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

GUAM POWER AUTHORITY WORK SESSION

CCU Conference Room

4:30 p.m., Wednesday, November 21, 2018

* AMENDED AGENDA

1. **ISSUES FOR DECISION**
   - 1.1 **Levelized Energy Adjustment Clause (LEAC) / RESOLUTION NO. 2018-27**
   - 1.2 **Relative to the Creation of Equipment Operator Superintendent Position / RESOLUTION NO. 2018-28**
   - 1.3 **Relative to FHB Credit Card / RESOLUTION NO. 2018-29**
   - 1.4 **Relative to 2nd Year Extension to Diesel Fuel Contract / RESOLUTION NO. 2018-30**

2. **GM REPORT**
   - 2.1 **GM Summary**

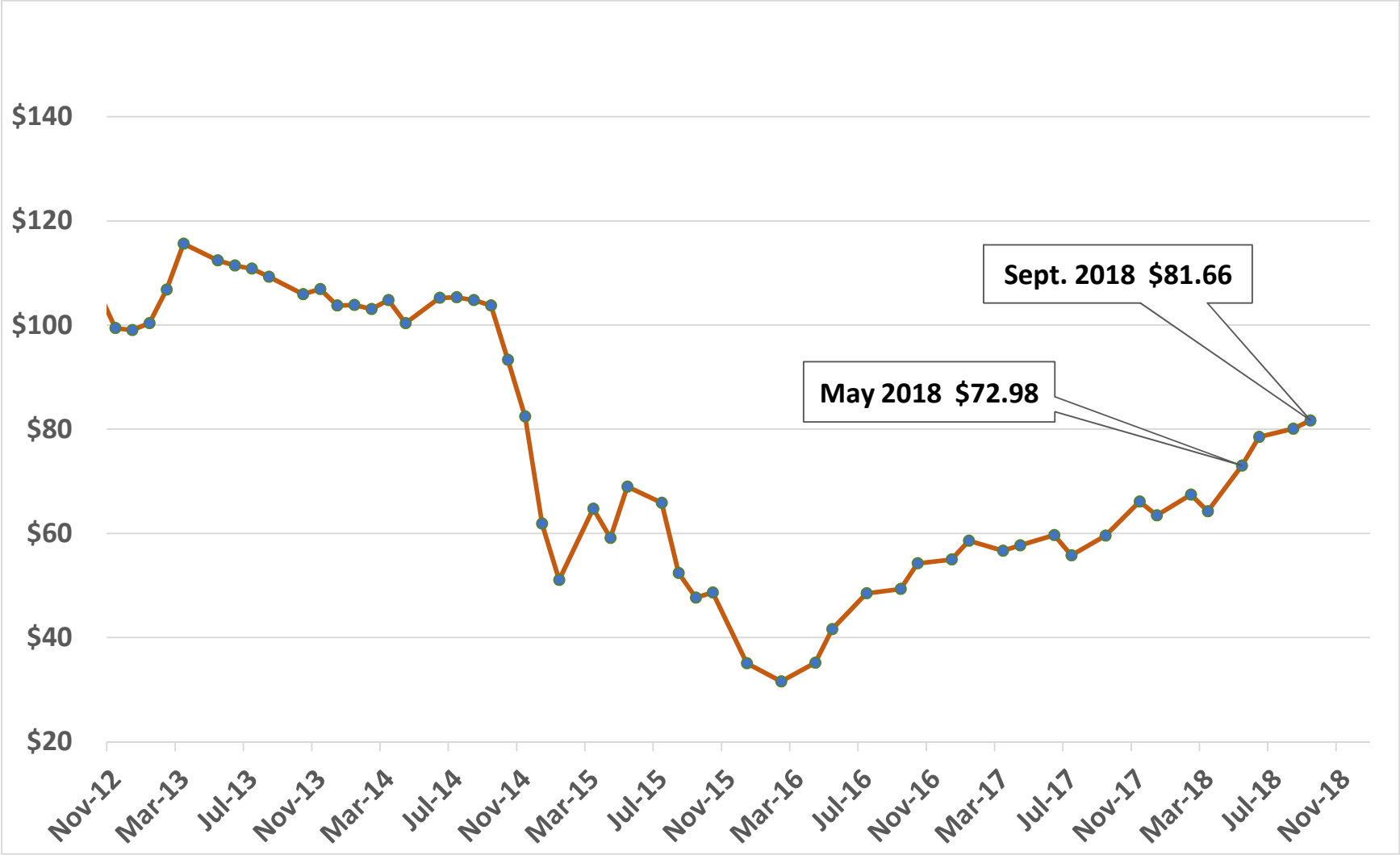
* 3. **ISSUES FOR DISCUSSION**
   - 3.1 **Typhoon Yutu Update**
   - 3.2 **CNMI Recovery Assistance**
   - 3.3 **GDOE Best School Feasibility Study**

4. **DIVISION REPORTS**
   - 4.1 **Administration: Customer Service, HR, Procurement, Safety**
   - 4.2 **Engineering & Technical: Engineering, IT, Planning & Regulatory, SPORD**
   - 4.3 **Finance Reports**
   - 4.4 **Operations: Facilities, Generation, PSCC, T&D, Transportation**
   - 4.5 **Public Information Office**

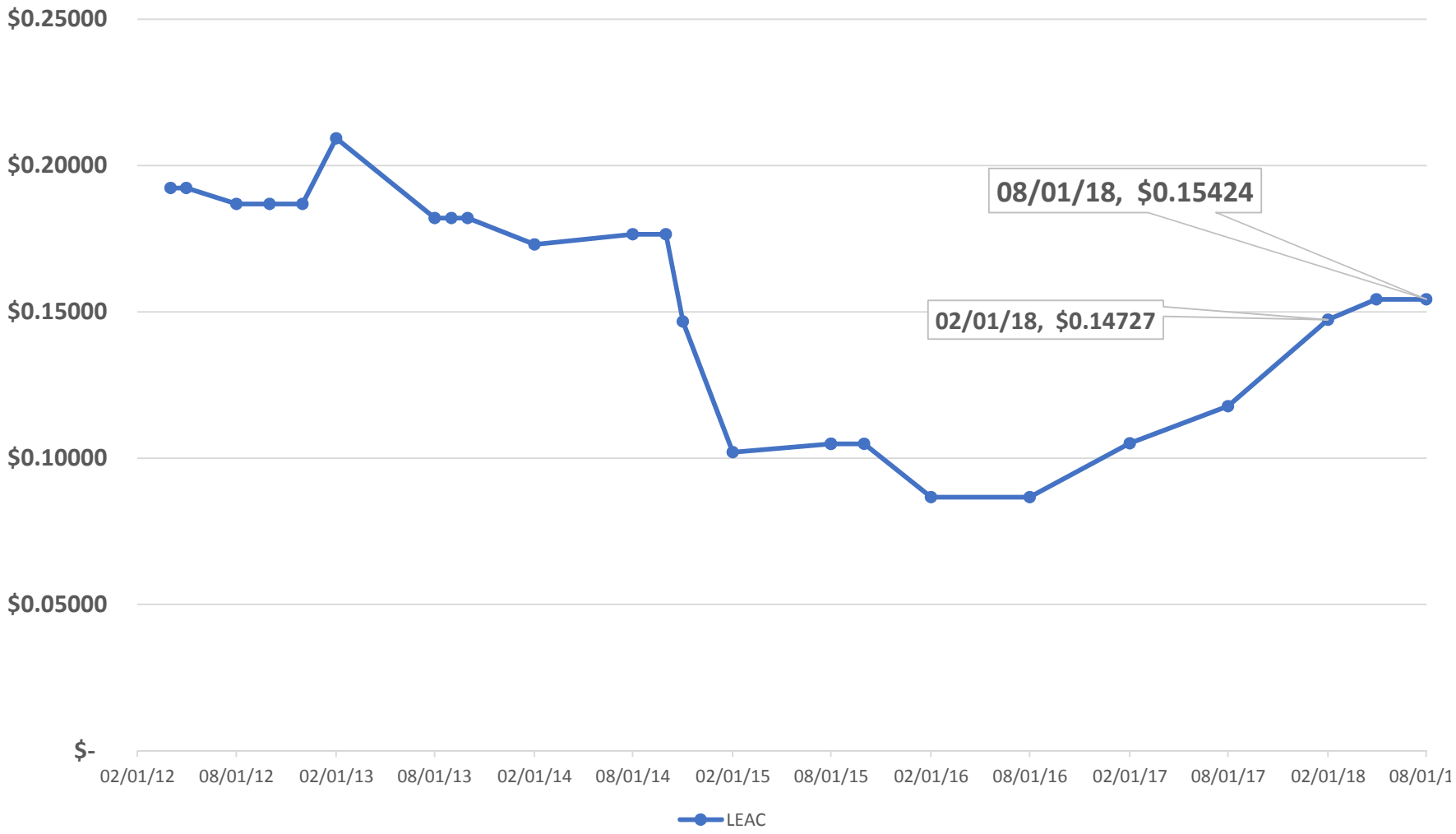
5. **ANNOUNCEMENTS**
   - 5.1 **Next Meeting: CCU Meeting – November 27, 2018**

6 **ADJOURNMENT**

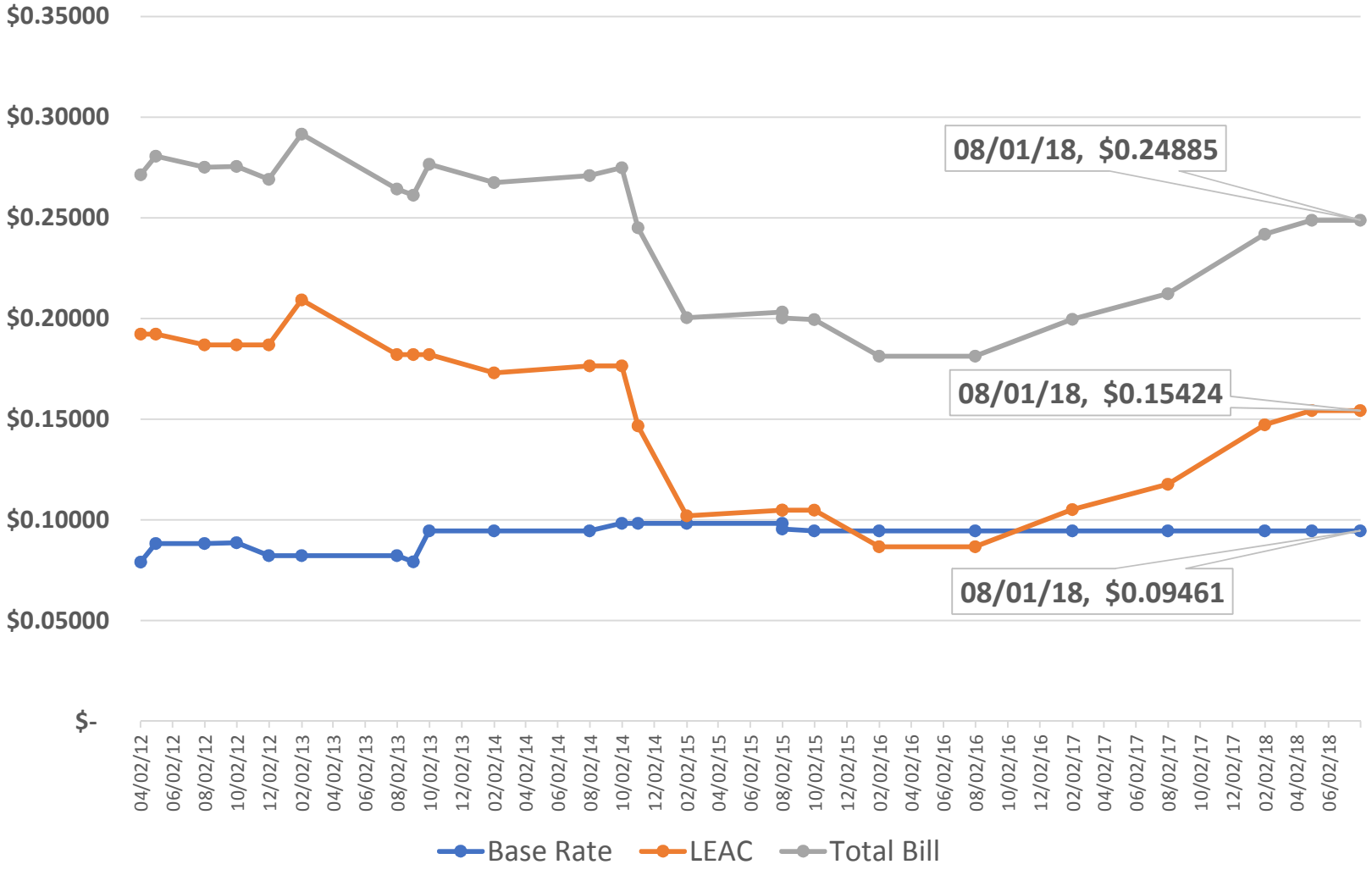
LEAC Update – GPA Fuel Purchases (Per Barrel)



Historical Residential LEAC Rate



Historical Residential Rate



Historical LEAC Over (Under) Recovery

LEAC Period From	LEAC Period To	Approved LEAC Rate	Actual Over (Under) Recovery	
4/1/2012	7/31/2012	$ 0.192310	$ (3,040,418)	
8/1/2012	1/31/2013	$ 0.186834	$ (2,494,052)	
2/1/2013	7/31/2013	$ 0.209271	$ 1,345,259	
8/1/2013	10/31/2013	$ 0.182054	$ 1,300,093	
2/1/2014	7/31/2014	$ 0.172986	$ (1,137,034)	
8/1/2014	10/31/2014	$ 0.176441	$ (4,646,872)	
11/1/2014	1/31/2015	$ 0.146666	$ 661,428	
2/1/2015	7/31/2015	$ 0.102054	$ 1,757,878	
8/1/2015	1/31/2016	$ 0.104871	$ (2,467,151)	
2/1/2016	7/31/2016	$ 0.086613	$ (2,668,603)	
8/1/2016	1/31/2017	$ 0.086613	$ (9,915,360)	
			$ (5,315,360)	a
2/1/2017	7/31/2017	$ 0.105051	$ (14,050,504)	
8/1/2017	01/31/1018	$ 0.117718	$ (16,775,982)	
2/1/2018	4/30/2018	$ 0.147266	$ (13,005,689)	
5/1/2018	7/31/2018	$ 0.154242	$ (8,422,674)	
8/1/2018	1/31/2019	$ 0.154242	$ (13,684,055)	Estimate

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

LEAC Update – Scenario Model Runs

	Proposed Effective 02/01/2019	Fuel Price at $65 per barrel		
		@ Zero Cost Recovery	@ 50% Recovery	@ Full Cost Recovery
1	Average Price per Bbl-RFO	$ 66.73	$ 66.73	$ 66.73
2	Average Price per Gal-Diesel	$ 83.03	$ 83.03	$ 83.03
3	Proposed LEAC Rate	**$ 0.154242**	**$ 0.158055**	**$ 0.161870**
4	Monthly Increase/(Decrease) - 1000 kWh	$ -	$ 3.81	$ 7.63
5	% Increase/(Decrease) in LEAC	0.00%	2.47%	4.95%
6	% Increase/(Decrease) in Total Bill	0.00%	1.53%	3.07%
7	Fuel Cost (Over) Under Recovery at the end of the period	**$5.0M**	**$2.5M**	**$ -**

LEAC Update – Billing Illustrations

	@ Zero Recovery		@ 50% Recovery		@ Full Recovery	
	Effective 2/1/19		Effective 2/1/19		Effective 2/1/19	
KWH		1,000		1,000		1,000
Monthly Charge	15.00	15.00	15.00	15.00	15.00	15.00
Non-Fuel Energy Charge						
First 500 KWH	0.06955	$ 34.78	0.06955	$ 34.78	0.06955	$ 34.78
Over 500 KWH	0.08687	$ 43.44	0.08687	$ 43.44	0.08687	$ 43.44
Emergency Water-well charge	0.00279	$ 1.40	0.00279	$ 1.40	0.00279	$ 1.40
Insurance Charge		$ -		$ -		$ -
Working Capital Fund Surcharge		$ -		$ -		$ -
Roll-Back Credit		$ -		$ -		$ -
Total Electric Charge before Fuel Recovery Charges		$ 94.61		$ 94.61		$ 94.61
Fuel Recovery Charge	**0.154242**	154.24	**0.158055**	158.06	**0.16187**	161.87
Total Electric Charge		$248.85		$252.66		$256.48
Increase (Decrease) in Total Bill		$0.00		$3.81		$7.63
% Increase (Decrease) in Total Bill		**0.00%**		**1.53%**		**3.07%**
% Increase (Decrease) in LEAC		**0.00%**		**2.47%**		**4.95%**
Cents/kWh		**$ 0.2488**		**$ 0.2527**		**$ 0.2565**

GUAM POWER AUTHORITY
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Issues for Decision

Resolution No. ***2018-27***

Relative to LEAC

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

The Guam Public Utilities Commission (GPUC) has established a Tariff under which the Guam Power Authority (GPA) is allowed to recover its fuel costs and fuel related costs under a factor which is reset and trued up every (6) six months through the Levelized Energy Adjustment Clause (LEAC). The deadline for the next filing is December 15, 2018. For the LEAC period covered of August 1, 2018 through January 31, 2019, GPA requested to maintain the LEAC rate of $0.154242/kWh that was approved for meters read on or after May 1, 2018. in anticipation of rising prices in the fuel market and to recover at least 70% of the under recovery at the end of the period. Since the application of the current rate beginning May 1, 2018, GPA was able to reduce the under-recovery balance of $12.2M as of April 30, 2018 to $8.3M by September 30, 2018; below the previously projected under-recovery balance of $8.8 million for that same date.

The average market price of fuel in the initial filing for the current period was approved at $77.13/bbl for the (6) six-month period ending January 31, 2018, the current projection for the remaining three months of this LEAC period is $69.30/bbl and the projected price of fuel for the period ending July 31, 2019 is $65.04/bbl. ***Although GPA will file the required LEAC schedules, it has determined that it will not petition for a change in the LEAC factor for secondary voltage service customers as well as alternative voltage customer for the period of February 1, 2019 to July 31, 2019.***

How much will it cost?
The LEAC rate to **remain at $0.154242/kWh** effective for the period from February 1, 2019 thru July 31, 2019.

Based on this status quo approach, an under-recovery of about **$5.0M** is anticipated by the end of the LEAC period on July 31, 2019 which will have some impact on the working capital and other financial ratios however GPA will be able to manage in a short-term period.

CONSOLIDATED COMMISSION ON UTILITIES
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RESOLUTION NO.: 2018 - 27

AUTHORIZING THE MANAGEMENT OF THE GUAM POWER AUTHORITY TO PETITION THE GUAM PUBLIC UTILITIES COMMISSION FOR NO CHANGE IN THE LEVELIZED ENERGY ADJUSTMENT CLAUSE

WHEREAS, the Guam Public Utilities Commission (GPUC) has established a Tariff under which the Guam Power Authority (GPA) is allowed to recover its fuel costs and fuel related costs under a factor which is reset and trued up every (6) six months through the Levelized Energy Adjustment Clause (LEAC); and

WHEREAS, the deadline for the next filing is December 15, 2018; and

WHEREAS, for the LEAC period covered of August 1, 2018 through January 31, 2019, GPA requested to maintain the LEAC rate of $0.154242/kWh that was approved for meters read on or after May 1, 2018. in anticipation of rising prices in the fuel market and to recover at least 70% of the under recovery at the end of the period; and

WHEREAS, since the application of the current rate beginning May 1, 2018, GPA was able to reduce the under-recovery balance of $12.2M as of April 30, 2018 to $8.3M by September 30, 2018; below the previously projected under-recovery balance of $8.8 million for that same date; and

WHEREAS, the average market price of fuel in the initial filing for the current period was approved at $77.13/bbl for the (6) six-month period ending January 31, 2018, the current projection for the remaining three months of this LEAC period is $69.30/bbl and the projected price of fuel for the period ending July 31, 2019 is $65.04/bbl; and

WHEREAS, although GPA will file the required LEAC schedules, it has determined that it will not petition for a change in the LEAC factor for secondary voltage service customers as well as alternative voltage customer for the period of February 1, 2019 to July 31, 2019; and

WHEREAS, based on this status quo approach, an under-recovery of about $5.0M is anticipated by the end of the LEAC period on July 31, 2019 which will have some impact on the working capital and other financial ratios however GPA will be able to manage in a short term period; and

WHEREAS, GPA now is requesting the Consolidated Commission on Utilities to authorize the Authority to file such petition with the Guam Public Utilities Commission; and

NOW, THEREFORE BE IT RESOLVED, by the Consolidated Commission on Utilities as follows:

The General Manager of the Guam Power Authority is authorized to petition the Guam Public Utilities Commission for the LEAC rate to remain at $0.154242/kWh effective for the period from February 1, 2019 thru July 31, 2019. (LEAC factors for alternative voltage levels are as reflected in the attached spreadsheets in the attached Exhibit A.)

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

DULY AND REGULARLY ADOPTED AND APPROVED THIS 27th DAY OF NOVEMBER 2018

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

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

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

ISSUES FOR DECISION

CREATION OF POSITION

EQUIPMENT OPERATOR SUPERINTENDENT

Summary

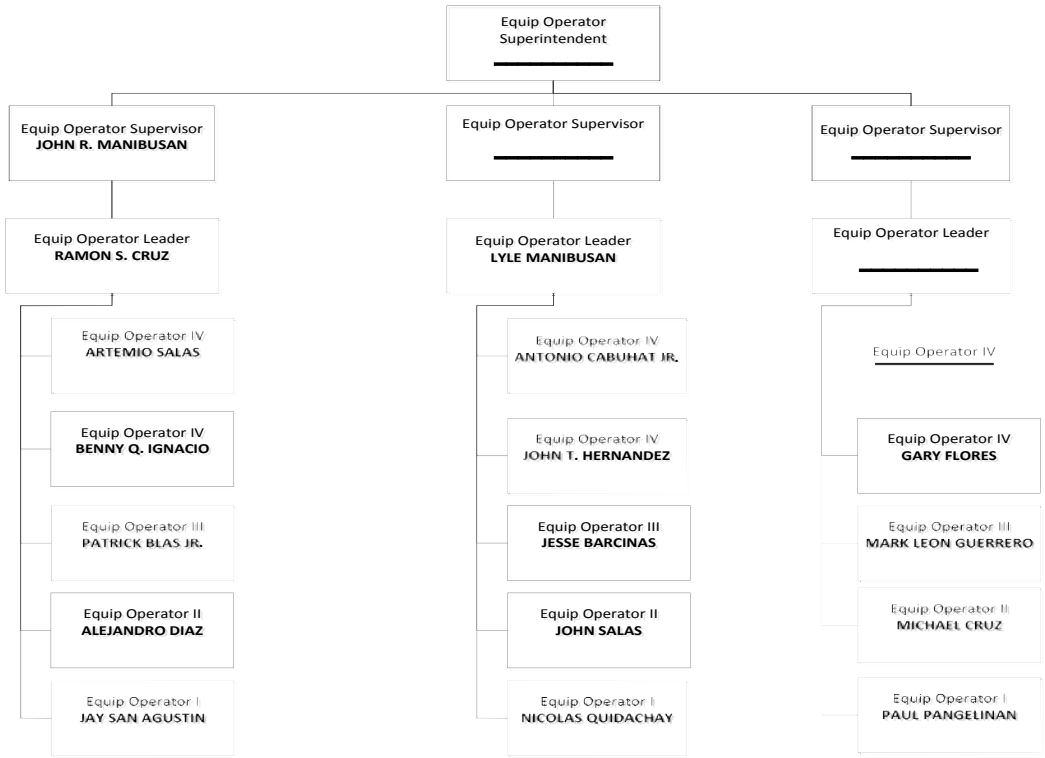
- Oversee the day-to-day operations of the Equipment Operator section to support all facets of installation and maintenance work within the Transmission and Distribution Division
- Plan and coordinate all equipment operations work such as new installations, relocations, and removals in construction and maintenance related projects in the Overhead, Underground, and Substation sections.
- Coordinate efforts with other divisions within the Authority and outside agencies such as the Guam Waterworks Authority and the Department of Public Works
- Oversee and manage the Vegetation Management Program such as scheduling of brush cutting maintenance, tractor mowing and tree trimming
    - Minimize outsourcing

Organizational Chart

Revised: 11/15/2018

T&D
Equipment Operators Section

PROPOSED



HEAVY EQUIPMENT

Backhoe = 2
Crane 25 tons = 1
Crane 40 tons = 1
Derrick = 1
Dump Truck = 3
Flatbed = 1
Gooseneck Trailer = 3
Pressure Digger = 3
Side Mower = 3
Backhoe Trailer = 2
Tractor = 2

Benchmark Position	JE	15th Market Percentile (2017 Market Data - 5 sub steps)									
		Structural Adjustment - MIN					Structural Adjustment - MAX				
		Base Salary	Hourly	Grade	Step	Sub Step	Base Salary	Hourly	Grade	Step	Sub Step
Equipment Operator I	397	29,358	14.11	E	3	B	30,550	14.69	E	4	B
Equipment Operator II	445	33,697	16.20	F	5	B	35,066	16.86	F	6	B
Equipment Operator III	511	38,296	18.41	G	7	A	39,851	19.16	G	8	A
Equipment Operator IV	546	42,160	20.27	H	7	B	43,872	21.09	H	8	B
Equipment Operator Leader I	644	47,691	22.93	I	7	C	49,628	23.86	I	8	C
Equipment Operator Leader II	661	51,330	24.68	J	6	C	53,414	25.68	J	7	C
Equipment Operator Supervisor	795	57,357	27.58	K	4	C	59,686	28.70	K	5	C
Equipment Operator Superintendent (Proposed)	927	71,080	34.17	M	2	A	73,966	35.56	M	3	A

TIMELINE	CREATION Equipment Operator Superintendent
10-Day Timeline Website posting:	11/13/18
GPA CCU Meeting:	11/27/18
Approval:	11/27/18
Job Announcement:	11/28/18
File with DOA:	11/28/18
File with Legislative Secretary:	11/28/18
Effective Date:	12/28/18

GUAM POWER AUTHORITY
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Issues for Decision

Resolution No. ***2018-28***

Creation of Equipment Operator Superintendent position

What is the project's objective?
Creation of the Equipment Operator Superintendent position is to oversee the day-to-day operations of the Equipment Operator section to support all facets of installation and maintenance work within the Transmission and Distribution Division.

Is it necessary and urgent?
The creation of the Equipment Operator Superintendent position is necessary and critical to the Guam Power Authority as it will be directly responsible for the planning and coordination of all equipment operations work such as new installations, relocations, and removals in construction and maintenance related to the Overhead, Underground, and Substation sections. Additionally, the superintendent position will be responsible for coordinating efforts with other divisions within the Authority and outside agencies such as the Guam Waterworks Authority and the Department of Public Works. This position will oversee and manage the Vegetation Management Program such as scheduling of brush cutting maintenance, tractor mowing and tree trimming. The impact to creating a superintendent position is to minimize the outsourcing of this type of work.

Where is the location?
The position is located within the Transmission and Distribution Division (T&D) and will report the Manager of T&D

How much will it cost?
At the 15th market percentile (2017 market data):
minimum = $70,080 per annum; maximum = $73,966 per annum

When will it be completed?
Upon approval, GPA will file all creation documents with the Director of Administration and the Legislative Secretary for a filing period of 30 days. The position will be ready for recruitment by December 28, 2018.

What is its funding source? O&M funding

CONSOLIDATED COMMISSION ON UTILITIES
Guam Power Authority | Guam Waterworks Authority
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GPA RESOLUTION NO. 2018-28

RELATIVE TO THE APPROVAL OF THE CREATION OF AN EQUIPMENT OPERATOR SUPERINTENDENT POSITION

WHEREAS, under 12 G.C.A. §8104, the Consolidated Commission on Utilities ("CCU") has plenary authority over financial, contractual and policy matters relative to the Guam Power Authority; and

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

WHEREAS, the GPA General Manager requests the CCU to approve the creation of the Equipment Operator Superintendent position (Exhibit A); and

WHEREAS, the GPA General Manager requests the CCU to approve the classification standard of the Equipment Operator Superintendent position in the classified status; and

WHEREAS, Public Law 28-112 and 4 G.C.A. §6303(d) authorizes the creation in Autonomous Agencies and Public Corporations; and

WHEREAS, GPA Personnel Rules & Regulations as amended by Public Law 28-159 authorizes the CCU to amend, modify or add a position to the list of certified, technical and professional positions; and

NOW, THEREFORE BE IT RESOLVED, the Consolidated Commission on Utilities, as the Governing Body of the Guam Power Authority, does hereby approve and authorize the following:

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

2. The creation and the job classification standard for the Equipment Operator Superintendent position in the classified status is hereby approved and attached herein as Exhibit A.

3. The Equipment Operator Superintendent position is hereby added to the Certified, Technical and Professional list of positions at GPA.

4. The authorization of the Equipment Operator Superintendent position shall become effective December 28, 2018.

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

DULY AND REGULARLY ADOPTED AND APPROVED THIS 27th DAY OF NOVEMBER 2018.

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

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

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

Ayes: _____

Nays: _____

Absent: _____

Abstain: _____

GUAM POWER AUTHORITY
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MEDIA NOTICE

The Guam Power Authority petitions the Consolidated Commission on Utilities (CCU) the following:

CREATION OF POSITION: (Classified)
Equipment Operator Superintendent

This petition is in compliance with 4 GCA, Chapter 6, §6303 (d) (added by Public Law 28-112). The petition is also required by 4 GCA. §6205 and §6303 as public documents for the purposes of 5 GCA, Chapter 10, Art. 1 (Sunshine Law).

For more information, please visit the Guam Power Authority's website at www.guampowerauthority.com/gpa_authority/careers/gpa_petitions.php or you may contact the Human Resources Division at 648-3130.

John M. Benavente, P.E.
General Manager

GUAM POWER AUTHORITY
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STAFF REPORT

I. REQUEST:

The General Manager of the Guam Power Authority petitions the Consolidated Commission on Utilities (CCU) to create the following positions in the classified service pursuant to Public Law 28-112:

- Equipment Operator Superintendent

II. AUTHORITY:

Public Law 28-159, Section 3(c) Amendment of Certified, Technical, and Professional Positions. Section 9, 4 GCA §6303 (d) states:

"Creation of positions in the Autonomous Agencies and Public Corporations.

(1) The petition of the head of an agency, department or public corporation listed in the first paragraph of 4 GCA §4105(a) of this Title to create a position shall include:

A. the justification for the new position;

Creation of the Equipment Operator Superintendent position is to oversee the day-to-day operations of the Equipment Operator section to support all facets of installation and maintenance work within the Transmission and Distribution Division. Within T&D, there are a combined (overhead & underground) total of 189 transmission lines, 1,638 distribution lines, 29 substations, and 67 distribution feeders. The Authority serves over 50,000 customers.

B. the essential details concerning the creation of the position; (see classification review below)

C. an analysis of the similarities and differences between the position to be created and positions listed pursuant to Title 4 GCA §4101.1.(d);

The Transmission and Distribution Division (T&D) is comprised of several sections: Administration, Overhead, Substation, Underground, Meter/Relay and Operators. The division is responsible for operation and maintenance of the Authority's overhead and underground power lines and associated hardware, substation equipment, energy/revenue meters and relay protective devices. The main functions of T&D are to provide new power installations, line extensions, work clearances, and miscellaneous power-related services to customers. Thus, the creation of the Equipment Operator Superintendent will be responsible to coordinate all efforts to support these functions. Further, this position is much needed towards the strategic goals of the Authority and fulfillment of its mission in support of our Island Wide Power System in order to continue its commitment towards operational efficiency and organizational effectiveness as we deliver reliable, quality service and affordability to our customers.

D. the position description; (see attached)

E. the proposed pay ranges and demonstration of compliance with §6301 of this Title;

The GPA's compensation plan was authorized by P.L. 28-159 and approved by the CCU in October 2007. The proposed compensation is in accordance with the Strategic Pay Plan Methodology.

F. a fiscal note as that term in described in 2 GCA §9101 et seq.; and any other pertinent information.

The Guam Power Authority is responsible for the funding availability for this position and is in compliance with all applicable laws, rules and regulations regarding the creation, filling and retention of positions in certified, technical and professional positions. The funding of this position has no financial impact to the General Fund.

(2) The petition shall be posted on the agency, department or public corporation's website for ten (10) days (Saturdays, Sundays and government of Guam holidays excepted). After the posting, the head shall forward the petition along with evidence of his compliance with 5 GCA §6303.1(a), to the governing board or commission who, if they approve the same, shall approve the petition by resolution and file the petition and resolution for records with the Director of Administration and the Legislative Secretary.

(3) No new position may be filled until after compliance with the provision of this section and thirty (30) days has elapsed from the date of filing with the Legislative Secretary."

III. METHODOLOGY:

Information was gathered from various public utilities associated with the American Public Power Association (APPA) and other utilities with comparable positions within the U.S. mainland. The information collected was used to analyze and develop the proposed job standards as they apply to the work performed at GPA. The staff reviewed the duties associated with the proposed creation as indicated in the position description form. In evaluating this position, the Strategic Pay Job Evaluation Methodology was utilized to determine the job evaluation points based on a total of twelve (12) measurement factors; Education, Experience, Complexity, Scope of Work, Problem Solving, Freedom to Act/Supervision Received, Work Environment, Physical Demands, Impact of Discretionary Decisions, Human Relations Skills/Contact, Authority Exercised, and Supervisory/Managerial Responsibility.

IV. SUMMARY/CLASSIFICATION REVIEW:

The creation of the Equipment Operator Superintendent position is necessary and critical to the Guam Power Authority as it will be directly responsible for the planning and coordination of all equipment operations work such as new installations, relocations, and removals in construction and maintenance related to the Overhead, Underground, and Substation sections. Additionally, the superintendent position will be responsible for coordinating efforts with other divisions within the Authority and outside agencies such as the Guam Waterworks Authority and the Department of Public Works. This position will oversee and manage the Vegetation Management Program such as scheduling of brush cutting maintenance, tractor mowing and tree trimming. The impact to creating a superintendent position is to minimize the outsourcing of this type of work.

Based on the proposed job standard for the Equipment Operator Superintendent position, the nature of work and minimum experience and training consist of:

This position is responsible for administering the programs and activities of the Equipment Operator section within the Transmission and Distribution Division. The proposed position requires:

1) Seven (7) years of experience in the operation, construction and maintenance of utility equipment within the transmission and distribution system; including four (4) years supervisory and skill in the complex operation of large and heavy equipment; or

2) Any equivalent combination of experience and training which provides the minimum knowledge, abilities and skills.

V. RECOMMENDATION:

To approve the creation of the Equipment Operator Superintendent position in the classified service and add the position to list of the certified, technical and professionals (CTP) category of positions:

The proposed minimum and maximum range of compensation will be in accordance with the Strategic Pay Methodology, as follows:

2017 MARKET DATA (15th Market Percentile)	JE Points	Structural Adjustment MINIMUM			Structural Adjustment MAXIMUM		
		Base Salary	Grade	Step	Base Salary	Grade	Step
Equipment Operator Superintendent	927	71,080	M	2A	73,966	M	3A

Prepared by:

SANDRA D. PEREZ
Personnel Services Administrator

Concurred by:

BEATRICE P. LIMTIACO
Assistant GM, Administration

Approved by:

JOHN M. BENAVENTE, P.E.
General Manager

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GUAM POWER AUTHORITY RECEIVED BY: TIME: 2:10 pm AUG 20 2018 om124-8.18 EXECUTIVE OFFICE POWER TO SERVE

August 16, 2018

MEMORANDUM

TO : General Manager

VIA : Assistant General Manager of Operations

FROM : Manager of Transmission & Distribution

SUBJECT : **Approval to Create a new T&D Section and Position**
RE: Equipment Operators Section and Equipment Operator Superintendent

We have analyzed the functions of our Equipment Operators (currently under our Overhead section) and have determined that their duties and responsibilities are not solely catered to Overhead. Below is a list of functions of our Equipment Operators:

Regular Functions:

- Install/relocate/remove power poles per specification listed on work order received from Engineering.
- Remove/install power poles per work order from Overhead supervisor.
- Change-out power poles damaged from auto collisions.
- Change-out power poles found to be unsafe to the community and public at large.
- Assist Overhead Crews and Troubleshooters with emergency change-outs of pole-mounted transformers.
- Obtained required work-clearances, prior to excavating and/or digging.

Additional Functions:

- Assist Underground with installation/relocation/removal power poles per specification listed on work order received from Engineering.
- Assist Underground with installation/relocation/removal of pad-mounted transformers.
- Assist Underground and Substation with oil spill clean-ups.
- Assist Substation with relocation of Mobil Substation.
- Assist Substation with transport of large equipment (i.e. power station transformers, breakers, radiator fins, etc.) from Substation Warehouse to designated work site.
- Assist Generation with installations/removals of large equipment (i.e. motors, pumps, generators, etc.)
- Assist Facilities with installations/removals of AC equipment.
- Assist Transportation with mechanical repairs that require rigging and/or lifting (i.e. bucket truck booms, etc.).
- Assist Guam Waterworks with deep-well pump repairs.
- Assist Department of Public Works with heavy equipment requirements.

In addition, with our purchased tractor mowers and dump trucks, Equipment Operators have been tasked to do the following:

- Mow areas below our power lines.
- Debris removal after completion of their tree trimming work done by Line Crews.

Through our analysis, we have concluded that it would beneficial to our operations if the Equipment Operators were separated from Overhead and placed into their own section within T&D, as well as have its own Superintendent to oversee the day-to-day operations.

For your review, we prepared the CSC Position Description, Organizational Chart and Functional Chart. Should these meet with your approval, we request that Human Resources proceed with completing the process to include an Equipment Operator Superintendent position into the Authority's Staffing List and proceed with the job announcement accordingly.

Your support in this matter is appreciated. Should you wish to discuss this matter, I am available at your convenience.

Anselmo M. Manibusan, Jr.

/attachments
xc: File

[✓] Approved
[ ] Disapproved

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

8/21/18
Date

TRICOE, Graham,
Please have HR undertake actions necessary to implement.
Thanks

Equipment Operator Superintendent (Proposed)

NATURE OF WORK IN THIS CLASS:

Administers the programs and activities of the Equipment Operator section within the Transmission and Distribution Division of the Guam Power Authority. This position plans and coordinates all work involved in new pole installations, construction and maintenance related to work in the Overhead, Underground and Substation sections. This position also oversees the Vegetation Management Program within the Authority.

ILLUSTRATIVE EXAMPLES OF WORK: *(Any one position may not include all the duties listed, nor do the examples cover all the duties which may be performed.)*

Administers the programs and projects of the Equipment Operations section.

Plans and coordinates all equipment operations work (i.e. new installations, construction and maintenance) related to the Overhead, Substation and Underground sections of T&D and other divisions and departments as necessary.

Plans and coordinates all work orders and work clearances.

Manages the Vegetation Management Program.

Reviews, develops, and implements plans, policies and procedures to improve efficiency and effectiveness of the operator section; makes recommendations to T&D management.

Prepares, maintains and oversees O&M and CIP budget requests.

Performs other related duties as required.

MINIMUM KNOWLEDGE, ABILITIES AND SKILLS:

Knowledge of the standard principles, methods and techniques used in the operation of light, large and heavy equipment used the construction and maintenance activities within the Authority.

Knowledge of the hazards and safety practices in the operation of light, large and heavy equipment in the construction and maintenance of equipment operations.

Knowledge of the National Electric Code and National Safety Code.

Knowledge of heavy equipment operations, tractor with trailer, crane, auger, back-hoe, flatbeds, forklift, insulator washer, tractor mower, mulcher, chainsaw, etc.

Ability to plan, implement, and administer programs, projects and activities of the Equipment Operations section.

Ability to make decisions in accordance with laws, rules, regulations and protocols and to apply agency's policies.

Ability to apply and enforce safe work practices on the job.

Ability to evaluate operational effectiveness and recommend or implement changes in policies

EXHIBIT A

and procedures to improve effectiveness.

Ability to work effectively with the public and employees.

Ability to communicate effectively, orally or in writing.

Ability to maintain records and prepare reports.

Skill in the safe operation of light, large, and heavy equipment.

MINIMUM EXPERIENCE AND TRAINING:

1) Seven (7) years of experience in the operation, construction and maintenance of utility equipment within the transmission and distribution system; including four (4) years supervisory and skill in the complex operation of large and heavy equipment.

2) Any equivalent combination of experience and training which provides the minimum knowledge, abilities and skills.

NECESSARY SPECIAL QUALIFICATION:

Possession of a valid chauffeur's license.

Established: November 27, 2018

JOSEPH T. DUENAS, Chairman
Consolidated Commission on Utilities

EXHIBIT A

Revised: 05/97 Class Code _____

CIVIL SERVICE COMMISSION
POSITION DESCRIPTION QUESTIONNAIRE

I. IDENTIFICATION

Official Position Title: Equipment Operator Superintendent Official Position No.: _____

Job

Location: Guam Power Authority (Department/Agency) Transmission & Distribution (Division) Equipment Operators (Section/Unit)

Name: _____
Last First Middle Initial

Pay Grade: _____ [X] Classified [ ] Unclassified [ ] Position Vacant

Supervisor: Enrique V. Quidachay (Name of Direct Supervisor) Assistant Manager of T&D Title of Supervisor

II. DESCRIPTION OF DUTIES

Duty NO. or % of Time	**ESSENTIAL FUNCTIONS:** Organize and list duties and responsibilities that **MUST** be performed. List duties in one of the formats below. (1) The daily work assignments, beginning with the first duty and ending with the last duty for the day. (2) Percentage of time and show % for each (total % equals 100%). (3) Order of importance, beginning with the most important. Mark (√ or X) one format only: [ ] (1), [X] (2), [ ] (3)
15%	Oversee the day to day operations of the Equipment Operators section. To include administrative work – reports, maintenance programs, timesheets, JDE/CMMS work-orders, emails, memorandums and employee recognition programs.
5%	Enforce the Authority's policies, regulations, rules and procedures, to include all Division SOPs, Safety rules, procedures and protocol, National Electrical Code and National Safety Code.
10%	Plan and coordinate all Equipment Operators work (i.e. new installations, construction and maintenance) related to Overhead, Substation and Underground. Inclusive of work scheduled and coordinated to assist Generation, Facilities, Transportation, Warehouse and other government agencies (i.e. Guam Waterworks Authority, Department of Public Works, etc.) When directed, prepare weekly, monthly or quarterly schedules for submission to Managers.
10%	Plan and coordinate all GPI work orders from Engineering. Obtain all required Work-Clearances (i.e. Docomo, GTA, Parks & Recreation, Historic Preservation Division) prior to start of work.
10%	Review schedule outages. Ensure attached documents are included; Manpower/Equipment/Material availability One-Line diagram, Clearance Request, Outage Announcement and OT Request form, when applicable. Ensure Supervisor receives Switching Orders from Chief Dispatcher. Ensure work is completed properly and within allotted schedule time.
10%	Manage Vegetation Management work (i.e. both contract and maintenance). Schedule bush-cutting maintenance, tractor mowing and tree trimming - inspect work completed. Oversee Contractors reports and invoices. Ensure debris are removed from work-sites on the same day – no more that 2-days.
5%	Review Trouble Reports related to vegetation received from PSCC. Compile and maintain a monthly report and submit to Managers, when requested. Analyze effect ways to minimize trouble reports related to vegetation and submit to Managers for review.
5%	Analyze and evaluate Equipment Operators policies and procedures to determine ways to improve efficiency and effectiveness; prepare recommendations for submittals to T&D Management for review and approval.
2%	Monitor tract subordinate leave balances (i.e. annual. Sick, and CT) and schedule excessive leave - to avoid shortage of man power. Instruct Supervisor(s) to take corrective action when necessary (i.e. excessive absenteeism, etc.).

2%	Track and maintain a file on subordinates' annual physicals, D.O.T. certifications, and Drivers Licenses, to ensure renewals are scheduled prior to expiration.
2%	Monitor and evaluate Supervisor(s) work performance. Conduct quarterly and annual evaluations – acknowledge good performance and discuss/guide where improvement is needed. Review all Equipment Operators quarterly and annual evaluations submitted by Supervisor(s). Assess for fairness and verify that ratings of a 1, 4 or 5 are appropriately justified.
2%	Ensure employees attend mandated training sessions coordinated by Safety and Human Resources (i.e. Accident & Injury, 10-Hour OSHA Safety Awareness, First-Aid/CPR, Drug Free Workplace Policy & Procedures, etc.)
2%	Coordinate training programs with Human Resources and Safety on the following equipment operations: crane, tractor with low-boy trailers, derrick, auger, back-hoe, mulcher, tractor mower, insulator washer, etc.).
2%	Coordinate Arborist Training and Certification programs with Human Resources. To allow employees to learn the appropriate way cut tree branches away from power lines and equipment – in an effort to effectively reduce unscheduled outages.
10%	Manage O&M and CIP approved fiscal year budgets. Maintain expenditures within a +/- 10% ratio of approved budget. Maintain a file of sections requisitions and purchase orders. Monitor and track expenses on all open purchases and contracts. Monitor and track expenses for each Object Code, to include budget transfers. Monitor and track subordinates overtime expenses. Provide Budget reports to Managers, when requested.
2%	Prepare O&M and CIP fiscal year Budget Requests. Justify budget requests per Object Codes. Ensure budget requests are in correlation with Division's KPIs and goals. Ensure Budget Requests are submitted on or before deadline set by the Managers.
2%	Conduct staff meetings. Review safety procedures, equipment and vehicle operations, relay information from Management, etc.
1%	Attend meetings when required (GM Briefing, AGMO Briefing, bid, safety, tailgate, etc.)
2%	Coordinate and perform community services for Government Agencies, Private Entities, and the General Public. Educational demonstrations and/or exhibitions, install/remove flags, Christmas festivals, field lights, court lights, etc.
1%	Other related duties deemed necessary to ensure productivity of the Equipment Operators section and the Division as a whole.
	NON-ESSENTIAL OR ADDITIONAL FUNCTIONS: List duties and responsibilities not listed above that may be performed, as assigned.
	Conduct interviews for new applicants seeking employment with the Authority. Inclusive of reviewing applications for qualifications, skills and experiences of applicant with designated Interview Panel Members.
	Perform other related duties (i.e. Liberation activities, Labor Day activities and etc.)

III. CONTACTS: Departments, agencies and individuals you deal with during the course of your daily activities.

A. Within your department / agency. Mark (X or √) one box:

[ ] None [ ] Up to 15% of total working hours

[ ] 15 – 50% of total working hours [X] Over 50%

B. Outside your department / agency. Mark (X or √)

[ ] None [ ] Up to 15% of total working hours

[X] 15 – 50% of total working hours [ ] Over 50%

IV. SUPERVISION RECEIVED: How closely is the employee's/jobholder's work reviewed by the direct supervisor? Mark (X or √) one correct response.

[ ]	Detailed and specific instructions / procedures received or followed for each assignment.
[ ]	General Supervision – Routine duties are performed with minimal supervision. Standard practices or procedures allow employee to function alone at routine work. Supervisor makes occasional check of work while in progress. Work is reviewed upon completion.
[ ]	Direction – Receives guidance about general objectives in most of the tasks and projects assigned; determines methods, work sequence, scheduling and how to achieve objectives of assignments; operates within policy guidelines. (Generally applicable to skilled professionals, supervisors and managers.)
[X]	General Direction – Receives very general guidance about overall objectives; work is usually quite independent of others; operates within division or department policy guidelines, using independent judgment in achieving assigned objectives. (Generally applicable to managers / administrators in large and complex organizations and to department / agency heads and their first assistants.)

V. SUPERVISION EXERCISED: The employee/jobholder supervises other employees. List the number of employees supervised, their position titles, and a brief description of their responsibilities.

Number Supervised	Position Title	Description of Responsibilities
1	Equipment Operator Supervisor	Supervise personnel performing work on Equipment Operators operations, enforce the Authority's policies, rules and regulations, generate JDE/CMMS work-orders, and etc.
2	Equipment Operator Leader II	Leads and performs skilled work in the installation, maintenance and repair of Equipment Operators operations.
4	Equipment Operator IV	Perform skilled work in the installation, maintenance and repair of Equipment Operators operations.
1	Equipment Operator III	Perform skilled work in the installation, maintenance and repair of Equipment Operators operations.

VI. EQUIPMENT: List the equipment (pickup truck, welder, crane, etc.), office machines (word processor, calculator, copying machine, etc.), or any other machines, tools or devices that are used on a regular and continuing basis. Show what percentage of the regular workday is spent using each.

TOOLS / EQUIPMENT	PERCENT (%) OF TIME FOR EACH
Pick-Up Truck or SUV Vehicle	25%
Desk Top Computer, Laptop Computer, Copier, Facsimile and Calculator.	35%
ShoreTel 510 Phone and VHS Radio	25%
Personnel Protective Equipment	5%
Equipment (tractor with trailer, crane, auger, derrick, back-hoe, flatbed, forklift, etc.)	5%
Other Equipment (insulator washer, tractor mower, mulcher, chainsaws, etc.)	5%

VII. JOB REQUIREMENTS

[ ] Mark (√ or X) here if jobholder is unable to complete this section. The direct supervisor will then complete this section for the jobholder.

A. MINIMUM QUALIFICATION REQUIREMENTS: List the minimum experience and training a qualified applicant must have before employment.

1. WORK EXPERIENCE: List the general, specialized and/or supervisory / management work experience needed and how much (in months and/or years). If none, mark (√ or X) "No work experience required."	
[ ] No work experience is required.	
General:	6 years
Experience in the operation of equipment, including four years in the skill operation of larger and heavy equipment.	
Specialized:	
Supervisor / Management:	4 years
Four (4) years in a supervisory or an administrative Capacity or any equivalent combination	
of experience, training and education which Provides the minimum knowledge, abilities and	
skills.	
If no work experience is required, list the knowledge, abilities and skills a qualified applicant needs before employment to perform the essential job functions.	

2. FORMAL EDUCATION OR TRAINING:
Mark (√ or X) the **most** applicable education level required.

a. [ ] Below High School – Show Number of Years
b. [**X**] High School Graduation / GED
c. [ ] Vocational / Technical School

Show specific training that is required by this position.

_____

_____

_____

d. [ ] Some College

Show number of [ ] Semester Hours _____ or [ ] Quarter Hours _____.

Show specific courses required by the essential functions of this job.

_____

_____

_____

e. College Degree (Show major area of study required.)

[ ] Associate's : _____

[ ] Bachelor's: _____

[ ] Master's: _____

[ ] Beyond Masters: _____

3. **CRITICAL SKILLS / EXPERTISE:** List specialized skills or specialization needed to perform essential functions.
4. LICENSE, REGISTRATION OR CERTIFICATION: List possession of required license, professional registration/certification needed to perform essential functions.
Valid Guam Driver's License (Type ABC)
DOT Certification

B. MENTAL / VISUAL, PHYSICAL, AND ENVIRONMENTAL JOB REQUIREMENTS:

1. Mark (√ or X) the most appropriate physical requirement(s) for the job.

[ ]	Sitting	The job requires the employee to sit in a comfortable position most of the time. The employee can move about.
[ ]	Sitting	Employee is required to sit for extended periods or time without being able to leave the work area.
[X]	Sitting/Standing/Walking	The employee is required to sit, stand, walk most of the time.
[X]	Climbing	Employee is required to climb ladders or scaffolding or to climb and work in overhead areas.
[X]	Lifting	Employee is required to raise or lower objects from one level to another regularly.
[X]	Pulling and/or Pushing	The job requires exerting force up to _1 - 5_ pounds on a regular basis to move the object to or away from the employee.
[X]	Carrying	The employee is required, on a regular basis, to carry objects in his or her arms or on the shoulder(s).
[X]	Reaching	The employee is regularly required to use the hands and arms to reach for objects.
[X]	Stooping and Crouching	The employee is regularly required to bend forward by bending at the waist or by bending legs and spine.
[X]	Crawling	Employee is required to work in a confined space and/or to crawl and move about on his or her hands and knees.
[X]	Speaking	The job requires expressing ideas by the spoken word.
[X]	Listening	The job requires the perception of speech or the nature of sounds in the air.
[X]	Other	Describe the requirement.
		Employee may be required to shovel gravel or dirt out of holes dug. In preparation for pole installations or removal. Or to fill holes (due to pole removal) for the safety of public at large.

