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BENJAMIN CRUZ <speaker@senatorbjcruz.com>

CCU MEEETING 9/26/17 / MEETING MATERIALS

2 messages

Bernadette Lou Sablan <l.sablan@gpagwa.com> Tue, Sep 26, 2017 at 3:35 PM
To: "Andy Niven (ndynvn@yahoo.com)" <ndynvn@yahoo.com>, Angelica Perez <aperez@amibrokers.com>, Ann Borja - GWA <annborja@guamwaterworks.org>, "Annmarie Muna (amuna@ambrokers.com)" <amuna@ambrokers.com>, Artemio S Perez <aperez@gpagwa.com>, BENJAMIN CRUZ <speaker@senatorbjcruz.com>, "Bill Chang (bchang@brwncald.com)" <bchang@brwncald.com>, "Cameron Mulka (cimiculka@guampdn.com)" <cimiculka@guampdn.com>, Chilang F Unpingco <cfejeran@gpagwa.com>, "Fred Horecky (horeckylaw@teleguam.net)" <horeckylaw@teleguam.net>, "Gaynor Delano (gdumat-ol@guam.gannett.com)" <gdumat-ol@guam.gannett.com>, Gllda Mafnas <gildam@guamwaterworks.org>, Governor's Office <joy.unpingco@guam.gov>, "Greg P. Cruz" <gpcruz@guamwaterworks.org>, Heidi Ballendorf <heidi@guamwaterworks.org>, "Jams Y Kim (pacguam@gmail.com)" <pacguam@gmail.com>, "Jeff Johnson (jeffcharjohnson@hotmail.com)" <jeffcharjohnson@hotmail.com>, "Jessica Peterse (webmaster@theguamguide.com)" <webmaster@theguamguide.com>, "Jessy Gogue (ocp.mayor@gmail.com)" <ocp.mayor@gmail.com>, "Joe John Mantanona (joejohnmantanona@gmail.com)" <joejohnmantanona@gmail.com>, "John O'Connor (john@postguam.com)" <john@postguam.com>, Joyce N Sayama <jsayama@gpagwa.com>, Karla Tydingco <ktydingco@guamwaterworks.org>, "Louella Losinio (louella@postguam.com)" <louella@postguam.com>, Manny Apuron <mapuron@guamwaterworks.org>, "Maripaz N. Perez" <mnperez@gpagwa.com>, "Michael White (whitema@cdmsmith.com)" <whitema@cdmsmith.com>, "Nestor Licanto (nestor@kuam.com)" <nestor@kuam.com>, "PDN Newsroom (news@guampdn.com)" <news@guampdn.com>, "Peter Montinola (peter@isuguam.com)" <peter@isuguam.com>, Selma HG Blas <sblas@gpagwa.com>, "Telena Nelson (senatortcnelson@gmail.com)" <senatortcnelson@gmail.com>, "Therese Terlaje (senatorterlajeguam@gmail.com)" <senatorterlajeguam@gmail.com>

Hi everyone,

Attached is pdf file for tonight's CCU meeting materials.

Best,

Lou

B. Lou Sablan

Board Secretary

Consolidated Commission on Utilities

Admin Asst., Legal Counsel, GPA

GLORIA B. NELSON PUBLIC SERVICE BLDG.

3RD Floor, Executive Division

688 Route 15, Mangilao, GU 96913

P.O. Box 2977, Hagatna, GU 96932

Tel: (671) 648-3002

Fax: (671) 648-3290

Email: l.sablan@gpagwa.com

Website: http://guamccu.org/

http://guampowerauthority.com/home.html

http://guamwaterworks.org/

2017 SEP 26 PM 5:01

Speaker Benjamin J.F. Cruz

SEP 26 2017

Time: 4:26 AM PM File No

Received By:

GL# 34-17-1003

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9491K

BENJAMIN CRUZ <speaker@senatorbjcruz.com> Tue, Sep 26, 2017 at 4:26 PM
To: 34th Guam Legislature Clerks <clerks@guamlegislature.org>
Cc: Rennae Meno <rennae@guamlegislature.org>

9/26/2017	9/26/2017	Consolidated Commission on Utilities	CCU Regular Board Meeting material s on September 26, 2017. *Emailed	34-17-1003

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OFFICE OF SPEAKER BENJAMIN J.F. CRUZ

Committee on Appropriations and Adjudication

I Mina'trentai Kuattro na Liheslaturan Guåhan

Guam Congress Building | 163 Chalan Santo Papa | Hagatna, GU 96910

T: (671) 477-2520/1 | F: (671) 477-2522 | www.senatorbjcruz.com

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1003

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
4:30 p.m., September 26, 2017

AGENDA

1. CALL TO ORDER

2. APPROVAL OF MINUTES

3. COMMUNICATIONS
   - 3.1 Public Comments (2 min. per person)

4. NEW BUSINESS
   - 4.1 GPA
   - 4.1.1 GM Report Update
   - 4.1.2 Financials
   - 4.1.3 Resolution No. 2017-29 Relative to Approval and Implementation of a Unified Zero Tolerance Drug & Alcohol Policy for GPA and GWA (GWA Resolution No. 42-FY2017)
   - 4.1.4 Resolution No. 2017-35 Ratification of Poll Vote on Approval of FY'2018 Budget
   - 4.1.5 Resolution No. 2017-38 Relative to the Creation and Addendum of Certified Technical and Professional (CTP) List of Positions and Adoption of Market Update for GPA & GWA (GWA Resolution No. 53-FY2017)
   - 4.1.6 Resolution No. 2017-39 Approval of the Bid for 180 MW Power Plant
   - 4.1.7 Resolution No. 2017-40 New RFO Fuel Supply Contract
   - 4.1.8 Resolution No. 2017-41 Ultra Low Sulfur Diesel (ULSD) Contract Extension
   - 4.1.9 Resolution No. 2017-42 Approval for Purchase of Land for New 180 Power Plant

   - 4.2 GWA
   - 4.2.1 GM Report Update
   - 4.2.2 Financials
   - 4.2.3 Resolution No. 42-FY2017 Relative to Adoption and Implementation of a Unified Zero Tolerance Drug & Alcohol Policy for GPA and GWA (GPA Resolution No. 2017-29)
   - 4.1.4 Resolution No. 53-FY2017 Relative to the Creation and Addendum of Certified, Technical and Professional (CTP) List of Positions and Adoption of Market Update for GPA & GWA (GPA Resolution No. 2017-38)
   - 4.1.5 Resolution No. 54-FY2017 Relative to Approving Contract Amendment No. 7 for Program Management Services

5. OLD BUSINESS

6. ANNOUNCEMENTS
   - 6.1 Next CCU Meetings: GWA Work Session – Oct 17; GPA Work Session – Oct. 19; CCU Meeting – Oct. 24

7. EXECTIVE SESSION
   - 7.1 Litigation Matter

8. 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., August 29, 2017

MINUTES

1. CALL TO ORDER

The Chairman called the regular monthly meeting of August 29, 2017 to order at 5:32 p.m. He announced that all five (5) Commissioners were present and that there was a quorum.

Those present include:

Commissioners:

Joseph T. Duenas	CCU Chairman
Francis Santos	CCU Vice Chairman
George Bamba	CCU Secretary
Judi Guthertz	CCU Treasurer
Simon Sanchez	Member

Executive Mgmt.:

John Benavente	GM / GPA
Miguel Bordallo	GM / GWA
John Kim	CFO / GPA
Greg Cruz	CFO / GWA
Melinda Camacho	AGMO / GPA
John Cruz	AGMET / GPA
Tricee Limtiaco	AGMA / GPA
Graham Botha	Staff Attorney / GPA
Kelly Clark	Staff Attorney / GWA

Management & Staff:

Paul Kemp	AGM Compliance & Safety / GWA
Manny Apuron	IT / GWA
Geigy Salayon	Asset / GWA
Ron Topasna	P&T / GWA
Vincent Pangelinan	GWA
Art Perez	PIO / GPA
Vince G.	GWA
Zina Charfauros	Personnel Admin. / GWA HR
JacalynTaisacan	Customer Service / GWA
Linda Benavente	Customer Service / GWA
Karen Grape	GWA / IT
Joyce Sayama	Mgmt. Analyst / GPA Ex. Office
Ann Borja	Mgmt. Analyst / GWA Ex. Office
Lou Sablan	Board Secretary / CCU

Guest:

Bill Gilman	Brown&Caldwell

George Watson	Brown&Caldwell
Dela Cruz, WW	KUAM
Andy Niven	Commissioner / PUC
Bill Chang	Brown&Caldwell
Annmarie Muna	AM Insurance
Angela Perez	AM Insurance

2. APPROVAL OF MINUTES

The Minutes of July 25, 2017 was presented for approval.

Comm. Bamba motioned to approve the Minutes subject to verification and written correction. Comm. Sanchez seconded. There was no further discussion and the motion carried.

3. COMMUNICATIONS

3.1 Public Comments - None

4. NEW BUSINESS

4.1 GWA

4.1.1 GM Report Update

The GWA GM gave his usual GM Update – following is synopsis.

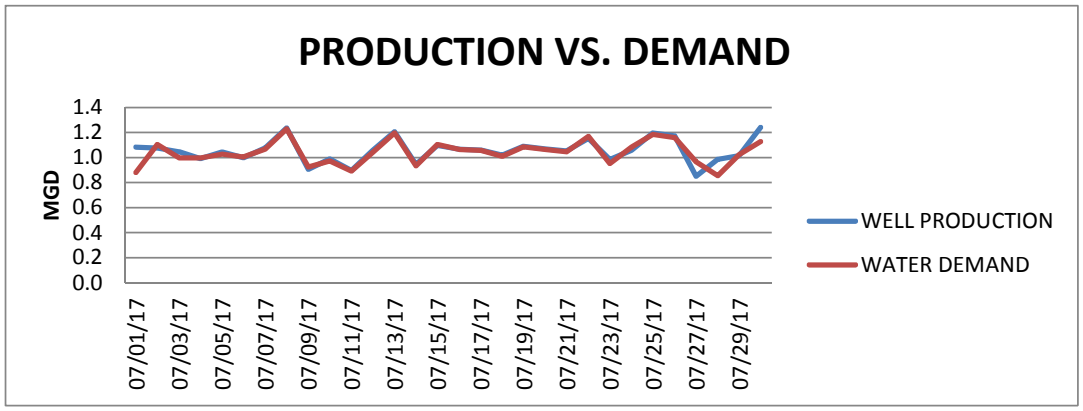
OPERATIONS UPDATE:

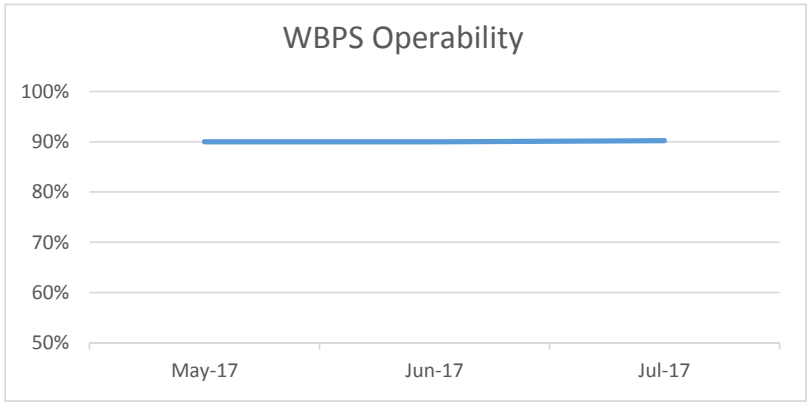
Production Update

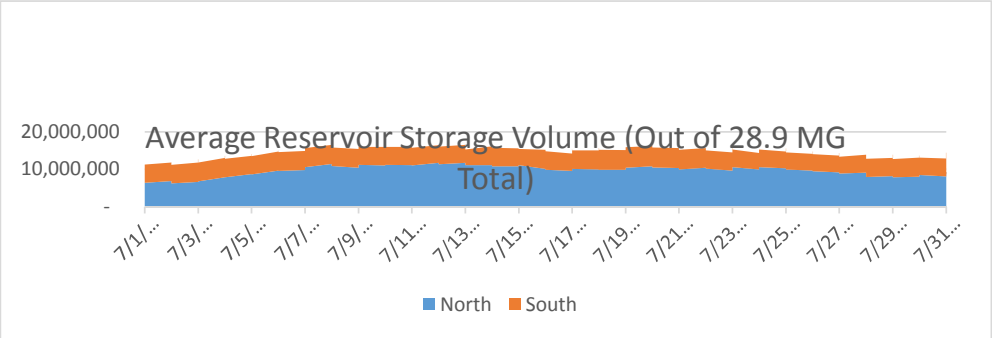
Monthly Production Summary - July 2017				
Deep Wells			36.8	MGD
Active wells =	96	of 120		
Avg days in operation =	30.52	days		
Total Production =	1,122,633	Kgals		
Springs			0.2	MGD
Avg days in operation =	31	days		
Total Production =	5194	Kgals		
Ugum Surface Water Plant			2.1	MGD
Avg days in operation =	31	days		
Total Production =	64,946	Kgals		
Tumon Maui Well			1.05	MGD
Avg days in operation =	31	days		
Total Production =	32,559	Kgals		
	1,225,332	Kgals	40.1	MGD

Monthly Distribution Summary - July 2017				
Water Booster Pump Stations				
District	No. of Stations	Total Pumps	Pumps Operating	% Operational
Northern	11	21	19	90.5%
Central	7	15	12	80.0%
Southern	7	15	15	100.0%
	25	51	46	90.2%

Distribution







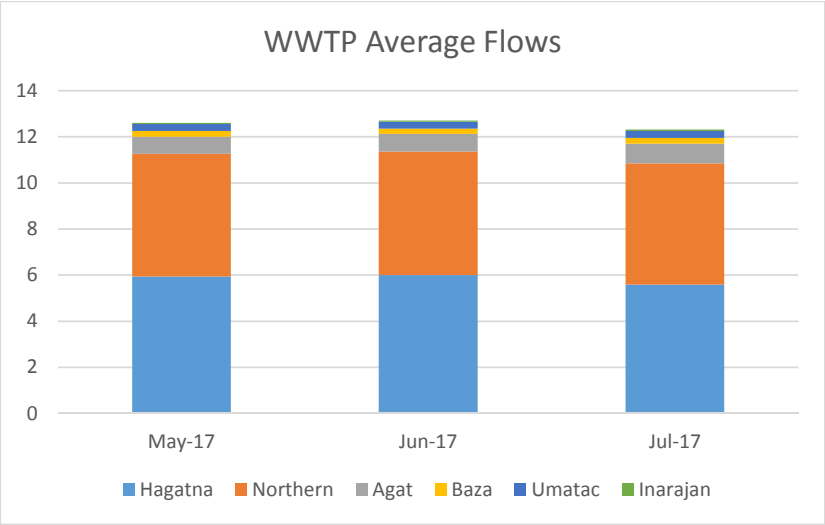
Wastewater Collections

Monthly Collections Summary - July 2017*				
Wastewater Pump Stations				
District	No. of Stations	Total Pumps	Pumps Operating	% Operational
Northern	22	52	46	88.5%
Central	29	65	62	95.4%
Southern	25	51	49	96.1%
	76	168	157	93.5%

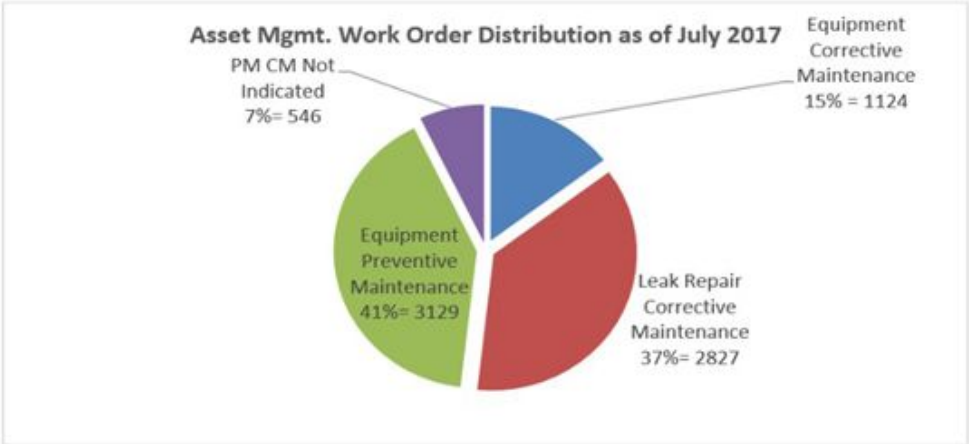
* pending verification

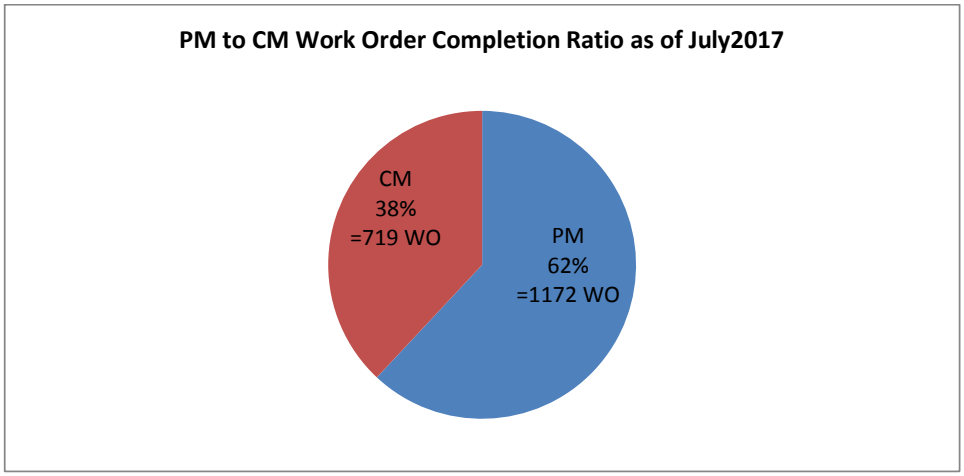
Wastewater Treatment

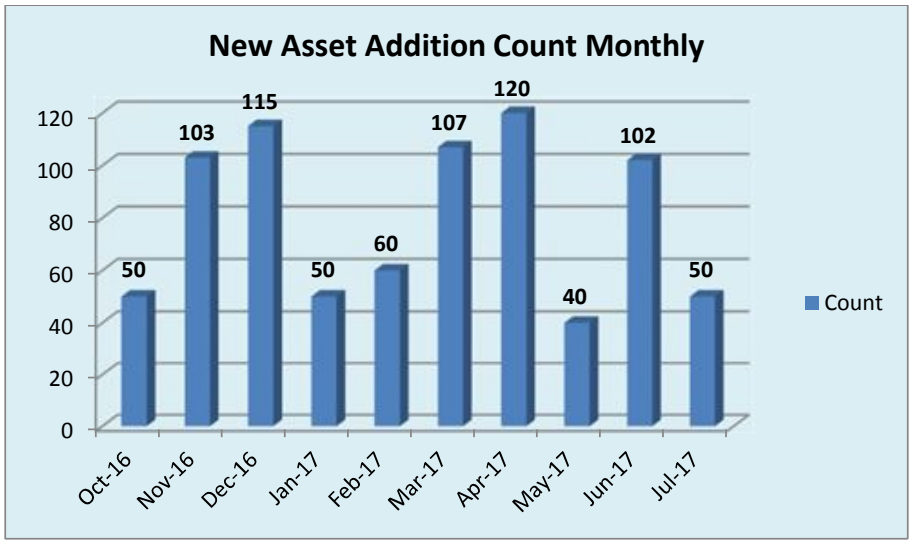
Monthly Wastewater Treatment Summary - July 2017				
WW Treatment Plants - Flows				
Facility	**Avg. Daily Flows (MGD)**	**Sludge (lbs)**	**Sludge Disp. ($)**	
Hagatna	5.94	462,420	$	41,618
Northern	5.33	1,423,168	$	128,085
Agat	0.74			
Baza	0.25			
Umatac	0.30			
Inarajan	0.05			
	12.61	1,885,588	$	169,703



Asset Management







On-Going Asset Management Activities

- Ongoing routine asset condition assessment for all water and wastewater assets and update asset registry.
  Goal: once a year for critical assets and every three years for non-critical.
- Risk identification based on asset condition
- Improved PM scheduling
- Establishment of an Asset Management System based on ISO 5500 standards through effective and efficient management of GWA assets.

Operational Issues

- Heavy weather events affecting production for Yigo and Barrigada/Tiyan areas
  - Yigo main break – 14-ft crack; suspected water hammer; loss of levels in Yigo reservoir;
  - Tripped wells affected production
  - M21 Pullout completed 8/29/17
  - Y12 Pullout on-going
- Action taken:
  - Main isolated – required securing of several high production wells
  - Main break repaired
  - M21 pullout completed with assistance of GPA
  - Critical wells isolated from grid for short term to stabilize production and distribution system
  - System adjustments to increase flows to Barrigada and Tiyan areas

Meter Changeout NC/LC Accounts

- As of August 19, 2017:
  - Field activities completed: 3378
  - Meter changeouts: **2627** (Crews verified 751 meters did not require changeout)
  - Field activity reports created for completed changeouts: 1228

  - Accounts backbilled: 341 (as of 8/26/17)
- Week of 8/20/17 through 8/26/17
  - Field Changeouts: 359
  - Field activity reports pending posting: 241
  - Meter Test Facility field activity reports pending posting: 133
- Meter Inventory
  - In stock: 3117
  - Programmed: 1165

Marbo (Andy-South) Wells – Status

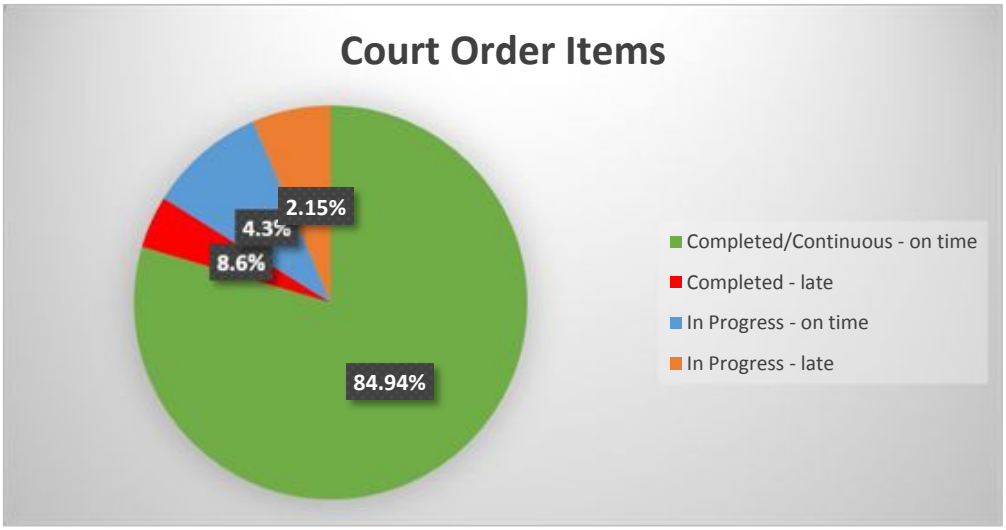
See attached meeting summary.

One Guam Update

- Potts Junction Service Lateral: Completed; MOU conditions now met.
- Santa Rosa Intertie: Draft MOU in progress; hydraulic modeling pending; grant of easement in progress
- Hydraulic model: shared / integrated model still in discussion; investigating technical issues re: software and data

Court Order

	Items	On-time Items Completed/Continuous	Items Delayed	Completed Late	Items on Schedule	Performance %
Court order total	93	79	2	8	4	97.8%



Status Information

- 2 items delayed
  - Cl Residual Monitors
  - Meters
- Final Date to complete all Court Order items is December 31, 2020.

- Overflow or Bypass events reported to USEPA:
  - 1 WW spill in Yigo due to FOG
  - 1 WW spill in Inarajan due to FOG
- The new Agat/SR WWTP is operating well and the UV system well exceeds the permit limits

CIP and Grant Project Status

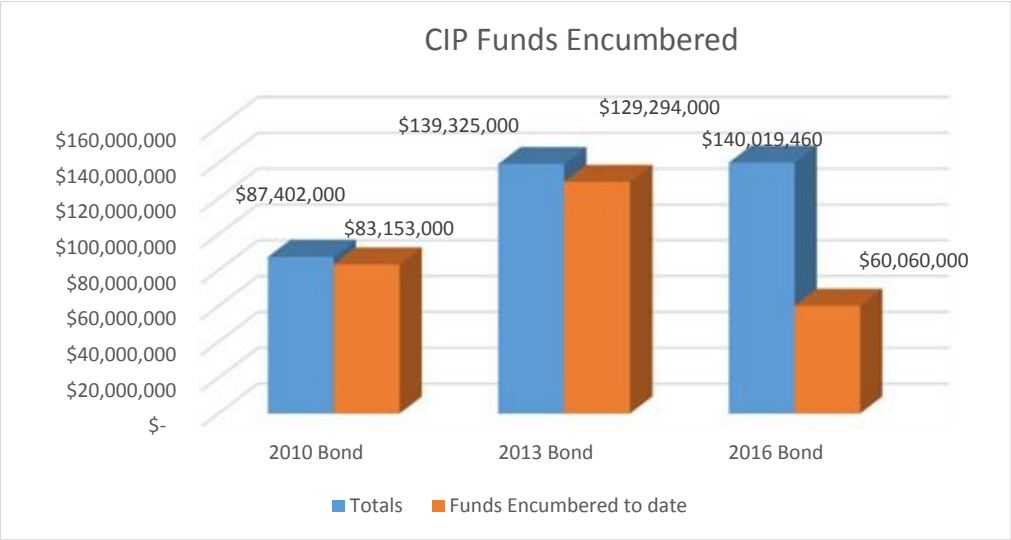
CIP Summary

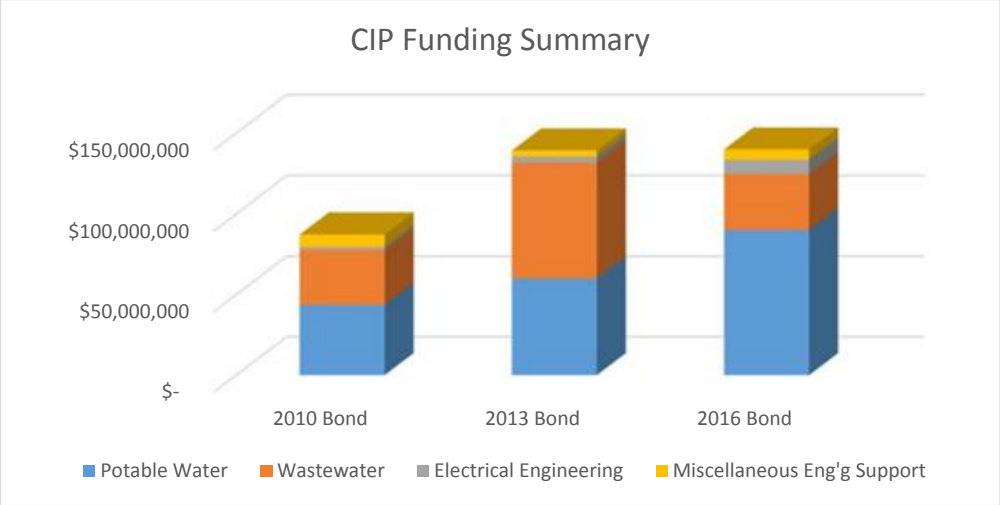
CIP Summary: Project Encumbrance

	2010 Bond		2013 Bond		2016 Bond			
	Funded	Complete	Funded	Complete	Funded	Complete	Total CIP Projects	%
Potable Water	28	17	21	7	20	0	35	49%
Wastewater	16	13	7	3	8	1	22	31%
Electrical Engineering	5	5	6	1	5	0	10	14%
Miscellaneous Eng'g Support	2	0	3	1	4	1	4	6%
Totals	51	35	37	12	37	2	71	100%
% of Total CIP by Fund Source	72%		52%		52%			

CIP Summary: Project Amounts

	2010 Bond		2013 Bond		2016 Bond			
	Funded	%	Funded	%	Funded	%	Total CIP Projects	%
Potable Water	$ 41,903,305	48%	$ 58,317,117	42%	$ 64,647,830	46%	$ 164,868,252	45%
Wastewater	$ 36,009,577	41%	$ 73,837,883	53%	$ 60,227,170	43%	$ 170,074,630	46%
Electrical Engineering	$ 1,748,118	2%	$ 3,395,000	2%	$ 8,750,000	6%	$ 13,893,118	4%
Miscellaneous Eng'g Support	$ 7,741,000	9%	$ 3,775,000	3%	$ 6,394,460	5%	$ 17,910,460	5%
Totals	$ 87,402,000	100%	$ 139,325,000	100%	$ 140,019,460	100%	$ 366,746,460	100%
Funds Encumbered to date	$ 83,153,000	95%	$ 129,294,000	93%	$ 60,060,000	43%		
% of Total CIP Funding	23.8%		38.0%		38.2%			



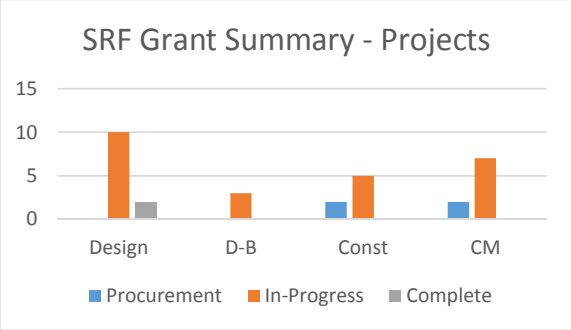


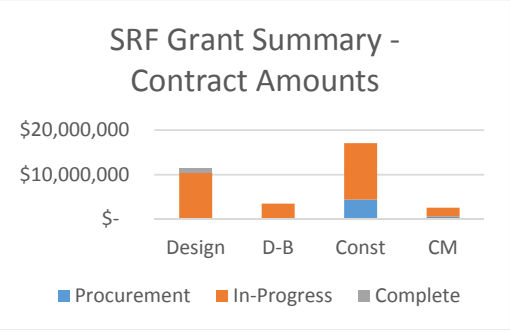
SRF Grant Summary

SRF Grant Summary - Contract Amounts

	Procurement	In-Progress	Complete	Totals	%
Design	$ -	$ 10,490,197	976,151	$ 11,466,348	33%
D-B	$ -	$ 3,502,453		$ 3,502,453	10%
Construction	$ 4,392,765	$ 12,650,479		$ 17,043,244	49%
CM	$ 584,725	$ 1,989,176		$ 2,573,901	7%
Totals	$ 4,977,490	$ 28,632,305	$ 976,151	$ 34,585,946	

%	14%	83%	3%	


SRF Grant Summary - Projects
15
10
5
0
Design
D-B
Const
CM
Procurement
In-Progress
Complete


SRF Grant Summary - Contract Amounts
$20,000,000
$10,000,000
$-
Design
D-B
Const
CM
Procurement
In-Progress
Complete

OEA Grant Summary

- NDWWTP Upgrades
  - Designer on Board
  - Kick-off Meeting: 8/30/17
- Outfall Diffuser
  - Design in progress; GWA waiting for review set
  - 30% due June 2017 (per PM/CM Schedule)
- Interceptor
  - Bridging Documents for Design-Build procurement in progress; GWA waiting for review set
  - Due June 2017 (per PM/CM Schedule)
- NGLA Monitoring Wells
  - UOG-WERI-USGS MOA executed
  - Design in progress; GWA waiting for review set
  - 30% due November 2017

Action Item	Date (Target)	Date (Actual)	Status	Remarks
Project Funds Available	July-16	AUG-30-16	Completed	
Land Acquisition	Jan-17	Jan-17 (Compensation Pending)	Pending	Survey complete, appraisals complete – under review
Procure PM/CM Firm	Jan-17	Jan-17 (NTP Issued Feb 10th)	Completed	
Procure Design Firm	Jul-17		Completed	Contract issued; kickoff pending
Design -- 30/60/90/Final -- Review	Jun-18		On-target	
NEPA Analysis and Determination	Feb-17		Delayed	USEPA work on-going; procurement of contractor completed
Procure Construction Firm	Dec-18		On-target	
Construction Complete/Commence Operations	Nov-21		On-target	
Sewer line connection from MCB to GWA infrastructure	Jul-19		On-target	
MCB Initial Operating Capability	Jul-22		On-target	

LAND ACQUISITION

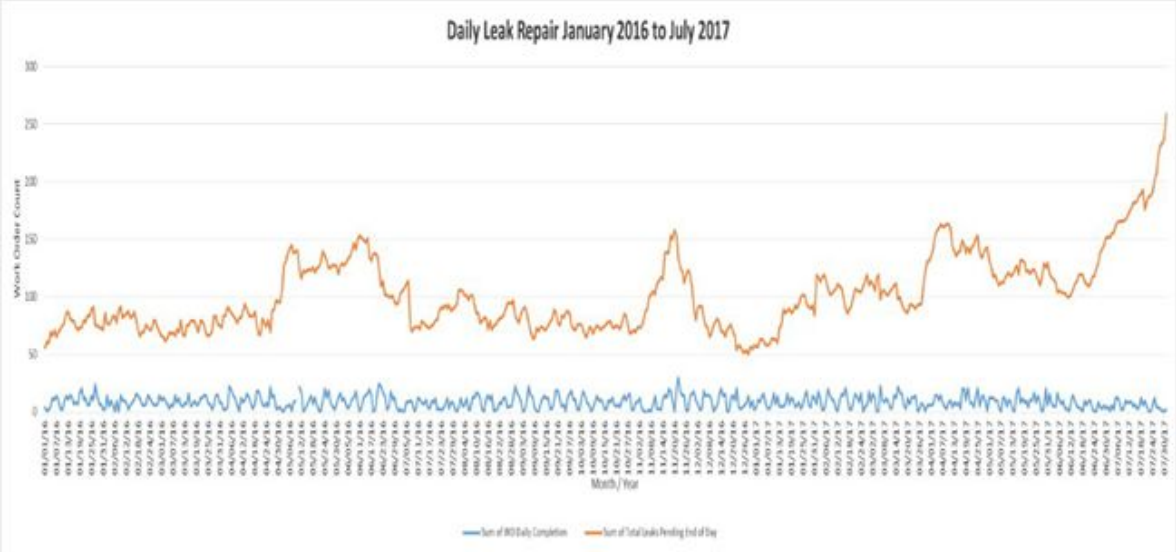
GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
N	Ugum	Private	Pending change order from TGE for GWA approval.
	Manenggon	Private	Property Ownership vested in GWA 05/02/17.
	Santa Rita	Gov't. – CLTC	Property Ownership vested in GWA 08/04/17.
	Astumbo	Gov't. - CLTC	GWA and DLM working together on Land Registration process. Abstract of Title sent to GWA for review 06/26/17. Pending technical description from DLM survey division.
	Upper Tumon	Gov't. - CLTC	Property Ownership vested in GWA 08/03/17.
	Piti	Private	GWA consultants drafting Letter of Intent for private property owners. GWA to draft Letter of Interest to Parks & Rec for possible use of portion of park area for Booster Pump Station 08/21/17.
Expansion of the Northern District Wastewater Treatment Plant (NDWWTP)	Dededo	Gov't - GALC	Lot Parceling Survey Map sent to DLM for review and comments 08/07/17. Appraisal Reports completed 08/11/17. GWA Land Agent to review reports.
R	Y-8	Gov't. - CLTC	DCA currently working on severance property map.
Deep Well	AG-12	Dept. of Agriculture/Manhita Farms	Preliminary Land Registration Survey Map forwarded to GWA for review 08/14/17. Appraisal process to begin once review and comments are forwarded to DCA.
Booster Pump Station	Brigade	Private	Escrow services opened with Security Title on 07/17/17

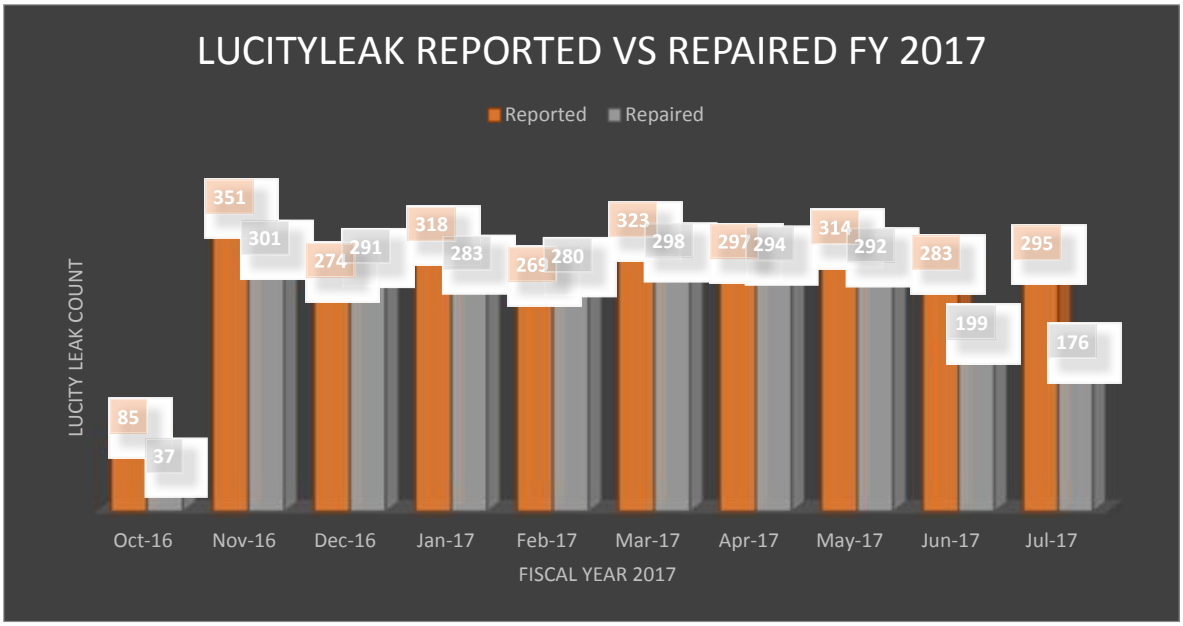
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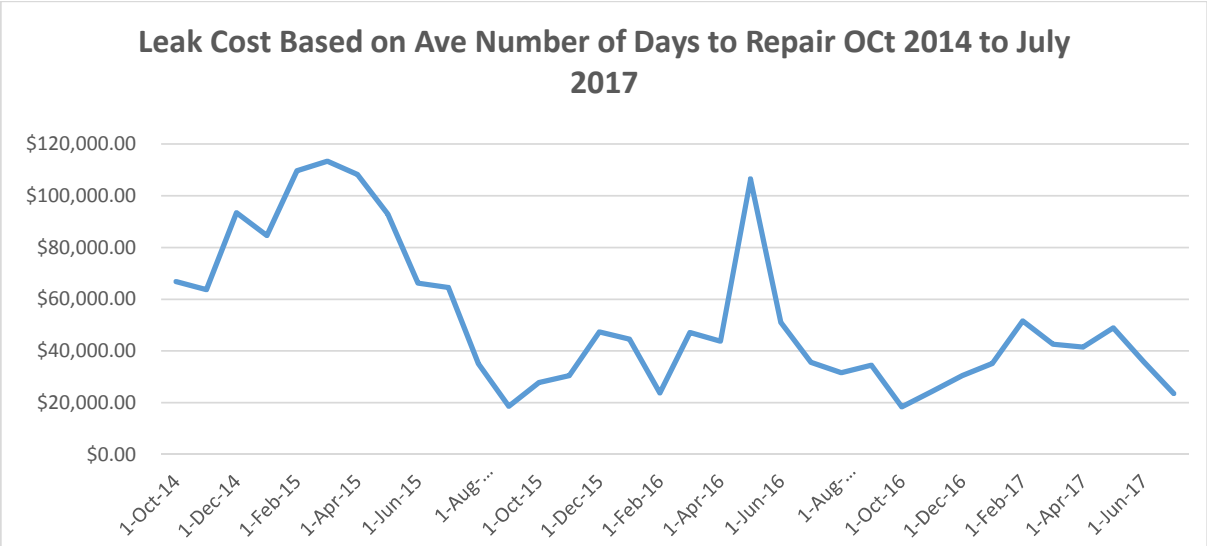
– Update

- Water Audit update on-going
  - Production rates are being reviewed for accuracy and refined
  - Unmetered, Authorized uses are being quantified
  - Meter and billing inaccuracies are being reviewed and refined

Leak Repair Summary







Assumptions:

1. Leak rate = 4 gpm
2. Cost per kgal = $4.00

There was a lengthy discussion on the outage over the weekend in Yigo where 7 wells tripped all at the same time causing a major water outage in the north.

Comm. Bamba asked if report can include kgal in reserve (similar to GPA's report). Comm. Sanchez said reserves are what are left in the tanks. Bamba said there is a high concentration of areas of low water pressure and wondered if there is a way the wells can focus on those areas. GM Miguel said that within each service area, certain wells feed certain areas. Comm. Bamba asked if the system is able to recover or a process in place where we can minimize impact to our customers. GM Miguel said GWA has the ability to manipulate but right now GWA is stretched to the limit and this should improve when the rehabilitation projects are completed. He added that the asset management program is in place and data collected will provide a better set of information for repair and/or replacement of assets.

Comm. Guthertz shared how outages affect DOE and schools. There's got to be a way to deal with outages so schools don't have to close. When schools close, students lose out and it is hard to get their focus back once the school shuts down. GM Bordallo responded that GWA is doing everything in its power to get the primary tanks up as soon as possible.
Comm. Duenas commented that the Tiyan well was not given back to GWA in good condition and GWA management has been working on these problems for a very long time.

Comm. Sanchez added you can only do what you can do with the money you have.

Comm. Guthertz asked if our systems and equipment are ready if we should have a major a storm; GM Benavente responded that GPA has several million in inventory at T&D and is confident that GPA can respond and restore capabilities are very strong. Comm. Duenas added that GM Benavente is working with GM Miguel on evaluating the generators in effort to upgrade them to optimum levels. GM Benavente confirmed that during a storm, generators and wells can respond with 97% availability.

Comm. Sanchez asked if there is potential for any further court order; Comm. Duenas responded that it would be best to discuss in executive session due to potential litigation.

4.1.2 Financials

CFO Cruz reported that GWA is selling less water this year v. PY – 4.5% less. He said despite this GWA is still making money – trending $2.3M income this year but ½ are in grants. He said management is offsetting under revenues with less spending. The Chairman said it's a challenge because cutting spending affects programs and added that as GWA makes improvements in meter program, revenues will begin to pick up- it's a work in progress.

Comm. Sanchez asked CFO Cruz to work on projections for FY18 and run it with and without rate increase just to give Commission / management a feel for where business will be. Historically when revenues are short management cuts back on payroll which affects ability to hire people. It will be interest sting to know how the latest financial challenges will affect next year's budget.

Comm. Santos asked how the number of unfilled positions; CFO Cruz responded about 70. Comm. Santos followed up with what is GWA sacrificing. He asked the CFO to give the Commission details for that but let us know what is being sacrificed to make that $2.3M. What did we forgo in this year's budget to make that number i.e. what projects were put on the back burner. Perhaps management can look at other projects that are more feasible

Relative to receivables, it was mentioned that Dept. of Education is lagging behind. Comm. Sanchez asked why Management is allowing them all this time when we don't do extend that to Tan Maria. Comm. Santos asked for a clear explanation as to why this is happening. The Chairman said that what management is hearing from the Commission is after a certain point, you need to write these debts off – it is not good practice to carry them for 6 years

4.1.3 Resolution 52-FY2017 Relative to Update of System Development Charge (SDC) Implementation Guidelines

The System Development Charge (SDC) Implementation Guidelines required revision to correct inconsistences in order to allow the expenditure of SDC funds without potential conflict with the Guidelines. The Update is also needed to incorporate changes from public laws passed after the original Guidelines were adopted by the January 29, 2010 PUC Decision and Order Docket No. 08-08. The PUC Order also directed GWA to provide a policy or provision whereby GWA agrees to give credits or offsets to developers regarding SDC assessments under appropriate circumstances. An SDC Financial Offset Policy is included in the Resolution for CCU approval.

Provided in support of this Resolution is the Water Line Upgrade Guidance Document, which provides a basis for rating and prioritizing water system improvement projects that may qualify for SDC funding.

Comm. Bamba motioned to approve Resolution 52-FY2017; Comm. Sanchez seconded.

In discussion, Comm. Sanchez said in some cases some SDC charges are so large and hopes this guideline will help Chairman Duenas added that the SDC was implemented in 2009 and the Commission never looked at it again until now.

On the motion, there was no further discussion or objection and the motion passed.

At this point, the Chairman called for a 5-minute recess. It was 7:05 p.m.

Meeting called back to order @ 7:15pm

4.2 GPA

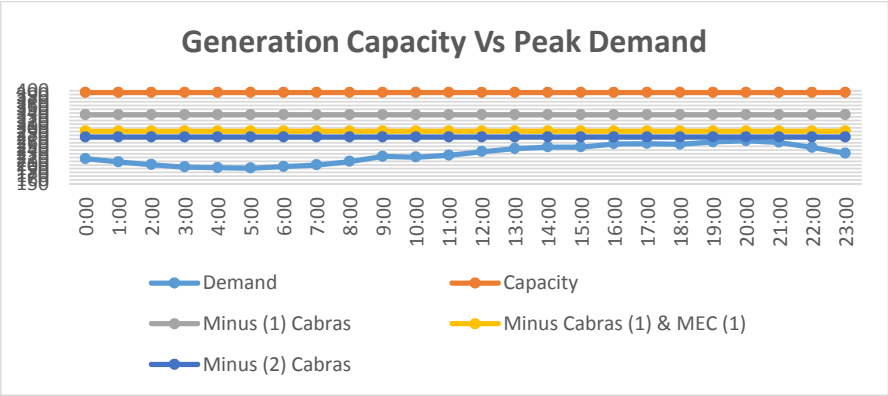
4.2.1 GM Report Update

The GPA GM said he would like to discuss action items first. There was no objection and the meeting moved to New Business section. Thereafter, he gave his usual GM Report Update accordingly:

1. **Generation System Update:**
    - The Cabras #1 overhaul began Saturday, July 15th and is substantially ahead of scheduled. It is now anticipated that the unit will be operating and cleared for full load sometime next week.
    - Navy had authorized the use of the Orote 18 MW plant for assistance under emergency conditions. We had one occasion during the overhaul period in which we utilized Orote. Thank you DoN…
    - Once Cabras #1 is cleared for full load operation, we will operate Cabras #2 at a higher load (55 to 60 MW). We limited the unit to 42MW this past month in order to reduce risk of experiencing another boiler tube leak while reserve levels were down.

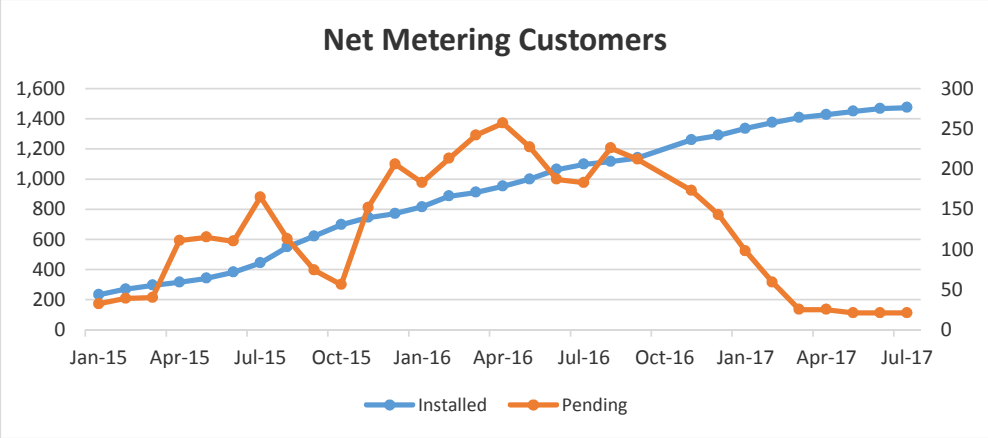
Generation Capacity Summary: 24-August-17	**September 1st, 2017 Reserve**
Generating Units:	
CABRAS 1	60
CABRAS 2	60
MEC 8	44
MEC 9	44
AGGREKO	36
MEDIUM SPEED DIESELS (8 Units)	32
YIGO CT	20
MACHECHE CT	20
TEMES CT	39
DEDEDO CT1	20
DEDEDO CT2	20
AVAILABLE CAPACITY	**395**
EXPECTED PEAK DEMAND (Highest to date in CY 2017 was 261 MW)	**265**
GPA SYSTEM RESERVE (Greater than two largest units)	**130**

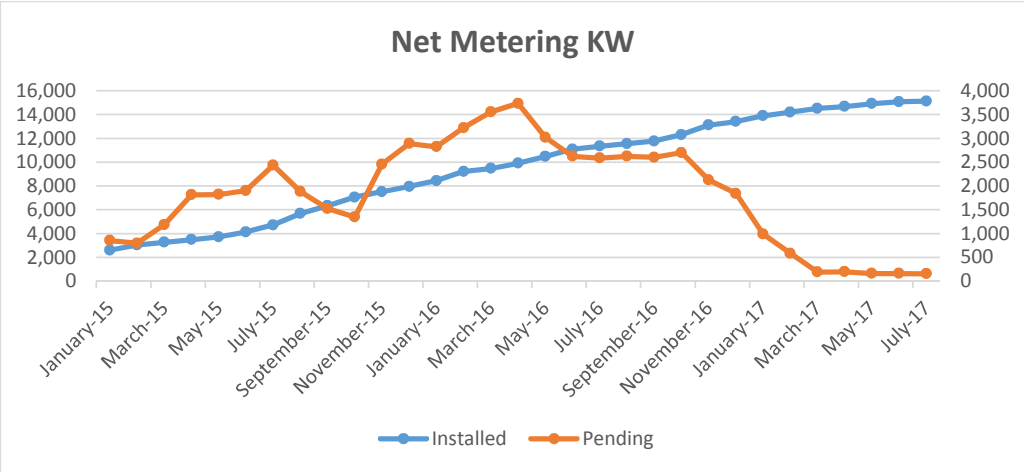
The following table and graph projects our reserve level for September 2017 with the completion of the Cabras #1 overhaul. The system reserves could cover the loss of the two largest units for the anticipated peak demand of 265 MW in CY 2017.



2. Net metering Summary Ending July 2017:

Description:	**Count**	**Kw**	
Active	**1,474**	**15,123**	
Pending	21	155	
Totals:	1,495	15,278	
Service:	**Count**	**KW**	**Kw/Customer**
Residential	1,397	12,530	9.0
Others	77	2,593	33.7
Total:	1,474	15,123	10.3
% Residential	**94.8%**	**82.9%**	
Estimated 12 Months Revenue Impact:	**$2,808,535**		





2. Renewable Energy Production Summary Thru July 2017:

Energy Production Source:	Kwh	Oil Barrels Avoided	Fuel Cost Avoided
NRG Total Production beginning Oct 2015	91,342,948	152,727	$8,399,983
Net Metering Estimated Production beginning Jan 2015	42,228,933	70,607	$3,883,412
Wind Power Production beginning Jan 2016	700,614	1,171	$64,429
Renewables Total:	**134,272,495**	**224,506**	**$12,347,825**
System Heat Rate Kwh/Gal	14.2		
System Fuel $/Bbl	$55.00		

3. DSM Program:

Demand Side Management Program Impact Thru July 2017:

Description	Count	KW Reduction
Split A/C	2,106	1,580
Central A/C	14	21
Window Units	8	2
Washer	43	11
Dryer	10	10
Totals:	2,181	1,623

New Conventional Power Plant $/KW		$1,500
Total Investment Reduction		$2,434,875
Total DSM Investment		$685,909
Investment Reduction		**$1,748,966**
Return on Investment		**3.5**

3. **New Power Plant Bid:** Work on land acquisition continues and I believe a recommendation for award could be made within the next month. A draft of the bid specifications is currently under review. Once the land location has been determined, the specifications could be ready for CCU and PUC approval within one month thereafter. It appears the date for bid invitation issuance for the new power plant would now be in the November/December timeframe.

4. **Liberation Day Parade:** GPA and GWA entered a float for the liberation day parade. We came in 2nd place in the government category. Congratulations to all employees and IPP partners on this success, but most especially for the work put in which made it a great day with lots of food and fun in celebration of our liberation.

5. **Key Performance Indicators:** The following pages provide updated information thru July 2017.

GM Benavente gave a report on Cabras 1; He said it ran for a couple of hours last night but was taken down for further work. The target date for operation was originally Sept 1st but is now looking more like Sept.3rd. The turbine itself had no major replacement and helped the maintenance to finish early than previously scheduled.

Sen. Santos asked - what's happening with solar farm in DanDan and the GM said GPA has the first right of refusal on the sale. GM Benavente said he will bring this matter to CCU in Sept. after discussion with key management relative to purchase price.

4.2.2 Financial

This matter was not discussed.

4.2.3 Resolution 2017-33 Relative to Revision of Scope of Work and Re-Solicitation of Contract for Supply of Diesel Fuel No.2 for Baseload

The Guam Power Authority's current contract for Supply of Diesel Fuel Oil No. 2 for the Baseload Plants and Peaking Units is expiring in December 2017. Through CCU Resolution 2015-05, Multi-Step Bid GPA-057-17 was issued with the intent to award before December 2017. However, based on the changing operation requirements, anticipated dispatching for the next 3-5 years, as well as inquiries raised by prospective bidders, major changes in the current structure of the bid needs to be changed. The Authority is requesting authorization to change the bid and re-solicit with revised structure and requirements.

Diesel Fuel Oil No.2 will be stored at GPA-leased tanks in the Tristar Facility. From the tank, it will be supplied via tanker truck and pipeline (if the option is available) to the following plant locations: baseloads (Cabras 1&2, MEC 8&9, Tenjo Vista, Fast Tracks (Manenggon & Talofofo), TEMES CT and Northern Plants (Dededo CT, Macheche CT , Yigo CT & Aggreko)

The contract is expected to cost $80,000,000 annually for an estimated 1,000,000 barrels of ULSD annually at $80 /bbl. and will be funded by fuel revenue funds. The contract is planned for an initial period of four years to commence on or about March 01, 2018 and to expire on February 29, 2022, with the option to extend for one (1) additional one-year terms. The IFB solicitation will commence after CCU & PUC approvals.

Comm. Guthertz motioned to approve Resolution 2017-33; Comm. Sanchez seconded. On the motion the vote was (4) yes and (1) abstention by Comm. Bamba.

4.2.4 Resolution 2017-34 Relative to Phase III Renewables with Energy Storage

GPA intends to obtain a contract(s) for renewable energy from Solar PV developed on leased Navy properties located on the South Finagayan on Route 3 and (4) sites within Naval Base Guam. The contracts will require all

energy to be stored and delivered to GPA as request (i.e. during evening hours) and minimize intermittency impact to the GPA system. GPA intends to issue a Multistep Bid for an energy price for delivered renewable energy. The anticipated funding source for this project is LEAC.

The following is a projected bid and construction schedules.

Task	Days	Start	End
Bid Schedule Milestones			
Announce	0	10-5-17 (Thu)	10-5-17 (Thu)
Bid Proposals Due	**0**	**12-11-17 (Mon)**	**12-11-17 (Mon)**
STEP 1: Technical Evaluation	21	12-11-17 (Mon)	1-1-18 (Mon)
STEP 2: Price Bid Evaluation	14	1-22-18 (Mon)	2-5-18 (Mon)
Contract Negotiation	14	2-19-18 (Mon)	3-5-18 (Mon)
CCU Worksession (2nd Wed)	0	3-15-18 (Thu)	3-15-18 (Thu)
CCU Approval (4th Tues)	0	3-27-18 (Tue)	3-27-18 (Tue)
PUC Approval (Last Thurs)	0	5-31-18 (Thu)	5-31-18 (Thu)

Solar Construction Milestones (Estimated)			
Contract Signing		6-14-18 (Thu)	6-14-18 (Thu)
Engineering / Procurement	480	6-14-18 (Thu)	1-2-19 (Wed)
Construction	480	1-2-19 (Wed)	4-26-20 (Sun)
Commissioning	31	4-26-20 (Sun)	5-27-20 (Wed)

Comm. Sanchez motioned to approve Resolution 2017-34; Comm. Santos seconded. There was no further discussion or objection and the motion passed.

5. OLD BUSINESS – None

6. ANNOUNCEMENTS

6.1 Next CCU Meetings: GPA Work Session: Sept.20; GWA Work Session: Sept 21; CCU Meeting: Sept. 26

The Chairman announced that the next meeting would be for GPA, Sept. 20 and GWA on Sept. 21 and CCU meeting on Sept. 26.

Commissioner Sanchez reminded the Chairman about amending work session meeting time and the Chairman apologized for not bringing the matter up earlier. He asked the Commission for their consideration to move the work session meeting time from 11:30 to 4 p.m. to accommodate Comm. Guthertz who teaches a class at Academy of Our Lady of Guam. She said it is difficult for her to get away from class. In addition, Comm. Sanchez added that since we are making this time change would the Commission consider changing the meeting dates from 3rd week Wed/Thurs. to 3rd week, Tues/Thurs. There was no objection by anyone and it was decided to move the meeting time and days accordingly effective with the September 2017. The chairman added he would send everyone the firm dates by email.

7. ADJOURNMENT

There was no further business to bring before the Commission and the meeting was adjourned at 7:27 p.m.

\\s\\
bls

Attested:

_____ _____

JOSEPH T. DUENAS, Chairman J. GEORGE BAMBA, Secretary

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

TO: **Consolidated Commission on Utilities**

FROM: **General Manager**

DATE: **September 26, 2017**

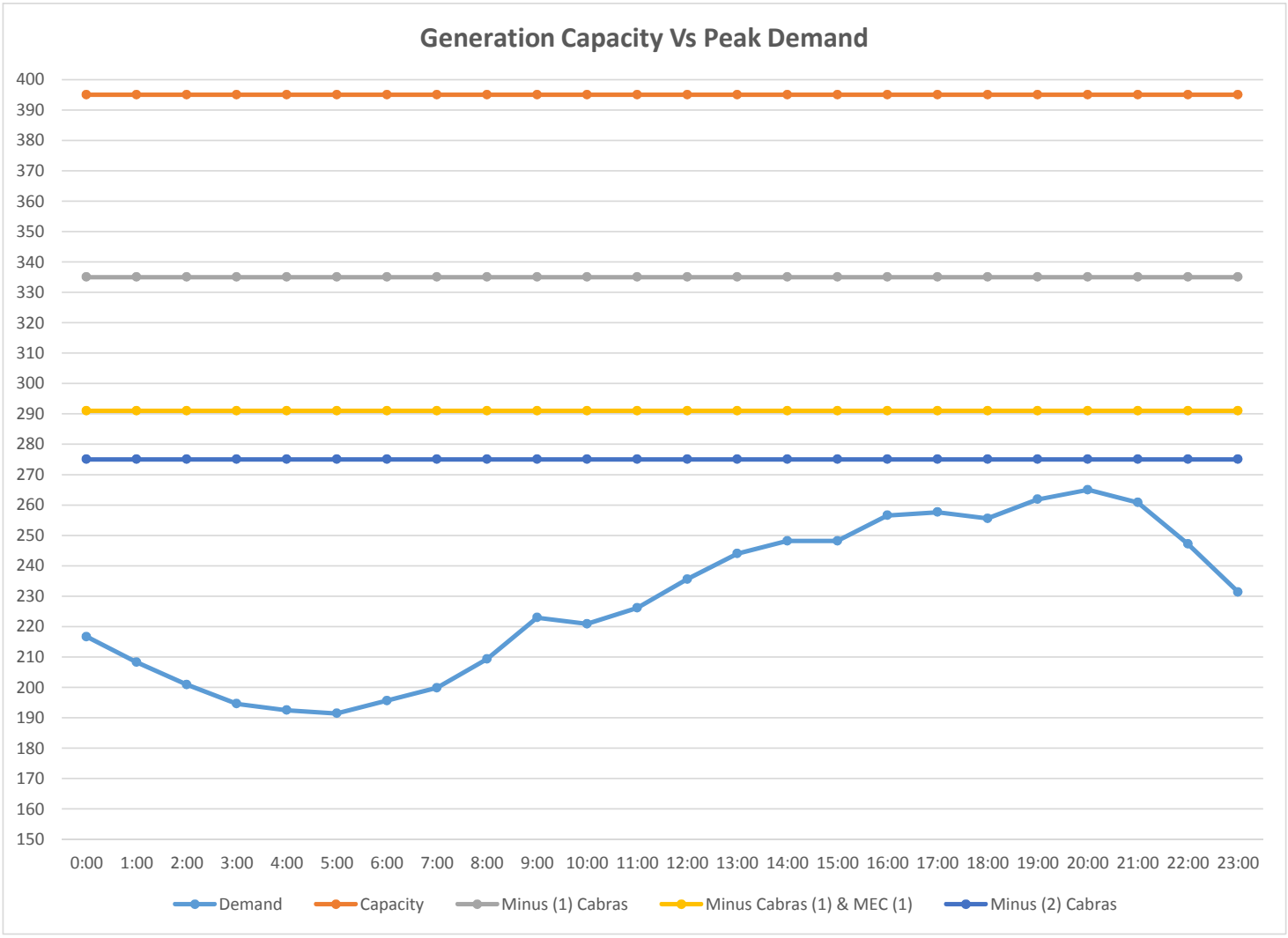
SUBJECT: **General Manager's Report**

1. Generation System Update:

- Once Cabras #1 is cleared to 50 MW capacity Central Maintenance is working on repairing 1B Circulating Water Pump and expects to complete repairs this week. Unit will be cleared for 60MW at that time.
- Cabras #2 was limited to 42 MW to minimize risk of a boiler tube leak. Now that the Cabras 1 overhaul is completed, unit will be tested for 60 MW by next week.
- The following table and graph projects our reserve level for October 2017. The system reserves could cover the loss of the two largest units at the anticipated peak demand of 265 MW for October.

Generation Capacity Summary:

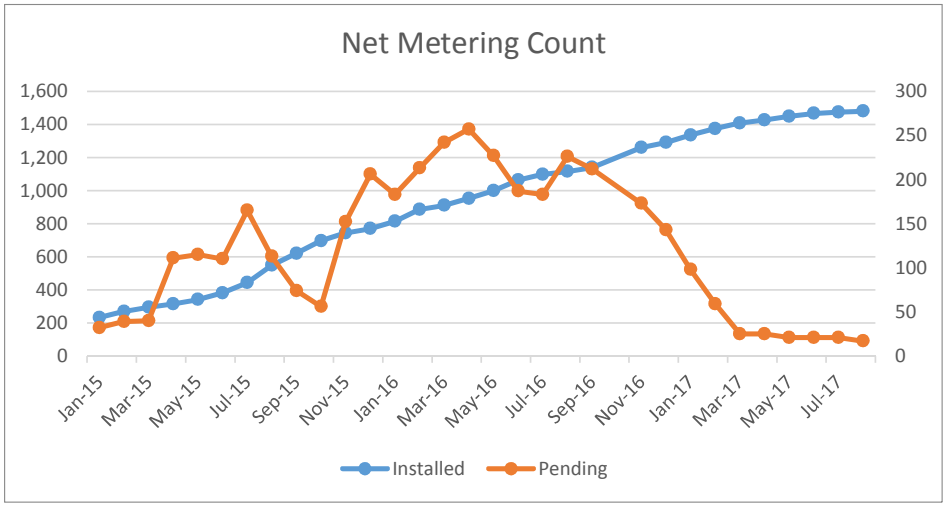
	October, 2017 Reserve
Generating Units:	
CABRAS 1	60
CABRAS 2	60
MEC 8	44
MEC 9	44
AGGREKO	38
MEDIUM SPEED DIESELS (8 Units)	32
YIGO CT	20
MACHECHE CT	20
TEMES CT	39
DEDEDO CT1	20
DEDEDO CT2	20
AVAILABLE CAPACITY	**397**
EXPECTED PEAK DEMAND (Highest to date in CY 2017 was 261 MW)	**265**
GPA SYSTEM RESERVE (Greater than two largest units)	**132**

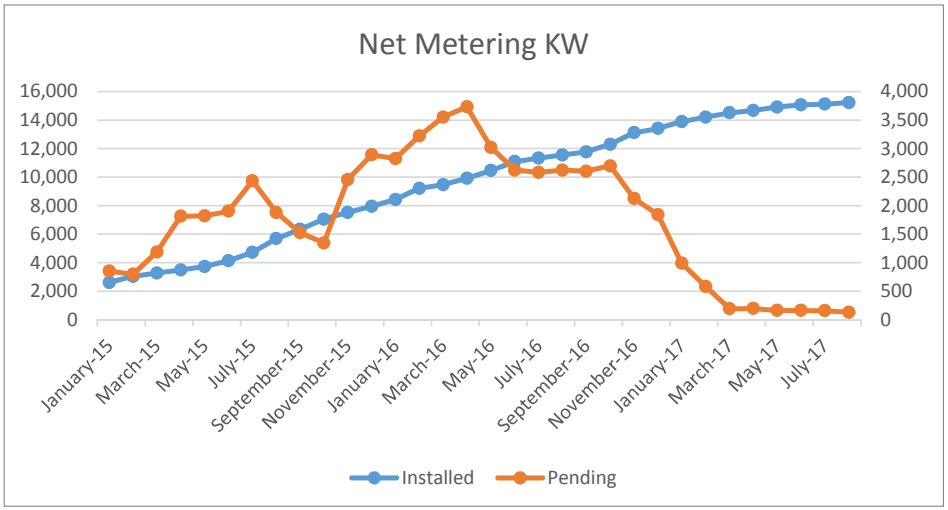

Generation Capacity Vs Peak Demand
400
390
380
370
360
350
340
330
320
310
300
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
0:00 1:00 2:00 3:00 4:00 5:00 6:00 7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00
Demand
Capacity
Minus (1) Cabras
Minus Cabras (1) & MEC (1)
Minus (2) Cabras

2. Net metering Summary Ending August 2017:

Description:	**Count**	**Kw**
Active	**1,480**	**15,226**
Pending	17	129
Totals:	1,497	15,355

Service:	**Count**	**KW**	**Kw/Customer**
Residential	1,403	12,574	9.0
Others	77	2,652	34.4
Total:	1,480	15,226	10.3
% Residential	**94.8%**	**82.6%**	
Estimated 12 Months Revenue Impact:	**$2,828,835**		





3. Renewable Energy Production Summary Thru August 2017:

Energy Production Source:	Kwh	Oil Barrels Avoided	Fuel Cost Avoided
NRG Total Production beginning Oct 2015	94,240,300	157,571	$8,666,427
Net Metering Estimated Production beginning Jan 2015	43,993,536	73,558	$4,045,687
Wind Power Production beginning Jan 2016	710,020	1,187	$65,294
Renewables Total:	**138,943,856**	**232,317**	**$12,777,408**
System Heat Rate Kwh/Gal	14.2		
System Fuel $/Bbl	$55.00		

4. **Demand Side Management (DSM) Program:**



5. **Phase II Renewables:** GPA has provided the OPA with documents required for protest. The OPA has set up the hearing calendar for October 24th to 26th. The OPA plans to render a decision 30 days after.

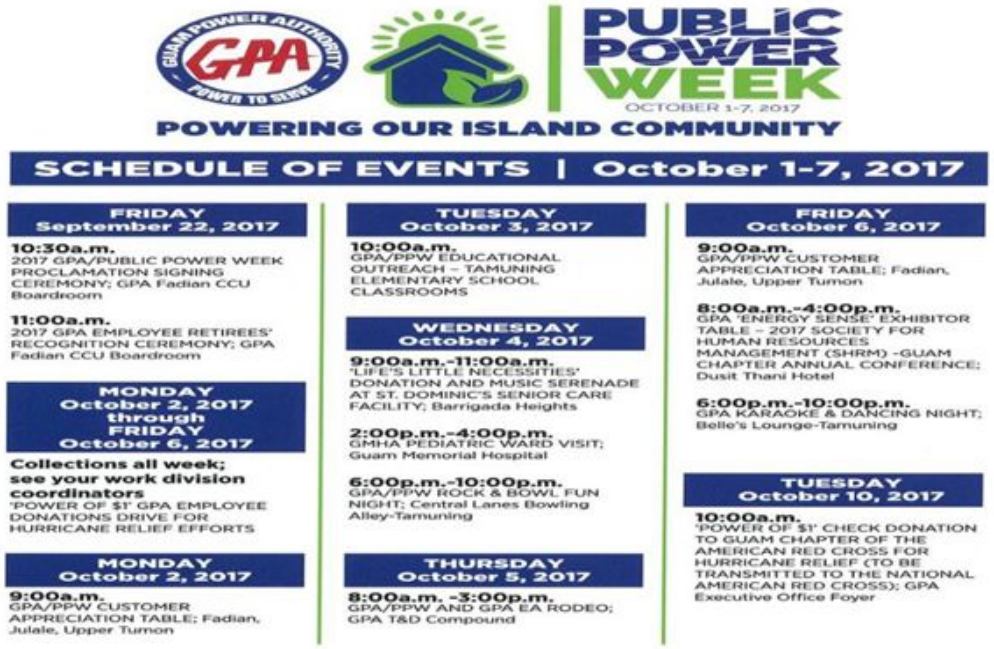
6. **Status of Standby Generators for GWA assets:** As of August 28, 2017, the average reliability for the standby generator system is at 97% (see below). GPA and GWA are procuring several more generators in addition to replacing older units in the system.

Water Wells Summary:				
Sector	**Asset Count**	**With Generator**	**Available**	**% Availability**
Northern	69	68	68	
Central	34	33	33	
South Booster Pumps	15	15	15	
Totals:	**118**	**116**	**116**	**100.0%**

Wastewater Summary:				
Sector	**Asset Count**	**With Generator**	**Available**	**% Availability**
Northern	25	25	23	
Central	33	28	28	
South	32	32	28	
Totals:	**90**	**85**	**79**	**92.9%**

All Assets Summary:				
Sector	**Asset Count**	**With Generator**	**Available**	**% Availability**
Northern	94	93	91	
Central	67	61	61	
South	47	47	43	
Totals:	**208**	**201**	**195**	**97.0%**

7. Public Power Week: October 1 – 7, 2017



8. PUC Agenda for September 28, 2017:

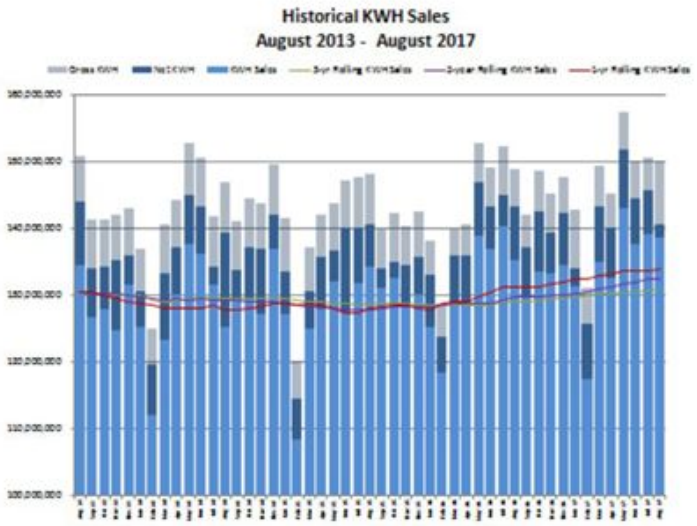
- GPA Docket 17-22, GPA Petition to Approve FY2018 CIP Ceiling Cap
- GPA Docket 17-21, GPA Petition for Approving the Procurement of Phase III Renewable Acquisition
- GPA Docket 17-18, GPA Petition for Approving the Procurement for Supply of Diesel Fuel Oil
- GPA Docket 17-23, GPA Petition to Approve the Contract with Tristar Terminals Guam, Inc. for Lease of an Additional Storage Tank for Diesel Fuel
- GPA Docket 17-24, GPA Filing of FY2018-2020 Construction Budget [Informational Filing]
- GPA Docket 17-20, GPA Petition to Approve a Bond Issuance to Refinance a Portion of the Outstanding Revenue Bond

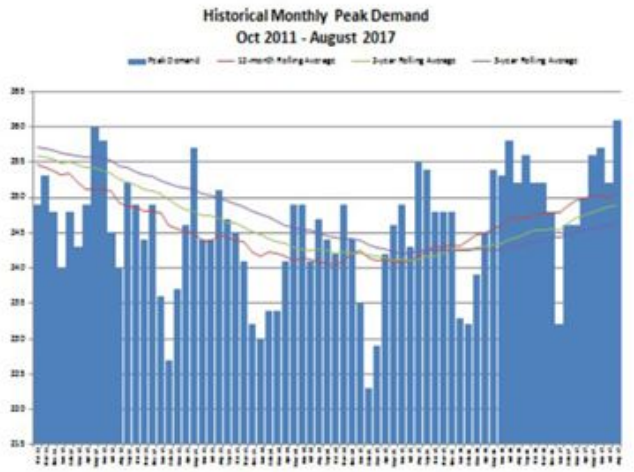
9. Presentations on New Power Plant: I am schedule to present as follows:

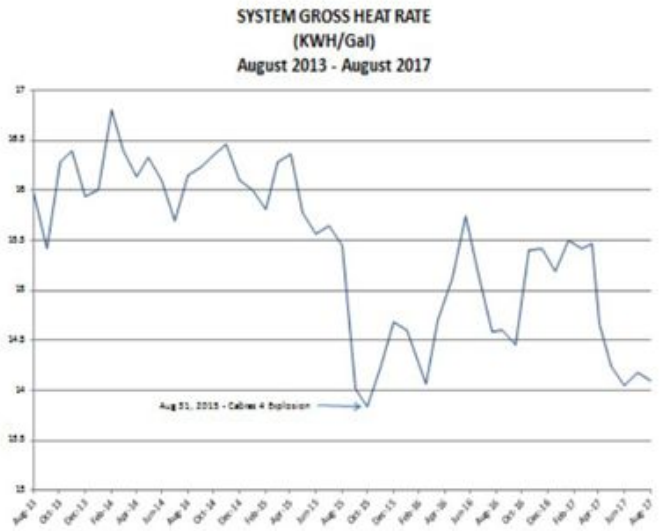
- Guam Contractor's Association, September 20th
- Chamber of Commerce, September 27th
- GHRA Membership, November 9th

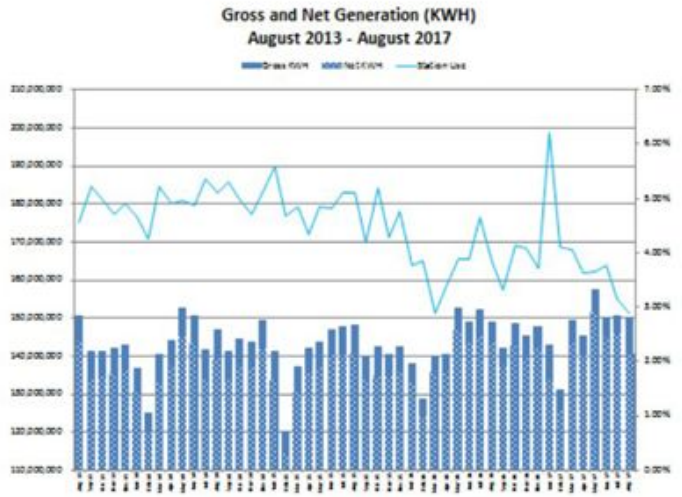
10. Key Performance Indicators: The following pages provide updated information thru August 2017.

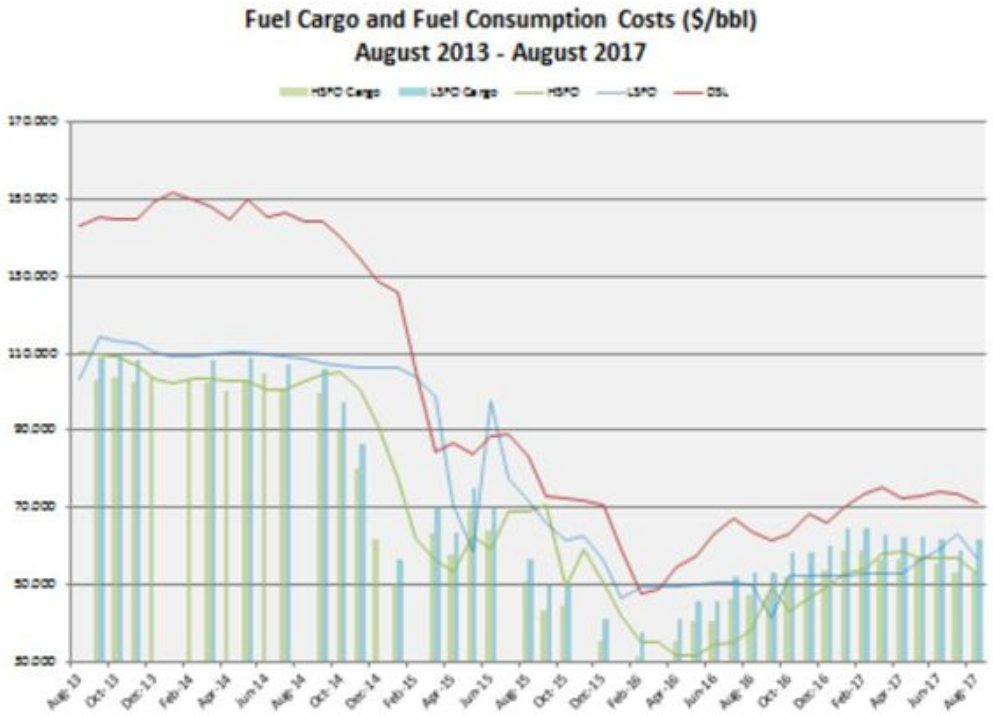
John M. Benavente, P.E.


Historical KWH Sales
August 2013 - August 2017


Historical Monthly Peak Demand
Oct 2011 - August 2017


SYSTEM GROSS HEAT RATE
(KWH/Gal)
August 2013 - August 2017
Aug 31, 2015 - Calpine 4 Explosion


Gross and Net Generation (KWH)
August 2013 - August 2017


Fuel Cargo and Fuel Consumption Costs ($/bbl)
August 2013 - August 2017
HSFO Cargo
LSFO Cargo
HSFO
LSFO
DSL
170.000
150.000
130.000
110.000
90.000
70.000
50.000
30.000
Aug-13
Oct-13
Dec-13
Feb-14
Apr-14
Jun-14
Aug-14
Oct-14
Dec-14
Feb-15
Apr-15
Jun-15
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Aug-17

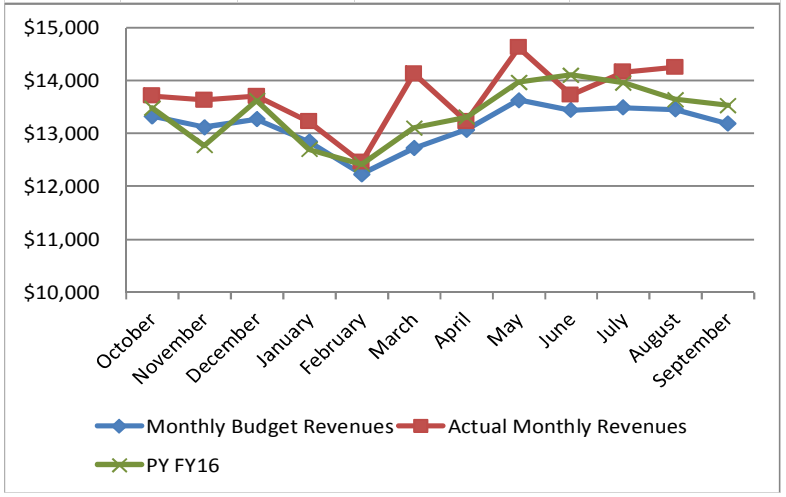
August 2017 Monthly Financial Highlight

- Base revenue sales and Mwh sales are better than budget for August.

Base Revenue Through August 31, 2017

$000	Monthly Budget Revenues	Actual Monthly Revenues	Variance		PY FY16	CY vs PY Variance	
October	$ 13,320	$ 13,702	$ 383	↑	$ 13,481	$ 221	↑
November	13,114	13,622	$ 509	↑	12,769	$ 853	↑
December	13,265	13,695	$ 430	↑	13,617	$ 78	↑
January	12,838	13,220	$ 382	↑	12,694	$ 526	↑
February	12,226	12,454	$ 228	↑	12,415	$ 39	↑
March	12,720	14,123	$ 1,403	↑	13,103	$ 1,020	↑
April	13,066	13,224	$ 158	↑	13,300	$ (76)	↓
May	13,624	14,617	$ 993	↑	13,963	$ 654	↑
June	13,438	13,722	$ 283	↑	14,098	$ (377)	↓
July	13,483	14,151	$ 668	↑	13,953	$ 198	↑
August	13,447	14,244	$ 797	↑	13,639	$ 606	↑
September	13,179				13,525		
Total	**$ 157,720**	**$ 150,775**	**$ 6,234**		**$ 160,557**	**$ 3,743**	

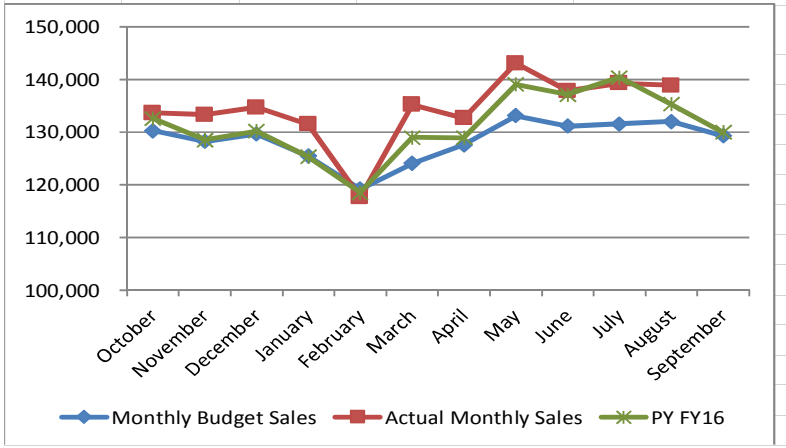
Base Rate Revenue $000



MWH sales Through August 31, 2017

mwh	Monthly Budget Sales	Actual Monthly Sales	Variance		PY FY16	CY vs PY Variance	
October	130,212	133,620	3,408	↑	132,517	1,103	↑
November	128,213	133,235	5,022	↑	128,470	4,765	↑
December	129,585	134,634	5,048	↑	130,157	4,477	↑
January	125,428	131,461	6,032	↑	125,264	6,196	↑
February	119,112	117,617	(1,494)	↓	118,483	(865)	↓
March	123,983	135,131	11,149	↑	128,934	6,197	↑
April	127,578	132,587	5,009	↑	128,910	3,677	↑
May	133,054	143,013	9,959	↑	138,989	4,024	↑
June	131,073	137,777	6,704	↑	137,074	703	↑
July	131,526	139,227	7,700	↑	140,334	(1,107)	↓
August	131,966	138,797	6,831	↑	135,275	3,522	↑
September	129,238				129,932		
Total	**1,540,970**	**1,477,100**	**65,368**		**1,574,340**	**32,692**	

MWh Sales

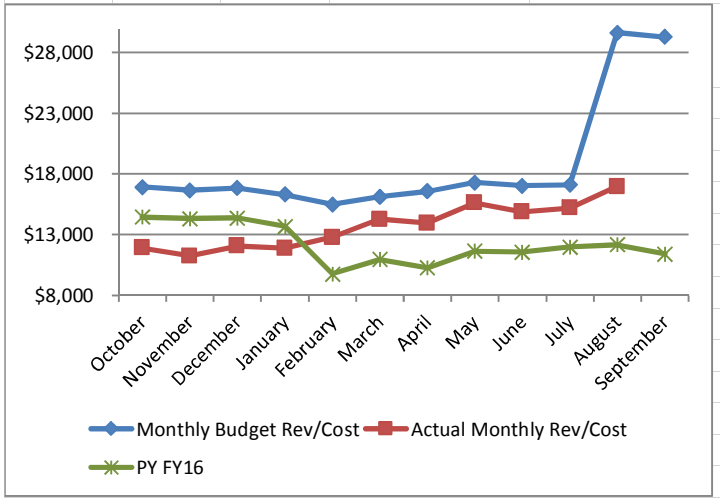


August 2017 Monthly Financial Highlight (Continued)

Fuel Revenue Through August 31, 2017

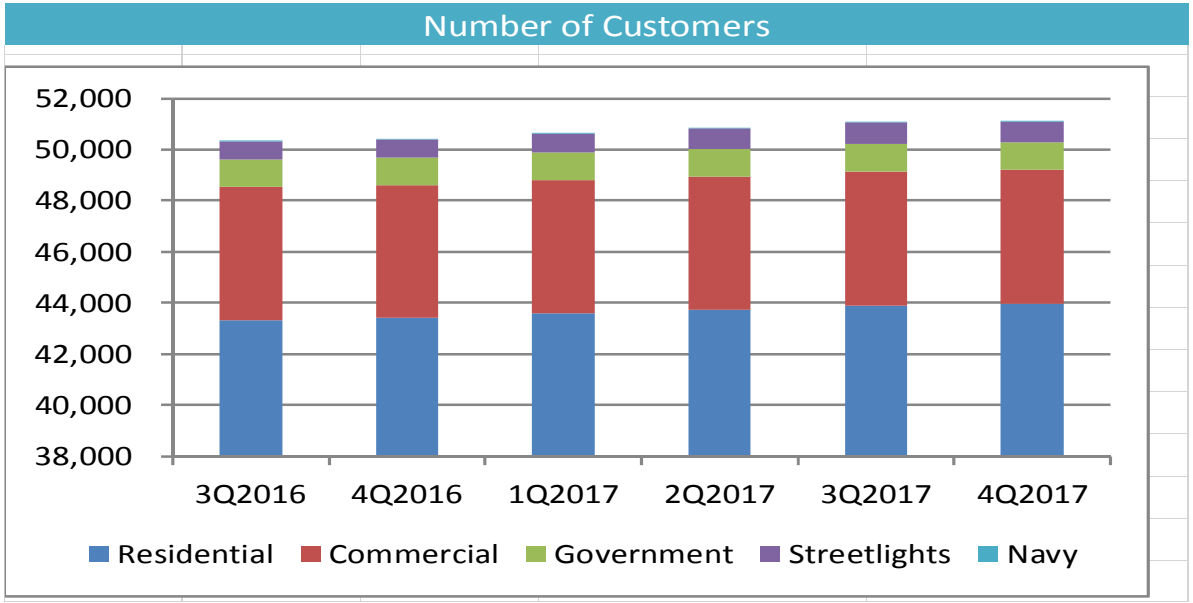
$000	Monthly Budget Rev/Cost	Actual Monthly Rev/Cost	Variance		PY FY16	CY vs PY Variance	
October	$ 16,901	$ 11,894	$ (5,008)	↓	$ 14,443	$ (2,549)	↓
November	16,642	11,215	$ (5,427)	↓	14,306	$ (3,091)	↓
December	16,820	12,036	$ (4,783)	↓	14,349	$ (2,313)	↓
January	16,280	11,867	$ (4,413)	↓	13,663	$ (1,796)	↓
February	15,460	12,751	(2,709)	↓	9,739	3,012	↑
March	16,093	14,248	(1,845)	↓	10,924	3,324	↑
April	16,559	13,940	(2,619)	↓	10,256	3,684	↑
May	17,270	15,596	(1,674)	↓	11,637	3,959	↑
June	17,013	14,859	(2,154)	↓	11,536	3,323	↑
July	17,072	15,175	(1,897)	↓	11,966	3,209	↑
August	29,621	16,947	(12,674)	↓	12,146	4,801	↑
September	29,267				11,375		
Total	**$ 225,000**	**$ 150,529**	**$ (45,203)**		**$ 146,340**	**$ 15,564**	

Fuel Revenue/ Cost $000



August 2017 Monthly Financial Highlight (Continued)

Number of Customers						
	3Q2016	4Q2016	1Q2017	2Q2017	3Q2017	4Q2017
Residential	43,333	43,408	43,582	43,718	43,902	43,969
Commercial	5,195	5,198	5,235	5,236	5,252	5,233
Governmen	1,088	1,089	1,071	1,077	1,071	1,074
Streetlights	689	688	722	800	824	827
Navy	1	1	1	1	1	1
	50,306	50,384	50,611	50,832	51,050	51,104



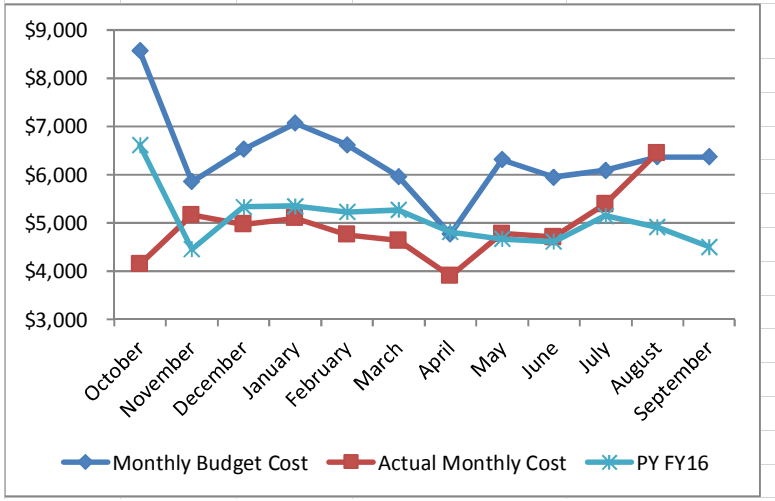
August 2017 Monthly Financial Highlight (Continued)

- Operating Expenses within budget and close to prior year.

O&M Through August 31, 2017

$000	Monthly Budget Cost	Actual Monthly Cost	Variance		PY FY16	CY vs PY Variance	
October	$ 8,564	4,135	4,429	↑	6,605	2,470	↑
November	5,846	5,158	688	↑	4,452	(707)	↓
December	6,520	4,966	1,554	↑	5,330	364	↑
January	7,063	5,092	1,971	↑	5,346	254	↑
February	6,616	4,748	1,868	↑	5,220	471	↑
March	5,958	4,629	1,328	↑	5,267	638	↑
April	4,763	3,892	872	↑	4,806	915	↑
May	6,304	4,772	1,533	↑	4,662	(109)	↓
June	5,943	4,702	1,241	↑	4,608	(94)	↓
July	6,083	5,385	699	↑	5,143	(242)	↓
August	6,366	6,445	(79)	↓	4,906	(1,539)	↓
September	6,366				4,501		
Total	**$ 76,394**	**$ 53,925**	**$ 16,103**		**$ 60,847**	**$ 2,421**	

O&M Cost $000



- DSC greater than target of 1.75

Debt service coverage (DSC) calculation-indenture	2012	2013	2014	2015	2016	YTD August 2017
Senior lien coverage	2.13	3.36	3.16	3.62	3.35	2.91
Aggregate debt service coverage	1.35	1.88	1.98	2.62	3.35	2.91
Debt service coverage (DSC) calculation-IPP as O&M						
Senior lien coverage	1.29	2.16	2.25	2.56	2.52	2.05
Aggregate debt service coverage	0.82	1.21	1.41	1.85	2.52	2.05

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

GUAM POWER AUTHORITY
FINANCIAL STATEMENT OVERVIEW
August 2017

Attached are the financial statements and supporting schedules for the month and fiscal year ended August 31, 2017.

Summary
The increase in net assets for the month ended was $0.2 million as compared to the anticipated net decrease of $47 thousand projected at the beginning of the year. The total kWh sales for the month were 5.18% more than projected and non-fuel revenues were $0.8 million more than the estimated amount. O & M expenses for the month were $6.4million which was in line with our projections for the month. Other expenses for the month such as interest expense, IPP costs, (net of interest income and other income) totaled to $4.0 million, which was right in line with the projected amount as well. There were no other significant departures from the budget during the period.

Analysis

Description	**Previous Month**	**Current Month**	**Target**
Quick Ratio	1.77	2.02	2
Days in Receivables	41	41	52
Days in Payables	45	29	30
LEAC (Over)/Under Recovery Balance -YTD	$14,050,504	$15,640,990	$11,469,198
T&D Losses	4.92%	4.96%	7.00%
Debt Service Coverage	2.10	2.05	1.75
Long-term equity ratio	13%	13%	30 – 40%
Days in Cash	200	183	60

The Quick Ratio has been a challenge for GPA historically. However, over the last two fiscal years, the influx of cash has continued to improve this ratio. GPA has current obligations of approximately $78 million and approximately $157 million in cash and current receivables. The increase in cash is attributable to the receipt of $34M in insurance proceeds during the fiscal year. Debt Service Coverage ratio is calculated using the methodology in use before the Fiscal Year 2002 change in accounting practice.

