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BENJAMIN CRUZ <speaker@senatorbjcruz.com>

M&C Fwd: CCU MEETING 10/20/17 / MEETING MATERIALS

1 message

BENJAMIN CRUZ <speaker@senatorbjcruz.com> Fri, Oct 20, 2017 at 1:27 P
To: 34th Guam Legislature Clerks <clerks@guamlegislature.org>
Cc: Rennae Meno <rennae@guamlegislature.org>

10/20/2017	10/20/2017	Consolidated Commission on Utilities -	CCU Meeting Materials 10/20/17*	34-17-1115

---------- Forwarded message ----------
From: **Bernadette Lou Sablan** <l.sablan@gpagwa.com>
Date: Fri, Oct 20, 2017 at 12:19 PM
Subject: CCU MEETING 10/20/17 / MEETING MATERIALS
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>, Gilda 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 Peterson (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 today's meeting materials.

GU#34-17-1115
Speaker Benjamin J.F. Cruz

OCT 20 2017
Time: 1:27 [ ] AM [✓] PM File No.
Received By:

Best,

Lou

B. Lou Sablan

Board Secretary

Consolidated Commission on Utilities

Admin Asst., Legal Counsel, GPA

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http://guampowerauthority.com/home.html

http://guamwaterworks.org/

2017 OCT 20 PM 1:45 CC

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OFFICE OF SPEAKER BENJAMIN J.F. CRUZ

Committee on Appropriations and Adjudication

I Mina'trentai Kuattro na Liheslaturan Guahan

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CCU 10.20.17.pdf
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1115

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., October 20, 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 GWA
   - 4.1.1 GM Report Update
   - 4.1.2 Financials
   - 4.1.3 Resolution No. 01-FY2018 Relative to the Creation and Addendum of Certified, Technical and Professional (CTP) List of Positions and to Adopt CCU Resolution No. 2012-49 as an Approved Business Process for Guam Waterworks Authority
   - 4.1.4 Resolution No. 02-FY2018 Relative to the Adoption of the 2017 Market Update and the Approval to Migrate to the 10th Market Percentile for the Guam Waterworks Authority's
   - 4.1.5 Resolution No. 03-FY2018 Relative to Approving the Construction Management Contract for Tumon No. 2, Hyundai, and Chaot No. 2 Tank and Systems Upgrades

   - 4.2 GPA
   - 4.2.1 GM Report Update
   - 4.2.2 Financials

5. OLD BUSINESS

6. ANNOUNCEMENTS
   - 6.1 Next CCU Meetings: GWA Work Session – Nov.14; GPA Nov 16; CCU Meeting Nov. 21

7. ADJOURNMENT

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

Special Board Meeting
CCU Conference Room
Gloria B. Nelson Public Service Building
4:30 p.m., October 13, 2017

MINUTES

1. CALL TO ORDER

The Chairman called the special meeting of October 13, 2017 to order at 4:31p.m. He announced that all five (3) Commissioners were present and that there was a quorum. Comm. Sanchez and Bamba were absent and excused.

Those present included:

Commissioners:

Joseph T. Duenas	CCU Chairman
Francis Santos	CCU Vice Chairman
Judi Guthertz	CCU Treasurer

Executive Mgmt.:

John Benavente	GM / GPA
Melinda Camacho	AGMO / GPA
John Cruz	AGMET / GPA
Tricee Limtiaco	AGMA / GPA
Graham Botha	Staff Attorney / GPA

Management & Staff:

Cora Montellano	Asst. CFO / GPA
Antonio Gumataotao	Real Property Unit / GPA Engineering
Jennifer Sablan	SPORD / GPA
Heidi Ballendorf	Communications / GPA
Art Perez	PIO / GPA
Joyce Sayama	Mgmt. Analyst / GPA Ex. Office
Lou Sablan	Board Secretary / CCU

Guest:

John Rojas	PDN
Ray Aguon	Land Owner
Ray Haddock	Representative
Anita P. Arriola	Arriola, Cowan & Arriola
Michael Borja	Director of Land Management
Isabel M. Duenas	Land Owner
Peter M. Duenas	Land Owner
Jose Duenas Simpson	Land Owner
Josephine EC Duenas	Land Owner

Jeanette Aguon Sablan	Land Owner
Storm Eduardo Gerber	Land Owner
Reo John Aguon Gerber	Land Owner
Angelica Perez	AM Insurance

2. COMMUNICATIONS

2.1 Public Comments

3. NEW BUSINESS

3.1 GPA

3.1.1 Resolution No. 2017-42 Approval for Purchase of Land for New 180 MW Power Plant

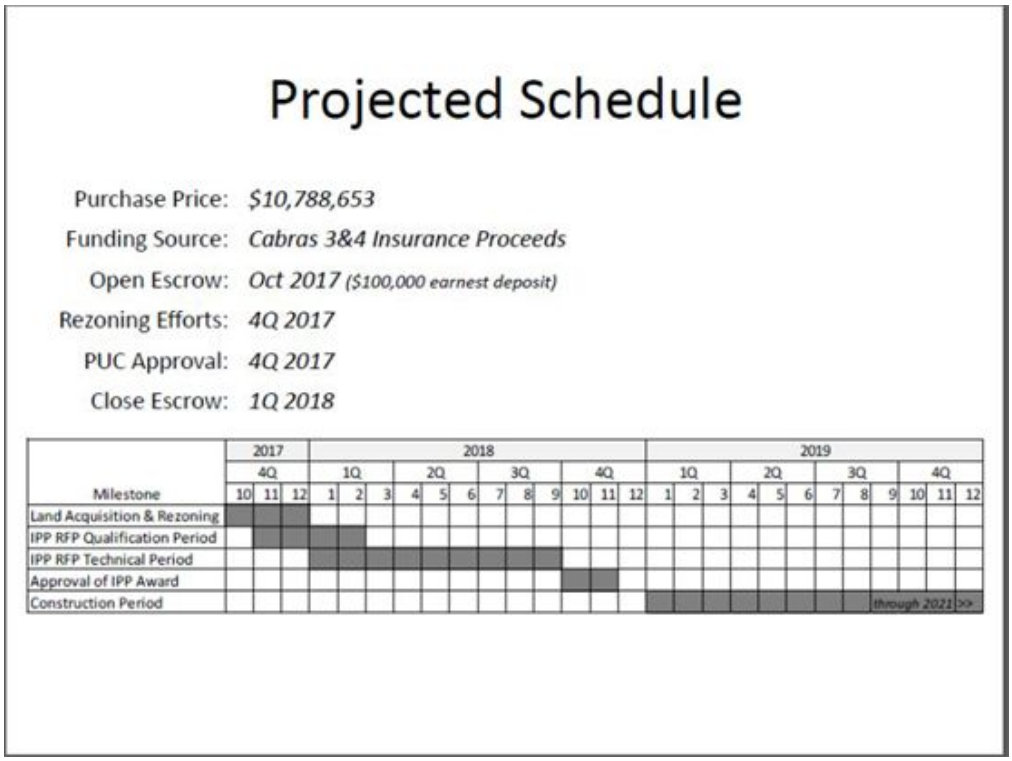
In January 2017, the CCU authorized the award of the engineering, procurement and construction management contract for the procurement development of an IPP contract for new generation capacity and to represent GPA as Owner's engineer support in the construction of a new power plant. The commissioning of the new power generation plant is critical to GPA's Compliance Plan with USEPA and to ensure adequate baseload units to meet future system demand.

The location of the new power generation plant is in Ukudu, Dededo and in proximity to the GWA Northern District Waste Water Treatment Plant and to GPA's Harmon Substation. This is important because the new generation plant will be able to utilize the NDWWTP's tertiary treated waste water to cool the new power plant thus eliminating the extraction of up to three million (3,000) gallons of water daily from Guam's fresh water aquifer, and will reduce transmission line construction, operations and maintenance costs, and maximize reliability because of its close proximity to the Harmon Substation.

On June 13, 2017, GPA published a Statement of Interest seeking to acquire up to 60 acres of unimproved real property to construct and operate a 180MW power generation plant. Five (5) responses were received on July 3, 2017, and the combined proposal of Lots 5010-1NEW, 5042-1, and 5042-R1, Ukudu, Dededo were determined to be the best suited location for the new power generation plant due to the reduced transmission costs.

Management anticipates this transaction to be completed at the end of 1st Quarter, FY2018 and it will be funded by insurance proceeds.

GM Benavente presented the entire resolution verbatim followed by presentation slide discussing in detail site location and infrastructure plans. He said the property in question allows for buffer zone around the property. A satellite view (google map) of site was also included. He also said that while RFP for new power plant is being formulated other related activity will be happening such as the rezoning of land. GM Benavente said he is hoping the whole process will take no more than 6 month and presented the following time.



It was mentioned that it would be a good idea to make a similar presentation the Senator's Ada and Nelson so that they are updated on the status of this project.

Comm. Santos asked about the adjacent property – who the owners are and have they been advised of the plans for the property in question and the possibility of any opposition. AGMA Limtiaco responded that the neighboring land owners have all responded to GPA's initial Statement of Interest so yes they are aware of GPA's plans for the property and does not believe that they have any objections.

Comm. Guthertz moved the approve Resolution 2017-42; Comm. Santos seconded.

In further discussion Comm. Guthertz commended staff for all the work that has gone into this process and said it is exciting to know that we have had some responses to request for land. She asked about topography of the land and the GM said it was flat. She asked the GM if he anticipated any significant opposition to this project. The GM responded that he believes it is in the community's best interest and relative to opposition, he really does not know. He added that in terms of evaluating the benefits and impact, this particular property is ideal. This plant is clean burning and not anything like the RFO plants we are currently operating at Cabras. As part of the military buildup, DoD has put their entire infrastructure underground so our location will make for a complete circle.

Comm. Guthertz asked how the land value determined. The GM responded that GPA had one appraisal and the land owners had another. Negotiations then followed to reach a mutually acceptable figure by all. It was mentioned that the plant will not be big - it will be comprised of one main plant and several smaller units.

Comm. Duenas said it would be good to have a rendering or some kind of sketch to show how the plant will fit within the land space and to develop a map with adjacent property zoning.

Comm. Santos said he wants to make sure GPA does its due diligence to make sure that we do everything within the law and more importantly to make sure the general public knows why it is important for GPA and the community to build this new plant.

Comm. Duenas said what is nice is that this property is adjacent to the current pipeline because GPA does not need to build another pipeline to bring the fuel up to this site. GM Benavente added saying the other advantage is the transmission lines across the mountains from Cabras to the north is no longer going to be needed. Those lines will eventually be taken down.

Comm. Guthertz asked management to be sure that with planning and design of the plant, to try to make this a green environment for the community - make it attractive to the public and not an eyesore.

On the motion – the vote was (3) ayes (2) absent and Resolution 2017-42 passed.

4. ANNOUNCEMENTS

4.1 Next CCU Meetings

The chairman reminded everyone that the next CCU meeting would be a work session for GWA on Oct. 17, GPA on Oct. 19 and the CCU meeting on Oct. 20.

5. ADJOURNMENT

There was no further business to bring before the Commission and the meeting was adjourned at 4:54 p.m.

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bls

Attested:

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

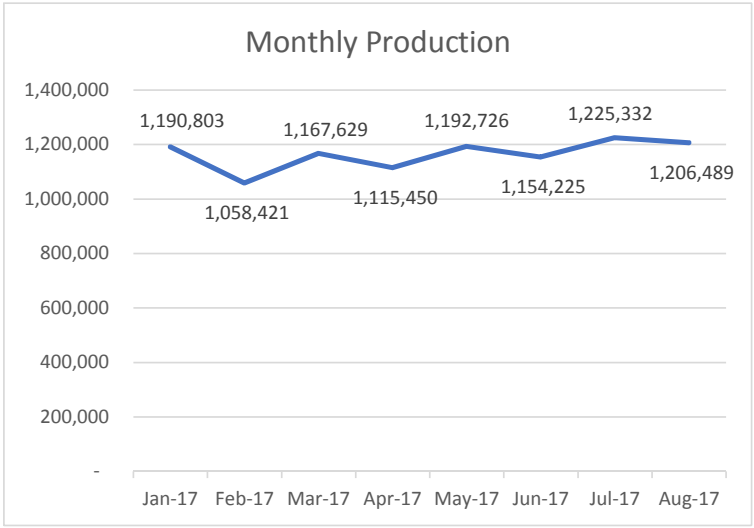
GUAM WATERWORKS AUTHORITY

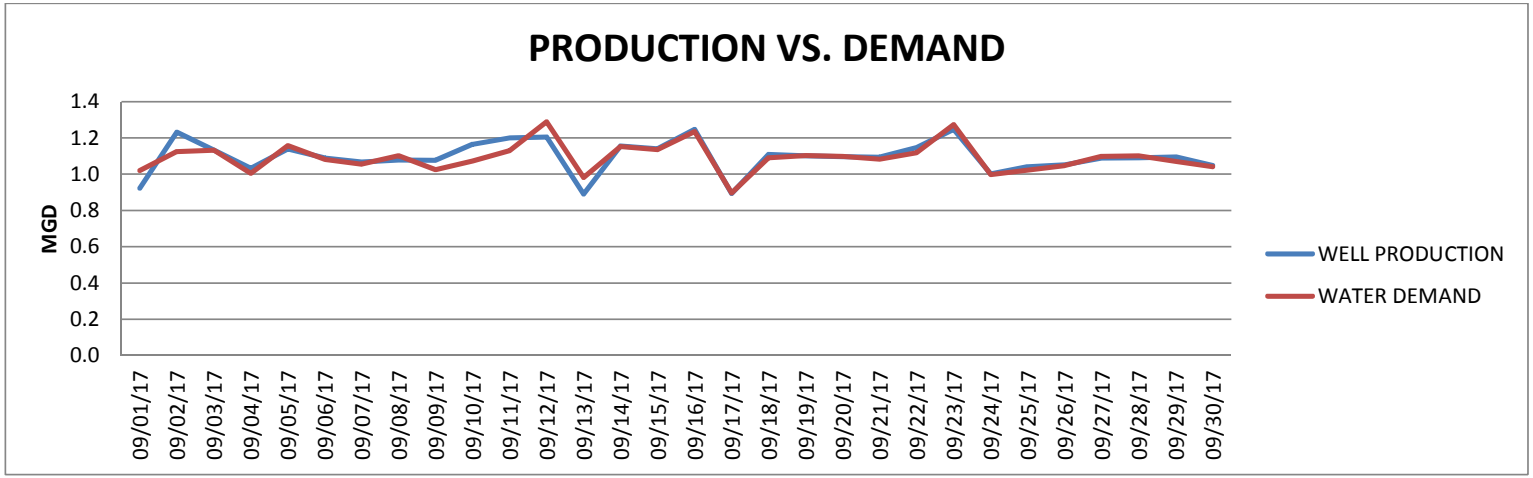
General Manager's Report
GPWA CCU Board Meeting, October 20, 2017

Operations Update

Production

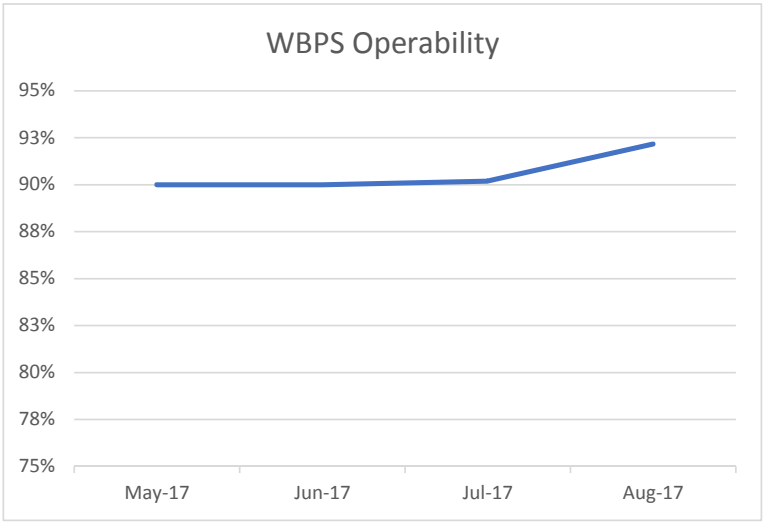
Monthly Production Summary - August 2017				
Deep Wells			35.5	MGD
Active wells =	94	of 120		
Avg days in operation =	30.11	days		
Total Production =	1,102,007	Kgals		
Springs			0.22	MGD
Avg days in operation =	31	days		
Total Production =	6912	Kgals		
Ugum Surface Water Plant			2.1	MGD
Avg days in operation =	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

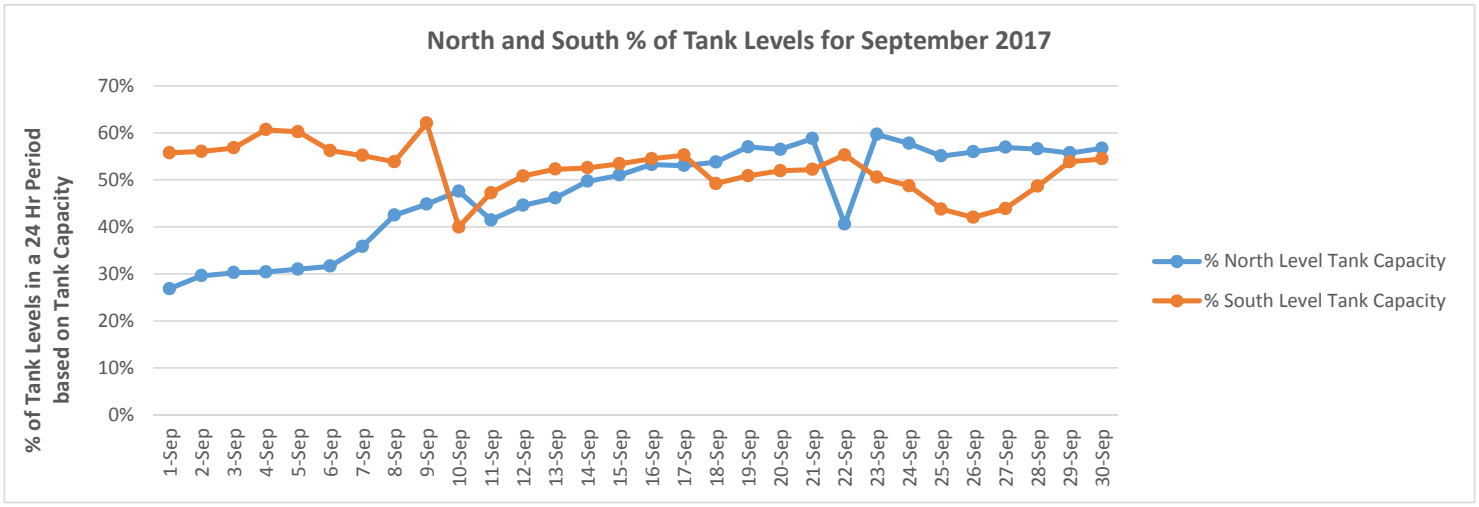




Distribution

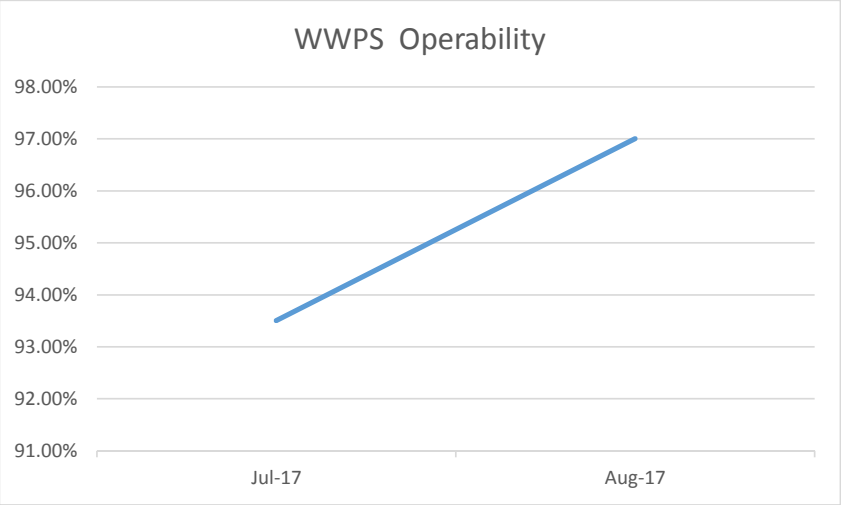
Monthly Distribution Summary - August 2017				
Water Booster Pump Stations				
District	No. of Stations	Total Pumps	Pumps Operating	% Operational
Northern	11	21	20	95.2%
Central	7	15	12	80.0%
Southern	7	15	15	100.0%
	25	51	47	92.2%





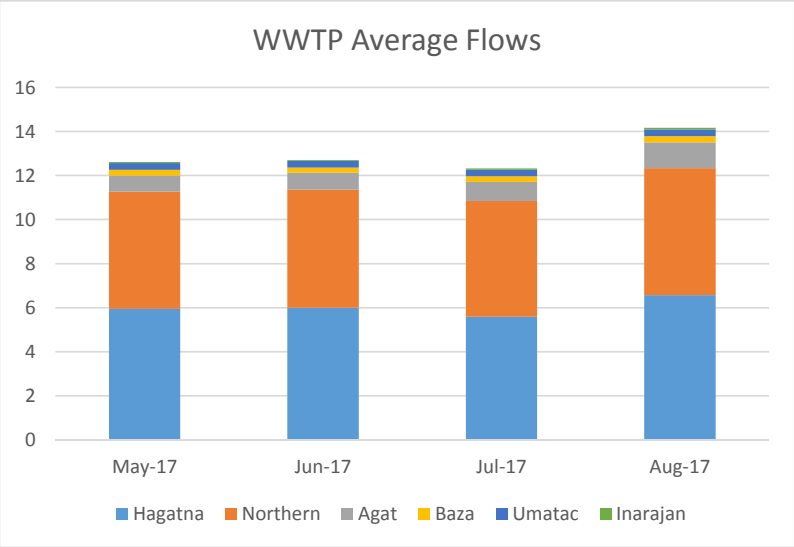
Wastewater Collections

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%

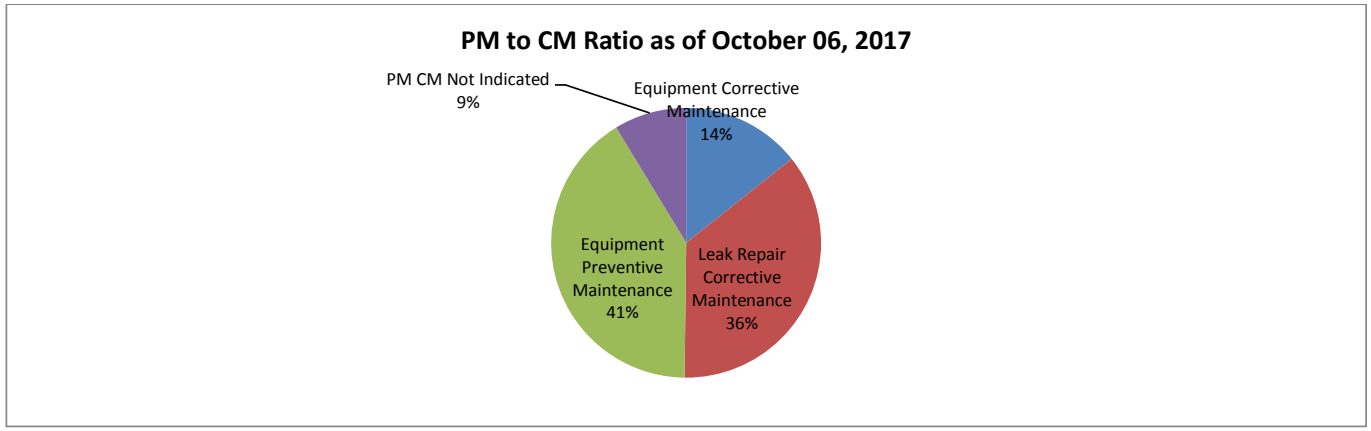


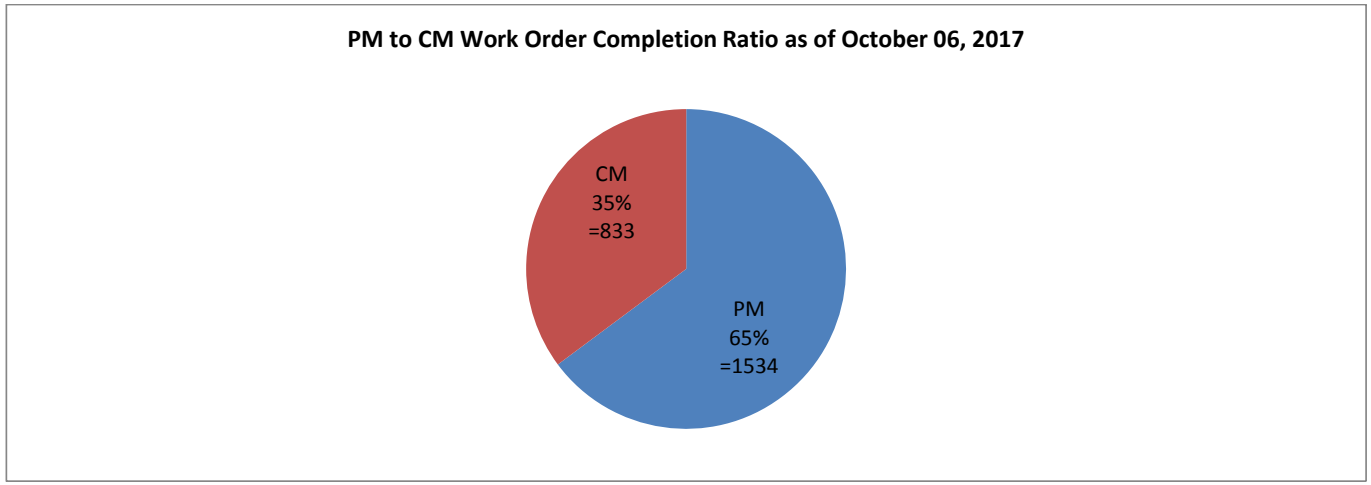
Wastewater Treatment

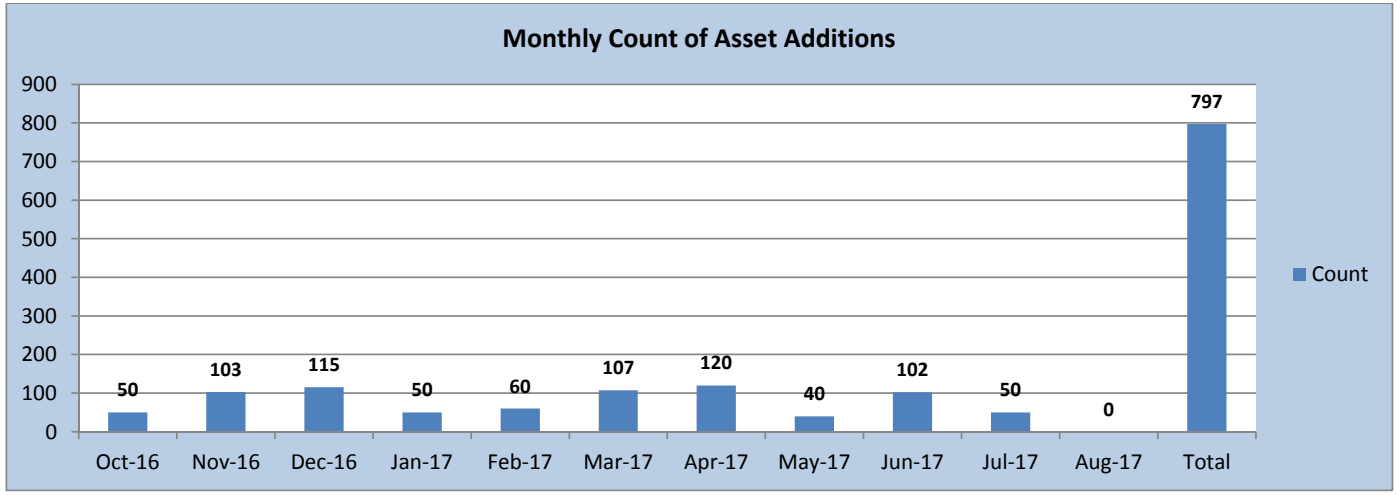
Monthly Wastewater Treatment Summary - August 2017				
WW Treatment Plants - Flows				
	Facility	**Avg. Daily Flows**	**Sludge (lbs)**	**Sludge Disp. ($)**
	Hagatna	6.57	694,420	$ 62,498
	Northern	5.77	690,200	$ 62,118
	Agat	1.16		
	Baza	0.29		
	Umatac	0.30		
	Inarajan	0.08		
		14.17	1,384,620	$ 124,616



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 through effective and efficient management of GWA assets.

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.

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

- Tumon Maui Well: The quarterly inspection is rescheduled for Tuesday, October 10, to document the status of the system.
- Santa Rosa Tank: Working on the MOU for the Intertie at Santa Rosa Tanks.
- Agat Santa Rita WWTP: Miguel Bordallo submitted the request for the in-kind consideration for use of permanent easement . DOD is reviewing the request.
- Other:
    - Nimitz Hill : GWA will be receiving the infrastructure easement for returned federal lands in Nimitz Hill.
        - NAVFAC will prepare the deed for the easements. The map for the sewer lines is completed; waiting on the water lines.
        - GWA will be getting 3 meters along the transmission lines.
    - ACEORP Priority: Maui Well (Tamuning)-GWA will be requesting the ACEORP Maui well to be transferred to GWA. Inspection and sampling will be scheduled before the transfer of the property.

Update to GM Report as requested by CCU during GWA Work Session on Oct. 17, 2017:

Detailed evaluation of the requirements and a timeline for the following:

1. How do we see that every phone call to GWA (both Customer Service as well as Dispatch) is answered by a human being?
    - Dispatch and SCC:
        - This is not possible at this time with the number of dispatchers assigned to take in technical customer complaints. Usually 2 dispatchers in the morning; 1 for each for grave and swing. The only time we are unable to answer all phone calls at the same time is when customers are all calling at the same time for the same complaint, like a main break causing low to no water or a well done affecting water pressures, there could be 10 or 20 customers calling in for the same complaint. The dispatcher taking in the phone call will be the same dispatcher who will be creating the work order.
        - Solution: We are looking into customer being able to access our Lucity work order system and be able to create the report online. They will be given a work order no. to be used when they follow up for the status of their complaints. This will entail cost. Requested Lucity to provide a quote when they were here last month.
    - Customer Service:
        - There are 3 areas where phone calls are accepted---Customer Service Call Center, Dispatch, and Pay by phone cashiers. Over the past 2-3 months, the biggest complaint we have been receiving from customers calling the Call Center has been no one is answering the Pay by phone service and no one is returning their voice mail message so they can pay by phone. Pay by phone functions are managed by finance not customer service.

- As for Customer service calls received at the Customer Service Call Center, we currently have 3 CSRs assigned to the Call Center and clear the voice message within 24 hours of the message placed. It will not be possible for every phone call to be answered by a CSR 100% of the time because call volume depends on what is going on at the time. When we have main breaks and outages for example, dispatch is bombarded with calls and frustrated customers call the Call center # which will inevitably increase our abandoned call #s because a CSR can only speak with 1 customer at a time. If we truly want every call to be answered by a human being, we need to drastically increase the staff to take calls using the worst case scenarios as our norm. In my opinion, 3 CSRs is adequate for our Call Center operations considering all voice messages are returned within 24 hours and we have fewer than 10 calls coming in on Saturday services.