2. Mark (√ or X) the most appropriate mental / visual requirement for the job.

[ ]	General Intelligence (typical requirement for machine operators, office staff, etc.)
[ ]	Motor Coordination Skills (typical for automotive mechanic, painter, etc.)
[X]	Coordination of Eyes, Hands, and Feet (typical for tractor trailer driver, fire fighter, line electrician, etc.)
[ ]	Verbal Intelligence (typical for counselors, customer service representatives, etc.)
[ ]	Numerical Intelligence (typical for an accounting clerk, cargo checker, etc.)

[ ] Other: _____

_____

_____

3. The job's most appropriate work environment and the weather exposure.

Show what percent of a typical workday is spent.
(Select one response only)

50 % Indoors in a comfortable temperature-controlled environment (for instance, in an office).

5 % Indoors in a non-temperature-controlled environment (such as an open garage, storerooms and warehouses, etc.)

15 % Outdoors exposed to changing weather conditions (for instance, rain, sun, wind, etc.)

30 % Outdoors but in an enclosed vehicle protected from extreme weather conditions.

4. Other physical working conditions

[ ] Mark (X or √) if none of the following is applicable.

Show what percent of a typical workday this position is exposed to:

25 % Air contamination (i.e., dust, fumes, smoke, toxic conditions, disagreeable odors).

5 % Vibration (i.e., operating jackhammer, impact wrench).

5 % Noise (Exposure at a level enough to cause bearing loss or fatigue).

5 % An improperly illuminated or awkward and confining work space.

5 % Working above ground level where the chance of falling exists (i.e., on ladders, rooftops, bucket trucks, scaffolding).

10 % Lifting or carrying items or objects. Describe item/object and weight:
chainsaws, shovels, slings, tackle blocks

25 % Heat. Describe source and degree of high temperature.
outdoor exposure

10 % Cold. Describe source and degree of cold temperature:
inclement weather

10 % Other hazards. Describe:
environmental hazardous (i.e. oil clean ups).

5. Describe the working conditions that are irregular or unusual for the job and show frequency of exposure.

[ ] Mark (X or √) if not applicable.

CONDITION	FREQUENCY OF EXPOSURE
High winds, heavy rain and/or lightning.	During stormy weather.

C. Work Schedule/Hours – Mark (√ or X) the most appropriate work schedule/hours for the job.

[ ] Regular – Standard Eight (8) hours daily, Monday – Friday
[ ] Irregular – Shift work – A 24-hour work operation.
[X] Regular / Irregular – Overtime hours with overtime pay entitlement

State Purpose and Total Hours required per pay period:

Emergency call-out by Manager or PSCC Dispatcher (4-8hrs), IWPS restoration (6-12hrs) or scheduled maintenance work (4-hrs).

[ ] Regular / Irregular – Overtime hours without overtime pay entitlement

State Purpose and Total Hours required per pay period:

The information given on this position is complete and correct.

Signature of Employee

Date

VIII. SUPERVISOR'S REVIEW

IMPORTANT: This Block To Be Filled Out Only By The Direct Supervisor

a. (1) Has the employee correctly stated his or her official payroll position title?

[ ] Yes [ ] No

(2) If not, what is the correct title? _____

b. (1) Are the employee's statements about the duties of his/her position and the supplementary information complete and accurate?

[ ] Yes [ ] No

(2) If not, what additions, deletions or corrections should be made? (Refer to block and page)

_____

_____

_____

c. What positions under your supervision perform the same essential functions Give name and title:

Name	Title
Ivan Shiroma	Power System Superintendent
Vincent Pangelinan, P.E.	Power System Superintendent
Anthony Ishmael	Meter/Relay Superintendent

d. Does this position require (mark one)

[ ] Immediate supervision on a regular basis,

[ ] Immediate supervision only for new/complex tasks, or

[X] Little immediate supervision.

e. Does the employee participate in (mark those appropriate) the

[X] Formulation, [X] Interpretation, and/or [X] Application of Agency/Department policy. Give examples:

Formulation: Budget Proposals, Test results

Interpretation: GPA SOP, AP and regulations

Application: GPA SOP, AP and regulations

f. The employee (mark one)

[ ] Performs routine, well-defined tasks,

[ ] Performs moderately complex tasks requiring moderate knowledge of Agency's/Department's work; or

[X] Performs complex tasks requiring extensive knowledge of Agency's/Department's work.

I certify to the accuracy of the description of duties, responsibilities and organizational relationships provided herein; further, that the position is necessary to carry out government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes on the use of public funds. The false or misleading statement may constitute violations of such statutes or their implementing regulations.

Signature of Immediate Supervisor	6/29/18 Date
Signature of Department/Agency Head	6-29-18 Date

9

May 12, 1997

IX.

Human Resources Office Review:

Date: _____

Reviewed by: _____ _____
Position Title Name

Classification Correct: [ ] Yes [ ] No

If not, corrective action taken: (Attach copy of review made)

_____

_____

Approved by: _____ _____
Personnel Services Administrator Date

Civil Service Commission Post-Audit:

Date: _____

Reviewed by: _____ _____
Position Title Name

Classification Correct: [ ] Yes [ ] No

If not, corrective action taken: (Attach copy of review made)

_____

_____

Authority	Benchmark Position	Year	Job Evaluation																												
			1. Education		2. Experience		3. Complexity				4. Scope of Work				5. Problem Solving		6. Sup. Received		7. Work Environment		8. Physical Demands		9. Dis. Decisions		10. HR Skills / Contact		11. Auth. Exercised		12. S & M Resp.		TOTAL
GPA	Equipment Operator Superintendent	2017	I	132	I	132	D	50	264	132.0	D	20	264	52.8	D	87	E	100	C3	50	A2	25	C1	43	D3	57	F1	87	C1	29	927

Implementation Ranges @ 15th Market Percentile (2017 Market data) - 5 Spread							
Structural Adjustment - MIN				Structural Adjustment - MAX			
Base Salary	Grade	Step	Sub Step	Base Salary	Grade	Step	Sub Step
71080	M	2	A	73966	M	3	A

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

Issues for Decision

Resolution No. ***2018-29***

Relative to the Authorization for GPA to Establish a Credit Card Account with Reward Points

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

5GCA section 2311 where to referred as the "Senator Edward J. Cruz Medical Referral and Education Mileage Program" requires accrued mileage earned through the use of credit cards for travel by employees of public corporations be available to support off-island medical care, and off-island student travel involving academic, sports and cultural activities; and

Guam Power Authority have found First Hawaiian Bank (FHB) Priority Reward Business credit card provides a program where reward points are earned through the use of the credit card and the rewards points can be used to purchase airline tickets and support 5GCA section 2311 requirements,

How much will it cost?

GPA has determined that *$50,000 credit limit* is required to support the travel requirements such as booking airfare, hotel arrangements, taxi fares and others.

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

RESOLUTION NO. 2018 - 29

RELATIVE TO THE AUTHORIZATION FOR GUAM POWER AUTHORITY TO ESTABLISH A CREDIT CARD ACCOUNT WITH REWARD POINTS

WHEREAS, the Guam Power Authority (GPA) are Public Corporations of the Government of Guam and are subject to the oversight of the Consolidated Commission on Utilities (CCU); and

WHEREAS, 5GCA section 2311 where to referred as the "Senator Edward J. Cruz Medical Referral and Education Mileage Program" requires accrued mileage earned through the use of credit cards for travel by employees of public corporations be available to support off-island medical care, and off-island student travel involving academic, sports and cultural activities; and

WHEREAS, Guam Power Authority have found FHB Priority Reward Business credit card provides a program where reward points are earned through the use of the credit card and the rewards points can be used to purchase airline tickets and support 5GCA section 2311 requirements; and

WHEREAS, GPA has determined that $50,000 credit limit is required to support the travel requirements such as booking airfare, hotel arrangements, taxi fares and others; and

NOW, THEREFORE BE IT RESOLVED, by the Consolidated Commission on Utilities as follows:

1. The General Manager of the Guam Power Authority is authorized to enter into a contract with FHB for Priority Rewards Business credit card.
2. The credit limit for the credit will be set at $50,000.

3. The credit card will be used for travel purpose such as purchasing airline tickets, hotels and lodging, taxi fare, and items related to the travel.

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

DULY AND REGULARLY ADOPTED AND APPROVED THIS 27th DAY OF NOVEMBER 2018

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

SECRETARY'S CERTIFICATE

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

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

First Hawaiian Bank.

PRIORITY REWARDS BUSINESS CREDIT CARD℠ DISCLOSURES

This disclosure was printed on 9/1/18. The information for this card is accurate as of that date and is subject to change after that date. For any changes since the print date, contact us at BankCard Center, P.O. Box 1959, Honolulu, HI, 96805.

Interest Rates and Interest Charges	
Annual Percentage Rate (APR) for Purchases	**15.99%** The APR for Purchases may vary on the first day of each of your billing cycles, which begin in March, June, September and December. The rate will be determined by adding 10.99 percentage points to the Index, which is the highest U.S. Prime Rate published in the "Money Rates" section of *The Wall Street Journal* within the three months immediately preceding the calendar month in which the Change Date occurs. The Current Index will not be less than 4.50%
APR for Cash Advances	**18.00%** Fixed
Penalty APR and When it Applies	**18.00%** Fixed The APR will apply to your account if you make a late payment. **How Long Will the Penalty APR Apply?:** The Penalty APR will apply until you have made six consecutive Minumum Payments when due.
How to Avoid Paying Interest on Purchases	Your due date is at least 25 days after the close of each billing cycle. We will not charge you interest on Purchases if you pay your entire balance by the due date each month.
Fees	
Annual Fee	**None**
Transaction Fees • Foreign Transaction • ATM/Over-the-counter Cash Advance	 **3%** of the U.S. dollar amount of any Purchase or Cash Advance made in a foreign currency Either **$10** or **3%** of the amount of each Cash Advance, whichever is greater.
Penalty Fees • Late Payment • Returned Payment	 **$19** if balance is less than or equal to $250**; $39** if balance is greater than $250 **$24.95**

How We Will Calculate Your Balance: We will use a method called "Average Daily Balance (including new Purchases)."

Unless otherwise defined herein, all capitalized terms shall have the meaning set forth in the Priority Rewards Business Credit Card Agreement.

First Hawaiian Bank

Priority Rewards Business Credit Card℠ Application

APPLICATION FOR:

❑ NEW ACCOUNT $ _____

❑ Increase Credit Limit Credit Line Requested $ _____

❑ Convert from existing First Hawaiian Bank Business. Credit Card Account #:

❑ Add Cardholders

Tell Us About Your Business

Business Legal Name (REQUIRED)	Federal Tax ID number (REQUIRED)	Census Tract (Guam/CNMI only)
Business Name to be printed on Card (max 19 letters)		
Country of Formation (REQUIRED)		

Street Address (REQUIRED - NO P.O. BOX, WE ARE REQUIRED TO OBTAIN YOUR PHYSICAL ADDRESS)	City	State	Zip
Billing Address (if different from street address)	City	State	Zip

Business Phone ( )

Gross Annual Revenue (REQUIRED)*	Years in Business (REQUIRED)	# of Employees	Legal Structure (REQUIRED - Check one): ❑ Corporation ❑ Sole Proprietorship ❑ LLC ❑ General Partnership ❑ Other: _____

*NOTE: Personal tax returns and/or business financial records may be requested.

Business Checking Institution	Current Balance $	Type of Business, Describe (REQUIRED - contrating, restaurant, etc.)

Tell Us About Yourself

Complete this section for each owner or shareholder with 20% or more ownership. Attach additional pages if necessary.

Name (REQUIRED - First, Middle, Last)	% Ownership	Social Security Number (REQUIRED)	Date Of Birth (REQUIRED)

Street Address (REQUIRED) ❑ Own ❑ Rent	City (REQUIRED)	State (REQUIRED)	Zip (REQUIRED)	Home Phone ( )	Cell Phone ( )

You Must Be One Of The Following (check one): ❑ President ❑ Partner ❑ Owner	For Sole Propietorship Only (REQUIRED) Are you a U.S. Citizen? (check one) ❑ Yes ❑ No, state Country of Citizenship _____	Are you a Permanent Resident Alien? (check one) ❑ Yes ❑ No

Years You Have Been An Owner	Gross Monthly Income* (REQUIRED)	*NOTE: Alimony, child support or maintenance income need not be revealed if you do not wish to have it considered as a basis for repaying this obligation.

Personal Deposits $	Real Estate Value $	Other Assets $	Applicant E-mail Address - If you want to receive special offers or information via e-mail. (Optional)

Reward and Billing Options:

❑ **Single Cardholder**: Award points to Cardholder and provide one monthly billing statement

❑ Award points to each individual employee and provide monthly individual cardholder statements (Multiple Cardholders)

❑ Award all points to the company and one monthly consolidated company statement and memo statements will be sent to individual Cardholders. (Multiple Cardholders) - Please also complete the section for the Program Administrator.

Please provide the following information:

Name of Program Administrator - Person who will be redeeming CashPoints (Max 15 Characters)

Email Address

Please Select a 4-Digit PassCode to be used when redeeming CashPoints ____ ____ ____ ____

Issue Business Credit Cards To

To request additional cards please provide us with a separate employee listing on Company letterhead including employee name, SSN, requested credit limit and cash advance access.

Employee Name (REQUIRED)	Social Security Number (For ID purposes) (REQUIRED)	Requested Credit Limit (REQUIRED)	Photo On Back of Card (OPTIONAL)	Allow Cash Advance Access?	If "Yes", please designate % allowed *
			❑ New photo to be taken ❑ Existing photo available ❑ No photo requested	❑ Yes ❑ No	❑ 25% ❑ 50%
			❑ New photo to be taken ❑ Existing photo available ❑ No photo requested	❑ Yes ❑ No	❑ 25% ❑ 50%
			❑ New photo to be taken ❑ Existing photo available ❑ No photo requested	❑ Yes ❑ No	❑ 25% ❑ 50%
	Total Amount Requested		*Visit any FHB Branch to take photo.*		*% of individual credit limit.

Please Sign Below

The person signing this Application certifies s/he has reviewed and agrees to the Priority Rewards Business Credit Card Application Terms and Conditions that appear on the back panel of this Application. If the Bank approves this Application, the Business and the person signing this Application separately agree to abide by all the terms and conditions of the Priority Rewards Business Credit Card Agreement and the Priority Rewards Business Program Agreement, copies of which will be provided upon approval. The person signing this Application understands that for final approval, additional agreements may need to be signed. All references in the Priority Rewards Business Credit Card Agreement to "you," "your," and "Borrower" shall mean and include the individual signing below, in such person's individual capacity.

By signing below, the Business and the individual signing this application certify that they have obtained proper authorization for the Bank to provide employee name(s) listed above, addresses, phone numbers, account number and other account information to the Bank's service provider(s) who provide or assist with providing cardholders with online access to account or statement information and the Bank's service provider(s) who operate, or assist with operating, the credit card rewards program.

The Business represents and warrants that the person signing below has the authority to (i) designate initially the officers, employees, agents or other representatives (collectively the "Representatives") of the Business to receive the card(s), and (ii) to add or delete the names of such Representatives or revise requested credit limits from time to time. Each such Representative(s) is authorized by the Business to use the card(s).

IMPORTANT INFORMATION ABOUT PROCEDURES FOR OPENING A NEW ACCOUNT To help the government fight the funding of terrorism and money laundering activities, Federal law requires all financial institutions to obtain, verify, and record information that identifies each person or business entity that opens an account. **What this means to you**: When you open an account, we will ask for your name, address, federal taxpayer identification number, date of birth (if applicable), and other information that will allow us to identify you.

X **Initial Here** _____ (to acknowledge personal liability on the account as described above)

X _____ _____ _____

Signed individually and on behalf of the Business | Print Name | Date

FOR BRANCH USE ONLY

BR#_____ REFERRAL EMP #_____

BNA_____ SALES EMP #_____

FOR BANK USE ONLY

New Account Number			Close And Convert #		Close And Convert #
Approved ❑ Yes ❑ No	Approved Credit Limit $	Approved By	Employee Number	Branch Number	Date

FOR BANKCARD USE ONLY:

CPC: _____ TPC: _____ ASC: _____ APPID: _____

Member FDIC

9/1/18

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

Issues for Decision

Resolution No. *2018-30*

Relative to Approving a 2nd Year Extension for the Diesel Fuel Contract

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

The three (3) year base period for the Diesel Fuel Oil No.2 Supply Contract (GPA-029-14) with Mobil Oil Guam, Inc. (herein after referred to as "Mobil") and Isla Petroleum and Energy, LLC (herein after referred to as "IP&E") expired on December 31, 2017. The first (1st) year of the 2-year contract extension option for Mobil and IP&E commenced on January 1, 2018 and will expire on December 31, 2018. The Authority released a solicitation for the procurement of a new contractor for the Supply of Diesel Fuel Oil No.2 under a Multi-Step IFB GPA-008-18. The term of the new contract is for a base period of two (2) years to commence on January 1, 2019, with three (3) additional 1-year extension options. the Authority anticipates a delay in awarding a new contract by January 01, 2019 due to a bid protest. GPA negotiated for the second (2nd) year extension of the existing contract with Mobil and IP&E for a term of one (1) year commencing in January 1, 2019. The total requirement for the second (2nd) year contract extension with Mobil and IP&E at the designated sites is estimated at about 700,000 barrels at a total cost of about $76M (Exhibit A), and is funded under the FY2019 approved budget (Exhibit B). GPA is requesting for the approval of the second (2nd) year contract extension with Mobil an IP&E.

Where is the location? All Diesel Peaking Units

How much will it cost?
A total cost of about $76M and is funded under the FY2019 approved budget

When will it be completed? December 31, 2019

What is its funding source? LEAC

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

RESOLUTION NO. 2018 - 30

AUTHORIZING THE MANAGEMENT OF THE GUAM POWER AUTHORITY TO PETITION THE PUBLIC UTILITIES COMMISSION FOR THE EXTENSION OF THE EXISTING DIESEL FUEL OIL NO.2 SUPPLY CONTRACT WITH MOBIL OIL GUAM, INC. AND ISLA PETROLEUM & ENERGY, LLC.

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

WHEREAS, the first (1st) year of the 2-year contract extension option for Mobil and IP&E commenced on January 1, 2018 and will expire on December 31, 2018; and

WHEREAS, the Authority released a solicitation for the procurement of a new contractor for the Supply of Diesel Fuel Oil No.2 under a Multi-Step IFB GPA-008-18. The term of the new contract is for a base period of two (2) years to commence on January 1, 2019, with three (3) additional 1-year extension options; and

WHEREAS, the Authority anticipates a delay in awarding a new contract by January 01, 2019 due to a bid protest[1]; and

WHEREAS, GPA negotiated for the second (2nd) year extension of the existing contract with Mobil and IP&E for a term of one (1) year commencing in January 1, 2019; and

WHEREAS, the total requirement for the second (2nd) year contract extension with Mobil and IP&E at the designated sites is estimated at about 700,000 barrels at a total cost of about $76M (Exhibit A), and is funded under the FY2019 approved budget (Exhibit B); and

WHEREAS, GPA is requesting for the approval of the second (2nd) year extension of the contract, subject to the mutual agreement with Mobil an IP&E.

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

1. The Guam Power Authority is hereby authorized to enter into a contract extension for the supply of Diesel Fuel Oil No.2 with Mobil and IP&E for a period of 1 year commencing January 01, 2019.

[1] Tristar protest dated October 8, 2018

2. The Guam Power Authority is hereby authorized to execute an agreement for the extension of the contracts.

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

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

DULY and REGULARLY ADOPTED this 27th day of November 2018.

Certified by: **Attested by:**

_____ _____

JOSEPH T. DUENAS
CHAIRMAN

J. GEORGE BAMBA
SECRETARY

SECRETARY'S CERTIFICATE

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

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

Ayes: _____

Nays: _____

Absent: _____

Abstain: _____

EXHIBIT A- ESTIMATED DIESEL EXPENSES

*** MOPS Based on MS Forecast dated 06Mar2018:** $98.218 /bbl
$2.339 /gal

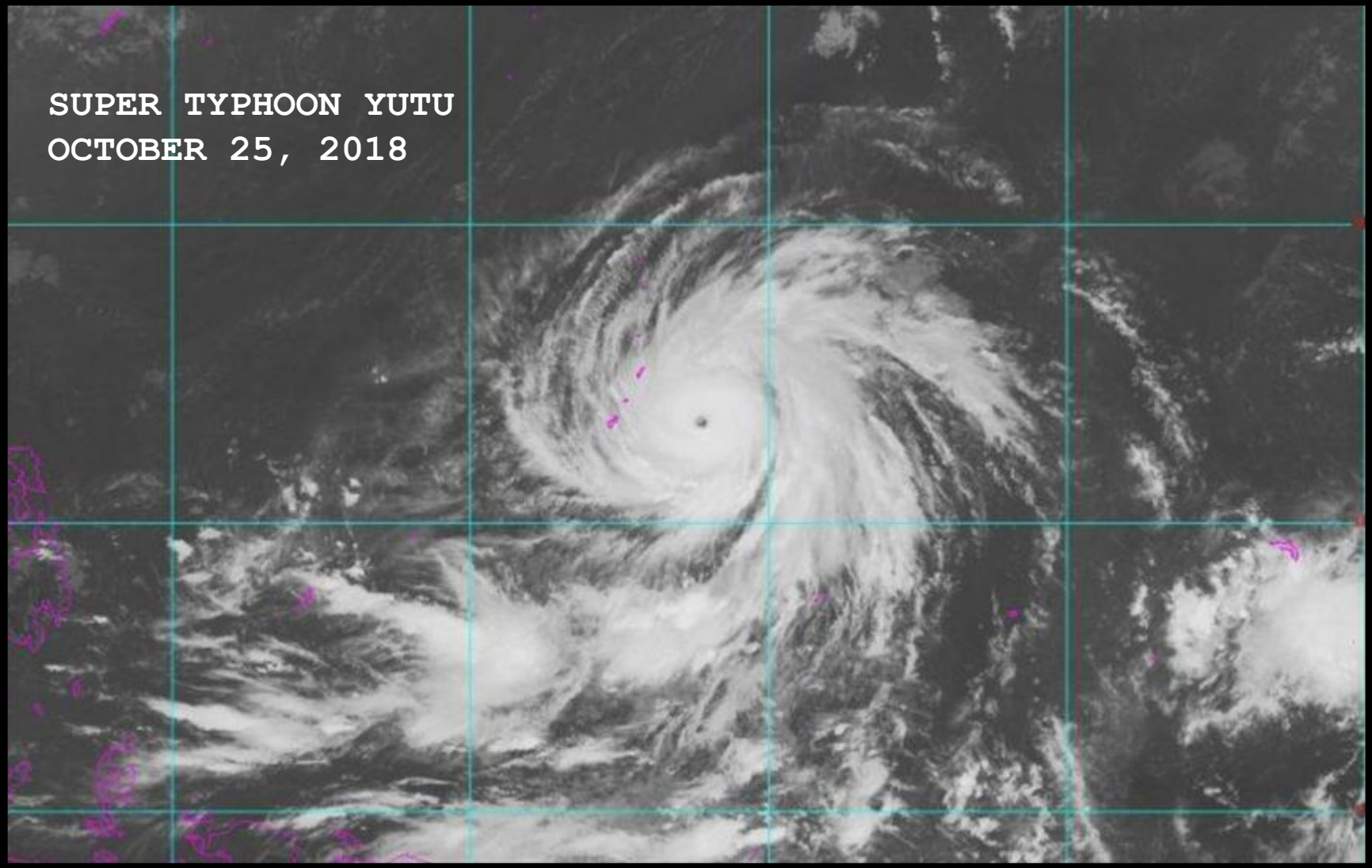
MOBIL CONTRACT	ANNUAL QUANTITY (Estimated)	UNIT COST [1] $/gal (Estimated)	ANNUAL AMOUNT ($) (Estimated)	Contract Premium Fee $/gal	*AVG. MOPS $/gal	[1] UNIT COST (CIF Cost) $/gal	$/bbl
Baseload Power Plants (Cabras 1&2 / Piti 8&9)	280,000 gals	$2.601	$728,148	$0.262	$2.339	$2.601	$109.22
Fast Track Units (Talofofo / Manengon)	1,274,033 gals	$2.581	$3,287,680	$0.242	$2.339	$2.581	$108.38
Piti 7	1,221,452 gals	$2.601	$3,176,422	$0.262	$2.339	$2.601	$109.22
Northern Plants (Dededo, Macheche, Marbo, & Yigo CT, Aggreko)	23,214,988 gals	$2.581	$59,906,967	$0.242	$2.339	$2.581	$108.38
TOTAL MOBIL CONTRACT EXPENSES	25,990,473 gals **618,821 bbls**	$2.582 **$108.431**	**$67,099,218**	$0.243 (Avg)			

IP&E CONTRACT	ANNUAL QUANTITY (Estimated)	UNIT COST [1] $/gal (Estimated)	ANNUAL AMOUNT ($) (Estimated)				
Tenjo Vista	3,360,000 gals	$2.601	$8,737,780	$0.262	$2.339	$2.601	$109.22
TOTAL IP&E CONTRACT EXPENSES	3,360,000 gals **80,000 bbls**	$2.601 **$109.222**	**$8,737,780**				

GRAND-TOTAL	29,350,473 gals **698,821 bbls**	$2.584 **$108.521**	**$75,836,998**	**$0.245** **$10.303** **(Avg)**	**($/gal)** **($/bbl)**

GUAM POWER AUTHORITY (GPA)					
FUEL SUPPLY MANAGEMENT APPROVED BUDGET 9/6/2018					**FY19 APPROVED**
(A) RESIDUAL FUEL OIL # 6 (RFO) / (Acct # 1000.151000.10)					
1. RFO Supply (Imports)	**Quantity (bbls)**	**MOPS ($/bbl)**	**Premium ($/bbl)**	**Landed Cost ($/bbl)**	**$**
ow Sulfur Fuel Oil (LSFO) ~					$53,940,228
gh Sulfur Fuel Oil (HSFO) ~					$106,574,278
TOTAL RFO REQUIREMENT ~					**$160,514,506**
(B) DIESEL FUEL OIL NO.2 (DFO) / (Acct # 1000.151000.20)					**$91,271,930**
(C) RENEWABLES / (Acct # 306000.555004.431)					**$10,463,361**
(D) UREA (FOR AGGREKO) / (Acct # 58410.501000.83)					**$929,886**
(E) FUEL HANDLING SERVICES / (Acct # 54900.501000.83)					
1 Ship Demurrage Cost					$123,212
2 Fuel Farm Management, Operations & Maintenance - Fixed Mgmt Fees					$834,300
3 Petroleum Inspection,Testing & Facility Calibration					$510,314
4 Dock Usage fee (Dock Use Agreement)					$1,644,052
5 Pipeline Agreement					$505,162
6 Storage Agreement (RFO)					$1,955,438
7 Storage Agreement (Diesel)					$1,733,446
8 Vacuum Truck Rental					$119,280
9 Bank Charges for RFO L/C Processing Fee					$826,057
10 Clean Petro-Tanker Hauling Services					$58,000
11 Labor and Others					
a. Labor					$192,172
b. Other Fuel-related Expenses					
Subscriptions and Technical Books					$50,000
Trainings & Seminars					$30,000
13 MEC HSFO Storage Tank Cleaning					$250,000
Handling Services					**$8,831,432**
			OVER-ALL FUEL BUDGET =		**$272,011,115**

1



SUPER TYPHOON YUTU - GUAM

Pre-Storm Preparation

SUPER TYPHOON YUTU - GUAM

22-OCT 2018 Monday

8:45 a.m.
TD Yutu forecasted to impact Marianas as Typhoon

1:10 p.m.
Now Tropical Storm

Crews focus on line clearing

Begin pre- & post-storm preparations

PSCC operating out of Fadian & Cabras

23-OCT 2018 Tuesday

9:00 a.m.
COR 3 declared

4:15 p.m.
Now Typhoon.
Guam in TS Watch

Internal Pre-Storm Meeting

Storm Prep Work Order Issued

Pacific Island MOAs reviewed in anticipation of severe damage to CNMI

24-OCT 2018 Wednesday

12:00 p.m.
COR 2 declared
Damaging winds expected. CPA Guam
12:00 a.m. 25-Oct

4:15 p.m.
Now Super Typhoon

5:00 p.m.
COR 1 declared

Final Internal Pre-Storm Meeting

GWA sites transferred to generator power

Assets secured

Non-essential employees excused

Troubleshooting crews responded through the storm

25-OCT 2018 Thursday

2:00 a.m.
CPA Guam

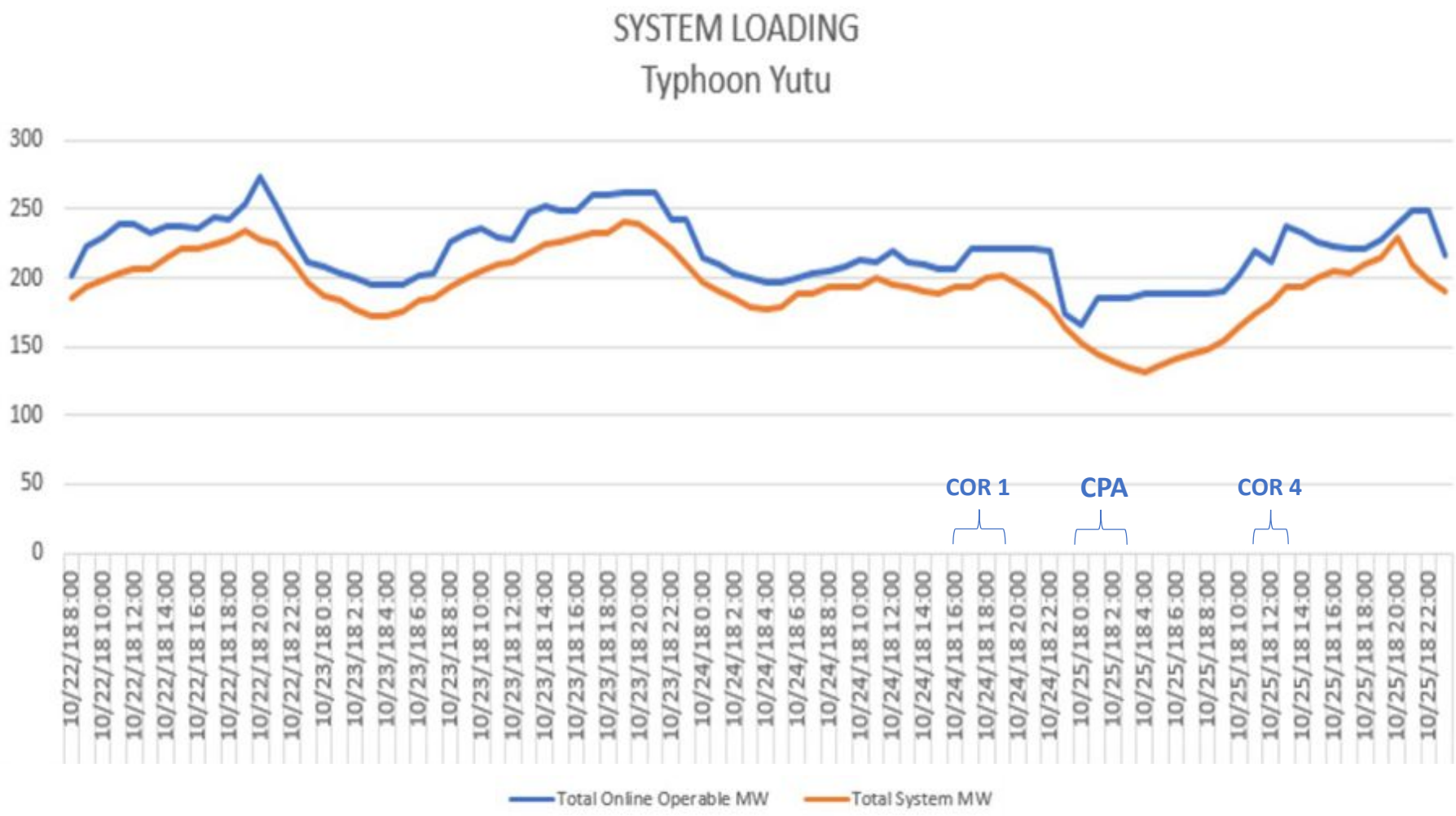
10:00 a.m.
COR 4 declared

Damage assessments of critical assets completed

GPA employees ordered to report to duty at noon

Storm-related trouble calls completed (26-Oct)

SUPER TYPHOON YUTU - GUAM



SUPER TYPHOON YUTU - GUAM

Outages

Snake-caused outage at Talofofo buss lockout on Thursday 25-Oct-2018

Isolated outages occurred in various areas beginning Wednesday afternoon through Thursday morning.

Most outages resolved remotely.

Troubleshooting crews responded to calls through the typhoon.

Some areas required heavy equipment section to assist with tree and vegetation removal.

	Wind	Vegetation	Snake	Equipment	TOTAL
COR 1	3	2	4	2	11
COR 2	2				2

GUAM CCU

SUPER TYPHOON YUTU - GUAM

Feeder Outages

COR	TripDate	CloseDate	FacilityCode	Customer Count	RLCode	RCCode	RCSubCode	Comments
COR 2	10/24/2018 14:53	10/24/2018 14:55	P223	1311	DI	WEATHER	WIND	MJS- Typhoon Yutu C-95 SAHAGON REPORTS P-223 TARGETS: TRIP, B & C PHASE. C-432 R. CHARGULAF REPORTS NO FINDNGS AFTER PATROLLING P-223 CKT.
	10/24/2018 16:50	10/24/2018 16:51	P321	1172	DI	WEATHER	WIND	MJS- Typhoon Yutu C-933 Yoshida reports: Trip, C-phase, grnd. C-440 J. SANTOS/R. MUNOZ REPORTS NO FINDINGS AFTER PATROLLING.
COR 1	10/24/2018 19:17	10/24/2018 19:18	P321	1172	DI	EQUIP	OVERHEAD	PDP - C-441 (RC/AF) completed making repairs to low static line by Eagles field, Rte. 15. Mangilao
	10/24/2018 20:29	10/24/2018 20:37	P321	1172	DI	EQUIP	OVERHEAD	PDP - Breaker tripped after low lying static line came in contact with P-321 13.8Kv primary lines. Gave C-441 clearance to treat line hot and make repairs. RNC - C-441 completed repairs.
	10/25/2018 1:01	10/25/2018 1:34	P250	1507	DI	VEGETATION	VEGETATION	PDP - CREW FOUND VEGETATION ON PRIMARY LINES BY CHALAN PAGO CHURCH. TARGET P-250 BKR. TRIP ON OVERCURRENT. OPENED SW-13-215
	10/25/2018 1:34	10/25/2018 2:37	P221	831	DI	VEGETATION	VEGETATION	PDP - CREW FOUND A TREE ON THE LINE 3 POLES FROM THE ENTRANCE OF SUMAY MEMORIAL.
	10/25/2018 2:36	10/25/2018 2:37	P202	491	DI	WEATHER	WIND	PDP - PENDING PATROL
	10/25/2018 2:46	10/25/2018 2:46	P311	869	DI	WEATHER	WIND	PDP - PENDING PATROL
	10/25/2018 2:52	10/25/2018 2:53	P294	1472	DI	WEATHER	WIND	PDP - PENDING PATROL
	10/25/2018 3:50	10/25/2018 4:16	P260	217	TR	ANIMAL	SNAKE	PDP - CREW FOUND SNAKE ON X-126 BKR. BACK FED VIA P-262 BKR THROUGH 13.8 BUS
	10/25/2018 3:50	10/25/2018 4:16	P262	1398	TR	ANIMAL	SNAKE	PDP - CREW FOUND SNAKE ON X-126 BKR. CLOSED SW 13-301.
	10/25/2018 3:50	10/25/2018 4:34	P261	872	TR	ANIMAL	SNAKE	PDP - CREW FOUND SNAKE ON X-126 BKR. CLOSED SW 13-162
	10/25/2018 4:46	10/25/2018 4:48	TP080		TR	ANIMAL	SNAKE	PDP - C-910 MANUALLY OPENED TO CLOSE X-125, CREW FOUND SNAKE ON X-126 BKR.

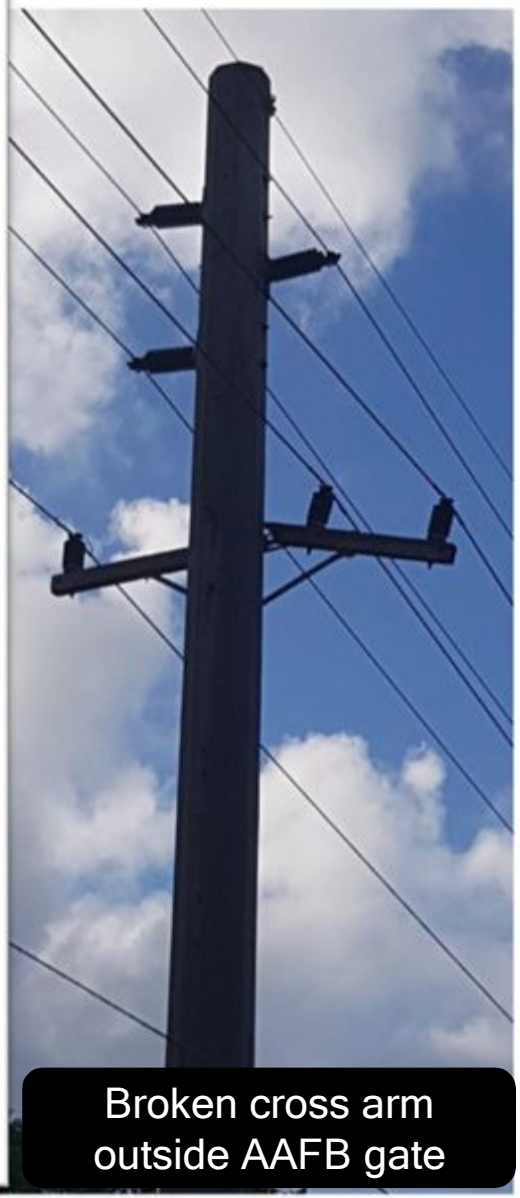
GUAM CCU

SUPER TYPHOON YUTU - GUAM

Damage

Piti to Harmon 115kV line

Secondary lead short at Chalan Emsley



Broken cross arm outside AAFB gate

GPA Saipan Recovery Efforts

Super Typhoon Yutu

Direct impact of Super Typhoon Yutu over Saipan & Tinian began early morning, October 25, 2018

Super Typhoon Yutu's eye moved over parts of Saipan and Tinian starting around 1:15 a.m. By 4:30 a.m., the 20-mile wide eye had moved past the islands, but a secondary eye wall approached. By then, the storm had maximum sustained winds of **180 mph**.

Super Typhoon Yutu Destruction

Damages

Damage Assessment - Saipan

Poles	Primary Wire (spans)	Secondary Wire (spans)	Transformers
1,772	5, 483	2,353	318

Super Typhoon Yutu Deployment

Sunday, Oct 28th

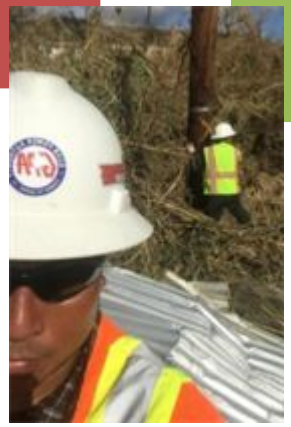
A 7-member Forward Team departed for Saipan via USCG C-130 out of AAFB

Tuesday, Oct 30th

John "Kadi" Manibusan and Rick Quidachay began pole installations

Tuesday, Oct 30th

Bucket trucks, flatbed, and utility trucks and vans are loaded on to the Russian Antonov and arrived in Saipan in the early evening.



Super Typhoon Yutu Deployment

Thursday, Nov 2nd – 1st Wave of employees, 26 member team departed for Saipan to join Forward Team

Tuesday, Nov 6th – GPA materials delivered to AAFB for delivery to Saipan and Tinian

Saturday, Nov 10th, Feeder Kiya 1 energized by GPA crews for the first time since the storm

GPA YUTU SUPPORT

ManPower

33 Personnel

- Rick Quidachay, Asst T&D Mgr
- 11 Linemen
- 6 Operators
- 5 Engineers
- 2 Substation Electricians
- 1 Relay Technician
- 2 Generation Mechanics
- 2 Generation Electricians
- 2 Heavy Equipment Mechanics
- 1 Safety Officer

Equipment

- 4 Bucket Trucks
- 2 Vans
- 1 Light Cart
- 1 Flatbed
- 3 Utility Trucks

Materials

- 439 Power Poles
- 140,000 LF of Primary & Secondary Wire
- 92 Transformers
- 1,020 Crossarms
- Insulators, Connectors, Clamps, Nuts, Bolts

GPA Restoration Team

Forward Team and 1st Wave

Restoration Progress

Generation – Substation – Relay GSR

Restoration Progress

Material Recovery

Restoration Progress

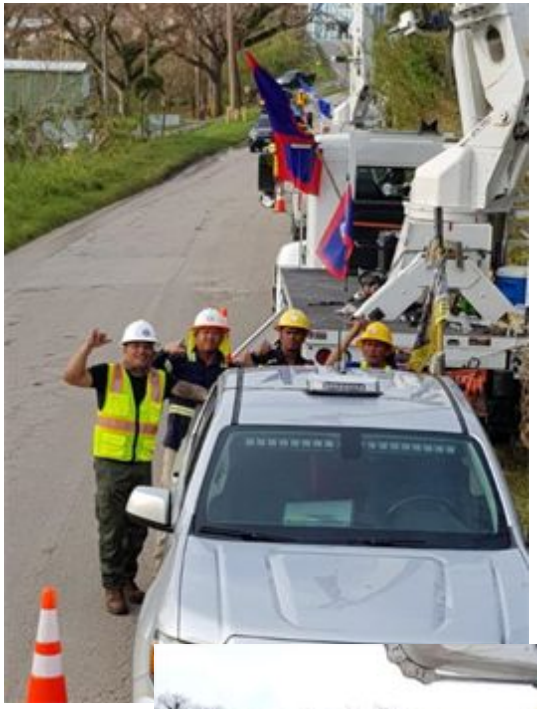
Operators

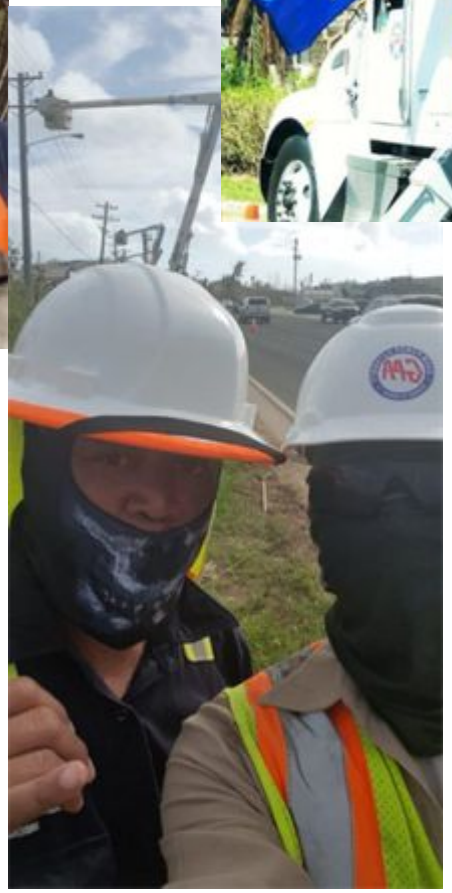
Restoration Progress

Line Crews

Restoration Progress

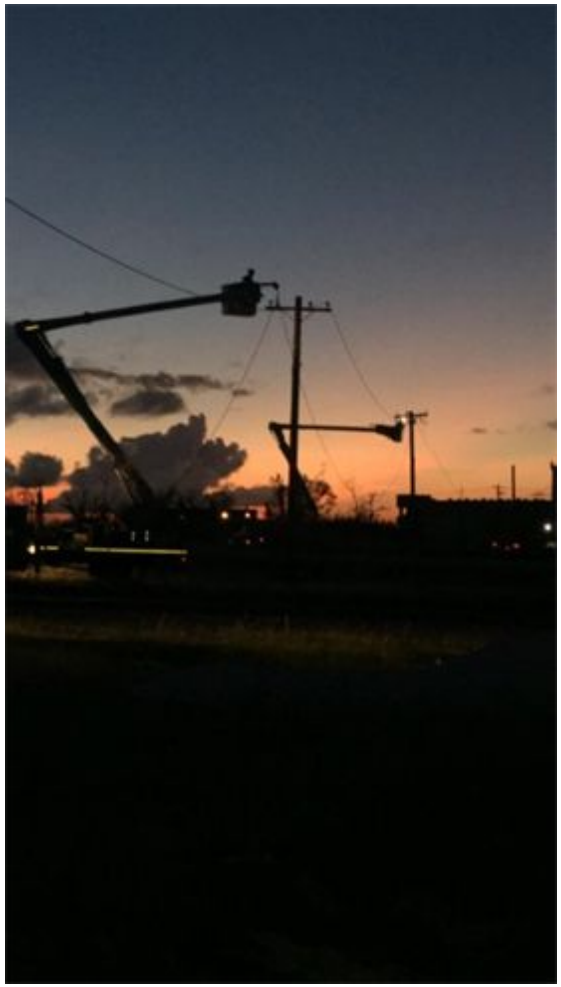
Line Crews





Restoration Progress

Line Crews



Restoration Progress

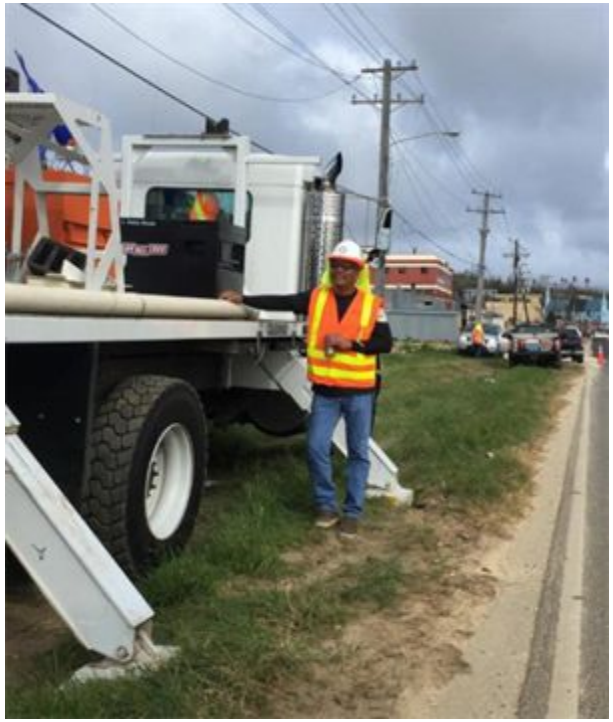
AIPORT RISER

Before After

Island power restored on 11/17

Restoration Progress

Mechanics, Engineers, Safety Officer



STATUS OF RECOVERY

GENERATION
Available = 51.7 MW
Normal Peak = 40.70 MW
Current Peak = 15.26 MW

FEEDERS
Total = 9
Energized = 7

POLES
Down and Damaged = 1,772
Installed = 421

Notes

- Most damage occurred in the central and south of the island
- Airport, Beach Road, major water wells, & major commercial areas affected
- Pole installations completed along Beach Road, Middle Road, and the feeders which serve the airport and southern areas
- Airport energized on November 17th

PLAN FORWARD

- GPA submitted the *TYPHOON YUTU - EMERGENCY UTILITY GRID RESTORATION PLAN FOR SAIPAN* to CUC Director Gary Camacho
- The plan calls for CUC/GPA to lead 4 sectors in the Central/South of the island to coordinate and manage restoration efforts in line with restoration priorities and material availability.
- The northern sector which is mostly restored, will be managed by CUC.
- GPA line crews, CUC line crews, contractors will be assigned to the 4 sectors.
- GPA engineers will prepare designs to maximize use of limited transformers.

RESTORATION SECTORS

SUMMARY

- GPA is making a difference in Saipan recovery efforts.
- The GPA Saipan team is working hard daily to restore critical services and businesses.
- The team on Guam at T&D, Generation, Engineering, Transportation, & Safety are multi-tasking and picking up extra duties to ensure continuity of services on Guam.
- GPA Executive Management is in daily contact with the Saipan team and with the CUC to ensure smooth operations.
- Based on the damages and at the request of the CUC, GPA estimates another 60 days of work in Saipan.
- All GPA personnel will be home for Christmas.
- The 2nd wave will deploy immediately after Christmas.
- GPA has begun invoicing CUC for labor, equipment, materials, and expenses.

TEAM GPA

ONE MARIANAS

Questions ???

Si Yu'os Ma'åse'

GPA-UOG Demand Side Management Model Home
Setting the Context for Energy Efficiency versus Self-Generation

John J. Cruz Jr., P.E. – AGMETS

Jennifer G. Sablan, P.E. – SPORD Manager

Leading the Next Generation

Background

- UOG SEA Grant office - Dean's Circle House 25 – renovations began in March, 2018.
- Guam Power Authority, through it's Demand Side Management Program, supplied energy efficient equipment in an effort to demonstrate the effectiveness of energy conservation measures.
- UOG SEA Grant office Grand Opening on July 18, 2018.
- UOG Endowment Foundation – Dean's Circle House 10 – was selected as the baseline office given similar occupancy, sized appliances, and operating hours.