Financial Statement
August 2017
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
August 31, 2017 and September 30, 2016

	Unaudited August 2017	Unaudited September 2016	Change from Sept 30 2016
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES			
Current assets:			
Cash and cash equivalents:			
Held by trustee for restricted purposes:			
Interest and principal funds	$ 15,317,127	$ 16,005,063	$ (687,936)
Bond indenture funds	59,902,463	69,821,815	(9,919,352)
Held by Guam Power Authority:			
Bond indenture funds	121,157,974	126,992,587	(5,834,613)
Self insurance fund-restricted	19,249,570	19,506,796	(257,226)
Energy sense fund	1,158,432	1,646,041	(487,609)
Total cash and cash equivalents	216,785,566	233,972,302	(17,186,736)
Accounts receivable, net	35,431,066	62,635,764	(27,204,698)
Total current receivables	35,431,066	62,635,764	(27,204,698)
Materials and supplies inventory	12,160,619	13,555,719	(1,395,100)
Fuel inventory	42,728,426	31,326,367	11,402,059
Prepaid expenses	1,624,926	754,024	870,902
Total current assets	308,730,603	342,244,176	(33,513,573)
Utility plant, at cost:			
Electric plant in service	1,024,482,769	990,594,593	33,888,176
Construction work in progress	22,839,408	17,206,429	5,632,979
Total	1,047,322,177	1,007,801,022	39,521,155
Less: Accumulated depreciation	(562,455,299)	(540,262,575)	(22,192,724)
Total utility plant	484,866,878	467,538,447	17,328,431
Other non-current assets:			
Investment - bond reserve funds held by trustee	48,570,947	48,550,887	20,060
Unamortized debt issuance costs	4,298,913	4,646,601	(347,688)
Total other non-current assets	52,869,860	53,197,488	(327,628)
Total assets	846,467,341	862,980,111	(16,512,770)
Deferred outflow of resources:			
Deferred fuel revenue	15,640,990	1,492,325	14,148,665
Unamortized loss on debt refunding	11,180,092	12,324,400	(1,144,308)
Pension	8,168,718	8,168,718	0
Unamortized forward delivery contract costs	650,638	796,718	(146,080)
Total deferred outflows of resources	35,640,438	22,782,161	12,858,277
	$ 882,107,779	$ 885,762,272	$ (3,654,493)

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)
Statement of Net Position, Continued
August 31, 2017 and September 30, 2016

	Unaudited August 2017	Unaudited September 2016	Change from Sept 30 2016
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION			
Current liabilities:			
Current maturities of long-term debt	$ 1,780,000	$ 115,000	$ 1,665,000
Current obligations under capital leases	16,737,242	16,737,242	0
Accounts payable			
Operations	29,009,356	24,622,615	4,386,741
Others	5,513,725	23,012,732	(17,499,007)
Accrued payroll and employees' benefits	1,399,835	1,533,906	(134,071)
Current portion of employees' annual leave	2,417,253	2,405,799	11,454
Interest payable	12,677,817	15,146,696	(2,468,879)
Customer deposits	8,315,583	8,381,571	(65,988)
Total current liabilities	77,850,811	91,955,561	(14,104,750)
Regulatory liabilities:			
Provision for self insurance	19,550,977	19,550,977	0
Total regulatory liabilities	19,550,977	19,550,977	0
Long term debt, net of current maturities	590,794,605	595,057,769	(4,263,164)
Obligations under capital leases, net of current portion	32,532,527	22,872,720	9,659,807
Net Pension liability	65,324,970	71,049,220	(5,724,250)
DCRS sick leave liability	3,436,738	3,436,738	0
Employees' annual leave net of current portion	806,762	806,762	0
Customer advances for construction	349,950	319,321	30,629
Total liabilities	790,647,340	805,049,068	(14,401,728)
Deferred inflows of resources:			
Unearned forward delivery contract revenue	2,384,739	2,920,088	(535,349)
Pension	732,788	732,788	0
Total deferred inflows of resources	3,117,527	3,652,876	(535,349)
Commitments and contigencies			
Net Position:			
Net investment in capital assets	(48,854,036)	(49,190,903)	336,868
Restricted	10,469,328	4,645,344	5,823,984
Unrestricted	126,727,619	121,605,887	5,121,731
Total net position	88,342,911	77,060,328	11,282,583
	$ 882,107,779	$ 885,762,272	$ (3,654,493)

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM
Statement of Revenues, Expenses and Changes in Net Assets

	August 31			Eleven Months Ended August 31		
	Unaudited 2017	Unaudited 2016	% of change Inc (dec)	Unaudited 2017	Unaudited 2016	% of change Inc (dec)
Revenues						
Sales of electricity	$ 31,191,516	$ 25,784,609	21	$ 301,304,326	$ 281,996,861	7
Miscellaneous	293,607	201,628	46	2,141,540	2,221,006	(4)
Total	31,485,123	25,986,237	21	303,445,866	284,217,867	7
Bad debt expense	(93,433)	(193,735)	(52)	(987,361)	(1,314,537)	(25)
Total revenues	31,391,690	25,792,502	22	302,458,505	282,903,330	7
Operating and maintenance expenses						
Production fuel	16,947,305	12,145,940	40	150,529,481	134,965,368	12
Other production	2,066,709	322,268	541	14,554,141	14,123,928	3
	19,014,014	12,468,208	52	165,083,622	149,089,296	11
Depreciation	3,718,993	3,727,939	(0)	43,460,200	38,243,546	14
Energy conversion cost	1,790,599	1,522,197	18	18,166,067	15,360,104	18
Transmission & distribution	1,058,314	1,105,023	(4)	10,763,156	10,224,095	5
Customer accounting	419,085	338,526	24	3,828,180	4,717,715	(19)
Administrative & general	2,807,312	2,152,427	30	23,791,755	25,965,751	(8)
Total operating and maintenance expenses	28,808,317	21,314,320	35	265,092,980	243,600,507	9
Operating income	2,583,373	4,478,182	(42)	37,365,525	39,302,823	(5)
Other income (expenses)						
Interest income	166,469	50,107	232	1,375,513	842,017	63
Interest expense and amortization	(2,765,685)	(2,836,984)	(3)	(31,082,641)	(31,909,189)	(3)
Bond issuance costs	76,827	68,617	12	845,097	754,787	12
Assets written off	0	0		0	0	
Allowance for funds used during construction	273,825	323,642	(15)	3,403,308	3,813,786	(11)
Other expense	(233,550)	(4,291)	5,343	(768,927)	(1,692,694)	(55)
Total other income (expenses)	(2,482,114)	(2,398,909)	3	(26,227,650)	(28,191,293)	(7)
Income (loss) before capital contributions	101,259	2,079,273	(95)	11,137,875	11,111,530	0
Capital contributions	101,406	0	0	144,712	1,734,815	(92)
Increase (decrease) in net assets	202,665	2,079,273	(90)	11,282,587	12,846,345	(12)
Total net assets at beginning of period (restated)	88,140,251	92,394,847	(5)	77,060,329	81,627,775	(6)
Total net assets at end of period	$ 88,342,916	$ 94,474,120	(6)	$ 88,342,916	$ 94,474,120	(6)

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)
Statements of Cash Flows
Period Ended August 31, 2017

	Month Ended 8/31/2017	YTD Ended 8/31/2017
Increase(decrease) in cash and cash equivalents		
Cash flows from operating activities:		
Cash received from customers	$ 30,526,284	$ 329,710,359
Cash payments to suppliers and employees for goods and services	36,064,040	264,034,447
Net cash provided by operating activities	(5,537,756)	65,675,911
Cash flows from investing activities:		
Interest and dividends on investments and bank accounts	166,469	1,375,513
Net cash provided by investing activities	166,469	1,375,513
Cash flows from non-capital financing activities		
Interest paid on short term debt	(8,201)	(71,121)
Provision for self insurance funds	-	257,226
Net cash provided by noncapital financing activities	(8,201)	186,105
Cash flows from capital and related financing activities		
Acquisition of utility plant	348,996	(60,788,626)
Principal paid on bonds and other long-term debt	-	(115,000)
Interest paid on bonds(net of capitalized interest)	273,825	(25,350,817)
Interest paid on capital lease obligations	(369,652)	(4,726,273)
Interest & principal funds held by trustee	(2,545,258)	687,936
Reserve funds held by trustee	(5,915)	(20,060)
Bond funds held by trustee	1,724,631	9,919,352
Principal payment on capital lease obligations	(1,961,747)	9,659,807
Grant from DOI/FEMA	101,406	144,712
Debt issuance costs/loss on defeasance	(225,743)	(2,483,173)
Net cash provided by (used in) capital and related financing activities	(2,659,456)	(73,072,142)
Net (decrease) increase in cash and cash equivalents	(8,038,944)	(5,834,613)
Cash and cash equivalents, beginning	129,196,918	126,992,587
Cash and cash equivalents-Funds held by GPA, August 31, 2017	**$ 121,157,974**	**$ 121,157,974**

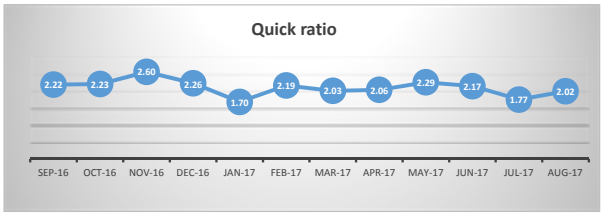
GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)
Statements of Cash Flows, continued
Period Ended August 31, 2017

	Month Ended 8/31/2017	YTD Ended 8/31/2017
Reconciliation of operating earnings to net cash provided by operating activities:		
Operating earnings net of depreciation expense and excluding interest income	$ 2,583,373	$ 37,365,525
Adjustments to reconcile operating earnings to net cash provided by operating activities:		
Depreciation and amortization	3,718,993	43,460,200
Other expense	(156,723)	76,170
(Increase) decrease in assets:		
Accounts receivable	(868,165)	27,204,698
Materials and inventory	158,407	1,395,100
Fuel inventory	7,595,617	(11,402,059)
Prepaid expenses	948,326	(870,902)
Unamortized debt issuance cost	31,608	347,688
Deferred fuel revenue	(1,590,486)	(14,148,665)
Unamortized loss on debt refunding	104,028	1,144,308
Unamortized forward delivery contract costs	13,280	146,080
Increase (decrease) in liabilities:		
Accounts payable-operations	(11,384,895)	4,386,741
Accounts payable-others	(6,569,711)	(17,011,398)
Accrued payroll and employees' benefits	385,911	(134,071)
Net pension liability	(477,785)	(5,724,250)
Employees' annual leave	(28,734)	11,454
Customers deposits	47,868	(65,988)
Customer advances for construction	-	30,629
Unearned forward delivery contract revenue	(48,668)	(535,349)
Net cash provided by operating activities	**$ (5,537,756)**	**$ 65,675,911**

Guam Power Authority
Financial Analysis
August 31, 2017

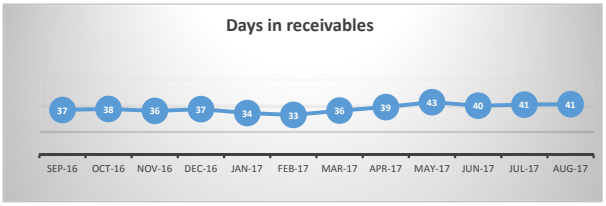
Quick Ratio

A	Reserve Funds Held by GPA	121,157,974
B	Current Accounts Receivable	36,041,244
C	Total Cash and A/R (A+B)	157,199,218
D	Total Current Liabilities	77,850,811
E	**Quick Ratio (F/G)**	**2.02**



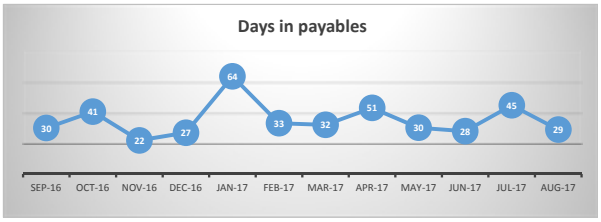
Days in Receivables

A	FY 16 Moving 12 Mos.-Actual	317,390,300
B	No. of Days	365
C	Average Revenues per day (A/B)	869,562
D	Current Accounts Receivable	36,041,244
E	**Days in Receivables (D/C)**	**41**



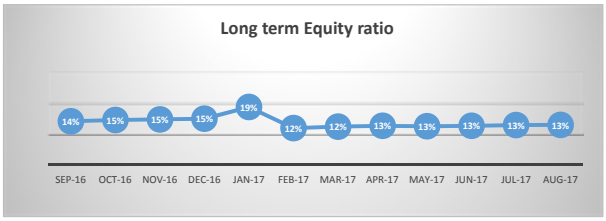
Days in Payables

A	FY 16 Moving 12 Months-Actual	432,011,537
B	No. of Days	365
C	Average Payables per day (A/B)	1,183,593
D	Current Accounts Payables	34,523,080
E	**Days in Payables (D/C)**	**29**



Long term equity ratio

A	Equity	$	88,342,911.00
B	Total Long term Liability	$	590,634,117.00
C	Total Equity and liability	$	678,977,028.00
D	**Long term equity ratio (A/C)**		**13%**

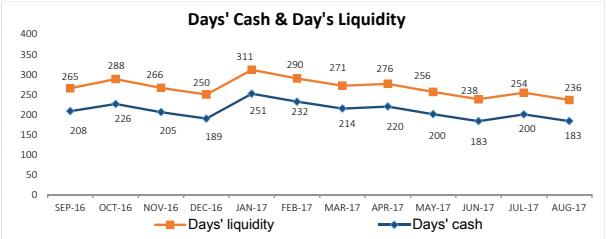


Days cash on hand

A	Unresctricted cash & cash equivalents	121,158
B	No. of Days -YTD	335
C	A x B	40,587,921
D	Total Operating expenses excluding depreciation	221,633
E	**Days cash on hand**	**183**

Days' Liquidity

A	Unresctricted cash , cash equivalents & revolving Credit	156,158
B	No. of Days -YTD	335
C	A x B	52,312,921
D	Total Operating expenses excluding depreciation	221,633
E	**Days liquidity**	**236**



GPA 302
18-Sep-17

GUAM POWER AUTHORITY
ACCRUED REVENUE
AUGUST 2017

	FOR THE MONTH ENDED AUGUST		ELEVEN MONTHS ENDED AUGUST	
	2017	2016	2017	2016
KWH SALES:				
Residential	44,434,719	40,605,742	464,844,586	444,705,670
Small Gen. Non Demand	7,347,440	6,436,709	76,877,608	73,004,506
Small Gen. Demand	16,488,257	16,356,323	174,541,517	176,041,338
Large General	27,038,013	27,103,703	289,141,197	283,756,713
Independent Power Producer	57,754	77,247	927,238	695,335
Private St. Lights	33,324	52,716	415,876	577,368
Sub-total	95,399,508	90,632,440	1,006,748,022	978,780,930
Government Service:				
Small Non Demand	1,243,487	1,140,666	12,656,139	12,232,208
Small Demand	8,147,386	7,953,405	88,794,234	85,261,858
Large	6,520,699	5,919,733	68,404,520	63,981,384
Street Lighting	877,130	902,068	8,817,604	10,348,145
Sub-total	16,788,702	15,915,871	178,672,497	171,823,595
Total	112,188,210	106,548,311	1,185,420,519	1,150,604,526
U. S. Navy	26,608,721	27,773,666	291,679,581	292,850,501
GRAND TOTAL	138,796,930	134,321,977	1,477,100,100	1,443,455,027
REVENUE:				
Residential	$ 9,762,810	$ 8,147,037	$ 91,714,657	$ 85,072,552
Small Gen. Non Demand	$ 1,902,660	$ 1,609,823	$ 18,256,735	$ 16,942,379
Small Gen. Demand	$ 3,964,157	$ 3,763,072	$ 38,377,244	$ 37,864,962
Large General	$ 6,028,539	$ 5,748,410	$ 58,535,001	$ 56,691,290
Independent Power Producer	$ 14,804	$ 16,160	$ 193,955	$ 145,501
Private St. Lights	$ 25,094	$ 29,843	$ 281,596	$ 318,666
Sub-total	$ 21,698,063	$ 19,314,347	$ 207,359,188	$ 197,035,351
Government Service:				
Small Non Demand	$ 332,325	$ 296,670	$ 3,179,930	$ 3,041,232
Small Demand	$ 2,052,253	$ 1,928,150	$ 20,779,787	$ 19,744,767
Large	$ 1,573,445	$ 1,391,420	$ 15,404,285	$ 14,289,102
Street Lighting	$ 516,047	$ 479,993	$ 5,001,887	$ 4,993,637
Sub-total	$ 4,474,070	$ 4,096,233	$ 44,365,889	$ 42,068,737
Total	$ 26,172,133	$ 23,410,580	$ 251,725,076	$ 239,104,088
U. S. Navy	$ 5,019,382	$ 5,173,691	$ 49,579,251	$ 45,692,435
GRAND TOTAL	$ 31,191,516	$ 28,584,271	$ 301,304,327	$ 284,796,524
NUMBER OF CUSTOMERS:				
Residential	43,969	42,746	43,735	42,601
Small Gen. Non Demand	4,134	4,017	4,127	3,988
Small Gen. Demand	981	1,015	987	1,015
Large General	115	117	116	137
Independent Power Producer	3	2	3	2
Private St. Lights	527	535	525	536
Sub-total	49,729	48,432	49,494	48,279
Government Service:				
Small Non Demand	678	703	682	713
Small Demand	351	339	348	336
Large	45	40	45	44
Street Lighting	297	161	249	168
Sub-total	1,371	1,243	1,324	1,260
Total	51,100	49,675	50,817	49,539
US Navy	1	1	1	1
	51,101	49,676	50,818	49,540

GPA403
18-Sep-17

GUAM POWER AUTHORITY
ACCRUED REVENUE

	TWELVE MONTHS ENDING	AUGUST 2017	JULY 2017	JUNE 2017	MAY 2017	APRIL 2017	MARCH 2017	FEBRUARY 2017	JANUARY 2017	DECEMBER 2016	NOVEMBER 2016	OCTOBER 2016	SEPTEMBER 2016
KWH SALES:													
Residential	506,031,116	44,434,719	45,094,364	45,699,553	46,940,445	42,105,054	40,911,781	35,936,337	39,423,550	41,105,614	40,882,645	42,310,523	41,186,530
Small General Non Demand	83,763,133	7,347,440	7,087,373	7,546,692	7,375,238	6,926,353	6,767,505	6,497,885	6,647,367	6,987,253	6,646,441	7,048,061	6,885,525
Small General Demand	189,282,625	16,488,257	15,839,125	16,853,701	16,415,592	15,638,177	16,300,307	13,890,958	15,535,910	16,033,983	15,504,615	16,040,892	14,741,107
Large General	314,317,706	27,038,013	27,119,633	26,399,095	27,209,329	25,771,823	26,173,462	23,699,969	26,550,140	26,487,608	26,823,315	25,868,811	25,176,509
Private Outdoor Lighting	472,111	33,324	35,412	36,199	31,956	34,275	34,097	32,325	36,736	39,997	52,271	49,285	56,235
Independent Power Producer	989,289	57,754	82,800	93,447	97,039	78,158	83,841	67,797	92,493	96,065	87,525	90,319	62,052
Sub-Total	1,094,855,980	95,399,508	95,258,706	96,628,687	98,069,599	90,553,840	90,270,993	80,125,270	88,286,197	90,750,519	89,996,812	91,407,891	88,107,957
Government Service:	1,006,748,022												
Small Non Demand	13,820,806	1,243,487	1,254,979	1,154,625	1,242,514	1,118,738	1,123,675	996,603	1,079,470	1,121,641	1,122,985	1,197,422	1,164,666
Small Demand	96,652,764	8,147,386	7,962,644	7,847,651	8,507,100	7,890,703	8,171,598	7,382,544	7,897,069	8,060,205	8,436,888	8,490,446	7,858,530
Large	74,208,667	6,520,699	6,219,351	6,043,966	6,712,069	6,145,212	6,340,287	5,654,767	6,032,854	6,238,617	6,094,610	6,402,088	5,804,148
Street Lighting (Agencies)	9,813,217	877,130	638,971	843,815	771,506	720,057	829,968	707,509	539,658	994,072	997,687	897,232	995,613
Sub-Total	194,495,454	16,788,702	16,075,944	15,890,058	17,233,190	15,874,710	16,465,529	14,741,423	15,549,052	16,414,534	16,652,169	16,987,187	15,822,957
Total	1,289,351,434	112,188,210	111,334,651	112,518,745	115,302,789	106,428,550	106,736,522	94,866,692	103,835,249	107,165,053	106,648,982	108,395,078	103,930,914
U.S. Navy	317,680,407	26,608,721	27,892,205	25,258,344	27,710,121	26,158,807	28,394,970	22,750,741	27,625,278	27,468,943	26,586,150	25,225,302	26,000,826
Grand Total	1,607,031,841	138,796,930	139,226,856	137,777,089	143,012,910	132,587,357	135,131,492	117,617,433	131,460,526	134,633,996	133,235,131	133,620,381	129,931,741
REVENUE:													
Residential	$ 99,207,627	$ 9,762,810	$ 9,056,344	$ 9,109,920	$ 9,464,539	$ 8,447,732	$ 8,255,658	$ 7,648,484	$ 7,213,121	$ 7,527,553	$ 7,455,636	$ 7,772,860	$ 7,492,970
Small General Non Demand	$ 19,779,813	$ 1,902,660	$ 1,709,931	$ 1,790,832	$ 1,782,557	$ 1,661,818	$ 1,647,869	$ 1,650,380	$ 1,468,355	$ 1,572,329	$ 1,481,078	$ 1,588,926	$ 1,523,079
Small General Demand	$ 41,452,843	$ 3,964,157	$ 3,527,191	$ 3,704,661	$ 3,828,208	$ 3,333,389	$ 3,674,304	$ 3,310,305	$ 3,200,532	$ 3,341,792	$ 3,195,499	$ 3,297,206	$ 3,075,598
Large General	$ 63,337,289	$ 6,028,539	$ 5,589,484	$ 5,443,855	$ 5,621,797	$ 5,382,999	$ 5,370,285	$ 5,066,026	$ 4,998,015	$ 5,049,240	$ 5,084,685	$ 4,900,077	$ 4,802,289
Private Outdoor Lighting	$ 310,576	$ 25,094	$ 25,099	$ 25,329	$ 24,432	$ 25,014	$ 25,012	$ 24,793	$ 25,546	$ 25,575	$ 27,645	$ 28,060	$ 28,980
Independent Power Producer	$ 207,527	$ 14,804	$ 17,270	$ 19,157	$ 20,386	$ 16,006	$ 17,451	$ 15,045	$ 18,807	$ 19,759	$ 16,793	$ 18,478	$ 13,572
Sub-Total	$ 224,295,674	$ 21,698,063	$ 19,925,320	$ 20,093,753	$ 20,741,919	$ 18,866,957	$ 18,990,578	$ 17,715,032	$ 16,924,376	$ 17,536,247	$ 17,261,335	$ 17,605,607	$ 16,936,487
Government Service:													
Small Non Demand	$ 3,457,449	$ 332,325	$ 319,135	$ 297,031	$ 313,817	$ 289,279	$ 289,226	$ 258,835	$ 258,411	$ 268,979	$ 268,355	$ 284,537	$ 277,519
Small Demand	$ 22,526,605	$ 2,052,253	$ 1,907,628	$ 1,885,990	$ 1,985,615	$ 1,919,140	$ 1,956,670	$ 1,819,228	$ 1,746,554	$ 1,798,184	$ 1,851,599	$ 1,856,926	$ 1,746,819
Large	$ 16,655,109	$ 1,573,445	$ 1,424,292	$ 1,393,449	$ 1,572,201	$ 1,374,482	$ 1,454,690	$ 1,331,459	$ 1,286,951	$ 1,334,239	$ 1,303,344	$ 1,355,735	$ 1,250,824
Street Lighting (Agencies)	$ 5,433,722	$ 516,047	$ 418,012	$ 451,933	$ 439,403	$ 431,759	$ 447,332	$ 447,721	$ 351,576	$ 548,266	$ 512,699	$ 437,139	$ 431,835
Sub-Total	$ 48,072,886	$ 4,474,070	$ 4,069,066	$ 4,028,403	$ 4,311,036	$ 4,014,660	$ 4,147,918	$ 3,857,244	$ 3,643,492	$ 3,949,668	$ 3,935,996	$ 3,934,337	$ 3,706,997
Total	$ 272,368,560	$ 26,172,133	$ 23,994,386	$ 24,122,156	$ 25,052,955	$ 22,881,617	$ 23,138,496	$ 21,572,276	$ 20,567,868	$ 21,485,915	$ 21,197,330	$ 21,539,944	$ 20,643,484
U.S. Navy	$ 53,835,657	$ 5,019,382	$ 5,331,702	$ 4,458,411	$ 5,160,265	$ 4,283,028	$ 5,232,508	$ 3,632,683	$ 4,519,844	$ 4,245,316	$ 3,640,144	$ 4,055,968	$ 4,256,406
Grand Total	$ 326,204,217	$ 31,191,516	$ 29,326,087	$ 28,580,567	$ 30,213,220	$ 27,164,645	$ 28,371,004	$ 25,204,958	$ 25,087,712	$ 25,731,231	$ 24,837,474	$ 25,595,912	$ 24,899,890
NUMBER OF CUSTOMERS:													
Residential	43,708	43,969	43,866	43,902	43,803	43,807	43,718	43,647	43,710	43,582	43,594	43,487	43,408
Small General Non Demand	4,124	4,134	4,131	4,145	4,130	4,137	4,128	4,119	4,127	4,125	4,110	4,114	4,092
Small General Demand	987	981	984	988	988	988	989	992	994	991	980	985	987
Large General	116	115	116	116	117	115	116	116	116	116	116	115	116
Private Outdoor Lighting	525	527	526	527	530	528	528	527	525	517	519	526	525
Independent Power Producer	3	3	3	3	3	3	3	3	3	3	3	3	3
Sub-Total	49,464	49,729	49,626	49,681	49,571	49,578	49,482	49,404	49,475	49,334	49,322	49,230	49,131
Government Service:													
Small Non Demand	683	678	678	677	684	684	684	682	684	680	683	684	696
Small Demand	348	351	352	349	346	347	348	347	347	346	346	345	348
Large	45	45	45	45	45	45	45	45	45	45	45	45	45
Street Lighting (Agencies)	242	297	297	297	293	290	272	271	211	205	155	155	163
Sub-Total	1,318	1,371	1,372	1,368	1,368	1,366	1,349	1,345	1,287	1,276	1,229	1,229	1,252
Total	50,781	51,100	50,998	51,049	50,939	50,944	50,831	50,749	50,762	50,610	50,551	50,459	50,383
U.S. Navy	1	1	1	1	1	1	1	1	1	1	1	1	1
Grand Total	50,782	51,101	50,999	51,050	50,940	50,945	50,832	50,750	50,763	50,611	50,552	50,460	50,384

GPA303

GUAM POWER AUTHORITY
ACCRUED REVENUE
AUGUST 2017

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	FUEL C/KWH	FUEL AMOUNT
									New Leac $ 0.11772		Old Leac $ 0.105051	
Month												
R Residential	43,969	44,434,719	$ 9,762,810	$ 21.97	$ 21.97	$ 9,762,810	1,010.59	$ 222.04	$ 9.57758	$ 4,255,769	$ 12.39355	$ 5,507,041
G Small Gen. Non Demand	4,134	7,347,440	$ 1,902,660	$ 25.90	$ 25.90	$ 1,902,660	1,777.32	$ 460.25	$ 13.51783	$ 993,214	$ 12.37772	$ 909,446
J Small Gen. Demand	981	16,488,257	$ 3,964,157	$ 24.04	$ 24.04	$ 3,964,157	16,807.60	$ 4,040.93	$ 11.77454	$ 1,941,417	$ 12.26776	$ 2,022,741
P Large General	115	27,038,013	$ 6,028,539	$ 22.30	$ 22.30	$ 6,028,539	235,113.16	$ 52,422.07	$ 10.46665	$ 2,829,975	$ 11.82988	$ 3,198,563
I Independent Power Producer	3	57,754	$ 14,804	$ 25.63	$ 25.63	$ 14,804	19,251.25	$ 4,934.64	$ 14.25481	$ 8,233	$ 11.37802	$ 6,571
H Private St. Lights	527	33,324	$ 25,094	$ 75.30	$ 75.30	$ 25,094	63.23	$ 47.62	$ 63.52938	$ 21,171	$ 11.77180	$ 3,923
Sub-Total	49,729	95,399,508	$ 21,698,063	$ 22.74	$ 22.74	$ 21,698,063	1,918.39	$ 436.33	$ 10.53441	$ 10,049,779	$ 12.21000	$ 11,648,284
Government Service:												
S Small Non Demand	678	1,243,487	$ 332,325	$ 26.73	$ 26.73	$ 332,325	1,834.05	$ 490.16	$ 14.95346	$ 185,944	$ 11.77180	$ 146,381
K Small Demand	351	8,147,386	$ 2,052,253	$ 25.19	$ 25.19	$ 2,052,253	23,211.93	$ 5,846.88	$ 13.41730	$ 1,093,159	$ 11.77180	$ 959,094
L Large	45	6,520,699	$ 1,573,445	$ 24.13	$ 24.13	$ 1,573,445	144,904.42	$ 34,965.43	$ 12.50253	$ 815,252	$ 11.62747	$ 758,192
F Street Lighting (Agencies)	297	877,130	$ 516,047	$ 58.83	$ 58.83	$ 516,047	2,953.30	$ 1,737.53	$ 47.06180	$ 412,793	$ 11.77180	$ 103,254
Sub-Total	1,371	16,788,702	$ 4,474,070	$ 26.65	$ 26.65	$ 4,474,070	12,245.59	$ 3,263.36	$ 14.93355	$ 2,507,149	$ 11.71574	$ 1,966,921
	51,100	112,188,210	$ 26,172,133	$ 49.39	$ 49.39	$ 26,172,133	2,195.46	$ 512.17	$ 11.19273	$ 12,556,928	$ 12.13604	$ 13,615,205
U.S. Navy	1	26,608,721	$ 5,019,382	$ 18.86	$ 18.86	$ 5,019,382			$ 6.34109	$ 1,687,282	$ 12.52259	$ 3,332,100
TOTAL	51,101	138,796,930	$ 31,191,516	$ 22.47	$ 22.47	$ 31,191,516	2,716.13	$ 610.39	$ 10.26263	$ 14,244,210	$ 12.21014	$ 16,947,305
Eleven Months Ended August 2017												
R Residential	43,708	464,844,586	$ 91,714,657	$ 19.73	$ 19.73	$ 91,714,657	10,635.29	$ 2,098.36	$ 9.62202	$ 44,727,423	$ 10.10816	$ 46,987,234
G Small Gen. Non Demand	4,124	76,877,608	$ 18,256,735	$ 23.75	$ 23.75	$ 18,256,735	18,640.01	$ 4,426.59	$ 13.64489	$ 10,489,863	$ 10.10290	$ 7,766,871
J Small Gen. Demand	987	174,541,517	$ 38,377,244	$ 21.99	$ 21.99	$ 38,377,244	176,795.66	$ 38,872.87	$ 11.92057	$ 20,806,339	$ 10.06689	$ 17,570,905
P Large General	116	289,141,197	$ 58,535,001	$ 20.24	$ 20.24	$ 58,535,001	2,496,182.99	$ 505,338.14	$ 10.28922	$ 29,750,388	$ 9.95521	$ 28,784,613
I Independent Power Producer	3	927,238	$ 193,955	$ 20.92	$ 20.92	$ 193,955	309,079.23	$ 64,651.61	$ 11.18300	$ 103,693	$ 9.73448	$ 90,262
H Private St. Lights	525	415,876	$ 281,596	$ 67.71	$ 67.71	$ 281,596	791.52	$ 535.95	$ 57.89545	$ 240,773	$ 9.81615	$ 40,823
Sub-Total	49,464	1,006,748,022	$ 207,359,188	$ 20.60	$ 20.60	$ 207,359,188	20,353.32	$ 4,192.16	$ 10.54072	$ 106,118,479	$ 10.05621	$ 101,240,708
Government Service:												
S Small Non Demand	683	12,656,139	$ 3,179,930	$ 25.13	$ 25.13	$ 3,179,930	18,534.74	$ 4,656.96	$ 15.15475	$ 1,918,006	$ 9.97084	$ 1,261,924
K Small Demand	348	88,794,234	$ 20,779,787	$ 23.40	$ 23.40	$ 20,779,787	255,400.48	$ 59,769.28	$ 13.46370	$ 11,954,987	$ 9.93848	$ 8,824,800
L Large	45	68,404,520	$ 15,404,285	$ 22.52	$ 22.52	$ 15,404,285	1,520,100.44	$ 342,317.45	$ 12.60979	$ 8,625,667	$ 9.90960	$ 6,778,618
F Street Lighting (Agencies)	242	8,817,604	$ 5,001,887	$ 56.73	$ 56.73	$ 5,001,887	36,411.30	$ 20,654.73	$ 46.81199	$ 4,127,696	$ 9.91416	$ 874,191
Sub-Total	1,318	178,672,497	$ 44,365,889	$ 24.83	$ 24.83	$ 44,365,889	135,597.65	$ 33,670.04	$ 14.90233	$ 26,626,356	$ 9.92852	$ 17,739,532
		1,185,420,519	$ 251,725,076	$ 21.24	$ 21.24				$ 11.19812	$ 132,744,836	$ 10.03696	$ 118,980,241
U.S. Navy	1	291,679,581	$ 49,579,251	$ 17.00	$ 17.00	$ 49,579,251			$ 6.18149	$ 18,030,142	$ 10.81636	$ 31,549,109
TOTAL	50,782	1,477,100,100	$ 301,304,327	$ 20.40	$ 20.40	$ 301,304,327	29,086.94	$ 5,933.26	$ 10.20750	$ 150,774,977	$ 10.19087	$ 150,529,350
				$ 10.21								
Twelve Months Ended August 2017												
R Residential	43,708	506,031,116	$ 99,207,627	$ 19.61	$ 19.61	$ 99,207,627	11,577.61	$ 2,269.79	$ 9.61465	$ 48,653,104	$ 9.99040	$ 50,554,523
G Small Gen. Non Demand	4,124	83,763,133	$ 19,779,813	$ 23.61	$ 23.61	$ 19,779,813	20,309.50	$ 4,795.88	$ 13.62958	$ 11,416,566	$ 9.98440	$ 8,363,247
J Small Gen. Demand	987	189,282,625	$ 41,452,843	$ 21.90	$ 21.90	$ 41,452,843	191,727.15	$ 41,988.19	$ 11.94281	$ 22,605,666	$ 9.95716	$ 18,847,177
P Large General	116	314,317,706	$ 63,337,289	$ 20.15	$ 20.15	$ 63,337,289	2,713,534.15	$ 546,796.74	$ 10.30231	$ 32,381,998	$ 9.84841	$ 30,955,291
I Independent Power Producer	3	989,289	$ 207,527	$ 20.98	$ 20.98	$ 207,527	329,763.08	$ 69,175.57	$ 11.32866	$ 112,073	$ 9.64870	$ 95,454
H Private St. Lights	525	472,111	$ 310,576	$ 65.78	$ 65.78	$ 310,576	898.55	$ 591.10	$ 56.10589	$ 264,882	$ 9.67859	$ 45,694
Sub-Total	49,464	1,094,855,980	$ 224,295,674	$ 20.49	$ 20.49	$ 224,295,674	22,134.59	$ 4,534.56	$ 10.54333	$ 115,434,288	$ 9.94299	$ 108,861,386
Government Service:												
S Small Non Demand	683	13,820,806	$ 3,457,449	$ 25.02	$ 25.02	$ 3,457,449	20,240.38	$ 5,063.39	$ 15.15577	$ 2,094,650	$ 9.86049	$ 1,362,799
K Small Demand	348	96,652,764	$ 22,526,605	$ 23.31	$ 23.31	$ 22,526,605	278,004.11	$ 64,793.69	$ 13.47210	$ 13,021,155	$ 9.83464	$ 9,505,450
L Large	45	74,208,667	$ 16,655,109	$ 22.44	$ 22.44	$ 16,655,109	1,649,081.50	$ 370,113.53	$ 12.63877	$ 9,379,061	$ 9.80485	$ 7,276,048
F Street Lighting (Agencies)	242	9,813,217	$ 5,433,722	$ 55.37	$ 55.37	$ 5,433,722	40,522.58	$ 22,437.95	$ 45.58442	$ 4,473,298	$ 9.78705	$ 960,424
Sub-Total	1,318	194,495,454	$ 48,072,886	$ 24.72	$ 24.72	$ 48,072,886	147,605.96	$ 36,483.34	$ 14.89401	$ 28,968,164	$ 9.82271	$ 19,104,722
	50,781	1,289,351,434	$ 272,368,560	$ 21.12	$ 21.12	$ 272,368,560	25,390.31	$ 41,017.91	$ 11.19962	$ 144,402,452	$ 9.92484	$ 127,966,108
U.S. Navy	1	317,680,407	$ 53,835,657	$ 16.95	$ 16.95	$ 53,835,657			$ 6.21425	$ 19,741,457	$ 10.73223	$ 34,094,200
TOTAL	50,782	1,607,031,841	$ 326,204,217	$ 20.30	$ 20.30	$ 326,204,217	31,645.54	$ 6,423.59	$ 10.2141	$ 164,143,909	$ 10.0844	$ 162,060,308

GPA-318 **ENERGY ACCOUNT** **FOR INTERNAL USE ONLY**

318Aug17 **FY 2017 Versus FY 2016**

	August 2017		August 2016		Y T D 2017		Y T D 2016		MOVING TWELVE MONTHS	
Gross Generation										
Number of days in Period	**31**		**31**		**335**		**305**		**365**	
Peak demand	**261**		**252**		**261**		**258**		**261**	
Date	**08/01/17**		**08/29/16**		**08/01/17**		**07/25/16**		**08/01/17**	
	KWH	**% change**	**KWH**	**% change**	**KWH**	**% change**	**KWH**	**% change**	**KWH**	**% change**
Energy Account:										
Kilowatt hours GPA:										
Cabras 1 & 2	27,265,000		71,857,000		651,614,000		605,368,000		686,533,000	
Cabras No. 3	0		0		0		0		0	
Cabras No. 4	0		0		0		0		0	
MEC (ENRON) Piti 8 (IPP)	29,367,000		8,779,300		291,354,200		252,419,850		320,546,700	
MEC (ENRON) Piti 9 (IPP)	29,240,300		24,628,800		280,540,600		290,604,300		304,473,500	
TEMES Piti 7 (IPP)	11,922,238		6,993,120		37,638,539		86,444,953		48,675,739	
Tanguisson 2	0		0		0		0		0	
Tanguisson 1	0		0		0		0		0	
Diesels/CT's & Others:							0			
MDI 10MW	12,690		781,731		2,257,627		9,557,262		3,484,839	
NRG Solar Dandan	3,808,792		3,344,722		39,219,573		46,130,296		42,639,653	
Dededo CT #1	2,541,390		0		4,322,130		0		4,322,130	
Dededo CT #2	1,731,840		0		4,618,222		0		4,618,222	
Macheche CT	8,344,855		0		47,833,186		50,634,675		47,833,186	
Yigo CT (Leased)	4,500,189		5,011,894		34,408,654		40,610,673		42,203,475	
Tenjo	6,016,910		3,072,400		40,182,940		43,323,609		44,777,520	
Talofofo 10 MW	3,104,830		1,310,840		17,068,080		9,273,823		19,003,190	
Aggreko	23,180,682		22,385,570		166,836,749		145,054,244		189,874,686	
Wind Turbine*	9,656		43,020		380,429		365,375		396,333	
Orote	0		0		0		0		0	
Marbo	0		0		0		0		0	
	151,046,372		**148,208,397**		**1,618,274,930**		**1,579,787,061**		**1,759,382,173**	
Ratio to last year		101.91		100.20		102.44		**100.88**		**102.08**
Station use	4,281,028		5,695,947		60,694,484		60,389,069		65,257,204	
Ratio to Gross generation		2.83		3.84		3.75		3.82		**3.71**
Net send out	146,765,344		142,512,449		1,557,580,446		1,519,397,992		1,694,124,970	
Ratio to last year		102.98		101.47		102.51		**102.06**		**102.23**
KWH deliveries:										
Sales to Navy (@34.5kv)	**26,608,721**		**27,005,111**		**291,679,583**		**292,850,501**		**317,680,409**	
Ratio to last year		98.53		97.23		99.60		**100.86**		**99.55**
GPA-metered	**120,156,623**		**115,507,338**		**1,265,900,863**		**1,226,547,491**		**1,376,444,561**	
Ratio to last year		104.03		102.51		103.21		**102.35**		**102.87**
Power factor adj.	0		0		0		0		0	
Adjusted	120,156,623		115,507,338		1,265,900,863		1,226,547,491		1,376,444,561	
GPA KWH Accountability:										
Sales to civilian customers-										
accrual basis	**112,188,210**		**108,270,169**		**1,185,420,521**		**1,150,604,526**		**1,289,351,435**	
Ratio to last year		103.62		101.62		103.03		**102.90**		**102.62**
GPA use-KWH	275,157		301,531		2,892,081		3,071,143		3,142,780	
Unaccounted For	7,693,256		6,935,638		77,588,261		72,871,822		83,950,346	
Ratio to deliveries		6.40		6.00		6.13		5.94		6.10
Ratio to Gross Generation		5.09		4.68		4.79		4.61		4.77
Ratio to Net Send Out		5.24		4.87		4.98		4.80		4.96

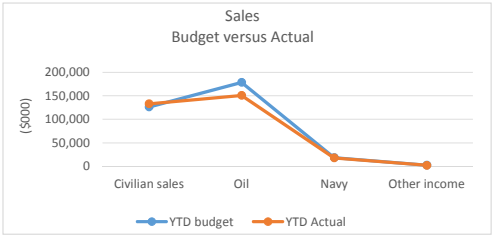
GPA-317Aug17

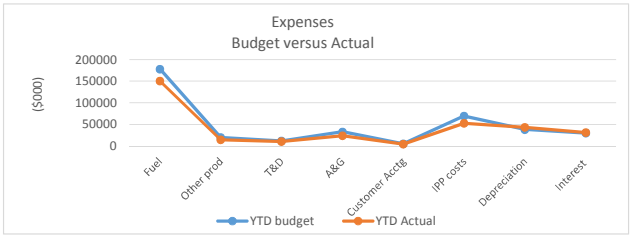
Guam Power Authority
Fuel Consumption
FY 2017

Description	August 2017 BARRELS	August 2017 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	64,455	$3,648,702	1,438,667	$ 76,080,368	1,517,413	$ 79,272,053
Diesel	129,416	$9,055,278	708,923	$ 50,499,056	810,788	$ 57,021,415
Low Sulfur	60,995	$3,768,378	429,634	$ 24,307,162	481,523	$ 26,762,660
Deferred Fuel Costs	0	-$1,590,486	0	$ (14,148,666)	0	$ (16,055,878)
Fuel Adjustments	0	$0		$ (64,785)	0	$ (23,873)
Fuel Handling Costs	0	$2,065,433	0	$ 13,856,346	0	$ 14,927,661
	254,866	**$16,947,305**	**2,577,224**	**$ 150,529,482**	**2,809,724**	**$ 161,904,039**
IWPS:						
GPA RFO	64,455	$3,648,702	1,438,667	$ 76,080,368	1,517,413	$ 79,272,053
Diesel	129,416	$9,055,278	708,923	$ 50,499,056	810,788	$ 57,021,415
Low Sulfur	60,995	$3,768,378	429,634	$ 24,307,162	481,523	$ 26,762,660
Deferred Fuel Costs	0	-$1,590,486	0	$ (14,148,666)	0	$ (16,055,878)
Fuel Variance	0	$0	0	$ (64,785)		$ (23,873)
Fuel Handling Costs	0	$2,065,433	0	$ 13,856,346	0	$ 14,927,661
	254,866	**$16,947,305**	**2,577,224**	**$ 150,529,482**	**2,809,724**	**$ 161,904,039**
AVERAGE COST/Bbl.						
GPA RFO		**$56.61**		**$52.88**		**$52.24**
Diesel		**$69.97**		**$71.23**		**$70.33**
Low Sulfur		**$61.78**		**$56.58**		**$55.58**
AS BURNED						
Cabras 1 & 2						
RFO	21,199	$ 1,200,032	927,481	$ 49,344,999	960,919	$ 50,700,281
Low Sulfur	25,598	$ 1,572,663	169,225	$ 9,357,713	195,361	$ 10,603,143
Diesel	748	$ 44,279	2,546	$ 166,250	2,847	$ 183,107
	47,545	$ 2,816,974	1,099,252	$ 58,868,961	1,159,127	$ 61,486,531
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	43,256	$ 2,448,670	511,186	$ 26,735,370	556,494	$ 28,571,772
Low Sulfur	35,397	$ 2,195,715	260,409	$ 14,949,449	286,162	$ 16,159,517
Diesel	0	$ -	40	$ 2,194	40	$ 2,194
	78,654	$ 4,644,385	771,635	$ 41,687,014	842,695	$ 44,733,483
Diesel & CT's - GPA:						
MDI Dsl	21	$ 1,336	3,605	$ 229,124	5,559	$ 355,808
Macheche CT	17,754	$ 1,252,615	103,877	$ 7,507,697	103,877	$ 7,507,697
Yigo CT	9,515	$ 655,102	72,665	$ 5,095,869	88,396	$ 6,074,425
Talofofo 10 MW	5,533	$ 386,459	28,634	$ 2,044,565	31,724	$ 2,237,885
Aggreko	42,429	$ 2,940,123	301,800	$ 21,223,856	344,062	$ 23,850,970
Tenjo	10,434	$ 758,287	69,966	$ 5,127,188	77,897	$ 5,647,317
TEMES (IPP)	29,605	$ 2,056,640	95,841	$ 6,908,187	123,945	$ 8,680,157
GWA Generators	15	$ 1,712	183	$ 21,514	2,675	$ 309,243
	128,669	$ 9,010,998	706,337	$ 50,330,612	807,901	$ 56,836,113
Deferred Fuel Costs	0	$ (1,590,486)		$ (14,148,666)		$ (16,055,878)
Adjustment		$ -		$ (64,785)		$ (23,873)
Fuel Handling Costs	0	$ 2,065,433		$ 13,856,346		$ 14,927,661
TOTAL	**254,867**	**$ 16,947,305**	**2,577,224**	**$ 150,529,482**	**2,809,724**	**$ 161,904,039**

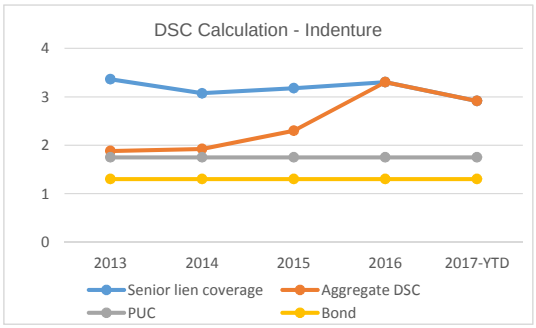
Statement of operations
Comparison-Budget versus Actual
For the month and year to date ended August 31, 2017

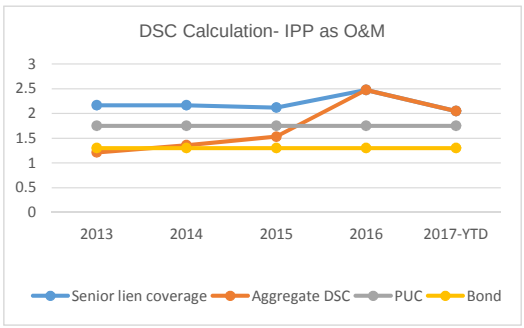
	Budget	Actual August-17	Variance	YTD Budget	YTD Actual	Variance
KwH Sales-Civilian	102,842	112,188	(9,346)	1,107,901	1,185,422	(77,521)
Non-fuel yield	$ 0.113402	$ 0.111928	$ 0.001474	$ 0.113659	$ 0.111980	$ 0.001680
KwH Sales-Navy	29,123	26,609	2,514	303,831	291,679	12,152
Non-fuel yield	$ 0.061275	$ 0.063400	$ (0.002124)	$ 0.061275	$ 0.061818	$ (0.000543)
Operating revenue						
Civilian sales	11,663	12,557	(894)	125,923	132,743	(6,820)
Oil	29,621	16,947	12,674	195,733	150,528	45,205
Navy	1,785	1,687	98	18,617	18,031	586
Other income	217	294	(77)	2,383	2,142	242
	43,285	31,485	11,801	342,657	303,444	39,213
Bad debts expense	83	93	(10)	917	987	(71)
Total operating revenues	43,202	31,391	11,811	341,740	302,456	39,284
Operating expenses:						
Production fuel	29,621	16,947	12,674	195,733	150,529	45,203
O & M expenses:						
Other production	1,827	2,067	(240)	20,099	14,554	5,545
Transmission distribution	1,080	1,058	22	11,880	10,763	1,117
Administrative expense	2,993	2,807	186	32,928	23,792	9,136
Customer accounting	382	419	(37)	4,205	3,828	377
	6,283	6,351	(69)	69,111	52,937	16,174
IPP costs	1,486	1,791	(304)	16,349	18,166	(1,817)
Depreciation	3,484	3,719	(235)	38,321	43,460	(5,140)
	40,874	28,808	12,066	319,513	265,093	54,420
Operating income	2,328	2,583	(255)	22,227	37,363	(15,136)
Other revenue (expenses):						
Investment income	115	166	(51)	1,269	1,376	(107)
Interest expense	(2,735)	(2,766)	31	(30,085)	(31,083)	997
AFUDC	118	274	(155)	1,302	3,403	(2,102)
Bond issuance costs/Other expenses	127	(157)	284	1,395	76	1,319
Net income before capital contribution	(47)	101	(148)	(3,893)	11,136	(15,029)
Grants from the U.S. Government	-	101	(101)	-	145	(145)
Increase (decrease) in net assets	(47)	202	(249)	(3,893)	11,280	(15,173)





Guam Power Authority Debt service coverage August 31, 2017	2013	2014	2015	2016	YTD 8/31/2017
Operating revenues					
Sales	449,029	434,462	366,185	306,896	301,302
Miscellaneous	2,927	2,156	4,775	2,294	2,142
Total revenues	451,956	436,618	370,960	309,190	303,444
Bad debts expense	1,223	178	959	990	987
Total operating revenues	450,733	436,440	370,001	308,200	302,456
Operating expenses					
Production fuel	295,473	271,175	204,136	146,340	150,529
Other production	22,009	19,305	20,079	15,835	14,554
Energy conversion costs	20,264	20,632	18,404	16,800	18,166
Transmission and distribution	13,368	12,950	11,170	10,817	10,763
Customer accounting	3,878	3,821	3,780	4,502	3,828
Admin and General	31,589	28,393	21,908	29,058	23,792
Total Expenses	386,581	356,276	279,477	223,352	221,633
Operating income	64,152	80,164	90,524	84,848	80,823
Interest/Other income (expenses)	720	157	256	57	(68)
Debt service and lease payments					
IPP lease payments	23,084	23,084	26,622	20,790	19,063
Capital lease payments-Aggreko	-	-	-	-	4,984
2014 bonds	-	-	-	10	4,664
2012 bonds	16,309	17,455	17,096	17,098	15,704
2010 senior bonds	2,997	7,999	7,999	7,999	7,337
2010 subordinate	15,163	15,193	9,605	-	-
Total Debt service-bonds	34,469	40,647	34,700	25,106	27,704
Total Debt service and capital lease	57,553	63,731	61,322	45,896	51,751
Debt service coverage (DSC) calculation-indenture					
Senior lien coverage	3.36	3.16	3.62	3.38	2.91
Aggregate debt service coverage	1.88	1.98	2.62	3.38	2.91
Debt service coverage (DSC) calculation-IPP as O&M					
Senior lien coverage	2.16	2.25	2.56	2.55	2.05
Aggregate debt service coverage	1.21	1.41	1.85	2.55	2.05

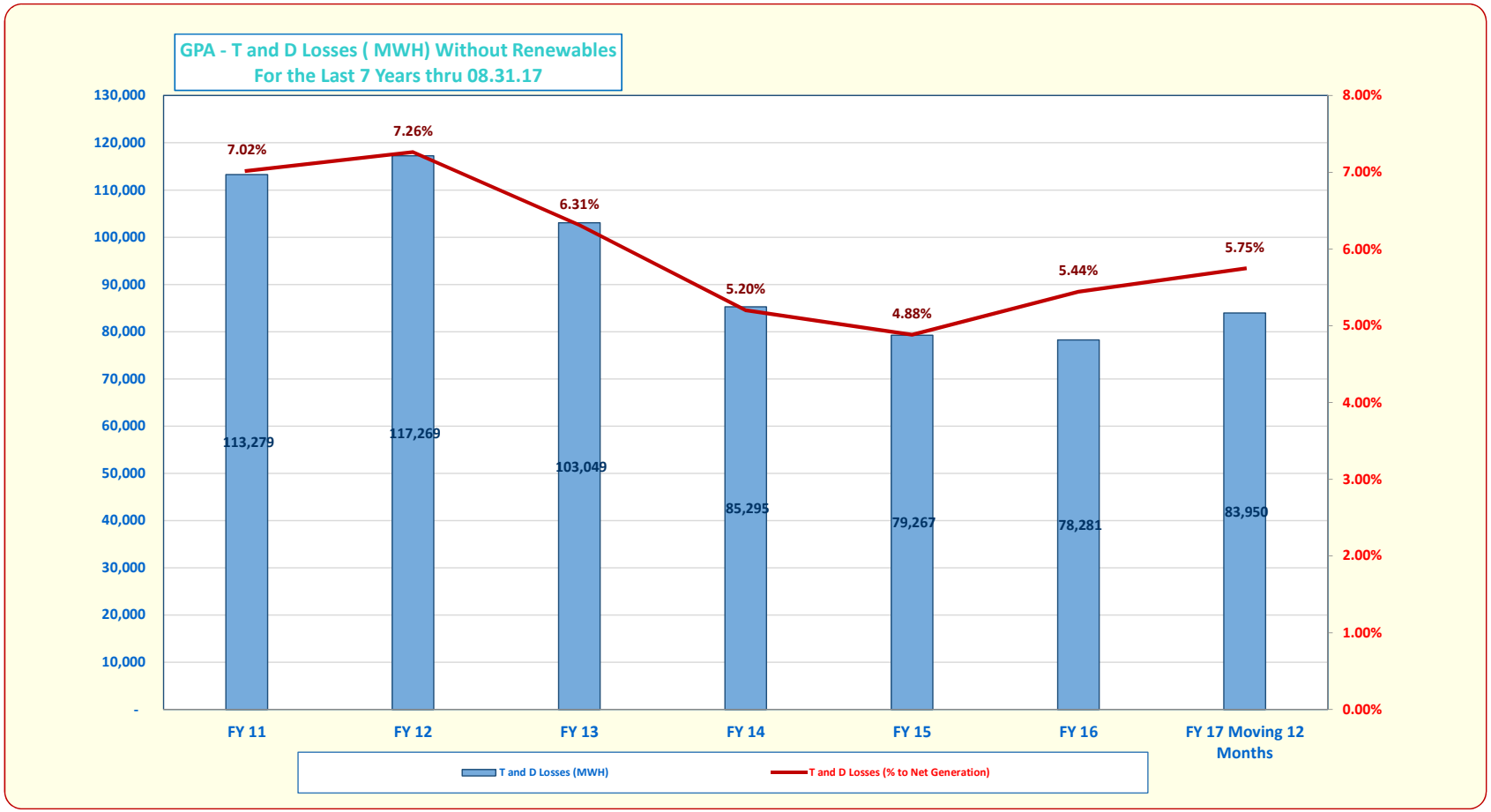


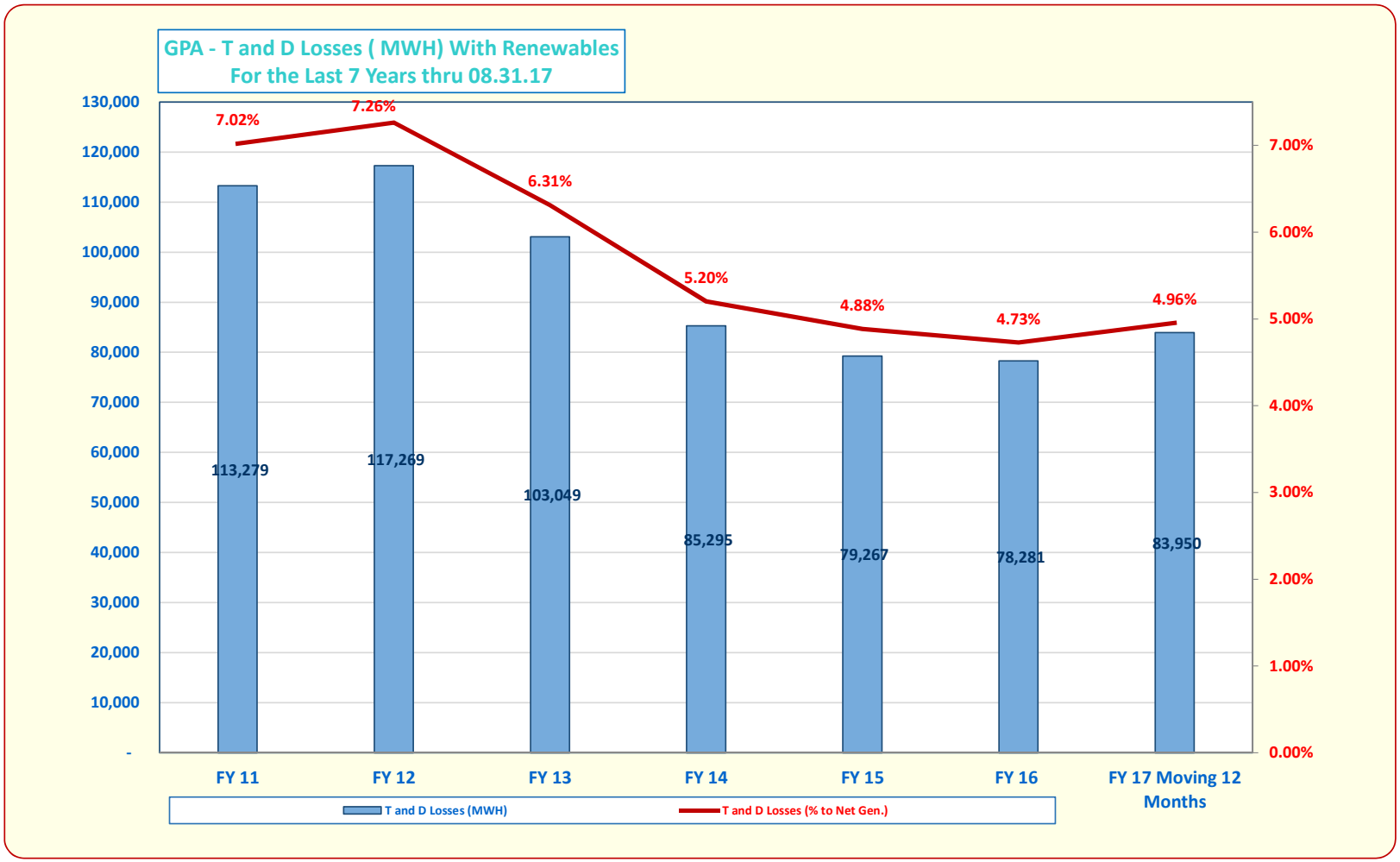


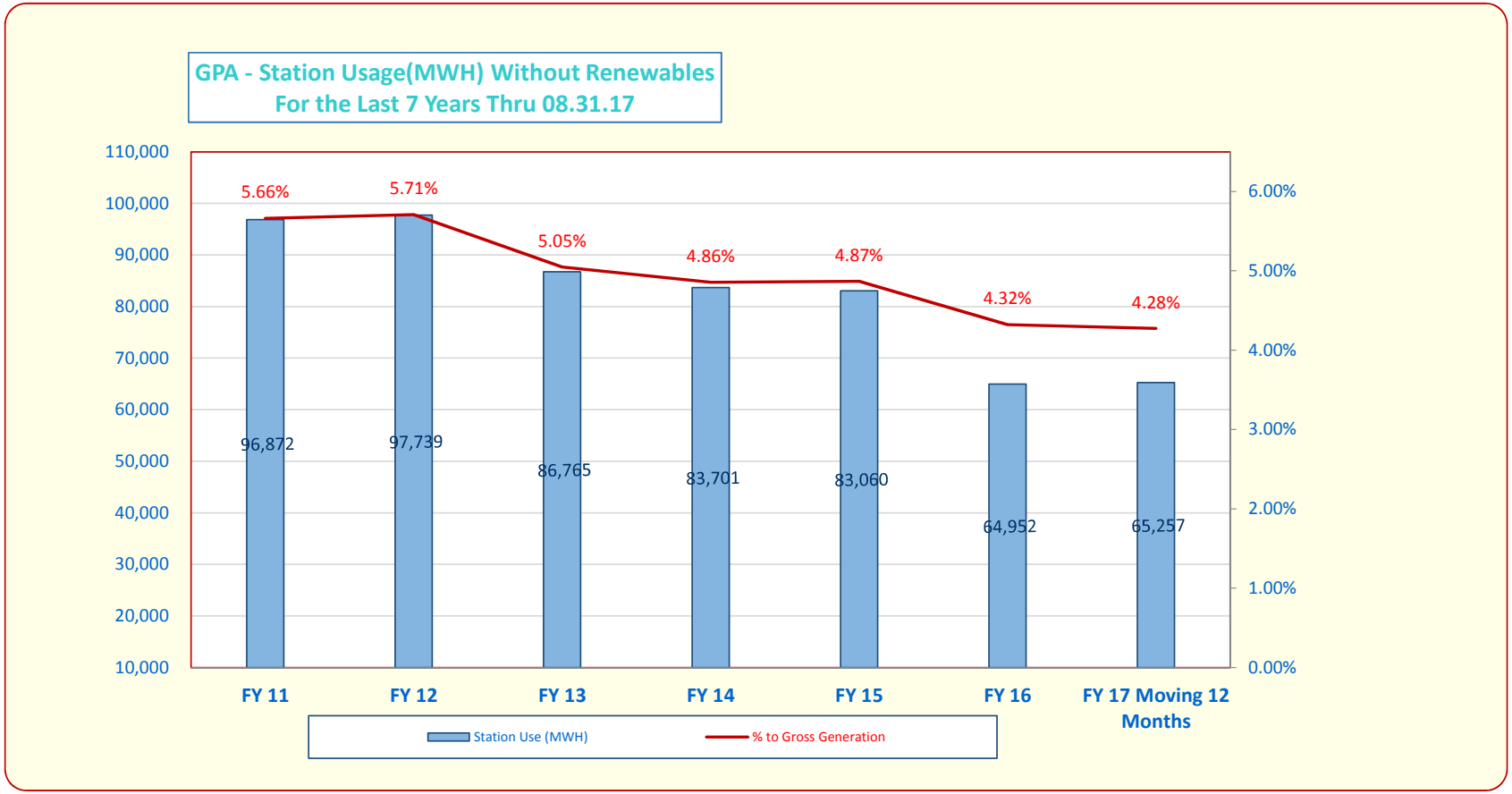
REVENUES-ACTUAL VS PROJECTIONS

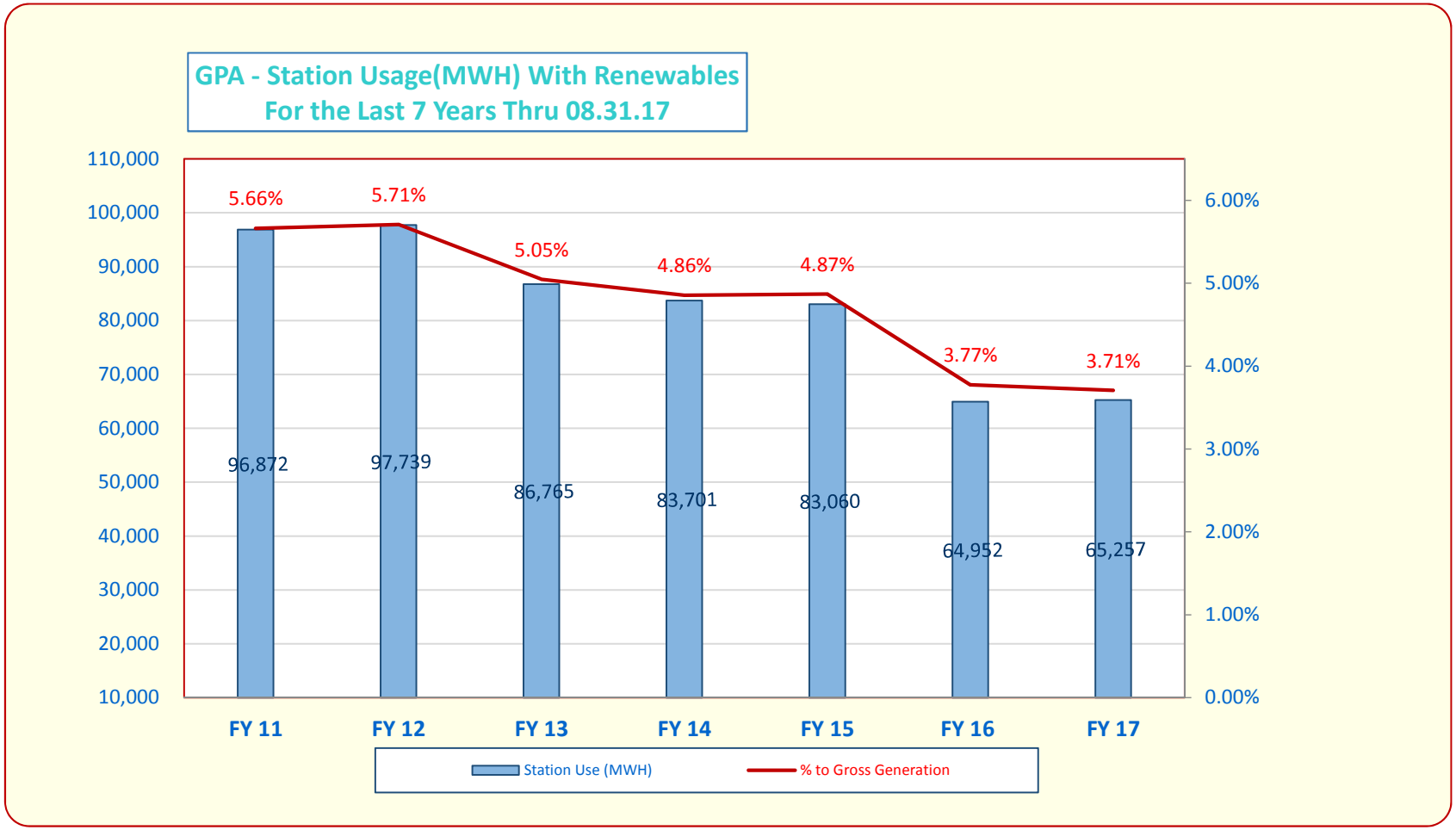
	MONTHLY - AUGUST 2017				YTD THRU 08/31/2017			
	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE
KWH								
Residential	38,051,732	44,434,719	6,382,987	16.77%	403,307,999	464,844,586	61,536,587	15.26%
Small General-Non-Demand	5,787,765	7,347,440	1,559,674	26.95%	62,239,203	76,877,609	14,638,406	23.52%
Small General-Demand	16,518,319	16,488,257	(30,062)	-0.18%	179,332,047	174,541,517	(4,790,529)	-2.67%
Large	26,502,922	27,038,013	535,092	2.02%	290,793,694	289,141,197	(1,652,497)	-0.57%
Independent Power Producers	77,247	57,754	(19,493)	-25.24%	581,936	927,238	345,302	59.34%
Private St. Lites	51,858	33,324	(18,534)	-35.74%	572,038	415,876	(156,162)	-27.30%
Sub-total	**86,989,843**	**95,399,508**	**8,409,665**	**9.67%**	**936,826,916**	**1,006,748,022**	**69,921,106**	**7.46%**
Government								
Small_Non Demand	1,155,390	1,243,487	88,097	7.62%	12,897,104	12,656,140	(240,964)	-1.87%
Small-Demand	8,314,003	8,147,386	(166,616)	-2.00%	88,271,583	88,794,234	522,651	0.59%
Large	5,486,229	6,520,699	1,034,469	18.86%	59,470,131	68,404,520	8,934,389	15.02%
Public St. Lites	896,921	877,130	(19,791)	-2.21%	10,435,306	8,817,604	(1,617,702)	-15.50%
Sub-total	**15,852,543**	**16,788,702**	**936,159**	**5.91%**	**171,074,124**	**178,672,497**	**7,598,373**	**4.44%**
Total-Civilian	**102,842,386**	**112,188,210**	**9,345,823**	**9.09%**	**1,107,901,040**	**1,185,420,520**	**77,519,480**	**7.00%**
USN	29,123,261	26,608,721	(2,514,540)	-8.63%	303,830,754	291,679,581	(12,151,173)	-4.00%
Grand Total	**131,965,647**	**138,796,930**	**6,831,283**	**5.18%**	**1,411,731,794**	**1,477,100,101**	**65,368,307**	**4.63%**
					-	-		
Non-Oil Yield								
Residential	0.096854	0.095776	(0.001078)	-1.11%	0.096854	0.096220	(0.000634)	-0.65%
Small General-Non-Demand	0.139795	0.135178	(0.004616)	-3.30%	0.139795	0.136449	(0.003346)	-2.39%
Small General-Demand	0.119750	0.117745	(0.002004)	-1.67%	0.119750	0.119206	(0.000544)	-0.45%
Large	0.106324	0.104667	(0.001657)	-1.56%	0.106324	0.102892	(0.003431)	-3.23%
Independent Power Producers	0.124400	0.142548	0.018148	0.00%	0.124400	0.111830	(0.012570)	0.00%
Private St. Lites	0.461908	0.635294	0.173386	37.54%	0.461908	0.578954	0.117047	25.34%
Sub-total	**0.107186**	**0.105344**	**(0.001842)**	**-1.72%**	**0.107269**	**0.105407**	**(0.001862)**	**-1.74%**
Government					-			
Small_Non Demand	0.152742	0.149535	(0.003207)	-2.10%	0.152742	0.151547	(0.001195)	-0.78%
Small-Demand	0.133985	0.134173	0.000188	0.14%	0.133985	0.134637	0.000652	0.49%
Large	0.128378	0.125025	(0.003353)	-2.61%	0.128378	0.126098	(0.002281)	-1.78%
Public St. Lites	0.383229	0.470618	0.087389	22.80%	0.383229	0.468120	0.084890	22.15%
Sub-total	**0.147514**	**0.149335**	**0.001822**	**1.24%**	**0.148653**	**0.149023**	**0.000370**	**0.25%**
Total-Civilian	**0.113402**	**0.111927**	**(0.001475)**	**-1.30%**	**0.113659**	**0.111981**	**(0.001678)**	**-1.48%**
USN	0.061275	0.063411	0.002135	3.49%	0.061275	0.061815	0.000540	0.88%
Grand Total	**0.101898**	**0.102626**	**0.000728**	**0.71%**	**0.102385**	**0.102075**	**(0.000310)**	**-0.30%**
Non-Oil Revenues								
Residential	3,685,465	4,255,769	570,304	15.47%	39,062,024	44,727,423	5,665,399	14.50%
Small General-Non-Demand	809,099	993,214	184,116	22.76%	8,700,710	10,489,863	1,789,153	20.56%
Small General-Demand	1,978,066	1,941,417	(36,650)	-1.85%	21,474,986	20,806,339	(668,647)	-3.11%
Large	2,817,886	2,829,975	12,089	0.43%	30,918,236	29,750,388	(1,167,849)	-3.78%
Independent Power Producers	9,610	8,233	(1,377)	-14.33%	72,393	103,693	31,300	43.24%
Private St. Lites	23,954	21,171	(2,783)	-11.62%	264,229	240,773	(23,456)	-8.88%
Sub-total	**9,324,080**	**10,049,779**	**725,699**	**7.78%**	**100,492,578**	**106,118,479**	**5,625,901**	**5.60%**
Government								
Small_Non Demand	176,477	185,944	9,468	5.36%	1,969,930	1,918,006	(51,924)	-2.64%
Small-Demand	1,113,948	1,093,159	(20,788)	-1.87%	11,827,026	11,954,987	127,961	1.08%
Large	704,314	815,252	110,939	15.75%	7,634,683	8,625,667	990,984	12.98%
Public St. Lites	343,726	412,793	69,067	20.09%	3,999,116	4,127,696	128,580	3.22%
Sub-total	**2,338,464**	**2,507,149**	**168,685**	**7.21%**	**25,430,755**	**26,626,356**	**1,195,601**	**4.70%**
Total-Civilian	**11,662,545**	**12,556,928**	**894,384**	**7.67%**	**125,923,334**	**132,744,836**	**6,821,502**	**5.42%**
USN	1,784,539	1,687,282	(97,257)	-5.45%	18,617,348	18,030,142	(587,206)	-3.15%
Grand Total	**13,447,084**	**14,244,210**	**797,127**	**5.93%**	**144,540,682**	**150,774,977**	**6,234,296**	**4.31%**
% of Total Revenues	43.98%	45.67%			44.10%	50.04%		
Oil Revenues								
Residential	4,939,043	5,507,041	567,998	11.50%	52,348,617	46,987,234	(5,361,383)	-10.24%
Small General-Non-Demand	751,241	909,446	158,205	21.06%	8,078,531	7,766,871	(311,660)	-3.86%
Small General-Demand	2,144,047	2,022,741	(121,306)	-5.66%	23,276,961	17,570,905	(5,706,056)	-24.51%
Large	3,440,029	3,198,563	(241,466)	-7.02%	37,744,473	28,784,613	(8,959,860)	-23.74%
Independent Power Producers	10,027	6,571	(3,455)	-34.46%	75,792	90,262	14,469	19.09%
Private St. Lites	6,731	3,923	(2,808)	-41.72%	73,991	40,823	(33,168)	-44.83%
Sub-total	**11,291,117**	**11,648,284**	**357,167**	**3.16%**	**121,598,365**	**101,240,708**	**(20,357,657)**	**-16.74%**
Government								
Small_Non Demand	149,967	146,381	(3,587)	-2.39%	1,674,020	1,261,924	(412,096)	-24.62%
Small-Demand	1,079,142	959,094	(120,048)	-11.12%	11,457,485	8,824,800	(2,632,685)	-22.98%
Large	712,102	758,192	46,090	6.47%	7,719,111	6,778,618	(940,493)	-12.18%
Public St. Lites	116,419	103,254	(13,165)	-11.31%	1,354,483	874,191	(480,292)	-35.46%
Sub-total	**2,057,630**	**1,966,921**	**(90,709)**	**-4.41%**	**22,205,098**	**17,739,532**	**(4,465,566)**	**-20.11%**
Total-Civilian	**13,348,748**	**13,615,205**	**266,458**	**2.00%**	**143,803,463**	**118,980,241**	**(24,823,223)**	**-17.26%**
USN	3,780,144	3,332,100	(448,044)	-11.85%	39,436,658	31,549,109	(7,887,549)	-20.00%
Grand Total	**17,128,892**	**16,947,305**	**(181,587)**	**-1.06%**	**183,240,122**	**150,529,350**	**(32,710,772)**	**-17.85%**
% of Total Revenues	56.02%	54.33%			55.90%	49.96%		
Grand Total								
Residential	8,624,508	9,762,810	1,138,302	13.20%	91,410,641	91,714,657	304,016	0.33%
Small General-Non-Demand	1,560,340	1,902,660	342,320	21.94%	16,779,241	18,256,735	1,477,493	8.81%
Small General-Demand	4,122,113	3,964,157	(157,956)	-3.83%	44,751,947	38,377,244	(6,374,703)	-14.24%
Large	6,257,916	6,028,539	(229,377)	-3.67%	68,662,709	58,535,001	(10,127,708)	-14.75%
Independent Power Producers	19,636	14,804	(4,832)	-24.61%	148,185	193,955	45,769	30.89%
Private St. Lites	30,685	25,094	(5,591)	-18.22%	338,220	281,596	(56,624)	-16.74%
Sub-total	**20,615,198**	**21,698,063**	**1,082,866**	**5.25%**	**222,090,943**	**207,359,188**	**(14,731,756)**	**-6.63%**
Government					-			
Small_Non Demand	326,444	332,325	5,881	1.80%	3,643,950	3,179,930	(464,020)	-12.73%
Small-Demand	2,193,090	2,052,253	(140,836)	-6.42%	23,284,510	20,779,787	(2,504,724)	-10.76%
Large	1,416,416	1,573,445	157,029	11.09%	15,353,794	15,404,285	50,491	0.33%
Public St. Lites	460,145	516,047	55,902	12.15%	5,353,599	5,001,887	(351,712)	-6.57%
Sub-total	**4,396,095**	**4,474,070**	**77,976**	**1.77%**	**47,635,854**	**44,365,889**	**(3,269,965)**	**-6.86%**
Total-Civilian	**25,011,292**	**26,172,133**	**1,160,841**	**4.64%**	**269,726,797**	**251,725,076**	**(18,001,721)**	**-6.67%**
USN	5,564,683	5,019,382	(545,301)	-9.80%	58,054,006	49,579,251	(8,474,755)	-14.60%
Grand Total	**30,575,976**	**31,191,516**	**615,540**	**2.01%**	**327,780,803**	**301,304,327**	**(26,476,476)**	**-8.08%**
	-	-	-					

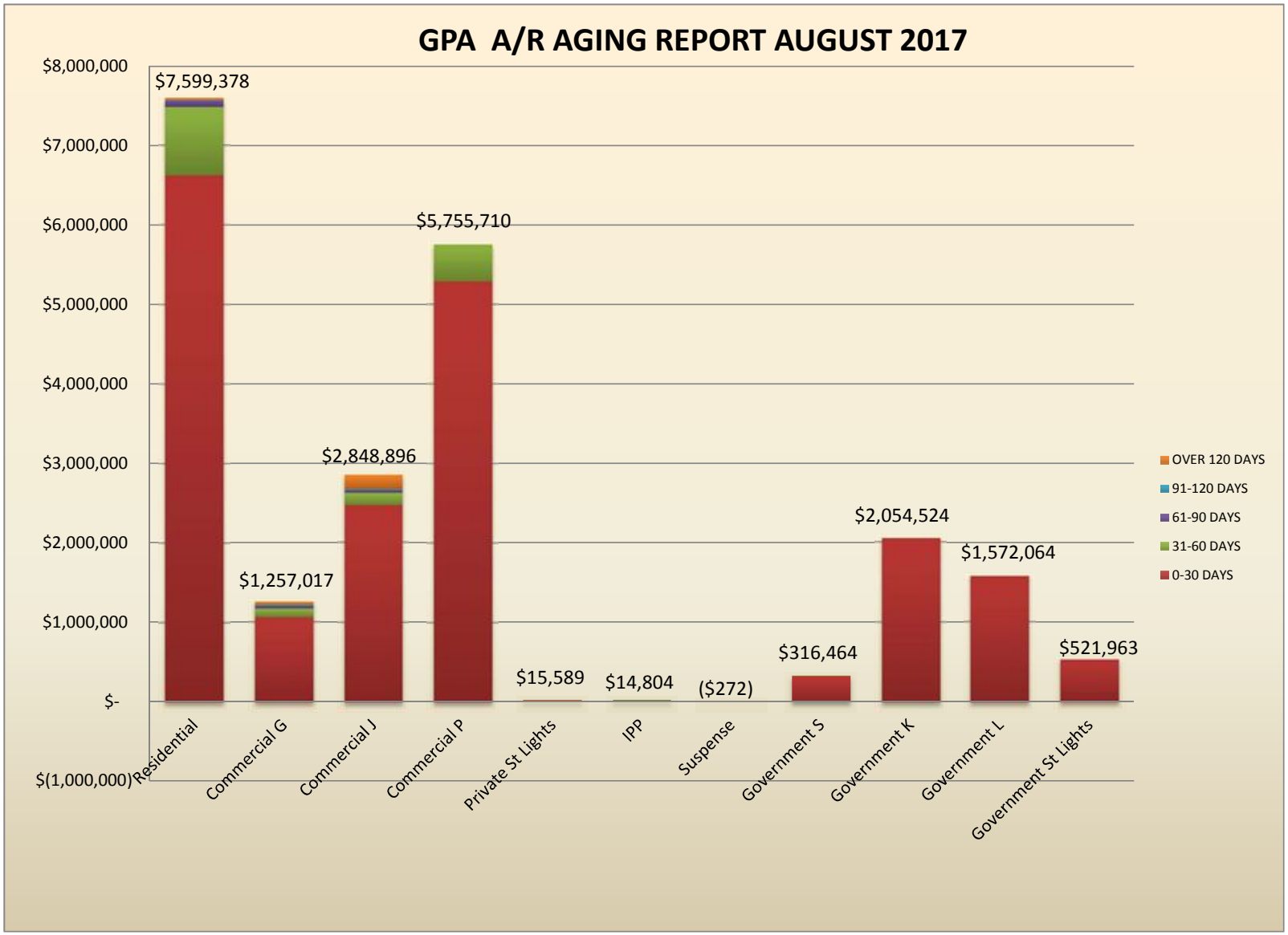
	YTD REVENUES - CURRENT YEAR VS PRIOR YEAR				MTD REVENUES - CURRENT YEAR VS PRIOR YEAR			
	ACTUALS - 11 MONTHS ENDED AUGUST 31				ACTUALS - MONTH ENDED AUGUST 31			
	2017	2016	VARIANCE	% VARIANCE	2017	2016	VARIANCE	% VARIANCE
KWH								
Residential	464,844,586	445,836,030	19,008,556	4.26%	44,434,719	41,736,102	2,698,617	6.47%
Small General-Non-Demand	76,877,609	73,398,543	3,479,066	4.74%	7,347,440	6,830,745	516,695	7.56%
Small General-Demand	174,541,517	175,846,018	(1,304,501)	-0.74%	16,488,257	16,161,003	327,255	2.02%
Large	289,141,197	283,658,369	5,482,828	1.93%	27,038,013	27,005,358	32,655	0.12%
Independent Power Producers	927,238	705,829	221,409	31.37%	57,754	87,741	(29,987)	-34.18%
Private St. Lites	415,876	573,509	(157,633)	-27.49%	33,324	48,857	(15,533)	-31.79%
Sub-total	**1,006,748,022**	**980,018,297**	**26,729,726**	**2.73%**	**95,399,508**	**91,869,806**	**3,529,702**	**3.84%**
Government								
Small_Non Demand	12,656,140	12,263,598	392,542	3.20%	1,243,487	1,172,055	71,431	6.09%
Small-Demand	88,794,234	85,444,466	3,349,768	3.92%	8,147,386	8,136,012	11,374	0.14%
Large	68,404,520	64,250,956	4,153,564	6.46%	6,520,699	6,189,305	331,394	5.35%
Public St. Lites	8,817,604	10,349,068	(1,531,463)	-14.80%	877,130	902,990	(25,860)	-2.86%
Sub-total	**178,672,497**	**172,308,087**	**6,364,410**	**3.69%**	**16,788,702**	**16,400,363**	**388,339**	**2.37%**
Total-Civilian	**1,185,420,520**	**1,152,326,384**	**33,094,136**	**2.87%**	**112,188,210**	**108,270,169**	**3,918,041**	**3.62%**
USN	291,679,581	292,081,946	(402,365)	-0.14%	26,608,721	27,005,111	(396,390)	-1.47%
Grand Total	**1,477,100,101**	**1,444,408,330**	**32,691,771**	**2.26%**	**138,796,930**	**135,275,280**	**3,521,651**	**2.60%**
Non-Oil Yield								
Residential	0.096220	0.096285	-0.000065	-0.07%	0.095776	0.096415	-0.000639	-0.66%
Small General-Non-Demand	0.136449	0.136531	-0.000082	-0.06%	0.135178	0.138153	-0.002975	-2.15%
Small General-Demand	0.119206	0.119202	0.000004	0.00%	0.117745	0.119139	-0.001393	-1.17%
Large	0.102892	0.103632	-0.000739	-0.71%	0.104667	0.100542	0.004124	4.10%
Independent Power Producers	0.000000	0.116483	-0.116483	-100.00%	0.142548	0.116435	0.026113	22.43%
Private St. Lites	0.578954	0.456784	0.122170	26.75%	0.635294	0.472786	0.162508	34.37%
Sub-total	**0.105407**	**0.105763**	**-0.000356**	**-0.34%**	**0.105344**	**0.104948**	**0.000396**	**0.38%**
Government								
Small_Non Demand	0.151547	0.152310	-0.000763	-0.50%	0.149535	0.150047	-0.000512	-0.34%
Small-Demand	0.134637	0.135028	-0.000391	-0.29%	0.134173	0.129797	0.004376	3.37%
Large	0.126098	0.127948	-0.001851	-1.45%	0.125025	0.125269	-0.000244	-0.19%
Public St. Lites	0.468120	0.383981	0.084139	21.91%	0.470618	0.398193	0.072425	18.19%
Sub-total	**0.149023**	**0.148570**	**0.000453**	**0.30%**	**0.149335**	**0.144313**	**0.005022**	**3.48%**
Total-Civilian	**0.111981**	**0.112164**	**-0.000183**	**-0.16%**	**0.111927**	**0.110911**	**0.001016**	**0.92%**
USN	0.061815	0.061414	0.000401	0.65%	0.063411	0.061338	0.002073	3.38%
Grand Total	**0.102075**	**0.101902**	**0.000173**	**0.17%**	**0.102626**	**0.101015**	**0.001612**	**1.60%**
Non-Oil Revenues								
Residential	44,727,423	42,927,540	1,799,883	4.19%	4,255,769	4,023,986	231,783	5.76%
Small General-Non-Demand	10,489,863	10,021,174	468,690	4.68%	993,214	943,688	49,527	5.25%
Small General-Demand	20,806,339	20,961,186	(154,847)	-0.74%	1,941,417	1,925,402	16,014	0.83%
Large	29,750,388	29,395,999	354,389	1.21%	2,829,975	2,715,179	114,796	4.23%
Independent Power Producers	103,693	82,217	21,476	26.12%	8,233	10,216	(1,983)	-19.41%
Private St. Lites	240,773	261,970	(21,197)	-8.09%	21,171	23,099	(1,928)	-8.35%
Sub-total	**106,118,479**	**103,650,085**	**2,468,394**	**2.38%**	**10,049,779**	**9,641,571**	**408,208**	**4.23%**
Government								
Small_Non Demand	1,918,006	1,867,870	50,136	2.68%	185,944	175,864	10,081	5.73%
Small-Demand	11,954,987	11,537,368	417,619	3.62%	1,093,159	1,056,031	37,129	3.52%
Large	8,625,667	8,220,808	404,859	4.92%	815,252	775,328	39,924	5.15%
Public St. Lites	4,127,696	3,973,842	153,854	3.87%	412,793	359,565	53,228	14.80%
Sub-total	**26,626,356**	**25,599,889**	**1,026,468**	**4.01%**	**2,507,149**	**2,366,787**	**140,362**	**5.93%**
Total-Civilian	**132,744,836**	**129,249,974**	**3,494,861**	**2.70%**	**12,556,928**	**12,008,358**	**548,570**	**4.57%**
USN	18,030,142	17,937,917	92,224	0.51%	1,687,282	1,656,427	30,855	1.86%
Grand Total	**150,774,977**	**147,187,891**	**3,587,086**	**2.44%**	**14,244,210**	**13,664,785**	**579,425**	**4.24%**
% of Total Revenues								
Oil Revenues								
Residential	46,987,234	41,636,850	5,350,384	12.85%	5,507,041	3,614,889	1,892,152	52.34%
Small General-Non-Demand	7,766,871	6,846,702	920,170	13.44%	909,446	591,631	317,814	53.72%
Small General-Demand	17,570,905	16,465,173	1,105,732	6.72%	2,022,741	1,399,068	623,673	44.58%
Large	28,784,613	26,588,997	2,195,616	8.26%	3,198,563	2,326,936	871,627	37.46%
Independent Power Producers	90,262	64,678	25,584	39.56%	6,571	7,337	(766)	-10.44%
Private St. Lites	40,823	54,184	(13,361)	-24.66%	3,923	4,232	(309)	-7.30%
Sub-total	**101,240,708**	**91,656,583**	**9,584,125**	**10.46%**	**11,648,284**	**7,944,093**	**3,704,191**	**46.63%**
Government								
Small_Non Demand	1,261,924	1,154,070	107,853	9.35%	146,381	101,515	44,866	44.20%
Small-Demand	8,824,800	8,039,964	784,835	9.76%	959,094	704,684	254,410	36.10%
Large	6,778,618	5,981,685	796,933	13.32%	758,192	529,484	228,709	43.19%
Public St. Lites	874,191	977,577	(103,386)	-10.58%	103,254	78,211	25,043	32.02%
Sub-total	**17,739,532**	**16,153,297**	**1,586,236**	**9.82%**	**1,966,921**	**1,413,894**	**553,027**	**39.11%**
Total-Civilian	**118,980,241**	**107,809,880**	**11,170,361**	**10.36%**	**13,615,205**	**9,357,987**	**4,257,218**	**45.49%**
USN	31,549,109	26,999,090	4,550,019	16.85%	3,332,100	2,761,836	570,264	20.65%
Grand Total	**150,529,350**	**134,808,970**	**15,720,380**	**11.66%**	**16,947,305**	**12,119,824**	**4,827,482**	**39.83%**
% of Total Revenues								
Grand Total								
Residential	91,714,657	84,564,390	7,150,267	8.46%	9,762,810	7,638,875	2,123,935	27.80%
Small General-Non-Demand	18,256,735	16,867,875	1,388,859	8.23%	1,902,660	1,535,319	367,341	23.93%
Small General-Demand	38,377,244	37,426,359	950,885	2.54%	3,964,157	3,324,470	639,687	19.24%
Large	58,535,001	55,984,995	2,550,005	4.55%	6,028,539	5,042,115	986,423	19.56%
Independent Power Producers	193,955	146,895	47,060	32.04%	14,804	17,553	(2,750)	-15.66%
Private St. Lites	281,596	316,154	(34,557)	-10.93%	25,094	27,331	(2,237)	-8.18%
Sub-total	**207,359,188**	**195,306,668**	**12,052,519**	**6.17%**	**21,698,063**	**17,585,664**	**4,112,399**	**23.38%**
Government								
Small_Non Demand	3,179,930	3,021,940	157,989	5.23%	332,325	277,379	54,946	19.81%
Small-Demand	20,779,787	19,577,332	1,202,454	6.14%	2,052,253	1,760,715	291,538	16.56%
Large	15,404,285	14,202,493	1,201,792	8.46%	1,573,445	1,304,812	268,633	20.59%
Public St. Lites	5,001,887	4,951,419	50,468	1.02%	516,047	437,775	78,272	17.88%
Sub-total	**44,365,889**	**41,753,185**	**2,612,703**	**6.26%**	**4,474,070**	**3,780,681**	**693,389**	**18.34%**
Total-Civilian	**251,725,076**	**237,059,854**	**14,665,222**	**6.19%**	**26,172,133**	**21,366,345**	**4,805,788**	**22.49%**
USN	49,579,251	44,937,008	4,642,244	10.33%	5,019,382	4,418,264	601,119	13.61%
Grand Total	**301,304,327**	**281,996,861**	**19,307,466**	**6.85%**	**31,191,516**	**25,784,609**	**5,406,907**	**20.97%**


GPA - T and D Losses (MWH) Without Renewables
For the Last 7 Years thru 08.31.17
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%
7.02%
7.26%
6.31%
5.20%
4.88%
5.44%
5.75%
113,279
117,269
103,049
85,295
79,267
78,281
83,950
FY 11
FY 12
FY 13
FY 14
FY 15
FY 16
FY 17 Moving 12 Months
T and D Losses (MWH)
T and D Losses (% to Net Generation)


GPA - T and D Losses (MWH) With Renewables
For the Last 7 Years thru 08.31.17
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
-
7.00%
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
7.02%
7.26%
6.31%
5.20%
4.88%
4.73%
4.96%
113,279
117,269
103,049
85,295
79,267
78,281
83,950
FY 11
FY 12
FY 13
FY 14
FY 15
FY 16
FY 17 Moving 12 Months
T and D Losses (MWH)
T and D Losses (% to Net Gen.)


GPA - Station Usage(MWH) Without Renewables
For the Last 7 Years Thru 08.31.17
110,000
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%
5.66%
5.71%
5.05%
4.86%
4.87%
4.32%
4.28%
96,872
97,739
86,765
83,701
83,060
64,952
65,257
FY 11
FY 12
FY 13
FY 14
FY 15
FY 16
FY 17 Moving 12 Months
Station Use (MWH)
% to Gross Generation


GPA - Station Usage(MWH) With Renewables
For the Last 7 Years Thru 08.31.17
110,000
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%
5.66%
5.71%
5.05%
4.86%
4.87%
3.77%
3.71%
96,872
97,739
86,765
83,701
83,060
64,952
65,257
FY 11
FY 12
FY 13
FY 14
FY 15
FY 16
FY 17
Station Use (MWH)
% to Gross Generation


GPA A/R AGING REPORT AUGUST 2017
$8,000,000
$7,000,000
$6,000,000
$5,000,000
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$-
$(1,000,000)
$7,599,378
$1,257,017
$2,848,896
$5,755,710
$15,589
$14,804
($272)
$316,464
$2,054,524
$1,572,064
$521,963
Residential
Commercial G
Commercial J
Commercial P
Private St Lights
IPP
Suspense
Government S
Government K
Government L
Government St Lights
OVER 120 DAYS
91-120 DAYS
61-90 DAYS
31-60 DAYS
0-30 DAYS

GUAM POWER AUTHORITY
GOVERNMENT ACCOUNTS RECEIVABLE
BILLING UP TO 08/31/2017 and Payment Applied as of 09/07/2017

Current (08/17 Billing due 09/30/17)
30 days Arrears (07/17 due 08/15/17)
60 days and over Arrears (06/17 billing due 07/15/17)

NEW ACCT NUMBER		DEPARTMENT	ARREARS BALANCE 31-Jul-17	CURRENT BILL FOR 08/31/2017 BILL DATE 09/07/2017	BILLING ADJUSTMENT 9/7/2017	PAYMENTS AS OF 9/7/2017	BILLING BALANCE 9/7/2017	
		Line Agencies						
124378	0237100000	Dept. of Corrections	71,003.49	-	75,062.05	(71,003.49)	75,062.05	
124401	0437100000	Dept. of Parks & Rec.	44,338.81	382.60	21,250.40	(44,338.81)	21,633.00	
124415	0537100000	Guam Fire Department	18,328.91		18,761.30	(18,328.91)	18,761.30	
108818	6995000000	DOA-Supply Management	1,270.95	-	1,464.52	(1,270.95)	1,464.52	
108799	7895000000	Dept. of Administration	3,687.33	-	3,952.53	(3,687.33)	3,952.53	
124392	1337100000	Nieves Flores Library	9,748.79	-	9,987.41	(9,748.79)	9,987.41	
140297	2206200000	General Services Agency	234.50	-	298.67	(234.50)	298.67	
124380	2237100000	DOA-Data Processing	6,941.61	-	7,610.42	(6,941.61)	7,610.42	
124393	2337100000	Dept. of PH&SS	58,295.74	-	73,937.35	(58,295.74)	73,937.35	
124381	3237100000	Dept. of Education	873,135.89	-	1,026,046.52	(873,135.89)	1,026,046.52	
124394	3337100000	Guam Police Department	34,512.14	-	35,411.69	(34,512.14)	35,411.69	
128478	3569100000	Dept of Youth Affairs (Federal)	1,457.85	-	1,044.81	(1,457.85)	1,044.81	
124407	4437100000	Dept. of Youth Affair* (Local)	13,448.92	-	14,457.80	(13,448.92)	14,457.80	
124445	4737100000	Guam Environmental Protect	5,790.74	-	6,374.42	(5,790.74)	6,374.42	
124408	5437100000	Mental Health/Subst.	40,136.04	-	42,347.47	(40,136.04)	42,347.47	
148823	7200300000	Veteran Affairs	998.81	-	1,098.93	(998.81)	1,098.93	
124412	7437100000	Civil Defense (Military Affairs)	10,669.44	15.45	11,379.70	(8,609.78)	13,454.81	
158935	7463300000	Pacific Energy Resource Center	519.76	-	602.60	(519.76)	602.60	
124374	8137100000	Dept. of Agriculture	8,951.49	-	9,416.67	(8,951.49)	9,416.67	
124399	8337100000	DPW-FAC Adm Account	25,567.72	-	27,361.57	(25,567.72)	27,361.57	
	8437100000	Guam Visitors Bureau	4,073.86	-	4,480.52	(4,073.86)	4,480.52	
166560	8446300000	Yona Senior Citizen Center	669.05	-	817.97	(669.05)	817.97	
124414	9437100000	Chamorro Village	4,691.70	35.18	4,645.98	(4,691.70)	4,681.16	
292266	5247210000	Mayors Council	3,721.23	-	4,390.62	(3,721.23)	4,390.62	
309494	6293410000	Office of the Governor	21,889.21	-	24,140.87	(21,889.21)	24,140.87	
	8555858369	Dept of Chamorro Affairs (Guam Museum)	17,395.50	-	18,404.31	(17,395.50)	18,404.31	
		Sub Total	**1,281,479.48**	**433.23**	**1,444,747.10**	**(1,279,419.82)**	**1,447,239.99**	
		MAYORS						
124427	0637100000	Santa Rita Mayor	3,494.62	-	3,547.63	(3,494.62)	3,547.63	
124437	0737100000	Ordot/Chalan Pago Mayor	838.57	-	911.15	(838.57)	911.15	
124417	1537100000	Agana Mun Planning Council	1,229.26	-	1,307.99	(1,229.26)	1,307.99	
124428	1637100000	Piti Mayor	1,398.61	-	1,333.66	(1,398.61)	1,333.66	
124438	1737100000	Mongmong/Toto/Maite Mayor	879.66	(357.99)	907.62	(879.66)	549.63	
124429	2637100000	Asan/Maina/Adelup Mayor	968.07	-	1,034.57	(968.07)	1,034.57	
124439	2737100000	Sinajana Mayor	4,810.84	-	4,966.88	(4,810.84)	4,966.88	
124430	3637100000	Dededo Mayor	5,477.73	-	5,606.24	(5,477.73)	5,606.24	
124431	4637100000	Yigo Mayor	3,127.16	-	3,616.03	(3,127.16)	3,616.03	
124432	5637100000	Umatac Mayor	1,315.54	-	1,275.34	(1,315.54)	1,275.34	
124423	6537100000	Agana Hts. Mayor	4,817.47	-	5,116.05	(4,817.47)	5,116.05	
124433	6637100000	Merizo Mayor	1,487.74	-	1,787.96	(1,487.74)	1,787.96	
124453	6737100000	Barrigada Mayors Office	1,855.26	-	2,108.14	(1,855.26)	2,108.14	
124424	7537100000	Agat Mayor	3,132.29	50.00	3,104.99	(3,580.64)	2,706.64	
124434	7637100000	Inarajan Mayor	1,483.94	-	1,430.25	(1,483.94)	1,430.25	
124425	8537100000	Tamuning Mayor	5,950.49	-	5,966.25	(5,950.49)	5,966.25	
124435	8637100000	Talofofo Mayor	2,253.63	-	2,221.03	(2,253.63)	2,221.03	
124426	9537100000	Mangilao Mayor	4,520.57	-	4,655.52	(4,520.57)	4,655.52	
124436	9637100000	Yona Mayor	1,027.62	-	1,006.26	(1,027.62)	1,006.26	
		Sub Total	**50,069.07**	**(307.99)**	**51,903.56**	**(50,517.42)**	**51,147.22**	
		DPW ACCOUNTS						
124395	4337100000	DPW-Village St. Lights	313,945.93	1,400.00	402,422.31	(313,945.93)	403,822.31	
124396	5337100000	DPW- Primary St. Lights	76,053.33	-	81,451.29	(76,053.33)	81,451.29	
124397	6337100000	DPW-Sec/Coll St. Lights	23,486.61	-	25,118.74	(23,486.61)	25,118.74	
124398	7337100000	DPW-Signal Lights	9,782.71	-	10,384.13	(9,782.71)	10,384.13	
		Sub Total	**423,268.58**	**1,400.00**	**519,376.47**	**(423,268.58)**	**520,776.47**	
		(B) AUTONOMOUS/PUBLIC CORP						
124402	1437100000	Retirement Fund	5,282.80	-	6,022.86	(5,282.80)	6,022.86	
208988	1915500000	Guam Housing Corp Rental Division	1,824.43	(96.62)	1,343.15	-	3,070.96	1
124403	2437100000	University of Guam	155,545.30	29.22	171,568.32	(155,799.20)	171,343.64	
124383	4237100000	Guam Airport Authority	467,145.20	-	489,547.28	(467,145.20)	489,547.28	
	5357510000	University of Guam (NET METERED)	71,420.96	-	77,885.70	(71,420.96)	77,885.70	
124387	6237100000	G H U R A	10,583.44	(85.64)	22,999.40	(22,638.19)	10,859.01	
124409	6437100000	Guam Community College	44,282.43	-	46,783.72	(44,282.43)	46,783.72	
124388	7237100000	Guam Memorial Hospital	158,338.19	-	168,534.42	(158,338.19)	168,534.42	
124377	9137100000	Port Authority of Guam	89,239.99	-	90,858.17	(89,239.99)	90,858.17	
	9157510000	Guam Community College (NET METERED)	32,074.53	-	36,349.38	(32,074.53)	36,349.38	
288441	9173210000	Guam Solid Waste Authority	5,325.52	-	5,354.04	(5,325.52)	5,354.04	
124400	9337100000	Guam Waterworks Authority	1,085,019.49	(1,197.21)	1,118,703.47	(1,085,078.51)	1,117,447.24	
		Sub Total	**2,126,082.28**	**(1,350.25)**	**2,235,949.91**	**(2,136,625.52)**	**2,224,056.42**	
		(C) OTHERS						
124391	0337100000	Guam Legislature	256.49	-	230.88	(256.49)	230.88	
	9503154359	Guam Legislature (NET METER)	5,606.19	-	6,437.66	(5,606.19)	6,437.66	
124379	1237100000	Superior Court of Guam	64,813.90	-	71,834.51	(64,813.90)	71,834.51	
124418	2537100000	Agana Post Office	4,747.61	-	5,129.70	(4,747.61)	5,129.70	
130431	2570200000	Customs & Quarantine Agency	861.92	-	946.30	(861.92)	946.30	
124419	3537100000	U.S. Post Office	37,023.73	-	37,355.43	(37,023.73)	37,355.43	
124422	5537100000	Dept. of Military Affairs	76,354.48	-	86,004.48	(76,354.48)	86,004.48	
	3209463043	Dept. of Military Affairs (NET METERED)	2,566.62	-	2,926.27	(2,566.62)	2,926.27	
124446	5737100000	KGTF	16,037.37	73.17	5,921.99	(16,037.37)	5,995.16	
102783	7281000000	Tamuning Post Office	5,291.04	-	5,471.61	(5,291.04)	5,471.61	
		Sub Total	**213,559.35**	**73.17**	**222,258.83**	**(213,559.35)**	**222,332.00**	
		Sub Total (w/out Promissory Note)	**4,094,458.76**	**248.16**	**4,474,235.87**	**(4,103,390.69)**	**4,465,552.10**	

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

Issues for Decision

Resolution No. 2017-29:

APPROVAL OF ZERO TOLERANCE DRUG-AND ALCOHOL-FREE WORKPLACE POLICY

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

The CCU has directed GPA and GWA to review its drug testing policies to ensure that the Agency maintains a drug- and alcohol-free workplace. GPA and GWA have drafted a new unified DRUG- AND ALCOHOL-FREE WORKPLACE policy that makes changes from the previous policy that allowed employees to a complete a drug treatment program, and remain employed provided they successfully completed a drug treatment program. GPA and GWA recognize that while the previous policies provided counseling and treatment to employees, it does not deter employee drug and/or alcohol use and its adverse effects on job performance in the workplace.

The new draft DRUG- AND ALCOHOL-FREE WORKPLACE POLICY provides for a zero-tolerance drug policy, such that if an employee tests positive for drugs they will be terminated as an employees of GPA and GWA. To ensure a drug-free workplace, every employee shall be tested for illicit drugs at least once a year. The management has provided notice, informational sessions, and solicited comments from GPA & GWA employees, including supervisors and managers regarding the new draft DRUG-AND ALCOHOL-FREE WORKPLACE policy.

Management of GPA and GWA request the Consolidated Commission on Utilities to adopt the draft unified DRUG- AND ALCOHOL-FREE WORKPLACE policy as follows:

1. **The unified DRUG- AND ALCOHOL-FREE WORKPLACE policy for GPA and GWA is hereby adopted to include employees of GPA and GWA.**
2. **All Consolidated Commission on Utilities members and employees shall be subject to the DRUG- AND ALCOHOL-FREE POLICY, and accordingly, will be placed in the employee population for random testing.**
3. **This policy shall be effective for the Guam Power Authority and the Consolidated Commission on Utilities on October 1, 2017.**
4. **This policy shall be effective for the Guam Waterworks Authority upon completion of the Guam Administrative Adjudication Act process.**

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. 2017–29
GWA RESOLUTION NO. 42-FY2017

ADOPTION AND IMPLEMENTATION OF A UNIFIED ZERO TOLERANCE DRUG- AND ALCOHOL-FREE WORKPLACE POLICY FOR THE GUAM POWER AUTHORITY AND THE GUAM WATERWORKS AUTHORITY

WHEREAS, it is the policy of the Guam Power Authority and Guam Waterworks Authority to provide a safe, healthy and secure work environment for all employees. It is also the policy of GPA and GWA to ensure that all employees perform their job duties in a safe, efficient and productive manner; and

WHEREAS, the CCU has directed GPA and GWA to review its drug testing policies to ensure that the Agency maintains a drug- and alcohol-free workplace; and

WHEREAS, GPA and GWA have drafted a new unified DRUG- AND ALCOHOL-FREE WORKPLACE policy that makes changes from the previous policy that allowed employees to a complete a drug treatment program, and remain employed provided they successfully completed a drug treatment program; and

WHEREAS, GPA and GWA recognize that while the previous policies provided counseling and treatment to employees, it does not deter employee drug and/or alcohol use and its adverse effects on job performance in the workplace; and

WHEREAS, the new draft DRUG- AND ALCOHOL-FREE WORKPLACE POLICY provides for a zero-tolerance drug policy, such that if an employee tests positive for drugs they will be terminated as employees of GPA and GWA; and

WHEREAS, to ensure a drug-free workplace, every employee shall be tested for illicit drugs at least once a year; and

WHEREAS, management has provided notice, informational sessions, and solicited comments from GPA & GWA employees, including supervisors and managers regarding the new draft DRUG- AND ALCOHOL-FREE WORKPLACE policy; and

WHEREAS, management of GPA and GWA request the Consolidated Commission on Utilities to adopt the draft unified DRUG- AND ALCOHOL-FREE WORKPLACE policy.

NOW, THEREFORE, BE IT RESOLVED, by the CONSOLIDATED COMMISSION ON UTILITIES as follows:

1. The unified DRUG- AND ALCOHOL-FREE WORKPLACE policy for GPA and GWA is hereby adopted to include employees of GPA and GWA.
2. All Consolidated Commission on Utilities members and employees shall be subject to the DRUG- AND ALCOHOL-FREE POLICY, and accordingly, will be placed in the employee population for random testing.
3. This policy shall be effective for the Guam Power Authority and the Consolidated Commission on Utilities on October 1, 2017.
4. Implementation by GWA of this policy shall take place after completion of the Guam Administrative Adjudication Act procedure as amended by P.L. 34-32.

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

DULY and REGULARLY ADOPTED AND APPROVED THIS 26th day of SEPTEMBER, 2017.