2. How do we get abandoned calls down to zero, and how soon can this be done?
   - Dispatch and SCC:
     - The only solution we are doing at this time is calling back our consumers .
   - Customer Service:
     - Historically, we were simply relying on the Shortel reports to give us the abandoned call count, however we have confirmed over the past 2-3 months that the shoretel report even counts abandoned calls outside of our operating hours. For this reason, the report for this month is reflective of only the calls during our Call Center operating hours. When a CSR is on the phone with a customer and another call comes in, if the 2nd caller opts to hang up and not wait for voice mail, this is counted as an abandoned call. We have set up our call center to rotate the call to each line in our call center so we have found that even on Saturdays when 1 CSR is on duty and only 5 calls were recorded for 4 hours of operation, we still have abandoned calls because while the CSR is on the line and a call comes while the CSR is on an active call, as soon as the 2nd caller hangs up, this call is counted as abandoned. AWWA Benchmarking Performance indicators for Abandoned call ratios for utilities such as ours is 4.9% for best practices, a median abandoned call ratio of 10.2% and 15.1% for the bottom quartile. At the start of FY16, our abandoned call ratio for our call center operation was 25.3%. Our FY16 ending ratio is 18.6%. We are still not at the median abandoned call ratio however this data includes the number of calls that were received outside of our operating hours and reflects a 6.7% improvement despite this. No utility has a "0" abandoned call rate.

3. Voice messages are not receiving responses – how do we correct this and how soon can we make sure it is done?
   - Dispatch and SCC:

- We tried to call each and every customer who left voice messages, there are times we can't call all of them especially on days when we have emergencies. The following are our performance indicators, I have requested dispatchers to measure all call backs.
- Solution: Implement work order system that can be accessed by consumers to report complaints and follow up status of complaints. (Waiting for quotes from Lucity)

Service Ratios	Jul-17	Aug-17	Sep-17
Total Calls handled by dispatch for the month	4223	4000	5500
Handled by Agent	3800	3500	4500
Handled by Voicemail	423	500	1000
Average handle time	3 minutes	3 minutes	2 minutes
Average Wait Time	40 seconds	30 seconds	30 seconds
Number of Calls during emergency main breaks/low to no water	1772	1300	1500
Abandoned Calls	80	120	106

- <u>Customer Service:</u>
  - We are confident that all the voice messages received on call center voice mail are returned because we have repeatedly performed QA checks and have received returned calls within the 24 hour period.

Detailed timeline for the following:

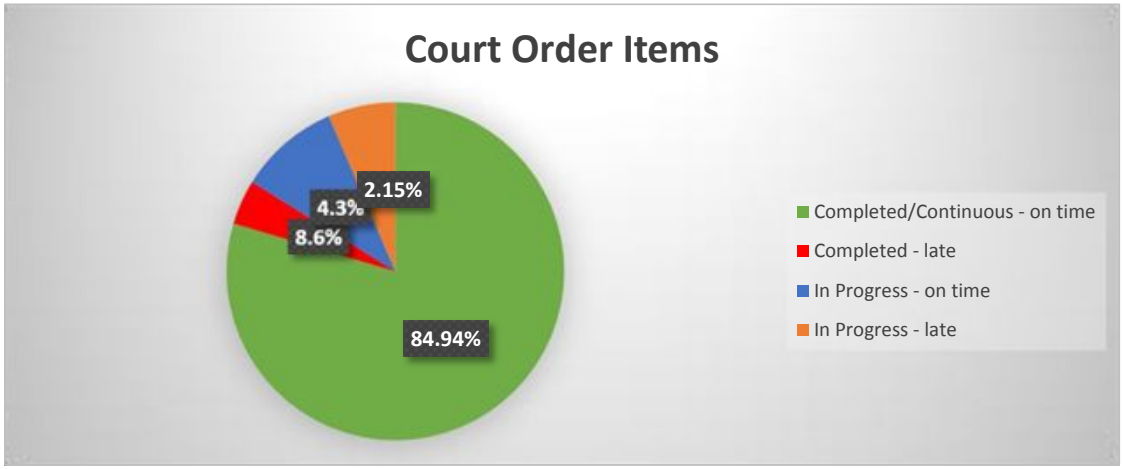
1. The issue with the Barrigada tanks and the Barrigada/Tiyan water supply:
   a. Why did the tank levels drop off and when
   b. What was done to make up for the system supply problems.
   c. What is being done to keep the water supply adequate to the area.
   d. What is being done to restore supply sources and how soon.

2. The Yigo – Mount Santa Rosa water supply problems:
   a. What happened to Y-15 well and why.
   b. How are we managing supply to that area's customers.
   c. What will it take to get Y-15 back on line and how soon.

- **SEE ATTACHMENT TO GM REPORT - Copy of Detailed Information Regarding Barrigada and Santa Rosa**

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 09/09/17 – (10/06/17 ended) – restarted 10/09/17 – continues.
  - Ypaopao Lift Station Wet Well – 10/03/17– instrument problem with rain
  - Harmon Lift station – 10/03/17 – heavy rain
  - Southern Link Lift Station – 10/04/17 – instrument problem
  - Santa Maria Ave. Santa Rita, sewer overflow – heavy rain – 10/04/17

- Aga Dr. Santa Rita, sewer overflow – heavy rain - 10/09/2017

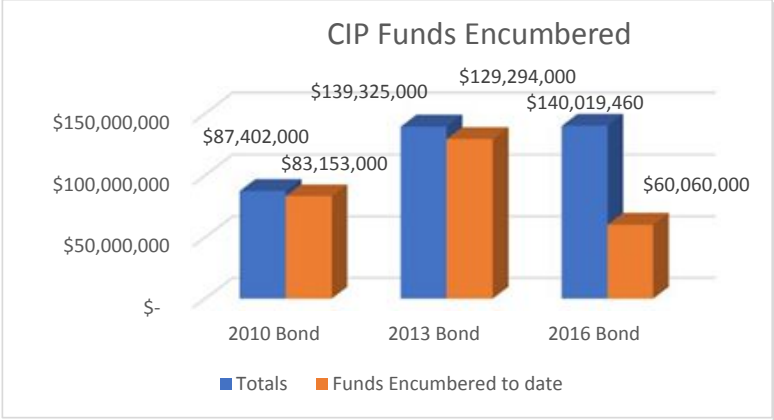
CIP Summary

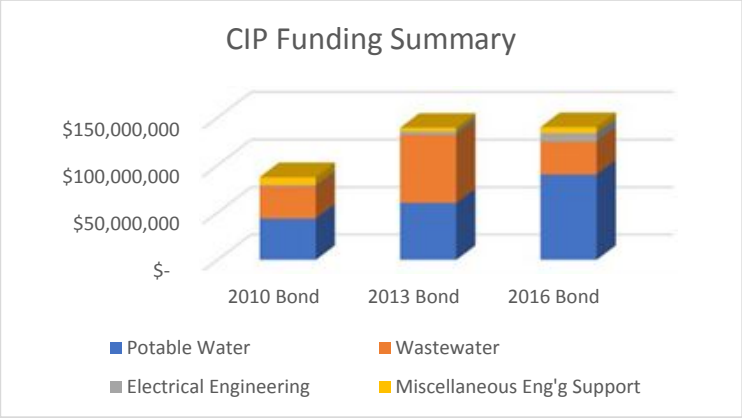
CIP Summary: Project Encumbrance

	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%			





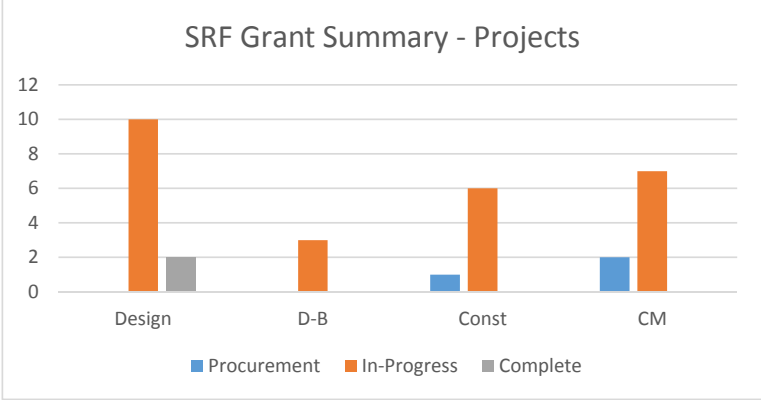
SRF Grant Summary

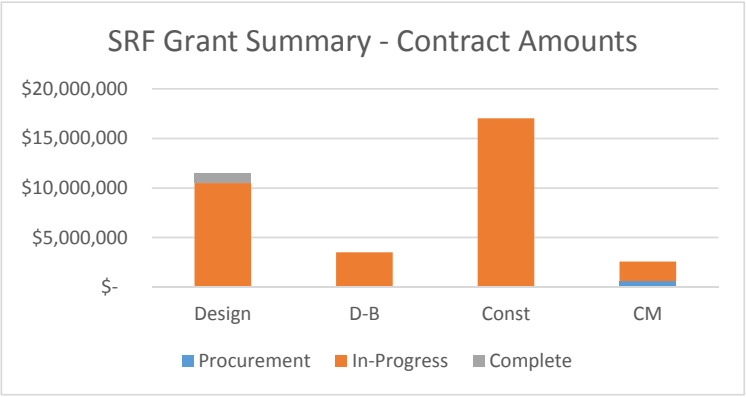
SRF Grant Summary - Projects

	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	

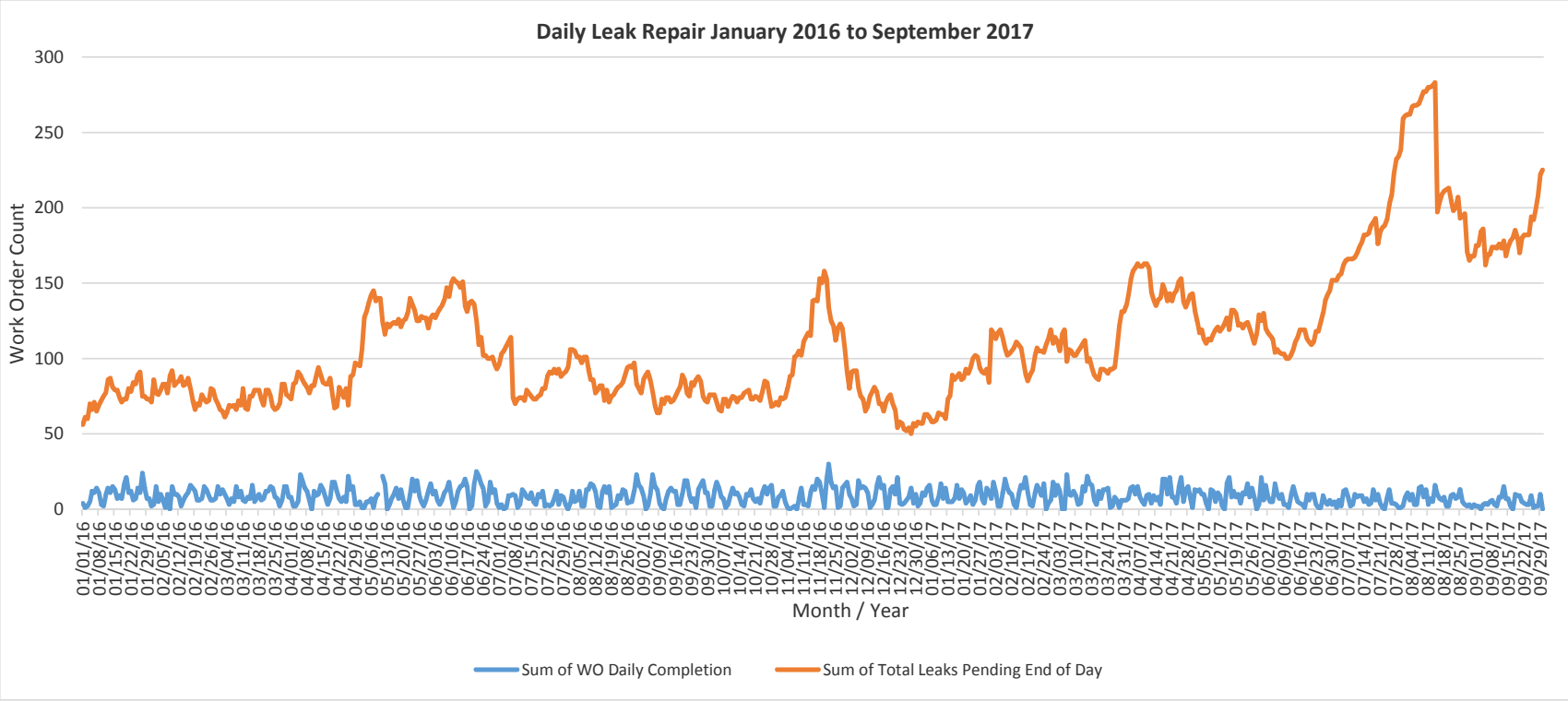
Land Acquisition Summary

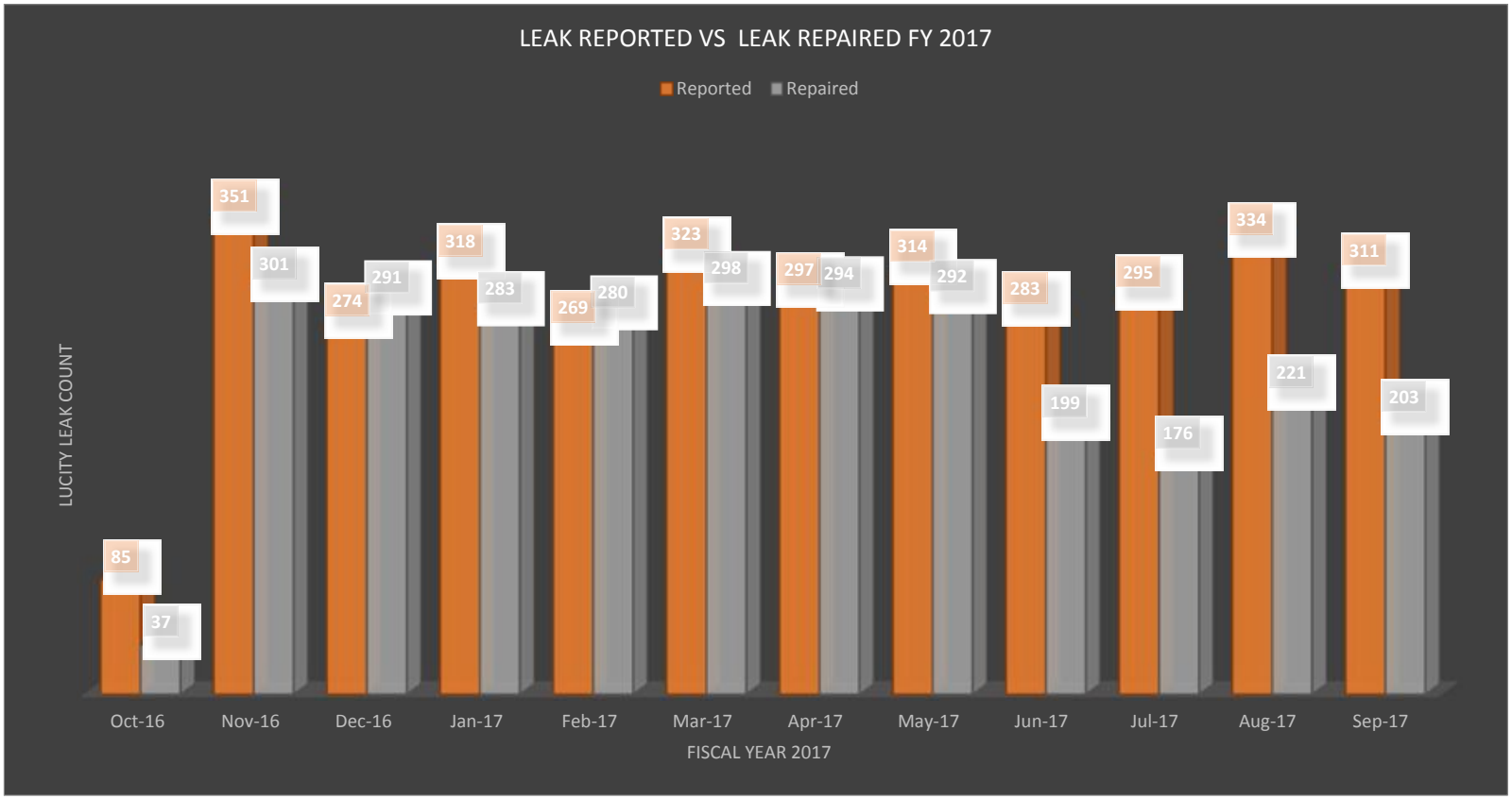
GWA Facility	Location	Gov. or Private Property	Land Acquisition Status
	Ugum	Private	GWA reviewing change order proposal.
	Property Adjacent to Southern Link	Private	GWA started acquisition process on 12/23/2016. Property ownership vested in GWA 08/11/2017.
	Astumbo	Gov't. - CLTC	GWA and DLM working together on Land Registration process. Abstract of Title sent to GWA for review 06/26/17. Pending technical description from DLM survey division. GWA reviewing technical description document - 10/02/17.
	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.
	A-12	Private	GWA in process of correcting title issue.
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. Appraisal services requested for Cornerstone Valuation 09/29/17.
Deep Well	Y-8	Gov't. - CLTC	DCA currently working on severance property map.
	AG-12	Dept. of Agriculture/ Manhita Farms	Land Registration Map submitted to DLM for review and comments 09/29/17.
Booster Pump Station	Brigade	Private	Pending Escrow revised buyers settlement statement for release of purchase price funding through Finance 10/11/17.

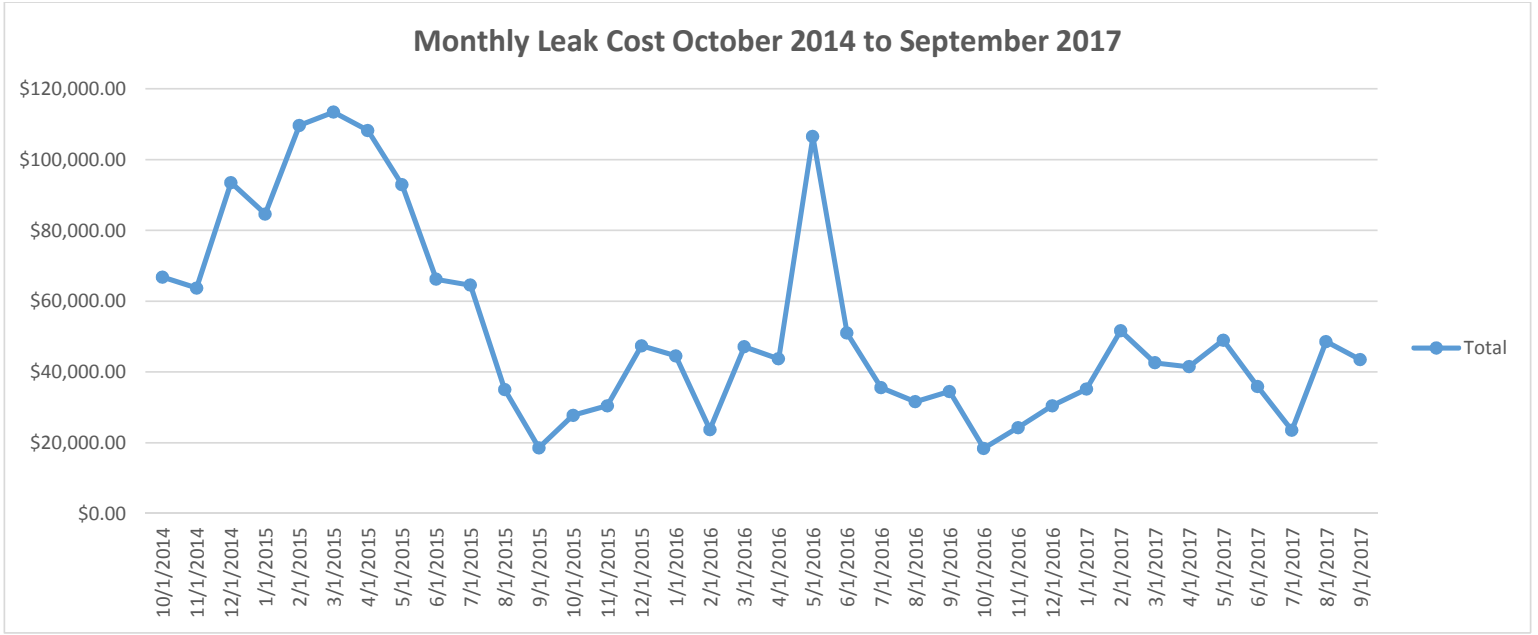
NRW – Update

- 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
311
203
Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Mar-17
Apr-17
May-17
Jun-17
Jul-17
Aug-17
Sep-17
FISCAL YEAR 2017



Assumptions:

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

Barrigada							
10/7/17	7:22 AM	Jack Pangilinan	Yigo	Y-12	Water	TRP	•Deep well rover reporting well tripped offline, informed Rudy to make 10-20. • @10:30am Rudy Santos reporting well secured due to grounded motor. Pat Siguenza informed.
10/8/17	8:09 AM	Mark Duenas	Barrigada	Hyundai Res.	Water	ADJ	•Dumping water from Hyundai Resv. To Barrigada 2m. GPM set to 1000. • @ 1:33pm Discontinued dumping. Barrigada inflow GPM @ 441.92, meter rdg-3028894. Hyundai @10.5ft, Barr 2M #1 @ 7.35ft #2 @ 7.21ft
10/10/17	10:41 AM	Shane Sablan	Yigo	Evangelista valve	Water	adj	Opened valve 10 turns from the closed. Yigo Res 26'/ Barrigada 3.5' Inflow 650 gpm before/ now 773 gpm after adjustment. Monitoring system.
10/11/17	11:51 PM	Vic Jardel	Mseries	M-21	Water	BOL	Found well tripped due to over current (Trip lock). Well reset and BOL. Tech. Dept. to analyze trip fault/s.
10/11/17	12:24 AM	Vic Jardel	Mseries	M-20A	Water	BOL	Found well tripped due to over current (Trip lock). Well reset and BOL. Tech. Dept. to analyze trip fault/s.
10/11/17	12:39 AM	Vic Jardel	Mseries	M-23	Water	Bol	Found well tripped due to over current (Trip lock). Well reset and BOL. Tech. Dept. to analyze trip fault/s.
10/11/17	2:31 AM	Jeremiah Diaz	Yseries	Y-22	Water	BOL	Found well tripped due to over current (Trip lock). Well reset and BOL. Tech. Dept. to analyze trip fault/s.
10/11/17	8:20 AM	Ike Reyes	Mangilao	M-9	Water	SEC	•Well secured for contractor. • @10:55am Pat Siguenza secured discharge line for contractor.
10/11/17	8:34 AM	Pete Nauta	Yigo	Y-21	Water	TRP	•Found well tripped, Art R. in route to make 10-20. • @ 9:28am Art R. reporting well back on-line, tripped due to power fluctuation. GPM-320 discharge 95psi defective head psi gauge.
10/11/17	8:50 AM	Gary Gagan	Barrigada	Barrigada/ Hyundai	Water	ADJ	•Secured Barr tank#1 inlet, Tank#2 at 1ft, dumping Hyundai to Barriada 2m. GPM set at 1000, current meter reading at 5862364 gal. • @12:25pm Sefrin A. discontinued dumpming form Hyundai to Barrigada. Barr. Tank#1 0.8ft, tank#2 1.8ft. GPM-710
10/12/17	8:46 AM	Gary Gagan	Barrigada	Barrigada/ Hyundai	Water	ADJ	•Dumping Hyundai to Barr 2M, incoming GPM set at 1000. • @ 11:47am Discontinued dumping. Barr 2m tank#2 at 1ft. Gpm 650
10/12/17	8:54 AM	Pete Nauta	Barrigada	M-series wells	Water	VR	•Informed deep well rover to verify M-series wells due to possible trip. • @9:13am Rover found M-21 tripped on over current. Electrician Art R. in route. • @9:57am Art R. reporting well back on line, 338gpm 45 discharge.
10/14/17	9:19 AM	Severn Apiag	Barrigada	Hyundai Res.	Water	SVC	• Severin Apiag Dumping Hyundai Res set @ 1000 GPM
10/14/17	1:32 AM	DZSP	Brrigada	Master Meter	Water	SVC	• DZSP opened master to 300GPM start reading was @ 10499000.

10/14/17	6:10 PM	Pat Siguenza	Yigo	Y-14	Water	Svc	As per Pat S. Y-14 pump is installed and now flushing to bring down turbidity. Pat will call as soon as Y-14 is activated.
10/14/17	7:08 PM	Pat Siguenza	Yigo	Y-14	Water	BOL	Y-14 BOL...490gpm...79h/75d
10/15/17	8:11 AM	Mark Duenas	Barrigada	Hyundai Res.	Water	ADJ	• Dumping Hyundai Res set @ 1000 GPM • @10:08am discontinued dumping.
10/15/17	8:55 AM	Ike Reyes	Mangilao	M-23	Water	TRP	• rover found well tripped, Mancini S. in route to make 10-20. • @10:09am back on line, 32/25psi no gpm defective well meter
10/16/17	7:00 AM	Jeremiah Diaz	Barrigada	M-20A AND M-21	Water	TR	•Crew to verify wells due to low to no water calls from lower Barrigada area. • @ 8:18am M-21 is back online. 300 GPM 32/24psi. Tirpped on over current. • @8:22am M-20A back on line. 210 GPM 60/35psi. Tripped on over current.
10/16/17	7:15 AM	Joey Cruz	Yigo	Y-22	Water	TR	•Rover found well tripped, Art R. in route to verify. • @ 9:08am well back on line 315 GPM 54/50 psi. Tripped on line conversion.

Santa Rosa							
10/17/17	7:00 AM	Pete Nauta	Yigo	Y-15	Water	TR	•Well found tripped Rudy Santos in route to verify. •@ 9:53am Well secured, pulling hi amps, Scheduled pullout to commence ASAP.
10/17/17	10:15 PM	Vic Jardel	Yigo	Y-15	Water	UPDATE	As per Vic Jardel crew is mounting motor will be dropping in soon
10/18/17	1:58 AM	Vic Jardel	Yigo	Y-15	water	UPDATE	Y-15 secured untill further notice

•On 7th Day of Oct 2017, Y-12 found tripped and later verified by electrician it was a grounded motor. Having a well producing 420gpm caused a great impact on Barrigada 2m reservoir causing level to drop. At that time crew were making adjustments, 1.Using Hyundai reservoir to be dumped into Barrigada 2m and 2. By switching D-8 valve to Barrigada 2m to help when ysensong reservoir is adequate in levels, adjustments are being made dailey since th e 7th till present. 3.Master meter in tiyan was opened giving GWA 300gpm. Rovers will bleed hydrants on areas of lower barrigada and monitoring pressures at Tiyan area to assure classes will stay open.
•Problems we are having was that wells feeding hyundai reservoir like M-21,M20A,M-23 were found tripped on some days causing levels on Hyundai reservoir to not gain for support of feeding Barrigada 2m.
•Awaiting parts for Y-12,M-6, and Y-1 which would help with Barrigada 2m.

•On 17th day of Oct. 2017 rover found well tripped, electrician tried activating well but the issues was that the pump reading Hi amps causing well to tripped when activated. Well was secured and scheduled pullout will commence to verify issues with pump and motor. Upon inspection findings was bearing issues.
•Awaiting pump and motor.

