must be developed and monitored to improve and measure progress. Note: a rating of 1 requires qualification.

SECTION A	**KEY PERFORMANCE INDICATORS (KPI's)**

Overview

Research has shown that the functions managers undertake can be grouped into four key generic roles : Managing Operations, Managing Finance, Managing People and Managing Information. Within each role a small number of agreed KPI's should be identified (where possible) as a basis for assessing and improving the performance of managers on an annual basis. Please note that the identification of KPI's may be difficult with some positions resulting in broader job statements or job standards being documented. This however should not detract from the primary goal of quantifying the work required wherever possible. In brief, the KPI's refer to personal targets for managers to focus their performance (i.e. over the review period) in order to fulfill their responsibilities and to maximize their contribution to the organization.

Performance Allocation

Performance against the key roles (see below) accounts for 70% of the total performance score :

1.0	**Managing Operations**	**30% of total performance score**
2.0	**Managing Finance**	**15% of total performance score**
3.0	**Managing People**	**15% of total performance score**
4.0	**Managing Information**	**10% of total performance score**

CCU STANDING RULES

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

Key Performance Indicators (KPI's)

1.0	**Managing Operations (Legal)**	**30% of total performance score**

Annual Rating

1.1	Represent/Protect the Interest of the CCU / GWA	
1.1.1	Efficient Intake and management of legal correspondence/inquiries addressed to the Commission or the General Manager (GM)	
1.1.2	Concise and accurate updates / effective counsel provided to the Commission and/or GM on legal issues, negotiations, claims, disputes, investigations, litigation (pending and in-progress)	
1.1.3	Efficient coordination and preparation of federal and local filings, pleadings, petitions and other required legal documents	
1.1.4	Effectively coordinates, confers and works with other legal officers, including the Attorney General, Governor's counsel and conflict counsel, in matters relating to the Commission, GWA and the Government of Guam	
1.1.5	Represents the Commission/GWA in negotiations, hearings, depositions and other legal proceedings in local and/or federal Courts as required	

Annual Rating

1.2	Representation on Regulatory Matters	
1.2.1	Efficiently prepare, develop and file petitions as required with the Public Utilities Commission as required under law and administrative rules/regs	
1.2.2	Effectively consult, counsel and coordinate with GM on regulatory filings, notices, responses or answers as required under federal and local permits (e.g., NPDES), regulations and laws (e.g., SDWA, CWA, Guam WRD Regs and Primary DW Regs)	
1.2.3	Effectively supports / defends GWA's position with regulatory consultants, administrative law judges (ALJs), enforcement attorneys, in applicable proceedings	
1.2.4	Effectively develops and presents cases before deliberative regulatory entities	
1.2.5	Efficiently drafts and files motions, pleadings and orders required	

CCU STANDING RULES

		Annual Rating
1.3	Management of Commission Procedural / Administrative Matters	
1.3.1	Provides comprehensive legal opinions as requested by the Commission	
1.3.2	Effectively counsels Commission on administrative and parliamentary procedures and requirements of law	
1.3.3	Effectively identifies and manages conflicts of interest to protect the integrity of Authority and protect the public interest	
1.3.4	Effectively manages the documentation, notice, and other requirements for Commission business and governance to comply with relevant open government and other laws	
1.3.5	Effectively maintains the privilege and confidentiality of Commission business and deliberations with respect to litigation, personnel and similar matters	

		Annual Rating
1.4	Management of Procurements and Contractual Matters	
1.4.1	Effectively develops procurement and contract documents to manage risk and liability, and promote efficiency of the procurement process	
1.4.2	Effectively consults, coordinates and works with GM and CFO to execute timely procurements in accordance with CCU policy and GWA operational and CIP needs	
1.4.3	Effectively counsels, coordinates and works with the GM to manage, document and resolve procurement protests and contract disputes	
1.4.4	Effectively manages alternative dispute resolution proceedings, such as mediation or arbitration, when required	
1.4.5	Effectively consults, coordinates and works with GM in representing GWA in Procurement Appeals proceedings with the Office of Public Accountability	

		Annual Rating
1.5	Management of Personnel Administrative Matters	
1.5.1	Effectively counsels, coordinates and works with GM and the Commission to negotiate, document and execute collective bargaining agreements as required	
1.5.2	Effectively counsels, coordinates and works with GM to develop, update and implement personnel rules and procedures, employment policies for adopted by the Commission	

1.5.3	Effectively counsels, coordinates and works with GM to represent GWA in personnel disciplinary actions, Civil Service Commission proceedings and other personnel dispute proceedings as required	
1.5.4	Effectively counsels, coordinates and works with GM to represent GWA in any personnel-related civil actions, criminal investigations or proceedings	
1.5.5		

2.0	**Managing Finance**	**15% of total performance score**

Annual Rating

2.1	Plan, develop and establish reasonable budget for Legal Division administration	
2.2	Track actual expenditures and monitor actual vs budget to assess and guide Legal administrative activities	
2.3	Properly plan, monitor and control procurements and administrative activities to prevent shortfalls and overages in materials, services and resources needed for Legal operations	
2.4	Assess and manage labor resources to minimize overtime and adjust staffing for appropriate levels for Legal Division administration requirements	
2.5		

3.0	**Managing People**	**15% of total performance score**

Annual Rating

3.1	Apply personnel rules, regulations, policies, procedures and mandates fairly amongst assigned employees	
3.2	Develop, track and report on annual operational and professional goals and objectives with assigned staff	
3.3	Demonstrate as role model, and foster the qualities, skills and values expected of GWA employees; promote and demonstrate ethical behavior, fairness and honesty	
3.4	Provide training and mentorship throughout the organizational unit	

3.5	Motivate, lead and encourage assigned staff toward excellence	

4.0	**Managing Information**	**10% of total performance score**

Annual Rating

4.1	Gather, analyze and report division performance data regularly to Mgmt.	
4.2	Analyze legal, procurement, regulatory and other issues as assigned and develop recommendations with supporting data justification	
4.3	Ensure all regulatory (PUC, enforcement, etc.) reports, petitions, filings, and other legal documents are posted and/or submitted timely, and maintained for proper compliance recordkeeping	
4.4	Provide relevant legal data and supporting information to other divisions in timely manner	
4.5	Manage and disseminate feedback on activities and management directives both up and down the chain of command	

SECTION B	**PERSONAL COMPETENCIES**

Overview

The personal competencies listed below are those used by effective managers to make decisions and achieve results and can be observed through the key behaviors outlined. The competencies work together to achieve results. One competency may be dominant in a particular situation or event, but it will usually be supported by other competencies. As the event unfolds, another competency will become dominant. Some competencies are about independent action, others are about working closely with colleagues, some call for analytical and logical thinking, whilst others are about creativity.

It is important to remember that the behaviors and competencies outlined are not valuable on their own. They are valuable only insofar as they help managers achieve results. Effective managers use their judgment to apply the right competency at the right time although they tend not to be strong in every competency but display a variety of different profiles with regards strengths, styles and preferences. Across management teams it is valuable to understand the profiles of individual team members and exploit those skills accordingly.

Performance Allocation

Performance against the key personal competencies (see below) accounts for 30% of the total performance score :

1.0	**Strategic Perspective**	**5% of total performance score**
2.0	**Building Teams**	**5% of total performance score**
3.0	**Communication**	**5% of total performance score**
4.0	**Information Search**	**5% of total performance score**
5.0	**Achievement Focus**	**5% of total performance score**
6.0	**Judgment**	**5% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

Annual Rating

1.0	**Strategic Perspective**	**5% of total performance score**	

This competence concerns the manager being able to place immediate goals and activities in a strategic context. This involves seeing how one area of activity is affected by, and affects, other parts of the organization or its environment. The competence involves taking a longer term perspective, considering what will happen several years hence, and establishing a vision of the future. An important part of the competence lies in managers setting out their vision of the future to others in such a way as to gain acceptance and support.

Behavior Indicators - An Effective Manager :

- works towards a vision of the future based on a strategic perspective
- acts with good understanding of how different parts, needs or functions of the organization and its environment fit together
- clearly relates goals and actions to the strategic aims of the business
- takes opportunities when they arise to achieve longer term aims or needs
- demonstrates competence in goal setting, identifying possible courses of action, implementing and monitoring them
- can disseminate strategic goals into KPI's for subordinate staff
- has highly developed skills in analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors
- demonstrates foresight (predicting / forecasting)

Annual Rating

CCU STANDING RULES

2.0	**Building Teams**	**5% of total performance score**	

This competence concerns working effectively with others at the same level or more junior level with the organization. The manager may use the key behavior in the context of a loose team or a coalition of peers from other parts of the organization and/or in the context of an immediate group of direct reports. The first two behaviors are about encouraging co-operative working. Depending on the circumstances, this can be achieved either formally or informally and the team may be well defined and established or a loose group of managers who do not necessarily see themselves as a "team". The third behavior is an aspect of empowerment, where the manager involves others in the process of making difficult decisions, and takes time to involve others in order to explore the problem and to contribute solutions. The final behavior is about evaluating the capabilities of the people who report to the manager.

Behavior Indicators - An Effective Manager :

- keeps others informed about plans and progress
- builds a desire to work together and builds co-operation within a team
- builds ownership of controversial decisions by involving others in the decision making process
- evaluates people's capability to do the job and takes action
- is very capable of balancing self and team interests to meet collective goals
- contributes positively by sharing information and listening and accepting others' points of view
- respects the thoughts and opinions of other team members
- positively influences the way the team works together
- facilitates and influences positive outcomes that focus on organizational goals
- recognizes conflicts that arise within the team and acts to bring these out into the open

Annual Rating

3.0	**Communication**	**5% of total performance score**	

This competence concerns communicating clearly with others. It may be used in a wide range of circumstances, from formal presentations to day-to-day meetings. A feature of managers with this competence is that they carefully consider what message they wish to communicate and then decide how best to do so. This may involve thorough planning of a presentation, the use of different media to reinforce a message, or even the establishment of systems to ensure good communication within the department or organization. Effective managers use this competence to achieve results. They communicate to inform, instruct, persuade and encourage others to communicate with them. Managers who are particularly competent in this area exhibit conviction and belief in what they have to say, which is closely linked to the self-confidence competency.

Behavior Indicators - An Effective Manager :

- conveys difficult ideas and problems in a way that aids understanding
- recognizes and responds to the needs and feelings of others

- demonstrates excellent verbal and written communication skills
- is very confident and competent in describing situations and actions
- effectively conveys and receives ideas, information and directions
- receives, interprets, understands and responds very well to verbal messages and other cues
- is assertive while being open minded and adaptable to difference of opinions
- has the ability to be very concise and clear when communicating
- confronts difficult issues openly

Annual Rating

4.0	**Information Search**	**5% of total performance score**	

This competence concerns gathering information to inform decision making. Effective managers seek facts and informed opinion in order to understand new or complex situations. Sometimes the manager will remain open-minded and suspend judgment until all the relevant facts are known. In other cases, the manager reaches a conclusion on the basis of an insight or limited personal knowledge, and then seeks more factual data to confirm or refute this conclusion.

Behavior Indicators - An Effective Manager :

- pushes for concrete information in an ambiguous situation
- seeks information from multiple sources to clarify a situation
- checks validity of own thinking with others
- excellent at gathering and assessing information to determine the optimum way to perform
- is very competent with personal planning and organizational skills
- has highly developed skills at analyzing and interpreting data and situations
- is very competent at diagnosing problems and identifying causal factors

Annual Rating

5.0	**Achievement Focus**	**5% of total performance score**	

Managers with this competence are geared towards achieving results and they will set ambitious goals and objectives for themselves and others. They will also deal with problems as they arise, and take advantage of any emerging opportunities. Recognizing and evaluating the risks that may lie ahead, and then taking firm action, is an aspect of this competence.

Behavior Indicators - An Effective Manager :

- sets high quality goals that are demanding of self and others
- sets key performance indicators and priorities in uncertain and complex situations
- tackles problems or takes advantage of opportunities as they arise
- calculates risks and takes decisive action
- focuses personal attention on specific details that are critical to the success of a key event

- is an energetic self-starter, highly motivated and results driven
- generates enthusiasm and energy by maintaining a positive attitude
- expresses confidence in the success of plans or initiatives (this includes showing commitment to a course of action)
- takes personal responsibility for making things happen
- is persistent in pursuing goals despite obstacles and setbacks
- is very competent with personal planning and organizational skills
- is very capable at gathering and assessing information to determine the optimum way to perform
- uses time and resources very effectively

Annual Rating

6.0	**Judgment**	**5% of total performance score**	

This competence concerns using a range of skills to evaluate situations and people and to develop plans and approaches for actions. Effective managers use analytical and logical approaches to understand people and events and to establish priorities and connections. They also use creative and intuitive approaches to assessing situations and problems and to producing solutions. Effective managers may demonstrate different profiles within this competence, some being more creative and intuitive or they may be strong in all aspects.

Behavior Indicators - An Effective Manager :

- identifies the most important issues in a complex situation
- identifies implications, consequences or casual relationships in a situation
- uses a range of ideas to explain the actions, needs and motives of others
- focuses on facts, problems and solutions when handling an emotional situation
- approaches the decision making process with a positive attitude and views the situation as an opportunity / challenge
- can explain decision(s) to those involved and affected and will follow up to ensure implementation
- uses instinct and intuition to assess situations and people
- identifies new patterns and interprets events in new ways
- has an excellent understanding of processes and quality improvement
- can prioritize problems and deal with them one at a time

SECTION C	**PERFORMANCE COMMENTS**

Note : In Sections A & B all performance ratings of 1 or 5 must be individually substantiated with comments.
This section can also be used for general comments concerning the employee's performance.

Section

SECTION D	DEVELOPMENTAL RECOMMENDATIONS

Use this section to record training and development goals over the next review period

SECTION E	PERSONAL DEVELOPMENT

Overview

Personal development focuses on initiatives taken by the employee or with the Authority's support that demonstrates a positive and proactive approach to personal growth and development. The intent here is to both recognize and reward employees for relevant achievements in excess of the minimum educational requirements of the position e.g. this may be in the form of a higher educational qualification(s), professional qualification(s), certification(s), license(s) etc.

Performance Allocation

Having achieved higher educational qualification(s), professional qualification(s), certification(s), license(s) etc (in excess of the minimum educational requirements of the position) the financial benefits (see table example below) will take the form of additional sub-steps being awarded in excess of those received from this appraisal process.

Please note that where the Authority's compensation model is being adjusted to a higher market percentile(s) the additional sub-steps awarded in this section will be applied with each adjustment and will continue until such time the Authority has reached its targeted position in the market.

Number of additional sub-steps awarded	**EXAMPLE**
3	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take in excess of two (2) years to obtain**
2	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take one (1) to two (2) years to obtain**
1	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take two (2) to twelve (12) months to obtain**

Notes :

The awarding of sub-step(s) following the attainment of multiple achievements or individual achievements taking less than two (2) months to obtain or any decision to include a particular achievement will be at the discretion of the General Manager.

All achievements must be current and valid (where required) for the additional sub-step(s) to be awarded.

Where progression towards a higher qualification sees an employee firstly achieving an interim qualification e.g. Engineer In Training (EIT) and then goes on to pass the Professional Engineer (PE) qualification the employee will be awarded the appropriate sub-steps for achieving the EIT qualification and then the balance of the sub-steps for achieving the PE.

Rating

Human Resources will initially assess (and score in the space provided) the proposed number of sub-steps awarded for higher educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Endorsement of this score (or otherwise) will be made by the General Manager (subject to discretionary and budget constraints) in reviewing the results of this form.

Personal Achievements

Please indicate below all relevant educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Please note that these will be subject to verification if no record of their achievement is included in the employee's personal file held with Human Resources.

	Personal Achievements	**Authorizing Institution**	**Pass Grade (where provided)**
1.0			
2.0			
3.0			
4.0			
5.0			
6.0			
7.0			
8.0			
9.0			
10.0			

Proposed Increase (number of sub-steps)

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(CCU to Complete)

(CCU to Complete)

SECTION F	CONFIRMATION / SIGNATURES

Conclusion of Evaluation

To the Employee : I have reviewed this performance evaluation on the date indicated below and have had the opportunity to discuss it with my supervisor. My signature does not necessarily mean that I agree with the rating.

Employee :Name : _____ *Signature :* _____ *Date :* _____

CCU

*CCU:*_____ *Date:*_____
(authorization) CCU Chairperson

Comments :

Employee : (amendments sighted)Signature : _____ *Date :* _____

11.1.3 CCU Secretary Evaluation Form

GUAM POWER AUTHORITY

GUAM WATERWORKS AUTHORITY

WORK PLANNING AND PERFORMANCE EVALUATION FORM

BOARD SECRETARY

NAME OF EMPLOYEE	
POSITION TITLE	Board Secretary
DIVISION	CCU / Board
DEPARTMENT	Executive
EVALUATION PERIOD	

CCU STANDING RULES

NAME OF DIRECT SUPERVISOR	CCU
POSITION TITLE	CCU
DIVISION	CCU / Board
DEPARTMENT	Executive
EVALUATION PERIOD	

INTRODUCTION

Whilst this form provides a structured framework for documenting and assessing work performance its success as a management / supervisory tool is to facilitate an open and honest discussion on performance. Whilst ongoing performance feedback, particularly against the key performance indicators (KPI's) outlined in Section A should be occurring on a regular basis (throughout the review period) the benefits of positive and constructive feedback are well documented, and with this in mind, it is important to ensure that the agreed ratings are an accurate reflection of the employees' performance over the review period. Inaccurate assessments are counter-productive (for both the company and the employee) as both the link to training and development and compensation becomes distorted and the implications far reaching, not only internally but externally in terms of the company's ability to consistently meet the expectations of customers.

Rating Scale

5	**Significantly Exceeds Expectations / Outstanding** Performance significantly exceeds expectations in all essential areas of responsibility. An outstanding result qualified by an exceptional or unique contribution in support of the section, department or division or the successful completion of a major goal or project. This rating is achievable by any employee although given infrequently. Note : a rating of 5 requires qualification.

4	**Exceeds Expectations / Above Satisfactory**
	Above standard performance with results exceeding expectations in all essential areas of responsibility.
3	**Meets Expectations / Satisfactory**
	Performance consistently meets expectations in all essential areas of responsibility.
2	**Inconsistently Meets Expectations / Marginal**
	Performance inconsistently meets expectations in one or more essential areas of responsibility. A less than satisfactory result requiring improvement(s) to come up to standard.
1	**Fails to Meet Expectations / Unsatisfactory**
	Performance consistently below expectations. Significant improvement is needed in one or more essential areas. Results may also reflect / demonstrate counter-productive behaviors that have negative outcomes or consequences. A plan to correct performance, including timelines, must be developed and monitored to improve and measure progress. Note : a rating of 1 requires qualification.
SECTION A	**KEY PERFORMANCE INDICATORS (KPI's)**

Overview

Current board secretary functions can be grouped into four generic roles : Managing Board duties, Managing GPA's Legal Office duties, Managing Communication & Information and Managing Regulatory Filing. Within each role a small number of agreed KPI's should be identified (where possible) as a basis for assessing and improving the performance of the board secretary on an annual basis. Please note that the identification of KPI's may be difficult resulting in broader job statements or job standards being documented. This however should not detract from the primary goal of quantifying the work required wherever possible. Please note that the review period may eventually be reduced to six-monthly or even quarterly. In brief, the KPI's refer to personal targets for the board secretary to focus his or her performance (i.e. over the review period) in order to fulfill his/her responsibilities and to maximize his / her contribution to the organization.

Performance Allocation

Performance against the key roles (see below) accounts for 70% of the total performance score :

CCU STANDING RULES

1.0	**Managing Board**	**30% of total performance score**
2.0	**Managing GPA's Legal Office**	**15% of total performance score**
3.0	**Managing Communication & Information**	**15% of total performance score**
4.0	**Managing Regulatory Filings**	**10% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

Key Performance Indicators (KPI's)

1.0	**Managing Board**	**30% of total performance score**

		Annual Rating
1.1	Enforce all rules and regulations of the Govt. of Guam, CCU, GPA & GWA	
1.1.1	Administer the daily business affairs to ensure that the Commission is on schedule with creation of annual CCU meeting calendar	
1.1.2	Administer the daily business affairs to ensure that the Commission is receiving information on a timely and efficient manner	
1.1.3	Administer the business of work sessions and meetings ensuring proper & timely media notification [Open Govt. Law]	
1.1.4		
1.1.5		

		Annual Rating
1.2	Preparation of work sessions and meetings	
1.2.1	Administer the business of work sessions and meetings by coordinating with GM's & Chairman to ensure proper and timely distribution of agenda to media	

CCU STANDING RULES

1.2.2	Coordinate with GM's and Chairman ensuring timely upload and distribution of Board Books to Commission, managers and CCU/GPA/GWA stakeholders	
1.2.3		
1.2.4		
1.2.5		

Annual Rating

1.3	Distribution of Minutes & Resolutions

1.3.1	Ensure proper and timely distribution of Minutes to managers and employees	
1.3.2	Maintain resolution log and ensure proper and timely distribution of Resolutions to managers and end users	
1.3.3		
1.3.4		
1.3.5		

Annual Rating

1.4	Special Projects / Events

1.4.1	Facilitate / coordinate event to include program, invitations, logistics & refreshments i.e. Oath of Office, key contract signings	
1.4.3	Perform other and additional duties as required by the Board.	
1.4.4		
1.4.5		

2.0	**Managing GPA's Legal Office**	**15% of total performance score**

Annual Rating

CCU STANDING RULES

2.1	Assist with / perform OPA filings and scheduling to ensure ALL parties are apprised and prepared	
2.2	Assist with / perform Civil Service Commission filings and scheduling to ensure ALL parties are apprised and prepared	
2.3		
2.4		
2.5		

3.0	**Managing Communication & Information**	**15% of total performance score**

Annual Rating

3.1	Ensure timely submittal in compliance with Reporting of Boards & Commissions [P.L. 31-233]	
3.2	Ensure timely response to all Freedom of Information Act [FOIA] Requests	
3.3	Coordinate with webmaster and facilitate timely and current postings of all CCU related meeting schedules, materials, minutes and resolutions	
3.4		
3.5		

4.0	**Managing Regulatory Filings**	**10% of total performance score**

Annual Rating

4.1	Coordinate with PUC to maintain correct and proper docket number / listing	
4.2	Assist with / coordinate scheduling of regulatory FILINGS and ORDERS to include annual, quarterly and monthly regulatory filings; follow up to ensure timely submittal and adherence to deadlines; maintain proper record for easy reference and retrieval	
4.3		

CCU STANDING RULES

4.4		
4.5		

CCU STANDING RULES

SECTION B	PERSONAL COMPETENCIES

Overview

The personal competencies listed below are those used by employees to aid work performance and can be observed through the key behaviors outlined. The competencies work together to achieve results. One competency may be dominant in a particular situation or event, but it will usually be supported by other competencies. As the event unfolds, another competency will become dominant. Some competencies are about independent action, others are about working closely with colleagues, some call for clear communication or personal planning, whilst others are about problem solving and decision making.

It is important to remember that the behaviors and competencies outlined are not valuable on their own. They are valuable only insofar as they help employees achieve results. Effective employees use their judgment to apply the right competency at the right time although they tend not to be strong in every competency but display a variety of different profiles with regards strengths, styles and preferences.

Performance Allocation

Performance against the key personal competencies (see below) accounts for 30% of the total performance score :

1.0	**Personal Planning**	**5% of total performance score**
2.0	**Initiative / Motivation**	**5% of total performance score**
3.0	**Communication (Oral and Written)**	**5% of total performance score**
4.0	**Problem Solving / Decision Making**	**5% of total performance score**
5.0	**Teamwork / Cooperation**	**5% of total performance score**
6.0	**Interpersonal Skills**	**5% of total performance score**

Rating

Please use the rating scale provided to rate the employee and mark the rating in the box provided.

			Annual Rating
1.0	**Personal Planning**	**5% of total performance score**	

Listens, follows directions and acts on instructions to complete job tasks / duties / assignments. This may result in additional planning and organizing being required including the prioritizing of job tasks / duties for self and/or team based on the goals / objectives of the section, department or division.

Performance Indicators (Significantly Exceeds Expectations / Outstanding): Rating 5

- extremely confident in following directions and instructions to complete job tasks / duties / assignments
- very competent with personal planning and organizational skills
- excellent at goal setting and identifying possible courses of action, implementing and monitoring them
- highly developed skills at analyzing and interpreting data and situations
- excellent at diagnosing problems and identifying causal factors
- demonstrates foresight (predicting / forecasting)
- excellent at gathering and assessing information to determine the optimum way to perform
- clearly takes responsibility for a decision and its outcomes
- uses time and resources very effectively

Performance Indicators (Meets Expectations / Satisfactory): Rating 3

- confident in following directions and instructions to complete job tasks / duties / assignments
- competent with personal planning and organizational skills
- prioritizes duties in a manner consistent with the goals / objectives of section, department or division
- confident with goals setting, identifying possible courses of action, implementing and monitoring them
- uses time and resources effectively
- competent at analyzing and interpreting data and situations
- confident at diagnosing problems and identifying causal factors
- gathers and assesses information to determine the optimum way to perform

Performance Indicators (Fails to Meet Expectations / Below Satisfactory): Rating 1

- poor personal planning and organizational skills
- has difficulty following directions and instructions to complete job tasks / duties / assignments
- not confident in analyzing and interpreting data and situations
- close supervision is required at all times
- not confident at diagnosing problems and identifying causal factors
- inefficient use of time and resources

Annual Rating

2.0	**Initiative / Motivation**	**5% of total performance score**	

Demonstrates personal responsibility, initiative, motivation and commitment when performing duties. This dimension also concentrates on behavior shown by an employee when initiating actions and taking responsibility for an outcome. This may on occasion includes taking control of situations and events rather than passively accepting them, demonstrating confidence and commitment and creating opportunities for new initiatives when / where required.

Performance Indicators (Significantly Exceeds Expectations / Outstanding): Rating 5

- energetic self-starter
- highly motivated and results driven
- demonstrates foresight
- very dependable and takes responsibility for actions
- demonstrates very good understanding and insight
- ability to originate or develop constructive ideas
- takes the necessary steps to get things done / focuses on finding solutions
- demonstrates clarity and surety of purpose
- generates enthusiasm and energy by maintaining a positive attitude
- expresses confidence in the success of plans or initiatives (this includes showing commitment to a course of action)
- takes personal responsibility for making things happen
- frequently asks for additional work assignments to improve self or organization
- inspires and motivates others
- is persistent in pursuing goals despite obstacles and setbacks
- excellent attendance record, always regular and prompt

Performance Indicators (Meets Expectations / Satisfactory): Rating 3

- dependable and generally takes responsibility for actions
- achieves expected results
- demonstrates good understanding and insight
- dependable and takes responsibility for actions
- maintains commitment and effort in spite of set-backs or problems
- performs with minimal supervision
- acceptable attendance / punctuality record

Performance Indicators (Fails to Meet Expectations / Below Satisfactory): Rating 1

- lacks motivation and commitment towards getting work done
- poor attendance record / often absent / late starter early quitter
- no interest or initiative
- often waits unnecessarily for instructions / directions
- close supervision / guidance is required at all times

Annual Rating

3.0	**Communication**	**5% of total performance score**	

Effectively conveys information and ideas both orally and in writing. Listens carefully and seeks clarification to ensure understanding.

Performance Indicators (Significantly Exceeds Expectations / Outstanding): Rating 5

- demonstrates excellent verbal and written communication skills
- very confident and competent in describing situations and actions
- has ability to be very concise and clear when communicating
- quickly understands and responds to written and oral instructions / information
- effectively conveys and receives ideas, information and directions
- can clearly express thoughts and feelings
- confronts difficult issues openly
- receives, interprets, understands and responds very well to verbal messages and other cues
- listens effectively
- always seeks to clarify and confirm (where required) the accuracy of their understanding of unfamiliar or vague terms and instructions
- conveys thoughts in a focused and concrete manner
- is assertive while being open minded and adaptable to difference of opinions
- picks out important information in verbal messages

Performance Indicators (Meets Expectations / Satisfactory): Rating 3

- demonstrates adequate verbal and written communication skills
- generally, seeks to clarify and confirm (where required) the accuracy of their understanding of unfamiliar or vague terms and instructions
- is competent in receiving, interpreting, understanding and responding to verbal messages and other cues
- quietly confident in describing situations and actions
- generally, understands and responds well to written and oral instructions / information
- is generally concise and clear when communicating

Performance Indicators (Fails to Meet Expectations / Below Satisfactory): Rating 1

- demonstrates poor verbal and written communication skills
- does not exchange ideas (whether prompted / unprompted)
- very slow in understanding and responding to written and oral instructions / information
- does not always seeks to clarify or confirm (where required) the accuracy of their understanding of unfamiliar or vague terms and instructions
- has difficulty in receiving, interpreting, understanding and responding to verbal messages and other cues
- poor listening skills

Annual Rating

4.0	**Prob. Solving / Dec. Making**	**5% of total performance score**	

Can identify and analyze problems and is proactive towards finding a solution. Wherever possible will formulate alternative solutions or take or recommend appropriate actions. Follows up (where required) to ensure problems are resolved. Makes sound judgments on everyday issues.

Performance Indicators (Significantly Exceeds Expectations / Outstanding): Rating 5

- judgments on everyday issues are excellent
- can identify and analyze problems and is proactive towards finding a solution
- has an excellent understanding of processes and quality improvement
- approaches problems with a high level of confidence and with a willingness to devote time and effort to finding an appropriate solution
- thinks quickly and logically
- decisions are based on a thorough analysis
- very competent at considering and comparing the pros and cons of alternative options
- approaches the decision-making process with a positive attitude and views the situation as an opportunity or challenge
- a very strong problem solver with excellent analytical skills
- thinks about or brainstorms possible options and solutions
- can explain decision(s) to those involved and affected, and (where required) will follow up to ensure proper and effective implementation
- can prioritize problems and deal with them one at a time
- gathers all the facts and understand their causes before making a decision
- uses existing rules and regulations as a guideline for making decisions

Performance Indicators (Meets Expectations / Satisfactory): Rating 3

- judgments / decisions on everyday issues are appropriate
- can generally recognize a problem exists and is helpful towards finding a solution
- has a good understanding of processes and quality improvement
- wherever possible will formulate alternative solutions to problems or take or recommend appropriate actions
- approaches problems with confidence and with a willingness to devote some time and effort to finding an appropriate solution

Performance Indicators (Fails to Meet Expectations / Below Satisfactory): Rating 1

- makes poor judgments / decisions on everyday issues
- has difficulty in identifying and analyzing problems
- decisions made are often inappropriate
- is not proactive in helping to resolve problems
- has a poor understanding of processes and quality improvement

Annual Rating

5.0	**Teamwork & Cooperation**	**5% of total performance score**	

Works cooperatively and productively with others to achieve results. Adapts to changing priorities and demands. Shares information and resources with others to promote positive and collaborative working relationships. Focuses on behavior which demonstrates that the employee is building rapport and positive relationships with others by offering and encouraging open and honest communication.

Performance Indicators (Significantly Exceeds Expectations / Outstanding): Rating 5

- a strong positive team player
- very capable of balancing self and team interests to meet collective goals
- goes out of way to help others / a team builder
- a strong positive force in contributing to employee / team morale
- inspires cooperation and progress
- a very successful contributor to team projects
- proactively and openly exchanges ideas and opinions
- facilitates and influences positive outcomes that focus on organizational goals
- recognizes conflicts that arise within the team and acts to bring these out into the open
- contributes positively by sharing information and listening and accepting others' points of view
- is flexible, open-minded and promotes mutual respect
- takes a collaborative approach to learning
- is able to give and receive constructive criticism
- develops positive working relationships wherever possible
- respects the thoughts and opinions of other team members
- positively influences the way the team works together
- very good at accepting or offering team direction

Performance Indicators (Meets Expectations / Satisfactory): Rating 3

- contributes to team projects
- accepts and offers team direction to achieve desired results
- understands and meets team goals / objectives
- generally, takes responsibility for developing and achieving group / team goals
- solicits ideas and opinions to help form specific decisions or plans
- is helpful in preventing and resolving conflicts
- maintains a positive outlook and generally shows flexibility to new approaches and ideas

Performance Indicators (Fails to Meet Expectations / Below Satisfactory): Rating 1

- a poor team player
- creates conflict in working with others
- has difficulty balancing self and team interests to meet collective goals
- may be unwilling to work with others
- does not take direction well

Annual Rating

6.0	**Interpersonal Skills**	**5% of total performance score**	

Having positive interpersonal skills increases productivity in an organization as the number of conflicts are reduced. In informal situations, it allows communication to be easy and comfortable. People with good interpersonal skills can generally control the feelings that emerge in difficult situations and can respond appropriately, instead of being overwhelmed by emotion.

Performance Indicators (Significantly Exceeds Expectations / Outstanding): Rating 5

- demonstrates a high level of respect in dealing positively and effectively with co-workers
- pays attention to the needs, feelings and values of others, and encourages them to discuss those issues openly
- treats people fairly and conveys respect for different perspectives
- is open to expanding own awareness on issues
- encourages, incorporates and provides other points of view, values differences and diversity
- is skilled at building trust with staff and coworkers across organizational and functional boundaries
- works very well with both men and women regardless of ethnic, social, or educational backgrounds
- demonstrates competence in helping others apply technical or knowledge requirements
- respects other people and speaks about them in positive terms, and openly acknowledges their contributions
- communicates thoughts, feelings, and ideas to justify a position
- encourages, persuades, convinces or otherwise motivates an individual or groups
- works towards an agreement that may involve exchanging specific resources or resolving divergent interests
- works very well with co-workers and understands / appreciates individual differences
- can adapt behavior to accommodate others
- does not blame others when things go wrong / works with integrity
- successfully appreciates and leverages the capabilities, insights and ideas of individuals
- displays empathy in working harmoniously with others
- displays an ability to work well in teams and actively cooperates with others
- encourages others to come up with solutions, listens carefully to their ideas and offers constructive feedback

Performance Indicators (Meets Expectations / Satisfactory): Rating 3

- shows a level of respect in dealing positively and effectively with co-workers
- works cooperatively with others and contributes to group with ideas, suggestions, and effort
- works with both men and women regardless of ethnic, social, or educational backgrounds
- displays an acceptable level of empathy in working with others
- generally, understands / appreciates individual differences

Performance Indicators (Fails to Meet Expectations / Below Satisfactory): Rating 1

- shows little respect in dealing positively and effectively with co-workers
- displays personal bias or may engage in harassment
- interferes with order and discipline by disregarding the rights of others
- pays little attention to the needs, feelings and values of others
- is confrontational in communicating thoughts, feelings, and ideas in order to justify a position
- is quick to blame others when things go wrong

SECTION C	PERFORMANCE COMMENTS

Note : In Sections A & B all performance ratings of 1 or 5 must be individually substantiated with comments. This section can also be used for general comments concerning the employee's performance.