Installed Equipment Listing and Specifications

Equipment	Specifications	Qty.	Cost
9,000 BTU Air Conditioner	22.5 SEER	3	$2,550
12,000 BTU Air Conditioner	21.5 SEER	1	$950
40 Gal. Water Heater	AHRI Certified/UL Listed	1	$450
LED Lighting Fixtures	Design Lights Consortium (DLC) Listed	7	$760
Refrigerator	Energy Star Certified	1	$800

Total Equipment Cost ≈ $5,513

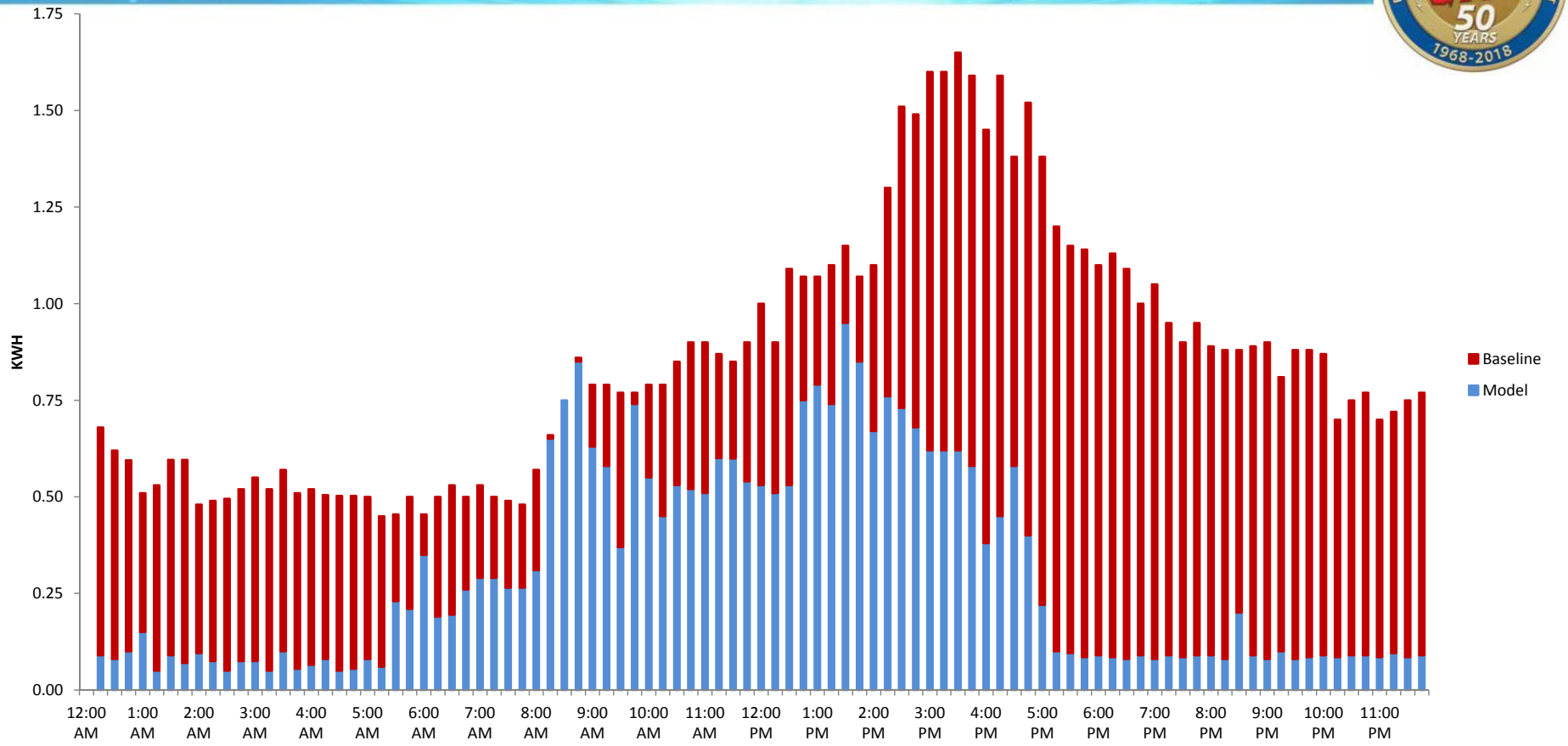
Leading the Next Generation

Equipment Cost Comparison

Equipment	High Efficiency Unit Cost (Actual)	Low Efficiency Unit Cost (Market Price)	Price Difference Per Unit
9,000 BTU Air Conditioner	$850	$550	$300
12,000 BTU Air Conditioner	$950	$650	$300
40 Gal. Water Heater	$450	$350	$100
LED Lighting Fixtures	$109	$65	$44
Refrigerator	$800	$670	$130

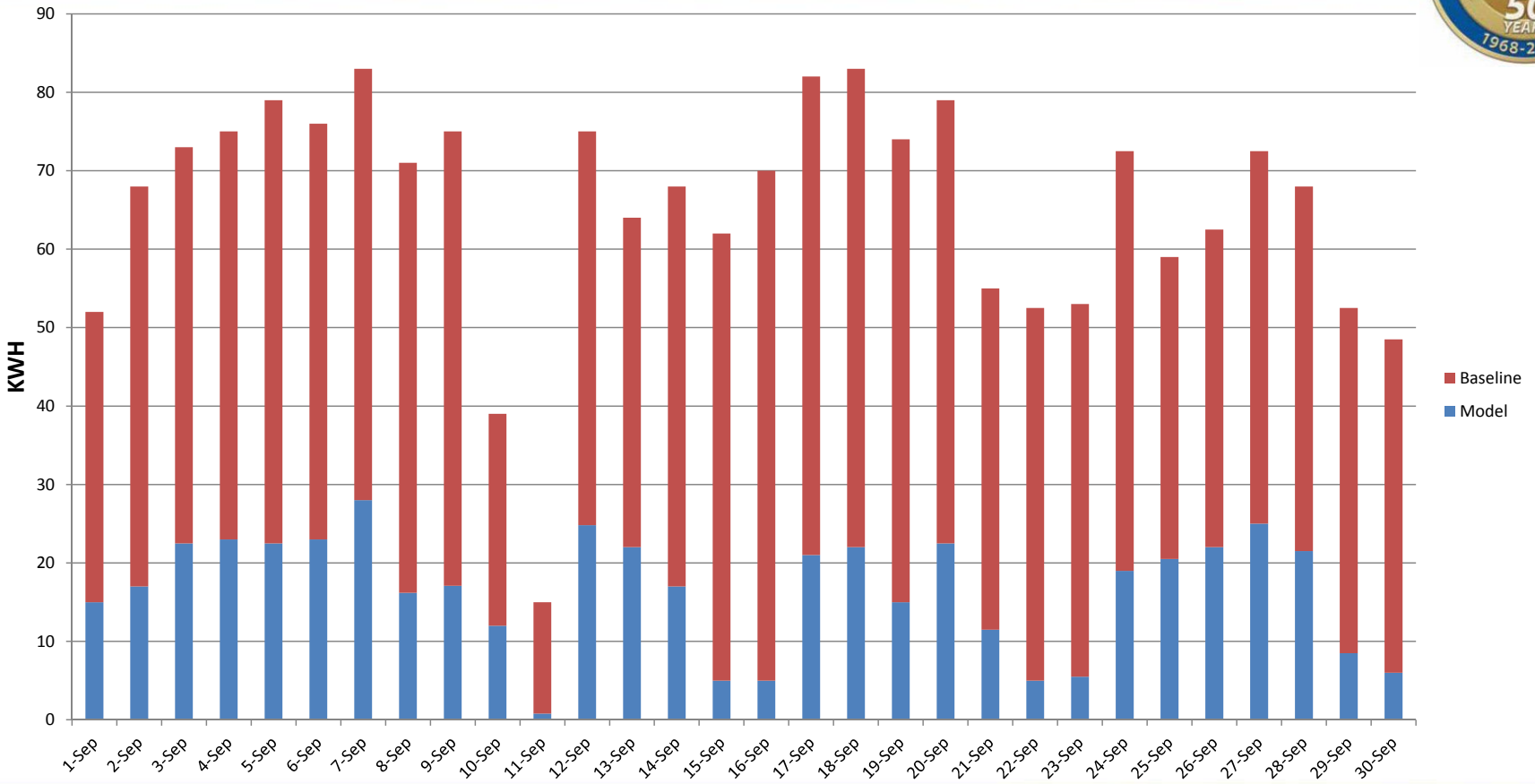
Initial Investment for Energy Efficiency ≈ $1,738

Daily Load Profile - October 4, 2018



Leading the Next Generation

Monthly Consumption - September, 2018



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University of Guam Load Analysis

	July Consumption (KWH) (Billed Amount)	August Consumption (KWH) (Billed Amount)	September Consumption (KWH) (Billed Amount)	October Consumption (KWH) (Billed Amount)
Baseline	2,272 ($692.23)	2,038 ($625.68)	1,850 (572.20)	2,440 ($740.27)
Model	504 ($188.72)	506 ($189.23)	496 ($186.44)	690 ($241.92)
Difference	1,768 ($503.51)	1,532 ($436.45)	1,354 ($385.76)	1,750 ($498.35)

Average reduced consumption per month = **1,600 KWH**
Average dollar savings per month = **$ 456**
Average dollar savings per year = **$ 5,472**

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- $Simple\ Payback\ Period\ = \frac{Cost\ of\ Investment}{Monthly\ Energy\ Savings}\ =$ 3.8 Months

- $NPV\ = \sum_{t=0}^{5}\left(\frac{Cash\ Flow_t}{(1+i)_t}\right) - Investment =$ $21,312

- $ROI = \frac{NPV}{Investment\ Cost}$ X 100% = 1226%

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Conclusions

- Investments in Energy Efficiency may have extraordinary rates of return over Solar PPAs

FY2018 Month	Baseline			Model Building			Equivalent Energy Cost ($/KWh)
	A	B	C	D	E	F	F / A
	Energy Consumption (KWH)	Energy Cost ($)	Energy Cost ($/KWh)	Energy Consumption (KWH)	Energy Cost ($)	Energy Cost ($/KWh)	Energy Cost ($/KWh)
July	2272	$ 692.23	$ 0.30	504	188.72	$ 0.37	$ 0.083
August	2038	$ 625.68	$ 0.31	506	189.23	$ 0.37	$ 0.093
September	1850	$ 572.20	$ 0.31	496	186.44	$ 0.38	$ 0.101
October	2440	$ 740.27	$ 0.30	690	241.92	$ 0.35	$ 0.099
Total	8600	$ 2,630.38	$ 0.31	2196	$ 806.31	$ 0.37	$ 0.094

GPA BEST Schools Program – GDOE Preliminary Feasibility Assessment

Presented by Guam Power Authority & Siemens Industry, Inc. – Building Technologies Division

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November 14, 2018

Introduction to GPA / Siemens Team

1. John Cruz, PE – Assistant General Manager of Engineering & Technical Services, GPA
2. Jennifer Sablan, PE – Division Manager of Strategic Planning & Operations Research Division, GPA
3. Amber McDonough, PE – Business Development Manager, Pacific Zone, Siemens
4. Alex Ramos, PE – Senior Energy Engineer, Pacific Zone, Siemens
5. John De Maio – General Manager, Pacific Zone Building Performance & Sustainability, Siemens

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Agenda

1. Overview of Report Findings
2. Review of Recommendations
3. Path Forward / Support from GPA
4. Next Steps

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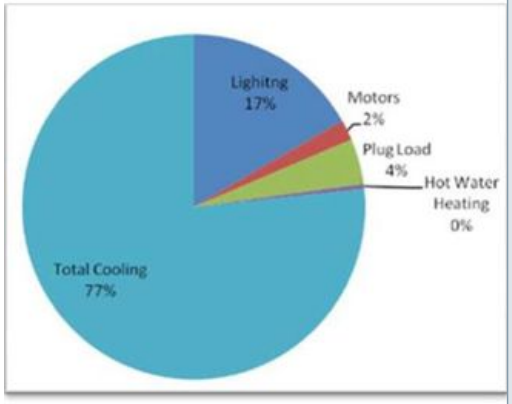
GPA BEST Schools Assessment Goals



- GPA pledged initial seed money of $500,000 for BEST Schools study and pilot project to demonstrate recommended FIMs
- Preliminary feasibility study to help GDOE:
  1) Achieve 10% energy consumption reduction & deploy renewable energy
  2) Assist GDOE to plan & prioritize actions to reduce operations expenditures, modernize their infrastructure & extend equipment life
- Audited 39 schools (26 ES, 8 MS & 5 HS) = ~4,000,000 sqf
- Explored viability of these key facility improvements measures (FIMs):
  a. Solar Photovoltaic (PV) Systems
  b. Heating Ventilation & Air-Conditioning (HVAC) Systems
  c. Water/Wastewater Systems
  d. Energy Management Systems (EMS)
  e. Lighting Systems
  f. Operations & Maintenance (O&M) Efficiencies

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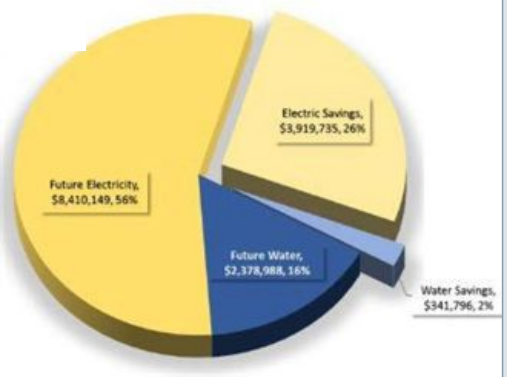
GPA BEST Schools Overall Findings



1) Study included an existing conditions summary & utility cost and savings analysis by school.
2) Recommendations are prioritized and ranked based on our preliminary estimates of their implementation costs and expected savings by FIM.
3) New pathways for GDOE to cost-effectively fund, procure, and construct these improvements were explored.

During 2017/2018 school year GDOE expenditures =
***$12,329,000 on electricity** & **$2,720,000 on water** = $15,050,000 / year*

*Total potential project cost to implement all FIMs = **$41,450,000***

*Predicted savings of **11,629,000 kWh electricity + 15,579 kGal water***
= $4,261,000 / year = 27% cost reduction

<u>** The energy project's utility savings would pay for itself in 9.7 years **</u>

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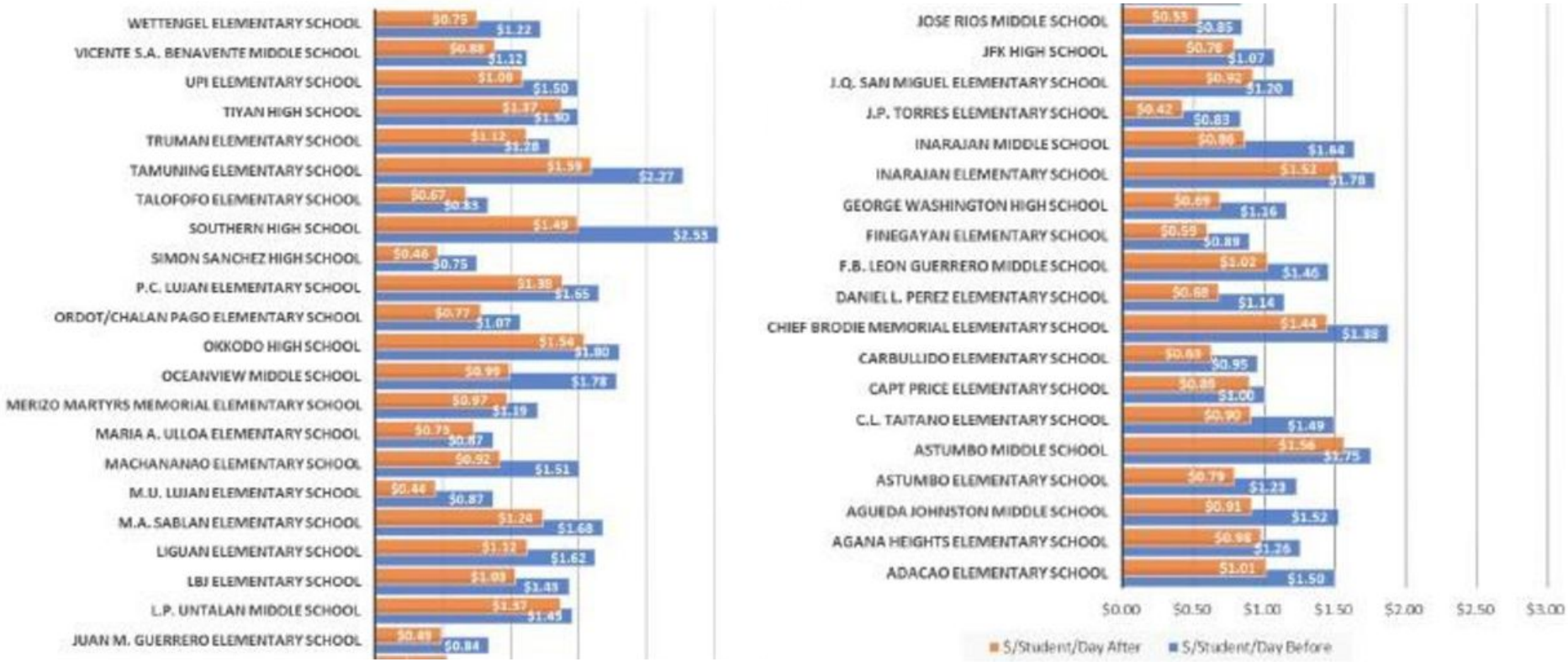
Utility Spend per Student / Year Before & After Project (pg 2-10)



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Priority FIMs by School (pg 2-3)

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Location	Energy Management Systems	Water Conservation	LED Lighting	Solar PV	Solar Assisted AC	Plug Load Controllers
Adacao ES		x	x	x		x
Agana Heights ES	x	x	x	x		x
Agueda Johnston MS	x	x	x	x	x	x
Astumbo ES		x	x	x		x
Astumbo MS		x	x			x
C.L. Taitano ES	x	x	x	x	x	x
Captain Price ES		x	x	x		x
Carbulido ES	x	x	x			x
Chief Brodie Memorial ES	x	x	x			x
Daniel L. Perez ES	x	x	x	x		x
F.B. Leon Guerrero MS	x	x	x	x	x	x
Finegayan ES		x	x	x	x	x
George Washington HS	x	x	x	x	x	x
Inarajan ES		x	x			x
Inarajan MS	x	x	x	x		x
J.P. Torres ES		x	x	x		x
J.Q. San Miguel ES	x	x	x			x
John F. Kennedy HS		x	x	x		x
Jose Rios MS		x	x	x	x	x
Juan M. Guerrero ES		x	x	x	x	x
L.P. Untalan MS		x	x			x
LBJ ES	x	x	x			x
Liguan ES		x	x	x		x
M.A. Sablan ES		x	x	x		x
M.U. Lujan ES		x	x	x		x
Machananao ES	x	x	x	x		x
Maria A. Ulloa ES		x	x			x
Merizo Martyrs Memorial ES	x	x	x			x

Location	Energy Management Systems	Water Conservation	LED Lighting	Solar PV	Solar Assisted AC	Plug Load Controllers
Oceanview MS	x	x	x	x		x
Okkodo HS		x	x	x		x
Ordot Chalan Pago ES	x	x	x	x		x
P.C. Lujan ES	x	x	x			x
Simon Sanchez HS	x	x	x	x	x	x
Southern HS	x	x	x	x	x	x
Talofofo ES		x	x			x
Tamuning ES	x	x	x	x		x
Truman ES		x	x			x
Tiyan HS		x	x			x
Upi ES		x	x	x	x	x
Vicente S.A. Benavente MS	x	x	x	x	x	x
Wettengel ES	x	x	x	x		x
GDOE Headquarters				x		x

NOTE: Not all schools are checked for Energy Management Systems. While all schools would benefit from having this FIM installed, not all schools are included at this stage due to sufficient energy savings at specific schools.

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Potential Costs, Savings & Simple Payback by School (pg 2-11 to 2-13)

School	Electric Savings (kWh)	Water Savings (gallons)	Utility Cost Savings ($)	Project Costs ($)	SPB (Years)
Adacao Elementary School	203,118	258,750	$95,127	$960,937	10.10
Agana Heights Elementary School	135,068	203,367	$40,899	$466,881	11.42
Agueda Johnston Middle School	488,574	478,393	$171,898	$1,658,704	9.65
Astumbo Elementary School	239,543	283,802	$92,792	$1,008,572	10.87
Astumbo Middle School	139,834	374,312	$41,315	$367,685	8.90
C.L. Taitano Elementary School	355,754	295,485	$129,908	$1,401,986	10.79
Capt Price Elementary School	55,844	331,275	$27,354	$370,132	13.53
Carbullido Elementary School	222,638	247,198	$58,555	$267,138	4.56
Chief Brodie Memorial Elementary School	202,183	179,085	$52,235	$527,814	10.10
Daniel L. Perez Elementary School	375,640	328,957	$111,715	$1,267,719	11.35
F.B. Leon Guerrero Middle School	644,646	682,836	$179,992	$1,397,077	7.76
Finegayan Elementary School	234,299	441,715	$92,681	$1,007,279	10.87
George Washington High School	782,975	968,416	$280,396	$2,900,117	10.34
Inarajan Elementary School	84,238	129,265	$22,896	$225,403	9.84
Inarajan Middle School	395,293	315,941	$139,122	$1,369,913	9.85
Truman Elementary School	78,154	188,006	$22,652	$161,315	7.12
Tiyan High School	185,984	763,571	$60,457	$531,619	8.79
Upi Elementary School	351,752	416,188	$132,080	$1,258,893	9.53
Vicente S.A. Benavente Middle School	370,050	707,936	$103,480	$957,237	9.25
Wettengel Elementary School	319,475	346,486	$120,535	$1,233,694	10.24
GDOE Headquarters	123,303	0	$47,497	$736,565	15.51
Totals	12,314,273	16,495,804	$4,261,531	$41,449,903	9.73

School	Electric Savings (kWh)	Water Savings (gallons)	Utility Cost Savings ($)	Project Costs ($)	SPB (Years)
J.P. Torres Elementary School	61,800	118,733	$25,342	$378,401	14.93
J.Q. San Miguel Elementary School	192,893	272,411	$51,939	$370,402	7.13
JFK High School	446,448	864,969	$201,176	$1,699,484	8.45
Jose Rios Middle School	222,118	497,080	$94,564	$980,460	10.37
Juan M. Guerrero Elementary School	223,569	333,661	$91,437	$1,010,983	11.06
L.P. Untalan Middle School	89,132	682,104	$35,525	$224,515	6.32
LBJ Elementary School	133,612	144,557	$35,062	$619,520	17.67
Liguan Elementary School	217,844	265,109	$102,762	$995,042	9.68
M.A. Sablan Elementary School	203,324	217,306	$70,271	$953,507	13.57
M.U. Lujan Elementary School	235,373	305,842	$93,838	$968,405	10.32
Machananao Elementary School	321,414	254,395	$114,171	$1,202,029	10.53
Maria A. Ulloa Elementary School	123,422	345,780	$36,786	$307,853	8.37
Merizo Martyrs Memorial Elementary School	79,414	136,889	$21,895	$221,027	10.09
Oceanview Middle School	316,160	304,735	$125,426	$1,433,207	11.43
Okkodo High School	355,159	959,627	$156,011	$1,395,397	8.94
Ordot/Chalan Pago Elementary School	177,376	250,833	$53,833	$606,330	11.26
P.C. Lujan Elementary School	142,124	220,599	$38,681	$407,244	10.53
Simon Sanchez High School	516,306	1,098,606	$195,371	$1,841,921	9.43
Southern High School	1,810,241	823,937	$528,557	$4,384,436	8.30
Talofofo Elementary School	62,522	152,591	$18,167	$172,189	9.48
Tamuning Elementary School	395,658	305,060	$147,131	$1,200,871	8.16

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Notes:

1) *Figures shown are high level budgetary estimates with a range of ± 20% and should be confirmed with future site investigations and detailed design development.*

2) *Potential savings do not account for resultant O&M repair cost reductions from implementing these FIMs; Actual net benefits to GDOE are expected to be greater than shown.*

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GPA BEST Schools Current Recommendations

1)Ensure Water Bill Accuracy; billed water meter use = actual meter readings.

2)Identify & repair existing Water Leaks; If leak cannot be immediately repaired, shut off water at night or on weekends to reduce water bills until the leak fixed.

3)Request GPA Customer Service's evaluate all schools' for **Electric Rate Schedule Changes** to lower electricity costs; Repeat every 6 months.

4)Continue implementing comprehensive **LED Lighting Retrofits** to lower electrical demand and consumption costs & improve light quality in schools.

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GPA BEST Schools Current Recommendations (cont.)

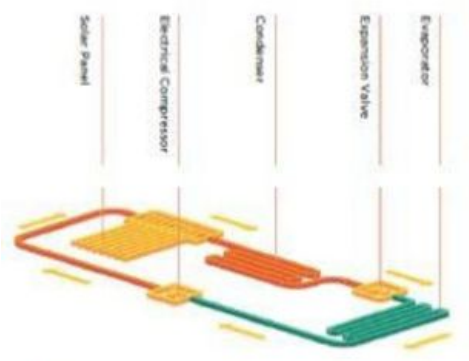

Figure 4-2 Schematic of Solar Assisted AC

5)Install **solar assisted thermal on AC units** > 10 tons to reduce electrical load.

6)Install **Solar PV systems** to lower electricity costs in conjunction with Electric Rate Schedule changes to maximize economic benefits.

7)Run split system **AC units in 'Dry Mode' at night** (if available), instead of cooling mode to reduce excess humidity and condensation.

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GPA BEST Schools Current Recommendations (cont.)

8)Avoid over cooling spaces; Enforce min. space temperature setpoint = 75°F & educate staff & students on importance.

9)Review effectiveness of existing HVAC maintenance contracts; consider increasing GDOE's "in-house" staff for more frequent & cost-effective maintenance to extend AC equipment life & reduce repair costs.

10)Utilize a modern **computerized maintenance management system (CMMS)** to generate work orders & track execution of district's HVAC systems' service.

Note: Wide-scale high-efficiency AC unit replacements were not included as a priority recommendation at this time; GDOE will not reap the full benefit from extra money spent on advanced AC unit capabilities & increased SEER rating until the equipment O&M is able to prolong unit life > 5 years. In this study only new controls are recommended, however any future detailed development would seek to incorporate new high-efficiency AC units wherever possible.

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SPLIT AC Replacements

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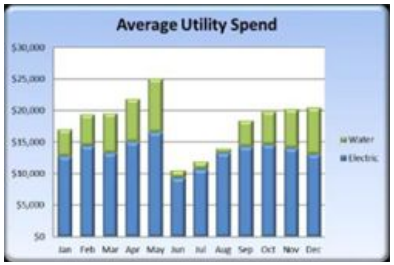
Replacement Considerations for Split Acs

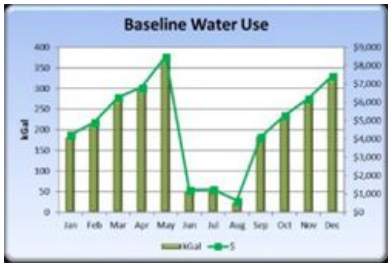
Not Recommended until Substantial Improvements in O&M are Made

Tons	SEER Before	SEER After	Annual kWh Before	Annual kWh After	% Savings	Approx No. of Units	kWh Savings	Blended Rate ($/kWh)	Estimated Annual Savings
1.0	15	21.5	2,741	2,272	17.1%	157	73,633	$0.24	$17,672
1.5	15	20.8	4,175	3,508	16.0%	13	8,671	$0.24	$2,081
2.0	15	20.5	5,683	4,801	15.5%	507	447,174	$0.24	$107,322
2.5	16	18	6,629	6,203	6.4%	1,227	522,702	$0.24	$125,448
5.0	13	16	15,442	13,488	12.7%	232	453,328	$0.24	$108,799
Totals						1,904			$361,322

Calculation above makes the following assumptions:
1) Unit available to run from 6AM - 9PM weekdays only
2) Unit doesn't run at all on weekends
3) EER = 1.12 * SEER - 0.02 * SEER2
4) EER assumed constant at all loads in calculation

GPA BEST Schools Future Recommendations





1)Convert & consolidate multiple ductless split system AC units into larger, single **Variable Refrigerant Flow (VRF) system** to save electricity & O&M costs.

2)Install **rain water capture & storage** systems for toilets and urinals to reduce water bills.

3)Develop **Procurement Specification Standards** to improve GDOE's repair & maintenance efficiency, increase staff equipment proficiency, and reduce spare parts inventory. Standards could include:

a) Minimum SEER rating
b) Mandatory corrosion coating
c) Preferred / limited equipment brands.

4)Expand Procurement Specification Standards to require all **new HVAC systems to have dehumidification capabilities & dew point temperature control** to 55°F to prevent excess condensation.

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GPA BEST Schools Pilot Project Recommendations

- Pilot gives GDOE the opportunity to **explore new technologies & effectiveness recommended FIMs** that can be extrapolated district wide.
- GDOE can **"try before they buy"** innovative FIMs on a small scale without risk of over committing to a technology that may not be a good fit.
- Propose pilot implementation at one of the following schools: **Carbullido Elementary, Maria A. Ulloa ES, Agueda Johnston MS or Finegayan ES**; Each has a "twin" school & will allow easy comparison of pilot results with a control school.
- A pilot at one of these schools will enable GPA to showcase & compare FIMs that are new to GDOE such as:
  1) Variable Refrigerant Flow (VRF)
  2) Solar Assisted AC
  3) Ceiling Insulation
  4) Building Automation
- GPA & Siemens will work with GDOE to finalize the pilot project's scope of work to maximize the impact of its $250,000 construction budget.

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Challenges to Adopting BEST Schools Plan District Wide

- **Insufficient government funding** for adequate facility maintenance or needed infrastructure improvements; GDOE's funding is often cut or in jeopardy of being reduced on a year to year basis.
- **Limited in-house manpower** to perform the recommended day-to-day maintenance tasks or respond to emergency repairs; Difficult to retain skilled workers & need to outsource large portion of the recurring O&M service
- **Low bid procurement methodology** drives down the first cost of equipment & construction, but is not best use of GDOE's limited funds over long term from maintenance, efficiency, and sustainability standpoint.
- **AC units as Disposable Equipment**, to be purchased, minimally serviced & then replaced; prevents GDOE from justifying added cost for more efficient equipment or enforcing higher quality specification standards.
- **Ongoing financial challenges** have negatively impacted GDOE's ability to pursue funding for FIMs through traditional capital requests or bonds; GDOE struggles to secure federal grants & comply with reporting requirements.

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A Time for Change has Arrived

"Business as usual" is no longer a viable option; Ongoing school deferred maintenance is continuing to amass causing:

- Comfort issues for students and staff
- Erosion to GDOE's limited budget with expensive emergency repairs
- Damage to GDOE's ability to create an effective learning environment
- Difficulty attracting & retaining highly skilled teachers
- Risk of tarnishing of the district's overall reputation within territory

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New Path Forward for BEST Implementation

GDOE is able to take advantage GPA's support programs such as:

1) **Demand Side Management (DSM) Program / BizConnect:** free access to view detailed energy use information on a meter by meter basis

2) **DSM Program Commercial Rebates:** program provides fixed rebates for replacing inefficient lights and AC units with more efficient equipment (pending funding renewal).

3) **Grant Application & Implementation Assistance:** GPA will help the district secure grants such as those offered by the U.S. DOI Office of Insular Affairs. GPA will also provide turn-key design-build services to expedite final design & construction of the improvements & provide grant reporting help.

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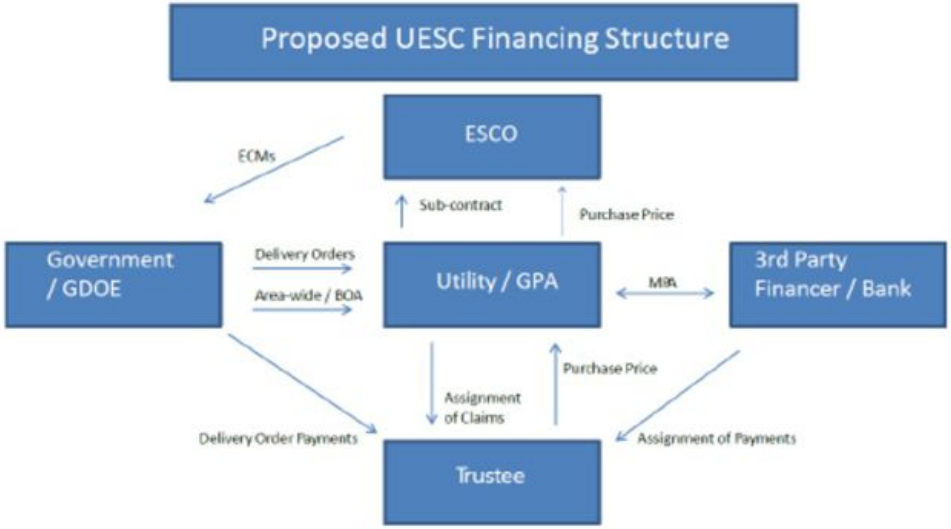
New Path Forward for BEST Implementation (cont.)



4) **Utility Energy Service Contract (UESC) Program:** allows federal clients to contract with utilities to perform widespread energy efficiency FIMs with savings that pay for themselves over time. GPA will offer GDOE access to a similar UESC-style partnership to assist with:

- project procurement
- design & implementation
- help GDOE connect with 3rd party financing

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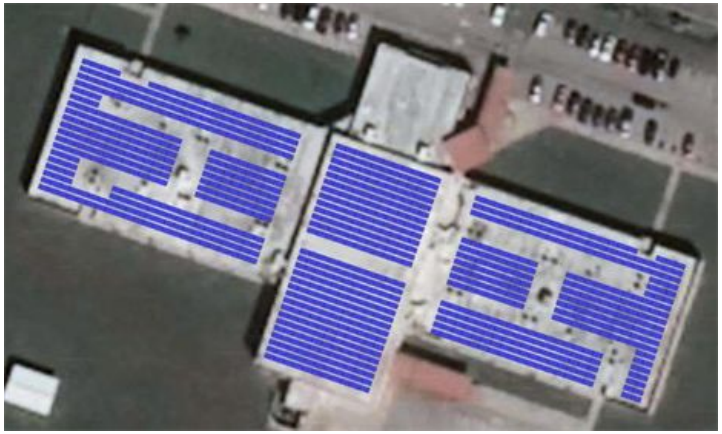
New Path Forward for BEST Implementation (cont.)



5) **Power Purchase Agreements:** GPA can provide GDOE with internally or externally sourced PPAs to assist in the deployment and procurement of solar PV systems as part of a district wide program. Benefits would include:

- A PPA program would lock in a reduced cost of solar PV power for an extended term (typically 20 years).
- Under a PPA, GDOE would not be liable for any risks or costs associated with solar PV array design, development, procurement, financing, construction, maintenance, power quality, or performance.
- GPA can provide an in-depth cost analysis on pros and cons of solar PV ownership vs. PPA to help the district determine which option is most advantageous.

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New Path Forward for BEST Implementation (cont.)

6) **Project Financing:** Possible funding sources to enable GDOE to pursue implementation of FIMs include:

- Tax-exempt municipal lease purchase agreement up to 15 years.
- Non-appropriation clause to enables public agencies to legally commit to multi-year leases.
- We have received interest from national lenders Dominion, Bostonia, Siemens Financial Services & potentially Bank of Guam.
- After project scope or work, firm price proposal, start date, and repayment term are determined established we will work to get offer letters from multiple lenders.
- Current market interest in GDOE seems to be trending at interest rates (yields) of about 5.0 – 5.25%; *(Dominion indicative rate this week was 7.5% for 15 year term)*
- This report estimates a total funding need of $41M with a projected simple payback of 9.7 years. Assuming GDOE can secure financing with the interest rates shown above, our **preliminary modeling indicates a viable cash flow over a 15 year term**.

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New Path Forward for BEST Implementation (cont.)

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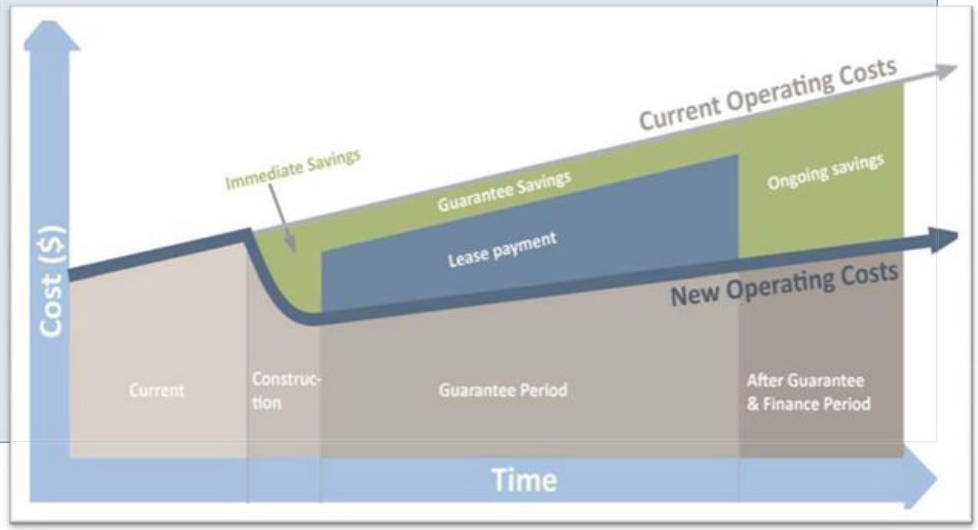
7) **Project Phasing for Success:** The total value of FIMs identified is probably too large to pursue as a single project. We recommend GDOE consider smaller phases to:

- Allow the IGA and project design to be completed more quickly.
- Encourage "on the fence" financial institutions to participate.
- Enable GDOE to start realizing savings more quickly than if they waited a for a much larger project's development to be completed.

A laddered approach would allow GDOE to:

- Start a Phase 1 project ($5M for example), finish its design, start its construction & then begin on an IGA to scope Phase 2.
- Once onsite work for Phase 1 is complete, construction of Phase 2 could begin, along with the kick-off for a Phase 3 IGA.



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GPA BEST Schools Program Recap / Next Steps

GPA seeks to use the BEST Schools Program to help GDOE:

1) Transform its inventory of schools to be resilient, energy efficient & sustainable facilities.
2) Achieve legislative mandate to reduce energy consumption by 10% & deploy renewable energy systems.
3) Use creative intra-agency agreements to provide new cost-effective ways to fund, procure, and construct critical facility improvements.
4) Capture reductions in energy, water, and maintenance costs by pursuing UESCs & PPAs that can be used in concert with DSM program.

Next Steps of this GPA/GDOE partnership:

- Schedule a follow up meeting to scope a Phase 1 project
- Sign MOU for an Investment Grade Audit for Phase 1 defining SOW & walk-away fee

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Questions?

Jennifer Sablan, PE
Division Manager of SPORD, GPA
(671) 648-3103
jsablan@gpagwa.com

Si Yu'os Ma'åse'!

Amber McDonough, PE
Business Development Manager – Pacific Zone
(907) 227-3734
amber.mcdonough@siemens.com

John J. Cruz Jr., PE
AGMETS, GPA (671) 648-3223
jcruz@gpagwa.com

www.siemens.com/perfect-places/energyconsulting

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BEST Schools – Technical Discussion

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Lack of Ceiling Insulation

C.L Taitano

6/22/2018

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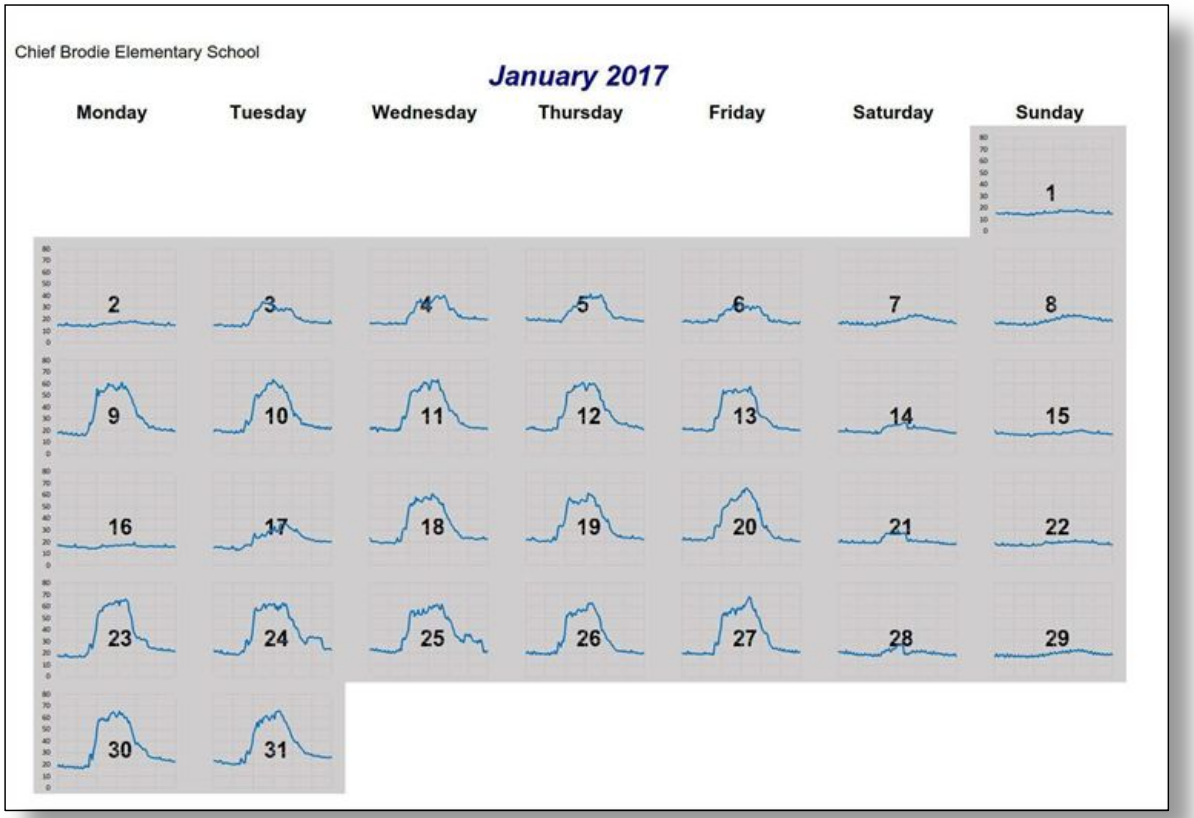
Electric Load Profile – Chief Brodie ES

1) Flat load profile on weekends and Holidays
2) Low base load (~20kW)
3) Load Factor = 49.03%



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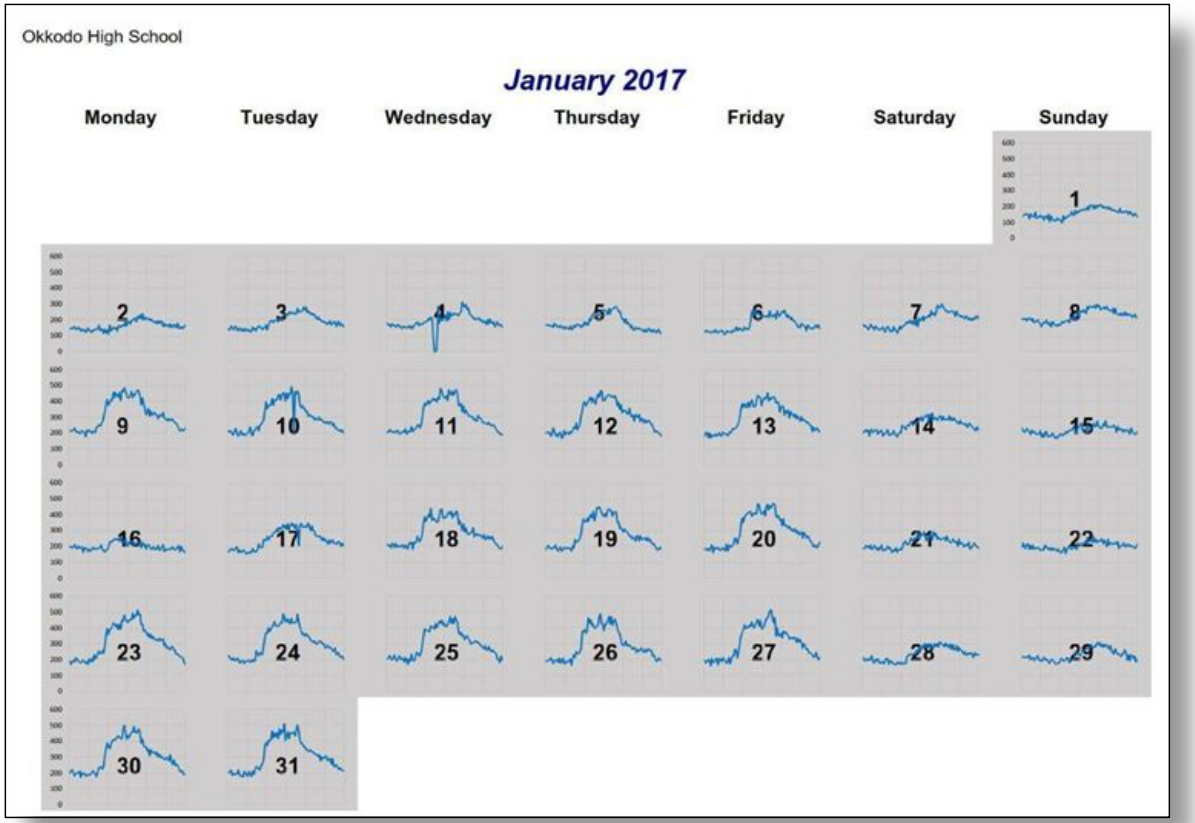
Electric Load Profile – Okkodo HS

1) Load profile on weekends and Holidays is NOT flat
2) High base load (~200kW)
3) Load Factor = 49.14%
4) Base load of 200kW higher than peak load of many schools
5) Okkodo Expansion has base load of 130kW
6) Okkodo High School has a base electrical load over 300kW!



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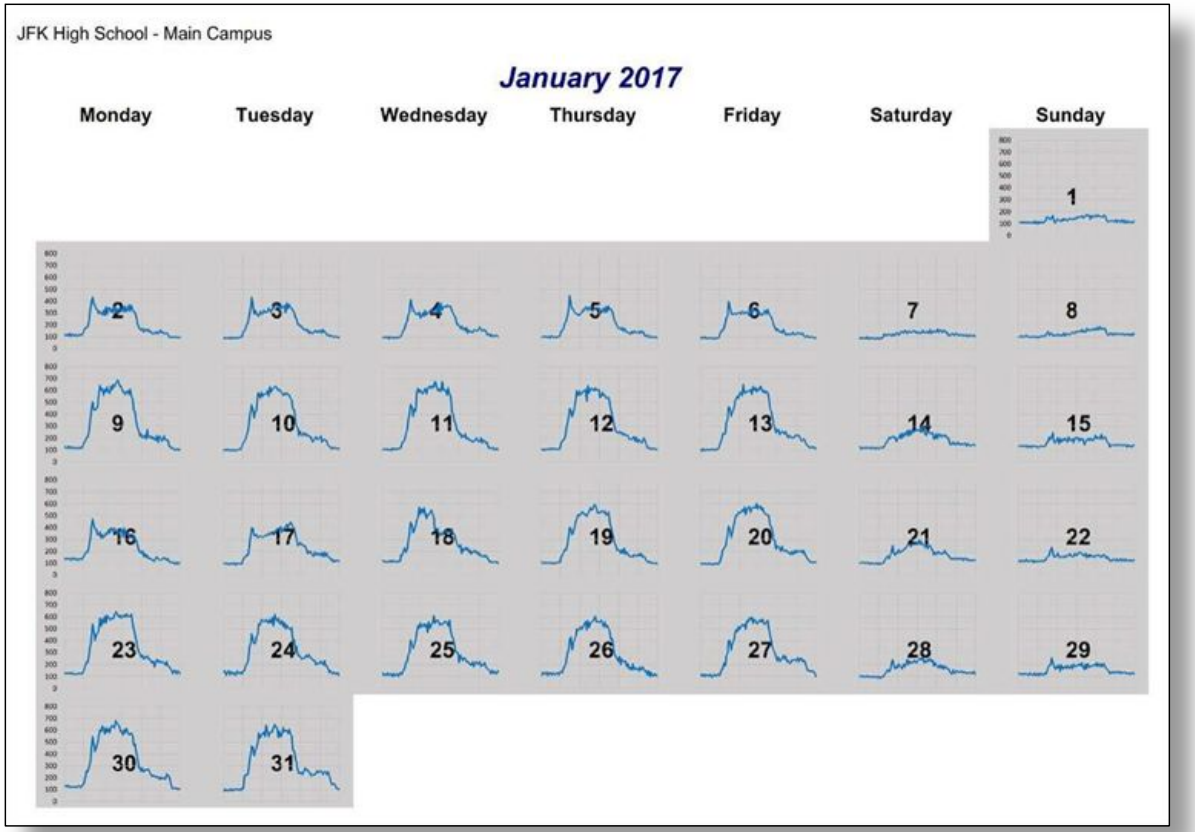
Electric Load Profile – JFK High School

1) Load profile *mostly* flat weekends or Holidays
2) Medium High base load (~100kW)
3) Load Factor = 35.55%



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Condensation Happens

When humid air meets a cold surface, moisture condenses from the warmer air. This causes problems for GDOE when:

- A classroom is overcooled and the AC is abruptly shut off, humid air meets the cold surfaces (i.e. concrete wall, glass, etc.) and condenses.
  - Heat conducts through concrete wall or glass and condenses

Both conditions cause excess moisture in the schools, encouraging mold growth and causing water damage

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Strategies to Minimize Condensation and Mold in Schools

1. Prevent water infiltration from leaks
2. Do NOT over cool space during the day. This limits your options during unoccupied periods; enforce minimum low temperature set points.
3. Run unit in “dry” or “dehumidification” mode rather than shutting off the unit completely.
4. Raise the setpoint during unoccupied times
5. Control the space to dewpoint instead of just space temperature

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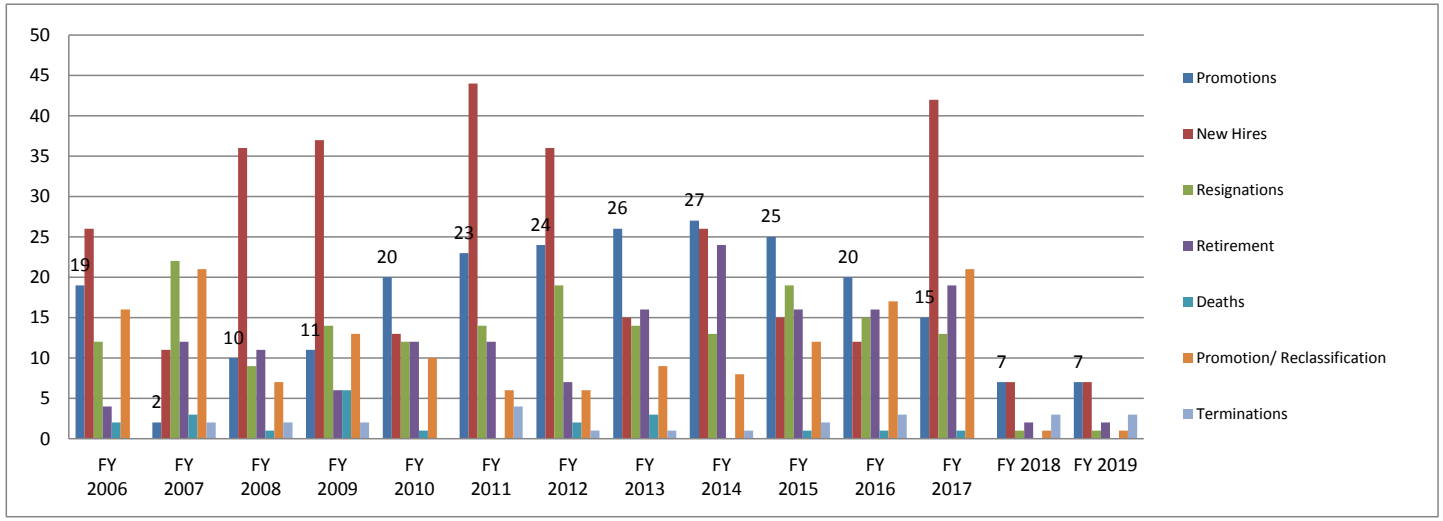
RECRUITMENT ANALYSIS

Fiscal Year	Promotions	New Hires	Resignations	Retirement	Deaths	Promotion/ Reclassifi-cation	Termina-tions	Total Author-ized FTE	Attrition Rate	Total Filled FTE at end of Fiscal Year	Percentage of Filled FTE at end of Fiscal Year
2006	19	26	12	4	2	16	0	584	3.3%	536	91.8%
2007	2	11	22	12	3	21	2	584	7.2%	510	87.3%
2008	10	36	9	11	1	7	2	592	4.5%	525	88.7%
2009	11	37	14	6	6	13	2	592	5.3%	534	90.2%
2010	20	13	12	12	1	10	0	592	4.7%	522	88.2%
2011	23	44	14	12	0	6	4	592	5.7%	536	90.5%
2012	24	36	19	7	2	6	1	568	5.4%	543	95.6%
2013	26	15	14	16	3	9	1	568	6.3%	524	92.3%
2014	27	26	13	24	0	8	1	568	7.3%	512	90.1%
2015	25	15	19	16	1	12	2	539	7.4%	489	90.7%
2016	20	12	15	16	1	17	3	510	7.2%	466	91.4%
2017	15	42	13	19	1	21	0	510	7.1%	476	93.3%
2018	16	17	15	11	3	13	0	510	6.1%	464	91.0%
2019	7	7	1	2	0	1	3	500	1.3%	465	93.0%

Recruitment Analysis (FY 2019) ..1 of 2

as of 10/31/18



	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019
Promotions	19	2	10	11	20	23	24	26	27	25	20	15	7	7
New Hires	26	11	36	37	13	44	36	15	26	15	12	42	7	7
Resignations	12	22	9	14	12	14	19	14	13	19	15	13	1	1
Retirement	4	12	11	6	12	12	7	16	24	16	16	19	2	2
Deaths	2	3	1	6	1	0	2	3	0	1	1	1	0	0
Promotion/ Reclassification	16	21	7	13	10	6	6	9	8	12	17	21	1	1
Terminations	0	2	2	2	0	4	1	1	1	2	3	0	3	3

TOTAL NO. OF EMPLOYEES	**536**	**510**	**525**	**534**	**522**	**536**	**543**	**524**	**512**	**489**	**466**	**476**	**464**	**465**

Recruitment Analysis (FY 2019) .. 2 of 2

as of 10/31/18

GUAM POWER AUTHORITY
HUMAN RESOURCES DIVISION
STAFFING REPORT (FY 2019)
AS OF OCTOBER 31, 2018

DIVISION	B1 ACTIVE EMP	B2 LAST EMP	C PROMOTE /TRANS	D PROM. RECLASS	E NEW HIRES	F RESIGN/ TERM	G RETIRE	H CURR VAC	I LAST VAC	(B1+H=K) TOTAL STAFFING
INTERNAL AUDIT/REVENUE PROTECTION	3	3	0	0	0	0	0	0	1	3
BOARD(10200)	2	2	0	0	0	0	0	0	0	2
GENERAL MANAGER (CUS) [10100]	0	0	0	0	0	0	0	0	0	0
GENERAL MANAGER (20500)	4	4	0	0	0	0	0	0	0	4
PUBLIC INFORMATION OFFICE	2	2	0	0	0	0	0	0	0	2
ASSIST GM-ENG/TECH SVCS (30500)	1	1	0	0	0	0	0	0	0	1
ASSISTANT GENERAL MGR (30800)	1	1	0	0	0	0	0	1	1	2
ASSISTANT GENERAL MGR (AGMO) 50900	2	2	0	0	0	0	0	0	0	2
STRAT PLANN & OPTNS RESEARCH DIV	9	9	0	0	0	0	0	2	2	11
FACILITIES	9	9	0	0	0	0	0	0	0	9
HUMAN RESOURCES	8	8	0	0	0	0	0	1	2	9
CUSTOMER SERVICES	33	38	2	0	0	2	0	5	2	38
INFORMATION TECHNOLOGY	15	15	0	0	0	0	0	1	1	16
FINANCE	37	40	0	0	1	2	0	7	6	44
PROCUREMENT	21	21	0	0	0	0	0	0	1	21
TRANSPORTATION	11	11	0	0	0	0	0	0	0	11
SAFETY	6	5	0	0	1	0	0	1	2	7
PLANNING & REG	8	8	0	0	0	0	0	0	0	8
ENGINEERING	36	37	0	0	0	0	1	3	2	39
GENERATION	127	128	0	0	0	0	1	6	9	133
TRANSMISSION/DISTRIBUTION	108	98	5	1	5	0	0	3	12	111
POWER SYSTEM CONTROL CENTER	22	22	0	0	0	0	0	5	5	27
	465	464	7	1	7	4	2	35	46	500
JOBS/SCSEP/GETP PARTICIPANTS	2	2								2
WORK EXPERIENCE PROGRAM	4	4								
APPRENTICESHIP PROGRAM	0	0								0
SUMMER ENGINEERING INTERNS	0	1								0
TEMPORARY (P.L. 34-116)	1	1								1
GRAND TOTAL WORKFORCE:	472	472	7	1	7	4	2	35	46	503

FTE Count per FY19 FMP: 500

Current vacancies adjusted to reflect FTE of 500

** JOBS = Job Opportunities and Basic Skills (individuals under the Public Health assistance program)

** GETP = Guam Employment & Training Program (individuals under the Public Health assistance program)

** SCSEP = Senior Community Service Employment Program

** APPRENTICESHIP TRAINING PROGRAM - Generation, PSCC and T&D combined total

** JOBS/SCSEP/GETP and Apprentice program participants are not included in the total annual budgeted FTE (Full-Time Employee) count.