DASHBOARD

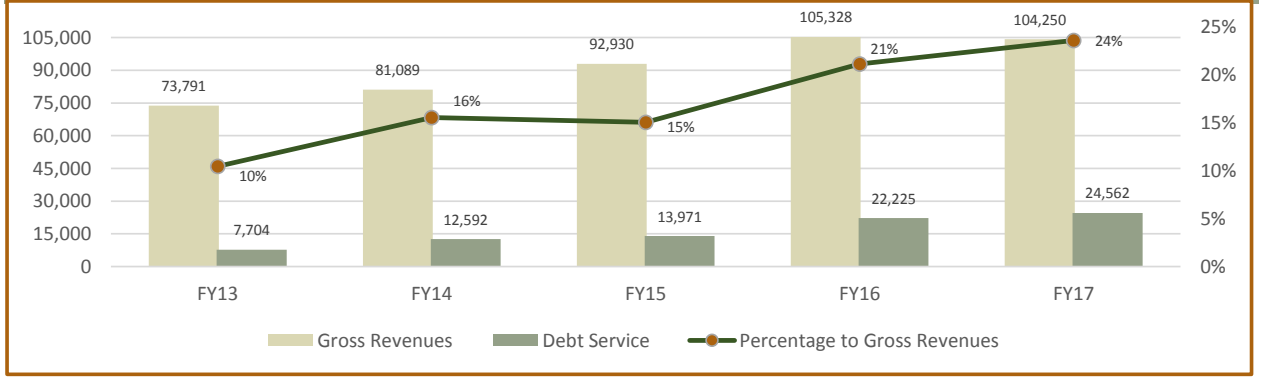
FY 2017 Budget vs Actual ($000)

Category	Description	Budget FY17	Actual FY17	Variance
Rate Based Revenues	Water	$70,467	$65,756	($4,711)
	Wastewater	40,549	38,063	(2,486)
	Total	111,016	103,819	(7,197)
Operations & Maintenance	Salaries & Benefits	26,209	22,743	(3,466)
	Power	12,742	12,076	(665)
	Water Purchases	8,117	7,309	(808)
	A&G	10,447	8,849	(1,598)
	Contractual	4,295	4,234	(62)
	Total	$81,152	$72,669	($8,482)

Key Financial Ratios ($000)

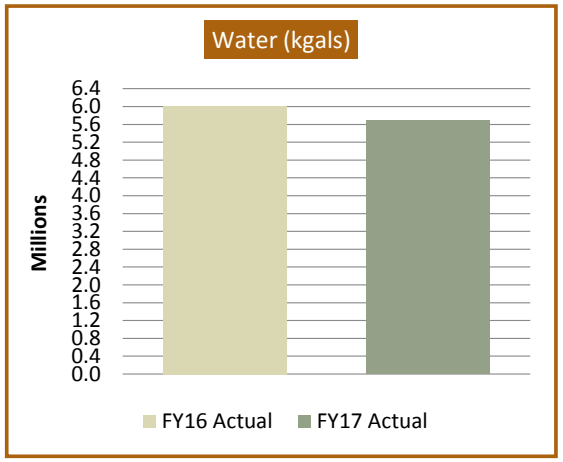
Category	FY17	FY16
Accounts Payable $$/Days	$5,897 / 59 days	$4,909 / 53 days
Accounts Receivable $$/Days	$18,024 / 51 days	$16,709 / 51 days
Days Cash On Hand	184 days	178 days
Annual Debt Service (Revenue Bonds)	$24,563	$22,225
Debt Service Coverage (Bond/PUC)	1.94 / 2.40	2.33 / 2.54

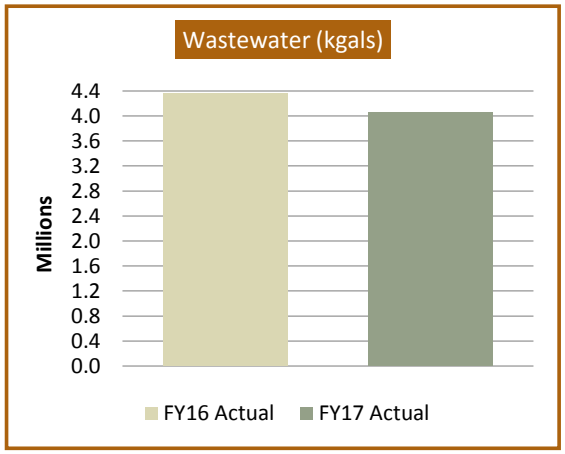
Debt as a Percent to Gross Revenue

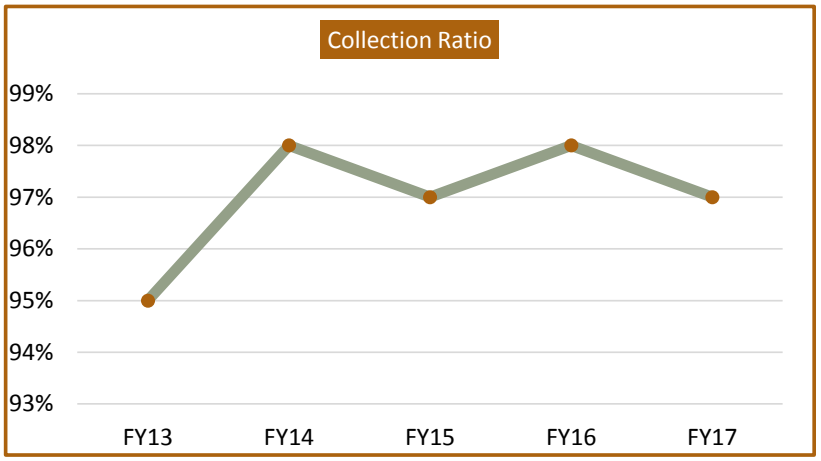


(1) Gross Revenues excludes SDC
(2) Debt Service Excludes Cap I

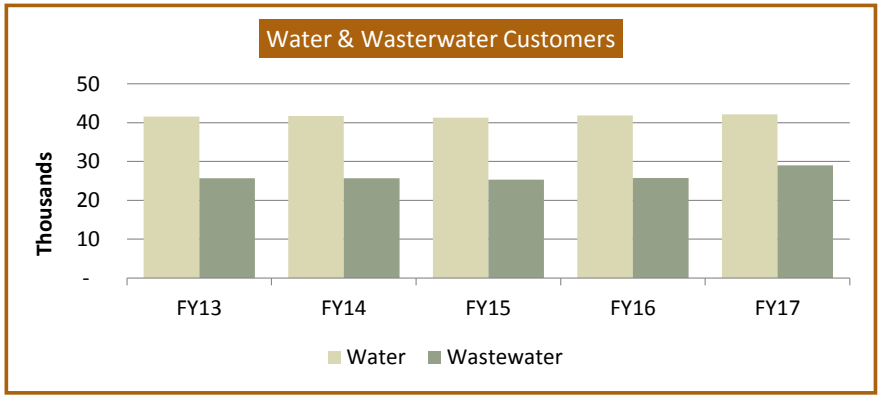
Water & Wastewater Analytics

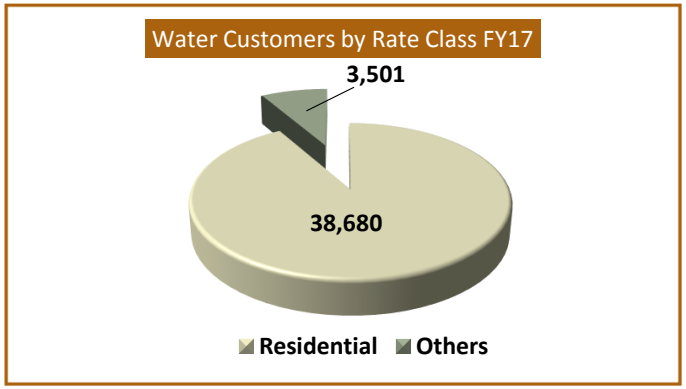


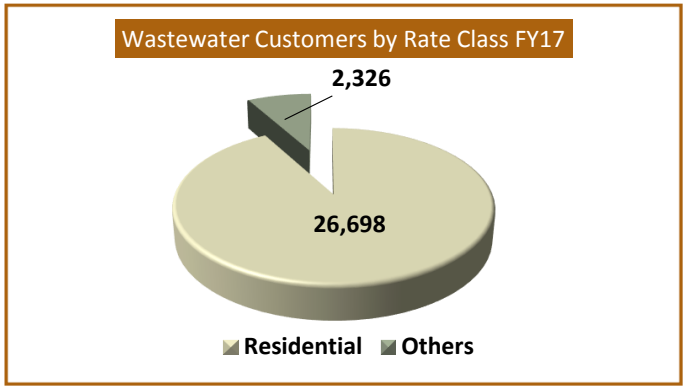


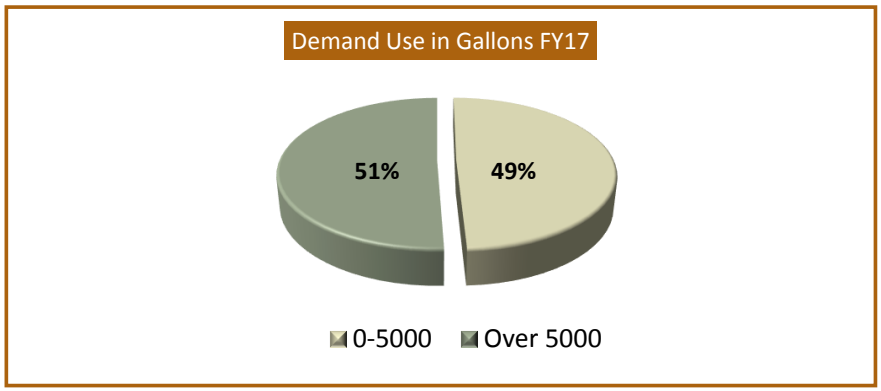


Water & Wastewater Customers





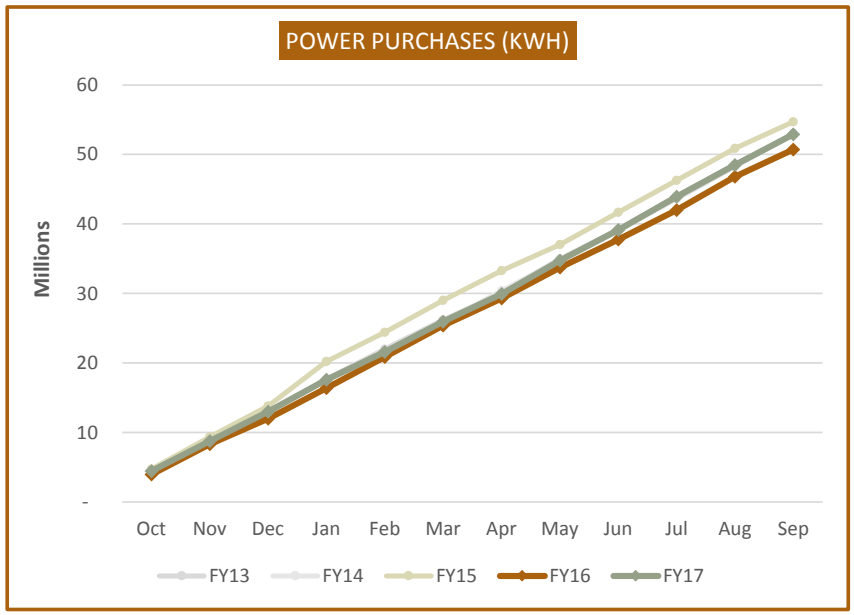


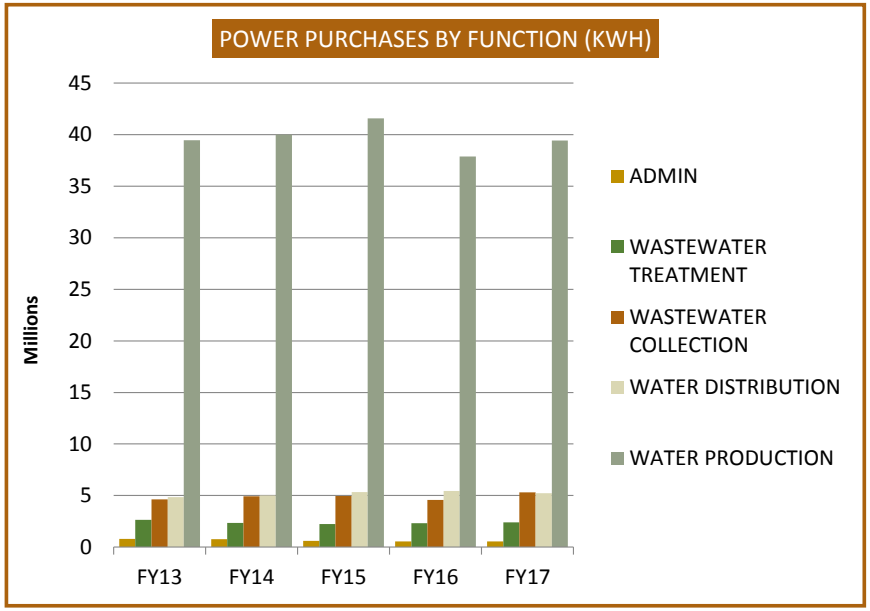


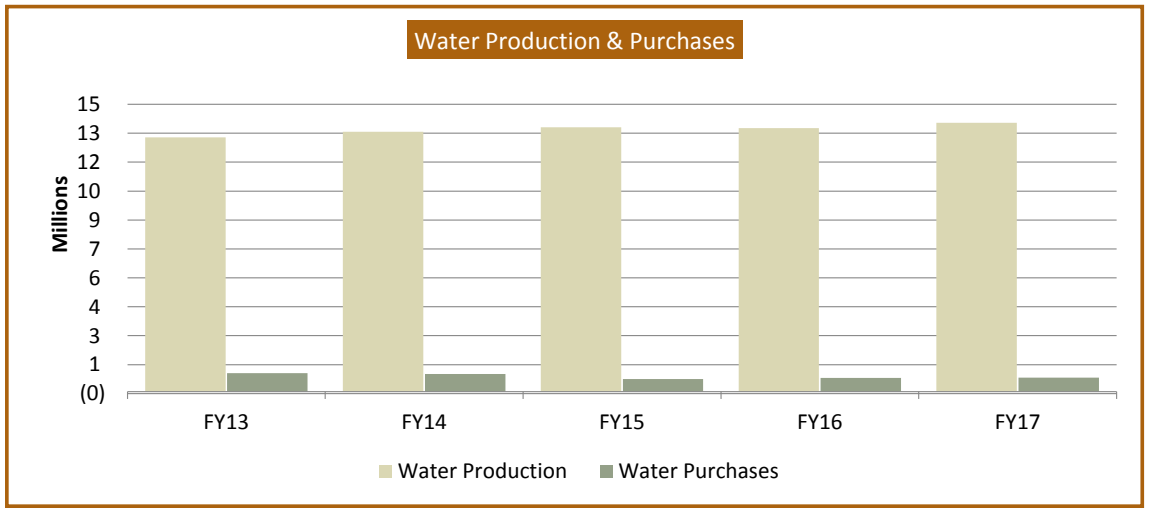
Top Ten Largest Water and Wastewater Customers – September 2017

Water			Wastewater		
Customer Name	FY17 Revenues	% of Total	Customer Name	FY17 Revenues	% of Total
1) MDI GUAM CORPORATION/LEOPALACE	$1,316,123	2.01%	1) AIR FORCE DOD	$3,860,920	10.17%
2) PACIFIC ISLANDS CLUB	1,178,757	1.80%	2) NAVY DOD	1,684,854	4.44%
3) HOTELS OF THE MARIANAS INC	995,330	1.52%	3) HOTELS OF THE MARIANAS INC	1,064,415	2.80%
4) SHERATON LAGUNA GUAM RESORT	851,904	1.30%	4) SHERATON LAGUNA GUAM RESORT	911,821	2.40%
5) HYATT	847,386	1.30%	5) HYATT	906,969	2.39%
6) HOTEL NIKKO GUAM	813,085	1.24%	6) HOTEL NIKKO GUAM	868,680	2.29%
7) PACIFIC STAR RESORT & SPA	649,388	0.99%	7) PACIFIC STAR RESORT & SPA	692,867	1.82%
8) MDI GUAM CORPORATION/WESTIN	628,271	0.96%	8) MDI GUAM CORPORATION/WESTIN	671,635	1.77%
9) GUAM REEF HOTEL INC	592,583	0.91%	9) OUTRIGGER GUAM RESORT	633,320	1.67%
10) OUTRIGGER GUAM RESORT	591,248	0.90%	10) GUAM REEF HOTEL INC	633,306	1.67%
Total	**$8,464,075**	**12.95%**	**Total**	**$11,928,786**	**31.42%**

Power, Water Purchases and Water Production

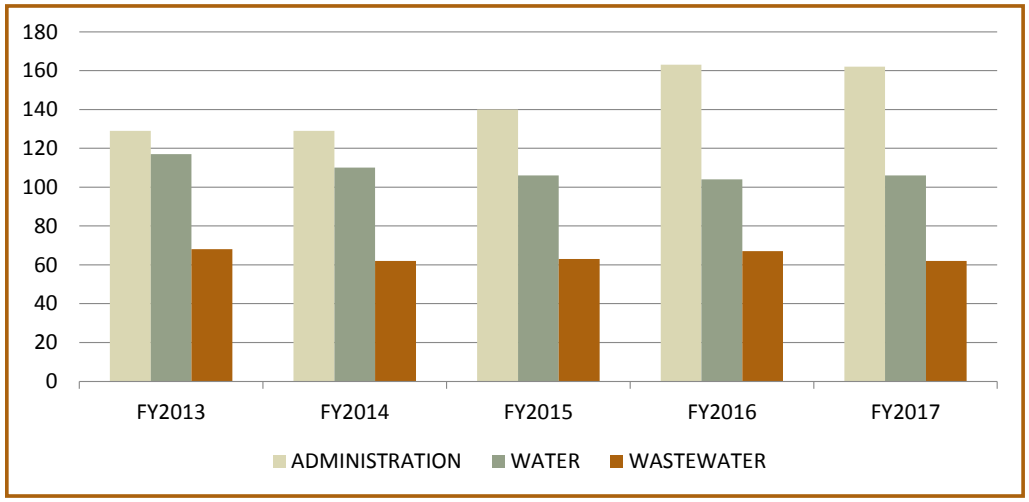




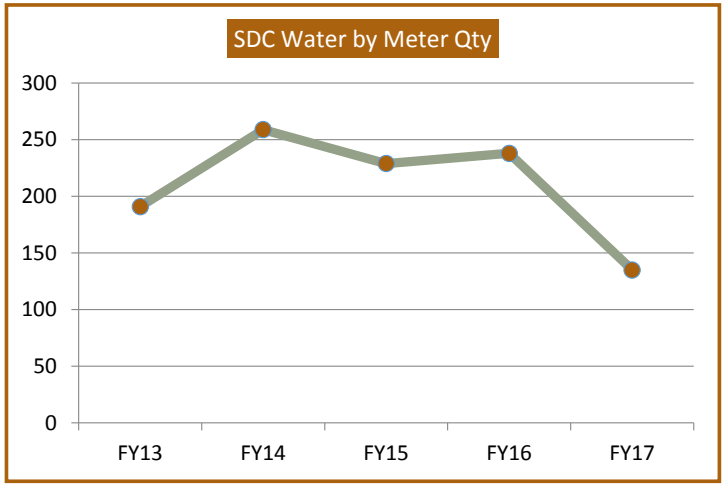


FTE by Major Division

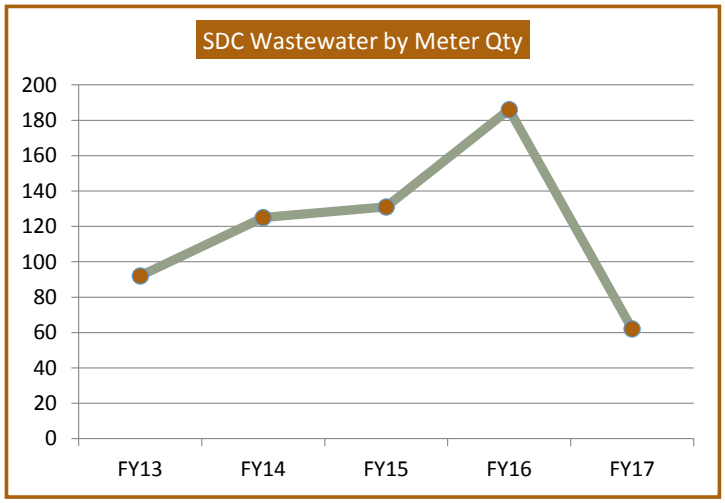
DIVISION	FY2013	FY2014	FY2015	FY2016	FY2017
ADMINISTRATION	129	129	140	163	162
WATER	117	110	106	104	106
WASTEWATER	68	62	63	67	62
TOTAL NUMBER OF STAFF	314	301	309	334	330
Gross Salaries & Wages ($000)	14,929	15,532	15,805	16,442	17,210
Water Customers	41,582	41,702	41,274	42,259	42,181
Staff to Customers Ratio	0.76%	0.72%	0.75%	0.79%	0.78%



SDC Water & Wastewater (Meter Quantity)



Actual Meter Sizes (Inches)	FY 2013	FY 2014	FY 2015	FY 2016	FY17
5/8 x 3/4	179	248	220	239	129
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	135



Actual Meter Sizes (Inches)	FY 2013	FY 2014	FY 2015	FY 2016	FY17
5/8 x 3/4	80	115	124	179	58
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	62

GUAM WATERWORKS AUTHORITY
SEPTEMBER 30, 2017
FINANCIAL AND RELATED REPORTS
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GUAM WATERWORKS AUTHORITY
Balance Sheet
September 30, 2017

SCHEDULE A

ASSETS	Unaudited September 30, 2017	Audited September 30, 2016	Increase (Decrease)
Current Assets:			
Cash:			
Unrestricted (Schedule G)	5,000,721	8,157,430	(3,156,709)
Restricted Funds (Schedule G)	65,103,751	48,436,547	16,667,204
Accounts Receivable Trade, Net of Allowance for Doubtful Receivables of $12,052,579 at Sep 30, 2017 and $11,302,579 at Sep 30, 2016	15,842,062	14,562,072	1,279,989
Other Receivable	2,182,580	2,147,155	35,425
Materials & Supplies Inventory, Net of Allowance for Obsolescence of $457,370 at Sep 30, 2017 and Sep 30, 2016	1,517,465	2,269,775	(752,310)
Total Current Assets	89,646,579	75,572,979	14,073,600
Property, Plant and Equipment			
Utility plant in service:			
Water system	311,716,223	306,262,568	5,453,655
Wastewater system	282,331,832	259,512,407	22,819,425
Non-utility property	18,571,111	22,474,787	(3,903,676)
Total property	612,619,165	588,249,761	24,369,404
Less Accumulated Depreciation	(298,781,718)	(282,837,613)	(15,944,106)
Land	1,110,998	254,288	856,710
Construction Work in Progress	135,427,628	81,877,561	53,550,067
Property, Plant and Equipment, net	450,376,072	387,543,997	62,832,075
Other noncurrent assets			
Restricted cash (Schedule G)	236,587,387	285,277,784	(48,690,397)
Investments (Schedule G)	41,042,038	41,029,262	12,776
Other Prepaid Expenses	732,238	652,000	80,238
Total other noncurrent assets	278,361,663	326,959,047	(48,597,383)
TOTAL ASSETS	818,384,314	790,076,022	28,308,291
Deferred outflows of resources:			
Debt defeasance loss on refunding	1,695,981	1,878,602	(182,621)
Deferred outflows from pension	3,414,242	4,668,010	(1,253,768)
Total Assets and Deferred Outflows of Resources	**823,494,537**	**796,622,635**	**26,871,902**
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	5,897,623	4,909,146	988,477
Accrued Expense	42,126	42,126	0
Interest Payable	6,656,499	6,748,638	(92,139)
Accrued Payroll and Employee Benefits	2,609,176	1,692,622	916,555
Accrued Annual Leave	1,891,497	1,641,497	250,000
Current portion of employee annual leave	524,652	548,845	(24,193)
Contractors' Payable	9,616,922	3,436,908	6,180,014
Customer and Other Deposits	2,130,957	2,228,235	(97,278)
Total Current Liabilities	37,283,441	29,162,004	8,121,437
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	(1,867,525)	(1,948,205)	80,680
Unamortized Discount - Bond 2013	(1,338,751)	(1,389,850)	51,099
Unamortized Premium - Bond 2014	4,804,694	5,071,307	(266,613)
Unamortized Premium - Bond 2016	17,262,975	17,870,470	(607,495)
Notes Payable	5,697,499	8,578,203	(2,880,704)
Unfunded Ret Liability (GASB 67/68)	37,997,946	38,195,938	(197,992)
Employee Annual Leave, Less Current Portion	911,277	887,084	24,193
TOTAL LIABILITIES	602,171,556	602,886,951	(715,394)
Net Assets	**221,322,981**	**193,735,684**	**27,587,297**
Total Liabilities and Net Assets	**823,494,537**	**796,622,635**	**26,871,902**

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited) **SCHEDULE B**
Comparative Budget vs. Actual for the period ending September 30, 2017

	Month to Date		Variance
	Budget September-17	Actual (Unaudited) September-17	Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	5,678,548	5,906,577	228,029
Wastewater Revenues	3,284,461	3,294,425	9,964
Legislative Surcharge	288,387	295,732	7,345
Other Revenues	43,750	31,097	(12,653)
System Development Charge	133,333	52,932	(80,402)
Total Operating Revenues	9,428,479	9,580,762	152,284
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	599,391	595,719	(3,672)
Power Purchases	1,084,804	1,084,621	(183)
Total Utility Costs	1,684,195	1,680,339	(3,855)
Salaries and Wages	1,599,470	1,598,954	(516)
Pension and Benefits	472,585	471,544	(1,040)
Total Salaries and Benefits	2,072,055	2,070,498	(1,557)
Capitalized Labor and Benefits	(292,554)	(200,000)	92,554
Net Salaries and Benefits	1,779,501	1,870,498	90,998
Administrative and General Expenses			
Sludge removal	123,895	123,780	(114)
Chemicals	135,222	134,357	(865)
Materials & Supplies	227,071	226,298	(772)
Transportation	155,419	155,378	(42)
Communications	12,152	12,006	(146)
Claims	30,284	30,211	(73)
Insurance	76,312	75,480	(832)
Training & Travel	49,570	49,373	(196)
Advertising	10,545	10,397	(148)
Miscellaneous	73,963	73,430	(533)
Total Administrative and General Expense	894,431	890,711	(3,721)
Regulatory Expense	43,791	43,529	(262)
Bad Debts Provision	62,500	62,497	(3)
Depreciation Expense	1,529,550	1,329,008	(200,542)
Contractual Expense			
Audit & Computer Maint.	48,630	47,701	(929)
Building rental	38,368	36,582	(1,785)
Equipment rental	96,270	95,659	(610)
Legal	439	-	(439)
Laboratory	34,086	33,520	(566)
Other	263,292	286,191	22,899
Total Contractual Expense	481,085	499,654	18,569
Retiree Supp. Annuities and health care costs	239,312	243,987	4,675
Contribution to Government of Guam	48,285	49,500	1,215
Total Retiree Benefits	287,597	293,487	5,890
Total Operating Expenses	6,762,648	6,669,723	(92,926)
Earnings (Loss) from Operations	2,665,830	2,911,040	245,210
Interest Income-2010/13/14/16 Series Bond	1,029	150,816	149,787
Interest Income-Other Funds	642	22,770	22,129
Interest Income-SDC	-	1,276	1,276
Interest Expense- 2010/13/14/16 Series Bond	(2,223,983)	(2,211,025)	12,959
Interest Expense- ST BOG	(46,124)	(7,728)	38,396
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)	(1,476,729)	215,381
Net Income (Loss) before capital contributions	973,720	1,434,311	460,591
Capital Contributions			-
Grants from US Government	250,000	2,109,678	1,859,678
Grants from GovGuam & Others	-	-	-
Other Contributions	-	-	-
Total Capital Contributions	250,000	2,109,678	1,859,678
Change in Net Assets	1,223,720	3,543,988	2,320,269
Debt Service Calculation			
Earnings From Operations	2,665,830	2,911,040	
System Development Charge	(133,333)	(52,932)	
Interest/Investment Income	642	22,770	
Depreciation	1,529,550	1,329,008	
Balance Available for Debt Service per Section 6.12	4,062,689	4,209,887	
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	5,142,021	
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	2.06	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	2.15	2.51	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited) **SCHEDULE C**
Comparative for the period ending September 30, 2017 and 2016

	Month to Date		Variance
	Actual (Unaudited) September-17	Actual (Audited) September-16	Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	5,906,577	5,361,643	544,934
Wastewater Revenues	3,294,425	3,102,398	192,027
Legislative Surcharge	295,732	241,527	54,205
Other Revenues	31,097	43,325	(12,228)
System Development Charge	52,932	119,028	(66,096)
Total Operating Revenues	9,580,762	8,867,921	712,842
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	595,719	531,170	64,549
Power Purchases	1,084,621	935,490	149,130
Total Utility Costs	1,680,339	1,466,660	213,679
Salaries and Wages	1,598,954	1,333,993	264,961
Pension and Benefits	471,544	454,904	16,640
Total Salaries and Benefits	2,070,498	1,788,897	281,601
Capitalized Labor and Benefits	(200,000)	(248,363)	48,363
Net Salaries and Benefits	1,870,498	1,540,534	329,964
Administrative and General Expenses			
Sludge removal	123,780	130,423	(6,643)
Chemicals	134,357	186,596	(52,239)
Materials & Supplies	226,298	103,711	122,587
Transportation	155,378	47,876	107,502
Communications	12,006	10,265	1,741
Claims	30,211	10,618	19,593
Insurance	75,480	101,111	(25,631)
Training & Travel	49,373	12,457	36,917
Advertising	10,397	15,907	(5,510)
Miscellaneous	73,430	68,429	5,001
Total Administrative and General Expense	890,711	687,393	203,318
Regulatory Expense	43,529	27,104	16,424
Bad Debts Provision	62,497	86,193	(23,695)
Depreciation Expense	1,329,008	1,279,008	50,000
Contractual Expense			
Audit & Computer Maint.	47,701	86,467	(38,766)
Building rental	36,582	33,279	3,304
Equipment rental	95,659	58,162	37,498
Legal	-	362	(362)
Laboratory	33,520	10,234	23,286
Other	286,191	154,589	131,602
Total Contractual Expense	499,654	343,094	156,560
Retiree Supp. Annuities and health care costs	243,987	230,355	13,632
Contribution to Government of Guam	49,500	48,667	833
Total Retiree Benefits	293,487	279,022	14,465
Total Operating Expenses	6,669,723	5,709,007	960,716
Earnings (Loss) from Operations	2,911,040	3,158,914	(247,874)
Interest Income-2010/13/14/16 Series Bond	150,816	2,083	148,733
Interest Income-Other Funds	22,770	1,281	21,489
Interest Income-SDC	1,276	1,896	(620)
Interest Expense- 2010/13/14/16 Series Bond	(2,211,025)	(1,994,375)	(216,650)
Interest Expense- ST BOG	(7,728)	(59,096)	51,368
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)	(1,476,729)	(1,237,323)	(239,406)
Net Income (Loss) before capital contributions	1,434,311	1,921,591	(487,280)
Capital Contributions			
Grants from US Government	2,109,678	434,254	1,675,424
Grants from GovGuam & Others	-	23,151	(23,151)
Other Contributions	-	-	-
Total Capital Contributions	2,109,678	457,405	1,652,272
Change in Net Assets	3,543,988	2,378,996	1,164,992
Debt Service Calculation			
Earnings From Operations	2,911,040	3,158,914	
System Development Charge	(52,932)	(119,028)	
Interest/Investment Income	22,770	1,281	
Depreciation	1,329,008	1,279,008	
Balance Available for Debt Service per Section 6.12	4,209,887	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	5,142,021	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)	2.06	2.33	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	2.51	2.54	

GUAM WATERWORKS AUTHORITY
Statement of Operations and Retained Earnings (Unaudited) **SCHEDULE D**
Comparative Budget vs. Actual for the period ending September 30, 2017

	Year to Date Budget September-17	Year to Date Actual (Unaudited) September-17	Variance Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	68,142,571	63,626,166	(4,516,405)
Wastewater Revenues	39,413,527	37,005,466	(2,408,061)
Legislative Surcharge	3,460,644	3,187,567	(273,077)
Other Revenues	525,000	430,892	(94,108)
System Development Charge	1,600,000	874,072	(725,928)
Total Operating Revenues	113,141,742	105,124,163	(8,017,579)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	8,116,687	7,309,125	(807,562)
Power Purchases	12,741,648	12,076,262	(665,386)
Total Utility Costs	20,858,335	19,385,387	(1,472,948)
Salaries and Wages	19,037,643	17,210,388	(1,827,255)
Pension and Benefits	7,171,015	5,532,557	(1,638,458)
Total Salaries and Benefits	26,208,658	22,742,945	(3,465,713)
Capitalized Labor and Benefits	(3,510,651)	(2,900,000)	610,651
Net Salaries and Benefits	22,698,007	19,842,945	(2,855,062)
Administrative and General Expenses			
Sludge removal	2,092,736	1,685,842	(406,894)
Chemicals	2,162,664	2,146,528	(16,136)
Materials & Supplies	1,690,947	1,659,963	(30,984)
Transportation	857,030	642,172	(214,858)
Communications	169,822	130,503	(39,319)
Claims	255,406	254,705	(701)
Insurance	1,623,740	1,087,233	(536,507)
Training & Travel	271,838	271,569	(269)
Advertising	109,534	107,853	(1,681)
Miscellaneous	1,212,559	862,275	(350,284)
Total Administrative and General Expense	10,446,276	8,848,643	(1,597,633)
Regulatory Expense	284,486	283,985	(501)
Bad Debts Provision	750,000	749,942	(58)
Depreciation Expense	18,354,600	15,948,096	(2,406,504)
Contractual Expense			
Audit & Computer Maint.	984,564	975,125	(9,439)
Building rental	460,412	438,678	(21,734)
Equipment rental	763,237	762,487	(750)
Legal	7,465	6,479	(986)
Laboratory	159,035	133,443	(25,592)
Other	1,920,501	1,917,454	(3,047)
Total Contractual Expense	4,295,214	4,233,667	(61,547)
Retiree Supp. Annuities and health care costs	2,871,740	2,782,745	(88,995)
Contribution to Government of Guam	593,120	594,000	880
Total Retiree Benefits	3,464,860	3,376,745	(88,115)
Total Operating Expenses	81,151,778	72,669,409	(8,482,369)
Earnings (Loss) from Operations	31,989,964	32,454,754	464,790
Interest Income-2010/13/14/16 Series Bond	12,344	784,252	771,908
Interest Income-Other Funds	7,702	120,071	112,369
Interest Income-SDC	-	12,717	12,717
Interest Expense- 2010/13/14/16 Series Bond	(26,687,801)	(26,648,925)	38,876
Interest Expense- ST BOG	(553,489)	(524,835)	28,654
Federal Expenditures	-	(256,661)	(256,661)
Loss on Asset Disposal	-	(232,147)	(232,147)
AFUDC	7,500,000	7,500,000	-
Amortization of Discount, Premium and Issuance Costs	452,850	742,328	289,478
Loss on Defeasance Bond05 Refunding	(233,796)	(182,621)	51,175
Deferred outflows from pension	(803,138)	(1,253,768)	(450,630)
Prior Year Adjustment	-	(529,784)	(529,784)
Total non-operating revenues (expenses)	(20,305,328)	(20,469,372)	(164,044)
Net Income (Loss) before capital contributions	11,684,636	11,985,382	300,746
Capital Contributions			-
Grants from US Government	3,000,000	15,600,029	12,600,029
Grants from GovGuam & Others	-	1,886	1,886
Other Contributions	-	-	-
Total Capital Contributions	3,000,000	15,601,914	12,601,914
Change in Net Assets	14,684,636	27,587,297	12,902,661
Debt Service Calculation			
Earnings From Operations	31,989,964	32,454,754	
System Development Charge	(1,600,000)	(874,072)	
Interest/Investment Income	7,702	120,071	
Depreciation	18,354,600	15,948,096	
Balance Available for Debt Service per Section 6.12	48,752,266	47,648,850	
Working Capital Reserve Available for Debt Service	7,585,000	11,185,610	
Transfer to Working Capital Debt Service Reserve	(3,650,000)	-	
Balance Available for Debt Service inclusive of reserves	52,687,266	58,834,460	
Debt Service			
Principal	5,040,000	5,040,000	
Interest	19,522,301	19,522,301	
Total	24,562,301	24,562,301	
Debt Service Coverage (1.25X)- per Section 6.12 (Indenture)	1.98	1.94	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	2.15	2.40	