Section

SECTION D	**DEVELOPMENTAL RECOMMENDATIONS**

Use this section to record training and development goals over the next review period

SECTION E	**PERSONAL DEVELOPMENT**

Overview

Personal development focuses on initiatives taken by the employee or with the Authority's support that demonstrates a positive and proactive approach to personal growth and development. The intent here is to both recognize and reward employees for relevant achievements in excess of the minimum educational requirements of the position e.g. this may be in the form of a higher educational qualification(s), professional qualification(s), certification(s), license(s) etc.

Performance Allocation

Having achieved higher educational qualification(s), professional qualification(s), certification(s), license(s) etc (in excess of the minimum educational requirements of the position) the financial benefits (see table example below) will take the form of additional sub-steps being awarded in excess of those received from this appraisal process.

Please note that where the Authority's compensation model is being adjusted to a higher market percentile(s) the additional sub-steps awarded in this section will be applied with each adjustment and will continue until such time the Authority has reached its targeted position in the market.

Number of additional sub-steps awarded	**EXAMPLE**
3	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take in excess of two (2) years to obtain**
2	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take one (1) to two (2) years to obtain**
1	**The achievement of : Higher Educational Qualifications / Professional Qualification(s) / Certification(s) / License(s) etc that take two (2) to twelve (12) months to obtain**

Notes :

The awarding of sub-step(s) following the attainment of multiple achievements or individual achievements taking less than two (2) months to obtain or any decision to include a particular achievement will be at the discretion of the General Manager.

CCU STANDING RULES

All achievements must be current and valid (where required) for the additional sub-step(s) to be awarded.

Where progression towards a higher qualification sees an employee firstly achieving an interim qualification e.g. Engineer in Training (EIT) and then goes on to pass the Professional Engineer (PE) qualification the employee will be awarded the appropriate sub-steps for achieving the EIT qualification and then the balance of the sub-steps for achieving the PE.

Rating

Human Resources will initially assess (and score in the space provided) the proposed number of sub-steps awarded for higher educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Endorsement of this score (or otherwise) will be made by the General Manager (subject to discretionary and budget constraints) in reviewing the results of this form.

Personal Achievements

Please indicate below all relevant educational qualification(s), professional qualification(s), certification(s), license(s) etc achieved in excess of the minimum required of the position. Please note that these will be subject to verification if no record of their achievement is included in the employee's personal file held with Human Resources.

	Personal Achievements	Authorizing Institution	Pass Grade (where provided)
1.0			
2.0			
3.0			
4.0			
5.0			
6.0			
7.0			
8.0			
9.0			
10.0			

Proposed Increase (number of sub-steps)

CCU STANDING RULES

(CCU to Complete)

SECTION F	CONFIRMATION / SIGNATURES

Conclusion of Evaluation

To the Employee : I have reviewed this performance evaluation on the date indicated below and have had the opportunity to discuss it with my supervisor. My signature does not necessarily mean that I agree with the rating.

Employee :Name : _____ *Signature :* _____ *Date :* _____

CCU

*CCU:*_____ *Date:*_____
(authorization) CCU Chairperson

EFFECTIVE DATE

This CCU RULES shall take effect upon approval by an affirmative vote of the majority of the Commissioners of the CCU.

SO APPROVED this 23rd day of June 2020 by:

_____

JOSEPH T. DUENAS
Chairman

_____

FRANCIS E. SANTOS
Vice Chairman

_____

MICHAEL T. LIMTIACO
Secretary

_____

JUDITH P. GUTHERTZ
Treasurer

_____

SIMON A. SANCHEZ
Commissioner

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GPA RESOLUTION NO. 2018-08
GWA RESOLUTION NO. 21–FY2018

RELATIVE TO UNIFIED EXECUTIVE OFFICE EVALUATION POLICY FOR GPA AND GWA

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Power Authority and the Guam Waterworks Authority; and

WHEREAS, the Guam Power Authority ("GPA") and the Guam Waterworks Authority ("GWA") are Guam Public Corporations established and existing under the laws of Guam; and

WHEREAS, the CCU has directed GPA and GWA to review the existing reporting requirements of the Officers of the Authorities along with the manner and frequency of evaluating the performance of the individual in each position; and

WHEREAS, GPA and GWA drafted a new unified EXECUTIVE OFFICER EVALUATION POLICY (Exhibit "A") to memorialize the responsibilities of the CCU and the General Managers with respect to assessing the performance of the executive officer team for each utility with the intent of establishing and documenting the performance goals and objectives for the officer team, assessing the performance against appropriate and measurable criteria, and recommending measures for improvement where and if needed; and

WHEREAS, the CCU has solicited comments from GPA & GWA General Managers and General Counsels regarding the proposed EXECUTIVE OFFICER EVALUATION POLICY; and

WHEREAS, management of GPA and GWA request the CCU to adopt the proposed unified EXECUTIVE OFFICER EVALUATION POLICY.

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The unified EXECUTIVE OFFICER EVALUATION POLICY (Exhibit "A") for GPA and GWA is hereby adopted to include the General Managers, Chief Financial Officers and General Counsels of GPA and GWA.
2. This policy shall be effective for the Guam Power Authority, Guam Waterworks Authority and the Consolidated Commission on Utilities on April 1, 2018.

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 27th day of March, 2018.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

SECRETARY'S CERTIFICATE

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 5

NAYS: 0

ABSTENTIONS: 0

ABSENT: 0

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

EXECUTIVE OFFICER EVALUATION POLICY

Section 1. AUTHORITY

In accordance with 12 GCA §79101, the Consolidated Commission on Utilities (CCU) hereby adopts the following Policy on Personnel Performance Evaluations, to assist in the conduct of its affairs.

Section 2. PREAMBLE

The CCU is tasked under law with the responsibility of recruitment, management and direction of the executive management positions for both the Guam Power Authority (GPA) and the Guam Waterworks Authority (GWA), specifically the General Managers, Chief Financial Officers, and General Counsels for the respective utilities.

The CCU desires to proactively and regularly assess the performance of the executive management team for each utility with the intent of establishing and documenting the performance goals and objectives for the management team, assessing the performance against appropriate and measurable criteria, and recommending measures for improvement where and if needed.

The CCU formally defines the roles of the executive management team of each utility as follows:

General Manager - Leads the executive management team and is responsible for the overall performance of the utility with the responsibilities defined in and in accordance with the provisions of the law.

Chief Financial Officer – Works with the General Counsel in support of the General Manager and is responsible for the financial performance of the utility with the responsibilities defined in 12 GCA Chapter 8 (GPA) and 12 GCA Chapter 14 (GWA) and in accordance with the provisions of the laws of Guam.

General Counsel – Works with the Chief Financial Officer in support of the General Manager and is responsible for all legal matters for the utility with the responsibilities defined in 12 GCA Chapter 8 (GPA) and 12 GCA Chapter 14 (GWA) and in accordance with the provisions of the laws of Guam.

EXHIBIT A

To this end, the CCU intends to formalize and document the manner in which personnel performance evaluations are conducted through a formal policy which will clarify the intent of this activity and set the general guidelines by which the activity is to be conducted.

Section 3. STATEMENT OF POLICY

It is the policy of the CCU to conduct individual performance evaluations for each member of the executive management team of both the GPA and GWA at a minimum of once per annum in accordance with the following guidelines.

Section 4. GENERAL GUIDELINES

(a) The CCU shall conduct performance evaluations for the following positions on at least an annual basis:

1. GPA General Manager
2. GPA Chief Financial Officer
3. GPA General Counsel
4. GWA General Manager
5. GWA Chief Financial Officer
6. GWA General Counsel

(b) The Chairperson shall call for the performance evaluation of each of the above employees at a schedule convenient for the Commission.

(c) All Commissioners shall participate in the performance evaluation and provide their input and feedback to the Chairperson.

(d) The CCU shall set the performance criteria to be used in the evaluation and discuss the same with each employee upon hiring or within the first quarter following the date of hire. In the case of employees in the above positions prior to the adoption of this policy, the CCU shall discuss the performance criteria at the first performance evaluation subsequent to adoption of the policy.

(e) The CCU may adopt any forms or formats for the documentation of the performance evaluation, and may, from time to time, revise the forms or formats as needed to meet the intent of this policy.

(f) The CCU shall solicit evaluations from each General Manager, as leader of the executive management team, which may be made part of the CCU's performance criteria used in each evaluation conducted on the Chief Financial Officer and General Counsel.

(g) The CCU shall meet with each employee listed above individually to discuss the results of the performance evaluation and to set, review and/or revise the performance goals and objectives for the next performance period.

(h) In accordance with Section 3, paragraph (g) of the CCU Code of Ethics, such performance evaluations shall be performed in a closed executive session in accordance with Guam Law.

Section 5. DISSEMINATION

A copy of this policy shall be delivered to each and every new member of the CCU no later than two weeks after such new member takes office.

Section 6. EFFECTIVE DATE

This Policy shall take effect upon approval by and affirmative vote of the majority of the Commissioners of the CCU.

SO, APPROVED this 27th day of March, 2018.

JOSEPH T. DUENAS
Chairman

FRANCIS E. SANTOS
Vice-Chairman

J. GEORGE BAMBA
Secretary

SIMON A. SANCHEZ, II
Commissioner

DR. JUDITH P. GUTHERTZ, P.A.
Treasurer

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
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Regular Board Meeting
CCU Conference Room, Gloria B. Nelson Public Service Building
5:30 p.m., May 26, 2020

MINUTES

1. CALL TO ORDER

The CCU Chairman called the regular meeting of April 28, 2020 to order at 5:32 p.m. He said four [4] Commissioners were present – Comm. Santos was excused. Others in attendance include:

Commissioners:

Joseph T. Duenas	CCU Chairman
Michael T. Limtiaco	CCU Secretary
Judith P. Guthertz	CCU Treasurer
Simon A. Sanchez	Commissioner

Executive Mgmt.:

Miguel Bordallo	GM / GWA
John Benavente	GM / GPA
Melinda Mafnas	AGMP / GPA
Tricee Limtiaco	AGMA / GPA
Chris Budasi	AGMA / GWA
John Kim	CFO / GPA
Taling Taitano	CFO / GWA
Graham Botha	Legal Counsel / GPA
Kelly Clark	Legal Counsel / GWA

Management & Staff:

Vien Wong	IT Support / GPA
Vladimir Navaska	IT Support / GPA
Lou Sablan	Board Secretary / CCU, GPA, GWA
Ann Borja	Management Analyst, GM's Office / GWA

2. APPROVAL OF MINUTES

The Minutes of March 24, 2020 was presented for approval.

Comm. Guthertz motioned to approve the Minutes subject to verification and written correction, second by Comm. Limtiaco. There was no objection or discussion and the motion passed. The vote was 4 ayes, 1 absent.

3. GWA

3.1 GM Report

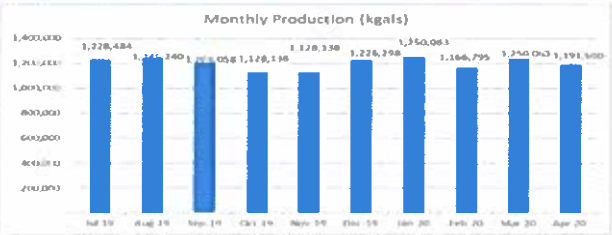
The GM submitted his usual GM Summary Report -- highlights noted below.

Operations Update

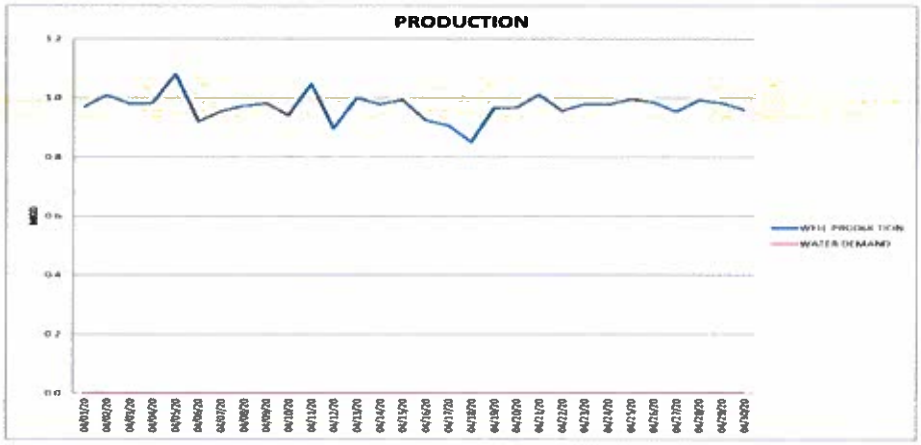
Production (updated for April 2020)

Monthly Production Summary - April 2020			
Deep Wells		36.3	MGD
Active wells =	98 of 120		
Avg days in operation =	30 days		
Total Production =	1,089,192	Kgals	
Springs		0.18	MGD
Avg days in operation =	30 days		
Total Production =	5,384	Kgals	
Ugum Surface Water Plant		2.3	MGD
Avg days in operation =	30 days		
Total Production =	67,804	Kgals	
Tumon Maui Well		0.97	MGD
Avg days in operation =	30 days		
Total Production =	29,120	Kgals	
	1,191,500	Kgals	39.7 MGD

DW Status as of 4/30/2020		
Active	98	
Grounded motor or Pump Failure	4	A26-003-M6-M21
Out of commission	8	A03-A07-A25-D05-D13-M14-M18-M85
Temporarily Secured	2	A13-A25
Standby	8	A16-A29-D08-D-26-F10-F15-F20-M12
TOTAL	120	

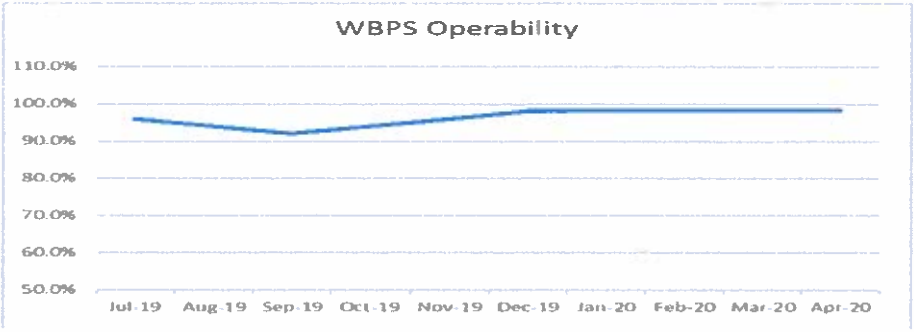


Tumon Maui Well Production (April 2020)



Distribution (April 2020)

Monthly Distribution Summary - April 2020					
Water Booster Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	13	26	25	96.2%
	Central	7	15	15	100.0%
	Southern	7	15	15	100.0%
		27	56	55	98.2%

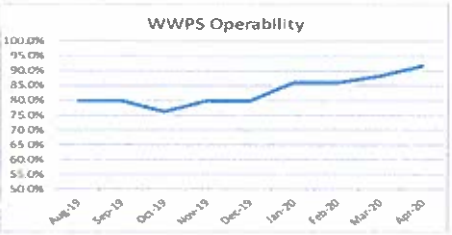


Wastewater Collections (April 2020)

Monthly Collections Summary - April 2020

Wastewater Pump Stations

District	No. of Stations	Total Pumps	Pumps Operating	% Operational
Northern	22	52	46	88.5%
Central	29	63	56	88.9%
Southern	26	56	55	98.2%
	77	171	157	91.8%



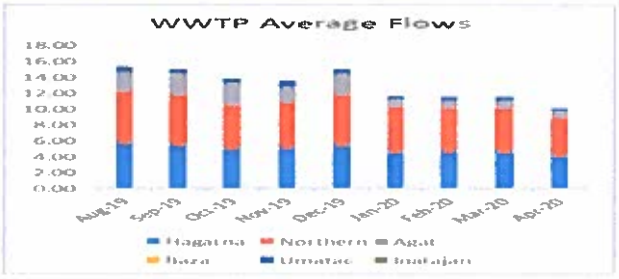


Wastewater Treatment (April 2020)

Monthly Wastewater Treatment Summary - April 2020

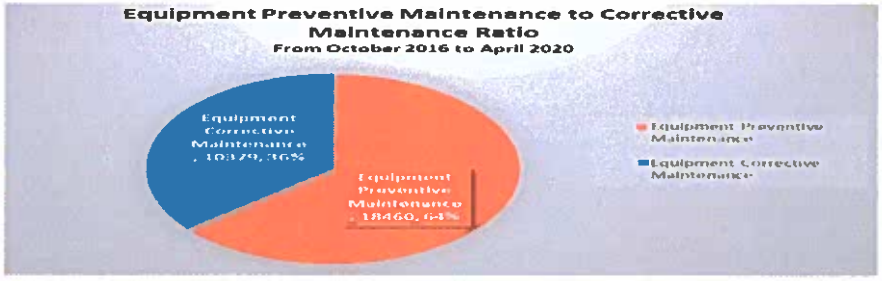
WW Treatment Plants - Flows

Facility	Avg. Daily Flows	Sludge (lbs)	Sludge Disp. ($)
Hagatna	3.94	386,580	$ 34,792
Northern	4.95	809,300	$ 72,837
Agat	0.97	-	$ -
Baza	0		
Umatac	0.20		
Inarajan	0.04		
	10.10	1,195,880	$ 107,629

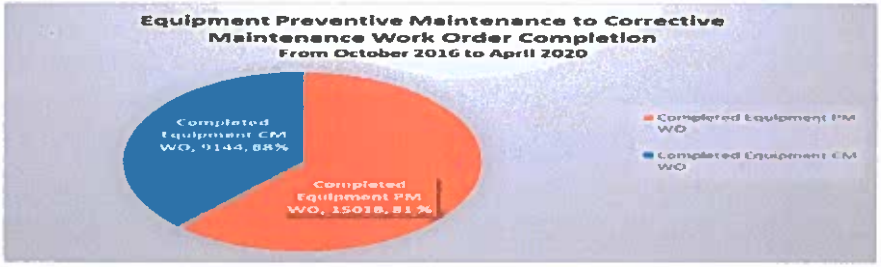


Asset Management (April 2020)

I. Equipment Preventive Maintenance to Corrective Maintenance ***Ratio***

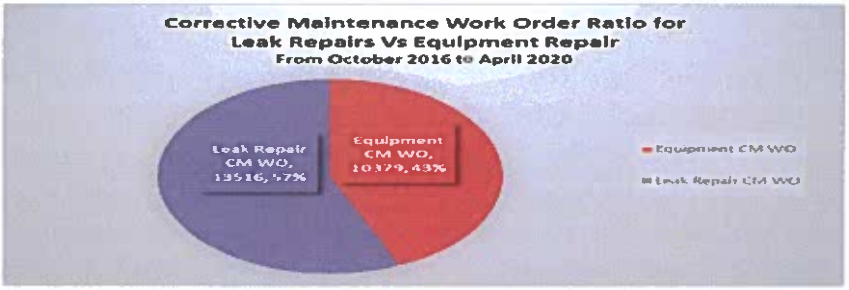


II. Equipment Preventive Maintenance to Corrective Maintenance ***Work Order Completion***



Asset Management (April 2020)

III. Corrective Maintenance Work Order *Ratio* for Leak Repairs vs. Equipment Repair



IV. Corrective Maintenance Work Order *Completion* for Leak Repairs vs. Equipment Repair



Meters from January 2017 through May 12, 2020

COMPLETED FIELD ACTIVITY JAN 2017 THRU MAY 12 2020 (posted in CIS)	2017	2018	2019	Jan-20	Feb-20	Mar-20	04/18/20	05/12/20	TOTAL:	COMPLETED FIELD ACTIVITIES (in process) TO BE POSTED IN CIS
GWA - Meter Exchange	6497	13353	10850	1079	714	546	117	44	33192	0

# OF METERS TESTED AS PER METER TEST FACILITY REPORTS:	6079	12259	9276	749	908	1116	341	662	31392
AVG # OF FIELD STAFF PERFORMING CHANGE OUTS (MON THRU FRI)*	19	16	7	7	7	7	7	1	
# OF ADMIN STAFF TO CREATE AND POST FIELD ACTIVITIES IN CIS	10	6.3	5	5	5	2	1	1	
TOTAL:	29	22	12	12	12	9	8	2	

*projected not presently effective as 04/13/20

REMAINING ACTIVE BADGER LP MODELS TO BE REPLACED AS OF 04/18/20: **447**

3/4" BADGER METERS IN STOCK AS OF April 17, 2020

Size	Meter Description	New Meters Passed	New Meters Untested	Passed Field Meters	MMP	Meters Available
3/4"	METER, Badger AMR 5/8" X 3/4" RCDL Model M25 Disc Meter	381	0	246	0	627
3/4"	METER, Badger AMR 5/8" x 3/4" **WARRANTY** RCDL Model M25	0	0	0	0	0
3/4"	METER,Badger 5/8"x3/4" NSF61-G RCDL M25 Disc Meter Integral	2	0	3	0	5
3/4"	METER, Badger AMR 5/8" x 3/4" RCDL Model M25 **** ZM ****	0	0	0	0	0
3/4"	METER, Badger E-SERIES 5/8"X3/4"ULTRASONIC	960	0	0	0	960

Backbilling through April 2020

Guam Waterworks Authority

Collections Report[1] on Accounts Backbilled thru April 30, 2020

For Fiscal years 2015 thru 2020 (Apr)

Accounts Billed			Collection Status									
			Amounts Collected[1]			Amounts Adjusted			Total Uncollected (Active)			Total Uncollected (Inactive)		
FY Billed	No. of Accounts	Amount	No. of Accounts	Amount	%	No. of Accounts	Amount	%	No. of Accounts	Amount	%	No. of Accounts	Amount	%
FY2015														
FY2016	17	$ 882	17	$ 882	100%	0	$ -		0	$ -		0	$ -	
FY2017	537	$ 397,450	473	301,732	76%	14	20,967	5%	23	48,869	12%	27	25,883	7%
FY2018	1,374	$ 742,109	1,206	564,906	76%	48	61,850	8%	68	74,137	10%	50	41,215	6%
FY2019	8,324	$ 3,064,384	7,473	2,426,146	79%	151	133,752	4%	487	401,807	13%	213	112,679	4%
FY2020	1,816	$ 506,622	1,344	209,234	41%	17	5,541	1%	426	285,229	56%	29	6,618	0%
Total	12,068	$ 4,711,447	10,515	$ 3,492,900	74%	230	$ 222,110	5%	1,004	$ 810,043	17%	319	$ 186,395	4%

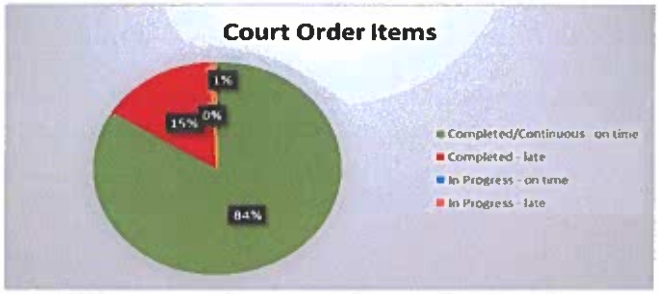
[1] Collections thru May 12, 2020

One Guam Update

Meetings suspended due to COVID-19

Court Order Summary (April 2020)

	Total Items	On-time Items Completed / Continuous	In Progress - late	Completed - Late	In Progress - on time	Performance %
Court order total	93	78	1	14	0	98.90%



	Court Order Items	%	Performance (on-time or completed)
Completed/Continuous - on time	78	84%	
Completed - late	14	15%	
In Progress - on time	0	0%	
In Progress - late	1	1%	98.9%
Totals	93	100%	

Court Order

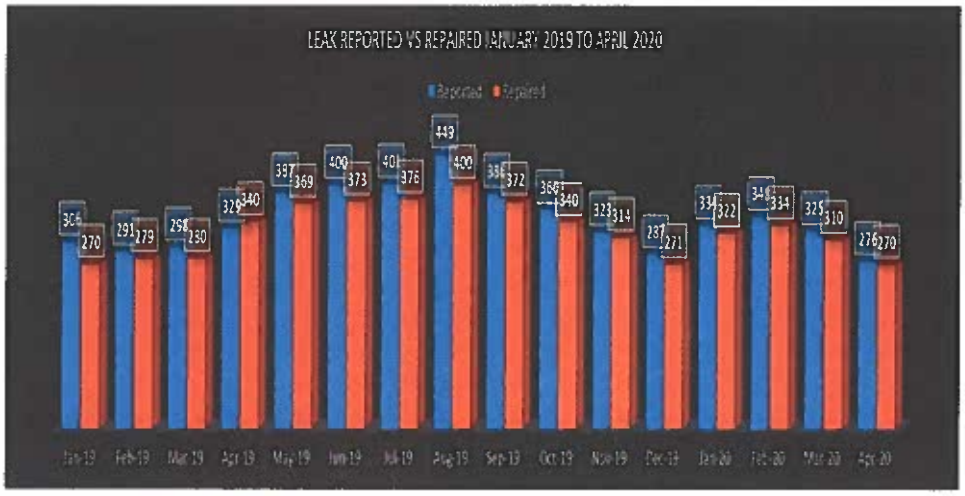
Status Information (for April and May 2020)

- 1 item delayed - The Court Order is down to one item remaining, § II, (C), (29) – Storage tank Repair, Restoration, Replacement or Relocation – which is the item that will take longer than the "end" of the court order. That makes us 98.9% done with the CO.
- Final Date to complete all Court Order items will be delayed past December 31, 2020.
  - CO 29(b) has been expanded by 31% beyond the original Court Order Requirements
  - General Counsel is reviewing filing requirements and content
  - Additional impact likely if 2020 Bond issuance is delayed due to COVID-19 impacts
- Overflow or Bypass events reported to USEPA:
  - 04-08-2020 Chalan Kanton Tasi, Sinajana – PS Controller Failure
  - 04-16-2020 Gills Apartment – Service Lateral (pipe) Failure
  - 04-20-2020 Chalan Goro Elena sewer backup – FOG
  - 04-20-2020 Tai Mangilao PS, Wetwell – PS Controller Failure
  - 04-21-2020 Carnation RD sewer backup – FOG
  - 04-28-2020 Aga Dr#126 – contractor bypass pump failure
  - 04-29-2020 Aga Dr#127 – contractor bypass pump failure
  - 05-04-2020 Aschena, Barrigada, Force Main break
  - 05-07-2020 SSO#132 Wusstig RD sewer overflow – damaged manhole allowed debris to get into the sewer line
  - 05-11-2020 Aga St#140 – contractor bypass pump failure
  - 05-12-2020 Aga St#140 – contractor bypass pump failure

Land Acquisition Summary (as of April 2020)

GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
Tanks	Astumbo	Gov't. - CLTC	Petition of Land Registration package forwarded to Attorney General by DLM 11/04/19. Follow up update status request emailed to DLM 05/14/2020.
	Piti	Private	SHPO sect. 106 response received 1/2/20. GEPA Environmental Impact Review received 1/3/20. USFWS Environmental Consultation response received 12/12/19. Environmental Consultation from DOAg Aquatics and wildlife received 3/4/20. Response from DOAg Forestry & soils still pending.
	Airport	Private	Letter of 1st offer to property owner mailed out on May 8, 2020.
Deep Wells	AG-12	Dept. of Agriculture/Manhita Farms	Right of Entry Agreement sent to Dept of AG for signature 05/24/18. 2nd follow up sent on 09/12/18. 3rd follow up sent on 04/10/19. Retracement Survey Property Map filed and recorded at DLM 7/10/19.
Booster Pump Station	Agfayan	Private	TGE working on structural design for pump station area for L28, B19, T3734, Inarajan 11/07/19.
Asan Springs	Asan	Federal	Received remaining comments from Federal and GovGuam agencies in regards to Section 106 on 12/16/19. GWA and Designer negotiated on a Revised Change Order No. 2 submitted on 2/26/2020. CO. No. 2 is to address Federal and Local agencies concerns, specifically on developing an Environmental Assessment and performing Biological Survey work. Pending approval for revised CO. No.2 as of 3/3/2020. Negotiations with NPS on a ROW agreement is ongoing.

Comparison of Leaks Reported vs. Leaks Repaired (April 2020)



Monthly Leak Report Cost (April 2020)

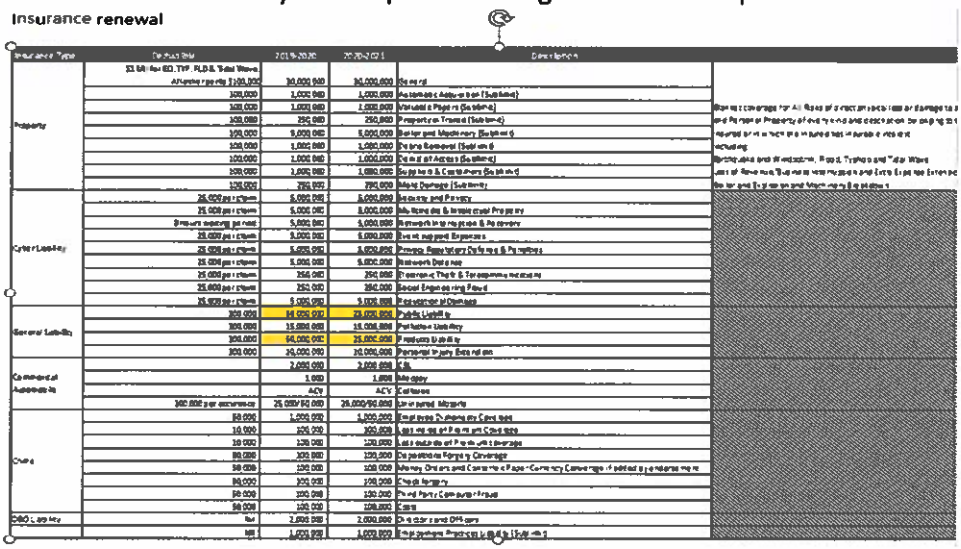


Assumptions:

1. **Leak rate = 4 gpm**
2. **Cost per kgal = $4.00**

The Chair asked GM if any other updates - GM gave Insurance update

- **Insurance renewal**



- Series 2020 Bonds
  - S&P Affirmed "A-" rating and assessed stable outlook
  - Moody's Affirmed "Baa2" rating and removed "Review for Downgrade" but assessed negative outlook
  - Schedule moving forward
    - Investor calls this week Wed, Thu, Fri
    - On-Island retail period Wednesday 27th
    - Bond pricing Thursday 28th
    - Closing Thursday June 4th

Regarding Insurance GM Miguel updated that GWA's broker waa not able to place same amount of coverage for liability so GWA renewed for $25M and they are still working on proposal to reach $50M. Management met with bond counsel who said this was a minor issue so all is ok he just wanted to point this out to the Commission.

3.2 Financials

CFO Taitano gave update on Revenue & Collections wi [report was not loaded to board books but copies were provided to the Commission]. She said this is a picture to show what has been happening with collections. We saw a drop I collections and below average in April. CFO said last week collections increased slightly but overall revenue is down and collection is flat. There was a drop in demand from Commercial accounts in March and April. We are seeing impact to debt service coverage. Our collection ration is closer to 98% but dropped in April.

3.3 Resolution No. 18-FY2020 Relative to Approving the Charge-Off of Guam Waterworks Authority Receivables Deemed Uncollectible

It is good accounting practice to regularly review accounts receivable to ensure the Allowance for Doubtful Accounts is appropriate and to write off accounts that are deemed uncollectible. If uncollectible receivables are not written off regularly, eg annually, Accounts Receivable and the related Allowance become overstated. The proposed amounts to be charged off are $1,841,105.

The employee receivables included costs for lost or damaged equipment, uncleared travel expenses, amounts owed for insurance, and advanced salary payments. Trade receivables included billings as well as work order charges.

As receivables are written off, the Allowance is adjusted. The write off of receivables will not impact income as the amounts were expensed as the Allowance was adjusted, i.e., the write off will reduce the Accounts Receivable and the Allowance for Doubtful Accounts balances on the Statement of Net Position (aka Balance Sheet).

Note, if these receivables are eventually collected, the amounts will be recognized as Miscellaneous Income. The write off will take happen immediately after CCU approval.

Comm. Sanchez motioned to approve Resolution 18-FY2020 second by Comm. Guthertz.

There was discussion on employee receivables. Comm. Guthertz asked clarification of the type of charge and management gave some examples. Comm. Limtiaco asked management to review advanced funds in terms of procedure on payback and if the matter is addressed in the employee rules and regulations. The purpose of the review is to ascertain if these types of advances are allowable using ratepayer dollars in order to avoid this type of charge off in the future. Comm. Limtiaco recommended that the rules and regs be reviewed and matter brought back at the next meeting, Comm. Sanchez said another option is to hold back last paychecks pending clearance of any outstanding receivables.

Comm. Duenas pointed out correction on the year 2000-2016 in the resolved section.

On the motion the vote was 4 ayes and 1 absent – the Resolution carried.

3.4 Resolution No. 25-FY2020 Relative to Approving the Terms of the Settlement in the Claim Against the Guam Waterworks Authority by Ronald W. Blade and Mae K. Cruz Also Referenced as GWA Government Claim No. 2019-005

This resolution is to approve the proposed settlement of the government claim of Mr. Ronald W. Blade and Ms. Mae K. Cruz. On September 24, 2019, Mr. Blade and Ms. Cruz filed a government claim with the Guam Waterworks Authority for damage to their property when a GWA employee hit the Claimants aluminum "automatic" sliding gate while driving into Claimants driveway when responding to a report of a sewer line back-up. The recommendation for settlement is Thirteen Thousand Dollars ($13,000.00). Upon final review, approval and signature of the Release and Settlement Agreement by the Attorney General of Guam and the Governor of Guam. Funding source for this request will be revenue funds.

Comm. Sanchez motioned to approve Resolution 25-FY2020 second by Comm. Guthertz On the notion the vote was 4 ayes and 1 absent

3.5 Resolution No. 26-FY2020 Relative to Authorizing the General Manager the Authority to Settle Government Claims Against GWA

The objective of the Resolution is to authorize the General Manager the authority to settle government claims against GWA without having to get prior CCU approval up to the amount of $50,000.00.

Comm. Sanchez motioned to approve Resolution 26-FY2020 second by Comm. Guthertz

In discussion Comm. Sanchez stated that the resolution state that the GM must notify the Commission of any such action which is included in the resolved section.