Certified By:	**Attested By:**
_____	_____
JOSEPH T. DUENAS	**J. GEORGE BAMBA**
Chairperson	Secretary
Consolidated Commission on Utilities	Consolidated Commission on Utilities

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities (CCU), as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and correct copy of a resolution duly adopted at a regular meeting of the members of 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: _____

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

GUAM POWER and GUAM WATERWORKS AUTHORITY (GPWA) Drug-and Alcohol-Free Workplace Policy

Statement of Policy

It is the policy of the GPWA to provide a safe, healthy and secure work environment for all employees. It is also the policy of the GPWA to ensure that all employees perform their job duties in a safe, efficient and productive manner. In an effort to ensure that Department Head, Managers and Supervisors continue to be informed and educated on GPWA's Drug and Alcohol policies, updated training will be required every two years. All new employees and any employee who is hired or promoted into a supervisory position must receive training on this policy within sixty (60) days of hire or promotion. Finally, it is the policy of the GPWA to ensure that its equipment and facilities are maintained and utilized appropriately so as not to pose a risk of harm. The use of drugs and the misuse of alcohol are inconsistent with these policies. Accordingly, to protect the health, safety and welfare of employees, citizens, visitors and persons who interact with GPWA employees during the course and scope of their employment, GPWA has adopted this Drug- and Alcohol- Free Workplace Policy which shall be strictly enforced.

Enforcement Date

This policy will go into effect on October 1, 2017 and will apply to all employees of GPWA regardless of status or classification. Upon the effective date, the policy will be strictly enforced and **will not** allow any employee entry into the Employee Assistance Program upon voluntary identification by himself or herself as a user of drugs or abuser of alcohol.

Prohibited Conduct

The following violations of the Drug and Alcohol Free Workplace Policy constitute gross misconduct and shall result in severe disciplinary action up to and including dismissal:

1. Unauthorized use, possession, sale, or solicitation for purchase/sale of drugs or alcohol on GPWA property or while the employee is on duty.

2. Hindering, obstructing or refusing to cooperate or participate in any investigation involving suspected violations of this policy. This includes, but is not limited to, providing false, misleading or incomplete information in response to any inquiry from a supervisor related to a suspected violation of this policy. It also includes refusing to undergo a drug or alcohol test(s).

a) Refusal by an applicant to sign a consent form will be considered a refusal to submit to a drug and/or alcohol test as a condition of employment and will be considered the equivalent of receiving a confirmed "positive" result for employment and disqualification purposes. Such applicant will have his/her name removed from the certified list of eligibles and the position eligibility listing.

b) Refusal by an employee to sign a consent form will be considered a refusal to submit to a drug and/or alcohol test as a condition of employment and will be considered the equivalent of receiving a confirmed "positive" result for employment and disciplinary purposes, up to, and including dismissal.

3. Hindering, delaying or obstructing a drug or alcohol test(s), including but not limited to, tampering with a sample or interfering in any way with the chain of custody.

4. Reporting to work or engaging in any work activity whatsoever on behalf of the GPWA in a condition which could pose a threat of harm to the employee or any other person, or reporting to or engaging in any work on behalf of the GPWA in a condition which could impair the ability to satisfactorily perform any essential function of the job, due to the use of drugs or misuse of alcohol. Should any detectable amount of drugs, or alcohol in a concentration of 0.04 breath alcohol content (BAC) or greater be established, the employee is in violation of the GPWA Drug & Alcohol Free Workplace Policy. No employee shall perform their job functions within four hours after using alcohol.

5. Abusing or misusing prescription drugs or over-the-counter medication when such conduct could reasonably interfere with the safe or satisfactory performance of any essential job function. This includes, but is not limited to, the use, possession, sale or solicitation for the purpose of purchase or sale any prescription medication for which the employee lacks a valid prescription.

Prohibited Substances

1. "Drugs" refers to marijuana, cocaine, amphetamines, opiates (including heroin and codeine), phencyclidine, and all other "controlled substances" as defined in Title 9 GCA Chapter 67 Guam Uniform Controlled Substances Act.
   a. Specimens from applicants and employees will be screened in all cases to identify the following classes of substances:
      1. Marijuana/Cannabinoids (THC);
      2. Cocaine Metabolites;
      3. Opiates;
      4. Phencyclidine (PCP);
      5. Amphetamines/Methamphetamine; and
      6. Barbiturates

   b. GPWA reserves the right to change, add or delete any combination of "controlled substances" for screening as new forms become available.

2. "Alcohol" includes any beverage or substance containing alcohol manufactured for the primary purpose of personal consumption.

3. "Prescription drugs" means any substance, which is attainable only by lawful prescription from a physician.

4. "Over-the-counter medication" includes any substance which does not require a prescription but has the capacity to affect a person physically, mentally, or emotionally or which could otherwise affect a person's ability to safely perform his/her duties.

When Testing is Required

1. All competitive and non-competitive recruitments within GPWA will be tested after a conditional offer of employment has been extended. Drug testing will be required for but, not limited to the following:

a) **Pre-Employment (Probational/Unclassified/Exempt/Provisional/Temporary)**: Applicants for positions within GPWA will be tested after a conditional offer of employment has been extended. An applicant who refuses a drug test(s) or who tests positive, shall not be extended a final offer of employment.

b) **Promotions, Transfers, Reclassification:** Employees within GPWA will be tested upon the General Manager's approval for selection/reclassification. An employee who refuses a drug test(s) or who tests positive, shall be subject to disciplinary action up to and including dismissal.

Except for emergency situations, applicants and employees will not be permitted to reschedule drug testing after they are notified that such testing is scheduled.

2. **Random Testing**: All positions at GPWA shall be subject to random testing as follows:

a) Tests will be ordered on a random, unannounced basis from the entire population of GPWA employees.

(1) A scientifically valid method such as a random number table or a computer-based random number generator will be used to select employees, thereby allowing each employee an equal chance of being tested each quarter.

(2) At least 25% of the employees will be selected for drug testing, and at least 25% of employees for breath alcohol testing each quarter of the testing year.

(3) An employee's name will remain in the potential testing population after being selected so that every employee will have an equal chance of being tested each time selections are made. Therefore, it is possible that any employee, who is randomly selected for testing, may be randomly selected again every quarter.

(4) Every employee selected for random testing must be tested unless that employee is excused by the General Manager for reasons such as long-term leave, disability or termination of employment.

(5) Any employee who has not had an equal chance of being tested each time a selection was made will be tested on or before September 30 of any year.

b) GPWA reserves the right to increase or decrease the frequency of testing based on the needs of each utility, availability of resources, and experience in the program, consistent with the duty to achieve a drug free workplace.

3. **Follow-up Testing**: The GPWA General Manager reserves the right to require an employee to submit to subsequent drug testing as necessary, during the authorized treatment program, and for 12 months after the program ends. A certification of completion from the treating agency must be submitted to the Human Resources office to demonstrate a successful completion of the treatment program.

4. **Return to Duty Testing**: Employees who are absent from work without approval for more than fifteen calendar (15) days shall be tested for drugs immediately after returning to work and before performing any job duties.

5. **Reasonable Suspicion**: All employees will be subject to testing when there is reasonable suspicion that the employee has used drugs or misused alcohol in violation of this policy. Grounds for reasonable suspicion testing shall include, but not be limited to:

a) Personal observation of the employee's job performance, appearance, behavior, speech or odor which causes reasonable suspicion that the employee (i) is impaired by drugs or alcohol, (ii) has used drugs or alcohol while on duty, (iii) or poses a threat to personal safety or others due to the use of drugs or misuse of alcohol in violation of this policy.

b) Specific and objective facts indicating that an employee's drug or alcohol use may have caused or been a contributing factor to an on-duty motor vehicle accident. An alcohol test(s) should be completed within two (2) hours of the accident and a drug test(s) within twenty-four (24) hours of the accident. The following facts, if present, may independently or collectively, depending upon the circumstances, give rise to reasonable suspicion:

(1) the appearance, behavior, speech or odor of the employee immediately prior to or after the accident;

(2) the employee left the scene or attempted to leave the accident scene without legal authority or permission to do so;

(3) the employee acted contrary to a safety rule, established safety practice or otherwise engaged in demonstrably unsafe behavior for which there is no reasonable explanation;

(4) the employee was arrested or received a traffic citation;

(5) the employee or any person received medical attention as a result of the accident;

(6) the employee has been involved, as a contributing factor, in a pattern of repetitive on-duty motor vehicle accidents whether they involved actual or potential injury.

c) Specific and objective facts indicating that an employee's drug or alcohol use may have caused or been a contributing factor to an on the job accident. An alcohol test(s) should be completed within two (2) hours of the accident and a drug test(s) within forty-eight (48) hours of the accident. The following facts, if present, may independently or collectively, depending on the circumstances, give rise to reasonable suspicion:

(1) The appearance, behavior, speech or odor of the employee immediately prior to or after the accident;

(2) The employee left the accident scene or attempted to leave the accident scene without legal authority or authorization to do so, or failed to report the accident to the appropriate individual or otherwise attempted to keep appropriate persons from learning about the accident or the extent of the accident;

(3) The employee acted contrary to a safety rule, established safety practices
or otherwise engaged in demonstrably unsafe behavior without a reasonable explanation;

(4) The employee or any other person received medical attention because of the accident;

(5) The employee has been involved as a contributing factor in a pattern of on- duty accidents whether or not they involved actual or potential injury.

d) Drugs, drug paraphernalia, alcohol or containers indicating the presence of drugs or alcohol are observed or discovered in a location in which the employee had primary control or access, including but not limited to, desks, lockers, equipment, machines or vehicles. The employee must have accessed the location within eight (8) hours prior to the discovery of such items.

6. **Consent**: By acknowledging receipt of this Policy in writing, the employee is providing his or her consent to any and all testing required to comply with the Policy.

Who May Request a Reasonable Suspicion Drug or Alcohol Test(s)

1. Any supervisor who has received training in the signs and symptoms of drug and alcohol use and impairment may request an employee to undergo a reasonable suspicion test(s) for drugs or alcohol based upon (i) the personal observation of the employee by the trained individual, or (ii) personal observation of the employee by another employee who has fully disclosed the observations to the trained individual, or (iii) observation of the employee by a nurse or physician engaged in the treatment or evaluation of a work related injury who has disclosed such observation to the trained individual.

2. Any untrained supervisor may request a reasonable suspicion test(s) for drugs or alcohol based upon his personal observation of the employee, under the following circumstances:

a) The employee has been independently observed by a trained supervisor, or

b) A trained supervisor has reviewed the underlying facts and agrees that reasonable suspicion exists to require a test.

3. Any supervisor, personnel of managerial capacity, or personnel of the Safety and Human Resources Divisions trained in detecting drug and alcohol impairment, may request a reasonable suspicion drug or alcohol test(s) following a work-related accident based upon personal observation of the employee or upon review of the specific and objective facts underlying the accident.

Procedure

1. Whenever there is reasonable suspicion to require a drug or alcohol test(s) under this policy, the General Manager, department/division heads or designees and Human Resources shall be notified of the circumstances necessitating the test(s) as soon as possible.

2. All circumstances causing reasonable suspicion to require a drug or alcohol test(s) shall be fully documented by the supervisor(s) and/or managerial personnel and all appropriate witnesses as soon as possible.

3. All GPWA-issued equipment, property and facilities, including but not limited to, desks, lockers, and vehicles (collectively "materials") are subject to inspection at any time and for any reason. No employee shall have any privacy interest whatsoever in any GPWA issued materials. No personal property may be searched unless the owner of the property has consented or a search is otherwise legally permissible.

4. Alcohol screening will be conducted using a federally approved evidential breath-testing device. An initial screening test of one (1) breath sample will be conducted first, and if an initial test detects any level of alcohol, a second confirmation test of one (1) additional breath sample will be completed.

5. Testing will be performed by a certified, licensed forensic laboratory. Drug test methods, collection, security and chain of custody procedures will conform to federal regulations. The drug test will include marijuana, cocaine, amphetamines, methamphetamines, opiates (including heroin and codeine), and phencyclidine (PCP) and barbiturates. Other "controlled substances" may be added as new forms become available. All specimens identified as positive for illegal drugs on the initial screening will be confirmed using the gas chromatography/mass spectrometry technique.

6. All positive test results for drugs will be interpreted by a physician approved by GPWA as a medical review officer (MRO) before the results are reported to the GPWA. Prior to notifying GPWA, the MRO will make reasonable efforts to contact the employee for the purpose of allowing the employee to offer an alternative medical explanation for the positive test result. If the MRO is able to contact the employee and determines there is a legitimate medical explanation for the positive test, the result will be communicated as negative to GPWA. The MRO's inability to contact the employee before providing test results to the GPWA will not void the test result or make the test result unusable in any subsequent disciplinary action. Because the employee is present for interpretation of an alcohol test, the procedure concerning prior notification by the MRO is not applicable.

7. Upon notification by the MRO of a verified positive result for drugs, the employee may request that the remaining portion of his split specimen undergo a second confirmation test at his expense. The results of the second confirmation test, upon review by the MRO, will be determinative. If the results from the second confirmation test is negative, all prior positive tests will be disregarded and shall not be the basis for any disciplinary or adverse action.

8. The GPWA will make reasonable efforts to notify the employee of a positive drug test within five (5) days from the date it receives the test results. Because the results of a breath alcohol test are immediately available, this provision will not apply to alcohol tests conducted in such a manner.

9. Any employee ordered to be tested, based upon reasonable suspicion, shall be immediately removed from duty, escorted to the testing facility and taken home (unless other suitable arrangements have been made to transport the employee including calling a cab). The employee shall turn in keys to a GPWA vehicle, building or office, their identification badge or any other property belonging to the GPWA. The employee shall be placed on paid administrative leave pending the results of the test.

10. An employee who tests positive for drugs or alcohol shall immediately be relieved from duty, required to turn in keys to a GPWA vehicle, building or office, identification badge or any other property that belongs to the GPWA, placed on paid administrative leave, and sent home pending disciplinary action, if appropriate. A supervisor may take an employee home. If a supervisor is not comfortable taking an employee home, however, a cab may be called to come and take the employee home at the employee's expense.

11. In situations in which the employee has been ordered to be tested or tests positive and the employee refuses assistance in leaving the building and walks out or insists on leaving in his/her own vehicle, document the situation and, depending upon the circumstances, call Guam Police Department's non-emergency phone number. Give the police the employee's name, vehicle description, and license plate number. However, if the employee is extremely agitated, violent or is making threats of violence, leaves the premises in a GPWA vehicle, or you believe the employee has violated the law, call the Guam Police Department at 9-1-1.

12. A refusal to consent to a drug or alcohol test is a violation of the Policy and will be considered the equivalent of receiving a confirmed "positive" result for employment and disciplinary purposes, up to, and including dismissal.

13 If it is not reasonable under the circumstances to conduct an alcohol test, based on a breath test, GPWA reserves the right to test for the presence of alcohol by a blood test analysis. If this procedure is used, the GPWA will attempt to notify the employee of the results within five (5) days after the results are received. An MRO will not be used when a blood test for alcohol is conducted.

Employee Assistance Program

Prior to October 1, 2017, any employee who voluntarily identifies himself or herself as a user of drugs or abuser of alcohol, will not be subject to disciplinary action if the employee seeks immediate assistance and treatment through the GPWA's Employee Assistance Program (EAP) or a similarly available treatment program. Failure to comply with all requirements of a treatment program, or continued use of drugs or alcohol during or after completion of such a program, will result in dismissal.

Arrests for Drug and Alcohol Related Offenses

Any employee who is arrested for a drug or alcohol related offense must notify the General Manager of the arrest immediately. GPWA will decide at that time whether the arrest causes a temporary or permanent disqualification from holding that position, or constitutes grounds for disciplinary action. All convictions for alcohol or drug related offenses must be reported immediately by an employee to the General Manager. GPWA reserves the right to take appropriate action based upon such conviction.

All employees who are required to operate a GPWA vehicle as a regular part of their job must report any drug or alcohol arrest, temporary or permanent suspension of driving privileges, and any drug/alcohol related conviction to the General Manager immediately. GPWA reserves the right to take appropriate action, including relieving the employee from duty, transferring the employee to a non-driving position, or instituting disciplinary action up to and including dismissal.

Confidentiality

All reports of test results for drug and alcohol, searches, or any employee referral, or participation in an EAP program or treatment program for addictive disorders, will be maintained in strict confidence. Any person authorized to have access to such confidential information, who, without authorization, discloses it to another person shall have engaged in gross misconduct and be subject to severe disciplinary action up to and including dismissal. The confidentiality of such information shall not apply to any use by or communication to the GPWA General Counsel, or where the information is relevant to the GPWA's defense in an administrative or civil action. Such information may also be disclosed to the extent required by any federal, state or local law, statute, ordinance or regulation.

Proposed 2018 Budget

Pro-Forma Statement of Operations ('000)	2017 Adjusted Budget	2017 Projected Actual	2018 Proposed Budget
Revenue			
Sale of Electricity:			
Base Revenue	$ 157,720	$ 163,486	$ 165,064
Fuel Revenue	225,000	166,974	248,678
Miscellaneous	2,600	2,181	2,029
Provision for bad debt	(1,000)	(1,000)	(1,039)
Total Revenue	**384,320**	**331,641**	**414,732**
Production Cost			
Production Fuel	225,000	166,974	248,677
IPP Costs	17,835	20,040	17,355
Total Production Cost	**242,835**	**187,014**	**266,032**
Operating Expenditures	**75,394**	**68,873**	**75,757**
Earnings Before Depreciation & Amortization	**66,091**	**75,754**	**72,943**
Depreciation & Amortization	41,804	48,215	43,619
Earnings from Operations	**24,287**	**27,539**	**29,324**
Non-operating revenues (expense)			
Interest/Other Income (Expense)	(24,079)	(25,768)	(28,327)
Change in Net Position	**$ 208**	**$ 1,771**	**$ 997**

Proposed 2018 Budget - Continued

Debt Service Coverage Ratio	2017 Adopted	2017 Projected	2018 Proposed
Debt Service Coverage Ratio (Bond Method)	2.19	2.51	2.44
Debt Service Coverage Ratio (S&P Method) (Bond DSCR - 1.3)	1.51	1.64	1.57

Reserve Balance ('000)	2017 Adopted	2017 Projected	2018 Proposed
Unrestricted Cash Fund Balance	$ 72,548	$ 64,812	$ 54,906
Number of Days Cash on Hand	90	92	59

LEAC ('000)	Aug-17 to Jan-18	18-Feb to July -18
LEAC-Residential rate	$ 0.117718	To be determine in Dec. 2017

	2017 Adopted	2018 Proposed
General Plant	$ 13,548,120	$ 16,780,813
Line Extensions	6,092,614	4,270,187
Engineering Projects	4,000,000	4,179,000
	$ 23,640,734	$ 25,230,000

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

Issues for Decision

Resolution No. 2017-35:

RELATIVE TO APPROVAL OF A BUDGET FOR THE GUAM POWER AUTHORITY FOR FISCAL YEAR 2018

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

Section 8117 of Chapter 8 of Title 12 of Guam Code Annotated authorizes the Consolidated Commission on Utilities (CCU) to adopt an annual budget for the Authority. Section 6.11 of the GPA Bond Indenture Agreement requires the Authority to provide a copy of an approved budget to the Bond Trustee prior to the beginning of each fiscal year. The General Manager has carefully scrutinized each line item of the budget and made substantial and significant reductions to the budget document as a whole to ensure that all budget expenditures are consistent with the strategic goals of the Authority. The Consolidated Commission on Utilities has held a working session in which budget items were reviewed and discussed.

The Fiscal Year 2018 Budget is based on a Non-Fuel Revenue forecast of $165,064,000 and miscellaneous revenues and a Fuel Revenue forecast of $250,707,000 for *total revenues of $415,771,000.*

Total Operations and Maintenance budget includes Labor and Retiree's benefit costs of $48,294,006; Non-Labor cost of $34,257,992 less Capitalized O&M of $6,794,853 for *total O&M Budget of $75,757,145*; Bad Debt Expense of $1,039,000; Independent Power Producers costs plus Aggreko Payments of $43,719,000; Debt Service of $30,168,000; Production Fuel of $248,677,000 and revenue Funded Capital Improvement Projects of $25,230,000. Funds pledged for the Bond Reserves are not included in the overall budget amounts.

How much will it cost?

The General Manager of the Guam Power Authority has created and thoroughly reviewed the budget for *Fiscal Year 2018 totaling $415,771,000.* The CCU Commissioners noted that the budget provides funding of Revenue Funded Capital Improvement Projects totaling $25,230,000.

GUAM CCU

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

September 26, 2017

MEMORANDUM

TO: Members, Consolidated Commission on Utilities

FROM: Board Secretary

SUBJECT: **REPORT OF POLL VOTE ON RESOLUTION 2017-35 FY2018 BUDGET**

This is to certify that a POLL VOTE was conducted via email on September 8, 2017 relative to above subject matter. I attest that the vote below is true and correct and submit the related support documents.

COMMISSIONER	Y/N	INITIALS	TIME / DATE	VOTED BY
Joseph T. Duenas	Yes		2:33 p.m. / 8 Sept	Email
Francis E. Santos	Yes		1:08 p.m. / 9 Sept	Email
J. George Bamba	Yes		10:16 a.m. / 9 Sept	Email
Judith P. Guthertz	Yes		5:36 p.m. / 8 Sept	Email
Simon A. Sanchez	No response		7:45 a.m.. / 9 Sept	Email

Attested by:

_____
B. Lou Sablan, Board Secretary

Concurred by:

_____
John Benavente, GM

Bernadette Lou Sablan

From:	Bernadette Lou Sablan
Sent:	Friday, September 08, 2017 1:46 PM
To:	CCU Board Members
Cc:	John M Benavente; Graham Botha; John J.E.. Kim; Selma HG Blas
Subject:	CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2
Attachments:	CCU Resolution 2017- 35 FY2018 BUDGET v2.docx

Dear Commissioners,

This is a POLL VOTE MATTER (refer to Legal Counsel message below regarding urgency).

Please reply all when responding so Legal Counsel is aware of your vote and can act with PUC with required 3 (or more) votes for passage.

Thank you,
Lou

From: Graham Botha
Sent: Thursday, September 7, 2017 3:57 PM
To: Bernadette Lou Sablan
Cc: John M Benavente; John J.E.. Kim; Selma HG Blas
Subject: CCU Resolution 2017- 35 FY2018 BUDGET v2

Lou:

Please send to the CCU commissioners for a poll vote. We need to file with the PUC prior to the CCU meeting on September 26, 2017.

Thanks,

Graham

Disclaimer Notice: The information contained in this communication is intended solely for the use of the individual or entity to whom it is addressed and others authorized to receive it. It may contain confidential or legally privileged information. If you are not the intended recipient you are hereby notified that any disclosure, copying, distribution or taking any action in reliance on the contents of this information is strictly prohibited and may be unlawful. If you have received this communication in error, please notify us immediately by responding to this email and then delete it from your system. Guam Power Authority is neither liable for the proper and complete transmission of the information contained in this communication nor for any delay in its receipt.

Bernadette Lou Sablan

From: Joseph Duenas <jtduenas@hotmail.com>
Sent: Friday, September 08, 2017 2:33 PM
To: Bernadette Lou Sablan
Cc: CCU Board Members; John M Benavente; Graham Botha; John J.E.. Kim; Selma HG Blas
Subject: Re: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2

Commissioners,

I vote yes for this poll vote. Joey

Sent from my iPad

On Sep 8, 2017, at 1:47 PM, Bernadette Lou Sablan <l.sablan@gpagwa.com> wrote:

> Dear Commissioners,
>
> This is a POLL VOTE MATTER (refer to Legal Counsel message below regarding urgency).
>
> Please reply all when responding so Legal Counsel is aware of your vote and can act with PUC with required 3 (or more) votes for passage.
>
> Thank you,
> Lou

From: Graham Botha
Sent: Thursday, September 7, 2017 3:57 PM
To: Bernadette Lou Sablan
Cc: John M Benavente; John J.E.. Kim; Selma HG Blas
Subject: CCU Resolution 2017- 35 FY2018 BUDGET v2

Lou:

Please send to the CCU commissioners for a poll vote. We need to file with the PUC prior to the CCU meeting on September 26, 2017.

Thanks,

Bernadette Lou Sablan

From: Judith Gutherz <judithguthertz@gmail.com>
Sent: Friday, September 08, 2017 5:36 PM
To: Joseph Duenas
Cc: Bernadette Lou Sablan; CCU Board Members; John M Benavente; Graham Botha; John J.E.. Kim; Selma HG Blas
Subject: Re: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2

I vote yes on the resolution. Judi guthertz

PLEASE UPDATE YOUR ADDRESS BOOK AS I HAVE CHANGED MY EMAIL ADDRESS TO: judithguthertz@gmail.com *

On Sep 8, 2017, at 2:32 PM, Joseph Duenas <jtduenas@hotmail.com> wrote:

> Commissioners,
>
> I vote yes for this poll vote. Joey
>
> Sent from my iPad
>
> On Sep 8, 2017, at 1:47 PM, Bernadette Lou Sablan <l.sablan@gpagwa.com> wrote:
>
> > Dear Commissioners,
> >
> > This is a POLL VOTE MATTER (refer to Legal Counsel message below regarding urgency).
> >
> > Please reply all when responding so Legal Counsel is aware of your vote and can act with PUC with required 3 (or more) votes for passage.
> >
> > Thank you,
> > Lou
>
> ---
>
> **From:** Graham Botha
> **Sent:** Thursday, September 7, 2017 3:57 PM
> **To:** Bernadette Lou Sablan
> **Cc:** John M Benavente; John J.E.. Kim; Selma HG Blas
> **Subject:** CCU Resolution 2017- 35 FY2018 BUDGET v2
>
> Lou:

Bernadette Lou Sablan

From: Francis Santos (CCU Member)
Sent: Saturday, September 09, 2017 1:08 AM
To: Judith Guthertz
Cc: Joseph Duenas; Bernadette Lou Sablan; CCU Board Members; John M Benavente; Graham Botha; John J.E.. Kim; Selma HG Blas
Subject: Re: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2

Fellow Commissioners,

My vote is YES.

Thank you,
Francis

Sent from my iPad

On Sep 8, 2017, at 12:36 AM, Judith Gutherz <judithguthertz@gmail.com> wrote:

> I vote yes on the resolution. Judi guthertz
>
> ***PLEASE UPDATE YOUR ADDRESS BOOK AS I HAVE CHANGED MY EMAIL ADDRESS TO: judithguthertz@gmail.com ****
>
> On Sep 8, 2017, at 2:32 PM, Joseph Duenas <jtduenas@hotmail.com> wrote:
>
> > Commissioners,
> >
> > I vote yes for this poll vote. Joey
> >
> > Sent from my iPad
> >
> > On Sep 8, 2017, at 1:47 PM, Bernadette Lou Sablan <l.sablan@gpagwa.com> wrote:
> >
> > > Dear Commissioners,
> > >
> > > This is a POLL VOTE MATTER (refer to Legal Counsel message below regarding urgency).
> > >
> > > Please reply all when responding so Legal Counsel is aware of your vote and can act with PUC with required 3 (or more) votes for passage.
> > >
> > > Thank you,
> > > Lou

Bernadette Lou Sablan

From: J. George Bamba <georgebamba@hotmail.com>
Sent: Saturday, September 09, 2017 10:16 AM
To: John M Benavente; Simon Sanchez
Cc: Bernadette Lou Sablan; CCU Board Members; Graham Botha; John J.E.. Kim; Selma HG Blas
Subject: Re: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2

John,
I was checking my sent email and did not see my earlier response. Anyhow, my vote is yes.
Blessings,
George

From: John M Benavente <jbenavente@gpagwa.com>
Sent: Saturday, September 9, 2017 10:04 AM
To: Simon Sanchez
Cc: Bernadette Lou Sablan; CCU Board Members; Graham Botha; John J.E.. Kim; Selma HG Blas
Subject: Re: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2

Thank you everyone. We can now meet PUC schedule

Sent from my iPhone

> On Sep 9, 2017, at 9:31 AM, Simon Sanchez <gdcmgr@guamdrycleaners.com> wrote:
>
> Thanks John
>
> Simon says
>
>
>> On Sep 9, 2017, at 9:17 AM, John M Benavente <jbenavente@gpagwa.com> wrote:
>>
>> On this month's work session. Ratification at Sept regular meeting. Thank you
>>
>> Sent from my iPhone
>>
>> On Sep 9, 2017, at 7:41 AM, Simon Sanchez <gdcmgr@guamdrycleaners.com<mailto:gdcmgr@guamdrycleaners.com>> wrote:
>>
>> Did we have a work session on this budget or is that forthcoming this month?
>> I understand the PUC deadline and our goal. I just want to make sure I didn't miss the discussion of the budget.
>> We have enough votes to send to PUC. Any changes I might suggest, can be dealt with at the meeting and won't materially affect the budget.
>> S
>>
>> From: Bernadette Lou Sablan [mailto:l.sablan@gpagwa.com]
>> Sent: Friday, September 08, 2017 1:46 PM
>> To: CCU Board Members
>> Cc: John M Benavente; Graham Botha; John J.E.. Kim; Selma HG Blas
>> Subject: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2
>>

Bernadette Lou Sablan

From: Simon Sanchez <gdcmgr@guamdrycleaners.com>
Sent: Saturday, September 09, 2017 7:45 AM
To: Bernadette Lou Sablan; CCU Board Members
Cc: John M Benavente; Graham Botha; John J.E.. Kim; Selma HG Blas
Subject: RE: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2

Did we have a work session on this budget or is that forthcoming this month?
I understand the PUC deadline and our goal. I just want to make sure I didn't miss the discussion of the budget.
We have enough votes to send to PUC. Any changes I might suggest, can be dealt with at the meeting and won't materially affect the budget.
S

From: Bernadette Lou Sablan [mailto:l.sablan@gpagwa.com]
Sent: Friday, September 08, 2017 1:46 PM
To: CCU Board Members
Cc: John M Benavente; Graham Botha; John J.E.. Kim; Selma HG Blas
Subject: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2

Dear Commissioners,

This is a POLL VOTE MATTER (refer to Legal Counsel message below regarding urgency).

Please reply all when responding so Legal Counsel is aware of your vote and can act with PUC with required 3 (or more) votes for passage.

Thank you,
Lou

From: Graham Botha
Sent: Thursday, September 7, 2017 3:57 PM
To: Bernadette Lou Sablan
Cc: John M Benavente; John J.E.. Kim; Selma HG Blas
Subject: CCU Resolution 2017- 35 FY2018 BUDGET v2

Lou:

Please send to the CCU commissioners for a poll vote. We need to file with the PUC prior to the CCU meeting on September 26, 2017.

Thanks,

Graham
Disclaimer Notice: The information contained in this communication is intended solely for the use of the individual or entity to whom it is addressed and others authorized to receive it. It may contain confidential or legally privileged information. If you are not the intended recipient you are hereby notified that any

Bernadette Lou Sablan

From: Bernadette Lou Sablan
Sent: Monday, September 18, 2017 2:13 PM
To: Simon Sanchez
Subject: RE: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2

Importance: High

Thank you!

Lou

From: Simon Sanchez [mailto:gdcmgr@guamdrycleaners.com]
Sent: Monday, September 18, 2017 11:52 AM
To: Bernadette Lou Sablan
Subject: Re: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2

I didn't vote

Simon says

On Sep 18, 2017, at 10:56 AM, Bernadette Lou Sablan <l.sablan@gpagwa.com> wrote:

> Hi Si,
>
> I just want to be certain ... you did not vote on this matter correct? Below is only correspondence I have on file for you I need your confirmation for the record.
>
> Thank you,
> Lou
>
> ---
>
> **From:** Simon Sanchez [mailto:gdcmgr@guamdrycleaners.com]
> **Sent:** Saturday, September 09, 2017 7:45 AM
> **To:** Bernadette Lou Sablan; CCU Board Members
> **Cc:** John M Benavente; Graham Botha; John J.E.. Kim; Selma HG Blas
> **Subject:** RE: CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2
>
> Did we have a work session on this budget or is that forthcoming this month?
> I understand the PUC deadline and our goal. I just want to make sure I didn't miss the discussion of the budget.
> We have enough votes to send to PUC. Any changes I might suggest, can be dealt with at the meeting and won't materially affect the budget.
> S
>
> ---
>
> **From:** Bernadette Lou Sablan [mailto:l.sablan@gpagwa.com]
> **Sent:** Friday, September 08, 2017 1:46 PM
> **To:** CCU Board Members
> **Cc:** John M Benavente; Graham Botha; John J.E.. Kim; Selma HG Blas
> **Subject:** CCU POLL VOTE: CCU Resolution 2017- 35 FY2018 BUDGET v2

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

GPA RESOLUTION 2017-35

RELATIVE TO THE ADOPTION OF A BUDGET FOR THE GUAM POWER AUTHORITY FOR FISCAL YEAR 2018

WHEREAS, the Guam Power Authority (GPA) is a Public Corporation of the Government of Guam; and

WHEREAS, Section 8117 of Chapter 8 of Title 12 of Guam Code Annotated authorizes the Consolidated Commission on Utilities (CCU) to adopt an annual budget for the Authority; and

WHEREAS, Section 6.11 of the GPA Bond Indenture Agreement requires the Authority to provide a copy of an approved budget to the Bond Trustee prior to the beginning of each fiscal year; and

WHEREAS, the General Manager of the Guam Power Authority has created and thoroughly reviewed the budget for Fiscal Year 2018 totaling $415,771,000; and

WHEREAS, the General Manager has carefully scrutinized each line item of the budget and made substantial and significant reductions to the budget document as a whole to ensure that all budget expenditures are consistent with the strategic goals of the Authority; and

WHEREAS, the Consolidated Commission on Utilities has held a working session in which budget items were reviewed and discussed with the General Manager and his staff; and

WHEREAS, the CCU Commissioners noted that the budget provides funding of Revenue Funded Capital Improvement Projects totaling $25,230,000.

NOW, THEREFORE BE IT RESOLVED BY THE CONSOLIDATED COMMISSION ON UTILITIES AS THE GOVERNING BODY OF THE GUAM POWER AUTHORITY, AS FOLLOWS:

1. The Fiscal Year 2018 Budget of **$415,771,000** is hereby approved. The Fiscal Year 2018 Budget is based on a Non-Fuel Revenue forecast of $165,064,000 and miscellaneous revenues and a Fuel Revenue forecast of $250,707,000 for total revenues of $415,771,000. Total Operations and Maintenance budget includes Labor and Retiree's benefit costs of $48,294,006; Non-Labor cost of $34,257,992 less Capitalized O&M of $6,794,853 for total O&M Budget of $75,757,145; Bad debt

expense of $1,039,000; Independent Power Producers costs plus Aggreko Payments of $43,719,000; Debt Service of $30,168,000; Production Fuel of $248,677,000 and revenue Funded Capital Improvement Projects of $25,230,000 as expressed in the attached summary of Revenue Requirements is hereby adopted. Funds pledged for the Bond Reserves are not included in the overall budget amounts.

2. The authorized level of positions within the Authority shall not exceed 510 FTEs excluding personnel in the GPA Apprenticeship Program for FY2018.

3. The General Manager is authorized to transfer within the overall approved GPA budget, with the exception that there shall be no transfer into the personnel account. In addition, there is no transfer authority for funds budgeted for debt service payment or IPP payments.

4. The Revenue Funded Capital Improvement budget is $25,230,000 is approved and the General Manager is authorized to petition the Public Utilities Commission (PUC) for approval.

RESOLVED, that the Chairman certifies and the Board Secretary attests to the adoption of this Resolution. **DULY AND REGULARLY ADOPTED AND APPROVED THIS 26th DAY OF SEPTEMBER 2017.**

Certified by:	Attested by:
_____	_____
JOSEPH T. DUENAS	**J. GEORGE BAMBA**
Chairperson	Secretary
Consolidated Commission on Utilities	Consolidated Commission on Utilities

I, J. GEORGE BAMBA, Secretary, Consolidated Commission on Utilities hereby certify as follows:

The foregoing is a full, true and correct copy of a resolution duly adopted via POLL VOTE of the members of Guam's Consolidated Commission on Utilities, initiated on September 8, 2017, via email for which all members were attempted to be contacted. Copies of all poll votes received via email is attached for the record:

Via said POLL VOTE, said resolution was adopted by the following vote:

Ayes:	4
Nays:	0
Abstained:	0
No response:	1

	Guam Power Authority	
	FY 18 PROPOSED Revenue Requirement ($000)	
		FY2018
1	**Proforma Income Statement**	
2	Existing Base Rate Revenues	$ 165,064
3	Fuel Revenues	$ 248,677
4	WCF Surcharge	$ -
5	Miscellaneous Revenues	$ 2,030
6	**Total Revenues**	$ 415,771
7	Bad Debt Expense	$ (1,039)
8	**Net Operating Revenues**	$ 414,731
9		
10	Production Fuel	$ 248,677
11	IPP Costs	$ 14,415
12	Aggreko Lease Payment	$ 2,940
13	Production Non-fuel	$ 23,260
14	Transmission and Distribution	$ 13,436
15	Administrative and General	$ 34,315
16	Customer Accounting	$ 4,746
17	**Total O&M Expenses**	$ 75,757
18	Depreciation	$ 43,619
19		
20	**Total Operating Expenses**	$ 385,407
21		
22	Earnings From Operations	$ 29,324
23		
24	Other Revenues (Expenses):	
25	Investment Income	$ 1,184
26	Interest expense (ST Debt)	$ (27)
27	Interest expense (2010 Senior Lien TE Bond)	$ (7,999)
28	Interest Expense (Aggreko Lease Payment)	$ (1,221)
29	Interest expense (2012 Revenue Bond)	$ (16,966)
30	Interest expense (2014 Revenue Bond)	$ (3,708)
31	Interest expense (IPP's)	$ (1,935)
32	AFUDC	$ 730
33	Amortization of Issuance Costs	$ 1,615
34		
35	**Net Earnings(Loss) Before Capital Contribution**	**$ 997**
36	Capital Contributions	$ -
37	**Increase (Decrease) in Net Assets**	**$ 997**

	Guam Power Authority	
	FY 18 PROPOSED Revenue Requirement ($000)	
		FY2018
38		
39	**Debt Service Coverage Calculation**	
40	Earnings From Operations	$ 29,324
41	Add Interest Income (Net of Const. Fund Interest)	$ 600
42	Add: Depreciation	$ 43,619
43	Balance Available for Debt Service	$ 73,543
44	IPP Debt Service + Aggreko lease	$ 26,364
45	Balance After IPP Debt Service	$ 47,179
46	**Debt Service**	
47	Bond Interest Expense	$ 28,673
48	Bond Principal	$ 1,495
49	Total Debt Service	$ 30,168
50		
51	Debt Service Coverage (Bond Method)	**2.44**
52	Debt Service Coverage (S&P Method)	**1.57**
53		
54		
55	**Internal Cashflow Statement**	
56	Total Cash Generated	$ 42,271
57	CIP's-Internally Funded	$ (25,230)
58	Principal Payment (Aggreko Lease Payment)	$ (6,258)
59	Principal Payment (2012 Revenue Bond)	$ (120)
60	Principal Payment (2014 Revenue Bond)	$ (1,375)
61	Principal Payment (IPP)	$ (16,949)
62	CAP I Fund-2018 Revenue Bond	$ (0)
63	Materials Inventory	$ (1,000)
64	Other WC Requirement	$ (660)
65	Construction Fund Interest Income	$ (584)
66	Cash Carry Over-Surplus/(Deficit)	$ (710)
67	Surplus Fund Shortfall/(Excess)	$ 10,616

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

Issues for Decision

GPA Resolution No. 2017-38

Relative to the Creation and Addendum of CTP List of Positions and Adoption of Market Update for GPA & GWA

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

The aim of this project is to improve GPWA business processes, optimize its assets and maximize employee's performance through the consolidation of its pay policies and all positions under an updated Strategic Pay plan. It is necessary to create new utility-specific CTP positions and fill these positions with existing employees who have the requisite training and skills. It is necessary to accept the 2017 market update report and adopt an updated pay scale necessary to maintain the utilities' position in the market place aimed at being externally competitive in attracting and retaining talented, skilled employees. It is necessary that CCU Resolution No. 2012-49 apply to both GPA and GWA business processes to promote equity and uniformity in the utilities' promotion, demotion, and transfer pay policies.

How much will it cost?

$2,281,785* (est) to move to the 2017 15th market percentile
$2,955,775* (est) to move to the 2017 20th market percentile
[*per 12-month calendar year]

The recommended 2017 15th market percentile update will be implemented in January 2018, thus the *FY2018 cost is estimated at $1,725,000* ($1,121,250 base salary + $603,750 benefits) from January - September.

When will it be completed?

Upon approval by the CCU, the implementation date is January 6, 2018 for the 15th market percentile and January 6, 2019 for the 20th market percentile.

What is the funding source?
Revenue Fund

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. 2017–38

GWA RESOLUTION NO. 53-FY2017

RELATIVE TO THE CREATION AND ADDENDUM OF CERTIFIED, TECHNICAL, AND PROFESSIONAL (CTP) LIST OF POSITIONS AND ADOPTION OF MARKET UPDATE FOR GUAM POWER AUTHORITY AND GUAM WATERWORKS AUTHORITY

WHEREAS, the Guam Power Authority (GPA) and the Guam Waterworks Authority (GWA) are Public Corporations of the Government of Guam; and

WHEREAS, Section 8104 (c), Chapter 8, and Section 14104 (c), Chapter 14 of Title 12 of the Guam Code Annotated authorizes the Guam Power Authority and Guam Waterworks Authority to establish its internal organization and management and adopt regulations for the administration of its operations; and

WHEREAS, Public Law 28-159 added Subsection 7.03 to the GPA Personnel Rules and Regulations, and added Paragraph 29 to the Glossary of GWA's Personnel Rules, item (c) authorizing the General Manager to petition the Consolidated Commission on Utilities (CCU) to amend, to include, but not limited to deleting, adding, or modifying such positions, the approved list of each Authority's CTP positions; and

WHEREAS, Public Law 28-159 added Subsection 15.17 to GPA's Personnel Rules and Regulations, and a new Chapter 5.200 to GWA's Personnel Rules and Regulations, item 3.0.3, authorizes the CCU to approve, disapprove, or amend, the unified pay scale at any regularly scheduled meeting; and

WHEREAS, a market review update of all positions and the CTP Strategic Pay scale was conducted and completed in August 2017 by Alan Searle and Associates. (See Exhibits A & B, Appendix A). This resulted in an adjustment of the pay scale to address obsolete pay grades that were in place since 2007 and a reset and refit of new grades to coincide with 2017 Market Data. The market review determined that GPA positions are approximately at the 15th market percentile, and that GWA positions are below the 5th market percentile based on 2017 Market Data. It was also determined that implementation of an updated pay scale is necessary to maintain the utilities position in the market place aimed at being externally competitive in attracting and retaining employees. (See Exhibits A & B, Appendix B). In maintaining this position, GPA recommends implementation of incremental structural pay adjustments to the 15th market percentile on January 6, 2018, and to the 20th market percentile on January 6, 2019, respectively. GWA recommends implementation of incremental structural pay adjustments to the 10th market percentile on January 1, 2018, and to the 15th market percentile not later than FY2020, respectively. GPA and GWA are committed to maintaining the goal of being competitive and achieving a position at the 25th market percentile by the year 2021 and 2022, respectively; and

WHEREAS, GPA and GWA desire to improve business processes, optimize its assets and maximize employees' performance. GPA and GWA prefer to consolidate its pay policy and all positions under the Strategic Pay plan and add remaining positions to the list of CTP positions, providing equity. (See Exhibits A & B, Appendix C). GPA and GWA also recognize that these positions involve processes that are uncommon and unique to the utilities. Thus, GPA and GWA petition to create positions for incumbents to integrate

and transition into the Strategic Pay classification methodology applicable to CTP positions (See Exhibits A & B, Appendix D); and

WHEREAS, modern companies operate on information and GPA and GWA must leverage information in modernizing its infrastructure and technology, and must create an awareness of the importance of protecting these facets critical to the utilities. GPA and GWA operations are critical to preserving its business processes and the quality of life island-wide. GPA and GWA are committed to promoting and strengthening the role and responsibility of all employees in the protection of information, infrastructure and technology through physical security and cyber security training programs, of which, will help preserve assets, and, deter the impact of an attack to the utilities; and

NOW THEREFORE BE IT RESOLVED, the Consolidated Commission on Utilities approves and authorize as follows:

1. To accept the recommendations of the market review update conducted by Alan Searle and Associates, including implementation of a new and adjusted Strategic Pay Scale for all Certified, Technical, and Professional (CTP) positions. (See Exhibits A & B, Appendices A & B).

2. The General Manager at GPA to implement structural pay adjustments, incrementally, to the 15th market percentile on January 6, 2018, and to the 20th market percentile on January 6, 2019 based on the 2017 Market Data. The General Manager may determine the breadth and application of sub-steps to determine the implementation range for positions based on affordability. Thereafter, the management may implement a structural pay adjustment to the 25th market percentile based on an updated market review, as necessary. Structural pay adjustments are subject to the availability of funds.

3. The General Manager at GWA to implement structural pay adjustments, incrementally, to the 10th market percentile on January 1, 2018, and to the 15th market percentile no later than FY2020 based on the 2017 Market Data. The General Manager may determine the breadth and application of sub-steps to determine the implementation range for positions based on affordability. Thereafter, the management may implement a structural pay adjustment to the 25th market percentile based on an updated market review, as necessary. Structural pay adjustments are subject to the availability of funds.

4. The creation of positions delineated in Exhibits A & B, Appendix D, and the addition of these positions into the GPA and GWA list of CTP positions delineated in Exhibits A & B, Appendix C. The incumbents of these positions must complete a Physical Security training course prior to a reclassification of position. Thereafter, the incumbents must complete a Cyber Security training course and other courses deemed necessary by the management to ensure preservation of utility assets and deterrence of the impact of an attack to the utilities

5. To maintain uniformity in the application of the promotion/demotion/transfer pay policy relative to CCU Resolution No. 2012-49, and in the spirit of equity for all positions covered under the Strategic Pay Scale for CTP positions, CCU Resolution No. 2012-49 delineated in Exhibits A & B, Appendix E, is applicable to GPA and GWA business processes.

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

DULY AND REGULARLY ADOPTED AND APPROVED this **26th day of September, 2017.**

Certified by:	Attested by:
_____	_____
JOSEPH T. DUENAS	J. GEORGE BAMBA
Chairperson	Secretary
Consolidated Commission on Utilities	Consolidated Commission on Utilities

I, J. GEORGE BAMBA, Secretary for the Consolidated Commission on Utilities do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly adopted at a regular meeting by the members of 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:

At said meeting said resolution was adopted by the following vote:

Ayes: _____

Nays: _____

Absent: _____

Abstain: _____

GUAM POWER AUTHORITY
EXECUTIVE REPORT

MISSION STATEMENT: The Guam Power Authority SHALL provide

R eliable
E³ fficient, Effective, Environmentally Sound
A² ffordable, Accountable
L eading Energy Solutions

AUTHORITY:

12 GCA CHAPTER 8,

§8103. Continuation of Existence.
Guam Power Authority is continued in existence as a public corporation.

§8107. Governance of Authority.
All powers vested in the Authority, except as provided herein, shall be exercised by the Consolidated Commission on Utilities, as established in Chapter 79 of Title 12 of the Guam Code Annotated.

4 GCA §6303 (d) - Creation of positions.

GPA Personnel Rules & Regulations, Section 7.00, Rule 7.03 (c) – Amendment of Certified, Technical, and Professional Positions (as amended by Public Law 28-159 Section 3 (c)):

SUMMARY:

The Guam Power Authority is the sole electric power utility on Guam, generating and distributing electricity to residential, commercial, local government, and military customers throughout the island. The Authority's physical attributes are unique and consist of:

- 420 MW Gross Generation Capacity;
- 189 Miles of Transmission Lines;
- 685 Miles of Primary Distribution Lines; and
- 29 Substations.

These physical attributes integrate into the island-wide power system (IWPS) providing electrical services to over 49,000 customers and is operated and maintained by approximately 470 employees.

The Authority is actively incorporating proven and emerging technologies into all aspects of its services. Until recently, GPA operated like a 1980's utility. GPA has taken significant strides to meet modern industry standards by adding renewable energy generation assets, smart grid implementation, integrating a customer information system (CIS), and energy storage initiatives. While these efforts support efficient and

Exhibit A - GPA

reliable utility service, they cannot abate the growing cyber and physical security threats to the Authority. As GPA continues to build better business processes and optimize its assets, the roles of *all employees* have become increasingly critical to the defense of potential security breaches to the GPA infrastructure.

Security breaches and threats – both physical and cyber - impact people, information, functions and physical assets. These hazards can range from workplace violence, crime, including personal and property thefts, terrorism acts, and natural disasters to name a few.

All employees are responsible to conduct safe work practices in their working environment and to secure their work places to delay or deter threats to GPA facilities. Examples of this include, and are not limited to:

Cashier duties involving the ability to observe the actions and behavior of a potential adversary and alerting authorities, protecting the face-to-face cash handling process and securing customer information when conducting payment transactions using the proprietary customer service program that is interconnected to the GPA network.

Administrative and Clerical duties involve securing and updating employee and customer data on the utility's integrated network and protecting access to this information. This also includes observance and monitoring of internal and external customers access to office business and processes.

Maintenance Worker duties involve the maintenance of GPA facilities including power plants, substations and the administration office building. They must be cognizant to situations that increase physical vulnerabilities of these sites and apply corrective measures to minimize risks to integrity of these physical assets.

Procurement duties include the purchasing of materials and equipment, and the storing of equipment, materials and parts relevant to operations work such as power plant overhauls, overhead and underground line construction and repairs, and conducting inventory of large bulk items unique to the GPA operations. Measures are implemented to protect access to warehouses and storage areas from unauthorized persons. Additional duties include inputting and retrieving data on the utility's integrated network for accountability.

The security of GPA's assets is paramount. GPA is moving swiftly from a traditional utility to a more technological, modern utility. The whole organization is accountable for ensuring safety and preparedness of its employees when safety and security at any level is compromised.

GPA has embarked on a physical and cybersecurity training program for all employees. These training programs are the initial stages of enhancing employees' awareness and knowledge of the importance of securing GPA assets and its environment.

Recently, an updated market review of all positons was conducted and determined GPA's position in the market is relatively at the 15th market percentile of the 2017 Market Data (Appendix A). The review included an adjustment of the pay scale to address obsolete pay grades that were in place since 2007, and a refit and reset of new grades to coincide with the 2017 Market Data (Appendices B and C). The proposed creation of positions were also included in the market review update (Appendices D1-D59).

Based on the foregoing, management recognizes that all positions are critical to the safety and welfare of GPA operations. In meeting management's needs for the efficacy of operating the utility within modern industry standards, we recommend the following:

a) To approve the proposed creation of positions (delineated in Appendices D1-D59); and

b) To add these new and filled positions (delineated in Appendices D1-D59) to GPA's list of Certified, Technical and Professional positions (delineated in Appendix C).

c) To accept the recommendations of the market review update for CTP positions, including a new pay scale, the refit and reset of new grades to coincide with the 2017 market data, and implementation of a structural adjustment subject to the availability of funds (Appendices A and B).

d) To maintain uniformity in the application of the promotion/demotion/transfer pay policy relative to CCU Resolution No. 2012-49 for all CTP positions covered under the Strategic Pay Scale, apply CCU Resolution No. 2012-49 (delineated in Appendix E) to GPA and GWA business processes.

JOHN M. BENAVENTE, P.E.
General Manager, GPA

9/12/17
Date

RECEIVED
SEP - 8 2017
GUAM POWER AUTHORITY
HUMAN RESOURCES DIVISION

GUAM POWER AUTHORITY

COMPENSATION & BENEFITS STUDY

Market Review

Executive Summary

September 2017

ALAN SEARLE & ASSOCIATES

Management Consultants, Russell, New Zealand

APPENDIX A1

A. Background

With the passing of public laws PL 28-113 and PL 28-159 GWA was given the mandate to implement a new market based compensation model that would aid the attraction and retention of "Certified Technical and Professional" or CTP personnel. The law was a result of concerns that the Authority was losing highly skilled personnel due to the fact that current salaries and compensation were not sufficient to attract and retain such personnel.

Through the RFP process, GPA in 2005 engaged the consulting services of Alan Searle & Associates to undertake the above compensation study. This was an extensive project involving three stages as follows :

The first stage of the study focused on job evaluation which involved applying a structured methodology of twelve (12) individual factors to assess all CTP positions. Each factor derived a point value with their sum representing the "total point" value of the position. The process was important as it re-established the internal equity of all positions based on job size. An exponential regression analysis was then undertaken to determine GPA's base salary pay line. This step was also important in that the resulting base salary pay line could eventually be compared to the market percentiles identified in Stage Two.

The second stage involved gathering external pay data on all CTP positions. The target market was the U.S. power industry and extensive data was gathered from a number of sources including the APPA (American Public Power Association), U.S. Bureau of Labor Statistics (BLS), U.S. Department of Labor (DOL), U.S. Federal Government / Civil Service, U.S. Military, Web Based Compensation Companies, U.S. Utility Recruitment Companies and U.S. Utility Company Websites. The resulting data was analyzed and presented as market percentiles (5^{th} through to the 95^{th}) with the 50^{th} market percentile being the market average. A second exponential regression analysis was then undertaken to compare GPA's base salary pay line against the market percentiles as gathered in 2008.

The results validated GPA's market vulnerability as their base salary pay line (for a large number of CTP positions) was clearly below the 5^{th} market percentile. This was an exceptionally low position and validated the ongoing difficulties GPA had been experiencing in being able to attract and retain CTP employees. The situation at the time was further exacerbated by Gov. Guam policy (Hay methodology) that stipulated that employees on Step 10 and above receive a 3.5% increment (based on satisfactory performance) once every two (2) years. On an annualized basis this was clearly below the CPI (Consumer Price Index).

With the passing of resolution 01-FY2008 the CCU approved a transition period (beginning in fiscal year 2008) to migrate all CTP positions to a more competitive position in the market. The CCU resolution approved a five-year phase-in using the 5^{th}, 15^{th}, 25^{th}, 35^{th} and 50^{th} market percentiles as targets for 2008 and subsequent years.

APPENDIX A2

The third stage of the review focused on implementation and the transition of all CTP employees into the new compensation model. The new salary schedule has twenty-six (26) alphabetical grades each with twenty (20) numeric steps. An additional feature was the introduction of four (4) sub-steps per step which amounts to eighty sub-steps in total. Each sub-step increases base salary by 1% and was introduced to allow a performance range for GPA to ultimately pay for performance.

The outcome of the above was the identification of a specific implementation range for each CTP position. With each implementation range encompassing sixteen (16) sub-steps the final phase was to migrate all CTP employees into the new compensation model. In completing this exercise the following three implementation criteria was applied : education, experience and performance. The end result was a score (for each employee) that could be transposed to their specific implementation range and a new grade, step and sub-step identified.

B. Current Review (2017)

The current review replicates the second stage above in order to provide updated market data as at 2017. Once again the target market was the U.S. power industry and extensive data was gathered from a number of sources including the APPA (American Public Power Association), U.S. Bureau of Labor Statistics (BLS), U.S. Department of Labor (DOL), U.S. Federal Government / Civil Service, U.S. Military, Web Based Compensation Companies, U.S. Utility Recruitment Companies and U.S. Utility Company Websites.

In summary, external pay data was gathered on 257 positions (both CTP and Non-CTP) with results once again being analyzed and presented as market percentiles (5^{th} through to the 95^{th}). Please note that as with the earlier study the 50^{th} market percentile represents the market average (U.S. mainland). An exponential regression analysis was then undertaken (see Appendix A) to compare GPA's base salary pay line against the 2017 market percentiles as gathered.

C. Observations / Recommendations

In terms of recommendations the focus must be on ensuring that GPA's compensation model (cost permitting) is in the most competitive position it can be with regards the external market place. Whilst any increase in market position obviously comes at a cost this must be weighed against the Authority's ability to attract and retain competent employees.

With reference to Appendix A GPA's market position in 2008 was extremely vulnerable with a large number of employees well below the 5^{th} market percentile. Whilst an adjustment to start correcting this situation was addressed by the CCU in 2008 the market has unfortunately continued to move over the period through to 2017. Given that early initiative taken by the CCU we would now place GPA (with

APPENDIX A3

reference to Appendix A) at approximately the 15th market percentile based on the 2017 market data that has been obtained.

Having determined GPA's current market position (relative to the 2017 market data) we then completed a number of cost options aimed at migrating GPA to a more competitive market position. These included migrating to the 5th, 10th, 15th (essentially a status quo option), 20th and 25th market percentiles. The costing process also included both a 5 sub-step and 7 sub-step implementation range for employee "slotting' purposes. The results are shown in Appendix B.

In undertaking the above cost analysis it also became apparent that an updated pay schedule was also required. With the current pay schedule now 10 years old, grades A, B & C have become redundant and are no longer being used. The need for an update is also reflected in the fact that some employees are approaching or have exceeded Step 20, Sub-step D.

In terms of a course of action our recommendations are as follows :

1. Consolidate GPA's compensation model to include all employees i.e. both CTP and Non-CTP employees.

   Note : the need to distinguish between CTP and Non-CTP positions has become largely irrelevant as all positions are now deemed critical in providing the Authority's services. This perspective is clearly evident with both PAG and GIAA (excluding ARFF and Airport Police) now incorporating all positions in their respective compensation models.

2. Make an initial structural adjustment (cost permitting) to the 15th market percentile based on the 2017 market data. If this can be done we would recommend using the 5 sub-step implementation range cost option as "employee slotting" is closer than using the 7 sub-step cost option. As outlined earlier, this is essentially a status quo adjustment as despite being at the 15th market percentile this adjustment targets (in particular) those employees who are below the 15th market percentile regression line.

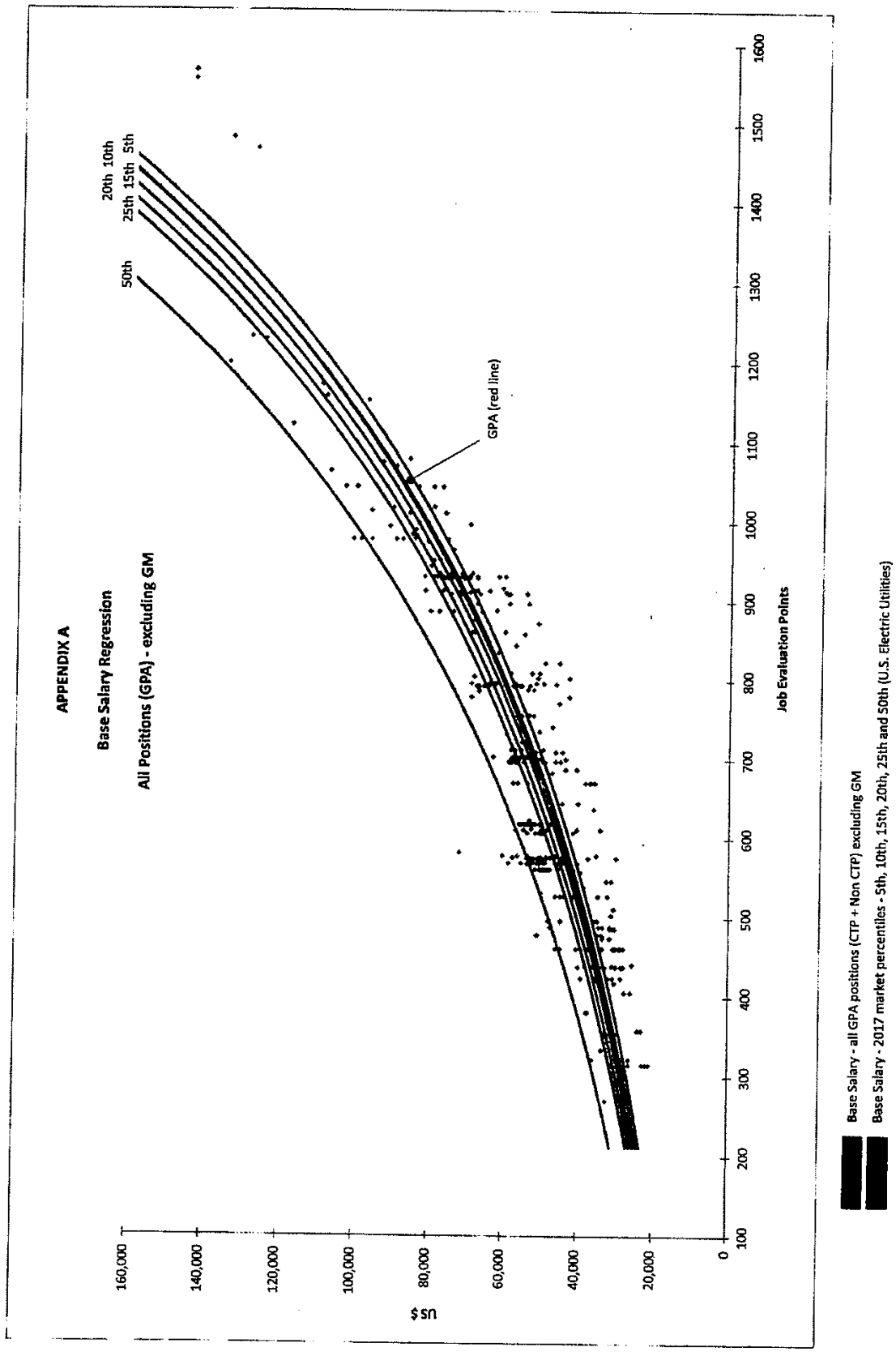
3. Agree on a transition plan (cost permitting) aimed at migrating GPA to a higher market percentile e.g. the 20th or 25th market percentile based on the 2017 market data. With the eventual target being the 50th market percentile (or market average within the U.S. mainland based on the prevailing market) this transition plan will continue the momentum to ensure GPA's compensation model remains externally competitive.

4. Given current controls in a) annually determining the implementation range on offer re : pay for performance, and b) determining the percentage of employees who can receive the "top scores" continue to allow (for employees below the 50th market percentile of market average within the U.S. mainland) the employees eventual pay for performance adjustment to be added

APPENDIX A4

to their base salary. This makes computation of any future regression analysis a lot more accurate when comparing results against the prevailing market.

APPENDIX A5


APPENDIX A
Base Salary Regression
All Positions (GPA) - excluding GM
20th 10th
25th 15th 5th
50th
GPA (red line)
US $
Job Evaluation Points
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
Base Salary - all GPA positions (CTP + Non CTP) excluding GM
Base Salary - 2017 market percentiles - 5th, 10th, 15th, 20th, 25th and 50th (U.S. Electric Utilities)

APPENDIX A6

APPENDIX B

ESTIMATED COST IN MIGRATING GPA TO VARIOUS MARKET PERCENTILES

BASED ON 2017 MARKET DATA

GPA - Seven (7) Sub-Step Implementation Range

Market Percentile 2017	Base Salary	Total Compensation (Base Salary plus Benefits)	Percentage Increase
5th	762,146	1,172,532	2.95
10th	1,018,678	1,567,197	3.95
15th	1,344,417	2,068,334	5.21
20th	1,765,748	2,716,535	6.84
25th	2,246,436	3,456,055	8.70

GPA - Five (5) Sub-Step Implementation Range

Market Percentile 2017	Base Salary	Total Compensation (Base Salary plus Benefits)	Percentage Increase
5th	843,378	1,297,505	3.27
10th	1,125,975	1,732,269	4.36
15th	1,483,160	2,281,785	5.75
20th	1,921,254	2,955,775	7.44
25th	2,448,233	3,766,512	9.48

APPENDIX A7

STRATEGIC PAY SCALE (2017)

			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
		Step 1				Step 2				Step 3				Step 4				Step 5				Step 6				Step 7			
		A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Grade	A	20,580	20,705	20,912	21,121	21,332	21,546	21,761	21,979	22,199	22,421	22,645	22,871	23,100	23,331	23,564	23,800	24,038	24,278	24,521	24,766	25,014	25,264	25,517	25,772	26,030	26,290	26,553	26,818
9.0%	B	22,345	22,568	22,794	23,022	23,252	23,485	23,720	23,957	24,196	24,438	24,683	24,930	25,179	25,431	25,685	25,942	26,201	26,463	26,728	26,995	27,265	27,538	27,813	28,091	28,372	28,656	28,943	29,232
9.0%	C	24,356	24,600	24,846	25,094	25,345	25,598	25,854	26,113	26,374	26,638	26,904	27,173	27,445	27,719	27,997	28,277	28,559	28,845	29,133	29,425	29,719	30,016	30,316	30,620	30,926	31,235	31,547	31,863
7.0%	D	26,061	26,322	26,585	26,851	27,119	27,390	27,664	27,941	28,220	28,503	28,788	29,075	29,366	29,660	29,956	30,256	30,559	30,864	31,172	31,484	31,799	32,117	32,439	32,763	33,091	33,421	33,756	34,093
3.0%	E	26,843	27,111	27,382	27,656	27,933	28,212	28,494	28,779	29,067	29,358	29,651	29,948	30,247	30,550	30,855	31,164	31,475	31,790	32,108	32,429	32,753	33,081	33,412	33,746	34,083	34,424	34,768	35,116
6.0%	F	28,453	28,738	29,025	29,316	29,609	29,905	30,204	30,506	30,811	31,119	31,430	31,745	32,062	32,383	32,706	33,033	33,364	33,697	34,034	34,375	34,719	35,066	35,416	35,771	36,128	36,490	36,854	37,223
6.0%	G	30,161	30,462	30,767	31,074	31,385	31,699	32,016	32,336	32,660	32,986	33,316	33,649	33,986	34,326	34,669	35,015	35,366	35,719	36,076	36,437	36,802	37,170	37,541	37,917	38,296	38,679	39,066	39,456
9.0%	H	32,875	33,204	33,536	33,871	34,210	34,552	34,898	35,246	35,599	35,955	36,314	36,678	37,044	37,415	37,789	38,167	38,549	38,934	39,323	39,717	40,114	40,515	40,920	41,329	41,743	42,160	42,582	43,007
12.0%	I	36,830	37,198	37,569	37,936	38,315	38,698	39,085	39,476	39,871	40,270	40,672	41,079	41,490	41,905	42,324	42,747	43,174	43,606	44,042	44,483	44,927	45,377	45,830	46,289	46,752	47,219	47,691	48,168
12.0%	J	41,238	41,651	42,067	42,488	42,913	43,342	43,775	44,213	44,655	45,102	45,553	46,008	46,468	46,933	47,403	47,877	48,355	48,839	49,327	49,821	50,319	50,822	51,330	51,843	52,362	52,885	53,414	53,948
21.0%	K	49,899	50,397	50,901	51,410	51,925	52,444	52,968	53,498	54,033	54,573	55,119	55,670	56,227	56,789	57,357	57,931	58,510	59,095	59,686	60,283	60,886	61,495	62,109	62,731	63,358	63,991	64,631	65,278
17.0%	L	58,381	58,965	59,555	60,150	60,752	61,359	61,973	62,593	63,219	63,851	64,489	65,134	65,785	66,443	67,108	67,779	68,457	69,141	69,833	70,531	71,236	71,949	72,668	73,395	74,129	74,870	75,619	76,375
17.0%	M	68,306	68,989	69,679	70,376	71,080	71,790	72,508	73,233	73,966	74,705	75,452	76,207	76,969	77,739	78,516	79,301	80,094	80,895	81,704	82,521	83,346	84,180	85,022	85,872	86,731	87,598	88,474	89,359
8.0%	N	73,771	74,508	75,253	76,006	76,766	77,534	78,309	79,092	79,883	80,682	81,489	82,303	83,126	83,958	84,797	85,645	86,502	87,367	88,240	89,123	90,014	90,914	91,823	92,742	93,669	94,606	95,552	96,507
13.0%	O	83,361	84,194	85,036	85,887	86,745	87,613	88,489	89,374	90,268	91,170	92,082	93,003	93,933	94,872	95,821	96,779	97,747	98,724	99,712	100,709	101,716	102,733	103,760	104,798	105,846	106,904	107,973	109,053
16.0%	P	96,698	97,665	98,642	99,628	100,625	101,631	102,647	103,674	104,711	105,758	106,815	107,883	108,962	110,052	111,152	112,264	113,387	114,520	115,666	116,822	117,990	119,170	120,362	121,566	122,781	124,009	125,249	126,502
12.0%	Q	108,302	109,385	110,479	111,584	112,700	113,827	114,965	116,115	117,276	118,449	119,633	120,829	122,038	123,258	124,491	125,736	126,993	128,263	129,545	130,841	132,149	133,471	134,806	136,154	137,515	138,890	140,279	141,682
14.0%	R	123,465	124,699	125,946	127,206	128,478	129,762	131,060	132,371	133,694	135,031	136,382	137,745	139,123	140,514	141,919	143,339	144,772	146,220	147,682	149,159	150,650	152,157	153,678	155,215	156,767	158,335	159,918	161,517
13.0%	S	139,515	140,910	142,319	143,742	145,180	146,632	148,098	149,579	151,075	152,585	154,111	155,652	157,209	158,781	160,369	161,972	163,592	165,228	166,880	168,549	170,235	171,937	173,656	175,393	177,147	178,918	180,708	182,515
11.0%	T	154,862	156,410	157,974	159,554	161,150	162,761	164,389	166,033	167,693	169,370	171,064	172,774	174,502	176,247	178,009	179,789	181,587	183,403	185,237	187,090	188,961	190,850	192,759	194,686	196,633	198,599	200,585	202,591
11.0%	U	171,896	173,615	175,351	177,105	178,876	180,665	182,471	184,296	186,139	188,001	189,881	191,779	193,697	195,634	197,590	199,586	201,562	203,578	205,613	207,670	209,746	211,844	213,962	216,102	218,263	220,445	222,650	224,876
11.0%	V	190,805	192,713	194,640	196,587	198,552	200,538	202,543	204,569	206,614	208,681	210,767	212,875	215,004	217,154	219,325	221,519	223,734	225,971	228,231	230,513	232,818	235,146	237,498	239,873	242,272	244,694	247,141	249,613
11.0%	W	211,794	213,911	216,051	218,211	220,393	222,597	224,823	227,071	229,342	231,635	233,952	236,291	238,654	241,041	243,451	245,886	248,345	250,828	253,336	255,870	258,428	261,013	263,623	266,259	268,922	271,611	274,327	277,070
11.0%	X	235,091	237,442	239,816	242,214	244,636	247,083	249,554	252,049	254,570	257,115	259,686	262,283	264,906	267,555	270,231	272,933	275,662	278,419	281,203	284,015	286,855	289,724	292,621	295,547	298,503	301,488	304,503	307,548
11.0%	Y	260,951	263,560	266,196	268,858	271,546	274,262	277,005	279,775	282,572	285,398	288,252	291,135	294,046	296,986	299,956	302,956	305,985	309,045	312,136	315,257	318,410	321,594	324,810	328,058	331,338	334,652	337,998	341,378
11.0%	Z	289,655	292,552	295,477	298,432	301,417	304,431	307,475	310,550	313,655	316,792	319,960	323,159	326,391	329,655	332,951	336,281	339,644	343,040	346,471	349,935	353,435	356,969	360,539	364,144	367,785	371,463	375,178	378,930

APPENDIX B1

STRATEGIC PAY SCALE (2017)

	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Step 8				Step 9				Step 10				Step 11				Step 12				Step 13				Step 14			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
A	27,086	27,357	27,631	27,907	28,186	28,468	28,753	29,040	29,331	29,624	29,920	30,220	30,522	30,827	31,135	31,447	31,761	32,079	32,399	32,723	33,051	33,381	33,715	34,052	34,393	34,737	35,084	35,435
B	29,524	29,819	30,118	30,419	30,723	31,030	31,341	31,654	31,971	32,290	32,613	32,939	33,269	33,601	33,937	34,277	34,620	34,966	35,315	35,669	36,025	36,385	36,749	37,117	37,488	37,863	38,241	38,624
C	32,181	32,503	32,828	33,157	33,488	33,823	34,161	34,503	34,848	35,196	35,548	35,904	36,263	36,625	36,992	37,362	37,735	38,113	38,494	38,879	39,267	39,660	40,057	40,457	40,862	41,270	41,683	42,100
D	34,434	34,778	35,126	35,478	35,832	36,191	36,553	36,918	37,287	37,660	38,037	38,417	38,801	39,189	39,581	39,977	40,377	40,780	41,188	41,600	42,016	42,436	42,861	43,289	43,722	44,159	44,601	45,047
E	35,467	35,822	36,180	36,542	36,907	37,276	37,649	38,025	38,406	38,790	39,178	39,570	39,965	40,365	40,769	41,176	41,588	42,004	42,424	42,848	43,277	43,709	44,147	44,588	45,034	45,484	45,939	46,398
F	37,595	37,971	38,351	38,734	39,122	39,513	39,908	40,307	40,710	41,117	41,528	41,944	42,363	42,787	43,215	43,647	44,083	44,524	44,969	45,419	45,873	46,332	46,795	47,263	47,736	48,213	48,695	49,182
G	39,851	40,249	40,652	41,058	41,469	41,884	42,303	42,726	43,153	43,584	44,020	44,460	44,905	45,354	45,808	46,266	46,728	47,196	47,668	48,144	48,626	49,112	49,603	50,099	50,600	51,106	51,617	52,133
H	43,437	43,872	44,311	44,754	45,201	45,653	46,110	46,571	47,037	47,507	47,982	48,462	48,946	49,436	49,930	50,430	50,934	51,443	51,958	52,477	53,002	53,532	54,067	54,608	55,154	55,706	56,263	56,825
I	48,650	49,136	49,628	50,124	50,625	51,132	51,643	52,159	52,681	53,208	53,740	54,277	54,820	55,368	55,922	56,481	57,046	57,616	58,193	58,776	59,362	59,956	60,555	61,161	61,773	62,390	63,014	63,644
J	54,488	55,033	55,583	56,139	56,700	57,267	57,840	58,418	59,003	59,593	60,189	60,790	61,398	62,012	62,633	63,259	63,891	64,530	65,176	65,827	66,486	67,151	67,823	68,500	69,185	69,877	70,576	71,282
K	65,930	66,590	67,256	67,928	68,607	69,294	69,986	70,686	71,393	72,107	72,828	73,557	74,292	75,035	75,785	76,543	77,309	78,082	78,863	79,651	80,448	81,252	82,065	82,885	83,714	84,551	85,397	86,251
L	77,139	77,910	78,689	79,476	80,271	81,073	81,884	82,703	83,530	84,365	85,209	86,061	86,922	87,791	88,669	89,556	90,451	91,356	92,269	93,192	94,124	95,065	96,016	96,976	97,946	98,925	99,914	100,913
M	90,252	91,155	92,066	92,987	93,917	94,856	95,805	96,763	97,730	98,707	99,695	100,691	101,698	102,715	103,743	104,780	105,828	106,886	107,955	109,034	110,125	111,226	112,338	113,462	114,596	115,742	116,900	118,069
N	97,472	98,447	99,432	100,426	101,430	102,444	103,468	104,504	105,549	106,604	107,670	108,747	109,834	110,933	112,042	113,162	114,294	115,437	116,591	117,757	118,935	120,124	121,325	122,539	123,764	125,002	126,252	127,514
O	110,144	111,245	112,358	113,481	114,616	115,762	116,920	118,089	119,270	120,463	121,667	122,884	124,113	125,354	126,607	127,873	129,152	130,444	131,748	133,066	134,396	135,740	137,098	138,469	139,853	141,252	142,664	144,091
P	127,767	129,044	130,335	131,638	132,955	134,284	135,627	136,983	138,353	139,737	141,134	142,545	143,971	145,410	146,865	148,333	149,817	151,315	152,828	154,356	155,900	157,459	159,033	160,624	162,230	163,852	165,491	167,146
Q	143,899	144,538	145,975	147,435	148,909	150,398	151,902	153,421	154,955	156,505	158,070	159,651	161,247	162,860	164,488	166,133	167,795	169,473	171,167	172,879	174,608	176,354	178,117	179,898	181,697	183,514	185,350	187,203
R	163,333	164,964	166,612	168,276	169,756	171,454	173,169	174,900	176,649	178,416	180,200	182,002	183,822	185,660	187,517	189,392	191,286	193,199	195,131	197,082	199,053	201,043	203,054	205,084	207,135	209,206	211,299	213,412
S	184,348	186,193	188,045	189,926	191,825	193,743	195,680	197,637	199,614	201,610	203,626	205,662	207,719	209,796	211,894	214,013	216,153	218,314	220,498	222,703	224,930	227,179	229,451	231,745	234,063	236,403	238,767	241,155
T	204,617	206,663	208,730	210,817	212,925	215,055	217,205	219,377	221,571	223,787	226,025	228,285	230,568	232,873	235,202	237,554	239,930	242,329	244,752	247,200	249,672	252,169	254,690	257,237	259,810	262,408	265,032	267,682
U	227,125	229,396	231,690	234,007	236,347	238,711	241,098	243,509	245,944	248,403	250,887	253,396	255,930	258,490	261,074	263,685	266,322	268,985	271,675	274,392	277,136	279,907	282,706	285,533	288,389	291,273	294,185	297,127
V	252,109	254,630	257,176	259,748	262,346	264,969	267,619	270,295	272,998	275,728	278,485	281,270	284,083	286,923	289,793	292,691	295,617	298,574	301,559	304,575	307,621	310,697	313,804	316,942	320,111	323,312	326,546	329,811
W	279,841	282,639	285,466	288,320	291,204	294,116	297,057	300,027	303,028	306,058	309,118	312,210	315,332	318,485	321,670	324,887	328,135	331,417	334,731	338,078	341,459	344,874	348,322	351,806	355,324	358,877	362,466	366,090
X	318,623	313,738	316,867	320,036	323,236	326,468	329,733	333,030	336,361	339,724	343,121	346,553	350,018	353,518	357,054	360,624	364,230	367,873	371,551	375,267	379,020	382,810	386,638	390,504	394,409	398,353	402,337	406,360
Y	344,792	348,240	351,722	355,239	358,792	362,380	366,004	369,664	373,360	377,094	380,865	384,673	388,520	392,405	396,329	400,293	404,296	408,339	412,422	416,546	420,712	424,919	429,168	433,460	437,794	442,172	446,594	451,060
Z	382,719	386,546	390,412	394,316	398,259	402,242	406,264	410,327	414,430	418,574	422,760	426,988	431,257	435,570	439,926	444,325	448,768	453,256	457,788	462,366	466,990	471,660	476,376	481,140	485,952	490,811	495,719	500,676

APPENDIX B2

STRATEGIC PAY SCALE (2017)

	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Step 15				Step 16				Step 17				Step 18				Step 19				Step 20			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
A	35,789	36,147	36,508	36,874	37,242	37,615	37,991	38,371	38,754	39,142	39,533	39,929	40,328	40,731	41,139	41,550	41,966	42,385	42,809	43,237	43,670	44,106	44,547	44,993
B	39,810	39,400	39,794	40,192	40,594	41,000	41,410	41,824	42,242	42,665	43,091	43,522	43,958	44,397	44,841	45,290	45,742	46,200	46,662	47,128	47,600	48,076	48,557	49,042
C	42,521	42,946	43,376	43,809	44,248	44,690	45,137	45,588	46,044	46,505	46,970	47,439	47,914	48,393	48,877	49,366	49,859	50,358	50,861	51,370	51,884	52,403	52,927	53,456
D	45,498	45,952	46,412	46,876	47,345	47,818	48,297	48,779	49,267	49,760	50,258	50,760	51,268	51,780	52,298	52,821	53,349	53,883	54,422	54,966	55,516	56,071	56,631	57,198
E	46,962	47,331	47,804	48,282	48,765	49,253	49,745	50,243	50,745	51,253	51,765	52,283	52,806	53,334	53,867	54,406	54,950	55,499	56,054	56,615	57,181	57,753	58,330	58,914
F	49,674	50,171	50,673	51,179	51,691	52,208	52,730	53,257	53,790	54,328	54,871	55,420	55,974	56,534	57,099	57,670	58,247	58,829	59,418	60,012	60,612	61,218	61,830	62,449
G	52,655	53,181	53,713	54,250	54,793	55,341	55,894	56,453	57,017	57,588	58,163	58,745	59,333	59,926	60,525	61,130	61,741	62,359	62,983	63,613	64,249	64,891	65,540	66,195
H	57,394	57,967	58,547	59,133	59,724	60,321	60,924	61,534	62,149	62,770	63,398	64,032	64,672	65,319	65,972	66,632	67,298	67,971	68,651	69,338	70,031	70,731	71,439	72,153
I	64,282	64,924	65,573	66,229	66,891	67,560	68,235	68,918	69,607	70,303	71,006	71,716	72,433	73,158	73,889	74,628	75,374	76,128	76,889	77,658	78,435	79,219	80,011	80,811
J	71,994	72,714	73,442	74,176	74,918	75,667	76,424	77,188	77,960	78,739	79,527	80,322	81,125	81,936	82,756	83,583	84,419	85,263	86,116	86,977	87,847	88,725	89,613	90,509
K	87,133	87,984	88,864	89,753	90,650	91,557	92,473	93,397	94,331	95,275	96,227	97,190	98,161	99,143	100,134	101,136	102,147	103,169	104,200	105,242	106,295	107,358	108,431	109,516
L	101,923	102,942	103,971	105,011	106,061	107,122	108,193	109,275	110,368	111,471	112,586	113,712	114,849	115,997	117,157	118,329	119,512	120,707	121,914	123,134	124,365	125,609	126,865	128,133
M	119,249	120,442	121,646	122,863	124,091	125,332	126,586	127,851	129,130	130,421	131,726	133,043	134,373	135,717	137,074	138,445	139,829	141,228	142,640	144,066	145,507	146,962	148,432	149,916
N	128,789	130,077	131,378	132,692	134,019	135,359	136,712	138,080	139,460	140,855	142,264	143,686	145,123	146,574	148,040	149,520	151,016	152,526	154,051	155,592	157,147	158,719	160,306	161,909
O	145,532	146,987	148,457	149,942	151,441	152,956	154,485	156,030	157,590	159,166	160,758	162,365	163,989	165,629	167,285	168,958	170,648	172,354	174,078	175,818	177,577	179,352	181,146	182,957
P	168,817	170,505	172,210	173,932	175,672	177,428	179,203	180,995	182,805	184,633	186,479	188,344	190,227	192,130	194,051	195,991	197,951	199,931	201,930	203,949	205,989	208,049	210,129	212,231
Q	189,875	190,966	192,076	194,884	196,752	198,720	200,707	202,714	204,741	206,789	208,857	210,945	213,055	215,185	217,337	219,510	221,705	223,922	226,162	228,423	230,708	233,015	235,345	237,698
R	215,546	217,701	219,878	222,077	224,298	226,541	228,806	231,094	233,405	235,739	238,096	240,477	242,882	245,311	247,764	250,242	252,744	255,272	257,824	260,403	263,007	265,637	268,293	270,976
S	243,567	246,002	248,462	250,947	253,456	255,991	258,551	261,136	263,748	266,385	269,049	271,740	274,457	277,201	279,973	282,773	285,601	288,457	291,342	294,255	297,197	300,169	303,171	306,203
T	270,359	273,063	275,793	278,551	281,337	284,150	286,991	289,861	292,760	295,688	298,644	301,631	304,647	307,694	310,771	313,878	317,017	320,187	323,389	326,623	329,889	333,188	336,520	339,885
U	300,098	303,099	306,130	309,192	312,284	315,406	318,560	321,746	324,964	328,213	331,495	334,810	338,158	341,540	344,955	348,405	351,889	355,408	358,962	362,552	366,177	369,839	373,537	377,273
V	333,109	336,440	339,805	343,203	346,635	350,101	353,602	357,138	360,710	364,317	367,960	371,639	375,356	379,109	382,900	386,729	390,597	394,503	398,448	402,432	406,457	410,521	414,626	418,773
W	369,751	373,449	377,183	380,955	384,765	388,612	392,498	396,423	400,388	404,391	408,435	412,520	416,645	420,811	425,019	429,270	433,562	437,898	442,277	446,700	451,167	455,678	460,235	464,838
X	418,424	416,528	418,673	422,860	427,089	431,360	435,673	440,030	444,430	448,874	453,363	457,897	462,476	467,101	471,772	476,489	481,254	486,067	490,927	495,837	500,795	505,803	510,861	515,970
Y	455,579	460,126	464,727	469,375	474,068	478,809	483,597	488,433	493,318	498,251	503,233	508,266	513,348	518,482	523,666	528,903	534,192	539,534	544,929	550,379	555,883	561,441	567,056	572,726
Z	505,683	510,740	515,847	521,006	526,216	531,478	536,793	542,161	547,582	553,058	558,589	564,175	569,816	575,515	581,270	587,082	592,953	598,883	604,872	610,920	617,030	623,200	629,432	635,726

APPENDIX B3

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Accountant I	670	J
GPA	Accountant II	796	K
GPA	Accountant III	913	L
GPA	Accounting Technician I	431	F
GPA	Accounting Technician II	503	G
GPA	Accounting Technician III	606	I
GPA	Administrative Aide	353	D
GPA	Administrative Assistant	527	H
GPA	Administrative Officer	611	I
GPA	AGM Administration	1468	R
GPA	AGM Engineering & Technical Services	1555	R
GPA	AGM Operations	1566	R
GPA	Assistant Chief Financial Officer	1122	O
GPA	Assistant Customer Services Manager	951	M
GPA	Assistant Generation Manager	1100	O
GPA	Assistant Plant Superintendent (Cabras 1&2)	1014	N
GPA	Assistant Plant Superintendent (Cabras 3&4)	1007	N
GPA	Assistant Plant Superintendent (CT / Diesel Systems)	965	N
GPA	Assistant Plant Superintendent (Diesel)	979	N
GPA	Assistant Plant Superintendent (Tanguisson)	1014	N
GPA	Assistant T&D Manager	1070	O
GPA	Auditor I	670	J
GPA	Auditor II	796	K
GPA	Auditor III	913	L
GPA	Board Secretary	582	I
GPA	Budget Analyst	779	K
GPA	Building Maintenance Supervisor	909	L
GPA	Buyer I	381	F
GPA	Buyer II	496	H
GPA	Buyer Supervisor I	735	J
GPA	Buyer Supervisor II	834	K
GPA	Carpenter I	461	G
GPA	Carpenter II	543	I

APPENDIX C1

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Carpenter Leader	683	J
GPA	Carpenter Supervisor	774	K
GPA	Cashier I	315	C
GPA	Cashier II	358	E
GPA	Chief Budget Officer	994	N
GPA	Chief Electric Power Systems Dispatcher	984	N
GPA	Chief Financial Officer (GPA)	1482	R
GPA	Chief Information Technology Officer	1173	P
GPA	Clerk I	212	A
GPA	Clerk II	270	B
GPA	Clerk III	322	C
GPA	Clerk Typist I	270	B
GPA	Clerk Typist II	322	C
GPA	Clerk Typist III	346	D
GPA	Collection Agent	421	E
GPA	Collection Supervisor	795	K
GPA	Communication / Electronic Technician Leader	709	J
GPA	Communication / Electronic Technician I	479	G
GPA	Communication / Electronic Technician II	575	I
GPA	Communication / Electronic Technician Supervisor	910	L
GPA	Computer Operations Supervisor	844	K
GPA	Computer Operator I	356	E
GPA	Computer Operator II	506	G
GPA	Computer Operator III	637	I
GPA	Computer Systems Analyst I	771	J
GPA	Computer Systems Analyst II	910	L
GPA	Computer Technician I	479	G
GPA	Computer Technician II	575	I
GPA	Computer Technician Leader	709	J
GPA	Computer Technician Supervisor	897	L
GPA	Construction Inspector I	498	G
GPA	Construction Inspector II	622	I
GPA	Construction Inspector III	732	K

APPENDIX C2

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Contracts Administrator	798	K
GPA	Control Operator	793	K
GPA	Controller	1079	O
GPA	Customer Service Electrician I	439	G
GPA	Customer Service Electrician II	527	I
GPA	Customer Service Electrician Leader	660	J
GPA	Customer Service Electrician Supervisor	851	K
GPA	Customer Service Representative	461	G
GPA	Customer Service Representative Supervisor	795	K
GPA	Database Administrator	822	J
GPA	Electric Meter Reader I	319	C
GPA	Electric Meter Reader II	406	E
GPA	Electric Meter Reader Leader	553	H
GPA	Electric Meter Reader Supervisor	734	J
GPA	Electric Operation Trainee	364	C
GPA	Electric Power Laboratory Chief	952	M
GPA	Electric Power Systems Dispatcher I	788	K
GPA	Electric Power Systems Dispatcher II	911	L
GPA	Electric Power Systems Dispatcher Technician	660	J
GPA	Electric Relay Technician I	486	G
GPA	Electric Relay Technician II	575	I
GPA	Electric Relay Technician Leader	718	J
GPA	Electric Relay Technician Supervisor	911	L
GPA	Electrician Troubleshooter	697	J
GPA	Employee Development Specialist I	503	H
GPA	Employee Development Specialist II	670	J
GPA	Employee Development Specialist III	796	K
GPA	Engineer I	687	J
GPA	Engineer II	809	K
GPA	Engineer III	931	M
GPA	Engineer Supervisor	1044	O
GPA	Engineering Aide I	298	C
GPA	Engineering Aide II	339	D

APPENDIX C3

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Engineering Aide III	441	F
GPA	Engineering Technician I	482	G
GPA	Engineering Technician II	578	J
GPA	Environmental Manager	1158	O
GPA	Equipment Operator I	397	E
GPA	Equipment Operator II	445	F
GPA	Equipment Operator III	511	G
GPA	Equipment Operator IV	546	H
GPA	Equipment Operator Leader I	644	I
GPA	Equipment Operator Leader II	661	J
GPA	Equipment Operator Supervisor	795	K
GPA	Facilities Manager	997	M
GPA	Fleet Support Services Manager	1015	N
GPA	General Manager (GPA)	1831	S
GPA	GIS Analyst I	502	H
GPA	GIS Analyst II	612	J
GPA	GIS Analyst III	756	K
GPA	Heavy Equipment Mechanic I	477	G
GPA	Heavy Equipment Mechanic II	561	I
GPA	Heavy Equipment Mechanic Leader	700	J
GPA	Heavy Equipment Mechanic Supervisor	909	L
GPA	Help Desk Support Supervisor	771	J
GPA	Help Desk Technician	575	I
GPA	HVCS / Electrician I	486	G
GPA	HVCS / Electrician II	570	I
GPA	HVCS / Electrician Leader	703	J
GPA	HVCS / Electrician Supervisor	911	L
GPA	Information Security Administrator	822	J
GPA	Information Technology Manager	1064	O
GPA	Internal Auditor	1019	N
GPA	Inventory Management Officer	824	K
GPA	Land Agent I	362	E
GPA	Land Agent II	465	G

APPENDIX C4

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Land Agent III	531	I
GPA	Line Electrician I	486	G
GPA	Line Electrician II	568	I
GPA	Line Electrician Leader	702	J
GPA	Line Electrician Supervisor	911	L
GPA	Line Inspector	623	J
GPA	Machinist I	482	G
GPA	Machinist II	570	I
GPA	Machinist Leader	700	J
GPA	Maintenance Planner	796	K
GPA	Maintenance Worker	422	E
GPA	Management Analyst I	503	H
GPA	Management Analyst II	670	J
GPA	Management Analyst III	796	K
GPA	Management Analyst IV	913	L
GPA	Manager of Engineering	1232	Q
GPA	Manager of Generation	1229	Q
GPA	Meter / Relay Superintendent	1018	N
GPA	Meter Electrician I	478	G
GPA	Meter Electrician II	569	I
GPA	Meter Electrician Leader	712	J
GPA	Meter Electrician Supervisor	911	L
GPA	Network Systems Administrator	897	L
GPA	Payroll Clerk I	346	D
GPA	Payroll Clerk II	438	G
GPA	Payroll Clerk III	493	H
GPA	Payroll Supervisor	805	K
GPA	Personnel Assistant I	364	D
GPA	Personnel Assistant II	433	F
GPA	Personnel Services Administrator	1064	O
GPA	Personnel Specialist I	503	H
GPA	Personnel Specialist II	670	J
GPA	Personnel Specialist III	796	K

APPENDIX C5

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Personnel Specialist IV	913	L
GPA	Planner Work Co-Ordinator (Transportation)	561	H
GPA	Plant Electrician / Instrument Maintenance Supervisor	911	L
GPA	Plant Electrician I	478	G
GPA	Plant Electrician II	569	I
GPA	Plant Electrician Leader	712	J
GPA	Plant Instrument Technician I	488	G
GPA	Plant Instrument Technician II	576	I
GPA	Plant Instrument Technician Leader	722	J
GPA	Plant Maintenance Mechanic I	477	G
GPA	Plant Maintenance Mechanic II	561	I
GPA	Plant Maintenance Mechanic Leader	700	J
GPA	Plant Maintenance Supervisor	909	L
GPA	Plant Maintenance Welder I	477	G
GPA	Plant Maintenance Welder II	557	I
GPA	Plant Maintenance Welder III	696	J
GPA	Plant Operator / Main. Mechanic Leader	755	J
GPA	Plant Operator / Maintenance Supervisor	929	L
GPA	Plant Operator / Maintenance Worker I	488	G
GPA	Plant Operator / Maintenance Worker II	607	J
GPA	Plant Operator I	438	F
GPA	Plant Operator II	488	G
GPA	Plant Operator III	618	J
GPA	Plant Results Supervisor	908	L
GPA	Plant Shift Supervisor	935	L
GPA	Plant Utility Worker	348	D
GPA	Plant Water Technician I	469	G
GPA	Plant Water Technician II	576	I
GPA	Plant Water Technician Leader	656	J
GPA	Power Plant Maintenance Superintendent (CMWS)	998	N
GPA	Power Systems Superintendent (Overhead)	999	N
GPA	Power Systems Superintendent (Substation)	1011	N
GPA	Power Systems Superintendent (Underground)	1011	N

APPENDIX C6

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Program Coordinator I	503	H
GPA	Program Coordinator II	670	J
GPA	Program Coordinator III	796	K
GPA	Program Coordinator IV	913	L
GPA	Programmer / Analyst Supervisor	916	L
GPA	Programmer Analyst	683	J
GPA	PSCC Manager	1153	P
GPA	PSCC Superintendent	1047	N
GPA	Public Information Officer	926	M
GPA	Refrigeration Mechanic I	477	G
GPA	Refrigeration Mechanic II	561	I
GPA	Refrigeration Mechanic Leader	696	J
GPA	Revenue Protection Field Investigator	794	K
GPA	Revenue Protection Utility Analyst	913	L
GPA	Right of Way Supervisor	915	L
GPA	Risk Analyst	779	K
GPA	Safety Administrator	975	M
GPA	Safety Inspector I	418	F
GPA	Safety Inspector II	539	H
GPA	Safety Inspector III	741	J
GPA	Safety Supervisor	872	K
GPA	SCADA Technician I	589	I
GPA	SCADA Technician II	705	J
GPA	SCADA Technician Leader	809	K
GPA	SCADA Technician Supervisor	926	L
GPA	Secretary I	378	E
GPA	Secretary I (Typist)	378	E
GPA	Secretary II	438	G
GPA	Secretary II (Typist)	438	G
GPA	Shop Planner	786	K
GPA	Special Projects Engineer	978	N
GPA	SPORD Manager	1236	Q
GPA	Staff Attorney	1199	P

APPENDIX C7

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Storekeeper I	322	C
GPA	Storekeeper II	424	F
GPA	Substation Electrician I	486	G
GPA	Substation Electrician II	570	I
GPA	Substation Electrician Leader	703	J
GPA	Substation Electrician Supervisor	911	L
GPA	Supply Clerk	322	C
GPA	Supply Management Administrator	990	M
GPA	Survey Supervisor	900	L
GPA	System Protection Engineer (Substation)	944	M
GPA	Systems Analyst I	725	J
GPA	Systems Analyst II	910	L
GPA	Systems Manager	1064	O
GPA	T&D Manager	1196	P
GPA	Tool Mechanic	390	E
GPA	Trouble Dispatcher	474	G
GPA	Trouble Dispatcher Leader	600	J
GPA	Utility Auditor I	670	J
GPA	Utility Auditor II	796	K
GPA	Utility Auditor III	913	L
GPA	Utility Services Administrator	1075	O
GPA	Utility Worker	348	D
GPA	Warehouse Supervisor I	724	J
GPA	Warehouse Supervisor II	803	K
GPA	Word Processing Secretary I	378	E
GPA	Word Processing Secretary II	438	G

APPENDIX C8

PROPOSED NEW POSITIONS TO ADD TO CTP LIST (GPA)

Authority	POSITION	JE	GRADE
GPA	Accounting Technician I	431	F
GPA	Accounting Technician II	503	G
GPA	Accounting Technician III	606	I
GPA	Administrative Aide	353	D
GPA	Administrative Assistant	527	H
GPA	Board Secretary	582	I
GPA	Buyer I	381	F
GPA	Cashier I	315	C
GPA	Cashier II	358	E
GPA	Clerk I	212	A
GPA	Clerk II	270	B
GPA	Clerk III	322	C
GPA	Clerk Typist I	270	B
GPA	Clerk Typist II	322	C
GPA	Clerk Typist III	346	D
GPA	Engineering Aide I	298	C
GPA	Engineering Aide II	339	D
GPA	Engineering Aide III	441	F
GPA	Maintenance Worker	422	E
GPA	Payroll Clerk I	346	D
GPA	Payroll Clerk II	438	G
GPA	Payroll Clerk III	493	H
GPA	Personnel Assistant I	364	D
GPA	Personnel Assistant II	433	F
GPA	Secretary I	378	E
GPA	Secretary I (Typist)	378	E
GPA	Secretary II	438	G
GPA	Secretary II (Typist)	438	G
GPA	Storekeeper I	322	C
GPA	Storekeeper II	424	F
GPA	Supply Clerk	322	C
GPA	Utility Worker	348	D
GPA	Word Processing Secretary I	378	E
GPA	Word Processing Secretary II	438	G

APPENDIX D1

PROPOSED NEW POSITIONS TO ADD TO CTP LIST (GPA)

Five (5) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS (NEW)	POSITION	JE	STRUCTURAL ADJUSTMENT - MIN				STRUCTURAL ADJUSTMENT - MAX			
				BASE SALARY	GRADE	STEP	SUB STEP	BASE SALARY	GRADE	STEP	SUB STEP
GPA	FILLED	ADMINISTRATIVE AIDE	353	29,660	D	4	B	30,864	D	5	B
GPA	FILLED	ADMINISTRATIVE ASSISTANT	527	39,717	H	5	D	41,329	H	6	D
GPA	FILLED	BUYER I	381	31,430	F	3	C	32,706	F	4	C
GPA	FILLED	CASHIER I	315	27,445	C	4	A	28,559	C	5	A
GPA	FILLED	CASHIER II	358	30,550	E	4	B	31,790	E	5	B
GPA	FILLED	CLERK II	270	25,942	B	4	D	26,995	B	5	D
GPA	FILLED	CLERK III	322	27,997	C	4	C	29,133	C	5	C
GPA	FILLED	ENGINEERING AIDE III	441	32,062	F	4	A	33,364	F	5	A
GPA	FILLED	MAINTENANCE WORKER	422	32,429	E	5	D	33,746	E	6	D
GPA	FILLED	PAYROLL CLERK II	438	33,649	G	3	D	35,015	G	4	D
GPA	FILLED	STOREKEEPER I	322	27,445	C	4	A	28,559	C	5	A
GPA	FILLED	STOREKEEPER II	424	32,706	F	4	C	34,034	F	5	C
GPA	FILLED	UTILITY WORKER	348	28,788	D	3	C	29,956	D	4	C
GPA	FILLED	WORD PROCESSING SECRETARY II	438	33,649	G	3	D	35,015	G	4	D

Five (5) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS (NEW)	POSITION	JE	STRUCTURAL ADJUSTMENT - MIN				STRUCTURAL ADJUSTMENT - MAX			
				BASE SALARY	GRADE	STEP	SUB STEP	BASE SALARY	GRADE	STEP	SUB STEP
GPA	NEW	ACCOUNTING TECHNICIAN I	431	32,062	F	4	A	33,364	F	5	A
GPA	NEW	ACCOUNTING TECHNICIAN II	503	36,437	G	5	D	37,917	G	6	D
GPA	NEW	ACCOUNTING TECHNICIAN III	606	44,042	I	5	C	45,830	I	6	C
GPA	NEW	CLERK I	212	23,100	A	4	A	24,038	A	5	A
GPA	NEW	CLERK TYPIST I	270	25,942	B	4	D	26,995	B	5	D
GPA	NEW	CLERK TYPIST II	322	27,997	C	4	C	29,133	C	5	C
GPA	NEW	CLERK TYPIST III	346	29,660	D	4	B	30,864	D	5	B
GPA	NEW	ENGINEERING AIDE I	298	26,638	C	3	B	27,719	C	4	B
GPA	NEW	ENGINEERING AIDE II	339	28,503	D	3	B	29,660	D	4	B
GPA	NEW	PAYROLL CLERK I	346	28,788	D	3	C	29,956	D	4	C
GPA	NEW	PAYROLL CLERK III	493	38,549	H	5	A	40,114	H	6	A
GPA	NEW	PERSONNEL ASSISTANT I	364	29,660	D	4	B	30,864	D	5	B
GPA	NEW	PERSONNEL ASSISTANT II	433	33,033	F	4	D	34,375	F	5	D
GPA	NEW	SECRETARY I	378	31,164	E	4	D	32,429	E	5	D
GPA	NEW	SECRETARY I (TYPIST)	378	31,164	E	4	D	32,429	E	5	D
GPA	NEW	SECRETARY II	438	33,649	G	3	D	35,015	G	4	D
GPA	NEW	SECRETARY II (TYPIST)	438	33,649	G	3	D	35,015	G	4	D
GPA	NEW	SUPPLY CLERK	322	27,445	C	4	A	28,559	C	5	A
GPA	NEW	WORD PROCESSING SECRETARY I	378	31,164	E	4	D	32,429	E	5	D

APPENDIX D2

PROPOSED NEW POSITIONS TO ADD TO CTP LIST (GPA)

Seven (7) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS (NEW)	POSITION	JE	STRUCTURAL ADJUSTMENT - MIN				STRUCTURAL ADJUSTMENT - MAX			
				BASE SALARY	GRADE	STEP	SUB STEP	BASE SALARY	GRADE	STEP	SUB STEP
GPA	FILLED	ADMINISTRATIVE AIDE	353	29,075	D	3	D	30,864	D	5	B
GPA	FILLED	ADMINISTRATIVE ASSISTANT	527	38,934	H	5	B	41,329	H	6	D
GPA	FILLED	BUYER I	381	30,811	F	3	A	32,706	F	4	C
GPA	FILLED	CASHIER I	315	26,904	C	3	C	28,559	C	5	A
GPA	FILLED	CASHIER II	358	29,948	E	3	D	31,790	E	5	B
GPA	FILLED	CLERK II	270	25,431	B	4	B	26,995	B	5	D
GPA	FILLED	CLERK III	322	27,445	C	4	A	29,133	C	5	C
GPA	FILLED	ENGINEERING AIDE III	441	31,430	F	3	C	33,364	F	5	A
GPA	FILLED	MAINTENANCE WORKER	422	31,790	E	5	B	33,746	E	6	D
GPA	FILLED	PAYROLL CLERK II	438	32,986	G	3	B	35,015	G	4	D
GPA	FILLED	STOREKEEPER I	322	26,904	C	3	C	28,559	C	5	A
GPA	FILLED	STOREKEEPER II	424	32,062	F	4	A	34,034	F	5	C
GPA	FILLED	UTILITY WORKER	348	28,220	D	3	A	29,956	D	4	C
GPA	FILLED	WORD PROCESSING SECRETARY II	438	32,986	G	3	B	35,015	G	4	D

Seven (7) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS (NEW)	POSITION	JE	STRUCTURAL ADJUSTMENT - MIN				STRUCTURAL ADJUSTMENT - MAX			
				BASE SALARY	GRADE	STEP	SUB STEP	BASE SALARY	GRADE	STEP	SUB STEP
GPA	NEW	ACCOUNTING TECHNICIAN I	431	31,430	F	3	C	33,364	F	5	A
GPA	NEW	ACCOUNTING TECHNICIAN II	503	35,719	G	5	B	37,917	G	6	D
GPA	NEW	ACCOUNTING TECHNICIAN III	606	43,174	I	5	A	45,830	I	6	C
GPA	NEW	CLERK I	212	22,645	A	3	C	24,038	A	5	A
GPA	NEW	CLERK TYPIST I	270	25,431	B	4	B	26,995	B	5	D
GPA	NEW	CLERK TYPIST II	322	27,445	C	4	A	29,133	C	5	C
GPA	NEW	CLERK TYPIST III	346	29,075	D	3	D	30,864	D	5	B
GPA	NEW	ENGINEERING AIDE I	298	26,113	C	2	D	27,719	C	4	B
GPA	NEW	ENGINEERING AIDE II	339	27,941	D	2	D	29,660	D	4	B
GPA	NEW	PAYROLL CLERK I	346	28,220	D	3	A	29,956	D	4	C
GPA	NEW	PAYROLL CLERK III	493	37,789	H	4	C	40,114	H	6	A
GPA	NEW	PERSONNEL ASSISTANT I	364	29,075	D	3	D	30,864	D	5	B
GPA	NEW	PERSONNEL ASSISTANT II	433	32,383	F	4	B	34,375	F	5	D
GPA	NEW	SECRETARY I	378	30,550	E	4	B	32,429	E	5	D
GPA	NEW	SECRETARY I (TYPIST)	378	30,550	E	4	B	32,429	E	5	D
GPA	NEW	SECRETARY II	438	32,986	G	3	B	35,015	G	4	D
GPA	NEW	SECRETARY II (TYPIST)	438	32,986	G	3	B	35,015	G	4	D
GPA	NEW	SUPPLY CLERK	322	26,904	C	3	C	28,559	C	5	A
GPA	NEW	WORD PROCESSING SECRETARY I	378	30,550	E	4	B	32,429	E	5	D

APPENDIX D3

GUAM WATERWORKS AUTHORITY
EXECUTIVE REPORT

MISSION STATEMENT: The Guam Waterworks Authority SHALL

Provide outstanding customer service by delivering excellent water and wastewater services in a safe, reliable, responsible and cost effective manner.