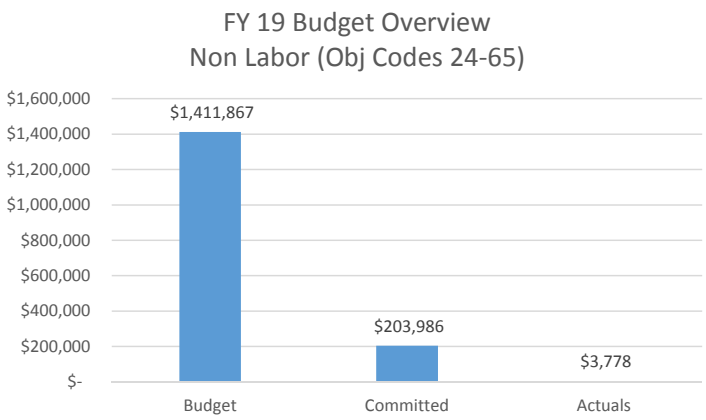
** P.L. 34-116

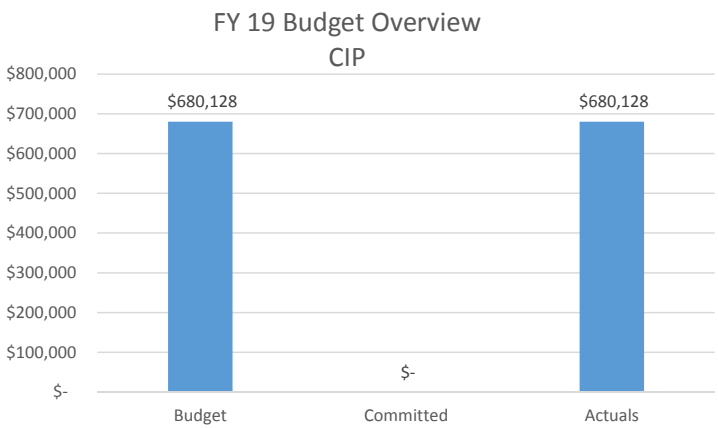
Staffing Report as of October 31, 2018 - PREPARED BY: J.Aguigui

SPORD CCU Report

OCTOBER 2018

SPORD FY 2019 Budget Status





SPORD FY 2018 Budget Status

- Major Contracts (Non-O&M) thru October 2018

	Budgeted Amount	Committed Amount	Actuals	PO Balance
Aggreko Contract	$ 12,822,000	$ 12,414,831	$ 917,597	$ 11,497,234
Fuel Contracts	$ 260,617,868	$ 81,525,059	$ 13,520,804	$ 68,004,255
MEC IPP (Piti 8&9)	$ 21,183,000	$ 12,383,000	$ -	$ 12,383,000
NRG Contract (Renewable)	$ 10,463,361	$ 10,178,157	$ 813,474	$ 9,364,683

Note: Not all contracts and purchase orders have been issued or processed as new contract terms for RFO and Diesel fuel contracts and MEC IPP extension contract commence after November.

SPORD FY 2018 Budget Status

- DSM Expenses

Description	FY16	FY17	FY18	FY19 thru 10/31/18*	Total to Date
Regular/OT Pay	$ 11,349	$ 22,256	$ 26,122	$ 4,984	$ 64,710
Other Contractual	$ 28,279	$ 85,550	$ 116,978	$ -	$ 230,806
Bank Fees	$ 155	$ 1,032	$ 1,085	$ 15	$ 2,287
Paid Rebates-Split AC	$ 154,700	$ 557,275	$ 1,247,000	$ 66,575	$ 2,025,550
Paid Rebates- Central AC	$ 3,400	$ 8,200	$ 4,400	$ -	$ 16,000
Paid Rebates-Washer/Dryer	$ 2,800	$ 7,425	$ 48,800	$ 4,800	$ 63,825
Total Expenses	$ 200,682	$ 681,738	$ 1,444,384	$ 76,374	$ 2,403,178

** Expenses for October 2018 are preliminary pending closing of October books and above includes an update for September 2018 actuals.*

Ongoing Activities

- Contract Performance Management (IPP, Agrekko)
- Generation Fuel Supply & Fuel Farm Management
- DSM Rebate Processing & UESC Program
- Renewables (Wind Turbine Maint & DOAg MOA, NRG Invoicing)
- Smart Grid/Network Support
- Project Management
  - Procurement
  - *Oct Project Activities*

PROCUREMENT ACTIVITIES

PENDING AWARD / NTP

Responsible	PROJECT	Description	CCU Date Approved (Resolution No.)	PUC Date Approved (Docket No.)	Projected Start*	Projected Completion	Status
SPORD (ANF)	FUEL	Supply of Residual Fuel Oil No. 6	(2018-16)	Aug 2018 (18-01)	12/1/2018	2 yrs	Contract Awarded.
SPORD (FJI)	NEW POWER PLANT	Geotechnical Services	NA	NA	pending permit	TBD	Contracted awarded.
SPORD (RAC)	SMART GRID	Mobile Workforce Management System (MWMS) **RE-BID**	MS Bid	GPA-023-17	10/5/2017	3/20/2018	GPA Legal Review of Insurance - September 2018

ONGOING PROCUREMENT

Responsible	PROJECT	Description	Bid or RFP	Bid/RFP No	Announced	Bid Opening /	Notes
SPORD (RAC)	SMART GRID	MV90 Integration Services	RFP	GPA-RFP-18-001	1/30/2018	3/6/2018	Best and Final Offer -October 2018
SPORD (RAC)	PLANNING	Milsoft Systems Software Services	RFP	GPA-RFP-18-003	2/1/2018	3/7/2018	Best and Final Offer -October 2018
SPORD (FJI)	NEW POWER PLANT	Build, Operate & Transfer Contract for 120-180MW of New Generation Capacity. **(PHASE I - REQUEST FOR QUALIFICATIONS)**	MS Bid	GPA-034-18	1/16/2018	4/5/2018	Step I - Qualifications completed. Total of 7 Qualified bidders selected. Obtained CCU approval to petition PUC for approval of technical bid documents in July 2018.
SPORD (ANF)	FUEL	Supply of Diesel Fuel Oil No. 2	MS Bid	GPA-008-18	11/16/2017	9/18/18 (Phase I) / TBD	Stay of Procurement due to Protest
SPORD (JTL)	RENEWABLES	Renewable Energy Resource Phase III	MS Bid	GPA-007-18	11/16/2017	12/13/2018	Lease modifications ongoing to address bidders' concerns/questions. Completed lease discussions in July.
SPORD (MAT)	PLANNING	Planning Software Consulting Services	RFP	GPA-RFP-18-010	7/26/2018	8/30/2018	Cancelled due to proponent non-compliance with Procurement Requirements. Planning for re-solicitation with revised scope.

PROCUREMENT ACTIVITIES

ONGOING PROCUREMENT (continued)

Responsible	PROJECT	Description	Bid or RFP	Bid/RFP No	Announced	Bid Opening /	Notes
SPORD (MAT)	FUEL / OPERATIONS	Handling and Hauling of GPA Used Oil and Supply of GPA Used Oil Meeting GPA Specifications	MS Bid	GPA-118-18	Sep-18	1/22/2019	On-going Procurement
SPORD (RAC)	SCADA	DNP3 SA training	RFP		Oct-18		Announced Closing (October 5, 2018)
SPORD (RAC)	STUDIES	Consulting Services for Distribution Study using Smart Grid Analytics	RFP		Oct-18		Announced October 2018
SPORD (LOS)	STUDIES	Power System Analyses and Studies	RFP		Oct-18	11/9/2018	Technical Proposals due 11/9/18

DEVELOPING PROCUREMENT

Responsible	PROJECT	Description	Bid or RFP	Projected Start	Projected Completion	Status
ENGINEERING	FUEL	GPA Tank Farm DFO Pipeline Upgrade - Design / Build	Bid	2/8/2018	11/30/2018	Preparation of bid specs in progress. To install new diesel line from Navy Tie-in to the Bulk Fuel Tanks and replace diesel line to TEMES CT
ENGINEERING	FUEL	Tank 1935 API 653 Internal Inspection	Bid	5/1/2018	5/31/2019	Preparation of bid specs in progress. Budgeted for FY 2018.
SPORD (RAC)	ELECTRIC VEHICLE	Electric Vehicle Infrastructure	RFP	Oct-18	Jun-19	Developing Requirements
SPORD (RAC)	SMARTWORK SYSTEMS	Smartworks Systems Software Services	RFP	Aug-18	Continous	Developing RFP
SPORD (ANF)	FUEL	Bulk ULSD Supply	Bid	Aug-18	Dec-18	Draft Bid review by Mgt Fuel Committee
SPORD (ANF)	FUEL	ULSD Hauling and Delivery Services for WSD and other plant sites	Bid	Nov-18	Mar-19	Draft Bid review by Mgt Fuel Committee

PROCUREMENT ACTIVITIES

DEVELOPING PROCUREMENT (continued)

Responsible	PROJECT	Description	Bid or RFP	Projected Start	Projected Completion	Status
SPORD (ANF)	FUEL	GPA Bulk Fuel Storage Facility PMC	Bid	FY2019	Sep-19	Developing Specifications to convert to PMC
SPORD (LOS)	WIND TURBINE	Wind Turbine O&M Supervision and Materials	RFP	FY2019	FY2019	Developing RFP documents

Project Activities

No.	Project Description	October 2018 Activities	Status / Est. Completion	RFP/Bid No
1	Energy Storage System (Phase I)	GPA reviewing Pre-Final design. Clearing and grading permit work commenced in November 2017. Foundation permit work commenced in January 2018. Construction is 58% completed.	12/31/2018 (reviewing schedule for project delays, potential delay thru Feb 2019)	MS Bid GPA-082-15
2	Renewable Energy Resource Phase II	On-going review for KEPCO-LGCNS substation design drawings. Hanwha working on interconnection scope and design.	KEPCO PV plant COD is APR 2021. Hanwha's COD is NLT Aug 22, 2021.	MS Bid GPA-070-16
3	New Power Plant Bid (EPCM)	Pre-bid conference and site visits scheduled for week of Nov.5th. Ongoing bidders' question submittal phase. Bid proposals due January 18, 2019. GPA coordinating with archeaologist and geotechnical consultants to conduct preliminary geotechnical assessment. Also, Stanley consultants conducting preliminary environmental assessment. Assessments are to be forwarded to bidders as part of bid documents.	Projected Award (2019 Q3) COD (2022 Q2)	MS GPA-034-18
4	DSM Marketing	Completed DSM Survey and continued continued marketing support. Developing scope of work for FY19, pending funding allotment.	Continuous	
5	DSM Rebate Program	Processed about 290 equipment in applications for rebates totaling ~ $71K	Continuous	
6	Wireless Network Expansion	Commenced Southern Expansion in collaboration with GWA: 30% Assessment of GWA Well Locations: Completed Assessment of Existing Tropos Units: 100% Router Equiqment and Accessories purchase Routers programming Preparing next router order and installation documents	Dec-18 Completed Completed Received routers - May 2018 Completed - June 2018 Accessories - May 2018 October 2018	GPA-019-18
7	Electric Grid Analysis Software	Additional training for users Realtime Voltage Module Training on Planning and Analysis Cases	Completed Completed (July 2018) November 2018	GPA-064-16

Project Activities

No.	Project Description	October 2018 Activities	Status / Est. Completion	RFP/Bid No
8	Services to Develop Business Performance Indices using iDashboards	Dashboard builds 95%	Ongoing	GPA-RFP-16-008
9	Supervisory Control and Data Acquisition (SCADA) System	Change Order Approved for November 2018 Completion and hardware costs Servers; Programs, & Workstations Installed Point to Point Test Ongoing Operator Training Completed Admin Training Completed	Nov 2018 (SCADA COD) Completed 'Oct 2018 (Estimated Completion) September 2018 September 2018	GPA-066-16
10	Mobile Workforce Management System	Bid Evaluation Completed, Clevest recommendation memo submitted for approval March 21, 2018 Purchase Order being Processed Pending GPA legal comment on Insurance	May 2018 (Bid Award) August 2018 September 2018	GPA-023-17
11	Consulting Services for Smart Grid Analytics Enabled Distribution System Planning, Technical, and Economic Feasibility Studies	New Bid	October 2018 (PMM Announcement)	RFP-18-XXX
12	MEC Piti &8 and #9 - ECA Extension	CCU and PUC approvals received. Contract Extension (Amendment No. 4) and Sublease Agreement Extension (Amendment No.3) scheduled for November 7, 2018.	[Completed] In progress	
13	Generation Software (GADS open software)	Pending data entry from Generation & SPORD.	[On-going work]	
14	IFB for ULSD Supply for Baseloads and Peaking Units	Solicitation in progress. Bid package revised to include delivery requirements.	Start Date: Nov 2017 Est. completion: FY2019	IFB GPA-008-18
15	EV Infrastructure	Fast charge station scope for Mangilao offices. Developing fast charge station scope for Mangilao offices.	6/1/2019	

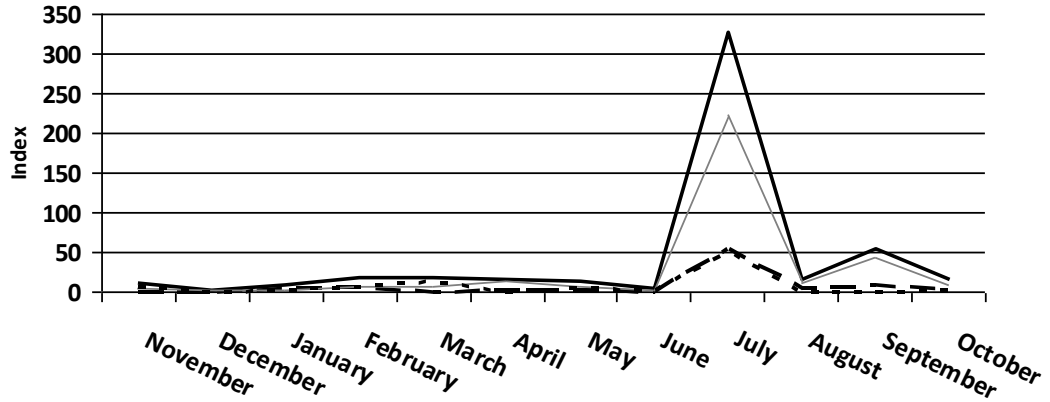
Project Activities

No.	Project Description	October 2018 Activities	Status / Est. Completion	RFP/Bid No
16	Renewable Energy Resource Phase III	Completed pre-bid conference and site visits January 23-24 2018. GPA/Navy evaluating lease to address bidder questions. Bid extended pending amendment to include lease modifications.	(Update on Schedule TBD) Tech Proposal Due	
17	Utility Energy Services Contract (UESC)	GDOE assessment report being drafted. Continued discussions with Navy and initiated data collection.	Oct 2018	
18	IFB for RFO Supply to Baseload Plants	Completed- 2-year Contract to commence on Dec 1, 2018 and will expire on August 31, 2020 with 3-1 year extention options	Completed	IFB GPA-009-18
19	GPA Fuel Farm RFO Pipeline Repair & Upgrade	c/o Engineering Project Mgt. Design ongoing.	Completed. Project Implementation in progress (Design phase)	IFB GPA-047-18
20	GPA Fuel Farm ULSD Pipeline Upgrade	c/o Engineering Project Mgt. Finalized bid specifications and obtained CCU approval Resolution 2018-21. Petitioned PUC for approval.	Estimated Start: Oct 2019 Est. Completion: Sep 2019	For CCU/PUC approval for IFB Solicitation
21	Tk 1934 & Tk1935 API 653 Internal Inspection	c/o Engineering Project Mgt. Finalized bid specifications and obtained CCU approval Resolution 2018-20. Petitioned PUC for approval.	Estimated Start: Jun 2018 Est. Completion: FY2019	For CCU/PUC approval for IFB Solicitation
22	Milsoft Systems Software Services	Best and Final Offer - October 2018	Continuous	GPA-RFP-18-003
23	MV90 Integration Services	Best and Final Offer - October 2018	May-19	GPA-RFP-18-001
24	Grant Proposal Development and Proposal Application Management Services	GPA submitted a grant request for the Department of Interior funding opportunity which includes partnered projects with GDOE(Best Schools Program), Public-Access Parking Lot Solar Canopy, Demand-Side Management Expansion, Electric Vehicle (EV) Infrastructure, Employees-Access Parking Lot Solar Canopy, Wind Turbine Battery Storage, and Geothermal Studies and Exploration. **GPA received notice of award for $954,685 for Southern High School LED Lighting Retrofit and $295,315 for George Washington High School LED Lighting Retrofit.** Pending official transfer of award and instructions from DOI.	Feb 2018 (Contract signed)	Re-Solicitation GPA-RFP-16-011

Project Activities

No.	Project Description	October 2018 Activities	Status / Est. Completion	RFP/Bid No
25	Redesignation of Cabras-Piti / Guam	Re-designation received 12/2018. TRC standing assisting with SIP Modeling, SIP draft. AAQM Installation/Implementation on hold, will depend on USEPA approval of SIP after submission on/before July 2019	Start: October 2011 Est. Completion: July 2019 *Submitted to EPA by completion date	RFP-11-001
26	Environmental Strategic Planning	Draft being finalized.	Start: April 2018 Est. Completion:December 2018	RFP-11-001
27	GPA Fuel Farm- OWS Upgrading	c/o Engineering Project Mgt. Scope included in Tk 1934 & Tk1935 API 653 Internal Inspection and repair.	Estimated Start: Jun 2018 Est. Completion: FY2019	For IFB Solicitation
28	GPA Fuel Farm- LD System Upgrading	c/o Engineering Project Mgt Scope included in Tk 1934 & Tk1935 API 653 Internal Inspection and repair.	Estimated Start: Jun 2018 Est. Completion: FY2019	For IFB Solicitation
29	Planning Software Consulting Services	Request for Proposal for Consulting Services for GPA's Planning Software	RFP cancelled, will re-issue for solicitation with revised scope.	RFP-18-010
30	IFB for Supply of Reprocessed Waste Oil Meeting GPA's ULSD Specifications	Bid for the Supply of Reprocessed Waste Oil Meeting GPA's ULSD Specifications. Supplier will haul Waste Oil from GPA WOF, reprocess waste oil to meet GPA's ULSD Specifications, and supply to designated GPA Power Plants	Announced Sept. 19, 2018	For IFB Solicitation
31	Energy Storage Development Support	Consultant preparing proposal for third-party commissioning services	December 31, 2018	GPA-RFP-13-007
32	Wind Turbine Post-Construction Biologist Services (Grant Funds)	Consultant concluded two-year monitoring and submitted final report. Final report was reviewed by U.S. Fish and Wildlife Service.	September 30, 2018	GPA-RFP-14-003
33	Wind Turbine Maintenance Supervision and Materials	Consultant to supervise turbine repairs & replacement parts.		Sole Source
34	Waste Oil Hauling Contract Solicitation	Under Procurement Review, awaiting announcement.	Estimated Start: Nov 2018 Est. Completion: Award by Jan 2019	TBD
35	Planning Software Contract	*Under discussion*. GPA evaluating software license and renewals.	*Under discussion*	*Under discussion*

(Item 1.1,1.2,1.5) October 2018 SAIDI = 509.52 ↑ (509.08)



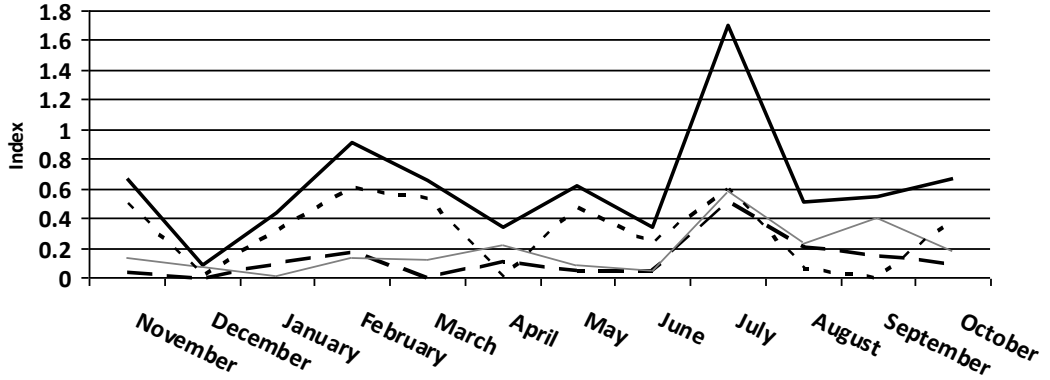
ALL

GEN=89.53 ↓ (90.89)

TRANS=90.03 ↑ (85.99)

DIST=329.96 ↓ (332.20)

(Item 1.1,1.2,1.5) October 2018 SAIFI = 7.45 ↓ (7.63)



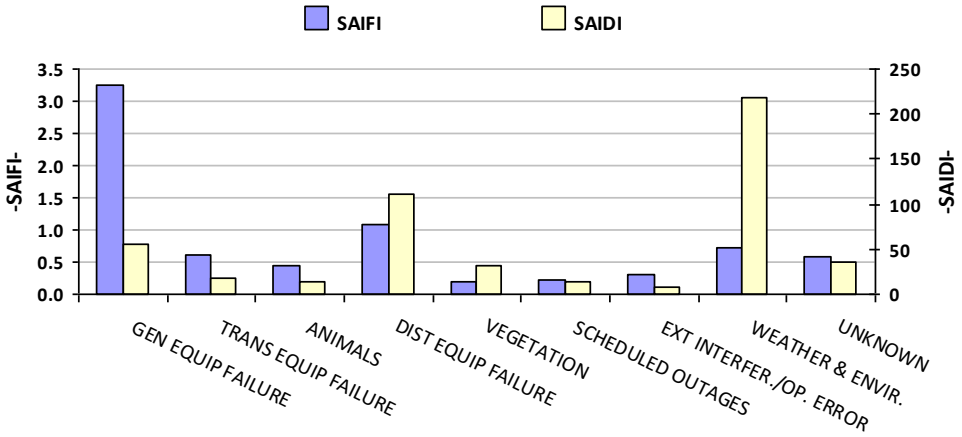
ALL

GEN=3.73 ↑ (3.71)

TRANS=1.49 ↑ (1.43)

DIST=2.23 ↓ (2.49)

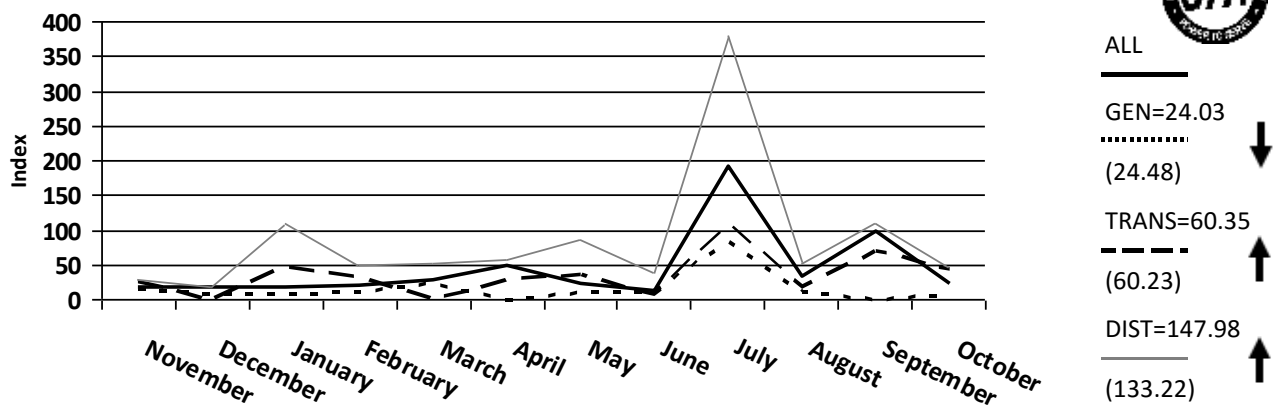
(Item 1.9) 12 Month Cause Contributions to Reliability



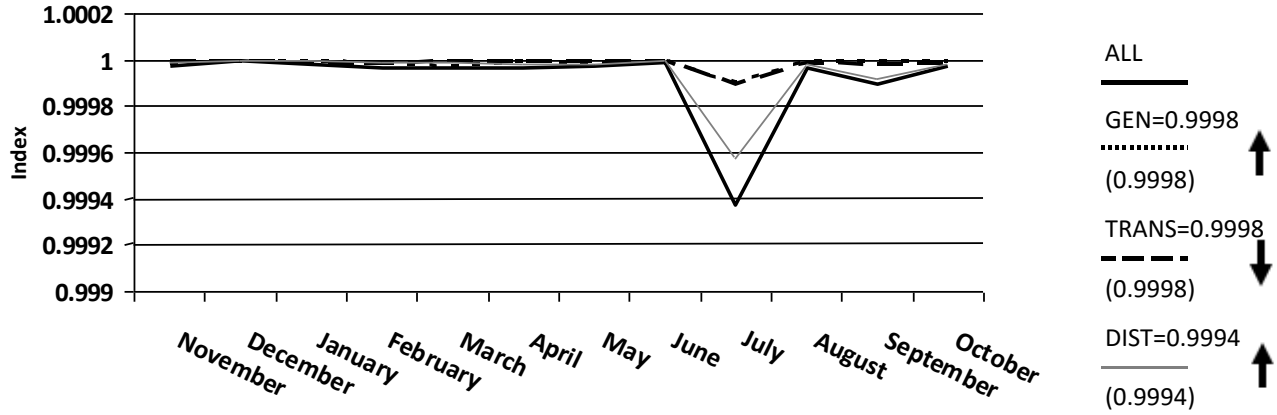
GEN EQUIP FAILURE
F:42.9% D:11.1%
TRANS EQUIP FAILURE
F:8.1% D:3.5%
ANIMALS
F:7.4% D:2.6%
DIST EQUIP FAILURE
F:12.3% D:21.9%
VEGETATION
F:2.3% D:6.3%
SCHEDULED OUTAGES
F:5.5% D:2.7%
EXT INTERFER./OP. ERROR
F:3.4% D:1.8%
WEATHER & ENVIR.
F:8.9% D:43.1%
UNKNOWN
F:9.3% D:7.0%

As of October 31, 2018

(Item 1.1,1.2,1.5) October 2018 CAIDI = 68.42 ↑ (66.69)



(Item 1.1,1.2,1.5) October 2018 ASAI = 0.9990 ↓ (0.9990)



(Item 1.4) Top 5 Worst Feeders Distribution Causes

#	Feeder	Outage Count
1	P046	11
2	P340	10
3	P244	9
4	P341	8
5	P332	7

(Item 1.4) Top 5 Distribution Outage Causes

#	Outage Cause	Count
1	Wind	90
2	Overhead Equipment	45
3	Substation Equipment	14
4	Underground Equipment	9
5	Vegetation	7

(Item 1.3) Outage Count

TOTAL	UFLS	Non-UFLS
616	247	369

(Item 1.3) UFLS Contribution to Reliability

SAIDI	SAIFI	CAIDI
64.45	3.62	17.82

As of October 31, 2018

CCU Report– DSM

As of October, 2018

All Expenses – Fiscal Year

Description	FY16	FY17	FY18	FY19 thru 10/31/18*	Total to Date
Regular/OT Pay	$ 11,348.80	$ 22,256.00	$ 26,121.83	$ 4,983.57	$ 64,710.20
Other Contractual	$ 28,278.50	$ 85,550.05	$ 116,977.50	$ -	$ 230,806.05
Paid Rebates-Split AC	$ 154,700.00	$ 557,275.00	$ 1,247,000.00	$ 66,575.00	$ 2,025,550.00
Paid Rebates- Central AC	$ 3,400.00	$ 8,200.00	$ 4,400.00	$ -	$ 16,000.00
Paid Rebates- Washer/Dryer	$ 2,800.00	$ 7,425.00	$ 48,800.00	$ 4,800.00	$ 63,825.00
Total Expenses	**$200,527.30**	**$680,706.05**	**$1,443,299.33**	**$ 76,358.57**	**$2,400,891.25**
Bank Interest (+)	$ 1,676.42	$ 1,722.74	$ 1,222.29	$ 107.19	$ 4,728.64
Bank Fees	$ 155.00	$ 1,032.06	$ 1,085.08	$ 15.00	$ 2,287.14
			Ending Balance		$ 546,753.25

** Expenses for October 2018 are preliminary pending closing of October books and above includes an update for September 2018 actuals.*

FY 2017– Rebate Amount Paid Monthly

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

FY 2018– Rebate Amount Paid Monthly

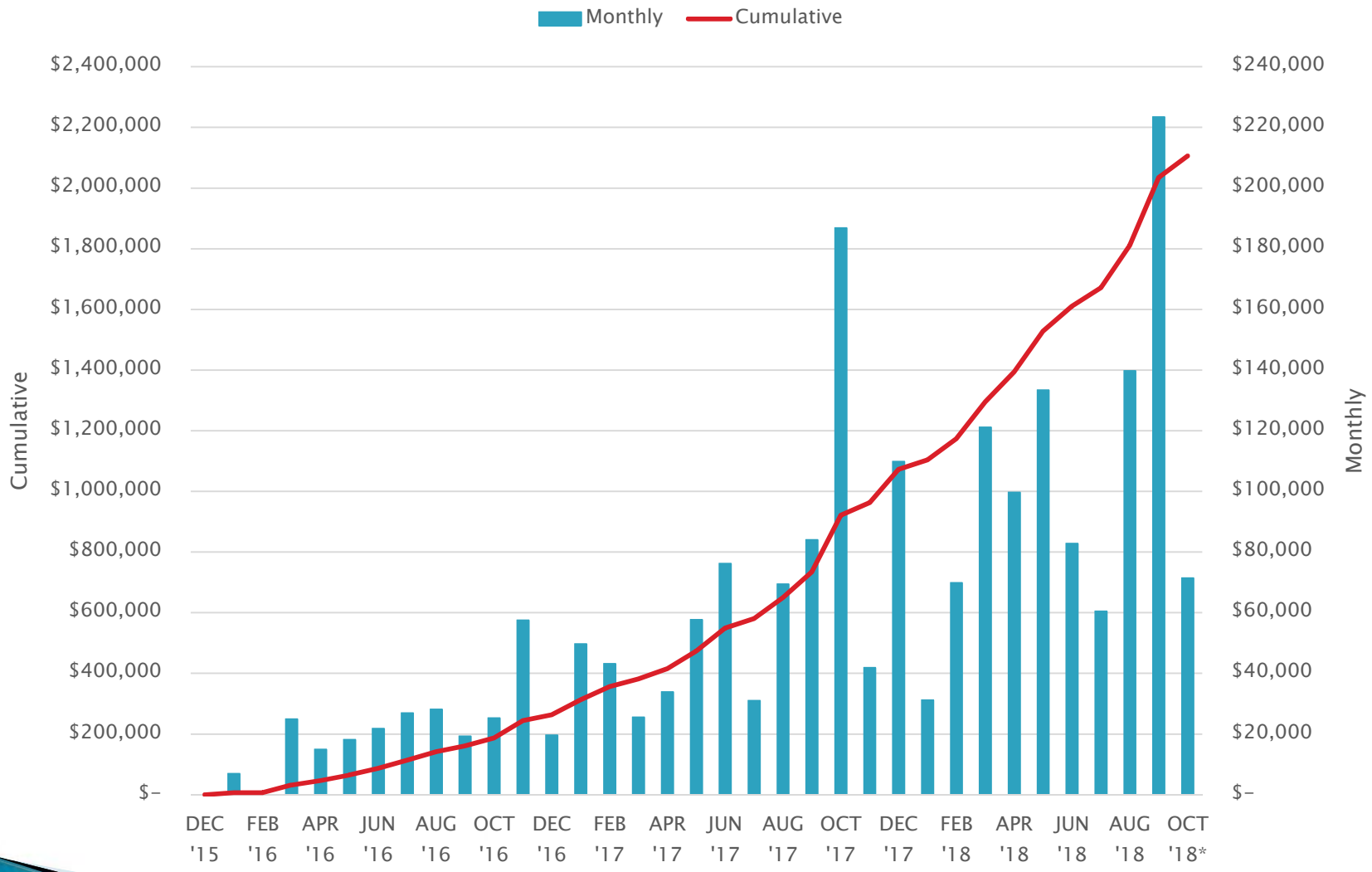
Month	Total	Split A/C Units	Central A/C Units	Washers/ Dryers
OCT '17	$ 186,850.00	$ 185,850.00	$ 800.00	$ 200.00
NOV '17	$ 41,900.00	$ 41,700.00		$ 200.00
DEC '17	$ 109,875.00	$ 108,475.00		$ 1,400.00
JAN '18	$ 31,175.00	$ 31,175.00		
FEB '18	$ 69,825.00	$ 68,825.00		$ 1,000.00
MAR '18	$ 121,100.00	$ 120,100.00		$ 1,000.00
APR '18	$ 99,700.00	$ 94,400.00	$ 500.00	$ 4,800.00
MAY '18	$ 133,350.00	$ 127,150.00		$ 6,200.00
JUN '18	$ 82,800.00	$ 77,600.00		$ 5,200.00
JUL '18	$ 60,475.00	$ 56,475.00	$ 1,000.00	$ 3,000.00
AUG '18	$ 139,750.00	$ 129,650.00	$ 1,300.00	$ 8,800.00
SEP '18	$ 223,400.00	$ 205,600.00	$ 800.00	$17,000.00
TOTALS	$1,300,200.00	$1,247,000.00	$ 4,400.00	$48,800.00

FY 2019– Rebate Amount Paid Monthly

Month	Total	Split A/C Units	Central A/C Units	Washers/ Dryers
OCT '18*	$ 71,375.00	$ 66,575.00	$ –	$ 4,800.00
NOV '18				
DEC '18				
JAN '19				
FEB '19				
MAR '19				
APR '19				
MAY '19				
JUN '19				
JUL '19				
AUG '19				
SEP '19				
TOTALS	$ 71,375.00	$ 66,575.00	$ –	$ 4,800.00

** Expenses for October 2018 are preliminary pending closing of October books*

FY'17– FY'19 Rebate Amount Paid



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

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

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

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

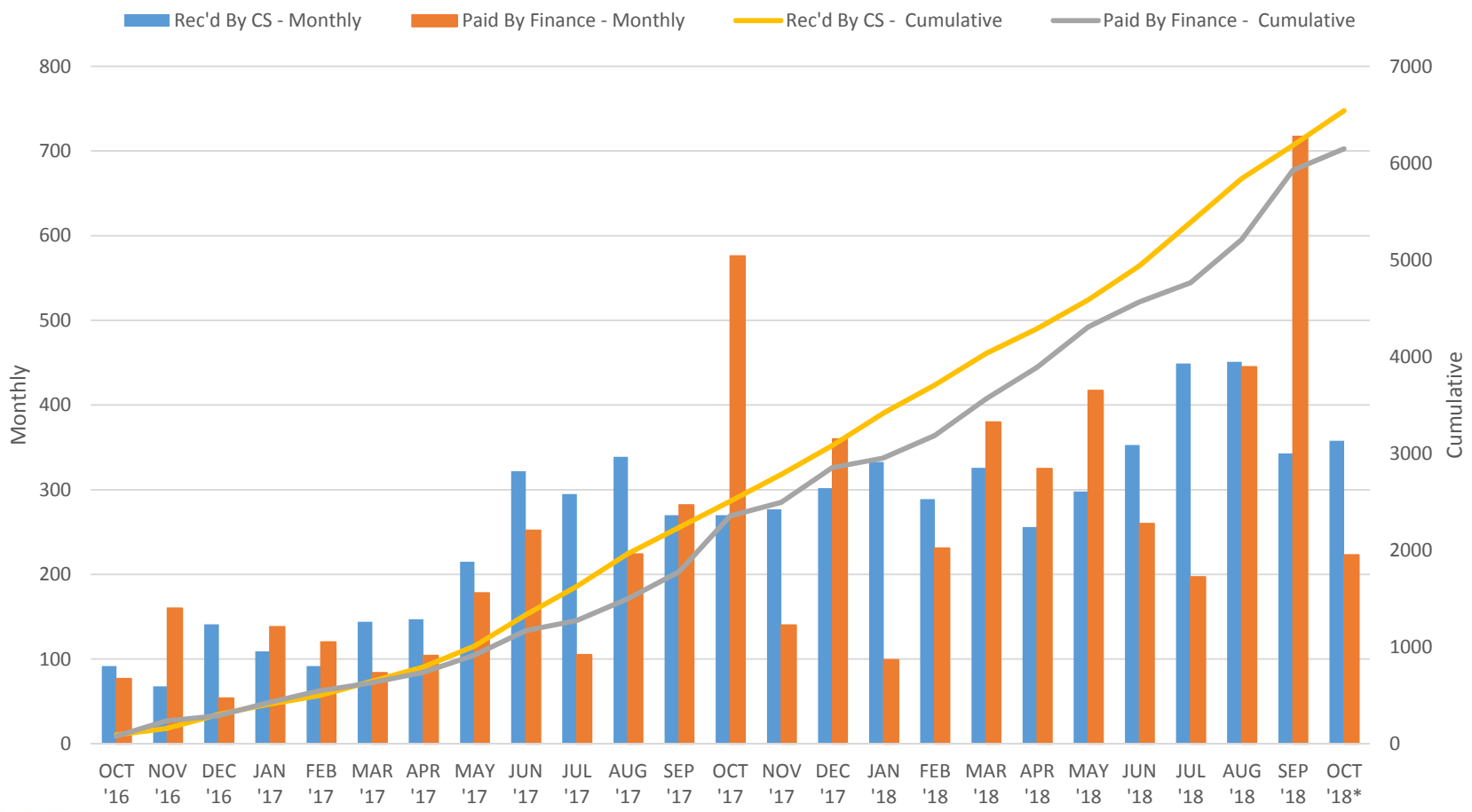
**Rebates for September 2018 are updated*

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

Month	Rec'd By CS	Paid By Finance
OCT '18*	358	223
NOV '18		
DEC '18		
JAN '19		
FEB '19		
MAR '19		
APR '19		
MAY '19		
JUN '19		
JUL '19		
AUG '19		
SEP '19		

**Rebates for October 2018 are preliminary pending closing of October books.*

FY'17– FY'19 Number of Applications Received By Customer Service and Paid



GPA-UOG Demand Side Management Model Home

John J. Cruz Jr., P.E. – AGMETS

Jennifer G. Sablan, P.E. – SPORD Manager

Leading the Next Generation

Background

- UOG SEA Grant office - Dean's Circle House 25 – renovations began in March, 2018.
- Guam Power Authority, through it's Demand Side Management Program, supplied energy efficient equipment in an effort to demonstrate the effectiveness of energy conservation measures.
- UOG SEA Grant office Grand Opening on July 18, 2018.
- UOG Endowment Foundation – Dean's Circle House 10 – was selected as the baseline office given similar occupancy, sized appliances, and operating hours.

Installed Equipment Listing and Specifications

Equipment	Specifications	Qty.	Cost
9,000 BTU Air Conditioner	22.5 SEER	3	$2,550
12,000 BTU Air Conditioner	21.5 SEER	1	$950
40 Gal. Water Heater	AHRI Certified/UL Listed	1	$450
LED Lighting Fixtures	Design Lights Consortium (DLC) Listed	7	$760
Refrigerator	Energy Star Certified	1	$800

Total Equipment Cost ≈ $5,513

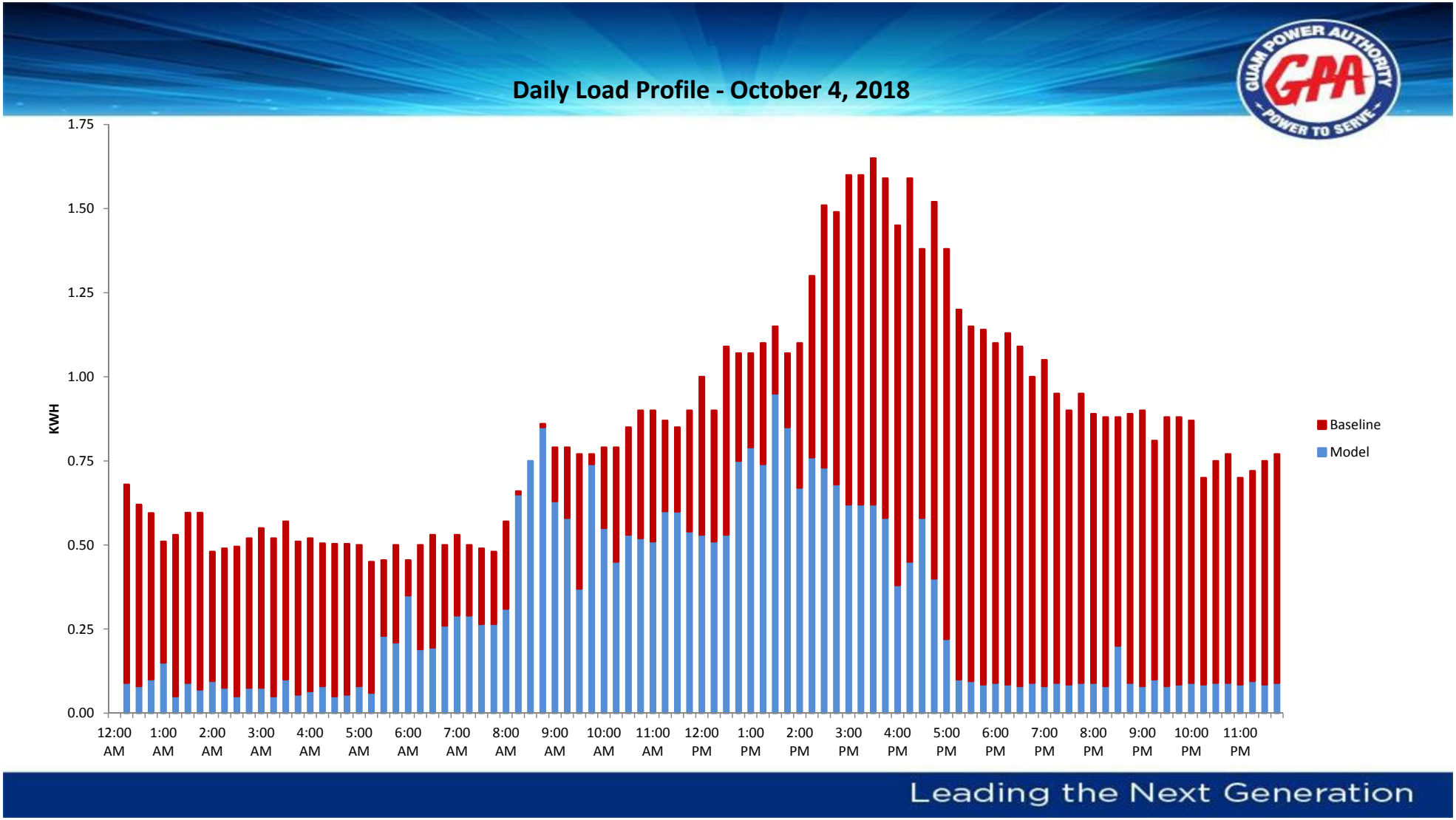
Leading the Next Generation

Equipment Cost Comparison

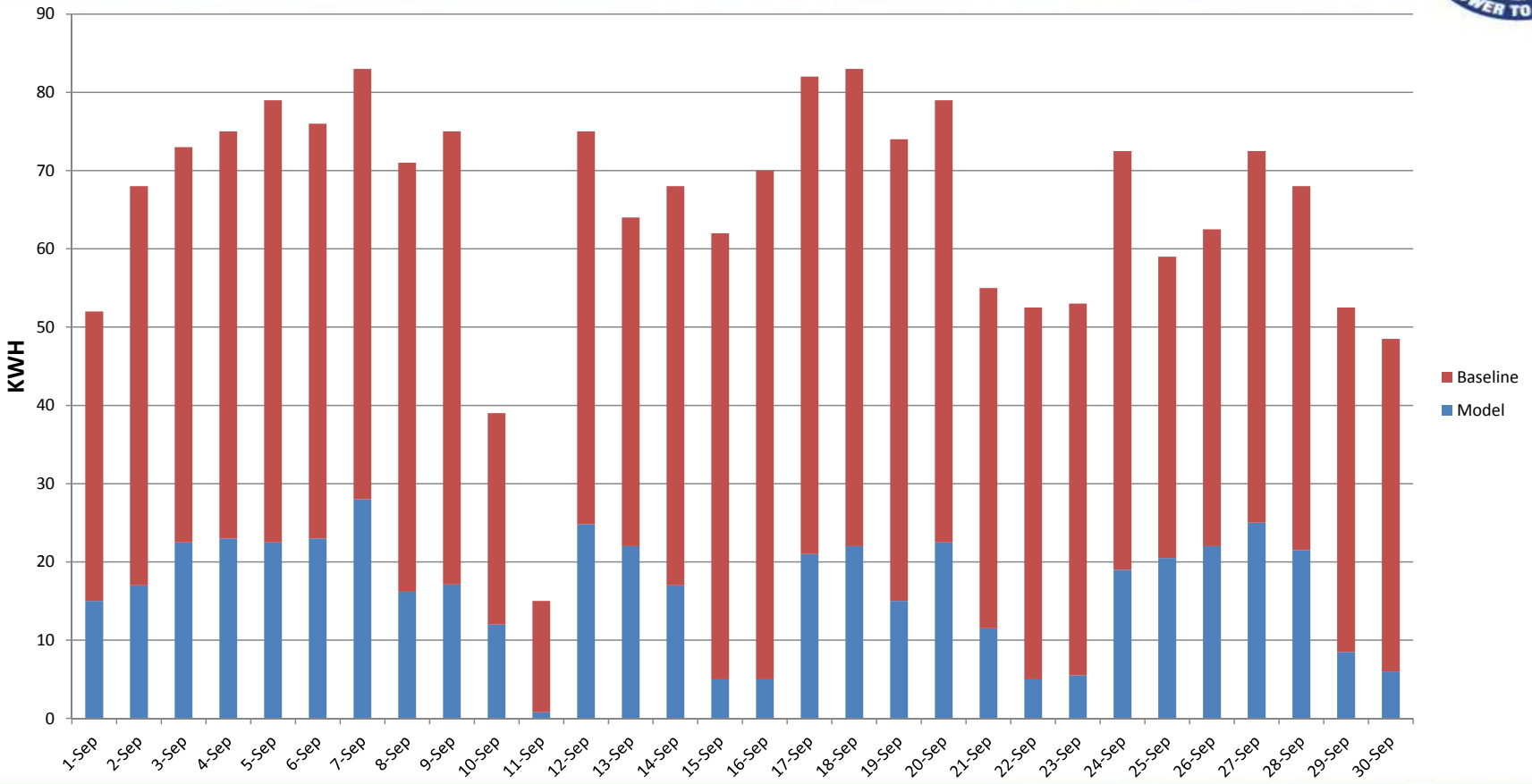
Equipment	High Efficiency Unit Cost (Actual)	Low Efficiency Unit Cost (Market Price)	Price Difference Per Unit
9,000 BTU Air Conditioner	$850	$550	$300
12,000 BTU Air Conditioner	$950	$650	$300
40 Gal. Water Heater	$450	$350	$100
LED Lighting Fixtures	$109	$65	$44
Refrigerator	$800	$670	$130