On the motion, the vote was 4 ayes and 1 absent – the resolution passed. The vote was 4 ayes; 1 absent

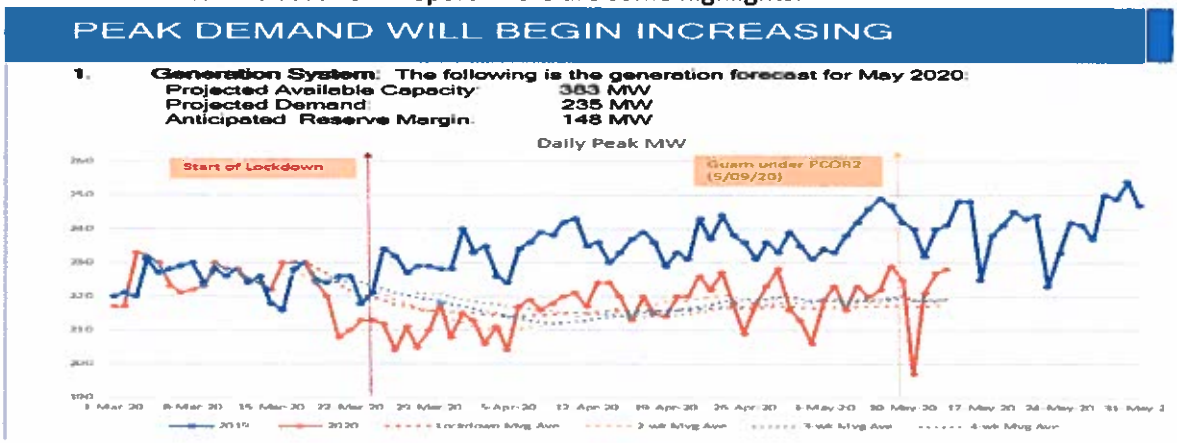
3.6 GWA Resolution No. 27FY2020 Recognizing GPWA Employees for Success in Providing Continuous Service for the Island Throughout the COVID-19 Pandemic

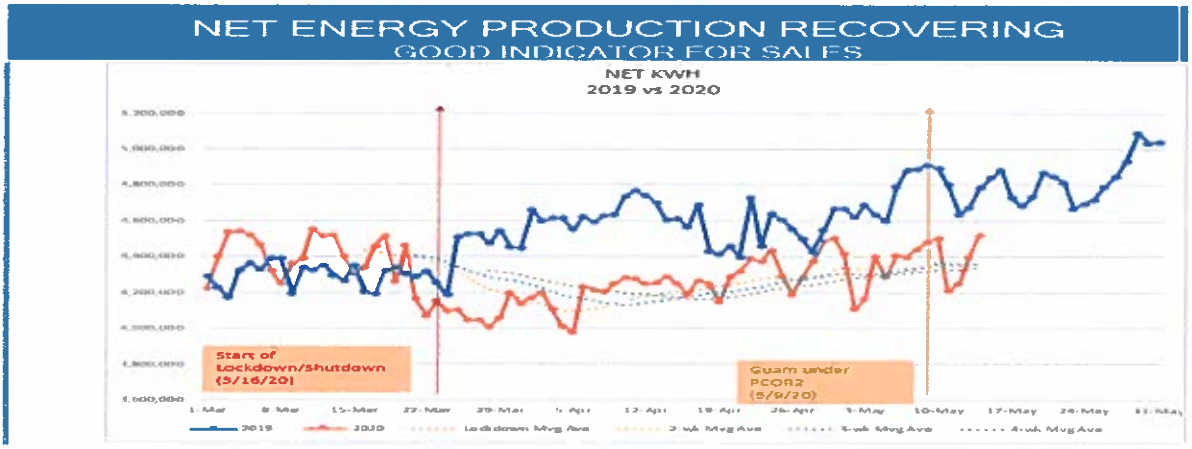
This is a joint resolution with GPA and was presented and discussed in Section 4.5.

4. GPA

4.1 GM Report

The GM submitted his usual GM Report. Here are some highlights:





2. **Net Metering (NEM) Growth Thru April 2020:**



3. **DSM Program Expenses**

Description	FY16	FY17	FY18	FY19	FY20 As of 03/31/20	Total to Date
Regular/OT Pay	$11,348.80	$22,256.00	$26,121.83	$50,715.19	$17,610.32	$128,052.14
Other Contractual	$28,278.50	$85,550.05	$116,977.50	$3,025.00		$233,831.05
Ads & Radio Announcements	-	-	-	$7,500.00	$1,500.00	$9,000.00
Paid Rebates-Split AC	$154,700.00	$557,275.00	$1,349,825.00	$1,374,650.00	$ 299,300.00	$ 3,735,750.00
Paid Rebates- Central AC	$3,400.00	$8,200.00	$4,400.00	$6,500.00	$500.00	$23,000.00
Paid Rebates- Washer/Dryer	$2,800.00	$7,425.00	$57,200.00	$110,800.00	$26,600.00	$204,825.00
Total Expenses	$200,527.30	$680,706.05	$1,554,524.33	$1,553,190.19	$345,510.32	$4,334,458.19
Bank Interest (-)	$1,676.42	$1,722.74	$1,222.29	$730.05	$246.83	$5,598.33
Bank Fees	$155.00	$1,032.08	$1,085.08	$1,247.54	$210.00	$3,729.68

**Expenses for March '20 are preliminary and may be subject to adjustment during reconciliation process.*

4. **Energy Storage System (ESS) Update:** Project suspended until the moratorium on in-coming air transportation and the 14-day quarantine requirement are lifted. Commissioning parties consist of many off-island technical expertise required to complete commissioning work.

5. **KEPCO 60 MW Solar PV Project:** Project Financing has been achieved by KEPCO and their Security Development Deposit of $6,054,636 has been posted with GPA. Project Commercial Operational Date (COD) is Jan 21, 2022.

6. **HANWHA 60 MW Solar PV Project:** HANWHA posted their Security Development Deposit of $4,624,161 with GPA on September 11, 2019. Project Commercial Operational Date is August 22, 2022.

7. **Integrated Resource Plan (IRP) 2020:** Stakeholder meetings suspended until island pandemic emergency lifted. However, virtual stakeholder meetings are being planned which may allow this process to continue earlier.

MEETING	DATE	AGENDA
1	To be rescheduled	-Introduction to the IRP and Stakeholder Process -Demand and Fuel Price Forecasting -Existing Supply-side Resources -Environmental Regulations -Update on GPA's Power Plant -DSM, Net Metering and GPA's Smart Grid Network -Renewable Energy & Energy Storage Systems -Progress in Other Areas of Operation -[Open Session w/ Stakeholders]
2		Stakeholder Breakout Sessions & Feedback
3&4	Pending updated schedule	Results

8. **Credit Rating Agencies**: We have had conference calls with all three rating agencies. We have provided updates on the impact of COVID-19 on the utility. GPA is confident it will maintain its investment grade rating, although like many other utilities credit watches are in effect.

9. **FY 2019 Audit**: The audit has been completed and Issued. All publication and notification requirements have been done.

10. **Generation KPI's**: The following graphs show the updated system information through April 2020:

There was discussed relative to Govt. Receivables and status of those in arrears. The total AR is 4.059K and DOE alone is 3.449k. Comm. Limtiaco said for the next meeting to amend the report to record those accounts over 90 or 120 days in another color code and that management needs to give these agencies notice and start disconnecting their admin buildings.

4.2 Financials

CFO Kim gave his usual financial highlights to include these brief updates – revenues are 8.5% lower than prior year. MWh Sales are down by 8% compared to prior year. RE O&M budget is favorable by $346k vs. prior year. It was mentioned that residential and prepaid customers are being reminded weekly by text about their limits and other collection information.

4.3 Resolution 2020-10 PMC for GPA's Aggreko Temporary Power Units

GPA's contract with Aggreko expires on January 8, 2021. GPA's new Ukudu power plant and renewable energy contracts are not expected are expected to be commissioned until about 2022-2023. Therefore, to ensure adequate installed capacity to meet system demand, GPA needs to continue operating and maintaining the Aggreko Temporary Power Units. The term of the new contract is for a three-year base period beginning January 9, 2021 and two (2) additional 1-year extensions. During this period, the PMC will also assure that all necessary activities to ensure efficiency and reliability of the units are accomplished. The plant will be operated and maintained by GPA personnel and supplemented by PMC personnel as necessary.

The anticipated schedule is as follows:

Contract Commencement:	January 9, 2021
Contract Base Period End:	January 8, 2024
Optional Extension Year 1:	January 9, 2024 – January 10, 2025
Optional Extension Year 2:	January 9, 2025 – January 10, 2026

The project will be funded by revenue funds and the annual estimated cost is $3.8M. This will result in a $8.1M reduction in current cost for plant.

Actual	2016	2017	2018	2019	2020 (thru March)	2021 Estimated
Capacity Charge, $/kw/Month	8,447,280.00	$ 6,979,200.00	$ 6,979,200.00	$ 6,979,200.00	$ 1,744,800.00	
Transit (or Shipping) Charge, $/Month	1,274,363.20					
Fixed O&M, $/Month	2,264,686.00	$ 2,227,560.00	$ 2,227,560.00	$ 2,227,560.00	$ 556,890.00	$ 2,227,560.0
Emission Controls Monthly Charges		$ 220,162.50	$ 285,000.00	$ 285,000.00	$ 71,250.00	
Monthly Installment (Rent-to-Own)		$ 500,004.00	$ 500,004.00	$ 1,771,111.20	$ 492,778.63	
Total Fixed Charges:						
Energy Charge, $/MWh (Min. 8,098 MWH)	995,896.05	$ 794,517.37	$ 660,309.76	$ 649,326.48	$ 158,694.54	$ 701,384.54
DEF Charges,$/MWH (Min. 8,098 MWH/Month)		$ 932,898.05	$ 914,033.50	$ 901,526.32	$ 220,305.65	$ 916,152.62
Availability Penalty		$ (155,985.42)		$ (23,744.00)		
TOTAL ACTUAL COSTS:	$ 12,982,225.25	$ 11,498,356.49	$ 11,566,107.26	$ 12,789,980.00	$ 3,244,718.82	$ 3,845,097.16
5-YEAR TOTAL					**$ 52,081,387.82**	
Annual Cost Reduction						**$ 8,106,384.09**

Notes:

1. Energy Charges includes lube oil and maintenance spare parts.
2. Emission Control Monthly Charges include the supply, transport and installation of 39x SCR units and Urea shipping and piping syste
3. DEF Charges the cost of urea
4. Fixed O&M include 24-hour staffing for 7 Aggreko and 12 local hires and availability with capacity factor of 50%

It was mentioned that the good news is GPA now owns the Units beginning Jan9th 2021. Huge Savings from 12M to 9M per year will be realized. These machines will be needed until Ukudu comes on line. Agrekko will be with GPA for a very long time. They fit right into plans for renewables.

GM Benavente confirmed that this matter needs to go to PUC for approval.

Comm. Guthertz motioned to approve Resolution 2020-10 second by Comm. Sanchez. The resolution passed; the vote was 4 ayes and 1 absent.

4.4 Resolution 2020-11 UKUDU Power Plant ECA Amendment

This Resolution was TABLED.

4.5 Resolution 2020-12 Recognizing GPWA Employees for Success in Providing Continuous Service for the Island Throughout the COVID-19 Pandemic

This is a dual resolution that applies to both GPA and GWA. Executive Order No. 2020-04, issued March 16, 2020, declared a public health emergency for the island of Guam due to the potential dangers posed by the Coronavirus (COVID-19), and ordered the closure of non-essential government of Guam services through March 30, 2020. Guam Power Authority and Guam Waterworks Authority (GPWA) were prepared to ensure continuity of essential utility services to the island community during the mandated two-week shutdown and beyond if necessary. GPWA developed a contingent operational plan, while the shutdown was extended. In addition to providing essential utility services, GPWA supported regular business functions to the extent practicable. To minimize exposure and spread of coronavirus, especially to and among employees in mission-critical positions, only approved key, essential employees were allowed entry into Fadian. Executive Order No. 2020-05 issued on March 19, 2020 mandated social isolation, prohibiting social gatherings and clarified status of non-essential government of Guam operations. The Government of Guam was operating in a limited capacity. It was expressed that one of the best courses of combat against community spread is through the reduction of face-to-face interaction with others and the practice of social distancing. In order to best deal with the ongoing Public Health Emergency, both Guam Power Authority (GPA) and Guam Waterworks Authority (GWA) coordinated and provided the following operational plan; I) Direction and Organization; II) Ensuring Essential Operations; III) Ensuring Customer Services; and IV) Supportive Efforts. On May 10, 2020, Governor Lou Leon Guerrero placed the island in Pandemic Condition of Readiness (PCOR) 2 under the Governor's Executive Order 2020-14. PCOR 2, expanded the categories of businesses and places authorized to reopen with moderate restrictions, including the public-facing functions of GPWA, signaling a positive movement toward normalcy.

In joint coordination, GPA & GWA General Managers ordered the full reopening of the utilities on Thursday, May 14, 2020 in compliance with PCOR 2 restrictions and requirements. To accommodate new health and safety requirements, work schedules were modified to incorporate continued telework and staggered shifts, where possible.

In addition to the Upper Tumon payment drive-thru, in-lobby and online payment options, a new, temporary payment drive-thru service was commissioned at Fadian location on May 14, 2020. Moving forward both utilities resumed full utility operations after a 2-month shutdown. As both agencies return to the business of the utility, employees were reminded to continue to do their part to slow the spread of COVID-19, and continue to promote good safety and health practices promoted by Guam Department of Public Health and Social Services, and the US Center for Disease Control and Prevention.

The coronavirus pandemic has changed our everyday lives and the way we interact with each other, moving individuals toward minimal human contact. Keeping safe, promoting healthy practices, working from home, wearing personal protective gear (mask) and practicing social distancing, is the new norm and for now part of our daily lives.

The CCU recognizes the hard work and dedication of the employees of the Guam Power Authority and Guam Waterworks Authority in providing uninterrupted power and water services to the island community during the pandemic public health emergency.

The CCU wishes to commend the employees of the Guam Power Authority and Guam Waterworks Authority for the successful efforts in providing continuous critical services to the ratepayers and people of Guam during this unprecedented emergency.

Comm. Guthertz motioned to approve GWA Resolution 27-FY2020 and GPA Resolution 2020-12 second by Comm. Sanchez. On the motion there was no further discussion or objection and the motion passed. The vote was 4 ayes and 1 absent.

5. OTHER DISCUSSION

5.1 Proposed CCU Rules

There was no discussion on this matter.

6. ANNOUNCEMENTS

6.1 Next CCU Meetings

The next CCU meeting would be on June 23. It was not mentioned whether or not a June work session would be held.

8. ADJOURNMENT

There being no other business to bring before the Commission, Comm. Sanchez motioned to adjourn the meeting second by Comm. Guthertz. There was no objection or discussion and the meeting adjourned at 6:16 p.m.

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Attested

JOSEPH T. DUENAS, Chairman

MICHAEL T. LIMTIACO Secretary

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

RESOLUTION NO. 31–FY2020

RELATIVE TO APPROVAL OF THE 2010, 2013 AND 2016 BOND PROCEEDS REALLOCATION

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA management intends to expend unobligated 2010, 2013 and 2016 Bond proceeds in an effort to maintain compliance with bond indenture requirements by reallocating said bond proceeds to on-going or active CIP projects; and

WHEREAS, the PUC required via GWA Docket 19-08 "FY20 Rate Decision" that GWA establish a Water Loss Reduction Program to improve the utility's water loss in an effort to save on operating cost; and

WHEREAS, GWA is currently in negotiations with USEPA for a "Consent Decree" (CD) relative to wastewater system improvements at GWA sewer pump stations (SPS), force mains and gravity lines and as such GWA intends to focus engineering and financial resources to meet the anticipated CD priorities; and

WHEREAS, GWA finance has reconciled as of May 31, 2020 the 2010, 2013 and 2016 Bonds Capital Improvements Project (CIP) accounts and has determined there are several CIP line items with a remaining balance under the "Unobligated Project Cost" totaling Three Million Seven Hundred Seventeen Thousand Five Hundred Sixty-Eight Dollars ($3,717,568.00) (See

Exhibit A), Four Million One Hundred Twenty Thousand Five Hundred Thirty-Three Dollars ($4,120,533.00) (See Exhibit B), Seventeen Million Seven Hundred Forty-One Thousand Six Hundred Seventy Dollars ($17,741,670.00) (See Exhibit C), respectively; and

WHEREAS, GWA management seeks to reallocate Seven Hundred Eighty-Three Thousand Seven Hundred Sixteen Dollars ($783,716.00) of the 2010 Bond proceeds from various CIP line items to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", and PW 12-01 "Water Audit Program & Water Loss Control Plan" (See Exhibit D); and

WHEREAS, GWA management further seeks to reallocate One Million Sixty-Six Thousand Four Dollars ($1,066,004.00) of 2013 Bond proceeds from various CIP line items to the CIP line item WW 09-01 "Lift station upgrades" (See Exhibit E); and

WHEREAS, GWA management further seeks to reallocate Two Million Seven Hundred One Thousand Eight Hundred Seventy-Seven Dollars ($2,701,877.00) of 2016 Bond proceeds from various CIP line items to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", WW 09-01 "Lift station upgrades", WW 09-06 "Wastewater Collection System Repl/Rehab" and MP-Gen-Misc-05 "GWA Infrastructure Improvements" (See Exhibit F); and

WHEREAS, the reallocation of the 2010, 2013 and 2016 Bond as described above has caused the Capital Improvement Plan to be adjusted (See Exhibit G) to reflect the movement of funding as well as allow for CIP line items that had projected shortages in bond funding to reduce future bond borrowing for that CIP line item due to this reallocation; and

WHEREAS, GWA management seeks CCU approval to petition the PUC for approval to reallocate the 2010, 2013 and 2016 bond as indicated above; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve and authorize the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the justification for the 2010, 2013 and 2016 bond reallocation to be acceptable.
3. The CCU hereby approves Seven Hundred Eighty-Three Thousand Seven Hundred Sixteen Dollars ($783,716.00) of 2010 Bond proceeds from various CIP line items to be reallocated to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", and PW 12-01 "Water Audit Program & Water Loss Control Plan".
4. The CCU hereby further approves One Million Sixty-Six Thousand Four Dollars ($1,066,004.00) of 2013 Bond proceeds from various CIP line items to be reallocated to the CIP line item WW 09-01 "Lift station upgrades".
5. The CCU hereby further approves Two Million Seven Hundred One Thousand Eight Hundred Seventy-Seven Dollars ($2,701,877.00) of 2016 Bond proceeds from various CIP line items to be reallocated to the CIP line items PW 09-01 "Ugum Water Treatment Plant Intake", PW 09-03 "Water Distribution System Pipe Replacement and Upgrades", WW 09-01 "Lift station upgrades", WW 09-06 "Wastewater Collection System Repl/Rehab" and MP-Gen-Misc-05 "GWA Infrastructure Improvements".
6. The CCU further approves the management of GWA seek PUC approval for the reallocation of 2010, 2013 and 2016 bond funds as indicated herein.

RESOLVED, that the Chairman certified, and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

MICHAEL T. LIMTIACO
Secretary

SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 4

NAYS: ϕ

ABSENT: 1

ABSTAIN: ϕ

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GUAM WATERWORKS AUTHORITY
2010 Series Bond Project Status
As of May 31, 2020

Exhibit A (page 1 of 1)

SCHEDULE M

	PROJECT NAME	BOND INTEREST	Adjusted Project Cost	EXPENDITURES AS OF 5/31/20	OUTSTANDING ENCUMBRANCES	FUNDING REQUEST	TOTAL EXPENDITURES ENCUMBRANCES & FUNDING REQUESTS	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 5/31/20
PW 05-01	Ground Water Disinfection		$ 500,000	$ 465,008	$ -		$ 465,008	34,992	34,992
PW 05-05	"A" Series Well Transmission Line		$ 475,709	$ 475,709	$ -		$ 475,709	-0	-0
PW 05-06	Water Booster Pump Station		$ 500,000	$ 500,000	$ -	$ -	$ 500,000	0	0
PW 05-07	Meter Replacement Program		$ 10,450,000	$ 10,174,513	$ 6,517	$ -	$ 10,181,030	268,970	275,487
PW 05-08	Barrigada Tank Repair/Replacement		$ 5,450,000	$ 5,371,011	$ 33,337		$ 5,404,348	45,652	78,989
PW 05-09	Leak Detection		$ 200,000	$ 17,037	$ -		$ 17,037	182,963	182,963
PW 05-10	Potable Water System Planning	10,487	$ 210,487	$ 210,487	$ 0		$ 210,487	0	0
PW 05-11	Implement Ground Water Rule		$ 1,699,999	$ 1,699,998	$ -		$ 1,699,998	1	1
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade		$ 1,900,000	$ 368,647	$ 5,914		$ 374,561	1,525,439	1,531,353
PW 05-13	Deep Well Rehabilitation		$ 548,000	$ 404,045	$ -		$ 404,045	143,955	143,955
PW 05-14	New Deep Wells at Down Hard		$ 485,743	$ 485,743	$ -		$ 485,743	0	0
PW 05-15	Rehabilitation of Asan Springs		$ 1,100,000	$ 251,593	$ 339,641		$ 591,234	508,766	848,407
PW 05-16	Master Meters		$ 1,489,957	$ 1,489,957	$ -		$ 1,489,957	0	0
PW 09-01	Ugum Water Treatment Plant Intake		$ 700,000	$ 610,234	$ 106	$ -	$ 610,340	89,660	89,766
PW 09-02	Water Wells		$ -	$ -			$ -	0	0
PW 09-03	Water Distribution System		$ 3,174,748	$ 3,152,725	$ 21,963		$ 3,174,688	60	22,023
PW 09-04	Pressure Zone Realignment /		$ -	$ -			$ -	0	0
PW 09-05	Northern System Water Distribution		$ -	$ -	$ -		$ -	0	0
PW 09-06	Central Water Distribution System 2005		$ 775,002	$ 709,031	$ 2	$ -	$ 709,033	65,969	65,971
PW 09-07	Southern Water Distribution System		$ -	$ -			$ -	0	0
PW 09-08	Mechanical/Electrical Equipment		$ 1,200,000	$ 1,200,000	$ -	$ -	$ 1,200,000	0	0
PW 09-09	Water Reservoir Internal/External		$ 2,150,000	$ 1,178,456	$ 930,928	$ -	$ 2,109,384	40,616	971,544
PW 09-10	Water Reservoir Internal/External		$ -	$ -			$ -	0	0
PW 09-11	Water System Reservoirs 2005 Improvements		$ 1,050,000	$ 1,033,925	$ 16,075		$ 1,050,000	0	16,075
PW 11-01	Distribution System Upgrades		$ 474,160	$ 449,046	$ -		$ 449,046	25,114	25,114
PW 11-02	Ugum Water Treatment Plant Reservoir		$ -	$ -			$ -	0	0
PW 12-01	Water Audit Program & Water Loss Control Plan		$ 78,459	$ 15,031	$ -	$ -	$ 15,031	63,429	63,429
PW 12-02	Production Plan / Reduce Navy Purchases		$ 100,000	$ 99,900	$ -		$ 99,900	100	100
PW 12-03	Hydraulic Asessment of Tank		$ 500,000	$ 489,161	$ 2,680		$ 491,841	8,159	10,839
PW 12-04	Agana Heights & Chaot Tanks		$ 4,700,000	$ 4,647,524	$ -		$ 4,647,524	52,476	52,476
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 1,848,013	$ 1,765,504	$ 77,283		$ 1,842,787	5,226	82,509
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ -	$ -			$ -	0	0
PW 12-07	Assessment of malojloj Elevetad & Yigo Elevated		$ 200,000	$ 200,000	$ -		$ 200,000	0	0
PW 12-08	Public Water System Asser Inventory/Condition Assesment		$ 100,000	$ 78,386	$ -		$ 78,386	21,614	21,614
PW 12-09	Public Water System GIS & Mapping		$ 50,000	$ 50,000	$ -		$ 50,000	0	0
			$ -	$ -			$ -	0	0
WW 05-04	Wastewater System Planning	18,857	$ 1,492,857	$ 1,492,857	$ -		$ 1,492,857	0	0
WW 05-05	Wastewater Vehicles		$ 235,000	$ 209,795	$ -		$ 209,795	25,205	25,205
WW 05-07	NDWWTP - Chlorine Tanks	207,982	$ 457,982	$ 457,982			$ 457,982	0	0
WW 09-07	Tumon Bay Sewer Upgrades		$ -	$ -			$ -	0	0
WW 09-06	Wastewater Collection System Repl/Rehab		$ 1,001,323	$ 904,432	$ -	$ -	$ 904,432	96,891	96,891
WW 09-08	Facilities Plan/Design for Baza Garde	16,757	$ 1,266,757	$ 1,198,678	$ 68,079		$ 1,266,757	0	68,079
WW 09-10	Facilities Plan/Design for Agat-Santa Rita WWTP		$ 899,630	$ 778,208	$ 121,422		$ 899,630	0	121,422
WW 11-02	Priority 1 Sewer Upgrades – Baza Gardens WWTP		$ -	$ -			$ -	0	0
WW 11-03	Baza Gardens STP Replacement		$ 1,488,378	$ 1,445,363	$ -		$ 1,445,363	43,015	43,015
WW 11-04	Facilities Plan/Design for Umatac Merizo WWTP		$ 853,858	$ 827,795	$ 26,063		$ 853,858	0	26,063
WW 11-08	Agat/Santa Rita STP Replacement		$ 2,217,700	$ 2,215,110	$ 1,363		$ 2,216,473	1,227	2,590
WW 12-01	Northern District WWTP Primary Treatment Upgrades		$ 11,743,514	$ 11,419,078	$ 177,322	$ -	$ 11,596,400	147,114	324,436
WW 12-02	Biosolids Management Plan		$ 200,000	$ 162,084	$ -		$ 162,084	37,916	37,916
WW 12-03	Agana WWTP Interim Measures	63,892	$ 11,363,892	$ 11,298,383	$ 23,595		$ 11,321,978	41,913	65,508
WW 12-04	I&I SSES Southern		$ 800,000	$ 793,717	$ 5,278		$ 798,995	1,005	6,283
WW 12-05	I&I SSES Central		$ 850,000	$ 792,566	$ 1,019		$ 793,585	56,415	57,434
WW 12-06	I&I SSES Northern		$ -	$ -			$ -	0	0
WW 12-07	Umatac Merizo Replacement		$ 250,000	$ 245,449	$ 2,569		$ 248,018	1,982	4,551
WW 17-02	Northern District WWTP Secondary Treatment Upgrades		$ 1,000,000	$ 1,000,000	$ -		$ 1,000,000	0	0
			$ -	$ -					
EE 05-01	Well Electrical Protection		$ -	$ -			$ -	0	0
EE 05-02	SCADA Pilot Project		$ 61,950	$ 19,812	$ -		$ 19,812	42,138	42,138
EE 09-02	Electrical Upgrade - Water Wells		$ 354,227	$ 350,291	$ 3,936		$ 354,227	0	3,936
EE 09-03	Electrical Upgrade - Water Booster		$ -	$ -			$ -	0	0
EE 09-04	Electrical Upgrade -Water Booster		$ -	$ -			$ -	0	0
EE 09-05	Electrical Upgrade - Other Water		$ -	$ -			$ -	0	0
EE 09-06	SCADA Improvements – Phase 1		$ 250,000	$ 202,894.23	$ 6,597		$ 209,492	40,508	47,106
EE 09-07	SCADA Improvements – Phase 2		$ 1,056,986	$ 1,026,782	$ 6,597		$ 1,033,380	23,606	30,204
EE 09-08	SCADA Improvements – Phase 3		$ 24,956	$ 24,956	$ -		$ 24,956	0	0
EE 09-09	SCADA Improvements – Phase 4		$ -	$ -			$ -	0	0
			$ -	$ -					
MC 05-01	Laboratory Modernization		$ -	$ -			$ -	0	0
MC 05-02	Land Survey		$ 499,688	$ 469,484	$ 6,597		$ 476,081	23,607	30,204
MC 09-01	General Plant Improvements / Water		$ 7,241,000	$ 7,202,237	$ -	$ -	$ 7,202,237	38,763	38,763
Interest	Interest Earned	$ 13,099	$ 13,099					13,099	13,099
	Total Construction Fund (2010 Se	**$ 331,073**	**$ 87,733,073**	**$ 82,130,622**	**$ 1,884,884**	**$ -**	**$ 84,015,506**	**$ 3,717,568**	**$ 5,602,451**

GUAM WATERWORKS AUTHORITY
2013 Series Bond Project Status
As of May 31, 2020

SCHEDULE J

	PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	BOND INTEREST	Adjusted Project Cost	EXPENDITURES AS OF 5/31/20	OUTSTANDING ENCUMBRANCES	FUNDING REQUEST	TOTAL EXPENDITURES ENCUMBRANCES & FUNDING REQUESTS	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 5/31/20
PW 05-03	Santa Rita Springs Booster Pu	$ 100,000	$ 100,000.00		$ 100,000	100,000	-		$ 100,000	$ -	$ -
PW 05-05	"A" Series Well Transmission	$ 400,000	$ 400,000.00		$ 369,846	369,846	(0)		$ 369,846	$ 0	$ 0
PW 05-06	Water Booster Pump Station	$ 6,000,000	$ 6,000,000.00		$ 1,679,964	1,664,351	2,442	-	$ 1,666,793	$ 13,171	$ 15,613
PW 05-07	Meter Replacement Program		$ 1,500,000.00		$ 996,532	854,479	-		$ 854,479	$ 142,053	$ 142,053
PW 05-08	Barrigada Tank Repair/Replac	$ 6,000,000	$ 6,000,000.00		$ 4,987,000	4,779,897	16,000		$ 4,795,897	$ 191,103	$ 207,103
PW 05-09	Leak Detection	$ 100,000	$ 100,000.00		$ 16,916	-	(0)	-	$ (0)	$ 16,916	$ 16,916
PW 05-10	Potable Water System Planni	$ 800,000	$ 1,200,000.00		$ 624,000	593,939	30,061		$ 624,000	$ 0	$ 30,061
PW 05-11	Implement Ground Water Rul	$ 1,000,000	$ 1,000,000.00		$ 1,000,000	952,052	29,724		$ 981,776	$ 18,224	$ 47,948
PW 05-13	Deep Well Rehabilitation	$ 800,000	$ 800,000.00		$ 200,000	198,175	1,826		$ 200,000	$ (0)	$ 1,825
PW 05-14	New Deep Wells at Down Har	$ 2,000,000	$ 2,000,000.00		$ -	-	-		$ -	$ -	$ -
PW 05-16	Master Meters	$ 4,000,000	$ 4,000,000.00		$ 712,060	476,315	180,872		$ 657,187	$ 54,873	$ 235,745
PW 09-01	Ugum Water Treatment Plant	$ 1,000,000	$ 1,000,000.00		$ 859,801	354,136	14,512	414,684	$ 783,332	$ 76,469	$ 505,665
PW 09-02	Water Wells	$ 4,200,000	$ 4,200,000.00		$ 3,030,029	2,148,678	8,167		$ 2,156,845	$ 873,184	$ 881,351
PW 09-03	Water Distribution System	$ 12,000,000	$ 14,000,000.00		$ 10,912,453	10,001,340.93	540,687		$ 10,542,028	$ 370,425	$ 911,112
PW 09-04	Pressure Zone Realignment /	$ 1,000,000	$ 1,000,000.00		$ 337,110	336,036	1,074		$ 337,110	$ 0	$ 1,074
PW 09-08	Mechanical/Electrical Equipme	$ 430,000	$ 430,000.00		$ 426,799	309,784	-	111,522	$ 421,306	$ 5,493	$ 117,015
PW 09-10	Water Reservoir Internal/Exte	$ 800,000	$ 800,000.00		$ -	-	-		$ -	$ -	$ -
PW 09-11	Water System Reservoirs 200	$ 21,000,000	$ 18,000,000.00		$ 13,878,000	13,020,796	812,788		$ 13,833,584	$ 44,416	$ 857,204
PW 11-02	Ugum Water Treatment Plant	$ 7,000,000	$ 7,000,000.00		$ -	-	-		$ -	$ -	$ -
PW 12-04	Agana Heights & Chaot Tanks	$ 4,500,000	$ 4,500,000.00		$ 1,330,287	1,114,271	216,016		$ 1,330,287	$ (0)	$ 216,016
PW 12-05	Tank Maior Repair Yigo#1 Ma	$ 13,500,000	$ 13,500,000.00		$ 11,605,000	10,713,256	891,369		$ 11,604,625	$ 375	$ 891,744
PW 12-06	Tank Maior Repair Yigo#1 Ma	$ 8,000,000	$ 8,000,000.00		$ -	-	-		$ -	$ -	$ -
PW 12-07	Assessment of maloiloi Elevat	$ 500,000	$ 500,000.00		$ 485,117	461,813	23,304		$ 485,117	$ 0	$ 23,304
PW 14-01	Fire Hydrant Replacement Prc	$ -	$ 1,000,000.00		$ -	-	-		$ -	$ -	$ -
					$ -				$ -	$ -	
WW 05-04	Wastewater System Planning	$ 800,000	$ 800,000.00		$ 650,901	618,613	6,982		$ 625,595	$ 25,306	$ 32,288
WW 09-01	Lift Station Upgrades	$ 5,000,000	$ 2,000,000.00		$ 563,148	538,385	7,265		$ 545,650	$ 17,498	$ 24,763
WW 09-06	Wastewater Collection Systen	$ 6,500,000	$ 3,800,000.00	72,045	$ 732,358	575,303	75,152		$ 650,455	$ 81,903	$ 157,055
WW 11-03	Baza Gardens STP Replacement		$ 1,000,000.00		$ 9,656,874	7,890,391	1,429,611		$ 9,320,002	$ 336,872	$ 1,766,483
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP		$ 1,000,000.00		$ 371,699	369,613	2,086		$ 371,699	$ 0	$ 2,086
WW 11-08	Agat/Santa Rita STP Replace	$ 19,000,000	$ 19,000,000.00		$ 67,200,000	66,539,824	393,770		$ 66,933,594	$ 266,406	$ 660,176
WW 12-03	Agana WWTP Interim Measures		$ 1,500,000.00	45,076	$ 718,076	667,693	50,383		$ 718,076	$ 0	$ 50,383
WW 12-07	Umatac Merizo Replacement	$ 2,000,000	$ 1,000,000.00		$ -	-	-		$ -	$ -	$ -
					$ -				$ -	$ -	
EE 09-01	Wastewater Pump Station Ele	$ 620,000	$ 620,000.00		$ 99,861	99,087	774		$ 99,861	$ -	$ 774
EE 09-02	Electrical Upgrade - Water W	$ 1,500,000	$ 1,500,000.00		$ 1,500,000	1,487,105	2,599		$ 1,489,704	$ 10,296	$ 12,895
EE 09-03	Electrical Upgrade - Water Bo	$ 325,000	$ 325,000.00		$ -	-	-		$ -	$ -	$ -
EE 09-04	Electrical Upgrade -Water Boo	$ 350,000	$ 350,000.00		$ 977	977	-		$ 977	$ -	$ -
EE 09-05	Electrical Upgrade - Other Wa	$ 250,000	$ 250,000.00		$ 60,700	60,700	-		$ 60,700	$ -	$ -
EE 09-08	SCADA Improvements – Phas	$ 1,850,000	$ 1,850,000.00		$ 722,359	514,786	173,869	-	$ 688,655	$ 33,704	$ 207,573
EE 09-09	SCADA Improvements – Phas	$ 500,000	$ 1,200,000.00		$ -	-	-		$ -	$ -	$ -
					$ -				$ -	$ -	$ -
MC 05-01	Laboratory Modernization	$ 1,500,000	$ 1,500,000.00		$ 1,171,465	1,163,037	7,785		$ 1,170,822	$ 643	$ 8,428
MC 05-02	Land Survey	$ 2,000,000	$ 2,000,000.00		$ 1,052	1,038	15		$ 1,053	$ (1)	$ 15
MC 09-01	General Plant Improvements /	$ 2,000,000	$ 2,600,000.00		$ 2,441,737	1,331,471	3,251	942,603	$ 2,277,325	$ 164,412	$ 1,110,266
	Allowance for COI										$ 275,005
Interest	Interest Earned			$ 1,376,792	$ 1,376,792					$ 1,376,791.71	$ 1,376,792
	Total Construction Fund (2	**$ 139,325,000**	**$ 139,325,000**	**$ 1,493,913**	**$ 140,818,913**	**$ 130,307,188**	**$ 4,922,384**	**$ 1,468,808**	**$ 136,698,380**	**$ 4,120,533**	**$ 10,786,730**