AUTHORITY:

12 GCA CHAPTER 14, GUAM WATERWORKS AUTHORITY

§14103. Continuation of Existence.
Guam Waterworks Authority (GWA) is continued in existence as a public corporation.

§ 14105. Governance of Authority.
All powers vested in the Authority, except as provided herein, shall be exercised by the Consolidated Commission on Utilities, as established in Chapter 79 of Title 12 of the Guam Code Annotated.

4 GCA §6303 (d) - Creation of positions.

GWA Personnel Rules & Regulations, Paragraph A to the Glossary of GWA's Personnel Rules - Certified, Technical, and Professional Positions (as amended by Public Law 28-159 Section 3 (c)):

SUMMARY:

The Guam Waterworks Authority owns and operates an extensive network of facilities that provides water and wastewater services to the majority of island residents. These facilities represent a significant investment and include substantial visible and underground infrastructure assets.

GWA Operates and maintains more than 200 water facilities on Guam. The facility types can generally be classified as sources, reservoirs, and waster booster pumping stations. GWA is also responsible for three public water systems. The Northern, Central and Southern Public Water Systems.

GWA provides wastewater services for Guam's general population and Andersen Air Force Base. The wastewater system consists of seven wastewater basins: Agat, Umatac - Merizo, Inajaran, Baza Gardens, Pago Socio, Northern District and Hagatna.

While these efforts support efficient and reliable utility service, they cannot abate the growing cyber and physical security threats to the Authority. GWA continues to build better business processes and optimize its assets, the roles of *all employees* have become increasingly critical to the defense of potential security breaches to the GWA infrastructure.

Security breaches and threats – both physical and cyber -impact people, information, functions and physical assets. These hazards can range from workplace violence, crime, including personal and property thefts, terrorism acts, and natural disasters to name a few.

All employees are responsible to conduct safe work practices in their working environment and to secure their work places to delay or deter threats to GWA facilities. Examples of this include, and are not limited to:

Cashier duties involving the ability to observe the actions and behavior of a potential adversary and alerting authorities, protecting the face-to-face cash handling process and securing customer information when conducting payment transactions using the proprietary customer service program that is interconnected to the GWA network.

Administrative and clerical duties involve securing and updating employee and customer data on the utility's integrated network and protecting access to this information. This also includes observance and monitoring of internal and external customers access to office business and processes.

Finance and Accounting duties involve responsibility for the financial records of the Authority. This includes: analyzing financial statements, long range financial planning, enhancing and monitoring internal controls, preparing annual budgets, external/internal audit functions, debt/financing proposals, managing investments, revenue collection and tracking. Accounting computer based applications used in carrying out the functions of Finance and Accounting include, but not limited to the JD Edwards Accounting Modules and Customer Care and Billing system.

Maintenance Worker duties involve work the maintenance of GWA facilities including facilities, treatment plants, pumping stations, wells and the administration office building. They must be cognizant to hazard conditions at these sites and apply corrective measures to minimize risks to integrity of these physical assets.

Procurement duties include the purchasing of materials and equipment, and the storing of equipment, materials and parts relevant to operations work such as water distribution, water production and treatment, wastewater collection and wastewater treatment plants and facilities overhauls, underground water and sewer line construction and repairs, and conducting inventory of large bulk items unique to the GWA operations. Measures are implemented to protect access to warehouses and storage areas from unauthorized persons. Additional duties include inputting and retrieving data on the utility's integrated network for accountability.

The security of GWA's assets is paramount. The whole organization is accountable for ensuring safety and preparedness of its employees when safety and security at any level is compromised.

GWA has embarked on a cybersecurity training program for all employees. GWA will also implement a physical security training program. These training programs are the initial stages of enhancing employees' awareness and knowledge of the importance of securing GWA assets and its environment.

Recently, an updated market review of all positons was conducted and determined GWA's position in the market is relatively at the 15th market percentile of the 2017 Market Data (Appendix A). The review included an adjustment of the pay scale to address obsolete pay grades that were in place since 2007, and a refit and reset of new grades to coincide with the 2017 Market Data (Appendices B and C). The proposed creation of positions were also included in the market review update (Appendices D1 - D17)

Based on the foregoing, management recognizes that all positions are critical to the safety and welfare of GWA operations. In meeting management's needs for the efficacy of operating the utility within modern industry standards, we recommend the following:

a) To approve the proposed creation of positions (delineated in Appendices D1 – D17); and

b) To add these newly created positions (delineated in Appendices D1 – D17) to GWA's list of Certified, Technical and Professional positions (delineated in Appendix C).

c) To accept the recommendations of the market review update for CTP positions, including a new pay scale, the refit and reset of new grades to coincide with the 2017 market data, and implementation of a structural adjustment subject to the availability of funds (Appendices A and B).

d) To maintain uniformity in the application of the promotion/demotion/transfer pay policy relative to CCU Resolution No. 2012-49 for all CTP positions covered under the Strategic Pay Scale, apply CCU Resolution No. 2012-49 to GPA and GWA business processes (delineated in Appendices E1 – E16).

MIGUEL C. BORDALLO, P.E.
General Manager, GWA

9.12.17
Date

GUAM WATERWORKS AUTHORITY

COMPENSATION & BENEFITS STUDY

Market Review

Executive Summary

September 2017

GUAM WATERWORKS AUTHORITY

ALAN SEARLE & ASSOCIATES

Management Consultants, Russell, New Zealand

Appendix A

A. Background

With the passing of public laws PL 28-113 and PL 28-159 GWA was given the mandate to implement a new market based compensation model that would aid the attraction and retention of "Certified Technical and Professional" or CTP personnel. The law was a result of concerns that the Authority was losing highly skilled personnel due to the fact that current salaries and compensation were not sufficient to attract and retain such personnel.

Through the RFP process, GWA in 2005 engaged the consulting services of Alan Searle & Associates to undertake the above compensation study. This was an extensive project involving three stages as follows :

The first stage of the study focused on job evaluation which involved applying a structured methodology of twelve (12) individual factors to assess all CTP positions. Each factor derived a point value with their sum representing the "total point" value of the position. The process was important as it re-established the internal equity of all positions based on job size. An exponential regression analysis was then undertaken to determine GWA's base salary pay line. This step was also important in that the resulting base salary pay line could eventually be compared to the market percentiles identified in Stage Two.

The second stage involved gathering external pay data on all CTP positions. The target market was the U.S. water industry and extensive data was gathered from a number of sources including the AWWA (American Water Works Association), U.S. Bureau of Labor Statistics (BLS), U.S. Department of Labor (DOL), U.S. Federal Government / Civil Service, U.S. Military, Web Based Compensation Companies, U.S. Utility Recruitment Companies and U.S. Utility Company Websites. The resulting data was analyzed and presented as market percentiles (5^{th} through to the 95^{th}) with the 50^{th} market percentile being the market average. A second exponential regression analysis was then undertaken to compare GWA's base salary pay line against the market percentiles as gathered in 2008.

The results validated GWA's market vulnerability as their base salary pay line (for a large number of CTP positions) was clearly below the 5^{th} market percentile. This was an exceptionally low position and validated the ongoing difficulties GWA had been experiencing in being able to attract and retain CTP employees. The situation at the time was further exacerbated by Gov. Guam policy (Hay methodology) that stipulated that employees on Step 10 and above receive a 3.5% increment (based on satisfactory performance) once every two (2) years. On an annualized basis this was clearly below the CPI (Consumer Price Index).

With the passing of resolution 01-FY2008 the CCU approved a transition period (beginning in fiscal year 2008) to migrate all CTP positions to a more competitive position in the market. The CCU resolution approved a five-year phase-in using the 5^{th}, 15^{th}, 25^{th}, 35^{th} and 50^{th} market percentiles as targets for 2008 and subsequent years.

Appendix A1

The third stage of the review focused on implementation and the transition of all CTP employees into the new compensation model. The new salary schedule has twenty-six (26) alphabetical grades each with twenty (20) numeric steps. An additional feature was the introduction of four (4) sub-steps per step which amounts to eighty sub-steps in total. Each sub-step increases base salary by 1% and was introduced to allow a performance range for GWA to ultimately pay for performance.

The outcome of the above was the identification of a specific implementation range for each CTP position. With each implementation range encompassing sixteen (16) sub-steps the final phase was to migrate all CTP employees into the new compensation model. In completing this exercise the following three implementation criteria was applied : education, experience and performance. The end result was a score (for each employee) that could be transposed to their specific implementation range and a new grade, step and sub-step identified.

B. Current Review (2017)

The current review replicates the second stage above in order to provide updated market data as at 2017. Once again the target market was the U.S. water industry and extensive data was gathered from a number of sources including the AWWA (American Water Works Association), U.S. Bureau of Labor Statistics (BLS), U.S. Department of Labor (DOL), U.S. Federal Government / Civil Service, U.S. Military, Web Based Compensation Companies, U.S. Utility Recruitment Companies and U.S. Utility Company Websites.

In summary, external pay data was gathered on 230 positions (both CTP and Non-CTP) with results once again being analyzed and presented as market percentiles (5^{th} through to the 95^{th}). Please note that as with the earlier study the 50^{th} market percentile represents the market average (U.S. mainland). An exponential regression analysis was then undertaken (see Appendix A) to compare GWA's base salary pay line against the 2017 market percentiles as gathered.

C. Observations / Recommendations

In terms of recommendations the focus must be on ensuring that GWA's compensation model (cost permitting) is in the most competitive position it can be with regards the external market place. Whilst any increase in market position obviously comes at a cost this must be weighed against the Authority's ability to attract and retain competent employees.

With reference to Appendix A, GWA's market position in 2008 was extremely vulnerable with a large number of employees well below the 5^{th} market percentile. Whilst some adjustments were made to correct the situation the market has unfortunately continued to move through to 2017. Given those early initiatives taken by the CCU we would now place GWA (with reference to Appendix A) at just below the 5th market percentile based on the 2017 market data that has been obtained.

Appendix A2

Having determined GWA's current market position (relative to the 2017 market data) we then completed a number of cost options aimed at migrating GWA to a more competitive market position. These included migrating to the 5th (essentially a status quo option), 10th, 15th 20th and 25th market percentiles. The costing process also included both a 5 sub-step and 7 sub-step implementation range for employee "slotting' purposes. The results are shown in Appendix B.

In undertaking the above cost analysis it also became apparent that an updated pay schedule was also required. With the current pay schedule now 10 years old, grades A, B & C have become redundant and are no longer being used. The need for an update is also reflected in the fact that some employees are approaching or have exceeded Step 20, Sub-step D.

In terms of a course of action our recommendations are as follows :

1. Consolidate GWA's compensation model to include all employees i.e. both CTP and Non-CTP employees.

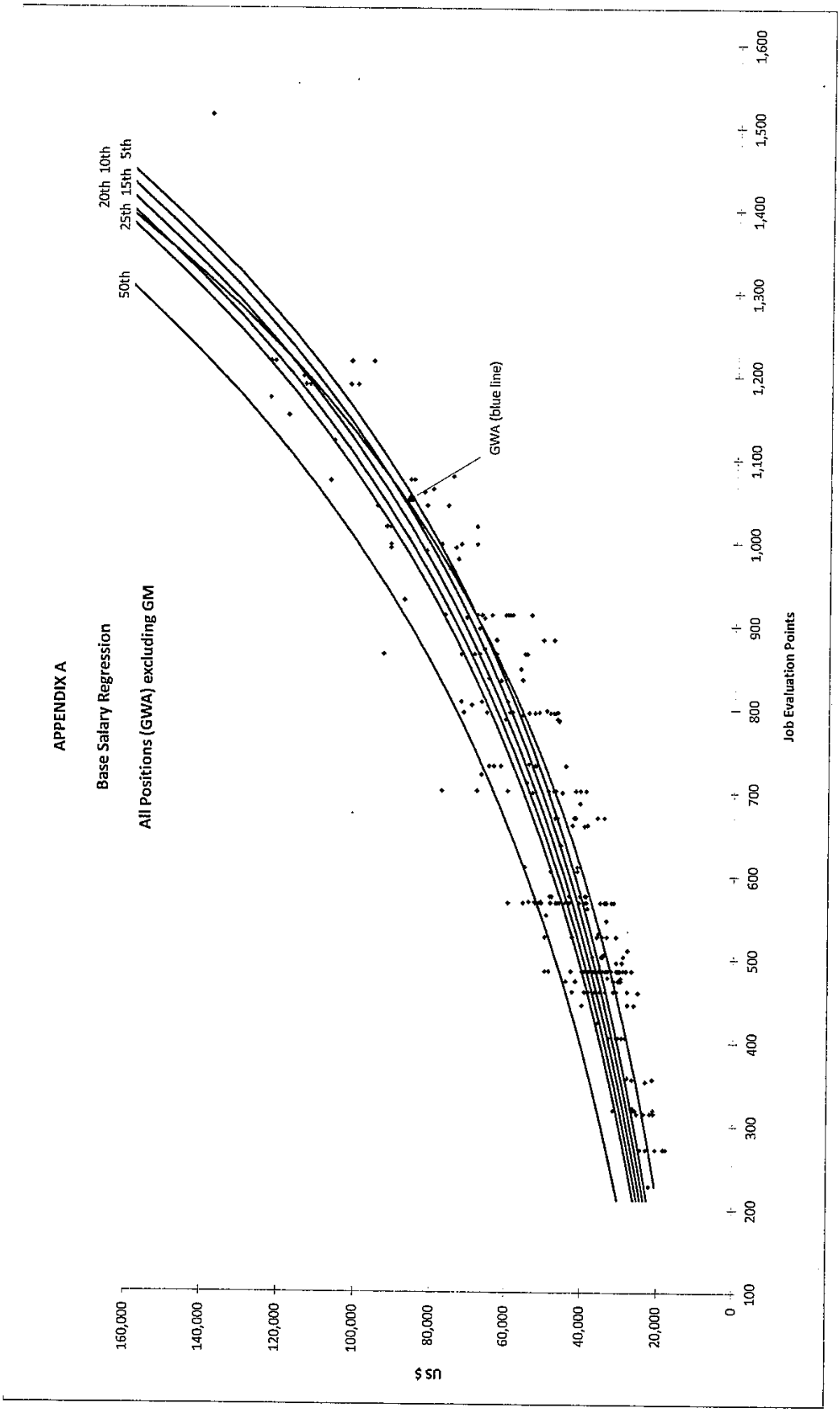
   Note : the need to distinguish between CTP and Non-CTP positions has become largely irrelevant as all positions are now deemed critical in providing the Authority's services. This perspective is clearly evident with both PAG and GIAA (excluding ARFF and Airport Police) now incorporating all positions in their respective compensation models.

2. Make an initial structural adjustment (cost permitting) to the 5th market percentile based on the 2017 market data. If this can be done we would recommend using the 5 sub-step implementation range cost option as "employee slotting" is closer than using the 7 sub-step cost option. As outlined earlier, this is essentially a status quo adjustment as despite being at just below the 5th market percentile this adjustment targets (in particular) those employees who are below the 5th market percentile regression line.

3. Agree on a transition plan (cost permitting) aimed at migrating GWA to a higher market percentile e.g. the 10th, 15th, 20th or 25th market percentile based on the 2017 market data. With the eventual target being the 50th market percentile (or market average within the U.S. mainland based on the prevailing market) this transition plan will continue the momentum to ensure GWA's compensation model is externally competitive.

4. Given current controls in a) annually determining the implementation range on offer re : pay for performance, and b) determining the percentage of employees who can receive the "top scores" continue to allow (for employees below the 50th market percentile of market average within the U.S. mainland) the employees eventual pay for performance adjustment to be added to their base salary. This makes computation of any future regression analysis a lot more accurate when comparing results against the prevailing market.

Appendix A3


APPENDIX A
Base Salary Regression
All Positions (GWA) excluding GM
20th 10th
25th 15th 5th
50th
GWA (blue line)
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
$ us
100
200
300
400
500
600
700
800
900
1,000
1,100
1,200
1,300
1,400
1,500
1,600
Job Evaluation Points
Base Salary - all GWA positions (CTP + Non CTP) excluding GM
Base Salary - 2017 market percentiles - 5th, 10th, 15th, 20th, 25th and 50th (U.S. Water / Wastewater Utilities)

Appendix A4

APPENDIX B

ESTIMATED COST IN MIGRATING GWA TO VARIOUS MARKET PERCENTILES

BASED ON 2017 MARKET DATA

GWA - Seven (7) Sub-Step Implementation Range

Market Percentile 2017	Base Salary	Total Compensation (Base Salary plus Benefits)	Percentage Increase
5th	971,101	1,494,002	6.52
10th	1,258,166	1,935,640	8.44
15th	1,574,160	2,421,785	10.56
20th	1,924,266	2,960,409	12.91
25th	2,302,416	3,542,178	15.45

GWA - Five (5) Sub-Step Implementation Range

Market Percentile 2017	Base Salary	Total Compensation (Base Salary plus Benefits)	Percentage Increase
5th	1,053,018	1,620,028	7.07
10th	1,348,839	2,075,137	9.05
15th	1,674,843	2,576,682	11.24
20th	2,034,034	3,129,283	13.65
25th	2,423,857	3,729,011	16.26

Appendix A5

STRATEGIC PAY SCALE (2017)

			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
		Step 1				Step 2				Step 3				Step 4				Step 5				Step 6				Step 7			
		A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Grade	A	20,500	20,705	20,912	21,121	21,332	21,546	21,761	21,979	22,199	22,421	22,645	22,871	23,100	23,331	23,564	23,800	24,038	24,278	24,521	24,766	25,014	25,264	25,517	25,772	26,030	26,290	26,553	26,818
9.0%	B	22,345	22,568	22,794	23,022	23,252	23,485	23,720	23,957	24,196	24,438	24,683	24,930	25,179	25,431	25,685	25,942	26,201	26,463	26,728	26,995	27,265	27,538	27,813	28,091	28,372	28,656	28,943	29,232
9.0%	C	24,356	24,600	24,846	25,094	25,345	25,598	25,854	26,113	26,374	26,638	26,904	27,173	27,445	27,719	27,997	28,277	28,559	28,845	29,133	29,425	29,719	30,016	30,316	30,620	30,926	31,235	31,547	31,863
7.0%	D	26,061	26,322	26,585	26,851	27,119	27,390	27,664	27,941	28,220	28,503	28,788	29,075	29,366	29,660	29,956	30,256	30,559	30,864	31,173	31,484	31,799	32,117	32,439	32,763	33,091	33,421	33,756	34,093
3.0%	E	26,843	27,111	27,382	27,656	27,933	28,212	28,494	28,779	29,067	29,358	29,651	29,948	30,247	30,550	30,855	31,164	31,475	31,790	32,108	32,429	32,753	33,081	33,412	33,746	34,083	34,424	34,768	35,116
6.0%	F	28,453	28,738	29,025	29,316	29,609	29,905	30,204	30,506	30,811	31,119	31,430	31,745	32,062	32,383	32,706	33,033	33,364	33,697	34,034	34,375	34,719	35,066	35,416	35,771	36,128	36,490	36,854	37,223
6.0%	G	30,161	30,462	30,767	31,074	31,385	31,699	32,016	32,336	32,660	32,986	33,316	33,649	33,986	34,326	34,669	35,015	35,366	35,719	36,076	36,437	36,802	37,170	37,541	37,917	38,296	38,679	39,066	39,456
9.0%	H	32,875	33,204	33,536	33,871	34,210	34,552	34,898	35,246	35,599	35,955	36,314	36,678	37,044	37,415	37,789	38,167	38,549	38,934	39,323	39,717	40,114	40,515	40,920	41,329	41,743	42,160	42,582	43,007
12.0%	I	36,820	37,188	37,560	37,936	38,315	38,698	39,085	39,476	39,871	40,270	40,672	41,079	41,490	41,905	42,324	42,747	43,174	43,606	44,042	44,483	44,927	45,377	45,830	46,289	46,752	47,219	47,691	48,168
12.0%	J	41,238	41,651	42,067	42,488	42,913	43,342	43,775	44,213	44,655	45,102	45,553	46,008	46,468	46,933	47,403	47,877	48,355	48,839	49,327	49,821	50,319	50,822	51,330	51,843	52,362	52,885	53,414	53,948
21.0%	K	49,899	50,397	50,901	51,410	51,925	52,444	52,968	53,498	54,033	54,573	55,119	55,670	56,227	56,789	57,357	57,931	58,510	59,095	59,686	60,283	60,885	61,495	62,109	62,731	63,358	63,991	64,631	65,278
17.0%	L	58,381	58,965	59,555	60,150	60,752	61,359	61,973	62,593	63,219	63,851	64,489	65,134	65,785	66,443	67,108	67,779	68,457	69,141	69,833	70,531	71,236	71,949	72,668	73,395	74,129	74,870	75,619	76,375
17.0%	M	68,306	68,989	69,679	70,376	71,080	71,790	72,508	73,233	73,966	74,705	75,452	76,207	76,969	77,739	78,516	79,301	80,094	80,895	81,704	82,521	83,346	84,180	85,022	85,872	86,731	87,598	88,474	89,359
8.0%	N	73,771	74,508	75,253	76,006	76,766	77,534	78,309	79,092	79,883	80,682	81,489	82,303	83,126	83,958	84,797	85,645	86,502	87,367	88,240	89,123	90,014	90,914	91,823	92,742	93,669	94,606	95,552	96,507
13.0%	O	83,361	84,194	85,036	85,887	86,745	87,613	88,489	89,374	90,268	91,170	92,082	93,003	93,933	94,872	95,821	96,779	97,747	98,724	99,712	100,709	101,716	102,733	103,760	104,798	105,846	106,904	107,973	109,053
16.0%	P	96,698	97,665	98,642	99,628	100,625	101,631	102,647	103,674	104,711	105,758	106,815	107,883	108,962	110,052	111,152	112,264	113,387	114,520	115,666	116,822	117,990	119,170	120,362	121,566	122,781	124,009	125,249	126,502
12.0%	Q	108,302	109,385	110,479	111,584	112,700	113,827	114,965	116,115	117,276	118,449	119,633	120,829	122,038	123,258	124,491	125,736	126,993	128,263	129,545	130,841	132,149	133,471	134,806	136,154	137,515	138,890	140,279	141,682
14.0%	R	123,465	124,699	125,946	127,206	128,478	129,762	131,060	132,371	133,694	135,031	136,382	137,745	139,123	140,514	141,919	143,339	144,772	146,220	147,682	149,159	150,650	152,157	153,678	155,215	156,767	158,335	159,918	161,517
13.0%	S	139,515	140,910	142,319	143,742	145,180	146,632	148,098	149,579	151,075	152,585	154,111	155,652	157,209	158,781	160,369	161,973	163,592	165,228	166,880	168,549	170,235	171,937	173,656	175,393	177,147	178,918	180,708	182,515
11.0%	T	154,862	156,410	157,974	159,554	161,150	162,761	164,389	166,033	167,693	169,370	171,064	172,774	174,502	176,247	178,009	179,789	181,587	183,403	185,237	187,090	188,961	190,850	192,759	194,686	196,633	198,599	200,585	202,591
11.0%	U	171,896	173,615	175,351	177,105	178,876	180,665	182,471	184,296	186,139	188,001	189,881	191,779	193,697	195,634	197,590	199,566	201,562	203,578	205,613	207,670	209,746	211,844	213,962	216,102	218,263	220,445	222,650	224,876
11.0%	V	190,805	192,713	194,640	196,587	198,552	200,538	202,543	204,569	206,614	208,681	210,767	212,875	215,004	217,154	219,325	221,519	223,734	225,971	228,231	230,513	232,818	235,146	237,498	239,873	242,272	244,694	247,141	249,613
11.0%	W	211,794	213,911	216,051	218,211	220,393	222,597	224,823	227,071	229,342	231,635	233,952	236,291	238,654	241,041	243,451	245,886	248,345	250,828	253,336	255,870	258,428	261,013	263,623	266,259	268,922	271,611	274,327	277,070
11.0%	X	235,091	237,442	239,816	242,214	244,636	247,083	249,554	252,049	254,570	257,115	259,686	262,283	264,906	267,555	270,231	272,933	275,662	278,419	281,203	284,015	286,855	289,724	292,621	295,547	298,503	301,488	304,503	307,548
11.0%	Y	260,951	263,560	266,196	268,858	271,546	274,262	277,005	279,775	282,572	285,398	288,252	291,135	294,045	296,986	299,956	302,956	305,985	309,045	312,136	315,257	318,410	321,594	324,810	328,058	331,338	334,652	337,998	341,378
11.0%	Z	289,655	292,552	295,477	298,432	301,417	304,431	307,475	310,550	313,655	316,792	319,960	323,159	326,391	329,655	332,951	336,281	339,644	343,040	346,471	349,935	353,435	356,969	360,539	364,144	367,785	371,463	375,178	378,930

APPENDIX B1

STRATEGIC PAY SCALE (2017)

	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Step 8				Step 9				Step 10				Step 11				Step 12				Step 13				Step 14			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
A	27,086	27,357	27,631	27,907	28,186	28,468	28,753	29,040	29,331	29,624	29,920	30,220	30,522	30,827	31,135	31,447	31,761	32,079	32,399	32,723	33,051	33,381	33,715	34,052	34,393	34,737	35,084	35,435
B	29,524	29,819	30,118	30,419	30,723	31,030	31,341	31,654	31,971	32,290	32,613	32,939	33,269	33,601	33,937	34,277	34,620	34,966	35,315	35,669	36,025	36,385	36,749	37,117	37,488	37,863	38,241	38,624
C	32,181	32,503	32,828	33,157	33,488	33,823	34,161	34,503	34,848	35,196	35,548	35,904	36,263	36,625	36,992	37,362	37,735	38,113	38,494	38,879	39,267	39,660	40,057	40,457	40,862	41,270	41,683	42,100
D	34,434	34,778	35,126	35,478	35,832	36,191	36,553	36,918	37,287	37,660	38,037	38,417	38,801	39,189	39,581	39,977	40,377	40,780	41,188	41,600	42,016	42,436	42,861	43,289	43,722	44,159	44,601	45,047
E	35,467	35,822	36,180	36,542	36,907	37,276	37,649	38,026	38,406	38,790	39,178	39,570	39,965	40,365	40,769	41,176	41,588	42,004	42,424	42,848	43,277	43,709	44,147	44,588	45,034	45,484	45,939	46,398
F	37,595	37,971	38,351	38,734	39,122	39,513	39,908	40,307	40,710	41,117	41,528	41,944	42,363	42,787	43,215	43,647	44,083	44,524	44,969	45,419	45,873	46,332	46,795	47,263	47,736	48,213	48,695	49,182
G	39,851	40,249	40,652	41,058	41,469	41,884	42,303	42,726	43,153	43,584	44,020	44,460	44,905	45,354	45,808	46,266	46,728	47,196	47,668	48,144	48,626	49,112	49,603	50,099	50,600	51,106	51,617	52,133
H	43,437	43,872	44,311	44,754	45,201	45,653	46,110	46,571	47,037	47,507	47,982	48,462	48,946	49,436	49,930	50,430	50,934	51,443	51,958	52,477	53,002	53,532	54,067	54,608	55,154	55,706	56,263	56,825
I	48,650	49,136	49,628	50,124	50,625	51,132	51,643	52,159	52,681	53,208	53,740	54,277	54,820	55,368	55,922	56,481	57,046	57,616	58,193	58,774	59,362	59,956	60,555	61,161	61,773	62,390	63,014	63,644
J	54,488	55,033	55,583	56,139	56,700	57,267	57,840	58,418	59,003	59,593	60,189	60,790	61,398	62,012	62,633	63,259	63,891	64,530	65,176	65,827	66,486	67,151	67,822	68,500	69,185	69,877	70,576	71,282
K	65,930	66,590	67,256	67,928	68,607	69,294	69,986	70,686	71,393	72,107	72,828	73,557	74,292	75,035	75,785	76,543	77,309	78,082	78,863	79,651	80,448	81,252	82,065	82,885	83,714	84,551	85,397	86,251
L	77,139	77,910	78,689	79,476	80,271	81,073	81,884	82,703	83,530	84,365	85,209	86,061	86,922	87,791	88,669	89,556	90,451	91,356	92,269	93,192	94,124	95,065	96,016	96,976	97,946	98,925	99,914	100,913
M	90,252	91,155	92,066	92,987	93,917	94,856	95,805	96,763	97,730	98,707	99,695	100,691	101,698	102,715	103,743	104,780	105,828	106,886	107,955	109,034	110,125	111,226	112,338	113,462	114,596	115,742	116,900	118,069
N	97,472	98,447	99,432	100,426	101,430	102,444	103,469	104,504	105,549	106,604	107,670	108,747	109,834	110,933	112,042	113,162	114,294	115,437	116,591	117,757	118,935	120,124	121,325	122,539	123,764	125,002	126,252	127,514
O	110,144	111,245	112,358	113,481	114,616	115,762	116,920	118,089	119,270	120,463	121,667	122,884	124,113	125,354	126,607	127,873	129,152	130,444	131,748	133,066	134,396	135,740	137,098	138,469	139,853	141,252	142,664	144,091
P	127,767	129,044	130,335	131,638	132,955	134,284	135,627	136,983	138,353	139,737	141,134	142,545	143,971	145,410	146,865	148,333	149,817	151,315	152,828	154,356	155,900	157,459	159,033	160,624	162,230	163,852	165,491	167,146
Q	143,099	144,530	145,975	147,435	148,909	150,398	151,902	153,421	154,955	156,505	158,070	159,651	161,247	162,860	164,488	166,133	167,795	169,473	171,167	172,879	174,608	176,354	178,117	179,898	181,697	183,514	185,350	187,203
R	163,133	164,764	166,412	168,076	169,756	171,454	173,169	174,900	176,649	178,416	180,200	182,002	183,822	185,660	187,517	189,392	191,286	193,199	195,131	197,082	199,053	201,043	203,054	205,084	207,135	209,206	211,299	213,412
S	184,340	186,183	188,045	189,926	191,825	193,743	195,680	197,637	199,614	201,610	203,626	205,662	207,719	209,796	211,894	214,013	216,153	218,314	220,498	222,703	224,930	227,179	229,451	231,745	234,063	236,403	238,767	241,155
T	204,617	206,663	208,730	210,817	212,925	215,055	217,205	219,377	221,571	223,787	226,025	228,285	230,568	232,873	235,202	237,554	239,930	242,329	244,752	247,200	249,672	252,169	254,690	257,237	259,810	262,408	265,032	267,682
U	227,125	229,396	231,690	234,007	236,347	238,711	241,098	243,509	245,944	248,403	250,887	253,396	255,930	258,490	261,074	263,685	266,322	268,985	271,675	274,392	277,136	279,907	282,706	285,533	288,389	291,273	294,185	297,127
V	252,109	254,630	257,176	259,748	262,346	264,969	267,619	270,295	272,998	275,728	278,485	281,270	284,083	286,923	289,793	292,691	295,617	298,574	301,559	304,575	307,621	310,697	313,804	316,942	320,111	323,312	326,546	329,811
W	279,841	282,639	285,466	288,320	291,204	294,116	297,057	300,027	303,028	306,058	309,118	312,210	315,332	318,485	321,670	324,887	328,135	331,417	334,731	338,078	341,459	344,874	348,322	351,806	355,324	358,877	362,466	366,090
X	310,623	313,730	316,867	320,036	323,236	326,468	329,733	333,030	336,361	339,724	343,121	346,553	350,018	353,518	357,054	360,624	364,230	367,873	371,551	375,267	379,020	382,810	386,638	390,504	394,409	398,353	402,337	406,360
Y	344,792	348,240	351,722	355,239	358,792	362,380	366,004	369,664	373,360	377,094	380,865	384,673	388,520	392,405	396,329	400,293	404,296	408,339	412,422	416,546	420,712	424,919	429,168	433,460	437,794	442,172	446,594	451,060
Z	382,719	386,546	390,412	394,316	398,259	402,242	406,264	410,327	414,430	418,574	422,760	426,988	431,257	435,570	439,926	444,325	448,768	453,256	457,788	462,366	466,990	471,660	476,376	481,140	485,952	490,811	495,719	500,676

APPENDIX B2

APPENDIX B3

STRATEGIC PAY SCALE (2017)

	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Step 15			Step 16				Step 17			Step 18			Step 19				Step 20								
	A	B	C	D	A	B	C	D	A	B	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
A	35,789	36,147	36,508	36,874	37,242	37,615	37,991	38,371	38,754	39,142	39,533	39,929	40,328	40,731	41,139	41,550	41,966	42,385	42,809	43,237	43,670	44,106	44,547	44,993		
B	36,010	36,400	36,794	37,192	37,594	38,000	38,410	38,824	39,242	39,665	40,091	40,522	40,958	41,398	41,843	42,290	42,742	43,200	43,662	44,128	44,600	45,076	45,557	46,042		
C	42,521	42,946	43,376	43,809	44,248	44,690	45,137	45,588	46,044	46,505	46,970	47,439	47,914	48,393	48,877	49,366	49,859	50,358	50,861	51,370	51,884	52,403	52,927	53,456		
D	45,498	45,952	46,412	46,876	47,345	47,818	48,297	48,779	49,267	49,760	50,258	50,760	51,268	51,780	52,298	52,821	53,349	53,883	54,422	54,966	55,516	56,071	56,631	57,198		
E	46,862	47,331	47,804	48,282	48,765	49,253	49,745	50,243	50,745	51,253	51,765	52,283	52,806	53,334	53,867	54,406	54,950	55,499	56,054	56,615	57,181	57,753	58,330	58,914		
F	49,674	50,171	50,673	51,179	51,691	52,208	52,730	53,257	53,790	54,328	54,871	55,420	55,974	56,534	57,099	57,670	58,247	58,829	59,418	60,012	60,612	61,218	61,830	62,449		
G	52,655	53,181	53,713	54,250	54,793	55,341	55,894	56,453	57,017	57,588	58,163	58,745	59,333	59,926	60,525	61,130	61,742	62,359	62,983	63,613	64,249	64,891	65,540	66,195		
H	57,394	57,967	58,547	59,133	59,724	60,321	60,924	61,534	62,149	62,770	63,398	64,032	64,672	65,319	65,972	66,632	67,298	67,971	68,651	69,338	70,031	70,731	71,439	72,153		
I	64,281	64,924	65,573	66,229	66,891	67,560	68,235	68,918	69,607	70,303	71,006	71,716	72,433	73,158	73,889	74,628	75,374	76,128	76,889	77,658	78,435	79,219	80,011	80,811		
J	71,994	72,714	73,442	74,176	74,918	75,667	76,424	77,188	77,960	78,739	79,527	80,322	81,125	81,936	82,756	83,583	84,419	85,263	86,116	86,977	87,847	88,725	89,613	90,509		
K	87,113	87,984	88,864	89,753	90,650	91,557	92,473	93,397	94,331	95,275	96,227	97,190	98,161	99,143	100,134	101,136	102,147	103,169	104,200	105,242	106,295	107,358	108,431	109,516		
L	101,923	102,942	103,971	105,011	106,061	107,122	108,193	109,275	110,368	111,471	112,586	113,712	114,849	115,997	117,157	118,329	119,512	120,707	121,914	123,134	124,365	125,609	126,865	128,133		
M	119,249	120,442	121,646	122,863	124,091	125,332	126,586	127,851	129,130	130,421	131,726	133,043	134,373	135,717	137,074	138,445	139,829	141,228	142,640	144,066	145,507	146,962	148,432	149,916		
N	128,289	130,077	131,378	132,692	134,019	135,359	136,712	138,080	139,460	140,855	142,264	143,686	145,123	146,574	148,040	149,520	151,016	152,526	154,051	155,592	157,147	158,719	160,306	161,909		
O	145,532	146,987	148,457	149,942	151,441	152,956	154,485	156,030	157,590	159,166	160,758	162,365	163,989	165,629	167,285	168,958	170,648	172,354	174,078	175,818	177,577	179,352	181,146	182,957		
P	168,817	170,505	172,210	173,932	175,672	177,428	179,203	180,995	182,805	184,633	186,479	188,344	190,227	192,130	194,051	195,991	197,951	199,931	201,930	203,949	205,989	208,049	210,129	212,231		
Q	189,075	190,966	192,876	194,804	196,752	198,720	200,707	202,714	204,741	206,789	208,857	210,945	213,055	215,185	217,337	219,510	221,705	223,922	226,162	228,423	230,708	233,015	235,345	237,698		
R	215,546	217,701	219,878	222,077	224,298	226,541	228,806	231,094	233,405	235,739	238,096	240,477	242,882	245,311	247,764	250,242	252,744	255,272	257,824	260,403	263,007	265,637	268,293	270,976		
S	243,567	246,002	248,462	250,947	253,456	255,991	258,551	261,136	263,748	266,385	269,049	271,740	274,457	277,201	279,973	282,773	285,601	288,457	291,342	294,255	297,197	300,169	303,171	306,203		
T	270,359	273,062	275,793	278,551	281,337	284,150	286,991	289,861	292,760	295,688	298,644	301,631	304,647	307,694	310,771	313,878	317,017	320,187	323,389	326,623	329,889	333,188	336,520	339,885		
U	300,058	303,059	306,130	309,192	312,284	315,406	318,560	321,746	324,964	328,213	331,495	334,810	338,158	341,540	344,955	348,405	351,889	355,408	358,962	362,552	366,177	369,839	373,537	377,273		
V	333,109	336,440	339,805	343,203	346,635	350,101	353,602	357,138	360,710	364,317	367,960	371,639	375,356	379,109	382,900	386,729	390,597	394,503	398,448	402,432	406,457	410,521	414,626	418,773		
W	369,751	373,449	377,183	380,955	384,765	388,612	392,498	396,423	400,388	404,391	408,435	412,520	416,645	420,811	425,019	429,270	433,562	437,898	442,277	446,700	451,167	455,678	460,235	464,838		
X	410,424	414,528	418,673	422,860	427,089	431,360	435,673	440,030	444,430	448,874	453,363	457,897	462,476	467,101	471,772	476,489	481,254	486,067	490,927	495,837	500,795	505,803	510,861	515,970		
Y	455,570	460,126	464,727	469,375	474,068	478,809	483,597	488,433	493,318	498,251	503,233	508,266	513,348	518,482	523,666	528,903	534,192	539,534	544,929	550,379	555,883	561,441	567,056	572,726		
Z	505,683	510,740	515,847	521,006	526,216	531,478	536,793	542,161	547,582	553,058	558,589	564,175	569,816	575,515	581,270	587,082	592,953	598,883	604,872	610,920	617,030	623,200	629,432	635,726		

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Accountant I	670	J
GWA	Accountant II	796	K
GWA	Accountant III	913	L
GWA	Accounting Technician I	431	F
GWA	Accounting Technician II	503	G
GWA	Accounting Technician III	606	I
GWA	Administrative Aide	353	D
GWA	Administrative Assistant	527	H
GWA	Administrative Officer	611	I
GWA	Asset Man. and Maint. Information System Officer	913	L
GWA	Assistant Chief Engineer	1232	Q
GWA	Assistant Chief Financial Officer	1122	O
GWA	Assistant General Manager Collection & Distribution	1173	P
GWA	Assistant General Manager Compliance & Safety	1152	O
GWA	Assistant General Manager Production & Treatment	1173	P
GWA	Automotive Mechanic I	477	G
GWA	Automotive Mechanic II	561	I
GWA	Biologist I	590	H
GWA	Biologist II	708	J
GWA	Biologist III	848	K
GWA	Budget Analyst	779	K
GWA	Building Custodian	228	A
GWA	Buyer I	381	F
GWA	Buyer II	496	H
GWA	Buyer Supervisor I	735	J
GWA	Buyer Supervisor II	834	K

Appendix C

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Carpenter I	461	G
GWA	Carpenter II	543	I
GWA	Carpenter Leader	683	J
GWA	Cashier I	315	C
GWA	Cashier II	358	E
GWA	Centralized Wastewater Maintenance Superintendent	998	N
GWA	Chemist I	600	I
GWA	Chemist II	754	J
GWA	Chemist III	858	L
GWA	Chief Budget Officer	994	N
GWA	Chief Engineer, PE (GWA)	1514	R
GWA	Chief Water and Wastewater Systems Dispatcher	984	N
GWA	Clerk I	212	A
GWA	Clerk II	270	B
GWA	Clerk III	322	C
GWA	Clerk Typist I	270	B
GWA	Clerk Typist II	322	C
GWA	Clerk Typist III	346	D
GWA	Collection Agent	421	E
GWA	Collection Supervisor	795	K
GWA	Communications Manager	1060	N
GWA	Community Maintenance Worker	422	E
GWA	Computer Operations Supervisor	844	K
GWA	Computer Operator I	356	E
GWA	Computer Operator II	506	G
GWA	Computer Operator III	637	I

Appendix C1

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Computer Technician I	479	G
GWA	Computer Technician II	575	I
GWA	Computer Technician Leader	709	J
GWA	Computer Technician Supervisor	897	L
GWA	Construction Inspector I	498	G
GWA	Construction Inspector II	622	I
GWA	Construction Inspector III	732	K
GWA	Contracts & Small Claims Administrator	798	K
GWA	Controller	1079	O
GWA	Customer Service Representative	461	G
GWA	Customer Service Representative Supervisor	795	K
GWA	Electrician I	478	G
GWA	Electrician II	569	I
GWA	Electrician Leader	712	J
GWA	Employee Development Specialist I	503	H
GWA	Employee Development Specialist II	670	J
GWA	Employee Development Specialist III	796	K
GWA	Engineer I	687	J
GWA	Engineer II	809	K
GWA	Engineer III	931	M
GWA	Engineer Supervisor	1044	O
GWA	Equipment Maintenance Superintendent	998	N
GWA	Equipment Operator I	397	E
GWA	Equipment Operator II	445	F
GWA	Equipment Operator III	511	G
GWA	Equipment Operator IV	546	H

Appendix C2

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Equipment Operator Leader I	644	I
GWA	Equipment Operator Leader II	661	J
GWA	Equipment Operator Supervisor	795	K
GWA	General Accounting Supervisor	1001	N
GWA	General Manager (GWA)	1734	S
GWA	GIS Analyst I	502	H
GWA	GIS Analyst II	612	J
GWA	GIS Analyst III	756	K
GWA	GIS/LIS Manager	910	L
GWA	Grants Administrator	994	N
GWA	Heavy Equipment Mechanic I	477	G
GWA	Heavy Equipment Mechanic II	561	I
GWA	Heavy Equipment Mechanic Leader	700	J
GWA	Heavy Equipment Mechanic Supervisor	909	L
GWA	Information Technology Manager	1064	O
GWA	Internal Auditor	1019	N
GWA	Inventory Management Officer	824	K
GWA	Laboratory Technician I	469	F
GWA	Laboratory Technician II	576	I
GWA	Laboratory Technician Supervisor	837	K
GWA	Land Agent I	362	E
GWA	Land Agent II	465	G
GWA	Land Agent III	531	I
GWA	Legal Secretary I	397	E
GWA	Legal Secretary II	460	G
GWA	Legal Secretary III	532	H

Appendix C3

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Maintenance Welder I	477	G
GWA	Maintenance Welder II	557	I
GWA	Maintenance Welder III	696	J
GWA	Maintenance Worker	422	E
GWA	Management Analyst I	503	H
GWA	Management Analyst II	670	J
GWA	Management Analyst III	796	K
GWA	Management Analyst IV	913	L
GWA	Meter Reader I	319	C
GWA	Meter Reader II	406	E
GWA	Meter Reader Leader	553	H
GWA	Monitoring Laboratory Services Administrator	1074	O
GWA	Network Analyst	793	J
GWA	Network Systems Administrator	897	L
GWA	Operations & Maintenance Manager	1189	P
GWA	Payroll Clerk I	346	D
GWA	Payroll Clerk II	438	G
GWA	Payroll Clerk III	493	H
GWA	Payroll Supervisor	805	K
GWA	Personnel Assistant I	364	D
GWA	Personnel Assistant II	433	F
GWA	Personnel Services Administrator	1064	O
GWA	Personnel Specialist I	503	H
GWA	Personnel Specialist II	670	J
GWA	Personnel Specialist III	796	K
GWA	Personnel Specialist IV	913	L

Appendix C4

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Planner / Co-ordinator I	503	H
GWA	Planner / Co-ordinator II	670	J
GWA	Planner / Co-ordinator III	796	K
GWA	Planner / Co-ordinator IV	913	L
GWA	Planner I	503	H
GWA	Planner II	670	J
GWA	Planner III	796	K
GWA	Planner IV	913	L
GWA	Plant Electrical Instrument Superintendent	1003	N
GWA	Plant Electrical Instrument Technician I	488	G
GWA	Plant Electrical Instrument Technician II	576	I
GWA	Plant Electrical Instrument Technician Leader	722	J
GWA	Program Coordinator I	503	H
GWA	Program Coordinator II	670	J
GWA	Program Coordinator III	796	K
GWA	Program Coordinator IV	913	L
GWA	Programmer Analyst I	683	J
GWA	Programmer Analyst II	910	L
GWA	Pumping Station Leader	702	J
GWA	Pumping Station Operator I	486	G
GWA	Pumping Station Operator II	568	I
GWA	Pumping Station Supervisor	866	L
GWA	Quality Control / Quality Assurance Officer	851	L
GWA	Refrigeration Mechanic I	477	G
GWA	Refrigeration Mechanic II	561	I
GWA	Refrigeration Mechanic Leader	696	J

Appendix C5

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Right of Way Supervisor	915	L
GWA	Safety Inspector I	418	F
GWA	Safety Inspector II	539	H
GWA	Safety Inspector III	741	J
GWA	Safety Supervisor	872	K
GWA	Secretary I	378	E
GWA	Secretary I (Typist)	378	E
GWA	Secretary II	438	G
GWA	Secretary II (Typist)	438	G
GWA	Senior Engineer Supervisor, PE	1217	P
GWA	Senior Engineer, PE	1044	O
GWA	Senior Regulatory Analyst	1019	N
GWA	Sewer Plant Leader	702	J
GWA	Sewer Plant Operator I	486	G
GWA	Sewer Plant Operator II	568	I
GWA	Sewer Plant Supervisor	866	L
GWA	Shop Planner	786	K
GWA	Source Control Manager	980	M
GWA	Staff Attorney	1199	P
GWA	Storekeeper I	322	C
GWA	Storekeeper II	424	F
GWA	Supply Management Administrator	990	M
GWA	Survey Supervisor	900	L
GWA	Systems & Programming Administrator	968	L
GWA	Systems / Trouble Dispatch Supervisor	788	K
GWA	Systems Dispatcher I	660	J

Appendix C6

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Systems Dispatcher II	788	K
GWA	Systems Dispatcher III	911	L
GWA	Technical Support Analyst	683	J
GWA	Tool Clerk	275	B
GWA	Trades Helper	272	B
GWA	Training & Development Manager	913	L
GWA	Training Specialist	503	H
GWA	Trouble Dispatcher	474	G
GWA	Trouble Dispatcher Leader	600	J
GWA	Trouble Dispatcher Supervisor	788	K
GWA	Utility Services Administrator	1075	O
GWA	Warehouse Supervisor I	724	J
GWA	Warehouse Supervisor II	803	K
GWA	Wastewater Collection Superintendent	998	N
GWA	Wastewater Construction / Maintenance Superintendent	998	N
GWA	Wastewater Maintenance Mechanic I	486	G
GWA	Wastewater Maintenance Mechanic II	568	I
GWA	Wastewater Maintenance Mechanic Leader	702	J
GWA	Wastewater Maintenance Mechanic Supervisor	866	L
GWA	Wastewater Plant Superintendent	998	N
GWA	Water & Wastewater Systems Control Dispatcher I	660	J
GWA	Water & Wastewater Systems Control Dispatcher II	788	K
GWA	Water / Sewer Maintenance Leader	702	J
GWA	Water / Sewer Maintenance Supervisor	866	L
GWA	Water / Sewer Maintenance Worker I	486	G
GWA	Water / Sewer Maintenance Worker II	568	I

Appendix C7

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Water and Wastewater Systems Leader	702	J
GWA	Water Construction / Maintenance Superintendent	998	N
GWA	Water Distribution System Manager	998	N
GWA	Water Meter Maintenance & Repair Leader	702	J
GWA	Water Meter Maintenance & Repair Supervisor	866	L
GWA	Water Meter Maintenance & Repair Worker I	486	G
GWA	Water Meter Maintenance & Repair Worker II	568	I
GWA	Water Meter Reader I	319	C
GWA	Water Meter Reader II	406	E
GWA	Water Meter Reader Leader	553	H
GWA	Water Meter Reader Supervisor	734	J
GWA	Water Plant Leader	702	J
GWA	Water Plant Operator I	486	G
GWA	Water Plant Operator II	568	I
GWA	Water Plant Supervisor	866	L
GWA	Water Treatment Plant Superintendent	998	N
GWA	Welder I	477	G
GWA	Welder II	557	I
GWA	Welder III	696	J
GWA	Word Processing Secretary I	378	E
GWA	Word Processing Secretary II	438	G

Appendix C8

PROPOSED NEW POSITIONS TO ADD TO CTP LIST (GWA)

Authority	Position	JE Points	Grade
GWA	Utility Accounting Technician I	431	F
GWA	Utility Accounting Technician II	503	G
GWA	Utility Accounting Technician III	606	I
GWA	Utility Administrative Aide	353	D
GWA	Utility Administrative Assistant	527	H
GWA	Utility Cashier I	315	C
GWA	Utility Cashier II	358	E
GWA	Utility General Accounting Supervisor	1001	N
GWA	Utility Personnel Assistant I	364	D
GWA	Utility Personnel Assistant II	433	F
GWA	Utility Storekeeper I	322	C
GWA	Utility Storekeeper II	424	F
GWA	Utility Trades Helper	272	B

Appendix D1

Five (5) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS	POSITION	JE	Structural Adjustment – MIN				Structural Adjustment - MAX			
				Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GWA	FILLED	Accounting Technician III	606	43,606	I	5	B	45,377	I	6	B
GWA	FILLED	Administrative Aide	353	29,366	D	4	A	30,559	D	5	A
GWA	FILLED	Administrative Assistant	527	39,323	H	5	C	40,920	H	6	C
GWA	FILLED	Cashier I	315	26,904	C	3	C	27,997	C	4	C
GWA	FILLED	Cashier II	315	30,247	E	4	A	31,475	E	5	A
GWA	FILLED	Storekeeper II	424	32,062	F	4	A	33,364	F	5	A
GWA	FILLED	Trades Helper	272	24,683	B	3	C	25,685	B	4	C

Five (5) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS	POSITION	JE	Structural Adjustment – MIN				Structural Adjustment - MAX			
				Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GWA	NEW	Utility Personnel Assistant I	364	29,366	D	4	A	30,559	D	5	A
GWA	NEW	Utility Personnel Assistant II	433	32,706	F	4	C	34,034	F	5	C
GWA	NEW	General Accounting Supervisor	1001	82,303	N	3	D	85,645	N	4	D
GWA	NEW	Accounting Technician I	431	31,745	F	3	D	33,033	F	4	D
GWA	NEW	Accounting Technician II	503	36,076	G	5	C	37,541	G	6	C
GWA	NEW	Storekeeper I	322	26,904	C	3	C	27,997	C	4	C

Appendix D2

Seven (7) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS	POSITION	JE	Structural Adjustment – MIN				Structural Adjustment - MAX			
				Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GWA	FILLED	Accounting Technician III	606	42,747	I	4	D	45,377	I	6	B
GWA	FILLED	Administrative Aide	353	28,788	D	3	C	30,559	D	5	A
GWA	FILLED	Administrative Assistant	527	38,549	H	5	A	40,920	H	6	C
GWA	FILLED	Cashier I	315	26,374	3	C	A	27,997	C	4	C
GWA	FILLED	Cashier II	322	29,651	E	3	C	31,475	E	5	A
GWA	FILLED	Storekeeper II	424	31,430	F	3	C	33,364	F	5	A
GWA	FILLED	Trades Helper	272	24,196	B	3	A	25,685	B	4	C

Seven (7) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS	POSITION	JE	Structural Adjustment – MIN				Structural Adjustment - MAX			
				Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GWA	NEW	Utility Personnel Assistant I	364	28,788	D	3	C	30,559	D	5	A
GWA	NEW	Utility Personnel Assistant II	433	32,062	F	4	A	34,034	F	5	C
GWA	NEW	General Accounting Supervisor	1001	80,682	N	3	B	85,64 5	N	4	D
GWA	NEW	Accounting Technician I	431	31,119	F	3	B	33,033	F	4	D
GWA	NEW	Accounting Technician II	503	35,366	G	5	A	37,541	G	6	C
GWA	NEW	Storekeeper I	322	26,374	C	3	A	27,997	C	4	C

Appendix D3

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

Issues for Decision

Resolution No. 2017-39:

Relative to: Authorizing the Management of Guam Power Authority to Petition the Public Utilities Commission for the Approval of the Bid Process for 180 MW Power Plant.

What is the project's objective? Is it necessary and urgent?
The Guam Power Authority is developing the technical bid documents for the new power plant. However GPA is still in the process of acquiring the property to site the new plant and the land details will be required in the bid documents. GPA is proposing a three step bid process that requires a prequalification of bidders based on experience and financial capability to execute a contract for the construction, commission and operation of a power plant up to 180MW in capacity. The remaining steps are the qualification of the technical proposal and the cost evaluation. Since bidder qualifications will not be based on any technical requirements and does not require the technical bid documents, GPA would like to proceed with the bidder qualification process to establish the Qualified Bidders List. This parallel process while the technical bid documents are being finalized will aid to minimize further schedule delays on the commissioning of the new plant. The projected timelines will allow GPA to complete the bid documents and obtain necessary approvals upon the finalization of a Qualified Bidders List.

Where is the location?
GPA is presently evaluating and negotiating the land acquisition for property in the Harmon area.

When will it be completed?
The allowance of the RFQ process will shorten the procurement schedule by 3-4 months if done parallel with finalization of bid documents. A summary of the proposed bid schedule is provided below.

Milestone	Complete
IPP RFQ Advertised	Nov-17
Evaluate / Qualify Bidders	Feb-18
Land Acquisition & Process	Jan-18
Finalize IPP Bid Documents	Jan-18
Announce IPP Bid	Mar-18
Evaluate / Qualify Technical Proposals	Aug-18
Evaluate/ Select Price Proposal	Sep-18
Negotiations & Final Recommendation	Oct-18
Notice to Proceed	Dec-18
Commissioning	Dec-21

What is its funding source?
Revenue funds

The RFP/BID responses:
None

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

RESOLUTION NO. 2017-39

AUTHORIZING THE MANAGEMENT OF THE GUAM POWER AUTHORITY TO PETITION THE PUBLIC UTILITIES COMMISSION FOR THE APPROVAL OF THE BID PROCESS FOR 180 MW POWER PLANT

WHEREAS, GPA has contracted Stanley Consultants to develop the bid documents for the new 120-180MW power plant; and

WHEREAS, the multi-step bid requires a qualification process prior to evaluation of cost in the selection of a proposal and award of a contract; and

WHEREAS, GPA intends to use a three step multi-step bid process that requires bidders to be prequalified based on experience and financial capability in order to receive the technical bid documents and submit a technical and price proposal. In addition, only technical proposals that meet the bid document requirements will be evaluated further for cost. These steps are further described below:

- **Step 1** Experience & Financial Qualification is the period from this Request for Qualification (RFQ) announcement through Notification of Qualified Bidders. This step establishes a Qualified Bidders List (QBL) based on acceptable submitted Qualification Proposals.
- **Step 2** Technical Proposal Qualification is the period from Invitation for Bid (IFB) provided to the bidders identified on the QBL to the selection of qualified Technical proposals. During this step, only Qualified Bidders are allowed to obtain the Invitation for Bid which contains the technical and evaluation criteria for the bid proposals.
- **Step 3** Cost Evaluation is the period from the start of evaluation of submitted Priced Proposals to the date of issuance of the letter of award and invitation to negotiate the Contract to the first ranked Bidder. Only bidders whose technical proposal met the requirements of the IFB will be evaluated ; and

WHEREAS, GPA expects that the evaluation of each technical proposal will take considerable time, a prequalification process provides the assurance on an executable project from the bidders' credentials; and

WHEREAS, Exhibit A projects the procurement schedule and a plant commissioning by end of 2021; and

WHEREAS, the technical requirements for the bid documents are still being developed which includes final details on the plant site; and

WHEREAS, GPA is evaluating properties and negotiating land purchase which is expected to take 3-4 months; and

WHEREAS, GPA will require 3-4 months to establish a Qualified Bidders list from the announcement of Request for Qualification; and

WHEREAS, issuing the Request for Qualifications will allow GPA to minimize further delays in the bid process and new plant commissioning date; and

WHEREAS, the Request for Qualification does not provide any technical details on the new power plant requirements and is mainly to determine the capability of the bidder to execute a contract to construct, commission and operate dual fuel power plant up to 180 MW in size;

WHEREAS, as GPA continues to develop and finalize the bid documents, GPA would like to obtain CCU and PUC approvals to proceed with issuing the Request for Qualifications, Exhibit B to establish a Qualified Bidders listing; and

WHEREAS, GPA will forward the technical bid documents to CCU and PUC upon completion for review and approval prior to issuing Invitation for Bid to qualified bidders.

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 Guam Power Authority is hereby authorized to petition the PUC for the approval of the multi-step bid process and to initiate the Request for Qualifications to establish a bidders list.

RESOLVED, that the Chairman of the Commission certifies and the Secretary of the Commission attests the adoption of this Resolution. **DULY and REGULARLY ADOPTED this 26th day of September 2017.**

Certified by: **Attested by:**

JOSEPH T. DUENAS
CHAIRMAN

J. GEORGE BAMBA
SECRETARY

I, J. GEORGE BAMBA, Secretary for the Consolidated Commission on Utilities (CCU), as evidenced by my signature above do hereby 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's 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:

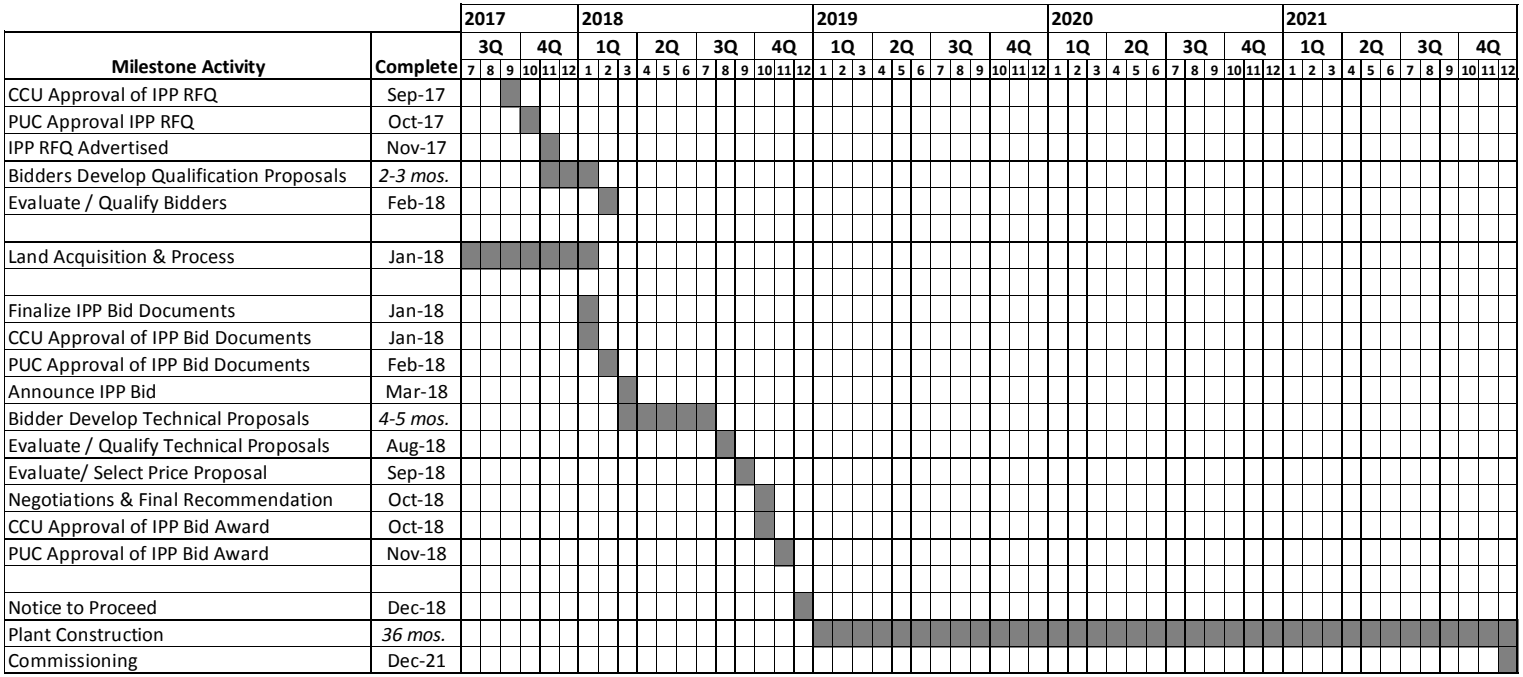
Ayes: _____

Nays: _____

Absent: _____

Abstain: _____

Exhibit A – IPP Bid Schedule Projection



REQUEST FOR QUALIFICATIONS OF BIDDERS FOR DEVELOPMENT OF A 120-180 MW POWER PLANT IN GUAM ON A BUILD, OPERATE, TRANSFER (BOT) BASIS

Tender No. GPA-XXX-XXX

September 2017



Table of Abbreviations

BOT	Build, Operate, Transfer
GPA	Guam Power Authority
IPP	Independent Power Project
IFB	Invitation for Bid
RFQ	Request for Qualifications

1 Project Information

1.1 General

The Guam Power Authority (GPA) hereby invites interested qualified firms and consortia ("Bidders") to participate in a Multi-Step Bid process by submitting qualification information for the right to bid for the development of a power generation project including all support facilities (the "Project"), on a Build, Operate, Transfer (BOT) basis and to provide electricity to GPA under a 25-year energy conversion agreement ("ECA" or the "Contract").

1.2 Procurement Process

The qualified Bidders shortlisted as a result of this prequalification process will be requested to submit a proposal for the Project in response to an Invitation for Bid (IFB) to be issued by GPA to such qualified Bidders.

This bid shall be composed of a Three Step process.

- Step One is the period from this Request for Qualification (RFQ) announcement through Notification of Qualified Bidders. This step will establish a Qualified Bidders List (QBL) based on acceptable submitted Technical Qualification Proposals.
- Step Two is the period from Invitation for Bid (IFB) provided to the bidders identified on the QBL to submission of Priced Proposals.
- Step Three is the period from the start of evaluation of submitted Priced Proposals to the date of issuance of the letter of award and invitation to negotiate the Contract to the first ranked Bidder.

English is the official language of Guam. As such, Bidders should submit all of their bid documents, any accompanying documents, in English. Any bids not submitted in English will be designated as "Unacceptable" and will not qualify for the QBL.

Any prospective Bidder desiring an explanation or interpretation of the Request for Qualification (RFQ), etc., must make a request in writing to the GPA Procurement Office at the mailing address or the email address listed below, referencing the Invitation for Multi-Step Bid No. GPA-XXX-XX.

ATTENTION: JOHN M. BENAVENTE, P.E.
GENERAL MANAGER
GUAM POWER AUTHORITY
POST OFFICE BOX 2977
HAGATNA, GUAM 96932-2977

ATTENTION: SUPPLY MANAGEMENT ADMINISTRATOR
EMAIL: jpangelinan@gpagwa.com
PHONE: (671) 646-3054/55
FAX: (671) 648-3165.

All inquiries must be received by GPA Procurement no later than the Cut-Off Date for Receipt of Proposals indicated below in Table 1, Paragraph 1.4. Any oral explanations or instructions given by GPA to prospective Bidders will not be binding. GPA will promptly furnish any information

given to a prospective Bidder concerning this RFQ to all parties recorded by the Procurement Officer as having received the RFQ. This information may be provided as an amendment to the RFQ if that information is necessary in submitting bids or if the lack of it would be prejudicial to other prospective Bidders. In addition, Bidders may also make this request by writing to the GPA PMC Procurement Officer at: jpangelinan@gpagwa.com.

Any amendment, modification or addendum issued by the Guam Power Authority, prior to the opening of the bids, for the purpose of changing the intent of the Technical Qualification Requirements, clarifying the meaning or changing any of the provisions of this RFQ, shall be binding to the same extent as if written in the originally issued RFQ documents. Any addendum issued will be made available to all Bidders via mail, fax, e-mail or posting to the GPA Website. The Bidders shall acknowledge receipt of the amendment by a signature on one copy, which is to be returned to GPA at the mailing address, email address, or FAX number below.

Bidders shall bear all costs associated with the preparation and submission of their bids. GPA will not be responsible or liable for those costs, regardless of the outcome of the IFB process.

1.3 Project Scope

The Project will consist of a power generating facility with capacity of approximately 120-180 MW net at site reference conditions to be specified in an IFB to be issued to Bidders on the QBL. The Project will operate on Ultra Low Sulfur Diesel (ULSD) and, in the future, LNG-derived natural gas. The Project must be designed to have dual fuel capabilities to burn both ULSD and natural gas. Bidders must design the Project facilities to have all the provisions required to burn a secondary liquid fuel source when it becomes available. The Bidders will be required to quote the incremental tariff associated with adding any necessary natural gas equipment and systems in the future. The incremental tariff will be included as part of the proposal evaluation methodology. The Bidders will select the power generating technology for the Project, consistent with the requirements to be set forth by GPA in the IFB.

1.4 Project Schedule

The desired commecial operation date for the Project is June 30, 2021 or 30 months after the notice to proceed. GPA may decide to require the Project to be constructed in phases. In that case the Project phases and their desired commercial operation dates will be defined in the IFB.

1.5 Fuel Procurement

Under the ECA, GPA will be responsible for supplying the fuel for the Project. The Project will initially operate on ULSD with the possibility of operating on a second fuel source if it becomes available in the future.

1.6 Power Evacuation

Power will be evacuated via either a 115 kV or a 230 kV transmission line connected to an existing GPA substation. The transmission line and modifications to the existing substation will be designed and constructed by the selected Bidder and transferred to GPA at no cost after the commercial operation date.

1.7 Environmental Requirements

The Project will be required to meet all applicable U.S. EPA and Guam EPA standards and regulations, all applicable federal and local regulations and requirements to safeguard environmental, natural and cultural resources, and Bidder will be responsible for obtaining all permits, licenses, and approvals (whether environmental or otherwise) necessary to build, own, and operate the Project.

2 Bidder Qualification

For a Bidder to qualify for QBL, the qualifications submission must contain information in sufficient detail to allow GPA to assess the Bidder's ability to develop the Project in compliance with the requirements established by GPA. The following will be used in determination of qualifications:

a) The Bidder can be a single entity (company, corporation, or unincorporated association) or can be a team of multiple members (consortium, joint venture) with joint and several responsibilities. After a Bidder has been short-listed, the membership structure used to qualify may not be changed without prior written approval of GPA.

b) For determining the experience and technical capability of a consortium, the experience and technical capability of each member shall be combined for evaluation. However, the experience and resources of Bidder's subcontractors shall not be considered in determining the Bidder's compliance with the qualification criteria.

c) Each member is required to provide its financial capability separately for evaluation.

d) Bidder's financial capacity will be judged on the basis of its net worth, working capital, profitability, and bonding capacity. The Bidder must demonstrate that it will be able to access and provide sufficient project equity and debt financing as well as working capital for the execution and construction of the Project, including security deposits to back performance guarantees during both the construction and operations and maintenance period.

e) Bidders' qualifications will be evaluated on the basis of a PASS-FAIL approach.

f) A short-listed Bidder is one, who in GPA's opinion, meets or exceeds the qualification criteria listed herein below. The following table shall be filled in by each Bidder *supported by sufficient evidence of its required capabilities.*

Table 2.1: Bidder Qualification Criteria

Qualification Criteria	Bidder's Response
1. Greenfield Private Power Project Criteria The projects submitted by the Bidder in this Section will not qualify for consideration unless such projects were executed by the Bidder based on the Greenfield Private Power Project concept defined as follows: 1 Prepared proposals to "build-own-operate" or "build-operate-transfer" IPP projects. 2 Was selected as a Bidder based on ranking during a competitive bidding process or direct award. 3 Directly negotiated the project agreements and finalized them successfully. 4 Achieved financial closing for the projects on non-recourse or limited recourse basis. Non-recourse financing is defined as financing where lenders have recourse solely to the project company and its assets. Limited recourse financing is defined as financing where lenders have some recourse to the project owners. Projects where lenders have full recourse for the full amount of the debt via a guarantee, corporate indemnity, or other instrument will not be considered as non-recourse or limited-recourse financing. 5 Successfully operated the project for at least 18 months. Existing projects or facilities that were acquired via purchase directly or indirectly, through a merger, or by other means will not be considered as Greenfield Private Power Projects.	
1.1 Clear Description of the Bidder. The qualified Bidder shall identify the lead developer or firm, its relation to parent company (if any), and any other firms comprising the consortium or joint venture.	
1.2 Project Development Experience. • The qualified Bidder shall clearly demonstrate its ability to obtain sufficient bank guarantees and its previous financial capability to develop a greenfield fossil fuel fired project of 100 MW or larger. • The qualified Bidder had the role as a lead developer in at least two fossil fuel fired greenfield projects that achieved commercial operation within the last 10 years from	

Qualification Criteria	Bidder's Response
the qualification document submittal date as follows: a) Both projects are fossil fuel projects in the range of 100 MW (gross at ISO conditions) and larger. Bidder shall clearly demonstrate that each of the projects: i) has been developed and achieved financial closing, ii) is located in a country outside of Bidder's country of origin unless the Bidder is a U.S. company, and iii) has been in commercial operation for at least 18 months prior to the date of issuance of this RFQ. • If the Bidder does not have two projects that comply with (a) above, then the Bidder may include at least one project with capacity of less than 100 MW, but no less than 80 MW (gross at ISO conditions) in addition to the one project that complies with (a) above. Bidder shall clearly demonstrate that such other project i) has been developed and achieved financial closing, and ii) is currently in commercial operation and that the commencement of such commercial operation occurred prior to the date of issuance of this RFQ.	
1.3 Project Financing Experience and Financial Capacity • The qualified Bidder must illustrate its lead developer's previous successful experience in raising sufficient non-recourse or limited recourse debt (>$100 million USD), and substantial equity participation (>$50 million USD), for at least two greenfield fossil fuel fired projects of 100 MW or larger; at least one -project should be a project claimed under 1.2 a) above; and at least one project should be located in a country outside of Bidder's country of origin for Bidders that are not U.S. companies. • Each member is required to separately provide its financial capability including audited financial statements for the three (3) most recent years. • Bidder's financial capacity will be judged based on its net worth, working capital, profitability, and bonding capacity. The Bidder must demonstrate that it will be able to access and provide sufficient project equity and debt financing as well as working capital for the execution and construction of the Project, including security deposits	

Qualification Criteria	Bidder's Response
to back performance guarantees during both the construction and the operations and maintenance period. • The qualified Bidders will have to demonstrate that their net worth over the last three (3) years was at least $100 million USD.	
1.4 Technical Capabilities and Qualifications. • The qualified Bidder must provide evidence of having within its organization (or team, by association) the technical capability to manage the design, engineering, construction and operation of international projects of 100 MW (gross at ISO conditions) or larger. • The qualified Bidder must provide evidence of having within its organization (or team, by association) the technical capability to manage the permitting, design, engineering, construction and operation of international projects of 100 MW (gross at ISO conditions) or larger utilizing diesel fuel and natural gas burning technologies. • The qualified Bidder must provide evidence that it currently owns, and has operated for at least 18 months, at least one power project of 100 MW (gross at ISO conditions) or larger utilizing dual fuel diesel/gas burning technologies with unit capacity of no less than 10 MW (nominal) for reciprocating engines or 80 MW (nominal at ISO conditions) for combustion turbines. The technology for which the Bidder claims their experience must match the technology the Bidder plans to use for the Project.	

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

Issues for Decision

Resolution No. 2017-40:

Relative to: Authorizing the Management of Guam Power Authority to Solicit Bids (IFB) for the Supply of Residual Fuel Oil No.6 for the Baseload Plants.

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, 2018. The 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 exceed $1.5M 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, 2018 and to expire on August 31, 2021, with the option to extend for two (2) additional one-year terms.

What is its funding source?

Fuel revenue funds

The RFP/BID responses:

The IFB solicitation will commence after CCU approval.

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

RESOLUTION NO. 2017-40

AUTHORIZING THE MANAGEMENT OF THE GUAM POWER AUTHORITY TO PROCEED WITH THE PROCUREMENT OF A RESIDUAL FUEL OIL NO.6 SUPPLIER FOR THE BASELOAD POWER GENERATING PLANTS

WHEREAS, the five (5) year period for the current supply contract with Hyundai Corporation for the Supply of Residual Fuel Oil (RFO) for the Baseload Power Generating Units will expire on August 31, 2018; and

WHEREAS, GPA intends to issue a new Invitation For Bid for the procurement of Residual Fuel Oil No.6 for the Baseload plants for a base period of three (3) years, to commence on or about September 01, 2018 through August 31, 2021, with two (2) additional one-year extension options; and

WHEREAS, the draft bid solicitation documents for the procurement of a new Residual Fuel Oil No.6 supply contract is hereby attached as Exhibit B; and

WHEREAS, the total cost for the new contract is anticipated to exceed $1.5M requiring GPA to seek authorization for this procurement from the PUC; and

WHEREAS, GPA is requesting the approval of the CCU to petition the PUC for the issuance of an Invitation for Bid for a new Residual Fuel Oil No.6 supply contract.

NOW THEREFORE, BE IT RESOLVED, by the Consolidated Commission on Utilities, subject to the review and approval of the Public Utilities Commission, as follows:

1. GPA's request to solicit competitive bids for a new Residual Fuel Oil No.6 supply contract through a Multi-Step Bid process is reasonable, prudent and beneficial to ratepayers.

2. GPA is authorized to petition the Public Utilities Commission for approval to issue bids to procure a Contractor for the supply of Residual Fuel Oil No.6 for the Baseloads and Peaking Units.

RESOLVED, that the Chairman of the Commission certifies and the Secretary of the Commission attests the adoption of this Resolution. **DULY and REGULARLY ADOPTED this 26th day of September 2017.**

Certified by: **Attested by:**

JOSEPH T. DUENAS
CHAIRMAN

J. GEORGE BAMBA
SECRETARY

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities (CCU), as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and correct copy of a resolution duly adopted at a regular meeting of the members of 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: _____

EXHIBIT A

GPA-068-12 RFO Supply Contract
Contractor: Hyundai Corporation

RFO Purchases	BBLS	$/bbl	Amount
FY 2014	2,616,975	$104.304	$ 272,959,945
FY 2015	2,410,746	$64.385	$ 155,215,337
FY 2016	1,865,693	$41.185	$ 76,839,443
FY 2017	2,129,513	$56.853	$ 121,068,369
SUMMARY	**9,022,927**	**$69.388**	**$ 626,083,093**

Invitation For Multi-Step Re-Bid

No. GPA- -18

SUPPLY OF BULK FUEL OIL

Volume II

CONTRACT

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CONTRACT

CONTRACTOR

GUAM POWER AUTHORITY

IFB No. GPA- -18

SUPPLY OF RESIDUAL FUEL OIL NO.6

FORMAL CONTRACT

This Agreement and Formal Contract ("Contract"), is made and entered into on the _____ day of _____, 2018 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, 2018; 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- -18; 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- -18.

"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, 2018**.

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)

Grades of Fuel	Estimated Quantity
Low Sulfur Fuel Oil (LSFO), 1.19% $_w$ Sulfur (Maximum)	**600,000 bbls/yr**
High Sulfur Fuel Oil (HSFO), 2.00% $_w$ Sulfur (Maximum)	**1,400,000 bbls/yr**

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, 2018**, and shall continue until midnight of **August 31, 2021** 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 ~~outside of Guam~~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 gallon) and the BID REFERENCE PRICE as of July 31, 2017 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 July31, 2017.

Reference date: July 31, 2017

	Low ($/MT)	High ($/MT)
HSFO 180 CST	$ 312.16	$ 312.20

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 July 31, 2017.

Mean Singapore Spot = Low + High Price Assessments:

$$= \frac{\$\ 312.16 + \$\ 312.20}{2} \text{ per Metric Ton (MT)}$$

= $ 312.180 per Metric Ton (MT)

BID REFERENCE PRICE = $ 315.100 per Metric Ton

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

Bid Offer		THREE (3)-Year Contract Base Period			CONTRACT EXTENSION OPTION	
		First (1st) Year Base Period	Second (2nd) Year Base Period	Third (3rd) Year Base Period	First (1st) Year Extension	Second (2nd) Year Extension
LSFO 1.19% w Sulfur Max	US$/MT (3 decimals)					
	Amount in Words					
HSFO 2.00% w Sulfur Max	US$/MT (3 decimals)					
	Amount in Words					

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 = July 31, 2017

Marketscan Postings HSFO 180cst ($/MT)

	Date	Low	High	Avg
5	July 24, 2017 (Monday)	293.74	293.78	293.760
4	July 25, 2017 (Tuesday)	298.41	298.45	298.430
3	July 26, 2017 (Wednesday)	306.99	307.03	307.010
2	July 27, 2017 (Thursday)	307.87	307.91	307.890
1	July 28, 2017 (Friday)	307.23	307.27	307.250
B/L	July 31, 2017 (Monday)	312.16	312.20	312.180
1	August 01, 2017 (Tuesday)	315.08	315.12	315.100
2	August 02, 2017 (Wednesday)	305.17	305.21	305.190
3	August 03, 2017 (Thursday)	303.68	303.72	303.700
4	August 04, 2017 (Friday)	304.95	304.99	304.970

5	August 07, 2017 (Monday)	310.42	310.46	310.440
			Mean Arithmetic Average ($/MT) =	**305.993**

Invoice Reference Price = $305.993/MT

Invoice Price Calculation:

Product Grade	Invoice Reference Price ($/MT)	Fixed Premium Fee (Sample) ($/MT)	**Invoice Price ($/MT)**
LSFO, 1.19%S	305.993	35.000	**340.993**
HSFO, 2.00%S	305.993	25.000	**330.993**

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

SECTION 6. ~~FUEL OIL DELIVERY~~TITLE, CUSTODY AND RISK OF LOSS

Commented [ANF1]: To clearly define title & custody

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**.

~~Residual Fuel Oil No.6 product temperature shall be maintained between one hundred fifteen to one hundred thirty degrees Fahrenheit (120 °F–130°F) on arrival and during the discharge at Guam Port.~~

Commented [ANF2]: Moved to Section 25 (Transportation)

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.

Commented [ANF3]: Do we need to include this?

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

(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 Section 10.

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, 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 upon completion of loading.

Original/copy of the quality analysis certificates and ship's "certificate of cleanliness" issued before loading to be handed over with the other shipping documents (B/L, Certificate of Origin, Cargo Manifest, Certificate of Quality, Certificate of Quantity with shore tank measurement report, etc.) 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.

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 ºF). 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 ºF) 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.

Commented [ANF4]: For committee review

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.

Commented [ANF5]: For committee review

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.

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' Manager (Tristar), 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	~~237~~259 ~~-~~meters
Maximum Breadth	45 meters
Maximum Vessel Draft Alongside	~~14.8~~16.4592 meters
Maximum Displacement	~~120,000 tonnes~~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 Tristar 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 Tristar's vessel vetting requirements and be pre-approved by the F-1 dock facility manager (Tristar), having its registered office at:

414 West Soledad Avenue
GCIC Building, Suite 500P
Hagatna, Guam 96910
Tel: (671) 565-2300/ 565-9021
Fax: (671) 565-3909

The **CONTRACTOR** or its agents shall be responsible in seeking vessel clearance from Tristar. In the event that vessels owned or chartered by the **CONTRACTOR** do not meet the Tristar 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 Tristar.

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 thirty to one hundred forty degrees Fahrenheit (130^{o}F -140^{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) **Ship Demurrage:**

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 rate of thirteen thousand barrels per hour (13,000 bbls/hr) and 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 dock facility manager, Tristar.

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.

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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 five days late.
- $0.60/MT multiplied by the Bill of Lading quantity for every day of delay if delivery is more than five 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 ten percent (0,10%) on the price per metric ton.

(2) If the Vanadium content exceeds the specifications limits then for every 20 part per million (20 ppm) or part thereof there will be a price reduction of zero point zero five per cent (0.05%) 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 zero five per cent (0.05%) 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 zero five per cent (0.05%) on the price per metric ton.

(6) If API exceeds the specification limit then for every zero point one degree (0.10º) 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.

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~~, and the Contract shall be terminated effective THREE HUNDRED SIXTY (360) days after receipt of notice by **CONTRACTOR**~~.

Commented [ANF7]: Do we have to include?

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. 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- -18**. 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- RESIDUAL FUEL OIL NO.6

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	**Pour Point**	Deg C	ASTM D-97	N/A	N/A	21	
3	**Flash Point**	Deg C	ASTM D-93	N/A	66	N/A	
4	**Kinematic Viscosity**	cSt at 50 °C	ASTM D-445	ASTM D-2161		180	
5	**Sediment By Extraction**	% mass	ASTM D-473	N/A	N/A	0.05	
6	**Water By Distillation**	% by Volume	ASTM D-95	N/A	N/A	0.50	
7	**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	70	
8a	**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.	Individual results to be reported separately
8b	**Aluminum Content**	Parts Per Million	ASTM D-5184	a) IP 470 b) IP 377 c) ISO 10487 d) IP 501	N/A	Al not to exceed 30 ppm.	
9	**Guaranteed Gross Heating Value (HHV)**	Million BTU Per US Barrel	ASTM D-240	N/A	6. 30	N/A	
10	**Micro- Carbon Residue**	% mass	ASTM D-4530	ASTM D-5245 ASTM D-189 (see comments)	N/A	10	CCR result shall be converted using table in method to RCR equivalent
11	**Ash**	% mass	ASTM D-482	N/A	N/A	0.10	
12	**Asphaltenes**	% mass	ASTM D-6560	IP 143	N/A	5	
13	**Sodium**	ppm	ASTM D-5863/B	ASTM D-5708/B IP288	N/A	40	
14	**Total Sediment (Existent)**	% mass	ISO 10307-2	ASTM D-4870 IP 377	N/A	0.10	
15	**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.
16	**API Gravity**		ASTM D-287	ASTM D-1298 and conversion	11.2	23.0	
17	**Density @ 15 °C**	Kg/L	ASTM D-287	ASTM D-1298 ASTM D-4052		0.9855	
18	**Odor**				Report		See Note
19	**Hydrogen Sulfide content (in liquid phase)**	Mg/kg	IP-399	IP-570	N/A	2.0	See Note
20	**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 15: **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 18: 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 19:

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 100 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 20: 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.

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

Issues for Decision

Resolution No. 2017-41:

Relative to: Authorizing the Management of Guam Power Authority to extend the existing contract for the Supply of Diesel Fuel Oil No. 2 for the Baseload Plants and Peaking Units with IP&E.

What is the project's objective? Is it necessary and urgent?
The Guam Power Authority's current contract for Supply of Diesel Fuel Oil No. 2 for the Baseload Plants and Peaking Units expires on December 31, 2017. Through CCU Resolution 2015-05, a Multi-Step Bid GPA-057-17 to procure a new supply contractor was issued with the intent to award before December 2017. The bid was cancelled due to changes in operation requirements, anticipated dispatching for the next 3-5 years, as well as inquiries raised by prospective bidders requiring major revisions in the current structure of the bid. The CCU Resolution No. 2017-33 approved the revised bid documents which requires and is pending PUC approval.

Based on a projected bid schedule for the re-solicitation for a Diesel supply and delivery contract, the new contract is anticipated to commence July 01, 2018. GPA requires an extension of supply and delivery services for 6 months from January 01, 2018 to June 30, 2018.

Where is the location?
Diesel Fuel Oil No.2 supply will be stored at GPA-leased tanks in the Tristar Facility. From the tank, it will be delivered via tanker truck and pipeline (if the option is available) to the following plant locations:

1. **Baseloads (Cabras 1&2 and MEC 8&9)**
2. **Fast Tracks (Manenggon and Talofofo)**
3. **TEMES CT**
4. **Northern Plants (Dededo CT, Macheche CT and Yigo CT, Aggreko)**

How much will it cost?
The estimated quantity for 6 months is approximately 16 million gallons (~380,000 barrels) of ULSD at an estimated premium fee cost of $0.3500/gallon for a total cost of approximately $5.6M.

When will it be completed?
The contract will be extended for a period of six months to commence on or about January 01, 2018 and to expire on June 30, 2018.

What is its funding source?
Fuel revenue funds.

The RFP/BID responses:
Price proposals were submitted by Mobil Oil Guam and IP&E. IP&E was determined to have the lowest price proposal (Exhibit 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. 2017-41

AUTHORIZING THE MANAGEMENT OF THE GUAM POWER AUTHORITY TO PETITION THE PUBLIC UTILITIES COMMISSION FOR THE EXTENSION OF THE ULTRA LOW SULFUR DIESEL (ULSD) FUEL OIL CONTRACT FOR SIX (6) MONTHS WITH ISLA PETROLEUM AND ENERGY, LLC (IP&E)

WHEREAS, the three (3) year base period for the Diesel Fuel Oil No.2 Supply Contract (GPA-029-14) between the Guam Power Authority (herein after referred to as "GPA") Mobil Oil Guam (herein after referred to as "Mobil") and Isla Petroleum and Energy, LLC (herein after referred to as "IP&E") will expire on December 31, 2017; and

WHEREAS, GPA canceled the solicitation for a new Diesel Fuel Oil No. 2 supply contract to restructure the specifications to reflect the changes to GPA's needs and requirements; and

WHEREAS, GPA anticipates that the award and commencement of the new Diesel Fuel Oil No. 2 supply contract on or about July 01, 2018; and

WHEREAS, GPA requires a contract extension for six (6) months from January 01, 2018 to June 30, 2018; and

WHEREAS, Mobil & IPE submitted its fixed premium fee proposal for a six-month extension period for the following site locations: Cabras 1&2, MEC 8&9, Aggreko, Yigo CT, Dededo CT, Macheche CT, TEMES CT, Menenggon, and Talofofo; and

WHEREAS, GPA has evaluated the premium fee proposals as summarized in Schedule A**;** and

WHEREAS, Mobil's fixed premium fee proposal for the 6-month extension period will significantly increase by about $0.3580/gallon (from $0.1920/gallon to $0.5500/gallon); and

WHEREAS, IP&E's fixed premium fee for the 6-months extension will increase by about $0.0800/gallon (from $0.2700/gallon to $0.3500/gallon); and

WHEREAS, GPA has determined the Mobil premium fee proposal to be about $0.2000/gallon more than the IP&E premium fee proposal; and

WHEREAS, GPA has determined the IP&E premium fee proposal to be reasonable and will provide the best benefit to GPA customers. The premium fee increase is attributed to the price escalation and cost to recover the investment for additional tanker trucks and drivers needed to meet GPA's requirement for the six-month extension period.

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 Guam Power Authority is hereby authorized to enter into a 6-month contract extension with IP&E for the supply of Diesel Fuel Oil No.2 for an estimated quantity of 16 million gallons of ULSD at a premium fee cost of $0.3500/gallon, for a total cost of approximately $5.6 million.

2. The General Manager of the Guam Power Authority is hereby authorized an increase in obligating authority over $750,000.00 and execute such agreements and documents necessary for a contract extension with **IP&E**.