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

SCHEDULE E

	Year to Date ACTUAL (Unaudited) September-17	ACTUAL (Audited) September-16	Variance Increase / (Decrease)
OPERATING REVENUES			
Water Revenues	63,626,166	64,339,714	(713,548)
Wastewater Revenues	37,005,466	37,228,781	(223,315)
Legislative Surcharge	3,187,567	2,898,325	289,243
Other Revenues	430,892	519,899	(89,006)
System Development Charge	874,072	1,428,332	(554,260)
Total Operating Revenues	105,124,163	106,415,050	(1,290,887)
OPERATING AND MAINTENANCE EXPENSES			
Water Purchases	7,309,125	6,374,035	935,090
Power Purchases	12,076,262	11,225,884	850,379
Total Utility Costs	19,385,387	17,599,919	1,785,468
Salaries and Wages	17,210,388	16,007,914	1,202,474
Pension and Benefits	5,532,557	5,458,851	73,706
Total Salaries and Benefits	22,742,945	21,466,765	1,276,180
Capitalized Labor and Benefits	(2,900,000)	(2,980,358)	80,358
Net Salaries and Benefits	19,842,945	18,486,407	1,356,538
Administrative and General Expenses			
Sludge removal	1,685,842	1,565,080	120,762
Chemicals	2,146,528	2,239,147	(92,619)
Materials & Supplies	1,659,963	1,244,535	415,428
Transportation	642,172	574,510	67,662
Communications	130,503	123,178	7,325
Claims	254,705	127,412	127,293
Insurance	1,087,233	1,213,327	(126,094)
Training & Travel	271,569	149,481	122,088
Advertising	107,853	190,889	(83,036)
Miscellaneous	862,275	821,152	41,123
Total Administrative and General Expense	8,848,643	8,248,710	599,933
Regulatory Expense	283,985	325,252	(41,267)
Bad Debts Provision	749,942	1,034,310	(284,369)
Depreciation Expense	15,948,096	15,348,101	599,995
Contractual Expense			
Audit & Computer Maint.	975,125	1,037,609	(62,484)
Building rental	438,678	399,343	39,335
Equipment rental	762,487	697,942	64,544
Legal	6,479	4,348	2,131
Laboratory	133,443	122,810	10,633
Other	1,917,454	1,855,070	62,384
Total Contractual Expense	4,233,667	4,117,122	116,544
Retiree Supp. Annuities and health care costs	2,782,745	2,764,262	18,483
Contribution to Government of Guam	594,000	584,000	10,000
Total Retiree Benefits	3,376,745	3,348,262	28,483
Total Operating Expenses	72,669,409	68,508,084	4,161,325
Earnings (Loss) from Operations	32,454,754	37,906,966	(5,452,212)
Interest Income-2010/13/14/16 Series Bond	784,252	24,991	759,262
Interest Income-Other Funds	120,071	15,378	104,693
Interest Income-SDC	12,717	22,746	(10,029)
Interest Expense- 2010/13/14/16 Series Bond	(26,648,925)	(23,932,501)	(2,716,425)
Interest Expense- ST BOG	(524,835)	(709,146)	184,311
Federal Expenditures	(256,661)	(1,058,262)	801,601
Loss on Asset Disposal	(232,147)	(49,796)	(182,351)
AFUDC	7,500,000	13,708,441	(6,208,441)
Amortization of Discount, Premium and Issuance Costs	742,328	(1,929,740)	2,672,068
Loss on Defeasance Bond05 Refunding	(182,621)	(233,796)	51,175
Deferred outflows from pension	(1,253,768)	(89,420)	(1,164,348)
Prior Year Adjustment	(529,784)	(616,767)	86,983
Total non-operating revenues (expenses)	(20,469,372)	(14,847,872)	(5,621,500)
Net Income (Loss) before capital contributions	11,985,382	23,059,094	(11,073,711)
Capital Contributions			
Grants from US Government	15,600,029	5,211,045	10,388,984
Grants from GovGuam & Others	1,886	277,818	(275,932)
Other Contributions	-	-	-
Total Capital Contributions	15,601,914	5,488,862	10,113,052
Change in Net Assets	27,587,297	28,547,956	(960,659)
Debt Service Calculation			
Earnings From Operations	32,454,754	37,906,966	
System Development Charge	(874,072)	(1,428,332)	
Interest/Investment Income	120,071	15,378	
Depreciation	15,948,096	15,348,101	
Balance Available for Debt Service per Section 6.12	47,648,850	51,842,113	
Working Capital Reserve Available for Debt Service	11,185,610	4,585,000	
Transfer to Working Capital Debt Service Reserve	-	-	
Balance Available for Debt Service inclusive of reserves	58,834,460	56,427,113	
Debt Service			
Principal	5,040,000	4,910,000	
Interest	19,522,301	17,315,395	
Total	24,562,301	22,225,395	
Debt Service Coverage (1.25X)- per Section 6.12 (Indenture)	1.94	2.33	
Debt Service Coverage (1.75X) inclusive of reserves (PUC)	2.40	2.54	

SCHEDULE F

Bond Compliance		**($$$) Per Indenture**	**As of 09/30/17 ($$$) 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	$5.6K
• Capitalized Interest Fund			$1.8M

GUAM WATERWORKS AUTHORITY
Restricted and Unrestricted Cash Summary
FY 2017

SCHEDULE G

Description	Unaudited September 30, 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	4,963,682	8,126,177	(3,162,495)
BOG - PRN Payroll	30,039	24,253	5,786
Sub-total Unrestricted	5,000,721	8,157,430	(3,156,709)
RESTRICTED			
BOG - Credit Card-Sweep	-	-	0
BOG - On Line Payment	-	-	0
BOG - Sweep Account	-	76	(76)
Bank of Hawaii	134,720	121,322	13,398
ANZ Bank	-	229	(229)
First Hawaiian Bank	10,302	47,741	(37,439)
Bank Pacific	16,223	14,194	2,029
Community First FCU	3,803	4,638	(835)
BOG - Customer Refunds	1,827,485	1,431,631	395,854
Bank Pacific - Surcharge	278,022	166,763	111,259
Bank Pacific - Escrow Deposit	665,955	845,734	(179,779)
BOG Emergency Reserve Fund	6,122	6,114	7
BOG - Revenue Trust	183,628	595,751	(412,122)
BOG Revenue Trust Fund	7,782,227	8,182,472	(400,245)
BOG Capital Improvement Fund-Bond	5,598	3,933	1,665
BOG Capital Improvement Revenue Fund	-	-	0
BOG-O & M Reserve	13,516,540	4,050,319	9,466,221
BOG-Debt Service Reserve	11,217,733	11,185,610	32,124
BOG-CAPEX Reserve	15,462,869	8,710,383	6,752,486
BOG Sewer Hookup Revolving Fund	63,590	62,132	1,458
BOG Short Term Loan DSF	-	-	0
BOG Subord. Sec. Fund	859,233	859,233	0
BOG Operation and Maintenance Fund	3,083,482	3,083,482	0
	55,117,532	39,371,755	15,745,777
BOG - SDC Deposit	1,486,219	1,064,792	421,427
BOG - SDC CDs	8,500,000	8,000,000	500,000
Total Restricted	65,103,751	48,436,547	16,667,204
Reserve Funds			
BOG Series 05 OMRRRF Fund	17,423,213	17,423,213	0
BOG Series 10 Construction Fund	9,299,311	11,725,749	(2,426,437)
BOG Series 13 Construction Fund	74,499,150	107,622,618	(33,123,468)
BOG Series 13 CAP I Fund	-	-	0
BOG Series 14 Refunding Construction Fund	771,281	820,529	(49,248)
BOG Series 16 Construction Fund	132,811,449	138,748,131	(5,936,682)
BOG Series 16 Cap Int Fund	1,782,982	8,937,545	(7,154,562)
BOG Series 16 COI Fund	-	-	0
Total Restricted - Held by Trustee	236,587,387	285,277,784	(48,690,397)
USB Series 2010 Debt Service Fund	2,020,121	2,016,414	3,707
USB Series 2010 Debt Service Reserve Fund	7,566,460	7,566,460	0
USB Series 2013 Debt Service Fund	2,336,754	2,333,083	3,671
USB Series 2013 Debt Service Reserve Fund	12,031,688	12,031,688	0
USB Series 2014 Refunding Debt Service Fund	1,796,559	1,791,266	5,293
USB Series 2014 Refunding Debt Service Reserve Func	7,707,602	7,707,628	(26)
USB Series 2016 Debt Service Fund	130	-	130
USB Series 2016 Debt Service Reserve Fund	7,582,725	7,582,725	0
Total Investments	41,042,038	41,029,262	12,776
Total Restricted and Unrestricted Cash	347,733,897	382,901,023	(35,167,126)

SCHEDULE H

Guam Waterworks Authority
Statement of Cash Flows (Unaudited)
FY 2017

	YTD Sep-17
Increase (decrease) in cash	
Cash flows from operating activities:	
Cash received from trade and others	103,518,335
Cash payments to suppliers/contractors for goods and services	(32,073,221)
Cash payments to employees for services	(20,997,359)
Net cash provided by operating activities	50,447,754
Cash flows from capital and related financing activities:	
Contributed capital received (grants)	14,788,448
Acquisition of utility plant	(67,734,698)
Repayment of Long Term Debt	(5,782,328)
Interest expense	(27,803,343)
Net cash provided by (used in) capital and related financing activities	(86,531,921)
Cash flows from investing activities:	
Transfers from (to) restricted fund	32,010,417
Interest income received	917,041
Net cash provided by investing activities	32,927,458
Net increase (decrease) in cash	(3,156,709)
Unrestricted cash at beginning of the period	8,157,430
Unrestricted cash at end of period	5,000,721
Reconciliation of operating loss to net cash provided by operating activities:	
Operating Income (loss)	31,704,813
Adjustments to reconcile to net cash provided by operating activities:	
Depreciation expense	15,948,096
Other Expense/income	1,573,570
(Increase) decrease in assets:	
Accounts receivable	(1,508,551)
Materials and supplies inventory	752,310
Other Assets	(80,238)
Increase (decrease) in liabilities:	
Accounts payable, Contractors, Retention & Escrow Deposit	988,477
Accrued payroll	1,166,555
Customer deposits	(97,278)
Net cash provided by operating activities	50,447,754

Guam Waterworks Authority
Accounts Receivable - Government
As of September 30, 2017

SCHEDULE I

		AGING					
Customer Name	**No. of Accounts**	**Current Balance**	**31-60 days**	**61-90 days**	**91-120 days**	**Over 120 days**	**Outstanding Balance**
Guam International Airport Authority	10	45,892	28,532	44,012	29,386	150,835	298,657
Guam Power Authority	25	50,126	107,374	70,531	9,662	679	238,372
Port Authority of Guam	1	41,888	26,603	-	-	-	68,490
Guam Memorial Hospital Authority	3	38,565	131	-	-	-	38,696
University of Guam	2	6,675	-	-	-	-	6,675
Guam Housing & Urban Renewal Authority	7	1,051	176	-	-	92	1,319
Guam Housing Corporation	1	32	-	-	-	-	32
Autonomous Agencies	**49**	**184,227**	**162,816**	**114,543**	**39,048**	**151,606**	**652,240**
Department of Education	48	283,578	86,993	-	2,647	20,174	393,392
Department of Parks & Recreation	21	50,139	50,478	36,425	21,614	121,126	279,782
Department of Corrections	6	136,391	109,383	-	-	-	245,773
Department of Public Health & Social Services	5	2,347	1,517	176	1,003	103,115	108,158
Mayors' Council of Guam	47	11,846	13,952	334	7,886	-	34,018
Department of Chamorro Affairs	6	7,626	7,724	15,826	-	-	31,177
Department of Agriculture	6	5,508	5,796	-	-	-	11,304
Guam Fire Department	8	7,229	2,727	442	-	-	10,399
Department of Youth Affairs	4	5,619	249	-	-	-	5,868
Department of Public Works	9	4,593	228	-	-	-	4,821
Office of The Governor	2	3,451	-	-	-	-	3,451
Sanctuary Inc	1	3,336	-	-	-	-	3,336
Department of Military Affairs/GUARNG	1	2,333	-	-	-	-	2,333
Department of Administration	2	571	103	1,103	-	-	1,776
Department of Mental Health and Substance Abuse	1	1,339	-	-	-	-	1,339
Division of Senior Citizens, DPHSS	2	865	199	152	-	-	1,216
GHURA-Agafa Gumas Park	1	47	33	119	278	327	803
Guam Police Department	1	718	-	-	-	-	718
Guam Veterans Affairs Office	2	483	-	-	-	-	483
Department of Customs & Quarantine	1	374	-	-	-	-	374
Guam Legislature	2	116	134	-	-	-	250
Department of Agriculture-Fisheries	1	123	97	-	-	-	220
The Office of the Dededo Mayor	1	47	92	-	-	-	139
Guam Public Library	3	127	-	-	-	-	127
Merizo Mayor	1	28	-	-	-	-	28
Guam Solid Waste Authority	1	23	-	-	-	-	23
Line Agencies	**183**	**528,856**	**279,706**	**54,577**	**33,428**	**244,741**	**1,141,308**
Total as of September 30, 2017	**232**	**713,084**	**442,522**	**169,120**	**72,476**	**396,347**	**1,793,549**
Total as of September 30, 2016	**243**	**1,516,081**	**325,256**	**94,308**	**95,259**	**717,692**	**2,748,597**
% Increase / (Decrease)	**-5%**	**-53%**	**36%**	**79%**	**-24%**	**-45%**	**-35%**

GUAM WATERWORKS AUTHORITY
2010 Series Bond Project Status
As of Sept. 30, 2017

SCHEDULE J

PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	EXPENDITURES AS OF 09/30/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 09/30/17
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	$ 692,926	$ 82,076	$ 775,002	$ 124,998	$ 207,074
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	$ 890,583	$ 573,410	$ 1,463,993	$ 536,007	$ 1,109,417
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	$ 683,211	$ 170,646	$ 853,858	$ 46,142	$ 216,789
Agat/Santa Rita STP Replacement	$ 2,968,000	$ 2,218,000	$ 2,215,591	$ 2,109	$ 2,217,701	$ 300	$ 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	$ 733,872	$ 66,129	$ 800,000	$ (0)	$ 66,128
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							$ 59,011
Total Construction Fund (2010 Series Revenue Bond)	**$ 87,402,000**	**$ 87,402,000**	**$ 78,161,700**	**$ 3,664,061**	**$ 81,825,761**	**$ 4,576,239**	**$ 9,299,311**

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 Sept. 30, 2017

SCHEDULE K

PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	EXPENDITURES AS OF 09/30/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 09/30/17
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	4,680,418	$ 9,046,860	$ 2,104,140	$ 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	9,052,791	4,695,985	$ 13,748,776	$ 129,224	$ 4,825,209
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	476,682	168,631	$ 645,314	$ 134,687	$ 303,318
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	335,000	36,699	$ 371,699	$ 101,301	$ 138,000
Agat/Santa Rita STP Replacement	$ 19,000,000	$ 67,200,000	28,903,287	38,296,713	$ 67,200,000	$ 0	$ 38,296,713
Agana WWTP Interim Measures		$ 673,000	548,597	124,403	$ 673,000	$ (0)	$ 124,403
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	427,949	294,410	$ 722,359	$ 200,641	$ 495,051
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							$ 272,619
Total Construction Fund (2013 Series Revenue Bond)	**$ 139,325,000**	**$ 139,325,000**	**$ 65,373,475**	**$ 64,330,097**	**$ 129,703,572**	**$ 9,621,428**	**$ 74,499,150**

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

GUAM WATERWORKS AUTHORITY
2014 Series Refunded Bond Project Status
As of Sept. 30, 2017

SCHEDULE L

PROJECT NAME	ORIGINAL APPROVED PROJECT	ADJUSTED PROJECT COST	EXPENDITURES AS OF 09/30/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	20% PUC AS OF 09/30/17	Construction fund balance AS OF 09/30/17
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	1,249,227.16	$ 772	$ 1,250,000	$ 0	$ -	$ 773
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	$ 768,726
Interest Earned	$ 6,781,612	$ (0)				$ (0)		$ 2,555
Total Project Cost Funding	**$ 89,711,698**	**$ 89,711,698**	**88,891,990**	**$ 758,873.38**	**$ 89,711,543**	**$ 1**	**$ 13,990,813**	**$ 771,282**

GUAM WATERWORKS AUTHORITY
2016 Series Bond Project Status
As of Sept. 30, 2017

SCHEDULE M

PROJECT NAME	ORIGINAL APPROVED PROJECT COST	Adjusted Project Cost	EXPENDITURES AS OF 09/30/17	OUTSTANDING ENCUMBRANCES	TOTAL EXPENDITURES AND ENCUMBRANCES	UNOBLIGATED PROJECT COST	Construction fund balance AS OF 09/30/17
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	159,105	317,188.58	$ 476,294	$ 1,799,706	$ 2,116,895
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	30,708	282,274.77	$ 312,983	$ 36,017	$ 318,292
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	4,871,711	24,327,379.80	$ 29,199,091	$ 201,079	$ 24,528,459
Facilities Plan/Design for Umatac-Merizo WWTP	$ 527,000	$ 527,000	190,947	61,158.47	$ 252,105	$ 274,895	$ 336,053
Agat/Santa Rita STP Replacement	$ 3,000,000	$ 3,000,000	337,891	348,827.64	$ 686,719	$ 2,313,281	$ 2,662,109
Agana WWTP Interim Measures	$ 827,000	$ 827,000			$ -	$ 827,000	$ 827,000
Umatac Merizo Replacement	$ 8,000,000	$ 20,800,000	199,684	20,574,598.47	$ 20,774,282	$ 25,718	$ 20,600,316
						$ -	
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	956,458	170,541.65	$ 1,127,000	$ -	$ 170,542
Land Survey	$ 1,998,000	$ 1,998,000		1,246,376.39	$ 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		$ -					$ 376,587
		$ -					
Total Construction Fund (2016 Series Revenue Bond)	**$ 140,019,463**	**$ 140,019,463**	**$ 7,584,601**	**$ 53,335,204**	**$ 60,675,737**	**$ 79,343,726**	**$ 132,811,448**

GUAM WATERWORKS AUTHORITY
Schedule of Series 2010, 2013, 2014 Refunding and 2016 Bond Bank Accounts
As of September 30, 2017

SCHEDULE N

	9/30/2017
BANK OF GUAM	
BOG - Revenue Account	7,782,227
BOG - Operations and Maintenance Reserve	3,083,482
BOG - Operations, Maintenance, Renewal and Replacement Reserve Fund	17,423,213
BOG - Capital Improvement Fund	5,598
BOG - O & M Reserve	13,516,540
BOG - Debt Service Reserve	11,217,733
BOG - CAPEX Reserve	15,462,869
Total BOG Bank Account Balance	**68,491,662**
Series 2010 Bond:	
BOG - Construction Account	9,299,311
USB - Debt Service Fund	2,020,121
USB - Debt Service Reserve Fund	7,566,460
Total Series 2010 Bond Bank Balance	**18,885,892**
Series 2013 Bond:	
BOG - Construction Fund	74,499,150
BOG - Capitalized Interest Fund	-
USB - Debt Service Fund	2,336,754
USB - Debt Service Reserve Fund	12,031,688
Total Series 2013 Bond Bank Balance	**88,867,592**
Series 2014 Refunding Bond:	
BOG - Construction Fund	771,281
USB - Debt Service Fund	1,796,559
USB - Debt Service Reserve Fund	7,707,602
Total Series 2014 Refunding Bond Bank Balance	**10,275,442**
Series 2016 Bond:	
BOG - Construction Account	132,811,449
BOG - Capitalized Interest Fund	1,782,982
BOG - Cost of Issuance Fund	-
USB - Debt Service Fund	130
USB - Debt Service Reserve Fund	7,582,725
Total Series 2016 Bond Bank Balance	**142,177,286**

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. 01-FY2018
Relative to the Creation and Addendum of Certified, Technical and Professional (CTP) List of Positions and to Adopt CCU Resolution No. 2012-49 as an Approved Business Process for Guam Waterworks Authority

What is the project's objective and is it necessary and urgent?
The objectives are 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, we request the Board's approval of the proposed creation of positions and the addition of the previously non-CTP positions to the list of CTP positions. 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 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?
There is no cost to create and adopt the Resolution.

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

What is the funding source?
N/A

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

RESOLUTION NO. 01–FY2018

RELATIVE TO THE CREATION AND ADDENDUM OF CERTIFIED, TECHNICAL, AND PROFESSIONAL (CTP) LIST OF POSITIONS AND TO ADOPT CCU RESOLUTION NO. 2012-49 AS AN APPROVED BUSINESS PROCESS FOR GUAM WATERWORKS AUTHORITY

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

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, 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, 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 Exhibit A, Appendices A-A5). 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 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 Exhibit A, Appendices B1-B3); and

WHEREAS, GWA desires to improve business processes, optimize its assets and maximize employees' performance. GWA prefers 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 Exhibit A, Appendices C-C8). GWA also recognizes that these positions involve processes that are uncommon and unique to the utility. Thus, GWA petitions to create positions for incumbents to integrate and transition into the Strategic Pay classification methodology applicable to CTP positions (See Exhibit A, Appendices D1-D3); and

WHEREAS, modern companies operate on information 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. GWA operations are critical to preserving its business processes and the quality of life island-wide. GWA is 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 utility; 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. (Exhibit A, Appendices A-A5 & B1-B3).

2. The creation of positions delineated in Exhibit A, Appendices D1-D3, and the addition of these positions into the GWA list of CTP positions delineated in Exhibit A, Appendices C-C8. 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 utility.

3. 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 Exhibit A, Appendices E1-E16, is applicable to GWA business processes.

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

DULY AND REGULARLY ADOPTED, this 20th day of October, 2017.

Certified by:	Attested by:
_____	_____
JOSEPH T. DUENAS	**J. GEORGE BAMBA**
Chairperson	Secretary

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SECRETARY'S CERTIFICATE

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

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

AYES: _____

NAYS: _____

ABSTENTIONS: _____

ABSENT: _____

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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.

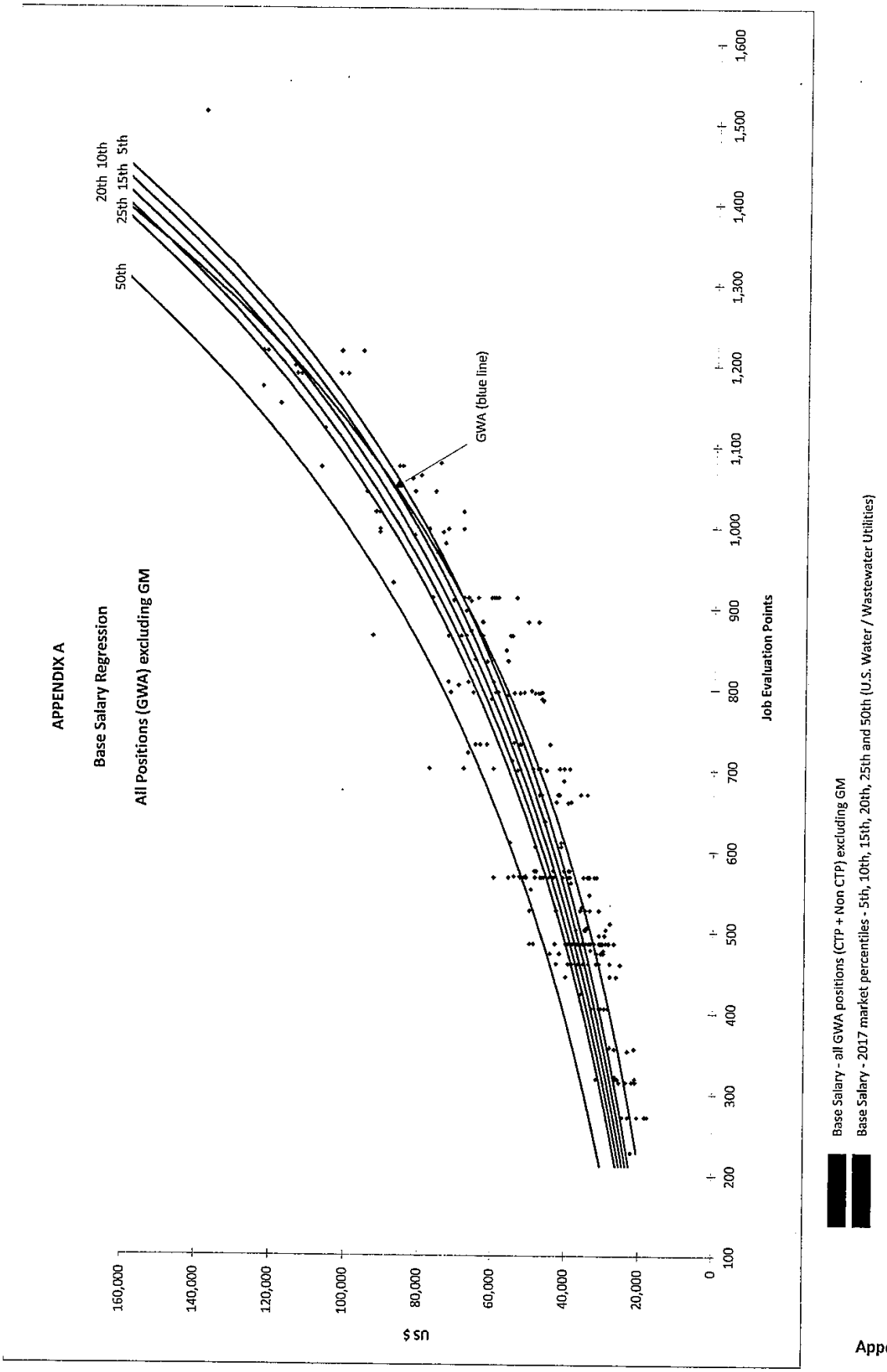
   Note : the need to distinguish between CTP and Non-CTP positions has become largely irrelevant as all positions are now deemed critical in providing the Authority's services. This perspective is clearly evident with both PAG and GIAA (excluding ARFF and Airport Police) now incorporating all positions 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
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
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%
		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	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	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	243,967	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	300,058	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

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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

CONSOLIDATED COMMISSION ON UTILITIES

RESOLUTION NO. 2012-49

RESOLUTION RELATIVE TO AMENDING THE PROMOTION/DEMOTION/TRANSFER POLICY

WHEREAS, the General Manager, Guam Power Authority petitions the Consolidated Commission on Utilities (CCU) to amend the Promotion/Demotion/Transfer Policy, and

WHEREAS, the CCU has the lawful authority under Public Law 28-159, Section 3.0.b to approve and amend a unified pay scale and implementation plan for employees in certified, technical, and professional positions; and

WHEREAS, the Guam Power Authority is a public corporation established and existing under the laws of Guam; and

WHEREAS, in 2007, the CCU adopted the recommendations of the Compensation and Benefits Study conducted by Alan Searle & Associates; and

WHEREAS, the CCU also endorsed a plan to transition GPA to the new compensation model over a five (5) year period beginning fiscal year 2008; and

WHEREAS, the transition plan also included a compensation formula used to determine new rates of pay upon an employee's promotion and/or demotion into another position; and

WHEREAS, based on the current pay policy, upon promotion, an employee's new base salary is determined by slotting the current salary into the higher pay grade closest to but not less than the current salary earned and is then awarded a further six sub-steps; and

Appendix E1

WHEREAS, the implementation of the current pay policy distorts internal equity; and

WHEREAS, when upon promotion, junior employees are slotted at the minimum range with an additional six sub-steps increase surpassing senior employees whose step placements were slotted at the minimum range at the time of a transitional movement to the next market percentile.

WHEREAS, the proposed policy change corrects this problem by making a process change to when the six sub-steps is applied.

WHEREAS, when an employee is being promoted the first step will be to identify a new base salary six sub-steps up from the employee's current base salary. If the new base salary is still below the minimum of the implementation range he/she is promoted to then they are slotted at the minimum of the new implementation range.

WHEREAS, for demotions, the process will be applied with a six sub-step decrease down the grade prior to slotting into the new lower grade.

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

1. The amendment of the Promotion/Demotion/Transfer Policy applicable to CTP positions and personnel at GPA as delineated in Appendices "D, E and F" of Exhibit 1.
2. That the Guam Waterworks Authority also review the effect of the pay policy applicable to the determination of new pay rates assigned upon a promotion/demotion/transfer of personnel in CTP positions as delineated in Appendices "D, E and F" of Exhibit 1.

Appendix E2

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

DULY AND REGULARLY ADOPTED this 24th day of July, 2012.

Certified by:

SIMON A. SANCHEZ, II
Chairperson
Consolidated Commission on Utilities

Attested by:

GLORIA B. NELSON
Secretary
Consolidated Commission on Utilities

SECRETARY'S CERTIFICATE

I, Gloria B. Nelson, Board Secretary of the Consolidated Commission on Utilities evidenced by my signature do hereby certify as follows:

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

AYES: 4
NAYS: 0
ABSTENTIONS: 0
ABSENT: 1

Appendix E3

GUAM POWER AUTHORITY
HUMAN RESOURCES DIVISION
STAFF REPORT

I. REQUEST:

The General Manager requests the Consolidated Commission on Utilities (CCU) to amend the Promotion/Demotion/Transfer Policy applicable to certified, technical, and professional (CTP) positions.

II. AUTHORITY: P.L. 28-159, Section 3.0.b.

III. BACKGROUND:

In March 2007, the CCU adopted the recommendations of the Compensation and Benefits Study conducted by Alan Searle and Associates. These recommendations included a comprehensive compensation methodology, a pay scale, an implementation plan and a list of positions distributed as List A and List B of certified, technical and professional positions. The scope of the study involved comparisons of all GPA positions to industry standards and the national average market conditions. This was necessary to retain employees and provide incentives to attract new ones. Further, the pay scale in effect prior to the adoption of the new pay scale was outdated and had not been revisited since its implementation in 1990.

In adopting the recommendations presented by Alan Searle and Associates, the CCU was prudent and endorsed a plan to transition GPA to the new compensation model over a five year period beginning in fiscal year 2008. The incremental transitions provide a more competitive market position for GPA. The initial structural adjustment was made to the 5th market percentile in 2008. In 2009, GPA targeted a second structural pay adjustment at the 15^{th} market percentile. However, based on funding availability the second structural pay adjustment was allocated at the 10^{th} market percentile. To date, most positions are on or near the 12^{th} market percentile as a result of performance pay increments.

The recommendations adopted by the CCU also included a compensation formula that is used to determine new rates of pay upon an employee's promotion and or demotion into another position. Based on the current policy, 6% is tagged on to the new base salary in the higher grade closest to but not less than the current salary earned. At face value, the formula appeared to work well. However, in its implementation there was discrepancy overall in the slotting of new rates with regard the implementation range of a position during a transitional pay adjustment placing the new rate of pay above the minimum range creating internal inequity.

Appendix E4

IV. DISCUSSION:

When moving from one market percentile to the next higher percentile, the impact in moving from a position of a lower grade and implementation pay range to a position of a higher grade and implementation pay range is significant. The result of this process is similar to a step to step movement which creates a wider gap between incumbent employees being bypassed by the newly promoted employees in the same position. It is important to note, that when moving from one market percentile to the next higher market percentile, there are incumbent employees in positions whose current salaries are below the minimum step of the implementation range. From there, their salaries will be brought up to the minimum range during the transitional and structural pay adjustment. There are also employees whose current salaries are slotted above the minimum step of the implementation range. This is where the discrepancy exists. Under the current pay policy, junior employees who are promoted are slotted above the minimum range with an additional six percent increase. Thus, exceeding current incumbents placements during a transitional movement.