GUAM WATERWORKS AUTHORITY
2016 Series Bond Project Status
As of May 31, 2020

SCHEDULE L

	PROJECT NAME	BOND INTEREST	Adjusted Project Cost	EXPENDITURES AS OF 5/31/20	OUTSTANDING ENCUMBRANCES	FUNDING REQUEST	TOTAL EXPENDITURES ENCUMBRANCES & FUNDING REQUESTS	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 5/31/20
PW 05-06	Water Booster Pump Station		$ -	-			$ -	$ -	$ -
PW 05-07	Meter Replacement Program		$ 1,400,000	149,970	1,250,030		$ 1,400,000	$ -	$ 1,250,030
PW 05-08	Barrigada Tank Repair/Replacement		$ -	-	-		$ -	$ -	$ -
PW 05-09	Leak Detection		$ 100,000	-	-		$ -	$ 100,000	$ 100,000
PW 05-10	Potable Water System Planning		$ 876,294	833,563	42,731		$ 876,294	$ -	$ 42,731
PW 05-13	Deep Well Rehabilitation		$ 250,000	203	109,810		$ 110,013	$ 139,987	$ 249,797
PW 05-14	New Deep Wells at Down Hard		$ 1,190,000	-			$ -	$ 1,190,000	$ 1,190,000
PW 05-16	Master Meters		$ 2,151,539	151,539	-		$ 151,539	$ 2,000,000	$ 2,000,000
PW 09-01	Ugum Water Treatment Plant Intake		$ -	-			$ -	$ -	$ -
PW 09-02	Water Wells		$ 2,500,000	77,520	92,480	39,703	$ 209,703	$ 2,290,297	$ 2,422,480
PW 09-03	Water Distribution System		$ -	-			$ -	$ -	$ -
PW 09-04	Pressure Zone Realignment / Mechanical/Electrical Equipment		$ 1,141,000	687,712	453,288		$ 1,141,000	$ (0)	$ 453,288
PW 09-08			$ -	-			$ -	$ -	$ -
PW 09-10	Water Reservoir Internal/External		$ 800,000	661,188	138,812		$ 800,000	$ -	$ 138,812
PW 09-11	Water System Reservoirs 2005 Improvements		$ 58,830,170	11,810,679	41,432,227		$ 53,242,905	$ 5,587,265	$ 47,019,491
PW 11-02	Ugum Water Treatment Plant Reservoir		$ -	-			$ -	$ -	$ -
PW 12-01	Water Audit Program & Water Loss Control Plan		$ 550,000	-	326,134		$ 326,134	$ 223,867	$ 550,000
PW 12-04	Agana Heights & Chaot Tanks		$ 1,220,000	-	1,220,000		$ 1,220,000	$ -	$ 1,220,000
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 1,822,133	662,334	1,159,799		$ 1,822,133	$ 0	$ 1,159,799
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 7,300,000	6,650,000	650,000		$ 7,300,000	$ -	$ 650,000
PW 14-01	Fire Hydrant Replacement Program		$ 1,200,000	67,478	1,128,900		$ 1,196,377	$ 3,623	$ 1,132,523
			$ -	-			$ -	$ -	
WW 05-04	Wastewater System Planning		$ 312,983	312,983	-		$ 312,983	$ 0	$ 0
WW 09-01	Lift Station Upgrades		$ 1,714,755	414,748	783,659	278,745	$ 1,477,152	$ 237,603	$ 1,300,007
WW 09-06	Wastewater Collection System Repl/Rehab		$ 1,055,478	364,276	237,183		$ 601,459	$ 454,019	$ 691,202
WW 11-03	Baza Gardens STP Replacement	$ 2,384,747	$ 25,048,523	21,944,323	638,480		$ 22,582,803	$ 2,465,719	$ 3,104,200
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP		$ 252,105	239,065	13,040		$ 252,105	$ -	$ 13,040
WW 11-08	Agat/Santa Rita STP Replacement	$ 224,328	$ 2,226,659	1,966,308	36,023		$ 2,002,331	$ 224,328	$ 260,351
WW 12-03	Agana WWTP Interim Measures		$ -	-			$ -	$ -	$ -
WW 12-07	Umatac Merizo Replacement	$ 152,872	$ 20,952,872	20,160,515	792,356		$ 20,952,872	$ (0)	$ 792,356
			$ -	-			$ -	$ -	
EE 09-01	Wastewater Pump Station Electrical Upgrade		$ -	-			$ -	$ -	$ -
EE 09-02	Electrical Upgrade - Water Wells		$ -	-			$ -	$ -	$ -
EE 09-03	Electrical Upgrade - Water Booster		$ -	-			$ -	$ -	$ -
EE 09-08	SCADA Improvements – Phase 3		$ 1,077,497	802,003	-		$ 802,003	$ 275,494	$ 275,494
EE 09-09	SCADA Improvements – Phase 4		$ 4,378,118	1,829,698	1,794,928		$ 3,624,626	$ 753,492	$ 2,548,420
			$ -	-			$ -	$ -	
MC 05-01	Laboratory Modernization		$ 1,127,000	1,127,000	-		$ 1,127,000	$ -	$ -
MC 05-02	Land Survey		$ 1,260,524	540,053	712,264		$ 1,252,317	$ 8,207	$ 720,471
MC 09-01	General Plant Improvements / Water		$ 1,543,760	716,554	780,392	-	$ 1,496,947	$ 46,813	$ 827,206
MC 15-01	Information Technology Integration Improvements		$ 500,000	244,068	120,851		$ 364,919	$ 135,081	$ 255,932
	Interest Earned (unencumbered)	$ 1,605,874	$ 1,605,874					$ 1,605,874	$ 1,605,874
	Total Construction Fund (2016 Series Revenue Bon	**$ 4,367,821**	**$ 144,387,284**	**$ 72,413,780**	**$ 53,913,386**	**$ 318,448**	**$ 126,645,614**	**$ 17,741,670**	**$ 71,973,504**

2010 Bond Schedule and Reallocation					
CIP Number	CIP Name	Project Cost	Additional Funding	Reduction Funding	Adjusted Project Cost
PW 05-01	Ground Water Disinfection	$ 500,000		$ (34,992)	$ 465,008
PW 05-05	"A" Series Well Transmission Line	$ 475,709			$ 475,709
PW 05-06	Water Booster Pump Station	$ 500,000			$ 500,000
PW 05-07	Meter Replacement Program	$ 10,450,000			$ 10,450,000
PW 05-08	Barrigada Tank Repair/Replacement	$ 5,450,000		$ (45,652)	$ 5,404,348
PW 05-09	Leak Detection	$ 200,000			$ 200,000
PW 05-10	Potable Water System Planning	$ 200,000			$ 200,000
PW 05-11	Implement Ground Water Rule	$ 1,699,999			$ 1,699,999
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade	$ 1,900,000			$ 1,900,000
PW 05-13	Deep Well Rehabilitation	$ 548,000			$ 548,000
PW 05-14	New Deep Wells at Down Hard	$ 485,743			$ 485,743
PW 05-15	Rehabilitation of Asan Springs	$ 1,100,000			$ 1,100,000
PW 05-16	Master Meters	$ 1,489,957			$ 1,489,957
PW 09-01	Ugum Water Treatment Plant Intake	$ 700,000	$ 250,000		$ 950,000
PW 09-02	Water Wells	$ -			$ -
PW 09-03	Water Distribution System	$ 3,174,748	$ 250,000		$ 3,424,748
PW 09-04	Pressure Zone Realignment /	$ -			$ -
PW 09-05	Northern System Water Distribution	$ -			$ -
PW 09-06	Central Water Distribution System 2005	$ 775,002		$ (65,969)	$ 709,033
PW 09-07	Southern Water Distribution System	$ -			$ -
PW 09-08	Mechanical/Electrical Equipment	$ 1,200,000			$ 1,200,000
PW 09-09	Water Reservoir Internal/External	$ 2,150,000			$ 2,150,000
PW 09-10	Water Reservoir Internal/External	$ -			$ -
PW 09-11	Water System Reservoirs 2005 Improvements	$ 1,050,000			$ 1,050,000
PW 11-01	Distribution System Upgrades	$ 474,160		$ (25,114)	$ 449,046
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -			$ -
PW 12-01	Water Audit Program & Water Loss Control Plan	$ 78,459	$ 283,716		$ 362,175
PW 12-02	Production Plan / Reduce Navy Purchases	$ 100,000		$ (100)	$ 99,900
PW 12-03	Hydraulic Asessment of Tank	$ 500,000		$ (8,159)	$ 491,841
PW 12-04	Agana Heights & Chaot Tanks	$ 4,700,000		$ (52,476)	$ 4,647,524
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 1,848,013		$ (5,226)	$ 1,842,787
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ -			$ -
PW 12-07	Assessment of malojloj Elevetad & Yigo Elevated	$ 200,000			$ 200,000
PW 12-08	Public Water System Asser Inventory/Condition Assesment	$ 100,000		$ (21,614)	$ 78,386
PW 12-09	Public Water System GIS & Mapping	$ 50,000			$ 50,000
WW 05-04	Wastewater System Planning	$ 1,474,000			$ 1,474,000
WW 05-05	Wastewater Vehicles	$ 235,000		$ (25,205)	$ 209,795
WW 05-07	NDWWTP - Chlorine Tanks	$ 250,000			$ 250,000
WW 09-07	Tumon Bay Sewer Upgrades	$ -			$ -
WW 09-06	Wastewater Collection System Repl/Rehab	$ 1,001,323			$ 1,001,323
WW 09-08	Facilities Plan/Design for Baza Gardens WWTP	$ 1,250,000			$ 1,250,000
WW 09-10	Facilities Plan/Design for Agat-Santa Rita WWTP	$ 899,630			$ 899,630
WW 11-02	Priority 1 Sewer Upgrades – Baza Gardens WWTP	$ -			$ -
WW 11-03	Baza Gardens STP Replacement	$ 1,488,378		$ (43,015)	$ 1,445,363
WW 11-04	Facilities Plan/Design for Umatac Merizo WWTP	$ 853,858			$ 853,858
WW 11-08	Agat/Santa Rita STP Replacement	$ 2,217,700		$ (1,227)	$ 2,216,473
WW 12-01	Northern District WWTP Primary Treatment Upgrades	$ 11,743,514		$ (147,114)	$ 11,596,400
WW 12-02	Biosolids Management Plan	$ 200,000		$ (37,916)	$ 162,084
WW 12-03	Agana WWTP Interim Measures	$ 11,300,000		$ (41,913)	$ 11,258,087
WW 12-04	I&I SSES Southern	$ 800,000		$ (1,005)	$ 798,995
WW 12-05	I&I SSES Central	$ 850,000		$ (56,415)	$ 793,585
WW 12-06	I&I SSES Northern	$ -			$ -
WW 12-07	Umatac Merizo Replacement	$ 250,000		$ (1,982)	$ 248,018
WW 17-02	Northern District WWTP Secondary Treatment Upgrades	$ 1,000,000			$ 1,000,000
EE 05-01	Well Electrical Protection	$ -			$ -
EE 05-02	SCADA Pilot Project	$ 61,950		$ (42,138)	$ 19,812
EE 09-02	Electrical Upgrade - Water Wells	$ 354,227			$ 354,227
EE 09-03	Electrical Upgrade - Water Booster	$ -			$ -
EE 09-04	Electrical Upgrade -Water Booster	$ -			$ -
EE 09-05	Electrical Upgrade - Other Water	$ -			$ -
EE 09-06	SCADA Improvements – Phase 1	$ 250,000		$ (40,508)	$ 209,492
EE 09-07	SCADA Improvements – Phase 2	$ 1,056,986		$ (23,606)	$ 1,033,380
EE 09-08	SCADA Improvements – Phase 3	$ 24,956			$ 24,956
EE 09-09	SCADA Improvements – Phase 4	$ -			$ -
MC 05-01	Laboratory Modernization	$ -			$ -
MC 05-02	Land Survey	$ 499,688		$ (23,607)	$ 476,081

MC 09-01	General Plant Improvements / Water	$ 7,241,000		$ (38,763)	$ 7,202,237
	TOTALS	$ 87,402,000	$ 783,716	$ (783,716)	$ 87,402,000

2013 Bond Schedule and Reallocation					
CIP Number	CIP Name	Project Cost	Additional Funding	Reduction Funding	Adjusted Project Cost
PW 05-03	Santa Rita Springs Booster Pump Rehab Phase II	$ 100,000			$ 100,000
PW 05-05	"A" Series Well Transmission Line	$ 369,846			$ 369,846
PW 05-06	Water Booster Pump Station	$ 1,679,964		$ (13,171)	$ 1,666,793
PW 05-07	Meter Replacement Program	$ 996,532			$ 996,532
PW 05-08	Barrigada Tank Repair/Replacement	$ 4,987,000		$ (191,102)	$ 4,795,898
PW 05-09	Leak Detection	$ 16,916			$ 16,916
PW 05-10	Potable Water System Planning	$ 624,000			$ 624,000
PW 05-11	Implement Ground Water Rule	$ 1,000,000		$ (18,224)	$ 981,776
PW 05-13	Deep Well Rehabilitation	$ 200,000			$ 200,000
PW 05-14	New Deep Wells at Down Hard	$ -			$ -
PW 05-16	Master Meters	$ 712,060			$ 712,060
PW 09-01	Ugum Water Treatment Plant Intake	$ 859,801			$ 859,801
PW 09-02	Water Wells	$ 3,030,029			$ 3,030,029
PW 09-03	Water Distribution System	$ 10,912,453			$ 10,912,453
PW 09-04	Pressure Zone Realignment /	$ 337,110			$ 337,110
PW 09-08	Mechanical/Electrical Equipment	$ 426,799		$ (5,493)	$ 421,306
PW 09-10	Water Reservoir Internal/External	$ -			$ -
PW 09-11	Water System Reservoirs 2005 Improvements	$ 13,878,000			$ 13,878,000
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -			$ -
PW 12-04	Agana Heights & Chaot Tanks	$ 1,330,287			$ 1,330,287
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 11,605,000		$ (375)	$ 11,604,625
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ -			$ -
PW 12-07	Assessment of malojloj Elevetad & Yigo Elevated	$ 485,117			$ 485,117
PW 14-01	Fire Hydrant Replacement Program	$ -			$ -
WW 05-04	Wastewater System Planning	$ 650,901		$ (25,306)	$ 625,595
WW 09-01	Lift Station Upgrades	$ 563,148	$ 1,066,004		$ 1,629,152
WW 09-06	Wastewater Collection System Repl/Rehab	$ 660,313			$ 660,313
WW 11-03	Baza Gardens STP Replacement	$ 9,656,874		$ (336,872)	$ 9,320,002
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP	$ 371,699			$ 371,699
WW 11-08	Agat/Santa Rita STP Replacement	$ 67,200,000		$ (266,406)	$ 66,933,594
WW 12-03	Agana WWTP Interim Measures	$ 673,000			$ 673,000
WW 12-07	Umatac Merizo Replacement	$ -			$ -
EE 09-01	Wastewater Pump Station Electrical Upgrade	$ 99,861			$ 99,861
EE 09-02	Electrical Upgrade - Water Wells	$ 1,500,000		$ (10,296)	$ 1,489,704
EE 09-03	Electrical Upgrade - Water Booster	$ -			$ -
EE 09-04	Electrical Upgrade -Water Booster	$ 977			$ 977
EE 09-05	Electrical Upgrade - Other Water	$ 60,700			$ 60,700
EE 09-08	SCADA Improvements – Phase 3	$ 722,359		$ (33,704)	$ 688,655
EE 09-09	SCADA Improvements – Phase 4	$ -			$ -
MC 05-01	Laboratory Modernization	$ 1,171,465		$ (643)	$ 1,170,822
MC 05-02	Land Survey	$ 1,052			$ 1,052
MC 09-01	General Plant Improvements / Water	$ 2,441,737		$ (164,412)	$ 2,277,325
	TOTALS	$ 139,325,000	$ 1,066,004	$ (1,066,004)	$ 139,325,000

2016 Bond Schedule and Reallocation					
CIP Number	CIP Name	Project Cost	Additional Funding	Reduction Funding	Adjusted Project Cost
PW 05-06	Water Booster Pump Station	$ -			$ -
PW 05-07	Meter Replacement Program	$ 1,400,000			$ 1,400,000
PW 05-08	Barrigada Tank Repair/Replacement	$ -			$ -
PW 05-09	Leak Detection	$ 100,000			$ 100,000
PW 05-10	Potable Water System Planning	$ 876,294			$ 876,294
PW 05-13	Deep Well Rehabilitation	$ 250,000			$ 250,000
PW 05-14	New Deep Wells at Down Hard	$ 1,190,000			$ 1,190,000
PW 05-16	Master Meters	$ 2,151,539			$ 2,151,539
PW 09-01	Ugum Water Treatment Plant Intake	$ -	$ 267,881		$ 267,881
PW 09-02	Water Wells	$ 2,500,000			$ 2,500,000
PW 09-03	Water Distribution System	$ -	$ 750,000		$ 750,000
PW 09-04	Pressure Zone Realignment /	$ 1,141,000			$ 1,141,000
PW 09-08	Mechanical/Electrical Equipment	$ -			$ -
PW 09-10	Water Reservoir Internal/External	$ 800,000			$ 800,000
PW 09-11	Water System Reservoirs 2005 Improvements	$ 58,830,170			$ 58,830,170
PW 11-02	Ugum Water Treatment Plant Reservoir	$ -			$ -
PW 12-01	Water Audit Program & Water Loss Control Plan	$ 550,000			$ 550,000
PW 12-04	Agana Heights & Chaot Tanks	$ 1,220,000			$ 1,220,000
PW 12-05	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 1,822,133			$ 1,822,133
PW 12-06	Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 7,300,000			$ 7,300,000
PW 14-01	Fire Hydrant Replacement Program	$ 1,200,000		$ (3,623)	$ 1,196,377
WW 05-04	Wastewater System Planning	$ 312,983			$ 312,983
WW 09-01	Lift Station Upgrades	$ 1,714,755	$ 433,996		$ 2,148,751
WW 09-06	Wastewater Collection System Repl/Rehab	$ 1,055,478	$ 500,000		$ 1,555,478
WW 11-03	Baza Gardens STP Replacement	$ 22,663,776		$ (2,465,719)	$ 20,198,057
WW 11-04	Facilities Plan/Design for Umatac-Merizo WWTP	$ 252,105			$ 252,105
WW 11-08	Agat/Santa Rita STP Replacement	$ 2,002,331		$ (224,328)	$ 1,778,003
WW 12-03	Agana WWTP Interim Measures	$ -			$ -
WW 12-07	Umatac Merizo Replacement	$ 20,800,000			$ 20,800,000
EE 09-01	Wastewater Pump Station Electrical Upgrade	$ -			$ -
EE 09-02	Electrical Upgrade - Water Wells	$ -			$ -
EE 09-03	Electrical Upgrade - Water Booster	$ -			$ -
EE 09-08	SCADA Improvements – Phase 3	$ 1,077,497			$ 1,077,497
EE 09-09	SCADA Improvements – Phase 4	$ 4,378,118			$ 4,378,118
MC 05-01	Laboratory Modernization	$ 1,127,000			$ 1,127,000
MC 05-02	Land Survey	$ 1,260,524		$ (8,207)	$ 1,252,317
MC 09-01	General Plant Improvements / Water	$ 1,543,760			$ 1,543,760
MC 15-01	Information Technology Integration Improvements	$ 500,000			$ 500,000
MP-Gen-Misc-05	GWA Infrastructure Improvements		$ 750,000		$ 750,000
	TOTALS	$ 140,019,463	$ 2,701,877	$ (2,701,877)	$ 139,269,463

FS - Funding Source

		2020		2021		2022		2023		2024		2025	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
PW 05-01	Ground Water Disinfection	B2010	-										
PW 05-03	Santa Rita Springs Booster Pump Rehab Phase II												
PW 05-05	"A" Series Well Transmission Line												
PW 05-06	Water Booster Pump Station	B2013	-	IFCIP	200	IFCIP	100						
		GRANTS	387	B2020	700								
		SRF	1,200					SRF	2,000				
PW 05-07	Meter Replacement Program	B2010	268.97										
		B2013	142.053										
PW 05-08	Barrigada Tank Repair/Replacement	B2010	-										
		B2013	-										
PW 05-09	Leak Detection	B2010	182.963	B2020	400								
		B2013	16.916										
		B2016	100	IFCIP	400					IFCIP	70		
PW 05-10	Potable Water System Planning			B2020	400								
				IFCIP	200								
PW 05-11	Implement Ground Water Rule	B2013	-										
PW 05-12	Brigade II (Ugum Lift) BPS Upgrade	B2010	1,525.439										
PW 05-13	Deep Well Rehabilitation	B2010	143.955										
		B2016	139.987										
		B2020	350										
		SRF	2,188			SRF	4,000						
PW 05-14	New Deep Wells at Down Hard	B2016	1,190										
		B2020	500										
PW 05-15	Rehabilitation of Asan Springs	B2010	508.766										
		B2020	550										
PW 05-16	Master Meters	B2013	54.873										
		B2016	2,000										
PW 09-01	Ugum Water Treatment Plant Intake	B2010	339.66	IFCIP	214	IFCIP	500						
		B2013	76.469	B2020	400								
		B2016	267.881										
		B2020	200										
PW 09-02	Water Wells	B2013	873.184	SDC	1,000								
		B2016	2,290.297										
		B2020	500										
		IFCIP	500	IFCIP	300			SRF	2,000				
		SDC	250										
PW 09-03	Water Distribution System Pipe Replacement and Upgrades	B2010	250.000	IFCIP	400	SDC	500	SDC	500	IFCIP	600		
		B2013	370.425										
		B2016	750			FB-A	1791						
		B2020	500	B2020	500	B2020	1,250	FB-A	-	FB-A	-		
		SDC	250			IFCIP	500	IFCIP	500	SDC	500		
PW 09-04	Pressure Zone Realignment / Development 2005 Improvements									IFCIP	500		
		GRANTS	561										
PW 09-06	Central Water Distribution System 2005 Improvements	B2010	-										
PW 09-08	Mechanical/Electrical Equipment												
		B2013	-										
PW 09-09	Water Reservoir Internal/External	B2010	40.616										
PW 09-10	Water Reservoir Internal/External												
PW 09-11	Water System Reservoirs 2005 Improvements	B2013	44.416			IFCIP	1,200	IFCIP	500				
		B2016	5,587.265										
		B2020	25,100	B2020	800								
		IFCIP	100	IFCIP	800								
PW 11-01	Distribution System Upgrade	B2010	-										
PW 11-02	Ugum Water Treatment Plant Reservoir	B2020	7,500										
PW 12-01	Water Audit Program & Water Loss Control Plan	B2010	347.145										
		B2016	223.867										
PW 12-02	Production Plan / Reduce Navy Purchases	B2010	-										
PW 12-03	Hydraulic Assessment of Tanks	B2010	-										
PW 12-04	Agana Heights & Chaot Tanks	B2010	-										
PW 12-05	Tank Major Repair Yigo #1, Mangilao #2, Astumbo #1	B2010	-										
		B2013	-										
PW 12-06	Tank Replacement Piti & Hyundai	B2020	6,500										
PW 12-07	Assessment/Replacement of Malojloj Elevated & Yigo Elevated												
PW 12-08	Public Water System Asset Inventory/ Condition Assessment	B2010	-										
PW 12-09	Public Water System GIS & Mapping												
PW 14-01	Fire Hydrant Replacement Program	B2016	-			FB-A	500			FB-A	250		
MP-PW-Pipe-01	Astumbo Zone Piping					FB-A	368	FB-A	700				
								FB-B	2,700				
								IFCIP	900				
MP-PW-Pipe-02	Route 1 Astumbo Zone Piping							FB-A	545	FB-B	3,000	IFCIP	2,000
										IFCIP	300	FB-B	573
MP-PW-Pipe-03	Harmon Cliffline Piping to Route 1							FB-A	424				
MP-PW-Pipe-04	Hyundai Well Piping	B2020	500										
MP-PW-Pipe-05	Kaiser Zone Looping	B2020	300										
MP-PW-Pipe-06	Mangilao Pressure Zone Realignment	B2020	300										
MP-PW-Pipe-07	Mataguac BPS Suction Piping			B2020	500								
MP-PW-Pipe-08	Nimitz Lower BPS Piping							FB-A	121	FB-B	1,000		
										IFCIP	400		
MP-PW-Pipe-09	Yigo, Santa Rosa Zone Realignment					FB-A	178	FB-A	1,800				
								IFCIP	364				
MP-PW-Pipe-10	Miscellaneous Piping Projects	B2020	100	B2020	100	FB-A	694						
MP-PW-Pipe-11	Miscellaneous Piping Connections	B2020	100	B2020	100	FB-A	194						
MP-PW-Pipe-12	Rehabilitation and Replacement Program	B2020	1,000	B2020	1,000	FB-A	2,500	FB-A	4,457	FB-B	7,000	FB-B	1,676
								IFCIP	500				
MP-PW-Pipe-13	2-Inch Pipe Replacement Program	IFCIP	500	IFCIP	300	IFCIP	1,000	IFCIP	1,250	IFCIP	1,000	FB-B	1,750
		B2020	2,230	B2020	1,100								
MP-PW-Pipe-14	Asbestos Cement Pipe Replacement Program					FB-A	3,850	IFCIP	3,000	IFCIP	2,200	FB-B	1,500
MP-PW-Pipe-15	PRV Rehab and Replacement	IFCIP	250	B2020	1,300	FB-A	1,000	FB-A	1,000	FB-B	900		
		B2020	750	IFCIP	300			IFCIP	428	IFCIP	450		
MP-PW-Pipe-16	Valve Exercise, Repair, and Replacement Program	B2020	250			FB-A	250			FB-B	200		
										IFCIP	30		
MP-PW-Pipe-17	Cross Island Highway Piping			B2020	100	FB-A	1,401						
MP-PW-Tank-22	Existing Tank Inspections	B2020	150										
MP-PW-Tank-23	Recurring Tank Inspections	B2020	200	B2020	200	FB-A	214	FB-A	214	FB-B	214	IFCIP	100
MP-PW-BPS-01	Rehabilitate and Replace BPSs	B2020	309	B2020	100	FB-A	150	FB-A	150	FB-B	150	IFCIP	150
		IFCIP	100	IFCIP	100								
MP-PW-BPS-02	Nimitz Hill Upper BPS	B2020	48										
MP-PW-BPS-03	Route 15 BPS									FB-B	86	FB-B	1,050
MP-PW-SWTP-01	Ugum SWTP River Intake Cleaning Project	B2020	380										
MP-PW-SWTP-02	Ugum SWTP Intake Modifications	B2020	1,174										
MP-PW-SWTP-03	Ugum SWTP Reliability Improvements	B2020	1,150										
MP-PW-SWTP-04	Ugum SWTP 7-Year Improvement Project									FB-B	3,000		
										IFCIP	150		
MP-PW-Well-01	Well Rehabilitation Program	B2020	300	B2020	3,300	FB-A	440	FB-A	1,500	FB-B	1,440	FB-B	5,368
								FB-B	3,000				
		IFCIP	100	IFCIP	1,800	IFCIP	1,000	IFCIP	600				
MP-PW-Well-02	Well Equipment Overhaul Program					FB-A	1,000			FB-B	750		
										IFCIP	750		
MP-PW-Well-03	Capacity Enhancement – Well Exploration Program	B2020	500							FB-B	750		
										IFCIP	400		
MP-PW-Well-04	Capacity Enhancement – Well Development and Construction Program					FB-A	379	FB-B	3,000			SDC	394
								IFCIP	1,000			IFCIP	6
MP-PW-Well-05	Wellhead Protection Program	B2020	300					FB-A	660				
		IFCIP	-										
MP-PW-Well-06	Well Repair Program	B2020	950	B2020	250	FB-A	1,000	FB-A	1,000	FB-B	750	IFCIP	553
		IFCIP	200					IFCIP	274	IFCIP	400	SDC	200
MP-PW-Misc-01	South Guam Water Supply Study	IFCIP	-										
		B2020	100										

MP-PW-Misc-02	Master Meter Implementation and Ongoing Meter Replacement	B2020	500	B2020	250	FB-A	734	FB-B IFCIP	500 234	FB-B IFCIP	500 200	IFCIP	300
MP-PW-Misc-03	Hydrant Condition Assessment and Maintenance					FB-A	970	FB-B IFCIP	500 200	FB-B IFCIP	500 450	IFCIP	50
MP-PW-Misc-04	OneGuam Program	IFCIP B2020	- 50	IFCIP B2020	50 50	IFCIP	50	IFCIP	50	IFCIP	35	IFCIP	135
MP-PW-Misc-05	Leak Detection Assistance	IFCIP B2020	- 150										
DoD-3	Rehabilitation and New NGLA Monitoring Wells	GRANTS	2,465.674										

TOTAL POTABLE WATER PROJECTS B2010	3,608	-	-	-	-	-
TOTAL POTABLE WATER PROJECTS B2013	1,578	-	-	-	-	-
TOTAL POTABLE WATER PROJECTS B2016	12,549	-	-	-	-	-
TOTAL POTABLE WATER PROJECTS B2020	53,491	11,550	1,250	-	-	-
TOTAL POTABLE WATER PROJECTS Future Borrow A (FB-A)	-	-	17,613	12,571	250	-
TOTAL POTABLE WATER PROJECTS Future Borrow B (FB-B)	-	-	-	9,700	20,240	11,917
State Revolving Fund (SRF) Grant Funds	3,388	-	4,000	4,000	-	-
System Development Charge (SDC)	500	1,000	500	500	500	594
GRANTS	3,413	-	-	-	-	-
IFCIP	1,750	5,064	4,350	9,800	7,935	3,294
	80,277	17,614	27,713	36,571	28,925	15,805

FS - Funding Source

		2020		2021		2022		2023		2024		2025	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
WW 05-04	Wastewater System Planning	B2013 B2020	- 150										
WW 05-05	Wastewater Vehicles	B2010	-										
WW 09-01	Lift station upgrades	B2013 B2016 SRF	1,083.502 671.599 1,600	IFCIP B2020	250 1,050			SRF	2,000	IFCIP SRF	200 2,000		
WW 09-02	Moratorium												
WW 09-06	Wastewater Collection System Repl/ Rehabilitation	B2010 B2013 B2016 B2020 IFCIP SRF	96.891 81.903 954.019 350 250 -	B2020 IFCIP SRF	1,050 250 1,000			SRF	2,000	SRF	2,000		
WW 09-08	Facilities Plan/Design/interim for Baza Gardens STP Impr.												
WW 09-10	Facilities Plan/Design/interim for Agat-Santa Rita STP Impr.												
WW 09-11	WWTP Priority 1 Upgrades	SDC	-										
WW 11-03	Baza Gardens STP Replacement	B2010 B2013 B2016	- - -	B2020 IFCIP	500								
WW 11-04	Facilities Plan/Design/Interim for Umatac-Merizo STP Impr.												
WW 11-08	Agat/ Santa Rita STP Replacement	B2010 B2013 B2016	- - -										
WW 12-01	Northern District WWTP Primary Treatment Upgrades	B2010	-										
WW 12-02	Bio Solids Management Plan	B2010	-										
WW 12-03	Agana WWTP Interim Measures	B2010	-										
WW 12-04	I&I SSES Southern	B2010	-										
WW 12-05	I&I SSES Central	B2010	-										
WW 12-06	I&I SSES Northern												
WW 12-07	Umatac Merizo STP Replacement	SDC B2010	- -										
WW 12-09	Wastewater Facility Back Up Power												
WW 17-01	Wastewater Sewer System Expansion	SDC	-										
WW 17-02	Northern District WWTP Secondary Treatment Upgrade												

MP-WW-Pipe-01	Gravity Pipe Rehabilitation/Replacement Program	B2020	170	IFCIP B2020	1,300 1,800	IFCIP SRF FB-A	1,000 4,000 2000	FB-A	750	IFCIP SRF FB-B	2,000 2,000 6,343	FB-B	4,632
MP-WW-Pipe-02	Barrigada Pump Station Pipe Rehabilitation/Replacement					FB-A	411	FB-A FB-B IFCIP	1,200 2,000 -				
MP-WW-Pipe-03	Route 1 Piti Pipe Rehabilitation/Replacement	IFCIP B2020	600 940										
MP-WW-Pipe-04	Southern Link Pump Station Pipe Rehabilitation/Replacement	B2020	657										
MP-WW-Pipe-05	Agana Heights Pipe Replacement					FB-A	169	FB-A FB-B	1,500 1,000				
MP-WW-Pipe-06	Northern District Route 1 Capacity Replacement - Phase 1									FB-B IFCIP	1,000 150	IFCIP FB-B	2,754 719
MP-WW-Pipe-07	Northern District Route 1 Capacity Replacement - Phase 2												
MP-WW-Pipe-08	Northern District Route 1 Capacity Replacement - Phase 3												
MP-WW-Pipe-09	North Dededo Capacity Replacement - Phase 1												
MP-WW-Pipe-10	North Dededo Capacity Replacement - Phase 2												
MP-WW-Pipe-11	Route 16 Capacity Replacement									FB-B IFCIP	500 50	IFCIP FB-B	2,484 521
MP-WW-Pipe-12	Barrigada Capacity Replacement									FB-B IFCIP	30 15	IFCIP	562
MP-WW-Pipe-13	Mangilao Capacity Replacement												
MP-WW-Pipe-14	Dededo Capacity Replacement												
MP-WW-Pipe-16	Yigo Capacity Replacement												
MP-WW-Pipe-17	Mamajanao Capacity Replacement	B2020	400	IFCIP B2020	686 414	FB-A IFCIP	2,000 600						
MP-WW-Pipe-18	Agat-Santa Rita Capacity Replacement - Phase 1												
MP-WW-Pipe-19	Agat-Santa Rita Capacity Replacement - Phase 2												
MP-WW-Pipe-20	Agat-Santa Rita Capacity Replacement - Phase 3												
MP-WW-Pipe-21	Baza Gardens Capacity Replacement - Phase 1									FB-B IFCIP	192 100	IFCIP FB-B	3,393 528
MP-WW-Pipe-22	Baza Gardens Capacity Replacement - Phase 2												
MP-WW-Pipe-23	Baza Gardens Capacity Replacement - Phase 3												
MP-WW-Pipe-24	Umatac-Merizo Capacity Replacement									FB-B IFCIP	150 50	FB-B	1,441
MP-WW-Pipe-25	Piping Near Bayside Lift Station			SRF	2,000			FB-A	250				
MP-WW-Pipe-26	Finile Drive Rehabilitation - Agat	B2020	813										
MP-WW-Pipe-27	Septic/Cesspool System Reduction Program					B2020	350.27	IFCIP	2,000	FB-A IFCIP	4,800 200	SRF FB-B	1,000 1,538
MP-WW-MH-01	Manhole Rehabilitation Program	B2020	350			FB-A	350			FB-A	350		
MP-WW-FM-01	Force Main Rehabilitation/Replacement Program			B2020	100	FB-A	1,458			FB-B	120		
MP-WW-FM-02	Replace Yigo Lift Station Force Main			B2020	200	FB-A IFCIP	1,579 250						
MP-WW-FM-03	Route 1 Asan Force Main Rehabilitation/Replacement	B2020	2,124										
MP-WW-FM-04	Hagåtña WWTP Force Main Rehabilitation/Replacement	B2020 IFCIP	6,600 100										
MP-WW-Pump-01	Lift Station Rehabilitation/Replacement Program	B2020 IFCIP	1,820 300	B2020	6,500	IFCIP FB-A	500 420	FB-B	7,624	FB-B IFCIP	4,420 250	IFCIP SRF FB-B	2,259 3,350 762
MP-WW-Pump-02	Tumon Basin - Fujita Lift Station Analysis	B2020 IFCIP	6,600 -	B2020	3,000								
MP-WW-Pump-03	Replacement of Former Navy Pump Station (Donut Hole)	B2020	1,301										
MP-WW-WWTP-01	Hagåtña WWTP Primary Treatment Repair/Rehabilitation Program												
MP-WW-WWTP-02	Hagåtña WWTP Secondary Treatment Upgrade												
MP-WW-WWTP-03	Inarajan WWTP Repair/Rehabilitation Program												
MP-WW-WWTP-04	Pago Socio WWTP Pump Station Conversion					FB-A IFCIP	1,200 500	FB-A	1,000				
MP-WW-WWTP-05	Umatac-Merizo WWTP Repair/Rehabilitation Program												
MP-WW-WWTP-06	Agat-Santa Rita WWTP Repair/Rehabilitation Program												