RESOLVED, that the Chairman of the Commission certifies and the Secretary of the Commission attests the adoption of this Resolution. **DULY and REGULARLY ADOPTED this 26th day of September 2017.**

Certified by: **Attested by:**

JOSEPH T. DUENAS **CHAIRMAN**	**J. GEORGE BAMBA** **SECRETARY**

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities (CCU) as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and correct copy of a resolution duly adopted at a regular meeting of the members of 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: _____

Exhibit A

CONTRACT: GPA-029-14

CONTRACT EXTENSION: 6 MONTHS (JANUARY 01, 2017 TO JUNE 30, 2018)

COMPARISON OF PREMIUM FEE PROPOSALS

Mobil Premium Fee

Aggreko, Yigo CT, Dededo CT, and Macheche CT, Manenggon and Talofofo	Current	6mo. Ext Proposal	Variance	Remarks
Supply to GPA Bulk Storage ($/gal) Delivery by Tanker Truck ($/gal) Total Premium Fee ($/gal)	$0.1920	$0.5500	$0.3580	186% increase

Cabras 1&2, MEC 8&9 and TEMES CT	Current	6mo. Ext Proposal	Variance	Remarks
Supply to GPA Bulk Storage ($/gal) Delivery by Tanker Truck ($/gal) Total Premium Fee ($/gal)	$0.2120	$0.5700	$0.3580	169% increase

IP&E Premium Fee

Aggreko, Yigo CT, Dededo CT, and Macheche CT, Manenggon, Talofofo, Cabras 1&2, MEC 8&9 and TEMES CT	Per Bid	6mo. Ext Proposal	Variance	Remarks
Supply to GPA Bulk Storage ($/gal) Delivery by Tanker Truck ($/gal) Total Premium Fee ($/gal)	$0.2700	$0.2500 $0.1000 $0.3500	$0.0800	30% Increase

PREMIUM FEE COMPARISON (Except Tenjo)

Premium Fee Comparison	$/GAL	$/GAL	VARIANCE
Current Fee	$0.1920	$0.1920	
Mobil 6-month extn proposal	$0.5500		
IP&E 6-month extn proposal		$0.3500	
Additional Cost	$0.3580	$0.1580	$0.2000
	MOBIL	IP&E	
6 months quantity (gallons)	15,947,736	15,947,736	
Additional Cost	$5,709,289.49	$2,519,742.29	$3,189,547.2000

OTHER COMPARISONS

	Premium Fee Comparison ($/gal)				
Mobil original bid	$0.192	$0.192		$0.192	
IP&E original bid	$0.270		$0.270		
Mobil 6-month extn proposal				$0.550	$0.550
IP&E 6-month extn proposal		$0.350	$0.350		$0.350
Additional Cost (Mobil)				$0.358	$0.200
Additional Cost (IP&E)	$0.078	$0.158	$0.080		
	41%	82%	30%	186%	57%
6 months quantity (gallons)	15,947,736	15,947,736	15,947,736	15,947,736	15,947,736
Additional Cost	$1,243,923.41	$2,519,742.29	$1,275,818.88	$5,709,289.49	$3,189,547.20
	IP&E	IP&E	IP&E	Mobil	Mobil

SUMMARY								
6-Months Extension Premium Fee Proposal								
$/gallon	Mobil	IP&E	variance	Increased Cost	$/bbl	Mobil	IP&E	variance
Baseloads	$0.5700	$0.3500	$0.2200	63%	Baseloads	$23.94	$14.70	$9.2400
TEMES CT	$0.5700	$0.3500	$0.2200	63%	TEMES CT	$23.94	$14.70	$9.2400
Dededo CT	$0.5500	$0.3500	$0.2000	57%	Dededo CT	$23.10	$14.70	$8.4000
Macheche CT	$0.5500	$0.3500	$0.2000	57%	Macheche CT	$23.10	$14.70	$8.4000
Yigo CT	$0.5500	$0.3500	$0.2000	57%	Yigo CT	$23.10	$14.70	$8.4000
Aggreko	$0.5500	$0.3500	$0.2000	57%	Aggreko	$23.10	$14.70	$8.4000
MDI	$0.5500	$0.3500	$0.2000	57%	MDI	$23.10	$14.70	$8.4000
Talofofo	$0.5500	$0.3500	$0.2000	57%	Talofofo	$23.10	$14.70	$8.4000

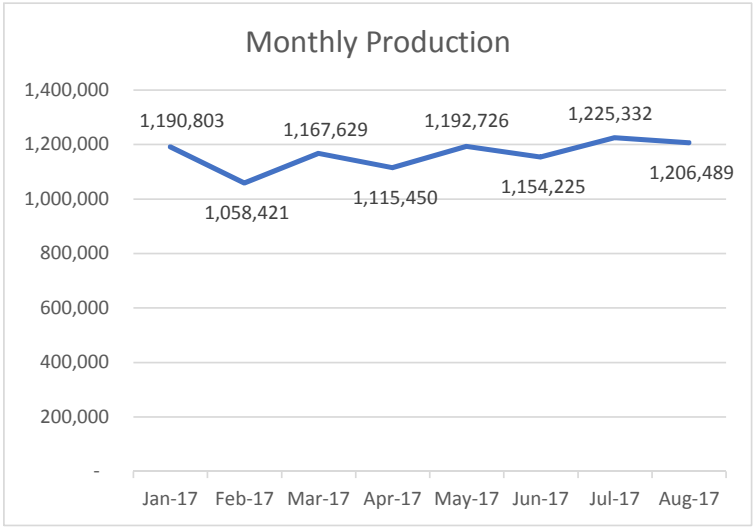
GUAM WATERWORKS AUTHORITY

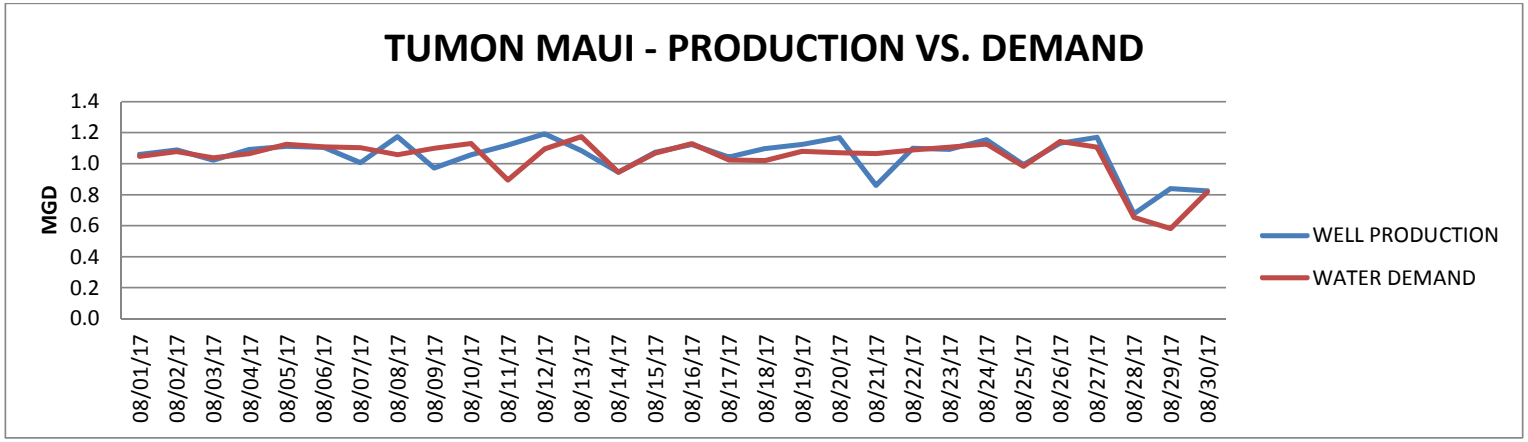
General Manager's Report
GPWA CCU Board Meeting, September 26, 2017

Operations Update

Production

Monthly Production Summary - August 2017				
Deep Wells			35.5	MGD
Active wells =	94	of 120		
Avg days in operation =	30.11	days		
Total Production =	1,102,007	Kgals		
Springs			0.22	MGD
Avg days in operation =	31	days		
Total Production =	6912	Kgals		
Ugum Surface Water Plant			2.1	MGD
Avg days in operation =	31	days		
Total Production =	65,037	Kgals		
Tumon Maui Well			1.05	MGD
Avg days in operation =	31	days		
Total Production =	32,534	Kgals		
	1,206,489	Kgals	38.9	MGD



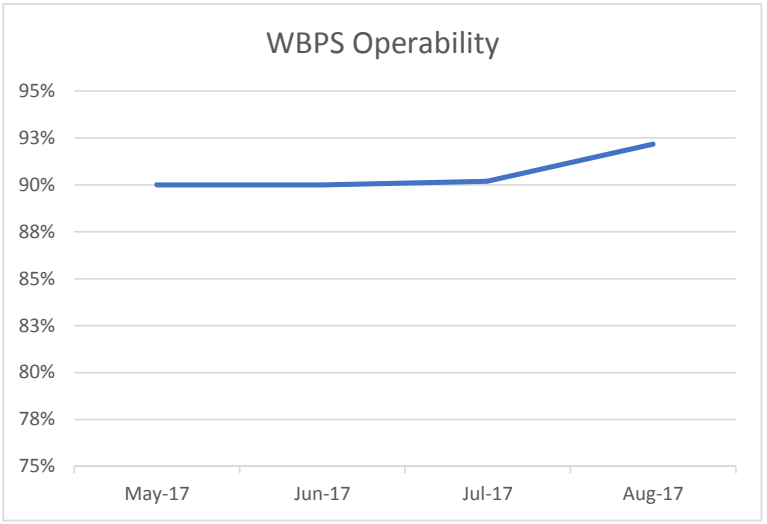


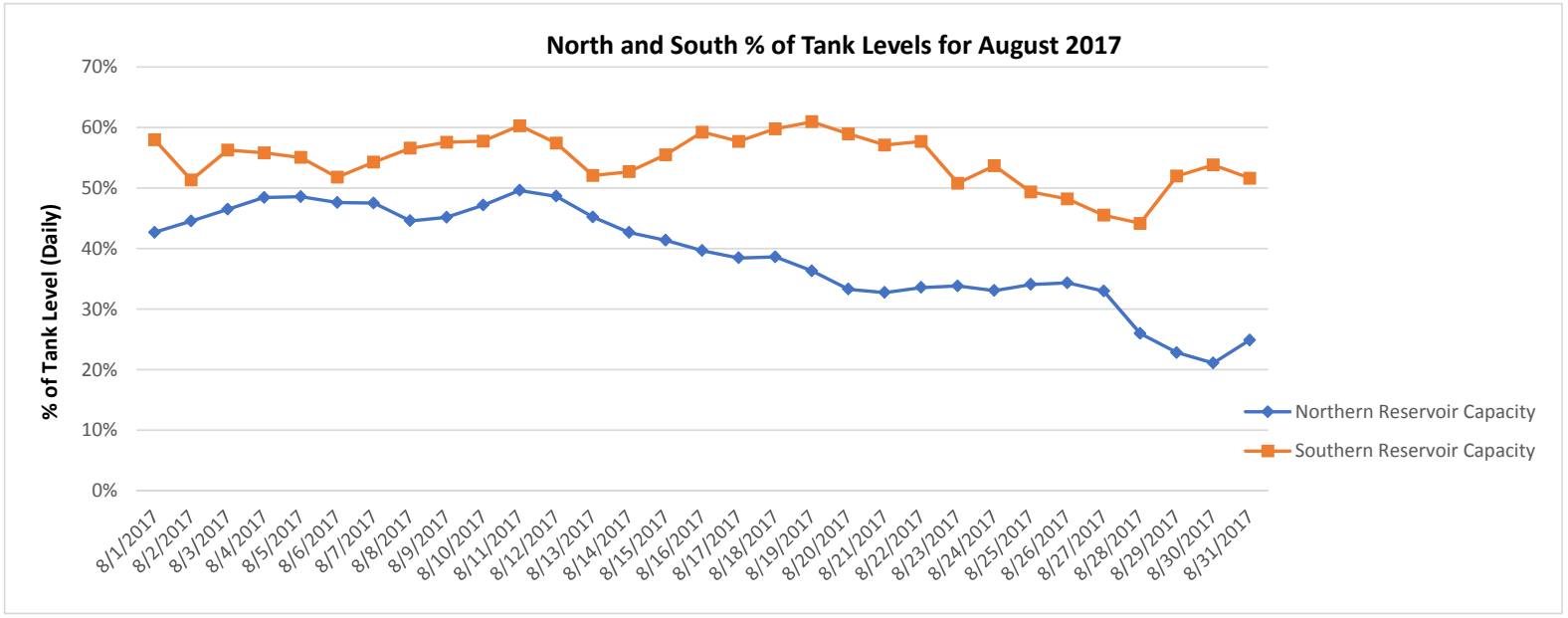
Distribution

Monthly Distribution Summary - August 2017

Water Booster Pump Stations

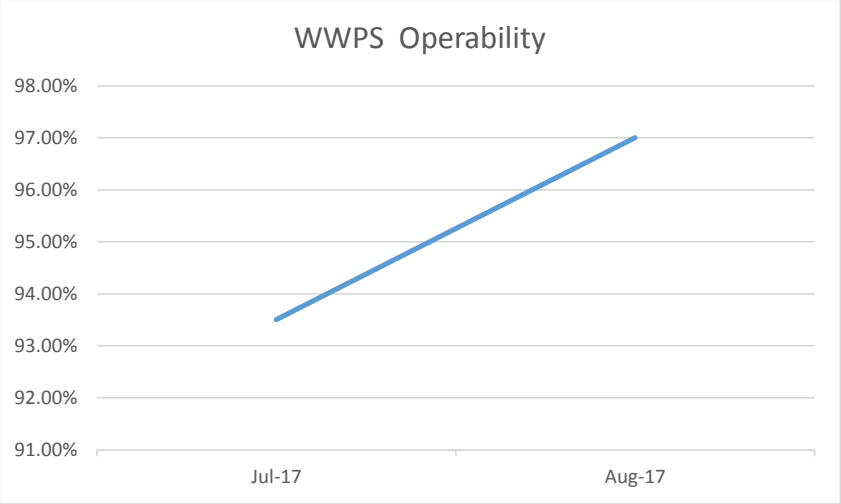
District	No. of Stations	Total Pumps	Pumps Operating	% Operational
Northern	11	21	20	95.2%
Central	7	15	12	80.0%
Southern	7	15	15	100.0%
	25	51	47	92.2%





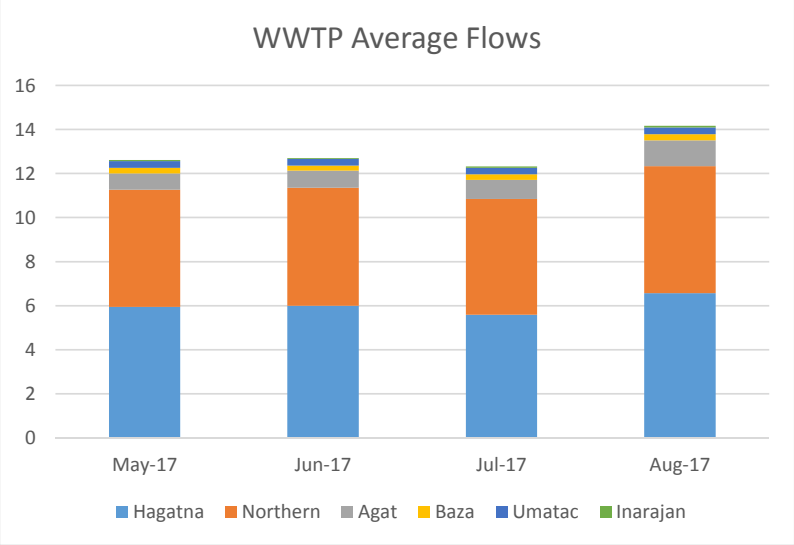
Wastewater Collections

Monthly Collections Summary - August 2017*					
Wastewater Pump Stations					
	District	No. of Stations	Total Pumps	Pumps Operating	% Operational
	Northern	22	52	51	98.1%
	Central	29	65	62	95.4%
	Southern	25	51	50	98.0%
		76	168	163	97.0%

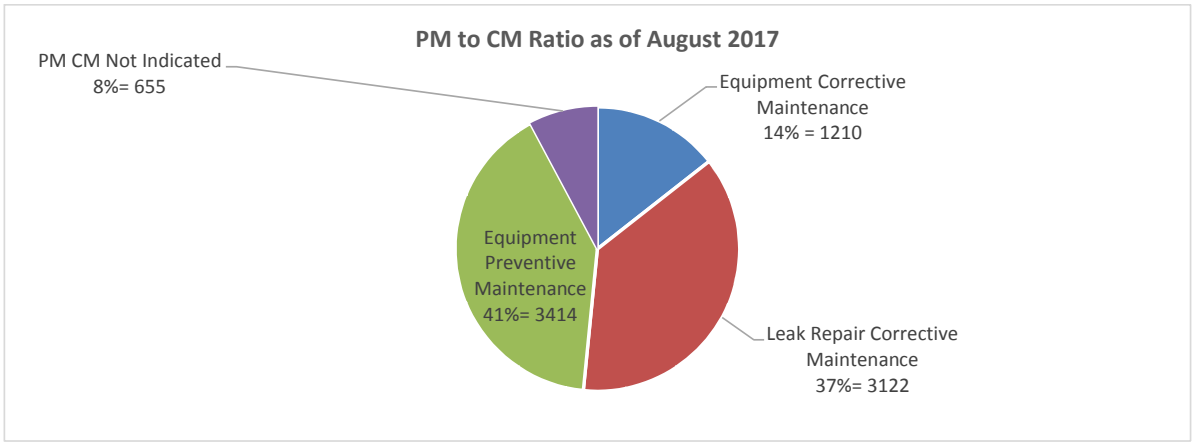


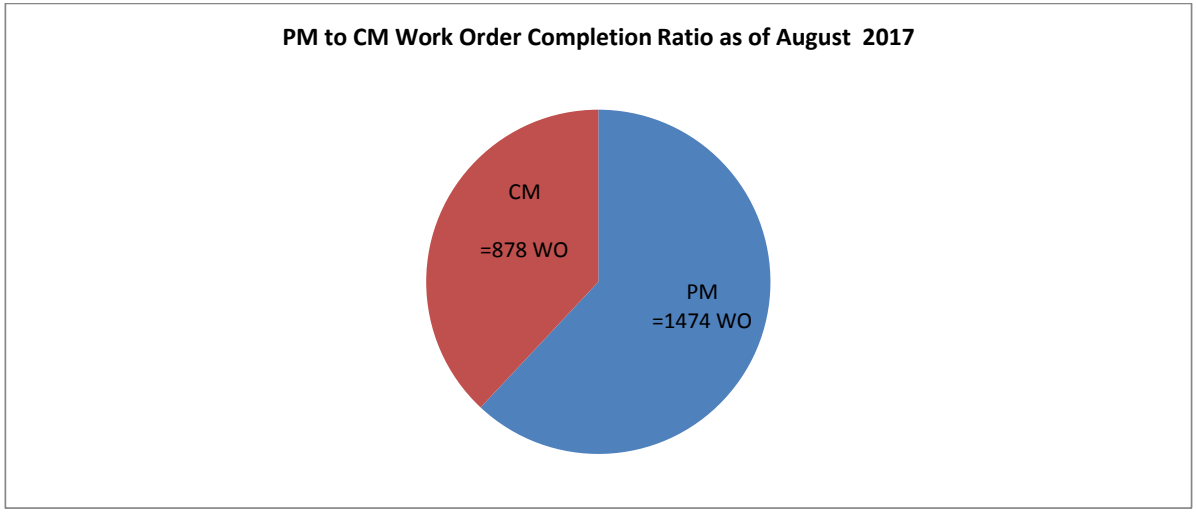
Wastewater Treatment

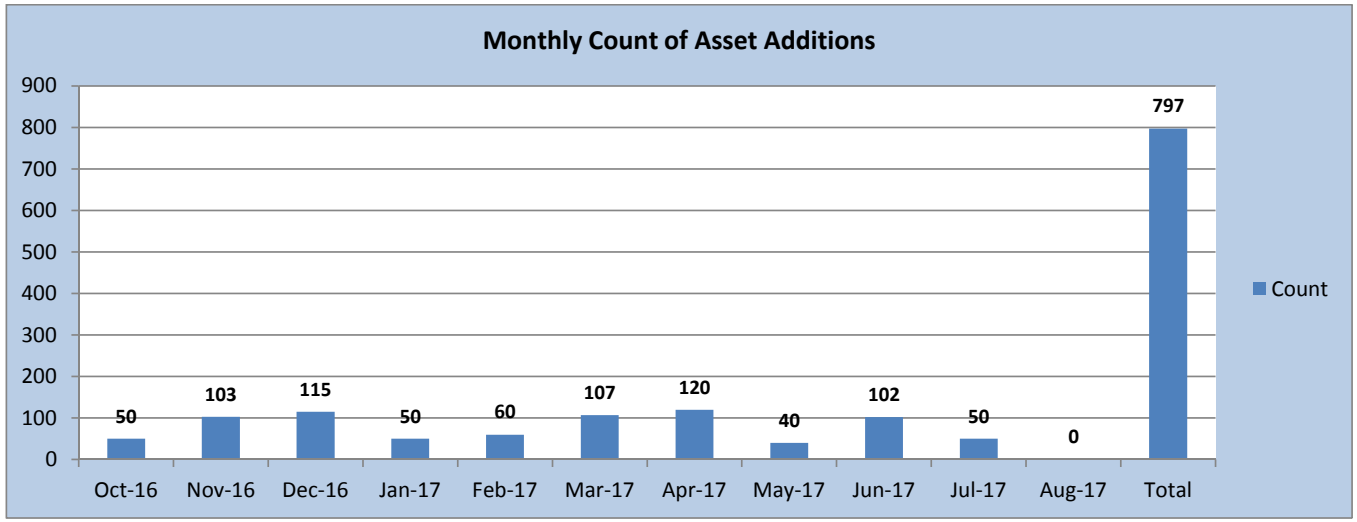
Monthly Wastewater Treatment Summary - August 2017				
WW Treatment Plants - Flows				
	Facility	**Avg. Daily Flows**	**Sludge (lbs)**	**Sludge Disp. ($)**
	Hagatna	6.57	694,420	$ 62,498
	Northern	5.77	690,200	$ 62,118
	Agat	1.16		
	Baza	0.29		
	Umatac	0.30		
	Inarajan	0.08		
		14.17	1,384,620	$ 124,616



Asset Management





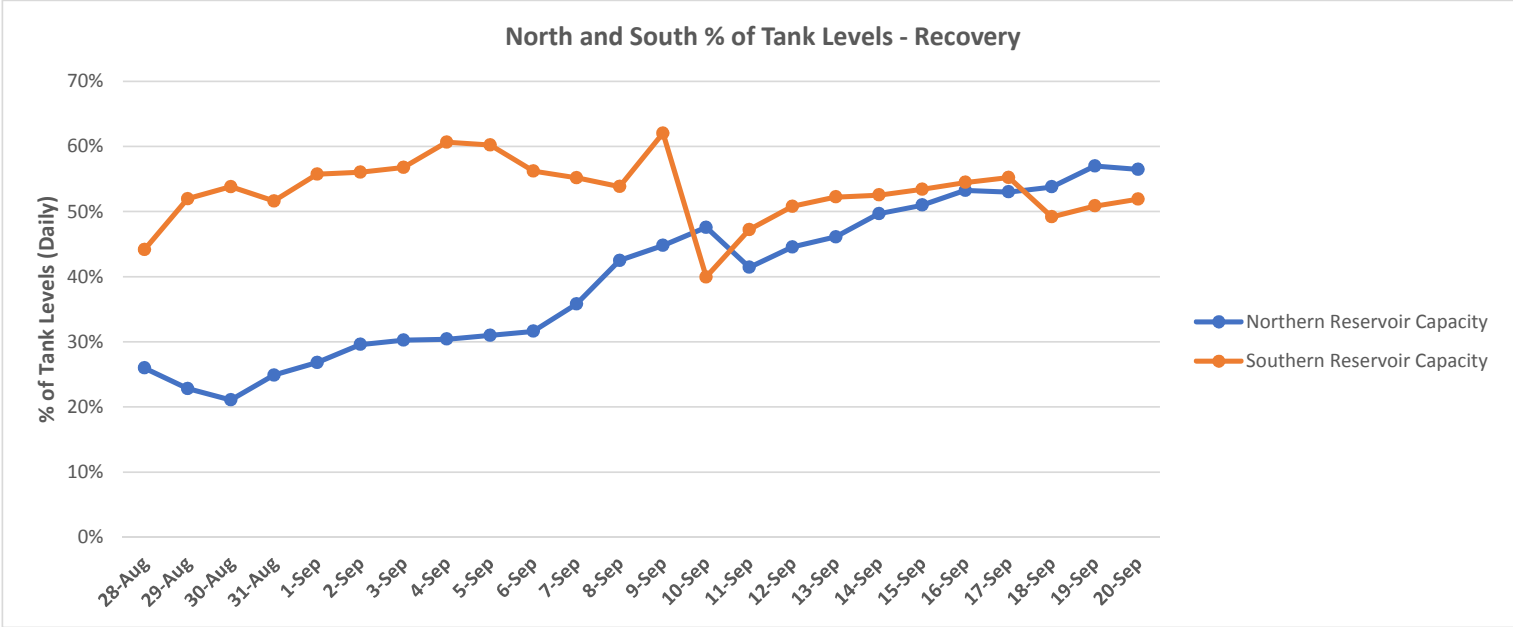


On-Going Asset Management Activities

- Ongoing routine asset condition assessment for all water and wastewater assets and update asset registry. **Goal:** once a year for critical assets and every three years for non-critical.
- Risk identification based on asset condition
- Improved PM scheduling
- Establishment of an Asset Management System based on ISO 5500 standards.

Operational Issues

- Recovery from Heavy weather events affecting production for Yigo and Barrigada/Tiyan areas – in progress
  - Completed well pullouts for the following wells (since 8-29-17):
    - M-21 @ ~200 gpm
    - Y-12 @ ~235 gpm
    - AG-2 @ ~500 gpm
    - EX-11 @ ~210 gpm
    - F-6 @ ~150 gpm
  - M-6 Pullout on-going
  - Joint GWA-GPA Deep Well Task Force has increased its efforts to improve system resilience to these events.
  - Northern Reservoir Daily Capacity increased from low of 20% at end of August to 56% as of September 21st.



- On September 9th, the Santa Rita Reservoir Access Road washed out, causing multiple main breaks and isolation of the tank.
- Actions taken:
  - Access road secure to protect employee and public safety
  - Coordination with GDOE and Mayor's Office for staging water tankers
  - Outage notices sent to media outlets
  - Engineering and Construction team deployed; geotechnical assessment conducted
  - Distribution system adjusted to feed directly from other sources – minimal impacts to service area (3-homes affected).
  - By-pass of reservoir completed by September 15th
  - Access road slope stabilization and restoration design in progress
  - Repair to be initiated / completed upon approval of design

Meter Changeout NC/LC Accounts

- As of September 16, 2017:
  - Field activities completed: 4934
  - Meter changeouts: **3406** (Crews verified 1528 meters did not require changeout)
  - Field activity reports created for completed changeouts: 1936
  - Accounts backbilled: 382 (as of 9/16/17)
- Week of 9/10/17 through 9/16/17
  - Field Changeouts: 369
  - Field activity reports pending posting: 481
  - Meter Test Facility field activity reports pending posting: 91
- Meter Inventory
  - In stock: 2715
  - Programmed: 256

Marbo (Andy-South) Wells – Status

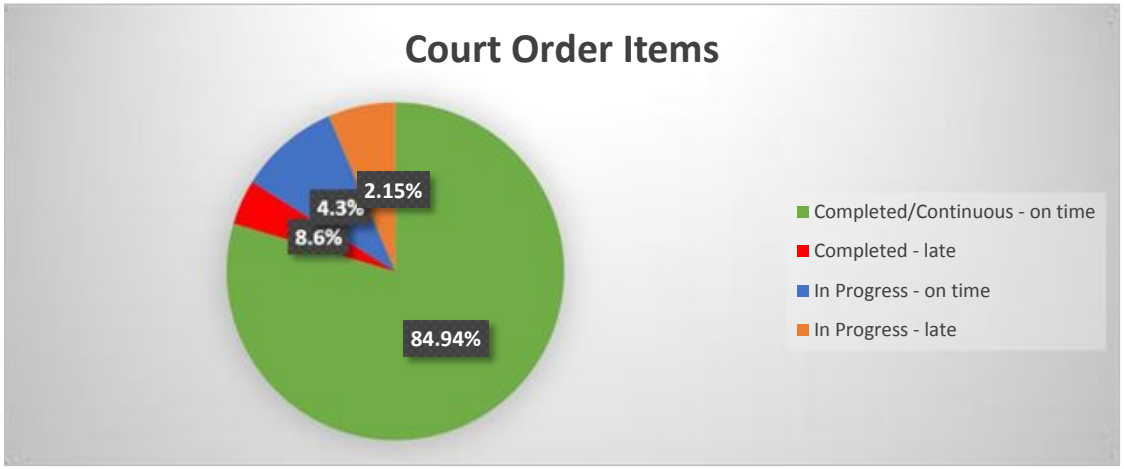
- Correspondence initiated with GSA
- Surveyor has provided sketch for parceling (under GWA review)
- Technical descriptions pending for submission to GSA

One Guam Update

- Potts Junction Service Lateral: As-builts completed; to be delivered 9-22-17.
- Santa Rosa Intertie: Draft MOU discussed in meeting with AAFB on 9-7-17; hydraulic modeling pending; grant of easement in progress
- Hydraulic model: planning briefing with B&C for model updates and future integration issues

Court Order

	Items	On-time Items Completed/Continuous	Items Delayed	Completed Late	Items on Schedule	Performance %
Court order total	93	79	2	8	4	97.8%



Status Information

- 2 items delayed
  - Cl Residual Monitors
  - Meters
- Final Date to complete all Court Order items is December 31, 2020.
- Overflow or Bypass events reported to USEPA:
  - Umatac By Pass 8/28/17 – 9/03/17
  - Agat Rt 2 MH overflow 9/1/17 – heavy rain
  - Umatac Pump station force main break 09/12/2017
  - Harmon Lift Station Manhole overflow due to rain 09/13/2017
  - Contractor bypass line joint leak Agat Sewer Line Refurbishment project 09/15/2017
  - Umatac by Pass 9/9/17 to present.
- The new Agat/SR WWTP is operating well and the UV system well exceeds the permit limits

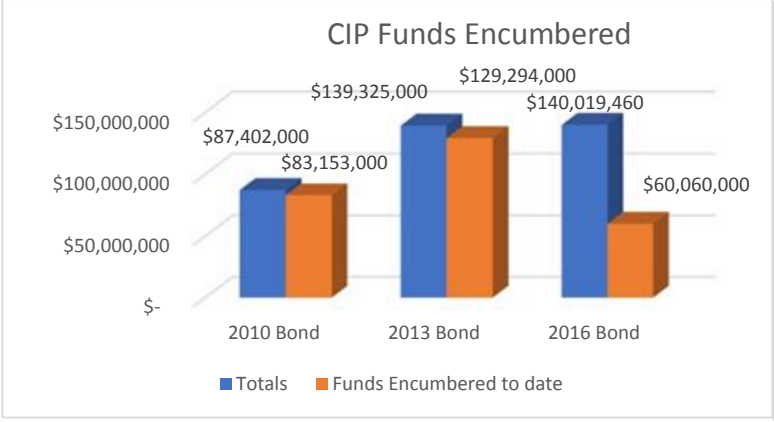
CIP Summary

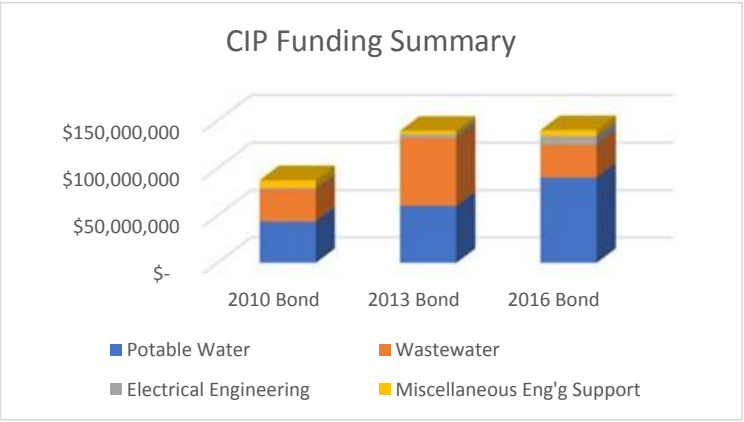
CIP Summary: Project Encumbrance

	2010 Bond		2013 Bond		2016 Bond			
	Funded	Complete	Funded	Complete	Funded	Complete	Total CIP Projects	%
Potable Water	28	17	21	7	20	0	35	49%
Wastewater	16	13	7	3	8	1	22	31%
Electrical Engineering	5	5	6	1	5	0	10	14%
Miscellaneous Eng'g Support	2	0	3	1	4	1	4	6%
Totals	51	35	37	12	37	2	71	100%
% of Total CIP by Fund Source	72%		52%		52%			

CIP Summary: Project Amounts

	2010 Bond		2013 Bond		2016 Bond			
	Funded	%	Funded	%	Funded	%	Total CIP Projects	%
Potable Water	$ 41,903,305	48%	$ 58,317,117	42%	$ 64,647,830	46%	$ 164,868,252	45%
Wastewater	$ 36,009,577	41%	$ 73,837,883	53%	$ 60,227,170	43%	$ 170,074,630	46%
Electrical Engineering	$ 1,748,118	2%	$ 3,395,000	2%	$ 8,750,000	6%	$ 13,893,118	4%
Miscellaneous Eng'g Support	$ 7,741,000	9%	$ 3,775,000	3%	$ 6,394,460	5%	$ 17,910,460	5%
Totals	$ 87,402,000	100%	$ 139,325,000	100%	$ 140,019,460	100%	$ 366,746,460	100%
Funds Encumbered to date	$ 83,153,000	95%	$ 129,294,000	93%	$ 60,060,000	43%		
% of Total CIP Funding	23.8%		38.0%		38.2%			





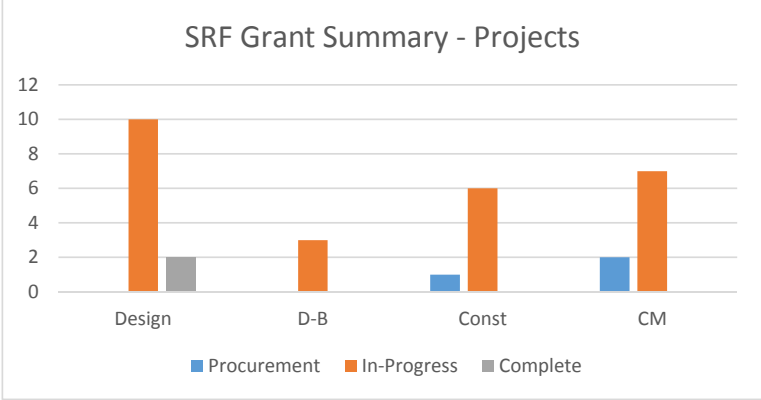
SRF Grant Summary

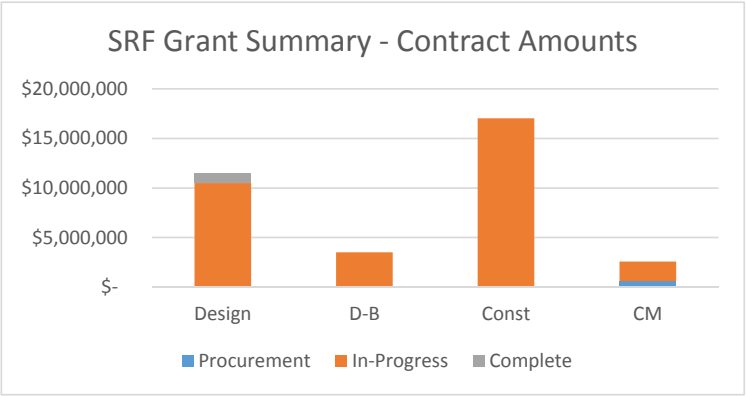
SRF Grant Summary - Projects

	Procurement	In-Progress	Complete	Totals	%
Design	0	10	2	12	39%
D-B	0	3		3	10%
Const	1	6		7	23%
CM	2	7		9	29%
Totals	3	26	2	31	
%	10%	84%	6%		

SRF Grant Summary - Contract Amounts

	Procurement	In-Progress	Complete	Totals	%
Design	$ -	$ 10,490,197	976,151	$ 11,466,348	33%
D-B	$ -	$ 3,502,453		$ 3,502,453	10%
Const	$ -	$ 17,043,244		$ 17,043,244	49%
CM	$ 584,725	$ 1,989,176		$ 2,573,901	7%
Totals	$ 584,725	$ 33,025,070	$ 976,151	$ 34,585,946	
%	2%	95%	3%		





OEA Grant Summary

- Grant application submitted for remainder of funding; OEA meeting schedule in early October
- NDWWTP Upgrades
  - Kick-off and Technical Review Meeting conducted end of August
  - Currently conducting WW sampling and characterization study
- Outfall Diffuser
  - 30% Design received August 30th – under review
  - GWA assisting with CCTV inspection of old outfall for bypass use
- Interceptor
  - Bridging Documents for Design-Build procurement received September 1st ; Under GWA review
  - Right-of-entry documents required (ALC and Navy) for completion of environmental documents
- NGLA Monitoring Wells
  - Design conference schedule for early October
  - Design in progress; GWA waiting for review set - 30% due November 2017

Action Item	Date (Target)	Date (Actual)	Status	Remarks
Project Funds Available	July-16	AUG-30-16	Completed	
Land Acquisition	Jan-17	Jan-17 (Compensation Pending)	Pending	Survey complete, appraisals complete – under review
Procure PM/CM Firm	Jan-17	Jan-17 (NTP Issued Feb 10th)	Completed	
Procure Design Firm	Jul-17		Completed	Contract issued; kickoff pending
Design -- 30/60/90/Final -- Review	Jun-18		On-target	Project design schedule under review by PM/CM
NEPA Analysis and Determination	Feb-17		Delayed	USEPA work on-going; procurement of contractor completed
Procure Construction Firm	Dec-18		On-target	
Construction Complete/Commence Operations	Nov-21		On-target	
Sewer line connection from MCB to GWA infrastructure	Jul-19		On-target	
MCB Initial Operating Capability	Jul-22		On-target	

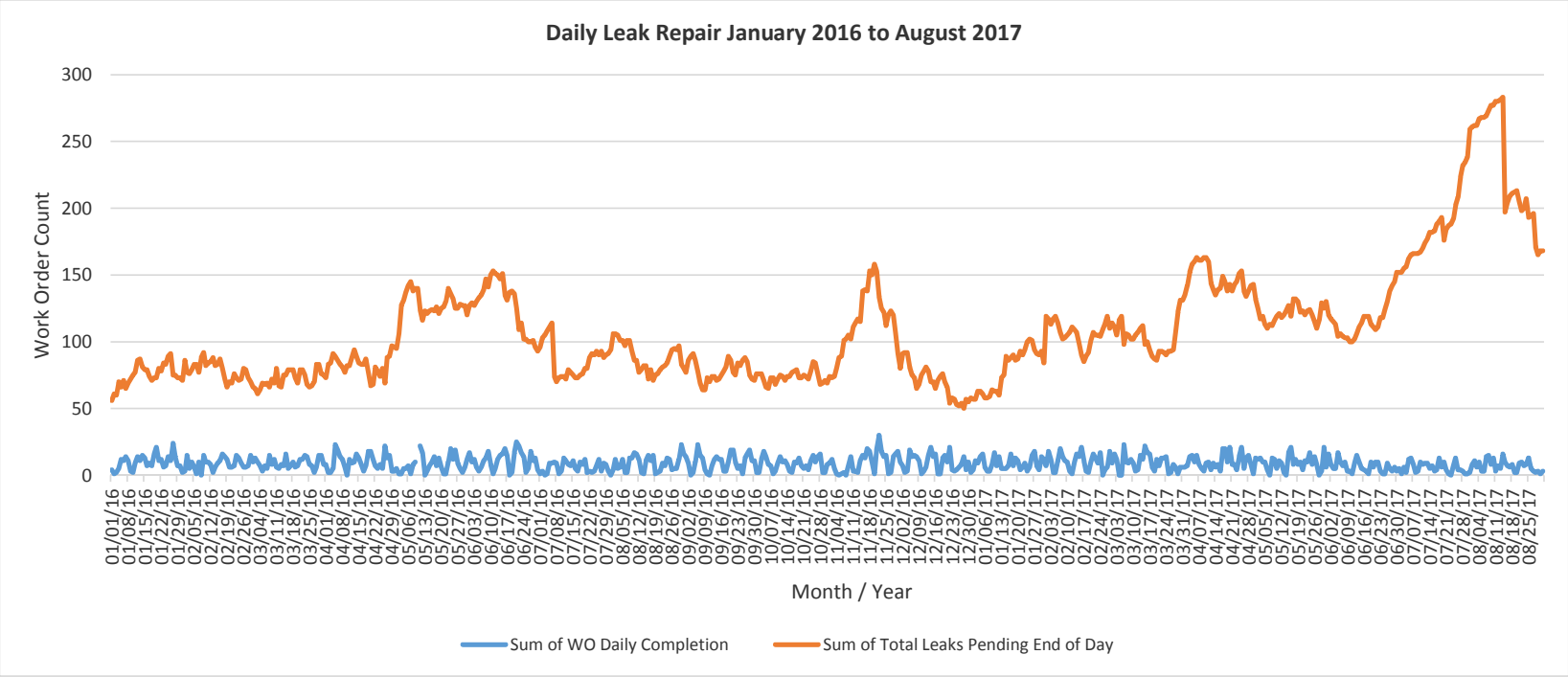
Land Acquisition Summary

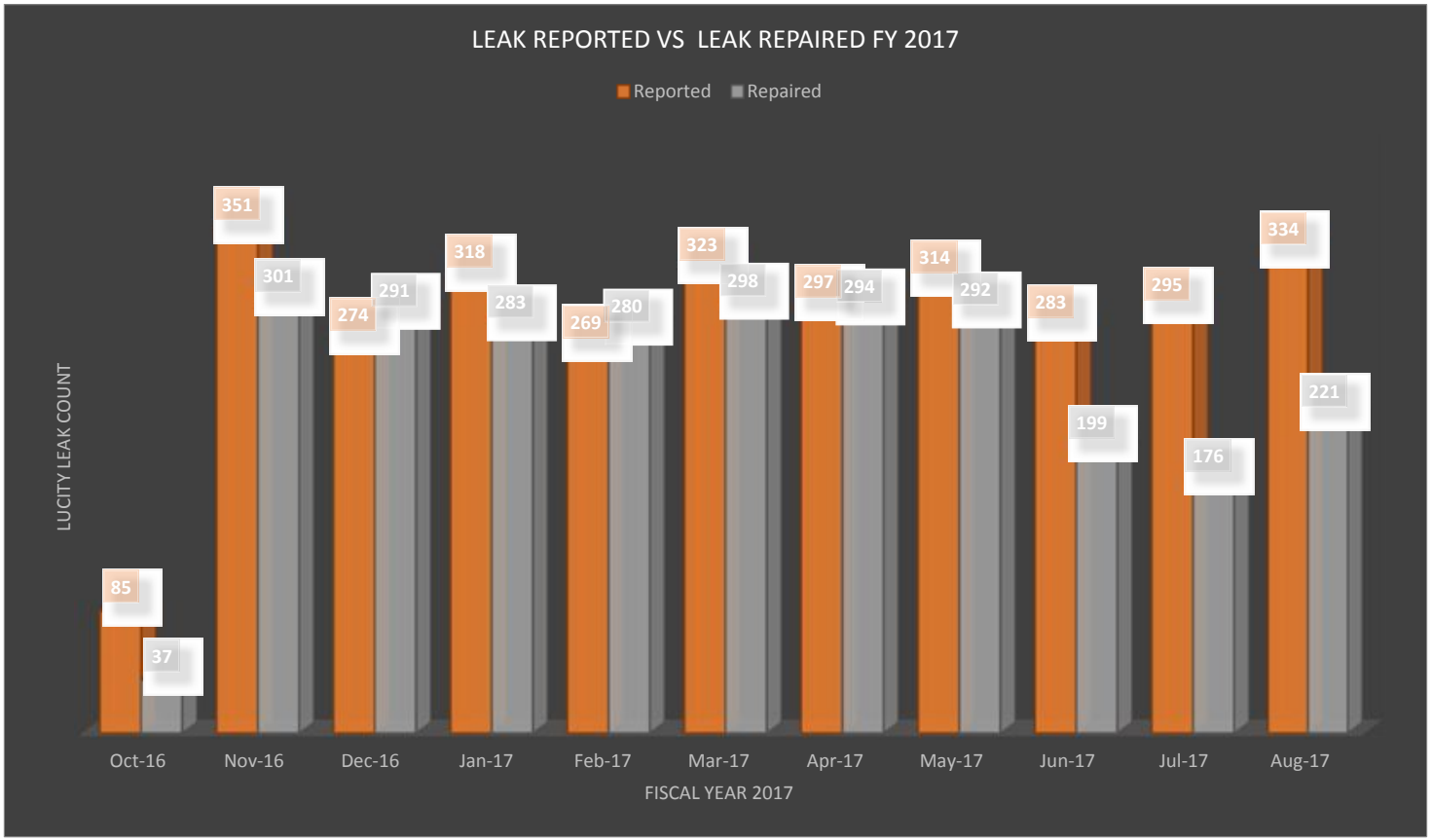
GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
	Ugum	Private	GWA reviewing change order proposal.
	Manenggon	Private	Property Ownership vested in GWA 05/02/17.
	Santa Rita	Gov't. – CLTC	Property Ownership vested in GWA 08/04/17.
	Astumbo	Gov't. - CLTC	GWA and DLM working together on Land Registration process. Abstract of Title sent to GWA for review 06/26/17. Pending technical description from DLM survey division. Follow up status sent to DLM regarding technical description document 09/18/17.
	Upper Tumon	Gov't. - CLTC	Property Ownership vested in GWA 08/03/17.
	Piti	Private	GWA consultants drafting Letter of Intent for private property owners. GWA consultants to draft Letter of Interest to Parks & Rec for possible use of portion of park area for Booster Pump Station 09/18/17.
Expansion of the Northern District Wastewater Treatment Plant (NDWWTP)	Dededo	Gov't - GALC	Lot Parceling Survey Map sent to DLM for review and comments 08/07/17. Appraisal Reports completed 08/11/17. GWA Land Agent to meet with GM this week regarding appraisal reports.
Deep Well	Y-8	Gov't. - CLTC	DCA currently working on severance property map.
	AG-12	Dept. of Agriculture/Manhita Farms	Preliminary Land Registration Survey Map forwarded to GWA for review 08/14/17. Appraisal process to begin once review and comments are forwarded to DCA.
Booster Pump Station	Brigade	Private	Escrow services opened with Security Title on 07/17/17. Follow up status sent to escrow company 09/08/17 and 09/18/17.

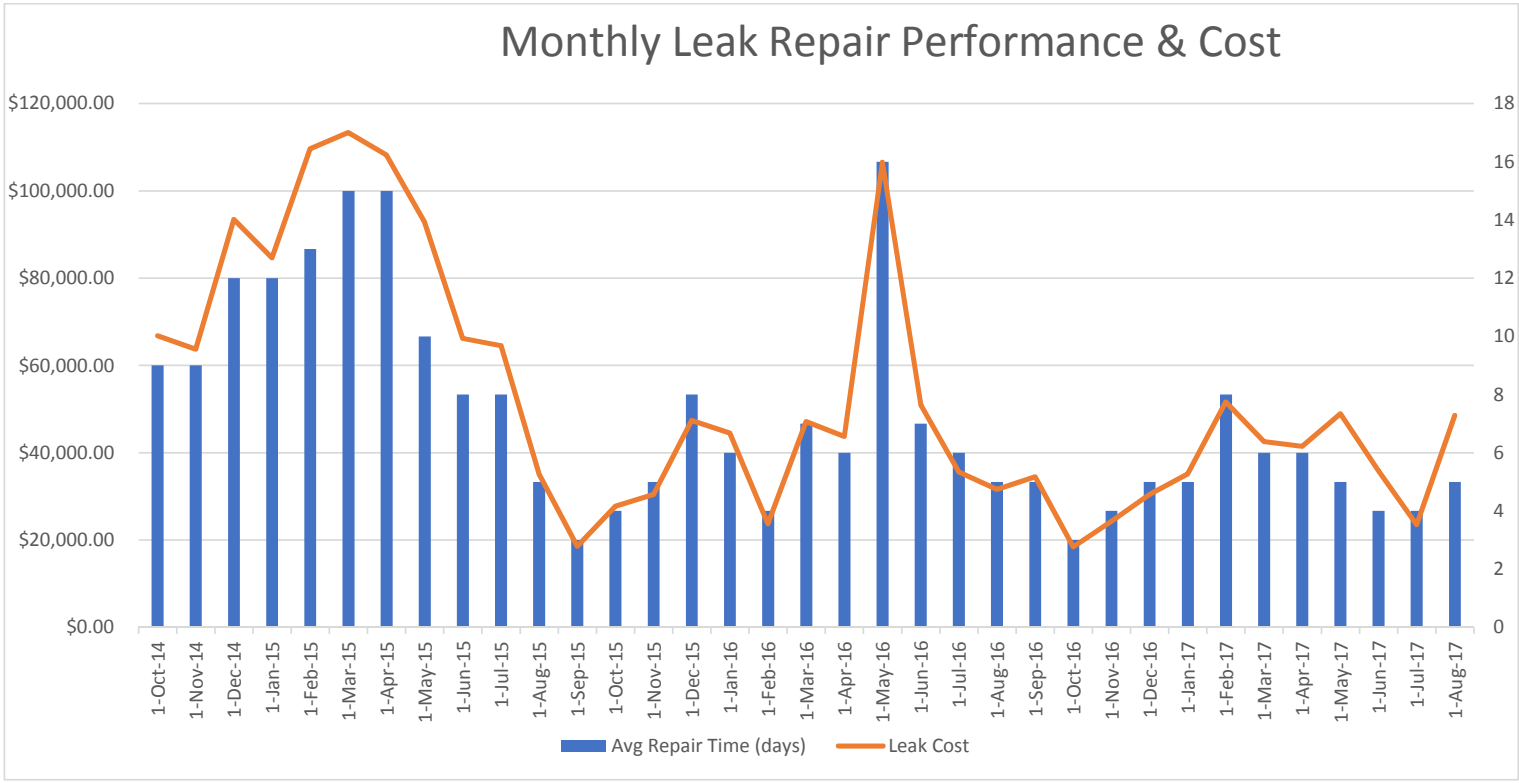
NRW – Update

- Water Audit update on-going
  - Production rates are being reviewed for accuracy and refined
  - Unmetered, Authorized uses are being quantified
  - Meter and billing inaccuracies are being reviewed and refined

Leak Repair Summary




LEAK REPORTED VS LEAK REPAIRED FY 2017
Reported
Repaired
LUCITY LEAK COUNT
85
37
351
301
274
291
318
283
269
280
323
298
297
294
314
292
283
199
295
176
334
221
Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Mar-17
Apr-17
May-17
Jun-17
Jul-17
Aug-17
FISCAL YEAR 2017



Assumptions:

1. Leak rate = 4 gpm
2. Cost per kgal = $4.00

DASHBOARD

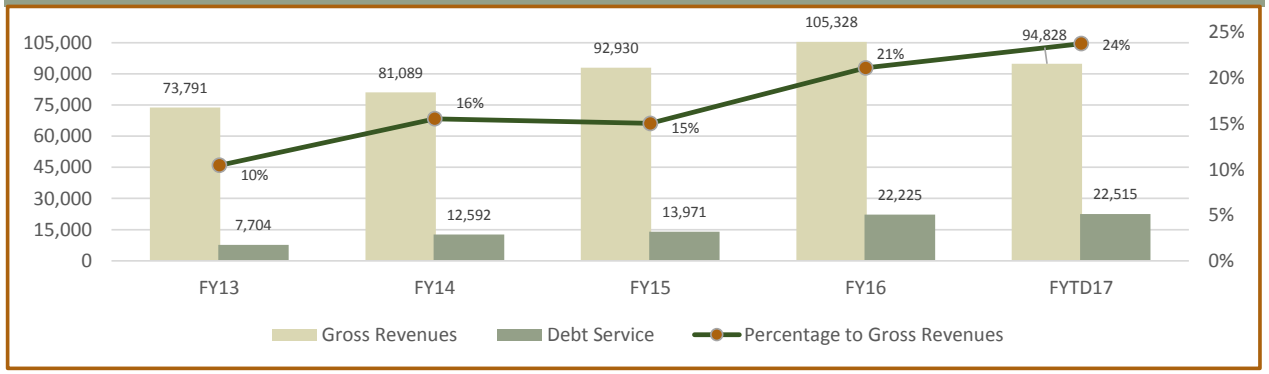
August 2017 YTD Budget vs Actual ($000)

Category	Description	Budget FY17	Actual FY17	Variance
Rate Based Revenues	Water	$64,595	$59,644	($4,951)
	Wastewater	37,170	34,673	(2,497)
	Total	101,765	94,317	(7,448)
Operations & Maintenance	Salaries & Benefits	24,025	18,225	(5,800)
	Power	11,680	11,001	(679)
	Water Purchases	7,440	6,713	(727)
	A&G	9,834	7,671	(2,163)
	Contractual	3,699	3,591	(108)
	Total	$74,389	$63,623	($10,766)

Key Financial Ratios ($000)

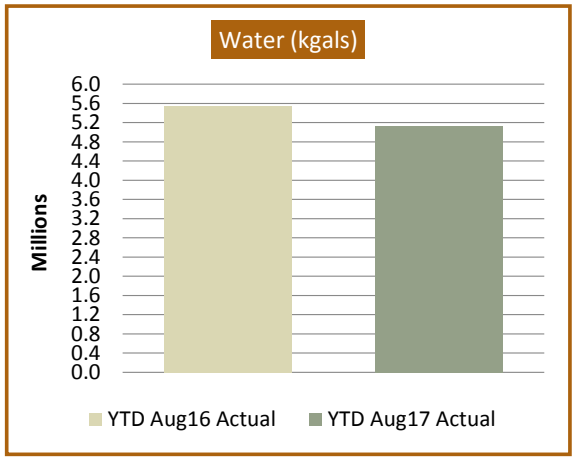
Category	FY17	FY16
Accounts Payable $$/Days	$4,136 / 51 days	$4,909 / 53 days
Accounts Receivable $$/Days	$14,926 / 50 days	$16,709 / 51 days
Days Cash On Hand	204 days	178 days
Annual Debt Service (Revenue Bonds)	$24,563	$22,225
Debt Service Coverage (Bond/PUC)	2.04 / 2.49	2.33 / 2.54

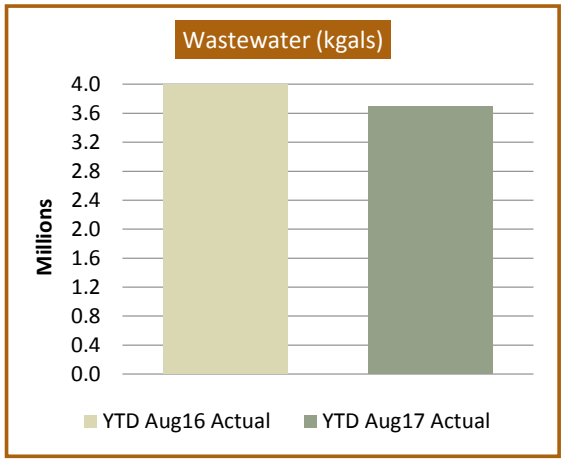
Debt as a Percent to Gross Revenue

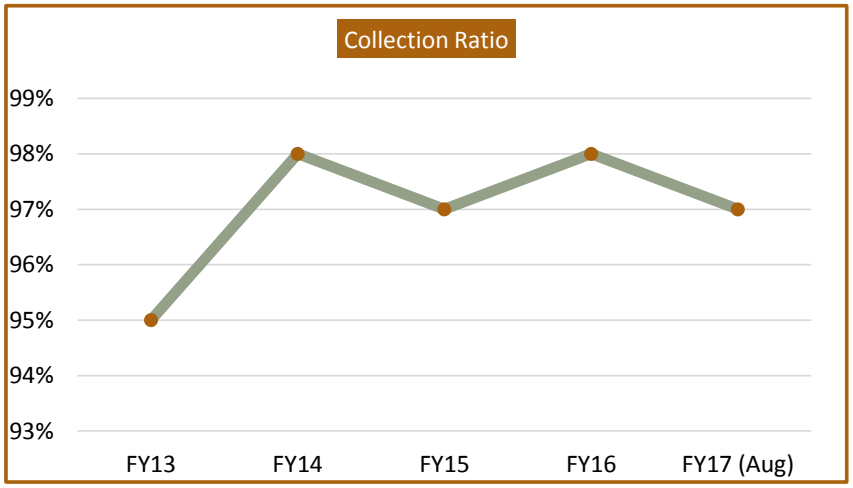


(1) Gross Revenues excludes SDC
(2) Debt Service Excludes Cap I

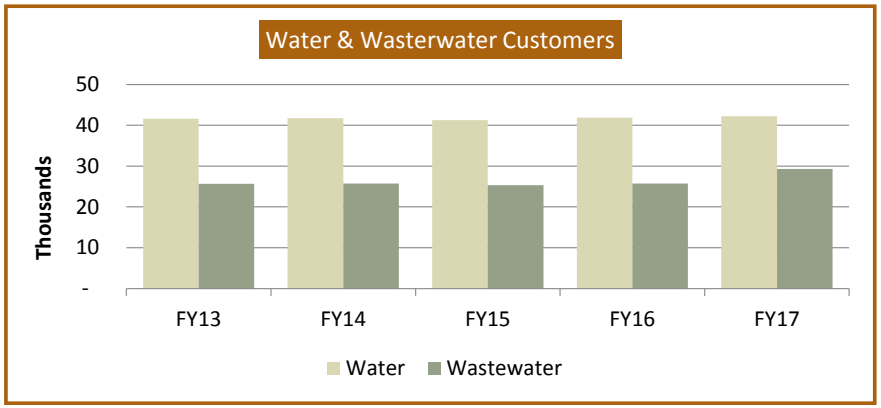
Water & Wastewater Analytics

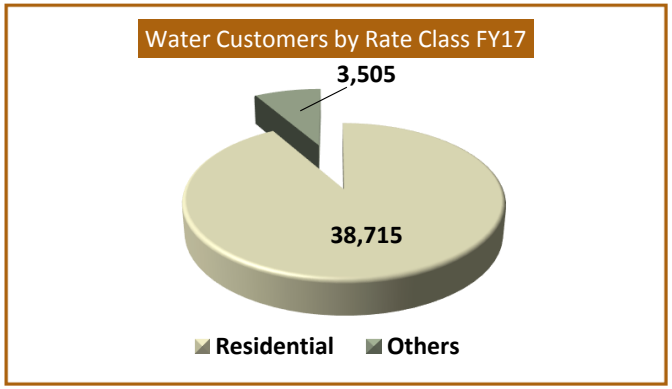


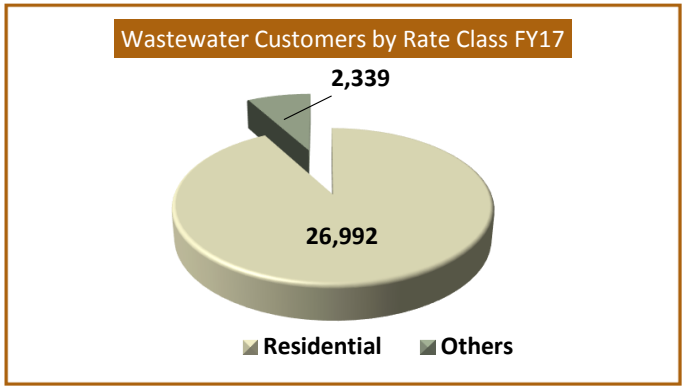


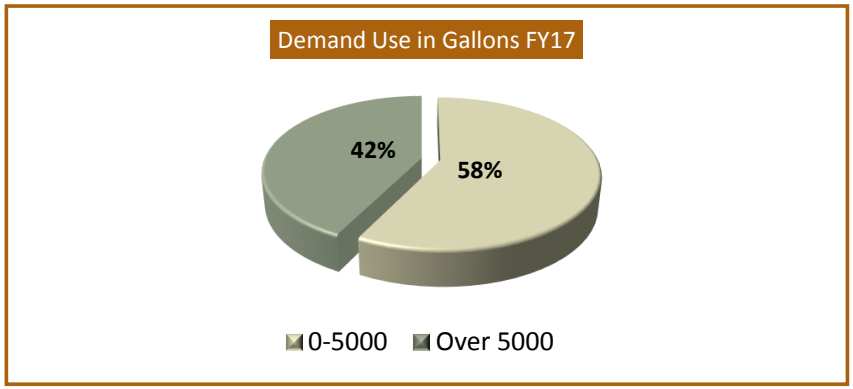


Water & Wastewater Customers





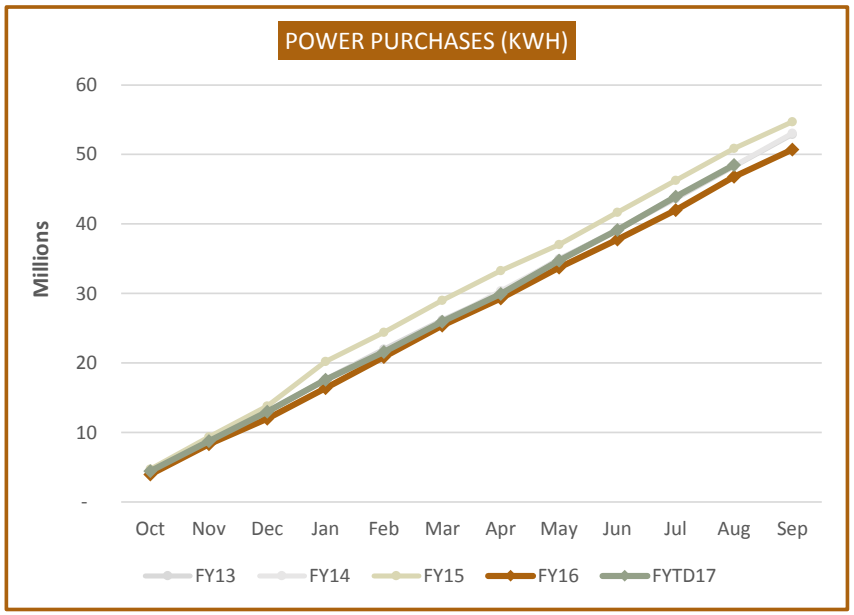


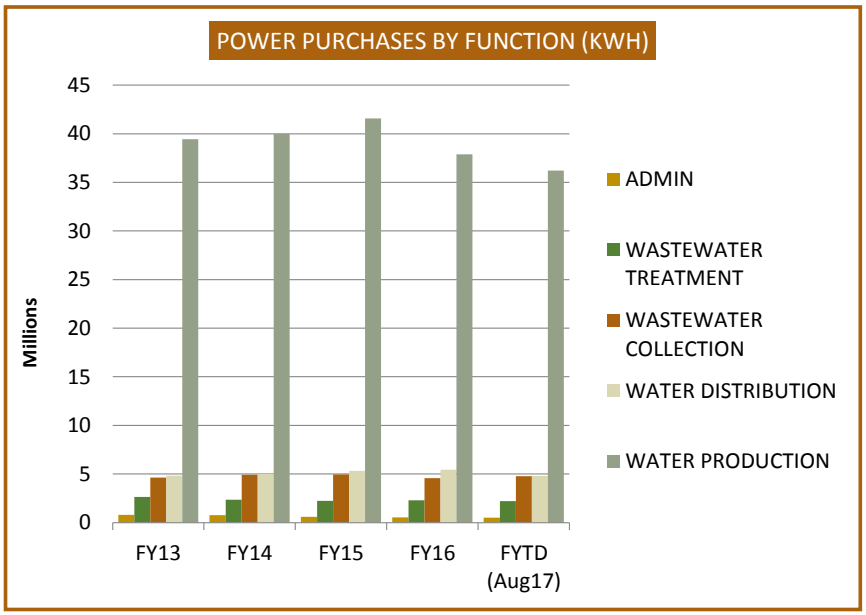


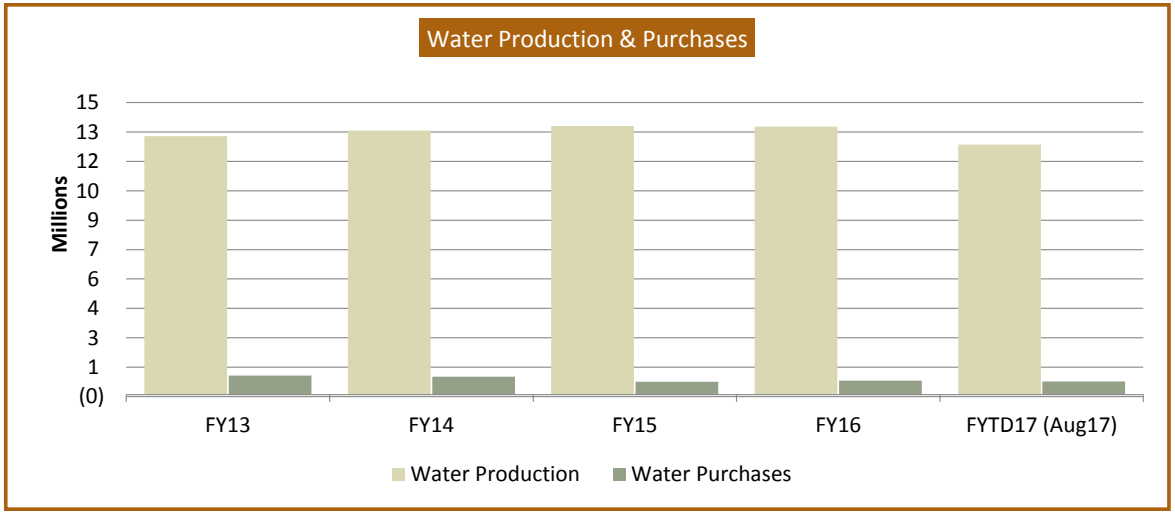
Top Ten Largest Water and Wastewater Customers – August 2017

Water			Wastewater		
Customer Name	FY17 YTD Revenues	% of Total	Customer Name	FY17 YTD Revenues	% of Total
1) MDI GUAM CORPORATION/LEOPALACE	$1,201,833	2.02%	1) AIR FORCE DOD	$3,470,820	10.01%
2) PACIFIC ISLANDS CLUB	1,086,230	1.82%	2) NAVY DOD	1,579,912	4.56%
3) HOTELS OF THE MARIANAS INC	912,395	1.53%	3) HOTELS OF THE MARIANAS INC	975,723	2.81%
4) SHERATON LAGUNA GUAM RESORT	780,543	1.31%	4) SHERATON LAGUNA GUAM RESORT	835,439	2.41%
5) HYATT	777,036	1.30%	5) HYATT	831,673	2.40%
6) HOTEL NIKKO GUAM	745,329	1.25%	6) HOTEL NIKKO GUAM	796,291	2.30%
7) PACIFIC STAR RESORT & SPA	593,793	1.00%	7) PACIFIC STAR RESORT & SPA	633,539	1.83%
8) MDI GUAM CORPORATION/WESTIN	579,846	0.97%	8) MDI GUAM CORPORATION/WESTIN	619,888	1.79%
9) OUTRIGGER GUAM RESORT	547,213	0.92%	9) OUTRIGGER GUAM RESORT	586,167	1.69%
10) GUAM REEF HOTEL INC	528,069	0.89%	10) GUAM REEF HOTEL INC	564,539	1.63%
Total	**$7,752,287**	**13.00%**	**Total**	**$10,893,991**	**31.42%**

Power, Water Purchases and Water Production

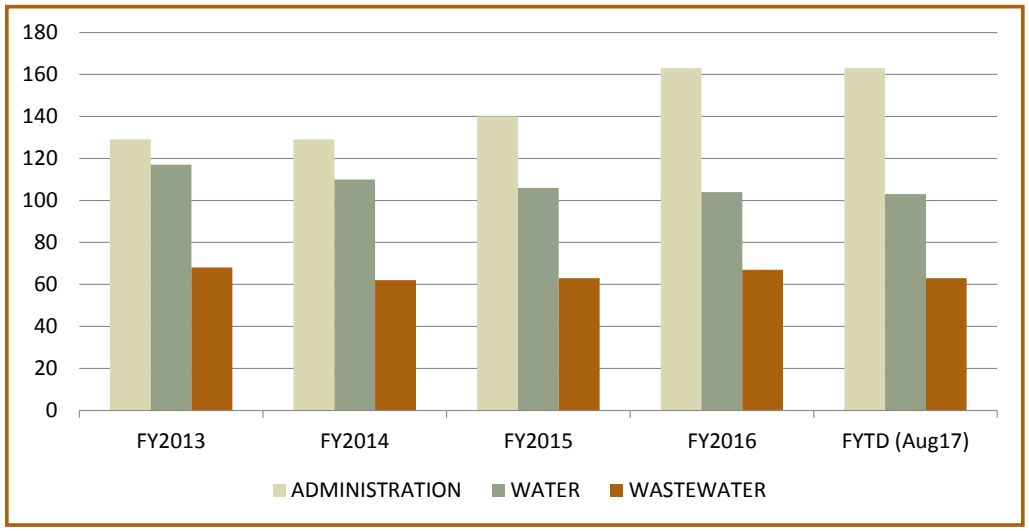






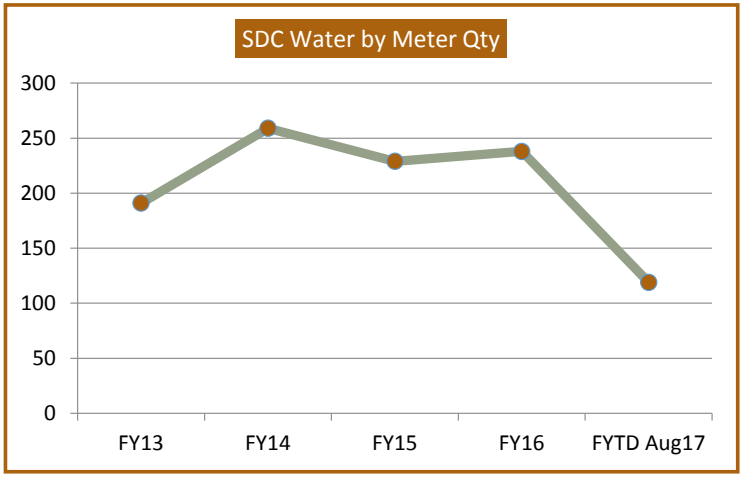
FTE by Major Division

DIVISION	FY2013	FY2014	FY2015	FY2016	FYTD (Aug17)
ADMINISTRATION	129	129	140	163	163
WATER	117	110	106	104	103
WASTEWATER	68	62	63	67	63
TOTAL NUMBER OF STAFF	314	301	309	334	329
Gross Salaries & Wages ($000)	14,929	15,532	15,805	16,442	15,361
Water Customers	41,582	41,702	41,274	42,259	42,220
Staff to Customers Ratio	0.76%	0.72%	0.75%	0.79%	0.78%

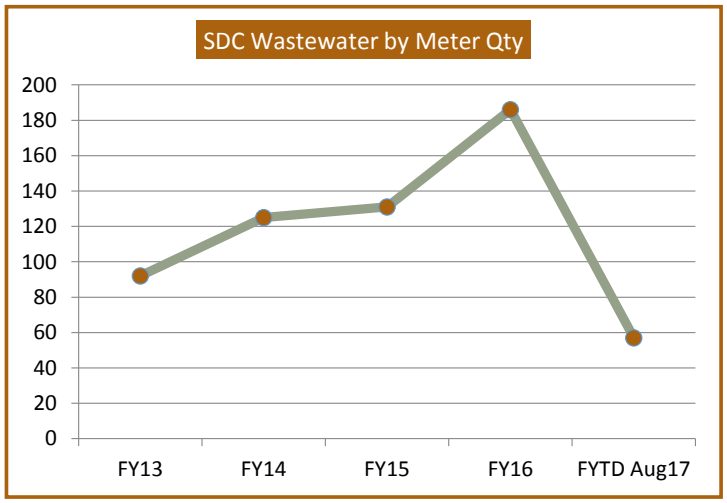


Note: FYTD17 number of employees 329 is as of August 2017

SDC Water & Wastewater (Meter Quantity)



Actual Meter Sizes (Inches)	FY 2013	FY 2014	FY 2015	FY 2016	FYTD (Aug17)
5/8 x 3/4	179	248	220	239	113
1	-	5	5	7	2
1 1/2	5	1	1	1	1
2	4	3	2	4	2
3	-	1	-	1	-
4	3	-	1	-	-
6	-	-	-	-	1
8	-	1	-	-	-
10	-	-	-	-	-
Total SDC by Water	191	259	229	252	119



Actual Meter Sizes (Inches)	FY 2013	FY 2014	FY 2015	FY 2016	FYTD (Aug17)
5/8 x 3/4	80	115	124	179	53
1	-	4	3	2	-
1 1/2	5	1	1	1	1
2	4	3	2	3	2
3	-	1	-	1	-
4	3	-	1	-	-
6	-	-	-	-	1
8	-	1	-	-	-
10	-	-	-	-	-
Total SDC by Wastewater	92	125	131	186	57

GUAM WATERWORKS AUTHORITY
AUGUST 31, 2017
FINANCIAL AND RELATED REPORTS
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GUAM WATERWORKS AUTHORITY
Balance Sheet
August 31, 2017

SCHEDULE A

ASSETS	Unaudited August 31, 2017	Audited September 30, 2016	Increase (Decrease)
Current Assets:			
Cash:			
Unrestricted (Schedule G)	5,273,038	8,157,430	(2,884,393)
Restricted Funds (Schedule G)	64,184,790	48,436,547	15,748,243
Accounts Receivable Trade, Net of Allowance for Doubtful Receivables of $11,990,079 at Aug 31, 2017 and $11,302,579 at Sep 30, 2016	14,925,917	14,562,072	363,845
Other Receivable	1,947,637	2,147,155	(199,518)
Materials & Supplies Inventory, Net of Allowance for Obsolescence of $457,370 at Aug 31, 2017 and Sep 30, 2016	1,521,150	2,269,775	(748,625)
Total Current Assets	87,852,531	75,572,979	12,279,552
Property, Plant and Equipment			
Utility plant in service:			
Water system	316,716,967	306,262,568	10,454,399
Wastewater system	277,869,485	259,512,407	18,357,078
Non-utility property	23,023,353	22,474,787	548,566
Total property	617,609,804	588,249,761	29,360,043
Less Accumulated Depreciation	(297,452,710)	(282,837,613)	(14,615,098)
Land	1,110,998	254,288	856,710
Construction Work in Progress	120,520,621	81,877,561	38,643,060
Property, Plant and Equipment, net	441,788,712	387,543,997	54,244,715
Other noncurrent assets			
Restricted cash (Schedule G)	238,383,415	285,277,784	(46,894,369)
Investments (Schedule G)	39,031,619	41,029,262	(1,997,644)
Other Prepaid Expenses	744,748	652,000	92,748
Total other noncurrent assets	278,159,782	326,959,047	(48,799,265)
TOTAL ASSETS	807,801,025	790,076,022	17,725,002
Deferred outflows of resources:			
Debt defeasance loss on refunding	1,711,199	1,878,602	(167,403)
Deferred outflows from pension	3,518,723	4,668,010	(1,149,288)
Total Assets and Deferred Outflows of Resources	**813,030,947**	**796,622,635**	**16,408,312**
LIABILITIES AND NET ASSETS			
Current Liabilities:			
Current maturities of long-term debt			
-Series 2010 Bond	1,655,000	1,655,000	-
-Series 2014 Refunding	3,385,000	3,385,000	-
-Notes Payable	2,873,988	2,873,988	-
Accounts Payable -Trade	4,135,747	4,909,146	(773,399)
Accrued Expense	42,126	42,126	0
Interest Payable	4,460,851	6,748,638	(2,287,787)
Accrued Payroll and Employee Benefits	2,269,860	1,692,622	577,238
Accrued Annual Leave	1,748,665	1,641,497	107,168
Current portion of employee annual leave	524,652	548,845	(24,193)
Contractors' Payable	6,427,759	3,436,908	2,990,851
Customer and Other Deposits	2,127,255	2,228,235	(100,980)
Total Current Liabilities	29,650,901	29,162,004	488,897
Long Term Debt, less current maturities			
Series 2010 Revenue Bond	112,870,000	114,525,000	(1,655,000)
Series 2013 Revenue Bond	172,630,000	172,630,000	-
Series 2014 Refunding	72,610,000	75,995,000	(3,385,000)
Series 2016 Revenue Bond	143,310,000	143,310,000	-
Unamortized Discount - Bond 2010	(1,874,248)	(1,948,205)	73,957
Unamortized Discount - Bond 2013	(1,343,009)	(1,389,850)	46,841
Unamortized Premium - Bond 2014	4,826,912	5,071,307	(244,396)
Unamortized Premium - Bond 2016	17,313,600	17,870,470	(556,870)
Notes Payable	5,998,196	8,578,203	(2,580,007)
Unfunded Ret Liability (GASB 67/68)	35,756,378	38,195,938	(2,439,560)
Employee Annual Leave, Less Current Portion	847,981	887,084	(39,104)
TOTAL LIABILITIES	592,596,710	602,886,951	(10,290,241)
Net Assets	**220,434,237**	**193,735,684**	**26,698,554**
Total Liabilities and Net Assets	**813,030,947**	**796,622,635**	**16,408,312**

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited) **SCHEDULE B**
Comparative Budget vs. Actual for the period ending August 31, 2017

	Month to Date			Variance
	Budget August-17	Encumbered August-17	Actual (Unaudited) August-17	Increase / (Decrease)
OPERATING REVENUES				
Water Revenues	5,678,548		5,138,203	(540,345)
Wastewater Revenues	3,284,461		3,161,132	(123,329)
Legislative Surcharge	288,387		266,501	(21,886)
Other Revenues	43,750		42,408	(1,342)
System Development Charge	133,333		50,234	(83,099)
Total Operating Revenues	9,428,479		8,658,477	(770,001)
OPERATING AND MAINTENANCE EXPENSES				
Water Purchases	676,391		664,992	(11,399)
Power Purchases	1,121,804		1,118,703	(3,101)
Total Utility Costs	1,798,195		1,783,695	(14,499)
Salaries and Wages	1,586,470		1,519,647	(66,824)
Pension and Benefits	524,585		280,516	(244,069)
Total Salaries and Benefits	2,111,055		1,800,163	(310,892)
Capitalized Labor and Benefits	(292,554)		(200,000)	92,554
Net Salaries and Benefits	1,818,501		1,600,163	(218,338)
Administrative and General Expenses				
Sludge removal	146,395	-	146,002	(392)
Chemicals	134,222	-	128,030	(6,192)
Materials & Supplies	204,856	-	201,670	(3,186)
Transportation	31,419	-	29,679	(1,740)
Communications	14,152	-	11,761	(2,391)
Claims	6,084	-	300	(5,784)
Insurance	76,312	-	75,480	(832)
Training & Travel	9,570	-	8,633	(937)
Advertising	7,045	-	3,120	(3,924)
Miscellaneous	95,363	-	82,613	(12,750)
Total Administrative and General Expense	725,416	-	687,289	(38,128)
Regulatory Expense	21,791	-	37,133	15,342
Bad Debts Provision	62,500	-	62,496	(4)
Depreciation Expense	1,529,550	-	1,329,008	(200,542)
Contractual Expense				
Audit & Computer Maint.	78,630	-	65,838	(12,793)
Building rental	38,368	-	36,582	(1,785)
Equipment rental	114,270	-	112,460	(1,810)
Legal	639	-	600	(39)
Laboratory	28,086	-	27,112	(974)
Other	257,892	-	257,037	(855)
Total Contractual Expense	517,885	-	499,629	(18,256)
Retiree Supp. Annuities and health care costs	239,312		228,588	(10,724)
Contribution to Government of Guam	49,500		49,500	-
Total Retiree Benefits	288,812		278,088	(10,724)
Total Operating Expenses	6,762,648	-	6,277,500	(485,149)
Earnings (Loss) from Operations	2,665,830	-	2,380,978	(284,852)
Interest Income-2010/13/14/16 Series Bond	1,029		145,706	144,678
Interest Income-Other Funds	642		21,301	20,660
Interest Income-SDC	-		1,901	1,901
Interest Expense- 2010/13/14/16 Series Bond	(2,223,983)		(2,211,025)	12,959
Interest Expense- ST BOG	(46,124)		(44,322)	1,802
Federal Expenditures	-		-	-
Loss on Asset Disposal	-		-	-
AFUDC	625,000		625,000	-
Amortization of Discount, Premium and Issuance Costs	37,738		61,861	24,123
Loss on Defeasance Bond05 Refunding	(19,483)		(15,218)	4,265
Deferred outflows from pension	(66,928)		(104,481)	(37,552)
Prior Year Adjustment	-		-	-
Total non-operating revenues (expenses)	(1,692,111)	-	(1,519,277)	172,834
Net Income (Loss) before capital contributions	973,720	-	861,701	(112,019)
Capital Contributions				
Grants from US Government	250,000		1,836,566	1,586,566
Grants from GovGuam & Others	-		-	-
Other Contributions	-		-	-
Total Capital Contributions	250,000	-	1,836,566	1,586,566
Change in Net Assets	1,223,720	-	2,698,267	1,474,547
Debt Service Calculation				
Earnings From Operations	2,665,830		2,380,978	
System Development Charge	(133,333)		(50,234)	
Interest/Investment Income	642		21,301	
Depreciation	1,529,550		1,329,008	
Balance Available for Debt Service per Section 6.12	4,062,689		3,681,053	
Working Capital Reserve Available for Debt Service	632,083		932,134	
Transfer to Working Capital Debt Service Reserve	(304,167)		-	
Balance Available for Debt Service inclusive of reserves	4,390,606		4,613,187	
Debt Service				
Principal	420,000		420,000	
Interest	1,626,858		1,626,858	
Total	2,046,858		2,046,858	
Debt Service Coverage (1.25X)- per Section 6.12 (Indenture)	1.98		1.80	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	2.15		2.25	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited) **SCHEDULE C**
Comparative for the period ending August 31, 2017 and 2016

	Month to Date		Variance
	Actual (Unaudited) August-17	Actual (Audited) August-16	Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	5,138,203	5,361,643	(223,440)
Wastewater Revenues	3,161,132	3,102,398	58,733
Legislative Surcharge	266,501	241,527	24,974
Other Revenues	42,408	43,325	(917)
System Development Charge	50,234	119,028	(68,793)
Total Operating Revenues	8,658,477	8,867,921	(209,443)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	664,992	531,170	133,822
Power Purchases	1,118,703	935,490	183,213
Total Utility Costs	1,783,695	1,466,660	317,035
Salaries and Wages	1,519,647	1,333,993	185,654
Pension and Benefits	280,516	454,904	(174,388)
Total Salaries and Benefits	1,800,163	1,788,897	11,266
Capitalized Labor and Benefits	(200,000)	(248,363)	48,363
Net Salaries and Benefits	1,600,163	1,540,534	59,629
Administrative and General Expenses			
Sludge removal	146,002	130,423	15,579
Chemicals	128,030	186,596	(58,565)
Materials & Supplies	201,670	103,711	97,959
Transportation	29,679	47,876	(18,197)
Communications	11,761	10,265	1,496
Claims	300	10,618	(10,318)
Insurance	75,480	101,111	(25,631)
Training & Travel	8,633	12,457	(3,824)
Advertising	3,120	15,907	(12,787)
Miscellaneous	82,613	68,429	14,184
Total Administrative and General Expense	687,289	687,393	(104)
Regulatory Expense	37,133	27,104	10,028
Bad Debts Provision	62,496	86,193	(23,697)
Depreciation Expense	1,329,008	1,279,008	50,000
Contractual Expense			
Audit & Computer Maint.	65,838	86,467	(20,630)
Building rental	36,582	33,279	3,304
Equipment rental	112,460	58,162	54,298
Legal	600	362	238
Laboratory	27,112	10,234	16,878
Other	257,037	154,589	102,448
Total Contractual Expense	499,629	343,094	156,535
Retiree Supp. Annuities and health care costs	228,588	230,355	(1,767)
Contribution to Government of Guam	49,500	48,667	833
Total Retiree Benefits	278,088	279,022	(934)
Total Operating Expenses	6,277,500	5,709,007	568,493
Earnings (Loss) from Operations	2,380,978	3,158,914	(777,936)
Interest Income-2010/13/14/16 Series Bond	145,706	2,083	143,624
Interest Income-Other Funds	21,301	1,281	20,020
Interest Income-SDC	1,901	1,896	5
Interest Expense- 2010/13/14/16 Series Bond	(2,211,025)	(1,994,375)	(216,650)
Interest Expense- ST BOG	(44,322)	(59,096)	14,773
Federal Expenditures	-	(88,189)	88,189
Loss on Asset Disposal	-	(4,150)	4,150
AFUDC	625,000	1,142,370	(517,370)
Amortization of Discount, Premium and Issuance Costs	61,861	(160,812)	222,672
Loss on Defeasance Bond05 Refunding	(15,218)	(19,483)	4,265
Deferred outflows from pension	(104,481)	(7,452)	(97,029)
Prior Year Adjustment	-	(51,397)	51,397
Total non-operating revenues (expenses)	(1,519,277)	(1,237,323)	(281,954)
Net Income (Loss) before capital contributions	861,701	1,921,591	(1,059,890)
Capital Contributions			
Grants from US Government	1,836,566	434,254	1,402,312
Grants from GovGuam & Others	-	23,151	(23,151)
Other Contributions	-	-	-
Total Capital Contributions	1,836,566	457,405	1,379,161
Change in Net Assets	2,698,267	2,378,996	319,270
Debt Service Calculation			
Earnings From Operations	2,380,978	3,158,914	
System Development Charge	(50,234)	(119,028)	
Interest/Investment Income	21,301	1,281	
Depreciation	1,329,008	1,279,008	
Balance Available for Debt Service per Section 6.12	3,681,053	4,320,176	
Working Capital Reserve Available for Debt Service	932,134	382,083	
Transfer to Working Capital Debt Service Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	4,613,187	4,702,259	
Debt Service			
Principal	420,000	409,167	
Interest	1,626,858	1,442,950	
Total	2,046,858	1,852,116	
Debt Service Coverage (1.25X)- per Section 6.12 (Indenture)	1.80	2.33	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	2.25	2.54	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited) **SCHEDULE D**
Comparative Budget vs. Actual for the period ending August 31, 2017

	Budget August-17	Year to Date Encumbered August-17	Year to Date Actual (Unaudited) August-17	Variance Increase / (Decrease)
OPERATING REVENUES				
Water Revenues	62,464,023		57,679,055	(4,784,968)
Wastewater Revenues	36,129,066		33,744,260	(2,384,806)
Legislative Surcharge	3,172,257		2,894,253	(278,004)
Other Revenues	481,250		510,812	29,562
System Development Charge	1,466,667		811,049	(655,618)
Total Operating Revenues	103,713,264		95,639,429	(8,073,834)
OPERATING AND MAINTENANCE EXPENSES				
Water Purchases	7,440,296		6,713,406	(726,890)
Power Purchases	11,679,844		11,001,203	(678,641)
Total Utility Costs	19,120,140		17,714,609	(1,405,531)
Salaries and Wages	17,451,173		15,405,305	(2,045,868)
Pension and Benefits	6,573,430		2,819,445	(3,753,986)
Total Salaries and Benefits	24,024,603		18,224,750	(5,799,853)
Capitalized Labor and Benefits	(3,218,097)		(2,200,000)	1,018,097
Net Salaries and Benefits	20,806,506		16,024,750	(4,781,757)
Administrative and General Expenses				
Sludge removal	1,918,341	382,554	1,534,806	(981)
Chemicals	2,257,442	154,603	1,926,943	(175,896)
Materials & Supplies	1,695,876	192,404	1,500,873	(2,600)
Transportation	785,611	321,351	398,327	(65,933)
Communications	155,670	-	118,497	(37,173)
Claims	119,122	-	115,400	(3,723)
Insurance	1,488,428	-	1,011,753	(476,676)
Training & Travel	178,268	-	177,853	(415)
Advertising	102,490	-	97,717	(4,772)
Miscellaneous	1,132,596	24,147	788,844	(319,604)
Total Administrative and General Expense	9,833,845	1,075,059	7,671,013	(1,087,773)
Regulatory Expense	239,696	-	231,280	(8,416)
Bad Debts Provision	687,500	-	687,444	(56)
Depreciation Expense	16,825,050	-	14,619,088	(2,205,962)
Contractual Expense				
Audit & Computer Maint.	1,046,934	-	999,769	(47,165)
Building rental	422,044	-	402,096	(19,948)
Equipment rental	617,967	-	616,827	(1,140)
Legal	7,026	-	4,969	(2,058)
Laboratory	110,949	25,447	75,143	(10,359)
Other	1,494,209	-	1,492,391	(1,818)
Total Contractual Expense	3,699,130	25,447	3,591,195	(82,488)
Retiree Supp. Annuities and health care costs	2,632,428		2,538,758	(93,670)
Contribution to Government of Guam	544,835		544,500	(335)
Total Retiree Benefits	3,177,263	-	3,083,258	(94,005)
Total Operating Expenses	74,389,130	1,100,506	63,622,636	(9,665,988)
Earnings (Loss) from Operations	29,324,134	(1,100,506)	32,016,793	1,592,153
Interest Income-2010/13/14/16 Series Bond	11,315		633,437	622,121
Interest Income-Other Funds	7,060		97,301	90,241
Interest Income-SDC	-		19,407	19,407
Interest Expense- 2010/13/14/16 Series Bond	(24,463,818)		(24,437,900)	25,917
Interest Expense- ST BOG	(507,365)		(517,107)	(9,742)
Federal Expenditures	-		(256,661)	(256,661)
Loss on Asset Disposal	-		(20,949)	(20,949)
AFUDC	6,875,000		6,875,000	-
Amortization of Discount, Premium and Issuance Costs	415,113		680,468	265,355
Loss on Defeasance Bond05 Refunding	(214,313)		(167,403)	46,910
Deferred outflows from pension	(736,210)		(1,149,287)	(413,077)
Prior Year Adjustment	-		(566,781)	(566,781)
Total non-operating revenues (expenses)	(18,613,217)	-	(18,810,476)	(197,259)
Net Income (Loss) before capital contributions	10,710,916	(1,100,506)	13,206,317	1,394,894
Capital Contributions				
Grants from US Government	2,750,000		13,490,351	10,740,351
Grants from GovGuam & Others	-		1,886	1,886
Other Contributions	-		-	-
Total Capital Contributions	2,750,000	-	13,492,237	10,742,237
Change in Net Assets	13,460,916	(1,100,506)	26,698,553	12,137,131
Debt Service Calculation				
Earnings From Operations	29,324,134		32,016,793	
System Development Charge	(1,466,667)		(811,049)	
Interest/Investment Income	7,060		97,301	
Depreciation	16,825,050		14,619,088	
Balance Available for Debt Service per Section 6.12	44,689,577		45,922,133	
Working Capital Reserve Available for Debt Service	6,952,917		10,253,476	
Transfer to Working Capital Debt Service Reserve	(3,345,833)		-	
Balance Available for Debt Service inclusive of reserves	48,296,661		56,175,608	
Debt Service				
Principal	4,620,000		4,620,000	
Interest	17,895,443		17,895,443	
Total	22,515,443		22,515,443	
Debt Service Coverage (1.25X)- per Section 6.12 (Indenture)	1.98		2.04	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	2.15		2.49	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited)
Comparative for the period ending August 31, 2017 and 2016

SCHEDULE E

	Year to Date ACTUAL (Unaudited) August-17	ACTUAL (Audited) August-16	Variance Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	57,679,055	58,978,071	(1,299,016)
Wastewater Revenues	33,744,260	34,126,382	(382,122)
Legislative Surcharge	2,894,253	2,656,798	237,455
Other Revenues	510,812	476,574	34,238
System Development Charge	811,049	1,309,304	(498,255)
Total Operating Revenues	95,639,429	97,547,129	(1,907,700)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	6,713,406	5,842,865	870,541
Power Purchases	11,001,203	10,290,394	710,809
Total Utility Costs	17,714,609	16,133,259	1,581,350
Salaries and Wages	15,405,305	14,673,921	731,384
Pension and Benefits	2,819,445	5,003,947	(2,184,502)
Total Salaries and Benefits	18,224,750	19,677,868	(1,453,118)
Capitalized Labor and Benefits	(2,200,000)	(2,731,995)	531,995
Net Salaries and Benefits	16,024,750	16,945,873	(921,123)
Administrative and General Expenses			
Sludge removal	1,534,806	1,434,656	100,150
Chemicals	1,926,943	2,052,551	(125,608)
Materials & Supplies	1,500,873	1,140,824	360,049
Transportation	398,327	526,634	(128,307)
Communications	118,497	112,913	5,584
Claims	115,400	116,795	(1,395)
Insurance	1,011,753	1,112,216	(100,464)
Training & Travel	177,853	137,024	40,829
Advertising	97,717	174,982	(77,265)
Miscellaneous	788,844	752,722	36,122
Total Administrative and General Expense	7,671,013	7,561,318	109,695
Regulatory Expense	231,280	298,148	(66,868)
Bad Debts Provision	687,444	948,118	(260,674)
Depreciation Expense	14,619,088	14,069,093	549,995
Contractual Expense			
Audit & Computer Maint.	999,769	951,142	48,627
Building rental	402,096	366,065	36,031
Equipment rental	616,827	639,781	(22,953)
Legal	4,969	3,986	983
Laboratory	75,143	112,576	(37,433)
Other	1,492,391	1,700,481	(208,090)
Total Contractual Expense	3,591,195	3,774,029	(182,834)
Retiree Supp. Annuities and health care costs	2,538,758	2,533,907	4,851
Contribution to Government of Guam	544,500	535,333	9,167
Total Retiree Benefits	3,083,258	3,069,241	14,017
Total Operating Expenses	63,622,636	62,799,077	823,559
Earnings (Loss) from Operations	32,016,793	34,748,052	(2,731,259)
Interest Income-2010/13/14/16 Series Bond	633,437	22,908	610,528
Interest Income-Other Funds	97,301	14,096	83,205
Interest Income-SDC	19,407	20,851	(1,444)
Interest Expense- 2010/13/14/16 Series Bond	(24,437,900)	(21,938,125)	(2,499,775)
Interest Expense- ST BOG	(517,107)	(650,051)	132,944
Federal Expenditures	(256,661)	(970,074)	713,413
Loss on Asset Disposal	(20,949)	(45,646)	24,698
AFUDC	6,875,000	12,566,071	(5,691,071)
Amortization of Discount, Premium and Issuance Costs	680,468	(1,768,928)	2,449,396
Loss on Defeasance Bond05 Refunding	(167,403)	(214,313)	46,910
Deferred outflows from pension	(1,149,287)	(81,969)	(1,067,319)
Prior Year Adjustment	(566,781)	(565,370)	(1,411)
Total non-operating revenues (expenses)	(18,810,476)	(13,610,549)	(5,199,927)
Net Income (Loss) before capital contributions	13,206,317	21,137,503	(7,931,186)
Capital Contributions			
Grants from US Government	13,490,351	4,776,791	8,713,560
Grants from GovGuam & Others	1,886	254,666	(252,780)
Other Contributions	-	-	-
Total Capital Contributions	13,492,237	5,031,457	8,460,780
Change in Net Assets	26,698,553	26,168,960	529,594
Debt Service Calculation			
Earnings From Operations	32,016,793	34,748,052	
System Development Charge	(811,049)	(1,309,304)	
Interest/Investment Income	97,301	14,096	
Depreciation	14,619,088	14,069,093	
Balance Available for Debt Service per Section 6.12	45,922,133	47,521,937	
Working Capital Reserve Available for Debt Service	10,253,476	4,202,917	
Transfer to Working Capital Debt Service Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	56,175,608	51,724,853	
Debt Service			
Principal	4,620,000	4,500,833	
Interest	17,895,443	15,872,445	
Total	22,515,443	20,373,279	
Debt Service Coverage (1.25X)- per Section 6.12 (Indenture)	2.04	2.33	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	2.49	2.54	

SCHEDULE F

Bond Compliance		**($$$) Per Indenture**	**As of 08/31/17 ($$$) Bond 2010/2013/2014/2016**
• Operation and Maintenance Fund-BOG	*Equivalent to 55 days of the annual O&M budget less depreciation*	$10.5M	$10.5M
• Bond Reserve Fund - US Bank	*Fully funded- Principal and Interest (Bond Series 2010, 2013, 2014 Refunding and 2016)*	$34.9M	$34.9M
• Operation, Maintenance, Renewal and Replacement Reserve Fund-BOG Trust	*Equivalent to 1/4 of the annual O&M budget & CIP budget to be funded in 5 years ($2M/year)*	$17.4M	$17.4M
• Capital Improvement Fund	*Balance remaining in the Revenue Fund after the foregoing deposits*	$3.9K	$4.5K
• Capitalized Interest Fund			$1.8M

GUAM WATERWORKS AUTHORITY
Restricted and Unrestricted Cash Summary
FY 2017

SCHEDULE G

Description	Unaudited August 31, 2017	Audited September 30, 2016	Increase (Decrease)
UNRESTRICTED			
Change Fund	2,000	2,000	0
Petty Cash	5,000	5,000	0
BOG - General Fund	5,235,998	8,126,177	(2,890,179)
BOG - PRN Payroll	30,039	24,253	5,786
Sub-total Unrestricted	5,273,038	8,157,430	(2,884,393)
RESTRICTED			
BOG - Credit Card-Sweep	-	-	0
BOG - On Line Payment	-	-	0
BOG - Sweep Account	-	76	(76)
Bank of Hawaii	82,481	121,322	(38,841)
ANZ Bank	978	229	749
First Hawaiian Bank	11,043	47,741	(36,698)
Bank Pacific	11,434	14,194	(2,759)
Community First FCU	4,338	4,638	(300)
BOG - Customer Refunds	1,832,361	1,431,631	400,730
Bank Pacific - Surcharge	188,861	166,763	22,099
Bank Pacific - Escrow Deposit	665,955	845,734	(179,779)
BOG Emergency Reserve Fund	6,121	6,114	7
BOG - Revenue Trust	328,988	595,751	(266,763)
BOG Revenue Trust Fund	7,246,992	8,182,472	(935,480)
BOG Capital Improvement Fund-Bond	4,500	3,933	567
BOG Capital Improvement Revenue Fund	3,740,208	-	3,740,208
BOG-O & M Reserve	13,029,350	4,050,319	8,979,031
BOG-Debt Service Reserve	11,211,546	11,185,610	25,936
BOG-CAPEX Reserve	11,636,447	8,710,383	2,926,064
BOG Sewer Hookup Revolving Fund	63,525	62,132	1,393
BOG Short Term Loan DSF	-	-	0
BOG Subord. Sec. Fund	1,125,118	859,233	265,885
BOG Operation and Maintenance Fund	3,083,482	3,083,482	0
	54,273,729	39,371,755	14,901,974
BOG - SDC Deposit	1,911,061	1,064,792	846,269
BOG - SDC CDs	8,000,000	8,000,000	0
Total Restricted	64,184,790	48,436,547	15,748,243
Reserve Funds			
BOG Series 05 OMRRRF Fund	17,423,213	17,423,213	0
BOG Series 10 Construction Fund	9,403,468	11,725,749	(2,322,281)
BOG Series 13 Construction Fund	75,551,537	107,622,618	(32,071,080)
BOG Series 13 CAP I Fund	-	-	0
BOG Series 14 Refunding Construction Fund	812,805	820,529	(7,724)
BOG Series 16 Construction Fund	133,410,367	138,748,131	(5,337,764)
BOG Series 16 Cap Int Fund	1,782,025	8,937,545	(7,155,520)
BOG Series 16 COI Fund	-	-	0
Total Restricted - Held by Trustee	238,383,415	285,277,784	(46,894,369)
USB Series 2010 Debt Service Fund	1,347,531	2,016,414	(668,883)
USB Series 2010 Debt Service Reserve Fund	7,566,460	7,566,460	0
USB Series 2013 Debt Service Fund	1,558,552	2,333,083	(774,531)
USB Series 2013 Debt Service Reserve Fund	12,031,688	12,031,688	0
USB Series 2014 Refunding Debt Service Fund	1,198,640	1,791,266	(592,626)
USB Series 2014 Refunding Debt Service Reserve Func	7,737,571	7,707,628	29,943
USB Series 2016 Debt Service Fund	130	-	130
USB Series 2016 Debt Service Reserve Fund	7,591,047	7,582,725	8,322
Total Investments	39,031,619	41,029,262	(1,997,644)
Total Restricted and Unrestricted Cash	346,872,861	382,901,023	(36,028,162)

SCHEDULE H

Guam Waterworks Authority **Statement of Cash Flows (Unaudited)** **FY 2017**	**YTD** **Aug-17**
Increase (decrease) in cash	
Cash flows from operating activities:	
Cash received from trade and others	93,763,656
Cash payments to suppliers/contractors for goods and services	(29,275,331)
Cash payments to employees for services	(18,613,226)
Net cash provided by operating activities	45,875,099
Cash flows from capital and related financing activities:	
Contributed capital received (grants)	13,347,144
Acquisition of utility plant	(58,997,953)
Repayment of Long Term Debt	(8,935,484)
Interest expense	(27,643,383)
Net cash provided by (used in) capital and related financing activities	(82,229,676)
Cash flows from investing activities:	
Transfers from (to) restricted fund	32,739,447
Interest income received	730,737
Net cash provided by investing activities	33,470,184
Net increase (decrease) in cash	(2,884,393)
Unrestricted cash at beginning of the period	8,157,430
Unrestricted cash at end of period	5,273,038
Reconciliation of operating loss to net cash provided by operating activities:	
Operating Income (loss)	32,371,917
Adjustments to reconcile to net cash provided by operating activities:	
Depreciation expense	14,619,088
Other Expense/income	
(Increase) decrease in assets:	
Accounts receivable	(275,895)
Materials and supplies inventory	745,991
Other Assets	(43,248)
Increase (decrease) in liabilities:	
Accounts payable, Contractors, Retention & Escrow Deposit	(772,611)
Accrued payroll	(669,163)
Customer deposits	(100,980)
Net cash provided by operating activities	45,875,099

Guam Waterworks Authority
Accounts Receivable - Government
As of August 31, 2017

SCHEDULE I

		AGING				
Customer Name	**No of Accounts**	**Current Balance**	**31-60 days**	**61-90 days**	**91-120 days**	**Over 120 days**	**Outstanding Bal.**
GUAM POWER AUTHORITY	25	124,616	104,975	32,099	64,134	67,269	393,093
GUAM INT'L AIRPORT AUTHORITY	4	28,532	44,012	29,386	24,840	125,995	252,765
PORT AUTHORITY OF GUAM	2	35,716	37,035	27,742	-	-	100,493
UNIVERSITY OF GUAM	2	6,956	-	-	-	-	6,956
GUAM MEMORIAL HOSPITAL AUTHORITY	2	2,269	-	-	-	-	2,269
GUAM HOUSING & URBAN RENEWAL AUTHORITY	8	1,801	-	-	-	92	1,893
GUAM HOUSING CORPORATION	1	29	-	-	-	-	29
AUTONOMOUS AGENCIES	**44**	**199,918**	**186,022**	**89,227**	**88,974**	**193,356**	**757,497**
DEPT OF EDUCATION	51	289,390	136,534	51,951	8,336	161,799	648,011
DEPT OF CORRECTIONS	8	127,213	108,061	-	-	-	235,274
DEPT OF PARKS & RECREATION	21	50,866	36,425	21,614	6,274	114,852	230,031
DEPT OF PUBLIC HEALTH & SOCIAL SERVICES	7	3,126	941	1,555	333	103,380	109,334
MAYORS' COUNCIL OF GUAM	46	17,085	334	7,886	-	-	25,304
DEPT OF CHAMORRO AFFAIRS	7	8,126	15,826	-	-	-	23,952
GUAM POLICE DEPARTMENT	5	9,937	8,747	-	-	-	18,684
GUAM FIRE DEPARTMENT	11	9,423	2,457	-	-	-	11,880
DEPT OF AGRICULTURE	7	5,894	-	-	-	-	5,894
DEPT OF PUBLIC WORKS	11	3,314	-	-	-	-	3,314
OFFICE OF THE GOVERNOR	2	2,714	-	-	-	-	2,714
SANCTUARY INC	1	1,642	-	-	-	-	1,642
DIVISION OF SENIOR CITIZENS, DPH&SS	2	1,283	197	154	-	-	1,634
DEPT OF ADMINISTRATION	2	430	1,103	-	-	-	1,533
DEPT OF YOUTH AFFAIRS	4	1,387	-	-	-	-	1,387
DEPT OF MENTAL HEALTH AND SUBTANCE	1	1,339	-	-	-	-	1,339
GHURA-AGAFU GUMAS PARK	1	33	119	278	34	292	755
GUAM VETERANS AFFAIRS OFFICE	2	434	-	-	-	-	434
GUAM ENVIROMENTAL PROTECTION AGENCY	2	208	-	-	-	-	208
GUAM PUBLIC LIBRARY	4	159	-	-	-	-	159
GUAM LEGISLATURE	2	134	-	-	-	-	134
THE OFFICE OF THE DEDEDO MAYOR	1	92	-	-	-	-	92
MERIZO MAYOR	1	89	-	-	-	-	89
GUAM SOLID WASTE AUTHORITY	1	23	-	-	-	-	23
LINE AGENCIES	**200**	**534,341**	**310,743**	**83,438**	**14,976**	**380,324**	**1,323,822**
TOTAL August 31, 2017	**244**	**734,259**	**496,765**	**172,665**	**103,950**	**573,680**	**2,081,319**
TOTAL September 30, 2016	**243**	**1,516,081**	**325,256**	**94,308**	**95,259**	**717,692**	**2,748,597**
% INCREASE/ (DECREASE)	**0%**	**-52%**	**53%**	**83%**	**9%**	**-20%**	**-24%**