The proposed amendment will provide the six percent increase from the employees current pay grade and sub-step prior to slotting into the new pay grade and sub-step of the position promoted to. This process will maintain internal equity between the positions and the gaps that exist between junior and senior employees. (See Exhibit 1 Alan Searle & Associates Report, May 2012).

V. RECOMMENDATION:

a. To approve the amendment of the Promotion/Demotion/Transfer Policy applicable to CTP positions and personnel at GPA as delineated in Appendices "D, E and F" of Exhibit 1.

b. To request that the Guam Waterworks Authority also review the effect of the pay policy applicable to the determination of new pay rates assigned upon the promotion/demotion/transfer of personnel in CTP positions as delineated in Appendices "D, E and F" of Exhibit 1.

Julie L. Quinata
Personnel Services Administrator

7/6/12
JOAQUIN C. FLORES, P.E.
General Manager, GPA

Appendix E5

GUAM POWER AUTHORITY

COMPENSATION & BENEFITS STUDY

Request to Amend

Promotion / Demotion Policy

May 2012

ALAN SEARLE & ASSOCIATES LIMITED

Management Consultants, Auckland, New Zealand

EXHIBIT "1"

Appendix E6

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GUAM POWER AUTHORITY

Request To Amend Promotion / Demotion / Transfer Policy

1.0 Background

When the compensation study for GPA and GWA was ratified a policy (Appendix A) concerning promotions, demotions and transfers was also included. However it has since been identified that under certain promotional situations employees are effectively receiving "two bites at the cake" so to speak. The certain situations referred to above are those instances where (prior to the promotion) the employee's current base salary is below the minimum of the implementation range they are being promoted to. In this situation current policy is such that the employee is initially slotted at the minimum of the implementation range he/she is being promoted to (seen as the first "bite of the cake") and is then awarded a further six sub-steps (seen as the second "bite of the cake") in order to identify their new base salary. This policy whilst attractive to the employee being promoted needs to be amended in order to ensure internal relativities and equity are maintained.

Please note that the above also applies to PAG, GIAA and GCC who also have the same policy in place with regards their compensation models.

2.0 Current Policy

Current policy (to handling promotions and demotions) is outlined in Appendix A
An example of current policy relating to promotions is outlined in Appendix B
An example of current policy relating to demotions is outlined in Appendix C

3.0 Proposed Policy

The proposed policy change corrects the problem by simply making a process change to when the six sub-steps is applied. In short, when an employee is being promoted the first step will be to identify a new base

salary six sub-steps up from the employee's current base salary (grade, step and sub-step). If this new base salary is still below the minimum of the implementation range he/she is being promoted to then they are simply slotted at the minimum of the new implementation range. If on the other hand the new base salary is above the minimum of the implementation range he/she is being promoted to then they would be slotted at the closest sub-step just on the high side.

In summary, the proposed change simply applies (as an initial step) the six sub-steps to the employee's current base salary and grade. For promotions this is a six sub-step increase up the grade or for demotions it is a six sub-step decrease down the grade. This then identifies a value that can then be compared to the implementation range of the position the employee is being promoted or demoted to.

The proposed policy (to handling promotions and demotions) is outlined in Appendix D
An example of the proposed policy relating to promotions is outlined in Appendix E
An example of the proposed policy relating to demotions is outlined in Appendix F

4.0 Impact / Handling of Proposed Policy Change

Whilst some employees at GPA have benefited from existing policy in the handling of their promotion we cannot turn around now and reduce their base salaries as the policy was correctly followed at the time the promotion was calculated. However, any advantage can be brought back to a "level playing field" when GPA / GWA make their next structural adjustment in pay and move i.e. to a higher market percentile. For information purposes, both GPA / GWA are currently around the 10^{th} - 15^{th} market percentile compared to utilities (both electric and water) on the U.S. mainland.

The "level playing field" is achieved as follows : when the next structural adjustment in calculated we identify (which is part of the normal process) a new implementation range for every position. With regards the minimum of that range an employee's current base salary is either above or below it. So therefore the salary of an employee who (by virtue of their promotion) may have exceeded a longer serving employee in the same position are now both treated the same and depending on the implementation criteria will be slotted accordingly.

5.0 Summary

Whilst current promotion policy has benefited some employees slightly the situation can be corrected. As outlined earlier, the optimum time to make that change is when GPA / GWA make their next structural adjustment in pay and move to a higher market percentile. The process is straightforward for once the new implementation ranges have been identified (at the preferred market percentile) all employees are treated the same, and as previously outlined, depending on the implementation criteria will be slotted accordingly.

APPENDIX A

1.1 Promotion

a) A pay adjustment resulting in an increase / promotion either by competition, reclassification, pay grade reassignment or temporary appointment is effectuated by identifying from the new pay grade the salary (sub-step) closest to, but not less than the salary currently being received prior to promotion plus an additional six (6) sub-steps. This identifies the new base salary.

b) A pay adjustment where the salary received prior to promotion is below the low end of the new implementation range shall be slotted at the lowest sub-step of the new implementation range plus an additional six (6) sub-steps. This identifies the new base salary.

c) The General Manager at his / her discretion, or upon the recommendation of a respective Division Manager, may grant up to three (3) additional sub-steps, based on superior performance, significant contributions made to the business unit or the Authority as a whole, or demonstration of personal enrichment and development related to and beyond the job requirement. All requests for additional sub-step placement must be justified in writing.

1.2 Demotion

a) A pay adjustment resulting in a decrease either by demotion, voluntary, reclassification, or pay grade reassignment is effectuated by identifying from the amended pay grade the salary (sub-step) closest to, but not more than the salary (sub-step) currently being received prior to demotion less an additional six (6) sub-steps. This identifies the new base salary.

b) A pay adjustment where the salary received prior to demotion, voluntary, reclassification, or pay grade reassignment is below the lowest sub-step of the new implementation range shall be slotted at the lowest sub-step of the new implementation range. This identifies the new base salary.

APPENDIX "A"

Appendix E11

Appendix B : Example - Promotions (Current Policy)

			Step 3				Step 4				Step 5				Step 6				Step 7				Step 8		
	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
Position A	33,309	33,642	33,978	34,318	34,661	35,008	35,358	35,712	36,069	36,429	36,794	37,162	37,533	37,909	38,288	38,671	39,057	39,448	39,842	40,241	40,643	41,050	41,460	41,875	42,293
Position B	37,972	38,352	38,735	39,123	39,514	39,909	40,308	40,711	41,118	41,530	41,945	42,364 (1)	42,788 (2)	43,216 (3)	43,648 (4)	44,084 (5)	44,525 (6)	44,971	45,420	45,874	46,333	46,797	47,264	47,737	48,214
Position C	43,288	43,721	44,158	44,600	45,046	45,496	45,951	46,411	46,875	47,344	47,817	48,295	48,778	49,266	49,759	50,256	50,759	51,266	51,779	52,297	52,820	53,348	53,881	54,420	54,965

Low end of implementation range

Employees current grade, step and sub-step prior to promotion i.e. Grade I, Step 8, Sub-step B ($41,875)

Step 1 : Initially move to closest sub-step on new grade (high side) i.e. Grade J, Step 5, Sub-step A ($41,945)

Step 2 : Increase by a further 6 (six) sub-steps to indentify final grade, step and sub-step i.e. Grade J, Step 6, Sub-step C ($44,525)

	Step 2				Step 3				Step 4				Step 5				Step 6				Step 7				Step 8
	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
Position A	25,125	25,376	25,630	25,886	26,145	26,407	26,671	26,937	27,207	27,479	27,754	28,031	28,312	28,595	28,881	29,169	29,461	29,756	30,053	30,354	30,657	30,964	31,274	31,586	31,902
Position B	28,643	28,929	29,218	29,510 (1)	29,806 (2)	30,104 (3)	30,405 (4)	30,709 (5)	31,016 (6)	31,326	31,639	31,956	32,275	32,598	32,924	33,253	33,586	33,922	34,261	34,603	34,949	35,299	35,652	36,008	36,368

Low end of implementation range

Employees current grade, step and sub-step prior to promotion i.e. Grade G, Step 4, Sub-step C ($27,754)

Step 1 : As employees current base salary is below minimum initially move to low end of implementation range of new grade i.e. Grade H, Step 2, Sub-step C ($29,218)

Step 2 : Increase by 6 (six) sub-steps to indentify new grade, step and sub-step i.e. Grade H, Step 4, Sub-step A ($31,016)

APPENDIX "B"
Appendix E12

Appendix C : Example - Demotions (Current Policy)

			Step 3				Step 4				Step 5				Step 6				Step 7				Step 8		
	C	D	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D (6)	A (5)	B (4)	C (3)	D (2)	A (1)	B	C
Position A	33,309	33,642	33,978	34,318	34,661	35,008	35,358	35,712	36,069	36,429	36,794	37,162	37,533	37,909	38,288	38,671	39,057	39,448	39,842	40,241	40,643	41,050	41,460	41,875	42,293
Position B	37,972	38,352	38,735	39,123	39,514	39,909	40,308	40,711	41,118	41,530	41,945	42,364	42,788	43,216	43,648	44,084	44,525	44,971	45,420	45,874	46,333	46,797	47,264	47,737	48,214
Position C	43,268	43,721	44,158	44,600	45,046	45,496	45,951	46,411	46,875	47,344	47,817	48,295	48,778	49,266	49,759	50,256	50,759	51,266	51,779	52,297	52,820	53,348	53,881	54,420	54,965

Low end of implementation range

Employees current grade, step and sub-step prior to demotion i.e. Grade J, Step 5, Sub-step A ($41,945)

Step 1 : Initially move to closest substep on lower grade (low side) i.e. Grade I, Step 8, Sub-step B ($41,875)

Step 2 : Decrease by 6 (six) sub-steps to indentify final grade, step and sub-step i.e. Grade I, Step 8, Sub-step D ($39,448)

			Step 3				Step 4				Step 5				Step 6				Step 7				Step 8		
	C	D	A	B	C	D	A	B	C (6)	D (5)	A (4)	B (3)	C (2)	D (1)	A	B	C	D	A	B	C	D	A	B	C
Position A	33,309	33,642	33,978	34,318	34,661	35,008	35,358	35,712	36,069	36,429	36,794	37,162	37,533	37,909	38,288	38,671	39,057	39,448	39,842	40,241	40,643	41,050	41,460	41,875	42,293
Position B	37,972	38,352	38,735	39,123	39,514	39,909	40,308	40,711	41,118	41,530	41,945	42,364	42,788	43,216	43,648	44,084	44,525	44,971	45,420	45,874	46,333	46,797	47,264	47,737	48,214
Position C	43,268	43,721	44,158	44,600	45,046	45,496	45,951	46,411	46,875	47,344	47,817	48,295	48,778	49,266	49,759	50,256	50,759	51,266	51,779	52,297	52,820	53,348	53,881	54,420	54,965

Low end of implementation range

Employees current grade, step and sub-step prior to demotion i.e. Grade J, Step 2, Sub-step D ($38,352)

Step 1 : Initially move to closest substep on lower grade (low side) i.e. Grade I, Step 6, Sub-step A ($38,288)

Step 2 : Decrease by 6 (six) sub-steps to indentify final grade, step and sub-step i.e. Grade I, Step 4, Sub-step C ($36,069)

Note : if six (6) sub-steps cannot be taken, take low end of implementation range as new base salary

APPENDIX "C"
Appendix E13

APPENDIX D

1.1 Promotion

A pay adjustment resulting in a promotion either by competition, reclassification, pay grade reassignment or temporary appointment is effectuated by initially increasing the employee's current base salary by six (6) sub-steps on the grade they are currently allocated. If this figure is :

a) below the minimum of the new implementation range they would be slotted at the minimum of the new implementation range. This identifies the employee's new base salary.

b) above the minimum of the new implementation range they would be slotted at the closest sub-step (just on the high side) of the new grade. This identifies the employee's new base salary.

c) The General Manager at his / her discretion, or upon the recommendation of a respective Division Manager, may grant up to three (3) additional sub-steps, based on superior performance, significant contributions made to the business unit or the Authority as a whole, or demonstration of personal enrichment and development related to and beyond the job requirement. All requests for additional sub-step placement must be justified in writing.

1.2 Demotion

A pay adjustment resulting in a decrease either by demotion, voluntary, reclassification, or pay grade reassignment is effectuated by initially decreasing the employee's current base salary by six (6) sub-steps on the grade they are currently allocated. If this figure is :

d) below the minimum of the new implementation range they would be slotted at the minimum of the new implementation range. This identifies the employee's new base salary.

e) above the minimum of the new implementation range they would be slotted at the closest sub-step (just on the low side) of the new grade. This identifies the employee's new base salary.

APPENDIX "D"

Appendix E : Example - Promotions (Proposed Policy)

SCENARIO 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
											①	②	③	④	⑤	⑥							
Position A	Grade F	25,125	25,376	25,630	25,886	26,145	26,407	26,671	26,937	27,207	27,479	27,754	28,031	28,312	28,595	28,881	29,169	29,461	29,756	30,053	30,354	30,657	30,964
Position B	Grade H	28,643	28,929	29,218	29,510	29,806	30,104	30,405	30,709	31,016	31,326	31,639	31,956	32,275	32,598	32,924	33,253	33,586	33,922	34,261	34,603	34,949	35,299

Low end of implementation ranges (both Positions A & B)

Employees current grade, step and sub-step prior to promotion i.e. Grade F, Step 4, Sub-step A ($27,207)

Step 1 : Initially move up the employees current grade by six sub-steps to identify a value i.e. Grade F, Step 5, Sub-step C ($28,881)

Step 2 : Transpose that value to the new grade that the employee is being promoted to and to the closest sub-step "just on the high side" i.e. Grade H, Step 2, Sub-step B ($28,929)

As this value is still BELOW the minimum of the new implementation range the employee would move to the minimum of the new implementation range i.e. Grade H, Step3, Substep C ($30,405) as their new base salary

SCENARIO 2.

		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
																	①	②	③	④	⑤	⑥	
Position A	Grade F	25,125	25,376	25,630	25,886	26,145	26,407	26,671	26,937	27,207	27,479	27,754	28,031	28,312	28,595	28,881	29,169	29,461	29,756	30,053	30,354	30,657	30,964
Position B	Grade H	28,643	28,929	29,218	29,510	29,806	30,104	30,405	30,709	31,016	31,326	31,639	31,956	32,275	32,598	32,924	33,253	33,586	33,922	34,261	34,603	34,949	35,299

Low end of implementation ranges (both Positions A & B)

Employees current grade, step and sub-step prior to promotion i.e. Grade F, Step 5, Sub-step C ($28,881)

Step 1 : Initially move up the employees current grade by six sub-steps to identify a value i.e. Grade F, Step 7, Sub-step A ($30,657)

Step 2 : Transpose that value to the new grade that the employee is being promoted to and to the closest sub-step "just on the high side" i.e. Grade H, Step 3, Sub-step D ($30,709)

As this value is ABOVE the minimum of the new implementation range the employee would stay at that value i.e. Grade H, Step 3, Sub-step D ($30,709) as their new base salary

APPENDIX "E"

Appendix E15

Appendix F : Example - Demotions (Proposed Policy)

SCENARIO 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
Position A	Grade F	25,125	25,376	25,630	~~25,886~~	~~26,145~~	~~26,407~~	~~26,671~~	~~26,937~~	~~27,207~~	~~27,479~~	~~27,754~~	~~28,031~~	~~28,312~~	~~28,595~~	~~28,881~~	~~29,169~~	~~29,461~~	~~29,756~~	~~30,053~~	~~30,354~~	~~30,657~~	30,964
Position B	Grade H	28,643	28,929	29,218	29,510	29,806	30,104	30,405	30,709	31,016	31,326	31,639	31,956	32,275	32,598	32,924	33,253	33,586	33,922	34,261	34,603	34,949	35,299

(6) (5) (4) (3) (2) (1)

Low end of implementation ranges (both Positions A & B)

Employees current grade, step and sub-step prior to demotion i.e. Grade H, Step 5, Sub-step B ($32,598)

Step 1 : Initially move down six sub-steps from the employees current salary to identify a value i.e. Grade H, Step 3, Sub-step D ($30,709)

Step 2 : Transpose that value to the new grade that the employee is being demoted to, and to the closest sub-step "just on the low side" i.e. Grade F, Step 7, Sub-step A ($30,657)

As this value is still ABOVE the minimum of the new implementation range management reserves the right (depending on the circumstances of the demotion) to further reduce this to the minimum.

SCENARIO 2.

		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
Position A	Grade F	25,125	~~25,376~~	~~25,630~~	~~25,886~~	~~26,145~~	~~26,407~~	~~26,671~~	~~26,937~~	~~27,207~~	~~27,479~~	~~27,754~~	~~28,031~~	~~28,312~~	~~28,595~~	~~28,881~~	29,169	29,461	29,756	30,053	30,354	30,657	30,964
Position B	Grade H	28,643	28,929	29,218	29,510	29,806	30,104	30,405	30,709	31,016	31,326	31,639	31,956	32,275	32,598	32,924	33,253	33,586	33,922	34,261	34,603	34,949	35,299

(6) (5) (4) (3) (2) (1)

Low end of implementation ranges (both Positions A & B)

Employees current grade, step and sub-step prior to demotion i.e. Grade H, Step 3, Sub-step D ($30,709)

Step 1 : Initially move down six sub-steps from the employees current salary to identify a value i.e. Grade H, Step 2, Sub-step B ($28,929). Please note (that with this scenario) this action goes below the minimum of the current grade.

Step 2 : Transpose that value to the new grade that the employee is being demoted to, and to the closest sub-step "just on the low side" i.e. Grade F, Step 5, Sub-step C ($28,881)

As this value is still ABOVE the minimum of the new implementation range management reserves the right (depending on the circumstances of the demotion) to further reduce this to the minimum.

APPENDIX "F"
Appendix E16

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. 02-FY2018 ~~(Formerly Resolution No. 53-FY2017)~~

Relative to the Adoption of the 2017 Market Update and the Approval to Migrate to the 10th Market Percentile for the Guam waterworks Authority

What is the project's objective and is it necessary and urgent?
To adopt recommendations of utility market review and update for GWA's pay scale. In order to meet these objectives, ~~.~~ 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 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

RESOLUTION NO. 02–FY2018

RELATIVE TO THE ADOPTION OF 2017 MARKET UPDATE AND THE APPROVAL TO MIGRATE TO THE 10TH MARKET PERCENTILE FOR THE GUAM WATERWORKS AUTHORITY

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

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, 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, 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. (Appendices A-

A5). The market review determined that GWA positions are below the 5th market percentile based on 2017 Market Data. In maintaining this position, GWA recommends implementation of incremental structural pay adjustments to the 10th market percentile on January 1, 2018; and

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

1. The General Manager at GWA to implement structural pay adjustments, to the 10th market percentile on January 1, 2018.

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

DULY AND REGULARLY ADOPTED, this 20th day of October, 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: _____

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.

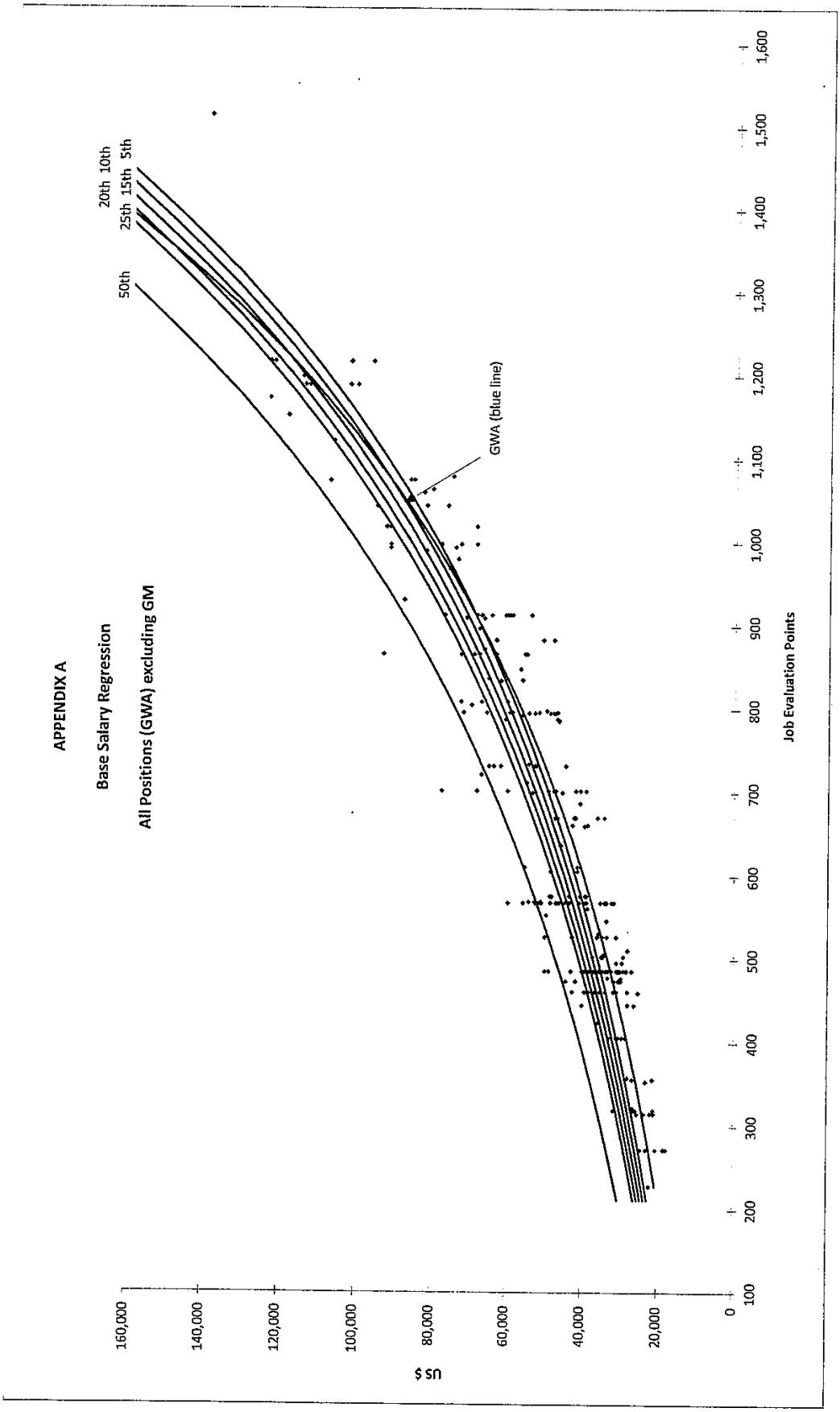
   Note : the need to distinguish between CTP and Non-CTP positions has become largely irrelevant as all positions are now deemed critical in providing the Authority's services. This perspective is clearly evident with both PAG and GIAA (excluding ARFF and Airport Police) now incorporating all positions 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
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
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%
		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%
	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	39,010	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	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	128,789	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	189,075	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	215,548	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

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

CONSOLIDATED COMMISSION ON UTILITIES

RESOLUTION NO. 2012-49

RESOLUTION RELATIVE TO AMENDING THE PROMOTION/DEMOTION/TRANSFER POLICY

WHEREAS, the General Manager, Guam Power Authority petitions the Consolidated Commission on Utilities (CCU) to amend the Promotion/Demotion/Transfer Policy, and

WHEREAS, the CCU has the lawful authority under Public Law 28-159, Section 3.0.b to approve and amend a unified pay scale and implementation plan for employees in certified, technical, and professional positions; and

WHEREAS, the Guam Power Authority is a public corporation established and existing under the laws of Guam; and

WHEREAS, in 2007, the CCU adopted the recommendations of the Compensation and Benefits Study conducted by Alan Searle & Associates; and

WHEREAS, the CCU also endorsed a plan to transition GPA to the new compensation model over a five (5) year period beginning fiscal year 2008; and

WHEREAS, the transition plan also included a compensation formula used to determine new rates of pay upon an employee's promotion and/or demotion into another position; and

WHEREAS, based on the current pay policy, upon promotion, an employee's new base salary is determined by slotting the current salary into the higher pay grade closest to but not less than the current salary earned and is then awarded a further six sub-steps; and

Appendix E1

WHEREAS, the implementation of the current pay policy distorts internal equity; and

WHEREAS, when upon promotion, junior employees are slotted at the minimum range with an additional six sub-steps increase surpassing senior employees whose step placements were slotted at the minimum range at the time of a transitional movement to the next market percentile.

WHEREAS, the proposed policy change corrects this problem by making a process change to when the six sub-steps is applied.

WHEREAS, when an employee is being promoted the first step will be to identify a new base salary six sub-steps up from the employee's current base salary. If the new base salary is still below the minimum of the implementation range he/she is promoted to then they are slotted at the minimum of the new implementation range.

WHEREAS, for demotions, the process will be applied with a six sub-step decrease down the grade prior to slotting into the new lower grade.

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

1. The amendment of the Promotion/Demotion/Transfer Policy applicable to CTP positions and personnel at GPA as delineated in Appendices "D, E and F" of Exhibit 1.
2. That the Guam Waterworks Authority also review the effect of the pay policy applicable to the determination of new pay rates assigned upon a promotion/demotion/transfer of personnel in CTP positions as delineated in Appendices "D, E and F" of Exhibit 1.

Appendix E2

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

DULY AND REGULARLY ADOPTED this 24th day of July, 2012.

Certified by:

SIMON A. SANCHEZ, II
Chairperson
Consolidated Commission on Utilities

Attested by:

GLORIA B. NELSON
Secretary
Consolidated Commission on Utilities

SECRETARY'S CERTIFICATE

I, Gloria B. Nelson, Board Secretary of the Consolidated Commission on Utilities evidenced by my signature do hereby certify as follows:

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

AYES: 4
NAYS: 0
ABSTENTIONS: 0
ABSENT: 1

Appendix E3

GUAM POWER AUTHORITY
HUMAN RESOURCES DIVISION
STAFF REPORT

I. REQUEST:

The General Manager requests the Consolidated Commission on Utilities (CCU) to amend the Promotion/Demotion/Transfer Policy applicable to certified, technical, and professional (CTP) positions.

II. AUTHORITY: P.L. 28-159, Section 3.0.b.

III. BACKGROUND:

In March 2007, the CCU adopted the recommendations of the Compensation and Benefits Study conducted by Alan Searle and Associates. These recommendations included a comprehensive compensation methodology, a pay scale, an implementation plan and a list of positions distributed as List A and List B of certified, technical and professional positions. The scope of the study involved comparisons of all GPA positions to industry standards and the national average market conditions. This was necessary to retain employees and provide incentives to attract new ones. Further, the pay scale in effect prior to the adoption of the new pay scale was outdated and had not been revisited since its implementation in 1990.

In adopting the recommendations presented by Alan Searle and Associates, the CCU was prudent and endorsed a plan to transition GPA to the new compensation model over a five year period beginning in fiscal year 2008. The incremental transitions provide a more competitive market position for GPA. The initial structural adjustment was made to the 5th market percentile in 2008. In 2009, GPA targeted a second structural pay adjustment at the 15^{th} market percentile. However, based on funding availability the second structural pay adjustment was allocated at the 10^{th} market percentile. To date, most positions are on or near the 12^{th} market percentile as a result of performance pay increments.

The recommendations adopted by the CCU also included a compensation formula that is used to determine new rates of pay upon an employee's promotion and or demotion into another position. Based on the current policy, 6% is tagged on to the new base salary in the higher grade closest to but not less than the current salary earned. At face value, the formula appeared to work well. However, in its implementation there was discrepancy overall in the slotting of new rates with regard the implementation range of a position during a transitional pay adjustment placing the new rate of pay above the minimum range creating internal inequity.

Appendix E4

IV. DISCUSSION:

When moving from one market percentile to the next higher percentile, the impact in moving from a position of a lower grade and implementation pay range to a position of a higher grade and implementation pay range is significant. The result of this process is similar to a step to step movement which creates a wider gap between incumbent employees being bypassed by the newly promoted employees in the same position. It is important to note, that when moving from one market percentile to the next higher market percentile, there are incumbent employees in positions whose current salaries are below the minimum step of the implementation range. From there, their salaries will be brought up to the minimum range during the transitional and structural pay adjustment. There are also employees whose current salaries are slotted above the minimum step of the implementation range. This is where the discrepancy exists. Under the current pay policy, junior employees who are promoted are slotted above the minimum range with an additional six percent increase. Thus, exceeding current incumbents placements during a transitional movement.

The proposed amendment will provide the six percent increase from the employees current pay grade and sub-step prior to slotting into the new pay grade and sub-step of the position promoted to. This process will maintain internal equity between the positions and the gaps that exist between junior and senior employees. (See Exhibit 1 Alan Searle & Associates Report, May 2012).

V. RECOMMENDATION:

a. To approve the amendment of the Promotion/Demotion/Transfer Policy applicable to CTP positions and personnel at GPA as delineated in Appendices "D, E and F" of Exhibit 1.

b. To request that the Guam Waterworks Authority also review the effect of the pay policy applicable to the determination of new pay rates assigned upon the promotion/demotion/transfer of personnel in CTP positions as delineated in Appendices "D, E and F" of Exhibit 1.

Julie L. Quinata
Personnel Services Administrator

7/6/17
JOAQUIN C. FLORES, P.E.
General Manager, GPA

Appendix E5

GUAM POWER AUTHORITY

COMPENSATION & BENEFITS STUDY

Request to Amend

Promotion / Demotion Policy

May 2012

ALAN SEARLE & ASSOCIATES LIMITED

Management Consultants, Auckland, New Zealand

EXHIBIT "1"

Appendix E6

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GUAM POWER AUTHORITY

Request To Amend Promotion / Demotion / Transfer Policy

1.0 Background

When the compensation study for GPA and GWA was ratified a policy (Appendix A) concerning promotions, demotions and transfers was also included. However it has since been identified that under certain promotional situations employees are effectively receiving "two bites at the cake" so to speak. The certain situations referred to above are those instances where (prior to the promotion) the employee's current base salary is below the minimum of the implementation range they are being promoted to. In this situation current policy is such that the employee is initially slotted at the minimum of the implementation range he/she is being promoted to (seen as the first "bite of the cake") and is then awarded a further six sub-steps (seen as the second "bite of the cake") in order to identify their new base salary. This policy whilst attractive to the employee being promoted needs to be amended in order to ensure internal relativities and equity are maintained.

Please note that the above also applies to PAG, GIAA and GCC who also have the same policy in place with regards their compensation models.

2.0 Current Policy

Current policy (to handling promotions and demotions) is outlined in Appendix A
An example of current policy relating to promotions is outlined in Appendix B
An example of current policy relating to demotions is outlined in Appendix C

3.0 Proposed Policy

The proposed policy change corrects the problem by simply making a process change to when the six sub-steps is applied. In short, when an employee is being promoted the first step will be to identify a new base

salary six sub-steps up from the employee's current base salary (grade, step and sub-step). If this new base salary is still below the minimum of the implementation range he/she is being promoted to then they are simply slotted at the minimum of the new implementation range. If on the other hand the new base salary is above the minimum of the implementation range he/she is being promoted to then they would be slotted at the closest sub-step just on the high side.

In summary, the proposed change simply applies (as an initial step) the six sub-steps to the employee's current base salary and grade. For promotions this is a six sub-step increase up the grade or for demotions it is a six sub-step decrease down the grade. This then identifies a value that can then be compared to the implementation range of the position the employee is being promoted or demoted to.

The proposed policy (to handling promotions and demotions) is outlined in Appendix D
An example of the proposed policy relating to promotions is outlined in Appendix E
An example of the proposed policy relating to demotions is outlined in Appendix F

4.0 Impact / Handling of Proposed Policy Change

Whilst some employees at GPA have benefited from existing policy in the handling of their promotion we cannot turn around now and reduce their base salaries as the policy was correctly followed at the time the promotion was calculated. However, any advantage can be brought back to a "level playing field" when GPA / GWA make their next structural adjustment in pay and move i.e. to a higher market percentile. For information purposes, both GPA / GWA are currently around the 10^{th} - 15^{th} market percentile compared to utilities (both electric and water) on the U.S. mainland.