MP-WW-WWTP-07	Baza Gardens Cross Island Pipeline - Preliminary Treatment Equipment Repair and Rehabilitation Program						
MP-WW-WWTP-08	Northern District WWTP Completion		B2020 7,500	FB-A 800 IFCIP 4,500			
MP-WW-WWTP-09	Ocean Outfall Inspection Program	IFCIP - B2020 100					IFCIP 150
MP-WW-Misc-01A	Update Wastewater Collection System Model (Major Update)						
MP-WW-Misc-01B	Update Wastewater Collection System Model (Continued)	IFCIP - B2020 50		IFCIP 100		IFCIP 100	
MP-WW-Misc-02	I/I and SSES Assessments	IFCIP - B2020 50			FB-A 400		
MP-WW-Misc-03	Miscellaneous Wastewater Improvements	B2020 500	IFCIP 200	IFCIP 500	IFCIP 500		IFCIP - FB-B 500
MP-WW-Misc-04	Fats, Oils, and Grease Study	IFCIP - B2020 50					
DoD-01	NDWWTP Secondary Treatment Capacity 12MGD	GRANTS 7,594.541					
DoD-02	Northern Systems Wastewater System	GRANTS 2,053					

TOTAL WASTEWATER PROJECTS B2010	97	-	-	-	-	-
TOTAL WASTEWATER PROJECTS B2013	1,165	-	-	-	-	-
TOTAL WASTEWATER PROJECTS B2016	1,626	-	-	-	-	-
TOTAL WASTEWATER PROJECTS B2020	23,025	21,614	350	-	-	-
TOTAL WASTEWATER PROJECTS Future Borrow A (FB-A)	-	-	10,387	5,100	5,150	-
TOTAL WASTEWATER PROJECTS Future Borrow B (FB-B)	-	-	-	10,624	12,755	10,641
State Revolving Fund (SRF) Grant Funds	1,600	3,000	4,000	4,000	6,000	4,350
System Development Charge (SDC)	-	-	-	-	-	-
GRANTS	9,648	-	-	-	-	-
IFCIP	1,250	3,186	7,950	2,500	3,115	11,602
	38,410	27,800	22,687	22,224	27,020	26,593

FS - Funding Source

		2020		2021		2022		2023		2024		2025	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
EE 05-02	SCADA Pilot Project	B2010	-										
EE 09-01	Wastewater Pumping Station Electrical Upgrade												
EE 09-02	Electrical Upgrade - Water Wells	B2013 B2020	- 90										
EE 09-03	Electrical Upgrade - Water Booster												
EE 09-04	Electrical Upgrade -Water Booster	B2020	150										
EE 09-05	Electrical Upgrade - Other Water	B2020	100										
EE 09-06	SCADA Improvements – Phase 1	B2010	-										
EE 09-07	SCADA Improvements – Phase 2	B2010 B2020	- 45										
EE 09-08	SCADA Improvements – Phase 3	B2013 B2016 B2020 SRF	- 275.494 25 100							SRF	2,000		
EE 09-09	SCADA Improvements – Phase 4	B2016	753.492										
MP-Gen-EE-01	SCADA Implementation Phase A2 – Initial Project Completion	B2020	2,000	IFCIP B2020	300 2,250	IFCIP	1,000	FB-A	3,100	IFCIP FB-B	1,000 2,895	FB-B	1,220
MP-Gen-EE-02	SCADA Implementation Phase B – Additional Sites							IFCIP	300	IFCIP	400	IFCIP	1,554
MP-Gen-EE-03	SCADA Implementation Phase C – Additional Instruments												
MP-Gen-EE-04	SCADA System Improvement Program									IFCIP	200	IFCIP	200

TOTAL ELECTRICAL PROJECTS B2010	-	-	-	-	-	-
TOTAL ELECTRICAL PROJECTS B2013	-	-	-	-	-	-
TOTAL ELECTRICAL PROJECTS B2016	1,029	-	-	-	-	-
TOTAL ELECTRICAL PROJECTS B2020	2,410	2,250	-	-	-	-
TOTAL ELECTRICAL PROJECTS Future Borrow A (FB-A)	-	-	-	3,100	-	-
TOTAL ELECTRICAL PROJECTS Future Borrow B (FB-B)	-	-	-	-	2,895	1,220
State Revolving Fund (SRF) Grant Funds	100	-	-	-	2,000	-
System Development Charge (SDC)	-	-	-	-	-	-
GRANTS	-	-	-	-	-	-
IFCIP	-	300	1,000	300	1,600	1,754
	3,539	2,550	1,000	3,400	6,495	2,974

FS - Funding Source

		2020		2021		2022		2023		2024		2025	
		FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)	FS	(x1000)
MC 05-01	Laboratory Modernization	B2013	-										
MC 05-02	Land Survey	B2010 B2016	- -										
MC 09-01	General Plant Improvements	B2010 B2013 B2016	- - 46.813	IFCIP	100	IFCIP	250	IFCIP	400	IFCIP	750		
MC 15-01	Information Tecnology Integration Improvements	B2016	135.081	IFCIP	100	IFCIP	250	IFCIP	250	IFCIP	400		
MP-Gen-Misc-01	GWA Systems Planning	IFCIP B2020	- 550	IFCIP	500	IFCIP	100	IFCIP	250	IFCIP	400	IFCIP FB-B	250 700
MP-Gen-Misc-02A	WRMP Update (Comprehensive Update)					IFCIP	100						
MP-Gen-Misc-02B	WRMP Update (Interim Update)	B2020	200									IFCIP	200
MP-Gen-Misc-03	Surveying and Property Delineation	B2020	250	IFCIP	250			IFCIP	250			IFCIP	250
MP-Gen-Misc-04	Information Technology Improvements	B2020 IFCIP	1,650 -	IFCIP	200	IFCIP	100	IFCIP	100	IFCIP	150	IFCIP FB-B	200 1,800
MP-Gen-Misc-05	GWA Infrastructure Improvements	B2020 B2016	500 750	B2020	2,000			IFCIP	250			IFCIP	150
MP-Gen-Misc-06	GPWA Fleet Maintenance Facility	B2020	500										
MP-Gen-Misc-07	Mobile Equipment Replacement Program	B2020	800	IFCIP	200	IFCIP	100	IFCIP	100	IFCIP	300	IFCIP FB-B	100 200
MP-Gen-Misc-08	General Plant Improvements	B2020	1,000	IFCIP	400	IFCIP	200	IFCIP	200	IFCIP	300	IFCIP	100
MP-Gen-Misc-09	Security and Resilience Program	B2020	200	IFCIP	100	IFCIP	100	IFCIP	100	IFCIP	50	IFCIP	100

TOTAL MISCELLANEOUS PROJECTS B2010	-	-	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2013	-	-	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2016	932	-	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS B2020	5,650	2,000	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS Future Borrow A (FB-A)	-	-	-	-	-	-
TOTAL MISCELLANEOUS PROJECTS Future Borrow B (FB-B)	-	-	-	-	-	2,700
State Revolving Fund (SRF) Grant Funds	-	-	-	-	-	-
System Development Charge (SDC)	-	-	-	-	-	-
GRANTS	-	-	-	-	-	-
IFCIP	-	1,850	1,200	1,900	2,350	1,350
	6,582	3,850	1,200	1,900	2,350	4,050

	2020	2021	2022	2023	2024	2025	TOTAL
2010 Bond Series	3,704	-	-	-	-	-	$ 3,704
2013 Bond Series	2,744	-	-	-	-	-	$ 2,744
2016 Bond Series	16,136	-	-	-	-	-	$ 16,136
2020 Bond Series	84,576	37,414	1,600	-	-	-	$ 123,590
Future Borrow A	-	-	28,000	20,771	5,400	-	$ 54,171
Future Borrow B	-	-	-	20,324	35,890	26478	$ 82,692
State Revolving Fund (SRF)	5,088	3,000	8,000	8,000	8,000	4,350	$ 36,438
System Development Charge (SDC)	500	1,000	500	500	500	594	$ 3,594
GRANTS	13,061	-	-	-	-	-	$ 13,061
Internally Funded CIP	3,000	10,400	14,500	14,500	15,000	18,000	$ 75,400
	128,809	51,814	52,600	64,095	64,790	49,422	

Yellow shade cell indictaed fund reduction
Blue shade cell indictaes fund addition
Green shade cell indicates future bond borrowing reduction

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 32-FY2020

RELATIVE TO APPROVAL OF ADDITIONAL FUNDING TO THE CONSTRUCTION MANAGEMENT CONTRACT FOR SANTA ROSA, SINIFA, AND SANTA RITA TANK AND SYSTEM UPGRADES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, the CCU approved Resolution No. 13-FY2018 authorized a funding of $2,977,234.69 along with a 10% contingency of $297,723.47 to bring the total authorized funding amount to a maximum of $3,274,958.16 (Exhibit A) for the construction management contract; and

WHEREAS, the construction management contract for the Santa Rosa, Santa Rita, and Sinifa tanks and system upgrade project was issued on April 2, 2018;

WHEREAS, the construction management team has completed pre-construction and limited construction task which included design document review, bid review and analysis, development of quality assurance plan, project document control software setup, meetings, and submittal review; and

WHEREAS, the construction contract for the Santa Rosa, Santa Rita, and Sinifa tanks and system upgrade project was issued on September 30, 2019;

WHEREAS, construction at the sites have not started due to the following reasons:

1. Engineer of Record (Designer) did not complete the archaeological survey process for the three sites before the bid, which led to the State Historic Preservation Office delay in reviewing the permit package;
2. Permitting agencies shut down due to the COVID-19 pandemic, which further extended the permit review process with the State Historic Preservation Office and Guam Environmental Protection Agency;

WHEREAS, the construction management construction performance period has expired due to no construction site activity;

WHEREAS, GWA and GHD has negotiated Change Order No. 1 scope and fee of Three Hundred Thirty-Seven Thousand Three Hundred Thirty-Seven Dollars and Thirty-Nine Cents ($337,337.39) to continue and extend the construction management period to match contractor's performance period and construction management cost escalation (Exhibit B); and

WHEREAS, GWA Management is seeking Thirty-Nine Thousand Six Hundred Thirteen Dollars and Ninety-Two Cents ($39,613.92) to supplement the available contingency of $297,723.47 to fund Change Order No. 1 in the amount of Three Hundred Thirty-Seven Thousand Three Hundred Thirty-Seven Dollars and Thirty-Nine Cents ($337,337.39); and

WHEREAS, funding for this project will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.

2. The CCU finds that the terms of the scope and fee proposal submitted by GHD are fair and reasonable.
3. The CCU hereby authorizes $36,613.92 in additional funding to bring the total authorized funding amount to $3,314,572.08.
4. The CCU hereby authorizes the management of GWA the option to issue Change Order No. 1 in the not-to-exceed amount of $337,337.39. (Exhibit "B")
5. The CCU hereby authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by:



JOSEPH T. DUENAS
Chairperson

Attested by:



MICHAEL T. LIMTIACO
Secretary

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SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 5 @

NAYS: ϕ

ABSENT: ϕ

ABSTAIN: ϕ

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CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 13–FY2018

RELATIVE TO APPROVAL OF THE CONSTRUCTION MANAGEMENT CONTRACT FOR SANTA ROSA, SINIFA, AND SANTA RITA TANK AND SYSTEM UPGRADES

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, the design of Santa Rosa, Sinifa, and Santa Rita Tank designs (RFP-09-ENG-2014) have been completed; and

WHEREAS, GWA has advertised the Request for Proposals (RFP-06-ENG-2017) soliciting statement of qualifications from experienced and qualified engineering firms to provide construction management services for the Santa Rosa, Sinifa, and Santa Rita Tank and System Upgrades project; and

WHEREAS, RFP packages were picked up by 19 interested parties, from which GWA received proposal submittals from 8 firms before the RFP submittal deadline; and

WHEREAS, the GWA A-E Selection committee reviewed and evaluated the 8 proposals (See Exhibit A – Score Summary) and generated a short list of the top 3 firms with a

recommendation to award a contract to the firm GHD (See Exhibit B – GM's Determination); and

WHEREAS, GHD and GWA negotiated the price for the construction management services (Santa Rosa, Sinifa, and Santa Rita tank and off-site system upgrades related to all three tank sites) to be provided in the total amount of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents ($2,977,234.69) (See Exhibit C – Scope of Work and Fees); and

WHEREAS, GWA management seeks approval of the fee proposal amount of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents ($2,977,234.69), along with a 10% contingency of Two Hundred Ninety-Seven Thousand Seven Hundred Twenty Three Dollars and Forty Seven Cents ($297,723.47), to bring the total authorized funding amount to a maximum of Three Million Two Hundred Seventy-Four Thousand Nine Hundred Fifty-Eight Dollars and Sixteen Cents ($3,274,958.16); and

WHEREAS, funding for this project will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by GHD are fair and reasonable (Exhibit C).
3. The CCU hereby authorizes the management to accept the fee proposal from GHD, which is also incorporated into this Resolution in its entirety.
4. The CCU hereby further authorizes the management of GWA to enter into a contract with GHD, in the amount of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-Four Dollars and Sixty-Nine Cents ($2,977,234.69).
5. The CCU hereby further approves the total funding amount for this project of Two Million Nine Hundred Seventy-Seven Thousand Two Hundred Thirty-

Four Dollars and Sixty-Nine Cents ($2,977,234.69), along with a 10% contingency of Two Hundred Ninety-Seven Thousand Seven Hundred Twenty-Three Dollars and Forty-Seven Cents ($297,723.47), to bring the total authorized funding amount to Three Million Two Hundred Seventy-Four Thousand Nine Hundred Fifty-Eight Dollars and Sixteen Cents ($3,274,958.16).

6. The CCU hereby further authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 23rd day of January 2018.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

J. GEORGE BAMBA
Secretary

SECRETARY'S CERTIFICATE

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 5

NAYS: 0

ABSTENTIONS: 0

ABSENT: 0

Exhibit A (1 of 1)

GUAM WATERWORKS AUTHORITY

Gloria B. Nelson Public Service Building • 688 Route 15 • Mangilao, Guam 96913

June 19, 2017

To: Thomas F. Cruz, P.E., Chief Engineer

From: Gloria P. Bensan
Chairperson, Consultant Selection Board9

Subject: RFP-06-ENG-2017
Construction Management Services for the Northern and Southern Guam Reservoirs (Santa Rosa, Sinifa, and Santa Rita) Tank and System Upgrades
GWA Project No. W14-007-BND

The following information is intended to document the evaluation process undertaken for the referenced solicitation.

EVALUATION COMMITTEE MEMBERS	
Name	**Title**
Brett Railey, P.E.	CIP Water Engineer Supervisor
Garrett Yeoh	Senior Engineer
Delfyn Quitlong	Engineer II
Vincent Pangelinan	Operations Manager

Consultant	Evaluation Score				Total	Rank
1. EMPSCO Engineering Consultants	75	65	90	74	304	7
2. HDR	90	80	95	86	351	2
3. LYON	65	72	89	80	306	6
4. SSFM International	86	82	94	85	347	3
5. Duenas, Camacho & Associates	79	74	92	80	325	4
6. E.M. Chen & Associates	71	67	88	70	296	8
7. AECOM	74	74	93	81	322	5
8. GHD	90	94	91	91	366	1

Scores were evaluated based on sum of the individual scores. The recommendation of the evaluation committee is shown in the ranking above.

Please review and approve at your earliest convenience so that we may proceed with the notification letters.

Exhibit B (1 of 1)

GUAM WATERWORKS AUTHORITY
"Better Water. Better Lives."
Gloria B. Nelson Public Service Building
688 Route 15, Mangilao, Guam 96913

MEMORANDUM

To: Miguel C. Bordallo, General Manager

From: Thomas F. Cruz, P.E., Chief Engineer

Subject: RFP-06-ENG-2017
Construction Management Services for the Northern and Southern Guam Reservoirs (Santa Rosa, Sinifa, and Santa Rita) Tank and System Upgrades
GWA Project No. W14-007-BND

Date: June 19, 2017

The Selection Committee has completed all necessary actions for selecting the most qualified consultant for the referenced solicitation. All proposals were reviewed and scored according to the conditions established in the solicitation. The evaluation summary sheet is attached for your information.

The committee recommends the following top three (3) firms in order of preference for the project:

1. GHD
2. HDR
3. SSFM International

Concurred:

VINCENT E. GUERRERO
Supply Management Administrator

6/20/2017
Date

GENERAL MANAGER'S DETERMINATION

Consultant Firm Selected:

GHD

Remarks:

MIGUEL C. BORDALLO, P.E.
General Manager

6.21.17
Date

Exhibit C

September 22, 2017

Mr. Miguel Bordallo
General Manager
688 Route 15
Mangilao, GU 96913

SUBJECT: FORMAL SUBMITTAL OF FINAL SCOPE OF WORK AND FEE PROPOSAL FOR NORTHERN AND SOUTHERN GUAM RESERVOIRS (SANTA ROSA, SINIFA, AND SANTA RITA) TANK AND SYSTEM UPGRADES CONSTRUCTION MANAGEMENT SERVICES RFP-06-ENG-2017, PROJECT NO. W14-007-BND

Dear Mr. Bordallo:

GHD is pleased to formally submit our final Scope of Work and Fee Proposal for the above referenced project. The scope of work and fee proposal is based upon detailed meetings we held with GWA staff and we believe it meets GWA's needs in an economically feasible manner by pooling project management and resident engineer resources between the three (3) projects. We look forward to working with GWA on this critical project for Guam. If you have any questions or need additional information, please do not hesitate to contact me directly by email or telephone.

Sincerely,

Paul K. Baron, PE
Principal

Attachments: Scope of Work (15 pages)
Fee Proposal (29 pages)

GHD Inc. 865 South Marine Corps Drive Suite 202 Tamuning Guam 96913

T 1 671 472 6792 **F** 1 671 477 6229 **E** guam@ghd.com **W** www.ghd.com

Guam Northern & Southern GWA Reservoirs
Construction Management Services Scope of Work & Fees

I. GENERAL

GHD, as the Construction Manager (CM) shall provide services relating to the daily field observation, inspection, testing, supervision, management, coordination, and compliance monitoring for the Guam Northern & Southern GWA Reservoirs (Projects) at the following project locations.

- **Santa Rita GWA Reservoir Replacement**
- **Santa Rosa GWA Reservoir Replacement**
- **Sinifa GWA Reservoir Replacement**

The projects generally consists of geo-technical ground improvements, demolition of existing tank structures, construction of pre-stressed concrete tanks conforming to AWWA/ANSI D110 for Type I Wire-and-Strand Wound, Circular Prestressed Concrete Water Tanks (site adapted for each location), installation of new water lines, construction and refurbishment of booster pump stations, chlorination systems, electrical, instrumentation and control, SCADA controls, plus associated utilities for each site. Additionally, the work includes preconstruction services including constructability review and value engineering of the project design.

Reports submitted to GWA by the CM shall be in a form approved by GWA's Chief Engineer.

II. PROJECT OVERVIEW

The construction management, testing, and field observation services for the projects will require general construction management and observation, as well as specialized inspection and testing. In addition to general construction management duties, the specialized inspection and testing will include, but not be limited to:

- Concrete placement
- Concrete anchors/Adhesive anchoring systems/Expansion bolts
- Grading
- Excavation
- Compaction grouting
- Compaction testing
- Pre-stressing operations
- Concrete cylinder testing
- Shotcrete application
- High strength bolting
- Earthwork/Soil analysis
- Instrumentation and SCADA
- Hydrostatic testing
- Disinfection

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In general, the CM shall function as Owner's representative whose primary function shall be to:

- Keep GWA advised and informed as to project progress and cost
- Manage the change process
- Disclose any information relevant to GWA's interest
- Make proactive recommendations to GWA for action to maintain progress and achieve the project schedule and budget
- Observing System Commissioning
- Act in the best interest of GWA

The CM shall administer the Contract, except that the CM is not authorized to make any decisions on the behalf of GWA that materially affect the intent of the design or financially obligate GWA in any manner.

III. TASK AND REQUIREMENTS

The following tasks are applicable to and will be provided to each of the Guam Northern & Southern GWA Reservoirs project locations.

A. PRE-CONSTRUCTION PHASE SERVICES:

In accordance with GWA's RFP, the purpose of this task is to obtain "a clear set of construction documents that will allow the perspective bidder to bid competitively, to build or install the designed facility in an efficient and timely manner, and reduce the number of change orders and delays." Under this task the CM will review the design documents; review the Contractor's Construction Management Quality Control Plan; prepare a Construction Quality Assurance Plan and a Construction Management Plan; provide contract bidding support; participate in meetings to discuss design documents; submit comments on design documents; and participate in meetings to discuss responses to comments as detailed in the following paragraphs.

Task A1: Design Document Review. The CM shall perform review of the design documents. The CM will provide redline mark-up of the plans and specifications and annotated comments. The review shall also verify that the design is clearly presented and potential construction related conflicts or deficiencies which may lead to substantive changes to the design, schedule, or cost of the project have been mitigated as practicable. Based upon our understanding of the current status of the design documents, we will undertake this at the 100% design stages.

Deliverables (electronic pdf files and hard copies)**:**

- Final Design Review Report

Task A2: CM Quality Assurance:

Task A2.1: Review Contractor Construction Management Quality Control Plan. The CM shall review, record, and comment on the Construction Management Quality Control Plan submitted by the Construction Contractor.

Task A2.2: Construction Quality Assurance Plan. The CM will develop, implement, and maintain a Quality Assurance Plan for civil, structural, electrical, mechanical, and instrumentation elements including specialized work related to the construction of concrete

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water reservoirs conforming to AWWA/ANSI D110 Type I Wire- and Strand- Wound, Circular Pre-stressed Concrete Water Tanks.

Content of the Quality Assurance Plan shall include, but not be limited to the following:

- Documentation of site conditions prior to beginning construction
- Review of approved submittals from the Contractor prior to fabrication or installation of materials and equipment
- Inspection, observation, and documentation of daily field work
- Monitoring of the Contractor's Quality Control Plan
- In-plant fabrication and/or witness testing at place of manufacture (where applicable)
- Reports and record keeping
- Non-conforming and deficient work resolution process
- Monitoring the Construction Contractor's implementation of their Quality Control Plan
- Complete list of specialized inspections for the tank structure and under tank

It is important to note that the CM is responsible for monitoring the Contractor's compliance with the Contract Documents, but is not responsible for the Contractor's means and methods the Contractor elects to use in performance of their work.

Deliverables (electronic pdf files and hardcopies)**:**

- Quality Assurance Plan

Task A3: Construction Management Plan. The CM will develop and implement the Construction Management Plan (CM Plan) including guidelines for project organization and coordination in the field, standard daily operations, change order procedures, quality, schedule, and cost control. The CM Plan sets forth the procedures and approach for the construction of the project. The CM Plan will serve the CM, the Owner's Representative, and Contractors by defining the project, project team members and their roles, coordination among team members, procedure, key milestones, and schedule constraints. By establishing these parameters early in the project, the CM Plan will help control resources and costs, establish communication and coordination between the CM, Contractor, and GWA.

Deliverables (electronic pdf files and hardcopies)**:**

- Construction Management Plan

Task A4: Contract Bidding:

The CM will review and perform an assessment of the 100% contract bid package (Parts A, B, & C) to assess their readiness, completeness, and suitability to solicit competitive bids. We will assist in the management of the bid documents, prepare for and conduct the pre-bid conference and site visit(s), manage and assist with RFI responses and addendums during the bid period.

After receipt of construction bid packages, the CM will perform an overall review of the bids received with a detailed emphasis on the apparent low bidder(s). The CM will work with GWA to perform the necessary follow-up with the bidders until the lowest responsible and responsive bidder is determined. Upon completion of this process, the CM will provide a technical memorandum summarizing the review and recommendation for award, and/or concurrence of

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the proposed selected contractor. Recommendation shall include document review to ensure compliance with all bid requirements and procurement regulations, bid analysis, and contractor selection.

Deliverables (electronic pdf files and hardcopies):

- Pre-Bid Meeting Agenda and Minutes
- Technical Memorandum(s) – Document Review, Bid Analysis, and Contractor Selection

B. CONSTRUCTION PHASE SERVICES:

Task B1.0: Project Records & Document Control. The CM shall provide services and tools to ensure that the project is efficiently managed and constructed according to the terms of the Contract. The primary function shall be the proper collection and organization of construction documents, gathering data regarding project progresses, producing progress reports, and monitoring time, cost, and quality.

The CM shall use Bentley EADOC for the Project Management Information System (PMIS) to track communication, design documents, construction documents, finances, and reporting. Our fee proposal shall include up to 15 users.

- Communication Documents: Memos, daily inspector logs for both contractor and CM, meeting minutes, and all other relevant documentation.
- Construction Documents: Submittals, RFIs, testing results, photo logs, special inspection, change orders, corrective actions, punch list, various construction logs, payment applications, wage rate reporting, and all other relevant documentation.
- Contract Documents: Specifications, drawings, permits, bid documents, contract documents, and all other relevant documentation.

Task B2.0: Daily Construction Reports. The onsite inspectors shall maintain daily reports of the general work performed, visitors to the site, daily production, weather and site condition, field orders, progress photos, material testing, special inspections, documentation of delays, non-conformance, punch lists, and other material and work facts and issues regarding the production of the work. The daily reports and logs shall be available to GWA project team for review at any time via the project management software.

Task B3.0: Progress Photo Log and Live Video Feed:

Task B3.1: Progress Photo Log. The CM shall prepare and retain a construction progress photo log in an album organized by year, month, and day. The photo log shall capture the different phases of the project – pre-construction, construction, and post-construction. The photo log shall be digital and provided to GWA at the end of the project.

Task B3.2: Live Video Feed. The CM shall provide 24 hour monitoring camera(s) to be installed at each project site to allow for regular monitoring of the project work. The camera system will allow for remote view and playback functions. A time-lapse video of the entire project shall be provided to GWA at the end of the project.

Task B4.0: Submittal and Shop Drawings. The CM shall review and act on (accept or reject) submittals required by the Contract documents. The CM shall review and provide comments

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regarding shop drawings, work drawings, material submittals, traffic control plan, safety plan, demolition plan, and other submittals for conformance with the Contract Documents. The CM reviewer shall be a competent person. In the event of a Contractor request for a time extension or material or equipment substitution, the CM shall make a recommendation to GWA regarding the substitution. The GWA Chief Engineer or his authorized representative will approve the substitution.

Task B5.0: Contractor Project Schedules. The CM shall review the Contractor's work schedule for accuracy and for efficient sequencing of the work. The CM shall provide recommendations to the Contractor to make changes deemed necessary and coordinate approval of the revised (recovery) schedule with GWA. Any delays shall be documented and notified to GWA and the Contractor when actual progress is behind schedule. The CM shall adhere to the requirements set forth in the Contract document for Contractor project schedule tracking and review.

Task B6.0: Payment Request. The CM shall receive and process payment requests from the Contractor. Payment requests shall be reviewed to be in compliance with the Contract documents and with the actual work completed. Upon completion of the review, the CM shall make any necessary adjustments, certify, and forward the request to GWA for processing of the payment. The CM shall submit their review, recommendation, acceptance, or rejection within five (5) working days of receipt from the Contractor. We assume the payment application will be a standard AIA or EJCDC.

Task B7.0: Payroll Report. The CM shall review any payroll submittals required by the Contract Documents including prevailing wage submissions. At the minimum, the Contractor and its subcontractors shall provide bi-weekly pay records for each of its employees on the project. The CM shall conduct two (2) random employee interviews every two (2) weeks to verify the pay request information. Upon completion of the review, the CM shall require the Contractor to make any necessary adjustments, certify, and forward the Payroll report along with the pay request to GWA for processing. Our review will be based on the wage rates provided in the bid package.

Task B8.0: Project Meetings. The CM shall schedule, arrange, and conduct conferences and meetings as required for clear communication of the Contract requirements and adherence to project schedules.

Task B8.1: Pre-construction Conference. The CM shall prepare for, chair, and provide meeting minutes for the pre-construction conference. The preconstruction conference shall be arranged to discuss mobilization, prosecution of work, safety, environmental protection, historic preservation, processing payments, material submittals, testing procedure, project schedules, inspections, and all other contract issues as necessary.

Task B8.2: Weekly Progress Meetings. The CM shall arrange for a weekly progress meeting with the Contractor and GWA to discuss progress of work, Contract requirements, and other issues related to the administration and prosecution of work. The CM shall prepare meeting minutes for all progress meetings with contractors, sub-contractors, GWA, and all other parties. The meeting minutes shall include action items from week to week until it has been completed.

Task B8.3: Special/Stakeholder Coordination Meetings. The CM shall arrange meetings between the Contractor and GWA, and other parties such as GEPA, DPW, GPA, etc. and other

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Stakeholders as necessary to address project issues that require decisions that cannot be made by the CM or to resolve regulatory concerns.

Task B9.0: As-Built Drawings:

Task B9.1: As-Built Drawing Review. After each weekly meeting, the CM shall review the Contractor's review drawings to ensure that they are current and capture any deviations from the original plan set.

Task B9.2: Maintain As-Built Drawing. The CM shall maintain a separate set of red-line as-built drawings on site. Drawings shall be available for GWA at any time. Monthly as-built documents shall be uploaded to the project management software system.

Task B10.0: Request for Information. The CM shall track Requests for Information (RFI) and maintain an RFI log; coordinate receipt of answers from other sources; and provide RFI responses with GWA's input regarding any aspect of the Contract documents, which includes the plans and technical specifications.

Task B11.0: General Compliance Monitoring. The CM shall evaluate and ensure Contractor compliance with all local and federal labor laws applicable to the Project. Any violations shall be immediately reported to GWA. Compliance monitoring shall include but not limited to the following:

Task B11.1: Regulations and Laws. The CM shall monitor compliance with Territorial and/or Federal laws, regulations, and rules.

Task B11.2: Labor Laws. The CM shall monitor Contractor and subcontractor procedures to verify legal status of employees on site. Verify bi-weekly compliance with labor requirements for federally funded projects including posting of wage rate schedules at the job site and safety requirements.

Task B11.3: Licensure. To the best of our ability, the CM shall confirm that the Contractor and its subcontractors and their workers have all required licenses and ensure that said licenses are valid throughout the terms of the Contract.

Task B11.4: Permit Compliance. To the best of our ability, the CM shall monitor and track Contractor's compliance in obtaining required permits and approvals.

Task B11.5: Insurance. To the best of our ability, the CM shall review the Contactor's insurance documents that are submitted to GWA for compliance with Contractor requirements. The CM shall track insurance documents, ensure insurance is valid throughout the term of Contract and maintain an insurance certificate log.

Task B12.0: Claims and Disputes. The CM shall promptly notify GWA regarding any issues that arise during construction of the project that could result in claims and/or disputes. The CM shall provide the following services to assist GWA with the resolution of claims and disputes:

Task B12.1: Claim Records. Maintain copies of all verbal and written communications, submittals, testimony, photos, and meetings regarding a potential dispute and promptly submit all originals to the Chief Engineer and Attorney for GWA.

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Task B12.2: Claims Reviews & Interpretation. Review claims submitted by the Contractor. Provide GWA with interpretation of Contract drawings and specifications and provide written recommendations to GWA regarding the solution of the dispute. At the outset of the Contract, the CM shall work with the Contractor to provide pricing for equipment, material, personnel, and other relevant considerations as specified in the bid. Prices agreed upon shall be used in any subsequent Change Order. No amounts shall be paid except for actual losses incurred by the Contractor through no fault of their own or for risks not allocated to the Contractor under the bid.

Task B13.0: Change Order Negotiations and Review:

Task B13.1: Change Order Review. Track all change orders and maintain a change order log. Provide change order evaluations, negotiations, and recommendations for approval by GWA. Change orders shall not be made when the Contractor has assumed such risk in the bid. Change orders may include requests for additional payments for differing site conditions and the CM shall utilize the bid documents to determine if a change order is warranted. The CM shall submit change order requests and supporting documentation to GWA for approval within ten (10) working days of receipt from the Contractor wherever practical.

Task B13.2: Change Order Negotiations with Contractor. Prepare independent cost estimates and negotiate change orders with the Contractor subject to GWA approval (final approval of negotiated change orders can only be made by the GWA General Manager).

Task B13.3: Change Order Documentation and Administration.
The CM shall maintain copies for all approved change orders (originals to be provided to GWA) and ensure that subsequent pay requests accurately represent these change orders. Approved change orders shall be administered by the CM along with other work elements according to the provisions of this scope of work.

Task B14.0: Design Changes and Verification Request:

As directed by GWA, prepare changes to the Contract technical documents (design and specifications) required to address a change order. GWA will direct the CM to make design changes only when changes are deemed by the GWA Chief Engineer and the Engineer of Record to have no material effect on the original intent of the design. All other design changes shall be forwarded to the Engineer of Record for processing.

If the request for change will materially change the original design, the CM shall coordinate with the Engineer of Record to accomplish the necessary design changes. The CM shall prepare a design change/verification request (DCVR) for submission to and for the approval of the Engineer of Record. If the required changes to the design are not covered within the original design scope of service, the CM will prepare a design scope amendment; solicit a fee proposal for the amendment on behalf of GWA, and assist with the negotiations.