GUAM WATERWORKS AUTHORITY
2010 Series Bond Project Status
As of Aug. 31, 2017

SCHEDULE J

PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	EXPENDITURES AS OF 08/31/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 08/31/17
Ground Water Disinfection	$ -	$ 500,000	$ 438,141	$ 61,859	$ 500,000	$ 0	$ 61,859
"A" Series Well Transmission Line	$ 600,000	$ 518,144	$ 474,434	$ 1,274	$ 475,709	$ 42,435	$ 43,710
Water Booster Pump Station	$ 500,000	$ 500,000	$ 418,844	$ 81,156	$ 500,000	$ (0)	$ 81,156
Meter Replacement Program	$ 2,500,000	$ 10,300,000	$ 10,254,220	$ 19,409	$ 10,273,628	$ 26,372	$ 45,780
Barrigada Tank Repair/Replacement	$ -	$ 5,450,000	$ 5,442,302	$ 7,698	$ 5,450,000	$ 0	$ 7,698
Leak Detection		$ 200,000	$ -	$ 200,000	$ 200,000	$ -	$ 200,000
Potable Water System Planning	$ 200,000	$ 200,000	$ 179,638	$ 20,362	$ 200,000	$ -	$ 20,362
Implement Ground Water Rule		$ 1,700,000	$ 1,499,464	$ 200,535	$ 1,700,000	$ 1	$ 200,536
Brigade II (Ugum Lift) BPS Upgrade	$ 1,200,000	$ 1,700,000	$ 83,395	$ 202,199	$ 285,595	$ 1,414,405	$ 1,616,605
Deep Well Rehabilitation	$ 548,000	$ 548,000	$ 548,000	$ -	$ 548,000	$ -	$ -
New Deep Wells at Down Hard	$ 3,773,000	$ 638,252	$ 485,743	$ -	$ 485,743	$ 152,509	$ 152,509
Rehabilitation of Asan Springs	$ 900,000	$ 900,000	$ 188,771	$ 152,068	$ 340,838	$ 559,162	$ 711,229
Master Meters	$ 1,600,000	$ 1,600,000	$ 1,421,267	$ 68,690	$ 1,489,957	$ 110,043	$ 178,733
Ugum Water Treatment Plant Intake	$ 3,670,000	$ 700,000	$ 543,615	$ 156,385	$ 700,000	$ -	$ 156,385
Water Wells	$ 2,000,000	$ -	$ -		$ -	$ -	$ -
Water Distribution System	$ 384,000	$ 3,174,748	$ 3,174,748	$ -	$ 3,174,748	$ (0)	$ (0)
Pressure Zone Realignment /	$ 3,550,000	$ -	$ -		$ -	$ -	$ -
Northern System Water Distribution	$ 2,725,000	$ -	$ -	$ -	$ -	$ -	$ -
Central Water Distribution System 2005	$ 1,200,000	$ 900,000	$ 683,214	$ 91,788	$ 775,002	$ 124,998	$ 216,786
Southern Water Distribution System	$ 1,800,000	$ -	$ -		$ -	$ -	$ -
Mechanical/Electrical Equipment	$ 1,360,000	$ 1,200,000	$ 1,079,495	$ 120,505	$ 1,200,000	$ (0)	$ 120,505
Water Reservoir Internal/External	$ 500,000	$ 2,000,000	$ 855,242	$ 584,234	$ 1,439,476	$ 560,524	$ 1,144,758
Water Reservoir Internal/External	$ 2,400,000	$ -	$ -		$ -	$ -	$ -
Water System Reservoirs 2005 Improvements	$ 11,697,000	$ 1,050,000	$ 1,050,000		$ 1,050,000	$ 0	$ 0
Distribution System Upgrades	$ 3,182,000	$ 474,160	$ 451,462	$ 22,698	$ 474,160	$ 0	$ 22,698
Ugum Water Treatment Plant Reservoir	$ 3,672,000	$ -	$ -		$ -	$ -	$ -
Water Audit Program & Water Loss Control Plan		$ 100,000	$ 15,031	$ 63,428	$ 78,459	$ 21,541	$ 84,970
Production Plan / Reduce Navy Purchases		$ 100,000	$ 94,286	$ 5,714	$ 100,000	$ -	$ 5,714
Hydraulic Asessment of Tank		$ 500,000	$ 497,004	$ 2,996	$ 500,000	$ -	$ 2,996
Agana Heights & Chaot Tanks		$ 4,700,000	$ 4,327,370	$ 372,630	$ 4,700,000	$ -	$ 372,630
Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ 1,900,000	$ 1,750,355	$ 97,659	$ 1,848,013	$ 51,987	$ 149,645
Tank Major Repair Yigo#1 Mangilao#2 Agat#2		$ -			$ -	$ -	$ -
Assessment of malojloj Elevetad & Yigo Elevated		$ 200,000	$ 200,000	$ -	$ 200,000	$ -	$ -
Public Water System Asser Inventory/Condition Assesment		$ 100,000	$ 96,554	$ 3,446	$ 100,000	$ -	$ 3,446
Public Water System GIS & Mapping		$ 50,000	$ 50,000	$ -	$ 50,000	$ -	$ -
		$ -			$ -	$ -	$ -
Wastewater System Planning	$ 1,500,000	$ 1,500,000	$ 1,465,858	$ 8,142	$ 1,474,000	$ 26,000	$ 34,142
Wastewater Vehicles	$ 235,000	$ 235,000	$ 209,795	$ 25,205	$ 235,000	$ 0	$ 25,205
NDWWTP - Chlorine Tanks	$ 250,000	$ 250,000	$ 250,000		$ 250,000	$ -	$ -
Tumon Bay Sewer Upgrades	$ 100,000	$ -	$ -		$ -	$ -	$ -
Wastewater Collection System Repl/Rehab		$ 1,105,000	$ 718,036	$ 283,287	$ 1,001,323	$ 103,677	$ 386,964
Facilities Plan/Design for Baza Gardens WWTP	$ 1,250,000	$ 1,250,000	$ 1,239,250	$ 10,750	$ 1,250,000	$ -	$ 10,750
Facilities Plan/Design for Agat-Santa Rita WWTP	$ 900,000	$ 899,630	$ 881,749	$ 17,881	$ 899,630	$ -	$ 17,881
Priority 1 Sewer Upgrades – Baza Gardens WWTP	$ 650,000	$ -	$ -		$ -	$ -	$ -
Baza Gardens STP Replacement	$ 3,567,000	$ 1,301,947	$ 268,150	$ 48,850	$ 317,000	$ 984,947	$ 1,033,797
Facilities Plan/Design for Umatac Merizo WWTP		$ 900,000	$ 646,050	$ 24,740	$ 670,791	$ 229,209	$ 253,950
Agat/Santa Rita STP Replacement	$ 2,968,000	$ 2,218,000	$ 2,215,591	$ 387	$ 2,215,978	$ 2,022	$ 2,409
Northern District WWTP Primary Treatment Upgrades	$ -	$ 11,750,000	$ 11,363,439	$ 211,161	$ 11,574,600	$ 175,400	$ 386,561
Biosolids Management Plan		$ 200,000	$ 196,414	$ 3,586	$ 200,000	$ -	$ 3,586
Agana WWTP Interim Measures	$ -	$ 11,500,000	$ 11,242,386	$ 57,614	$ 11,300,000	$ 200,000	$ 257,614
I&I SSES Southern		$ 800,000	$ 706,615	$ 93,385	$ 800,000	$ (0)	$ 93,385
I&I SSES Central		$ 850,000	$ 794,325	$ 55,675	$ 850,000	$ -	$ 55,675
I&I SSES Northern		$ -			$ -	$ -	$ -
Umatac Merizo Replacement		$ 250,000	$ 247,431	$ 2,569	$ 250,000	$ -	$ 2,569
Northern District WWTP Secondary Treatment Upgrades		$ 1,000,000					$ 1,000,000
		$ -					
Well Electrical Protection	$ 26,000	$ -	$ -		$ -	$ -	$ -
SCADA Pilot Project	$ 300,000	$ 61,950	$ 19,812	$ 42,138	$ 61,950	$ (0)	$ 42,138
Electrical Upgrade - Water Wells	$ 3,000,000	$ 354,227	$ 335,378	$ 18,849	$ 354,227	$ 0	$ 18,849
Electrical Upgrade - Water Booster	$ 325,000	$ -	$ -		$ -	$ -	$ -
Electrical Upgrade -Water Booster	$ 350,000	$ -	$ -		$ -	$ -	$ -
Electrical Upgrade - Other Water	$ 250,000	$ -			$ -	$ -	$ -
SCADA Improvements – Phase 1	$ 250,000	$ 250,000	$ 193,989	$ 56,011	$ 250,000	$ -	$ 56,011
SCADA Improvements – Phase 2	$ 1,100,000	$ 1,056,986	$ 1,027,424	$ 29,562	$ 1,056,986	$ -	$ 29,562
SCADA Improvements – Phase 3	$ 2,500,000	$ 24,956	$ 24,956	$ -	$ 24,956	$ 0	$ 0
SCADA Improvements – Phase 4	$ 850,000	$ -	$ -		$ -	$ -	$ -
		$ -					
Laboratory Modernization	$ 1,200,000	$ -	$ -		$ -	$ -	$ -
Land Survey	$ 1,500,000	$ 500,000	$ 461,986	$ 37,701	$ 499,687	$ 313	$ 38,014
General Plant Improvements / Water	$ 14,370,000	$ 7,241,000	$ 7,241,000	$ 0	$ 7,241,000	$ 0	$ 0
Interest Earned							$ 53,698
Total Construction Fund (2010 Series Revenue Bond)	**$ 87,402,000**	**$ 87,402,000**	**$ 78,052,230**	**$ 3,564,224**	**$ 81,616,454**	**$ 4,785,546**	**$ 9,403,468**

1.) PUC's Docket 11-01 $29,000,000.00 dated
09/19/11authorized GWA for reallocation
2) PUC's Docket 11-01 Reallocation of $23,246,000.00 dated 07/30/12
3) PUC's Dockect Reallocation dated February 2013

GUAM WATERWORKS AUTHORITY
2013 Series Bond Project Status
As of Aug. 31, 2017

SCHEDULE K

PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	EXPENDITURES AS OF 08/31/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 08/31/17
Santa Rita Springs Booster Pump Rehab Phase II	$ 100,000	$ 100,000	24,098	75,902	$ 100,000	$ -	$ 75,902
"A" Series Well Transmission Line	$ 400,000	$ 400,000	314,479	55,367	$ 369,846	$ 30,154	$ 85,521
Water Booster Pump Station	$ 6,000,000	$ 1,861,000	1,656,428	23,536	$ 1,679,964	$ 181,036	$ 204,572
Meter Replacement Program		$ 999,000	996,532	-	$ 996,532	$ 2,468	$ 2,468
Barrigada Tank Repair/Replacement	$ 6,000,000	$ 4,987,000	4,924,959	62,041	$ 4,987,000	$ 0	$ 62,041
Leak Detection	$ 100,000	$ 20,000	16,916	-	$ 16,916	$ 3,084	$ 3,084
Potable Water System Planning	$ 800,000	$ 624,000	598,825	25,175	$ 624,000	$ -	$ 25,175
Implement Ground Water Rule	$ 1,000,000	$ 1,000,000	1,000,000	-	$ 1,000,000	$ -	$ -
Deep Well Rehabilitation	$ 800,000	$ 200,000	189,930	10,071	$ 200,000	$ (0)	$ 10,070
New Deep Wells at Down Hard	$ 2,000,000	$ 810,000			$ -	$ 810,000	$ 810,000
Master Meters	$ 4,000,000	$ 784,000	531,188	180,872	$ 712,060	$ 71,940	$ 252,812
Ugum Water Treatment Plant Intake	$ 1,000,000	$ 982,000	578,858	280,943	$ 859,801	$ 122,199	$ 403,142
Water Wells	$ 4,200,000	$ 4,200,000	2,274,832	750,914	$ 3,025,746	$ 1,174,254	$ 1,925,168
Water Distribution System	$ 12,000,000	$ 11,151,000	4,366,442	4,438,918	$ 8,805,360	$ 2,345,640	$ 6,784,558
Pressure Zone Realignment /	$ 1,000,000	$ 431,000	321,651	1,074	$ 322,725	$ 108,275	$ 109,349
Mechanical/Electrical Equipment	$ 430,000	$ 430,000	328,686	98,112	$ 426,798	$ 3,202	$ 101,314
Water Reservoir Internal/External	$ 800,000	$ -			$ -	$ -	$ -
Water System Reservoirs 2005 Improvements	$ 21,000,000	$ 13,878,000	8,121,079	4,514,178	$ 12,635,257	$ 1,242,743	$ 5,756,921
Ugum Water Treatment Plant Reservoir	$ 7,000,000	$ 90,000			$ -	$ 90,000	$ 90,000
Agana Heights & Chaot Tanks	$ 4,500,000	$ 3,280,000	233,265	47,022	$ 280,287	$ 2,999,713	$ 3,046,735
Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 13,500,000	$ 11,605,000	847,731	10,757,269	$ 11,605,000	$ 0	$ 10,757,270
Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 8,000,000	$ -			$ -	$ -	$ -
Assessment of maloiloi Elevetad & Yigo Elevated	$ 500,000	$ 485,117	461,813	23,304	$ 485,117	$ -	$ 23,304
Fire Hydrant Replacement Program	$ -	$ -			$ -	$ -	$ -
		$ -					
Wastewater System Planning	$ 800,000	$ 651,000	550,480	100,520	$ 651,000	$ (0)	$ 100,520
Lift Station Upgrades	$ 5,000,000	$ 946,000	561,748	363	$ 562,111	$ 383,889	$ 384,252
Wastewater Collection System Repl/Rehab	$ 6,500,000	$ 780,000	456,050	185,698	$ 641,748	$ 138,253	$ 323,950
Baza Gardens STP Replacement		$ 3,114,883	889,234	2,225,634	$ 3,114,869	$ 15	$ 2,225,649
Facilities Plan/Design for Umatac-Merizo WWTP		$ 473,000	334,938	36,761	$ 371,699	$ 101,301	$ 138,062
Agat/Santa Rita STP Replacement	$ 19,000,000	$ 67,200,000	28,741,830	38,148,771	$ 66,890,601	$ 309,399	$ 38,458,170
Agana WWTP Interim Measures		$ 673,000	569,740	103,261	$ 673,000	$ (0)	$ 103,260
Umatac Merizo Replacement	$ 2,000,000	$ -			$ -	$ -	$ -
		$ -					
Wastewater Pump Station Electrical Upgrade	$ 620,000	$ 620,000	91,348	8,513	$ 99,861	$ 520,139	$ 528,652
Electrical Upgrade - Water Wells	$ 1,500,000	$ 1,500,000	1,480,769	19,230	$ 1,500,000	$ 0	$ 19,231
Electrical Upgrade - Water Booster	$ 325,000	$ 2,000			$ -	$ 2,000	$ 2,000
Electrical Upgrade -Water Booster	$ 350,000	$ 200,000	977	-	$ 977	$ 199,023	$ 199,023
Electrical Upgrade - Other Water	$ 250,000	$ 150,000	60,700	-	$ 60,700	$ 89,300	$ 89,300
SCADA Improvements – Phase 3	$ 1,850,000	$ 923,000	425,984	296,376	$ 722,359	$ 200,641	$ 497,017
SCADA Improvements – Phase 4	$ 500,000	$ -			$ -	$ -	$ -
		$ -					$ -
Laboratory Modernization	$ 1,500,000	$ 1,173,000	1,061,199	110,266	$ 1,171,465	$ 1,535	$ 111,801
Land Survey	$ 2,000,000	$ 2,000	1,038	15	$ 1,053	$ 948	$ 963
General Plant Improvements / Water	$ 2,000,000	$ 2,600,000	1,265,043	1,176,695	$ 2,441,737	$ 158,263	$ 1,334,957
Allowance for COI							$ 275,005
Interest Earned							$ 230,319
Total Construction Fund (2013 Series Revenue Bond)	**$ 139,325,000**	**$ 139,325,000**	**$ 64,278,787**	**$ 63,756,801**	**$ 128,035,588**	**$ 11,289,412**	**$ 75,551,537**

PUC's Docket 14-04 dated February 25, 2014

GUAM WATERWORKS AUTHORITY
2014 Series Refunded Bond Project Status
As of Aug. 31, 2017

SCHEDULE L

PROJECT NAME	ORIGINAL APPROVED PROJECT	ADJUSTED PROJECT COST	EXPENDITURES AS OF 08/31/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	20% PUC AS OF 08/31/17	Construction fund balance AS OF 08/31/17
Agana Treatment Plant	$ 10,475,000	$ 11,065,512	11,065,512	$ -	$ 11,065,512	$ (0)	$ 2,095,000	$ (0)
								$ -
Agana Outfall	$ 5,030,000	$ 10,127,198	10,127,198	$ -	$ 10,127,198	$ 0	$ 1,006,000	$ 0
								$ -
								$ -
Northern District (Outfall)	$ 4,700,000	$ 10,251,423	10,251,423	$ -	$ 10,251,423	$ 0	$ 940,000	$ 0
Northern District WWTP Upgrade		$ 173,681	173,681		$ 173,681	$ -		$ -
Northern Treatment Plant		$ -	-		$ -	$ -		$ -
Baza Gardens Wastewater Treatment Plant	$ 500,000	$ 297,177	297,177	$ -	$ 297,177	$ (0)	$ 100,000	$ (0)
Interim Disinfection Facilities	$ 581,000	$ 3,437,311	3,408,599	$ 28,712	$ 3,437,311	$ (0)	$ 116,200	$ 28,712
						$ -		$ -
Electrical Protection	$ 1,000,000	$ 1,512,483	1,512,483.3	$ -	$ 1,512,483	$ (0)	$ 200,000	$ (0)
Well Vulnerability Reduction	$ 600,000	$ 185,522	185,522	$ -	$ 185,522	$ 0	$ 120,000	$ 0
Old Agat Wastewater Collection (I/I Reductic	$ 2,155,000	$ 1,931,659	1,931,659	$ -	$ 1,931,659	$ (0)	$ 431,000	$ (0)
				$ -		$ -		$ -
Chaot WW Pump Station/Collection System	$ 410,000	$ 399,120	399,120	$ -	$ 399,120	$ -	$ 82,000	$ -
Lift Station Upgrades	$ 230,000	$ 149,895	149,895	$ -	$ 149,895	$ 0	$ 46,000	$ 0
Collection Line Upgrades	$ 200,000	$ 62,755	62,755	$ -	$ 62,755	$ 0	$ 40,000	$ 0
"A" Well Transmission Line	$ 2,413,000	$ 3,833,175	3,790,888	$ 42,287	$ 3,833,175	$ (0)	$ 482,600	$ 42,287
					$ -	$ -		$ -
Santa Rita Springs - Booster Pump Rehab.	$ 648,000	$ 306,841	306,841	-	$ 306,841	$ (0)	$ 129,600	$ (0)
						$ -	$ -	$ -
Fena Bypass Transmission line		$ 160,913	160,913	$ -	$ 160,913	$ (0)	$ -	$ (0)
Storage Additions	$ 950,000	$ -			$ -	$ -	$ 190,000	$ -
Booster Station Upgrades	$ 390,000	$ 66,734	66,734	$ -	$ 66,734	$ -	$ 78,000	$ -
Mangilao Tank Repair	$ 800,000	$ 398,367	397,933	$ 434	$ 398,367	$ (0)	$ 160,000	$ 434
Ugum Tank Replacement	$ 2,500,000	$ -			$ -	$ -	$ 500,000	$ -
Ugum WTPlant Refurbishment ($1.724,970EPA)		$ 6,588,473	6,531,525	$ 56,949	$ 6,588,473	$ (0)		$ 56,948
Barrigada Tank Repair/Replacement	$ 3,000,000	$ 65,019	65,019	$ -	$ 65,019	$ 0	$ 600,000	$ 0
						$ -		$ -
Water Reservoir Condition Assessment		$ 1,250,000	1,207,250.62	$ 42,749	$ 1,250,000	$ 0	$ -	$ 42,749
EarthTech Well Buyout	$ 5,000,000	$ 5,975,000	5,975,000	$ -	$ 5,975,000	$ -	$ 1,000,000	$ -
Water Wastewater Master Plan	$ 4,900,000	$ 4,881,308	4,881,308	$ -	$ 4,881,308	$ 0	$ 980,000	$ 0
Laboratory Modernization	$ 800,000	$ 135,055	135,055	$ -	$ 135,055	$ 0	$ 160,000	$ 0
Land Survey	$ 800,000	$ 577,836	565,670	$ 12,166	$ 577,836	$ 0	$ 160,000	$ 12,166
Ground Water Disinfection		$ -				$ -		$ -
GWUDI Study		$ 262,234	260,430	1,804	$ 262,234	$ -		$ 1,804
						$ -		$ -
Contingency	$ 12,276,023	$ 154	-	$ -	$ -	$ -		$ 732
						$ -		$ -
						$ -		$ -
						$ -		$ -
						$ -		$ -
						$ -		$ -
Vehicles	$ 1,100,000	$ 1,280,000	2,130,305	$ (850,305)	$ 1,280,000	$ -	$ 220,000	$ -
Generation Equipment	$ 700,000	$ 880,000	2,712	$ 877,288	$ 880,000	$ 0		$ 27,033
Leak Detection/Line Replacement	$ 8,200,000	$ 5,988,494	5,988,494	$ -	$ 5,988,494	$ -	$ 1,640,000	$ -
						$ -		$ -
						$ -		$ -
Automated Meter Reading	$ 12,572,063	$ 17,468,359	16,870,522	$ 537,157	$ 17,468,359.32	$ 0	$ 2,514,413	$ 597,837
Total Construction Fund (2014 Series Refu	$ 82,930,086	$ 89,711,698	88,891,990	$ 758,873.38	$ 89,711,543	$ 1	$ 13,990,813	$ 810,703
Interest Earned	$ 6,781,612	$ (0)				$ (0)		$ 2,103
Total Project Cost Funding	**$ 89,711,698**	**$ 89,711,698**	**88,891,990**	**$ 758,873.38**	**$ 89,711,543**	**$ 1**	**$ 13,990,813**	**$ 812,805**

GUAM WATERWORKS AUTHORITY
2016 Series Bond Project Status
As of Aug. 31, 2017

SCHEDULE M

PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	EXPENDITURES AS OF 08/31/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 08/31/17
Water Booster Pump Station	$ 4,139,000	$ 4,139,000			$ -	$ 4,139,000	$ 4,139,000
Meter Replacement Program	$ 4,501,000	$ 4,501,000		150,000.00	$ 150,000	$ 4,351,000	$ 4,501,000
Barrigada Tank Repair/Replacement	$ 1,013,000	$ 1,013,000		-	$ -	$ 1,013,000	$ 1,013,000
Leak Detection	$ 1,180,000	$ 1,180,000		-	$ -	$ 1,180,000	$ 1,180,000
Potable Water System Planning	$ 2,276,000	$ 2,276,000	145,548	317,188.58	$ 462,736	$ 1,813,264	$ 2,130,452
Deep Well Rehabilitation	$ 250,000	$ 250,000		-	$ -	$ 250,000	$ 250,000
New Deep Wells at Down Hard	$ 1,190,000	$ 1,190,000			$ -	$ 1,190,000	$ 1,190,000
Master Meters	$ 3,616,000	$ 3,616,000		151,539.00	$ 151,539	$ 3,464,461	$ 3,616,000
Ugum Water Treatment Plant Intake	$ 18,000	$ 18,000			$ -	$ 18,000	$ 18,000
Water Wells	$ 2,500,000	$ 2,500,000			$ -	$ 2,500,000	$ 2,500,000
Water Distribution System	$ 2,049,000	$ 49,000			$ -	$ 49,000	$ 49,000
Pressure Zone Realignment /	$ 1,141,000	$ 1,141,000			$ -	$ 1,141,000	$ 1,141,000
Mechanical/Electrical Equipment	$ 100,000	$ 100,000			$ -	$ 100,000	$ 100,000
Water Reservoir Internal/External	$ 800,000	$ 800,000			$ -	$ 800,000	$ 800,000
Water System Reservoirs 2005 Improvements	$ 42,350,000	$ 28,350,000	456,038	1,893,343.00	$ 2,349,381	$ 26,000,620	$ 27,893,963
Ugum Water Treatment Plant Reservoir	$ 6,410,000	$ -			$ -	$ -	$ -
Water Audit Program & Water Loss Control Plan	$ 1,000,000	$ 1,000,000				$ 1,000,000	$ 1,000,000
Agana Heights & Chaot Tanks	$ 1,220,000	$ 1,220,000			$ -	$ 1,220,000	$ 1,220,000
Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 1,895,000	$ 1,895,000			$ -	$ 1,895,000	$ 1,895,000
Tank Major Repair Yigo#1 Mangilao#2 Agat#2	$ 10,500,000	$ 7,409,830		1,822,132.80	$ 1,822,133	$ 5,587,697	$ 7,409,830
Fire Hydrant Replacement Program	$ 2,000,000	$ 2,000,000			$ -	$ 2,000,000	$ 2,000,000
						$ -	
Wastewater System Planning	$ 349,000	$ 349,000	28,091	282,274.77	$ 310,366	$ 38,634	$ 320,909
Lift Station Upgrades	$ 2,404,000	$ 2,404,000	17,800	200,000.00	$ 217,800	$ 2,186,200	$ 2,386,200
Wastewater Collection System Repl/Rehab	$ 2,920,000	$ 2,920,000			$ -	$ 2,920,000	$ 2,920,000
Baza Gardens STP Replacement	$ 16,700,000	$ 29,400,170	4,371,801	24,517,904.41	$ 28,889,705	$ 510,465	$ 25,028,369
Facilities Plan/Design for Umatac-Merizo WWTP	$ 527,000	$ 527,000	174,852	61,158.47	$ 236,011	$ 290,989	$ 352,148
Agat/Santa Rita STP Replacement	$ 3,000,000	$ 3,000,000	309,098	348,827.64	$ 657,926	$ 2,342,074	$ 2,690,902
Agana WWTP Interim Measures	$ 827,000	$ 827,000			$ -	$ 827,000	$ 827,000
Umatac Merizo Replacement	$ 8,000,000	$ 20,800,000	196,000	20,574,598.47	$ 20,770,598	$ 29,402	$ 20,604,000
						$ -	
Wastewater Pump Station Electrical Upgrade	$ 100,000	$ 100,000			$ -	$ 100,000	$ 100,000
Electrical Upgrade - Water Wells	$ 650,000	$ 650,000			$ -	$ 650,000	$ 650,000
Electrical Upgrade - Water Booster	$ 323,000	$ 323,000			$ -	$ 323,000	$ 323,000
SCADA Improvements – Phase 3	$ 1,177,000	$ 1,177,000		432,705.00	$ 432,705	$ 744,295	$ 1,177,000
SCADA Improvements – Phase 4	$ 6,500,000	$ 6,500,000			$ -	$ 6,500,000	$ 6,500,000
						$ -	
Laboratory Modernization	$ 1,127,000	$ 1,127,000	849,360	277,639.85	$ 1,127,000	$ -	$ 277,640
Land Survey	$ 1,998,000	$ 1,998,000		1,246,376.27	$ 1,246,376	$ 751,624	$ 1,998,000
General Plant Improvements / Water	$ 2,769,463	$ 2,769,463	120,192	1,357,138.23	$ 1,477,330	$ 1,292,133	$ 2,649,271
Information Technology Integration Improvements	$ 500,000	$ 500,000	244,068	-		$ 500,000	$ 255,932
Interest Earned		$ -					$ 303,751
		$ -					
Total Construction Fund (2016 Series Revenue Bond)	**$ 140,019,463**	**$ 140,019,463**	**$ 6,912,848**	**$ 53,632,826**	**$ 60,301,606**	**$ 79,717,857**	**$ 133,410,366**

GUAM WATERWORKS AUTHORITY
Schedule of Series 2010, 2013, 2014 Refunding and 2016 Bond Bank Accounts
As of August 31, 2017

SCHEDULE N

	8/31/2017
BANK OF GUAM	
BOG - Revenue Account	7,246,992
BOG - Operations and Maintenance Reserve	3,083,482
BOG - Operations, Maintenance, Renewal and Replacement Reserve Fund	17,423,213
BOG - Capital Improvement Fund	3,744,708
BOG - O & M Reserve	13,029,350
BOG - Debt Service Reserve	11,211,546
BOG - CAPEX Reserve	11,636,447
Total BOG Bank Account Balance	**67,375,738**
Series 2010 Bond:	
BOG - Construction Account	9,403,468
USB - Debt Service Fund	1,347,531
USB - Debt Service Reserve Fund	7,566,460
Total Series 2010 Bond Bank Balance	**18,317,459**
Series 2013 Bond:	
BOG - Construction Fund	75,551,537
BOG - Capitalized Interest Fund	-
USB - Debt Service Fund	1,558,552
USB - Debt Service Reserve Fund	12,031,688
Total Series 2013 Bond Bank Balance	**89,141,777**
Series 2014 Refunding Bond:	
BOG - Construction Fund	812,805
USB - Debt Service Fund	1,198,640
USB - Debt Service Reserve Fund	7,737,571
Total Series 2014 Refunding Bond Bank Balance	**9,749,016**
Series 2016 Bond:	
BOG - Construction Account	133,410,367
BOG - Capitalized Interest Fund	1,782,025
BOG - Cost of Issuance Fund	-
USB - Debt Service Fund	130
USB - Debt Service Reserve Fund	7,591,047
Total Series 2016 Bond Bank Balance	**142,783,569**

GUAM WATERWORKS AUTHORITY

SUPPLEMENTAL FINANCIAL INFORMATION

September 20, 2017

GUAM WATERWORKS AUTHORITY
COMPARATIVE SCHEDULE

	ANNUALIZED FY2017 Based on Actual Eleven Months Ending August	PROJECTION FY2018 As filed with PUC June 1	PROJECTION FY2018 Without rate increase
Basic & Non-Lifeline Increase	3.50%	4.00%	0.00%
Lifeline Increase	3.50%	0.00%	0.00%
Legislative Surcharge	3.70%	3.75%	3.75%
Customer Growth	0.00%	0.00%	0.00%
OPERATING REVENUES			
Water Revenues	$ 62,922,606	$ 68,917,921	$ 66,476,494
Wastewater Revenues	36,811,920	38,739,088	37,587,949
Legislative Surcharge	3,157,366	3,502,752	3,368,031
Other Revenues	557,249	691,656	691,656
System Development Charge	884,781	553,630	553,630
Total Operating Revenues	**$ 104,333,923**	**$ 112,405,047**	**$ 108,677,759**
O & M EXPENSES			
Power Purchases	$ 12,001,312	$ 12,695,963	$ 12,695,963
Water Purchases	7,323,716	8,653,358	8,653,358
Salaries and Benefits	19,881,545	24,015,371	24,015,371
Administrative and General Expenses	8,365,505	11,916,710	11,916,710
Regulatory Expense	241,525	265,036	265,036
Bad Debt Expense	749,939	685,231	685,231
Depreciation Expense	15,948,096	18,338,096	18,338,096
Contractual Expense	3,928,447	4,478,895	4,478,895
Retiree Supplemental Annuities/Health care costs	3,363,554	3,474,100	3,474,100
Total Operating Expenses	**$ 71,803,640**	**$ 84,522,759**	**$ 84,522,759**
Earnings (Loss) from Operations	**32,530,283**	**27,882,288**	**24,155,000**
Other (Expenses)Revenue			
Interest Income-Bond 2010,2013, 2014 Refunding & 2016	691,022	188,719	691,022
Interest Income-Other Funds	106,146	35,217	106,146
Interest Income-SDC	21,171	28,971	21,171
Interest Expense-Bonds 2010,2013,2014 Refunding and 2016	(26,687,801)	(31,507,047)	(31,507,047)
Interest Expense-BOG	(564,117)	(399,458)	(399,458)
Prior Year Adjustment	(618,307)	-	-
Grant Funded Expenditures	(279,994)	(615,986)	(615,986)
AFUDC	7,500,000	7,500,000	7,500,000
Amortization of Discount, Premium and Issuance Costs	742,328	(742,330)	(742,330)
Grants & other contributions	14,718,804	10,477,298	10,477,298
Loss on Defeasance Bond05 Refunding	(182,621)	(182,621)	(182,621)
Deferred outflows from pension	(1,253,768)	(1,263,367)	(1,263,367)
Loss on Asset Disposal/Invty writedown	(22,853)	-	-
Net Income (Loss)	**26,700,294**	**11,401,684**	**8,239,829**
INCREASE (DECREASE) in Capital	**$ 26,700,294**	**$ 11,401,684**	**$ 8,239,829**
BOND DEBT SERVICE			
Principal	$ 5,040,000	$ 5,200,000	$ 5,200,000
Interest	19,522,301	24,760,826	24,760,826
Total	**$ 24,562,301**	**$ 29,960,826**	**$ 29,960,826**
DEBT SERVICE COVERAGE CALCULATION - Section 6.12			
Earnings (Loss) from Operations	**$ 32,530,283**	**$ 27,882,288**	**$ 24,155,000**
Investment Income-Other Funds & Recoveries	106,146	35,217	106,146
Supplemental Annuities/COLA	594,000	594,000	594,000
System Development Charge	(884,781)	(553,630)	(553,630)
Depreciation	15,948,096	18,338,096	18,338,096
Balance Available for Debt Service - Section 6.12	**$ 48,293,745**	**$ 46,295,971**	**$ 42,639,613**
Debt Service Coverage (1.25X) - Section 6.12	1.97	1.55	1.42
DEBT SERVICE COVERAGE CALCULATION - PUC			
Balance Available for Debt Service	**$ 48,293,745**	**$ 46,295,971**	**$ 42,639,613**
Transfer - Reserve for O & M Reserve	$ -	(3,200,000)	(3,200,000)
Transfer - Reserve for Debt Service	(0)	(1,800,000)	(1,800,000)
Available for Debt Service -Reserves For Debt Service	11,187,181	11,187,181	11,187,181
Balance Available for Debt Service - PUC	**$ 59,480,925**	**$ 52,483,152**	**$ 48,826,794**
Debt Service Coverage (1.75X) - PUC	2.42	1.75	1.63
CASH FLOW STATEMENT			
Net Income (Loss)	**$ 26,700,294**	**$ 11,401,684**	**$ 8,239,829**
Interest Income-Bond 2010,2013, 2014 Refunding & 2016	(691,022)	-	(691,022)
Interest Income-Other Funds	(106,146)	-	(106,146)
Interest Income-SDC	(21,171)	-	(21,171)
Depreciation & Amortization	15,205,768	19,080,426	19,080,426
AFUDC	(7,500,000)	(7,500,000)	(7,500,000)
Principal Payments - Bonds	(5,040,000)	(5,200,000)	(5,200,000)
Working Capital Change (Increase)Decrease	(4,223,840)	(1,905,018)	(1,445,490)
Principal Payments- BOG ST-$30M	(2,863,988)	(3,018,019)	(3,018,019)
Deposit to Debt Service Reserve	-	(6,405,162)	(6,405,162)
Deposit to Capitalized Interest Reserve	-	(9,949,500)	(9,949,500)
Gross Bond Proceeds	-	90,450,000	90,450,000
Cost of Issuance	-	(1,809,000)	(1,809,000)
Deposit to Bond Construction Fund	-	(72,286,338)	(72,286,338)
Revenue Funded CAPEX	(4,249,714)	-	-
Transfer to Trust	-	-	-
Bond Reserve Requirement(OMRRRF)		-	-
System Development Charge	(884,781)	(553,630)	(553,630)
Loss on Defeasance Bond05 Refunding & Amortization costs	182,621	182,621	182,621
Deferred outflows from pension	1,253,768	1,263,367	1,263,367
Prior Year Adjustment & Loss on Asset Disposal/Invty writedown	(641,160)	0	0
Working Capital Reserve for CAPEX	(5,404,323)	(11,000,000)	(11,000,000)
Working Capital Reserve for O & M	(8,954,687)	(3,200,000)	(3,200,000)
Working Capital Reserve for Debt Service	-	(1,800,000)	(1,800,000)
Grant Funded Expenditures	615,986	615,986	615,986
Grants	(14,718,804)	(10,477,298)	(10,477,298)
Transfer from Capitalized Interest Fund	7,165,500	6,746,221	6,746,221
Cash Surplus (Deficit)	(4,175,698)	(5,363,660)	(8,884,326)
Beginning Balance-	9,777,260	5,680,349	5,601,562
Ending Balance	**$ 5,601,562**	**$ 316,689**	**$ (3,282,765)**

(1) Refunding is assuming a delivery date of October 2017

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

Issues for Decision

GPA Resolution No. 2017-29:
GWA Resolution No. 42-FY2017

APPROVAL OF ZERO TOLERANCE DRUG-AND ALCOHOL-FREE WORKPLACE POLICY

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

The CCU has directed GPA and GWA to review its drug testing policies to ensure that the Agency maintains a drug- and alcohol-free workplace. GPA and GWA have drafted a new unified DRUG- AND ALCOHOL-FREE WORKPLACE policy that makes changes from the previous policy that allowed employees to a complete a drug treatment program, and remain employed provided they successfully completed a drug treatment program. GPA and GWA recognize that while the previous policies provided counseling and treatment to employees, it does not deter employee drug and/or alcohol use and its adverse effects on job performance in the workplace.

The new draft DRUG- AND ALCOHOL-FREE WORKPLACE POLICY provides for a zero-tolerance drug policy, such that if an employee tests positive for drugs they will be terminated as an employees of GPA and GWA. To ensure a drug-free workplace, every employee shall be tested for illicit drugs at least once a year. The management has provided notice, informational sessions, and solicited comments from GPA & GWA employees, including supervisors and managers regarding the new draft DRUG-AND ALCOHOL-FREE WORKPLACE policy.

Management of GPA and GWA request the Consolidated Commission on Utilities to adopt the draft unified DRUG- AND ALCOHOL-FREE WORKPLACE policy as follows:

1. **The unified DRUG- AND ALCOHOL-FREE WORKPLACE policy for GPA and GWA is hereby adopted to include employees of GPA and GWA.**
2. **All Consolidated Commission on Utilities members and employees shall be subject to the DRUG- AND ALCOHOL-FREE POLICY, and accordingly, will be placed in the employee population for random testing.**
3. **This policy shall be effective for the Guam Power Authority and the Consolidated Commission on Utilities on October 1, 2017.**

4. **This policy shall be effective for the Guam Waterworks Authority upon completion of the Guam Administrative Adjudication Act process.**

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. 2017–29
GWA RESOLUTION NO. 42-FY2017

ADOPTION AND IMPLEMENTATION OF A UNIFIED ZERO TOLERANCE DRUG- AND ALCOHOL-FREE WORKPLACE POLICY FOR THE GUAM POWER AUTHORITY AND THE GUAM WATERWORKS AUTHORITY

WHEREAS, it is the policy of the Guam Power Authority and Guam Waterworks Authority to provide a safe, healthy and secure work environment for all employees. It is also the policy of GPA and GWA to ensure that all employees perform their job duties in a safe, efficient and productive manner; and

WHEREAS, the CCU has directed GPA and GWA to review its drug testing policies to ensure that the Agency maintains a drug- and alcohol-free workplace; and

WHEREAS, GPA and GWA have drafted a new unified DRUG- AND ALCOHOL-FREE WORKPLACE policy that makes changes from the previous policy that allowed employees to a complete a drug treatment program, and remain employed provided they successfully completed a drug treatment program; and

WHEREAS, GPA and GWA recognize that while the previous policies provided counseling and treatment to employees, it does not deter employee drug and/or alcohol use and its adverse effects on job performance in the workplace; and

WHEREAS, the new draft DRUG- AND ALCOHOL-FREE WORKPLACE POLICY provides for a zero-tolerance drug policy, such that if an employee tests positive for drugs they will be terminated as employees of GPA and GWA; and

WHEREAS, to ensure a drug-free workplace, every employee shall be tested for illicit drugs at least once a year; and

WHEREAS, management has provided notice, informational sessions, and solicited comments from GPA & GWA employees, including supervisors and managers regarding the new draft DRUG- AND ALCOHOL-FREE WORKPLACE policy; and

WHEREAS, management of GPA and GWA request the Consolidated Commission on Utilities to adopt the draft unified DRUG- AND ALCOHOL-FREE WORKPLACE policy.

NOW, THEREFORE, BE IT RESOLVED, by the CONSOLIDATED COMMISSION ON UTILITIES as follows:

1. The unified DRUG- AND ALCOHOL-FREE WORKPLACE policy for GPA and GWA is hereby adopted to include employees of GPA and GWA.
2. All Consolidated Commission on Utilities members and employees shall be subject to the DRUG- AND ALCOHOL-FREE POLICY, and accordingly, will be placed in the employee population for random testing.
3. This policy shall be effective for the Guam Power Authority and the Consolidated Commission on Utilities on October 1, 2017.
4. Implementation by GWA of this policy shall take place after completion of the Guam Administrative Adjudication Act procedure as amended by P.L. 34-32.

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

DULY and REGULARLY ADOPTED AND APPROVED THIS 26th day of SEPTEMBER, 2017.

Certified By:	**Attested By:**
_____	_____
JOSEPH T. DUENAS	**J. GEORGE BAMBA**
Chairperson	Secretary
Consolidated Commission on Utilities	Consolidated Commission on Utilities

I, J. George Bamba, Board Secretary of the Consolidated Commission on Utilities (CCU), as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and correct copy of a resolution duly adopted at a regular meeting of the members of 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: _____

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

GUAM POWER and GUAM WATERWORKS AUTHORITY (GPWA)
Drug and Alcohol Free Workplace Policy

Statement of Policy

It is the policy of the GPWA to provide a safe, healthy and secure work environment for all employees. It is also the policy of the GPWA to ensure that all employees perform their job duties in a safe, efficient and productive manner. In an effort to ensure that Department Head, Managers and Supervisors continue to be informed and educated on GPWA's Drug and Alcohol policies, updated training will be required every two years. All new employees and any employee who is hired or promoted into a supervisory position must receive training on this policy within sixty (60) days of hire or promotion. Finally, it is the policy of the GPWA to ensure that its equipment and facilities are maintained and utilized appropriately so as not to pose a risk of harm. The use of drugs and the misuse of alcohol are inconsistent with these policies. Accordingly, to protect the health, safety and welfare of employees, citizens, visitors and persons who interact with GPWA employees during the course and scope of their employment, GPWA has adopted this Drug and Alcohol Free Workplace Policy which shall be strictly enforced.

Enforcement Date

This policy will go into effect on October 1, 2017 and will apply to all employees of GPWA regardless of status or classification. Upon the effective date, the policy will be strictly enforced and **will not** allow any employee entry into the Employee Assistance Program upon voluntary identification by himself or herself as a user of drugs or abuser of alcohol.

Prohibited Conduct

The following violations of the Drug and Alcohol Free Workplace Policy constitute gross misconduct and shall result in severe disciplinary action up to and including dismissal:

1. Unauthorized use, possession, sale, or solicitation for purchase/sale of drugs or alcohol on GPWA property or while the employee is on duty.

2. Hindering, obstructing or refusing to cooperate or participate in any investigation involving suspected violations of this policy. This includes, but is not limited to, providing false, misleading or incomplete information in response to any inquiry from a supervisor related to a suspected violation of this policy. It also includes refusing to undergo a drug or alcohol test(s).

a) Refusal by an applicant to sign a consent form will be considered a refusal to submit to a drug and/or alcohol test as a condition of employment and will be considered the equivalent of receiving a confirmed "positive" result for employment and disqualification purposes. Such applicant will have his/her name removed from the certified list of eligibles and the position eligibility listing.

b) Refusal by an employee to sign a consent form will be considered a refusal to submit to a drug and/or alcohol test as a condition of employment and will be considered the equivalent of receiving a confirmed "positive" result for employment and disciplinary purposes, up to, and including dismissal.

3. Hindering, delaying or obstructing a drug or alcohol test(s), including but not limited to, tampering with a sample or interfering in any way with the chain of custody.

4. Reporting to work or engaging in any work activity whatsoever on behalf of the GPWA in a condition which could pose a threat of harm to the employee or any other person, or reporting to or engaging in any work on behalf of the GPWA in a condition which could impair the ability to satisfactorily perform any essential function of the job, due to the use of drugs or misuse of alcohol. Should any detectable amount of drugs, or alcohol in a concentration of 0.04 breath alcohol content (BAC) or greater be established, the employee is in violation of the GPWA Drug & Alcohol Free Workplace Policy. No employee shall perform their job functions within four hours after using alcohol.

5. Abusing or misusing prescription drugs or over-the-counter medication when such conduct could reasonably interfere with the safe or satisfactory performance of any essential job function. This includes, but is not limited to, the use, possession, sale or solicitation for the purpose of purchase or sale any prescription medication for which the employee lacks a valid prescription.

Prohibited Substances

1. "Drugs" refers to marijuana, cocaine, amphetamines, opiates (including heroin and codeine), phencyclidine, and all other "controlled substances" as defined in Title 9 GCA Chapter 67 Guam Uniform Controlled Substances Act.
   a. Specimens from applicants and employees will be screened in all cases to identify the following classes of substances:
      1. Marijuana/Cannabinoids (THC);
      2. Cocaine Metabolites;
      3. Opiates;
      4. Phencyclidine (PCP);
      5. Amphetamines/Methamphetamine; and
      6. Barbiturates

   b. GPWA reserves the right to change, add or delete any combination of "controlled substances" for screening as new forms become available.

2. "Alcohol" includes any beverage or substance containing alcohol manufactured for the primary purpose of personal consumption.

3. "Prescription drugs" means any substance, which is attainable only by lawful prescription from a physician.

4. "Over-the-counter medication" includes any substance which does not require a prescription but has the capacity to affect a person physically, mentally, or emotionally or which could otherwise affect a person's ability to safely perform his/her duties.

When Testing is Required

1. All competitive and non-competitive recruitments within GPWA will be tested after a conditional offer of employment has been extended. Drug testing will be required for but, not limited to the following:

a) **Pre-Employment (Probational/Unclassified/Exempt/Provisional/Temporary)**: Applicants for positions within GPWA will be tested after a conditional offer of employment has been extended. An applicant who refuses a drug test(s) or who tests positive, shall not be extended a final offer of employment.

b) **Promotions, Transfers, Reclassification:** Employees within GPWA will be tested upon the General Manager's approval for selection/reclassification. An

employee who refuses a drug test(s) or who tests positive, shall be subject to disciplinary action up to and including dismissal.

Except for emergency situations, applicants and employees will not be permitted to reschedule drug testing after they are notified that such testing is scheduled.

2. **Random Testing**: All positions at GPWA shall be subject to random testing as follows:

a) Tests will be ordered on a random, unannounced basis from the entire population of GPWA employees.

(1) A scientifically valid method such as a random number table or a computer-based random number generator will be used to select employees, thereby allowing each employee an equal chance of being tested each quarter.

(2) At least 25% of the employees will be selected for drug testing, and at least 25% of employees for breath alcohol testing each quarter of the testing year.

(3) An employee's name will remain in the potential testing population after being selected so that every employee will have an equal chance of being tested each time selections are made. Therefore, it is possible that any employee, who is randomly selected for testing, may be randomly selected again every quarter.

(4) Every employee selected for random testing must be tested unless that employee is excused by the General Manager for reasons such as long-term leave, disability or termination of employment.

(5) Any employee who has not had an equal chance of being tested each time a selection was made will be tested on or before September 30 of any year.

b) GPWA reserves the right to increase or decrease the frequency of testing based on the needs of each utility, availability of resources, and experience in the program, consistent with the duty to achieve a drug free workplace.

3. **Follow-up Testing**: The GPWA General Manager reserves the right to require an employee to submit to subsequent drug testing as necessary, during the authorized treatment program, and for 12 months after the program ends.

A certification of completion from the treating agency must be submitted to the Human Resources office to demonstrate a successful completion of the treatment program.

4. **Return to Duty Testing**: Employees who are absent from work without approval for more than fifteen calendar (15) days shall be tested for drugs immediately after returning to work and before performing any job duties.

5. **Reasonable Suspicion**: All employees will be subject to testing when there is reasonable suspicion that the employee has used drugs or misused alcohol in violation of this policy. Grounds for reasonable suspicion testing shall include, but not be limited to:

a) Personal observation of the employee's job performance, appearance, behavior, speech or odor which causes reasonable suspicion that the employee (i) is impaired by drugs or alcohol, (ii) has used drugs or alcohol while on duty, (iii) or poses a threat to personal safety or others due to the use of drugs or misuse of alcohol in violation of this policy.

b) Specific and objective facts indicating that an employee's drug or alcohol use may have caused or been a contributing factor to an on-duty motor vehicle accident. An alcohol test(s) should be completed within two (2) hours of the accident and a drug test(s) within twenty-four (24) hours of the accident. The following facts, if present, may independently or collectively, depending upon the circumstances, give rise to reasonable suspicion:

(1) the appearance, behavior, speech or odor of the employee immediately prior to or after the accident;

(2) the employee left the scene or attempted to leave the accident scene without legal authority or permission to do so;

(3) the employee acted contrary to a safety rule, established safety practice or otherwise engaged in demonstrably unsafe behavior for which there is no reasonable explanation;

(4) the employee was arrested or received a traffic citation;

(5) the employee or any person received medical attention as a result of the accident;

(6) the employee has been involved, as a contributing factor, in a pattern of repetitive on-duty motor vehicle accidents whether they involved actual or potential injury.

c) Specific and objective facts indicating that an employee's drug or alcohol use may have caused or been a contributing factor to an on the job accident. An alcohol test(s) should be completed within two (2) hours of the accident and a drug test(s) within forty-eight (48) hours of the accident. The following facts, if present, may independently or collectively, depending on the circumstances, give rise to reasonable suspicion:

(1) The appearance, behavior, speech or odor of the employee immediately prior to or after the accident;

(2) The employee left the accident scene or attempted to leave the accident scene without legal authority or authorization to do so, or failed to report the accident to the appropriate individual or otherwise attempted to keep appropriate persons from learning about the accident or the extent of the accident;

(3) The employee acted contrary to a safety rule, established safety practices
or otherwise engaged in demonstrably unsafe behavior without a reasonable explanation;

(4) The employee or any other person received medical attention because of the accident;

(5) The employee has been involved as a contributing factor in a pattern of on- duty accidents whether or not they involved actual or potential injury.

d) Drugs, drug paraphernalia, alcohol or containers indicating the presence of drugs or alcohol are observed or discovered in a location in which the employee had primary control or access, including but not limited to, desks, lockers, equipment, machines or vehicles. The employee must have accessed the location within eight (8) hours prior to the discovery of such items.

6. **Consent**: By acknowledging receipt of this Policy in writing, the employee is providing his or her consent to any and all testing required to comply with the Policy.

Who May Request a Reasonable Suspicion Drug or Alcohol Test(s)

1. Any supervisor who has received training in the signs and symptoms of drug and alcohol use and impairment may request an employee to undergo a reasonable suspicion test(s) for drugs or alcohol based upon (i) the personal observation of the employee by the trained individual, or (ii) personal observation of the employee by another employee who has fully disclosed the observations to the trained individual, or (iii) observation of the employee by a nurse or physician engaged in the treatment or evaluation of a work related injury who has disclosed such observation to the trained individual.

2. Any untrained supervisor may request a reasonable suspicion test(s) for drugs or alcohol based upon his personal observation of the employee, under the following circumstances:

a) The employee has been independently observed by a trained supervisor, or

b) A trained supervisor has reviewed the underlying facts and agrees that reasonable suspicion exists to require a test.

3. Any supervisor, personnel of managerial capacity, or personnel of the Safety and Human Resources Divisions trained in detecting drug and alcohol impairment, may request a reasonable suspicion drug or alcohol test(s) following a work-related accident based upon personal observation of the employee or upon review of the specific and objective facts underlying the accident.

Procedure

1. Whenever there is reasonable suspicion to require a drug or alcohol test(s) under this policy, the General Manager, department/division heads or designees and Human Resources shall be notified of the circumstances necessitating the test(s) as soon as possible.

2. All circumstances causing reasonable suspicion to require a drug or alcohol test(s) shall be fully documented by the supervisor(s) and/or managerial personnel and all appropriate witnesses as soon as possible.

3. All GPWA-issued equipment, property and facilities, including but not limited to, desks, lockers, and vehicles (collectively “materials”) are subject

to inspection at any time and for any reason. No employee shall have any privacy interest whatsoever in any GPWA issued materials. No personal property may be searched unless the owner of the property has consented or a search is otherwise legally permissible.

4. Alcohol screening will be conducted using a federally approved evidential breath-testing device. An initial screening test of one (1) breath sample will be conducted first, and if an initial test detects any level of alcohol, a second confirmation test of one (1) additional breath sample will be completed.

5. Testing will be performed by a certified, licensed forensic laboratory. Drug test methods, collection, security and chain of custody procedures will conform to federal regulations. The drug test will include marijuana, cocaine, amphetamines, methamphetamines, opiates (including heroin and codeine), and phencyclidine (PCP) and barbiturates. Other "controlled substances" may be added as new forms become available. All specimens identified as positive for illegal drugs on the initial screening will be confirmed using the gas chromatography/mass spectrometry technique.

6. All positive test results for drugs will be interpreted by a physician approved by GPWA as a medical review officer (MRO) before the results are reported to the GPWA. Prior to notifying GPWA, the MRO will make reasonable efforts to contact the employee for the purpose of allowing the employee to offer an alternative medical explanation for the positive test result. If the MRO is able to contact the employee and determines there is a legitimate medical explanation for the positive test, the result will be communicated as negative to GPWA. The MRO's inability to contact the employee before providing test results to the GPWA will not void the test result or make the test result unusable in any subsequent disciplinary action. Because the employee is present for interpretation of an alcohol test, the procedure concerning prior notification by the MRO is not applicable.

7. Upon notification by the MRO of a verified positive result for drugs, the employee may request that the remaining portion of his split specimen undergo a second confirmation test at his expense at a laboratory of his choice. If the test conducted by the laboratory selected by the employee is negative for the presence of drugs, a third test may be made at GPWA's sole expense at a separate facility of its own choosing. The results of the third facility will be determinative. If the results from the third facility are negative, all prior positive tests will be disregarded and shall not be the basis for any disciplinary or adverse action.

8. The GPWA will make reasonable efforts to notify the employee of a positive drug test within five (5) days from the date it receives the test results. Because the results of a breath alcohol test are immediately available, this provision will not apply to alcohol tests conducted in such a manner.

9. Any employee ordered to be tested, based upon reasonable suspicion, shall be immediately removed from duty, escorted to the testing facility and taken home (unless other suitable arrangements have been made to transport the employee including calling a cab). The employee shall turn in keys to a GPWA vehicle, building or office, their identification badge or any other property belonging to the GPWA. The employee shall be placed on paid administrative leave pending the results of the test.

10. An employee who tests positive for drugs or alcohol shall immediately be relieved from duty, required to turn in keys to a GPWA vehicle, building or office, identification badge or any other property that belongs to the GPWA, placed on paid administrative leave, and sent home pending disciplinary action, if appropriate. A supervisor may take an employee home. If a supervisor is not comfortable taking an employee home, however, a cab may be called to come and take the employee home at the employee's expense.

11. In situations in which the employee has been ordered to be tested or tests positive and the employee refuses assistance in leaving the building and walks out or insists on leaving in his/her own vehicle, document the situation and, depending upon the circumstances, call Guam Police Department's non-emergency phone number. Give the police the employee's name, vehicle description, and license plate number. However, if the employee is extremely agitated, violent or is making threats of violence, leaves the premises in a GPWA vehicle, or you believe the employee has violated the law, call the Guam Police Department at 9-1-1.

12. A refusal to consent to a drug or alcohol test is a violation of the Policy and will be considered the equivalent of receiving a confirmed "positive" result for employment and disciplinary purposes, up to, and including dismissal.

13 If it is not reasonable under the circumstances to conduct an alcohol test, based on a breath test, GPWA reserves the right to test for the presence of alcohol by a blood test analysis. If this procedure is used, the GPWA will attempt to notify the employee of the results within five (5) days after the results are received. An MRO will not be used when a blood test for alcohol is conducted.

Employee Assistance Program

Prior to October 1, 2017, any employee who voluntarily identifies himself or herself as a user of drugs or abuser of alcohol, will not be subject to disciplinary action if the employee seeks immediate assistance and treatment through the GPWA's Employee Assistance Program (EAP) or a similarly available treatment program. Failure to comply with all requirements of a treatment program, or continued use of drugs or alcohol during or after completion of such a program, will result in dismissal.

Arrests for Drug or Alcohol Related Offenses

Any employee who is arrested for a drug or alcohol related offense must notify the General Manager of the arrest immediately. GPWA will decide at that time whether the arrest causes a temporary or permanent disqualification from holding that position, or constitutes grounds for disciplinary action. All convictions for alcohol or drug related offenses must be reported immediately by an employee to the General Manager. GPWA reserves the right to take appropriate action based upon such conviction.

All employees who are required to operate a GPWA vehicle as a regular part of their job must report any drug or alcohol arrest, temporary or permanent suspension of driving privileges, and any drug/alcohol related conviction to the General Manager immediately. GPWA reserves the right to take appropriate action, including relieving the employee from duty, transferring the employee to a non-driving position, or instituting disciplinary action up to and including dismissal.

Confidentiality

All reports of test results for drug and alcohol, searches, or any employee referral, or participation in an EAP program or treatment program for addictive disorders, will be maintained in strict confidence. Any person authorized to have access to such confidential information, who, without authorization, discloses it to another person shall have engaged in gross misconduct and be subject to severe disciplinary action up to and including dismissal. The confidentiality of such information shall not apply to any use by or communication to the GPWA General Counsel, or where the information is relevant to the GPWA's defense in an administrative or civil action. Such information may also be disclosed to the extent required by any federal, state or local law, statute, ordinance or regulation.

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. 53-FY2017 (GPA Resolution No. 2017-38)
Relative to the Creation and Addendum of Certified, Technical and Professional (CTP) List of Positions and Adoption of Market Update for Guam Power Authority and Guam Waterworks Authority's

What is the project's objective and is it necessary and urgent?
The objectives are (1) to provide for the integration of previously non-CTP positions for which specific knowledge of utility systems and/or operations is required, into the list of CTP positions; and (2) to adopt recommendations of utility market review and update for GWA's pay scale. In order to meet these objectives, we request the Board's approval of the proposed creation of positions and the addition the previously non-CTP positions to the list of CTP positions. GWA also requests the Board to accept the recommendations of the market review update for CTP positions, including a new pay scale, the refit and reset of new grades to coincide with the 2017 market data. These actions are necessary to maintain uniformity in the application of the promotion/demotion/transfer pay policy relative to CCU Resolution No. 2012-49 for all CTP positions covered under the Strategic Pay Scale, and to apply CCU Resolution No. 2012-49 to GPA and GWA business processes.

The matters covered under this resolution are necessary and urgent to address the obsolete pay grades that were in place since 2007 and to allow for a refit and reset of the new pay grades that will coincide with the 2017 market data.

Where is the location?
Within the Guam Waterworks Authority

How much will it cost?
Cost to migrate to the 2017 10th market percentile is estimated to be $1.2M

When will it be completed?
Upon approval by the CCU, the transition to the new pay scale is anticipated to take effect January 1, 2018.

What is the funding source?
Fiscal Year 2018 Budget has been identified as the funding source for the above project.

The RFP/BID responses:
N/A

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. 2017–38

GWA RESOLUTION NO. 53-FY2017

RELATIVE TO THE CREATION AND ADDENDUM OF CERTIFIED, TECHNICAL, AND PROFESSIONAL (CTP) LIST OF POSITIONS AND ADOPTION OF MARKET UPDATE FOR GUAM POWER AUTHORITY AND GUAM WATERWORKS AUTHORITY

WHEREAS, the Guam Power Authority (GPA) and the Guam Waterworks Authority (GWA) are Public Corporations of the Government of Guam; and

WHEREAS, Section 8104 (c), Chapter 8, and Section 14104 (c), Chapter 14 of Title 12 of the Guam Code Annotated authorizes the Guam Power Authority and Guam Waterworks Authority to establish its internal organization and management and adopt regulations for the administration of its operations; and

WHEREAS, Public Law 28-159 added Subsection 7.03 to the GPA Personnel Rules and Regulations, and added Paragraph 29 to the Glossary of GWA's Personnel Rules, item (c) authorizing the General Manager to petition the Consolidated Commission on Utilities (CCU) to amend, to include, but not limited to deleting, adding, or modifying such positions, the approved list of each Authority's CTP positions; and

WHEREAS, Public Law 28-159 added Subsection 15.17 to GPA's Personnel Rules and Regulations, and a new Chapter 5.200 to GWA's Personnel Rules and Regulations, item 3.0.3, authorizes the CCU to approve, disapprove, or amend, the unified pay scale at any regularly scheduled meeting; and

WHEREAS, a market review update of all positions and the CTP Strategic Pay scale was conducted and completed in August 2017 by Alan Searle and Associates. (See Exhibits A & B, Appendix A). This resulted in an adjustment of the pay scale to address obsolete pay grades that were in place since 2007 and a reset and refit of new grades to coincide with 2017 Market Data. The market review determined that GPA positions are approximately at the 15th market percentile, and that GWA positions are below the 5th market percentile based on 2017 Market Data. It was also determined that implementation of an updated pay scale is necessary to maintain the utilities position in the market place aimed at being externally competitive in attracting and retaining employees. (See Exhibits A & B, Appendix B). In maintaining this position, GPA recommends implementation of incremental structural pay adjustments to the 15th market percentile on January 6, 2018, and to the 20th market percentile on January 6, 2019, respectively. GWA recommends implementation of incremental structural pay adjustments to the 10th market percentile on January 1, 2018, and to the 15th market percentile not later than FY2020, respectively. GPA and GWA are committed to maintaining the goal of being competitive and achieving a position at the 25th market percentile by the year 2021 and 2022, respectively; and

WHEREAS, GPA and GWA desire to improve business processes, optimize its assets and maximize employees' performance. GPA and GWA prefer to consolidate its pay policy and all positions under the Strategic Pay plan and add remaining positions to the list of CTP positions, providing equity. (See Exhibits A & B, Appendix C). GPA and GWA also recognize that these positions involve processes that are uncommon and unique to the utilities. Thus, GPA and GWA petition to create positions for incumbents to integrate

and transition into the Strategic Pay classification methodology applicable to CTP positions (See Exhibits A & B, Appendix D); and

WHEREAS, modern companies operate on information and GPA and GWA must leverage information in modernizing its infrastructure and technology, and must create an awareness of the importance of protecting these facets critical to the utilities. GPA and GWA operations are critical to preserving its business processes and the quality of life island-wide. GPA and GWA are committed to promoting and strengthening the role and responsibility of all employees in the protection of information, infrastructure and technology through physical security and cyber security training programs, of which, will help preserve assets, and, deter the impact of an attack to the utilities; and

NOW THEREFORE BE IT RESOLVED, the Consolidated Commission on Utilities approves and authorize as follows:

1. To accept the recommendations of the market review update conducted by Alan Searle and Associates, including implementation of a new and adjusted Strategic Pay Scale for all Certified, Technical, and Professional (CTP) positions. (See Exhibits A & B, Appendices A & B).

2. The General Manager at GPA to implement structural pay adjustments, incrementally, to the 15th market percentile on January 6, 2018, and to the 20th market percentile on January 6, 2019 based on the 2017 Market Data. The General Manager may determine the breadth and application of sub-steps to determine the implementation range for positions based on affordability. Thereafter, the management may implement a structural pay adjustment to the 25th market percentile based on an updated market review, as necessary. Structural pay adjustments are subject to the availability of funds.

3. The General Manager at GWA to implement structural pay adjustments, incrementally, to the 10th market percentile on January 1, 2018, and to the 15th market percentile no later than FY2020 based on the 2017 Market Data. The General Manager may determine the breadth and application of sub-steps to determine the implementation range for positions based on affordability. Thereafter, the management may implement a structural pay adjustment to the 25th market percentile based on an updated market review, as necessary. Structural pay adjustments are subject to the availability of funds.

4. The creation of positions delineated in Exhibits A & B, Appendix D, and the addition of these positions into the GPA and GWA list of CTP positions delineated in Exhibits A & B, Appendix C. The incumbents of these positions must complete a Physical Security training course prior to a reclassification of position. Thereafter, the incumbents must complete a Cyber Security training course and other courses deemed necessary by the management to ensure preservation of utility assets and deterrence of the impact of an attack to the utilities

5. To maintain uniformity in the application of the promotion/demotion/transfer pay policy relative to CCU Resolution No. 2012-49, and in the spirit of equity for all positions covered under the Strategic Pay Scale for CTP positions, CCU Resolution No. 2012-49 delineated in Exhibits A & B, Appendix E, is applicable to GPA and GWA business processes.

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

DULY AND REGULARLY ADOPTED AND APPROVED this **26th day of September, 2017.**

Certified by:	Attested by:
_____	_____
JOSEPH T. DUENAS	J. GEORGE BAMBA
Chairperson	Secretary
Consolidated Commission on Utilities	Consolidated Commission on Utilities

I, J. GEORGE BAMBA, Secretary for the Consolidated Commission on Utilities do hereby certify that the foregoing is a full, true, and correct copy of a resolution duly adopted at a regular meeting by the members of 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:

At said meeting said resolution was adopted by the following vote:

Ayes: _____

Nays: _____

Absent: _____

Abstain: _____

GUAM POWER AUTHORITY
EXECUTIVE REPORT

MISSION STATEMENT: The Guam Power Authority SHALL provide

R eliable
E³ fficient, Effective, Environmentally Sound
A² ffordable, Accountable
L eading Energy Solutions

AUTHORITY:

12 GCA CHAPTER 8,

§8103. Continuation of Existence.
Guam Power Authority is continued in existence as a public corporation.

§8107. Governance of Authority.
All powers vested in the Authority, except as provided herein, shall be exercised by the Consolidated Commission on Utilities, as established in Chapter 79 of Title 12 of the Guam Code Annotated.

4 GCA §6303 (d) - Creation of positions.

GPA Personnel Rules & Regulations, Section 7.00, Rule 7.03 (c) – Amendment of Certified, Technical, and Professional Positions (as amended by Public Law 28-159 Section 3 (c)):

SUMMARY:

The Guam Power Authority is the sole electric power utility on Guam, generating and distributing electricity to residential, commercial, local government, and military customers throughout the island. The Authority's physical attributes are unique and consist of:

- 420 MW Gross Generation Capacity;
- 189 Miles of Transmission Lines;
- 685 Miles of Primary Distribution Lines; and
- 29 Substations.

These physical attributes integrate into the island-wide power system (IWPS) providing electrical services to over 49,000 customers and is operated and maintained by approximately 470 employees.

The Authority is actively incorporating proven and emerging technologies into all aspects of its services. Until recently, GPA operated like a 1980's utility. GPA has taken significant strides to meet modern industry standards by adding renewable energy generation assets, smart grid implementation, integrating a customer information system (CIS), and energy storage initiatives. While these efforts support efficient and

Exhibit A - GPA

reliable utility service, they cannot abate the growing cyber and physical security threats to the Authority. As GPA continues to build better business processes and optimize its assets, the roles of *all employees* have become increasingly critical to the defense of potential security breaches to the GPA infrastructure.

Security breaches and threats – both physical and cyber - impact people, information, functions and physical assets. These hazards can range from workplace violence, crime, including personal and property thefts, terrorism acts, and natural disasters to name a few.

All employees are responsible to conduct safe work practices in their working environment and to secure their work places to delay or deter threats to GPA facilities. Examples of this include, and are not limited to:

Cashier duties involving the ability to observe the actions and behavior of a potential adversary and alerting authorities, protecting the face-to-face cash handling process and securing customer information when conducting payment transactions using the proprietary customer service program that is interconnected to the GPA network.

Administrative and Clerical duties involve securing and updating employee and customer data on the utility's integrated network and protecting access to this information. This also includes observance and monitoring of internal and external customers access to office business and processes.

Maintenance Worker duties involve the maintenance of GPA facilities including power plants, substations and the administration office building. They must be cognizant to situations that increase physical vulnerabilities of these sites and apply corrective measures to minimize risks to integrity of these physical assets.

Procurement duties include the purchasing of materials and equipment, and the storing of equipment, materials and parts relevant to operations work such as power plant overhauls, overhead and underground line construction and repairs, and conducting inventory of large bulk items unique to the GPA operations. Measures are implemented to protect access to warehouses and storage areas from unauthorized persons. Additional duties include inputting and retrieving data on the utility's integrated network for accountability.

The security of GPA's assets is paramount. GPA is moving swiftly from a traditional utility to a more technological, modern utility. The whole organization is accountable for ensuring safety and preparedness of its employees when safety and security at any level is compromised.

GPA has embarked on a physical and cybersecurity training program for all employees. These training programs are the initial stages of enhancing employees' awareness and knowledge of the importance of securing GPA assets and its environment.

Recently, an updated market review of all positons was conducted and determined GPA's position in the market is relatively at the 15th market percentile of the 2017 Market Data (Appendix A). The review included an adjustment of the pay scale to address obsolete pay grades that were in place since 2007, and a refit and reset of new grades to coincide with the 2017 Market Data (Appendices B and C). The proposed creation of positions were also included in the market review update (Appendices D1-D59).

Based on the foregoing, management recognizes that all positions are critical to the safety and welfare of GPA operations. In meeting management's needs for the efficacy of operating the utility within modern industry standards, we recommend the following:

a) To approve the proposed creation of positions (delineated in Appendices D1-D59); and

b) To add these new and filled positions (delineated in Appendices D1-D59) to GPA's list of Certified, Technical and Professional positions (delineated in Appendix C).

c) To accept the recommendations of the market review update for CTP positions, including a new pay scale, the refit and reset of new grades to coincide with the 2017 market data, and implementation of a structural adjustment subject to the availability of funds (Appendices A and B).

d) To maintain uniformity in the application of the promotion/demotion/transfer pay policy relative to CCU Resolution No. 2012-49 for all CTP positions covered under the Strategic Pay Scale, apply CCU Resolution No. 2012-49 (delineated in Appendix E) to GPA and GWA business processes.

JOHN M. BENAVENTE, P.E.
General Manager, GPA

9/12/17
Date

RECEIVED
SEP - 8 2017
GUAM POWER AUTHORITY
HUMAN RESOURCES DIVISION

GUAM POWER AUTHORITY

COMPENSATION & BENEFITS STUDY

Market Review

Executive Summary

September 2017

ALAN SEARLE & ASSOCIATES

Management Consultants, Russell, New Zealand

APPENDIX A1

A. Background

With the passing of public laws PL 28-113 and PL 28-159 GWA was given the mandate to implement a new market based compensation model that would aid the attraction and retention of "Certified Technical and Professional" or CTP personnel. The law was a result of concerns that the Authority was losing highly skilled personnel due to the fact that current salaries and compensation were not sufficient to attract and retain such personnel.

Through the RFP process, GPA in 2005 engaged the consulting services of Alan Searle & Associates to undertake the above compensation study. This was an extensive project involving three stages as follows :

The first stage of the study focused on job evaluation which involved applying a structured methodology of twelve (12) individual factors to assess all CTP positions. Each factor derived a point value with their sum representing the "total point" value of the position. The process was important as it re-established the internal equity of all positions based on job size. An exponential regression analysis was then undertaken to determine GPA's base salary pay line. This step was also important in that the resulting base salary pay line could eventually be compared to the market percentiles identified in Stage Two.

The second stage involved gathering external pay data on all CTP positions. The target market was the U.S. power industry and extensive data was gathered from a number of sources including the APPA (American Public Power Association), U.S. Bureau of Labor Statistics (BLS), U.S. Department of Labor (DOL), U.S. Federal Government / Civil Service, U.S. Military, Web Based Compensation Companies, U.S. Utility Recruitment Companies and U.S. Utility Company Websites. The resulting data was analyzed and presented as market percentiles (5^{th} through to the 95^{th}) with the 50^{th} market percentile being the market average. A second exponential regression analysis was then undertaken to compare GPA's base salary pay line against the market percentiles as gathered in 2008.

The results validated GPA's market vulnerability as their base salary pay line (for a large number of CTP positions) was clearly below the 5^{th} market percentile. This was an exceptionally low position and validated the ongoing difficulties GPA had been experiencing in being able to attract and retain CTP employees. The situation at the time was further exacerbated by Gov. Guam policy (Hay methodology) that stipulated that employees on Step 10 and above receive a 3.5% increment (based on satisfactory performance) once every two (2) years. On an annualized basis this was clearly below the CPI (Consumer Price Index).

With the passing of resolution 01-FY2008 the CCU approved a transition period (beginning in fiscal year 2008) to migrate all CTP positions to a more competitive position in the market. The CCU resolution approved a five-year phase-in using the 5^{th}, 15^{th}, 25^{th}, 35^{th} and 50^{th} market percentiles as targets for 2008 and subsequent years.

APPENDIX A2

The third stage of the review focused on implementation and the transition of all CTP employees into the new compensation model. The new salary schedule has twenty-six (26) alphabetical grades each with twenty (20) numeric steps. An additional feature was the introduction of four (4) sub-steps per step which amounts to eighty sub-steps in total. Each sub-step increases base salary by 1% and was introduced to allow a performance range for GPA to ultimately pay for performance.

The outcome of the above was the identification of a specific implementation range for each CTP position. With each implementation range encompassing sixteen (16) sub-steps the final phase was to migrate all CTP employees into the new compensation model. In completing this exercise the following three implementation criteria was applied : education, experience and performance. The end result was a score (for each employee) that could be transposed to their specific implementation range and a new grade, step and sub-step identified.

B. Current Review (2017)

The current review replicates the second stage above in order to provide updated market data as at 2017. Once again the target market was the U.S. power industry and extensive data was gathered from a number of sources including the APPA (American Public Power Association), U.S. Bureau of Labor Statistics (BLS), U.S. Department of Labor (DOL), U.S. Federal Government / Civil Service, U.S. Military, Web Based Compensation Companies, U.S. Utility Recruitment Companies and U.S. Utility Company Websites.

In summary, external pay data was gathered on 257 positions (both CTP and Non-CTP) with results once again being analyzed and presented as market percentiles (5^{th} through to the 95^{th}). Please note that as with the earlier study the 50^{th} market percentile represents the market average (U.S. mainland). An exponential regression analysis was then undertaken (see Appendix A) to compare GPA's base salary pay line against the 2017 market percentiles as gathered.

C. Observations / Recommendations

In terms of recommendations the focus must be on ensuring that GPA's compensation model (cost permitting) is in the most competitive position it can be with regards the external market place. Whilst any increase in market position obviously comes at a cost this must be weighed against the Authority's ability to attract and retain competent employees.

With reference to Appendix A GPA's market position in 2008 was extremely vulnerable with a large number of employees well below the 5^{th} market percentile. Whilst an adjustment to start correcting this situation was addressed by the CCU in 2008 the market has unfortunately continued to move over the period through to 2017. Given that early initiative taken by the CCU we would now place GPA (with

APPENDIX A3

reference to Appendix A) at approximately the 15th market percentile based on the 2017 market data that has been obtained.

Having determined GPA's current market position (relative to the 2017 market data) we then completed a number of cost options aimed at migrating GPA to a more competitive market position. These included migrating to the 5th, 10th, 15th (essentially a status quo option), 20th and 25th market percentiles. The costing process also included both a 5 sub-step and 7 sub-step implementation range for employee "slotting' purposes. The results are shown in Appendix B.

In undertaking the above cost analysis it also became apparent that an updated pay schedule was also required. With the current pay schedule now 10 years old, grades A, B & C have become redundant and are no longer being used. The need for an update is also reflected in the fact that some employees are approaching or have exceeded Step 20, Sub-step D.

In terms of a course of action our recommendations are as follows :

1. Consolidate GPA's compensation model to include all employees i.e. both CTP and Non-CTP employees.

   Note : the need to distinguish between CTP and Non-CTP positions has become largely irrelevant as all positions are now deemed critical in providing the Authority's services. This perspective is clearly evident with both PAG and GIAA (excluding ARFF and Airport Police) now incorporating all positions in their respective compensation models.

2. Make an initial structural adjustment (cost permitting) to the 15th market percentile based on the 2017 market data. If this can be done we would recommend using the 5 sub-step implementation range cost option as "employee slotting" is closer than using the 7 sub-step cost option. As outlined earlier, this is essentially a status quo adjustment as despite being at the 15th market percentile this adjustment targets (in particular) those employees who are below the 15th market percentile regression line.

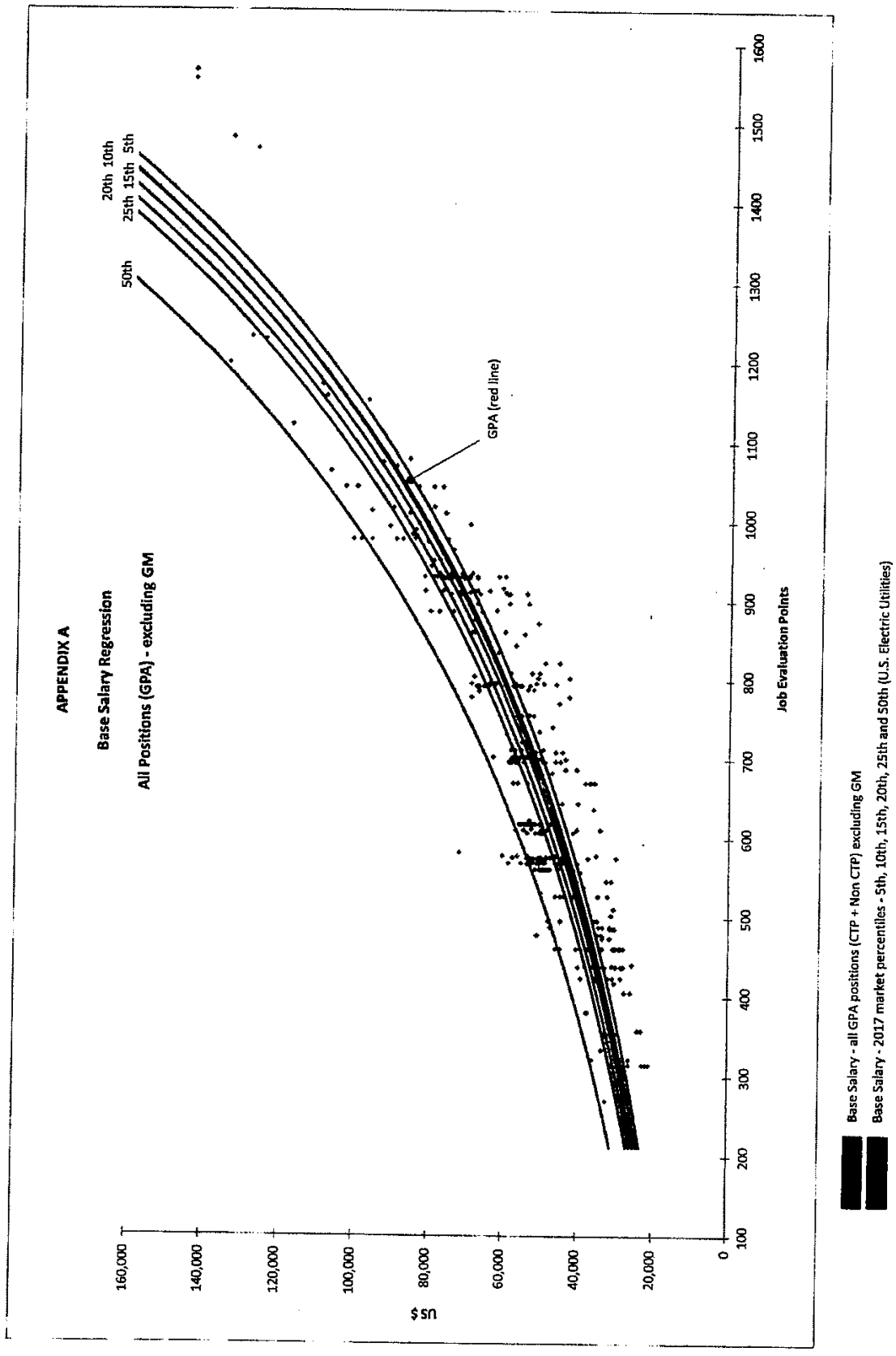
3. Agree on a transition plan (cost permitting) aimed at migrating GPA to a higher market percentile e.g. the 20th or 25th market percentile based on the 2017 market data. With the eventual target being the 50th market percentile (or market average within the U.S. mainland based on the prevailing market) this transition plan will continue the momentum to ensure GPA's compensation model remains externally competitive.

4. Given current controls in a) annually determining the implementation range on offer re : pay for performance, and b) determining the percentage of employees who can receive the "top scores" continue to allow (for employees below the 50th market percentile of market average within the U.S. mainland) the employees eventual pay for performance adjustment to be added

APPENDIX A4

to their base salary. This makes computation of any future regression analysis a lot more accurate when comparing results against the prevailing market.

APPENDIX A5


APPENDIX A
Base Salary Regression
All Positions (GPA) - excluding GM
20th 10th
25th 15th 5th
50th
GPA (red line)
US $
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600
Job Evaluation Points
Base Salary - all GPA positions (CTP + Non CTP) excluding GM
Base Salary - 2017 market percentiles - 5th, 10th, 15th, 20th, 25th and 50th (U.S. Electric Utilities)

APPENDIX A6

APPENDIX B

ESTIMATED COST IN MIGRATING GPA TO VARIOUS MARKET PERCENTILES

BASED ON 2017 MARKET DATA

GPA - Seven (7) Sub-Step Implementation Range

Market Percentile 2017	Base Salary	Total Compensation (Base Salary plus Benefits)	Percentage Increase
5th	762,146	1,172,532	2.95
10th	1,018,678	1,567,197	3.95
15th	1,344,417	2,068,334	5.21
20th	1,765,748	2,716,535	6.84
25th	2,246,436	3,456,055	8.70

GPA - Five (5) Sub-Step Implementation Range

Market Percentile 2017	Base Salary	Total Compensation (Base Salary plus Benefits)	Percentage Increase
5th	843,378	1,297,505	3.27
10th	1,125,975	1,732,269	4.36
15th	1,483,160	2,281,785	5.75
20th	1,921,254	2,955,775	7.44
25th	2,448,233	3,766,512	9.48

APPENDIX A7

STRATEGIC PAY SCALE (2017)

			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
		Step 1				Step 2				Step 3				Step 4				Step 5				Step 6				Step 7				
		A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	
Grade	A	20,580	20,705	20,912	21,121	21,332	21,546	21,761	21,979	22,199	22,421	22,645	22,871	23,100	23,331	23,564	23,800	24,038	24,278	24,521	24,766	25,014	25,264	25,517	25,772	26,030	26,290	26,553	26,818	
9.0%	B	22,345	22,568	22,794	23,022	23,252	23,485	23,720	23,957	24,196	24,438	24,683	24,930	25,179	25,431	25,685	25,942	26,201	26,463	26,728	26,995	27,265	27,538	27,813	28,091	28,372	28,656	28,943	29,232	
9.0%	C	24,356	24,600	24,846	25,094	25,345	25,598	25,854	26,113	26,374	26,638	26,904	27,173	27,445	27,719	27,997	28,277	28,559	28,845	29,133	29,425	29,719	30,016	30,316	30,620	30,926	31,235	31,547	31,863	
7.0%	D	26,061	26,322	26,585	26,851	27,119	27,390	27,664	27,941	28,220	28,503	28,788	29,075	29,366	29,660	29,956	30,256	30,559	30,864	31,172	31,484	31,799	32,117	32,439	32,763	33,091	33,421	33,756	34,093	
3.0%	E	26,843	27,111	27,382	27,656	27,933	28,212	28,494	28,779	29,067	29,358	29,651	29,948	30,247	30,550	30,855	31,164	31,475	31,790	32,108	32,429	32,753	33,081	33,412	33,746	34,083	34,424	34,768	35,116	
6.0%	F	28,453	28,738	29,025	29,316	29,609	29,905	30,204	30,506	30,811	31,119	31,430	31,745	32,062	32,383	32,706	33,033	33,364	33,697	34,034	34,375	34,719	35,066	35,416	35,771	36,128	36,490	36,854	37,223	
6.0%	G	30,161	30,462	30,767	31,074	31,385	31,699	32,016	32,336	32,660	32,986	33,316	33,649	33,986	34,326	34,669	35,015	35,366	35,719	36,076	36,437	36,802	37,170	37,541	37,917	38,296	38,679	39,066	39,456	
9.0%	H	32,875	33,204	33,536	33,871	34,210	34,552	34,898	35,246	35,599	35,955	36,314	36,678	37,044	37,415	37,789	38,167	38,549	38,934	39,323	39,717	40,114	40,515	40,920	41,329	41,743	42,160	42,582	43,007	
12.0%	I	36,830	37,198	37,569	37,936	38,315	38,698	39,085	39,476	39,871	40,270	40,672	41,079	41,490	41,905	42,324	42,747	43,174	43,606	44,042	44,483	44,927	45,377	45,830	46,289	46,752	47,219	47,691	48,168	
12.0%	J	41,238	41,651	42,067	42,488	42,913	43,342	43,775	44,213	44,655	45,102	45,553	46,008	46,468	46,933	47,403	47,877	48,355	48,839	49,327	49,821	50,319	50,822	51,330	51,843	52,362	52,885	53,414	53,948	
21.0%	K	49,899	50,397	50,901	51,410	51,925	52,444	52,968	53,498	54,033	54,573	55,119	55,670	56,227	56,789	57,357	57,931	58,510	59,095	59,686	60,283	60,886	61,495	62,109	62,731	63,358	63,991	64,631	65,278	
17.0%	L	58,381	58,965	59,555	60,150	60,752	61,359	61,973	62,593	63,219	63,851	64,489	65,134	65,785	66,443	67,108	67,779	68,457	69,141	69,833	70,531	71,236	71,949	72,668	73,395	74,129	74,870	75,619	76,375	
17.0%	M	68,306	68,989	69,679	70,376	71,080	71,790	72,508	73,233	73,966	74,705	75,452	76,207	76,969	77,739	78,516	79,301	80,094	80,895	81,704	82,521	83,346	84,180	85,022	85,872	86,731	87,598	88,474	89,359	
8.0%	N	73,771	74,508	75,253	76,006	76,766	77,534	78,309	79,092	79,883	80,682	81,489	82,303	83,126	83,958	84,797	85,645	86,502	87,367	88,240	89,123	90,014	90,914	91,823	92,742	93,669	94,606	95,552	96,507	
13.0%	O	82,361	84,194	85,036	85,887	86,745	87,613	88,489	89,374	90,268	91,170	92,082	93,003	93,933	94,872	95,821	96,779	97,747	98,724	99,712	100,709	101,716	102,733	103,760	104,798	105,846	106,904	107,973	109,053	
16.0%	P	96,698	97,665	98,642	99,628	100,625	101,631	102,647	103,674	104,711	105,758	106,815	107,883	108,962	110,052	111,152	112,264	113,387	114,520	115,666	116,822	117,990	119,170	120,362	121,566	122,781	124,009	125,249	126,502	
12.0%	Q	108,302	109,385	110,479	111,584	112,700	113,827	114,965	116,115	117,276	118,449	119,633	120,829	122,038	123,258	124,491	125,736	126,993	128,263	129,545	130,841	132,149	133,471	134,806	136,154	137,515	138,890	140,279	141,682	
14.0%	R	123,465	124,699	125,946	127,206	128,478	129,762	131,060	132,371	133,694	135,031	136,382	137,745	139,123	140,514	141,919	143,339	144,772	146,220	147,682	149,159	150,650	152,157	153,678	155,215	156,767	158,335	159,918	161,517	
13.0%	S	139,515	140,910	142,319	143,742	145,180	146,632	148,098	149,579	151,075	152,585	154,111	155,652	157,209	158,781	160,369	161,972	163,592	165,228	166,880	168,549	170,235	171,937	173,656	175,393	177,147	178,918	180,708	182,515	
11.0%	T	154,862	156,410	157,974	159,554	161,150	162,761	164,389	166,033	167,693	169,370	171,064	172,774	174,502	176,247	178,009	179,789	181,587	183,403	185,237	187,090	188,961	190,850	192,759	194,686	196,633	198,599	200,585	202,591	
11.0%	U	171,896	173,615	175,351	177,105	178,876	180,665	182,471	184,296	186,139	188,001	189,881	191,779	193,697	195,634	197,590	199,586	201,562	203,578	205,613	207,670	209,746	211,844	213,962	216,102	218,263	220,445	222,650	224,876	
11.0%	V	190,805	192,713	194,640	196,587	198,552	200,538	202,543	204,569	206,614	208,681	210,767	212,875	215,004	217,154	219,325	221,519	223,734	225,971	228,231	230,513	232,818	235,146	237,498	239,873	242,272	244,694	247,141	249,613	
11.0%	W	211,794	213,911	216,051	218,211	220,393	222,597	224,823	227,071	229,342	231,635	233,952	236,291	238,654	241,041	243,451	245,886	248,345	250,828	253,336	255,870	258,428	261,013	263,623	266,259	268,922	271,611	274,327	277,070	
11.0%	X	235,091	237,442	239,816	242,214	244,636	247,083	249,554	252,049	254,570	257,115	259,686	262,283	264,906	267,555	270,231	272,933	275,662	278,419	281,203	284,015	286,855	289,724	292,621	295,547	298,503	301,488	304,503	307,548	
11.0%	Y	260,951	263,560	266,196	268,858	271,546	274,262	277,005	279,775	282,572	285,398	288,252	291,135	294,046	296,986	299,956	302,956	305,985	309,045	312,136	315,257	318,410	321,594	324,810	328,058	331,338	334,652	337,998	341,378	
11.0%	Z	289,655	292,552	295,477	298,432	301,417	304,431	307,475	310,550	313,655	316,792	319,960	323,159	326,391	329,655	332,951	336,281	339,644	343,040	346,471	349,935	353,435	356,969	360,539	364,144	367,785	371,463	375,178	378,930	

APPENDIX B1

STRATEGIC PAY SCALE (2017)

	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Step 8				Step 9				Step 10				Step 11				Step 12				Step 13				Step 14			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
A	27,086	27,357	27,631	27,907	28,186	28,468	28,753	29,040	29,331	29,624	29,920	30,220	30,522	30,827	31,135	31,447	31,761	32,079	32,399	32,723	33,051	33,381	33,715	34,052	34,393	34,737	35,084	35,435
B	29,524	29,819	30,118	30,419	30,723	31,030	31,341	31,654	31,971	32,290	32,613	32,939	33,269	33,601	33,937	34,277	34,620	34,966	35,315	35,669	36,025	36,385	36,749	37,117	37,488	37,863	38,241	38,624
C	32,181	32,503	32,828	33,157	33,488	33,823	34,161	34,503	34,848	35,196	35,548	35,904	36,263	36,625	36,992	37,362	37,735	38,113	38,494	38,879	39,267	39,660	40,057	40,457	40,862	41,270	41,683	42,100
D	34,434	34,778	35,126	35,478	35,832	36,191	36,553	36,918	37,287	37,660	38,037	38,417	38,801	39,189	39,581	39,977	40,377	40,780	41,188	41,600	42,016	42,436	42,861	43,289	43,722	44,159	44,601	45,047
E	35,467	35,822	36,180	36,542	36,907	37,276	37,649	38,025	38,406	38,790	39,178	39,570	39,965	40,365	40,769	41,176	41,588	42,004	42,424	42,848	43,277	43,709	44,147	44,588	45,034	45,484	45,939	46,398
F	37,595	37,971	38,351	38,734	39,122	39,513	39,908	40,307	40,710	41,117	41,528	41,944	42,363	42,787	43,215	43,647	44,083	44,524	44,969	45,419	45,873	46,332	46,795	47,263	47,736	48,213	48,695	49,182
G	39,851	40,249	40,652	41,058	41,469	41,884	42,303	42,726	43,153	43,584	44,020	44,460	44,905	45,354	45,808	46,266	46,728	47,196	47,668	48,144	48,626	49,112	49,603	50,099	50,600	51,106	51,617	52,133
H	43,437	43,872	44,311	44,754	45,201	45,653	46,110	46,571	47,037	47,507	47,982	48,462	48,946	49,436	49,930	50,430	50,934	51,443	51,958	52,477	53,002	53,532	54,067	54,608	55,154	55,706	56,263	56,825
I	48,650	49,136	49,628	50,124	50,625	51,132	51,643	52,159	52,681	53,208	53,740	54,277	54,820	55,368	55,922	56,481	57,046	57,616	58,193	58,775	59,362	59,956	60,555	61,161	61,773	62,390	63,014	63,644
J	54,488	55,033	55,583	56,139	56,700	57,267	57,840	58,418	59,003	59,593	60,189	60,790	61,398	62,012	62,633	63,259	63,891	64,530	65,176	65,827	66,486	67,151	67,823	68,500	69,185	69,877	70,576	71,282
K	65,930	66,590	67,256	67,928	68,607	69,294	69,986	70,686	71,393	72,107	72,828	73,557	74,292	75,035	75,785	76,543	77,309	78,082	78,863	79,651	80,448	81,252	82,065	82,885	83,714	84,551	85,397	86,251
L	77,139	77,910	78,689	79,476	80,271	81,073	81,884	82,703	83,530	84,365	85,209	86,061	86,922	87,791	88,669	89,556	90,451	91,356	92,269	93,192	94,124	95,065	96,016	96,976	97,946	98,925	99,914	100,913
M	90,252	91,155	92,066	92,987	93,917	94,856	95,805	96,763	97,730	98,707	99,695	100,691	101,698	102,715	103,743	104,780	105,828	106,886	107,955	109,034	110,125	111,226	112,338	113,462	114,596	115,742	116,900	118,069
N	97,472	98,447	99,432	100,426	101,430	102,444	103,468	104,504	105,549	106,604	107,670	108,747	109,834	110,933	112,042	113,162	114,294	115,437	116,591	117,757	118,935	120,124	121,325	122,539	123,764	125,002	126,252	127,514
O	110,144	111,245	112,358	113,481	114,616	115,762	116,920	118,089	119,270	120,463	121,667	122,884	124,113	125,354	126,607	127,873	129,152	130,444	131,748	133,066	134,396	135,740	137,098	138,469	139,853	141,252	142,664	144,091
P	127,767	129,044	130,335	131,638	132,955	134,284	135,627	136,983	138,353	139,737	141,134	142,545	143,971	145,410	146,865	148,333	149,817	151,315	152,828	154,356	155,900	157,459	159,033	160,624	162,230	163,852	165,491	167,146
Q	143,899	144,538	145,975	147,435	148,909	150,398	151,902	153,421	154,955	156,505	158,070	159,651	161,247	162,860	164,488	166,133	167,795	169,473	171,167	172,879	174,608	176,354	178,117	179,898	181,697	183,514	185,350	187,203
R	163,333	164,964	166,612	168,276	169,756	171,454	173,169	174,900	176,649	178,416	180,200	182,002	183,822	185,660	187,517	189,392	191,286	193,199	195,131	197,082	199,053	201,043	203,054	205,084	207,135	209,206	211,299	213,412
S	184,348	186,193	188,045	189,926	191,825	193,743	195,680	197,637	199,614	201,610	203,626	205,662	207,719	209,796	211,894	214,013	216,153	218,314	220,498	222,703	224,930	227,179	229,451	231,745	234,063	236,403	238,767	241,155
T	204,617	206,663	208,730	210,817	212,925	215,055	217,205	219,377	221,571	223,787	226,025	228,285	230,568	232,873	235,202	237,554	239,930	242,329	244,752	247,200	249,672	252,169	254,690	257,237	259,810	262,408	265,032	267,682
U	227,125	229,396	231,690	234,007	236,347	238,711	241,098	243,509	245,944	248,403	250,887	253,396	255,930	258,490	261,074	263,685	266,322	268,985	271,675	274,392	277,136	279,907	282,706	285,533	288,389	291,273	294,185	297,127
V	252,109	254,630	257,176	259,748	262,346	264,969	267,619	270,295	272,998	275,728	278,485	281,270	284,083	286,923	289,793	292,691	295,617	298,574	301,559	304,575	307,621	310,697	313,804	316,942	320,111	323,312	326,546	329,811
W	279,841	282,639	285,466	288,320	291,204	294,116	297,057	300,027	303,028	306,058	309,118	312,210	315,332	318,485	321,670	324,887	328,135	331,417	334,731	338,078	341,459	344,874	348,322	351,806	355,324	358,877	362,466	366,090
X	318,623	313,738	316,867	320,036	323,236	326,468	329,733	333,030	336,361	339,724	343,121	346,553	350,018	353,518	357,054	360,624	364,230	367,873	371,551	375,267	379,020	382,810	386,638	390,504	394,409	398,353	402,337	406,360
Y	344,792	348,240	351,722	355,239	358,792	362,380	366,004	369,664	373,360	377,094	380,865	384,673	388,520	392,405	396,329	400,293	404,296	408,339	412,422	416,546	420,712	424,919	429,168	433,460	437,794	442,172	446,594	451,060
Z	382,719	386,546	390,412	394,316	398,259	402,242	406,264	410,327	414,430	418,574	422,760	426,988	431,257	435,570	439,926	444,325	448,768	453,256	457,788	462,366	466,990	471,660	476,376	481,140	485,952	490,811	495,719	500,676

APPENDIX B2

STRATEGIC PAY SCALE (2017)

	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Step 15				Step 16				Step 17				Step 18				Step 19				Step 20			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
A	35,789	36,147	36,508	36,874	37,242	37,615	37,991	38,371	38,754	39,142	39,533	39,929	40,328	40,731	41,139	41,550	41,966	42,385	42,809	43,237	43,670	44,106	44,547	44,993
B	39,810	39,400	39,794	40,192	40,594	41,000	41,410	41,824	42,242	42,665	43,091	43,522	43,958	44,397	44,841	45,290	45,742	46,200	46,662	47,128	47,600	48,076	48,557	49,042
C	42,521	42,946	43,376	43,809	44,248	44,690	45,137	45,588	46,044	46,505	46,970	47,439	47,914	48,393	48,877	49,366	49,859	50,358	50,861	51,370	51,884	52,403	52,927	53,456
D	45,498	45,952	46,412	46,876	47,345	47,818	48,297	48,779	49,267	49,760	50,258	50,760	51,268	51,780	52,298	52,821	53,349	53,883	54,422	54,966	55,516	56,071	56,631	57,198
E	46,962	47,331	47,804	48,282	48,765	49,253	49,745	50,243	50,745	51,253	51,765	52,283	52,806	53,334	53,867	54,406	54,950	55,499	56,054	56,615	57,181	57,753	58,330	58,914
F	49,674	50,171	50,673	51,179	51,691	52,208	52,730	53,257	53,790	54,328	54,871	55,420	55,974	56,534	57,099	57,670	58,247	58,829	59,418	60,012	60,612	61,218	61,830	62,449
G	52,655	53,181	53,713	54,250	54,793	55,341	55,894	56,453	57,017	57,588	58,163	58,745	59,333	59,926	60,525	61,130	61,741	62,359	62,983	63,613	64,249	64,891	65,540	66,195
H	57,394	57,967	58,547	59,133	59,724	60,321	60,924	61,534	62,149	62,770	63,398	64,032	64,672	65,319	65,972	66,632	67,298	67,971	68,651	69,338	70,031	70,731	71,439	72,153
I	64,282	64,924	65,573	66,229	66,891	67,560	68,235	68,918	69,607	70,303	71,006	71,716	72,433	73,158	73,889	74,628	75,374	76,128	76,889	77,658	78,435	79,219	80,011	80,811
J	71,994	72,714	73,442	74,176	74,918	75,667	76,424	77,188	77,960	78,739	79,527	80,322	81,125	81,936	82,756	83,583	84,419	85,263	86,116	86,977	87,847	88,725	89,613	90,509
K	87,133	87,984	88,864	89,753	90,650	91,557	92,473	93,397	94,331	95,275	96,227	97,190	98,161	99,143	100,134	101,136	102,147	103,169	104,200	105,242	106,295	107,358	108,431	109,516
L	101,923	102,942	103,971	105,011	106,061	107,122	108,193	109,275	110,368	111,471	112,586	113,712	114,849	115,997	117,157	118,329	119,512	120,707	121,914	123,134	124,365	125,609	126,865	128,133
M	119,249	120,442	121,646	122,863	124,091	125,332	126,586	127,851	129,130	130,421	131,726	133,043	134,373	135,717	137,074	138,445	139,829	141,228	142,640	144,066	145,507	146,962	148,432	149,916
N	128,788	130,077	131,378	132,692	134,019	135,359	136,712	138,080	139,460	140,855	142,264	143,686	145,123	146,574	148,040	149,520	151,016	152,526	154,051	155,592	157,147	158,719	160,306	161,909
O	145,532	146,987	148,457	149,942	151,441	152,956	154,485	156,030	157,590	159,166	160,758	162,365	163,989	165,629	167,285	168,958	170,648	172,354	174,078	175,818	177,577	179,352	181,146	182,957
P	168,817	170,505	172,210	173,932	175,672	177,428	179,203	180,995	182,805	184,633	186,479	188,344	190,227	192,130	194,051	195,991	197,951	199,931	201,930	203,949	205,989	208,049	210,129	212,231
Q	189,875	190,966	192,076	194,884	196,752	198,720	200,707	202,714	204,741	206,789	208,857	210,945	213,055	215,185	217,337	219,510	221,705	223,922	226,162	228,423	230,708	233,015	235,345	237,698
R	215,546	217,701	219,878	222,077	224,298	226,541	228,806	231,094	233,405	235,739	238,096	240,477	242,882	245,311	247,764	250,242	252,744	255,272	257,824	260,403	263,007	265,637	268,293	270,976
S	243,567	246,002	248,462	250,947	253,456	255,991	258,551	261,136	263,748	266,385	269,049	271,740	274,457	277,201	279,973	282,773	285,601	288,457	291,342	294,255	297,197	300,169	303,171	306,203
T	270,359	273,063	275,793	278,551	281,337	284,150	286,991	289,861	292,760	295,688	298,644	301,631	304,647	307,694	310,771	313,878	317,017	320,187	323,389	326,623	329,889	333,188	336,520	339,885
U	300,098	303,099	306,130	309,192	312,284	315,406	318,560	321,746	324,964	328,213	331,495	334,810	338,158	341,540	344,955	348,405	351,889	355,408	358,962	362,552	366,177	369,839	373,537	377,273
V	333,109	336,440	339,805	343,203	346,635	350,101	353,602	357,138	360,710	364,317	367,960	371,639	375,356	379,109	382,900	386,729	390,597	394,503	398,448	402,432	406,457	410,521	414,626	418,773
W	369,751	373,449	377,183	380,955	384,765	388,612	392,498	396,423	400,388	404,391	408,435	412,520	416,645	420,811	425,019	429,270	433,562	437,898	442,277	446,700	451,167	455,678	460,235	464,838
X	418,424	416,528	418,673	422,860	427,089	431,360	435,673	440,030	444,430	448,874	453,363	457,897	462,476	467,101	471,772	476,489	481,254	486,067	490,927	495,837	500,795	505,803	510,861	515,970
Y	455,579	460,126	464,727	469,375	474,068	478,809	483,597	488,433	493,318	498,251	503,233	508,266	513,348	518,482	523,666	528,903	534,192	539,534	544,929	550,379	555,883	561,441	567,056	572,726
Z	505,683	510,740	515,847	521,006	526,216	531,478	536,793	542,161	547,582	553,058	558,589	564,175	569,816	575,515	581,270	587,082	592,953	598,883	604,872	610,920	617,030	623,200	629,432	635,726