The "level playing field" is achieved as follows : when the next structural adjustment in calculated we identify (which is part of the normal process) a new implementation range for every position. With regards the minimum of that range an employee's current base salary is either above or below it. So therefore the salary of an employee who (by virtue of their promotion) may have exceeded a longer serving employee in the same position are now both treated the same and depending on the implementation criteria will be slotted accordingly.

5.0 Summary

Whilst current promotion policy has benefited some employees slightly the situation can be corrected. As outlined earlier, the optimum time to make that change is when GPA / GWA make their next structural adjustment in pay and move to a higher market percentile. The process is straightforward for once the new implementation ranges have been identified (at the preferred market percentile) all employees are treated the same, and as previously outlined, depending on the implementation criteria will be slotted accordingly.

APPENDIX A

1.1 Promotion

a) A pay adjustment resulting in an increase / promotion either by competition, reclassification, pay grade reassignment or temporary appointment is effectuated by identifying from the new pay grade the salary (sub-step) closest to, but not less than the salary currently being received prior to promotion plus an additional six (6) sub-steps. This identifies the new base salary.

b) A pay adjustment where the salary received prior to promotion is below the low end of the new implementation range shall be slotted at the lowest sub-step of the new implementation range plus an additional six (6) sub-steps. This identifies the new base salary.

c) The General Manager at his / her discretion, or upon the recommendation of a respective Division Manager, may grant up to three (3) additional sub-steps, based on superior performance, significant contributions made to the business unit or the Authority as a whole, or demonstration of personal enrichment and development related to and beyond the job requirement. All requests for additional sub-step placement must be justified in writing.

1.2 Demotion

a) A pay adjustment resulting in a decrease either by demotion, voluntary, reclassification, or pay grade reassignment is effectuated by identifying from the amended pay grade the salary (sub-step) closest to, but not more than the salary (sub-step) currently being received prior to demotion less an additional six (6) sub-steps. This identifies the new base salary.

b) A pay adjustment where the salary received prior to demotion, voluntary, reclassification, or pay grade reassignment is below the lowest sub-step of the new implementation range shall be slotted at the lowest sub-step of the new implementation range. This identifies the new base salary.

APPENDIX "A"

Appendix E11

Appendix B : Example - Promotions (Current Policy)

			Step 3				Step 4				Step 5				Step 6				Step 7				Step 8		
	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
Position A	33,309	33,642	33,978	34,318	34,661	35,008	35,358	35,712	36,069	36,429	36,794	37,162	37,533	37,909	38,288	38,671	39,057	39,448	39,842	40,241	40,643	41,050	41,460	41,875	42,293
Position B	37,972	38,352	38,735	39,123	39,514	39,909	40,308	40,711	41,118	41,530	41,945	42,364 (1)	42,788 (2)	43,216 (3)	43,648 (4)	44,084 (5)	44,525 (6)	44,971	45,420	45,874	46,333	46,797	47,264	47,737	48,214
Position C	43,288	43,721	44,158	44,600	45,046	45,496	45,951	46,411	46,875	47,344	47,817	48,295	48,778	49,266	49,759	50,256	50,759	51,266	51,779	52,297	52,820	53,348	53,881	54,420	54,965

Low end of implementation range

Employees current grade, step and sub-step prior to promotion i.e. Grade I, Step 8, Sub-step B ($41,875)

Step 1 : Initially move to closest sub-step on new grade (high side) i.e. Grade J, Step 5, Sub-step A ($41,945)

Step 2 : Increase by a further 6 (six) sub-steps to indentify final grade, step and sub-step i.e. Grade J, Step 6, Sub-step C ($44,525)

	Step 2				Step 3				Step 4				Step 5				Step 6				Step 7				Step 8
	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
Position A	25,125	25,376	25,630	25,886	26,145	26,407	26,671	26,937	27,207	27,479	27,754	28,031	28,312	28,595	28,881	29,169	29,461	29,756	30,053	30,354	30,657	30,964	31,274	31,586	31,902
Position B	28,643	28,929	29,218	29,510 (1)	29,806 (2)	30,104 (3)	30,405 (4)	30,709 (5)	31,016 (6)	31,326	31,639	31,956	32,275	32,598	32,924	33,253	33,586	33,922	34,261	34,603	34,949	35,299	35,652	36,008	36,368

Low end of implementation range

Employees current grade, step and sub-step prior to promotion i.e. Grade G, Step 4, Sub-step C ($27,754)

Step 1 : As employees current base salary is below minimum initially move to low end of implementation range of new grade i.e. Grade H, Step 2, Sub-step C ($29,218)

Step 2 : Increase by 6 (six) sub-steps to indentify new grade, step and sub-step i.e. Grade H, Step 4, Sub-step A ($31,016)

APPENDIX "B"

Appendix E12

Appendix C : Example - Demotions (Current Policy)

			Step 3				Step 4				Step 5				Step 6				Step 7				Step 8		
	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
																		(6)	(5)	(4)	(3)	(2)	(1)		
Position A	33,309	33,642	33,978	34,318	34,661	35,008	35,358	35,712	36,069	36,429	36,794	37,162	37,533	37,909	38,288	38,671	39,057	39,448	39,842	40,241	40,643	41,050	41,460	41,875	42,293
Position B	37,972	38,352	38,735	39,123	39,514	39,909	40,308	40,711	41,118	41,530	41,945	42,364	42,788	43,216	43,648	44,084	44,525	44,971	45,420	45,874	46,333	46,797	47,264	47,737	48,214
Position C	43,268	43,721	44,158	44,600	45,046	45,496	45,951	46,411	46,875	47,344	47,817	48,295	48,778	49,266	49,759	50,256	50,759	51,266	51,779	52,297	52,820	53,348	53,881	54,420	54,965

Low end of implementation range

Employees current grade, step and sub-step prior to demotion i.e. Grade J, Step 5, Sub-step A ($41,945)

Step 1 : Initially move to closest substep on lower grade (low side) i.e. Grade I, Step 8, Sub-step B ($41,875)

Step 2 : Decrease by 6 (six) sub-steps to indentify final grade, step and sub-step i.e. Grade I, Step 8, Sub-step D ($39,448)

			Step 3				Step 4				Step 5				Step 6				Step 7				Step 8		
	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
									(6)	(5)	(4)	(3)	(2)	(1)											
Position A	33,309	33,642	33,978	34,318	34,661	35,008	35,358	35,712	36,069	36,429	36,794	37,162	37,533	37,909	38,288	38,671	39,057	39,448	39,842	40,241	40,643	41,050	41,460	41,875	42,293
Position B	37,972	38,352	38,735	39,123	39,514	39,909	40,308	40,711	41,118	41,530	41,945	42,364	42,788	43,216	43,648	44,084	44,525	44,971	45,420	45,874	46,333	46,797	47,264	47,737	48,214
Position C	43,268	43,721	44,158	44,600	45,046	45,496	45,951	46,411	46,875	47,344	47,817	48,295	48,778	49,266	49,759	50,256	50,759	51,266	51,779	52,297	52,820	53,348	53,881	54,420	54,965

Low end of implementation range

Employees current grade, step and sub-step prior to demotion i.e. Grade J, Step 2, Sub-step D ($38,352)

Step 1 : Initially move to closest substep on lower grade (low side) i.e. Grade I, Step 6, Sub-step A ($38,288)

Step 2 : Decrease by 6 (six) sub-steps to indentify final grade, step and sub-step i.e. Grade I, Step 4, Sub-step C ($36,069)

Note : if six (6) sub-steps cannot be taken, take low end of implementation range as new base salary

APPENDIX "C"
Appendix E13

APPENDIX D

1.1 Promotion

A pay adjustment resulting in a promotion either by competition, reclassification, pay grade reassignment or temporary appointment is effectuated by initially increasing the employee's current base salary by six (6) sub-steps on the grade they are currently allocated. If this figure is :

a) below the minimum of the new implementation range they would be slotted at the minimum of the new implementation range. This identifies the employee's new base salary.

b) above the minimum of the new implementation range they would be slotted at the closest sub-step (just on the high side) of the new grade. This identifies the employee's new base salary.

c) The General Manager at his / her discretion, or upon the recommendation of a respective Division Manager, may grant up to three (3) additional sub-steps, based on superior performance, significant contributions made to the business unit or the Authority as a whole, or demonstration of personal enrichment and development related to and beyond the job requirement. All requests for additional sub-step placement must be justified in writing.

1.2 Demotion

A pay adjustment resulting in a decrease either by demotion, voluntary, reclassification, or pay grade reassignment is effectuated by initially decreasing the employee's current base salary by six (6) sub-steps on the grade they are currently allocated. If this figure is :

d) below the minimum of the new implementation range they would be slotted at the minimum of the new implementation range. This identifies the employee's new base salary.

e) above the minimum of the new implementation range they would be slotted at the closest sub-step (just on the low side) of the new grade. This identifies the employee's new base salary.

APPENDIX "D"

Appendix E : Example - Promotions (Proposed Policy)

SCENARIO 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
											①	②	③	④	⑤	⑥							
Position A	Grade F	25,125	25,376	25,630	25,886	26,145	26,407	26,671	26,937	27,207	27,479	27,754	28,031	28,312	28,595	28,881	29,169	29,461	29,756	30,053	30,354	30,657	30,964
Position B	Grade H	28,643	28,929	29,218	29,510	29,806	30,104	30,405	30,709	31,016	31,326	31,639	31,956	32,275	32,598	32,924	33,253	33,586	33,922	34,261	34,603	34,949	35,299

Low end of implementation ranges (both Positions A & B)

Employees current grade, step and sub-step prior to promotion i.e. Grade F, Step 4, Sub-step A ($27,207)

Step 1 : Initially move up the employees current grade by six sub-steps to identify a value i.e. Grade F, Step 5, Sub-step C ($28,881)

Step 2 : Transpose that value to the new grade that the employee is being promoted to and to the closest sub-step "just on the high side" i.e. Grade H, Step 2, Sub-step B ($28,929)

As this value is still BELOW the minimum of the new implementation range the employee would move to the minimum of the new implementation range i.e. Grade H, Step3, Substep C ($30,405) as their new base salary

SCENARIO 2.

		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
																	①	②	③	④	⑤	⑥	
Position A	Grade F	25,125	25,376	25,630	25,886	26,145	26,407	26,671	26,937	27,207	27,479	27,754	28,031	28,312	28,595	28,881	29,169	29,461	29,756	30,053	30,354	30,657	30,964
Position B	Grade H	28,643	28,929	29,218	29,510	29,806	30,104	30,405	30,709	31,016	31,326	31,639	31,956	32,275	32,598	32,924	33,253	33,586	33,922	34,261	34,603	34,949	35,299

Low end of implementation ranges (both Positions A & B)

Employees current grade, step and sub-step prior to promotion i.e. Grade F, Step 5, Sub-step C ($28,881)

Step 1 : Initially move up the employees current grade by six sub-steps to identify a value i.e. Grade F, Step 7, Sub-step A ($30,657)

Step 2 : Transpose that value to the new grade that the employee is being promoted to and to the closest sub-step "just on the high side" i.e. Grade H, Step 3, Sub-step D ($30,709)

As this value is ABOVE the minimum of the new implementation range the employee would stay at that value i.e. Grade H, Step 3, Sub-step D ($30,709) as their new base salary

APPENDIX "E"

Appendix E15

Appendix F : Example - Demotions (Proposed Policy)

SCENARIO 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
Position A	Grade F	25,125	25,376	25,630	~~25,886~~	~~26,145~~	~~26,407~~	~~26,671~~	~~26,937~~	~~27,207~~	~~27,479~~	~~27,754~~	~~28,031~~	~~28,312~~	~~28,595~~	~~28,881~~	~~29,169~~	~~29,461~~	~~29,756~~	~~30,053~~	~~30,354~~	~~30,657~~	30,964
Position B	Grade H	28,643	28,929	29,218	29,510	29,806	30,104	30,405	30,709	31,016	31,326	31,639	31,956	32,275	32,598	32,924	33,253	33,586	33,922	34,261	34,603	34,949	35,299

(6) (5) (4) (3) (2) (1)

Low end of implementation ranges (both Positions A & B)

Employees current grade, step and sub-step prior to demotion i.e. Grade H, Step 5, Sub-step B ($32,598)

Step 1 : Initially move down six sub-steps from the employees current salary to identify a value i.e. Grade H, Step 3, Sub-step D ($30,709)

Step 2 : Transpose that value to the new grade that the employee is being demoted to, and to the closest sub-step "just on the low side" i.e. Grade F, Step 7, Sub-step A ($30,657)

As this value is still ABOVE the minimum of the new implementation range management reserves the right (depending on the circumstances of the demotion) to further reduce this to the minimum.

SCENARIO 2.

		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
Position A	Grade F	25,125	~~25,376~~	~~25,630~~	~~25,886~~	~~26,145~~	~~26,407~~	~~26,671~~	~~26,937~~	~~27,207~~	~~27,479~~	~~27,754~~	~~28,031~~	~~28,312~~	~~28,595~~	~~28,881~~	29,169	29,461	29,756	30,053	30,354	30,657	30,964
Position B	Grade H	28,643	28,929	29,218	29,510	29,806	30,104	30,405	30,709	31,016	31,326	31,639	31,956	32,275	32,598	32,924	33,253	33,586	33,922	34,261	34,603	34,949	35,299

(6) (5) (4) (3) (2) (1)

Low end of implementation ranges (both Positions A & B)

Employees current grade, step and sub-step prior to demotion i.e. Grade H, Step 3, Sub-step D ($30,709)

Step 1 : Initially move down six sub-steps from the employees current salary to identify a value i.e. Grade H, Step 2, Sub-step B ($28,929). Please note (that with this scenario) this action goes below the minimum of the current grade.

Step 2 : Transpose that value to the new grade that the employee is being demoted to, and to the closest sub-step "just on the low side" i.e. Grade F, Step 5, Sub-step C ($28,881)

As this value is still ABOVE the minimum of the new implementation range management reserves the right (depending on the circumstances of the demotion) to further reduce this to the minimum.

APPENDIX "F"
Appendix E16

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. 03- FY2018
Relative to Approving the Construction Management Contract for Tumon No. 2, Hyundai, and Chaot No. 2 Tank and System Upgrades

What is the project's objective and is it necessary and urgent?
The project is part of the 2011 Court Order Paragraph 29 – Storage Tank/Reservoir Repair, Replacement, and Relocation Program. As a Court Order project, it is necessary and urgent to work towards meeting the Court Order deadlines. The project's objective is to provide construction management services for the construction of the Tumon No. 2, Hyundai, and Chaot No. 2 tank project. The construction management contract includes Tumon No. 2 tank with offsite upgrades, Hyundai tank, and Chaot off-site upgrades.

Where is the location?
Tumon No. 2: The tank is located on Marine Corp. Drive adjacent to the Nissan Dealership. Offsite upgrades will include PRVs on Pale San Vitores Road and Marine Corp Drive.
Hyundai: The tank is located in Barrigada Heights off South Sabana Drive.
Chaot Offsite: Work is located on Dero Road, A-Series wells, and the Chaot/Agana Height tank sites.

How much will it cost?
The fee proposal is for One Million Nine Hundred Fifty Four Thousand Eighty Nine Dollars ($1,954,089.00). Scope of work includes Tumon No. 2 tank with offsite work, Hyundai tank, and Chaot offsite work. With a ten percent (10%) contingency included of One Hundred Ninety Five Thousand Four Hundred Eight Dollars and Ninety Cents ($195,408.90), to bring the total authorized funding amount to Two Million One Hundred Forty Nine Thousand Four Hundred Ninety Seven Dollars and Ninety Cents ($2,149,497.90) is $2,149,497.90.

When will it be completed?
CM services is for 16 months. The start date is dependent on the construction contract.

What is the funding source?
The funding shall be from PW 09-11: Water System Reservoirs 2005 Improvements, PW 12-04: Agana Heights and Chaot Tank Construction, and PW 12-06: Tank Replacement Piti and Hyundai Tanks.

The RFP/BID responses (if applicable):
- RFP-02-ENG-2017
- 22 firms RFP picked up
- 7 firms submitted
- TG Engineers recommended for award

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

GWA RESOLUTION NO. 03– FY2018

RELATIVE TO APPROVING THE CONSTRUCTION MANAGEMENT CONTRACT FOR TUMON NO. 2, HYUNDAI, AND CHAOT NO. 2 TANK AND SYSTEM UPGRADES

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

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

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

WHEREAS, the design of Tumon No. 2, Hyundai, and Chaot No. 2 Tank designs have been completed and are out for bid (IFB-09-ENG-2017); and

WHEREAS, GWA has advertised the Request For Proposals (RFP-02-ENG-2017) soliciting statement of qualifications from experienced and qualified engineering firms to provide construction management services for the Tumon No. 2, Hyundai, and Chaot No. 2 Tank and System Upgrades project; and

WHEREAS, RFP packages were picked up by 22 interested parties, from which GWA received proposal submittals from 7 firms before the RFP submittal deadline; and

WHEREAS, the GWA A-E Selection committee reviewed and evaluated the 7 proposals (See Exhibit A – Score Summary) and generated a short list of the top 3 firms with a recommendation to award a contract to the firm TG Engineers (See Exhibit B – GM's Determination); and

WHEREAS, TG Engineers and GWA negotiated the price for the construction management services for the Base Bid Construction (Tumon No. 2 tank/offsite, Hyundai tank, and Chaot No. 2 offsite work) to be provided in the total amount of One Million Nine Hundred Fifty Four Thousand Eighty Nine Dollars ($1,954,089.00) (See Exhibit C – Scope of Work and Fees); and

WHEREAS, GWA management seeks approval of the fee proposal amount of One Million Nine Hundred Fifty Four Thousand Eighty Nine Dollars ($1,954,089.00), along with a ten percent (10%) contingency of One Hundred Ninety Five Thousand Four Hundred Eight Dollars and Ninety Cents ($195,408.90), to bring the total authorized funding amount to a maximum of Two Million One Hundred Forty Nine Thousand Four Hundred Ninety Seven Dollars and Ninety Cents ($2,149,497.90); and

WHEREAS, funding for this project will be from the Bond Funds under the line items "PW 09-11 Water System Reservoirs 2005 Improvements", "PW 12-04 Agana Heights and Chaot Tank Construction", and "PW 12-06 Tank Replacement Piti and Hyundai Tanks"; and

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

1. The recitals set forth above hereby constitute the findings of the CCU.
2. The CCU finds that the terms of the fee proposal submitted by TG Engineers are fair and reasonable.
3. The CCU hereby authorizes the management to accept the fee proposal from TG Engineers, which is also incorporated into this Resolution in its entirety.

4. The CCU hereby further authorizes the management of GWA to enter into a contract with TG Engineers, in the amount of One Million Nine Hundred Fifty Four Thousand Eighty Nine Dollars ($1,954,089.00) (Exhibit C).
5. The CCU hereby further approves the total funding amount for this project of One Million Nine Hundred Fifty Four Thousand Eighty Nine Dollars ($1,954,089.00), along with a ten percent (10%) contingency of One Hundred Ninety Five Thousand Four Hundred Eight Dollars and Ninety Cents ($195,408.90), to bring the total authorized funding amount to Two Million One Hundred Forty Nine Thousand Four Hundred Ninety Seven Dollars and Ninety Cents ($2,149,497.90).
6. Funding source shall be the following:
    - PW 09-11: Water System Reservoirs 2005 Improvements
    - PW 12-04: Agana Heights and Chaot Tank Construction
    - PW 12-06: Tank Replacement Piti and Hyundai Tanks

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

DULY AND REGULARLY ADOPTED, this 20th day of October 2017.

Certified by:

_____
JOSEPH T. DUENAS
Chairperson

Attested by:

_____
J. GEORGE BAMBA
Secretary

//

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SECRETARY'S CERTIFICATE

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

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

AYES: _____

NAYS: _____

ABSTENTIONS: _____

ABSENT: _____

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EXHIBIT "A"

GUAM WATERWORKS AUTHORITY
Gloria B. Nelson Public Service Building • 688 Route 15 • Mangilao, Guam 96913

April 4, 2017

To: Thomas F. Cruz, P.E., Chief Engineer

From: Gloria P. Bensan
Chairperson, Consultant Selection Board

Subject: RFP-02-ENG-2017
Construction Management Services for the Central Guam Reservoirs (Tumon No. 2, Hyundai, and Chaot No. 2) Tank and System Upgrades
GWA Project No. W14-006-BND

The following information is intended to document the evaluation process undertaken for the referenced solicitation.

EVALUATION COMMITTEE MEMBERS	
Name	**Title**
Brett Railey, P.E.	CIP Water Engineer Supervisor
Garrett Yeoh	Senior Engineer
Marc Lopez	Associate Engineer
Vincent Pangelinan	Operations Manager

Consultant	Evaluation Score				Total	Rank
1. EMPSCO Engineering Consultants	60	74	65	73	272	6
2. SSFM	79	88	86	84	337	2
3. E.M. Chen & Associates, Inc.	65	74	60	69	268	7
4. TG Engineers, PC	80	95	92	88	355	1
5. LYON	58	76	77	80	291	4
6. AmOrient	61	75	72	77	285	5
7. Duenas, Camacho & Associates	75	78	76	84	313	3

Scores were evaluated based on sum of the individual scores. The recommendation of the evaluation committee is shown in the ranking above.

Please review and approve at your earliest convenience so that we may proceed with the notification letters.

EXHIBIT "B"

GUAM WATERWORKS AUTHORITY
"Better Water. Better Lives."
Gloria B. Nelson Public Service Building
688 Route 15, Mangilao, Guam 96913

MEMORANDUM

To: Miguel C. Bordallo, P.E., General Manager

From: Thomas F. Cruz, P.E., Chief Engineer

Subject: RFP-02-ENG-2017
Construction Management Services for the Central Guam Reservoirs (Tumon No. 2, Hyundai, and Chaot No. 2) Tank and System Upgrades
GWA Project No. W14-006-BND

Date: April 4, 2017

The Selection Committee has completed all necessary actions for selecting the most qualified consultant for the referenced solicitation. All proposals were reviewed and scored according to the conditions established in the solicitation. The evaluation summary sheet is attached for your information.

The committee recommends the following top three (3) firms in order of preference for the project:

1. TG Engineers, PC
2. Duenas, Camacho & Associates
3. SSFM

Concurred:

VINCENT E. GUERRERO
Supply Management Administrator

4/5/17
Date

GENERAL MANAGER'S DETERMINATION

Consultant Firm Selected:

TG ENGINEERS

Remarks:

MIGUEL C. BORDALLO, P.E.
General Manager

4.10.17
Date

TFC/gb

EXHIBIT "C"

TG ENGINEERS, PC

September 11, 2017

Mr. Miguel C. Bordallo, P.E.
General Manager
Guam Waterworks Authority
Engineering Division
Gloria B. Nelson Public Service Building
688 Route15, Mangilao, GU 96913

Attn: Mr. Thomas Cruz, P.E., Chief Engineer

RE: FEE PROPOSAL FOR CONSTRUCTION MANAGEMENT SERVICES: TUMON NO. 2, HYUNDAI, AND CHAOT NO. 2 TANK AND SYSTEM UPGRADES GWA PROJECT NO. W14-006-BND; RFP 02-ENG-2017

Hafa Adai Tom,

TG Engineers, PC (TGE) is pleased to submit our updated Fee Proposal for the referenced project.

1.0 PROJECT DESRIPTION

The project is construction of the first 3-water storage tanks from the GWA Central Reservoirs project group as follows.

- Chaot No. 2 - PENDING
- Tumon No. 2 (Nissan)
- Hyundai

As requested in the email from Mr. Garrett Yeoh, dated July 14, 2017, we have evaluated 3-different Base Bid and Base Bid Plus Additive Bid scenarios. In general, we have adjusted Inspector, Office Engineer and Document Control personnel time to match the expected work requirements for each scenario.

2.0 SCOPE OF SERVICES

Please refer to the Scope of Work issued with the RFP, pages 14-26.

3.0 FEES

We estimate to complete these CM services for the fees shown as follows with the different bid scenarios. Please refer to the TGE Fee Spreadsheets attached for the time, expenses and breakdown.

BID SCENARIO	FEE ESTIMATE
Base Bid Chaot Tank – excluded Chaot Offsite – included Tumon No. 2 Tank and including offsite Hyundai Tank – included Hyundai Offsite – excluded	$1,954,089.00
Base Bid Plus Additive Bid 1 or 2 (Hyundai Offsite Part 1 or 2)	$2,054,124.00
Base Bid Plus Additive Bids 1 & 2 (Hyundai Offsite parts 1 & 2)	$2,088,062.00

We have included current pricing for 1-vehicle, equipment and software expenses and assume these will be updated to incorporate any increases at the project start.

4.0 SCHEDULE & DELIVERABLES

As clarified in the email from Mr. Garrett Yeoh, dated July 14, 2017, we are planning on tentative construction schedules as follows.

- Chaot No. 2 = PENDING
- Chaot Offsite = 14-mos
- Tumon No. 2 = 14-mos
- Hyundai = 14-mos

5.0 ASSUMPTIONS

5.1 The schedule assumes 14-months for construction plus 2-months of closeout and post-construction services (total 14+2 = 16-months). We will evaluate if additional time requirements are needed for closeout and post-construction tasks later in the project.

5.2 We have adjusted labor rates matching our annual office increases in June.

5.3 We have increased the number of Water Pressure Data Loggers to 25, based on a request from Garrett Yeoh.

6.0 PERSONNEL SUBSTITUTION

As discussed, we are Planning on including Mr. Robert Marks for the Senior Construction Manager position. We believe Mr. Marks, leading and together with the full CM team will be an effective team arrangement.

GWA reserves the right to remove the Construction Manager, Engineers, Inspectors and any onsite staff if he/she does not perform to the GWA's expectations.

We are submitting this in electronic file format and will deliver printed copies once the final pricing is accepted

Please call Teena Barnes or myself at 647-0808 with any comments or questions.

Si Yu'os Ma'ase,
TG Engineers, PC

Tor Gudmundsen, PE
President

Attachments:

TGE Fee Spreadsheet
Dated 9/11/17, 6-pages

Guam Waterworks Authority **Fee Proposal Spreadsheet** 9/11/2017
Tumon No. 2, Hyundai, and Chaot No. 2 Tank and System Upgrades CM **Base Bid** Page 1 of 2

PERIOD OF NOVEMBER 2017 - JUNE 2018

PHASE/ TASK	TASK DESCRIPTION	Principal	Const Mgr	Chaot Insp	Tumon Insp	Hyundai Insp	Office Engr #1	Office Engr #2	Doc Ctrl #1	Doc Ctrl #2	Sr Engr	CAD	Clerical	TOTAL COST
	2017 - 2018 HOURLY LABOR RATES	$221.00	$185.00	$74.00	$74.00	$74.00	$74.00	$74.00	$50.00	$50.00	$195.00	$106.00	$50.00	
A	PRECONSTRUCTION													
1.0	Design Review - Chaot No. 2													$0
2.0	Design Review - Tumon No. 2													$0
3.0	Design Review - Hyundai													$0
4.0	CM QA & Const Mgmt Plans	1.0	10.0				10.0						10.0	$3,311
5.0	CM Software Training	1.0	8.0	0.0	8.0	8.0	8.0	8.0	8.0	8.0			15.0	$5,619
6.0	Attend Pre-Bid Meeting/Process Bid RFI's		25.0				25.0						10.0	$6,975
7.0	Bid Analysis & Award Recommendation	1.0	25.0										10.0	$5,346
	Subtotal Hours	3.0	68.0	0.0	8.0	8.0	43.0	8.0	8.0	8.0	0.0	0.0	45.0	**$21,251**
B	CONSTRUCTION PHASE													
1.0	Project Controls	24.0	864.0	0.0	270.0	270.0	864.0	540.0	1080.0	540.0	0.0	20.0	60.0	$395,120
	Project Correspondence													
	Submittal Review													
	Payment Requests													
	Project Meetings													
	Requests for Information													
	Claims and Disputes													
	Project Records													
2.0	Construction Inspection		216.0	0.0	810.0	810.0	216.0	0.0			0.0			$175,824
	Onsite Inspection													
	Acceptance of Work													
	Stop Work Orders													
	Change Orders													
	Change Order Reviews													
	Design Change													
	DCVR													
	Subtotal Hours	24.0	1080.0	0.0	1,080.0	1,080.0	1080.0	540.0	1080.0	540.0	0.0	20.0	60.0	**$570,944**

PERIOD OF JULY 2018 - JUNE 2019

PHASE/ TASK	TASK DESCRIPTION	Principal	Const Mgr	Chaot Insp	Tumon Insp	Hyundai Insp	Office Engr #1	Office Engr #2	Doc Ctrl #1	Doc Ctrl #2	Sr Engr	CAD	Clerical	TOTAL COST
	2018 - 2019 HOURLY LABOR RATES	$221.00	$185.00	$76.00	$76.00	$76.00	$76.00	$76.00	$53.00	$53.00	$195.00	$109.00	$53.00	
B	CONSTRUCTION PHASE													
1.0	Project Controls	40.0	900.0	0.0	360.0	540.0	1008.0	360.0	1440.0	720.0	0.0	20.0	80.0	$468,608
	Project Correspondence													
	Submittal Review													
	Payment Requests													
	Project Meetings													
	Requests for Information													
	Claims and Disputes													
	Project Records													
2.0	Construction Inspection		540.0	0.0	1080.0	900.0	432.0	360.0			0.0			$310,572
	Onsite Inspection													
	Acceptance of Work													
	Stop Work Orders													
	Change Orders													
	Change Order Reviews													
	Design Change													
	DCVR													
3.0	Construction Survey Testing													$45,000
4.0	Project Closeout		360.0		180.0	180.0	360.0		360.0					$140,400
	Timely Completion													
	Punchlist Development													
	Inspections													
	Training and Warranty													
5.0	Post Construction													$0
	Final Report													
	Project Records													
	Record Drawings													
	Subtotal Hours	40.0	1800.0	0.0	1,620.0	1,620.0	1800.0	720.0	1800.0	720.0	0.0	20.0	80.0	**$964,580**

Guam Waterworks Authority **Fee Proposal Spreadsheet** 9/11/2017
Tumon No. 2, Hyundai, and Chaot No. 2 Tank and System Upgrades CM **Base Bid** Page 2 of 2

C	SUBCONSULTANTS	
1.0	Michael Baker International	$30,000
2.0	QA Testing	$60,000
3.0	Onsite Cameras	$0
4.0	TGE Sub Admin Fee (10%)	$9,000
	Subtotal - Subconsultants	**$99,000**

D	EXPENSES				
	Expense Item	**Units**	**Quantity**	**Unit Cost**	**Subtotal**
A	**PRECONSTRUCTION**				
	Reproduction	job	5	$250	$1,250
B	**CONSTRUCTION PHASE**				
	Reproduction	month	14	$1,000	$14,000
	Office Supplies	month	14	$100	$1,400
	Vehicle - Const Manager	month	14	$1,100	$15,400
	Vehicle - Const Insp (Chaot)	month	0	$1,100	$0
	Vehicle - Const Insp (Tumon)	month	14	$1,100	$15,400
	Vehicle - Const Insp (Hyundai)	month	14	$1,100	$15,400
	Vehicle - Office Engineer	month	14	$1,100	$15,400
	Vehicle - Office Engineer	month	14	$1,100	$15,400
	Cell Phone Service - Const Manager	month	14	$80	$1,120
	Cell Phone Service - Const Insp (Chaot)	month	0	$80	$0
	Cell Phone Service - Const Insp (Tumon)	month	14	$80	$1,120
	Cell Phone Service - Const Insp (Hyundai)	month	14	$80	$1,120
	Cell Phone Service - Office Engr (2 x @25))	month	14	$50	$700
	EADOC Software	each	1	$55,000	$55,000
	Panasonic Toughbook 20	each	1	$3,900	$3,900
	Water Pressure Data Loggers	each	25	$760	$19,000
	Vehicle - GWA	each	1	$23,472	$23,472
C	**POST CONSTRUCTION**				
	Final Report Reproduction	sets	2	$250	$500
	As-Built Drawing Reproduction	sets	2	$250	$500
D	**TGE EXPENSE FEE (10%)**				$20,008
			Subtotal - Expenses		**$220,090**