Task B15.0: Construction Monitoring, Special Inspection, and Quality Control Monitoring.
The CM shall provide construction management and onsite inspection observation services to ensure that the work is accomplished in accordance with the Contract documents.
Project field staff shall review project documents, conduct daily observations, special inspections (where applicable), prepare and submit daily observation and special inspection reports; communicate deficiency issues and resolve with Contractor; and update a non-

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compliance log. It is anticipated that during peak construction as many as four (4) field staff may be present at the site during normal working hours.

Task B15.1: Project Manager. The CM will assign a part time Project Manager (PM) to the Guam Northern and Southern GWA Reservoir project. The PM will be responsible for general over-sight of the project, formal correspondence with GWA and the Contractor, and the professional and technical accuracy of all work and materials of the project.

Task B15.2: Resident Engineer. A full time Resident Engineer (RE) shall be assigned to manage all three (3) sites and will be at one (1) of the sites during normal working hours unless attending project related meetings or during holidays, vacation, or sick days. The Resident Engineer (RE) will determine along with the Project Manager (PM), which field staff will be onsite but it may be comprised of civil, structural, electrical, or mechanical field staff with the intent that there will be at least one (1) of them on site during normal working hours and will be supported by additional Special Inspectors as described in Task 15.4.

Task B15.3: Onsite Construction Inspector. The CM shall provide construction inspector staff at each of the three (3) sites to monitor the construction. The Resident Engineer and onsite field staff shall have demonstrable experience (satisfactory to GWA) relative to the discipline and type of work being performed. Project field staff shall review project documents, conduct daily observations, special inspections (where applicable), prepare and submit daily observation and special inspection reports, communicate deficiency issues and resolve with Contractor, and update a non-compliance log.

Task B15.4: Special Inspector. In addition to general compliance inspections, the CM shall provide special inspections services in accordance with IBC 2009, Chapter 17 by a person with demonstrable experience (satisfactory to GWA) related to concrete placement, structural field welding, field welding of reinforcement, concrete anchoring, expansion bolts, shotcrete application, high strength bolting, reinforcing steel placement, pre-stressing operations, grading, excavation, backfilling, foundation probing and injection, and other operations that require special inspections. The Special Inspections staff shall be accepted by DPW and approved by GWA before inspection.

SCADA, mechanical, and electrical inspections will be handled by competent staff on an "on-call" basis to periodically observe these phases of the construction. The same staff will be used to provide discipline specific submittal, shop drawing, and RFI review and response support. The staff shall have demonstrable experience relative to the discipline and type of work being performed.

Task B16.0: Testing (Quality Assurance).

Task B16.1: Contactor Testing. Schedule, observe, approve or reject, and document testing required under the Contract to be performed by the Contractor.

Task B16.2: Construction Quality Assurance Testing. The CM shall provide the following CQA testing to monitor the Contractor's independent testing firm:

SPECIAL TESTING	STANDARD	FREQUENCY
Concrete Compressive Testing: Water tank, structures, encasement, hand holds,	ASTM C-39	See attached QA Summary of Services

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electrical and communication vaults, pavement, retaining walls, drilled piles, etc.		
Backfill Compaction Testing: Over-excavation, tank foundation, structure foundations, manholes, vaults, electrical & communication hand holes, pavement, etc.	ASTM D-698 ASTM D-6938	See attached QA Summary of Services
Soil and Aggregate Analysis: Subgrade, limestone, base course, general fill, and structural fill, etc.	ASTM C-136 ASTM C-117 ASTM C-40 ASTM D-1140 ASTM D-1183 ASTM D-4318	See attached QA Summary of Services

Task B16.2: GWA Testing. Coordinate and monitor testing required to be performed by GWA.

Task B17.0: Acceptance. The CM shall promptly reject, orally, or in writing, any construction work that does not fully comply with Contract documents. Within 24 hours of notification to the Contractor that work elements have been rejected, the CM shall provide a written description of the deficiency to the GWA Chief Engineer for his/her concurrence. When concurrence has been obtained, the Contractor shall be directed to correct the work. The CM shall promptly advise the GWA Project Manager or the GWA Chief Engineer if the Contractor fails to correct or remove the defective work.

The CM shall issue written stop work orders to the Contractor and immediately provide GWA with a copy for a portion of or the entire Contract non-compliance issues as follows:

- If condition of work or Contractor actions threaten the health and safety of Contractor personnel, GWA representatives, or the public in such cases, stop work orders may be oral depending on the circumstances with written stop work order to follow.
- With prior notification and approval of the GWA Chief Engineer or Project Manager in all other cases.

Task B18.0: Construction QA Survey Services. The CM shall conduct survey and field measurements as necessary to verify that the work is located according to the plans and specifications. Changes to the horizontal and vertical alignments and elevations shall be made only with the approval of the GWA Chief Engineer.

- Pipeline Alignments and Location of Structures: Spot check Contractor's construction staking to verify the pipeline alignments and structure locations are as called for on the plan and specifications and in order to ensure that the work is in a location within lawful and approved Rights-of-Way and easements.
- Elevations: Spot check with Contractor's elevations for foundations, pads, pipe line inverts, backfill thickness, manholes, and other structures for which vertical elevations is a critical design element.
- Construction Survey Quality Assurance: The CM shall provide, at the minimum, the following CQA survey to monitor the Contractor's independent survey firm.
- See attached QA Summary of Services for a project specific list of those items to be verified. In general, the following work shall be provided: under-tank piping, over-excavation, tank foundation, vaults, pavement, water line, bench marks, etc.

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Task B19.0: Project Closeout (Punch List and Project Closeout Inspections). Throughout the construction of the project, the CM shall prepare and maintain a list of defects and deficiencies in the work which must be corrected by the Contractor prior to final acceptance of work. The list shall be provided to all members of the pre-final and final inspection team. The list shall be revised after inspections to reflect additional items identified during the inspection. Coordinate with the Contractor to ensure that all punch list items have been completed. When all items have been completed, inform GWA in writing recommending that the work be accepted.

Schedule, arrange, and conduct preliminary, pre-final, and final inspections of work with Contractor, GWA, GEPA, DPW, and other stakeholders in this project.

Task B19.1: Deficiency Log. Prepare and maintain a list of defects and deficiencies in the work which must be corrected by the Contractor prior to final acceptance of work.

Task B19.2: Preliminary Inspection. Preliminary inspections shall be arranged as necessary for specific work elements that require the certification and approval of other agencies.

Task B19.3: Pre-final Inspection. A pre-final inspection shall be conducted after substantial completion of the work.

Task B19.4: Final Inspection. The final inspection shall be conducted after correction of pre-final inspection punch list items.

Task B20.0: Train and Warranty Periods.

Task B20.1: Startup Training & Maintenance Procedures Coordination. The CM shall coordinate with the Contractor to schedule and conduct startup training and standard maintenance procedures required by the Contract documents.

Task B20.2: Master Warranty Package. The CM shall maintain a copy of the warranties and compile associated Manufacturer and Contractor warranty documents. Warranty information shall be included in the final project report. All original warranty documents shall be provided to GWA along with Lien Release Information from the Contractor.

Task B21.0: Equipment.

Task B21.1: Pressure Data Loggers. The CM shall provide GWA with 15 water pressure data loggers, batteries, lock boxes, chains, padlocks, and associated fittings. The water pressure data loggers shall contain USB downloading, water resistant case, delay start feature, and 0-300 PSI range. For the purposes of this proposal, the cost of five (5) data loggers has been carried in each of the three (3) projects. Product data for the above has been included as an attachment to this document.

Task B21.2: Equipment. The CM shall provide GWA with a Panasonic Toughbook 20 with Windows Pro operating system per the attached product data. For the purposes of this proposal, the cost of Toughbook has been divided equally and 1/3 of the cost was carried in each of the projects.

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Task B22.0: Expenses. The CM has summarized the costs associated with reports & reproduction, mileage, live video fee, website access & maintenance, project management information system (EADOC), QA soil & aggregate analysis, QA backfill compaction testing, QA concrete compressive strength testing, QA survey verification, etc. as a single total for all three (3) projects and carried the average amount equally in each of the projects.

C. POST-CONSTRUCTION SERVICES:

Task C1.0: Final Report. The CM shall prepare a final report after written acceptance of the work by GWA. The final report shall include a narrative documentation of all significant design and construction events and issues and shall become a historical record for the project. The Final Report shall include:

- All communication documentation
- All design documentation
- All construction documentation
- Warranty information
- Operation and maintenance information
- Asset management registry

Deliverables (electronic pdf files and 5 hard copies)**:**

- CM Final Report

Task C2.0: Record Drawings. After the conclusion of the project, the CM shall review and approve the official record drawings prepared by the Contractor.

Deliverables (electronic pdf files and 5 hard copies)**:**

- As-Built Record Drawings

IV. CLARIFICATIONS AND ASSUMPTIONS:

1) For this project, the CM's onsite presence shall consist of the following:

   a) ***One (1) part time Project Manager*** (assumed 45%) equally distributed to each of the three (3) project locations.
   b) ***One (1) full time Resident Engineer*** (assumed 100%) equally distributed to each of the three (3) project locations.
   c) ***Three (3) full time Civil/Structural Inspector*** (assume 100%), one at each of the three (3) project locations.
   d) ***One (1) part time Structural Special Inspector*** (assumed 24%), equally distributed to each of the three (3) project locations.
   e) ***One (1) part time SCADA Inspector*** (assume 21%), equally distributed to each of the three (3) project locations.
   f) ***One (1) part time equivalent of Mechanical Engineer/ Mechanical Inspector*** (assume 21%), equally distributed to each of the three (3) project locations.
   g) ***One (1) part time equivalent of Electrical Engineer/ Electrical Inspector*** (assume 21%), equally distributed to each of the three (3) project locations.

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h) ***One (1) part time equivalent of Submittal Manager/Project Manager Assistant*** (assume 45%) at each of the three (3) project locations, and various part time support as needed from the Principal, additional inspectors, engineers, etc.

2) Per the June 27, 2017 CM Services scoping meeting with GWA, the following project durations were used:

a) Santa Rosa GWA Reservoir Replacement ***(365 calendar days).***
b) Santa Rita GWA Reservoir Replacement ***(410 calendar days).***
c) Sinifa GWA Reservoir Replacement ***(365 calendar days).***

As requested by GWA, the CM shall provide limited close-out services for a period of 30 to 60 days after substantial completion provided all the construction work is complete and support is mainly at an administrative level (i.e. does not require full time staff to be assigned to the job site).

3) In an effort to reduce costs, the following assumptions have been made:

a) Preparation of Construction Management Plan (CMP) assumes a single document can be prepared for all three projects. One third effort carried in each fee proposal.
b) Contract Bidding effort assumes preparation if a single Pre-Bid Meeting, Contract Bidding Management effort, Bid Opening, Review of Bid Packages, Preparation of Recommendation Memorandum, and Technical Memorandums for all three (3) projects as a single bid package. One third of the effort has been carried in each fee proposal.
c) At the end of the project, the CM will turn-over each of the EarthCam - Construction Cam Lite HD to GWA. It is our understanding that GWA will have the cameras permanently installed at each of the three (3) sites by others. The cameras have an approximate value of ***$45,000.00*** excluding software support and archiving services which are excluded. Note, GHD access to the EarthCam environment is subject to compliance with their terms of use for the service. GHD is a subscriber to the service only and has no control over the performance of the EarthCam Service but will take all reasonable measures and actions within our power to ensure good performance of the system.

4) Inspection and testing of any existing steel storage reservoirs including draining and cleaning is excluded for this scope of services.

5) An amount of $18,930.00 for the Project Management Information System (PMIS), Bentley's ProjectWise Construction Management Service (EADOC), was budgeted for each project. Our fee assumes a total of 15 users for each project at a cost of approximately $180.00 per user per quarter as follows:

a) Client – **two (2)**
b) Construction Manager – **five (5)**
c) Contractor – **five (5)**
d) Spare – **three (3)**

Additional users can be provided at the request of GWA via Change Order. Note, GHD Access to the ProjectWise Construction Management environment is subject to compliance

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with the Bentley Systems terms of use for the service. GHD is a subscriber to the ProjectWise Construction Management service only and has no control over the performance of Bentley's ProjectWise Construction Management Service but will take all reasonable measures and actions within our power to ensure good performance of the system.

6) The CM will use Primavera P6 project management software to track the Contractor's project schedule, construction cost, resource tracking, and cost management.

7) The CM shall conduct random employee interviews every two (2) weeks for two (2) employees to verify the pay request information.

8) Job Site Safety is the sole responsibility of the Contractor. The CM assumes the Contractor shall perform all work in accordance with the requirements of the Contract Documents, applicable federal and local regulations, compliance with regulations of public agencies having jurisdiction, including safety and health requirements of the Territory of Guam and the Occupational Safety and Health Administration of the US Department of Labor (OSHA) as may be required.

   In the event that the GHD believes that the Contractor is not conducting their work in compliance with OSHA requirements, we may request GWA to bring in an independent third party safety expert to determine the extent of the Contractor's compliance and potential mitigation for non-compliance. We recommend that GWA include language in the contract documents requiring the contractor to pay for this additional cost in the event it is necessary.

9) ***Stop Work Orders:*** It is understood that the CM may issue written stop work orders to the Contractor in accordance with GWA policies for a portion of or the entire project for Contract non-compliance issues as follows:

   a) If in the opinion of the CM, the condition of work or Contractor actions threaten the health and safety of Contractor's personnel, GWA representatives, CM Staff, or the public in such cases, stop work orders may be oral depending on the circumstances (with written stop work order to follow).

   b) With prior notification and approval of the GWA Chief Engineer or GWA Project Manager in all other cases.

10) ***Authority to Direct Contractor Operations:*** The CM shall direct the Contractor's Operations under the following conditions:

   a) ***Safety and Public Convenience:*** In order to minimize inconvenience to the public and businesses, and in order to protect the safety of the public.

   b) ***Compliance:*** In order to affect compliance with local and federal regulations, such as those dealing with traffic control, environmental protection, cultural protection, and historic protection.

11) No formal Partnering Program will be provided but GHD will incorporate partnering to the extent practicable to ensure that environmental commitments are met; complete the

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project on time by resolving disputes quickly; finish within budget by proactively monitoring costs and facilitating creative solutions when faced with potential cost increases; ensure that quality is met by adequate oversight by the Contractor and CM.

12) An amount has been budgeted as detailed in the attached ***QA Services Summary*** to provide QA Testing. Material laboratory testing, Compaction testing, and Concrete Compressive Strength Testing shall be provided by a licensed geotechnical engineering firm. If additional services are required, it shall be brought to GWA's attention and a fee negotiated.

13) An amount has been budgeted as detailed in the attached ***QA Services Summary*** to provide QA Field Survey verification services. Survey verification services will be provided by a licensed land surveyor. If additional work is required it will be brought to GWA's attention and a fee negotiated.

14) No generator, fuel storage or pump systems are part of the project.

15) No project specific permitting services are included in this scope of work, but GHD will assist GWA, the designer, and the Contractor on a limited basis to help facilitate procurement of permits as expeditiously as possible.

16) No Archeological survey, Section 106 Historic Preservation, biological resource monitoring, Section 7 Endangered Species Act or related work is included.

17) Any and all permit fees are excluded.

18) The scope assumes the processing of up to ***100 RFIs*** (Task B10.0) per project, with the understanding that the EOR will provide responses to all design related RFIs. The scope also assumes ***five (5) change orders*** for (Task B13.0) and ***three (3) design changes*** for (Task B14.0). If additional work is required it will be brought to GWA's attention and a fee negotiated.

19) Warranty follow-up is not included in the scope. If required, a fee will be negotiated with GWA.

20) These CM Services are being provided for the construction of improvements shown on the ***90% Design package.*** If additional improvements are added to the construction contract then a fee for additional CM Services will be negotiated with GWA.

21) The Construction contract shall include requirements that the Construction Contractor pay for all overtime for inspection and special inspection requested by the Contractor outside of the normal 40 hour work week and this requirement will be strictly enforced and supported by GWA with payment coming out of the Contractor's Pay Request and then distributed to GHD by GWA via change order.

22) GWA agrees to negotiate with GHD for change orders for additional construction phase services due to construction delays, time extensions, additional work, adverse weather delays ***(in excess of 30 days),*** or any other reason not due to negligent acts of GHD until final acceptance of the project is achieved.

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VI. FEE SCHEDULE

TABLE 01 - SANTA RITA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$45,820.00
Construction	$905,939.38
Post-Construction	$31,802.00
SUBTOTAL	$983,561.38
GRT	$40,985.00
Santa Rita Total	**$1,024,546.39**

TABLE 02 - SANTA ROSA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Santa Rosa Total	**$976,344.15**

TABLE 03 - SINIFA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Sinifa Total	**$976,344.15**

TABLE 04 - SANTA RITA SANTA ROSA & SINIFA GWA RESERVOIR

Task Description	Amount
Pre-Construction	$137,460.00
Construction	$2,625,270.15
Post-Construction	$95,406.00
SUBTOTAL	$2,858,136.15
GRT	$119,098.53
GRAND TOTAL	**$2,977,234.69**

See attached spreadsheets for detailed information. Note, work to be invoiced monthly based on prorated effort.

GHD Inc. 865 South Marine Corps Drive Suite 202 Tamuning Guam 96913
T 1 671 472 6792 **F** 1 671 477 6229 **E** guam@ghd.com **W** www.ghd.com

Santa Rosa, Sinifa, and Santa Rita Tank System Upgrades
Fee Summary
09/22/2017

	Amount
Pre-Construction	$45,820.00
Construction	$905,939.38
Post-Construction	$31,802.00
SUBTOTAL	$983,561.38
GRT	$40,985.00
Santa Rita TOTAL	**$1,024,546.39**

	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Santa Rosa TOTAL	**$976,344.15**

	Amount
Pre-Construction	$45,820.00
Construction	$859,665.38
Post-Construction	$31,802.00
SUBTOTAL	$937,287.38
GRT	$39,056.77
Sinifa TOTAL	**$976,344.15**

	Amount
Pre-Construction	$137,460.00
Construction	$2,625,270.15
Post-Construction	$95,406.00
SUBTOTAL	$2,858,136.15
GRT	$119,098.53
GRAND TOTAL	**$2,977,234.69**

	-	8	16	24	-	-	-	-	-	-	-	-
	-	2	4	8	-	-	-	-	-	-	-	-
	-	4	4	4	8	-	-	-	-	-	-	-
	-	8	16	20	60	-	-	-	-	-	-	-
	-	4	4	8	4	-	-	-	-	-	-	-
	-	2	2	12	8	-	-	-	-	-	-	-
	-	2	2	20	4	-	-	-	-	-	-	-
	-	2	2	2	2	-	-	-	-	-	-	-
	-	2	2	4	4	-	-	-	-	-	-	-
	-	2		4	4	-	-	-	-	-	-	-
	-	2	2	4	4	-	-	-	-	-	-	-
	-	38	54	110	98	-	-	-	-	-	-	-
	-	6,308	12,204	13,860	12,348	-	-	-	-	-	-	-
	-	6,308	12,204	13,860	12,348	-	-	-	-	-	-	-

		68		44		405						
						270						
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				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	8		8	8		8	
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		8		20		40						
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				4		40						
	-	8	-	104	-	80	-	-	-	-	-	
	-	1,328	-	13,104	-	10,880	-	-	-	-	-	
	-	1,328	-	13,104	-	10,880	-	-	-	-	-	
	-	397	166	987	98	2,422	180	106	122	40	122	
	-	65,902	37,516	124,362	12,348	329,392	35,280	18,550	18,910	5,000	18,910	
	-	65,902	37,516	124,362	12,348	329,392	35,280	18,550	18,910	5,000	18,910	

	-	8	16	24	-	-	-	-	-	-	-	
	-	2	4	8	-	-	-	-	-	-	-	
	-	4	4	4	8	-	-	-	-	-	-	
	-	8	16	20	60	-	-	-	-	-	-	
	-	4	4	8	4	-	-	-	-	-	-	
	-	2	2	12	8	-	-	-	-	-	-	
	-	2	2	20	4	-	-	-	-	-	-	
	-	2	2	2	2	-	-	-	-	-	-	
	-	2	2	4	4	-	-	-	-	-	-	
	-	2		4	4	-	-	-	-	-	-	
	-	2	2	4	4	-	-	-	-	-	-	
	-	38	54	110	98	-	-	-	-	-	-	
	-	6,308	12,204	13,860	12,348	-	-	-	-	-	-	
	-	6,308	12,204	13,860	12,348	-	-	-	-	-	-	

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				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	20						
				8		20						
	-	342	112	695	-	2,085	180	106	122	40	122	
	0%	16%	5%	33%	0%	100%	9%	5%	6%	2%	6%	2
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	

	-	388	166	909	98	2,165	180	106	122	40	122	
	-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910	
	-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910	

	-	8	16	24	-	-	-	-	-	-	-	
	-	2	4	8	-	-	-	-	-	-	-	
	-	4	4	4	8	-	-	-	-	-	-	
	-	8	16	20	60	-	-	-	-	-	-	
	-	4	4	8	4	-	-	-	-	-	-	
	-	2	2	12	8	-	-	-	-	-	-	
	-	2	2	20	4	-	-	-	-	-	-	
	-	2	2	2	2	-	-	-	-	-	-	
	-	2	2	4	4	-	-	-	-	-	-	
	-	2		4	4	-	-	-	-	-	-	
	-	2	2	4	4	-	-	-	-	-	-	
	-	38	54	110	98	-	-	-	-	-	-	
	-	6,308	12,204	13,860	12,348	-	-	-	-	-	-	
	-	6,308	12,204	13,860	12,348	-	-	-	-	-	-	

		68		44		405						
						270						
				29	-	150	-	16	24		24	
				6		75	60	16	24		24	
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				8		52						
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					-	240						
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					-	108						
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				18		54						
				18		54						
				18	-	54						
				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	8		8	8		8	
				8	-	20						
				8		20						
	-	342	112	695	-	2,085	180	106	122	40	122	
	0%	16%	5%	33%	0%	100%	9%	5%	6%	2%	6%	2
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	
	-	56,772	25,312	87,570	-	283,560	35,280	18,550	18,910	5,000	18,910	

	-	388	166	909	98	2,165	180	106	122	40	122	
	-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910	
	-	64,408	37,516	114,534	12,348	294,440	35,280	18,550	18,910	5,000	18,910	

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA RITA
Prepared by: B.Ryley

Attachment:
of:
Checked By: P.Baron
Date: 09/22/17

QA SURVEY ESTIMATE

	Quantity
Under Tank Piping:	
Inlet Piping & Top of Flange	$1,200
Outlet Piping & Top of Flange	$1,200
Over-Flow Piping & Top of Flange	$1,200
Drain Line Piping & Top of Flange	$1,200
Wash Down Piping	$1,200
Tank Foundation:	
Top of Formwork	$1,200
Control Building 1	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Control Building 2	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Manhole:	
Below Base	$800
Top of Manhole	$800
Bottom of Pipe	$800
Ponding Basin 1	
Subgrade	$800
Ponding Basin 2	
Subgrade	$800
Vaults:	
Top Outlet Meter Vault Footing Formwork	$800
Top Outlet Meter Vault Roof Slab Formwork	$800
Top Inlet Meter Vault Footing Formwork	$800
Top Inlet Meter Vault Roof Slab Formwork	$800
Top Electrical Handhole	$800
Pavement:	
Pavement Formwork	$800
Sidewalk Formwork	$800
Fencing	
Corners	$800

Drilled Piles		
Cast In Place Drilled Piles		$5,500
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.		$1,200
	Contingency 25%	$7,675
	TOTAL ESTIMATED BUDGET	**$38,375**

	Rate
Half Day	$800
Full Day	$1,200
Hourly	$150

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	Unit Cost	Quantity	Cost
Subgrade	$295.00	2	$590.00
Limestone	$295.00	2	$590.00
Base course	$295.00	2	$590.00
General Fill	$295.00	2	$590.00
		Contingency **25%**	$590.00
		TOTAL ESTIMATED BUDGET:	**$2,950.00**

Compaction Testing:

Control Building 1			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Control Building 2			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Reservoir Access Road			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	2	$148.00
Ponding Basin 1 Access Road			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
General Fill	$74.00	1	$74.00
Ponding Basin 2 Access Road			

Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Manhole			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Outlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Inlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Electrical Handhole (estimated)			
Below Foundation	$74.00	1	$74.00
Pavement:			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	2	$148.00
Base course	$74.00	1	$74.00
		Contingency **25%**	$573.50
		TOTAL ESTIMATED BUDGET:	**$2,867.50**

	Rate
1st Test	$55
2nd Test	$19
	$74

Concrete Testing:

Outlet Meter Vault:	Unit Cost	Quantity	Cost
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Inlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Encasement:			
Inlet Piping	$305.00	1	$305.00
Outlet Piping	$305.00	1	$305.00
Over-Flow Piping	$305.00	1	$305.00
Drain Line Piping	$305.00	1	$305.00
Wash Down Piping	$305.00	1	$305.00
Electrical & Communications Ducts	$305.00	1	$305.00

Handholes:				
Electrical	$305.00	1		$305.00
Pavement:				
Pavement	$305.00	1		$305.00
Control Building 1				
Footing	$305.00	1		$305.00
Building Corners	$305.00	1		$305.00
Control Building 2				
Footing	$305.00	1		$305.00
Building Corners	$305.00	1		$305.00
Manhole				
Pre-Cast Sections	$305.00	1		$305.00
Drilled Piles				
Cast In Drilled Piles	$305.00	77		$23,485.00
Water Tank:				
Foundation	$305.00	1		$305.00
Core Walls	$305.00	7		$2,135.00
Columns	$305.00	9		$2,745.00
Column Footings	$305.00	9		$2,745.00
Roof Slab	$305.00	1		$305.00
Shotcrete	$305.00	2		$610.00
		170		
			Contingency 15%	$5,718.75
			TOTAL ESTIMATED BUDGET:	**$43,843.75**

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):		$68.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:		$12.00
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:		$50.00
Unit Weight and Yield of Fresh Concrete, each:		$50.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):		$125.00
	SUBTOTAL:	**$305.00**

QA SPECIAL INSPECTIONS

Special Inspections:

Outlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Inlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220

Roof Slab	hours	2	110	$220
Encasement:				
Inlet Piping	hours	2	110	$210
Outlet Piping	hours	2	110	$210
Over-Flow Piping	hours	2	110	$210
Drain Line Piping	hours	2	110	$210
Wash Down Piping	hours	2	110	$210
Electrical & Communications Ducts	hours	2	110	$210
Handholes:				
Electrical	hours	2	110	$210
Pavement:				
Pavement	hours	4	110	$420
Manhole:				
Pre-Cast Sections	hours	2	110	$210
Drilled Piles				
Cast In Drilled Piles	hours	616	110	$67,760
Water Tank:				
Foundation	hours	8	110	$880
Core Walls	hours	14	110	$1,540
Columns	hours	18	110	$1,980
Column Footings	hours	18	110	$1,980
Roof Slab	hours	12	110	$1,320
Shotcrete	hours	24	110	$2,640
Vertical Post-tensioning	hours	8	110	$880
Circumferential Pre-stressing	hours	16	110	$1,760
		766		**$84,160**
		Contingency	10%	$8,416.00
		TOTAL ESTIMATED BUDGET:		**$92,576.00**
		GRAND TOTAL:		**$177,662.25**

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA ROSA
Prepared by: B.Ryley

Attachment:
of:
Checked By: P.Baron
Date: 09/22/17

QA SURVEY ESTIMATE

	Quantity
Under Tank Piping:	
Inlet Piping & Top of Flange	$1,200
Outlet Piping & Top of Flange	$1,200
Over-Flow Piping & Top of Flange	$1,200
Drain Line Piping & Top of Flange	$1,200
Wash Down Piping	$1,200
Over Excavation:	
Bottom of Over Excavation	$800
Top of Base course	$800
Top of Limestone	$800
Tank Foundation:	
Top of Formwork	$1,200
Hydropnuematic Tank Pad	
Top of Formwork	$800
Control and Pump Room Building	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Manhole:	
Below Base	$800
Top of Manhole	$800
Bottom of Pipe	$800
Ponding Basin	
Subgrade	$800
Vaults:	
Top Outlet Meter Vault Footing Formwork	$800
Top Outlet Meter Vault Roof Slab Formwork	$800
Top Inlet Meter Vault Footing Formwork	$800
Top Inlet Meter Vault Roof Slab Formwork	$800
Top Drain Vault Footing Formwork	$800
Top Drain Vault Roof Slab Formwork	$800
Top Outlet Check Valve Vault Footing Formwork	$800
Top Outlet Check Valve Vault Roof Slab Formwork	$800
Retaining Wall	
Top of Formwork	$1,200
Pavement:	
Pavement Formwork	$800

Sidewalk Formwork	$800
Fencing	
Corners	$800
Bench Marks:	
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200
Contingency 25%	$7,000
TOTAL ESTIMATED BUDGET	**$35,000**

	Rate
Half Day	$800
Full Day	$1,200
Hourly	$150

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	Unit Cost	Quantity	Cost
Subgrade	$295.00	2	$590.00
Limestone	$295.00	2	$590.00
Base course	$295.00	2	$590.00
General Fill	$295.00	2	$590.00
Structural Fill	$295.00	2	$590.00
		Contingency 25%	$737.50
		TOTAL ESTIMATED BUDGET:	**$3,687.50**

Compaction Testing:

Over-Excavation:			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Control and Pump Room Building			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Hydropnuematic Tank Pad			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Access Road			
Subgrade	$74.00	1	$74.00

Structural Fill	$74.00	2	$148.00
Limestone	$74.00	1	$74.00
Pond Access Road			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Ponding Basin			
General Fill	$74.00	1	$74.00
Off-Site Gravel Road			
Subgrade	$74.00	1	$74.00
General Fill	$74.00	1	$74.00
AC Pavement			
Subgrade	$74.00	1	$74.00
Structural Fill	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Concrete Sidewalk			
Subgrade	$74.00	1	$74.00
Structural Fill	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Outlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Inlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Drain Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Outlet Check Valve Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Retaining Wall			
Limestone	$74.00	1	$74.00
Electrical Handhole (estimated)			
Below Foundation	$74.00	1	$74.00
		Contingency 25%	$777.00
		TOTAL ESTIMATED BUDGET:	**$3,885.00**

	Rate
1st Test	$55
2nd Test	$19

$74

Concrete Testing:

	Unit Cost	Quantity	Cost
Outlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Inlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Drain Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Outlet Check Valve Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Encasement:			
Inlet Piping	$305.00	1	$305.00
Outlet Piping	$305.00	1	$305.00
Over-Flow Piping	$305.00	1	$305.00
Drain Line Piping	$305.00	1	$305.00
Wash Down Piping	$305.00	1	$305.00
Electrical & Communications Ducts	$305.00	1	$305.00
Handholes:			
Electrical	$305.00	1	$305.00
Pavement:			
Pavement	$305.00	1	$305.00
Retaining Wall			
Footing	$305.00	1	$305.00
Hydropnuematic Tank Pad			
Foundation	$305.00	1	$305.00
Water Tank:			
Foundation	$305.00	1	$305.00
Core Walls	$305.00	7	$2,135.00
Columns	$305.00	9	$2,745.00
Column Footings	$305.00	9	$2,745.00
Roof Slab	$305.00	1	$305.00
Shotcrete	$305.00	2	$610.00
		94	
		Contingency 15%	$2,333.25

TOTAL ESTIMATED BUDGET: **$17,888.25**

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00
SUBTOTAL:	**$305.00**

QA SPECIAL INSPECTIONS

Special Inspections:

Outlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Inlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Drain Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Outlet Check Valve Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Encasement:				
Inlet Piping	hours	2	110	$210
Outlet Piping	hours	2	110	$210
Over-Flow Piping	hours	2	110	$210
Drain Line Piping	hours	2	110	$210
Wash Down Piping	hours	2	110	$210
Electrical & Communications Ducts	hours	2	110	$210
Handholes:				
Electrical	hours	2	110	$210
Pavement:				
Pavement	hours	4	110	$420
Retaining Wall				
Footing	hours	2	110	$210
Walls	hours	2	110	$210
Water Tank:				

Foundation	hours	8	110	$880
Core Walls	hours	14	110	$1,540
Columns	hours	18	110	$1,980
Column Footings	hours	18	110	$1,980
Roof Slab	hours	12	110	$1,320
Shotcrete	hours	24	110	$2,640
Vertical Post-tensioning	hours	8	110	$880
Circumferential Pre-stressing	hours	16	110	$1,760
		164		**$17,930**
			Contingency 10%	$1,793.00
			TOTAL ESTIMATED BUDGET:	**$19,723.00**
			GRAND TOTAL:	**$76,496.25**

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SINIFA
Prepared by: B.Ryley

Attachment:
of:
Checked By: P.Baron
Date: 09/22/17

QA SURVEY ESTIMATE

	Quantity
Under Tank Piping:	
Inlet Piping & Top of Flange	$1,200
Outlet Piping & Top of Flange	$1,200
Over-Flow Piping & Top of Flange	$1,200
Drain Line Piping & Top of Flange	$1,200
Wash Down Piping	$1,200
Over Excavation:	
Bottom of Over Excavation	$800
Top of Base course	$800
Top of Limestone	$800
Tank Foundation:	
Top of Formwork	$1,200
Control Room	
Subgrade	$800
Footing	$800
Building Corners	$800
FFE	$800
Manhole:	
Below Base	$800
Top of Manhole	$800
Bottom of Pipe	$800
Ponding Basin	
Subgrade	$800
Vaults:	
Top Outlet Meter Vault Footing Formwork	$800
Top Outlet Meter Vault Roof Slab Formwork	$800
Top Inlet Meter Vault Footing Formwork	$800
Top Inlet Meter Vault Roof Slab Formwork	$800
Top Drain Vault Footing Formwork	$800
Top Drain Vault Roof Slab Formwork	$800
Retaining Wall	
Top of Formwork	$1,200
Pavement:	
Pavement Formwork	$800
Sidewalk Formwork	$800
Fencing	
Corners	$800

Bench Marks:

Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200
Contingency 25%	$6,400
TOTAL ESTIMATED BUDGET	**$32,000**

	Rate
Half Day	$800
Full Day	$1,200
Hourly	$150

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	Unit Cost	Quantity	Cost
Subgrade	$295.00	2	$590.00
Limestone	$295.00	2	$590.00
Base course	$295.00	2	$590.00
		Contingency **25%**	$442.50
		TOTAL ESTIMATED BUDGET:	**$2,212.50**

Compaction Testing:

Over-Excavation:			
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Control Room			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Ponding Basin Access Road			
Subgrade	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Off-Site Gravel Road			
Subgrade	$74.00	1	$74.00
General Fill	$74.00	1	$74.00
AC Pavement			
Subgrade	$74.00	1	$74.00
Limestone	$74.00	1	$74.00
Base course	$74.00	1	$74.00
Concrete Sidewalk			
Subgrade	$74.00	1	$74.00
Structural Fill	$74.00	1	$74.00