APPENDIX B3

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Accountant I	670	J
GPA	Accountant II	796	K
GPA	Accountant III	913	L
GPA	Accounting Technician I	431	F
GPA	Accounting Technician II	503	G
GPA	Accounting Technician III	606	I
GPA	Administrative Aide	353	D
GPA	Administrative Assistant	527	H
GPA	Administrative Officer	611	I
GPA	AGM Administration	1468	R
GPA	AGM Engineering & Technical Services	1555	R
GPA	AGM Operations	1566	R
GPA	Assistant Chief Financial Officer	1122	O
GPA	Assistant Customer Services Manager	951	M
GPA	Assistant Generation Manager	1100	O
GPA	Assistant Plant Superintendent (Cabras 1&2)	1014	N
GPA	Assistant Plant Superintendent (Cabras 3&4)	1007	N
GPA	Assistant Plant Superintendent (CT / Diesel Systems)	965	N
GPA	Assistant Plant Superintendent (Diesel)	979	N
GPA	Assistant Plant Superintendent (Tanguisson)	1014	N
GPA	Assistant T&D Manager	1070	O
GPA	Auditor I	670	J
GPA	Auditor II	796	K
GPA	Auditor III	913	L
GPA	Board Secretary	582	I
GPA	Budget Analyst	779	K
GPA	Building Maintenance Supervisor	909	L
GPA	Buyer I	381	F
GPA	Buyer II	496	H
GPA	Buyer Supervisor I	735	J
GPA	Buyer Supervisor II	834	K
GPA	Carpenter I	461	G
GPA	Carpenter II	543	I

APPENDIX C1

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Carpenter Leader	683	J
GPA	Carpenter Supervisor	774	K
GPA	Cashier I	315	C
GPA	Cashier II	358	E
GPA	Chief Budget Officer	994	N
GPA	Chief Electric Power Systems Dispatcher	984	N
GPA	Chief Financial Officer (GPA)	1482	R
GPA	Chief Information Technology Officer	1173	P
GPA	Clerk I	212	A
GPA	Clerk II	270	B
GPA	Clerk III	322	C
GPA	Clerk Typist I	270	B
GPA	Clerk Typist II	322	C
GPA	Clerk Typist III	346	D
GPA	Collection Agent	421	E
GPA	Collection Supervisor	795	K
GPA	Communication / Electronic Technician Leader	709	J
GPA	Communication / Electronic Technician I	479	G
GPA	Communication / Electronic Technician II	575	I
GPA	Communication / Electronic Technician Supervisor	910	L
GPA	Computer Operations Supervisor	844	K
GPA	Computer Operator I	356	E
GPA	Computer Operator II	506	G
GPA	Computer Operator III	637	I
GPA	Computer Systems Analyst I	771	J
GPA	Computer Systems Analyst II	910	L
GPA	Computer Technician I	479	G
GPA	Computer Technician II	575	I
GPA	Computer Technician Leader	709	J
GPA	Computer Technician Supervisor	897	L
GPA	Construction Inspector I	498	G
GPA	Construction Inspector II	622	I
GPA	Construction Inspector III	732	K

APPENDIX C2

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Contracts Administrator	798	K
GPA	Control Operator	793	K
GPA	Controller	1079	O
GPA	Customer Service Electrician I	439	G
GPA	Customer Service Electrician II	527	I
GPA	Customer Service Electrician Leader	660	J
GPA	Customer Service Electrician Supervisor	851	K
GPA	Customer Service Representative	461	G
GPA	Customer Service Representative Supervisor	795	K
GPA	Database Administrator	822	J
GPA	Electric Meter Reader I	319	C
GPA	Electric Meter Reader II	406	E
GPA	Electric Meter Reader Leader	553	H
GPA	Electric Meter Reader Supervisor	734	J
GPA	Electric Operation Trainee	364	C
GPA	Electric Power Laboratory Chief	952	M
GPA	Electric Power Systems Dispatcher I	788	K
GPA	Electric Power Systems Dispatcher II	911	L
GPA	Electric Power Systems Dispatcher Technician	660	J
GPA	Electric Relay Technician I	486	G
GPA	Electric Relay Technician II	575	I
GPA	Electric Relay Technician Leader	718	J
GPA	Electric Relay Technician Supervisor	911	L
GPA	Electrician Troubleshooter	697	J
GPA	Employee Development Specialist I	503	H
GPA	Employee Development Specialist II	670	J
GPA	Employee Development Specialist III	796	K
GPA	Engineer I	687	J
GPA	Engineer II	809	K
GPA	Engineer III	931	M
GPA	Engineer Supervisor	1044	O
GPA	Engineering Aide I	298	C
GPA	Engineering Aide II	339	D

APPENDIX C3

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Engineering Aide III	441	F
GPA	Engineering Technician I	482	G
GPA	Engineering Technician II	578	J
GPA	Environmental Manager	1158	O
GPA	Equipment Operator I	397	E
GPA	Equipment Operator II	445	F
GPA	Equipment Operator III	511	G
GPA	Equipment Operator IV	546	H
GPA	Equipment Operator Leader I	644	I
GPA	Equipment Operator Leader II	661	J
GPA	Equipment Operator Supervisor	795	K
GPA	Facilities Manager	997	M
GPA	Fleet Support Services Manager	1015	N
GPA	General Manager (GPA)	1831	S
GPA	GIS Analyst I	502	H
GPA	GIS Analyst II	612	J
GPA	GIS Analyst III	756	K
GPA	Heavy Equipment Mechanic I	477	G
GPA	Heavy Equipment Mechanic II	561	I
GPA	Heavy Equipment Mechanic Leader	700	J
GPA	Heavy Equipment Mechanic Supervisor	909	L
GPA	Help Desk Support Supervisor	771	J
GPA	Help Desk Technician	575	I
GPA	HVCS / Electrician I	486	G
GPA	HVCS / Electrician II	570	I
GPA	HVCS / Electrician Leader	703	J
GPA	HVCS / Electrician Supervisor	911	L
GPA	Information Security Administrator	822	J
GPA	Information Technology Manager	1064	O
GPA	Internal Auditor	1019	N
GPA	Inventory Management Officer	824	K
GPA	Land Agent I	362	E
GPA	Land Agent II	465	G

APPENDIX C4

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Land Agent III	531	I
GPA	Line Electrician I	486	G
GPA	Line Electrician II	568	I
GPA	Line Electrician Leader	702	J
GPA	Line Electrician Supervisor	911	L
GPA	Line Inspector	623	J
GPA	Machinist I	482	G
GPA	Machinist II	570	I
GPA	Machinist Leader	700	J
GPA	Maintenance Planner	796	K
GPA	Maintenance Worker	422	E
GPA	Management Analyst I	503	H
GPA	Management Analyst II	670	J
GPA	Management Analyst III	796	K
GPA	Management Analyst IV	913	L
GPA	Manager of Engineering	1232	Q
GPA	Manager of Generation	1229	Q
GPA	Meter / Relay Superintendent	1018	N
GPA	Meter Electrician I	478	G
GPA	Meter Electrician II	569	I
GPA	Meter Electrician Leader	712	J
GPA	Meter Electrician Supervisor	911	L
GPA	Network Systems Administrator	897	L
GPA	Payroll Clerk I	346	D
GPA	Payroll Clerk II	438	G
GPA	Payroll Clerk III	493	H
GPA	Payroll Supervisor	805	K
GPA	Personnel Assistant I	364	D
GPA	Personnel Assistant II	433	F
GPA	Personnel Services Administrator	1064	O
GPA	Personnel Specialist I	503	H
GPA	Personnel Specialist II	670	J
GPA	Personnel Specialist III	796	K

APPENDIX C5

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Personnel Specialist IV	913	L
GPA	Planner Work Co-Ordinator (Transportation)	561	H
GPA	Plant Electrician / Instrument Maintenance Supervisor	911	L
GPA	Plant Electrician I	478	G
GPA	Plant Electrician II	569	I
GPA	Plant Electrician Leader	712	J
GPA	Plant Instrument Technician I	488	G
GPA	Plant Instrument Technician II	576	I
GPA	Plant Instrument Technician Leader	722	J
GPA	Plant Maintenance Mechanic I	477	G
GPA	Plant Maintenance Mechanic II	561	I
GPA	Plant Maintenance Mechanic Leader	700	J
GPA	Plant Maintenance Supervisor	909	L
GPA	Plant Maintenance Welder I	477	G
GPA	Plant Maintenance Welder II	557	I
GPA	Plant Maintenance Welder III	696	J
GPA	Plant Operator / Main. Mechanic Leader	755	J
GPA	Plant Operator / Maintenance Supervisor	929	L
GPA	Plant Operator / Maintenance Worker I	488	G
GPA	Plant Operator / Maintenance Worker II	607	J
GPA	Plant Operator I	438	F
GPA	Plant Operator II	488	G
GPA	Plant Operator III	618	J
GPA	Plant Results Supervisor	908	L
GPA	Plant Shift Supervisor	935	L
GPA	Plant Utility Worker	348	D
GPA	Plant Water Technician I	469	G
GPA	Plant Water Technician II	576	I
GPA	Plant Water Technician Leader	656	J
GPA	Power Plant Maintenance Superintendent (CMWS)	998	N
GPA	Power Systems Superintendent (Overhead)	999	N
GPA	Power Systems Superintendent (Substation)	1011	N
GPA	Power Systems Superintendent (Underground)	1011	N

APPENDIX C6

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Program Coordinator I	503	H
GPA	Program Coordinator II	670	J
GPA	Program Coordinator III	796	K
GPA	Program Coordinator IV	913	L
GPA	Programmer / Analyst Supervisor	916	L
GPA	Programmer Analyst	683	J
GPA	PSCC Manager	1153	P
GPA	PSCC Superintendent	1047	N
GPA	Public Information Officer	926	M
GPA	Refrigeration Mechanic I	477	G
GPA	Refrigeration Mechanic II	561	I
GPA	Refrigeration Mechanic Leader	696	J
GPA	Revenue Protection Field Investigator	794	K
GPA	Revenue Protection Utility Analyst	913	L
GPA	Right of Way Supervisor	915	L
GPA	Risk Analyst	779	K
GPA	Safety Administrator	975	M
GPA	Safety Inspector I	418	F
GPA	Safety Inspector II	539	H
GPA	Safety Inspector III	741	J
GPA	Safety Supervisor	872	K
GPA	SCADA Technician I	589	I
GPA	SCADA Technician II	705	J
GPA	SCADA Technician Leader	809	K
GPA	SCADA Technician Supervisor	926	L
GPA	Secretary I	378	E
GPA	Secretary I (Typist)	378	E
GPA	Secretary II	438	G
GPA	Secretary II (Typist)	438	G
GPA	Shop Planner	786	K
GPA	Special Projects Engineer	978	N
GPA	SPORD Manager	1236	Q
GPA	Staff Attorney	1199	P

APPENDIX C7

CTP POSITIONS (GPA)

Authority	POSITION	JE	GRADE
GPA	Storekeeper I	322	C
GPA	Storekeeper II	424	F
GPA	Substation Electrician I	486	G
GPA	Substation Electrician II	570	I
GPA	Substation Electrician Leader	703	J
GPA	Substation Electrician Supervisor	911	L
GPA	Supply Clerk	322	C
GPA	Supply Management Administrator	990	M
GPA	Survey Supervisor	900	L
GPA	System Protection Engineer (Substation)	944	M
GPA	Systems Analyst I	725	J
GPA	Systems Analyst II	910	L
GPA	Systems Manager	1064	O
GPA	T&D Manager	1196	P
GPA	Tool Mechanic	390	E
GPA	Trouble Dispatcher	474	G
GPA	Trouble Dispatcher Leader	600	J
GPA	Utility Auditor I	670	J
GPA	Utility Auditor II	796	K
GPA	Utility Auditor III	913	L
GPA	Utility Services Administrator	1075	O
GPA	Utility Worker	348	D
GPA	Warehouse Supervisor I	724	J
GPA	Warehouse Supervisor II	803	K
GPA	Word Processing Secretary I	378	E
GPA	Word Processing Secretary II	438	G

APPENDIX C8

PROPOSED NEW POSITIONS TO ADD TO CTP LIST (GPA)

Authority	POSITION	JE	GRADE
GPA	Accounting Technician I	431	F
GPA	Accounting Technician II	503	G
GPA	Accounting Technician III	606	I
GPA	Administrative Aide	353	D
GPA	Administrative Assistant	527	H
GPA	Board Secretary	582	I
GPA	Buyer I	381	F
GPA	Cashier I	315	C
GPA	Cashier II	358	E
GPA	Clerk I	212	A
GPA	Clerk II	270	B
GPA	Clerk III	322	C
GPA	Clerk Typist I	270	B
GPA	Clerk Typist II	322	C
GPA	Clerk Typist III	346	D
GPA	Engineering Aide I	298	C
GPA	Engineering Aide II	339	D
GPA	Engineering Aide III	441	F
GPA	Maintenance Worker	422	E
GPA	Payroll Clerk I	346	D
GPA	Payroll Clerk II	438	G
GPA	Payroll Clerk III	493	H
GPA	Personnel Assistant I	364	D
GPA	Personnel Assistant II	433	F
GPA	Secretary I	378	E
GPA	Secretary I (Typist)	378	E
GPA	Secretary II	438	G
GPA	Secretary II (Typist)	438	G
GPA	Storekeeper I	322	C
GPA	Storekeeper II	424	F
GPA	Supply Clerk	322	C
GPA	Utility Worker	348	D
GPA	Word Processing Secretary I	378	E
GPA	Word Processing Secretary II	438	G

APPENDIX D1

PROPOSED NEW POSITIONS TO ADD TO CTP LIST (GPA)

Five (5) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS (NEW)	POSITION	JE	STRUCTURAL ADJUSTMENT - MIN				STRUCTURAL ADJUSTMENT - MAX			
				BASE SALARY	GRADE	STEP	SUB STEP	BASE SALARY	GRADE	STEP	SUB STEP
GPA	FILLED	ADMINISTRATIVE AIDE	353	29,660	D	4	B	30,864	D	5	B
GPA	FILLED	ADMINISTRATIVE ASSISTANT	527	39,717	H	5	D	41,329	H	6	D
GPA	FILLED	BUYER I	381	31,430	F	3	C	32,706	F	4	C
GPA	FILLED	CASHIER I	315	27,445	C	4	A	28,559	C	5	A
GPA	FILLED	CASHIER II	358	30,550	E	4	B	31,790	E	5	B
GPA	FILLED	CLERK II	270	25,942	B	4	D	26,995	B	5	D
GPA	FILLED	CLERK III	322	27,997	C	4	C	29,133	C	5	C
GPA	FILLED	ENGINEERING AIDE III	441	32,062	F	4	A	33,364	F	5	A
GPA	FILLED	MAINTENANCE WORKER	422	32,429	E	5	D	33,746	E	6	D
GPA	FILLED	PAYROLL CLERK II	438	33,649	G	3	D	35,015	G	4	D
GPA	FILLED	STOREKEEPER I	322	27,445	C	4	A	28,559	C	5	A
GPA	FILLED	STOREKEEPER II	424	32,706	F	4	C	34,034	F	5	C
GPA	FILLED	UTILITY WORKER	348	28,788	D	3	C	29,956	D	4	C
GPA	FILLED	WORD PROCESSING SECRETARY II	438	33,649	G	3	D	35,015	G	4	D

Five (5) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS (NEW)	POSITION	JE	STRUCTURAL ADJUSTMENT - MIN				STRUCTURAL ADJUSTMENT - MAX			
				BASE SALARY	GRADE	STEP	SUB STEP	BASE SALARY	GRADE	STEP	SUB STEP
GPA	NEW	ACCOUNTING TECHNICIAN I	431	32,062	F	4	A	33,364	F	5	A
GPA	NEW	ACCOUNTING TECHNICIAN II	503	36,437	G	5	D	37,917	G	6	D
GPA	NEW	ACCOUNTING TECHNICIAN III	606	44,042	I	5	C	45,830	I	6	C
GPA	NEW	CLERK I	212	23,100	A	4	A	24,038	A	5	A
GPA	NEW	CLERK TYPIST I	270	25,942	B	4	D	26,995	B	5	D
GPA	NEW	CLERK TYPIST II	322	27,997	C	4	C	29,133	C	5	C
GPA	NEW	CLERK TYPIST III	346	29,660	D	4	B	30,864	D	5	B
GPA	NEW	ENGINEERING AIDE I	298	26,638	C	3	B	27,719	C	4	B
GPA	NEW	ENGINEERING AIDE II	339	28,503	D	3	B	29,660	D	4	B
GPA	NEW	PAYROLL CLERK I	346	28,788	D	3	C	29,956	D	4	C
GPA	NEW	PAYROLL CLERK III	493	38,549	H	5	A	40,114	H	6	A
GPA	NEW	PERSONNEL ASSISTANT I	364	29,660	D	4	B	30,864	D	5	B
GPA	NEW	PERSONNEL ASSISTANT II	433	33,033	F	4	D	34,375	F	5	D
GPA	NEW	SECRETARY I	378	31,164	E	4	D	32,429	E	5	D
GPA	NEW	SECRETARY I (TYPIST)	378	31,164	E	4	D	32,429	E	5	D
GPA	NEW	SECRETARY II	438	33,649	G	3	D	35,015	G	4	D
GPA	NEW	SECRETARY II (TYPIST)	438	33,649	G	3	D	35,015	G	4	D
GPA	NEW	SUPPLY CLERK	322	27,445	C	4	A	28,559	C	5	A
GPA	NEW	WORD PROCESSING SECRETARY I	378	31,164	E	4	D	32,429	E	5	D

APPENDIX D2

PROPOSED NEW POSITIONS TO ADD TO CTP LIST (GPA)

Seven (7) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS (NEW)	POSITION	JE	STRUCTURAL ADJUSTMENT - MIN				STRUCTURAL ADJUSTMENT - MAX			
				BASE SALARY	GRADE	STEP	SUB STEP	BASE SALARY	GRADE	STEP	SUB STEP
GPA	FILLED	ADMINISTRATIVE AIDE	353	29,075	D	3	D	30,864	D	5	B
GPA	FILLED	ADMINISTRATIVE ASSISTANT	527	38,934	H	5	B	41,329	H	6	D
GPA	FILLED	BUYER I	381	30,811	F	3	A	32,706	F	4	C
GPA	FILLED	CASHIER I	315	26,904	C	3	C	28,559	C	5	A
GPA	FILLED	CASHIER II	358	29,948	E	3	D	31,790	E	5	B
GPA	FILLED	CLERK II	270	25,431	B	4	B	26,995	B	5	D
GPA	FILLED	CLERK III	322	27,445	C	4	A	29,133	C	5	C
GPA	FILLED	ENGINEERING AIDE III	441	31,430	F	3	C	33,364	F	5	A
GPA	FILLED	MAINTENANCE WORKER	422	31,790	E	5	B	33,746	E	6	D
GPA	FILLED	PAYROLL CLERK II	438	32,986	G	3	B	35,015	G	4	D
GPA	FILLED	STOREKEEPER I	322	26,904	C	3	C	28,559	C	5	A
GPA	FILLED	STOREKEEPER II	424	32,062	F	4	A	34,034	F	5	C
GPA	FILLED	UTILITY WORKER	348	28,220	D	3	A	29,956	D	4	C
GPA	FILLED	WORD PROCESSING SECRETARY II	438	32,986	G	3	B	35,015	G	4	D

Seven (7) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS (NEW)	POSITION	JE	STRUCTURAL ADJUSTMENT - MIN				STRUCTURAL ADJUSTMENT - MAX			
				BASE SALARY	GRADE	STEP	SUB STEP	BASE SALARY	GRADE	STEP	SUB STEP
GPA	NEW	ACCOUNTING TECHNICIAN I	431	31,430	F	3	C	33,364	F	5	A
GPA	NEW	ACCOUNTING TECHNICIAN II	503	35,719	G	5	B	37,917	G	6	D
GPA	NEW	ACCOUNTING TECHNICIAN III	606	43,174	I	5	A	45,830	I	6	C
GPA	NEW	CLERK I	212	22,645	A	3	C	24,038	A	5	A
GPA	NEW	CLERK TYPIST I	270	25,431	B	4	B	26,995	B	5	D
GPA	NEW	CLERK TYPIST II	322	27,445	C	4	A	29,133	C	5	C
GPA	NEW	CLERK TYPIST III	346	29,075	D	3	D	30,864	D	5	B
GPA	NEW	ENGINEERING AIDE I	298	26,113	C	2	D	27,719	C	4	B
GPA	NEW	ENGINEERING AIDE II	339	27,941	D	2	D	29,660	D	4	B
GPA	NEW	PAYROLL CLERK I	346	28,220	D	3	A	29,956	D	4	C
GPA	NEW	PAYROLL CLERK III	493	37,789	H	4	C	40,114	H	6	A
GPA	NEW	PERSONNEL ASSISTANT I	364	29,075	D	3	D	30,864	D	5	B
GPA	NEW	PERSONNEL ASSISTANT II	433	32,383	F	4	B	34,375	F	5	D
GPA	NEW	SECRETARY I	378	30,550	E	4	B	32,429	E	5	D
GPA	NEW	SECRETARY I (TYPIST)	378	30,550	E	4	B	32,429	E	5	D
GPA	NEW	SECRETARY II	438	32,986	G	3	B	35,015	G	4	D
GPA	NEW	SECRETARY II (TYPIST)	438	32,986	G	3	B	35,015	G	4	D
GPA	NEW	SUPPLY CLERK	322	26,904	C	3	C	28,559	C	5	A
GPA	NEW	WORD PROCESSING SECRETARY I	378	30,550	E	4	B	32,429	E	5	D

APPENDIX D3

GUAM WATERWORKS AUTHORITY
EXECUTIVE REPORT

MISSION STATEMENT: The Guam Waterworks Authority SHALL

Provide outstanding customer service by delivering excellent water and wastewater services in a safe, reliable, responsible and cost effective manner.

AUTHORITY:

12 GCA CHAPTER 14, GUAM WATERWORKS AUTHORITY

§14103. Continuation of Existence.
Guam Waterworks Authority (GWA) is continued in existence as a public corporation.

§ 14105. Governance of Authority.
All powers vested in the Authority, except as provided herein, shall be exercised by the Consolidated Commission on Utilities, as established in Chapter 79 of Title 12 of the Guam Code Annotated.

4 GCA §6303 (d) - Creation of positions.

GWA Personnel Rules & Regulations, Paragraph A to the Glossary of GWA's Personnel Rules - Certified, Technical, and Professional Positions (as amended by Public Law 28-159 Section 3 (c)):

SUMMARY:

The Guam Waterworks Authority owns and operates an extensive network of facilities that provides water and wastewater services to the majority of island residents. These facilities represent a significant investment and include substantial visible and underground infrastructure assets.

GWA Operates and maintains more than 200 water facilities on Guam. The facility types can generally be classified as sources, reservoirs, and waster booster pumping stations. GWA is also responsible for three public water systems. The Northern, Central and Southern Public Water Systems.

GWA provides wastewater services for Guam's general population and Andersen Air Force Base. The wastewater system consists of seven wastewater basins: Agat, Umatac - Merizo, Inajaran, Baza Gardens, Pago Socio, Northern District and Hagatna.

While these efforts support efficient and reliable utility service, they cannot abate the growing cyber and physical security threats to the Authority. GWA continues to build better business processes and optimize its assets, the roles of *all employees* have become increasingly critical to the defense of potential security breaches to the GWA infrastructure.

Security breaches and threats – both physical and cyber -impact people, information, functions and physical assets. These hazards can range from workplace violence, crime, including personal and property thefts, terrorism acts, and natural disasters to name a few.

All employees are responsible to conduct safe work practices in their working environment and to secure their work places to delay or deter threats to GWA facilities. Examples of this include, and are not limited to:

Cashier duties involving the ability to observe the actions and behavior of a potential adversary and alerting authorities, protecting the face-to-face cash handling process and securing customer information when conducting payment transactions using the proprietary customer service program that is interconnected to the GWA network.

Administrative and clerical duties involve securing and updating employee and customer data on the utility's integrated network and protecting access to this information. This also includes observance and monitoring of internal and external customers access to office business and processes.

Finance and Accounting duties involve responsibility for the financial records of the Authority. This includes: analyzing financial statements, long range financial planning, enhancing and monitoring internal controls, preparing annual budgets, external/internal audit functions, debt/financing proposals, managing investments, revenue collection and tracking. Accounting computer based applications used in carrying out the functions of Finance and Accounting include, but not limited to the JD Edwards Accounting Modules and Customer Care and Billing system.

Maintenance Worker duties involve work the maintenance of GWA facilities including facilities, treatment plants, pumping stations, wells and the administration office building. They must be cognizant to hazard conditions at these sites and apply corrective measures to minimize risks to integrity of these physical assets.

Procurement duties include the purchasing of materials and equipment, and the storing of equipment, materials and parts relevant to operations work such as water distribution, water production and treatment, wastewater collection and wastewater treatment plants and facilities overhauls, underground water and sewer line construction and repairs, and conducting inventory of large bulk items unique to the GWA operations. Measures are implemented to protect access to warehouses and storage areas from unauthorized persons. Additional duties include inputting and retrieving data on the utility's integrated network for accountability.

The security of GWA's assets is paramount. The whole organization is accountable for ensuring safety and preparedness of its employees when safety and security at any level is compromised.

GWA has embarked on a cybersecurity training program for all employees. GWA will also implement a physical security training program. These training programs are the initial stages of enhancing employees' awareness and knowledge of the importance of securing GWA assets and its environment.

Recently, an updated market review of all positons was conducted and determined GWA's position in the market is relatively at the 15th market percentile of the 2017 Market Data (Appendix A). The review included an adjustment of the pay scale to address obsolete pay grades that were in place since 2007, and a refit and reset of new grades to coincide with the 2017 Market Data (Appendices B and C). The proposed creation of positions were also included in the market review update (Appendices D1 - D17)

Based on the foregoing, management recognizes that all positions are critical to the safety and welfare of GWA operations. In meeting management's needs for the efficacy of operating the utility within modern industry standards, we recommend the following:

a) To approve the proposed creation of positions (delineated in Appendices D1 – D17); and

b) To add these newly created positions (delineated in Appendices D1 – D17) to GWA's list of Certified, Technical and Professional positions (delineated in Appendix C).

c) To accept the recommendations of the market review update for CTP positions, including a new pay scale, the refit and reset of new grades to coincide with the 2017 market data, and implementation of a structural adjustment subject to the availability of funds (Appendices A and B).

d) To maintain uniformity in the application of the promotion/demotion/transfer pay policy relative to CCU Resolution No. 2012-49 for all CTP positions covered under the Strategic Pay Scale, apply CCU Resolution No. 2012-49 to GPA and GWA business processes (delineated in Appendices E1 – E16).

MIGUEL C. BORDALLO, P.E.
General Manager, GWA

9.12.17
Date

GUAM WATERWORKS AUTHORITY

COMPENSATION & BENEFITS STUDY

Market Review

Executive Summary

September 2017

GUAM WATERWORKS AUTHORITY

ALAN SEARLE & ASSOCIATES

Management Consultants, Russell, New Zealand

Appendix A

A. Background

With the passing of public laws PL 28-113 and PL 28-159 GWA was given the mandate to implement a new market based compensation model that would aid the attraction and retention of "Certified Technical and Professional" or CTP personnel. The law was a result of concerns that the Authority was losing highly skilled personnel due to the fact that current salaries and compensation were not sufficient to attract and retain such personnel.

Through the RFP process, GWA in 2005 engaged the consulting services of Alan Searle & Associates to undertake the above compensation study. This was an extensive project involving three stages as follows :

The first stage of the study focused on job evaluation which involved applying a structured methodology of twelve (12) individual factors to assess all CTP positions. Each factor derived a point value with their sum representing the "total point" value of the position. The process was important as it re-established the internal equity of all positions based on job size. An exponential regression analysis was then undertaken to determine GWA's base salary pay line. This step was also important in that the resulting base salary pay line could eventually be compared to the market percentiles identified in Stage Two.

The second stage involved gathering external pay data on all CTP positions. The target market was the U.S. water industry and extensive data was gathered from a number of sources including the AWWA (American Water Works Association), U.S. Bureau of Labor Statistics (BLS), U.S. Department of Labor (DOL), U.S. Federal Government / Civil Service, U.S. Military, Web Based Compensation Companies, U.S. Utility Recruitment Companies and U.S. Utility Company Websites. The resulting data was analyzed and presented as market percentiles (5^{th} through to the 95^{th}) with the 50^{th} market percentile being the market average. A second exponential regression analysis was then undertaken to compare GWA's base salary pay line against the market percentiles as gathered in 2008.

The results validated GWA's market vulnerability as their base salary pay line (for a large number of CTP positions) was clearly below the 5^{th} market percentile. This was an exceptionally low position and validated the ongoing difficulties GWA had been experiencing in being able to attract and retain CTP employees. The situation at the time was further exacerbated by Gov. Guam policy (Hay methodology) that stipulated that employees on Step 10 and above receive a 3.5% increment (based on satisfactory performance) once every two (2) years. On an annualized basis this was clearly below the CPI (Consumer Price Index).

With the passing of resolution 01-FY2008 the CCU approved a transition period (beginning in fiscal year 2008) to migrate all CTP positions to a more competitive position in the market. The CCU resolution approved a five-year phase-in using the 5^{th}, 15^{th}, 25^{th}, 35^{th} and 50^{th} market percentiles as targets for 2008 and subsequent years.

Appendix A1

The third stage of the review focused on implementation and the transition of all CTP employees into the new compensation model. The new salary schedule has twenty-six (26) alphabetical grades each with twenty (20) numeric steps. An additional feature was the introduction of four (4) sub-steps per step which amounts to eighty sub-steps in total. Each sub-step increases base salary by 1% and was introduced to allow a performance range for GWA to ultimately pay for performance.

The outcome of the above was the identification of a specific implementation range for each CTP position. With each implementation range encompassing sixteen (16) sub-steps the final phase was to migrate all CTP employees into the new compensation model. In completing this exercise the following three implementation criteria was applied : education, experience and performance. The end result was a score (for each employee) that could be transposed to their specific implementation range and a new grade, step and sub-step identified.

B. Current Review (2017)

The current review replicates the second stage above in order to provide updated market data as at 2017. Once again the target market was the U.S. water industry and extensive data was gathered from a number of sources including the AWWA (American Water Works Association), U.S. Bureau of Labor Statistics (BLS), U.S. Department of Labor (DOL), U.S. Federal Government / Civil Service, U.S. Military, Web Based Compensation Companies, U.S. Utility Recruitment Companies and U.S. Utility Company Websites.

In summary, external pay data was gathered on 230 positions (both CTP and Non-CTP) with results once again being analyzed and presented as market percentiles (5^{th} through to the 95^{th}). Please note that as with the earlier study the 50^{th} market percentile represents the market average (U.S. mainland). An exponential regression analysis was then undertaken (see Appendix A) to compare GWA's base salary pay line against the 2017 market percentiles as gathered.

C. Observations / Recommendations

In terms of recommendations the focus must be on ensuring that GWA's compensation model (cost permitting) is in the most competitive position it can be with regards the external market place. Whilst any increase in market position obviously comes at a cost this must be weighed against the Authority's ability to attract and retain competent employees.

With reference to Appendix A, GWA's market position in 2008 was extremely vulnerable with a large number of employees well below the 5^{th} market percentile. Whilst some adjustments were made to correct the situation the market has unfortunately continued to move through to 2017. Given those early initiatives taken by the CCU we would now place GWA (with reference to Appendix A) at just below the 5th market percentile based on the 2017 market data that has been obtained.

Appendix A2

Having determined GWA's current market position (relative to the 2017 market data) we then completed a number of cost options aimed at migrating GWA to a more competitive market position. These included migrating to the 5th (essentially a status quo option), 10th, 15th 20th and 25th market percentiles. The costing process also included both a 5 sub-step and 7 sub-step implementation range for employee "slotting' purposes. The results are shown in Appendix B.

In undertaking the above cost analysis it also became apparent that an updated pay schedule was also required. With the current pay schedule now 10 years old, grades A, B & C have become redundant and are no longer being used. The need for an update is also reflected in the fact that some employees are approaching or have exceeded Step 20, Sub-step D.

In terms of a course of action our recommendations are as follows :

1. Consolidate GWA's compensation model to include all employees i.e. both CTP and Non-CTP employees.

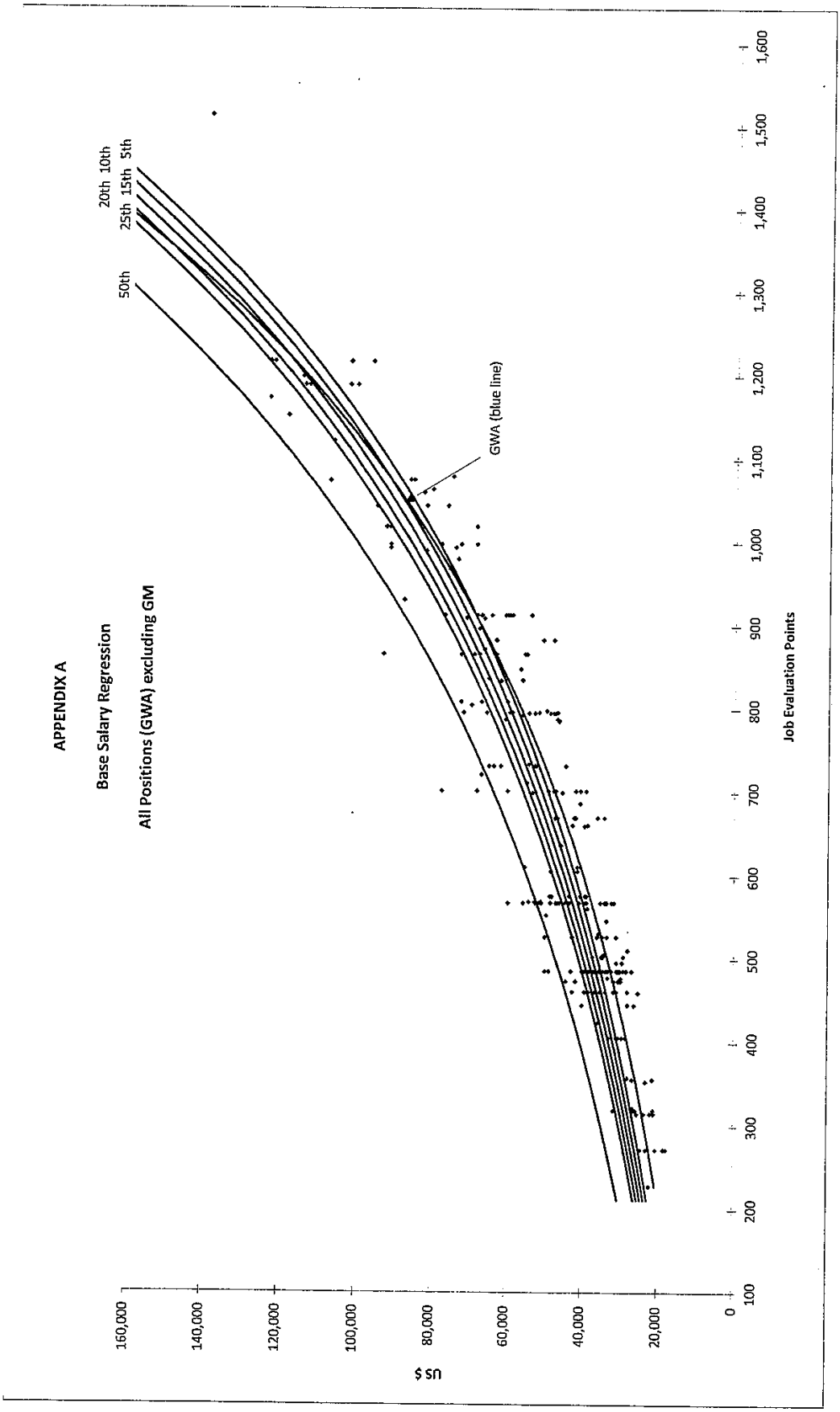
   Note : the need to distinguish between CTP and Non-CTP positions has become largely irrelevant as all positions are now deemed critical in providing the Authority's services. This perspective is clearly evident with both PAG and GIAA (excluding ARFF and Airport Police) now incorporating all positions in their respective compensation models.

2. Make an initial structural adjustment (cost permitting) to the 5th market percentile based on the 2017 market data. If this can be done we would recommend using the 5 sub-step implementation range cost option as "employee slotting" is closer than using the 7 sub-step cost option. As outlined earlier, this is essentially a status quo adjustment as despite being at just below the 5th market percentile this adjustment targets (in particular) those employees who are below the 5th market percentile regression line.

3. Agree on a transition plan (cost permitting) aimed at migrating GWA to a higher market percentile e.g. the 10th, 15th, 20th or 25th market percentile based on the 2017 market data. With the eventual target being the 50th market percentile (or market average within the U.S. mainland based on the prevailing market) this transition plan will continue the momentum to ensure GWA's compensation model is externally competitive.

4. Given current controls in a) annually determining the implementation range on offer re : pay for performance, and b) determining the percentage of employees who can receive the "top scores" continue to allow (for employees below the 50th market percentile of market average within the U.S. mainland) the employees eventual pay for performance adjustment to be added to their base salary. This makes computation of any future regression analysis a lot more accurate when comparing results against the prevailing market.

Appendix A3


APPENDIX A
Base Salary Regression
All Positions (GWA) excluding GM
20th 10th
25th 15th 5th
50th
GWA (blue line)
US $
Job Evaluation Points
160,000
140,000
120,000
100,000
80,000
60,000
40,000
20,000
0
100
200
300
400
500
600
700
800
900
1,000
1,100
1,200
1,300
1,400
1,500
1,600
Base Salary - all GWA positions (CTP + Non CTP) excluding GM
Base Salary - 2017 market percentiles - 5th, 10th, 15th, 20th, 25th and 50th (U.S. Water / Wastewater Utilities)

Appendix A4

APPENDIX B

ESTIMATED COST IN MIGRATING GWA TO VARIOUS MARKET PERCENTILES

BASED ON 2017 MARKET DATA

GWA - Seven (7) Sub-Step Implementation Range

Market Percentile 2017	Base Salary	Total Compensation (Base Salary plus Benefits)	Percentage Increase
5th	971,101	1,494,002	6.52
10th	1,258,166	1,935,640	8.44
15th	1,574,160	2,421,785	10.56
20th	1,924,266	2,960,409	12.91
25th	2,302,416	3,542,178	15.45

GWA - Five (5) Sub-Step Implementation Range

Market Percentile 2017	Base Salary	Total Compensation (Base Salary plus Benefits)	Percentage Increase
5th	1,053,018	1,620,028	7.07
10th	1,348,839	2,075,137	9.05
15th	1,674,843	2,576,682	11.24
20th	2,034,034	3,129,283	13.65
25th	2,423,857	3,729,011	16.26

Appendix A5

STRATEGIC PAY SCALE (2017)

			1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
		Step 1				Step 2				Step 3				Step 4				Step 5				Step 6				Step 7			
		A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Grade	A	20,500	20,705	20,912	21,121	21,332	21,546	21,761	21,979	22,199	22,421	22,645	22,871	23,100	23,331	23,564	23,800	24,038	24,278	24,521	24,766	25,014	25,264	25,517	25,772	26,030	26,290	26,553	26,818
9.0%	B	22,345	22,568	22,794	23,022	23,252	23,485	23,720	23,957	24,196	24,438	24,683	24,930	25,179	25,431	25,685	25,942	26,201	26,463	26,728	26,995	27,265	27,538	27,813	28,091	28,372	28,656	28,943	29,232
9.0%	C	24,356	24,600	24,846	25,094	25,345	25,598	25,854	26,113	26,374	26,638	26,904	27,173	27,445	27,719	27,997	28,277	28,559	28,845	29,133	29,425	29,719	30,016	30,316	30,620	30,926	31,235	31,547	31,863
7.0%	D	26,061	26,322	26,585	26,851	27,119	27,390	27,664	27,941	28,220	28,503	28,788	29,075	29,366	29,660	29,956	30,256	30,559	30,864	31,173	31,484	31,799	32,117	32,439	32,763	33,091	33,421	33,756	34,093
3.0%	E	26,843	27,111	27,382	27,656	27,933	28,212	28,494	28,779	29,067	29,358	29,651	29,948	30,247	30,550	30,855	31,164	31,475	31,790	32,108	32,429	32,753	33,081	33,412	33,746	34,083	34,424	34,768	35,116
6.0%	F	28,453	28,738	29,025	29,316	29,609	29,905	30,204	30,506	30,811	31,119	31,430	31,745	32,062	32,383	32,706	33,033	33,364	33,697	34,034	34,375	34,719	35,066	35,416	35,771	36,128	36,490	36,854	37,223
6.0%	G	30,161	30,462	30,767	31,074	31,385	31,699	32,016	32,336	32,660	32,986	33,316	33,649	33,986	34,326	34,669	35,015	35,366	35,719	36,076	36,437	36,802	37,170	37,541	37,917	38,296	38,679	39,066	39,456
9.0%	H	32,875	33,204	33,536	33,871	34,210	34,552	34,898	35,246	35,599	35,955	36,314	36,678	37,044	37,415	37,789	38,167	38,549	38,934	39,323	39,717	40,114	40,515	40,920	41,329	41,743	42,160	42,582	43,007
12.0%	I	36,820	37,188	37,560	37,936	38,315	38,698	39,085	39,476	39,871	40,270	40,672	41,079	41,490	41,905	42,324	42,747	43,174	43,606	44,042	44,483	44,927	45,377	45,830	46,289	46,752	47,219	47,691	48,168
12.0%	J	41,238	41,651	42,067	42,488	42,913	43,342	43,775	44,213	44,655	45,102	45,553	46,008	46,468	46,933	47,403	47,877	48,355	48,839	49,327	49,821	50,319	50,822	51,330	51,843	52,362	52,885	53,414	53,948
21.0%	K	49,899	50,397	50,901	51,410	51,925	52,444	52,968	53,498	54,033	54,573	55,119	55,670	56,227	56,789	57,357	57,931	58,510	59,095	59,686	60,283	60,885	61,495	62,109	62,731	63,358	63,991	64,631	65,278
17.0%	L	58,381	58,965	59,555	60,150	60,752	61,359	61,973	62,593	63,219	63,851	64,489	65,134	65,785	66,443	67,108	67,779	68,457	69,141	69,833	70,531	71,236	71,949	72,668	73,395	74,129	74,870	75,619	76,375
17.0%	M	68,306	68,989	69,679	70,376	71,080	71,790	72,508	73,233	73,966	74,705	75,452	76,207	76,969	77,739	78,516	79,301	80,094	80,895	81,704	82,521	83,346	84,180	85,022	85,872	86,731	87,598	88,474	89,359
8.0%	N	73,771	74,508	75,253	76,006	76,766	77,534	78,309	79,092	79,883	80,682	81,489	82,303	83,126	83,958	84,797	85,645	86,502	87,367	88,240	89,123	90,014	90,914	91,823	92,742	93,669	94,606	95,552	96,507
13.0%	O	83,361	84,194	85,036	85,887	86,745	87,613	88,489	89,374	90,268	91,170	92,082	93,003	93,933	94,872	95,821	96,779	97,747	98,724	99,712	100,709	101,716	102,733	103,760	104,798	105,846	106,904	107,973	109,053
16.0%	P	96,698	97,665	98,642	99,628	100,625	101,631	102,647	103,674	104,711	105,758	106,815	107,883	108,962	110,052	111,152	112,264	113,387	114,520	115,666	116,822	117,990	119,170	120,362	121,566	122,781	124,009	125,249	126,502
12.0%	Q	108,302	109,385	110,479	111,584	112,700	113,827	114,965	116,115	117,276	118,449	119,633	120,829	122,038	123,258	124,491	125,736	126,993	128,263	129,545	130,841	132,149	133,471	134,806	136,154	137,515	138,890	140,279	141,682
14.0%	R	123,465	124,699	125,946	127,206	128,478	129,762	131,060	132,371	133,694	135,031	136,382	137,745	139,123	140,514	141,919	143,339	144,772	146,220	147,682	149,159	150,650	152,157	153,678	155,215	156,767	158,335	159,918	161,517
13.0%	S	139,515	140,910	142,319	143,742	145,180	146,632	148,098	149,579	151,075	152,585	154,111	155,652	157,209	158,781	160,369	161,973	163,592	165,228	166,880	168,549	170,235	171,937	173,656	175,393	177,147	178,918	180,708	182,515
11.0%	T	154,862	156,410	157,974	159,554	161,150	162,761	164,389	166,033	167,693	169,370	171,064	172,774	174,502	176,247	178,009	179,789	181,587	183,403	185,237	187,090	188,961	190,850	192,759	194,686	196,633	198,599	200,585	202,591
11.0%	U	171,896	173,615	175,351	177,105	178,876	180,665	182,471	184,296	186,139	188,001	189,881	191,779	193,697	195,634	197,590	199,566	201,562	203,578	205,613	207,670	209,746	211,844	213,962	216,102	218,263	220,445	222,650	224,876
11.0%	V	190,805	192,713	194,640	196,587	198,552	200,538	202,543	204,569	206,614	208,681	210,767	212,875	215,004	217,154	219,325	221,519	223,734	225,971	228,231	230,513	232,818	235,146	237,498	239,873	242,272	244,694	247,141	249,613
11.0%	W	211,794	213,911	216,051	218,211	220,393	222,597	224,823	227,071	229,342	231,635	233,952	236,291	238,654	241,041	243,451	245,886	248,345	250,828	253,336	255,870	258,428	261,013	263,623	266,259	268,922	271,611	274,327	277,070
11.0%	X	235,091	237,442	239,816	242,214	244,636	247,083	249,554	252,049	254,570	257,115	259,686	262,283	264,906	267,555	270,231	272,933	275,662	278,419	281,203	284,015	286,855	289,724	292,621	295,547	298,503	301,488	304,503	307,548
11.0%	Y	260,951	263,560	266,196	268,858	271,546	274,262	277,005	279,775	282,572	285,398	288,252	291,135	294,045	296,986	299,956	302,956	305,985	309,045	312,136	315,257	318,410	321,594	324,810	328,058	331,338	334,652	337,998	341,378
11.0%	Z	289,655	292,552	295,477	298,432	301,417	304,431	307,475	310,550	313,655	316,792	319,960	323,159	326,391	329,655	332,951	336,281	339,644	343,040	346,471	349,935	353,435	356,969	360,539	364,144	367,785	371,463	375,178	378,930

APPENDIX B1

STRATEGIC PAY SCALE (2017)

	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Step 8				Step 9				Step 10				Step 11				Step 12				Step 13				Step 14			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
A	27,086	27,357	27,631	27,907	28,186	28,468	28,753	29,040	29,331	29,624	29,920	30,220	30,522	30,827	31,135	31,447	31,761	32,079	32,399	32,723	33,051	33,381	33,715	34,052	34,393	34,737	35,084	35,435
B	29,524	29,819	30,118	30,419	30,723	31,030	31,341	31,654	31,971	32,290	32,613	32,939	33,269	33,601	33,937	34,277	34,620	34,966	35,315	35,669	36,025	36,385	36,749	37,117	37,488	37,863	38,241	38,624
C	32,181	32,503	32,828	33,157	33,488	33,823	34,161	34,503	34,848	35,196	35,548	35,904	36,263	36,625	36,992	37,362	37,735	38,113	38,494	38,879	39,267	39,660	40,057	40,457	40,862	41,270	41,683	42,100
D	34,434	34,778	35,126	35,478	35,832	36,191	36,553	36,918	37,287	37,660	38,037	38,417	38,801	39,189	39,581	39,977	40,377	40,780	41,188	41,600	42,016	42,436	42,861	43,289	43,722	44,159	44,601	45,047
E	35,467	35,822	36,180	36,542	36,907	37,276	37,649	38,026	38,406	38,790	39,178	39,570	39,965	40,365	40,769	41,176	41,588	42,004	42,424	42,848	43,277	43,709	44,147	44,588	45,034	45,484	45,939	46,398
F	37,595	37,971	38,351	38,734	39,122	39,513	39,908	40,307	40,710	41,117	41,528	41,944	42,363	42,787	43,215	43,647	44,083	44,524	44,969	45,419	45,873	46,332	46,795	47,263	47,736	48,213	48,695	49,182
G	39,851	40,249	40,652	41,058	41,469	41,884	42,303	42,726	43,153	43,584	44,020	44,460	44,905	45,354	45,808	46,266	46,728	47,196	47,668	48,144	48,626	49,112	49,603	50,099	50,600	51,106	51,617	52,133
H	43,437	43,872	44,311	44,754	45,201	45,653	46,110	46,571	47,037	47,507	47,982	48,462	48,946	49,436	49,930	50,430	50,934	51,443	51,958	52,477	53,002	53,532	54,067	54,608	55,154	55,706	56,263	56,825
I	48,650	49,136	49,628	50,124	50,625	51,132	51,643	52,159	52,681	53,208	53,740	54,277	54,820	55,368	55,922	56,481	57,046	57,616	58,193	58,774	59,362	59,956	60,555	61,161	61,773	62,390	63,014	63,644
J	54,488	55,033	55,583	56,139	56,700	57,267	57,840	58,418	59,003	59,593	60,189	60,790	61,398	62,012	62,633	63,259	63,891	64,530	65,176	65,827	66,486	67,151	67,822	68,500	69,185	69,877	70,576	71,282
K	65,930	66,590	67,256	67,928	68,607	69,294	69,986	70,686	71,393	72,107	72,828	73,557	74,292	75,035	75,785	76,543	77,309	78,082	78,863	79,651	80,448	81,252	82,065	82,885	83,714	84,551	85,397	86,251
L	77,139	77,910	78,689	79,476	80,271	81,073	81,884	82,703	83,530	84,365	85,209	86,061	86,922	87,791	88,669	89,556	90,451	91,356	92,269	93,192	94,124	95,065	96,016	96,976	97,946	98,925	99,914	100,913
M	90,252	91,155	92,066	92,987	93,917	94,856	95,805	96,763	97,730	98,707	99,695	100,691	101,698	102,715	103,743	104,780	105,828	106,886	107,955	109,034	110,125	111,226	112,338	113,462	114,596	115,742	116,900	118,069
N	97,472	98,447	99,432	100,426	101,430	102,444	103,469	104,504	105,549	106,604	107,670	108,747	109,834	110,933	112,042	113,162	114,294	115,437	116,591	117,757	118,935	120,124	121,325	122,539	123,764	125,002	126,252	127,514
O	110,144	111,245	112,358	113,481	114,616	115,762	116,920	118,089	119,270	120,463	121,667	122,884	124,113	125,354	126,607	127,873	129,152	130,444	131,748	133,066	134,396	135,740	137,098	138,469	139,853	141,252	142,664	144,091
P	127,767	129,044	130,335	131,638	132,955	134,284	135,627	136,983	138,353	139,737	141,134	142,545	143,971	145,410	146,865	148,333	149,817	151,315	152,828	154,356	155,900	157,459	159,033	160,624	162,230	163,852	165,491	167,146
Q	143,099	144,530	145,975	147,435	148,909	150,398	151,902	153,421	154,955	156,505	158,070	159,651	161,247	162,860	164,488	166,133	167,795	169,473	171,167	172,879	174,608	176,354	178,117	179,898	181,697	183,514	185,350	187,203
R	163,133	164,764	166,412	168,076	169,756	171,454	173,169	174,900	176,649	178,416	180,200	182,002	183,822	185,660	187,517	189,392	191,286	193,199	195,131	197,082	199,053	201,043	203,054	205,084	207,135	209,206	211,299	213,412
S	184,340	186,183	188,045	189,926	191,825	193,743	195,680	197,637	199,614	201,610	203,626	205,662	207,719	209,796	211,894	214,013	216,153	218,314	220,498	222,703	224,930	227,179	229,451	231,745	234,063	236,403	238,767	241,155
T	204,617	206,663	208,730	210,817	212,925	215,055	217,205	219,377	221,571	223,787	226,025	228,285	230,568	232,873	235,202	237,554	239,930	242,329	244,752	247,200	249,672	252,169	254,690	257,237	259,810	262,408	265,032	267,682
U	227,125	229,396	231,690	234,007	236,347	238,711	241,098	243,509	245,944	248,403	250,887	253,396	255,930	258,490	261,074	263,685	266,322	268,985	271,675	274,392	277,136	279,907	282,706	285,533	288,389	291,273	294,185	297,127
V	252,109	254,630	257,176	259,748	262,346	264,969	267,619	270,295	272,998	275,728	278,485	281,270	284,083	286,923	289,793	292,691	295,617	298,574	301,559	304,575	307,621	310,697	313,804	316,942	320,111	323,312	326,546	329,811
W	279,841	282,639	285,466	288,320	291,204	294,116	297,057	300,027	303,028	306,058	309,118	312,210	315,332	318,485	321,670	324,887	328,135	331,417	334,731	338,078	341,459	344,874	348,322	351,806	355,324	358,877	362,466	366,090
X	310,623	313,730	316,867	320,036	323,236	326,468	329,733	333,030	336,361	339,724	343,121	346,553	350,018	353,518	357,054	360,624	364,230	367,873	371,551	375,267	379,020	382,810	386,638	390,504	394,409	398,353	402,337	406,360
Y	344,792	348,240	351,722	355,239	358,792	362,380	366,004	369,664	373,360	377,094	380,865	384,673	388,520	392,405	396,329	400,293	404,296	408,339	412,422	416,546	420,712	424,919	429,168	433,460	437,794	442,172	446,594	451,060
Z	382,719	386,546	390,412	394,316	398,259	402,242	406,264	410,327	414,430	418,574	422,760	426,988	431,257	435,570	439,926	444,325	448,768	453,256	457,788	462,366	466,990	471,660	476,376	481,140	485,952	490,811	495,719	500,676

APPENDIX B2

STRATEGIC PAY SCALE (2017)

	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
	Step 15				Step 16				Step 17				Step 18				Step 19				Step 20									
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
A	35,789	36,147	36,508	36,874	37,242	37,615	37,991	38,371	38,754	39,142	39,533	39,929	40,328	40,731	41,139	41,550	41,966	42,385	42,809	43,237	43,670	44,106	44,547	44,993						
B	36,010	39,400	39,794	40,192	40,594	41,000	41,410	41,824	42,242	42,665	43,091	43,522	43,958	44,397	44,841	45,290	45,742	46,200	46,662	47,128	47,600	48,076	48,557	49,042						
C	42,521	42,946	43,376	43,809	44,248	44,690	45,137	45,588	46,044	46,505	46,970	47,439	47,914	48,393	48,877	49,366	49,859	50,358	50,861	51,370	51,884	52,403	52,927	53,456						
D	45,498	45,952	46,412	46,876	47,345	47,818	48,297	48,779	49,267	49,760	50,258	50,760	51,268	51,780	52,298	52,821	53,349	53,883	54,422	54,966	55,516	56,071	56,631	57,198						
E	46,862	47,331	47,804	48,282	48,765	49,253	49,745	50,243	50,745	51,253	51,765	52,283	52,806	53,334	53,867	54,406	54,950	55,499	56,054	56,615	57,181	57,753	58,330	58,914						
F	48,674	50,171	50,673	51,179	51,691	52,208	52,730	53,257	53,790	54,328	54,871	55,420	55,974	56,534	57,099	57,670	58,247	58,829	59,418	60,012	60,612	61,218	61,830	62,449						
G	52,655	53,181	53,713	54,250	54,793	55,341	55,894	56,453	57,017	57,588	58,163	58,745	59,333	59,926	60,525	61,130	61,742	62,359	62,983	63,613	64,249	64,891	65,540	66,195						
H	57,394	57,967	58,547	59,133	59,724	60,321	60,924	61,534	62,149	62,770	63,398	64,032	64,672	65,319	65,972	66,632	67,298	67,971	68,651	69,338	70,031	70,731	71,439	72,153						
I	64,281	64,924	65,573	66,229	66,891	67,560	68,235	68,918	69,607	70,303	71,006	71,716	72,433	73,158	73,889	74,628	75,374	76,128	76,889	77,658	78,435	79,219	80,011	80,811						
J	71,994	72,714	73,442	74,176	74,918	75,667	76,424	77,188	77,960	78,739	79,527	80,322	81,125	81,936	82,756	83,583	84,419	85,263	86,116	86,977	87,847	88,725	89,613	90,509						
K	87,113	87,984	88,864	89,753	90,650	91,557	92,473	93,397	94,331	95,275	96,227	97,190	98,161	99,143	100,134	101,136	102,147	103,169	104,200	105,242	106,295	107,358	108,431	109,516						
L	101,923	102,942	103,971	105,011	106,061	107,122	108,193	109,275	110,368	111,471	112,586	113,712	114,849	115,997	117,157	118,329	119,512	120,707	121,914	123,134	124,365	125,609	126,865	128,133						
M	119,249	120,442	121,646	122,863	124,091	125,332	126,586	127,851	129,130	130,421	131,726	133,043	134,373	135,717	137,074	138,445	139,829	141,228	142,640	144,066	145,507	146,962	148,432	149,916						
N	128,289	130,077	131,378	132,692	134,019	135,359	136,712	138,080	139,460	140,855	142,264	143,686	145,123	146,574	148,040	149,520	151,016	152,526	154,051	155,592	157,147	158,719	160,306	161,909						
O	145,532	146,987	148,457	149,942	151,441	152,956	154,485	156,030	157,590	159,166	160,758	162,365	163,989	165,629	167,285	168,958	170,648	172,354	174,078	175,818	177,577	179,352	181,146	182,957						
P	168,817	170,505	172,210	173,932	175,672	177,428	179,203	180,995	182,805	184,633	186,479	188,344	190,227	192,130	194,051	195,991	197,951	199,931	201,930	203,949	205,989	208,049	210,129	212,231						
Q	189,075	190,966	192,876	194,804	196,752	198,720	200,707	202,714	204,741	206,789	208,857	210,945	213,055	215,185	217,337	219,510	221,705	223,922	226,162	228,423	230,708	233,015	235,345	237,698						
R	215,546	217,701	219,878	222,077	224,298	226,541	228,806	231,094	233,405	235,739	238,096	240,477	242,882	245,311	247,764	250,242	252,744	255,272	257,824	260,403	263,007	265,637	268,293	270,976						
S	243,967	246,002	248,462	250,947	253,456	255,991	258,551	261,136	263,748	266,385	269,049	271,740	274,457	277,201	279,973	282,773	285,601	288,457	291,342	294,255	297,197	300,169	303,171	306,203						
T	270,359	273,062	275,793	278,551	281,337	284,150	286,991	289,861	292,760	295,688	298,644	301,631	304,647	307,694	310,771	313,878	317,017	320,187	323,389	326,623	329,889	333,188	336,520	339,885						
U	300,008	303,009	306,039	309,100	312,192	315,406	318,560	321,746	324,964	328,213	331,495	334,810	338,158	341,540	344,955	348,405	351,889	355,408	358,962	362,552	366,177	369,839	373,537	377,273						
V	333,109	336,440	339,805	343,203	346,635	350,101	353,602	357,138	360,710	364,317	367,960	371,639	375,356	379,109	382,900	386,729	390,597	394,503	398,448	402,432	406,457	410,521	414,626	418,773						
W	369,751	373,449	377,183	380,955	384,765	388,612	392,498	396,423	400,388	404,391	408,435	412,520	416,645	420,811	425,019	429,270	433,562	437,898	442,277	446,700	451,167	455,678	460,235	464,838						
X	410,424	414,528	418,673	422,860	427,089	431,360	435,673	440,030	444,430	448,874	453,363	457,897	462,476	467,101	471,772	476,489	481,254	486,067	490,927	495,837	500,795	505,803	510,861	515,970						
Y	455,570	460,126	464,727	469,375	474,068	478,809	483,597	488,433	493,318	498,251	503,233	508,266	513,348	518,482	523,666	528,903	534,192	539,534	544,929	550,379	555,883	561,441	567,056	572,726						
Z	505,683	510,740	515,847	521,006	526,216	531,478	536,793	542,161	547,582	553,058	558,589	564,175	569,816	575,515	581,270	587,082	592,953	598,883	604,872	610,920	617,030	623,200	629,432	635,726						

APPENDIX B3

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Accountant I	670	J
GWA	Accountant II	796	K
GWA	Accountant III	913	L
GWA	Accounting Technician I	431	F
GWA	Accounting Technician II	503	G
GWA	Accounting Technician III	606	I
GWA	Administrative Aide	353	D
GWA	Administrative Assistant	527	H
GWA	Administrative Officer	611	I
GWA	Asset Man. and Maint. Information System Officer	913	L
GWA	Assistant Chief Engineer	1232	Q
GWA	Assistant Chief Financial Officer	1122	O
GWA	Assistant General Manager Collection & Distribution	1173	P
GWA	Assistant General Manager Compliance & Safety	1152	O
GWA	Assistant General Manager Production & Treatment	1173	P
GWA	Automotive Mechanic I	477	G
GWA	Automotive Mechanic II	561	I
GWA	Biologist I	590	H
GWA	Biologist II	708	J
GWA	Biologist III	848	K
GWA	Budget Analyst	779	K
GWA	Building Custodian	228	A
GWA	Buyer I	381	F
GWA	Buyer II	496	H
GWA	Buyer Supervisor I	735	J
GWA	Buyer Supervisor II	834	K

Appendix C

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Carpenter I	461	G
GWA	Carpenter II	543	I
GWA	Carpenter Leader	683	J
GWA	Cashier I	315	C
GWA	Cashier II	358	E
GWA	Centralized Wastewater Maintenance Superintendent	998	N
GWA	Chemist I	600	I
GWA	Chemist II	754	J
GWA	Chemist III	858	L
GWA	Chief Budget Officer	994	N
GWA	Chief Engineer, PE (GWA)	1514	R
GWA	Chief Water and Wastewater Systems Dispatcher	984	N
GWA	Clerk I	212	A
GWA	Clerk II	270	B
GWA	Clerk III	322	C
GWA	Clerk Typist I	270	B
GWA	Clerk Typist II	322	C
GWA	Clerk Typist III	346	D
GWA	Collection Agent	421	E
GWA	Collection Supervisor	795	K
GWA	Communications Manager	1060	N
GWA	Community Maintenance Worker	422	E
GWA	Computer Operations Supervisor	844	K
GWA	Computer Operator I	356	E
GWA	Computer Operator II	506	G
GWA	Computer Operator III	637	I

Appendix C1

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Computer Technician I	479	G
GWA	Computer Technician II	575	I
GWA	Computer Technician Leader	709	J
GWA	Computer Technician Supervisor	897	L
GWA	Construction Inspector I	498	G
GWA	Construction Inspector II	622	I
GWA	Construction Inspector III	732	K
GWA	Contracts & Small Claims Administrator	798	K
GWA	Controller	1079	O
GWA	Customer Service Representative	461	G
GWA	Customer Service Representative Supervisor	795	K
GWA	Electrician I	478	G
GWA	Electrician II	569	I
GWA	Electrician Leader	712	J
GWA	Employee Development Specialist I	503	H
GWA	Employee Development Specialist II	670	J
GWA	Employee Development Specialist III	796	K
GWA	Engineer I	687	J
GWA	Engineer II	809	K
GWA	Engineer III	931	M
GWA	Engineer Supervisor	1044	O
GWA	Equipment Maintenance Superintendent	998	N
GWA	Equipment Operator I	397	E
GWA	Equipment Operator II	445	F
GWA	Equipment Operator III	511	G
GWA	Equipment Operator IV	546	H

Appendix C2

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Equipment Operator Leader I	644	I
GWA	Equipment Operator Leader II	661	J
GWA	Equipment Operator Supervisor	795	K
GWA	General Accounting Supervisor	1001	N
GWA	General Manager (GWA)	1734	S
GWA	GIS Analyst I	502	H
GWA	GIS Analyst II	612	J
GWA	GIS Analyst III	756	K
GWA	GIS/LIS Manager	910	L
GWA	Grants Administrator	994	N
GWA	Heavy Equipment Mechanic I	477	G
GWA	Heavy Equipment Mechanic II	561	I
GWA	Heavy Equipment Mechanic Leader	700	J
GWA	Heavy Equipment Mechanic Supervisor	909	L
GWA	Information Technology Manager	1064	O
GWA	Internal Auditor	1019	N
GWA	Inventory Management Officer	824	K
GWA	Laboratory Technician I	469	F
GWA	Laboratory Technician II	576	I
GWA	Laboratory Technician Supervisor	837	K
GWA	Land Agent I	362	E
GWA	Land Agent II	465	G
GWA	Land Agent III	531	I
GWA	Legal Secretary I	397	E
GWA	Legal Secretary II	460	G
GWA	Legal Secretary III	532	H

Appendix C3

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Maintenance Welder I	477	G
GWA	Maintenance Welder II	557	I
GWA	Maintenance Welder III	696	J
GWA	Maintenance Worker	422	E
GWA	Management Analyst I	503	H
GWA	Management Analyst II	670	J
GWA	Management Analyst III	796	K
GWA	Management Analyst IV	913	L
GWA	Meter Reader I	319	C
GWA	Meter Reader II	406	E
GWA	Meter Reader Leader	553	H
GWA	Monitoring Laboratory Services Administrator	1074	O
GWA	Network Analyst	793	J
GWA	Network Systems Administrator	897	L
GWA	Operations & Maintenance Manager	1189	P
GWA	Payroll Clerk I	346	D
GWA	Payroll Clerk II	438	G
GWA	Payroll Clerk III	493	H
GWA	Payroll Supervisor	805	K
GWA	Personnel Assistant I	364	D
GWA	Personnel Assistant II	433	F
GWA	Personnel Services Administrator	1064	O
GWA	Personnel Specialist I	503	H
GWA	Personnel Specialist II	670	J
GWA	Personnel Specialist III	796	K
GWA	Personnel Specialist IV	913	L

Appendix C4

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Planner / Co-ordinator I	503	H
GWA	Planner / Co-ordinator II	670	J
GWA	Planner / Co-ordinator III	796	K
GWA	Planner / Co-ordinator IV	913	L
GWA	Planner I	503	H
GWA	Planner II	670	J
GWA	Planner III	796	K
GWA	Planner IV	913	L
GWA	Plant Electrical Instrument Superintendent	1003	N
GWA	Plant Electrical Instrument Technician I	488	G
GWA	Plant Electrical Instrument Technician II	576	I
GWA	Plant Electrical Instrument Technician Leader	722	J
GWA	Program Coordinator I	503	H
GWA	Program Coordinator II	670	J
GWA	Program Coordinator III	796	K
GWA	Program Coordinator IV	913	L
GWA	Programmer Analyst I	683	J
GWA	Programmer Analyst II	910	L
GWA	Pumping Station Leader	702	J
GWA	Pumping Station Operator I	486	G
GWA	Pumping Station Operator II	568	I
GWA	Pumping Station Supervisor	866	L
GWA	Quality Control / Quality Assurance Officer	851	L
GWA	Refrigeration Mechanic I	477	G
GWA	Refrigeration Mechanic II	561	I
GWA	Refrigeration Mechanic Leader	696	J

Appendix C5

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Right of Way Supervisor	915	L
GWA	Safety Inspector I	418	F
GWA	Safety Inspector II	539	H
GWA	Safety Inspector III	741	J
GWA	Safety Supervisor	872	K
GWA	Secretary I	378	E
GWA	Secretary I (Typist)	378	E
GWA	Secretary II	438	G
GWA	Secretary II (Typist)	438	G
GWA	Senior Engineer Supervisor, PE	1217	P
GWA	Senior Engineer, PE	1044	O
GWA	Senior Regulatory Analyst	1019	N
GWA	Sewer Plant Leader	702	J
GWA	Sewer Plant Operator I	486	G
GWA	Sewer Plant Operator II	568	I
GWA	Sewer Plant Supervisor	866	L
GWA	Shop Planner	786	K
GWA	Source Control Manager	980	M
GWA	Staff Attorney	1199	P
GWA	Storekeeper I	322	C
GWA	Storekeeper II	424	F
GWA	Supply Management Administrator	990	M
GWA	Survey Supervisor	900	L
GWA	Systems & Programming Administrator	968	L
GWA	Systems / Trouble Dispatch Supervisor	788	K
GWA	Systems Dispatcher I	660	J

Appendix C6

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Systems Dispatcher II	788	K
GWA	Systems Dispatcher III	911	L
GWA	Technical Support Analyst	683	J
GWA	Tool Clerk	275	B
GWA	Trades Helper	272	B
GWA	Training & Development Manager	913	L
GWA	Training Specialist	503	H
GWA	Trouble Dispatcher	474	G
GWA	Trouble Dispatcher Leader	600	J
GWA	Trouble Dispatcher Supervisor	788	K
GWA	Utility Services Administrator	1075	O
GWA	Warehouse Supervisor I	724	J
GWA	Warehouse Supervisor II	803	K
GWA	Wastewater Collection Superintendent	998	N
GWA	Wastewater Construction / Maintenance Superintendent	998	N
GWA	Wastewater Maintenance Mechanic I	486	G
GWA	Wastewater Maintenance Mechanic II	568	I
GWA	Wastewater Maintenance Mechanic Leader	702	J
GWA	Wastewater Maintenance Mechanic Supervisor	866	L
GWA	Wastewater Plant Superintendent	998	N
GWA	Water & Wastewater Systems Control Dispatcher I	660	J
GWA	Water & Wastewater Systems Control Dispatcher II	788	K
GWA	Water / Sewer Maintenance Leader	702	J
GWA	Water / Sewer Maintenance Supervisor	866	L
GWA	Water / Sewer Maintenance Worker I	486	G
GWA	Water / Sewer Maintenance Worker II	568	I

Appendix C7

CTP POSITIONS (GWA)

Authority	Position	JE Points	Grade
GWA	Water and Wastewater Systems Leader	702	J
GWA	Water Construction / Maintenance Superintendent	998	N
GWA	Water Distribution System Manager	998	N
GWA	Water Meter Maintenance & Repair Leader	702	J
GWA	Water Meter Maintenance & Repair Supervisor	866	L
GWA	Water Meter Maintenance & Repair Worker I	486	G
GWA	Water Meter Maintenance & Repair Worker II	568	I
GWA	Water Meter Reader I	319	C
GWA	Water Meter Reader II	406	E
GWA	Water Meter Reader Leader	553	H
GWA	Water Meter Reader Supervisor	734	J
GWA	Water Plant Leader	702	J
GWA	Water Plant Operator I	486	G
GWA	Water Plant Operator II	568	I
GWA	Water Plant Supervisor	866	L
GWA	Water Treatment Plant Superintendent	998	N
GWA	Welder I	477	G
GWA	Welder II	557	I
GWA	Welder III	696	J
GWA	Word Processing Secretary I	378	E
GWA	Word Processing Secretary II	438	G

Appendix C8

PROPOSED NEW POSITIONS TO ADD TO CTP LIST (GWA)

Authority	Position	JE Points	Grade
GWA	Utility Accounting Technician I	431	F
GWA	Utility Accounting Technician II	503	G
GWA	Utility Accounting Technician III	606	I
GWA	Utility Administrative Aide	353	D
GWA	Utility Administrative Assistant	527	H
GWA	Utility Cashier I	315	C
GWA	Utility Cashier II	358	E
GWA	Utility General Accounting Supervisor	1001	N
GWA	Utility Personnel Assistant I	364	D
GWA	Utility Personnel Assistant II	433	F
GWA	Utility Storekeeper I	322	C
GWA	Utility Storekeeper II	424	F
GWA	Utility Trades Helper	272	B

Appendix D1

Five (5) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS	POSITION	JE	Structural Adjustment – MIN				Structural Adjustment - MAX			
				Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GWA	FILLED	Accounting Technician III	606	43,606	I	5	B	45,377	I	6	B
GWA	FILLED	Administrative Aide	353	29,366	D	4	A	30,559	D	5	A
GWA	FILLED	Administrative Assistant	527	39,323	H	5	C	40,920	H	6	C
GWA	FILLED	Cashier I	315	26,904	C	3	C	27,997	C	4	C
GWA	FILLED	Cashier II	315	30,247	E	4	A	31,475	E	5	A
GWA	FILLED	Storekeeper II	424	32,062	F	4	A	33,364	F	5	A
GWA	FILLED	Trades Helper	272	24,683	B	3	C	25,685	B	4	C

Five (5) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS	POSITION	JE	Structural Adjustment – MIN				Structural Adjustment - MAX			
				Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GWA	NEW	Utility Personnel Assistant I	364	29,366	D	4	A	30,559	D	5	A
GWA	NEW	Utility Personnel Assistant II	433	32,706	F	4	C	34,034	F	5	C
GWA	NEW	General Accounting Supervisor	1001	82,303	N	3	D	85,645	N	4	D
GWA	NEW	Accounting Technician I	431	31,745	F	3	D	33,033	F	4	D
GWA	NEW	Accounting Technician II	503	36,076	G	5	C	37,541	G	6	C
GWA	NEW	Storekeeper I	322	26,904	C	3	C	27,997	C	4	C

Appendix D2

Seven (7) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS	POSITION	JE	Structural Adjustment – MIN				Structural Adjustment - MAX			
				Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GWA	FILLED	Accounting Technician III	606	42,747	I	4	D	45,377	I	6	B
GWA	FILLED	Administrative Aide	353	28,788	D	3	C	30,559	D	5	A
GWA	FILLED	Administrative Assistant	527	38,549	H	5	A	40,920	H	6	C
GWA	FILLED	Cashier I	315	26,374	3	C	A	27,997	C	4	C
GWA	FILLED	Cashier II	322	29,651	E	3	C	31,475	E	5	A
GWA	FILLED	Storekeeper II	424	31,430	F	3	C	33,364	F	5	A
GWA	FILLED	Trades Helper	272	24,196	B	3	A	25,685	B	4	C

Seven (7) Sub-Step Implementation Range (15th Market Percentile)											
UTILITY	STATUS	POSITION	JE	Structural Adjustment – MIN				Structural Adjustment - MAX			
				Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
GWA	NEW	Utility Personnel Assistant I	364	28,788	D	3	C	30,559	D	5	A
GWA	NEW	Utility Personnel Assistant II	433	32,062	F	4	A	34,034	F	5	C
GWA	NEW	General Accounting Supervisor	1001	80,682	N	3	B	85,645	N	4	D
GWA	NEW	Accounting Technician I	431	31,119	F	3	B	33,033	F	4	D
GWA	NEW	Accounting Technician II	503	35,366	G	5	A	37,541	G	6	C
GWA	NEW	Storekeeper I	322	26,374	C	3	A	27,997	C	4	C

Appendix D3

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. 54-FY2017
Relative to Approving Contract Amendment No. 7 for Program Management Services

What is the project's objective and is it necessary and urgent?
The objective of the project is to provide additional Program Management Services to GWA. The PMO currently provides various engineering services, financial analysis, and operational training to GWA and there is a need for additional services above the original contract value and amendments to date. The additional services needed include general programmatic work that covers needs throughout GWA, consulting engineer's report for 2018 revenue bond financing, project management for new wells AG10, AG12 and Y8, hydraulic modeling and training for wastewater collection system, and continued assistance with project management over USEPA SRF projects. The proposed amendment and funding are generally in line with GWA Management's transition plan for the PMO as presented to the PUC in December of 2016.

How much will it cost?
The additional cost for PMO services is Two Million Ninety Five Thousand Nine Hundred Four Dollars ($2,095,904.00).

When will it be completed?
The latest PMO service related to this Amendment No. 7 will be completed by December 2018.

What is the funding source?
The source of funding will be from the 2010, 2013 and 2015 bond series proceeds, GWA revenue funds as well as State Revolving Funds that are applicable to the PMO's work and which are eligible to be used.

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

RESOLUTION NO. 54–FY2017

RELATIVE TO APPROVING CONTRACT AMENDMENT NO. 7 FOR PROGRAM MANAGEMENT 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, on December 12, 2011 GWA received approval by the CCU via Resolution No. 11-FY2012 to seek from the PUC a request for approval to execute an initial contract with the engineering consultant "Brown & Caldwell" for Program Management Services at a cost not to exceed $3.2 million; and

WHEREAS, Resolution No. 11-FY2012 resolved that the General Manager is authorized an increase in obligating authority to effectuate a contract with Brown & Caldwell subject to CCU and PUC approval; and

WHEREAS, the PUC ORDER via GPA Docket 11-02 dated March 21, 2011 authorized GWA to execute a contract with Brown and Caldwell for Program Management Services; and

WHEREAS, GWA has utilized the PMO for various engineering services, financial analysis, operational training and determine the need for additional services above the original contract value and as such sought and received approval from the CCU via Resolution 53-FY2012, Resolution 34-FY2013, Resolution 07-FY2014, Resolution 37-FY2014, Resolution 39-FY2015 and Resolution 47-FY2016 to seek PUC approval to increase the contract value for the

PMO services by an additional One Million Two Hundred Thousand Dollars ($1,200,000.00), Two Million One Hundred Sixty Six Thousand Ninety One Dollars ($2,166,091.00), Three Million One Hundred Ninety Nine Thousand Four Hundred Ninety Three Dollars ($3,199,493.00), Two Million Four Hundred Fifty Eight Thousand Three Hundred Fifteen Dollars ($2,458,315.00), Five Million Three Hundred Three Thousand One Hundred Forty Five Dollars ($5,303,145.00) and Four Million Fifty Nine Thousand Eight Hundred Seventy Seven Dollars ($4,059,877.00) respectively; and

WHEREAS, the PUC ORDER via GPA Docket 11-02 dated April 30, 2013, the GWA Docket 13-01 dated December 30, 2013, July 31, 2014 and December 29, 2014, the GWA Docket 15-07 dated September 24, 2015 and the GWA Docket 16-06 dated September 29, 2016 approved GWA's request to increase the contract value for the PMO an additional One Million Two Hundred Thousand Dollars ($1,200,000.00), Two Million One Hundred Sixty Six Thousand Ninety One Dollars ($2,166,091.00), Three Million One Hundred Ninety Nine Thousand Four Hundred Ninety Three Dollars ($3,199,493.00), Two Million Four Hundred Fifty Eight Thousand Three Hundred Fifteen Dollars ($2,458,315.00), Five Million Three Hundred Three Thousand One Hundred Forty Five Dollars ($5,303,145.00) and Four Million Fifty Nine Thousand Eight Hundred Seventy Seven Dollars ($4,059,877.00) respectively to the PUC dockets noted above; and

WHEREAS, GWA management continues to support the fact that Brown & Caldwell provides tremendous benefit to GWA through subject matter expertise for all aspects of utility services provided by GWA, including issues or projects related to the 2011 Court Order as well as projects associated with USEPA State Revolving Funds (See Exhibit A); and

WHEREAS, GWA management again seeks CCU approval to amend the contract with Brown & Caldwell to increase the contract value an additional Two Million Ninety Five Thousand Nine Hundred Four Dollars ($2,095,904.00) for additional services to GWA (See Exhibit B); and

WHEREAS, GWA management finds the cost associated with the PMO to be commensurate to average PMO cost to the original $400M capital improvements program and the graph shown in Exhibit C illustrates the anticipated spending amounts for the PMO discussed with the PUC and the actual amounts approved by the PUC; and

WHEREAS, the proposed amendment and funding amounts are generally in line with GWA Management's transition plan for the PMO, which was submitted to the PUC in December of 2016; and

WHEREAS, GWA management further seeks CCU approval to petition the PUC's approval to increase the contract value of the Program Management Services a funding increase "not to exceed" Two Million Ninety Five Thousand Nine Hundred Four Dollars ($2,095,904.00) specific to additional PMO services; and

WHEREAS, the source of funding will be from the 2010, 2013 and 2015 bond series proceeds, GWA revenue funds as well as State Revolving Funds that are applicable to the PMO's work and which are eligible to be used; and

WHEREAS, the GWA Chief Engineer will identify specific CIP line items that are to fund the additional contract value to the PMO; 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. That GWA Management amends the contract with Brown and Caldwell for an additional, "not to exceed" Two Million Ninety Five Thousand Nine Hundred Four Dollars ($2,095,904.00) for additional Program Management Services (Exhibit B).

3. GWA management seeks immediate PUC approval to increase the contract value for PMO services by Brown and Caldwell an additional "not to exceed" Two Million Ninety Five Thousand Nine Hundred Four Dollars ($2,095,904.00).

//

#

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

DULY AND REGULARLY ADOPTED, this 26th day of September 2017.

Certified by: Attested by:

_____ _____

JOSEPH T. DUENAS **J. GEORGE BAMBA**
Chairperson 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: _____

NAYS: _____

ABSTENTIONS: _____

ABSENT: _____

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EXHIBIT "A" (1 of 23)

GUAM WATERWORKS AUTHORITY

Program Management Office

Quarterly Report to the Public Utilities Commission

2nd Quarter Report for 2017

Dated

06/30/2017

Preface

Guam Waterworks Authority (GWA) is committed to providing excellent water and wastewater products, programs and services in a safe, reliable, responsible, and cost effective manner. GWA has made meeting the deadlines stipulated in the 2011 Court Order its top priority, including the retainage of an engineering consultant to assist in the form of a Program Management Office (PMO). In addition, GWA has been subject to scrutiny by the USEPA through the NEIC Findings of Significant Deficiencies in the Water and Wastewater Systems and in the SRF Grants program. The PMO is being used to assist GWA in meeting obligations in these programs.

The estimated $300 million 2011 Court-Ordered projects must be constructed by 2020. The 5-Year Capital Improvement Program (CIP) contains approximately $457 million in water and wastewater projects. GWA is understaffed and requires the PMO's support to meet court-order deadlines, the NEIC Significant Findings requirements, the USEPA SRF Project implementation requests, and other work that is necessary to achieve completion of the CIP.

In recent years, GWA has emphasized employee and management training programs to increase the knowledge and skills of its workforce. The PMO is working with GWA to provide training to staff within the Engineering and Operations Divisions.

This quarterly report provides the status of projects in which the PMO is currently engaged. This information reflects a cut-off date of June 30, 2017.

Section 1.0: Active and Completed Work Authorizations

This section includes a listing of the active work authorizations performed under GWA's PMO during the reporting quarter. Table 1-1 below indicates each active work authorization, work authorization budget, invoiced amount prior to the current quarter, the amount invoiced in the current quarter, and the respective percent complete as of the cut-off date. New work authorizations pending funding certification are excluded from this table.

Table 1-1: Active PMO Work Authorizations

Work Authorization #	Project Title	Approved Budget	Invoiced Prior to Current Quarter	Invoiced in Current Quarter	Invoiced to Date	Percent (%) Complete
2012-14	NPDES Negotiation Support	$246,000	$218,488	$ 0	$218,488	89%
2013-02-A1	Phase II Constr Mgmt Agana WWTP Upgrades	$326,450	$326,445	$ 0	$326,445	100%*
2014-01-A2	Program Management Support	$99,920	$99,920	$ 0	$99,920	100%*
2014-02	Ugum WTP Operations Support	$415,390	$411,516	$ 0	$411,516	99%*
2014-03	NEIC Wastewater System Inspection	$90,095	$24,663	$ 0	$24,663	27%
2014-04	PUC Stipulations 2013	$160,019	$160,019	$ 0	$160,019	98%*
2014-05	Groundwater Well Rehab Plan	$373,350	$354,080	$ 0	$354,080	95%*
2014-06	Water System Hydraulic Analysis	$370,240	$329,276	$1,889	$331,165	89%
2014-07	Hydraulic Model for Sewer System	$250,324	$250,273	$ 0	$250,273	100%*
2014-09	Formal Training Program	$247,025	$221,457	$ 0	$221,457	90%

Table 1-1: Active PMO Work Authorizations						
Work Authorization #	Project Title	Approved Budget	Invoiced Prior to Current Quarter	Invoiced in Current Quarter	Invoiced to Date	Percent (%) Complete
2014-10	Design Management New Agat WWTP	$499,630	$490,975	$ 0	$490,975	98%*
2014-11	SRF Project Management	$544,925	$544,924	$ 0	$544,924	100%*
2014-12	Umatac-Merizo WWTP Water Quality Standards	$357,827	$348,625	$ 0	$348,625	97%
2014-13	Baza Gardens Wastewater Cross-Island Design	$299,780	$278,332	$ 0	$278,332	93%
2014-11-A1	SRF Program Support Amendment No. 1	$544,925	$544,924	$ 0	$544,924	100%*
2014-11-A2	SRF Program Support Amendment No. 2	$730,000	$102,152	$354,115	$456,268	63%
2015-01	Program Management Support	$894,882	$894,880	$ 0	$894,880	100%*
2015-05	2015 Revenue Bond Financing	$218,772	$218,772	$ 0	$218,772	100%*
2015-06	Facility Planning	$975,382	$577,236	$48,344	$625,580	64%
2015-07	Water Resources Master Plan Update	$2,623,300	$1,699,052	$198,360	$1,897,412	72%
2015-08	Source Control Program	$471,368	$74,441	$71,153	$145,594	31%
2016-01	Agat to Umatac Potable Waterline Analysis	$56,030	$ 260	$6,729	$6,990	13%
2016-02	Phase I: Tumon Sewer Basin Study	$187,990	$ 0	$ 0	$ 0	0%
2016-03	Mixing Zone Study for Agat-Santa Rita WWTP Discharge to Tipalao Bay	$447,250	$115,132	$322,002	$437,134	98%
2016-04	Hydraulic Modeling Phase 3	$148,746	$ 0	$ 0	$ 0	0%
2016-05	Engineering for Groundwater Well Production Meters	$301,539	$ 0	$ 0	$ 0	0%
2016-07	Project Management for Umatac-Merizo WWTP Upgrade and D/B Preparation	$1,250,757	$42,276	$309,393	$351,669	28%
2016-08	Program Management 2016-2017	$782,995	$31,748	$283,061	$314,809	40%
2016-09	Backflow Prevention and Cross-Connection Control Program	$154,570	$1,269	$17,641	$18,909	12%
Total		$14,069,481	$8,361,135	$1,612,687**	$9,973,823	

**Work Authorizations essentially complete but not formally closed.*

***Value is rounded.*

Table 1-2 below is a listing of completed work authorizations performed under GWA's Program Management Office.

Table 1-2. Completed PMO Work Authorizations			
Work Authorization #	Work Authorization Title	Approved Budget	Final Amount Invoiced
2012-01	Program Management/2013/Amend. 3	$956,700	$956,700
2012-02	Programmatic Overview	$28,548	$28,548
2012-03	Northern District Interim Improvements	$239,760	$239,760
2012-04	Agat/Santa Rita Interim Measures	$42,920	$42,920
2012-05	Baza Gardens Interim Measures	$46,200	$46,200
2012-06	Agana Interim Measures	$89,885	$89,885

Table 1-2. Completed PMO Work Authorizations			
Work Authorization #	Work Authorization Title	Approved Budget	Final Amount Invoiced
2012-07	Hydraulic Model	$389,024	$389,024
2012-08	Lifeline Program	$5,269	$5,269
2012-09	SSES Implementation	$80,602	$80,602
2012-10	Chaot/ Agana Heights Tank DB Package	$271,071	$271,071
2012-11	PUC Stipulated Order	$131,554	$131,554
2012-12	Phase I Facility Eval. Umatac-Merizo WW	$105,635	$105,635
2012-13	Phase I Ugum Inspection and Training	$135,986	135,986
2012-15	Well Corrosion Specialist	$48,610	$48,610
2012-16	Umatac-Merizo Overflow	$25,170	$25,170
2012-17	NEIC Water System Support	$288,488	$288,488
2012-01-A2	General Program Management Support	$289,414	$289,414
2012-01-A3	General Program Management Support	$583,709	$583,709
2012-12-A1	WW Eval Umatac PH 2	$205,172	$205,172
2012-13-A1	Update O&M Manual Ugum SWTP	$17,412	$17,412
2013-01	Phase I PM Agana WWTP Upgrades	$110,158	$110,158
2013-02	Phase I CM Agana WWTP Upgrades	$223,867	$223,867
2013-03	Southern Sewer Basin SSES	$452,329	$452,329
2013-04	Central I/I Tech Support	$47,991	$47,991
2013-05	WW Eval Agat-SR & Baza Gardens	$582,765	$582,765
2013-06	Engineer's Report Revenue Bond	$247,810	$247,810
2013-01-A1	Phase II PM-Agana WWTP Upgrades	$70,860	$70,860
2014-01	Program Management Support	$1,286,120	$1,286,120
2014-01-A1	Program Management Support	$100,000	$100,000
Total		$7,103,029	$7,103,029

Section 2.0: Work Authorization Highlights

This section includes information pertaining to work authorizations performed during this quarterly period. The information in this section contains: program successes and problems, project successes and status, and if applicable, projects exceeding budget and projects behind schedule.

Table 2-1 shows the work authorizations that were worked on during this quarterly period. Significant highlights of these work authorizations are provided to show the progress of each work authorization. Where appropriate, a summary of successes and/or problems are provided.

Table 2-1. Work Authorization Highlights for Active Work This Period				
Work Authorization #	Work Authorization Title	Significant Highlights	Successes	Problems
2012-14	NPDES Negotiation Support	• No action this period		
2013-02-A1	Phase II Constr Mgmt Agana WWTP Upgrades	• No action this period • Slated for close-out	• Project is substantially complete	
2014-01-A2	Program Management Support	• No action this period • Slated for close-out	• Project is substantially complete	
2014-02	Ugum WTP Operations Support	• No action this period • Slated for close-out	• Project is substantially complete	
2014-03	NEIC Wastewater System Support	• No action this period		
2014-04	PUC Stipulations 2013	• No action this period	• Project is substantially complete	• Awaiting approval from GWA to issue draft report as final
2014-05	Groundwater Well Rehabilitation Plan	• No action this period • Slated for close-out	• Project is substantially complete	
2014-06	Water System Hydraulic Analysis	• No action this period		
2014-07	Hydraulic Model for Sewer System	• No action this period • Slated for close-out	• Project is substantially complete	
2014-09	Formal Training Program Assistance	• No action this period		
2014-10	Design Management New Agat WWTP	• No action this period • Slated for close-out	• Project is substantially complete	
2014-11	SRF Project Management	• No action this period • Slated for close-out	• Project is substantially complete	
2014-11-A1	SRF Project Management	• No action this period	• Project is substantially complete	
2014-11-A2	SRF Project Management, Amendment 2	• CO 11 Approved Budget of additional $365,000 Southern SSES Rehabilitation – Phase I (Agat, Santa Rita, Umatac, Merizo) (Construction) • Led Discussions on warranty issues regarding CIPP installation/liner issues • Coordinated efforts on preparation and collection of final closeout documentation ○ Reviewed Contractor's revised standby claim ○ Prepared record drawings, and O&M Manual ○ Reviewed CM Claim response letter ○ Performed various follow-ups (e.g. CCTV, CM progress, etc.) Southern SSES Rehabilitation – Phase II (Baza Gardens, Santa Rita, Talofofo) (Construction) • Reviewed, and submitted CM Invoice no. 8, and 9, and Construction invoice no. 7 to GWA for payment	• Engineering Design underway for ○ Rt. 1 Sewer Rehab (99% Complete) ○ Rt. 2 Sewer Rehab (99% Complete) ○ Rt. 4 Sewer Rehab (95% Complete) • Engineering Design underway for:	• A/F-series (Design) Deep Well Rehabilitation Projects are both experiencing delays. Delays are primarily due to issues with pilot hole development and locating wells with adequate

Table 2-1. Work Authorization Highlights for Active Work This Period

Work Authorization #	Work Authorization Title	Significant Highlights	Successes	Problems
		• Managed CM Change Order request no. 2; submitted CO no. 2 for further processing • Reviewed construction submittals • Conducted Santa Rita site visits regarding manhole leaks, CCTV work, and CIPP installation • Led discussions regarding CIPP work and other technical complications • Coordinated on-site Davis-Bacon labor inspection interviews • Coordinated certified payroll and project schedule submittals to GWA Rt. 1 Asan-Adelup-Hagatna Sewer Line Rehabilitation (Engineering Design) • Prepared, reviewed, and submitted final bid plans and specifications; assisted with preparation of EJCDC documents for bidding and construction contract • Participated in Pre-bid meeting, and CM Scoping Meeting • Reviewed, and submitted Design Invoice no. 16, and 17 to GWA for payment • Participated in Route 1 bid opening ○ Discussed escalated cost of project ○ Discussed bid evaluation ○ Steps to move forward with bid/re-bid Rt. 1 Sewer Rehabilitation and Replacement (Asan-Adelup-Hagatna) Asan Sewer Break Repair • Reviewed, and submitted Construction invoice no. 1 to GWA for payment • Managed Construction Change Order request no. 1; led discussions on no-cost CO and means to re-allocate funding; submitted CO no. 1 for further processing • Corresponded on, and developed responses to RFI questions • Led discussions on the following: asbestos abatement, additional work upstream, challenges ongoing at current job sites, traffic control, proper shoring/trench support, etc. • Performed follow-ups (e.g. traffic control, archaeological monitoring, bypass set-up, removal of metal plans, and excavation schedule, etc.) • Coordinated on-site Davis-Bacon labor inspection interviews Rt. 2 Agat War-in-the-Pacific National Park (Engineering Design) • Developed, finalized, and submitted bid plans and specifications; assisted with preparation of EJCDC documents for bidding and construction contract • Participated in Pre-bid meeting; led discussions, reviewed, and submitted responses to RFIs Rt. 4 Relief Sewer Line Rehabilitation and Replacement (Engineering Design) • Received, reviewed, provided comments, finalized, and submitted 90% design plans and specifications to USEPA; discussed comments and costs implications • Received, reviewed, provided comments, and discussed 100% design plans and specifications submittal • Reviewed, and submitted Design Invoice no. 8, and 9 to GWA for payment D-series Deep Well Rehabilitation (Construction) • Reviewed, and submitted CM invoice nos. 5, 6, and 7, and Construction invoice no. 8, and 9 to GWA for payment	○ A & F-series Deep Well Rehab (30% Complete) ○ Tumon Hot Spots Sewer Rehab (40% Complete) ○ Tamuning Hot Spots Sewer Rehab (40% Complete) • Construction underway for: ○ Agat-Santa Rita-Umatac-Merizo Sewer Rehab (99% Original Scope Complete) ○ Baza Gardens-Santa Rita-Talofofo Sewer Rehab (60% Complete) ○ D-series Deep Well Rehab (60% Complete) ○ Route 1, Asan Sewer Break Repair (10% Complete) • (SSES, Phase II) Executed CM Change Order no. 2 • (D-series) Executed Construction Change Order no. 5 • (Rt.1 Asan Sewer Break) Executed Construction Change Order no. 1 • (Tamuning Hot Spots) Executed Change Order no. 1	capacity; additional pilot holes have been required and additional equipment was required by the drilling company to complete some of the pilot holes • SSES, Phase I, Subcontractor (CIPP) slow to respond to warranty claim • SSES, Phase II, Subcontractor (CIPP) delays due to mobilization from off-island

Table 2-1. Work Authorization Highlights for Active Work This Period				
Work Authorization #	Work Authorization Title	Significant Highlights	Successes	Problems
		• Managed Construction Change Order request no. 5; submitted CO no. 5 for further processing and approval • Led discussions, participated in additional meetings with GHD, GWA, and the CM regarding issues (M-09 shut down, sound tube modifications, electrical modifications and requirements, new M-09 scope of work, isolation of D-17 and D-18 to dry tap, additional requirements for gravel, completion of D-18 and D-22 boreholes, new isolation valves, additional time needed, etc.) A/F-series Deep Well Rehabilitation (Engineering Design) • Reviewed, and submitted Designer invoice no. 6, and 7 to GWA for payment • Managed Design Change Order request no. 1; submitted CO no. 1 to GWA for further processing • Led discussions on drilling for A-02, A-07, A-12 and D-05, status of borehole for F-03, design considerations for drilling deeper, etc. • Received, reviewed, provided comments on Draft DAR, and discussed options and associated costs Tumon Hot Spots Engineering Design • Participated in bi-weekly project progress meetings, and performed various follow-up tasks • Received, reviewed, provided comments, and discussed Draft 30% Design and associated costs • Reviewed, and submitted Design Invoice no. 6, to GWA for payment Tamuning Hot Spots Engineering Design • Participated in meetings to discuss cleaning/CCTV work and manhole inspections of additional lines • Led discussions on field work status updates, property/easement issues, survey work, etc. • Assisted Engineer and GWA with several property issues in the project • Received, reviewed, provided comments, and discussed Draft 30% Design and associated costs • Reviewed, and submitted Design Invoice no. 5 to GWA for payment • Managed Design Change Order request no. 1; submitted CO no. 1 to GWA for further processing	• (Tumon Hot Spots) Report (DAR) to USEPA • (Rt. 2) 100% Design Plans and Specifications submitted to GWA and Advertised for Bid • (Rt. 1) 100% Design Plan and Specifications submitted to GWA and Advertised for Bid • (Rt. 4) 90% Design Plans and Specifications to USEPA • (D-series) Pump tested D-22 borehole successfully	
2014-12	Umatac-Merizo WWTP Water Quality Standards	• No action this period • Slated for close-out	• Project is substantially complete	
2014-13	Baza Gardens Wastewater Cross-Island Design	• No action this period • Slated for close-out	• Project is substantially complete	
2015-01	Program Management Support 2016	• No action this period		
2015-05	2016 Revenue Bond Financing	• No action this period • Slated for close-out	• Project is substantially complete	

Table 2-1. Work Authorization Highlights for Active Work This Period				
Work Authorization #	Work Authorization Title	Significant Highlights	Successes	Problems

2015-06	Facility Plans for the HWWTP and NDWWTP	• Developed, reviewed, and submitted Northern District WWTP Facility Plan Report
		  ○ NDWWTP Liquid Treatment Options
		  ○ NDWWTP Solid Treatment Options
		  ○ NDWWTP Recommendations
		• Developed, and reviewed Request for Proposal (RFP) for the Northern District WWTP
		• Developed, reviewed, and submitted draft Hagåtña WWTP Existing Conditions and Flow Projects Technical Memorandum
		• Developed, and reviewed Hagåtña WWTP Location Alternatives Technical Memorandum
		  ○ Performed site visits for research and to gain information
		  ○ Coordinated internally on cost estimate development efforts; developed cost estimates
		  ○ Developed, and reviewed figures
		• Conducted Internal Workshop in Hagåtña WWTP Treatment Options
		• Performed clarifier/activated sludge calculations for HWWTP report incorporation
			• Project is 69% complete
			• Issued Northern District WWTP Facility Plan
			• Issued draft Hagåtña WWTP Existing Conditions and Flow Projections TM	

2015-07	Water Resources Master Plan Update	• Reviewed CDM's Invoice no. 5, and 6, and coded invoices for further processing and payment • Developed, and executed CDM Subcontractor Amendment No. 3, providing CDM with 159 calendar days from the date of the amendment to complete scope of services • Developed, reviewed, and submitted Preliminary Draft Water Resources Master Plan Update, Volume 3, for GWA review and comment • Prepared for, and conducted Capital Improvement Project (CIP) Workshops for Water and Wastewater Systems for inclusion into the WRMPU • Developed CIP sections of the Volume 2 (Water System) and Volume 3 (Wastewater System) for the GWRMPU; submitted Final Draft Water Resources Master Plan Update, Volume 2	• Issued Preliminary Draft Water Resources Master Plan Update, Volume 3 • Issued Final Draft Water Resources Master Plan Update, Volume 2 • Executed CDM Subcontract, Amendment No. 3 for Time Completion • Project is 70% complete	

2015-08	Source Control Program	• CO 11 Approved Budget of additional $227,368
		• Developed the following:
		  ○ GARR 28 revisions
		  ○ Pretreatment Program Enforcement Response Plan
		  ○ Fees, fines, and Implementation Plan for the Pretreatment Program
		  ○ FOG Control Manual
		  ○ ICID Control Program
			• Project is 31% complete
			• Developed Interagency Memorandum of Understanding with GEPA, DPW and DPHSS on FOG program and ICID program	

2016-01	Agat to Umatac Potable Waterline Analysis	• Performed analysis and modeling of piping		
2016-02	Phase I: Tumon Sewer Basin Study	• CO 11 Approved Budget: $187,990 • Project set-up in anticipation of budget and funding approval • Performed preliminary project set-up and management tasks through approval of budget in CO 11		

Table 2-1. Work Authorization Highlights for Active Work This Period				
Work Authorization #	Work Authorization Title	Significant Highlights	Successes	Problems
2016-03	Mixing Zone Study for Agat-Santa Rita WWTP Discharge to Tipalao Bay	• Reviewed Daily Monitoring Report (DMRs) and NPDES permits for metal limits and readings • Performed modeling update in preparation for final report submittal • Developed, reviewed, and submitted Mixing Zone Dilution Analysis Study – Field and Model Analysis Report	• Issued final Mixing Zone Dilution Analysis Study – Field and Model Analysis Report	
2016-04	Hydraulic Modeling Phase 3	• CO 11 Approved Budget: $148,746 • Project set-up in anticipation of budget and funding approval • Performed preliminary project set-up and management tasks through approval of budget in CO 11 • Performed updates to the hydraulic water model		
2016-05	Engineering for Groundwater Well Production Meters	• CO 11 Approved Budget: $301,539 • Project set-up in anticipation of budget and funding approval • Performed preliminary project set-up and management tasks through approval of budget in CO 11		

2016-07	Project Management for Umatac-Merizo WWTP Upgrade and D/B Preparation	• CO 11 Approved Budget of additional $665,757
		• Participated in Bid Opening meeting; submitted bid submittal packages for bid analysis preparations and recommendations
		  ○ Developed CCU Resolution and Summary
		  ○ Reviewed Bid Disqualification requirements and mobilization payment verbiage
		  ○ Reviewed winning Step 1 Proposal (CoreTech/Hawaiian Dredging)
		• Participated in CM/OSR scoping meeting preparations; reviewed CM fee proposal
		• Performed CM Proposal Evaluation, and provided recommendation
		  ○ Submitted CM RFP proposal submittals for analysis preparation
		  ○ Reviewed CM Proposal submittals, and complete scoresheets
		• Developed, reviewed, prepared, and submitted the addenda, and Step 2 RFI responses
		• Participated in Water Quality Standard Meeting; performed evaluations and report development
		  ○ Reviewed WERI Toguan River flow report
		• Developed wastewater treatment plant effluent discharge model and preliminary Toguan River dilution model
			• Successfully bid the Design/Build Contract
			• The bid amount came in within engineer's estimate and under budget
			• Issued Notice to Proceed (NTP) on June 29, 2017 meeting the Court Order deadline of June 30, 2017
			• Successfully negotiated the CM contract for GWA with a fee which is substantially under budget	

2016-08	Program Management Support 2017	• Change Order No. 11 approved, providing additional WA funding • CO 11 Approved Budget of additional $391,498 • Continued coordination efforts in adopting the Engineers Joint Contract Documents Committee (EJCDC) specifications in GWA's procurement • Continued development, and review efforts for draft GWA Water Standard Details • Provided GWA with guidance and engaged in discussion, as requested, for acquisition of well maintenance rig, as well as coordination efforts • Prepared for, and conducted second session of Scattergraph Analysis Training	• Successfully assist GWA in adopting the EJCDC front end construction contract document	

Table 2-1. Work Authorization Highlights for Active Work This Period				
Work Authorization #	Work Authorization Title	Significant Highlights	Successes	Problems
		• Prepared, and submitted PMO Invoices for January, February, March, and April 2017, for review and payment • Prepared documentation of 145437 WA closures, funding de-obligations/re-obligations, and extensions per GWA request • Change Order No. 11 approved, providing additional funding for: ○ WA 2016-02, Phase I: Tumon Sewer Basin Study ○ WA 2016-04, Hydraulic Modeling Phase 3 ○ WA 2014-11-A2, SRF Program Amendment No. 2 ○ WA 2016-05, Engineering for Groundwater Well Production Meters ○ WA 2016-07, Project Management for Umatac-Merizo WWTP Upgrade and D/B Preparation ○ WA 2016-08, Program Management 2016-2017 ○ WA 2015-08, Source Control Program • Developed, reviewed, and submitted 1st Quarter PUC Report to GWA for PUC consideration • Led discussions, both internally and with GWA on future training and personnel development work for GWA staff		
2016-09	Backflow Prevention and Cross-Connection Control Program	• Performed research and gathering on GWA customer service data • Developed a program overview • Reviewed CCC programs, and ID gaps within GWA data ○ Reviewed M14 • Developed policies and procedures for cross connection control and backflow prevention • Developed, and reviewed 1st Draft Program TM; performed data analysis		

Tables 2-2 and 2-3 show the projects that were over budget by more than 10% during this quarter and the projects that are behind schedule, respectively. As shown on Table 2-3, the PUC Stipulation 2013 Rate Study is behind schedule by six months. The draft study report is currently under GWA management's review. All work authorizations that were performed during this period are within budget.