Subtotal - A. Preconstruction	**$21,251**
Subtotal - B. Construction Phase	**$1,535,524**
Subtotal - C. Subconsultants	**$99,000**
Subtotal - D. Expenses	**$220,090**
GRT	**$78,224**
GRAND TOTAL	**$1,954,089**

Guam Waterworks Authority **Fee Proposal Spreadsheet** 9/11/2017

Tumon No. 2, Hyundai, and Chaot No. 2 Tank and System Upgrades CM **Base Bid+AB 1or2** Page 1 of 2

PERIOD OF NOVEMBER 2017 - JUNE 2018

PHASE/ TASK	TASK DESCRIPTION	Principal	Const Mgr	Chaot Insp	Tumon Insp	Hyundai Insp	Office Engr #1	Office Engr #2	Doc Ctrl #1	Doc Ctrl #2	Sr Engr	CAD	Clerical	TOTAL COST
	2017 - 2018 HOURLY LABOR RATES	$221.00	$185.00	$74.00	$74.00	$74.00	$74.00	$74.00	$50.00	$50.00	$195.00	$106.00	$50.00	
A	PRECONSTRUCTION													
1.0	Design Review - Chaot No. 2													$0
2.0	Design Review - Tumon No. 2													$0
3.0	Design Review - Hyundai													$0
4.0	CM QA & Const Mgmt Plans	1.0	10.0				10.0						10.0	$3,311
5.0	CM Software Training	1.0	8.0	0.0	8.0	8.0	8.0	8.0	16.0	16.0			15.0	$6,419
6.0	Attend Pre-Bid Meeting/Process Bid RFI's		25.0				25.0						10.0	$6,975
7.0	Bid Analysis & Award Recommendation	1.0	25.0										10.0	$5,346
	Subtotal Hours	3.0	68.0	0.0	8.0	8.0	43.0	8.0	16.0	16.0	0.0	0.0	45.0	**$22,051**
B	CONSTRUCTION PHASE													
1.0	Project Controls	24.0	864.0	0.0	270.0	270.0	864.0	864.0	1080.0	540.0	0.0	20.0	60.0	$419,096
	Project Correspondence													
	Submittal Review													
	Payment Requests													
	Project Meetings													
	Requests for Information													
	Claims and Disputes													
	Project Records													
2.0	Construction Inspection		216.0	0.0	810.0	810.0	216.0	216.0			0.0			$191,808
	Onsite Inspection													
	Acceptance of Work													
	Stop Work Orders													
	Change Orders													
	Change Order Reviews													
	Design Change													
	DCVR													
	Subtotal Hours	24.0	1080.0	0.0	1,080.0	1,080.0	1080.0	1080.0	1080.0	540.0	0.0	20.0	60.0	**$610,904**

PERIOD OF JULY 2018 - JUNE 2019

PHASE/ TASK	TASK DESCRIPTION	Principal	Const Mgr	Chaot Insp	Tumon Insp	Hyundai Insp	Office Engr #1	Office Engr #2	Doc Ctrl #1	Doc Ctrl #2	Sr Engr	CAD	Clerical	TOTAL COST
	2018 - 2019 HOURLY LABOR RATES	$221.00	$185.00	$76.00	$76.00	$76.00	$76.00	$76.00	$53.00	$53.00	$195.00	$109.00	$53.00	
B	CONSTRUCTION PHASE													
1.0	Project Controls	40.0	900.0	0.0	360.0	540.0	1008.0	1008.0	1440.0	720.0	0.0	20.0	80.0	$517,856
	Project Correspondence													
	Submittal Review													
	Payment Requests													
	Project Meetings													
	Requests for Information													
	Claims and Disputes													
	Project Records													
2.0	Construction Inspection		540.0	0.0	1080.0	900.0	432.0	432.0			0.0			$316,044
	Onsite Inspection													
	Acceptance of Work													
	Stop Work Orders													
	Change Orders													
	Change Order Reviews													
	Design Change													
	DCVR													
3.0	Construction Survey Testing													$45,000
4.0	Project Closeout		360.0		180.0	180.0	360.0		360.0					$140,400
	Timely Completion													
	Punchlist Development													
	Inspections													
	Training and Warranty													
5.0	Post Construction													$0
	Final Report													
	Project Records													
	Record Drawings													
	Subtotal Hours	40.0	1800.0	0.0	1,620.0	1,620.0	1800.0	1440.0	1800.0	720.0	0.0	20.0	80.0	**$1,019,300**

Guam Waterworks Authority **Fee Proposal Spreadsheet** 9/11/2017

Tumon No. 2, Hyundai, and Chaot No. 2 Tank and System Upgrades CM **Base Bid+AB 1or2** Page 2 of 2

C	SUBCONSULTANTS	
1.0	Michael Baker International	$30,000
2.0	QA Testing	$60,000
3.0	Onsite Cameras	$0
4.0	TGE Sub Admin Fee (10%)	$9,000
	Subtotal - Subconsultants	**$99,000**

D	EXPENSES				
	Expense Item	**Units**	**Quantity**	**Unit Cost**	**Subtotal**
A	**PRECONSTRUCTION**				
	Reproduction	job	5	$250	$1,250
B	**CONSTRUCTION PHASE**				
	Reproduction	month	14	$1,000	$14,000
	Office Supplies	month	14	$100	$1,400
	Vehicle - Const Manager	month	14	$1,100	$15,400
	Vehicle - Const Insp (Chaot)	month	0	$1,100	$0
	Vehicle - Const Insp (Tumon)	month	14	$1,100	$15,400
	Vehicle - Const Insp (Hyundai)	month	14	$1,100	$15,400
	Vehicle - Office Engineer	month	14	$1,100	$15,400
	Vehicle - Office Engineer	month	14	$1,100	$15,400
	Cell Phone Service - Const Manager	month	14	$80	$1,120
	Cell Phone Service - Const Insp (Chaot)	month	0	$80	$0
	Cell Phone Service - Const Insp (Tumon)	month	14	$80	$1,120
	Cell Phone Service - Const Insp (Hyundai)	month	14	$80	$1,120
	Cell Phone Service - Office Engr (2 x @25))	month	14	$50	$700
	EADOC Software	each	1	$55,000	$55,000
	Panasonic Toughbook 20	each	1	$3,900	$3,900
	Water Pressure Data Loggers	each	25	$760	$19,000
	Vehicle - GWA	each	1	$23,472	$23,472
C	**POST CONSTRUCTION**				
	Final Report Reproduction	sets	3	$250	$750
	As-Built Drawing Reproduction	sets	3	$250	$750
D	**TGE EXPENSE FEE (10%)**				$20,058
			Subtotal - Expenses		**$220,640**

Subtotal - A. Preconstruction	**$22,051**
Subtotal - B. Construction Phase	**$1,630,204**
Subtotal - C. Subconsultants	**$99,000**
Subtotal - D. Expenses	**$220,640**
GRT	**$82,228**
GRAND TOTAL	**$2,054,124**

Guam Waterworks Authority
Tumon No. 2, Hyundai, and Chaot No. 2 Tank CM

Fee Proposal Spreadsheet
Base Bid+AB 12

9/11/2017

PERIOD OF NOVEMBER 2017 - JUNE 2018

PHASE/ TASK	TASK DESCRIPTION	Principal	Const Mgr	Chaot Insp	Tumon Insp	Hyundai Insp	Office Engr #1	Office Engr #2	Doc Ctrl #1	Doc Ctrl #2	Sr Engr	CAD	Clerical	TOTAL COST
	2017 - 2018 HOURLY LABOR RATES	$221.00	$185.00	$74.00	$74.00	$74.00	$74.00	$74.00	$50.00	$50.00	$195.00	$106.00	$50.00	
A	PRECONSTRUCTION													
1.0	Design Review - Chaot No. 2													$0
2.0	Design Review - Tumon No. 2													$0
3.0	Design Review - Hyundai													$0
4.0	CM QA & Const Mgmt Plans	1.0	10.0				10.0						10.0	$3,311
5.0	CM Software Training	1.0	8.0	0.0	8.0	8.0	8.0	8.0	16.0	16.0			15.0	$6,419
6.0	Attend Pre-Bid Meeting/Process Bid RFI's		25.0				25.0						10.0	$6,975
7.0	Bid Analysis & Award Recommendation	1.0	25.0										10.0	$5,346
	Subtotal Hours	3.0	68.0	0.0	8.0	8.0	43.0	8.0	16.0	16.0	0.0	0.0	45.0	**$22,051**
B	CONSTRUCTION PHASE													
1.0	Project Controls	24.0	864.0	0.0	270.0	270.0	864.0	864.0	1080.0	810.0	0.0	20.0	60.0	$432,596
	Project Correspondence													
	Submittal Review													
	Payment Requests													
	Project Meetings													
	Requests for Information													
	Claims and Disputes													
	Project Records													
2.0	Construction Inspection		216.0	0.0	810.0	810.0	216.0	216.0			0.0			$191,808
	Onsite Inspection													
	Acceptance of Work													
	Stop Work Orders													
	Change Orders													
	Change Order Reviews													
	Design Change													
	DCVR													
	Subtotal Hours	24.0	1080.0	0.0	1,080.0	1,080.0	1080.0	1080.0	1080.0	810.0	0.0	20.0	60.0	**$624,404**

PERIOD OF JULY 2018 - JUNE 2019

PHASE/ TASK	TASK DESCRIPTION	Principal	Const Mgr	Chaot Insp	Tumon Insp	Hyundai Insp	Office Engr #1	Office Engr #2	Doc Ctrl #1	Doc Ctrl #2	Sr Engr	CAD	Clerical	TOTAL COST
	2018 - 2019 HOURLY LABOR RATES	$221.00	$185.00	$76.00	$76.00	$76.00	$76.00	$76.00	$53.00	$53.00	$195.00	$109.00	$53.00	
B	CONSTRUCTION PHASE													
1.0	Project Controls	40.0	900.0	0.0	360.0	540.0	1008.0	1008.0	1440.0	1080.0	0.0	20.0	80.0	$536,936
	Project Correspondence													
	Submittal Review													
	Payment Requests													
	Project Meetings													
	Requests for Information													
	Claims and Disputes													
	Project Records													
2.0	Construction Inspection		540.0	0.0	1080.0	900.0	432.0	432.0			0.0			$316,044
	Onsite Inspection													
	Acceptance of Work													
	Stop Work Orders													
	Change Orders													
	Change Order Reviews													
	Design Change													
	DCVR													
3.0	Construction Survey Testing													$45,000
4.0	Project Closeout		360.0		180.0	180.0	360.0		360.0					$140,400
	Timely Completion													
	Punchlist Development													
	Inspections													
	Training and Warranty													
5.0	Post Construction													$0
	Final Report													
	Project Records													
	Record Drawings													
	Subtotal Hours	40.0	1800.0	0.0	1,620.0	1,620.0	1800.0	1440.0	1800.0	1080.0	0.0	20.0	80.0	**$1,038,380**

Guam Waterworks Authority
Tumon No. 2, Hyundai, and Chaot No. 2 Tank CM

Fee Proposal Spreadsheet
Base Bid+AB 12

9/11/2017
Page 2 of 2

C	SUBCONSULTANTS	
1.0	Michael Baker International	$30,000
2.0	QA Testing	$60,000
3.0	Onsite Cameras	$0
4.0	TGE Sub Admin Fee (10%)	$9,000
	Subtotal - Subconsultants	**$99,000**

D	EXPENSES				
	Expense Item	**Units**	**Quantity**	**Unit Cost**	**Subtotal**
A	**PRECONSTRUCTION**				
	Reproduction	job	5	$250	$1,250
B	**CONSTRUCTION PHASE**				
	Reproduction	month	14	$1,000	$14,000
	Office Supplies	month	14	$100	$1,400
	Vehicle - Const Manager	month	14	$1,100	$15,400
	Vehicle - Const Insp (Chaot)	month	0	$1,100	$0
	Vehicle - Const Insp (Tumon)	month	14	$1,100	$15,400
	Vehicle - Const Insp (Hyundai)	month	14	$1,100	$15,400
	Vehicle - Office Engineer	month	14	$1,100	$15,400
	Vehicle - Office Engineer	month	14	$1,100	$15,400
	Cell Phone Service - Const Manager	month	14	$80	$1,120
	Cell Phone Service - Const Insp (Chaot)	month	0	$80	$0
	Cell Phone Service - Const Insp (Tumon)	month	14	$80	$1,120
	Cell Phone Service - Const Insp (Hyundai)	month	14	$80	$1,120
	Cell Phone Service - Office Engr (2 x @25))	month	14	$50	$700
	EADOC Software	each	1	$55,000	$55,000
	Panasonic Toughbook 20	each	1	$3,900	$3,900
	Water Pressure Data Loggers	each	25	$760	$19,000
	Vehicle - GWA	each	1	$23,472	$23,472
C	**POST CONSTRUCTION**				
	Final Report Reproduction	sets	3	$250	$750
	As-Built Drawing Reproduction	sets	3	$250	$750
D	**TGE EXPENSE FEE (10%)**				$20,058
			Subtotal - Expenses		**$220,640**

Subtotal - A. Preconstruction	**$22,051**
Subtotal - B. Construction Phase	**$1,662,784**
Subtotal - C. Subconsultants	**$99,000**
Subtotal - D. Expenses	**$220,640**
GRT	**$83,587**
GRAND TOTAL	**$2,088,062**

SCOPE OF WORK

Construction Management Services for the Tumon No. 2, Hyundai, and Chaot No. 2 Tank and System Upgrades

A. CONSTRUCTION DESCRIPTION:

The proposer will provide construction management (CM) services on behalf of GWA for construction of Tumon No. 2, Hyundai, and Chaot No. 2 water system improvement projects. The projects are located at several different sites.

The following are the general description of water system improvements to be completed at each location:

1. **PW 09-11: Tumon No. 2**
    - Demolition of existing facilities, including 1 MG steel tank, yard piping, vaults, and appurtenances.
    - Installation of new piping from Route No. 1 to the new Tumon No. 2 tank.
    - Construction of a new 1 MG concrete tank.
    - Off-site improvements, to include new pressure reducing valves, flow meters, and vaults.
    - SCADA

2. **PW 12-06: Hyundai**
    - Demolition of existing facilities, including 1 MG steel tank, yard piping, vaults, and appurtenances.
    - Construction of a new 1 MG concrete tank.
    - Installation of new transmission lines.
    - Construction of the new Hyundai booster station.
    - Refurbishment of the Barrigada booster station.
    - Off-site improvements, to include new pressure reducing valves, flow meters, and vaults.
    - SCADA

3. **PW 12-04: Chaot No. 2**
    - Construction of a new 0.5 MG concrete tank.
    - Modification to the central chlorination system at the Chaot and Agana Heights tank sites.
    - Off-site improvements, to include new pressure reducing valves, flow meters, and vaults.
    - Disconnection of A-series deep wells to the distribution line.
    - Commissioning of the Sinajana-Agana Heights system, which includes the Chaot No. 1, and Chaot No. 2, and Agana Heights tanks, booster station, deep wells, SCADA, and chlorination.
    - SCADA

B. GENERAL CONSTRUCTION MANAGEMENT SCOPE OF WORK

The CM will provide all services relating to the daily field observation, inspection, testing, supervision, management, coordination, and compliance monitoring for the construction projects. The projects generally consists of geo-technical ground improvements, demolition of existing tank structures, construction of pre-stressed concrete tanks conforming to AWWA/ANSI D110 for Type I Wire- and Strand- Wound, Circular Prestressed Concrete Water Tanks (site adapted for each location), installation of new water lines, construction and refurbishment of booster pump stations, chlorination systems,

electrical, instrumentation and control, SCADA controls, plus all associated utilities for each site. Additionally, GWA seeks pre-construction services including constructability review prepared by others.

The construction management, testing, and field observation services for the tank replacement projects will require general construction management and observation, as well as specialized inspection and testing.

In addition to general construction management duties, the specialized inspection and testing will include, but not limited to:

- Concrete placement
- Concrete anchors/Adhesive anchoring systems/Expansion bolts
- Grading
- Excavation
- Compaction grouting
- Compaction testing
- Pre-stressing operations
- Concrete cylinder testing
- Shotcrete application
- High strength bolting
- Earthwork/Soil analysis
- Instrumentation and SCADA
- Hydrostatic testing
- Disinfection
- System commissioning

In general, the proposer will be the CM as an independent contractor Owner's Representative of GWA whose primary function are to:

- Keep GWA advised and informed as to project progress and cost
- Manage the change process
- Disclose any information relevant to GWA's interest
- Make proactive recommendations to GWA for action to maintain progress and achieve the project schedule and budget
- Act in the best interest of GWA

The CM shall administer the Contract, except that the CM is not authorized to make any decisions on the behalf of GWA that materially affect the intent of the design or financially obligate GWA in any manner.

C. PRE-CONSTRUCTION PHASE SERVICES

1. Design Document Review

The CM shall perform review of the design documents. The CM will provide redline mark-up of the plans and specifications and annotated comments. The review will also verify that the design is clearly presents and poses no potential construction related conflicts or deficiencies which may lead to substantive changes to the design, schedule, or cost of the

project. Review will identify any contractual and technical deficiencies and contradictions in the construction documents.

Deliverables (electronic pdf files and hard copies):

- Final Design Review Report

2. CM Quality Assurance

The Construction Management consultant and/or sub-consultants shall have experience in managing the construction of concrete water reservoirs conforming to AWWA design and construction guidelines or similar concrete construction, construction of water lines, booster pump stations, and all relevant water utility work.

The CM will review, record, and comment on submittal on Quality Control Plan submitted by the Construction Contractor. The CM will develop, implement, and maintain a Quality Assurance Plan for civil, structural, electrical, mechanical, and instrumentation elements including specialized work related to the construction of concrete water reservoirs conforming to AWWA/ANSI D110 Type I Wire- and Strand- Wound, Circular Prestressed Concrete Water Tanks.

The CM Quality Assurance shall incorporate all the required testing listed Section D. Construction Phase Services, 16 and 18.

The CM will file contractor certifications: review, file, and submit inspection test results; and assess substantial completion.

Content of the Quality Assurance Plan will include the following at the minimum:

- Documentation of site conditions prior to beginning construction
- Review of approved submittals from the Contractor prior to fabrication or installation of materials and equipment
- Inspection, observation, and documentation of daily field work
- Monitoring of the Contractor's Quality Control Plan
- In-plant fabrication and/or witness testing at place of manufacture (where applicable)
- Reports and record keeping
- Non-conforming and deficient work resolution process
- Monitoring the Construction Contractor's implementation of their Quality Control Plan
- Complete list of specialized inspections for the tank structure and under tank

It is important to note that the CM is responsible for monitoring the Contractor's compliance with the Contract Documents, but not responsible for the Contractor's means and methods the Contractor may use to perform the work.

Deliverables (electronic pdf files and hardcopies):

- Quality Assurance Plan

3. Construction Management Plan

The CM will develop and implement the Construction Management Plan (CM Plan) including guidelines for project organization and coordination in the field, standard daily operations, change order procedures, safety, quality, schedule, and cost control. The CM Plan sets forth the procedures and approach for the construction of the project. The CM Plan will serve the CM, the Owner's Representative, and Contractors by defining the project, project team members and their roles, coordination among team members, procedure, key milestones, and schedule constraints. By establishing these parameters early in the project, the CM Plan will help control resources and costs, establish communication and coordination between the CM, Constructor, and GWA.

Deliverables (electronic pdf files and hardcopies):

- Construction Management Plan

4. Contract Bidding

Upon receipt of the construction bid packages, the CM will review the bid packages and provide GWA with a recommendation and/or concurrence of the proposed selected Contractor. Recommendation shall include document review to ensure compliance with all bid requirements and procurement regulations, bid analysis, and contractor selection.

Deliverables (electronic pdf files and hardcopies):

- Technical Memorandum(s) – Document Review, Bid Analysis, and Contractor Selection

D. CONSTRUCTION PHASE SERVICES

1. Project Records and Document Control

These services and tools shall be provided by the CM to insure that the project is efficiently managed and constructed according to the terms of the Contract and the Request for Proposal. The function is concerned with proper collection and organization of construction documents, gathering data regarding project progresses, producing progress reports, and monitoring time, cost, and quality.

The CM will use a construction management and project collaboration applications, such as Bentley EADOC, Procore Construction Project Management, NewForma Project Center, to track communication, design documents, construction documents, finances, and reporting. GWA shall approve the software before implementation.

- Communication documents: Memos, daily inspector logs for both contractor and CM, meeting minutes, and all other relevant documentation
- Construction documents: Submittals, RFIs, testing results, photo logs, special inspection, change orders, corrective actions, punch list, various construction logs, payment applications, wage rate reporting, and all other relevant documentation
- Design documents: Specifications, drawings, permits, bid documents, contract documents, and all other relevant documentation

The CM will use Primavera P6 project management software to track the Contractor's project schedule, construction cost, resource tracking, and cost management.

2. Daily Construction Reports

The onsite inspectors shall maintain a log of material deliveries, daily site production, site condition, field orders, progress photos, material testing, special inspections, documentation of delays, non-conformance, punch lists, and other material and work facts and issues regarding the prosecution of the work. The daily reports and logs shall be available to GWA project team for review at any time via the project management software.

3. Progress Photo Log and Live Video Feed

The CM shall prepare and retain a construction progress photo log in an organized album with phases of the project clearly labeled. The photo log shall capture all phases of the project – pre-construction, construction, and post-construction. The photo log shall be digital.

The CM shall provide 24 hour monitoring camera(s) to be installed at each project sites to allow for continuous monitoring of the project work. The camera system will allow for remote view and playback functions. Monthly progress videos shall be submitted to GWA.

4. Submittal and Shop Drawings

The CM shall review and act on (approve or reject) all submittals required by the Contract documents. The CM shall review and provide comments regarding shop drawings, work drawings, material submittals, traffic control plan, safety plan, demolition plan, and all other submittals for conformance with the Contract documents. CM reviewer shall be a competent person. In the event of a Contractor request for a time extension or material or equipment substitution, the CM shall make a recommendation to GWA regarding the substitution. The GWA Chief Engineer or his authorized representative will approve the substitution.

5. Contractor Project Schedules

The CM shall review the Contractor's work schedule for accuracy and for efficient sequencing of the work. The CM will direct the Contractor to make any changes deemed necessary and coordinate approval of the revised schedule with GWA. Any delays shall be documented and notified to GWA and the Contractor when actual progress is behind schedule. The CM shall adhere to the requirements set forth in the Contract document for contractor project schedule tracking and review.

6. Payment Request

The CM shall receive and process payment requests from the Contractor. Payment requests shall be reviewed compliance with the Contract document and with the actual work completed. Upon completion of the review, the CM shall make any necessary adjustments, certify, and forward the request to GWA for processing of the payment. The CM shall submit their review, recommendation, acceptance, or rejection within 5 working days of receipt from the Contractor.

7. Payroll Report

The CM shall also review any payroll submittals required by the Contract documents including prevailing wage submissions. At the minimum, the Contractor and its

subcontractors shall provide bi-weekly pay records for each of its employees on the project. The proposer will also conduct random employee interviews to verify the pay request information. Upon completion of the review, the CM shall require the Contractor to make any necessary adjustments, certify, and forward the Payroll report along with the pay request to GWA for processing.

8. Project Meetings

The CM shall schedule, arrange, and conduct conferences and meeting as required for clear communication of the Contract requirements and adherence to project schedules.

The CM shall arrange for a weekly progress meeting with the Contractor and GWA to discuss progress of work, Contract requirements, and other issues related to the administration and prosecution of work. The CM shall prepare meeting minutes for all progress meetings with contractors, sub-contractors, GWA, and all other parties. The meeting minutes shall include action items from week to week until it has been completed.

The CM shall arrange meetings between the Contractor and GWA, and other parties such as GEPA and DPW as necessary to address project issues that require decisions that cannot be made by the CM or to resolve regulatory concerns.

9. As-Built Drawing Reviews

After each weekly meeting, the CM shall review the Contractor's Review drawings to ensure that they are current and capture any deviations from the original plan set.

The CM shall maintain a separate set of red-line as-built drawing on site. Drawings shall be available for GWA at any time. Monthly as-builts documents shall be uploaded to the project management software system.

10. Request for Information

Track all Request for Information and maintain an RFI log. Coordinate receipt of answers from other sources. Provide RFI response with GWA's input regarding any aspect of the Contract documents, which includes the plans and technical specifications.

11. General Compliance Monitoring

The CM shall evaluate and ensure Contractor compliance with all local and federal labor laws applicable to the Project. Any violations shall be immediately reported to GWA. Compliance monitoring shall include but not limited to the following:

- Regulations and Laws: Monitor compliance with Territorial and/or Federal laws, regulations, and rules.
- Labor laws: Monitor Contractor and subcontractor procedures to verify legal status of employees on site. Verify bi-weekly compliance with labor requirements for federally funded projects including posting of wage rate schedules at the job site and safety requirements.
- Licensure: Confirm that the Contractor and its subcontractor and their workers have all required licenses and ensure that said licenses are valid throughout the terms of the Contract.

- Permit Compliance: Monitor and track Contractor's compliance in obtaining required permit and approvals.
- Insurance: Review Contactor's insurance documents submitted to GWA for compliance with Contractor requirements. Track insurance documents, ensure insurance is valid throughout the term of Contract and maintain insurance certificate log.

12. Claims and Disputes

The CM shall promptly the GWA regarding any issues that arise during construction of the Project that could result in claims and/or disputes. The CM shall provide the following services to assist GWA with the resolution of claims and disputes:

- Claim Records: Maintain copies of all verbal and written communications, submittals, testimony, photos, and meetings regarding a potential dispute and promptly submit all originals to the Chief Engineer and Attorney for GWA.
- Claims Reviews & Interpretation: Reviews claims submitted by the Contractor, provide GWA with interpretation of Contract drawings and specifications and provide written recommendations to GWA regarding the solution of the dispute. At the outset of the Contract, the CM shall work with the Contractor to provide pricing for equipment, material, personnel, and other relevant considerations as specified in the bid. Prices agreed upon shall be used in any subsequent Change Order. No amounts shall be paid except for actual losses incurred by the Contractor through no fault of their own or for risks not allocated to the Contractor under the bid.

13. Change Order Negotiations and Review

Prepare independent cost estimates and negotiate change orders with the Contractor subject to GWA approval (final approval of negotiated change orders can only be made by the GWA General Manager).

Track all change orders and maintain a change order log. Provide change order evaluations, negotiations, and recommendations for approval by GWA. Change orders shall not be made when the Contractor has assumed such risk in the bid. Change orders may include requests for additional payments for differing site conditions and the CM shall utilize the bid document to determine if a change order is warranted. CM shall submit change order requests and supporting documentation to GWA for approval within 5 working days of receipt from the Contractor wherever practical.

The CM shall maintain copies for all approved change orders (originals to be provided to GWA) and insure that subsequent pay requests accurately represent these change orders. Approved change orders shall be administered by the CM along with other work elements according to the provisions of this scope of work.

14. Design Changes and Verification Request

As directed by GWA, prepare changes to the Contract technical documents (design and specifications) required to address a change order. GWA will direct the CM to make design changes only when changes are deemed by the GWA Chief Engineer and the Engineer of

Record to have no material effect on the original intent of the design. All other design changes shall be forwarded to the Engineer of Record for processing.

If the request for change will materially change the original design, the CM shall coordinate with the Engineer of Record to accomplish the necessary design changes. The CM shall prepare a design change/verification request (DCVR) for submission to and for the approval of the Engineer of Record. If the required changes to the design are not covered within the original design scope of service, the CM will prepare a design scope amendment; solicit a fee proposal for the amendment on behalf of GWA, and assist with the negotiations.

15. Construction Monitoring, Special Inspection, and Quality Control Monitoring

The CM shall provide full time inspection observation and special inspection services to ensure that the work is accomplished in accordance with the Contract documents. A full time Resident Engineer shall be assigned to manage all sites and will be at one of the sites during normal working hours unless attending project related meetings or during holidays, vacation, or sick days.

The CM shall provide full time construction inspector staff at each of the 3 sites to monitor the construction. The Resident Engineer and onsite field staff shall have demonstrable experience (satisfactory to GWA) relative to the discipline and type of work being performed. Project field staff shall review project documents, conduct daily observations, special inspections (where applicable), prepare and submit Daily Observation and Special Inspection Reports; communicate deficiency issues and resolve with Contractor; and update Non-Compliance log.

In addition to general compliance inspections, the CM shall provide Special Inspections services in accordance with IBC 2009, Chapter 17 by a person with demonstrable experience (satisfactory to GWA) related to concrete placement, structural field welding, fielding welding of reinforcement, concrete anchoring, expansion bolts, shotcrete application, high strength bolting, reinforcing steel placement, pre-stressing operations, grading, excavation, backfilling, foundation probing and injection, and other operations that require special inspections. The Special Inspections staff shall be approved by GWA before inspection.

16. Testing (Quality Assurance)

Contractor Testing: Schedule, observe, approve or reject, and document testing required under the Contract to be performed by the Contractor.

Construction Quality Assurance Testing: The CM shall provide, at the minimum, the following CQA testing to monitor the Contractor's independent testing firm:

SPECIAL TESTING	STANDARD	FREQUENCY
Concrete Tests: • Pipe encasement: Inlet piping, outlet piping, overflow piping, drain line piping, wash down piping • Tank foundation	ASTM C-39	10% of Contractor's

• Tank wall • Tank roof slab • Tank column • Tank column footing • Shotcrete • Vaults • Detention basin: footing and walls • Electrical and communication encasement • Electrical and communication hand hold		
Compaction grouting	ASTM C-1019	10% of Contractor's
Compaction testing: • Over Excavation: Bottom of Over Excavation, Type G – Crushed Aggregate, Top of Type H – Drain Rock, Type E – Certification of Observation • Vaults: First lift, middle lift, and final lift. • Electrical Hand Holes: First lift, middle lift, and final lift • Communication Hand Holes: First lift, middle lift, and final lift • Detention Basin: Footing • Pavement: Ribbon gutter and pavement	ASTM D-698 ASTM D-6938	10% of Contractor's
Soil and Aggregate Analysis • Type G – Crushed Aggregate • Type H – Drain Rock • Type E – Pea Gravel • Type I – Backfill Material	ASTM C-136 ASTM C-117 ASTM C-40 ASTM D-1140 ASTM D-1183 ASTM D-4318	10% of Contractor's
All other required testing for Contract conformance.		

17. Acceptance

The CM shall promptly reject, orally, or in writing, any construction work that does not fully comply with Contract documents. Within 24 hours of notification to the Contractor that work elements have been rejected, the CM shall provide a written description of the deficiency to the GWA Chief Engineer for his/her concurrence. When concurrence has been obtained, the Contractor shall be directed to correct the work. The CM shall promptly advise the GWA Project Manager or the GWA Chief Engineer if the Contractor fails to correct or remove the defective work.

The CM shall issue written stop work orders to the Contractor and immediately provide GWA with a copy for a portion of or the entire Contract non-compliance issues as follows:

- If condition of work or Contractor actions threatens the health and safety of Contractor personnel, GWA representatives, or public in such cases, stop work orders may be oral depending on the circumstances with written stop work order to follow.
- With prior notification and approval of the GWA Chief Engineer or Project Manager in all other cases.

18. Construction Survey Services (Quality Assurance)

The CM shall conduct survey and field measurements as necessary to verify that the work is located according to the plans and specifications. Changes to the horizontal and vertical alignments and elevations shall be made only with the approval of the GWA Chief Engineer.