Limestone	$74.00	1	$74.00
Outlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Inlet Meter Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Drain Vault			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Retaining Wall			
Limestone	$74.00	1	$74.00
Manhole			
Subgrade	$74.00	1	$74.00
Base course	$74.00	3	$222.00
Electrical Handhole (estimated)			
Below Foundation	$74.00	1	$74.00
		Contingency 25%	$610.50
		TOTAL ESTIMATED BUDGET:	**$3,052.50**

	Rate
1st Test	$55
2nd Test	$19
	$74

Concrete Testing:

Outlet Meter Vault:	Unit Cost	Quantity	Cost
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Inlet Meter Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Drain Vault:			
Footing	$305.00	1	$305.00
Walls	$305.00	1	$305.00
Roof Slab	$305.00	1	$305.00
Control Room			
Footing	$305.00	1	$305.00
Building Corners	$305.00	1	$305.00

Encasement:			
Inlet Piping	$305.00	1	$305.00
Outlet Piping	$305.00	1	$305.00
Over-Flow Piping	$305.00	1	$305.00
Drain Line Piping	$305.00	1	$305.00
Wash Down Piping	$305.00	1	$305.00
Electrical & Communications Ducts	$305.00	1	$305.00
Pavement:			
Pavement	$305.00	1	$305.00
Retaining Wall			
Footing	$305.00	1	$305.00
Fencing			
Posts	$305.00	1	$305.00
Water Tank:			
Foundation	$305.00	1	$305.00
Core Walls	$305.00	7	$2,135.00
Columns	$305.00	9	$2,745.00
Column Footings	$305.00	9	$2,745.00
Roof Slab	$305.00	1	$305.00
Shotcrete	$305.00	2	$610.00
		90	
		Contingency 15%	$2,241.75
		TOTAL ESTIMATED BUDGET:	**$17,186.75**

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00
SUBTOTAL:	**$305.00**

QA SPECIAL INSPECTIONS

Special Inspections:

Outlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Inlet Meter Vault:				
Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Drain Vault:				

Footing	hours	2	110	$220
Walls	hours	2	110	$220
Roof Slab	hours	2	110	$220
Encasement:				
Inlet Piping	hours	2	110	$210
Outlet Piping	hours	2	110	$210
Over-Flow Piping	hours	2	110	$210
Drain Line Piping	hours	2	110	$210
Wash Down Piping	hours	2	110	$210
Electrical & Communications Ducts	hours	2	110	$210
Control Room				
Footing	hours	2	110	$210
Walls	hours	2	110	$210
Pavement:				
Pavement	hours	4	110	$420
Retaining Wall				
Footing	hours	2	110	$210
Walls	hours	2	110	$210
Water Tank:				
Foundation	hours	8	110	$880
Corewalls	hours	14	110	$1,540
Columns	hours	18	110	$1,980
Column Footings	hours	18	110	$1,980
Roof Slab	hours	12	110	$1,320
Shotcrete	hours	24	110	$2,640
Vertical Post-tensioning	hours	8	110	$880
Circumferential Pre-stressing	hours	16	110	$1,760
		160		**$17,480**
		Contingency	10%	$1,748.00
		TOTAL ESTIMATED BUDGET:		**$19,228.00**
		GRAND TOTAL:		**$71,467.25**

ID Project Number:
scription: EXPENSE SUMMARY
epared by: B.Ryley

of:
Checked by: P.Baron
Date: 09/22/17

EXPENSE ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT	MARKUP at 10%	TOTAL
RECONSTRUCTION PHASE TASKS						
eport Reproduction, misc.	3	lump sum	1,000.00	3,000.00	300.00	3,300.
					-	
					-	
SUBTOTAL				**3,000.00**	**300.00**	**3,300.**
ONSTRUCTION PHASE TASKS						
leage (1.50 vehicles x 30 miles x 321 days)	43,335	mile	0.52	22,534.20	2,253.42	24,787.
eport Reproduction, misc	3	lump sum	3,000.00	9,000.00	900.00	9,900.
ve Video Feed, Website Access & Maintenance	3	each	29,642.54	88,927.61	8,892.76	97,820.
oject Mangment Information Systems	3	lump sum	16,500.00	49,500.00	4,950.00	54,450.
ata Logger	3	lump sum	5,735.35	17,206.04	1,720.60	18,926.
nasonic Toughbook 20	1	ea.	2,399.00	2,399.00	239.90	2,638.
A Soil & Aggregate Analysis	3	lump sum	2,950.00	8,850.00	885.00	9,735.
A Compaction Testing	3	lump sum	3,268.33	9,805.00	980.50	10,785.
A Concrete Testing	3	lump sum	26,306.25	78,918.75	7,891.88	86,810.
A Survey Verification	3	lump sum	35,125.00	105,375.00	10,537.50	115,912.
SUBTOTAL				**392,515.59**	**39,251.56**	**431,767.**
OST CONSTRUCTION SERVICES						
eport Reproduction, misc.	3	lump sum	1,500.00	4,500.00	450.00	4,950.
			-			
			-			
SUBTOTAL				4,500.00	450.00	4,950.
GRAND TOTAL				**400,015.59**	**40,001.56**	**440,017.**

ID Project Number: of:

scription: VIDEO CAMERA EXPENSE BREAKDOWN Checked by: P.Baron

epared by: B.Ryley Date: 09/22/17

EXPENSE ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT	MARKUP at 10%	TOTAL
RECONSTRUCTION PHASE TASKS						
SUBTOTAL						
ONSTRUCTION PHASE TASKS						
rthCam - Construction Cam Lite HD	1	ea.	4,495.00	4,495.00	449.50	4,944.5
lar Power Upgrade	1	ea.	4,022.00	4,022.00	402.20	4,424.2
obal Modem	1	ea.	1,399.00	1,399.00	139.90	1,538.9
iversal Pole Mount	1	ea.	99.00	99.00	9.90	108.9
ftware Support & Archiving Services	1	ea.	575.00	575.00	57.50	632.5
dEx International Economy S&H	1	ls.	2,722.76	2,722.76	272.28	2,995.0
eather Station w/shipping	1	ea.	1,200.00	1,200.00	120.00	1,320.0
rthCam Consulting Services	1	incl.	-	-	-	-
ebsite Development & MP Image Integration	1	incl.	-	-	-	-
nd Edited Time-Lapse Move	1	incl.	-	-	-	-
vis 6250 Weather Station	1	ea.	465.00	465.00	46.50	511.5
vis 7654 Repeater	1	ea.	353.00	353.00	35.30	388.3
vis 6555 Weather Link IP software	1	ea.	347.00	347.00	34.70	381.7
adlepoint ARC MBR 1400 Series Router	1	ea.	850.00	850.00	85.00	935.0
GB high-speed HSPA data	18	mth.	140.00	2,520.00	252.00	2,772.0
" Telescoping Light Mast w/Shipping	1	ea.	4,400.00	4,400.00	440.00	4,840.0
C Foundation (5' x 5' x 1') w/single delivery	1	ea.	2,000.00	2,000.00	200.00	2,200.0
stallation & Start up	1	ls.	1,500.00	1,500.00	150.00	1,650.0
SUBTOTAL				26,947.76	2,694.78	29,642.5
OST CONSTRUCTION SERVICES						
SUBTOTAL						
OTAL				26,947.76	2,694.78	29,642.5

ID Project Number: of:
scription: DATA LOGGER EXPENSE BREAKDOWN Checked by: P.Baron
epared by: B.Ryley Date: 09/22/17

EXPENSE ITEM	QUANTITY	UNIT	UNIT COST	AMOUNT	MARKUP at 10%	TOTAL
RECONSTRUCTION PHASE TASKS						
SUBTOTAL						
ONSTRUCTION PHASE TASKS						
ckson PR325: Pressure Data Logger	15	ea.	499.00	7,485.00	748.50	8,233.5
ckson A016: Software w/USB Download Cable	15	ea.	89.00	1,335.00	133.50	1,468.5
ckson 721: Locking Case	15	ea.	79.00	1,185.00	118.50	1,303.5
ckson A220: Card Reader Kit	15	ea.	49.00	735.00	73.50	808.5
ckson R022: Pressure Filter Kit	15	ea.	30.00	450.00	45.00	495.0
ckson A061: USB Download Cable	15	ea.	19.00	285.00	28.50	313.5
ckson A125: 3 Volt (3V) Lithium Battery	15	ea.	16.00	240.00	24.00	264.0
ckson A791: Pressure Kit	15	ea.	149.00	2,235.00	223.50	2,458.5
t. Double Loop Cable w/ Padlock	15	ea.	12.79	191.85	19.19	211.0
dget for Miscellaneous, Fitting, Tubing, etc.	1	ls.	1,500.00	1,500.00	150.00	1,650.0
				-	-	-
				-	-	-
				-	-	-
				-	-	-
				-	-	-
				-	-	-
				-	-	-
SUBTOTAL				15,641.85	1,564.19	17,206.0
OST CONSTRUCTION SERVICES						
SUBTOTAL						
OTAL				15,641.85	1,564.19	17,206.0

June 11, 2020 (Revised July 13, 2020) Reference No. 11136961

Mr. Brett Railey, PE
Acting Chief Engineer
Guam Waterworks Authority
Gloria B. Nelson Public Service Building
688 Route 15
Mangilao, GU 96913

Re: Line1 GWA Project No: W14-007-BND, GWA Northern Southern Reservoir Project, Santa Rosa, Santa Rita, & Sinifa
Change Order #01 Extension of Contract Time

Dear Mr. Railey:

GHD is pleased to submit Change Order #01 to GWA for the extension of GHD's construction management contract for the above referenced project. As you are aware, GHD's contract is currently in expired as of July 23, 2019, which is the last construction management services completion date associated with the Santa Rita Reservoir. Since that date, GHD has continued to perform services in accordance with the contract terms in good faith and with GWA's awareness of the issue and with the understanding that GWA would issue a time extension and approve fair compensation for additional services in a timely manner.

As requested by you, Change Order #01 is submitted requesting the contract modifications as required to allow GHD to continue construction management services through the completion of Post Construction services stipulated in the CM contract and accounting for differences between the CM and Construction period of performance. This change order proposal addresses the following issues for the Northern Southern Reservoir Project construction management contract:

1. GHD's contract has expired and a contractual time extension is necessary to extend the contract duration and the performance period for construction management services through the revised construction contract period and in alignment with the time extension GWA is providing to the Contractor. GHD requests a time extension to the Construction Contractor end date for each reservoir site plus a minimum of 60 additional calendar days to complete Post Construction Services. GHD will start when GWA issues Notice to Proceed (NTP) to the CM to start work for each site. GWA will issue a separate NTP for each site.

2. GHD's CM period of performance is less than the Contractor's construction period of performance awarded by GWA. This difference is independent of any time extensions GWA may award the Contractor due to permit acquisition issues, COVID-19 pandemic delays, or other reasons. The time difference is summarized in the table below:

GHD
865 South Marine Corps Drive Suite 202 Orlean Pacific Plaza Tamuning Guam 96913
T 671 472 6792 F 671 477 6229 W www.ghd.com

REGISTERED COMPANY FOR ISO 9001 ENGINEERING DESIGN

Project	CM Performance Period (Days)	Contractor Performance Period (Days)	CM Performance Period Difference (Days)
Santa Rosa Reservoir	365	455	90 (64 working days)
Santa Rita Reservoir	410	485	75 (54 working days)
Sinifa Reservoir Project	365	425	60 (43 working days)

GHD's labor budget for CM and inspection services is based on the CM Performance Period. The cost of providing full-time CM and inspection services for this additional time is not included in GHD's budget for the project. We have identified two options to address this discrepancy. Option 1 is to increase GHD's budgeted labor effort to account for the difference and allow for the requested full-time CM and inspection services. Option 2 is GHD provides less than full-time CM and inspection services. The cost for Option 1 is included in this change order proposal using original labor rates with a 3% increase over two years. We are open to discussion on GWA's preferences to address this discrepancy.

3. As construction moves forward, GHD will incur additional unbudgeted QA expense cost associated with increased time for providing the services, and increased rates by our subconsultants since they were budgeted in 2017. We propose the following additional expense budget associated with rate increases and length of service:

    - Expense cost budget for the project management information system (ProjectWise) and the live video feed, website access and maintenance are pro-rated for an additional 6 months (180 calendar days) based on the original construction contract durations. If construction extends longer, GHD will invoice for the additional expense at cost plus a 10% markup.

    - Quality Assurance (QA) survey costs have increased significantly since 2017, and we are obligated to compensate our QA survey subconsultant at their current 2020 rates. The increase in QA survey costs due to the rate change is reflected in our fee proposal. Current survey rates and a calculation of the increase are included as an attachment to this proposal.

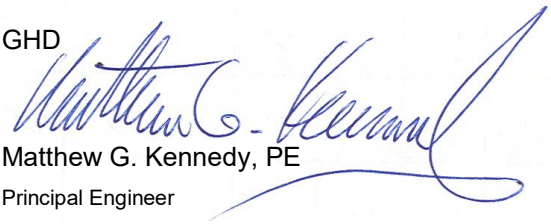
    - QA testing expenses have increased between 5% and 30% since 2017 depending on the specific test, and we are obligated to compensation our QA testing subconsultant at their current 2020 rates. The increase in QA testing costs due to the rate change is reflected in our fee proposal. Current QA testing rates and a calculation of the increase are included as an attachment to this proposal.

GHD proposes a lump sum fee of $337,337.39 for Change Order #01. Services not included in this proposal can be provided by a negotiated fee. Additional time and labor budget will be required if any additive bid items are included with the construction contract. We remain open to discussion with you on the specifics of our proposal. We welcome the opportunity to continue working with you on this important

project, and look forward to contributing to its successful completion. Should you have any questions about this proposal, please do not hesitate to contact me.

Very Respectfully,

GHD



Matthew G. Kennedy, PE

Principal Engineer

Attachments:

1. GHD Fee Proposal
2. GHD Revised Labor Rates
3. QA Cost Increase Documentation
4. 2020 QA Survey Rates
5. 2020 QA Testing Rates
6. Video Web Hosting Rates

cc: Bryan Ryley (GHD)

Nancy Heuman, PE (GHD)

GHD - PROJECT FEE ESTIMATING SHEET

Project Name: North South Reservoir CM — **Guam Waterworks Authority**

Prepared by: Matt Kennedy — **June 11, 2020**

Job Number: 11136961

		LABOR COSTS							FEE COMPUTATION		
Task / Item	LABOR CATEGORY > RATE >	Prinp. Eng. $260.98 /Hr	Proj. Mngr. $176.11 /Hr	Civil Insp. $133.67 /Hr	Civil/Struct. Insp. $144.28 /Hr	Proj. Mngr. Asst $101.85 /Hr	Sbmtl/ RFI Mngr $126.00 /Hr	TOTAL HOURS	Project Expenses	Sub-con-sultant(s)	TOTAL FEE
Santa Rosa Reservoir											
B15.1 Project Manager			171					171	$0.00		$30,114.81
B15.3 Onsite Construction Inspector				256	256			512	$0.00		$71,155.20
B22.1 QA Soil & Aggregate Analysis								0	$1,250.00		$1,250.00
B22.2 QA Backfill Compaction & Testing								0	$346.50		$346.50
B22.3 QA Concrete Compressive Strength Testing								0	$1,081.00		$1,081.00
B22.4 QA Survey Verification								0	$11,825.00		$11,825.00
B22.5 Live Video Feed, Website Access & Maintenance								0	$1,501.10		$1,501.10
B22.6 Project Management Information System								0	$7,518.99		$7,518.99
SUBTOTAL		**0**	**171**	**256**	**256**	**0**	**0**	**683**	**$23,522.59**	**$0.00**	**$124,792.60**
Santa Rita Reservoir											
B15.1 Project Manager			144					144	$0.00		$25,359.84
B15.3 Onsite Construction Inspector				216	216			432	$0.00		$60,037.20
B22.1 QA Soil & Aggregate Analysis								0	$1,000.00		$1,000.00
B22.2 QA Backfill Compaction & Testing								0	$255.75		$255.75
B22.3 QA Concrete Compressive Strength Testing								0	$2,649.00		$2,649.00
B22.4 QA Survey Verification								0	$10,588.00		$10,588.00
B22.5 Live Video Feed, Website Access & Maintenance								0	$1,501.10		$1,501.10
B22.6 Project Management Information System								0	$7,518.99		$7,518.99
SUBTOTAL		**0**	**144**	**216**	**216**	**0**	**0**	**576**	**$23,512.84**	**$0.00**	**$108,909.88**
Sinifa Reservoir											
B15.1 Project Manager			115					115	$0.00		$20,252.65
B15.3 Onsite Construction Inspector				172	172			344	$0.00		$47,807.40
B22.1 QA Soil & Aggregate Analysis								0	$750.00		$750.00
B22.2 QA Backfill Compaction & Testing								0	$272.25		$272.25
B22.3 QA Concrete Compressive Strength Testing								0	$1,038.00		$1,038.00
B22.4 QA Survey Verification								0	$11,000.00		$11,000.00
B22.5 Live Video Feed, Website Access & Maintenance								0	$1,501.10		$1,501.10
B22.6 Project Management Information System								0	$7,518.99		$7,518.99
SUBTOTAL		**0**	**115**	**172**	**172**	**0**	**0**	**459**	**$22,080.34**	**$0.00**	**$90,140.39**
Contingency											
2020 GRT (4.167%)								0	$0.00		$13,494.53
CHANGE ORDER TOTALS		**0**	**430**	**644**	**644**	**0**	**0**	**1,718**	**$69,115.76**	**$0.00**	**$337,337.39**

Position	Class	2017 Approved Rates	2020 Proposed Rates (3% increase over 2 years)
Principal Engineer	Principal F3	$246.00	$260.98
Project Manager	Associate E3	$166.00	$176.11
QA Manager/Design Review	Associate F2	$226.00	$239.76
Resident Engineer	Enginner D1	$126.00	$133.67
Civil Inspector	Scientist B1	$126.00	$133.67
Civil/Structural Inspector	Engineer B2	$136.00	$144.28
Special Inspector	Engineer C1	$196.00	$207.94
SCADA Specialty	Sub consultant Budgetary	$175.00	$185.66
SR. Mechanical Engineer	Sub consultant Budgetary	$155.00	$164.44
Mechanical Inspector	Sub consultant Budgetary	$125.00	$132.61
SR. Electrical Engineer	Sub consultant Budgetary	$155.00	$164.44
Electrical Inspector	Sub consultant Budgetary	$125.00	$132.61
CADD Support	Technician/Technologist D1	$121.00	$128.37
Scheduler Mgmt	Sub consultant Budgetary	$150.00	$159.14
Submittal/RFI Manager	Engineer B2	$126.00	$133.67
Estimating Support	Engineer B1	$110.00	$116.70
Project Manager Ass't	Administrative Assistant A1	$96.00	$101.85

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA RITA
Prepared by: B.Ryley

Attachment:
of:
Checked By: M.Kennedy
Date: 06/11/20

QA SURVEY ESTIMATE

	Cost (2017)	Cost (2020)
Under Tank Piping:		
Inlet Piping & Top of Flange	$1,200	$1,700
Outlet Piping & Top of Flange	$1,200	$1,700
Over-Flow Piping & Top of Flange	$1,200	$1,700
Drain Line Piping & Top of Flange	$1,200	$1,700
Wash Down Piping	$1,200	$1,700
Tank Foundation:		
Top of Formwork	$1,200	$1,700
Control Building 1		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Control Building 2		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Manhole:		
Below Base	$800	$1,000
Top of Manhole	$800	$1,000
Bottom of Pipe	$800	$1,000
Ponding Basin 1		
Subgrade	$800	$1,000
Ponding Basin 2		
Subgrade	$800	$1,000
Vaults:		
Top Outlet Meter Vault Footing Formwork	$800	$1,000
Top Outlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Inlet Meter Vault Footing Formwork	$800	$1,000
Top Inlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Electrical Handhole	$800	$1,000
Pavement:		
Pavement Formwork	$800	$1,000
Sidewalk Formwork	$800	$1,000
Fencing		
Corners	$800	$1,000
Drilled Piles		
Cast In Place Drilled Piles	$5,500	$5,500
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200	$1,700
Contingency 25%	$7,675	$9,600
2017 TOTAL ESTIMATED BUDGET	**$38,375**	**2020 TOTAL ESTIMATED BUDGET** **$48,000**
MARKUP AT 10 %	**$42,213**	**$52,800**

B22.4 COST INCREASE: $10,588

	2017 Rate		2020 Rate
Half Day	$800	Half Day	$1,000
Full Day	$1,200	Full Day	$1,700
Hourly	$150	Hourly	$250

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost		2020 Cost
Subgrade	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Limestone	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Base course	$295.00	2	$590.00	$ 395.00	2	$ 790.00
General Fill	$295.00	2	$590.00	$ 395.00	2	$ 790.00
		Contingency **25%**	$590.00		Contingency **25%**	$ 790.00
		2017 MATERIAL TESTING ESTIMATED BUDGET:	**$2,950.00**	**MATERIAL ESTIMATED BUDGET:**		**$ 3,950.00**

B22.1 COST INCREASE $ 1,000.00

Compaction Testing:

Control Building 1	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Control Building 2					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Reservoir Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	2	$148.00	$ 80.00	$ 160.00
Ponding Basin 1 Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Ponding Basin 2 Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Manhole					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Outlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Inlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Electrical Handhole (estimated)					
Below Foundation	$74.00	1	$74.00	$ 80.00	$ 80.00
				$ 80.00	$ -
Pavement:					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	2	$148.00	$ 80.00	$ 160.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
		Contingency **25%**	$573.50		$ 620.00
	COMPACTION ESTIMATED BUDGET:		**$2,867.50**		**$ 3,100.00**
	TOTAL QA COMPACTION BUDGET:		**$2,867.50**		**$3,100.00**
		MARKUP AT 10 %	**$3,154**		**$3,410**

B22.2 COST INCREASE $255.75

	2017 Rate
1st Test	$55
2nd Test	$19
	$74

	2020 Rate
1st Test	$57
2nd Test	$23
	$80

Concrete Testing:

Outlet Meter Vault:	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Inlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Encasement:					
Inlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Over-Flow Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Line Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Wash Down Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Electrical & Communications Ducts	$305.00	1	$305.00	$ 321.75	$ 321.75
Handholes:					
Electrical	$305.00	1	$305.00	$ 321.75	$ 321.75
Pavement:					
Pavement	$305.00	1	$305.00	$ 321.75	$ 321.75
Control Building 1					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Building Corners	$305.00	1	$305.00	$ 321.75	$ 321.75
Control Building 2					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Building Corners	$305.00	1	$305.00	$ 321.75	$ 321.75
Manhole					
Pre-Cast Sections	$305.00	1	$305.00	$ 321.75	$ 321.75
Drilled Piles					
Cast In Drilled Piles	$305.00	77	$23,485.00	$ 321.75	$ 24,774.75
Water Tank:					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Core Walls	$305.00	7	$2,135.00	$ 321.75	$ 2,252.25
Columns	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Column Footings	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Shotcrete	$305.00	2	$610.00	$ 321.75	$ 643.50
		170			
		Contingency 15%	$5,718.75	$ 1,254.83	$6,032.81
		TOTAL ESTIMATED BUDGET:	**$43,843.75**	**$ 9,620.33**	**$46,251.56**
		MARKUP AT 10 %	**$48,228**	**$10,582**	**$50,877**

	B22.3 COST INCREASE	**$2,649**
DESCRIPTION OF TESTS:		
Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00	$ 66.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00	$ 11.50
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00	$ 34.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00	$ 34.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00	$ 176.25
SUBTOTAL:	**$305.00**	**$321.75**

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SANTA ROSA
Prepared by: B.Ryley

Attachment:
of:
Checked By: M.Kennedy
Date: 06/11/20

QA SURVEY ESTIMATE

	Cost (2017)	Cost (2020)
Under Tank Piping:		
Inlet Piping & Top of Flange	$1,200	$1,700
Outlet Piping & Top of Flange	$1,200	$1,700
Over-Flow Piping & Top of Flange	$1,200	$1,700
Drain Line Piping & Top of Flange	$1,200	$1,700
Wash Down Piping	$1,200	$1,700
Over Excavation:		
Bottom of Over Excavation	$800	$1,000
Top of Base course	$800	$1,000
Top of Limestone	$800	$1,000
Tank Foundation:		
Top of Formwork	$1,200	$1,700
Hydropnuematic Tank Pad		
Top of Formwork	$800	$1,000
Control and Pump Room Building		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Manhole:		
Below Base	$800	$1,000
Top of Manhole	$800	$1,000
Bottom of Pipe	$800	$1,000
Ponding Basin		
Subgrade	$800	$1,000
Vaults:		
Top Outlet Meter Vault Footing Formwork	$800	$1,000
Top Outlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Inlet Meter Vault Footing Formwork	$800	$1,000
Top Inlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Drain Vault Footing Formwork	$800	$1,000
Top Drain Vault Roof Slab Formwork	$800	$1,000
Top Outlet Check Valve Vault Footing Formwork	$800	$1,000
Top Outlet Check Valve Vault Roof Slab Formwork	$800	$1,000
Retaining Wall		
Top of Formwork	$1,200	$1,700
Pavement:		
Pavement Formwork	$800	$1,000
Sidewalk Formwork	$800	$1,000
Fencing		
Corners	$800	$1,000
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200	$1,700
Contingency 25%	$7,000	$9,150
2017 TOTAL ESTIMATED BUDGET	**$35,000**	**2020 TOTAL ESTIMATED BUDGET** **$45,750**
MARKUP AT 10 %	**$38,500**	**$50,325**
		B22.4 COST INCREASE: **$11,825**

2017 Rate	
Half Day	$800
Full Day	$1,200
Hourly	$150

2020 Rate	
Half Day	$1,000
Full Day	$1,700
Hourly	$250

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	**2017 Unit Cost**	**Quantity**	**2017 Cost**	**2020 Unit Cost**		**2020 Cost**
Subgrade	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Limestone	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Base course	$295.00	2	$590.00	$ 395.00	2	$ 790.00
General Fill	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Structural Fill	$295.00	2	$590.00	$ 395.00	2	$ 790.00
		Contingency 25%	$737.50	Contingency 25%		$ 987.50
	2017 MATERIAL TESTING BUDGET:		**$3,687.50**	**2020 MATERIAL TESTING BUDGET:**		**$ 4,937.50**

B22.1 COST INCREASE: $ 1,250.00

Compaction Testing:

Over-Excavation:	**2017 Unit Cost**	**Quantity**	**2017 Cost**	**2020 Unit Cost**	**2020 Cost**
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Control and Pump Room Building					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Hydropnuematic Tank Pad					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	2	$148.00	$ 80.00	$ 160.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Pond Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Ponding Basin					
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Off-Site Gravel Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
AC Pavement					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Concrete Sidewalk					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Outlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Inlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Drain Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Outlet Check Valve Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Retaining Wall					
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Electrical Handhole (estimated)					
Below Foundation	$74.00	1	$74.00	$ 80.00	$ 80.00
		Contingency 25%	$777.00		$ 840.00
	COMPACTION ESTIMATED BUDGET:		**$3,885.00**		$ 4,200.00
B22.2 COST INCREASE: $346.50	**TOTAL QA COMPACTION BUDGET:**		$3,885.00		$ 4,200.00
		MARKUP AT 10 %	**$4,274**		**$4,620**

	2017 Rate
1st Test	$55
2nd Test	$19
	$74

	2020 Rate
1st Test	$57
2nd Test	$23
	$80

Concrete Testing:

	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Outlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Inlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Check Valve Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Encasement:					
Inlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Over-Flow Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Line Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Wash Down Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Electrical & Communications Ducts	$305.00	1	$305.00	$ 321.75	$ 321.75
Handholes:					
Electrical	$305.00	1	$305.00	$ 321.75	$ 321.75
Pavement:					
Pavement	$305.00	1	$305.00	$ 321.75	$ 321.75
Retaining Wall					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Hydropnuematic Tank Pad					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Water Tank:					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Core Walls	$305.00	7	$2,135.00	$ 321.75	$ 2,252.25
Columns	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Column Footings	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Shotcrete	$305.00	2	$610.00	$ 321.75	$ 643.50
		94			
		Contingency 15%	$2,333.25		$ 2,461.39
		TOTAL ESTIMATED BUDGET:	**$17,888.25**		**$ 18,870.64**
		MARKUP AT 10 %	**$19,677**		**$20,758**

B22.3 COST INCREASE: $1,081

DESCRIPTION OF TESTS:

Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00	$ 66.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00	$ 11.50
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00	$ 34.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00	$ 34.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00	$ 176.25
SUBTOTAL:	**$305.00**	**$321.75**

GHD - PROJECT ESTIMATING SHEET - GHD QA SERVICES SUMMARY

Project Name: Santa Rosa, Sinifa, and Santa Rita Tank & System Upgrades
GHD Project Number:
Description: SINIFA
Prepared by: B.Ryley
Attachment:
of:
Checked By: M.Kennedy
Date: 06/11/20

QA SURVEY ESTIMATE

	Cost (2017)	Cost (2020)
Under Tank Piping:		
Inlet Piping & Top of Flange	$1,200	$1,700
Outlet Piping & Top of Flange	$1,200	$1,700
Over-Flow Piping & Top of Flange	$1,200	$1,700
Drain Line Piping & Top of Flange	$1,200	$1,700
Wash Down Piping	$1,200	$1,700
Over Excavation:		
Bottom of Over Excavation	$800	$1,000
Top of Base course	$800	$1,000
Top of Limestone	$800	$1,000
Tank Foundation:		
Top of Formwork	$1,200	$1,700
Control Room		
Subgrade	$800	$1,000
Footing	$800	$1,000
Building Corners	$800	$1,000
FFE	$800	$1,000
Manhole:		
Below Base	$800	$1,000
Top of Manhole	$800	$1,000
Bottom of Pipe	$800	$1,000
Ponding Basin		
Subgrade	$800	$1,000
Vaults:		
Top Outlet Meter Vault Footing Formwork	$800	$1,000
Top Outlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Inlet Meter Vault Footing Formwork	$800	$1,000
Top Inlet Meter Vault Roof Slab Formwork	$800	$1,000
Top Drain Vault Footing Formwork	$800	$1,000
Top Drain Vault Roof Slab Formwork	$800	$1,000
Retaining Wall		
Top of Formwork	$1,200	$1,700
Pavement:		
Pavement Formwork	$800	$1,000
Sidewalk Formwork	$800	$1,000
Fencing		
Corners	$800	$1,000
Bench Marks:		
Establish bench marks on top of all vaults, top of retaining wall, top of footing at water height guauge, over-flow, drian, & outlet.	$1,200	$1,700
Contingency 25%	$6,400	$8,400
2017 TOTAL ESTIMATED BUDGET	**$32,000**	**2020 TOTAL ESTIMATED BUDGET** **$42,000**
MARKUP AT 10%	**$35,200**	**$46,200**

B22.4 COST INCREASE: $11,000

2017 Rate	
Half Day	$800
Full Day	$1,200
Hourly	$150

2020 Rate	
Half Day	$1,000
Full Day	$1,700
Hourly	$250

CQA TESTING ESTIMATE

Material Laboratory Testing:

Procotor & Sieve Analysis:	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	Quantity	2020 Cost
Subgrade	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Limestone	$295.00	2	$590.00	$ 395.00	2	$ 790.00
Base course	$295.00	2	$590.00	$ 395.00	2	$ 790.00
		Contingency **25%**	$442.50	Contingency 25%		$ 592.50
		MATERIAL TESTING ESTIMATED BUDGET:	**$2,212.50**	**MATERIAL ESTIMATED BUDGET:**		**$ 2,962.50**

B22.1 COST INCREASE $750.00

Compaction Testing:

Over-Excavation:	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Control Room					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Ponding Basin Access Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Off-Site Gravel Road					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
General Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
AC Pavement					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	1	$74.00	$ 80.00	$ 80.00
Concrete Sidewalk					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Structural Fill	$74.00	1	$74.00	$ 80.00	$ 80.00
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Outlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Inlet Meter Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Drain Vault					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Retaining Wall					
Limestone	$74.00	1	$74.00	$ 80.00	$ 80.00
Manhole					
Subgrade	$74.00	1	$74.00	$ 80.00	$ 80.00
Base course	$74.00	3	$222.00	$ 80.00	$ 240.00
Electrical Handhole (estimated)					
Below Foundation	$74.00	1	$74.00	$ 80.00	$ 80.00
		Contingency 25%	$610.50		$660.00
		COMPACTION ESTIMATED BUDGET:	**$3,052.50**		**$3,300.00**
		TOTAL QA COMPACTION BUDGET:	**$3,052.50**		**$3,300.00**
		MARKUP AT 10%:	**$3,357.75**		**$3,630.00**

B22.2 COST INCREASE $272.25

	2017 Rate
1st Test	$55
2nd Test	$19
	$74

	2020 Rate
1st Test	$57
2nd Test	$23
	$80

Concrete Testing:

	2017 Unit Cost	Quantity	2017 Cost	2020 Unit Cost	2020 Cost
Outlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Inlet Meter Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Vault:					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Walls	$305.00	1	$305.00	$ 321.75	$ 321.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Control Room					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Building Corners	$305.00	1	$305.00	$ 321.75	$ 321.75
Encasement:					
Inlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Outlet Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Over-Flow Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Drain Line Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Wash Down Piping	$305.00	1	$305.00	$ 321.75	$ 321.75
Electrical & Communications Ducts	$305.00	1	$305.00	$ 321.75	$ 321.75
Pavement:					
Pavement	$305.00	1	$305.00	$ 321.75	$ 321.75
Retaining Wall					
Footing	$305.00	1	$305.00	$ 321.75	$ 321.75
Fencing					
Posts	$305.00	1	$305.00	$ 321.75	$ 321.75
Water Tank:					
Foundation	$305.00	1	$305.00	$ 321.75	$ 321.75
Core Walls	$305.00	7	$2,135.00	$ 321.75	$ 2,252.25
Columns	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Column Footings	$305.00	9	$2,745.00	$ 321.75	$ 2,895.75
Roof Slab	$305.00	1	$305.00	$ 321.75	$ 321.75
Shotcrete	$305.00	2	$610.00	$ 321.75	$ 643.50
		90			
		Contingency 15%	$2,241.75		$2,364.86
		TOTAL ESTIMATED BUDGET:	**$17,186.75**		**$18,130.61**
		MARKUP AT 10%:	**$18,905.43**		**$19,943.67**

	B22.3 COST INCREASE	$1,038
DESCRIPTION OF TESTS:		
Compressive Strength of Cylindrical Concrete Specimens (4 at $17.00 ea.):	$68.00	$ 66.00
Curing and Disposal of Cylindrical Concrete Specimens without test, each:	$12.00	$ 11.50
Air Content of Freshly Mixed Concrete by the Pressure/Volumetric Method, per test:	$50.00	$ 34.00
Unit Weight and Yield of Fresh Concrete, each:	$50.00	$ 34.00
Slump Test & Making Concrete Specimens in the field (2.5 Hours of Labor):	$125.00	$ 176.25
SUBTOTAL:	**$305.00**	**$321.75**

GUAM SURVEYOR, LLC

STREET: 171 CHALAN PALE RAMON HAYA RT. 1 (MARINE DRIVE), YIGO, GUAM 96929
MAIL: P.O. BOX 6216, TAMUNING, GUAM 96931
P.671-637-2042/1 F.671-637-2041 M.688-0184
WWW.GUAMSURVEYOR.COM
SURVEYOR@GUAMSURVEYOR.COM

February 27, 2020

To Whom It May Concern,

RE: Rate Increase

Our unit rates have increased for 2020, please see new rates below:

Description	Quantity	Unit	Unit Price
Full Day - two man	1	LS	1700.00
Half Day - two man	1	LS	1000.00
Hourly	1	Hourly	250.00

Sincerely,

Dennis Balagtas
Vice President/Principal Land Surveyor

Attachment 6

WORK ZONE CAM

877-966-3101 www.workzonecam.com

Invoice # ZC0614196607

Arlyn Carpo
GHD Guam
865 South Marine Corps Drive Ste. 202
Tamuning, Guam 96913

Arlyn.Carpo@ghd.com
1 671 472 6792

Ship To:
Byan J Ryley
GHD Guam
865 South Marine Corps Drive Ste. 202
Tamuning, Guam 96913

bryan.ryley@ghd.com
+1671 472-6792

Invoice Date: June 14, 2019
Purchase Order: TBA
Payment Terms:
PREPAY

Make all checks payable to Work Zone Cam LLC:
Work Zone Cam LLC
Attn: Raymond Kuttner
650 East Crescent Avenue
Upper Saddle River, NJ 07458

Qty		Unit Price	Total
2	18 Megapixel Work Zone Cam Pro	$4,495.00	$8,990.00
	Live Video Burst		Included
1	Pole Mount Adapter		Included
1	Pole Mount Adapter		Included
1	18 Megapixel Work Zone Cam Pro		Included
	Live Video Burst		Included
1	Pole Mount Adapter		Included
1	Pole Mount Adapter		Included
2	Work Zone Cam Pro - 4K Fully Hosted Service (12 months)	$375	$9000.00
	Pro Services Package: • Custom client embeddable interface for public web page • Project Management Integration (Procore, PlanGrid, Aconex, SharePoint) • Professional HD time-lapse movie		Included
1	Work Zone Cam Pro - 4K Fully Hosted Service (12 months)	$375	$4500.00
	Pro Services Package: • Custom client embeddable interface for public web page • Project Management Integration (Procore, PlanGrid, Aconex, SharePoint) • Professional HD time-lapse movie		Included
	FedEx International Economy Shipping and Handling	$1,229.95	$1,229.95
	AMOUNT DUE		**$23,719.95**

Notes
Client to Provide Power & SIM Card with Data Plan

Available Options.