Initial Investment for Energy Efficiency ≈ $1,738

Leading the Next Generation


Daily Load Profile - October 4, 2018
KWH
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
12:00 AM
1:00 AM
2:00 AM
3:00 AM
4:00 AM
5:00 AM
6:00 AM
7:00 AM
8:00 AM
9:00 AM
10:00 AM
11:00 AM
12:00 PM
1:00 PM
2:00 PM
3:00 PM
4:00 PM
5:00 PM
6:00 PM
7:00 PM
8:00 PM
9:00 PM
10:00 PM
11:00 PM
Baseline
Model
Leading the Next Generation

Monthly Consumption - September, 2018



Leading the Next Generation

University of Guam Load Analysis

	July Consumption (KWH) (Billed Amount)	August Consumption (KWH) (Billed Amount)	September Consumption (KWH) (Billed Amount)	October Consumption (KWH) (Billed Amount)
Baseline	2,272 ($692.23)	2,038 ($625.68)	1,850 (572.20)	2,440 ($740.27)
Model	504 ($188.72)	506 ($189.23)	496 ($186.44)	690 ($241.92)
Difference	1,768 ($503.51)	1,532 ($436.45)	1,354 ($385.76)	1,750 ($498.35)

Average reduced consumption per month = **1,600 KWH**
Average dollar savings per month = **$ 456**
Average dollar savings per year = **$ 5,472**

Leading the Next Generation

- $Payback\ Period = \frac{Cost\ of\ Investment}{Monthly\ Energy\ Savings} =$ 3.8 Months

- $NPV = \sum_{t=0}^{5} \left(\frac{Cash\ Flow_t}{(1+i)_t} \right) - Investment =$ $21,312

- $ROI = \frac{NPV}{Investment\ Cost}$ X 100% = 1226%

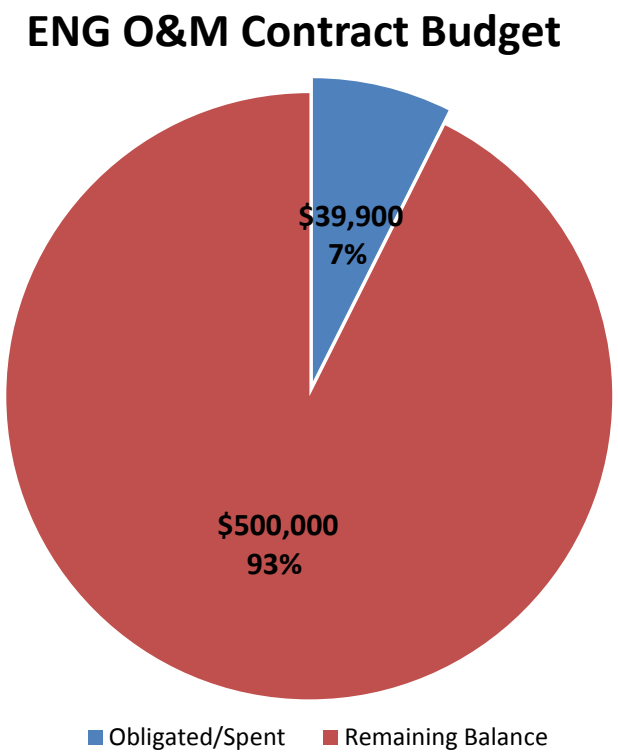
Leading the Next Generation

ENG Budget Execution Performance

October 31, 2018

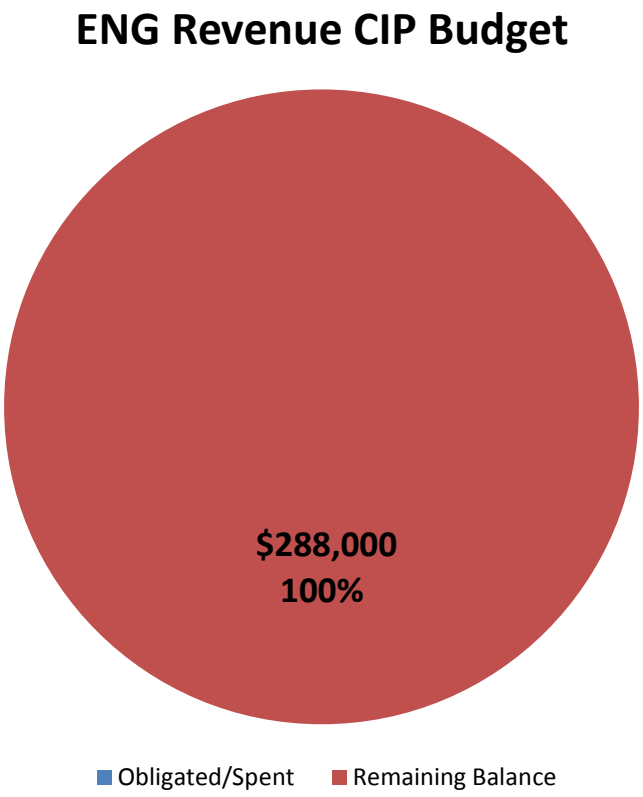
ENG Revenue O&M Budget

- Revenue Funded
- Target
  - 50% O&M Obligation by June 1, 2019
  - 100% O&M Spend by September 30, 2019

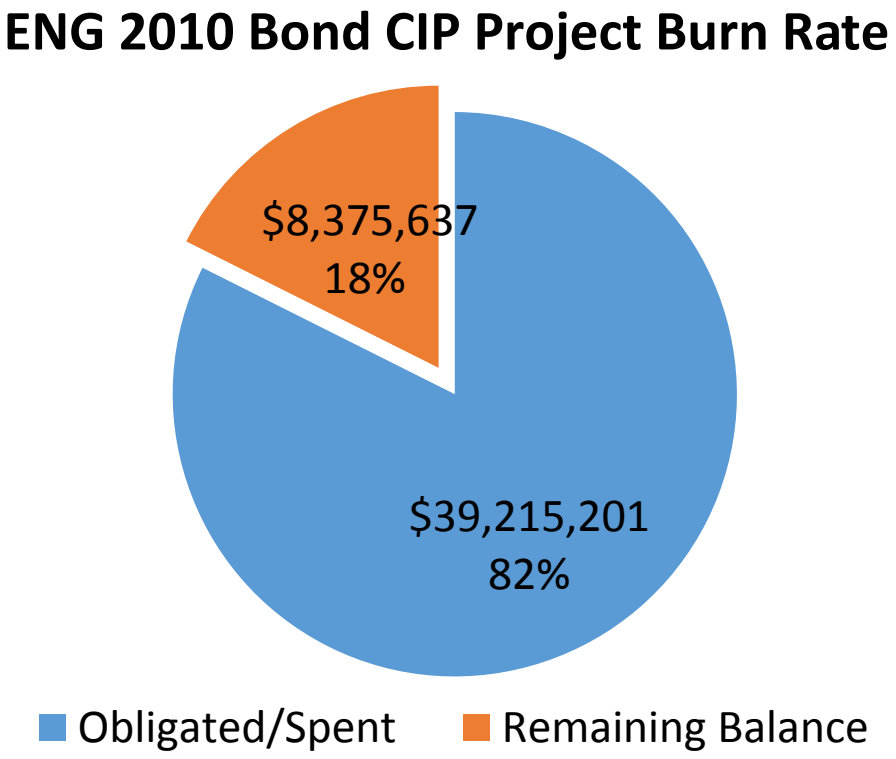


ENG CIP Contract Budget

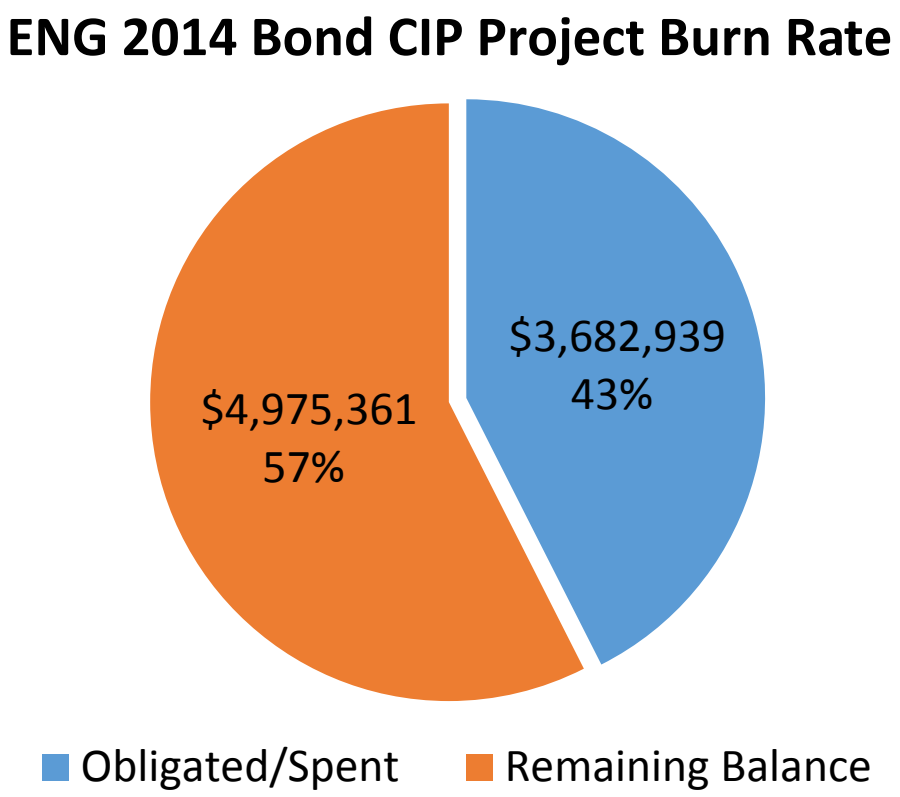
- Revenue Funded
- Target
  - 25% CIP Obligated by April 30, 2019
  - 75% CIP Obligation by August 30, 2019
  - 100% CIP Spend by September 30, 2019



ENG 2010 Bond Series CIP Budget



ENG 2014 Bond Series CIP Budget



GPA INFORMATION TECHNOLOGY
OCTOBER 2018

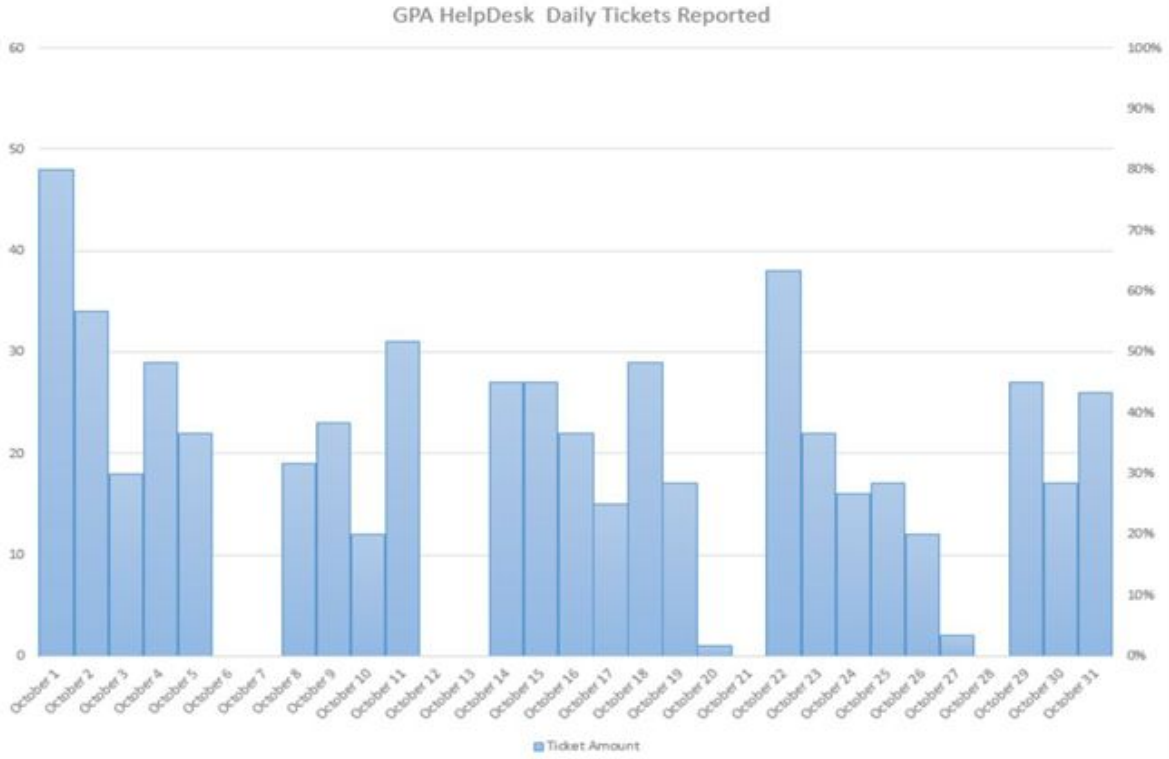
SUMMARY:

The Information Technology Department continues to improve services, monitoring processes and system infrastructure utilization as guided by Cyber-Security initiatives and regulatory compliance. We strive and continue to improve all areas. Computer Services continues to seek new technology with networking, system access and utilization. We also strive to meet target levels of uptime, to include the IBM i-Series AS400, Virtual Machine environment, (VMware V-Sphere), (Blade Servers and Disk Array Storage), and Physical Servers, (non-Virtual Machines).

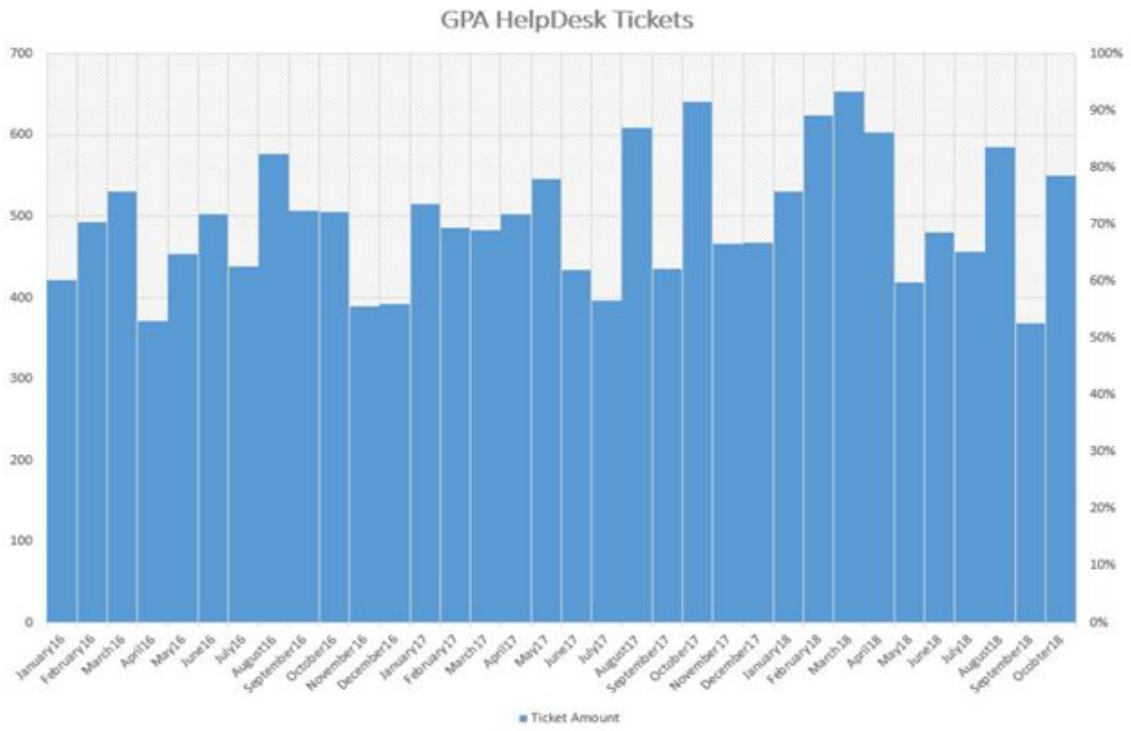
INCIDENT CALL SUMMARY:

The significance to record and utilize the Helpdesk Incident Handling Tool (ChangeGear) is to manage, track and measure workloads and assignments of customer reported IT incidents. The tracking of incidents is paramount. Measurements will be used for IT Customer Feedback survey in the future.

OCTOBER 2018 TICKETS



22 MONTH COMPARATIVE

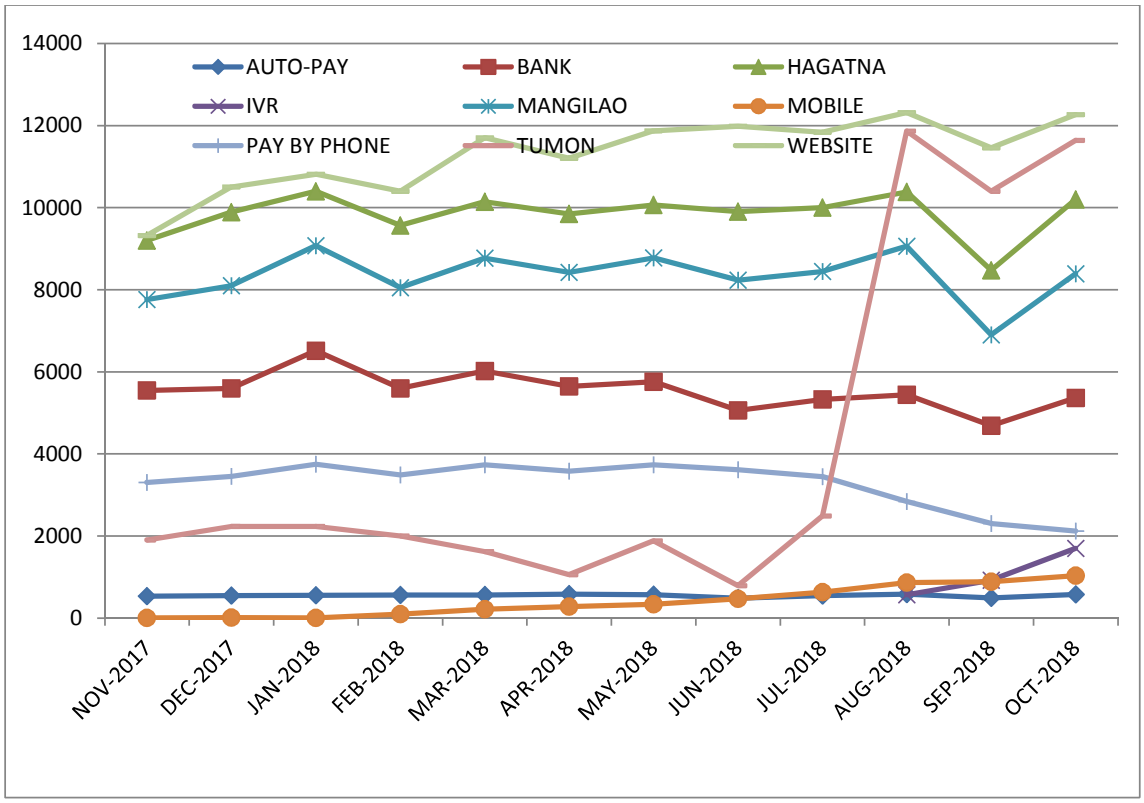


For October 2018, Computer Services responded to 551 help desk calls from GPA internal and external customers. Breakdown as follows:

CLOSED TICKETS			
Low	Medium	High	Critical
253	135	143	3
TICKET TYPES			
End User	Hardware	Software	Network
417	39	55	23
OPEN TICKETS			
Low	Medium	High	Critical
9	15	22	0
TICKET TYPES			
End User	Hardware	Software	Network
23	7	9	7

CC&B PAYMENT SUMMARY TRANSACTIONS:

Payment Transactions by On Site/Website/Auto-Pay/BANK/Mobile



Payment Transactions by Count:

Row Labels	AUTO-PAY	BANK	HAGATNA	IVR	MANGILAO	MOBILE	PAY BY PHONE	TUMON	WEBSITE
NOV-2017	535	5547	9200		7757	4	3305	1900	9320
DEC-2017	547	5593	9887		8095	8	3450	2233	10505
JAN-2018	554	6512	10397		9074	6	3745	2230	10814
FEB-2018	559	5597	9563		8051	94	3486	2000	10400
MAR-2018	560	6019	10145		8771	217	3735	1618	11704
APR-2018	583	5646	9846		8426	276	3581	1057	11201
MAY-2018	566	5757	10065		8774	336	3732	1879	11869
JUN-2018	486	5057	9902		8232	468	3614	784	11982
JUL-2018	550	5326	10002		8441	628	3443	2488	11832
AUG-2018	583	5442	10384	567	9057	862	2836	11864	12313
SEP-2018	489	4686	8470	920	6903	882	2301	10399	11455
OCT-2018	574	5359	10200	1695	8390	1036	2116	11637	12267
Grand Total	**6586**	**66541**	**118061**	**3182**	**99971**	**4817**	**39344**	**50089**	**135662**

MAJOR APPLICATION ISSUES FOR SEPTEMBER 2018

1. ORACLE CUSTOMER CARE & BILLING
   No system issue reported.

2. LANDIS & GYR AMI METERS (SMART METERS)
   No system issue reported.

3. ORACLE JDE
   No system issue reported.

4. METER DATA MANAGEMENT SYSTEM (MDMS)
   No system issue reported.

5. SHORETEL VOIP PHONE SYSTEM
   No system issue reported.

6. EMAIL EXCHANGE SERVER
   No system issue reported.

7. ONLINE PAYMENT SYSTEM (PAYGPA.COM)
   No system issue reported.

8. GEOGRAPHIC INFORMATION SYSTEM (GIS)
   No system issue reported.

9. MILSOFT OUTAGE MANAGEMENT SYSTEM (OMS)
   No system issue reported.

10. ADVANCED GRID ANALYTICS (AGA)
    No system issue reported.

11. Mobile APP Payment Program
    No system issue reported.

ONGOING PROJECT UPDATES:

Customer Care & Billing (CC&B) Upgrade: Upgrade of the current Oracle CC&B program from version 2.4 to version 2.6. The current version of CC&B 2.4 will be end of life by Sept. 30, 2017 and support thereafter will be limited. Completed the Database and Application update as of July 2018. Final part of database merge is currently ongoing. Expected completion by Dec. 3, 2018.

Disaster Recovery Site: Project to procure a Disaster Recovery (DR) site to provide redundancy for critical GPA applications and databases in case of disruption of the primary Fadian Data Center. Incorporating GWA requirements into proposal. IFB is being processed with procurement.

Physical Security: Project to provide additional surveillance monitoring for Fadian, T&D, Dededo CT and Transportation Warehouse. Kickoff meeting was on Oct. 9 and camera and PA system installation is scheduled to start in October and currently ongoing.

GPWA Website Upgrades: Project to revamp GPA and GWA websites for the following, GUAMPOWERAUTHORITY.COM, PAYGPA.COM, GUAMWETERWORKS.ORG and PAYGWA.COM. RFP Responses has been reviewed and awaiting clarification of proposals. PO is currently being issued with the chosen vendor. Approximate start date is Jan. 2019.

Oracle CHAT-BOT: Project to provide Oracle Chat Bot services to GPA's PAYGPA.COM, Mobile APP and Facebook Program. This will allow customers to utilize a CHAT program to make inquiries to frequently asked questions and inquiries on their account. Project has started and expected completion by Oct. 31. Project has just completed testing and looking to transfer into production by Nov. 2018.

Landis & Gyr Command Center upgrade from ver. 6.5 to 7.2: Project to upgrade GPA AMI Smart Meter Program to the latest version of 7.2. This will allow new functionality for the Command Center and Smart Meter Integration. Revised completion by October 2018. Delayed due to the onging CC&B Database Merge project to Jan. 2019.

JDE OneWorld to E1 Upgrade: License review is currently being done for both GPA and GWA to determine software and hardware requirements. Vendor is expected to start Process Review and Scoping for the project from Dec. 10 to Dec. 21.

Submitted by:
Melvyn Kwek
Chief Information Technology Officer

GPWA SCADA Project Status

November 2018

GPWA SCADA Site Acceptance Test (SAT)

- SCADA Workstation Functionality SAT
  - Pending Antivirus – GPA IT to sign on completion
  - PSCC ready to sign off SAT
- SCADA Servers Functionality SAT
  - Pending Antivirus for completion – GPA IT to sign on completion
  - SCADA Server Functionality
    - PSCC ready to sign off SAT
    - IT (Pending)
    - GWA (Pending)
- SCADA Software Functionality SAT
  - PSCC ready to sign off SAT

SCADA Software Functionality has been tested successfully.

GPWA SCADA Site Acceptance Test (SAT)

- Network Equipment SAT
  - Pending Firewall configuration (Pending Cisco Server) – GPA IT to sign on completion
  - PSCC ready to sign off SAT
  - IT (Pending)
  - GWA (Pending)
- Communications SAT
  - I/O LAN communications completed - James S. (PSCC) will sign for SAT
  - TCP/IP communications – tested on Laptop simulation Only
  - Need to test GPA-own fiber connection to an actual RTU at a remote site to complete SAT (Tumon Ready)
- Third party software installation
  - Adobe Acrobat professional activation OK – Need to confirm with IT
  - MS Office Activation – NOT OK – GPA IT will trouble shoot
- Cyber Security - Failed

GPWA SCADA Site Acceptance Test (SAT)

- Siemens and CISCO Taiwan to return - November 26, 2018
  - Web Certificate (SSL) not installed
  - Displays not labeled properly
  - Provide procedure for network backup of servers and workstations
  - Provide backup procedures and policy documentation including backup rota on, processing, restore tes ng and o site storage.
  - PSCC will provide punch-list
  - Siemens shall provide daily detailed descriptions of work done while on Guam (Siemens is claiming there is not a lot of work to do)
    - GPWA believes there is still a lot amount of really critical work left on securing the SCADA System.
    - This work was identified at FAT and not resolved at SAT

GWA SCADA Scope

- GPWA SCADA Contract (Bensons/Siemens)
- Ugum WTP SCADA Upgrade and Integration
- GWA SCADA Phase A-1 Project
- GWA High Limit Alarm Project
- Fadian – GWA System Control Area Construction
- Communication Network Expansion

GWA Summary

- GWA is on a slower track to allow Benson/Siemens to focus on completing GPA portion
  - GPA already has remote sites operational
  - GPA must move from existing PSCC offices at Cabras
  - Test of SCADA functionality for GPA comprises a subset of GWA functionality
  - SCADA Upgrades and integration of Ugum WTP and 19 other GWA sites to the GPWA SCADA System will not be completed until February 2019 and August 2019 respectively. So with no information available from Ugum WTP and 19 other sites, it is not critical to complete the GWA portion of the GPWA SCADA System by the scheduled completion date of October 2018.
  - Existing high level alarm system installed at 19 Sewer Pump Stations operates with a centralized HMI computer that monitors the levels and alarms. The centralized HMI computer will be decommissioned when the 19 sites are added to the GPWA SCADA System but it is not urgent. The existing HLA System automatically sends alarm messages to alert Wastewater Personnel when a high level event is detected.

GWA Current GPWA SCADA Activities

- GWA SCADA Displays
  - GWA submitted comments with recommended changes
  - Awaiting feedback from Benson/Siemens
- Training
  - GPA and GWA Training October 2018
  - GWA additional Training in February 2019
- Testing of End-to-end GWA IOs Transmission and Processing from a GWA RTU (Schneider SCADAPack) to Siemens SP5 Using GWA SCADA Displays
  - GWA to provide:
    - SCADAPack RTU
    - Router/firewall same model used by GWA
    - GWA SCADA Workstation Sited at PSCC
    - GWA SCADA Operations personnel to perform and witness point-to-point
  - GPA to provide:
    - Test Procedure
    - Wireless Communications Transport
    - Communications and Network Handshaking
    - Test Support
  - Test Schedule

Ugum WTP SCADA Upgrade and Integration

- Start Date: October 1, 2018
- Scheduled Completion Date: February 18, 2019
- Scope
  - Phase I
    - Siemens Singapore shall upgrade Ugum WTP's SCADA, PLC and controls in coordination with L&K. L&K is the fiber optic subcontractor.
  - Phase II
    - Siemens Taiwan, in coordination with Siemens Singapore and other subcontractors, shall integrate Ugum WTP’s SCADA to the GPWA SCADA System.

Ugum WTP SCADA Upgrade and Integration

- Work completed and on-going:
  - On-Site Survey conducted on October 15, 2018, by Siemens and Subcontractor with GWA at Ugum WTP
  - Kickoff meeting was held on October 16, between Benson/Siemens and GWA.
    - Agenda included project organization chart to complete this change order, project schedule, scope of work, technical clarifications, and documentation.
  - Procurement of Siemens Main PLC, SCADA Servers and Client workstations, Software, Siemens Simocode, VFD, Danfoss accessories and Profi Trace
  - Engineering changes and configuration of the new hardware and software of the new Main PLC, WinCC Scada, Remote connect access, VFDs, and to enable the SCADA monitoring and control of the Ugum water booster pump station.
- November 2018 Activities
  - Complete Engineering work
  - System setup and testing
- December 2018 Activities
  - FAT
  - Shipment to Guam
  - Site Installation Work begins starting with cabling work by Subcontractor (L&K)

GWA SCADA Phase A-1 Project

- 19 RTU Sites
- Points Telemetered
  - Status Points
  - Analog Points
- Communicating over ABB/TropOs Wireless Mesh Tier 2 Network
- Estimated Completion Date – August 2019

GWA System Control (SCC) Area Work

- GWA in coordination with GPA Engineering (February 2019)
  - GWA SCC Renovation
    - Layout drawing completed by GWA and reviewed by GPA
    - M80 purchase order to supply and install new furniture systems issued
    - ETA of furniture system - 6 to 10 weeks
    - Furniture installation work - 2 weeks
    - GWA to issue a change order to Benson to extend the SCADA network to GWA SCC.
- SCADA Workstations
  - DMR delivered remaining GWA SCADA desktop workstations with monitors and software licenses on October 19, 2018 pending installation except for workstation speakers
  - Workstation speakers remain outstanding from DMR (ETA 11/30/18)
  - Equipment stored at GWA IT
  - Initial 4 SCADA workstations and 12 monitors still remain at GPA PSCC until GWA SCC renovation is complete

Communications Network Expansion

- Procurement of ABB TropOs routers and needed materials to bridge GWA sites to GPA Island Wide ABB/TropOs wireless mesh network.
  - GPA to procure additional wireless routers; GWA to pay.
  - GPA to install Routers on shipment

Closing

- GPWA estimates that SAT may successfully conclude by January 11, 2018
- GWA SCADA SAT can successfully conclude on February 18, 2018 with the integration of Ugum WTP to the Siemens SP5
  - Validation of End-to-End connectivity and functionality will have been already verified over the Wireless Network using a Simulated RTU.
- GWA will create a Project Schedule for GWA Advanced Applications Integration after successful completion of SAT
- GWA has about 300 potential RTU sites. GWA will add these sites in phases determined by GWA's approved CIP Plan.

Guam GPA & GWA EMS/SCADA System

SIEMENS

GUAM POWER AUTHORITY
Bringing Energy Solutions to You

GUAM WATERWORKS AUTHORITY

Monthly Project Report

October 2018

Grow together and WIN

Unrestricted

Project Progression Summary

Point-to-Point Testing (P2P) – Modification and Customization

- Continuation of P2P testing to include point modification and customization of screen renderings

MET Tower

- Algorithm adjustment for fuel switching in SP5

Tyhpoon Yutu – Oct. 24-26, 2018

- Two (2) day delay due to typhoon

SP5 Administrator training

- Operator training for all Dispatchers conducted between October 23-28, 2018

Arrival of first Dispatch Crew

- October 22, 2018 first dispatch crew is on-shift at Fadian

Site Acceptance Testing

- SAT conducted October 23 – 27, 2018

Change Order No. 7

- Extension requested to November 30, 2018 to address punch list items identified during SAT

GPWA SCADA EMS Project Bid No. GPA 066-16

Contract Administrator: Monito Co

Overall Status				G
Burn Rate	This Month	Last Month	Incremental	
Scope (%)				
Budget (%)	13.2%			
Milestones Achieved	1, 3-12, & 14 of 18			

Resources

1. Benson/Siemens
2. GPWA

Risks & Issues	Schedule	Scope	Financial
G	G	G	G

Updates & Accomplishments -- Month of October 2018

1. 100% completion of point-to-point testing

2. SP5 Administrator Training completed

3. Site Acceptance Testing commencement

Resource	Upcoming Tasks / Open Items	TCD/ECD
GPWA Benson/Siemens	Completion of punch list items identified for rectification during SAT	Nov. 30, 2018
GPWA Benson/Siemens	Issuance of SAT Acceptance Certificates	Nov. 30, 2018

Risks and Issues	DATE IDENTIFIED	Resolution	RESOLUTION DEADLINE

Legend:

G No corrective action required

Y Near-term corrective action required

R Requires immediate attention

3

GPWA SCADA EMS Project
Bid No. GPA 066-16

Contract Administrator: Monito Co

Overall Status

Burn Rate	This Month	Last Month	Incremental
Scope (%)			
Budget (%)	13.2%		
Milestones Achieved	1, 3-12, & 14 of 18		

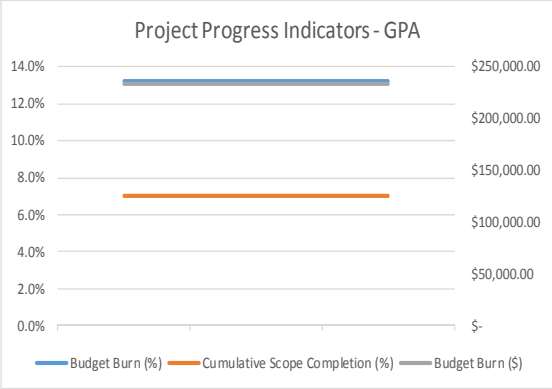
G

Resources

1. Benson/Siemens
2. GPWA

Risks & Issues	Schedule	Scope	Financial
G	G	G	G

Project Progress Indicators



Phase I	$ 1,518,769.00		$ 1,518,769.00	6
Phase I	$ 1,518,769.00	$ 250,537.38	$ 1,769,306.38	6

Project Schedule & Budget Performance Indicators

Factory Activities (In Taiwan / Germany)	9-Jul-18
Approval of revised documentation	4-Dec-17
Preliminary Factory Acceptance Test (Pre-FAT) in Taiwan	2-May-18
- Base Applications	27-Apr-18
- Advanced Applications	2-May-18
Factory Acceptance Test (FAT) in Taiwan	10-Jun-18
- Advanced Applications	7-May-18
- Hardware delivery to Site	31-May-18
Site Activities (In Guam)	1-Oct-18
Site Commissioning (Point to point testing)	29-Aug-18
Site Commissioning (GPA - Point to point testing)	28-Aug-18
Issuance of Site Commissioning Completion Certificate	28-Aug-18
Site Acceptance Test (SAT)	3-Sep-18
- Advanced Applications	2-Sep-18
Investigation of variance / bug (SAT if any - Advanced Applications)	3-Sep-18
Issuance of Site Acceptance Certificate	3-Sep-18
Availability Test (AVT) - 1000hrs （42 Calendar Day, 28 working day）	1-Oct-18
Issuance of AVT Certificate	1-Oct-18
Handover of System to end customer	1-Oct-18
Commencement of warranty (12 months)	1-Oct-19
Issuance of Final Acceptance Certificates (FAC)	1-Oct-19

Legend:

G No corrective action required

Y Near-term corrective action required

R Requires immediate attention

GPWA SCADA EMS Project
Bid No. GPA 066-16

Contract Administrator: Monito Co

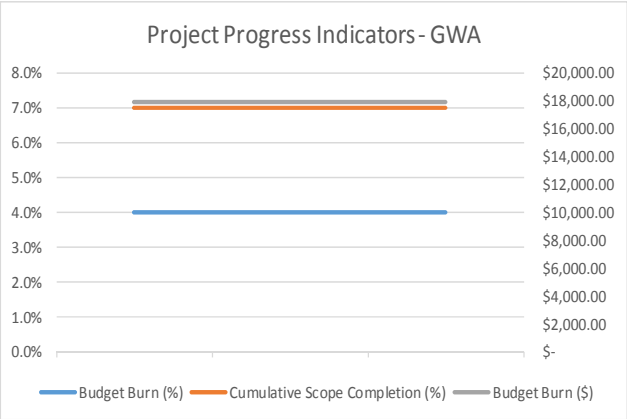
Overall Status				G
Burn Rate	This Month	Last Month	Incremental	
Scope (%)				
Budget (%)	13.2%			
Milestones Achieved	1, 3-12, & 14 of 18			

Resources

1. Benson/Siemens
2. GPWA

Risks & Issues	Schedule	Scope	Financial
G	G	G	G

Project Progress Indicators



Phase I	$ 432,705.00		$ 432,705.00	6
		$ 18,000.00	$ 450,705.00	6

Project Schedule & Budget Performance Indicators

Factory Activities (In Taiwan / Germany)	9-Jul-18	9-Jul-18	0
Approval of revised documentation	4-Dec-17	4-Dec-17	0
Preliminary Factory Acceptance Test (Pre-FAT) in Taiwan	2-May-18	2-May-18	0
- Base Applications	27-Apr-18	27-Apr-18	0
- Advanced Applications	2-May-18	2-May-18	0
Factory Acceptance Test (FAT) in Taiwan	10-Jun-18	10-Jun-18	0
- Advanced Applications	7-May-18	7-May-18	0
- Hardware delivery to Site	31-May-18	31-May-18	0
Site Activities (In Guam)	1-Oct-18	1-Oct-18	0
Site Commissioning (Point to point testing)	29-Aug-18	29-Aug-18	0
Site Commissioning (GPA - Point to point testing)	28-Aug-18	30-Sep-18	-33
Issuance of Site Commissioning Completion Certificate	28-Aug-18	30-Nov-18	-94
Site Acceptance Test (SAT)	3-Sep-18	30-Nov-18	-88
- Advanced Applications	2-Sep-18	2-Sep-18	0
Investigation of variance / bug (SAT if any - Advanced Applications)	3-Sep-18	3-Sep-18	0
Issuance of Site Acceptance Certificate	3-Sep-18	3-Sep-18	0
Availability Test (AVT) - 1000hrs (42 Calendar Day, 28 working day)	1-Oct-18	30-Nov-18	-60
Issuance of AVT Certificate	1-Oct-18	11-Jan-19	-102
Handover of System to end customer	1-Oct-18	30-Nov-18	-60
Commencement of warranty (12 months)	1-Oct-19	30-Nov-18	305
Issuance of Final Acceptance Certificates (FAC)	1-Oct-19	30-Nov-19	-60

Legend:

G — No corrective action required

Y — Near-term corrective action required

R — Requires immediate attention

GPWA SCADA EMS Project
Bid No. GPA 066-16

Contract Administrator: Monito Co

Overall Status			G
Burn Rate	**This Month**	**Last Month**	
Scope (%)			
Budget (%)			
Milestones Achieved	1, 3-12,& 14 of 18		
1. Mobilization			
2. Project Management			
3. Permits, Bonds and Codes			
4. Project Installation Site Survey			
5. Interconnection and Integration Design			
6. Communications and Networking Design and Execution Plan			
7. Installation Design			
8. Software Cost, Procurement and Delivery			
9. Third Party Software Cost, Procurement and Delivery			
10. Software Installation			
11. Equipment Cost, Procurement and Delivery			
12. Construction, Equipment Installation and Interconnection			
13. Commissioning, Quality Assurance and Performance Testing			
14. Training			
15. Demobilization			
16. Warranty			
17. Documentation			
18. Annual Maintenance			

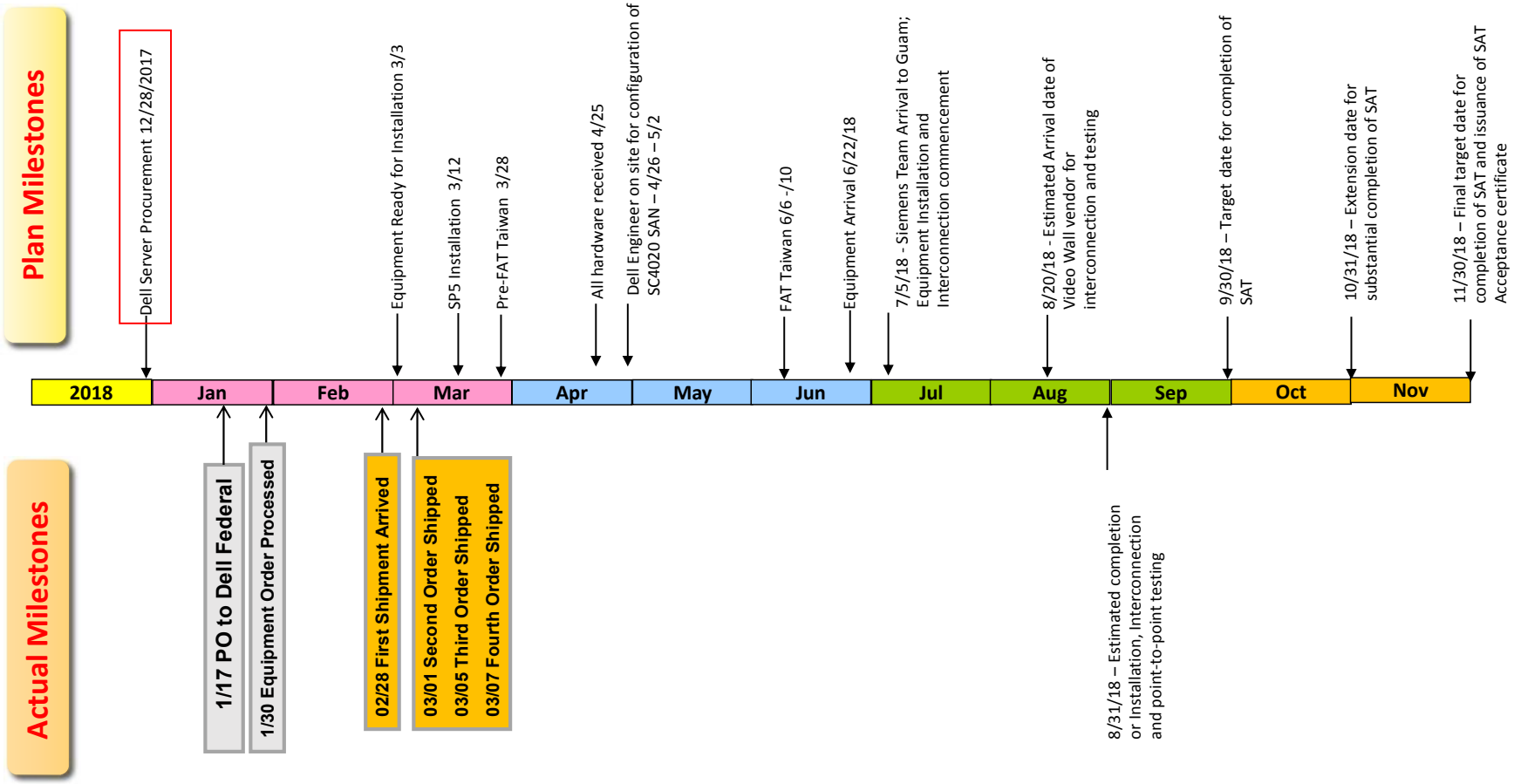
Legend:

G — No corrective action required

Y — Near-term corrective action required

R — Requires immediate attention

Project FAT Milestone



Infrared Inspection Worksheet

	Circuit	Last Infrared Inspection	
		Fiscal Year	Quarter
1	X065-X183	FY2017	4
2	X038-X124	FY2017	4
3	X123-X143	FY2017	4
4	H710/H760 - H502	FY2017	4
5	X023-X043	FY2017	4
6	X087-X073	FY2018	1
7	X247-X140		
8	X082-X160	FY2017	4
9	X020-X311-X336	FY2017	4
10	X039-X250	FY2018	1
11	X161-X070		
12	X006-X015/X016		
13	X024-X110	FY2017	4
14	X054-X246	FY2017	4
15	X056-X185		
16	X394-X126		
17	X173-X245		
18	H322/H326 - H401/H404		
19	H342/H346 - H402/H403		
20	H362/H366 - H750/H760		
21	H403/H404 - H602	FY2017	4
22	H612 - H501	FY2017	4
23	X021-X315-X334		
24	X022-X037-X190	FY2017	4
25	X036-X305		
26	X040-X112	FY2017	4
27	X045-X055		
28	X053-X209	FY2017	4
29	X081-X178		
30	X088-X151/X154	FY2017	4
31	X134-X180		
32	X150/X152-X221		
33	X214-X263		
34	X222-X067	FY2017	4
35	X150/X155-X071		
36	X080-X260		
37	X086-X101		
38	X093-X103		
39	X097-X227		
40	X098-X130		
41	X133-X170		
42	X174-X175		
43	X210-X226		
44	X301-X324		
45	X309-X326		

Top 10 Worst Circuits
Underground Circuits

Infrared Inspection Worksheet

	Sector	Circuit	Last Infrared Inspection	
			Fiscal Year	Quarter
1	North	P332		
2		P403		
3		P089		
4		P244		
5		P111		
6		P271	FY2017	4
7		P330		
8		P322		
9		P270		
10		P046	FY2018	1
11		P087		
12		P321		
13		P088	FY2017	4
14		P331		
15		P323		
16		P245		
17		P272		
18		P240		
19		P242		
20	Central	P212		
21		P213		
22		P202	FY2017	4
23		P201		
24		P210	FY2017	4
25		P007		
26		P250		
27		P205		
28		P206		
29		P203		
30		P253	FY2017	4
31		P283	FY2017	4
32		P280	FY2017	4
33		P311		
34		P007		
35		P211		
36		P202		
37		P251		
38		P252		
39		P201		
40		P282	FY2017	4
41		P310		
42		P204		
43		P312		
44		P281	FY2017	4
45		P400		
46	South	P340	FY2018	1
47		P261		
48		P221	FY2018	1
49		P294		
50		P341	FY2018	1
51		P005		
52		P260		
53		P003		
54		P220		
55		P298		
56		P262		
57		P223		
58		P301		
59		P005		
60		P260		

Top 10 Worst Circuits

NET METERING
October 2018

	Quantity	Connected kVA
Completed	1,778	18,894
Pending	19	241
Grand Total	1,797	19,135

Rate Class and Technology

Technology	Schedule	Count	Total kW
Solar Energy	R - Residential	1,685	15,517.55
	J - Gen Service Dmd	34	1,823.91
	K - Small Gov Dmd	9	317.80
	L - Large Government	2	122.80
	P - Large Power	3	240.70
	G - Gen Serv Non-Dmd	36	788.99
	S - Sm Gov Non-Dmd	7	78.80
Wind Turbine	R - Residential	2	3.60
Grand Total		**1,778**	**18,894.15**

Projected FY 2018 Non-Fuel Revenue Loss

Customer Rate Class	Renewable Energy Capacity (kW)	Annual kWh Generated (@5.092 hours/day)*	Average Non-Fuel Yield $/kWh	Estimated Annual Revenue Loss
R	15,521.15	28,845,410.6	0.09293	$ 2,680,632.85
J	1,823.91	3,389,660.7	0.13112	$ 444,455.71
K	317.80	590,618.1	0.13932	$ 82,286.09
L	122.80	228,218.7	0.13525	$ 30,866.12
P	240.70	447,330.9	0.11539	$ 51,617.07
G	788.99	1,466,305.0	0.15084	$ 221,171.59
S	78.80	146,446.5	0.15334	$ 22,456.26
Grand Total	**18,894.15**	**35,113,990.5**		**$ 3,533,485.67**

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

Estimated Annual Revenue Loss

Description	Estimated kWh	*Total Estimated Cost
FY18	34,981,036	$ 3,521,130.12
FY17	28,242,917	$ 2,828,834.71
FY16	21,867,383	$ 2,200,794.56
FY15	7,383,621	$ 856,921.27
FY14	3,137,212	$ 410,558.94
FY13	1,556,949	$ 178,996.00
FY12	494,672	$ 58,545.89
FY11	170,070	$ 18,177.13
FY10	98,830	$ 8,483.27
FY09	23,912	$ 1,656.87

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

NET METERING
October 2018

Customer Count and Connected kW by Feeder

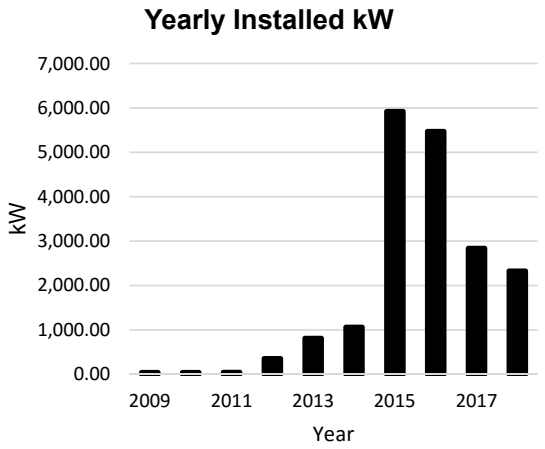
Status	Feeder	Net Metering Connected kW	Customer Count	% of Feeder Maximum kW	% of Feeder Minimum Daytime kW
Completed	P-005	254.37	24	14.7%	29.6%
	P-046	257.06	31	6.1%	9.3%
	P-088	649.29	71	10.8%	17.1%
	P-089	519.64	65	11.6%	28.0%
	P-111	90.00	2	1.7%	2.9%
	P-203	438.47	34	5.9%	16.6%
	P-204	135.63	16	2.9%	6.0%
	P-205	36.40	4	0.8%	1.3%
	P-210	519.37	53	10.2%	13.8%
	P-212	943.75	90	22.8%	59.1%
	P-213	303.83	12	11.6%	15.6%
	P-220	175.14	19	28.8%	90.3%
	P-221	568.34	58	12.9%	25.7%
	P-223	523.94	57	22.0%	31.4%
	P-240	58.55	2	0.9%	7.9%
	P-245	135.00	3	2.7%	5.8%
	P-250	1,006.95	99	15.5%	27.2%
	P-251	145.50	7	5.9%	9.0%
	P-253	501.65	53	11.2%	17.6%
	P-262	1,036.42	105	27.2%	65.3%
	P-270	340.47	29	6.7%	13.5%
	P-271	129.78	12	2.2%	4.7%
	P-272	228.03	17	8.9%	20.2%
	P-280	326.71	26	18.2%	33.8%
	P-281	189.70	4	6.8%	18.9%
	P-282	21.00	2	0.6%	1.7%
	P-283	550.18	51	15.2%	26.1%
	P-294	1,080.69	104	25.0%	49.4%
	P-301	199.26	22	14.1%	25.1%
	P-311	657.57	49	16.5%	28.2%
	P-322	936.51	94	12.3%	24.5%
	P-323	308.35	20	6.5%	20.3%
	P-330	574.90	72	10.6%	21.2%
	P-331	740.55	84	11.7%	19.0%
	P-332	510.69	57	9.1%	13.2%
	P-340	527.50	46	29.1%	64.0%
	P-087	1,197.11	127	30.5%	47.8%
	P-252	599.13	32	14.2%	29.0%
	P-321	275.66	26	4.9%	5.5%
	P-260	70.96	7	10.3%	35.5%
	P-067	86.20	10	1.0%	1.3%
	P-312	82.24	5	4.9%	5.7%
	P-206	18.33	2	1.9%	3.4%
	P-242	23.75	2	0.4%	1.1%
	P-310	181.57	8	6.6%	12.1%
	P-261	406.57	44	14.7%	25.2%
	P-201	45.00	6	1.3%	2.3%
	P-007	81.11	7	11.2%	23.9%
	P-244	36.56	2	2.1%	2.1%
	P-202	34.50	2	1.1%	2.6%
	P-341	4.30	1	0.4%	1.6%
	P-401	117.00	2	10.3%	17.3%
	P-400	13.00	1	1.4%	1.4%
Completed Total		**18,894.15**	**1,778**		
Pending	P-322	100.00	1	1.3%	2.6%
	Pending	129.41	17	0.0%	0.0%
	P-341	11.25	1	1.0%	4.3%
Pending Total		**240.66**	**19**	**2.3%**	**6.9%**
Grand Total		**19,134.81**	**1,797**		

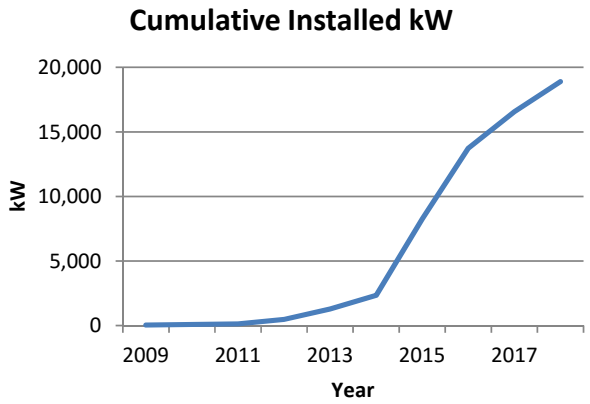
	Feeders highlighted in red indicates renewable energy capacity has exceeded 25% of minimum daytime load.
	Feeders highlighted in yellow indicates renewable energy capacity has reached 15% to 24% of minimum daytime load.