Table 2-2. Projects Over Budget

Work Authorization #	Project Title	% Over Budget	Remarks
N/A	N/A	N/A	N/A

Table 2-3. Projects Behind Schedule

Work Authorization #	Project Title	Time Behind (Mo.)	Corrective Actions
2014-04	PUC Stipulation 2013	6	Draft Report Currently under GWA Management's Review

Table 2-4 summarizes the staff trainings that were conducted during the quarterly period. Staff trainings include operational instruction and guidance not formally documented as a training session or module.

Table 2-4. Summary of Staff Training

Date	Course Description	Instructor(s)	# of Attendees	Duration (Hrs.)
5/5/2017	EJCDC Front End Documentation	Bill Chang/Bill Gilman Brown and Caldwell	2	8
6/30/2017	Supplemental Flow Meter Calibration, Reliability, and Field Validation Training (In-class)	Mark Poppe Brown and Caldwell	4	1.0
6/30/2017	Manhole Hydraulic Analysis to Determine Flow Meter Installation Suitability (Field Exercise)	Mark Poppe Brown and Caldwell	2	1.5

In addition, GWA's in-house training efforts for the past quarter have included the following:

- In an effort to measure GWA's Human Resource needs, a Training Needs Assessment (TNA) was conducted on March 23, 2017. The focus group for the TNA included Managers, Supervisors, and Leaders. Participants were given time to complete the TNA up to April 7, 2017. The results of the TNA are currently being analyzed to develop specific courses/workshops for implementation in the near future.
- As GWA continues to improve its Network Systems, GWA participated in the Certified Information Systems Security Professional (CISSP) Training Camp. The Training Camp is one of the leading, most informative, and most comprehensive Information Systems training. With threats to our network systems on the rise, GWA took measures to mitigate threats to our network and provided CISSP Certification to 2 employees in the Information Technology Division, the Network Systems Administrator and the Systems Programmer Administrator.
- GWA is actively training on Cyber Security Awareness – provided to 217 employees.

- Operations staff were trained on the following CBT Materials:
    - Water Supply Operations: Filtration – provided to 4 employees
    - Water Distribution Operator's Training: Valves - provided to 5 employees
    - Water Distribution Operator's Training: Service and Meters – provided to 5 employees
    - Water Distribution Operator's Training: Pumps and Motors – provided to 5 employees
    - Water Supply Operations: Pumps – provided to 6 employees
    - Water Distribution Operator Training: Hydrants – provided to 5 employees
    - Turbidity Measurement and Particle Counting – provided to 6 employees
    - Water Distribution Operator Training: Water Mains – provided to 6 employees
    - Membrane Technology: provided to 3 employees
- Chlorination Leak Response Training – provided to 5 employees; This 4-hr training was facilitated by Island Equipment.
- Sulzer Pump & Motor Training – provided to 48 employees; The Pump and Motor training was a 2-day training consisting of both Classroom and Hands-on Training. Course overview:
    a. Submersible Pump/Motor Overview
    b. General Pump Theory
    c. Submersible Pump and Motor Application, Installation, and Maintenance
    d. VFD Theory
    e. MCU 33, DI Sensors & Thermal Sensors
    f. Pump Maintenance & Troubleshooting
- AWWA-HIWPS Training Workshop "Complying with Regulations" – provided to 32 employees
- NASSCO Pipeline Assessment Certification Program (PACP)/Manhole & Lateral Assessment Certification Program (MACP/LACP) – provided to 9 employees; This certification program was necessary to comply with the standardized reporting requirements used by USEPA and GWA Consultants.
- 2017 Safety Conference – provided to 18 employees
- SHRM Guam Chapter "Labor Relations Training" – provided to 2 employees
- SHRM Guam Chapter "Employment Law Update" – provided to 2 employees
- Customer Service Training (Job-site specific duties) – provided to 10 employees
- 8HR HazWOPER Refresher – provided to 2 employees
- 8HR DOT HazMat Safe Transportation – provided to 5 employees
- First Aid/CPR AED Certification is on-going and has provided training thus far to 23 employees, to date.
- Government Procurement Training: - provided to 3 employees

Section 3.0: Summary of Hours and Fees Received by Local Contractors and PMO

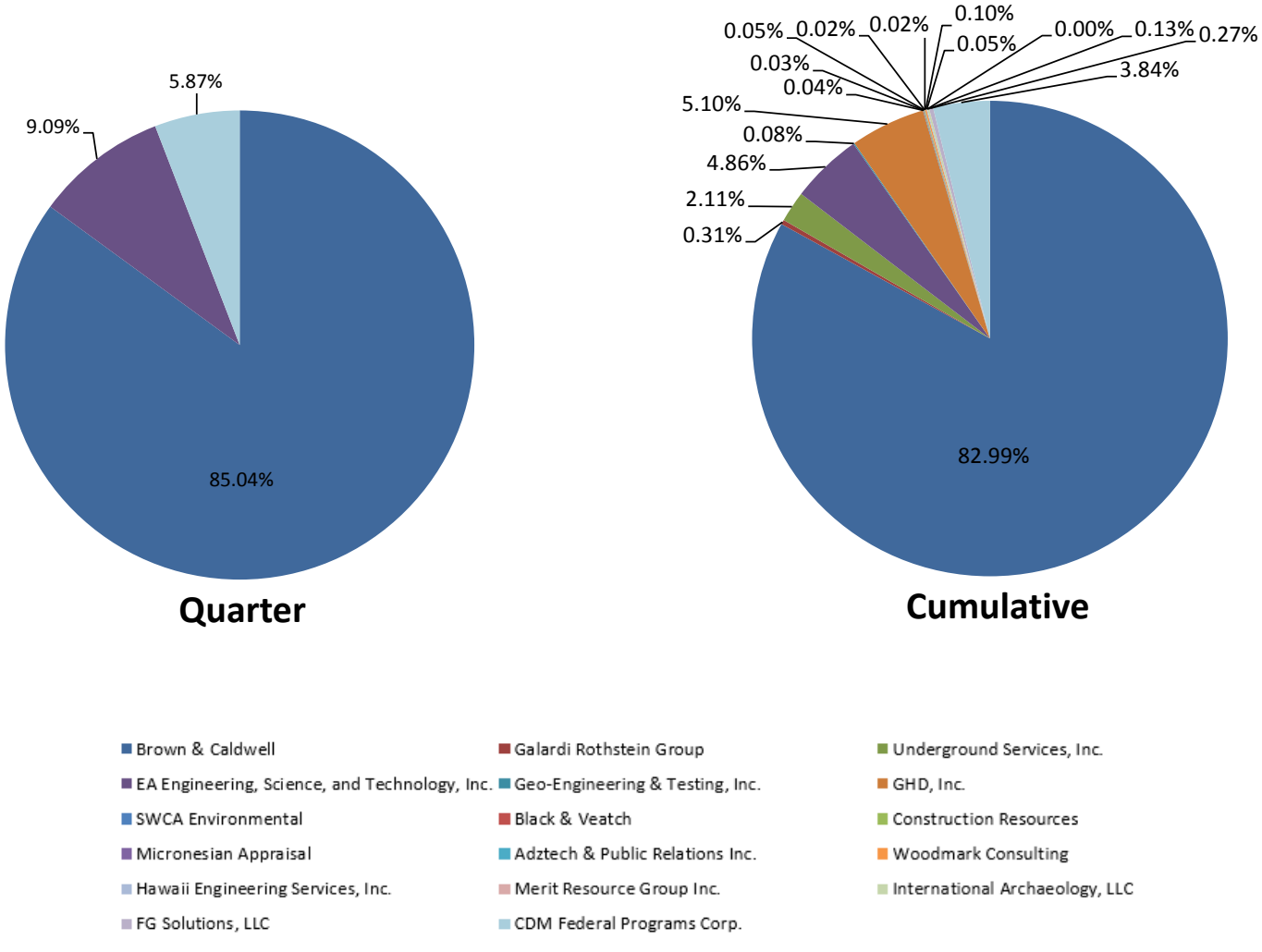
This section provides a summary of the fees invoiced by the PMO, local contractors, and subconsultants during the quarter. Table 3-1, Summary of Hours and Fees, and Figure 3-1, Percentage of Work by Firm, provides a summary of the total invoiced amount for work performed during the quarter compared to the cumulative invoiced amounts over the duration of the Program. Percentages of work performed by each subconsultant during the quarter and cumulative over program duration are also shown. GRT taxes are also depicted and represent a significant cost. Significant activities by subconsultants are anticipated in the upcoming work authorizations later in 2016.

Table 3-1. Summary of Hours and Fees

Company	Total Billed in Quarter	Hours Worked	% of Total Billed for Quarter (Less Taxes)	Cumulative Billed	Cumulative %
Brown and Caldwell (PMO)*	$1,316,618.72	5991.25	85.04%	$13,605,624.90	82.99%
Galardi Rothstein Group	$ 0.00	N/a	0.00%	$50,579.83	0.31%
Underground Services, Inc.	$ 0.00	N/a	0.00%	$345,331.25	2.11%
EA Engineering, Science, and Technology, Inc., PBC*	$140,733.00	785.50	9.09%	$797,290.17	4.86%
Geo-Engineering & Testing, Inc.*	$ 0.00	N/a	0.00%	$12,917.08	0.08%
GHD, Inc. *	$ 0.00	N/a	0.00%	$836,356.37	5.10%
SWCA Environmental*	$ 0.00	N/a	0.00%	$6,062.28	0.04%
Black & Veatch	$ 0.00	N/a	0.00%	$4,598.00	0.03%
Construction Resources*	$ 0.00	N/a	0.00%	$8,107.50	0.05%
Micronesian Appraisal*	$ 0.00	N/a	0.00%	$2,800.00	0.02%
Adztech & Public Relations, Inc.*	$ 0.00	N/a	0.00%	$2,625.00	0.02%
Woodmark Consulting	$ 0.00	N/a	0.00%	$17,002.43	0.10%
Hawaii Engineering Services, Inc.	$ 0.00	N/a	0.00%	$9,000.00	0.05%
Merit Resource Group, Inc.	$ 0.00	N/a	0.00%	$ 743.60	0.00%
International Archaeology, LLC	$ 0.00	N/a	0.00%	$20,642.75	0.13%
FG Solutions, LLC	$ 0.00	N/a	0.00%	$44,237.13	0.27%
CDM Federal Programs Corporation	$90,824.10	693.20	5.87%	$629,808.43	3.84%
Taxes (GRT)	$64,512.49			$683,126.59	
Total	$1,612,688.31	7469.95	100%	$17,076,853.31	100%
Cumulative Paid to Date**				$16,045,461.11	94%

** Local Guam Firm*
*** Cumulative Paid to Date only reflects the periods on the invoices submitted within the quarter (i.e. only reflects payments received until June 30, 2017).*

Figure 3-1. Percentage of Work by Firm



Section 4.0: Summary of Progress of Major Project Categories and Status

This section provides a summary of the progress of the major project categories and the progress status of the projects.

Figure 4-1, PMO Progress by Major Project Categories describes the major project categories – General Program & Small Project Support, Water System Support, Wastewater System Support, Planning Support, and Other Support for each quarter through the 1st Quarter of Year 6.

Figure 4-2, PMO Progress Status illustrates the PUC approved budgets to date, the actual spending to date along with an assessment of the Program percentage completed to date, and the PMO approved budget by year.

Figure 4-1. PMO Progress by Major Project Categories

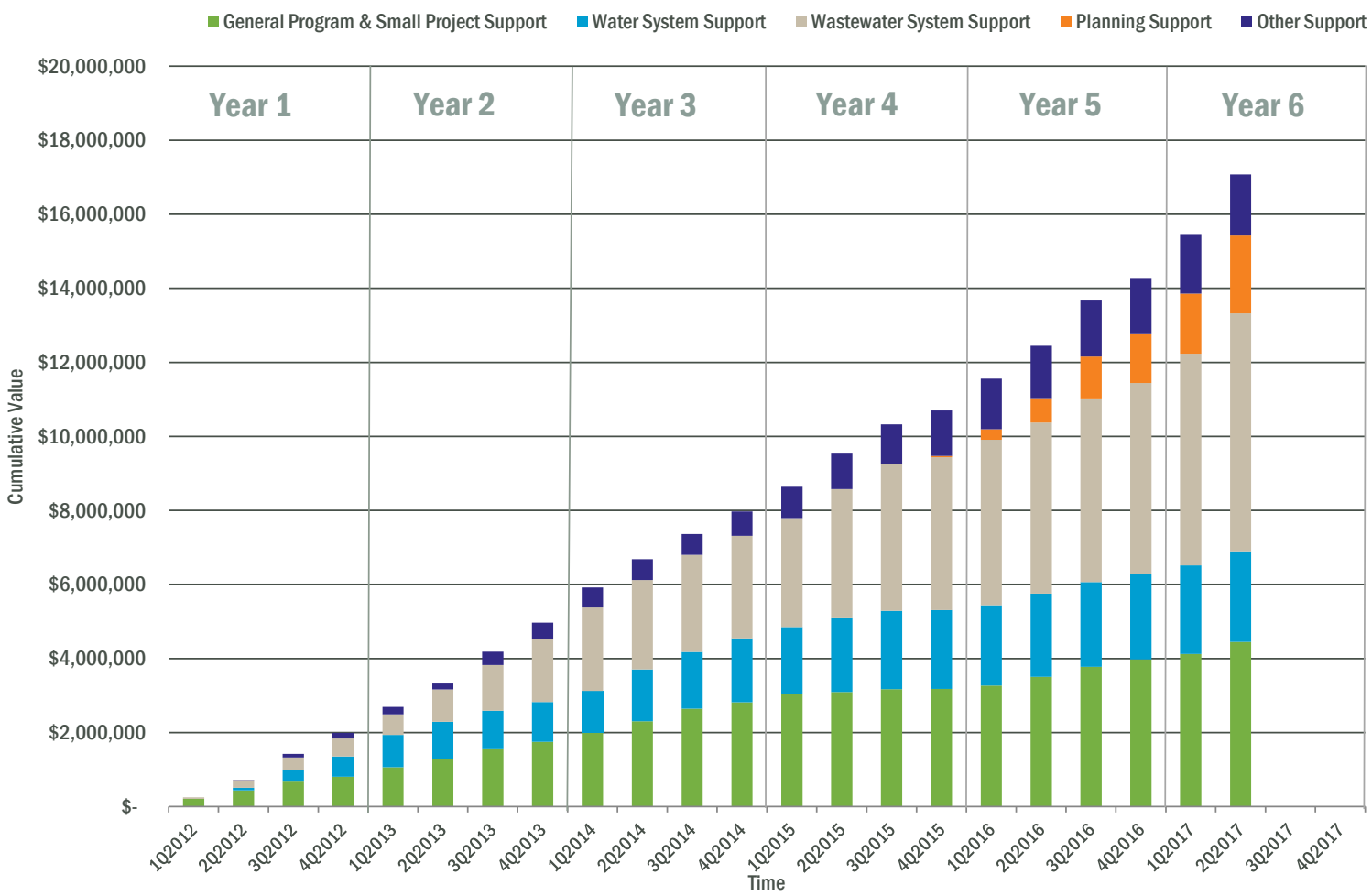
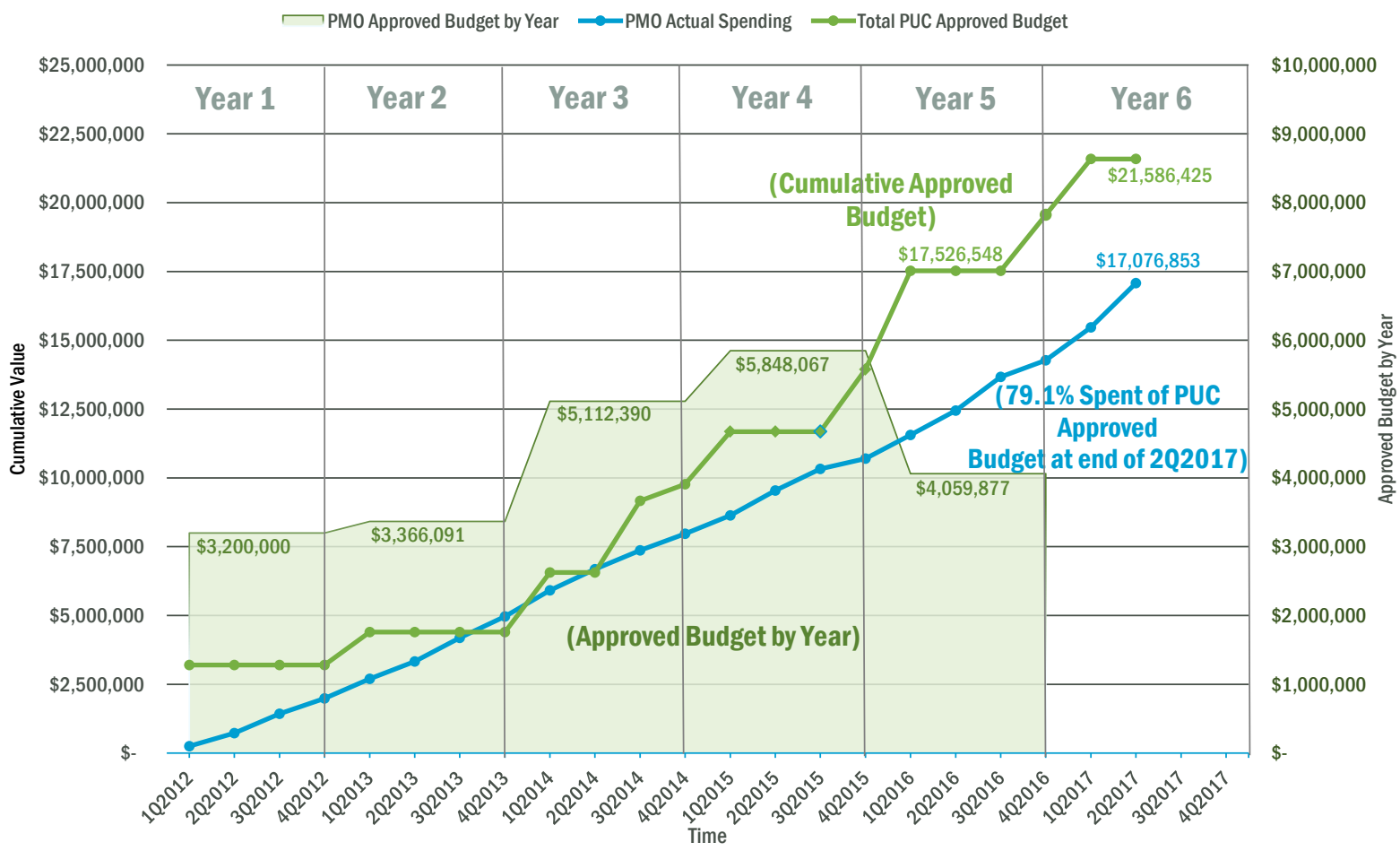


Figure 4-2. PMO Progress Status



Section 5.0: GWA Project Bidding Process Utilizing the PMO

Based on PUC Docket 13-01, dated July 31, 2014, Ordering Provision Number 7, an indication is required of whether certain projects managed by the PMO could be separately pursued under the competitive bidding process for all projects that are not typical management and supervisory assistance. The PMO is used primarily for technical review and subject matter knowledge, training support, and design/project/construction management support. The PMO continues to reinforce GWA's capabilities and limited manpower by identifying project needs and establishing clear scopes of work so that the design work can be openly procured from the consulting engineering community. The PMO encourages the local engineering community to participate in solving GWA's needs by acting in a supervisory project management and technical resource capacity, allowing the engineering community to do detailed design and construction management.

Projects initiated by the PMO and currently being performed by the Guam consulting engineering community as a result of open procurement are shown in Table 5-1 below.

Table 5-1. Work Distributed to the Consulting Engineering Community

Project	Consulting Engineer
Agat-Santa Rita WWTP	GHD, Inc.
Umatac-Merizo WWTP – Toguan River Monitoring	Water and Environmental Research Institute of the Western Pacific EA Engineering, Science, and Technology, Inc.
Baza Cross-Island Wastewater Conveyance	Dueñas, Camacho & Associates, Inc.
Route 1 Sewer Line Rehabilitation	HDR, Inc.
Route 1 Asan Sewer Break Repair	HDR, Inc.
Route 2 Sewer Line Rehabilitation	SSFM, Inc.
Route 4 Sewer Line Rehabilitation	AECOM
Tumon Hot Spots Sewer Line Rehabilitation	TG Engineers, Inc.
Tamuning Hot Spots Sewer Line Rehabilitation	TG Engineers, Inc.
Agat-Santa Rita Sewer Line Rehabilitation	TG Engineers, Inc.
Baza Gardens-Talafofo Sewer Line Rehabilitation	EMPSCO Engineering Consultants
Umatac-Merizo Sewer Line Rehabilitation	TG Engineers, Inc.
D-Series Wells	EA Engineering, Science, and Technology, Inc., PBC
A-Series Wells	AECOM
Water Resources Master Plan Update	CDM Smith
Mixing Zone Study for Agat-Santa Rita WWTP	EA Engineering, Science, and Technology, Inc., PBC
Source Control Program	EA Engineering, Science, and Technology, Inc., PBC

Table 5-2 provides a summary of PMO involvement with GWA's Capital Improvement Program (CIP) projects. While GWA has many active projects in the CIP, only 38% of the projects in the CIP have any participation by the PMO. The PMO provides technical review (TR), design management (DM), construction management (CM), and project management (PM) for 38%, 6%, 4.5%, and 3% of the total CIP projects, respectively, and several PMO services are offered on the same CIP project. The PMO's involvement on a CIP project is primarily to prepare the project for open procurement for the Engineering community on Guam.

Table 5-2. Plan Summary of PMO Involvement with GWA CIP

CIP #	Project Description	PMO Involvement		Remarks*
		No	Yes	
PW 05-01	Ground Water Disinfection	●		
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	●		
PW 05-07	Meter Replacement Program	●		
PW 05-08	Barrigada Tank Repair/Replacement	●		
PW 05-09	Leak Detection	●		
PW 05-10	Potable Water System Planning		●	TR, TRNG
PW 05-11	Implement Ground Water Rule	●		
PW 05-12	Brigade II (Ugum List) BPS Upgrade	●		
PW 05-13	Deep Well Rehabilitation		●	TR
PW 05-14	New Deep Wells at Down Hard	●		
PW 05-15	Rehablitation of Asan Springs		●	TR
PW 05-16	Master Meters		●	TR
PW 09-01	Ugum Water Treatment Plant Intake		●	TR, TRNG, CM
PW 09-02	Water Wells		●	TR, TRNG
PW 09-03	Water Distribution System Pipe Replacement and Upgrades		●	TR
PW 09-04	Pressure Zone Realignment/Development 2005 Improvements		●	TR
PW 09-06	Central Water Distribution System 2005 Improvements	●		
PW 09-08	Mechanical/Electrical Equipment	●		
PW 09-09	Water Reservoir Internal/External	●		
PW 09-10	Water Reservoir Internal/External	●		
PW 09-11	Water System Reservoirs 2005 Improvements		●	TR
PW 11-01	Distribution System Upgrade	●		
PW 11-02	Ugum Water Treatment Plant Reservoir		●	TR
PW 12-01	Water Audit Program & Water Loss Control Plan	●		
PW 12-02	Production Plan/Reduce Navy Purchases	●		
PW 12-03	Hydraulic Assessment of Tanks	●		
PW 12-04	Agana Heights & Chaot Tanks		●	TR, DM
PW 12-05	Tank Major Repair Yigo #1, Mangilao #2, Astumbo #1	●		
PW 12-06	Tank Replacement Piti & Hyundai	●		

Table 5-2. Plan Summary of PMO Involvement with GWA CIP				
CIP #	Project Description	PMO Involvement		Remarks*
		No	Yes	
PW 12-07	Assessment/Replacement of Malojloj Elevated & Yigo Elevated	●		
PW 12-08	Public Water System Asset Inventory/Condition Assessment	●		
PW 12-09	Public Water System GIS & Mapping	●		
PW 14-01	Fire Hydrant Replacement Program	●		
WW 05-04	Wastewater System Planning		●	TR, DM
WW 09-01	Lift Station Upgrades	●		
WW 09-02	Moratorium		●	TR
WW 09-06	Wastewater Collection System Repl/ Rehabilitation		●	TR
WW 09-08	Facilities Plan/Design/Interim for Baza Gardens STP Impr.		●	TR
WW 09-10	Facilities Plan/Design/Interim for Agat-Santa Rita STP Impr.		●	TR
WW 09-11	WTP Priority 1 Upgrades	●		
WW 11-03	Baza Gardens STP Replacement		●	TR
WW 11-04	Facilities Plan/Design/Interim for Umatac-Merizo STP Impr.		●	TR
WW 11-08	Agat/Santa Rita STP Replacement		●	TR, DM
WW 12-01	Northern District WWTP Primary Treatment Upgrades		●	TR, CM
WW 12-02	Bio Solids Management Plan	●		
WW 12-03	Agana WWTP Interim Measures		●	TR, DM, PM, CM
WW 12-04	I&I SSES Southern		●	TR, TRNG, PM
WW 12-05	I&I SSES Central	●		
WW 12-06	I&I SSES Northern	●		
WW 12-07	Umatac Merizo STP Replacement		●	TR
WW 12-09	Wastewater Facility Back Up Power	●		
EE 05-02	SCADA Pilot Project	●		
EE 09-01	Wastewater Pumping Station Electrical Upgrade	●		
EE 09-02	Electrical Upgrade - Water Wells	●		
EE 09-03	Electrical Upgrade - Water Booster	●		
EE 09-04	Electrical Upgrade - Water Booster	●		
EE 09-05	Electrical Upgrade - Other Water	●		
EE 09-07	SCADA Improvements - Phase 2	●		
EE 09-08	SCADA Improvements - Phase 3	●		
EE 09-09	SCADA Improvements - Phase 4		●	TR
MC 05-01	Laboratory Modernization		●	TR
MC 05-02	Land Survey	●		
MC 09-01	General Plant Improvements/Water	●		
MC 15-01	Information Technology Integration Improvements	●		

*Remarks: *TR – Technical Review*
TRNG – Training
DM – Design Management
PM – Project Management
CM – Construction Management

Section 6.0: Training Anticipated for Next Quarter

The PMO will continue to provide training to GWA staff through organized classroom training and facilitate knowledge transfer through collaboration with GWA staff on Work Authorization assignments.

For the next quarter, the PMO plans to conduct the following training for GWA:

1. Backflow Prevention and Cross Connection Control. The program will assist GWA in providing reasonable protection for its potable public water supply and system. Such protection will help prevent contamination resulting from backflow through uncontrolled plumbing connections and cross connections. GWA is increasing the staff assigned to compliance duties for these programs, and intends to provide training to the staff in the coming months.
2. Groundwater Operation, including:
    a. Groundwater Disinfection, Principle, Regulations and Calculation.
    b. Disinfection Monitoring.
    c. Chlorination/Chlorine Cylinders Management.
    d. Chlorination Equipment Operation and Maintenance.
    e. Water Well Production Rates/Monitoring.
    f. Well and Well Pump Service.
    g. Water Well Site Management.
    h. Water Well Rehabilitation.

In addition, GWA plans to implement the following training activities in-house through its Personnel Services Division:

- Employee Safety Orientation
- Cross Connection/Back Flow Prevention Awareness Training
- Computer Training
- Supervisory Training (i.e. Effective Communications, Adverse Action Procedures, etc.)
- Crane Operator Certification
- Well-Driller's Licensure
- Physical Security Training
- Customer Service Training
- Hazardous Communication
- Confined Space 8hr refresher
- Excavation
- Slips trips and falls CBT
- Safety Awareness OSHA 10hr.
- Forklift Safety
- MUTCD Temporary Traffic Control
- Office Safety
- Lockout/Tagout

Section 7.0: Make-up of the PMO Team

The Program Management Team consists of Brown and Caldwell (BC) as the prime engineer supported by seventeen (17) consultants as shown in Table 3-1. The number of local residents hired by BC since 2011 –

- 3 Engineering Interns, part-time
- 4 Full-time Engineers
- 1 Part-time Administrative Coordinator
- 1 Full-time Administrative Coordinator

The number of BC Employees who reside locally and worked on Guam projects during the quarter -

- 4 Full-time Engineers
- 1 Full-time Administrative Coordinator

Section 8.0: Use of Local Firms

The Ordering Provisions of the PUC, GWA Docket 13-01, dated 12/24/2014, OP #8, requires the PMO to indicate its use of local firms. Per Guam Procurement Law, 5 GCA Chapter 5, Section 5008(d), Policy in Favor of Local Procurement,

> *"All procurement of supplies and services shall be made from among businesses licensed to do business on Guam and that maintain an office or other facility on Guam, whenever a business that is willing to be a contractor is:*
>
> *(d) A service business actually in business, doing a substantial portion of its business on Guam, and hiring at least 95% U. S. Citizens, lawfully admitted permanent residents or nationals of the United States, or persons who are lawfully admitted to the United States to work, based on their citizenship in any of the nations previously comprising the Trust Territory of the Pacific Islands."*

The Brown and Caldwell Guam office is a service business, actually in business, doing business on Guam, and hiring 100% U.S. Citizens. In addition, Brown and Caldwell has maintained a Certificate of Authority (File# F-1236) to do business on Guam since January 25, 1990. Brown and Caldwell is considered a local business.

EXHIBIT "B" (1 of 1)

	Work Authorizations for Amendment No. 7	Fees	Recommended Reduction	Amount reduced	Adjusted Amounts	Comments
WA 2017-01	PMO Support 2017-18	$862,012	15%	$131,457	$730,555	Covers until Oct 1, 2017 to September 2018. I am ok with this.
WA 2014-11-A3	SRF Grant Funded Project Support Amendment No. 3	$914,571	10%	$94,201	$820,370	Covers until December 2018. I am ok with this because some of the SRF projects may be competed prior to the PMO ending so if there are anything movinig past engineeirng can take up.
WA 2017-03	Consulting Engineer's Report for 2018 Revenue Bond Financing	$243,387	14%	$33,344	$210,043	Needed for 2018 Bond
WA 2017-04	Project Management for New Wells AG10, AG12 and Y8	$221,131	50%	$111,118	$110,013	I was the one who asked for this but I think we can limit their involvemet to only provide technical input when necessary. GWA CIP Water would take the lead and the PMO support.
WA 2017-05	Hydraulic Modeling and Training forWastewater Collection System	$333,714	33%	$108,791	$224,923	We have started using the wasetwater hydraulic modeling but not to the level as water. The training is necessary but I think we can reduce the effort.
WA 2017-06	Southern Guam Water Supply Study	$468,251	100%	$468,251	$0	I don't think this is necessary at this time.
	Total	3,043,066			$2,095,904	

Guam Waterworks Authority
Program Management Support 2017-2018

TO: Brown and Caldwell
414 W. Soledad Ave.
Suite 602
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2017-01

SUBMITTAL DATE: August 21, 2017

FROM: Miguel C. Bordallo, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

DESCRIPTION: Program Management Support 2017-2018

Defined cost, scope, and schedule on a time and materials basis are provided below and consist of providing general program management support for GWA from Oct 1, 2017 to September 30, 2018. General program management support consists of managing and consulting oversight of GWA's capital improvements program and engineering advice on projects and programs that have critical and urgent deadlines, a brief scope and limited budget. Additionally, updates to the Program Strategy, Master Program Schedule, and Program Benefits Delivery are included.

NOT TO EXCEED amount: **$ 862,012**

Signed: _____ Date August 31, 2017
RAYMOND N. MATASCI
SR. VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

GWA Reviewer: _____ Date_____
THOMAS F. CRUZ, P.E.
CHIEF ENGINEER

Signed: _____ Date_____
MIGUEL C. BORDALLO, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Guam Waterworks Authority
Program Management Support 2017-2018

WORK AUTHORIZATION NO: 2017-01
DESCRIPTION: Program Management Support
GWA PROJECT MANAGER: Thomas F. Cruz, P.E.

PROJECT BACKGROUND AND OBJECTIVE

The purpose of this task order is to provide general program management support as part of GWA's Program Management Office (PMO) for GWA's Capital Improvements Program and engineering advice on critical issues facing GWA.

SCOPE OF WORK

Task 1: Program Planning, Implementation, and Management

Approach: The Program has completed its fifth year and many accomplishments and objectives have been achieved. A review of the program with respect to strategy, benefits realization, and execution will be performed to assure alignment with GWA's goals and objectives. Working together with GWA, program needs and direction will be developed with GWA staff and validated by the PMO. Improvements and changes will be documented in the updated program management plan. The following proposed subtasks will assist GWA in improving efficiency and internal capabilities.

The PMO will assist GWA with identifying component-project needs, planning the work, and coordinating with other Government of Guam agencies as required. The PMO will assist GWA in developing scopes of work and work plans for CIP projects, PUC Stipulated Order projects, and Court Order projects as required including preparation of work authorizations. PMO staff will collect information via document review and GWA staff interviews to develop work authorizations including scopes, schedules, budgets, and staffing plans for tasks that GWA delegates to the PMO. The PMO will effectively manage the project team members and perform administrative tasks for the projects to produce a quality product within budget and schedule.

The PMO will:

- be responsible for updating and implementing the program management plan;
- use a progress monitoring system to track team expenditures and product completion, providing the basis for PMO actions;
- use a monthly review process that estimates level of effort to complete and determines value earned, providing the basis for work plan modifications to meet budget and schedule;
- manage staff resources and sub-consultants to assure timely product generation and response; and
- conduct periodic quality control review of the work before final submittal to GWA.

The program will provide for housing subsistence, utilities, and leased cars for two full-time employees dedicated to the contract. In addition, airfare and per diem to bring subject knowledge technical experts as needed to Guam is limited to a total of seven (7) personnel, each for one week duration.

Guam Waterworks Authority
Program Management Support 2017-2018

PMO Team Responsibilities: PMO staff will provide updates to the program management plan and implement the plans and protocols listed in the program management plan. The PMO will develop work authorizations, scopes, schedules, budgets, and staffing plans.

GWA Responsibilities: GWA staff will review and provide comments on the plans, schedules, recommendations, and deliverables. GWA staff will participate in reviews and analyses, and abide by the protocols set forth in the plans. GWA staff will participate in subject matter technical discussions.

Products: Program management plan updates, scopes of work, meetings.

Task 2: Meeting and Reporting

Approach: PMO staff will be working closely with GWA staff to successfully deliver the program and will meet with GWA's Chief Engineer and Asst. General Manager of Compliance and Safety regularly. It is expected that PMO staff will meet with GWA staff weekly and provide weekly action items' reports along with monthly progress reports. Monthly reports will address project highlights and percent resources (man-hours and expenses) expended to date, decision tracking reports (issues and their resolutions), schedule for design and construction activities, and program changes (initiated by GWA, design-related, and/or other forces).

The PMO will prepare quarterly reports to the PUC on the status and performance of the PMO team. Reports will be comprised of a narrative, numerical, and graphical formats that track project performance and progress. The PMO will prepare periodic reports on training provided to GWA. The PMO will attend PUC and CCU meetings and work sessions, as necessary.

PMO Team Responsibilities: BC staff will coordinate and attend weekly status meetings, develop weekly and monthly progress reports and invoices, and develop quarterly and periodic reports.

GWA Responsibilities: GWA staff will be required to attend meetings and review progress reports.

Products: Weekly, monthly, and quarterly progress reports, monthly invoices, and training reports.

Task 3: Program and Technical Support

Approach: On an as-needed basis, the PMO will provide a highly qualified, specialized technical support team that covers engineering, management, business, and organizational processes, technical and analytical presentations, inspection, claims management, and scientific disciplines necessary to respond to issues that may require specialized support during the contract period. This team shall be available for resolution of critical issues, claims, special design reviews and reports, inspections, and other specialized technical assistance during planning, design, construction and close-out phases of the component-projects and the program.

Guam Waterworks Authority
Program Management Support 2017-2018

During the course of the program it is expected that GWA will require the PMO to conduct short-duration and immediate tasks such as independent research, document review, technical opinions and evaluations. These tasks will often have critical and urgent deadlines, a brief scope, and limited budget. It may be inefficient for such tasks to require the development of a stand-alone work authorization. Program support will be used for the PMO to respond to GWA's immediate needs required to support the overall program and GWA's operations. Tasks will be assigned to the PMO on an as-needed basis. Examples of such tasks as directed by GWA are, but not limited to:

- Support for ONE-GUAM water initiative requiring hydraulic analysis, mapping, studies and technical memoranda.
- Provide technical support for construction-related and startup issues on water and wastewater treatment plant and pumping station facilities.
- Review and edit specifications for GWA's specific equipment purchase.
- Identify appropriate curriculum for GWA to conduct internal training for "Utility Performance" improvement.
- Work with GWA in promoting knowledge transfer between members of the PMO and GWA staff through mentoring and training.
- Assist GWA in staff training programs for Engineering and Operations staff which include but are not limited to project management, risk management, and design-build project delivery.
- Provide on-call consultation services to GWA on its organizational rules and policies.
- Assist GWA in addressing emergency operational problems and regulatory compliance issues such as problems associated with the Ugum Surface Water Treatment Plant and the PFOS issues.
- Continue to support GWA in improving its construction contract front-end documents using the Engineers Joint Contract Documents Committee (EJCDC) format for design, technical, and construction contracts.
- Continue to support GWA in establishing Guam Water Standards and Water Standard Details.
- Strategic/CIP planning and scheduling.
- Review/evaluate/support current GWA contractor and consultant contracts, procurement, change orders, project close-out, invoice processing and other administrative practices to support GWA's on-going efforts to become more efficient and cost effective in the management of resources.
- Provide engineering services to report on and support environmental compliance with US EPA and Guam EPA. This includes supporting GWA on current court-order requirements as well as potential new enforcement actions.
- Provide technical support for Environmental Attorney in regards to USEPA actions.

Guam Waterworks Authority
Program Management Support 2017-2018

- Conduct business case evaluations on technical proposals presented to GWA including present worth analyses, cost-benefit ratios, economic and non-economic analyses and preparation of technical memoranda.
- Participate in and provide technical support during project meetings.
- Provide peer review, comments, and recommendations on engineering studies, reports, and designs conducted by others.
- Provide support for procurement of GWA projects and evaluate bids, technical engineering capabilities, contractor qualifications and review of contract bidding documents.
- Work with GWA to develop a basic information system to support Project Management by providing project information on budget, cost, schedule, scope, status, and location.

PMO Team Responsibilities: The PMO will provide the technical support team as needed. The PMO will conduct short-duration and immediate tasks as directed by GWA.

GWA Responsibilities: GWA staff will be required to attend meetings and provide available information to the PMO on upcoming tasks. GWA staff will be required to document the effort needed via e-mail or letter to the PMO.

Products: General services such as research and document review, reports, opinions, white papers, studies, meeting minutes, and memoranda.

Task 4: Program Contract Assistance

Approach: At GWA's discretion, the PMO team will prepare and review requests for proposals and scopes of work to procure engineering and construction contracting services from the local community. The program manager will also be available to participate in the negotiation of contracts with selected consultants and contractors for individual projects. Services are intended to include planning, design, design/build, construction, plant information and asset management systems, instrumentation contracts, and other tasks as may be requested by GWA.

PMO Team Responsibilities: The PMO will provide contract assistance, as needed.

GWA Responsibilities: GWA staff will review contract documentation and provide guidance to the PMO on services requested for individual projects.

Products: Contract documents.

SCHEDULE

The effort described in this work authorization will be conducted from October 1, 2017 through September 30, 2018.

Guam Waterworks Authority
Program Management Support 2017-2018

BUDGET SUMMARY

Labor (Labor Hours – 3,221)	$712,334
ODC	$115,195
GRT	$34,483
Total	$862,012

Guam Waterworks Authority
Program Management Support 2017-2018

BUDGET DETAILS

This work order will be performed on a time and materials basis, and will not exceed $862,012 without written consent from GWA.

Labor				
Name	**Labor Code**	**Labor Rate**	**Hours**	**Amount**
Chang	L	$270	639	$172,530
Bilz	K	$260	501	$130,260
Riegel	K	$260	251	$65,260
Matasci	N	$270	341	$92,070
Watson	G	$160	181	$30,046
Marble	G	$160	88	$14,608
Honda	I	$210	120	$26,160
Tamai	G	$166	344	$57,104
Sr. Advisor	M	$260	324	$87,480
Bourke	E	$130	60	$7,800
Admin	B	$78	372	$29,016
		Labor Subtotal	3,221	$712,334

Other Direct Costs	
Description	**Amount**
Airfare $2000 (x4) from HNL	$8,000
Airfare $3000 (x3) from Mainland	$9,000
Rental Car $75/day (35 days)	$2,625
Per Diem $250/day (35 days)	$8,750
Mileage	$420
Overseas Housing Allowance $2250/month (x2)	$54,000
Utility/Recurring Maintenance $600/month (x2)	$14,400
Lease Car $750/month (x2)	$18,000
ODC Subtotal	$115,195

Total Work Authorization Estimate	
Labor Subtotal	$712,334
ODC Subtotal	$115,195
GRT (4.167%)	$34,483
Total	$862,012

Guam Waterworks Authority
State Revolving Fund (SRF) Grant Project Support Amendment No. 3

TO: Brown and Caldwell
414 W. Soledad Ave.
Suite 602
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2014-11-A3

SUBMITTAL DATE: August 21, 2017

FROM: Miguel C. Bordallo, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

DESCRIPTION: State Revolving Fund (SRF) Grant Program Support Amendment No. 3

Defined cost, scope, and schedule on a time and materials basis are provided below and consist of providing project management, scheduling, reporting and tracking of SRF Grant and other related GWA projects for implementation in accordance with GWA's Programmatic Project Management Plan (PPMP).

NOT TO EXCEED amount: **$ 914,571**

Signed _____ Date August 31, 2017
RAYMOND N. MATASCI
SR. VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

GWA Reviewer: _____ Date_____
THOMAS F. CRUZ, P.E.
CHIEF ENGINEER

Signed _____ Date_____
MIGUEL C. BORDALLO, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Guam Waterworks Authority
State Revolving Fund (SRF) Grant Project Support Amendment No. 3

WORK AUTHORIZATION NO: 2014-11-A3
DESCRIPTION: State Revolving Fund (SRF) Grant Project Support Amendment No. 3
GWA PROJECT MANAGER: Thomas F. Cruz, P.E.

PROJECT BACKGROUND AND OBJECTIVE

In February, 2015, Brown and Caldwell (PMO) was authorized by GWA under Work Authorization No. 2014-11 to support GWA in the planning, development, review, prioritization, project management, scheduling, and tracking of State Revolving Fund (SRF) Grant projects for implementation in accordance with GWA's Programmatic Project Management Plan (PPMP). Over the past two and a half years, the PMO has managed ten (10) sewer rehabilitation and groundwater well reconstruction projects with total estimated construction costs over $30 million. The table below summarizes the status of each of the ten (10) projects.

Project Description		Estimated Completion Dates		
		Design	Bidding	Construction
1	Southern SSES Rehabilitation (Agat-Santa Rita-Umatac-Merizo)	Complete	Complete	9/30/2017
2	Route 1 Asan-Adelup-Hagatna	Complete	10/30/2017	2/28/2019
3	Asan Sewer Break Repair	Complete	Complete	12/31/17
4	Route 2 Agat War-in-the-Pacific	Complete	07/31/2017	7/31/2018
5	F and A Series Wells Rehab	9/30/2017	1/8/2018	5/22/2019
6	Tumon Sewer Hot Spots	9/4/2017	11/30/2017	11/30/2018
7	Route 4 Hagatna	Complete	10/30/2017	1/31/2019
8	D-Series Wells Rehabilitation	Complete	Complete	11/3/2017
9	Baza Gardens-Talafofo SSES	Complete	Complete	Delayed
10	Tamuning Sewer Hot Spots	9/4/2017	11/30/2017	11/17/2018

To make sure the projects are completed and SRF funding deadlines are met, and continuity is maintained through the remainder of the projects, the PMO requests an extension of PMO support through December 31 2018. Further extensions for PMO support will be reviewed by GWA on an annual basis.

SCOPE OF WORK

This work authorization will be performed by Brown and Caldwell listed herein as the PMO Team. This scope outlines the overall PMO Team scope, schedule, and budget.

Task 1: Task Management

Approach: Brown and Caldwell's PMO staff will manage the scope, schedule, and budget associated with the work described in this Work Authorization to ensure that this work is managed in a manner that meets the intent of the GWA PMO Program Management Plan. This includes, but is not limited to, management of documents, change, risk, and quality assurance and control. This task shall include regular progress meetings and conference calls (at least every

two weeks) between PMO and GWA personnel to review project progress, issues to be resolved, project reports and contractor procurement and payment procedures.

PMO Team Responsibilities: PMO staff will manage the scope, schedule and budget in accordance with the protocols set forth in the GWA PMO Program Management Plan.

GWA Responsibilities: GWA staff will attend meetings, review progress reports, and adhere to the protocols set forth in the GWA PMO Program Management Plan.

Task 2: Project Management

Approach: The PMO Team will manage assigned projects from initiation phase, through pre-design, design, bidding, construction and closeout. The PMO Team assumes a continuation of management services for the ten (10) individual SRF projects as listed in the table above.

In accordance with Grant Conditions P3, P7, P8:
The PMO will work with the GWA Engineering staff and manage projects as directed by GWA. The PMO will provide project management oversight and technical subject matter expertise for the individual projects assigned to the PMO. The PMO will handle consultant and contractor payment requests and substantiate documentation for pay requests. The PMO will assist GWA in submitting project updates, change order requests and payment requests to USEPA, and address USEPA comments. The PMO will oversee preparation of QA/QC Plans by consultants for data collection, attend bid openings, collect bid tabs and submit to USEPA through GWA, provide written statements when and if the lowest bidder was not selected and documentation of the reasons, and provide recommendations of award.

The PMO will:

- provide bi-weekly progress reporting via teleconference with GWA and USEPA;
- control costs and manage budget;
- facilitate project team cooperation and input;
- maintain project files;
- track and report on cash flow projections;
- receive, review, distribute, and return comments on meeting minutes and reports issued by construction managers;
- facilitate resolution of construction problems;
- review invoices and recommend payment;
- obtain input and consensus from operations and maintenance divisions;
- arrange for and coordinate easement and right-of-way procurement activities;
- coordinate building permits from Dept. of Public Works;
- coordinate necessary stream buffers or 404 permits; and
- coordinate USEPA review and approval as needed.

In accordance with Grant Conditions P9:
The PMO will assist GWA in Federal and Territory Agency notification, SHPO notification, development of procedures for protection or salvage during construction, and obtaining SHPO concurrence. The PMO will assist GWA in selecting consultants to prepare an Archaeological

monitoring, discovery and data recovery Plan, and provide project notification to the Guam Historic Preservation Officer, as necessary. Archeological and cultural resources work will be performed by others under separate contract with GWA.

In accordance with Grant Conditions P11, P19:
The PMO will verify that procurement follows Federal Regulations as defined in the Grant conditions and maintain necessary documentation, validate contractor performance, payment and other bonds, and validate that purchase orders and contracts include appropriate clauses required by Federal statues, regulations and Executive Orders as defined in the Grant conditions.

PMO Team Responsibilities: Manage projects as directed by GWA in accordance with the Grant conditions.

GWA Responsibilities Participate in reviews and project management of SRF-funded projects.

Products: Project documentation.

Task 3: Contract and Construction Management

Approach: The PMO Team will manage assigned projects from initiation phase, through pre-design, design, bidding, construction and closeout. The PMO Team assumes that the ten (10) individual projects currently assigned to the PMO will continue to require the following project management services during construction:

In accordance with Grant Conditions P14, P16, P17, P18, P20, P22, P23, P24:
As directed by GWA, the PMO will perform contract management, monitor contractor work plans, review cost breakdowns and schedules of values, notify USEPA of construction start, attend meetings with USEPA during construction, verify as-built drawings are being prepared by others, and submit final copies of work products to USEPA through GWA. The PMO will perform Change Order management and provide advance notification of changed conditions and budget category transfer requests to the USEPA and seek USEPA approvals.

For each infrastructure project funded by the Grant, the PMO will work with the contractor to obtain a Plan of Operation including O&M Manual, emergency operation plan, site safety plan, and personnel training plan as required.

In accordance with Grant Conditions P26, P29, P30, P34:
The PMO will assist GWA in issuing a letter at the close of the project certifying that the project meets or does not meet project performance standards. Corrective action reports and cost estimates for corrective action will be prepared, along with a schedule for corrective action. The PMO will assist GWA in meeting Federal cross-cutting requirements and conformance compliance with Federal regulations. The PMO will assist GWA with Davis-Bacon compliance efforts by accompanying GWA's grant specialist in wage rate interviews as requested by GWA. The PMO will assist GWA in notification of Public Media Events and publicity for accomplishments.

Guam Waterworks Authority
State Revolving Fund (SRF) Grant Project Support Amendment No. 3

Examples of such tasks are, but not limited to:

- Arrange for and coordinate bid award activities.
- Review Contractor prequalification and preparation of the qualified bidders list.
- Manage construction management contracts.
- Supervise and monitor the activities and schedules for materials testing consultant.
- Coordinate change orders.
- Coordinate, review, approve, and monitor erosion and sediment control measures.
- Attend periodic site visits.
- Monitor easement conditions.
- Track RFI's, RFP's, Work Change Directives (WCD's), change orders, shop drawings and other submittals.
- Assist Construction Manager with claims analysis and resolution.
- Coordinate, review, and approve payments to contractor and consultants; verify quantities.
- Determine substantial completion and prepare lists of incomplete or unsatisfactory items, and a schedule for their completion.
- Ensure appropriate levels of communication and public outreach.
- Submit fixed asset management reports to GWA.
- Oversee start-up training provided by others.
- Assist with O & M Manual Review.
- Deliver all project files to GWA digitally archived and in single hard copy format.
- Deliver as-built record drawings to GWA.

PMO Team Responsibilities: PMO staff will manage projects as directed by GWA in accordance with the Grant conditions.

GWA Responsibilities GWA staff will participate in reviews and project management of SRF-funded projects. Perform wage rage interview and administer Davis Bacon compliance.

Products: Project documentation.

SCHEDULE

The PMO Team will conduct the effort described in this work authorization to support GWA in the project management, scheduling, and tracking of projects. The PMO will conduct this effort for a period from January 1, 2018, to December 31, 2018. Work beyond the December 31, 2018, will proceed upon written authorization from GWA.

Guam Waterworks Authority
State Revolving Fund (SRF) Grant Project Support Amendment No. 3

BUDGET SUMMARY

Labor (4,458 hours)	$862,080
ODC	$15,905
GRT	$36,586
Total	$914,571

Guam Waterworks Authority
State Revolving Fund (SRF) Grant Project Support Amendment No. 3

BUDGET DETAILS
This work order will be performed on a time and materials basis and will not exceed $914,571 without written consent from GWA.

Labor				
Name	**Labor Code**	**Labor Rate**	**Hours**	**Amount**
Matasci	N	$270	52	$14,040
Chang	L	$270	208	$56,160
Bilz	K	$260	676	$175,760
Riegel	K	$260	312	$81,120
Marble	G	$166	1144	$189,904
Watson	G	$166	1196	$198,536
Poppe	H	$198	320	$63,360
Worster	K	$250	160	$41,600
Tamai	G	$166	104	$17,264
Admin	B	$78	312	$24,336
		Labor Subtotal	4,458	$862,080

Other Direct Costs	
Description	**Amount**
Airfare $2000 (x1) from HNL	$2,000
Airfare $3000 (x2) from Mainland	$6,000
Rental Car $75/day (21 days)	$1,575
Per Diem $250/day (21 days)	$5,250
Mileage	$1,080
ODC Subtotal	$15,905

Total Work Authorization Estimate	
Labor Subtotal	$862,080
ODC Subtotal	$15,905
GRT (4.167%)	$36,586
Total	$914,571

Guam Waterworks Authority
Consulting Engineer's Report for 2018 Revenue Bond Financing

TO: Brown and Caldwell
414 W. Soledad Ave.
Suite 602
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2017-03

SUBMITTAL DATE: August 21, 2017

FROM: Miguel C. Bordallo, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

DESCRIPTION: Consulting Engineer's Report for 2018 Revenue Bond Financing

Defined cost, scope and schedule on a time and materials basis are provided in the attached proposal letter.

NOT TO EXCEED amount: **$ 243,387**

Signed _____ Date August 31, 2017
RAYMOND N. MATASCI
SR. VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

GWA Reviewer: _____ Date _____
GREG CRUZ
CHIEF FINANCIAL OFFICER

Signed _____ Date _____
MIGUEL C. BORDALLO, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Guam Waterworks Authority
Consulting Engineer's Report for 2018 Revenue Bond Financing

WORK AUTHORIZATION NO: 2017-03
DESCRIPTION: Consulting Engineer's Report for 2018 Revenue Bond Financing
GWA PROJECT MANAGER: Greg Cruz

PROJECT BACKGROUND AND OBJECTIVE

A series of bond financing was approved by the Guam Consolidated Commission on Utilities in February 2013 in the act of approving the GWA 2014 – 2018 5-Year Rate Plan. The first bond sale in a series of three bond financings occurred in December 2013. The second bond sale occurred in January 2016. The third bond sale of the series is projected in the Rate Plan to take place in the 3rd quarter of calendar year 2018.

A condition of the bond sale is the preparation of a Consulting Engineer's Report and Consulting Engineer's Certification. The Report and Certification only provide engineering advice on this project, as that term is defined in Section 15B(e)(4)(C) of the Securities and Exchange Act, with respect to the regulation of municipal advisors. Brown and Caldwell has not, and does not, express any opinion or advice as to how to structure the existing or new issuance of municipal securities, including, but not limited to, the timing and terms of debt services payments. Brown and Caldwell is not subject to the relevant regulations as to municipal advisors including, without limitation, the fiduciary duty set forth in Section 15B(c)(1) of the Securities and Exchange Act. GWA has relied on the Guam Economic Development Authority (GEDA) and others for advice with respect to municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms, and other similar matters concerning such financial products or issues.

This Work Authorization proposes the following Scope of Work to prepare the Consulting Engineer's Report and Consulting Engineer's Certificate.

SCOPE OF WORK

This work authorization will be performed by Brown and Caldwell and Galardi Rothstein Group listed herein as the PMO Team. This scope outlines the overall PMO Team scope, schedule, and budget.

Task 1: Task Management

Approach: The Program Management Office (PMO) Team will manage the scope, schedule, and budget associated with the work described in this Work Authorization to ensure that this work is managed in a manner that meets the intent of the GWA PMO Program Management Plan. This includes, but is not limited to, management of documents, change, risk, and quality assurance and control. This task shall include regular progress conference calls (at least every two weeks) or meetings between PMO and GWA personnel to review project progress, issues to be resolved, early study results, etc. This task covers efforts associated with the internal quality control and technical review process. Specifically, the PMO will conduct internal QA/QC meetings and follow-up with technical experts as necessary during the course of the project. Internal checking or peer review of all deliverables will also be performed.

Guam Waterworks Authority
Consulting Engineer's Report for 2018 Revenue Bond Financing

PMO Team Responsibilities: PMO staff will manage the scope, schedule, and budget. The PMO lead will manage tasks in this Work Authorization in accordance with the protocols set forth in the GWA PMO Program Management Plan.

GWA Responsibilities: GWA staff will attend meetings, review progress reports, and adhere to the protocols set forth in the GWA PMO Program Management Plan.

Products: Project meetings and meeting minutes.

Task 2: Data Gathering

Approach: PMO staff will request and review available reports, plans, permits, agreements, CIP, budgets, and other pertinent documentation. PMO staff will conduct interviews with GWA management to discuss significant issues facing the agency.

The PMO Team will review available reports and publicly available information on GWA, including but not limited to the FY 2017 True Up Narrative submitted to the Guam Public Utilities Commission, GWA's most recent bond offering statements, GWA operating budget and financial statements, and GWA Master Plan capital project schedules and cost estimates. The PMO Team will also collect information and descriptions of the GWA water and wastewater systems and proposed capital projects that will be the basis for components of the financial projections.

Interviews are expected to take place during the Fall of 2017. Interview questions and a data request will be prepared in advance and provided to GWA staff so that they can prepare for the interviews and collect the necessary data. A majority of the data must be received at least one week prior to the scheduled interviews in order for the PMO team to review the data and prepare for the interviews.

PMO Team Responsibilities: Request and review documentation, conduct management interviews.

GWA Responsibilities: Provide requested information, schedule, and coordinate interviews and interview locations, and participate in management interviews.

Products: Summary of data.

Task 3: Analysis and Preparation of Consulting Engineer's Report and Consulting Engineer's Certificate

Approach: PMO staff will prepare a Consulting Engineer's Report (CER) for inclusion in the Official Statement of the Revenue Bond documents. The CER will include:

1. Summary description of GWA's Organization
2. Summary description of GWA's water systems, including:
    - General overview.

Guam Waterworks Authority
Consulting Engineer's Report for 2018 Revenue Bond Financing

- Evaluation of sources of supply.
- Evaluation of current and future water demands.
- Evaluation of water treatment facilities.
- Evaluation of water distribution and storage.
- Review and assessment of regulatory issues as they relate to GWA operations.

3. Summary description of GWA's wastewater systems, including:
   - General overview.
   - Evaluation of collection and transmission systems.
   - Evaluation of wastewater treatment plants.
   - Evaluation of residuals management.
   - Review and assessment of regulatory issues as they relate to GWA operations.
4. Capital improvement program (CIP) summary, including:
   - Presentation of the CIP for the five-year period following the bond issue (2018-2023).
   - Determination if the budgeted CIP appears adequate for the identified future improvement needs.
5. Financial projections to support GWA's planned capital program and operations through 2023, including:
   - Projection of revenues
   - Projection of operating and maintenance expenses
   - Projection of capital costs and funding sources for the CIP
   - Projection of financial assurance targets, including applicable debt service coverage and operating reserve requirements
   - Projection of rate impacts arising from implementation of the planned CIP.
   - Update to GWA's strategic financial planning (SFP) model initially developed to facilitate Consent Decree negotiations. In updating the SFP model, the PMO Team will append cash-flow forecasts with schedules, tables, and graphs to address issues of concern to the municipal bond market (e.g., projected debt service coverage, debt/equity ratios, operating reserves, rate comparability).

The PMO team will develop up to two draft CERs for GWA review and comment. The PMO team will coordinate with the GWA financial consultant, GEDA, and Bond Counsel during preparation of the CER.

PMO Team Responsibilities: Prepare CER; coordinate with GWA, GWA's financial consultant, GEDA, and Bond Counsel.

GWA Responsibilities: Provide information as requested by the PMO, review draft CER, provide collective GWA comments on up to two draft reports; participate in conference calls and attend meetings.

Products: Up to two draft CERs and final CER. Certificate of Consulting Engineer per Bond

Guam Waterworks Authority
Consulting Engineer's Report for 2018 Revenue Bond Financing

Resolution.

Task 4: Preparation for Rating Agency Presentations/Meetings

Approach: The PMO team will support the finance team in rating agency/bond insurer presentations via conference calls. Up to three conference calls are assumed. Attendance by BC staff at rating agency/bond insurer presentations may be performed as additional services to be requested by GWA.

The PMO team will participate in monthly teleconference calls with the finance team. Up to six (6) conference calls are assumed.

PMO Team Responsibilities: Contribute to the preparation of presentations by GWA's finance team. Prepare for and participate in conference calls.

GWA Responsibilities: Provide information as requested by the PMO, prepare final rating agency presentation.

Products: Contributions to rating agency presentation (by others).

ASSUMPTIONS

1) A relatively current update of the SFP model will be effected through the on-going Water Resources Master Plan development process.

SCHEDULE

The PMO Team will conduct the effort described in this work authorization to produce the final deliverables by June 1, 2018. This assumes notice to proceed is issued in October 2017. Draft report reviews will begin in December 2017.

Guam Waterworks Authority
Consulting Engineer's Report for 2018 Revenue Bond Financing

BUDGET SUMMARY

Labor (Labor Hours – 766)	$180,756
ODC	$52,895
GRT	$9,736
Total	$243,387

Guam Waterworks Authority
Consulting Engineer's Report for 2018 Revenue Bond Financing

DGET DETAILS

This work authorization will be performed on a time and materials basis and will not exceed $243,387 without written consent from GWA.

Labor				
Name	**Labor Code**	**Labor Rate**	**Hours**	**Amount**
Gilman	M	$270	128	$34,560
Bilz	K	$260	204	$53,040
Sorensen	J	$250	196	$49,000
Sr. Manager	M	$270	16	$4,320
Matasci	N	$270	12	$3,240
Constantinescu	H	$218	50	$10,900
Kansakar	G	$166	120	$19,920
Tamai	G	$166	8	$1,328
Draheim	G	$166	8	$1,328
Admin	E	$130	24	$3,120
		Labor Subtotal	766	$180,756

Other Direct Costs	
Description	**Amount**
Supplies	$750
Airfare $2000 (x2) from HNL	$4,000
Airfare $3000 from Mainland	$3,000
Rental Car $75/day (15 days)	$1,125
Per Diem $250/day (15 days)	$3,750
Mileage	$270
Subconsultant	$40,000
ODC Subtotal	$52,895

Total Work Order Estimate	
Labor Subtotal	$180,756
ODC Subtotal	$52,895
GRT (4.167%)	$9,736
Total	$243,387

Guam Waterworks Authority
Project Management for New Wells AG-10, AG-12, and Y-8

TO: Brown and Caldwell
414 W. Soledad Ave.
Suite 602
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2017-04

SUBMITTAL DATE: August 21, 2017

FROM: Miguel C. Bordallo, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

DESCRIPTION: Project Management for New Wells AG-10, AG-12, and Y-8

Defined cost, scope, and schedule on a time and materials basis are provided below and consist of providing project management and support for construction management, scheduling and reporting of New Wells AG-10, AG-12, and Y-8 Project.

NOT TO EXCEED amount: **$ 221,131**

Signed: _____ Date August 31, 2017
RAYMOND N. MATASCI
SR. VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

GWA Reviewer: _____ Date _____
THOMAS F. CRUZ, P.E.
CHIEF ENGINEER

Signed: _____ Date _____
MIGUEL C. BORDALLO, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Guam Waterworks Authority
Project Management for New Wells AG-10, AG-12, and Y-8

WORK AUTHORIZATION NO: 2017-07
DESCRIPTION: Project Management for New Wells AG-10, AG-12, and Y-8
GWA PROJECT MANAGER: Thomas F. Cruz, P.E.

PROJECT BACKGROUND AND OBJECTIVE

GWA is committed to enhance its water service and to provide uninterrupted water supply to its customers by increasing its groundwater production capacity. In 2011, GWA investigated 27 potential new well sites in the Northern Guam Lens and identified the top three (3) sites for further development, based on the water quality, yield potential, groundwater recharge zones, land ownership, land use plan, geological features, presence of nearby utilities, and the wellhead protection. The three new well sites identified are designated as AG-10, AG-12, and Y-8, located in Dededo and Yigo areas. In 2014, GWA completed the plans and specifications for these three new wells under Project No. PW 09-02 Island-Wide Well Site Rehabilitation and New Well Site Development. The new wells have not been constructed due to insufficient staffing to manage and complete this project. GWA is in the process of adding more staff to fill new engineering positions and to replace retiring engineers including a Senior Well Engineer. However, it would take some time for a new engineer to become familiar with the groundwater's very unique and sensitive hydrogeology.

GWA's Program Management Office (PMO) is currently managing the rehabilitation of five (5) existing wells in the Dededo area under Project No. PW05-14 Island-Wide Well Site Rehabilitation and New Well Site Development, also known as the "D-series Wells." The PMO's subject matter experts have helped resolve numerous problems encountered during construction of the D-series wells. It is anticipated that construction of the three (3) new wells could have similar issues due to their proximity in the area, similar geological formation, and similar groundwater characteristics. The plans and specifications prepared in 2014 for the three new wells need to be updated to incorporate the standardized equipment established by GWA in 2015. The electrical system would need to be revised to be SCADA ready. Other design changes required before the project goes into construction include changes for final pump capacity, motor size, and electrical requirements based on the capacity established by the pilot wells, verification of and updates to the required well casing diameter and sounding tube locations, electrical revisions to reflect the standard systems currently installed at other wells, and verification of existing site conditions to identify any additional work necessary based on the current conditions, and updates required to reflect GWA's selected RTU/HMI, etc.

The objective of this work authorization is to:

1. Assist GWA in completing this project by providing project management services for the construction of the three new wells. The project management services include working with the engineer of record (EOR) to update the 2014 plans and specifications, assisting GWA in construction bidding, assisting GWA in procuring construction management (CM) services, and providing project management services during the construction.
2. Assist GWA staff in becoming familiar with and knowledgeable of the tasks performed for this Work Authorization. Allow GWA staff to shadow appropriate PMO personnel and take steps to increase the training of GWA's staff.

Guam Waterworks Authority
Project Management for New Wells AG-10, AG-12, and Y-8

SCOPE OF WORK

This work authorization will be performed by Brown and Caldwell listed herein as the PMO Team. This scope outlines the overall PMO Team scope, schedule, and budget.

Task 1: Task Management

Approach: Brown and Caldwell's PMO staff will manage the scope, schedule, and budget associated with the work described in this Work Authorization to ensure this work is managed to meet the intent of the GWA PMO Program Management Plan. This includes, but is not limited to, management of documents, change, risk, and quality assurance, and control. This task shall include regular progress meetings and conference calls between PMO and GWA personnel to review project progress, issues to be resolved, project reports, and contractor procurement, and payment procedures.

PMO Team Responsibilities: PMO staff will manage the scope, schedule and budget in accordance with the protocols set forth in the GWA PMO Program Management Plan.

GWA Responsibilities: GWA staff will attend meetings, review progress reports, and adhere to the protocols set forth in the GWA PMO Program Management Plan.

Products: Scope of work, project meetings and meeting minutes.

Task 2: Project Management

Approach: The PMO Team will manage the project from design, bidding, construction, and closeout. The PMO will work with the GWA Engineering group and manage the project as directed by GWA. The PMO will provide project management oversight and technical subject matter expertise for the project. The PMO will handle consultant and contractor payment requests and substantiate documentation for pay requests.

The PMO will:

- provide weekly progress reporting with GWA;
- control costs and manage budget;
- facilitate project team cooperation and input;
- maintain project files;
- provide equipment standardization, SCADA requirements and other design changes to EOR for design update;
- prepare RFP and scope of services for CM procurement;
- assist GWA in selection of consultants;
- arrange and attend meeting(s) to negotiate final scope and fees;
- update project cost estimates based on design consultant's input;
- receive, review, distribute, and return comments on technical memoranda and reports issued by EOR;
- review invoices and recommend payment;

Guam Waterworks Authority
Project Management for New Wells AG-10, AG-12, and Y-8

- conduct review meetings with design consultant;
- obtain input and consensus from operations and maintenance divisions;
- arrange for and coordinate easement and right-of-way procurement activities;
- coordinate power supply by GPA; and
- coordinate building permits from Dept. of Public Works.

The PMO will assist GWA in Federal and Territory Agency notification, SHPO notification, development of procedures for protection or salvage during construction, and obtaining SHPO concurrence. The PMO will assist GWA in selecting consultants to prepare an Archaeological Monitoring, Discovery and Data Recovery Plan, and provide project notification to the Guam Historic Preservation Officer, as necessary. Archeological and cultural resources work will be performed by others under separate contract with GWA.

PMO Team Responsibilities: Manage the project as directed by GWA.

GWA Responsibilities Participate in reviews of submittals related to the project.

Products: Project documentation.

Task 3: Contract and Construction Management

Approach: As directed by GWA, the PMO will perform contract management, monitor contractor work plans, review cost breakdowns and schedules of values, notify GWA of construction start, attend meetings with CM and contractor during construction, verify as-built drawings are being prepared by others, and submit final copies of work products to GWA. The PMO will perform change order management and provide advance notification of changed conditions and budget category transfer requests to GWA and seek GWA approvals.

The PMO will work with the contractor to obtain a Plan of Operation including O&M Manual, emergency operation plan, site safety plan, and personnel training plan as required.

The PMO will assist GWA in issuing a letter at the close of the project certifying that the project meets or does not meet project performance standards. Corrective action reports and cost estimates for corrective action will be prepared, along with a schedule for corrective action.

The PMO will:

- arrange for and coordinate bid award activities;
- review contractor prequalification and preparation of the qualified bidders list;
- manage construction management contracts;
- supervise and monitor the activities and schedules for materials' testing consultant;
- coordinate change orders;
- coordinate, review, approve, and monitor erosion and sediment control measures;
- attend periodic site visits;
- monitor easement conditions;
- track RFIs, RFPs, Work Change Directives (WCDs), change orders, shop drawings, and other submittals;

Guam Waterworks Authority
Project Management for New Wells AG-10, AG-12, and Y-8

- assist CM with conducting claims analysis and claims resolution;
- coordinate, review, and approve payments to contractor and consultants, verifying quantities;
- determine substantial completion and prepare lists of incomplete or unsatisfactory items and a schedule for their completion;
- ensure appropriate level of communications and public outreach;
- submit fixed asset management reports to GWA;
- arrange dedication as required;
- oversee start up training provided by others;
- O & M Manual Review;
- deliver all project files to GWA in digitally archived and hard copy format; and
- deliver as-built record drawings to GWA.

PMO Team Responsibilities: Manage projects as directed by GWA.

GWA Responsibilities Participate in reviews of submittals related to the project.

Products: Project documentation.

SCHEDULE

The PMO Team will conduct the effort described in this work authorization to support GWA in the project management, scheduling, and tracking of projects. The PMO will conduct this effort for a period of 18 months upon notice of approval.

Guam Waterworks Authority
Project Management for New Wells AG-10, AG-12, and Y-8

BUDGET SUMMARY

Labor (1,082 hours)	$206,740
ODC	$5,545
GRT	$8,846
Total	$221,131

Guam Waterworks Authority
Project Management for New Wells AG-10, AG-12, and Y-8

BUDGET DETAILS

This work order will be performed on a time and materials basis and will not exceed $221,131 without written consent from GWA.

Labor				
Name	**Labor Code**	**Labor Rate**	**Hours**	**Amount**
Matasci	N	$270	36	$9,720
Chang	L	$270	36	$9,720
Bilz	K	$260	312	$81,120
Riegel	K	$260	36	$9,360
Marble	G	$166	312	$51,792
Worster	K	$260	80	$20,800
Tamai	G	$166	36	$5,976
Admin	B	$78	234	$18,252
		Labor Subtotal	1,082	$206,740

Other Direct Costs	
Description	**Amount**
Airfare $3000 from Mainland	$3,000
Rental Car $75/day (7 days)	$525
Per Diem $250/day (7 days)	$1,750
Mileage	$270
ODC Subtotal	$5,545

Total Work Authorization Estimate	
Labor Subtotal	$206,740
ODC Subtotal	$5,545
GRT (4.167%)	$8,846
Total	$221,131

Guam Waterworks Authority
Hydraulic Modeling and Training for Wastewater Collection System

TO: Brown and Caldwell
414 W. Soledad Ave.
Suite 602
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2017-05

SUBMITTAL DATE: August 21, 2017

FROM: Miguel C. Bordallo, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

DESCRIPTION: Hydraulic Modeling and Training for Wastewater Collection System

Defined cost, scope, and schedule on a time and materials basis are provided below and consist of updating, calibrating, and analyzing the GWA wastewater collection system model and providing GWA with wastewater collection system modeling support on an on-call basis.

NOT TO EXCEED amount: **$ 333,714**

Signed _____ Date August 31, 2017
RAYMOND N. MATASCI
SR. VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

GWA Reviewer: _____ Date _____
THOMAS F. CRUZ, P.E.
CHIEF ENGINEER

Signed _____ Date _____
MIGUEL C. BORDALLO, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Guam Waterworks Authority
Hydraulic Modeling and Training for Wastewater Collection System

WORK AUTHORIZATION NO: 2017-05
DESCRIPTION: Hydraulic Modeling and Training for Wastewater Collection System
GWA PROJECT MANAGER: Thomas F. Cruz, P.E.

PROJECT BACKGROUND AND OBJECTIVE

Flow metering data was not adequate to calibrate portions of the wastewater collection system model for the Water Resources Master Plan (WRMP) update. Therefore, portions of the system could not be fully analyzed for the WRMP update. The purpose of this Work Authorization is to collect flow metering data and then update and calibrate the wastewater collection system model. The model can then be analyzed to identify deficiencies and recommend improvement projects. On-call assistance will also be given to answer questions about the wastewater collection system using the calibrated model.

SCOPE OF WORK

This work authorization will be performed by the BC's Program Management Office (PMO) Team. This scope outlines the overall PMO Team scope, schedule, and budget.

Task 1: Task Management

Approach: GWA PMO staff will manage the scope, schedule, and budget associated with the work described in this Work Authorization to ensure that this work is managed in a manner that meets the intent of the GWA PMO Program Management Plan. This includes, but is not limited to, the management of documents, changes, risk, and quality assurance (QA) and quality control (QC). This task shall include periodic progress conference calls or meetings between PMO and GWA personnel to review project progress, issues to be resolved, early study results, etc. This task covers efforts associated with the internal quality control and technical review process. Specifically, the PMO will conduct internal QA/QC meetings and follow-up with technical experts as necessary during the course of the project. Internal checking or peer review of all deliverables will also be performed.

PMO Team Responsibilities: PMO staff will manage the scope, schedule, and budget in accordance with the protocols set forth in the GWA PMO Program Management Plan.

GWA Responsibilities: GWA staff will attend meetings, review progress reports, and adhere to the protocols set forth in the GWA PMO Program Management Plan.

Task 2: Flow Metering

Approach: The PMO will develop a flow metering plan. GWA will then place flow meters in the collection system. To cover the desired areas, data may be gathered in one area and then the flow meters may be moved to another area.

GWA will periodically download the data. The PMO will review the flow metering data and inform GWA if any meters require maintenance based on the data.

Guam Waterworks Authority
Hydraulic Modeling and Training for Wastewater Collection System

PMO Team Responsibilities: Develop a flow metering plan, and review the flow metering data.

GWA Responsibilities: Install, maintain, and download the flow meters.

Products: Flow metering plan and data collected during flow metering.

Task 3: Data Gathering and Fieldwork

Approach: The PMO will work with GWA to collect data to update portions of the model that need to be updated. Work was done to update model piping and verify elevations during the WRMP update. However, there are additional areas that need to be verified to improve the model accuracy. Data gathering and fieldwork that will be done for this task will include the following:

1. *Interviews.* Interviews will be conducted by GWA's staff to collect information on system piping and operations. This task will include meeting with the following staff:
    a. Operations staff. The operations staff have knowledge of piping obtained during their daily field work that is not reflected in the GIS. Staff will also be interviewed to collect information on correct piping in key areas of the system.
    b. GIS and Engineering staff. The GIS and Engineering staff have knowledge of what is included in GIS and what remains to be added based on a backlog of field-collected data.
2. *Fieldwork.* Fieldwork will be done to visit manholes as needed to verify piping configuration.

PMO Team Responsibilities: Conduct interviews and fieldwork as needed.

GWA Responsibilities: Respond to interview requests and support the PMO team in conducting site visits and fieldwork. GWA will be responsible for supplying any tools and equipment required for fieldwork such as manhole cover hooks.

Products: Data gathered from interviews and collected during fieldwork.

Task 4: Update and Calibrate Hydraulic Model

Approach: The latest GWA wastewater collection system model will be updated through the following tasks:

1. *Update Model Piping.* A major GIS update was delivered to GWA after the sewer model was built and calibrated. The model piping and manholes will be updated within GIS to reflect new calibrated sewer model. The model piping will also be updated using data collected during Task 3.
2. *Update Model Facilities.* Lift station data, including wet well dimensions and pump data, was not available for many of the lift stations when the model was built and calibrated. Data delivered after the model calibration will be incorporated into the model.
3. *Update Loads.* Water demands will be used as the initial customer loading. The latest water demand data will be loaded into the model (and then adjusted during calibration).

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4. *Calibrate Model*. The model will be calibrated by the PMO team using the flow metering data. Dry weather calibration will be performed followed by wet weather calibration. The calibration will focus on areas that are not currently well calibrated in the model.

PMO Team Responsibilities: Update and calibrate the model using the latest information and flow metering data.

GWA Responsibilities: Support the model update and calibration.

Products: Updated model.

Task 5: Model Analysis and Recommendations

Approach: The calibrated model will be analyzed and improvement projects will be developed similar to the approach used in the WRMP update. This task will include the following:

- *Model Analysis.* The model will be analyzed and deficiencies will be identified for gravity piping, force main piping, and lift stations using the criteria from the WRMP update.
- *Develop Improvement Projects.* Improvement projects will be developed for the pipe and pump deficiencies in a format similar to the format in the WRMP update.

PMO Team Responsibilities: Analyze the model, identify deficiencies, and develop recommendations.

GWA Responsibilities: Review the recommendations and provide feedback.

Products: Recommendation for improvement projects.

Task 6: On-Call Model Assistance

Approach: The PMO will assist GWA with wastewater system issues, which will include addressing specific concerns in the wastewater collection system and developing solutions using the model. Examples of typical assistance include:

- Analyze new developments and hotels.
- Assist in planning the implementation of proposed pipeline and lift station improvement projects. For example, the model was recently used to analyze the capacity of the pipeline running from Andersen AFB to the Northern District WWTP to answer pipe capacity questions from the DoD.
- Analyze wastewater collection system piping. For example, during the recent WRMP workshop, there was a discussion of using the model to analyze serving the Tiyan Donut Hole area off of Route 8.
- Analyze areas that could not be analyzed during the WRMP update. For example, as mentioned in Task 4 data was not available for many of the lift stations when the model was calibrated. Pump data that was delivered by GWA after the model was calibrated needs to be put into the model as part of Task 4. The lift stations then need to be analyzed for capacity.
- Conduct other analyses for growth, development, efficiency optimization, and maintenance.

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PMO Team Responsibilities: The PMO will assist GWA staff in analyzing the model and generating results for use by GWA. Prepare Technical Memoranda as outlined in Task 7 below.

GWA Responsibilities: Supply information as requested. Review results and recommendations prepared by the PMO and offer comments and opinions.

Products: Modeling results and recommendations.

Task 7: Technical Memoranda

Approach: The PMO will prepare technical memoranda (TM) documenting the modeling and the analyses and evaluation requested by GWA. The TMs will be submitted to GWA for review and comment. At a minimum, the TMs will include the following:

- Description of the flow metering;
- Description of the model update including the modeling methodology and assumptions;
- Description of the model analyses and findings;
- Recommended improvement projects;
- Figures, including maps and graphs, to support the findings and recommendations; and
- Other supporting documentation.

PMO Team Responsibilities: The PMO will develop the TMs. The PMO will also submit the updated model to GWA's designated person responsible for the model.

GWA Responsibilities: GWA staff will be required to review and comment on the TMs.

Products: Draft and final TMs.

Task 8: Hydraulic Model Training

Approach: The latest GWA wastewater collection system model will be used for one training class for GWA staff. Training for the class will occur on Guam or by teleconference based on GWA's needs. The model may be shared with other Engineering consultants at the request and approval of GWA. Documentation will be written and provided to authorized Engineering consultants for use of the model. Important user instructions will be discussed by teleconference with said Engineering consultants.

PMO Team Responsibilities: Prepare for and provide one training class for GWA.

GWA Responsibilities: Provide venue and necessary facilities for training as requested. Provide approvals and directions for consultants desiring to use the updated hydraulic model.

Products: Training class.

Guam Waterworks Authority
Hydraulic Modeling and Training for Wastewater Collection System

SCHEDULE

The effort described in this task order will be completed by December 31, 2018.

BUDGET SUMMARY

Labor (labor hours – 1,438)	$288,764
ODC	$31,600
GRT	$13,350
Total	$333,714

Guam Waterworks Authority
Hydraulic Modeling and Training for Wastewater Collection System

BUDGET DETAILS

This work order will be performed on a time and materials basis, and will not exceed $333,714 without written consent from GWA.

Labor				
Name	**Labor Code**	**Labor Rate**	**Hours**	**Amount**
Chang	L	$ 270	86	$ 23,220
Liechty	M	$ 270	12	$ 3,240
Poppe	J	$ 218	100	$ 21,800
Fugal	J	$ 260	404	$ 105,040
Engineer II	F	$ 166	684	$113,544
Bourke	E	$ 130	92	$ 11,960
Tamai	F	$ 166	60	$ 9,960
		Labor Subtotal	1,438	$288,764

Other Direct Costs	
Description	**Amount**
Airfare $3000 (x6) from Mainland	$18,000
Rental Car $75/day (40 days)	$3,000
Per Diem $250/day (40 days)	$10,000
Training Materials	$600
ODC Subtotal	$31,600

Total Work Authorization Estimate	
Labor Subtotal	$288,764
ODC Subtotal	$31,600
GRT (4.167%)	$13,350
Total	$333,714

Guam Waterworks Authority
Southern Guam Water Supply Study

TO: Brown and Caldwell
414 W. Soledad Ave.
Suite 602
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2017-06

SUBMITTAL DATE: August 21, 2017

FROM: Miguel C. Bordallo, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

DESCRIPTION: Southern Guam Water Supply Study

Defined cost, scope, and schedule on a time and materials basis are provided below and consist of providing engineering and technical support for the Southern Guam Water Supply Study.

NOT TO EXCEED amount: **$ 468,251**

Signed _____ Date August 31, 2017
RAYMOND N. MATASCI
SR. VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

GWA Reviewer: _____ Date _____
THOMAS F. CRUZ, P.E.
CHIEF ENGINEER

Signed _____ Date _____
MIGUEL C. BORDALLO, P.E.
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Guam Waterworks Authority
Southern Guam Water Supply Study

WORK AUTHORIZATION NO: 2017-06
DESCRIPTION: Southern Guam Water Supply Study
GWA PROJECT MANAGER: Thomas F. Cruz, P.E.

PROJECT BACKGROUND AND OBJECTIVE

The 2016 GWA Water Master Plan Update (WRMP) identified the need for a Southern Guam Water Supply Study (SGWSS). The capability of GWA to provide reliable water to Southern Guam is limited by infrastructure condition, system capacity, inadequate redundancy, restricted access to developed sources, operational issues, excessive system losses, and lack of water-resource policy. Service interruptions are frequent and considered commonplace. At present, the southern system has inadequate transmission and distribution redundancy and does not consistently meet the 1.2 supply-to-demand contingency factor established by the 2010 GWA Potable Water Production Plan to address reliability. An analysis of billing and meter data completed as part of the 2016 WRMP estimates non-revenue water (NRW) at nearly 75% in Southern Guam.

Growing water demands can be met through either increasing system capacity or decreasing demand. Capacity can be added to the Southern Guam system through: development of new surface and/or subsurface water resources; re-development of inactive or abandoned springs, diversions and wells; access to existing private and military sources; purchasing raw or treated water from the Navy's Fena reservoir; or transporting water from the Northern Guam Lens Aquifer well network. Significant decreases in water demand can be achieved through the reduction of non-revenue water and conservation measures.

The water system in Southern Guam is also subject to deteriorating infrastructure which affects reliability of water supply. The dead end, single-line transmission configuration and sole reliance on treated water produced by the Ugum surface water treatment plant (SWTP) makes the system particularly vulnerable to service interruptions. System redundancy and reliability can be increased by alternatives such as looping the system, increasing storage and developing new sources, especially as variations in weather and climate impact raw water source supply and quality.

All options will involve capital investment, and the formalization of GWA water supply policy to justify expenditures. The SGWSS will examine options to increase the quantity and reliability of water supply to Southern Guam. Project components will include:

- Analysis of historical water sources and evaluation of the development or re-development of southern springs, ground and surface water resources.
- Impact of transporting water from central or northern Guam including the ongoing analysis for "closing the loop" from Agat to Umatac.

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- Impact of water loss control efforts and strategic raw/treated water storage on supply and distribution.
- Analysis of alternate sources to supply water to the Ugum SWTP with the intent of maximizing Ugum production capabilities.
- Feasibility study for the long-term utilization of Fena Reservoir to supply treated and/or raw water to GWA.
- Suggestions for contingency planning in Southern Guam, including 1.2 supply-to-demand capability for system resilience.
- Business case evaluation and planning-level cost estimates for the recommended approach(es).

The end product of this study will be a roadmap and implementable plan for the reliable provision of enough quality potable water to Southern Guam over the planning horizon in compliance with Guam Safe Drinking Water Regulations.

SCOPE OF WORK

This work authorization will be performed by the Brown and Caldwell Program Management Office (PMO) Team. This scope outlines the overall PMO Team scope, schedule, and budget.

Task 1: Task Management

Approach: GWA PMO staff will manage the scope, schedule, and budget associated with the work described in this Work Authorization to ensure that this work is managed in a manner that meets the intent of the GWA PMO Program Management Plan. This includes, but is not limited to, management of documents, change, risk, and quality assurance and quality control.

PMO Team Responsibilities: PMO staff will manage the scope, schedule, and budget. The PMO will manage tasks in this Work Authorization in accordance with the protocols set forth in the GWA PMO Program Management Plan.

GWA Responsibilities: GWA staff will attend meetings, review progress reports, and adhere to the protocols set forth in the GWA PMO Program Management Plan.

Task 2: Existing Conditions

Approach: The PMO Team will review applicable studies, reports, plans, data, and recent evaluations relevant to the water supply in Southern Guam. The PMO Team Leader and key team members will conduct a kickoff meeting on Guam to develop goals for the Southern Guam Water Supply Study (SGWSS) in conjunction with GWA.

The PMO Team will review the Southern Guam service areas, island population projections,

potential development plans, and the island general plan as envisioned by the Guam Visitors Bureau, Guam Economic Development Authority, Comprehensive Economic Development Strategy (CEDS) and the Department of Land Management. A planning period will be established and approved by GWA. The PMO Team will develop demand projections for the planning period, updating the development and demand information outlined in the GWA 2017 Water Resources Master Plan Update (WRMPU).

Initial interviews will be carried out with GWA staff familiar with historic and current operation of the water supply system in Southern Guam to capture institutional knowledge regarding:

- Service interruption frequency and cause.
- Operational issues.
- Challenges to supplying water to the area.
- Underlying causes for elevated non-revenue water loss levels.
- Source water quality issues.

It is anticipated that as part of this phase meetings with key stakeholders in each Southern Guam community will be held to:

- Acquire historical data and anecdotal information to supplement the desktop literature review.
- Identify and access potential and historic water source site locations.
- Capture level of service issues and impacts at the community level.
- Determine the extent of private water supply available and utilized.

Input from other territorial stakeholders such as Guam EPA, the Navy and WERI will be sought.

Issues specific to or affecting water supply in Southern Guam will be identified during this task and may include:

- Water rights.
- Impact due to variations in weather and climate.
- Economic development.
- Watershed protection.
- Water quality.
- Security of supply.
- System redundancy.
- System resilience.
- Water policy and regulations.

A strategic planning workshop will be conducted to develop and formalize GWA water policy as it relates to Southern Guam. Workshop topics may include: establishing quantifiable goals for levels of service, environmental protection, economic development, pursuit of Fena resources as part of the OneGuam initiative, system reliability, and redundancy, contingency planning, and supply-to-demand ratio, as applicable.

The work effort will be documented in a TM for review and comment by GWA.

Guam Waterworks Authority
Southern Guam Water Supply Study

PMO Team Responsibilities: Request and review information, conduct kickoff meeting and site visits, conduct GWA in-house and community stakeholder interviews. Organize strategic planning workshop. Refine 2017 WRMPU demand and development projections. Produce TM.

GWA Responsibilities: Provide data as required. Attend kickoff meeting and strategic planning workshop. Participate in in-house interviews. Initiate contact with community stakeholders and attend stakeholder interviews, as needed. Facilitate access to existing and potential source water supply sites. TM review and comment.

Products: TM summarizing work effort and results.

Task 3: Identify and Develop Alternatives

3.1 Raw Water Supply and Storage Alternatives

Approach: The purpose of this phase is to identify and assess options to increase source water supply and raw water storage. The following project categories will be evaluated as applicable:

- Status quo – existing surface water and spring sources currently utilized by GWA.
- Enhanced status quo – options which add production or increase water quality using existing GWA sources (such as adding supply or raw water storage to the Ugum Surface Water Treatment Plant) or acquiring sources currently in use by private owners for irrigation, industrial, and potable water supply.
- Rehabilitation options – rehabilitating previously utilized sources (including Asan, Laelae, Silgin and Atlague springs, the Geus dam and Malojloj wells and others identified as part of the investigative work completed in Task 2).
- Renewal or new source options – developing new or re-developing long-abandoned wells, diversions, reservoirs, and spring sources (such as Laolao river, Fintasa falls, the abandoned Ylig treatment plant, and diversions at the Talofofo, and Tolaeyuus rivers).
- Navy water options – investigating the feasibility of the Fena Reservoir to supply raw water and/or continue to supply treated water to GWA.

The options will be ranked using a weighted matrix screening method, and GIS-based maps indicating source location and storage inundation areas, as applicable. For each potential new or rehabilitated supply source, yield will be estimated, and the impact of adding the supply to the system will be analyzed.

Preliminary water quality sampling and analysis may be required to further determine suitability of sources for treatment. The PMO Team will develop a schedule of sampling and analysis requirements as part of this task as needed. Sample collection and analysis are not included in this WA.

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3.2 Water Treatment Options

Approach: The purpose of this phase is to identify the water treatment requirements for sources identified in Task 3.1.

Surface water diversions, springs, and ground water well sources will require different treatment processes based on contaminant levels, physical characteristics, and whether the groundwater source is considered Groundwater under the Direct Influence of Surface Water (GWUDI).

Available hydrogeologic and water quality data will be analyzed for up to five options from Task 3.1 to determine the likelihood of any groundwater sources (wells, springs, and infiltration galleries) being designated as GWUDI.

Any new surface water or potential GWUDI-designated groundwater sources will need to be treated to meet Guam Primary and Secondary Safe Drinking Water Regulations, up to and including Long Term 2 Enhanced Surface Water Treatment Rule, Stage 2 Disinfection Byproducts Rule, Revised Ground Water Rule, and Revised Total Coliform Rule, as applicable.

Water treatment will be investigated for the following project categories as applicable:

- Status quo - adequacy of treatment at current facilities (including Ugum, Fena and Santa Rita spring).
- Rehabilitation options – treatment upgrades necessary to bring developed GWA sources not currently producing water into the system (including Asan spring and Malojloj wells) online.
- New treatment options - treatment of new or abandoned sources to meet current Guam Primary and Secondary Safe Drinking Water Regulations.

Potential new sources may need to undergo preliminary water quality sampling and analysis to assist in the determination of treatment requirements at a planning level. In addition to characteristics such as turbidity, hardness, alkalinity, odor, pH, and conductivity, the analysis may include testing for microorganisms (including pathogens), inorganic contaminants, pesticides and herbicides, organic contaminants, and radioactive contaminants. GWA staff and laboratory facilities will be utilized as much as practicable for the water quality sampling and analyses. Should collection and testing requirements exceed the expertise or manpower of GWA resources, this work will be undertaken by a subconsultant. Sample collection and analysis are not included in this WA.

As part of this phase, the cost of power, chemicals, labor, and other operations and maintenance and capital data will be analyzed to determine the current “per gallon” cost of production from treatment facilities owned and/or operated by GWA including Ugum, Santa Rita Spring, and wells in the north. The history of water purchased from the Navy will be investigated including contractual conditions, rates, and the potential to integrate treatment facilities in accordance with the OneGuam Framework for an Integrated Water System for Guam.

Planning-level treatment options and conceptual process layouts will be presented for up to five options. GIS-based location and conceptual figures will be created to illustrate the options.

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3.3 Water Transmission, Storage and Distribution Alternatives

Approach: The purpose of this phase is to identify and assess improvements to the distribution, pumping and treated water storage systems that will positively impact water supply in southern Guam. The following topics will be studied:

- System-wide cost of water transmission in terms of $/gal-mi.
- Non-revenue water and water loss control measures.
- Impact of potential new sources on pipe and pump capacity.
- Completion of pipeline, pump station and storage upgrades, replacement and rehabilitation as outlined in the 2016 WRMP update.
- "Closing the loop" between Agat and Umatac.
- Adding treated water storage to increase system reliability, resilience, and redundancy.
- Partially looping/twinning the transmission system to increase system reliability, resilience, and redundancy.
- Transmission from the north.

3.4 Modelling

Scenarios will be added to the current GWA hydraulic model, at locations where sufficient calibrated data exists and where feasible, to examine overall system impact of options identified in Tasks 3.1, 3.2, and 3.3.

Projected demand over the planning period will be combined with potential system enhancements including NRW reduction, addition of new raw or treated water storage, pipeline realignment, pumping from the north, looping, and addition of new water sources. It is anticipated that this phase will be completed by the PMO Team with GWA support.

PMO Team Responsibilities: Prepare weighted screening ranking for Task 3.1. Produce supplementary sampling requirements. Model storage, transmission and source options. Create GIS-based location maps and conceptual level treatment process drawings. Produce TM.

GWA Responsibilities: Provide data as required. Provide staff and laboratory facilities for water quality collection, sampling, and analyses. Assist with modelling efforts. TM review and comment.

Products: TM summarizing work effort and results of Tasks 3.1, 3.2, 3.3, and 3.4.

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Task 4: Recommended Water Supply Strategy

4.1 Fatal Flaw Analysis

Approach: The purpose of this phase is to summarize and combine as applicable the options identified in Task 3 and subject them to analysis at a fatal flaw level. This will reduce the number of viable conceptual alternatives, justifiably dismissing those that are not feasible, are clearly inferior in comparison to other alternatives, or otherwise do not satisfy the SGWSS goals. The general approach will be:

- Determine methodology and objectives for the analysis.
- Establish evaluation criteria.
- Conduct an iterative fatal flaw screening process.

4.2 Business Case Evaluation

Approach: The conceptual alternatives that pass the fatal flaw analysis will be brought forward to be evaluated in greater detail.

Business case evaluations (BCE) will be conducted to compare alternatives and develop the recommended approach. The recommended approach(es) will be supplemented with descriptions and conceptual drawings. As necessary, workshops will be conducted to establish BCE criteria and present recommended approach(es) in conjunction with GWA.

4.3 Planning Level Cost Estimates

Approach: The PMO Team will develop planning-level (ASTM E2516-11 Level 5) cost estimates for alternatives that survive the fatal flaw analysis. Capital, O&M, and lifecycle cost projections will be developed, and project implementation schedules will be generated. The estimates may include rough costs for land acquisition and permitting as applicable.

PMO Team Responsibilities: Develop and combine alternatives. Conduct fatal flaw analysis. Conduct BCE workshops and complete BCEs. Prepare recommended approach evaluations and recommendations. Prepare cost estimates. Produce TM.

GWA Responsibilities: Supply information as requested. Participate in BCE workshops. TM review and comment.

Products: TM summarizing work effort and results of Tasks 4.1, 4.2, 4.3.

Task 5: Report

Approach: The TMs developed during Task 2 through 4 work efforts will be combined and consolidated into one report.

PMO Team Responsibilities: Prepare draft and final Southern Guam Water Supply Study reports.

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GWA Responsibilities: Draft and final Southern Guam Water Supply Study reports review and comment.

Products: Draft and final Southern Guam Water Supply Study reports.

ASSUMPTIONS:

- Public outreach is not included in this work.
- Detailed field-level geotechnical, surveying, and hydrological investigations are not included in this work.
- It is assumed that proposed capacity and condition CIP projects relevant to the Southern Guam water supply (as outlined in the 2017 WRMPU) will be implemented.
- Sample collection and analysis are not included in this WA.

SCHEDULE

The PMO Team would be able to commence work immediately upon receiving a written Notice to Proceed (NTP). The scope of services described in this work authorization is expected to be completed within 12 months after NTP.

BUDGET SUMMARY

Labor (Labor Hours – 2,032)	$426,520
ODC	$23,275
GRT	$18,747
Total	$468,642

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BUDGET DETAILS

This work order will be performed on a time and materials basis, and will not exceed $468,642 without written consent from GWA.

Labor				
Name	**Labor Code**	**Labor Rate**	**Hours**	**Amount**
Chang	L	$270	24	$6,480
Matasci	N	$270	12	$3,240
Bilz	K	$260	96	$24,960
Engineer II	F	$151	640	$96,640
Senior Specialist	L	$270	280	$75,600
Worster	J	$250	120	$30,000
Faisst	M	$270	120	$32,400
Fugal	K	$260	100	$26,000
Sorensen	I	$218	480	$104,640
Tamai	G	$166	160	$26,560
		Labor Subtotal	2032	$426,520

Other Direct Costs	
Description	**Amount**
Airfare $3000 (x2) from US Mainland	$6,000
Airfare $2000 (x3) from Hawaii	$6,000
Rental Car $75/day (35 days)	$2,625
Per Diem $250/day (35 days)	$8,750
ODC Subtotal	$23,375

Total Work Authorization Estimate	
Labor Subtotal	$426,520
ODC Subtotal	$23,375
GRT (4.167%)	$18,747
Total	$468,642