Rentals *Multi-project discounts* *Insured installation* *Solar power upgrades*

MATERIALS TESTING & FIELD SERVICES PRICE LISTS (UPDATE: JUNE 2019)

I. Laboratory Testing

TEST METHOD	DESCRIPTION	UNIT PRICE
AGGREGATES		
ASTM C-29/AASHTO T-19:	Standard Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate	$ 40.00
ASTM C-88/AASHTO T-104:	Standard Test Method for Soundness of Aggregates by Use of Magnesium Sulfate, 5 Cycles Maximum, per size:	$ 374.00
ASTM C-117/AASHTO T-11:	Standard Test Method for Materials Finer than 0.075 mm (No. 200) Sieve in Mineral Aggregates by Washing	$ 32.00
ASTM C-127/AASHTO T-85:	Standard Test Method for Specific Gravity and Absorption of Coarse Aggregate	$ 32.00
ASTM C-128/AASHTO T-84:	Standard Test Method for Specific Gravity and Absorption of Fine Aggregate	$ 32.00
ASTM C-131/AASHTO T-96:	Standard Test Method for Resistance to Degradation of Small Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine (Los Angeles Abrasion Test)	$ 136.00
ASTM C-535:	Standard Test Method for Resistance to Degradation of Large Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine (Los Angeles Abrasion Test)	$ 175.50
ASTM C-136/AASHTO T-27:	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates	$ 57.00
ASTM D-2419/AASHTO T-176:	Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregates	$ 51.00
ASTM C-566:	Standard Test Method for Total Evaporable Moisture Content of Aggregate by Drying	$ 23.00
ASTM C-142:	Standard Test Method for Clay Lumps and Friable Particles in Aggregates	$ 257.50
ASTM D-5821:	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate	$ 281.50
ASTM D-4791:	Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate	$ 281.50
ASTM D-5711:	Standard Test Method for Determining the Adherent Coating on Coarse Aggregates	$ 93.00
ASTM C-40:	Standard Test Method for Organic Impurities in Fine Aggregates for Concrete	$ 93.00
AASHTO M-43:	Standard Specification for Sizes of Aggregate for Road and Bridge Construction	With Consultation

TEST METHOD	DESCRIPTION	UNIT PRICE
AASHTO M-80:	Standard Specification for Coarse Aggregate for Portland Cement Concrete	With Consultation
AASHTO M-6:	Standard Specification for Fine Aggregate for Portland Cement Concrete	With Consultation
ASTM D-5240:	Standard Test Method for Testing Rock Slabs to Evaluate Soundness of Riprap by Use of Sodium Sulfate or Magnesium Sulfate	$ 391.50
ASTM D-3744:	Standard Test Method for Aggregate Durability Index per Fractions	$ 201.00

SOILS		
ASTM D-698/AASHTO T-99:	Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 KN-m/m3))	$ 118.50
ASTM D-1140:	Standard Test Method for Determining the Amount of Material in Soils Finer than the No. 200 (0.075 mm) Sieve in Soils by Washing	$ 32.00
ASTM D-1557/ AASHTO T-180:	Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 KN-m/m3))	$ 118.50
ASTM D-1883/ AASHTO T-193:	Standard Test Method for California Bearing Ratio (CBR) of Laboratory Compacted Soils	$ 170.00
ASTM D-2216/T-255/C-566:	Standard Test Method for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass	$ 23.00
ASTM D-2487:	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)	$ 40.00
AASHTO M-145:	Recommended Practice for Classification of Soils and Soils-Aggregate Mixtures for Highway Construction Purposes	$ 40.00
ASTM D-4318/ AASHTO T-89 & T-96:	Standard Test Method for Liquid Limit, Plastic Limit and Plasticity Index of Soils	$ 180.50
ASTM D-854	Standard Test Method for Specific Gravity of Soil Solids by Water Pycnometer	$ 242.50

CONCRETE/CMU/MORTAR and GROUT		
ASTM C-39/AASHTO T-22:	Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens (Includes Curing, Standard Capping, and Handling)	$ 16.50
	Handling of Spare Cylinders (Curing and Handling)	$ 11.50
	Cylinders Supplied **by Others** (Includes Curing, Standard Capping and Handling)	$ 57.00

TEST METHOD	DESCRIPTION	UNIT PRICE
ASTM C-42/AASHTO T-24:	Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete (Includes Trimming and Compressive Strength)	$ 34.00
ASTM C-78/AASHTO T-97:	Standard Test Method for Flexural Strength of Concrete (Using Simple Beam with Third Point Loading)	$ 40.00
	Handling of Spare Beams (Curing and Handling)	$ 27.50
ASTM C-109:	Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2 -inch (50 mm) Cube specimens)	$ 17.00
ASTM C-231/AASHTO T-152:	Standard Test Method for Air Content of Freshly Mixed Concrete by Pressure Method	$ 34.00
ASTM C-138:	Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete	$ 34.00
ASTM C-426:	Standard Test Method for Linear Drying Shrinkage of Concrete Masonry Units	Per hour
ASTM C-805:	Standard Test Method for Rebound Number of Hardened Concrete	Per hour
ASTM C-1019:	Standard Test Method for Sampling and Testing Grout (Prism Specimens)	$ 17.00

BITUMINOUS MIXTURES (ASPHALTIC CONCRETE)		
ASTM D-1559/AASHTO T245:	Standard Test Method for Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus with Voids Analysis	$ 312.00
ASTM D-2041/AASHTO T209:	Standard Test Method for Theoretical Maximum Specific Gravity of Bituminous Paving Mixtures	$ 77.50
ASTM D-2726/AASHTO T166:	Standard Test Method for Bulk Specific Gravity of Compacted Bituminous Mixtures Using SSD Specimens	$ 34.00
ASTM D-3549:	Standard Test Method for Thickness or Height of Compacted Bituminous Paving Mixture Specimens	$ 34.00
ASTM D-5444 (AASHTO T-30)	Standard Test Method for Mechanical Size Analysis of Extracted Aggregates	$ 89.00
ASTM D-6307 (AASHTO T-308)	Standard Test Method for Asphalt Content of Hot Mix Asphalt by Ignition Method, Method A	$ 309.00

TEST METHOD	DESCRIPTION	UNIT PRICE
II. Field Testing Services:		
ASTM D-1556/AASHTO T-191:	Density of Soil in Place by the Sand-Cone Method (Minimum of three (3) tests per trip)	
	First Test	$ 68.00
	Subsequent Tests, same trip	$ 34.00
ASTM D-6938/AASHTO T-310:	Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth) (Minimum of three (3) tests per trip)	
	First Test	$ 51.00
	Subsequent Tests, same trip	$ 17.00
ASTM D-2950:	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods (Minimum of three (3) tests per trip)	
	First Test	$ 51.00
	Subsequent Tests, same trip	$ 17.00
Soils and Bituminous Mixtures Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 47.00
Concrete Testing and Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 47.00
Cancellation of Test Schedule, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 47.00
III. Consultation Services:		
Principal Engineer, per hour:		$ 180.00
Senior Civil Engineer, per hour:		$ 105.00
Field/Laboratory Technician, per hour:		$ 47.00
IV. Overtime, Weekend or Holiday Rates for Field Testing Services:		
ASTM D-6938/AASHTO T-310:	Standard Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth) (Minimum of three (3) tests per trip)	
	First Test	$ 57.00
	Subsequent Tests, same trip	$ 23.00
ASTM D-2950:	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods (Minimum of three (3) tests per trip)	
	First Test	$ 57.00
	Subsequent Tests, same trip	$ 23.00

TEST METHOD	DESCRIPTION	UNIT PRICE
Soils and Bituminous Mixtures Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 70.50
Concrete Testing and Sampling, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 70.50
Cancellation of Test Schedule, per hour: (Includes Portal to Portal Travel, Sampling and Stand-by Time)		$ 70.50

********UNIT PRICES SUBJECT TO CHANGE WITHOUT NOTICE********

V. Other Services Available--- Prices Subject to Negotiation:

1. Concrete coring for compressive strength determination.
2. Bituminous mixture coring for density and thickness determination.
3. Asphalt cement testing.
4. Rebar testing.
5. Top soil testing.
6. Field CBR testing.
7. Quality Control Services for concrete and asphalt batch plants.
8. Construction Inspection Services for Earthwork, Concrete and Bituminous Mixtures.
9. Pile Driving Monitoring Services.
10. Pile Load Testing Monitoring Services.
11. Field Percolation Testing Services.
12. Slope Stability Consultation.
13. Rock Core Drilling.
14. Foundation Probing Investigations.
15. Complete Foundation Investigation and Testing Services.
16. Concrete, Mortar or Bituminous Mixtures Mix Designs.

***** SUMMARY OF BASIS OF CHARGES ****

1. Pacific Soils Engineering & Testing makes no warranty, either expressed or implied, as to its findings, recommendations, specifications, or professional advice except that they are prepared and issued in accordance with generally accepted professional engineering practices.

2. The prices listed on the preceding pages are typical prices for field and laboratory testing services frequently requested by Pacific soils Engineering & Testing's customers. Prices for other services will be given upon request.

3. Invoices will be issued on a monthly basis, or upon completion of a project, whichever is sooner. Billings are payable upon presentation, unless otherwise agree, and are past due 30 days from the invoice date. A finance charge of 1-1/2% per month, or the maximum amount allowed by law, will be charges to past due accounts. Any attorney's fees or other costs incurred in collecting any delinquent amount shall be paid by the client.

4. It was assumed that our company's current comprehensive insurance coverages are adequate for this project, including Worker's Compensation Insurance, Comprehensive General Liability, Errors and Omissions. Upon request, a copy of our company's Certificate of Insurance will be forwarded when received from our insurance company. Any changes to our current comprehensive coverage are subject to additional charges.

5. All field work was assumed to be performed during regular working hours 0800 - 1700 hours. All work performed in excess of 8 hours per day and weekend/holiday work will be charged at 1.5 times the hourly rate. Time worked in excess of 12 hours per day will be charges at 2 times the hourly rate.

6. Advance notification for field test schedules, typically 24 to 48 hours prior, is requested in order to better accommodate your firm's preferred time frame and allow PSE&T to adequately allocate our manpower resources. While it is also understood that field production and weather conditions may require tweaking of this request, every effort will be made to work with you company's designated representative to closely coordinate your request.

7. It is preferred that all field and laboratory test requests be emailed to our office at admin@pacificsoilsguam.com. Otherwise, please contact our office at (671) 646-1471/3278/5790. We ask that all field test schedules be made with our front office personnel instead of the field technicians visiting the project site.

8. Laboratory testing services are performed on a first come, first served basis. Clients are requested to coordinate with our front office through telephone or email (admin@pacificsoilsguam.com or our manager, danielsan@pacificsoilsguam.com) regarding their requested test program and expected completion time. Samples requiring special urgency will be charged additional handling and manhour rates.

9. All field testing services were considered to be ready upon the arrival of our company's field technician. Stand-by time or delays incurred during the test procedure because of external factors were not included in our pricing.

10. All field testing services are charged on a portal to portal basis.

11. A one-hour minimum charge per day will be made for any office services.

12. Outside services will include a 20% markup, unless otherwise noted.

13. In the event of above average increase of fuel costs, a fuel subcharge of up to 3% will be added to all invoices.

14. The proposed fee includes standard invoicing with daily summary charges. Additional administrative services will be invoiced if backup information (eg. daily field reports or work summaries, etc.) is requested.

15. Pacific Soils Engineering & Testing routinely disposes all test samples (soils, aggregates, cylinders and bituminous mixtures) after submission of our final report unless otherwise notified by client.

16. Cylindrical sampling requiring additional handling and preparation are charged on a per hour basis.

17. This price listing assumes our company's current International Accreditation Service (IAS) Accreditation, existing insurance coverages and drug testing program were assumed to be adequate for this project.

18. We assumed that our company's current eBIDs passes for military installations are adequate for this undertaking. Additional secured passes/badges are subject to additional fees.

19. Natural Recourses, Cultural Training, Biological Training, UXO/MEC Safety Training and other safety/training sessions were not included in the price structures.

20. Pacific Soils Engineering & Testing reserves the right to adjust fee schedule on project not completed within 180 days from the contract signature date. For time and material projects, any not to exceed amount will be similarly adjusted.

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 33–FY2020

RELATIVE TO APPROVAL OF ADDITIONAL FUNDING TO THE DESIGN CONTRACT FOR NORTHERN AND SOUTHERN TANKS

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority ("GWA") is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on critical reservoir projects under the 2011 Court Order ("CO") Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program; and

WHEREAS, the CCU approved Resolution No. 12-FY2018 which authorized the total funding amount to a maximum of $3,624,912.25 (Exhibit A); and

WHEREAS, GWA issued Change Orders No. 1 through No. 4 to TG Engineers, P.C. for additional design task to bring the contract total to $3,624,912.25; and

WHEREAS, in the ongoing reservoir designs and the water system served by the noted reservoirs, further design services listed below were identified to move forward with improving the functionality of the water system:

(1) Ugum: The reservoir will require a pile foundation design due to the poor soil quality at the site;

(2) All sites (Ugum, Inarajan, Afgayan, Santa Rosa, Santa Rita, Sinifa): Continuation of progress design meetings;

WHEREAS, GWA engineering and TG Engineers, P.C. negotiated Change Order No. 5 scope and fee of One Hundred Twenty-Eight Thousand Four Hundred Fifteen Dollars ($128,415.00) for the above services (Exhibit B); and

WHEREAS, GWA Management is seeking One Hundred Twenty-Eight Thousand Four Hundred Fifteen Dollars ($128,415.00) to fund Change Order No. 5; and

WHEREAS, funding for this change order will be from the Bond Funds under the line item "PW 09-11 Water System Reservoirs 2005 Improvements"; and

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by TG Engineers, P.C. are fair and reasonable.
3. The CCU hereby authorizes $128,415.00 in additional funding to bring the total authorized funding amount to $3,753,327.25.
4. The CCU hereby authorizes the management of GWA the option to issue Change Order No. 5 in the not-to-exceed amount of $128,415.00 (Exhibit "B').
5. The CCU hereby authorizes the funding source to be from bond funds under the CIP line Item PW 09-11 "Water System Reservoirs 2005 Improvements".

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

MICHAEL T. LIMTIACO
Secretary

SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 5
NAYS: ϕ
ABSENT: ϕ
ABSTAIN: ϕ

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CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

GWA RESOLUTION NO. 34-FY2020

RELATIVE TO APPROVAL OF FUND INCREASE TO THE CONSTRUCTION MANAGEMENT CONTRACT FOR THE ROUTE 4 RELIEF SEWERLINE REHABILITATION AND REPLACEMENT PROJECT S15-006-EPA

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Waterworks Authority ("GWA"); and

WHEREAS, the Guam Waterworks Authority is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA received a grant from USEPA under the Title 2 Construction Grants Program to improve the sewer collection system, which included over 4,200 linear feet of gravity sewer line along Route 4 and Route 1, from the base of the Sinajaña hill in Hagatña to the Hagatña Main Pump Station; and

WHEREAS, the gravity sewer line noted above has a section that has been inactive since its original installation due to incomplete construction work, and sections that need repair due to high infiltration and inflow (I/I), and the intent of this project is to rehabilitate, repair or replace these sections; and

WHEREAS, in September 2018 GWA management executed two separate construction contracts (Schedule A and Schedule B) to rehabilitate the Route 4 Relief Sewerline, the first (Schedule A) with ProPacific Builder Corporation (PPBC), and the second (Schedule B) with Insituform Technologies LLC (Insituform); and

WHEREAS, to provide construction management (CM) services on both construction contracts, in June 2018 GWA management entered into a contract with EMPSCO Engineering

Consultants (EMPSCO) in the amount of Seven Hundred Two Thousand Six Hundred Seventy-Eight Dollars and Thirteen Cents ($702,678.13); and

WHEREAS, while both construction contractors received the Notice to Proceed in September 2018, the start of construction was delayed due to complications with obtaining approvals during the permitting process; and

WHEREAS, construction by Insituform Technologies LLC was substantially completed in March 2020; and

WHEREAS, construction by ProPacific Builder Corporation continues but is scheduled to be completed by the end of September 2020, and the CM services are anticipated to be required through September 2020; and

WHEREAS, GWA has amended the CM contract with EPMSCO to provide continued construction management services on both construction contracts through June 2020 on a Time and Materials basis, as authorized by Resolution 14-FY2020; and

WHEREAS, GWA has negotiated Change Order No.2 with EPMSCO, shown in Exhibit A, to provide continued construction management services on both construction contracts through September 2020 on a Time and Materials basis; and

WHEREAS, GWA Management seeks CCU approval of EMPSCO's Change Order No. 2 fee proposal for additional construction management services funding with a not-to-exceed amount of Eighty-Two Thousand Forty Two Dollars and Twenty Cents ($82,042.20), to bring the total authorized funding amount to a maximum not-to-exceed amount of One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95); and

WHEREAS, funding for this project will be from the USEPA Title 2 Construction Grants Program and, if necessary, GWA Bond funds with an estimated project budget One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95);

NOW BE IT THEREFORE RESOLVED, the Consolidated Commission on Utilities does hereby approve the following:

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU hereby approves the funding increase for construction management services of an additional not-to-exceed amount of One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95).
3. The CCU hereby further approves the total funding authorization for the contract with EMPSCO to an amount not-to-exceed One Million Fifteen Thousand Four Hundred Seventy-Nine Dollars and Ninety-Five Cents ($1,015,479.95).
4. The CCU hereby further approves management to duly notify the PUC that this contract will now exceed One Million Dollars ($1,000,000.00), funded primarily by USEPA grants and, if necessary, GWA Bond Funds.

RESOLVED, that the Chairman certified and the Board Secretary attests to the adoption of this Resolution.

DULY AND REGULARLY ADOPTED, this 28th day of July 2020.

Certified by:

JOSEPH T. DUENAS
Chairperson

Attested by:

MICHAEL T. LIMTIACO
Secretary

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SECRETARY'S CERTIFICATE

I, Michael T. Limtiaco, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES: 5
NAYS: ϕ
ABSENT: ϕ
ABSTAIN: ϕ

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CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671) 648-3002 | guamccu.org

RESOLUTION NO. 2020-16

AUTHORIZING THE MANAGEMENT OF THE GUAM POWER AUTHORITY TO PETITION THE PUBLIC UTILITIES COMMISSION TO AWARD THE CONTRACT FOR THE SUPPLY OF RESIDUAL FUEL OIL NO.6

WHEREAS, GPA's current 2-Year contract with Mobil Oil Guam for the supply of Residual Fuel Oil No.6 (RFO No. 6) is expiring in August 31, 2020; and

WHEREAS, in anticipation of this expiration date, GPA was authorized by the CCU under GPA Resolution No. 2020-06 and approved by the PUC under Docket 20-11 to issue bids for the procurement of a new residual fuel oil supply contract; and

WHEREAS, the Procurement Officer has provided adequate public announcement for the need for such fuel supply services through Invitation for Multi-Step Bid No. GPA-050-20 describing the type of services required and specifying the type of information and data required of each offeror; and

WHEREAS, Hyundai Corporation, Mobil Oil Guam, and Hanwha Corporation, submitted bids for GPA consideration; and

WHEREAS, the results and evaluation of the bids are provided in **Exhibit A**; and

WHEREAS, HYUNDAI CORPORATION was determined to be the lowest, most responsive bidder meeting the requirements of the bid solicitation; and

WHEREAS, the estimated Fixed Premium Fee cost based on estimated supply quantities has a value of approximately $26,710,692 for the first year, $35,044,025 for the second year, and $29,408,019 for the third year, for a total of **$91,162,736** for the three-year contract base period as shown in **Exhibit A**; and

WHEREAS, the average Fixed Premium Fee for **HYUNDAI CORPORATION** of $105.417/MT ($16.575/bbl) for the 3-year contract period is approximately 44% higher than the current contract average Fixed Premium Fee of $73.227/MT ($11.514/bbl) for the same period. The estimated cost increase in Fixed Premium for the 3-year base period is approximately $27,837,264; and

WHEREAS, the Residual Fuel Oil No.6 Supply Contract with **HYUNDAI CORPORATION** shall be for an initial period of three (3) years and is anticipated to commence in September 01, 2020 and to expire in August 31, 2023 with two one-year extension options renewable annually upon mutual agreement of both parties; and

WHEREAS, the award of the contract to **HYUNDAI CORPORATION** based on estimated supply quantities has a value of approximately $94,207,547 for the first year, $102,540,881 for the second year, and $80,030,660 for the third year, for a total of **$276,779,088** for the three-year contract period.

NOW THEREFORE, BE IT RESOLVED, by the CONSOLIDATED COMMISSION ON UTILITIES as the governing body of GPA, and subject to the review and approval of the Public Utilities Commission as follows:

1. The General Manager of the Guam Power Authority is hereby authorized to enter into a three (3) year contract commencing September 01, 2020 and expiring August 31, 2023 for a total contract cost of **$276,779,088** with **HYUNDAI CORPORATION** for the supply of Residual Fuel Oil No.6.

2. The General Manager of the Guam Power Authority is hereby authorized an increase in obligating authority to the annual value of the contract and execute such agreements and documents necessary for a contract with **HYUNDAI CORPORATION**.

RESOLVED, that the Chairman of the Commission certifies and the Board Secretary attests the adoption of this Resolution.

DULY and REGULARY ADOPTED AND APPROVED THIS 23RD DAY of JULY, 2020

Certified by:

JOSEPH T. DUENAS
Chairperson
Consolidated Commission on Utilities

Attested by:

MICHAEL LIMTIACO
Secretary
Consolidated Commission on Utilities

I, Michael Limtiaco, Secretary for the Consolidated Commission on Utilities (CCU), as evidenced by my signature above do certify as follows:

The foregoing is a full, true, and correct copy of the resolution duly adopted at a regular meeting of the members of Guam Consolidated Commission on Utilities, duly and legally held at the meeting place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

Ayes: 4

Nays: 0

Absent: 1

Abstain: 0

EXHIBIT A- CONTRACT COST ANALYSIS

Basis: Conversion bbl/MT 6.360 (Reference: Petroleum Table 13)

	BASE CONTRACT- 1st of 3 YEARS			BASE CONTRACT- 2nd of 3 YEARS			BASE CONTRACT- 3rd of 3 YEARS			SUMMARY: 3-YEAR BASE CONTRACT PERIOD		
	bbls/yr	bbl/MT	mt/yr	bbls/yr	bbl/MT	mt/yr	bbls/yr	bbl/MT	mt/yr	bbls/yr		mt
LSFO	500,000	6.360	78,616	1,500,000	6.360	235,849	1,500,000	6.360	235,849	3,500,000		550,314
HSFO	1,500,000	6.360	235,849	500,000	6.360	78,616	0	6.360	0	2,000,000		314,465
Total RFO	2,000,000		314,465	2,000,000		314,465	1,500,000		235,849	5,500,000		864,780

MS IFB GPA-050-20 3-YEAR BASE PERIOD	Bidder #1 Hyundai Corp.	Bidder #2 Mobil Oil Guam	Bidder #3 Hanwa	Bidder #1 Hyundai Corp.	Bidder #2 Mobil Oil Guam	Bidder #3 Hanwa	Bidder #1 Hyundai Corp.	Bidder #2 Mobil Oil Guam	Bidder #3 Hanwa	Bidder #1 Hyundai Corp.	Bidder #2 Mobil Oil Guam	Bidder #3 Hanwa	COMPARISON w/ CURRENT CONTRACT GPA-009-16 Mobil Oil Guam (Calculated for 3 Years)
1. LSFO, 1.19% Sulfur max.													
Quantity (metric tons or "mt")	78,616	78,616	78,616	235,849	235,849	235,849	235,849	235,849	235,849	550,314	550,314	550,314	550,314
Bid Price (Bid Reference Price + Bid Fixed Premium Fee), $/mt	$339.330	$416.424	$341.570	$339.330	$516.101	$354.670	$339.330	$527.575	$365.270	$339.330	$506.779	$357.341	
ESTIMATED CONTRACT COST ($)	$26,676,686.79	$32,737,735.85	$26,852,987.42	$80,030,660.38	$121,721,933.96	$83,648,584.91	$80,030,660.38	$124,428,066.04	$86,148,584.91	$186,738,307.55	$279,887,735.85	$196,650,157.23	
Bid Reference Price ($/mt)	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	
Bid Fixed Premium Fee, $/mt	$124.690	$201.784	$126.930	$124.690	$301.461	$140.030	$124.690	$312.935	$150.630	$124.690	$292.139	$142.701	$68,500
Variance with Current Premium Fees										($36.19)	($203.64)	($54.20)	
Fixed Premium Fee Cost ($/bbl)	$19.805	$31.727	$19.958	$19.805	$47.400	$22.017	$19.805	$49.204	$23.684	$19.805	$45.934	$22.437	$13.915
Variance with Current Premium Fees										(S5.890)	(S22.819)	(S8.522)	
Fixed Premium Fee Cost (mt x $/mt), $	$9,802,873	$15,863,522	$9,976,774	$29,466,019	$71,099,292	$33,025,943	$29,466,019	$73,805,425	$35,525,943	$68,618,711	$160,768,239	$78,530,660	$46,702,630
Savings / Additional Expense, Current Contract vs. New Bid										($18,119,981)	($112,268,470)	($31,827,830)	
2. HSFO, 2.00% Sulfur max.													
Quantity (metric tons or "mt")	235,849	235,849	235,849	78,616	78,616	78,616	0	0	0	314,465	314,465	314,465	314,465
Bid Price (Bid Reference Price + Bid Fixed Premium Fee), $/mt	$286.330	$356.866	$313.970	$286.330	$438.636	$327.970	$286.330	$448.128	$337.970	$286.330	$376.809	$317.470	
ESTIMATED CONTRACT COST ($)	$67,530,660.38	$84,166,509.43	$74,049,528.30	$22,510,220.13	$34,326,729.56	$25,783,805.03	$0.00	$0.00	$0.00	$90,040,880.50	$118,493,238.99	$99,833,333.33	
Reference Price ($/mt)	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	$214.640	
Bid Fixed Premium Fee, $/mt	$71.690	$142.226	$99.330	$71.690	$223.996	$113.330	$71.690	$234.488	$123.330	$71.690	$187.349	$102.830	$46,500
Variance with Current Premium Fees										($25.190)	($115.669)	($58.330)	
Fixed Premium Fee Cost ($/bbl)	$11.272	$22.383	$15.618	$11.272	$34.905	$17.819	$11.272	$36.712	$19.362	$11.272	$25.498	$16.185	$7.311
Variance with Current Premium Fees										($3.96)	($10.19)	($8.85)	
Fixed Premium Fee Cost (mt x $/mt), $	$16,908,019	$33,543,868	$23,426,887	$5,636,006	$17,452,516	$8,909,581	$0	$0	$0	$22,544,025	$50,996,384	$32,336,474	$14,622,642
Savings / Additional Expense, Current Contract vs. New Bid										($7,921,994)	($36,373,742)	($17,713,836)	
3. Total RFO (LSFO + HSFO)													
Quantity (metric tons or "mt")	314,465	314,465	314,465	314,465	314,465	314,465	235,849	235,849	235,849	864,780	864,780	864,780	864,780
ESTIMATED CONTRACT COST ($)	$94,207,547.17	$116,904,245.28	$100,902,515.72	$102,540,880.50	$156,048,663.52	$109,432,389.94	$80,030,660.38	$124,428,066.04	$86,148,584.91	$276,779,088.05	$397,380,974.84	$296,483,490.57	
LEVELIZED UNIT COST ($/mt)	$299.58	$371.76	$320.87	$326.06	$496.23	$348.00	$339.33	$527.58	$365.27	$320.06	$459.52	$342.84	
Average Fixed Premium Fee Cost ($/mt)	$84.940	$157.116	$106.230	$111.440	$281.595	$133.355	$124.690	$312.935	$150.630	$105.417	$244.877	$128.203	$73.227
Variance with Current Premium Fees										($32.190)	($171.650)	($54.975)	
Average Fixed Premium Fee Cost ($/bbl)	$13.355	$24.704	$16.703	$17.522	$44.276	$20.968	$19.605	$49.204	$23.684	$16.575	$38.503	$20.158	$11.514
Variance with Current Premium Fees										($5.084)	($26.969)	($8.644)	
Fixed Premium Fee Cost ($)	$26,710,692	$49,407,390	$33,405,668	$35,044,025	$88,551,808	$41,935,535	$29,466,019	$73,805,425	$35,525,943	$91,162,735.05	$211,764,622.64	$110,867,139.36	$63,325,472
Savings / Additional Expense, Current Contract vs. New Bid										($27,837,264.15)	($148,439,150.64)	($47,541,666.31)	
										-44%	234%	-75%	
Ranking (1 as the Lowest Bidder)										1	3	2	

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

RESOLUTION NO. 2020-17

AUTHORIZING MANAGEMENT OF THE GUAM POWER AUTHORITY (GPA) TO PROCEED WITH A ONE (1) MONTH EXTENSION OF THE EXISTING CONTRACT FOR THE SUPPLY OF RESIDUAL FUEL OIL NO. 6

WHEREAS, the two-year (2-year) Contract Base Period with Mobil Oil Guam, Inc. (MOGI) under GPA-009-18 is expiring on August 31, 2020; and

WHEREAS, the Authority released an Invitation for Bid for the Supply of Residual Fuel Oil No. 6 under MS IFB GPA-050-20 as approved by the Consolidated Commission on Utilities on February 21, 2020 through adoption of GPA Resolution No. 2020-06; and

WHEREAS, GPA Resolution No. 2020-16 was approved on July 23, 2020 awarding the new Residual Fuel Oil No. 6 contract for three (3) years to Hyundai Corporation; and

WHEREAS, the Authority would need to provide adequate mobilization period for the new supplier and anticipates awarding the new contract to commence on October 1, 2020; and

WHEREAS, GPA and MOGI have negotiated and agreed to a one (1) extension of the existing contract up to September 30, 2020, at a fixed premium fee of $66.500/MT for HSFO and $108.500/MT for LSFO; and

WHEREAS, the one (1) month contract extension with MOGI has an estimated value of approximately $12M; and

WHEREAS, the one (1) month contract extension with MOGI has an estimated savings of about $317,355 in premium fees compared to the new Hyundai Corporation contract as shown in **Attachment A;** and

WHEREAS, GPA management considers the price to be reasonable and in the best interests of GPA and its customers; and

WHEREAS, GPA requests the Consolidated Commission on Utilities to allow a one (1) month extension of the current contract.

NOW THEREFORE, BE IT RESOLVED, by the Consolidated Commission on Utilities, subject to the review and approval of the Guam Public Utilities Commission, as follows:

1. The Consolidated Commission on Utilities finds the negotiated contract price for the one (1) month extension to be reasonable, prudent and beneficial to GPA and its customers.

2. GPA is hereby authorized to proceed with the extension of contract under GPA-009-18 for the Supply of Residual Fuel Oil No. 6 with Mobil Oil Guam, Inc., for a period of one (1) month, from September 1, 2020 to September 30, 2020, at a fixed premium fee of $66.500/MT for HSFO and $108.500/MT for LSFO with an estimated value of approximately $12M, respectively.

RESOLVED, that the Chairman of the Commission certifies and the Board Secretary attests the adoption of this Resolution.

DULY and REGULARY ADOPTED AND APPROVED THIS 28th DAY of JULY, 2020

Certified by:

JOSEPH T. DUENAS
Chairperson
Consolidated Commission on Utilities

Attested by:

MICHAEL LIMTIACO
Secretary
Consolidated Commission on Utilities

I, Michael Limtiaco, Secretary for the Consolidated Commission on Utilities (CCU), as evidenced by my signature above do certify as follows:

The foregoing is a full, true, and correct copy of the resolution duly adopted at a regular meeting of the members of Guam Consolidated Commission on Utilities, duly and legally held at the meeting place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

Ayes: 5

Nays: ϕ

Absent: ϕ

Abstain: ϕ

"Attachment A"

Cost Savings for Extension of Mobil Contract for One Month in Order to receive a shipment in September:

HSRFO	Mobil Oil Current	Mobil Oil Amendment One-Month	New Contract Award 3-years Hyundai Corp	Variance	Estimated BBLS Sept Order	Savings:
Mobil Price:	$7.31	$7.31	11.272			
Add $20/MT @6.5 BBL/MT		$3.15				
Total:		$10.46	11.272	-$0.82	155,000	-$126,480.00

LSRFO	Mobil Oil Current	Mobil Oil Amendment One-Month	New Contract Award 3-years Hyundai Corp	Variance	Estimated BBLS Sept Order	Savings:
Mobil Price:	$13.92	$13.92	19.605			
Add $20/MT @6.5 BBL/MT		$3.15				
Total:		$17.06	19.605	-$2.55	75,000	-$190,875.00

Total Savings of One Month Extension of Mobil Contract:				**-$317,355**