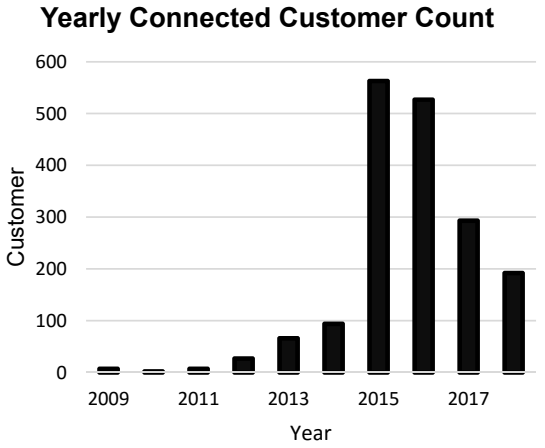
NET METERING
October 2018

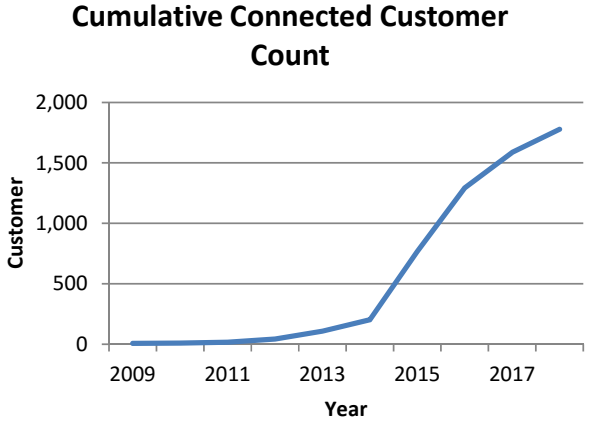
Installed kW by Year		
Year	Total	Cumulative
2009	39.46	39.46
2010	39.20	78.66
2011	43.61	122.27
2012	354.61	476.88
2013	808.15	1,285.03
2014	1,060.04	2,345.07
2015	5,920.39	8,265.46
2016	5,468.49	13,733.94
2017	2,836.10	16,570.04
2018	2,324.11	18,894.15
Grand Total	18,894.15	

Customer Count by Year		
Year	Total	Cumulative
2009	7	7
2010	2	9
2011	7	16
2012	27	43
2013	66	109
2014	94	203
2015	563	766
2016	527	1,293
2017	293	1,586
2018	192	1,778
Grand Total	1,778	









ENGINEERING WORK ORDERS

Engineering Work Order Summary - October 2018	
Work Orders Received from CSR	143
Work Orders Processed & Released to T&D	226
Work Orders Processed & Released to CSR	131
Work Orders Cancelled	24
Work Orders Pending Survey	16
Total Pending WO at Engineering	508

Engineering Large Customer and Net Metering Tracking

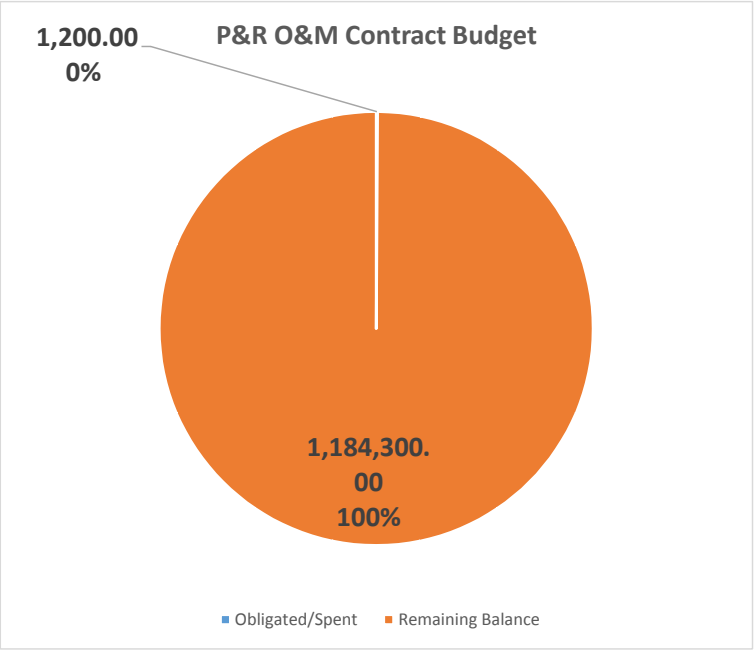
Date Received	Customer Name	Work Worder Numbers	Location	KVA	Meter Qty	Status
5/7/2014	Port Authority of Guam	412337	Piti			Upgrades of existing facilities, includes line relocations and service conversions from overhead to underground 75% completed. Currently on hold pending Port Authorty direction for final removal.
12/20/2013	CoreTech International	Multiple	Dededo	300	64	Lada Estates, 450 kVA, Phase I and II are 100% Completed - 242 units energized. Phase III, 66 Units, 2 completed, 64 Pending, 30% Completed, 300 kVA. Phase III delayed due to Labor issues.
1/27/2015	TG Engineers	422182-85, 90-93, 96-98	Agana Heights	100	11	10 Unit Apartment, 100 kVA, 80% Completed. Work currently on hold.
5/13/2015	CoreTech International Towers	426021	Tamuning	3300	1	New condominiums, 2-1500kVA and 1 300 kVA, Tower 101 100% Completed, Tower 102, 103, and 104 are 45% completed, currently on hold. Temporary power pending for Community Center, 100% Completed. First 52 Service Orders for Tower 101 is 100% completed. 44 Service Orders released to T&D for Tower 102.
Pending	New Nikko Expansion	Pending	Tumon	1500		New Nikko Expansion, pending submittal of work order application. Redesign of primary feed ongoing. New primary underground work was started in May 2018.
3/10/2017	Best Housing Corp Ltd	446924-30	Mangilao	60	6	New 6-Unit Townhome, 82% completed
8/7/2017	Matsumoto, Akiyoshi	452146-49, 51, 4, 6	Tumon	60	7	New 6 Unit Apartment with Common Meter. 70% Completed.
10/2/2017	Sumitomo Mitsui (Baza Gardens Wastewater)	453369	Yona	300	1	Baza Gardens Wastewater Treatment Plant Improvements, 75% Completed, 300 kVA
02/13/18	TNN Guam (Staff Housing)	457427-9, 32	Tumon	500	1	50 Unit Staff Housing, 20% Completed, 500 kVA
02/27/18	Propacific Builders (GCC)	457959, 60	Mangilao	150	0	New GCC Building 100, 100% Completed and released to T&D, existing meter and source, new switchgear only.
3/1/2018	Docomo Pacific Inc., New Data Center	Pending Application	Talofofo	3000	1	New Data Center. Planned to come off P-260 and P-262. 0% Completed. Still in Design Phase.
3/8/2018	Harmon Power Plant					Pending final Clearing permit from DPW. Clearing required along perimeter (10' x 6655 feet) to recover retrace boundary points.
03/12/18	Pernix Guam, LLC (GWA)	458313	Yigo	150	1	New GWA Water Reservoir, 90% Completed, 150 kVA
04/01/18	HG Northeast Inc	459085	Mangilao	100	14	New 14 Unit Subdivision, 5% Completed, 100 kVA, Pending Applications
4/30/2018	Rex International	459698	Sinajana	225	1	New Central Police Precinct, 50% Completed, 225 kVA
2/28/2018	Black Construction (Route 3 Road Improvements)	458020	Dededo			Route 3 Road Improvements. Involves the relocation of upto 54 ea. 45' concrete poles. 80% Completed.
05/12/18	Bestry Corporation	450085		500	8	Hamilton Hotel Renovation and Rehabilitation, 8 Meters, 100% Completed, 500 kVA
06/06/18	Goodwind Development Corporation	461159		225	1	New JolliBee Restaurant, 50% Completed, 225 kVA
06/14/18	Guam Waterworks Authority	461363		300	1	New Umatac-Merizo Wastewater Treatment, 10% Completed, 300 kVA
Varies	Pending Net Metering Customers	Varies	Various Locations Islandwide		19	Pending Net Metering Customers as of October 31, 2018.
			Total	**10770**	**137**	

Planning & Regulatory CCU Report

October 31, 2018

Planning & Regulatory O&M Contract Budget

- Revenue Funded
- Target
  - 0.10% O&M Obligated by October 31, 2018
  - 48.18% O&M Obligation as of Nov. 30, 2018
  - 56.62% O&M Obligation as of Dec. 31, 2018
  - 77.71% O&M Obligation as of March 31, 2019



2

P&R Weekly & Monthly Inspection Reports

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

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

P&R Inspection Report Purpose

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

WEEKLY BMP REPORT SUMMARY
CABRAS POWER PLANT
MONTH OF OCTOBER, 2018

LEGEND OF TRACKING

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

INSPECTOR: MARVIN POLIARCO

LOCATION	WE 10/05/18 FINDINGS	WE 10/12/18 FINDINGS	WE 10/19/18 FINDINGS	WE 10/26/18 FINDINGS	RECOMMENDATION/ REMARKS	DATES			RESPONSE
						initial Findings	Due	Completed	
Neutralization Tank/Pit (Cabras 1&2)	Accumulated rust and dirt on pit from stack washing	Corrected	Corrected			8/4/2018	ASAP	10/12/2018	
Infiltration Pond Cabras 3&4	Deteriorated absorbent booms	Corrected	Corrected		Remove and replace booms	7/20/2018	ASAP	10/12/2018	
Power Plant Bldg/Grounds Facility (Cabras 1, 2, 3, & 4)	Corroded metal debris on plant ground	Corroded metal debris on plant ground	Corrected		Remove corroded metal debris	1/10/2014	Dec. 2018	10/19/2018	
Power Plant Bldg/Grounds Facility (Cabras 1, 2, 3, & 4)				Metal debris and open manhole at PSCC parking lot	Repair hole and remove metal debris	10/26/2018	ASAP		
Cabras 1&2 Basement	Water accumulation in the basement	Water accumulation in the basement	Uncovered used oil drum; Water accumulation in the basement	Water accumulation in the basement	Dispose oil and keep drums covered with label;; Repair source of leak/monitor water accumulation to prevent flooding	10/19/2018 1/10/2014	Dec. 2018		*Major repair by end of 2018*
Pavillion Area (Cabras 3&4 side, generator building)	Various debris and soil pile	Various debris and soil pile	Various debris and soil pile	Various debris and soil pile	Remove debris and spread out the soil	2/8/2013	ASAP		
Cooling water intake	Corroded metal cover & screen metal structure; Dried leaves in cooling water intake collection pit	Corroded metal cover & screen metal structure; Dried leaves in cooling water intake collection pit	Corroded metal cover	Corroded metal cover	Replace/paint metal cover	8/4/2018	ASAP		*Corrective action ongoing 10/12/18*
Refilling Valve Pit (Cabras 1, 2, 3, & 4)	Algae and rainwater accumulation in sec. containment	Algae and rainwater accumulation in sec. containment	Algae and rainwater accumulation in sec. containment	Algae and rainwater accumulation in sec. containment	Drain rainwater and remove algae	8/5/2018	ASAP		
Central Maintenance Area			Scrap metals located in the area	Scrap metals located in the area	Dispose scrap metal	10/19/2018	ASAP		

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T&D SPCC Inspection Report

SUMMARY OF SPCC INSPECTION REPORT
MONTH OF OCTOBER, 2018

LEGEND OF TRACKING

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

SUBSTATIONS

LOCATIONS	Findings		Recommendation/Remarks	Status	Responsible	Completion Date	Due Date	Initial Findings Date
DEDEDO SUBSTATION	*Facility Area*	NO CORRECTIVE ACTION						
DEDEDO SUBSTATION WAREHOUSE	*Transformer Storage Area*	Rainwater accumulation	Drain and conduct cleanup				ASAP	August 2018
	Transformer Storage Area	*Debris of padmounted transformers and used radiators*	Place in proper storage area				ASAP	October 2018
	OWS Separator	Algae accumulation caused by rainwater overflow	Drain and conduct cleanup				ASAP	August 2018
MACHECHE SUBSTATION	*Facility Area*	NO CORRECTIVE ACTION						
TALOFOFO SUBSTATION	*Secondary Containment*	Algae and debris inside sec. containment	Remove algae and debris				ASAP	September 2018
	Secondary Containment	Deteriorated absorbent booms inside valve box	Replace absorbent boom				ASAP	September 2018
	Housekeeping	Overgrown vegetation/weeds on yard/perimeter fence line	Remove vegetation/weeds				ASAP	September 2018
TENJO SUBSTATION	*Transformer Area*	Algae	Remove algae				ASAP	October 2018
YIGO SUBSTATION	*Facility Area*	NO CORRECTIVE ACTION						

Generation SPCC Inspection Report

SUMMARY OF SPCC INSPECTION REPORT
MONTH OF OCTOBER, 2018

LEGEND OF TRACKING

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

POWER PLANT

Location	Location	Findings	Recommendation/Remarks	Status	Responsible	Completion Date	Due Date	Initial Findings Date
	Used Oil Tank	Corroded and damaged Tank Shell coating					ASAP	Sept 2018
	Tanks No. 1, 2, 3 & 4 Secondary Containments (Cabras 1 - 4)	Debris and vegetation	Practice good housekeeping after conducting repair				ASAP	August 2018
	Tank 3 secondary containment	Water and algae accumulation in the secondary contaiment	Drain water and conduct cleanup				ASAP	Sept 2018
	HS and LS Service Tank secondary containments (Cabras 3&4)						ASAP	
	Secondary containment on Tanks 1, 2, 3, & 4	Debris and vegetation	Remove debris and vegetation				ASAP	October 2018
	Tank No. 1 (Cabras 1&2)	Leaking pump	Repair pump				ASAP	October 2018
	Tank No. 2 (Cabras 1&2)	Corroded valve on tank #2	Chip corrosion and recoat				ASAP	August 2018
	Tank No. 4 (Cabras 3 & 4)	Leaking pipe	Repair pipe				ASAP	Sept 2018
	Tank No. 4 (Cabras 3 & 4)	Corroded pipe	Repair pipe				ASAP	August 2018
	8" Supply Pipeline crossing the outfall	No secondary containment	Provide secondary containment. Regular monitoring recommended				ASAP	November 2015
	8" Supply Pipeline crossing the outfall	Corroded	Conduct immediate repair				ASAP	Sept 2018
	Lube Oil Tank (Cabras 3 & 4)	Corroded lube oil pipe	Conduct repair				ASAP	February 2018
	Cabras 3 & 4 OWS	Heavily corroded pipeline	Remove and blank the pipe if pipeline will not be in service				ASAP	February 2018
	Facility Pipelines	Corroded pipelines	Chip corrosion and recoat				ASAP	October 2018
DEDEDO CT	*OWS #2*	NO CORRECTIVE ACTION						

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Generation SPCC Inspection Report (cont.)

SUMMARY OF SPCC INSPECTION REPORT
MONTH OF OCTOBER, 2018

LEGEND OF TRACKING

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

POWER PLANT

Location	Location	Findings	Recommendation/Remarks	Status	Responsible	Completion Date	Due Date	Initial Findings Date
MACHECHE CT	Facility Area	Corrosion at tanks T-130/140 (paint applied over rust only)	Remove rust and repaint				ASAP	October 2015
		Corroded tank support T-130/140 (paint applied over rust only)	Remove rust and repaint				ASAP	October 2015
		Rust buildup on seam and tank belly	Remove rust and paint,				ASAP	November 2015
		Oil leak observed on oil purifier room	Fix leak and conduct cleanup				ASAP	August 2018
		Housekeeping	Need to utilize drum storage area for drums found inside generator room				July 2018	August 2018
		Damaged butler wall panel and plyboard partition wall	Provide and install wall panel and plyboard partition wall				ASAP	October 2018
YIGO CT	Fuel Storage Tank	Fuel storage tank 140/130	Rust buildup on shell	Remove rust, re-paint			ASAP	April 2018
	Secondary Containment on OWS	Rainwater accumulation	Drain water				ASAP	August 2018
	Secondary Containment Floor	Algae on trench and floor	Remove algae, conduct cleanup	Remove rust, re-paint			ASAP	August 2018
MANENGGON DIESEL	*Tank No. 3*	Corroded tank shell (tank #3); Corroded catwalk ladder and rails	Chip and recoat				ASAP	April 2018
	Secondary Containment	Worn out sealant on the cracks on secondary containment	Replace sealant	Re-sealing is ongoing			ASAP	May 2017
		Algae and dried leaves accumulation in sec. containment	Conduct clean up				ASAP	November 2017
		Corroded fuel supply line	Chip corrosion and recoat				ASAP	December 2017
		Overgrown vegetation at perimeter fence adjacent to tank farm & sec. containment	Remove vegetation				ASAP	August 2018

Generation SPCC Inspection Report (cont.)

SUMMARY OF SPCC INSPECTION REPORT
MONTH OF OCTOBER, 2018

LEGEND OF TRACKING

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

POWER PLANT

Location	Location	Findings	Recommendation/Remarks	Status	Responsible	Completion Date	Due Date	Initial Findings Date
TALOFOFO DIESEL	*Facility Area*	Loose fire suppressant wires on the tank	Secure wires				ASAP	June 2018
		Vegetation growth inside containment	Remove weeds/vegetation				ASAP	September 2018
		Generator belly containment/catchment open and unsecured	Close opening to prevnt accident spill; Secure with valve or close permanently				ASAP	August 2018
		Overgrown vegetation	Trim off/remove overgrowth				ASAP	October 2018
TENJO DIESEL	*Facility Area*	Worn out gap seal on the secondary containment floor	Seal floor gaps				ASAP	August 2017
		Corroded tank shell on tank #2	Chip and recoat				ASAP	March 2018
		Corroded supply pipe	Chip corrosion and recoat				ASAP	February 2018
		Rainwater inside berm with oil sheen	Drain water				ASAP	October 2018
		Worn out crack seal on secondary containment wall	Repair crack and apply sealant				ASAP	October 2018
PITI #7	*Main Fuel Tank, Day Tank # 1 & 2*	No integrity test	Conduct integrity test				ASAP	January 2018
	Main Fuel Tank	Corrosion forming under pipes	Chip corrosion and recoat				ASAP	October 2018

PLANNING & REGULATORY DIVISION REPORT

The following summarizes P&R's activities for the month of October 2018

INSPECTIONS/MONITORING

- Best Management Practices (BMP) Weekly Inspection/Report – Cabras Power Plant
- Monthly Spill Prevention, Control and Countermeasures (SPCC) Inspection/Report – Cabras Power Plant, Macheche, Dededo, Yigo CT, Talofofo, MDI, Tenjo Diesel, Piti 7 Power Plants, IP&E fuel Farm.
- Reviews monthly Continuous Emissions Monitoring System (CEMS) report and monitors TRC's O & M for Tenjo Diesel
- Conducted emissions inspection at Tenjo Power Plant and prepared report

EMISSIONS AND LIMITS TRACKING FOR GPA AND AGGREKO POWER PLANTS

- Meeting with GM, AGMETS, and SPORD regarding permit limits
- Monitoring Fuel Use, Run Hours, and Emission limits of Power Plants. Ensure that we do not exceed limits set in the Title V Air Permits.
- Updated tracking Spreadsheet

ENERGY RECOVERY

- Used oil transfer to WOF from Dededo Used Transformer Oil Tank #2.

REPORTING

- New Source Performance Standards (NSPS) Monthly and Quarterly Report– Submitted reports to GEPA for Dededo CT, Macheche CT, Yigo CT, Talofofo, Manenggon and Tenjo Diesel Plants.
- UIC/ORS Fluid Level Measurement/Sounding Quarterly Report submitted to Guam EPA.
- Submitted Quarterly Fuel Switching Report for July – September 2018
- Submitted NPDES Quarterly reporting via US EPA Web Tool NetDMR

SPILL/ENVIRONMENTAL RESPONSE

- Respond to spill incident at Tumon Plaza Arcade Parking Lot – damaged pad-mounted transformer oil spill affecting several areas on-site.

PROCUREMENT

- GPA RFP-18-008 CEMS and RICE MACT O&M – Reviewed changes and corrections to Contract and responded to Procurement.

- GPA RFP-18-007 Annual Emission Testing – Reviewed changes and corrections to Contract and responded to Procurement.
- RFQ #31916 - Water Quality Monitoring at Piti Tank Farm- PO to be amended for another extension coordinated with EA engineering and still waiting for other equipment to be used for testing. Purchase Order was released September 28, 2018.
- OR #32485 - Scope of Work Prepared for the Prof. Services for Identification, Sampling, Removal and Disposal of Hazardous Waste at Old Piti Power Plant

TYPHOON YUTU

- Pre-Typhoon – Inspected GPA facilities to check that they are secure and without any environmental issues that could be aggravated by the approaching weather disturbance. Prepared forms for post-typhoon transformer and pole assessment

OTHERS

- Docket 19-02 RFI - Responded to inquiries from the PUC
- Prepared Timeline for PUC regarding the New 180 MW Power Plant
- Leak Detection at Piti Fuel Farm
    - Prepped and Re-installed data logger for Leak Detection System
    - Still having problem with server. Sent email to contractor to resolve issue

- Meeting with the CUC chairwoman on GPA Environmental compliance timeline
- Used Oil Reprocessing comments / reply to queries from vendors.
- Submitted to Guam EPA Post Typhoon Yutu Damage Assessments for respective GPA ASTs .

Production Data

31-Oct-18

SYSTEM											
YEAR	MONTH	# of DAYS	GROSS GENERATION	FUEL CONSUMPTION		GROSS FUEL EFFICIENCY (Target ≥ 15.99 kWh/gal)	COST per GROSS kWh	GROSS HEAT RATE (Baseloads) PUC Target less than 9,600	GROSS HEAT RATE (Peaking) PUC Target less than 13,600	Ave. MW	Peak MW
				(gal)	(bbl)						
2016	July	31	151,248,202	10,443,028	248,644	14.48	$ 0.0920	9,477.71	12,208.87	203	258
	Aug	31	149,051,031	10,210,429	243,105	14.60	$ 0.0935	9,431.70	11,155.10	200	252
	Sept	30	142,069,206	9,829,773	234,042	14.45	$ 0.0956	9,509.75	11,393.73	197	256
	Oct	31	148,824,965	9,660,319	230,008	15.41	$ 0.0729	9,749.38	10,738.69	200	252
	Nov	30	145,293,562	9,427,636	224,468	15.41	$ 0.0901	9,714.47	10,786.30	202	252
	Dec	31	147,753,552	9,725,521	231,560	15.19	$ 0.0934	9,661.13	10,645.44	199	248
2017	Jan	31	142,960,618	9,226,278	219,673	15.49	$ 0.0913	9,620.29	10,965.71	192	234
	Feb	28	113,499,400	7,270,830	173,115	15.61	$ 0.0900	9,609.08	11,503.12	195	246
	Mar	31	149,402,182	9,664,440	230,106	15.46	$ 0.1014	9,719.35	11,440.45	201	246
	Apr	30	145,351,026	9,913,757	236,042	14.66	$ 0.1101	9,750.73	11,392.12	202	250
	May	31	157,573,506	11,065,930	263,475	14.24	$ 0.1170	10,067.14	11,323.20	212	256
	June	30	150,240,751	10,654,196	253,671	14.10	$ 0.1101	10,209.74	11,248.62	209	257
	July	31	150,580,050	10,622,458	252,916	14.18	$ 0.1169	9,544.54	11,837.62	202	252
	Aug	31	150,084,827	10,642,044	253,382	14.10	$ 0.1177	9,206.15	11,917.58	202	261
	Sept	30	143,990,208	10,309,304	245,460	13.97	$ 0.1152	9,541.20	13,107.05	200	254
	Oct	31	147,122,071	9,774,857	232,735	15.05	$ 0.1079	9,590.71	11,375.81	198	254
	Nov	30	147,284,781	9,783,352	232,937	15.05	$ 0.1061	9,563.85	11,257.17	205	253
	Dec	31	151,600,064	9,925,003	236,310	15.27	$ 0.1122	9,607.13	11,035.82	204	250
2018	Jan	31	147,704,057	9,563,641	227,706	15.44	$ 0.1078	9,755.40	11,029.21	199	246
	Feb	28	131,329,470	8,660,044	206,192	15.16	$ 0.1150	9,763.94	11,125.15	195	241
	Mar	31	144,370,550	9,889,634	235,467	14.60	$ 0.1345	9,183.77	11,853.09	194	244
	Apr	30	142,493,891	9,636,757	229,447	14.79	$ 0.1232	9,558.86	11,901.02	198	247
	May	31	151,201,454	10,120,017	240,953	14.94	$ 0.1342	9,549.70	11,703.13	203	249
	June	30	142,902,259	9,674,924	230,355	14.77	$ 0.1399	9,563.51	11,494.36	198	246
	July	31	139,718,862	9,726,750	231,589	14.36	$ 0.1468	9,647.53	11,909.20	188	242
	Aug	31	141,640,237	9,834,936	234,165	14.40	$ 0.1437	9,817.09	13,623.96	190	238
	Sept	30	129,965,486	9,303,709	221,517	13.97	$ 0.1526	9,383.54	13,625.29	181	240
	Oct*	31									

*Note: October 2018 production data is under review.

T&D Vegetation Management
Percent Completion (per Sector Feeder)
Note: Feeders priority listing based on outages due to vegetation

Northern Sector

Feeder	Esitmated Distance (LF)	Distance Trimmed by T&D Crew (LF)	Distance Trimmed by Contractor (LF)	% Completion
P332	6,830	11,470	9,561	308%
P322	7,265	500	4,800	73%
P330	2,635		12,599	478%
P087	4,245	4,450		105%
P046	1,245	200		
P321	4,045			
P088	3,310			
P089	670	160		24%
P331	1,925	50		3%
P323	2,810			
P271	50	1,405		2810%
P270	300	1,595		532%
P245	1,660	1,200		72%
P272	150	430		287%
P111	500	475		95%
P244	920	940		102%
P240	430	430		100%
P242	290	160		55%
Total	39,280	23,465	26,960	128%

Central Sector

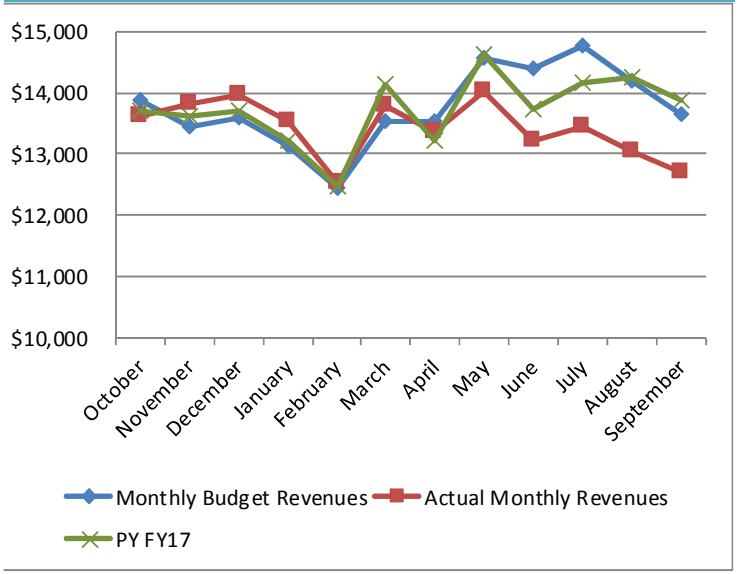
Feeder	Esitmated Distance (LF)	Distance Trimmed by T&D Crew (LF)	Distance Trimmed by Contractor (LF)	% Completion
P250	33,290	13,340	10,392	71%
P212	17,560	100		1%
P253	15,240			
P283	2,230		7,000	314%
P210	10,120	40		0%
P280	1,675	380		23%
P311	1,360			
P007	778			
P211	6,050			
P202	420			
P251	280			
P213	3,500			
P252	1,520		4,586	302%
P201	100			
P203	370			
P282	525			
P310	370	100		27%
P205	350			
P206	140			
P204	530			
P312	200			
P281	525			
P400	150			
Total	97,283	13,960	21,978	37%

Southern Sector

Feeder	Esitmated Distance (LF)	Distance Trimmed by T&D Crew (LF)	Distance Trimmed by Contractor (LF)	% Completion
P294	9,430	45	22,801	242%
P261	4,930	1,030	9,939	222%
P340	13,240	790	27,675	215%
P262	5,185	520	19,236	381%
P221	1,570	795		51%
P223	2,500	1,935		77%
P341	880	450	450	102%
P301	19,915	1,999	1,675	18%
P005	990	150		15%
P220	1,250	185		15%
P260	12,630	2,650		21%
Total	72,520	10,549	81,776	127%

September 2018 Monthly Financial Highlight

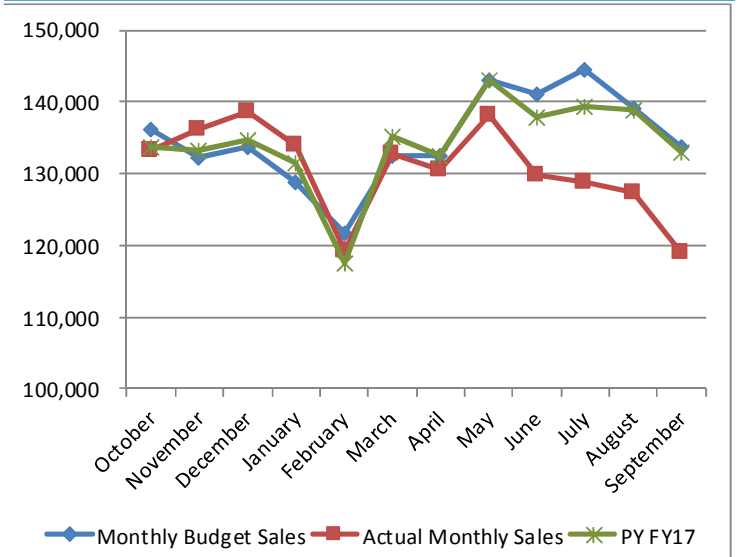
Base Rate Revenue $000



Through September 30, 2018

$000	Monthly Budget Revenues	Actual Monthly Revenues	Variance		PY FY17	CY vs PY Variance	
October	$ 13,873	$ 13,625	$ (248)	↓	$ 13,702	$ (77)	↓
November	13,451	13,827	$ 376	↑	13,622	$ 205	↑
December	13,599	13,968	$ 369	↑	13,695	$ 273	↑
January	13,114	13,534	$ 420	↑	13,220	$ 314	↑
February	12,422	12,522	$ 100	↑	12,454	$ 68	↑
March	13,534	13,776	$ 242	↑	14,123	$ (347)	↓
April	13,525	13,351	$ (174)	↓	13,224	$ 127	↑
May	14,568	14,011	$ (557)	↓	14,617	$ (606)	↓
June	14,386	13,201	$ (1,185)	↓	13,722	$ (521)	↓
July	14,759	13,446	$ (1,313)	↓	14,151	$ (705)	↓
August	14,183	13,047	$ (1,136)	↓	14,244	$ (1,197)	↓
September	13,651	12,700	$ (951)	↓	13,874	$ (1,174)	↓
Total	**$ 165,064**	**$ 161,008**	**$ (4,055)**		**$ 164,649**	**$ (3,641)**	

MWh Sales

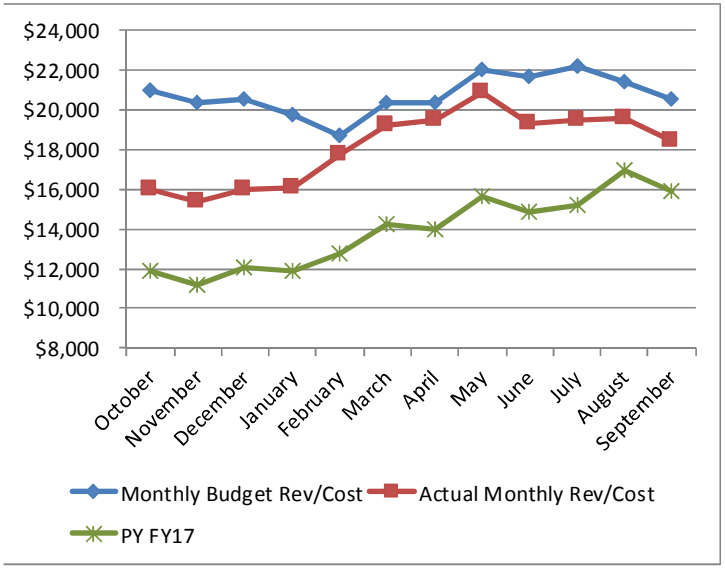


Through September 30, 2018

mwh	Monthly Budget Sales	Actual Monthly Sales	Variance		PY FY17	CY vs PY Variance	
October	136,219	133,262	(2,957)	↓	133,620	(358)	↓
November	132,132	136,044	3,912	↑	133,235	2,809	↑
December	133,625	138,587	4,962	↑	134,634	3,953	↑
January	128,711	133,882	5,170	↑	131,461	2,421	↑
February	121,668	119,241	(2,426)	↓	117,617	1,624	↑
March	132,587	132,693	106	↑	135,131	(2,438)	↓
April	132,532	130,565	(1,967)	↓	132,587	(2,022)	↓
May	142,956	138,085	(4,871)	↓	143,013	(4,928)	↓
June	141,064	129,728	(11,336)	↓	137,777	(8,049)	↓
July	144,404	128,681	(15,723)	↓	139,227	(10,546)	↓
August	139,093	127,348	(11,745)	↓	138,797	(11,449)	↓
September	133,658	118,935	(14,723)	↓	132,993	(14,058)	↓
Total	**1,618,650**	**1,567,052**	**(51,597)**		**1,610,093**	**(43,041)**	

September 2018 Monthly Financial Highlight (Continued)

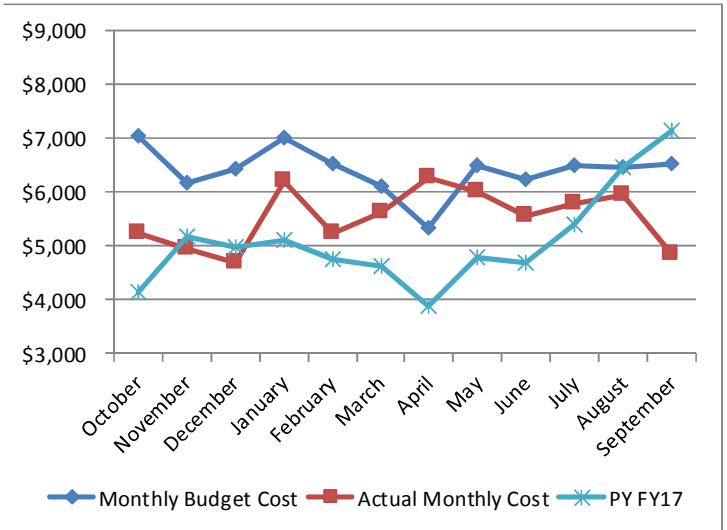
Fuel Revenue/ Cost $000



Through September 30, 2018

$000	Monthly Budget Rev/Cost	Actual Monthly Rev/Cost	Variance		PY FY17	CY vs PY Variance	
October	$ 20,928	$ 15,936	$ (4,992)	↓	$ 11,894	$ 4,042	↑
November	20,300	15,400	$ (4,899)	↓	11,215	$ 4,185	↑
December	20,529	16,007	$ (4,522)	↓	12,036	$ 3,971	↑
January	19,774	16,036	$ (3,738)	↓	11,867	$ 4,169	↑
February	18,692	17,763	$ (930)	↓	12,751	$ 5,012	↑
March	20,370	19,180	$ (1,190)	↓	14,248	$ 4,932	↑
April	20,361	19,441	(920)	↓	13,940	5,500	↑
May	21,963	20,854	(1,109)	↓	15,596	5,258	↑
June	21,672	19,252	(2,420)	↓	14,859	4,393	↑
July	22,185	19,457	(2,728)	↓	15,175	4,282	↑
August	21,369	19,597	(1,772)	↓	16,947	2,650	↑
September	20,534	18,398	(2,136)	↓	15,895	2,503	↑
Total	**$ 248,677**	**$ 217,321**	**$(31,356)**		**$ 166,425**	**$ 50,896**	

O&M Cost $000



Through September 30, 2018

$000	Monthly Budget Cost	Actual Monthly Cost	Variance		PY FY17	CY vs PY Variance	
October	$ 7,040	5,239	1,801	↑	4,135	(1,103)	↓
November	6,182	4,941	1,240	↑	5,158	217	↑
December	6,428	4,694	1,735	↑	4,966	273	↑
January	7,001	6,204	797	↑	5,092	(1,112)	↓
February	6,522	5,252	1,270	↑	4,748	(504)	↓
March	6,091	5,638	453	↑	4,612	(1,026)	↓
April	5,320	6,269	(949)	↓	3,892	(2,378)	↓
May	6,495	6,005	491	↑	4,772	(1,233)	↓
June	6,221	5,558	662	↑	4,702	(856)	↓
July	6,508	5,797	711	↑	5,385	(412)	↓
August	6,462	5,960	502	↑	6,445	485	↑
September	6,526	4,836	1,689	↑	7,138	2,302	↑
Total	**$ 76,796**	**$ 66,394**	**$ 10,403**		**$ 61,045**	**$ (5,348)**	

September 2018 Monthly Financial Highlight (Continued)

Through August 31, 2018						
	3Q2017	4Q2017	1Q2018	2Q2018	3Q2018	4Q2018
Residential	43,902	43,991	43,898	44,065	44,074	43,887
Commercial	5,252	5,226	5,231	5,262	5,278	5,261
Government	1,071	1,073	1,076	1,086	1,092	1,077
Streetlights	824	823	908	1,005	1,091	1,152
Navy	1	1	1	1	1	1
Total	51,050	51,114	51,114	51,419	51,536	51,378

Debt service coverage (DSC) calculation-indenture	2014	2015	2016	2017	YTD Sept 2018
Senior lien coverage	3.16	3.62	3.28	2.65	2.68
Aggregate debt service coverage	1.98	2.62	3.28	2.65	2.68
Debt service coverage (DSC) calculation-IPP as O&M					
Senior lien coverage	2.55	2.56	2.45	1.79	1.80
Aggregate debt service coverage	1.41	1.85	2.45	1.79	1.80

- Under recovery of LEAC - $8.4 million

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

GUAM POWER AUTHORITY
FINANCIAL STATEMENT OVERVIEW
September 2018

Attached are the financial statements and supporting schedules for the month and fiscal year ended September 30, 2018.

Summary
The increase in net assets for the year ended was $13.8 million as compared to the anticipated net increase of $1.0 million at the beginning of the year. This was primarily due to the under-expenditure of O&M expenses – more specifically the over-anticipated fuel costs. The total kWh sales for the year were 3.19% less than projected and non-fuel revenues were $4.0M less than the estimated amounts. O & M expenses for the year were $65.7 million which was $10.0 million less than our projections for this year. Other expenses for the year such as interest expense, IPP costs, (net of interest income and other income) totaled to $40.5 million which was about $7.1 million less than the projected amount. There were no other significant departures from the budget during the period.

Analysis

Description	**Previous Month**	**Current Month**	**Target**
Quick Ratio	2.62	1.92	2
Days in Receivables	38	38	52
Days in Payables	20	42	30
LEAC (Over)/Under Recovery Balance -YTD	$7,313,081	$8,370,542	$8,802,313
T&D Losses	5.08%	5.12%	7.00%
Debt Service Coverage	1.78	1.75	1.75
Long-term equity ratio	17%	18%	30 – 40%
Days in Cash	199	216	60

The Quick Ratio reflects the basic challenge facing GPA. However, this fiscal year has shown improvement over the previous fiscal year. This is due to the receipt of $84M in cash advances of insurance proceeds. GPA has current obligations of approximately $94.7 million and approximately $181.5 million in cash and current receivables. The LEAC under recovery for the month is $1.1 million. The Debt Service Coverage ratio is calculated using the methodology in use before the Fiscal Year 2002 change in accounting practice.

Financial Statement
September 2018
Significant Assumptions

The significant assumptions in the financial statements are as follows:

- Accrual cutoff procedures were performed at month end
- An inventory valuation is performed at year-end only
- Accounts Receivable includes accruals based on prior months' usage.

Prepared by:	Reviewed by:	Approved by:
Lenora M. Sanz Controller	John J.E. Kim Chief Financial Officer	John M. Benavente, P.E. General Manager

Statements of Net Position
September 30, 2018 and September 30, 2017

	Unaudited September 2018	Audited September 2017	Change from Sept 30 2017
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES			
Current assets:			
Cash and cash equivalents:			
Held by trustee for restricted purposes:			
Interest and principal funds	17,997,927	18,061,879	(63,952)
Bond indenture funds	49,970,719	56,907,535	(6,936,816)
Held by Guam Power Authority:			
Bond indenture funds	142,583,470	132,579,889	10,003,581
Self insurance fund-restricted	19,258,353	19,251,372	6,981
Energy sense fund	1,085,472	1,074,491	10,981
Total cash and cash equivalents	230,895,941	227,875,166	3,020,775
Accounts receivable, net	37,746,060	77,826,132	(40,080,072)
Total current receivables	37,746,060	77,826,132	(40,080,072)
Materials and supplies inventory	12,695,441	11,989,745	705,696
Fuel inventory	67,993,103	52,387,369	15,605,734
Prepaid expenses	979,828	629,586	350,242
Total current assets	350,310,373	370,707,998	(20,397,625)
Utility plant, at cost:			
Electric plant in service	1,063,192,955	1,038,121,362	25,071,593
Construction work in progress	28,495,325	18,480,173	10,015,152
Total	1,091,688,280	1,056,601,535	35,086,745
Less: Accumulated depreciation	(598,792,653)	(561,829,334)	(36,963,319)
Total utility plant	492,895,627	494,772,201	(1,876,574)
Other non-current assets:			
Investment - bond reserve funds held by trustee	48,600,660	48,576,863	23,797
Unamortized debt issuance costs	2,503,448	4,267,305	(1,763,857)
Total other non-current assets	51,104,108	52,844,168	(1,740,060)
Total assets	894,310,108	918,324,367	(24,014,259)
Deferred outflow of resources:			
Deferred fuel revenue	8,370,542	16,751,048	(8,380,506)
Unamortized loss on debt refunding	27,093,636	11,076,064	16,017,572
Pension	8,698,853	8,698,853	0
Unamortized forward delivery contract costs	477,998	637,358	(159,360)
Total deferred outflows of resources	44,641,029	37,163,323	7,477,706
	938,951,137	955,487,690	(16,536,553)

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)
Statement of Net Position, Continued
September 30, 2018 and September 30, 2017

	Unaudited September 2018	Audited September 2017	Change from Sept 30 2017
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION			
Current liabilities:			
Current maturities of long-term debt	1,630,000	1,780,000	(150,000)
Current obligations under capital leases	18,126,544	23,330,193	(5,203,649)
Accounts payable			
Operations	47,870,908	56,723,139	(8,852,232)
Others	259,708	7,597,801	(7,338,092)
Accrued payroll and employees' benefits	1,949,080	1,546,860	402,220
Current portion of employees' annual leave	2,101,168	2,045,201	55,967
Interest payable	14,660,598	15,065,830	(405,232)
Customer deposits	8,142,519	8,209,228	(66,709)
Total current liabilities	94,740,525	116,298,252	(21,557,727)
Regulatory liabilities:			
Provision for self insurance	19,345,291	19,550,977	(205,686)
Total regulatory liabilities	19,345,291	19,550,977	(205,686)
Long term debt, net of current maturities	604,881,434	590,568,862	14,312,572
Obligations under capital leases, net of current portion	6,571,815	24,428,832	(17,857,017)
Net Pension liability	81,468,099	85,875,217	(4,407,118)
DCRS sick leave liability	4,008,397	4,008,397	0
Employees' annual leave net of current portion	1,086,456	1,086,456	0
Customer advances for construction	385,293	369,180	16,113
Total liabilities	812,487,310	842,186,173	(29,698,863)
Deferred inflows of resources:			
Unearned forward delivery contract revenue	1,752,053	2,336,071	(584,018)
Pension	788,894	788,894	0
Total deferred inflows of resources	2,540,947	3,124,965	(584,018)
Commitments and contigencies			
Net Position:			
Net investment in capital assets	(40,128,079)	(40,220,468)	92,389
Restricted	47,856,103	15,232,832	32,623,271
Unrestricted	116,194,856	135,164,187	(18,969,332)
Total net position	123,922,879	110,176,552	13,746,327
	938,951,137	955,487,690	(16,536,553)

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

	September 30			Twelve Months Ending September 30		
	Unaudited 2018	Audited 2017	% of change Inc (dec)	Unaudited 2018	Audited 2017	% of change Inc (dec)
Revenues						
Sales of electricity	31,097,639	29,769,728	4	378,328,873	331,074,054	14
Miscellaneous	194,101	51,936	274	2,217,201	2,193,476	1
Total	31,291,740	29,821,664	5	380,546,074	333,267,530	14
Bad debt expense	285,382	1,187,950	(76)	(677,870)	200,588	(438)
Total revenues	31,577,122	31,009,614	2	379,868,204	333,468,118	14
Operating and maintenance expenses						
Production fuel	18,390,290	15,896,627	16	217,324,520	166,426,108	31
Other production	1,595,738	3,207,918	(50)	16,998,852	17,762,059	(4)
	19,986,028	19,104,545	5	234,323,372	184,188,167	27
Depreciation	3,229,310	831,387	288	38,549,877	44,291,587	(13)
Energy conversion cost	1,414,314	1,769,267	(20)	17,552,373	19,935,334	(12)
Transmission & distribution	389,149	986,467	(61)	12,228,617	11,749,623	4
Customer accounting	622,025	468,168	33	5,560,217	4,296,347	29
Administrative & general	2,514,747	8,709,435	(71)	30,928,370	32,484,110	(5)
Total operating and maintenance expenses	28,155,573	31,869,269	(12)	339,142,826	296,945,168	14
Operating income	3,421,549	(859,655)	(498)	40,725,378	36,522,950	12
Other income (expenses)						
Interest income	524,246	346,969	51	3,260,342	1,722,482	89
Interest expense and amortization	(2,500,104)	(2,610,748)	(4)	(31,620,663)	(33,693,389)	(6)
Bond issuance costs	(115,438)	76,827	(250)	(1,892,175)	921,924	(305)
Gains from catastrophic events	2,310,282	39,823,785	0	2,310,282	39,977,139	
Allowance for funds used during construction	123,062	272,277	(55)	1,686,379	3,675,582	(54)
Other expense	(4,291)	(4,058)	0	(839,392)	(772,971)	9
Total other income (expenses)	337,757	37,905,052	(99)	(27,095,227)	11,830,767	(329)
Income (loss) before capital contributions	3,759,306	37,045,397	(90)	13,630,151	48,353,717	(72)
Capital contributions	0	(144,702)	0	116,175	10	1,161,650
Increase (decrease) in net assets	3,759,306	36,900,695	(90)	13,746,326	48,353,727	(72)
Total net assets at beginning of period (restated)	120,163,577	73,122,508	64	110,176,557	61,822,830	78
Total net assets at end of period	123,922,883	110,023,203	13	123,922,883	110,176,557	12

GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)
Statements of Cash Flows
Period Ended September 30, 2018

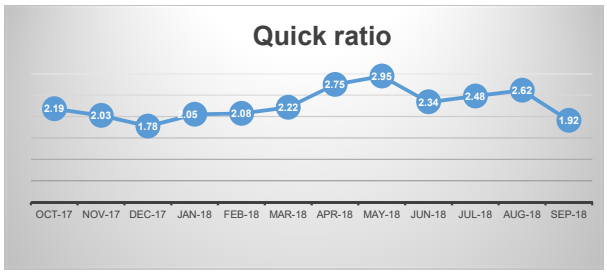
	Month Ended 9/30/2018	YTD Ended 9/30/2018
Increase(decrease) in cash and cash equivalents		
Cash flows from operating activities:		
Cash received from customers	$30,320,239	$ 377,977,999
Cash payments to suppliers and employees for goods and services	5,481,078	344,254,356
Net cash provided by operating activities	$24,839,161	33,723,643
Cash flows from investing activities:		
Interest and dividends on investments and bank accounts	524,246	3,260,342
Net cash provided by investing activities	524,246	3,260,342
Cash flows from non-capital financing activities		
Proceeds from Cabras 3&4 insurance claims	-	41,844,342
Interest paid on short term debt	(6,017)	(81,907)
Provision for self insurance funds	(1,167)	(6,981)
Net cash provided by noncapital financing activities	(7,184)	41,755,454
Cash flows from capital and related financing activities		
Acquisition of utility plant	(7,287,027)	(36,673,302)
Principal paid on bonds and other long-term debt	-	(3,550,000)
Interest paid on bonds(net of capitalized interest)	123,062	(27,090,907)
Interest paid on capital lease obligations	(180,898)	(3,166,701)
Interest & principal funds held by trustee	(2,688,136)	63,952
Reserve funds held by trustee	(32,958)	(23,797)
Bond funds held by trustee	1,023,269	6,936,816
Principal payment on capital lease obligations	(1,963,200)	(23,060,666)
Grant from DOI/FEMA	-	116,175
Debt issuance costs/loss on defeasance	(162,524)	17,712,572
Net cash provided by (used in) capital and related financing activities	(11,168,412)	(68,735,858)
Net (decrease) increase in cash and cash equivalents	14,187,811.13	10,003,581
Cash and cash equivalents, beginning	128,395,658	132,579,889
Cash and cash equivalents-Funds held by GPA, September 30, 2018	**$ 142,583,470**	**$ 142,583,470**