- Pipeline Alignments and Location of Structures: Spot check Contractor's construction staking to verify the pipeline alignments and structure locations are as called for on the plan and specifications and in order to insure that the work and is location within lawful and approved Rights-of-Way and easements.
- Elevations: Spot check with Contractor's elevations for foundations, pads, pipe line inverts, backfill thickness, manholes, and other structures for which vertical elevations is a critical design element.
- Construction Survey Quality Assurance: The CM shall provide, <u>at the minimum</u>, the following CQA survey to monitor the Contractor's independent survey firm:

<u>Under Tank Piping</u>

a. Inlet piping & top of flange
b. Outlet piping & top of flange
c. Over flow piping & top of flange
d. Drain line piping & top of flange
e. Wash down piping & top of flange
f. Ring drain, high points and outlets

<u>Over Excavation</u>

a. Bottom of over excavation
b. Top of Type G – fine aggregate
c. Top of Type H – drain rock

<u>Tank Foundation</u>

a. Top of formwork

<u>Vaults</u>

a. Top inlet vault footing formwork
b. Top inlet vault roof slab formwork
c. Top outlet vault footing formwork
d. Top outlet vault roof slab formwork
e. Top drain vault footing formwork
f. Top drain vault roof slab formwork
g. Top electrical hand hold
h. Top communication hand hold
i. PRSV

Pavement
a. Ribbon gutter formwork
b. Pavement formwork

Water Line
a. Invert of newly installed pipe
b. Location of fittings
c. Utility nodes, such as vertical and horizontal bends in pipes
d. Exposed utilities
e. New chambers, manholes, vaults, or structures

Bench Marks
a. Establish bench marks on the top of all vaults, top of footing at water height gauge, overflow, drain, and outlet

19. Project Closeout (Punch List and Project Closeout Inspections)

Throughout the construction of the project, prepare and maintenance a list of defects and deficiencies in the work which must be corrected by the Contractor prior to final acceptance of work. The list shall be provided to all members of the pre-final and final inspection team. The list shall be revised after inspections to reflect additional items identified during the inspection. Coordinate with the Contractor to ensure that all punch list items have been completed. When all items have been completed, inform GWA in writing recommending that the work be accepted.

Schedule, arrange, and conduct interim, pre-final, and final inspections of work with Contractor, GWA, GEPA, DPW, and other stakeholders in this project.

- Preliminary Inspection: Preliminary inspections shall be arranged as necessary for specific work elements that require the certification and approval of other agencies
- Pre-final Inspection: A pre-final inspection shall be conducted after substantial completion of the work
- Final Inspection: The final inspection shall be conducted after correction of pre-final inspection punch list items.

20. Train and Warranty Periods

The CM shall coordinate with the Contractor to schedule and conduct startup training and standard maintenance procedures required by the Contract document.

The CM shall maintain a copy of the warranties and compile associated Manufacturer and Contractor warranty documents. Warranty information shall be included in the final project report. All original warranty documents shall be provided to GWA along with Lien Release Information from the Contractor.

21. Equipment

The CM shall provide GWA with 15 water pressure data loggers, batteries, lock boxes, chains, padlocks, and associated fittings. The water pressure data loggers shall be USB downloading, water resistant case, delay start feature, and 0-300 PSI range.

The CM shall provide GWA with a Panasonic Toughbook 20 or approved equal. Windows 10 Pro shall be the operating system.

E. POST CONSTRUCTION SERVICES

1. Final Report

The CM shall prepare a final report after written acceptance of the work by GWA. The final report shall include a narrative documentation of all significant design and construction events and issues and shall become a historical record for the project. The Final Report shall include:

- All communication documentation
- All design documentation
- All construction documentation
- Warranty information
- Operation and maintenance information
- Asset management registry

Deliverables (electronic pdf files and 5 hard copies):

- CM Final Report

2. Record Drawings

After the conclusion of the project, the CM shall review and approve the official record drawings prepared by the Contractor. Record drawings shall be marked and sealed by a professional engineer licensed on Guam in accordance with Guam PEALS regulations.

Deliverables (electronic pdf files and 5 hard copies):

- As-Built Record Drawings

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: **October 20, 2017**

SUBJECT: **General Manager's Report**

1. Generation System Update:

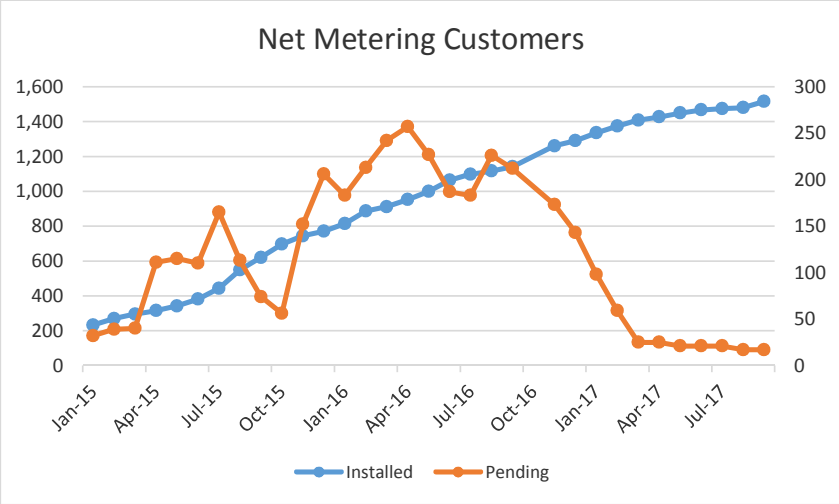
- The following table projects the expected reserve level for November 2017. The projected system reserve of 142 MW is adequate to cover the loss of the two largest units at an anticipated peak demand of 255 MW for November.
- The Re-commissioning of the Dededo Combustion Turbines 1 & 2 is scheduled for this Tuesday, October 24th at 10:00am at the Dededo Plant. GPA invested about $10M to refurbished the plant and provide 40MW of power.
- TEMES 7 will be turned over to GPA on December 4th, 2017. The turnover is part of a 20-year Build, Operate and Transfer (BOT) Contract signed 20 years ago. GPA has begun shadowing the Independent Power Producer (IPP) TEMES operation since June 2017 in preparation of the transfer. GPA is contracting a Professional Service Team for about $250K to assist in the operation and maintenance of the plant utilizing GPA employees. The annual cost savings of the takeover is about $5 to $6 Million.
- The MEC 8 & 9 plant is scheduled for transfer to GPA ownership in January 2019. We are currently reviewing if an extension of this contract is possible or do we need to issue a bid for a 10 to 15-year IPP contract to re-capitalize, operate and maintain the plant. This IPP Contract currently cost GPA about $28 Million annuall

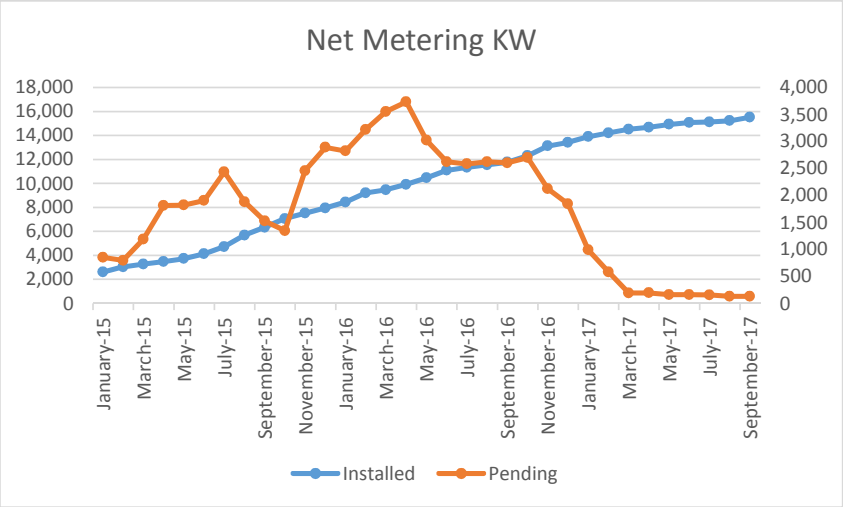
Generation Capacity Summary:

	Projected November 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)	**255**
GPA SYSTEM RESERVE (20 MW Greater than two largest units)	**142**

2. Net metering Summary Ending September 2017:

Description:	Count	Kw	
Active	**1,515**	**15,226**	
Pending	17	129	
Totals:	1,532	15,355	
Service:	**Count**	**KW**	**Kw/Customer**
Residential	1,436	12,862	9.0
Others	79	2,364	29.9
Total:	1,515	15,226	10.1
% Residential	**94.8%**	**84.5%**	
Estimated 12 Months Revenue Impact:	**$2,828,835**		





Renewable Energy Production Summary thru September 2017:

Energy Production Thru September 2017:

Energy Production Source:	Kwh	Oil Barrels Avoided	Fuel Cost Avoided
NRG Total Production beginning Oct 2015	96,868,569	161,966	$8,908,125
Net Metering Estimated Production beginning Jan 2015	45,624,955	76,286	$4,195,714
Wind Power Production beginning Jan 2016	719,426	1,203	$66,159
Renewables Total:	**143,212,950**	**239,455**	**$13,169,998**
System Heat Rate Kwh / Gal	14.2		
System Fuel $/Bbl.	$55.00		

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



4. **Phase II Renewables:** The OPA hearing on this protest begins this Tuesday, October 24th. The OPA plans to render a decision within 30 days thereafter.

5. **Public Power Week:** GPA had a successful public power week. Special thanks to Art Perez and the committee which made it all possible with special events, visits to schools and health care centers and a donation to the American Red Cross. The Communications Division will be working on next year's special events to mark GPA's 50th anniversary as an autonomous agency and now public corporation owned by the ratepayers of Guam.

6. **Health and Benefit Fair**: The Guam Power Authority will be a hosting a Health and Benefits Fair on October 27, 2017, from 9am – 12pm, at the Gloria B. Nelson Public Service Building 2nd floor training rooms.

   Based on AP-47, GPA is committed to maintaining a safe, healthful and productive work environment. This Health and Benefits fair will encourage and provide employees awareness of their health condition and the importance of an active lifestyle. Vendors to include insurance companies, local gyms, retirement representatives, clinics and other vendors will be present to support this health and benefits fair. This event is open to all Guam Power Authority and Guam Waterworks Authority Employees.

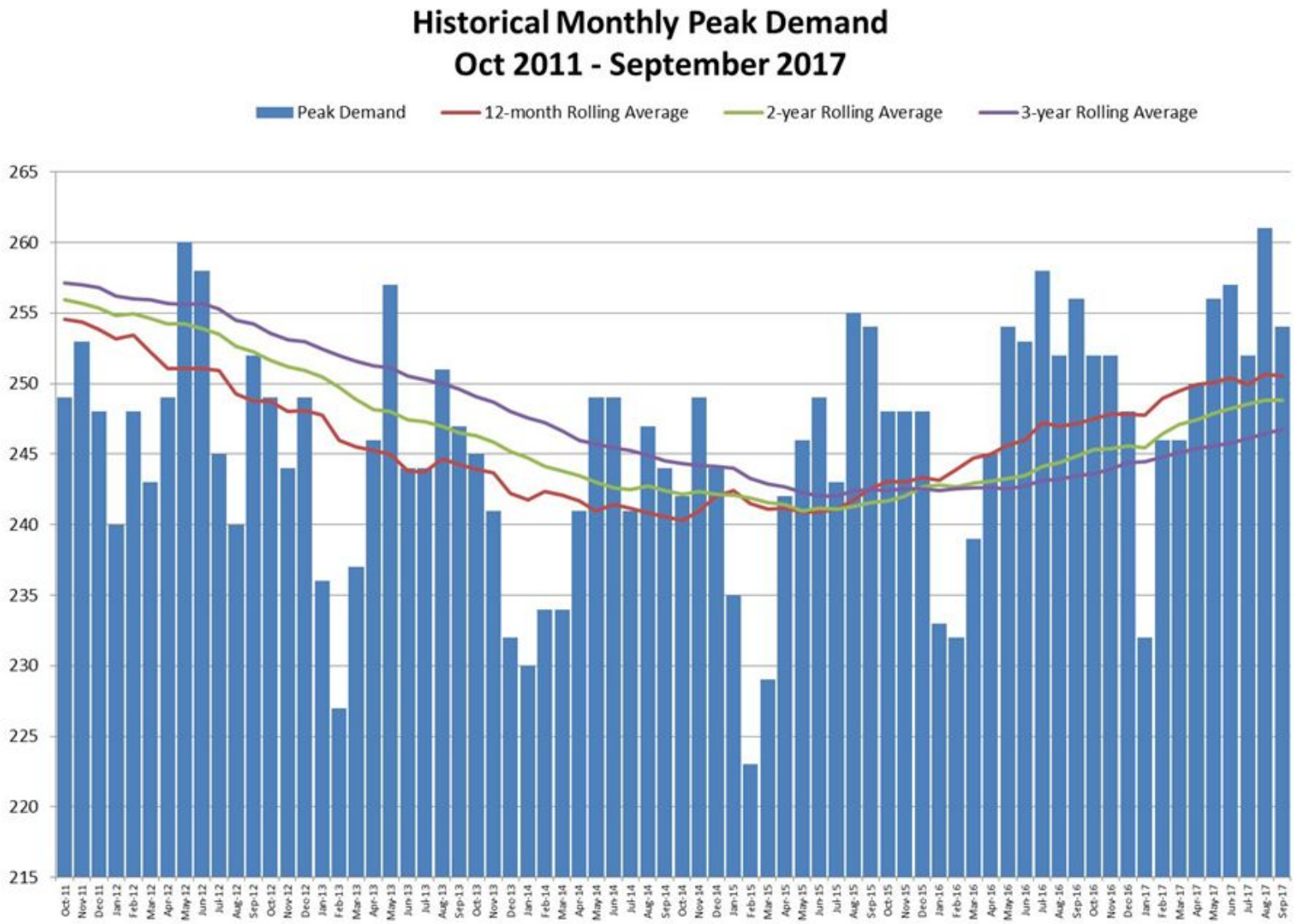
7. **PUC Agenda for October 26, 2017:**
   - **GPA Docket 18-01, Procurement of Residual Fuel Oil**

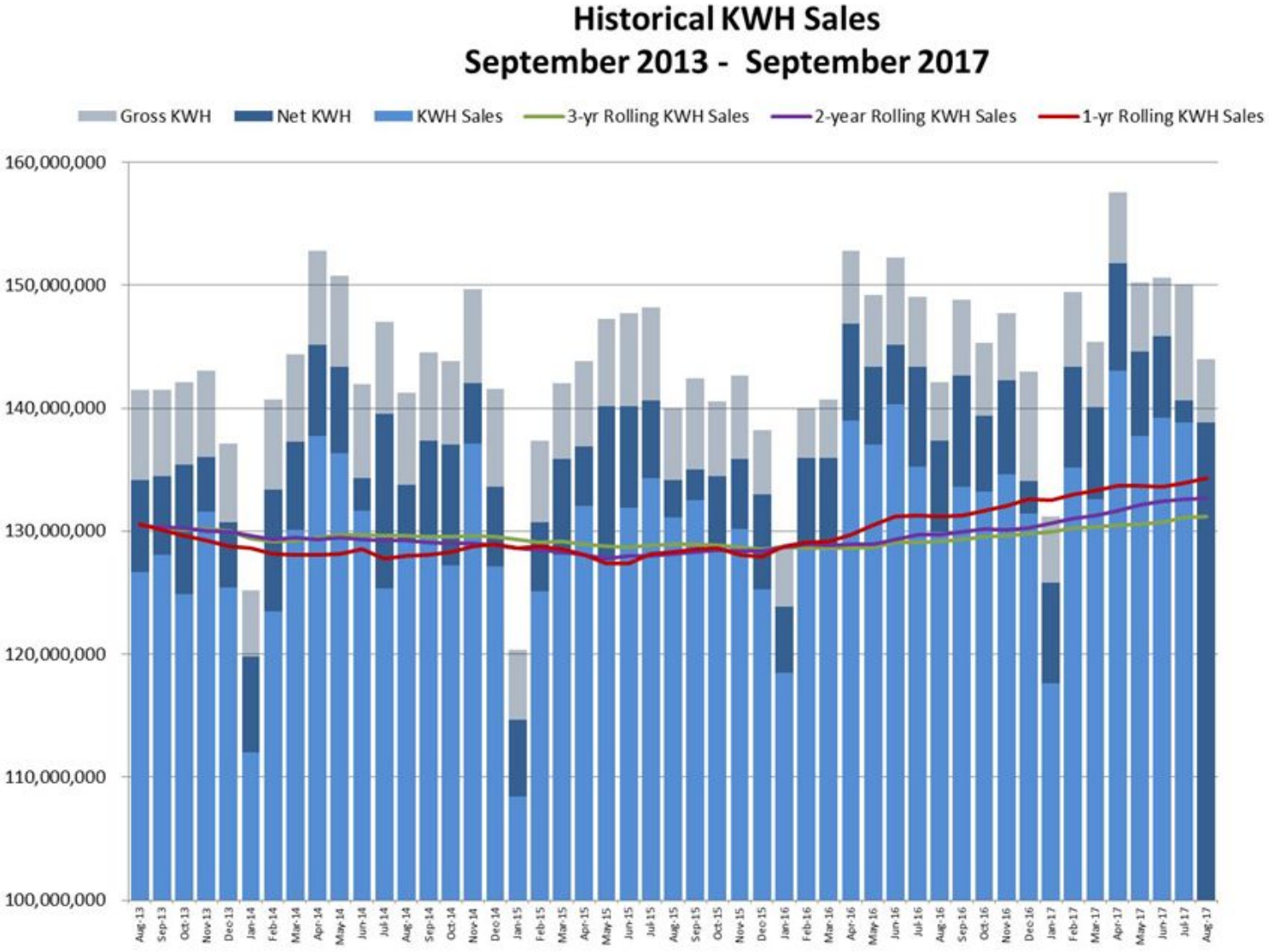
8. **Presentations on New Power Plant:** I am scheduled to present as follows:

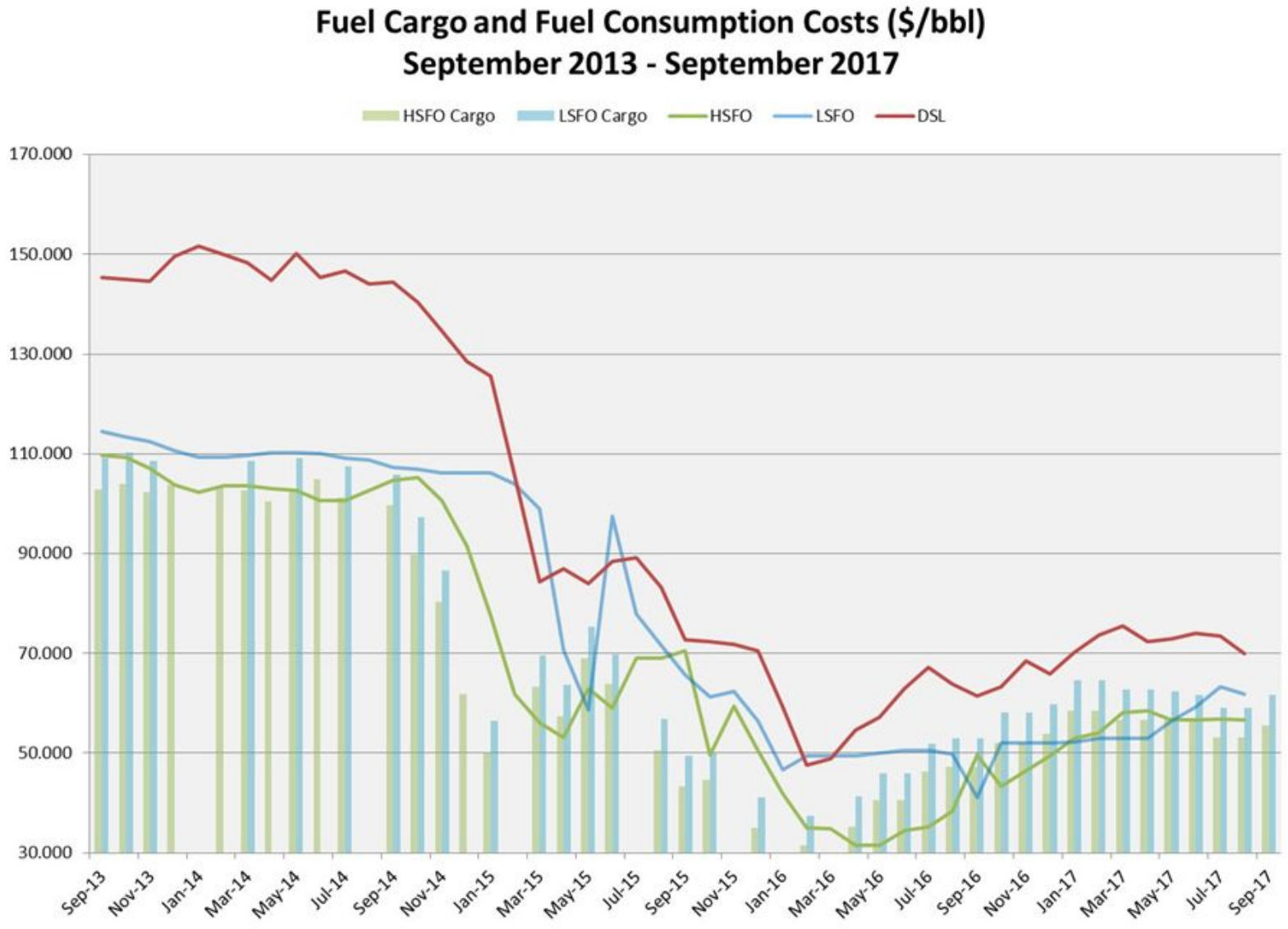
   - GHRA Membership, November 9th

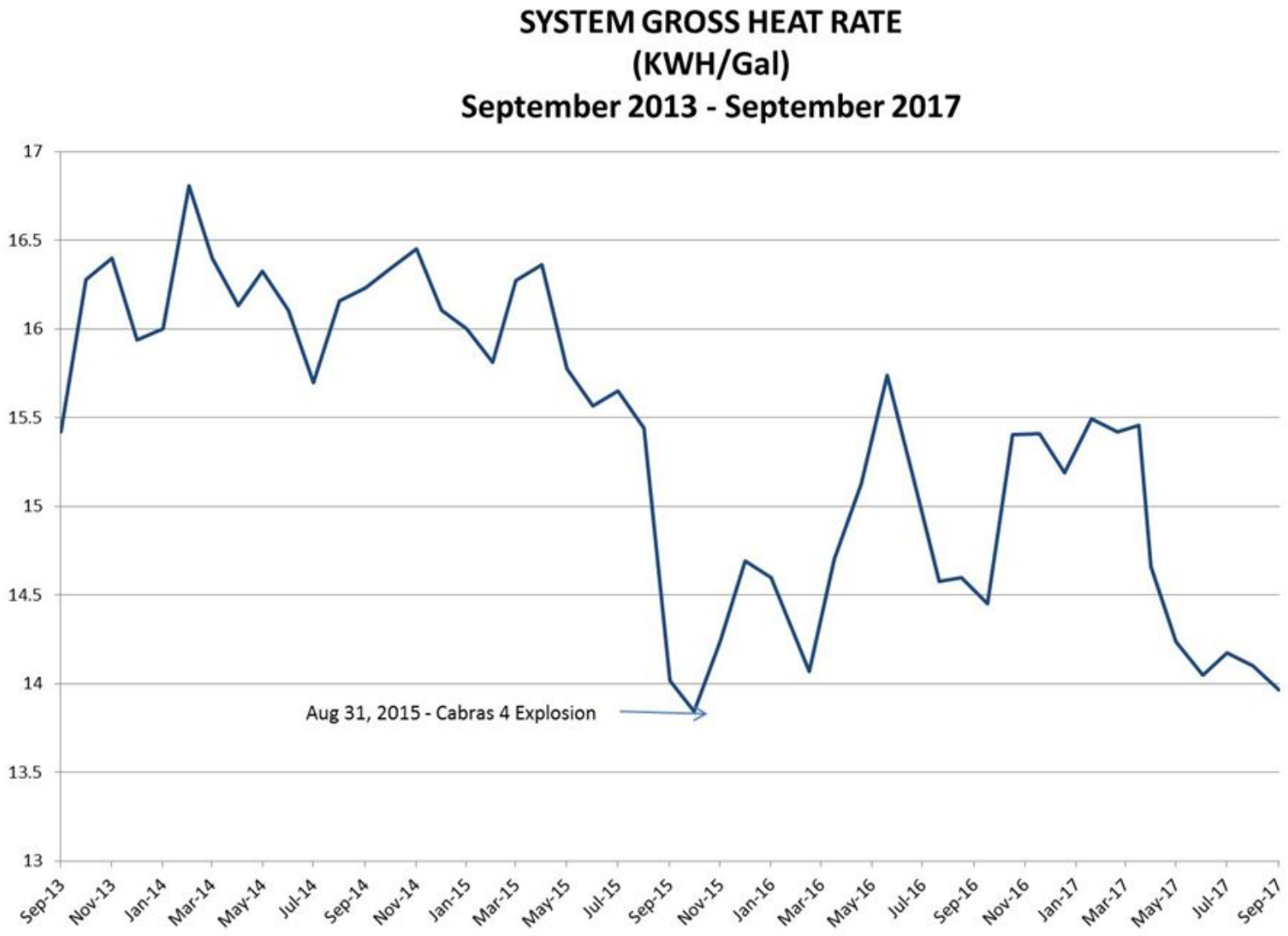
9. **Key Performance Indicators:** The following pages provide updated information thru September 2017.

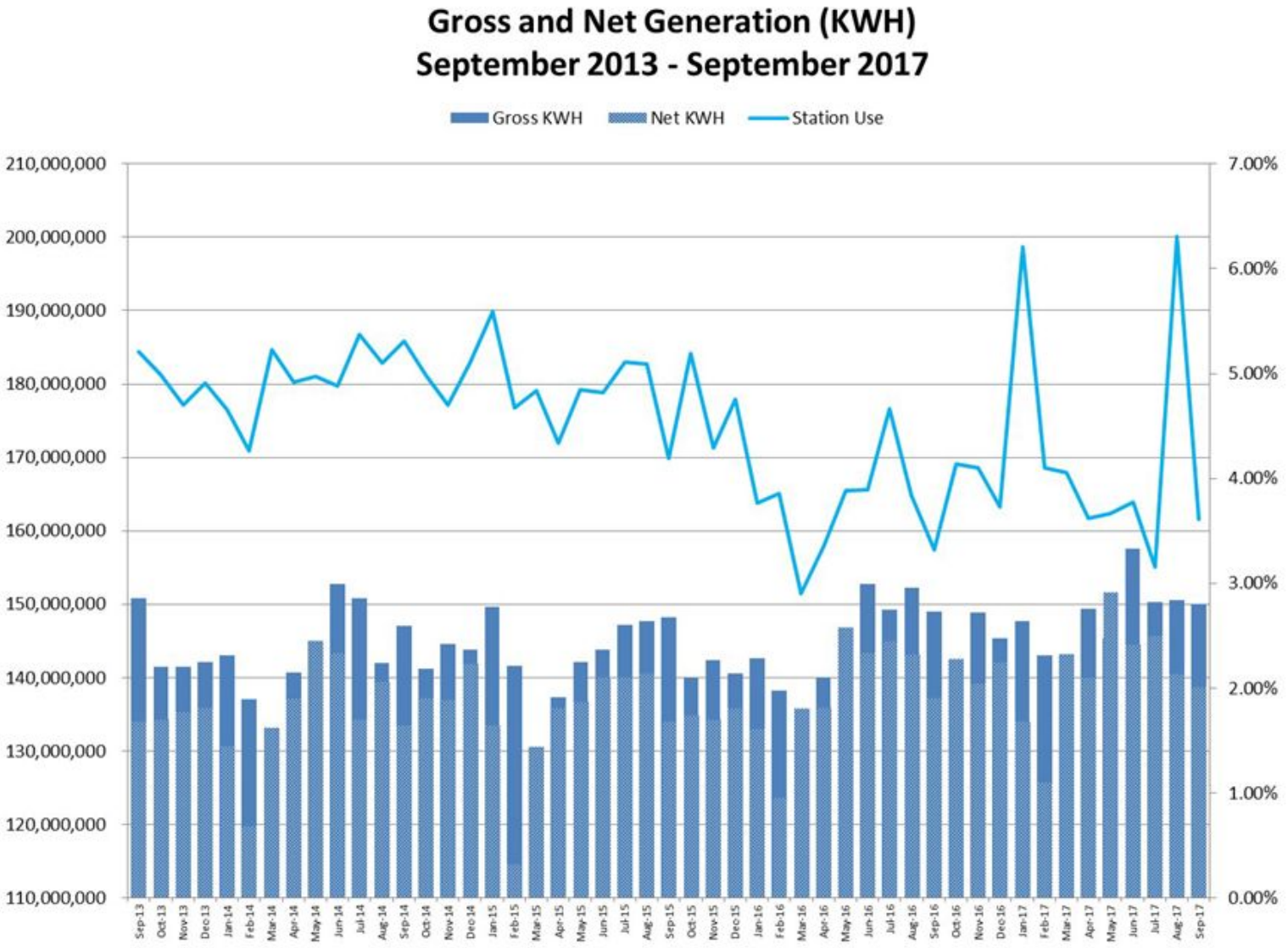
John M. Benavente, P.E.


Historical Monthly Peak Demand
Oct 2011 - September 2017
Peak Demand
12-month Rolling Average
2-year Rolling Average
3-year Rolling Average
265
260
255
250
245
240
235
230
225
220
215
Oct-11
Nov-11
Dec-11
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
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May-16
Jun-16
Jul-16
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Nov-16
Dec-16
Jan-17
Feb-17
Mar-17
Apr-17
May-17
Jun-17
Jul-17
Aug-17
Sep-17


Historical KWH Sales
September 2013 - September 2017
Gross KWH
Net KWH
KWH Sales
3-yr Rolling KWH Sales
2-year Rolling KWH Sales
1-yr Rolling KWH Sales
160,000,000
150,000,000
140,000,000
130,000,000
120,000,000
110,000,000
100,000,000
Aug-13
Sep-13
Oct-13
Nov-13
Dec-13
Jan-14
Feb-14
Mar-14
Apr-14
May-14
Jun-14
Jul-14
Aug-14
Sep-14
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Oct-16
Nov-16
Dec-16
Jan-17
Feb-17
Mar-17
Apr-17
May-17
Jun-17
Jul-17
Aug-17


Fuel Cargo and Fuel Consumption Costs ($/bbl)
September 2013 - September 2017
HSFO Cargo
LSFO Cargo
HSFO
LSFO
DSL
170.000
150.000
130.000
110.000
90.000
70.000
50.000
30.000
Sep-13
Nov-13
Jan-14
Mar-14
May-14
Jul-14
Sep-14
Nov-14
Jan-15
Mar-15
May-15
Jul-15
Sep-15
Nov-15
Jan-16
Mar-16
May-16
Jul-16
Sep-16
Nov-16
Jan-17
Mar-17
May-17
Jul-17
Sep-17


SYSTEM GROSS HEAT RATE
(KWH/Gal)
September 2013 - September 2017
17
16.5
16
15.5
15
14.5
14
13.5
13
Aug 31, 2015 - Cabras 4 Explosion
Sep-13
Nov-13
Jan-14
Mar-14
May-14
Jul-14
Sep-14
Nov-14
Jan-15
Mar-15
May-15
Jul-15
Sep-15
Nov-15
Jan-16
Mar-16
May-16
Jul-16
Sep-16
Nov-16
Jan-17
Mar-17
May-17
Jul-17
Sep-17


Gross and Net Generation (KWH)
September 2013 - September 2017
Gross KWH
Net KWH
Station Use
210,000,000
200,000,000
190,000,000
180,000,000
170,000,000
160,000,000
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