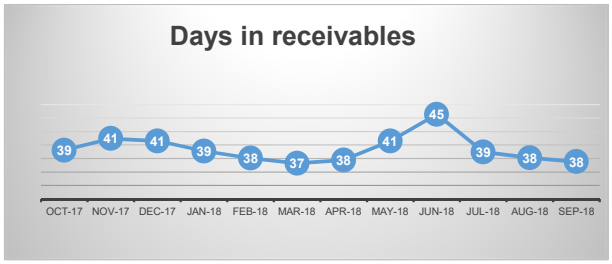
GUAM POWER AUTHORITY
(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)
Statements of Cash Flows, continued
Period Ended September 30, 2018

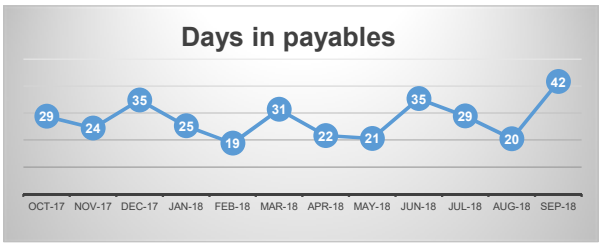
	Month Ended 9/30/2018	YTD Ended 9/30/2018
Reconciliation of operating earnings to net cash provided by operating activities:		
Operating earnings net of depreciation expense and excluding interest income	$3,421,549	$40,725,378
Adjustments to reconcile operating earnings to net cash provided by operating activities:		
Depreciation and amortization	3,229,310	38,549,877
Other expense	2,190,553	(421,285)
(Increase) decrease in assets:		
Accounts receivable	(1,248,340)	(1,764,270)
Materials and inventory	143,473	(705,696)
Fuel inventory	(6,491,625)	(15,605,734)
Prepaid expenses	960,567	(350,242)
Unamortized debt issuance cost	23,667	1,763,857
Deferred fuel revenue	(1,057,461)	8,380,506
Unamortized loss on debt refunding	229,166	(16,017,572)
Unamortized forward delivery contract costs	13,280	159,360
Increase (decrease) in liabilities:		
Accounts payable-operations	26,136,842	(8,852,232)
Accounts payable-others	(2,351,491)	(7,349,073)
Accrued payroll and employees' benefits	371,982	402,220
Provision for self insurance	(205,686)	(205,686)
Net pension liability	(482,933)	(4,407,118)
Employees' annual leave	30,250	55,967
Customers deposits	(25,274)	(66,709)
Customer advances for construction	-	16,113
Unearned forward delivery contract revenue	(48,668)	(584,018)
Net cash provided by operating activities	**$24,839,161**	**$ 33,723,643**

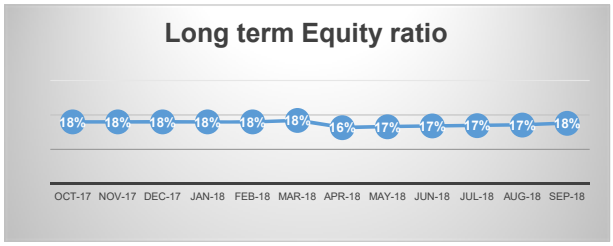
Guam Power Authority
Financial Analysis
09/30/18

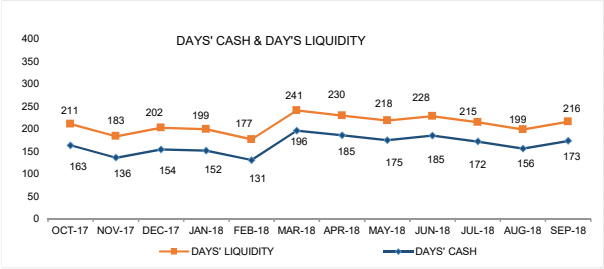
	Quick Ratio		
A	Reserve Funds Held by GPA		142,583,470
B	Current Accounts Receivable		38,923,067
C	Total Cash and A/R (A+B)		181,506,537
D	Total Current Liabilities		94,740,525
E	**Quick Ratio (F/G)**		**1.92**
	Days in Receivables		
A	FY 18 Moving 12 Mos.-Actual		378,328,873
B	No. of Days		365
C	Average Revenues per day (A/B)		1,036,517
D	Current Accounts Receivable		38,923,067
E	**Days in Receivables (D/C)**		**38**
	Days in Payables		
A	FY 18 Moving 12 Months-Actual		421,928,863
B	No. of Days		365
C	Average Payables per day (A/B)		1,155,969
D	Current Accounts Payables		48,130,616
E	**Days in Payables (D/C)**		**42**
	Long term equity ratio		
A	Equity	$	123,922,879.00
B	Total Long term Liability	$	579,271,804.00
C	Total Equity and liability	$	703,194,683.00
D	**Long term equity ratio (A/C)**		**18%**
	Days cash on hand		
A	Unresctricted cash & cash equivalents		142,583
B	No. of Days -YTD		365
C	A x B		52,042,967
D	Total Operating expenses excluding deprec		300,593
E	**Days cash on hand**		**173**
	Days' Liquidity		
A	Unresctricted cash , cash equivalents & revı		177,583
B	No. of Days -YTD		365
C	A x B		64,817,967
D	Total Operating expenses excluding deprec		300,593
E	**Days liquidity**		**216**











GPA 302
10/18/2018

GUAM POWER AUTHORITY
ACCRUED REVENUE
SEPTEMBER 2018

	FOR THE MONTH ENDED SEPTEMBER		TWELVE MONTHS ENDED SEPTEMBER	
	2018	**2017**	**2018**	**2017**
KWH SALES:				
Residential	37,207,511	41,491,015	495,346,749	506,335,601
Small Gen. Non Demand	6,128,698	7,022,092	81,419,604	83,899,700
Small Gen. Demand	14,018,162	15,509,408	184,605,153	190,050,925
Large General	23,573,240	25,432,034	307,368,249	314,573,231
Independent Power Producer	29,708	76,532	479,714	1,003,769
Private St. Lights	34,933	34,586	403,056	450,462
Sub-total	80,992,253	89,565,666	1,069,622,525	1,096,313,688
Government Service:				
Small Non Demand	1,089,787	1,246,106	14,326,985	13,902,245
Small Demand	7,082,161	8,084,368	92,945,937	96,878,601
Large	5,873,776	6,493,449	74,650,307	74,897,968
Street Lighting	734,966	697,002	9,046,218	9,514,607
Sub-total	14,780,690	16,520,925	190,969,447	195,193,421
Total	95,772,942	106,086,591	1,260,591,972	1,291,507,110
U. S. Navy	23,161,867	26,906,320	306,460,172	318,585,901
GRAND TOTAL	118,934,809	132,992,911	1,567,052,144	1,610,093,011
REVENUE:				
Residential	$ 9,335,975	$ 8,887,320	$ 117,823,431	$ 100,601,977
Small Gen. Non Demand	$ 1,793,407	$ 1,783,997	$ 22,678,840	$ 20,040,732
Small Gen. Demand	$ 3,892,588	$ 3,692,273	$ 48,253,949	$ 42,069,517
Large General	$ 6,170,948	$ 5,643,059	$ 74,919,062	$ 64,178,060
Independent Power Producer	$ 8,392	$ 17,076	$ 117,110	$ 211,031
Private St. Lights	$ 26,392	$ 25,361	$ 309,040	$ 306,957
Sub-total	$ 21,227,703	$ 20,049,087	$ 264,101,431	$ 227,408,274
Government Service:				
Small Non Demand	$ 335,723	$ 333,079	$ 4,157,890	$ 3,513,008
Small Demand	$ 2,104,471	$ 2,050,292	$ 25,540,259	$ 22,830,078
Large	$ 1,680,530	$ 1,575,080	$ 19,852,611	$ 16,979,365
Street Lighting	$ 477,638	$ 436,808	$ 5,557,483	$ 5,438,696
Sub-total	$ 4,598,362	$ 4,395,259	$ 55,108,243	$ 48,761,148
Total	$ 25,826,065	$ 24,444,346	$ 319,209,674	$ 276,169,422
U. S. Navy	$ 5,271,574	$ 5,325,383	$ 59,119,199	$ 54,904,634
GRAND TOTAL	$ 31,097,639	$ 29,769,728	$ 378,328,873	$ 331,074,056
NUMBER OF CUSTOMERS:				
Residential	43,887	43,991	44,006	43,756
Small Gen. Non Demand	4,159	4,127	4,158	4,127
Small Gen. Demand	982	980	984	987
Large General	118	116	119	116
Independent Power Producer	2	3	3	3
Private St. Lights	525	526	529	526
Sub-total	49,673	49,743	49,798	49,515
Government Service:				
Small Non Demand	677	675	685	681
Small Demand	353	353	351	348
Large	47	45	47	45
Street Lighting	627	297	489	253
Sub-total	1,704	1,370	1,573	1,328
Total	51,377	51,113	51,371	50,842
US Navy	1	1	1	1
	51,378	51,114	51,372	50,843

GPA403
18-Oct-18

GUAM POWER AUTHORITY
ACCRUED REVENUE

	TWELVE MONTHS ENDED	SEPTEMBER 2018	AUGUST 2018	JULY 2018	JUNE 2018	MAY 2018	APRIL 2018	MARCH 2018	FEBRUARY 2018	JANUARY 2018	DECEMBER 2017	NOVEMBER 2017	OCTOBER 2017
KWH SALES:													
Residential	495,346,749	37,207,511	39,748,314	41,361,122	42,056,621	44,782,019	41,394,961	41,541,824	36,809,815	42,067,765	43,307,944	43,386,853	41,682,000
Small General Non Demand	81,419,604	6,128,698	6,737,467	6,743,157	6,840,318	7,216,684	6,694,385	6,976,607	6,154,115	6,844,713	6,956,278	7,060,041	7,067,142
Small General Demand	184,605,153	14,018,162	15,283,605	15,161,689	15,360,000	16,316,998	15,390,268	15,917,309	14,164,319	15,562,774	15,848,505	15,789,397	15,792,127
Large General	307,368,249	23,573,240	24,724,982	25,339,577	25,263,128	26,377,222	25,681,619	26,155,199	23,674,407	26,242,185	27,485,887	26,267,661	26,583,141
Private Outdoor Lighting	403,056	34,933	33,511	34,288	37,088	34,126	27,531	32,791	32,408	32,358	35,129	35,042	33,851
Independent Power Producer	479,714	29,708	30,251	30,088	25,238	26,295	27,405	28,536	28,976	27,011	40,140	93,823	92,244
Sub-Total	1,069,622,525	80,992,253	86,558,130	88,669,920	89,582,394	94,753,344	89,216,169	90,652,265	80,864,040	90,776,805	93,673,883	92,632,817	91,250,505
Government Service:													
Small Non Demand	14,326,985	1,089,787	1,205,730	1,128,046	1,157,839	1,224,286	1,180,911	1,193,794	1,119,571	1,248,251	1,272,026	1,255,131	1,251,612
Small Demand	92,945,937	7,082,161	7,641,330	7,182,975	7,404,715	8,098,401	7,720,850	7,889,205	7,377,578	8,102,981	8,063,549	8,098,974	8,283,218
Large	74,650,307	5,873,776	6,179,381	5,707,305	5,896,149	6,622,597	6,142,309	6,226,210	5,905,830	6,315,619	6,812,255	6,550,623	6,418,254
Street Lighting (Agencies)	9,046,218	734,966	842,364	903,135	795,661	761,901	699,601	743,499	669,689	716,067	697,921	668,464	812,949
Sub-Total	190,969,447	14,780,690	15,868,805	14,921,461	15,254,364	16,707,185	15,743,671	16,052,709	15,072,669	16,382,918	16,845,750	16,573,193	16,766,033
Total	1,260,591,972	95,772,942	102,426,935	103,591,381	104,836,757	111,460,529	104,959,840	106,704,974	95,936,708	107,159,724	110,519,633	109,206,010	108,016,537
U.S. Navy	306,460,172	23,161,867	24,921,140	25,089,942	24,891,007	26,624,376	25,605,624	25,988,485	23,304,608	26,722,147	28,067,673	26,837,883	25,245,420
Grand Total	1,567,052,144	118,934,809	127,348,076	128,681,323	129,727,764	138,084,906	130,565,464	132,693,459	119,241,316	133,881,870	138,587,306	136,043,893	133,261,957
REVENUE:													
Residential	$ 117,823,431	$ 9,335,975	$ 9,971,178	$ 10,379,963	$ 10,487,819	$ 11,371,498	$ 10,082,308	$ 10,154,660	$ 9,633,432	$ 8,985,179	$ 9,238,911	$ 9,263,463	$ 8,919,044
Small General Non Demand	$ 22,678,840	$ 1,793,407	$ 1,962,561	$ 1,975,429	$ 1,969,294	$ 2,127,563	$ 1,903,541	$ 1,988,097	$ 1,869,658	$ 1,741,922	$ 1,765,223	$ 1,789,263	$ 1,792,881
Small General Demand	$ 48,253,949	$ 3,892,588	$ 4,192,538	$ 4,181,623	$ 4,150,658	$ 4,513,787	$ 4,108,079	$ 4,266,730	$ 4,006,949	$ 3,714,258	$ 3,769,415	$ 3,699,298	$ 3,758,026
Large General	$ 74,919,062	$ 6,170,948	$ 6,427,049	$ 6,510,707	$ 6,533,909	$ 6,798,955	$ 6,399,879	$ 6,565,683	$ 6,086,686	$ 5,762,313	$ 6,067,740	$ 5,793,817	$ 5,801,375
Private Outdoor Lighting	$ 309,040	$ 26,392	$ 26,189	$ 26,302	$ 27,542	$ 26,776	$ 22,912	$ 25,785	$ 25,733	$ 25,133	$ 25,553	$ 25,471	$ 25,250
Independent Power Producer	$ 117,110	$ 8,392	$ 7,924	$ 9,619	$ 6,601	$ 7,068	$ 7,057	$ 7,406	$ 7,969	$ 6,029	$ 9,249	$ 20,053	$ 19,744
Sub-Total	$ 264,101,431	$ 21,227,703	$ 22,587,439	$ 23,083,643	$ 23,175,823	$ 24,845,648	$ 22,523,776	$ 23,008,362	$ 21,630,428	$ 20,234,834	$ 20,876,091	$ 20,591,366	$ 20,316,320
Government Service:													
Small Non Demand	$ 4,157,890	$ 335,723	$ 366,623	$ 343,795	$ 354,533	$ 372,707	$ 350,949	$ 356,541	$ 335,126	$ 332,434	$ 341,017	$ 334,963	$ 333,478
Small Demand	$ 25,540,259	$ 2,104,471	$ 2,213,718	$ 2,081,391	$ 2,159,463	$ 2,323,025	$ 2,164,585	$ 2,224,973	$ 2,094,220	$ 2,016,922	$ 2,046,340	$ 2,043,720	$ 2,067,433
Large	$ 19,852,611	$ 1,680,530	$ 1,733,549	$ 1,609,173	$ 1,667,786	$ 1,840,797	$ 1,676,200	$ 1,707,269	$ 1,628,297	$ 1,525,771	$ 1,652,805	$ 1,583,988	$ 1,546,446
Street Lighting (Agencies)	$ 5,557,483	$ 477,638	$ 499,032	$ 568,447	$ 477,183	$ 477,272	$ 452,952	$ 455,729	$ 439,995	$ 427,482	$ 416,951	$ 419,351	$ 445,451
Sub-Total	$ 55,108,243	$ 4,598,362	$ 4,812,921	$ 4,602,806	$ 4,658,965	$ 5,013,801	$ 4,644,687	$ 4,744,512	$ 4,497,638	$ 4,302,609	$ 4,457,113	$ 4,382,022	$ 4,392,807
Total	$ 319,209,674	$ 25,826,065	$ 27,400,361	$ 27,686,449	$ 27,834,788	$ 29,859,448	$ 27,168,463	$ 27,752,874	$ 26,128,065	$ 24,537,443	$ 25,333,204	$ 24,973,388	$ 24,709,127
U.S. Navy	$ 59,119,199	$ 5,271,574	$ 5,243,314	$ 5,217,194	$ 4,618,042	$ 5,005,555	$ 5,623,411	$ 5,202,943	$ 4,155,974	$ 5,033,103	$ 4,642,130	$ 4,254,065	$ 4,851,893
Grand Total	$ 378,328,873	$ 31,097,639	$ 32,643,674	$ 32,903,643	$ 32,452,830	$ 34,865,003	$ 32,791,874	$ 32,955,817	$ 30,284,040	$ 29,570,546	$ 29,975,334	$ 29,227,453	$ 29,561,020
NUMBER OF CUSTOMERS:													
Residential	44,006	43,887	44,005	44,003	44,074	44,086	43,991	44,065	43,995	44,119	43,898	43,996	43,950
Small General Non Demand	4,158	4,159	4,185	4,183	4,173	4,172	4,183	4,154	4,153	4,142	4,129	4,131	4,134
Small General Demand	984	982	984	982	984	988	988	987	991	981	981	982	982
Large General	119	118	118	119	119	119	119	119	118	119	118	117	119
Private Outdoor Lighting	529	525	525	531	532	533	536	526	527	527	530	527	530
Independent Power Producer	3	2	3	3	3	2	2	2	2	2	3	3	3
Sub-Total	49,798	49,673	49,820	49,821	49,885	49,900	49,819	49,853	49,786	49,890	49,659	49,756	49,718
Government Service:													
Small Non Demand	685	677	683	690	694	691	692	689	684	686	679	678	676
Small Demand	351	353	354	351	351	350	350	350	351	350	350	354	351
Large	47	47	47	47	47	47	47	47	47	47	47	47	46
Street Lighting (Agencies)	489	627	614	612	559	526	513	479	421	389	378	378	377
Sub-Total	1,573	1,704	1,698	1,700	1,651	1,614	1,602	1,565	1,503	1,472	1,454	1,457	1,450
Total	51,371	51,377	51,518	51,521	51,536	51,514	51,421	51,418	51,289	51,362	51,113	51,213	51,168
U.S. Navy	1	1	1	1	1	1	1	1	1	1	1	1	1
Grand Total	51,372	51,378	51,519	51,522	51,537	51,515	51,422	51,419	51,290	51,363	51,114	51,214	51,169

GPA303

GUAM POWER AUTHORITY
ACCRUED REVENUE
SEPTEMBER 2018

RATE	NUMBER OF CUSTOMERS	KWH SALES	TOTAL REVENUE AMOUNT	TOTAL REVENUE C/KWH	BASE RATE REVENUE C/KWH	BASE RATE REVENUE AMOUNT	AVERAGE PER CUSTOMER KWH	AVERAGE PER CUSTOMER REVENUE	NON-FUEL C/KWH	NON-FUEL AMOUNT	0.154242 FUEL C/KWH	FUEL AMOUNT
Month ended September 2018												
R Residential	43,887	37,207,511	$ 9,335,975	$ 25.09	$ 25.09	$ 9,335,975	848	$ 213	$ 9.67	$ 3,597,014	$ 15.42	$ 5,738,961
G Small Gen. Non Demand	4,159	6,128,698	$ 1,793,407	$ 29.26	$ 29.26	$ 1,793,407	1,474	$ 431	$ 13.84	$ 848,105	$ 15.42	$ 945,303
J Small Gen. Demand	982	14,018,162	$ 3,892,588	$ 27.77	$ 27.77	$ 3,892,588	14,275	$ 3,964	$ 12.35	$ 1,731,150	$ 15.42	$ 2,161,438
P Large General	118	23,573,240	$ 6,170,948	$ 26.18	$ 26.18	$ 6,170,948	199,773	$ 52,296	$ 10.81	$ 2,549,051	$ 15.36	$ 3,621,896
I Independent Power Producer	2	29,708	$ 8,392	$ 28.25	$ 28.25	$ 8,392	14,854	$ 4,196	$ 13.32	$ 3,958	$ 14.93	$ 4,435
H Private St. Lights	525	34,933	$ 26,392	$ 75.55	$ 75.55	$ 26,392	67	$ 50	$ 60.13	$ 21,004	$ 15.42	$ 5,388
Sub-Total	49,673	80,992,253	$ 21,227,703	$ 26.21	$ 26.21	$ 21,227,703	1,631	$ 427	$ 10.80	$ 8,750,282	$ 15.41	$ 12,477,421
Government Service:												
S Small Non Demand	677	1,089,787	$ 335,723	$ 30.81	$ 30.81	$ 335,723	1,610	$ 496	$ 15.38	$ 167,632	$ 15.42	$ 168,091
K Small Demand	353	7,082,161	$ 2,104,471	$ 29.72	$ 29.72	$ 2,104,471	20,063	$ 5,962	$ 14.29	$ 1,012,105	$ 15.42	$ 1,092,367
L Large	47	5,873,776	$ 1,680,530	$ 28.61	$ 28.61	$ 1,680,530	124,974	$ 35,756	$ 13.37	$ 785,049	$ 15.25	$ 895,481
F Street Lighting (Agencies)	627	734,966	$ 477,638	$ 64.99	$ 64.99	$ 477,638	1,172	$ 762	$ 49.56	$ 364,275	$ 15.42	$ 113,363
Sub-Total	1,704	14,780,690	$ 4,598,362	$ 31.11	$ 31.11	$ 4,598,362	8,674	$ 2,699	$ 15.76	$ 2,329,061	$ 15.35	$ 2,269,301
	51,377	95,772,942	$ 25,826,065	$ 57.32	$ 57.32	$ 25,826,065	1,864	$ 503	$ 11.57	$ 11,079,343	$ 15.40	$ 14,746,722
U.S. Navy	1	23,161,867	$ 5,271,574	$ 22.76	$ 22.76	$ 5,271,574			$ 7.00	$ 1,622,468	$ 15.75	$ 3,649,106
TOTAL	51,378	118,934,809	$ 31,097,639	$ 26.15	$ 26.15	$ 31,097,639	2,315	$ 605	$ 10.68	$ 12,701,811	$ 15.47	$ 18,395,828
Twelve Months Ended September 2018												
R Residential	44,006	495,346,749	$ 117,823,431	$ 23.79	$ 23.79	$ 117,823,431	11,256	$ 2,677	$ 9.63	$ 47,684,300	$ 14.16	$ 70,139,131
G Small Gen. Non Demand	4,158	81,419,604	$ 22,678,840	$ 27.85	$ 27.85	$ 22,678,840	19,581	$ 5,454	$ 13.69	$ 11,144,442	$ 14.17	$ 11,534,398
J Small Gen. Demand	984	184,605,153	$ 48,253,949	$ 26.14	$ 26.14	$ 48,253,949	187,543	$ 49,022	$ 12.01	$ 22,162,504	$ 14.13	$ 26,091,445
P Large General	119	307,368,249	$ 74,919,062	$ 24.37	$ 24.37	$ 74,919,062	2,593,825	$ 632,228	$ 10.42	$ 32,030,195	$ 13.95	$ 42,888,867
I Independent Power Producer	3	479,714	$ 117,110	$ 24.41	$ 24.41	$ 117,110	191,886	$ 46,844	$ 11.49	$ 55,133	$ 12.92	$ 61,977
H Private St. Lights	529	403,056	$ 309,040	$ 76.67	$ 76.67	$ 309,040	762	$ 584	$ 62.65	$ 252,499	$ 14.03	$ 56,540
Sub-Total	49,798	1,069,622,525	$ 264,101,431	$ 24.69	$ 24.69	$ 264,101,431	21,479	$ 5,303	$ 10.60	$ 113,329,073	$ 14.10	$ 150,772,358
Government Service:												
S Small Non Demand	685	14,326,985	$ 4,157,890	$ 29.02	$ 29.02	$ 4,157,890	20,918	$ 6,071	$ 15.05	$ 2,156,006	$ 13.97	$ 2,001,884
K Small Demand	351	92,945,937	$ 25,540,259	$ 27.48	$ 27.48	$ 25,540,259	264,615	$ 72,712	$ 13.51	$ 12,553,263	$ 13.97	$ 12,986,996
L Large	47	74,650,307	$ 19,852,611	$ 26.59	$ 26.59	$ 19,852,611	1,591,126	$ 423,146	$ 12.79	$ 9,544,414	$ 13.81	$ 10,308,197
F Street Lighting (Agencies)	489	9,046,218	$ 5,557,483	$ 61.43	$ 61.43	$ 5,557,483	18,484	$ 11,355	$ 47.34	$ 4,282,666	$ 14.09	$ 1,274,816
Sub-Total	1,573	190,969,447	$ 55,108,243	$ 28.86	$ 28.86	$ 55,108,243	121,443	$ 35,045	$ 14.94	$ 28,536,350	$ 13.91	$ 26,571,893
U.S. Navy	1	306,460,172	$ 59,119,199	$ 19.29	$ 19.29	$ 59,119,199			$ 6.25	$ 19,138,937	$ 13.05	$ 39,980,262
TOTAL	51,372	1,567,052,144	$ 378,328,873	$ 24.14	$ 24.14	$ 378,328,873	30,504	$ 7,365	$ 10.27	$ 161,004,359	$ 13.87	$ 217,324,513
Twelve Months Ended September 2018												
R Residential	44,006	495,346,749	$ 117,823,431	$ 23.79	$ 23.79	$ 117,823,431	11,256	$ 2,677	$ 9.63	$ 47,684,300	$ 14.16	$ 70,139,131
G Small Gen. Non Demand	4,158	81,419,604	$ 22,678,840	$ 27.85	$ 27.85	$ 22,678,840	19,581	$ 5,454	$ 13.69	$ 11,144,442	$ 14.17	$ 11,534,398
J Small Gen. Demand	984	184,605,153	$ 48,253,949	$ 26.14	$ 26.14	$ 48,253,949	187,543	$ 49,022	$ 12.01	$ 22,162,504	$ 14.13	$ 26,091,445
P Large General	119	307,368,249	$ 74,919,062	$ 24.37	$ 24.37	$ 74,919,062	2,593,825	$ 632,228	$ 10.42	$ 32,030,195	$ 13.95	$ 42,888,867
I Independent Power Producer	3	479,714	$ 117,110	$ 24.41	$ 24.41	$ 117,110	191,886	$ 46,844	$ 11.49	$ 55,133	$ 12.92	$ 61,977
H Private St. Lights	529	403,056	$ 309,040	$ 76.67	$ 76.67	$ 309,040	762	$ 584	$ 62.65	$ 252,499	$ 14.03	$ 56,540
Sub-Total	49,798	1,069,622,525	$ 264,101,431	$ 24.69	$ 24.69	$ 264,101,431	21,479	$ 5,303	$ 10.60	$ 113,329,073	$ 14.10	$ 150,772,358
Government Service:												
S Small Non Demand	685	14,326,985	$ 4,157,890	$ 29.02	$ 29.02	$ 4,157,890	20,918	$ 6,071	$ 15.05	$ 2,156,006	$ 13.97	$ 2,001,884
K Small Demand	351	92,945,937	$ 25,540,259	$ 27.48	$ 27.48	$ 25,540,259	264,615	$ 72,712	$ 13.51	$ 12,553,263	$ 13.97	$ 12,986,996
L Large	47	74,650,307	$ 19,852,611	$ 26.59	$ 26.59	$ 19,852,611	1,591,126	$ 423,146	$ 12.79	$ 9,544,414	$ 13.81	$ 10,308,197
F Street Lighting (Agencies)	489	9,046,218	$ 5,557,483	$ 61.43	$ 61.43	$ 5,557,483	18,484	$ 11,355	$ 47.34	$ 4,282,666	$ 14.09	$ 1,274,816
Sub-Total	1,573	190,969,447	$ 55,108,243	$ 28.86	$ 28.86	$ 55,108,243	121,443	$ 35,045	$ 14.94	$ 28,536,350	$ 13.91	$ 26,571,893
	51,371	1,260,591,972	$ 319,209,674	$ 25.32	$ 25.32	$ 319,209,674	24,539	$ 40,348	$ 11.25	$ 141,865,423	$ 14.07	$ 177,344,252
U.S. Navy	1	306,460,172	$ 59,119,199	$ 19.29	$ 19.29	$ 59,119,199			$ 6.25	$ 19,138,937	$ 13.05	$ 39,980,262
TOTAL	51,372	1,567,052,144	$ 378,328,873	$ 24.14	$ 24.14	$ 378,328,873	30,504	$ 7,365	$ 10.27	$ 161,004,359	$ 13.87	$ 217,324,513

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

318Sep18 **FY 2018 Versus FY 2017**

	September 2018		September 2017		Y T D 2018		Y T D 2017		MOVING TWELVE MONTHS	
Gross Generation										
Number of days in Period	**30**		**30**		**365**		**273**		**365**	
Peak demand	**240**		**254**		**254**		**257**		**261**	
Date	**09/18/18**		**09/19/17**		**10/30/17**		**06/13/17**		**08/01/17**	
	KWH	**% change**	**KWH**	**% change**	**KWH**	**% change**	**KWH**	**% change**	**KWH**	**% change**
Energy Account:										
Kilowatt hours GPA:										
Cabras 1 & 2	39,547,000		43,379,000		651,235,000		694,993,000		651,235,000	
Cabras No. 3	0		0		0		0		0	
Cabras No. 4	0		0		0		0		0	
MEC (ENRON) Piti 8 (IPP)	27,038,800		28,279,500		318,373,900		319,633,700		318,373,900	
MEC (ENRON) Piti 9 (IPP)	25,348,200		27,521,700		323,835,900		308,062,300		323,835,900	
TEMES Piti 7 (IPP)	8,794,652		9,342,829		40,313,497		46,981,369		40,313,497	
Tanguisson 2	0		0		0		0		0	
Tanguisson 1	0		0		0		0		0	
Diesels/CT's & Others:							0			
MDI 10MW	314,391		0		1,300,258		2,257,627		1,300,258	
NRG Solar Dandan	3,343,655		3,971,229		46,301,346		43,190,802		46,301,346	
Dededo CT #1	4,290,780		2,801,170		11,806,070		7,123,300		11,806,070	
Dededo CT #2	4,817,040		1,214,370		12,226,470		5,832,592		12,226,470	
Macheche CT	2,912,826		7,734,370		48,354,741		55,567,556		48,354,741	
Yigo CT (Leased)	6,487,000		6,967,293		48,913,165		41,375,947		48,913,165	
Tenjo	2,514,900		5,274,540		41,498,130		45,457,480		41,498,130	
Talofofo 10 MW	0		1,703,310		13,311,900		18,771,390		13,311,900	
Aggreko	4,880,536		6,609,790		160,728,090		173,446,539		160,728,090	
Wind Turbine*	337		6,766		312,305		387,195		312,305	
Orote	0		0		0		0		0	
Marbo	0		0		0		0		0	
	130,290,117		**144,805,867**		**1,718,510,772**		**1,763,080,796**		**1,718,510,772**	
Ratio to last year		89.98		102.62		97.47		**102.45**		**97.47**
Station use	4,705,562		5,200,512		62,715,940		65,894,996		62,715,940	
Ratio to Gross generation		3.61		3.59		3.65		3.74		**3.65**
Net send out	125,584,555		139,605,354		1,655,794,831		1,697,185,800		1,655,794,831	
Ratio to last year		89.96		102.24		97.56		**102.49**		**97.56**
KWH deliveries:										
Sales to Navy (@34.5kv)	**23,161,867**		**26,906,320**		**306,460,172**		**318,585,903**		**306,460,172**	
Ratio to last year		86.08		103.48		96.19		**100.97**		**96.19**
GPA-metered	**102,422,688**		**112,699,034**		**1,349,334,659**		**1,378,599,897**		**1,349,334,659**	
Ratio to last year		90.88		101.95		97.88		**102.85**		**97.88**
Power factor adj.	0		0		0		0		0	
Adjusted	102,422,688		112,699,034		1,349,334,659		1,378,599,897		1,349,334,659	
GPA KWH Accountability:										
Sales to civilian customers-										
accrual basis	**95,772,942**		**106,086,591**		**1,260,591,970**		**1,291,507,112**		**1,260,591,970**	
Ratio to last year		90.28		102.07		97.61		**102.81**		**97.61**
GPA use-KWH	289,813		252,156		3,887,569		3,144,238		3,887,569	
Unaccounted For	6,359,933		6,360,287		84,855,120		83,948,548		84,855,120	
Ratio to deliveries		6.21		5.64		6.29		6.09		6.29
Ratio to Gross Generation		4.88		4.39		4.94		4.76		4.94
Ratio to Net Send Out		5.06		4.56		5.12		4.95		5.12

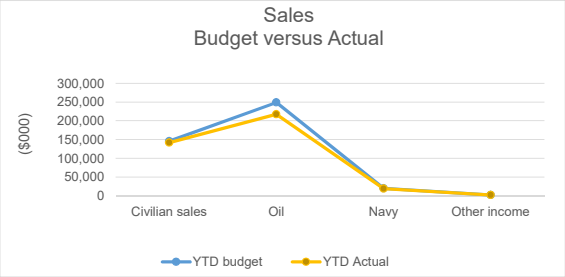
GPA-317Sep18

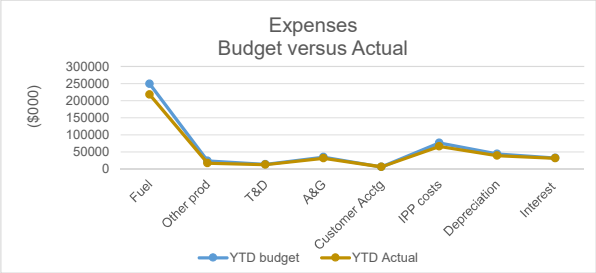
Guam Power Authority
Fuel Consumption
FY 2018

Description	September 2018 BARRELS	September 2018 AMOUNT	YEAR-TO-DATE BARRELS	YEAR-TO-DATE AMOUNT	MOVING 12 MONTHS BARREL S	MOVING 12 MONTHS AMOUNT
FUEL FURNISHED:						
NAVY:						
Diesel	0	0	0	0	0	0
Low Sulfur	0	0	0	0	0	0
	0	**0**	**0**	**0**	**0**	**0**
GPA:						
RFO	75,534	$5,490,419	1,557,446	$ 98,833,516	1,557,446	$ 98,833,516
Diesel	84,118	$7,894,144	776,249	$ 69,227,184	776,249	$ 69,227,184
Low Sulfur	60,966	$4,605,670	392,638	$ 25,306,636	392,638	$ 25,306,636
Deferred Fuel Costs	0	-$1,057,461	0	$ 8,380,506	0	$ 8,380,506
Fuel Adjustments	0	-$4,673		$ (235,674)	0	$ (235,674)
Fuel Handling Costs	0	$1,462,191	0	$ 15,812,350	0	$ 15,812,350
	220,618	**$18,390,290**	**2,726,333**	**$ 217,324,518**	**2,726,333**	**$ 217,324,518**
IWPS:						
GPA RFO	75,534	$5,490,419	1,557,446	$ 98,833,516	1,557,446	$ 98,833,516
Diesel	84,118	$7,894,144	776,249	$ 69,227,184	776,249	$ 69,227,184
Low Sulfur	60,966	$4,605,670	392,638	$ 25,306,636	392,638	$ 25,306,636
Deferred Fuel Costs	0	-$1,057,461	0	$ 8,380,506	0	$ 8,380,506
Fuel Variance	0	-$4,673	0	$ (235,674)		$ (235,674)
Fuel Handling Costs	0	$1,462,191	0	$ 15,812,350	0	$ 15,812,350
	220,618	**$18,390,290**	**2,726,333**	**$ 217,324,518**	**2,726,333**	**$ 217,324,518**
AVERAGE COST/Bbl.						
GPA RFO		**$72.69**		**$63.46**		**$63.46**
Diesel		**$93.85**		**$89.18**		**$89.18**
Low Sulfur		**$75.54**		**$64.45**		**$64.45**
AS BURNED						
Cabras 1 & 2						
RFO	36,769	$ 2,685,122	855,489	$ 54,217,966	855,489	$ 54,217,966
Low Sulfur	30,604	$ 2,324,339	233,580	$ 15,077,705	233,580	$ 15,077,705
Diesel	276	$ 27,800	2,342	$ 195,642	2,342	$ 195,642
	67,649	$ 5,037,261	1,091,411	$ 69,491,314	1,091,411	$ 69,491,314
Cabras 3 & 4						
RFO	0	$ -	0	$ -	0	$ -
Low Sulfur	0	$ -	0	$ -	0	$ -
Diesel	0	$ -	0	$ -	0	$ -
	0	$ -	0	$ -	0	$ -
MEC (Piti Units 8&9)						
RFO	38,766	$ 2,805,296	701,957	$ 44,615,550	701,957	$ 44,615,550
Low Sulfur	30,362	$ 2,281,331	159,058	$ 10,228,931	159,058	$ 10,228,931
Diesel	6	$ 408	67	$ 4,192	67	$ 4,192
	69,134	$ 5,087,035	861,082	$ 54,848,672	861,082	$ 54,848,672
Diesel & CT's - GPA:						
MDI Dsl	599	$ 44,456	2,160	$ 153,222	2,160	$ 153,222
Macheche CT	6,239	$ 590,478	103,760	$ 9,026,871	103,760	$ 9,026,871
Yigo CT	13,583	$ 1,303,153	102,598	$ 9,237,003	102,598	$ 9,237,003
Talofofo 10 MW	0	$ -	22,451	$ 1,982,147	22,451	$ 1,982,147
Aggreko	8,938	$ 859,941	295,809	$ 26,193,615	295,809	$ 26,193,615
Tenjo	4,502	$ 451,898	71,203	$ 6,516,969	71,203	$ 6,516,969
TEMES (IPP)	22,859	$ 2,145,194	103,539	$ 9,350,457	103,539	$ 9,350,457
GWA Generators	693	$ 81,480	1,683	$ 197,832	1,683	$ 197,832
	83,836	$ 7,865,936	773,840	$ 69,027,350	773,840	$ 69,027,350
Deferred Fuel Costs	0	$ (1,057,461)		$ 8,380,506		$ 8,380,506
Adjustment		$ (4,673)		$ (235,674)		$ (235,674)
Fuel Handling Costs	0	$ 1,462,191		$ 15,812,350		$ 15,812,350
TOTAL	**220,618**	**$ 18,390,290**	**2,726,333**	**$ 217,324,518**	**2,726,333**	**$ 217,324,518**

Statement of operations
Comparison-Budget versus Actual
For the month and year to date ended September 30, 2018

	Budget	Actual September-18	Variance	YTD Budget	YTD Actual	Variance
KwH Sales-Civilian	107,808	95,773	12,035	1,302,418	1,260,592	41,826
Non-fuel yield	$ 0.105576	$ 0.115680	$ (0.010104)	$ 0.105713	$ 0.112539	$ (0.006826)
KwH Sales-Navy	25,849	23,162	2,687	316,231	306,460	9,771
Non-fuel yield	$ 0.061774	$ 0.070028	$ (0.008255)	$ 0.061774	$ 0.062449	$ (0.000675)
Operating revenue						
Civilian sales	12,054	11,079	975	145,529	141,866	3,663
Oil	20,534	18,396	2,138	248,677	217,324	31,353
Navy	1,597	1,622	-25	19,535	19,138	397
Other income	169	194	-25	2,030	2,217	-187
	34,354	31,291	3,063	415,771	380,545	35,226
Bad debts expense	87	-285	372	1,039	678	362
Total operating revenues	34,267	31,576	2,691	414,731	379,867	34,864
Operating expenses:						
Production fuel	20,534	18,390	2,144	248,677	217,325	31,352
O & M expenses:						
Other production	1,860	1,596	264	23,260	16,999	6,261
Transmission distribution	613	389	224	13,436	12,229	1,207
Administrative expense	3,627	2,515	1,112	34,315	30,928	3,387
Customer accounting	339	622	-283	4,746	5,560	-814
	6,439	5,122	1,317	75,757	65,716	10,041
IPP costs	1,383	1,414	-31	17,355	17,552	-197
Depreciation	3,635	3,229	406	43,619	38,550	5,069
	31,991	28,156	3,836	385,408	339,143	46,265
Operating income	2,276	3,421	-1,145	29,324	40,725	-11,401
Other revenue (expenses):						
Investment income	99	524	-426	1,184	3,260	-2,076
Interest expense	(2,654)	(2,500)	(154)	(31,857)	(31,621)	(236)
AFUDC	61	123	(62)	730	1,686	(956)
Losses due to typhoon	0	2,310	(2,310)	0	2,310	(2,310)
Bond issuance costs/Other expenses	135	(120)	254	1,615	(2,732)	4,347
Net income before capital contribution	(84)	3,759	(3,844)	996	13,629	(12,634)
Grants from the U.S. Government	-	-	-	-	116	(116)
Increase (decrease) in net assets	(84)	3,759	(3,844)	996	13,745	(12,750)





Guam Power Authority
Debt service coverage
September 30, 2018

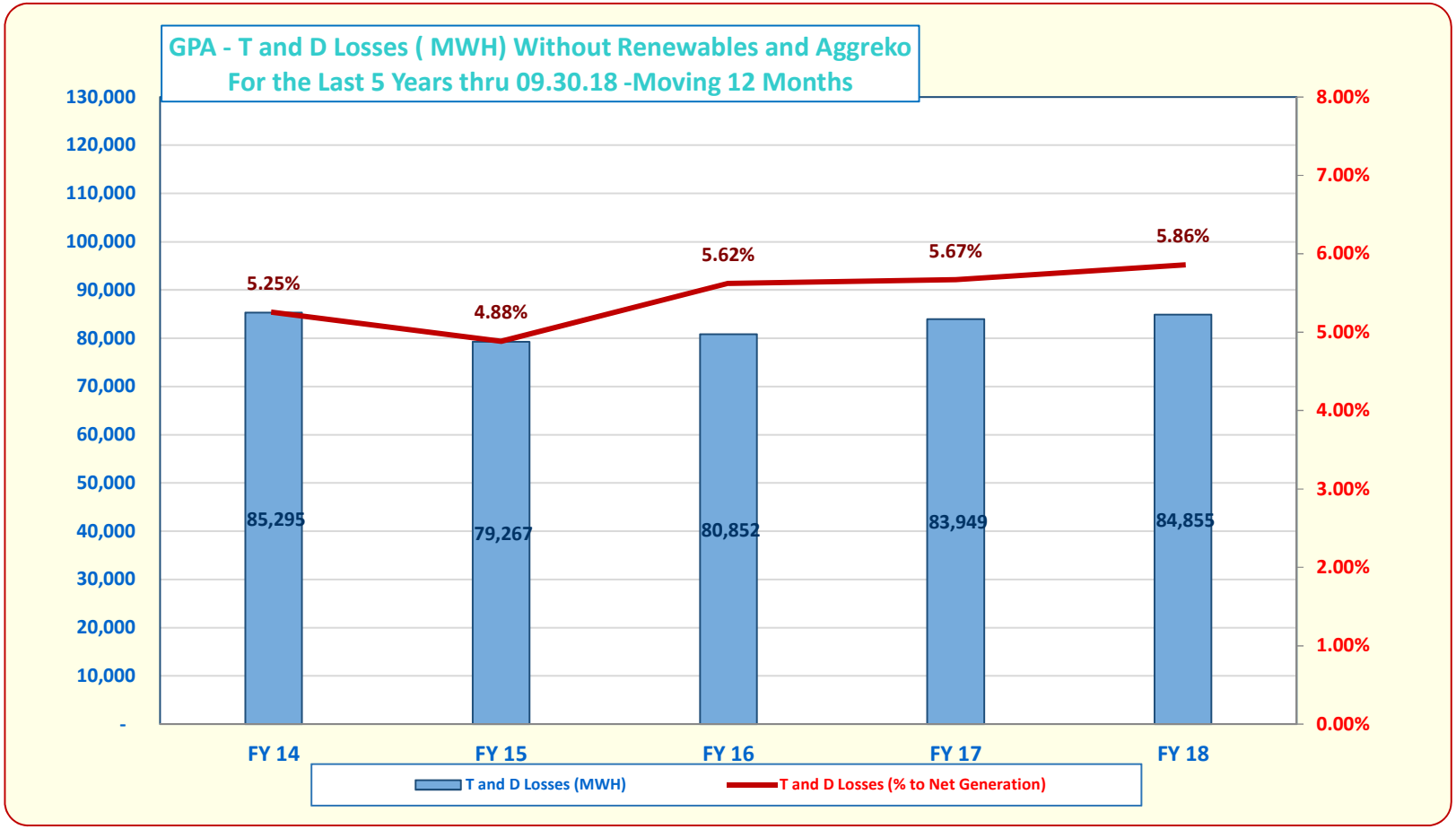
	2014	2015	Restated 2016	2017	YTD 2018
Funds Available for Debt Service					
Earnings from Operations	$40,895	$48,758	$37,981	$36,522	$40,725
Interest Income	$333	$368	$1,227	($32)	1,254
Depreciation Expense	36,989	41,766	44,240	44,292	38,550
Balance Available for Debt Service	$ 78,217	$ 90,892	$ 83,448	$ 80,782	$ 80,529
IPP - Capital Costs					
Principal	$13,064	$18,144	$14,819	$21,263	$23,210
Interest	10,020	8,478	5,970	5,137	3,159
Total IPP Payments	$ 23,084	$ 26,622	$ 20,789	$ 26,400	$ 26,369
Bond Debt Service					
Principal (1993 & 1999 Revenue Bond)	$ -	$ -	$ -	$ -	$ -
Interest (1993 & 1999 Revenue Bond)	-	-	-	-	-
Principal and Interest (2010 Subordinate Bond)	15,193	9,605	-	-	-
Principal and Interest (2010 Senior TE Bond)	7,999	7,999	7,999	7,999	2,000
Principal and Interest (2012 Senior TE Bond)	17,455	17,096	17,098	17,449	17,086
Principal and Interest (2014 Senior TE Bond)		-	10	5,084	5,083
Principal and Interest (2017 Senior TE Bond)					5,916
Total	$ 40,647	$ 34,700	$ 25,107	$ 30,532	$ 30,086
Debt Service Coverage (DSC) Calculation					
Existing DSC Methodology (Senior)	2.17 x	2.56 x	2.50 x	1.78 x	1.80 x
Existing DSC Methodology (Senior+Subordinate)	1.36 x	1.85 x	2.50 x	1.78 x	1.80 x
Bond Covenant DSC	1.92 x	2.62 x	3.32 x	2.65 x	2.68 x
Debt Service Coverage Requirements					
Existing Ratemaking DSC Target	1.75 x	1.75 x	1.75 x	1.75 x	1.75 x
Minimum Bond Covenant Requirement (Senior Bond)	1.30 x	1.30 x	1.30 x	1.30 x	1.30 x
Minimum Bond Covenant Requirement (Subordinate Bond)	1.20 x	1.20 x	1.20 x	1.20 x	1.20 x

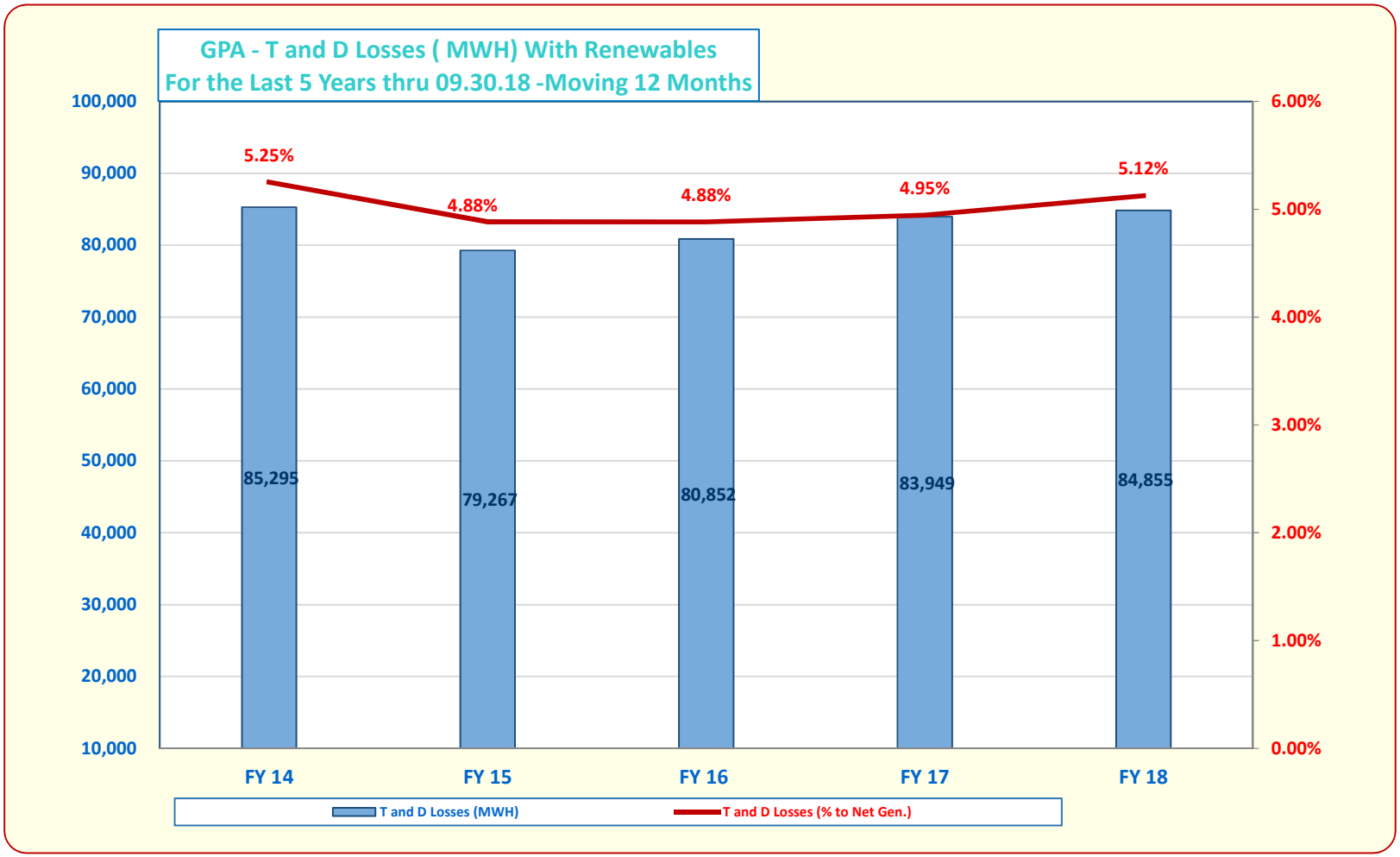
Notes:
(1) Source: Guam Power Authority, 2014 - 2017 Audited Financial Statements
(2) Interest income is net of interest earnings in the Construction Fund and the amortization of deferred credit.
(3) Existing DSC Methodology (Rating Agency Method):
(Operating Earnings + Depreciation Expense - IPP Principal & Interest Payments)/
(Senior and Subordinate Bond Principal & Interest Payments)
(4) Bond Covenant DSC Methodology: (Operating Earnings + Depreciation Expense)/
(Senior and Subordinate Bond Principal & Interest Payments)

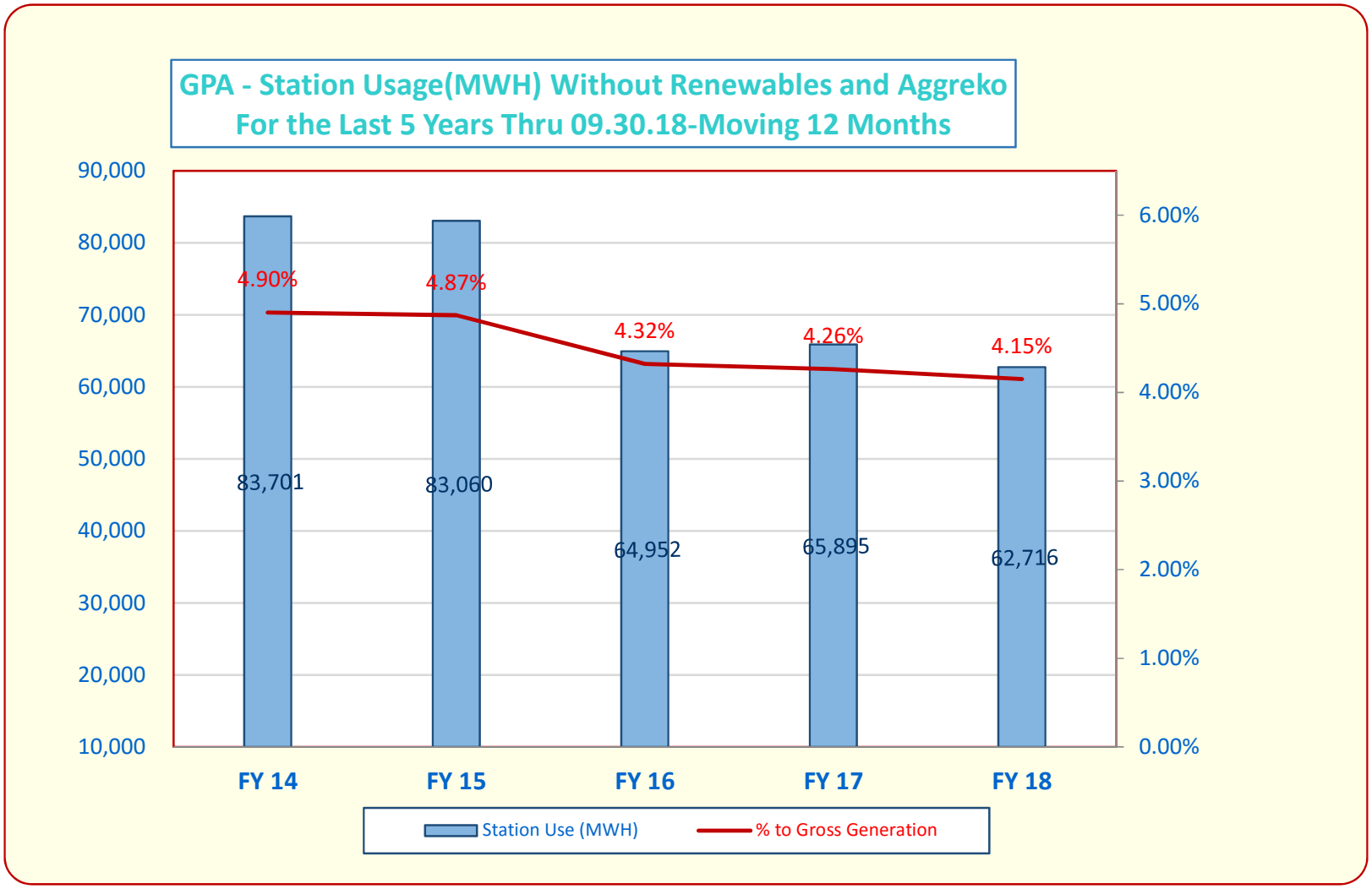
REVENUES-ACTUAL VS PROJECTIONS

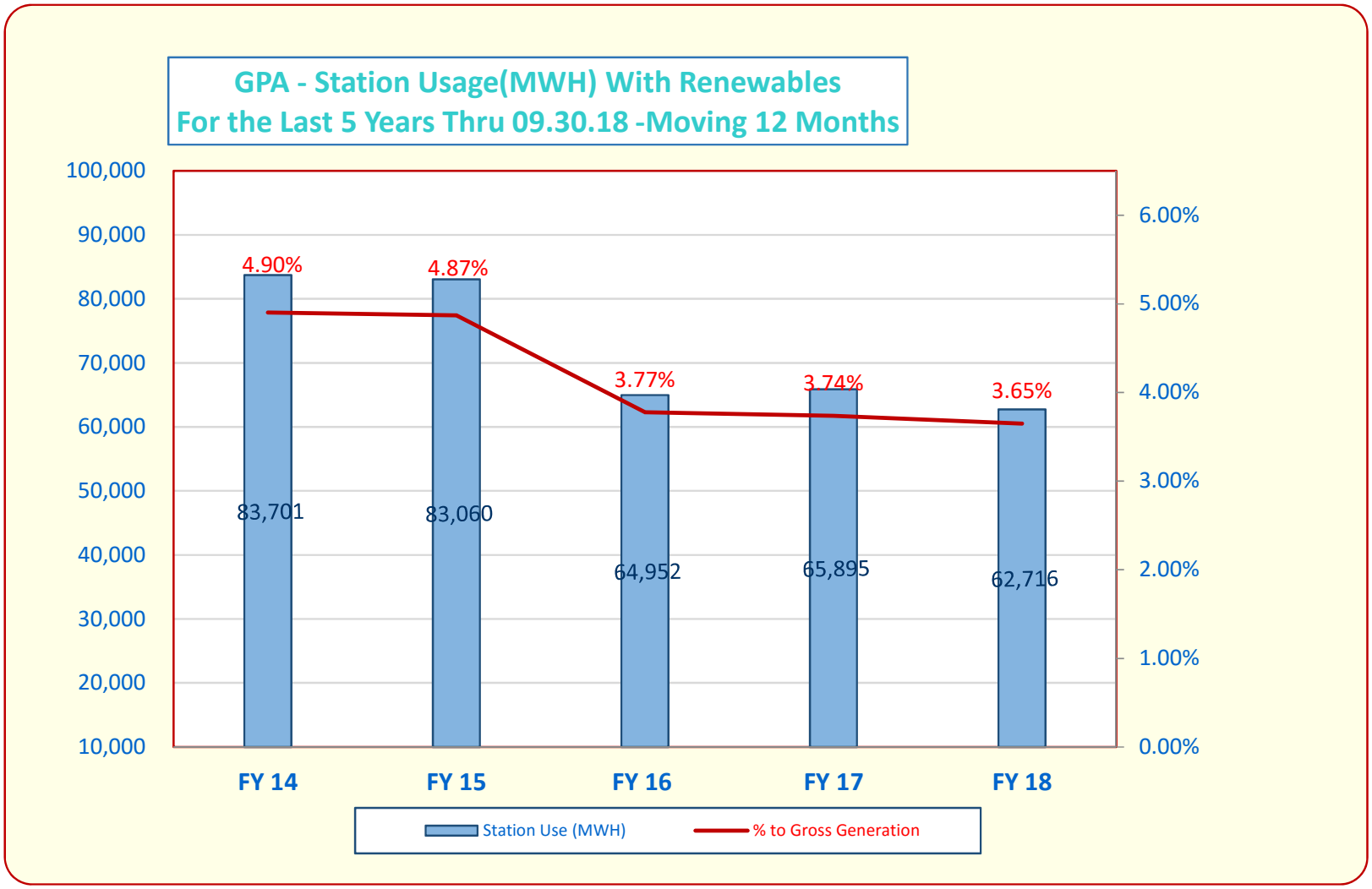
	MONTHLY - SEPTEMBER 2018				YTD THRU 09/30/2018			
	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE
KWH								
Residential	43,202,336	37,207,511	(5,994,825)	-13.88%	510,859,072	495,346,749	(15,512,324)	-3.04%
Small General-Non-Demand	7,458,330	6,128,698	(1,329,632)	-17.83%	86,962,881	81,419,604	(5,543,277)	-6.37%
Small General-Demand	14,650,413	14,018,162	(632,251)	-4.32%	189,414,540	184,605,153	(4,809,388)	-2.54%
Large	26,055,665	23,573,240	(2,482,425)	-9.53%	319,619,304	307,368,249	(12,251,055)	-3.83%
Independent Power Producers	32,593	29,708	(2,885)	-8.85%	399,810	479,714	79,904	19.99%
Private St. Lites	59,646	34,933	(24,713)	-41.43%	667,940	403,056	(264,884)	-39.66%
Sub-total	**91,458,983**	**80,992,253**	**(10,466,731)**	**-11.44%**	**1,107,923,548**	**1,069,622,525**	**(38,301,023)**	**-3.46%**
Government								
Small_Non Demand	1,180,221	1,089,787	(90,434)	-7.66%	13,607,608	14,326,985	719,376	5.29%
Small-Demand	8,219,521	7,082,161	(1,137,360)	-13.84%	97,588,979	92,945,937	(4,643,042)	-4.76%
Large	6,087,418	5,873,776	(213,642)	-3.51%	73,474,132	74,650,307	1,176,175	1.60%
Public St. Lites	862,162	734,966	(127,196)	-14.75%	9,824,053	9,046,218	(777,835)	-7.92%
Sub-total	**16,349,322**	**14,780,690**	**(1,568,633)**	**-9.59%**	**194,494,772**	**190,969,447**	**(3,525,325)**	**-1.81%**
Total-Civilian	**107,808,306**	**95,772,942**	**(12,035,363)**	**-11.16%**	**1,302,418,320**	**1,260,591,972**	**(41,826,348)**	**-3.21%**
USN	25,849,492	23,161,867	(2,687,625)	-10.40%	316,231,411	306,460,172	(9,771,238)	-3.09%
Grand Total	**133,657,798**	**118,934,809**	**(14,722,988)**	**-11.02%**	**1,618,649,731**	**1,567,052,144**	**(51,597,586)**	**-3.19%**
					-	-		
Non-Oil Yield								
Residential	0.096203	0.096674	0.000471	0.49%	0.096203	0.096264	0.000061	0.06%
Small General-Non-Demand	0.136364	0.138383	0.002018	1.48%	0.136364	0.136877	0.000512	0.38%
Small General-Demand	0.119423	0.123493	0.004070	3.41%	0.119423	0.120054	0.000630	0.53%
Large	0.103705	0.108133	0.004429	4.27%	0.103705	0.104208	0.000503	0.49%
Independent Power Producers	0.117983	0.133213	0.015230	0.00%	0.117983	0.114929	(0.003054)	0.00%
Private St. Lites	0.454278	0.601263	0.146985	32.36%	0.454278	0.626462	0.172184	37.90%
Sub-total	**0.105576**	**0.108039**	**0.002462**	**2.33%**	**0.105713**	**0.105952**	**0.000239**	**0.23%**
Government					-			
Small_Non Demand	0.152255	0.153821	0.001567	1.03%	0.152255	0.150486	(0.001769)	-1.16%
Small-Demand	0.135082	0.142909	0.007827	5.79%	0.135082	0.135060	(0.000022)	-0.02%
Large	0.128102	0.133653	0.005551	4.33%	0.128102	0.127855	(0.000247)	-0.19%
Public St. Lites	0.380746	0.495635	0.114889	30.17%	0.380746	0.473421	0.092674	24.34%
Sub-total	**0.146677**	**0.157575**	**0.010897**	**7.43%**	**0.146055**	**0.149429**	**0.003374**	**2.31%**
Total-Civilian	**0.111809**	**0.115683**	**0.003874**	**3.46%**	**0.111738**	**0.112539**	**0.000801**	**0.72%**
USN	0.061774	0.070049	0.008275	13.40%	0.061774	0.062452	0.000678	1.10%
Grand Total	**0.102132**	**0.106796**	**0.004664**	**4.57%**	**0.101976**	**0.102743**	**0.000767**	**0.75%**
Non-Oil Revenues								
Residential	4,156,211	3,597,014	(559,197)	-13.45%	49,146,374	47,684,300	(1,462,074)	-2.97%
Small General-Non-Demand	1,017,050	848,105	(168,945)	-16.61%	11,858,628	11,144,442	(714,186)	-6.02%
Small General-Demand	1,749,598	1,731,150	(18,448)	-1.05%	22,620,479	22,162,504	(457,975)	-2.02%
Large	2,702,093	2,549,051	(153,042)	-5.66%	33,146,003	32,030,195	(1,115,809)	-3.37%
Independent Power Producers	3,845	3,958	112	2.92%	47,171	55,133	7,962	16.88%
Private St. Lites	27,096	21,004	(6,092)	-22.48%	303,430	252,499	(50,931)	-16.79%
Sub-total	**9,655,894**	**8,750,282**	**(905,612)**	**-9.38%**	**117,122,086**	**113,329,073**	**(3,793,013)**	**-3.24%**
Government								
Small_Non Demand	179,694	167,632	(12,062)	-6.71%	2,071,820	2,156,006	84,186	4.06%
Small-Demand	1,110,308	1,012,105	(98,203)	-8.84%	13,182,494	12,553,263	(629,231)	-4.77%
Large	779,811	785,049	5,238	0.67%	9,412,186	9,544,414	132,228	1.40%
Public St. Lites	328,265	364,275	36,010	10.97%	3,740,471	4,282,666	542,195	14.50%
Sub-total	**2,398,077**	**2,329,061**	**(69,016)**	**-2.88%**	**28,406,972**	**28,536,350**	**129,378**	**0.46%**
Total-Civilian	**12,053,971**	**11,079,343**	**(974,628)**	**-8.09%**	**145,529,058**	**141,865,423**	**(3,663,635)**	**-2.52%**
USN	1,596,825	1,622,468	25,643	1.61%	19,534,867	19,138,937	(395,930)	-2.03%
Grand Total	**13,650,796**	**12,701,811**	**(948,985)**	**-6.95%**	**165,063,924**	**161,004,359**	**(4,059,565)**	**-2.46%**
% of Total Revenues	39.93%	40.84%			39.90%	42.56%		
Oil Revenues								
Residential	6,637,273	5,738,961	(898,312)	-13.53%	78,484,436	70,139,131	(8,345,306)	-10.63%
Small General-Non-Demand	1,145,840	945,303	(200,537)	-17.50%	13,360,304	11,534,398	(1,825,906)	-13.67%
Small General-Demand	2,250,776	2,161,438	(89,338)	-3.97%	29,100,185	26,091,445	(3,008,740)	-10.34%
Large	4,002,991	3,621,896	(381,095)	-9.52%	49,103,838	42,888,867	(6,214,971)	-12.66%
Independent Power Producers	5,007	4,435	(573)	-11.44%	61,424	61,977	554	0.90%
Private St. Lites	9,164	5,388	(3,775)	-41.20%	102,617	56,540	(46,077)	-44.90%
Sub-total	**14,051,051**	**12,477,421**	**(1,573,630)**	**-11.20%**	**170,212,804**	**150,772,358**	**(19,440,446)**	**-11.42%**
Government								
Small_Non Demand	181,320	168,091	(13,229)	-7.30%	2,090,568	2,001,884	(88,684)	-4.24%
Small-Demand	1,262,784	1,092,367	(170,417)	-13.50%	14,992,816	12,986,996	(2,005,820)	-13.38%
Large	935,224	895,481	(39,743)	-4.25%	11,287,997	10,308,197	(979,800)	-8.68%
Public St. Lites	132,456	113,363	(19,093)	-14.41%	1,509,292	1,274,816	(234,475)	-15.54%
Sub-total	**2,511,783**	**2,269,301**	**(242,482)**	**-9.65%**	**29,880,672**	**26,571,893**	**(3,308,779)**	**-11.07%**
Total-Civilian	**16,562,834**	**14,746,722**	**(1,816,112)**	**-10.96%**	**200,093,477**	**177,344,252**	**(22,749,225)**	**-11.37%**
USN	3,971,316	3,649,106	(322,210)	-8.11%	48,583,348	39,980,262	(8,603,086)	-17.71%
Grand Total	**20,534,150**	**18,395,828**	**(2,138,322)**	**-10.41%**	**248,676,825**	**217,324,513**	**(31,352,311)**	**-12.61%**
% of Total Revenues	60.07%	59.16%			60.10%	57.44%		
Grand Total								
Residential	10,793,484	9,335,975	(1,457,509)	-13.50%	127,630,811	117,823,431	(9,807,380)	-7.68%
Small General-Non-Demand	2,162,890	1,793,407	(369,482)	-17.08%	25,218,932	22,678,840	(2,540,092)	-10.07%
Small General-Demand	4,000,374	3,892,588	(107,786)	-2.69%	51,720,664	48,253,949	(3,466,715)	-6.70%
Large	6,705,084	6,170,948	(534,137)	-7.97%	82,249,841	74,919,062	(7,330,779)	-8.91%
Independent Power Producers	8,853	8,392	(461)	-5.20%	108,595	117,110	8,516	7.84%
Private St. Lites	36,259	26,392	(9,867)	-27.21%	406,048	309,040	(97,008)	-23.89%
Sub-total	**23,706,944**	**21,227,703**	**(2,479,242)**	**-10.46%**	**287,334,890**	**264,101,431**	**(23,233,459)**	**-8.09%**
Government					-			
Small_Non Demand	361,014	335,723	(25,291)	-7.01%	4,162,388	4,157,890	(4,498)	-0.11%
Small-Demand	2,373,091	2,104,471	(268,620)	-11.32%	28,175,310	25,540,259	(2,635,051)	-9.35%
Large	1,715,035	1,680,530	(34,504)	-2.01%	20,700,183	19,852,611	(847,573)	-4.09%
Public St. Lites	460,721	477,638	16,917	3.67%	5,249,763	5,557,483	307,720	5.86%
Sub-total	**4,909,861**	**4,598,362**	**(311,499)**	**-6.34%**	**58,287,644**	**55,108,243**	**(3,179,401)**	**-5.45%**
Total-Civilian	**28,616,805**	**25,826,065**	**(2,790,740)**	**-9.75%**	**345,622,534**	**319,209,674**	**(26,412,860)**	**-7.64%**
USN	5,568,141	5,271,574	(296,567)	-5.33%	68,118,215	59,119,199	(8,999,016)	-13.21%
Grand Total	**34,184,947**	**31,097,639**	**(3,087,307)**	**-9.03%**	**413,740,749**	**378,328,873**	**(35,411,876)**	**-8.56%**
	-	-	-					

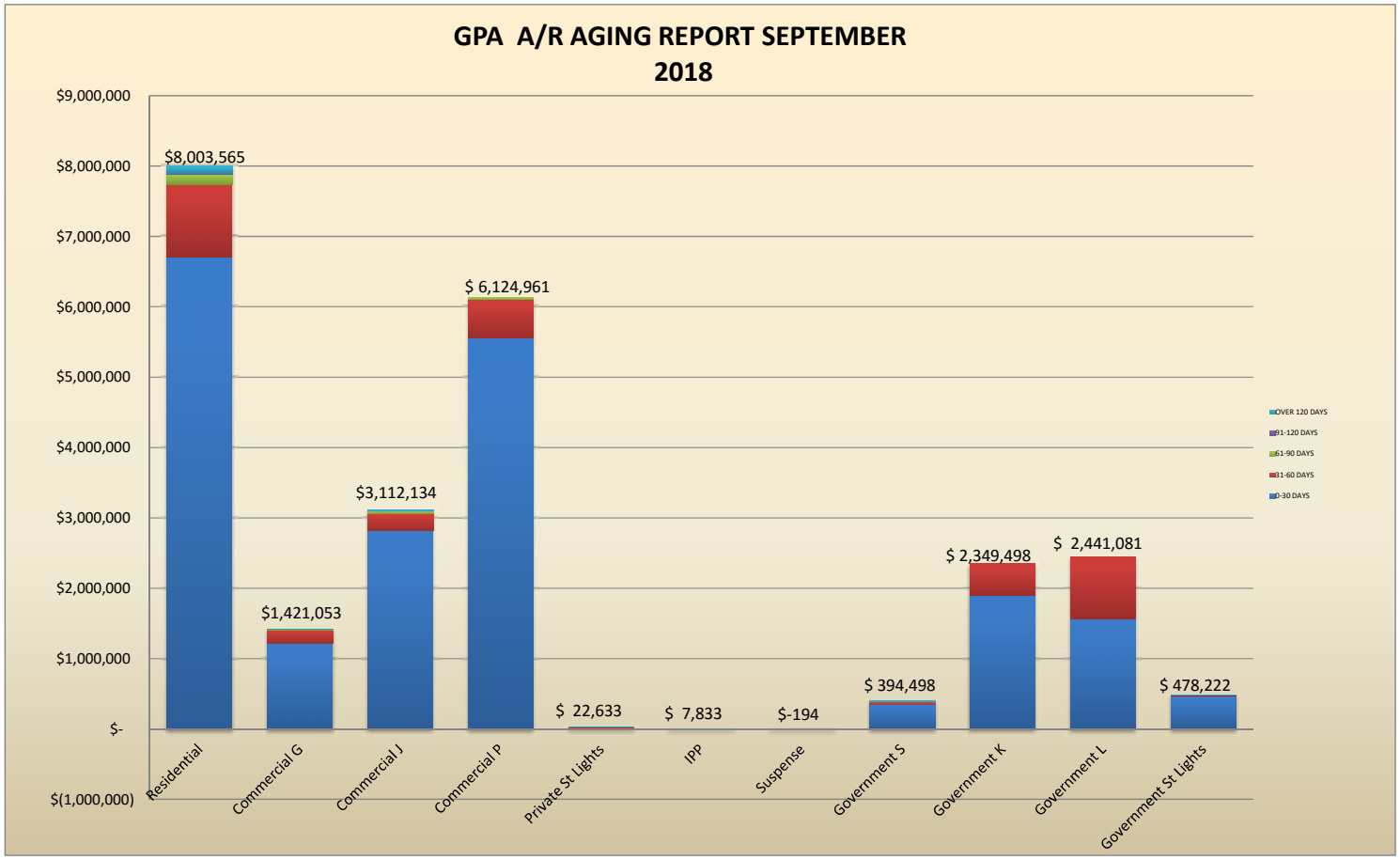
	YTD REVENUES - CURRENT YEAR VS PRIOR YEAR				MTD REVENUES - CURRENT YEAR VS PRIOR YEAR			
	ACTUALS - 12 MONTHS ENDED SEPTEMBER 30				ACTUALS - MONTH ENDED SEPTEMBER 30			
	2018	2017	VARIANCE	% VARIANCE	2018	2017	VARIANCE	% VARIANCE
KWH								
Residential	495,346,749	506,335,601	(10,988,852)	-2.17%	37,207,511	41,491,015	(4,283,504)	-10.32%
Small General-Non-Demand	81,419,604	83,899,700	(2,480,096)	-2.96%	6,128,698	7,022,092	(893,394)	-12.72%
Small General-Demand	184,605,153	190,050,925	(5,445,772)	-2.87%	14,018,162	15,509,408	(1,491,246)	-9.62%
Large	307,368,249	314,573,231	(7,204,982)	-2.29%	23,573,240	25,432,034	(1,858,794)	-7.31%
Independent Power Producers	479,714	1,003,769	(524,055)	-52.21%	29,708	76,532	(46,823)	-61.18%
Private St. Lites	403,056	450,462	(47,405)	-10.52%	34,933	34,586	347	1.00%
Sub-total	**1,069,622,525**	**1,096,313,688**	**(26,691,163)**	**-2.43%**	**80,992,253**	**89,565,666**	**(8,573,413)**	**-9.57%**
Government								
Small_Non Demand	14,326,985	13,902,246	424,739	3.06%	1,089,787	1,246,106	(156,319)	-12.54%
Small-Demand	92,945,937	96,878,602	(3,932,664)	-4.06%	7,082,161	8,084,368	(1,002,207)	-12.40%
Large	74,650,307	74,897,969	(247,662)	-0.33%	5,873,776	6,493,449	(619,673)	-9.54%
Public St. Lites	9,046,218	9,514,606	(468,388)	-4.92%	734,966	697,002	37,964	5.45%
Sub-total	**190,969,447**	**195,193,422**	**(4,223,975)**	**-2.16%**	**14,780,690**	**16,520,925**	**(1,740,235)**	**-10.53%**
Total-Civilian	**1,260,591,972**	**1,291,507,110**	**(30,915,138)**	**-2.39%**	**95,772,942**	**106,086,591**	**(10,313,648)**	**-9.72%**
USN	306,460,172	318,585,902	(12,125,729)	-3.81%	23,161,867	26,906,320	(3,744,453)	-13.92%
Grand Total	**1,567,052,144**	**1,610,093,012**	**(43,040,868)**	**-2.67%**	**118,934,809**	**132,992,911**	**(14,058,102)**	**-10.57%**
Non-Oil Yield								
Residential	0.096264	0.096242	0.000023	0.02%	0.096674	0.096481	0.000194	0.20%
Small General-Non-Demand	0.136877	0.136440	0.000437	0.32%	0.138383	0.136337	0.002046	1.50%
Small General-Demand	0.120054	0.119302	0.000751	0.63%	0.123493	0.120388	0.003105	2.58%
Large	0.104208	0.103044	0.001164	1.13%	0.108133	0.104766	0.003367	3.21%
Independent Power Producers	0.000000	0.111629	-0.111629	-100.00%	0.133213	0.109191	0.024022	22.00%
Private St. Lites	0.626462	0.581765	0.044697	7.68%	0.601263	0.615558	-0.014295	-2.32%
Sub-total	**0.105952**	**0.105481**	**0.000472**	**0.45%**	**0.108039**	**0.106309**	**0.001729**	**1.63%**
Government								
Small_Non Demand	0.150486	0.151371	-0.000885	-0.58%	0.153821	0.149578	0.004244	2.84%
Small-Demand	0.135060	0.134742	0.000318	0.24%	0.142909	0.135894	0.007015	5.16%
Large	0.127855	0.126110	0.001745	1.38%	0.133653	0.126242	0.007411	5.87%
Public St. Lites	0.473421	0.471113	0.002308	0.49%	0.495635	0.508978	-0.013343	-2.62%
Sub-total	**0.149429**	**0.149010**	**0.000418**	**0.28%**	**0.157575**	**0.148872**	**0.008702**	**5.85%**
Total-Civilian	**0.112539**	**0.112060**	**0.000479**	**0.43%**	**0.115683**	**0.112938**	**0.002746**	**2.43%**
USN	0.062452	0.062537	-0.000085	-0.14%	0.070049	0.070364	-0.000315	-0.45%
Grand Total	**0.102743**	**0.102261**	**0.000483**	**0.47%**	**0.106796**	**0.104325**	**0.002472**	**2.37%**
Non-Oil Revenues								
Residential	47,684,300	48,730,504	(1,046,204)	-2.15%	3,597,014	4,003,081	(406,067)	-10.14%
Small General-Non-Demand	11,144,442	11,447,234	(302,793)	-2.65%	848,105	957,371	(109,266)	-11.41%
Small General-Demand	22,162,504	22,673,489	(510,985)	-2.25%	1,731,150	1,867,150	(136,000)	-7.28%
Large	32,030,195	32,414,812	(384,617)	-1.19%	2,549,051	2,664,424	(115,372)	-4.33%
Independent Power Producers	55,133	112,050	(56,917)	-50.80%	3,958	8,357	(4,399)	-52.64%
Private St. Lites	252,499	262,063	(9,563)	-3.65%	21,004	21,289	(285)	-1.34%
Sub-total	**113,329,073**	**115,640,151**	**(2,311,078)**	**-2.00%**	**8,750,282**	**9,521,672**	**(771,390)**	**-8.10%**
Government								
Small_Non Demand	2,156,006	2,104,396	51,610	2.45%	167,632	186,389	(18,757)	-10.06%
Small-Demand	12,553,263	13,053,603	(500,340)	-3.83%	1,012,105	1,098,616	(86,512)	-7.87%
Large	9,544,414	9,445,414	99,000	1.05%	785,049	819,746	(34,697)	-4.23%
Public St. Lites	4,282,666	4,482,455	(199,788)	-4.46%	364,275	354,759	9,516	2.68%
Sub-total	**28,536,350**	**29,085,867**	**(549,518)**	**-1.89%**	**2,329,061**	**2,459,511**	**(130,450)**	**-5.30%**
Total-Civilian	**141,865,423**	**144,726,018**	**(2,860,595)**	**-1.98%**	**11,079,343**	**11,981,182**	**(901,840)**	**-7.53%**
USN	19,138,937	19,923,387	(784,451)	-3.94%	1,622,468	1,893,246	(270,777)	-14.30%
Grand Total	**161,004,359**	**164,649,406**	**(3,645,046)**	**-2.21%**	**12,701,811**	**13,874,428**	**(1,172,617)**	**-8.45%**
% of Total Revenues								
Oil Revenues								
Residential	70,139,131	51,871,474	18,267,657	35.22%	5,738,961	4,884,239	854,722	17.50%
Small General-Non-Demand	11,534,398	8,593,498	2,940,900	34.22%	945,303	826,627	118,676	14.36%
Small General-Demand	26,091,445	19,396,028	6,695,417	34.52%	2,161,438	1,825,123	336,316	18.43%
Large	42,888,867	31,763,248	11,125,618	35.03%	3,621,896	2,978,635	643,261	21.60%
Independent Power Producers	61,977	98,982	(37,004)	-37.38%	4,435	8,720	(4,285)	-49.14%
Private St. Lites	56,540	44,894	11,646	25.94%	5,388	4,071	1,317	32.34%
Sub-total	**150,772,358**	**111,768,124**	**39,004,235**	**34.90%**	**12,477,421**	**10,527,415**	**1,950,006**	**18.52%**
Government								
Small_Non Demand	2,001,884	1,408,613	593,271	42.12%	168,091	146,689	21,402	14.59%
Small-Demand	12,986,996	9,776,475	3,210,521	32.84%	1,092,367	951,676	140,691	14.78%
Large	10,308,197	7,533,951	2,774,246	36.82%	895,481	755,334	140,147	18.55%
Public St. Lites	1,274,816	956,241	318,575	33.32%	113,363	82,050	31,313	38.16%
Sub-total	**26,571,893**	**19,675,280**	**6,896,613**	**35.05%**	**2,269,301**	**1,935,748**	**333,553**	**17.23%**
Total-Civilian	**177,344,252**	**131,443,404**	**45,900,848**	**34.92%**	**14,746,722**	**12,463,163**	**2,283,559**	**18.32%**
USN	39,980,262	34,981,246	4,999,016	14.29%	3,649,106	3,432,137	216,969	6.32%
Grand Total	**217,324,513**	**166,424,650**	**50,899,863**	**30.58%**	**18,395,828**	**15,895,300**	**2,500,528**	**15.73%**
% of Total Revenues								
Grand Total								
Residential	117,823,431	100,601,977	17,221,454	17.12%	9,335,975	8,887,320	448,655	5.05%
Small General-Non-Demand	22,678,840	20,040,732	2,638,108	13.16%	1,793,407	1,783,997	9,410	0.53%
Small General-Demand	48,253,949	42,069,517	6,184,432	14.70%	3,892,588	3,692,273	200,316	5.43%
Large	74,919,062	64,178,060	10,741,002	16.74%	6,170,948	5,643,059	527,888	9.35%
Independent Power Producers	117,110	211,031	(93,921)	-44.51%	8,392	17,076	(8,684)	-50.86%
Private St. Lites	309,040	306,957	2,082	0.68%	26,392	25,361	1,031	4.07%
Sub-total	**264,101,431**	**227,408,274**	**36,693,157**	**16.14%**	**21,227,703**	**20,049,087**	**1,178,616**	**5.88%**
Government								
Small_Non Demand	4,157,890	3,513,008	644,881	18.36%	335,723	333,079	2,645	0.79%
Small-Demand	25,540,259	22,830,078	2,710,181	11.87%	2,104,471	2,050,292	54,179	2.64%
Large	19,852,611	16,979,365	2,873,246	16.92%	1,680,530	1,575,080	105,450	6.69%
Public St. Lites	5,557,483	5,438,696	118,787	2.18%	477,638	436,808	40,829	9.35%
Sub-total	**55,108,243**	**48,761,148**	**6,347,095**	**13.02%**	**4,598,362**	**4,395,259**	**203,103**	**4.62%**
Total-Civilian	**319,209,674**	**276,169,422**	**43,040,252**	**15.58%**	**25,826,065**	**24,444,346**	**1,381,719**	**5.65%**
USN	59,119,199	54,904,634	4,214,565	7.68%	5,271,574	5,325,383	(53,808)	-1.01%
Grand Total	**378,328,873**	**331,074,056**	**47,254,817**	**14.27%**	**31,097,639**	**29,769,728**	**1,327,911**	**4.46%**
	-	-				-		


GPA - T and D Losses (MWH) Without Renewables and Aggreko
For the Last 5 Years thru 09.30.18 -Moving 12 Months
130,000
120,000
110,000
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
-
8.00%
7.00%
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
5.25%
4.88%
5.62%
5.67%
5.86%
85,295
79,267
80,852
83,949
84,855
FY 14
FY 15
FY 16
FY 17
FY 18
T and D Losses (MWH)
T and D Losses (% to Net Generation)


GPA - T and D Losses (MWH) With Renewables
For the Last 5 Years thru 09.30.18 -Moving 12 Months
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
5.25%
4.88%
4.88%
4.95%
5.12%
85,295
79,267
80,852
83,949
84,855
FY 14
FY 15
FY 16
FY 17
FY 18
T and D Losses (MWH)
T and D Losses (% to Net Gen.)


GPA - Station Usage(MWH) Without Renewables and Aggreko
For the Last 5 Years Thru 09.30.18-Moving 12 Months
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
4.90%
4.87%
4.32%
4.26%
4.15%
83,701
83,060
64,952
65,895
62,716
FY 14
FY 15
FY 16
FY 17
FY 18
Station Use (MWH)
% to Gross Generation


GPA - Station Usage(MWH) With Renewables
For the Last 5 Years Thru 09.30.18 -Moving 12 Months
100,000
90,000
80,000
70,000
60,000
50,000
40,000
30,000
20,000
10,000
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
4.90%
4.87%
3.77%
3.74%
3.65%
83,701
83,060
64,952
65,895
62,716
FY 14
FY 15
FY 16
FY 17
FY 18
Station Use (MWH)
% to Gross Generation


GPA A/R AGING REPORT SEPTEMBER 2018
$9,000,000
$8,000,000
$7,000,000
$6,000,000
$5,000,000
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$-
$(1,000,000)
$8,003,565
$1,421,053
$3,112,134
$ 6,124,961
$ 22,633
$ 7,833
$-194
$ 394,498
$ 2,349,498
$ 2,441,081
$ 478,222
Residential
Commercial G
Commercial I
Commercial P
Private St Lights
IPP
Suspense
Government S
Government K
Government L
Government St Lights
OVER 120 DAYS
91-120 DAYS
61-90 DAYS
31-60 DAYS
0-30 DAYS

GUAM POWER AUTHORITY
GOVERNMENT ACCOUNTS RECEIVABLE
BILLING UP TO 10/31/2018 and Payment Applied as of 11/16/2018

Current (10/18 Billing due 11/30/18
30 days Arrears (09/18 due 10/15/18)
60 days and over Arrears (08/18 billing due 09/15/18)

CC&B ACCT NUMBER	DEPARTMENT	BALANCE 9/30/2018	CANCEL/REBILL/ SPEC CHARGE 10/31/2018	BILLING 10/31/2018	PAYMENT 11/16/2018	BALANCE 11/16/2018	
	Line Agencies						
0237100000	Dept. of Corrections	65,932.58		$ 86,333.39	$ (65,932.58)	86,333.39	
0437100000	Dept. of Parks & Rec.	21,092.02	$ -	$ 23,937.16	$ (21,092.02)	23,937.16	
0537100000	Guam Fire Department	13,623.30		$ 16,044.64	$ (13,623.30)	16,044.64	
6995000000	DOA Supply Mgmt (NET METERED)	1,230.38		$ 1,390.11	$ (1,230.38)	1,390.11	
7895000000	Dept. of Administration	4,703.25		$ 5,027.74	$ (4,703.25)	5,027.74	
1337100000	Nieves Flores Library	7,752.77		$ 14,411.36	$ (7,752.77)	14,411.36	
2206200000	General Services Agency	259.84		$ 267.48	$ (259.84)	267.48	
2237100000	DOA-Data Processing	7,589.44		$ 9,440.23	$ (7,589.44)	9,440.23	
2337100000	Dept. of PH&SS	56,928.00		$ 68,534.40	$ (56,928.00)	68,534.40	
3237100000	Dept. of Education	2,078,939.06	$ 47,007.27	$ 1,212,190.85	$ (1,087,839.01)	2,250,298.17	2
3337100000	Guam Police Department	42,871.12	$ -	$ 55,023.90	$ (42,871.12)	55,023.90	
3569100000	Dept of Youth Affairs (Federal)	738.98	$ -	$ 998.42	$ (738.98)	998.42	
4437100000	Dept. of Youth Affair* (Local)	8,392.76	$ -	$ 11,941.65	$ (8,392.76)	11,941.65	
4737100000	Guam Environmental Protect	5,988.03		$ 7,498.85	$ (5,988.03)	7,498.85	
5437100000	Mental Health/Subst.	37,548.48		$ 45,094.15	$ (37,548.48)	45,094.15	
7200300000	Veteran Affairs	810.66		$ 913.87	$ (810.66)	913.87	
7437100000	Civil Defense (Military Affairs)	11,520.80	$ 86.41	$ 13,575.66	$ -	25,182.87	1
7463300000	Pacific Energy Resource Center	644.77		$ 797.22	$ (644.77)	797.22	
8137100000	Dept. of Agriculture	4,416.63		$ 10,914.37	$ (4,416.63)	10,914.37	
8337100000	DPW-FAC Adm Account	23,384.07		$ 28,365.05	$ (23,384.07)	28,365.05	
8437100000	Guam Visitors Bureau	3,888.32		$ 4,597.95	$ (8,486.27)	-	
8446300000	Yona Senior Citizen Center	784.03		$ 880.75	$ (784.03)	880.75	
9437100000	Dept of Chamorro Affairs/Chamorro Village	3,579.34	$ (63.28)	$ 4,399.80	$ (3,579.34)	4,336.52	
5247210000	Mayors Council	1,541.33		$ 2,378.55	$ (1,541.33)	2,378.55	
6293410000	Office of the Governor	21,596.42		$ 26,630.76	$ (21,596.42)	26,630.76	
8555858369	Dept of Chamorro Affairs (Guam Museum)	18,810.73		$ 23,923.90	$ (18,810.73)	23,923.90	
	Sub Total	**2,444,567.11**	**47,030.40**	**1,675,512.21**	**(1,446,544.21)**	**2,720,565.51**	
	MAYORS						
0637100000	Santa Rita Mayor	2,833.51	$ 315.11	$ 4,026.01	$ (2,833.51)	4,341.12	
0737100000	Ordot/Chalan Pago Mayor	928.20		$ 943.27	$ (928.20)	943.27	
1537100000	Hagatna Mayor	1,170.36		$ 1,562.39	$ (1,170.36)	1,562.39	
1637100000	Piti Mayor	929.43		$ 1,035.15	$ (929.43)	1,035.15	
1737100000	Mongmong/Toto/Maite Mayor	1,231.79	$ (37.33)	$ 1,478.18	$ (1,231.79)	1,440.85	
2637100000	Asan/Maina/Adelup Mayor	667.95		$ 869.73	$ (667.95)	869.73	
2737100000	Sinajana Mayor	3,683.38		$ 4,772.18	$ (3,683.38)	4,772.18	
3637100000	Dededo Mayor	6,749.44		$ 7,504.89	$ (6,749.44)	7,504.89	
4637100000	Yigo Mayor	2,954.63		$ 4,173.63	$ (2,954.63)	4,173.63	
5637100000	Umatac Mayor	1,032.21		$ 1,270.22	$ (1,032.21)	1,270.22	
6537100000	Agana Hts. Mayor	4,197.42		$ 4,532.31	$ (4,197.42)	4,532.31	
6637100000	Merizo Mayor	829.68		$ 1,154.35	$ (829.68)	1,154.35	
6737100000	Barrigada Mayors Office	1,559.53		$ 2,650.99	$ (1,559.53)	2,650.99	
7537100000	Agat Mayor	2,071.35		$ 2,504.81	$ (2,071.35)	2,504.81	
7637100000	Inarajan Mayor	1,436.98		$ 2,546.30	$ (1,436.98)	2,546.30	
8537100000	Tamuning Mayor	4,698.98		$ 6,336.08	$ (4,698.98)	6,336.08	
8637100000	Talofofo Mayor	2,248.03	$ (955.76)	$ 3,108.83	$ (2,248.03)	2,153.07	
9537100000	Mangilao Mayor	4,117.29		$ 4,714.95	$ (4,117.29)	4,714.95	
9637100000	Yona Mayor	758.27	$ (27.81)	$ 909.74	$ (758.27)	881.93	
	Sub Total	**44,098.43**	**(705.79)**	**56,094.01**	**(44,098.43)**	**55,388.22**	
	DPW ACCOUNTS						
4337100000	DPW-Village St. Lights	371,782.73		$ 374,161.38	$ (371,782.73)	374,161.38	
5337100000	DPW- Primary St. Lights	84,350.98		$ 89,015.28	$ (84,958.50)	88,407.76	
6337100000	DPW-Sec/Coll St. Lights	25,608.31		$ 26,496.56	$ (25,608.31)	26,496.56	
7337100000	DPW-Signal Lights	9,665.24		$ 11,151.16	$ (9,665.24)	11,151.16	
	Sub Total	**491,407.26**	**-**	**500,824.38**	**(492,014.78)**	**500,216.86**	
	(B) AUTONOMOUS/PUBLIC CORP						
1437100000	Retirement Fund	5,287.31	$ 39.66	$ 6,674.86	$ -	12,001.83	1
1915500000	Guam Housing Corp Rental Division	1,999.79	$ 105.95	$ 2,699.68	$ (1,406.65)	3,398.77	1
2437100000	University of Guam	167,415.13		$ 207,541.54	$ (167,415.13)	207,541.54	
4237100000	Guam Airport Authority	492,298.17		$ 530,205.68	$ (492,298.17)	530,205.68	
5357510000	University of Guam (NET METERED)	67,976.35		$ 84,020.34	$ (67,976.35)	84,020.34	
6237100000	G H U R A	10,839.23	$ 181.91	$ 26,400.62	$ (22,926.04)	14,495.72	
6437100000	Guam Community College	46,808.24		$ 56,578.32	$ (46,808.24)	56,578.32	
7237100000	Guam Memorial Hospital	30,017.53		$ 40,676.88	$ (30,017.53)	40,676.88	
8426836906	Guam Memorial Hospital (NET METERED)	281,641.96		$ 163,791.42	$ (281,641.96)	163,791.42	
9137100000	Port Authority of Guam	86,748.07		$ 101,268.84	$ (86,748.07)	101,268.84	
9157510000	Guam Community College (NET METERED)	34,843.39		$ 40,206.36	$ (34,843.39)	40,206.36	
9173210000	Guam Solid Waste Authority	5,938.65		$ 7,443.80	$ (5,938.65)	7,443.80	
9337100000	Guam Waterworks Authority	1,137,558.14	$ 11,944.44	$ 1,411,006.05	$ (1,137,732.29)	1,422,776.34	
	Sub Total	**2,369,371.96**	**12,271.96**	**2,678,514.39**	**(2,375,752.47)**	**2,684,405.84**	
	(C) OTHERS						
0337100000	Guam Legislature	$ 158.67		$ 385.51	$ (158.67)	$ 385.51	
9503154359	Guam Legislature (NET METER)	$ 5,787.17		$ 6,797.85	$ (5,787.17)	$ 6,797.85	
1237100000	Superior Court of Guam	$ 64,020.12		$ 79,683.18	$ (64,020.12)	$ 79,683.18	
2537100000	Agana (Guam) Post Office	$ 5,164.28		$ 6,953.12	$ (12,117.40)	$ -	
2570200000	Customs & Quarantine Agency	$ 896.40		$ 1,040.43	$ (896.40)	$ 1,040.43	
3537100000	U.S. Post Office	$ 36,203.96		$ 45,777.81	$ (36,203.96)	$ 45,777.81	
5537100000	Dept. of Military Affairs	$ 68,345.32	$ -	$ 80,307.19	$ (68,345.32)	$ 80,307.19	
3209463043	Dept. of Military Affairs	$ 15,958.58		$ 18,160.16	$ (15,958.58)	$ 18,160.16	
5737100000	KGTF	$ 5,972.97		$ 7,222.95	$ (5,972.97)	$ 7,222.95	
7281000000	Tamuning Post Office	$ 4,738.91		$ 5,685.00	$ (10,423.91)	$ -	
	Sub Total	**207,246.38**	**-**	**252,013.20**	**(219,884.50)**	**239,375.08**	
	GRAND TOTAL	**5,556,691.14**	**58,596.57**	**5,162,958.19**	**(4,578,294.39)**	**6,199,951.51**	

GPA CCU WORK SESSION MEETING

November 21, 2018

2018 MagPRO Awards

GPA 2018 MagPRO Award SUMMARY

- The Guam Power Authority won 1 award in the category of 'Photo Of The Year' Recognition
- The Guam Power Authority won 7 awards in the category of 'National Recognition'

Photo Of The Year Recognition:

- ***Public Service and the Elderly. Showing interaction or bond between public servants and the elderly.***

- [x] 24. Photo of the Year – Public Service and the Elderly
- [ ] 25. National Recognition Citation

mag PRO Awards
Governor's Employee Recognition Program

National Recognition Citation

This award recognizes employees and programs who have received national recognition or certification for their contributions and achievement in public service.

Evaluation Period: The national recognition or certification must have been received during the period September 1, 2017 and July 31, 2018.

Eligibility: Any employee or program of the Executive Branch of the government of Guam who has received national recognition or certification that has brought credit to the department and the government.

Nomination Guideline:

- The Director may submit as many nationally-cited employees or programs from his or her department/agency.

GPA 2018 MagPRO Award SUMMARY

The Guam Power Authority won 7 awards in the category of National Recognition as follows:

DESCRIPTION
1) National Credit Rating Agencies Revenue Refunding Bonds 2017 Series A
2) National APPA Excellence in Safety Award
3) National APPA Excellence in Public Power Communications Award of Merit
4) U.S. Department of Labor Certified 4th Cycle Apprentice Graduates
5) GPA Check Presentation to National American Red Cross for 2017 Hurricanes Harvey, Irma and Maria Relief
6) GPA 50th Anniversary Recognition – Entry Into Congressional Record 115th U.S. Congress 08 May 2018
7) GPA Employees' Published Writing – Printed in T&D World February 2018 Magazine

Congressional Record

House of Representatives

Grid Upgrades Deliver Big

Guam Power Authority implements a smart grid program to modernize infrastructure, reduce costs and increase customer satisfaction.

GPA Communications/PIO KPI Status

19 November 2018

Ratepayer Newsletter

Overall Status	Risks & Issues	Schedule	Scope	Financial
G	G	G	G	G

Status

1. December "Insights" newsletter in production;
2. Standard features of recipe, village fiesta schedule and CDC advisory remain for newsletter content;
3. Inclusion of CS article on Upper Tumon location

Accomplishments

1. Completed January, February, March, April, May, June, July, August, September, October, November *Insights* Ratepayer Newsletter
2. December issue planning; will meet deadline

Risks and Issues	Resolution
1. None to report;	

Financial	
Budgeted for FY19	

Legend:

No corrective action required

Near-term corrective action required

Requires immediate attention

2017/8 Annual Report Projects

Overall Status	G	Risks & Issues	G	Schedule	G	Scope	G	Financial	G

Status

1. Submitted specifications for FY2018 Annual Report;
2. Inclusion of Citizens Centric Report on project bid

Accomplishments

1. Completed GPA FY2017 Report;

Risks and Issues	Resolution
1. None to Report	

Financial

None to report	Within Budget	

Legend:

No corrective action required

Near-term corrective action required

Requires immediate attention

Special Projects – Web and Social Media

Overall Status	Risks & Issues	Schedule	Scope	Financial
G	G	G	G	G

Status

1. Ongoing coordination with various departments for any updates to share on social media;

Accomplishments

1. Successfully provided updates on social media, WhatsApp and Text Alerts for outage notifications.

Risks and Issues

1. Timely Updates on Forced Outages and Scheduled Outages ;

Resolution

1. Close monitoring of outages and trouble desk for updates;

Financial

Within budget		

Legend:

No corrective action required

Near-term corrective action required

Requires immediate attention

Energy Sense Marketing

Overall Status	Risks & Issues	Schedule	Scope	Financial
G	G	G	G	G

Status

1. Review ongoing of DSM Customer Service Survey and Focus Group Discussion for Energy Sense Marketing as part of Phase III implementation.
2. On track to with DSM Phase II Marketing Goals & Objectives
3. Adztech Advertising continuing Phase II DSM Marketing Plan Goals & Objectives;

Accomplishments

1. Completed Customer Program Satisfaction Survey

Risks and Issues	Resolution
1. SPORD support pending additional funding;	PIO supporting DSM marketing in pending additional SPORD funding

Financial

Budget Support for SPORD for Phase II	

Legend:

No corrective action required

Near-term corrective action required

Requires immediate attention

Prepaid & SMS (text) Project

Overall Status	Risks & Issues	Schedule	Scope	Financial
G	G	G	G	G

Status

1. Text texting still in progress. No new information to report.

Accomplishments

1. Completed coordination with local carriers (GTA, Docomo & IT&E for SMS Texting test);

Risks and Issues	Resolution
1. Pending review and acceptance from PSCC for testing and eventual rollout;	

Financial	
None to report	

Legend:

No corrective action required

Near-term corrective action required

Requires immediate attention

Live Streaming of CCU Meetings & Work Sessions

Overall Status	Risks & Issues	Schedule	Scope	Financial
G	G	G	G	G

Status

1. Change order for inclusion of control room specifications.

Accomplishments

1. None to report at this time

Risks and Issues	Resolution
1. None to report at this time	

Financial	
Funding with IT Division & GWA for audio & video equipment & training	

Legend:

No corrective action required

Near-term corrective action required

Requires immediate attention

50th Anniversary Activities

Overall Status	Risks & Issues	Schedule	Scope	Financial
G	G	G	G	G

Status

1. List of events and programs connected to milestone 2018 GPA planned programs/business objectives already in place is under construction: PPA Signing, LEED Plaque on GBN Building Unveiling; Fadian Employee-Family Fun Day rescheduled due to TS Maria; 2018 Liberation Day Float(s) ongoing;
2. A GPA 50th Anniversary Steering Committee meeting weekly, with Communications-PIO serving as advisors.
3. Revisit budget items, (subject to change) to be presented to GM for approval.

Accomplishments

1. GPA 50th Anniversary t-shirts distributed to all GPA employees and IPP partners (500 shirts)
2. Highlighted GPA 50th Anniversary Milestone on 2018 Liberation Day Float – GPA's entry won 3rd Place. Media photos, video and mention in print publications, electronic and social media.
3. LIVE coverage promotion via PBS live (television) streaming of Liberation Day Parade. Included 50th anniversary logo imprinted on t-shirt giveaways.
4. LIVE coverage promotion via KStero live (radio) broadcast of Liberation Day Parade. Included 50th anniversary logo and Guam Energy Sense logo imprinted on 500 t-shirt giveaways.

Risks and Issues	Resolution
1. None to report at this time	

Financial	
None to report	

Legend:

No corrective action required

Near-term corrective action required

Requires immediate attention

Award Nomination Opportunities (various)

Overall Status	G	Risks & Issues	G	Schedule	G	Scope	G	Financial	G

Status

Accomplishments

Risks and Issues	Resolution
1. Missed opportunity if GPA does not submit entries 2. APPA – high level competition across USA 3. Department of the Decade – combines agency accomplishments judged by panel of 3; AND reader's choice (Guam Daily Post)	1. GPA will participate and is worthy of recognition(s)

Financial	

Legend:

No corrective action required

Near-term corrective action required

Requires immediate attention

Miscellaneous Activities

Overall Status	Risks & Issues	Schedule	Scope	Financial
G	G	G	G	G

Status

1. GPA Web page redesign work online and updated as necessary
2. Monitoring of CS Business Centers
3. Standard Media Releases for scheduled and emergency outage reporting is on-going
4. Education Outreach – random requests; ongoing
5. Compiling historic research on impact of power loss to GWA water well system

Accomplishments

1. Redesigned GPA website online; nominated for APPA Excellence in Public Power Communications Award

Risks and Issues	Resolution
1. None to report at this time;	

Financial	
None to report	

Legend:

No corrective action required

Near-term corrective action required

Requires immediate attention