



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., Thursday, August 22, 2019*

AGENDA

1. ISSUES FOR DECISION

1.1 FY'2020 Budget / Resolution FY2019-12

2. GM REPORT

2.1 [Updates](#)

3. ISSUES FOR DISCUSSION

3.1 [New Power Plant](#)

4. DIVISION REPORTS

4.1 [Administration: Customer Service, HR, Procurement, Safety](#)

4.2 [Communications](#)

4.3 [Engineering & Technical: Engineering, IT, Planning & Regulatory, SPORD](#)

4.4 [Finance](#)

4.5 [Operations: Facilities, Generation, PSCC, T&D, Transportation](#)

5. ANNOUNCEMENTS

5.1 Next Meeting: CCU/GWA Meeting August 27; CCU/GPA Meeting – August 29

6. ADJOURNMENT

GENERAL MANAGER'S REPORT

AUGUST 2019



1. **Generation System:** The following summarizes the generation forecast for September 2019:

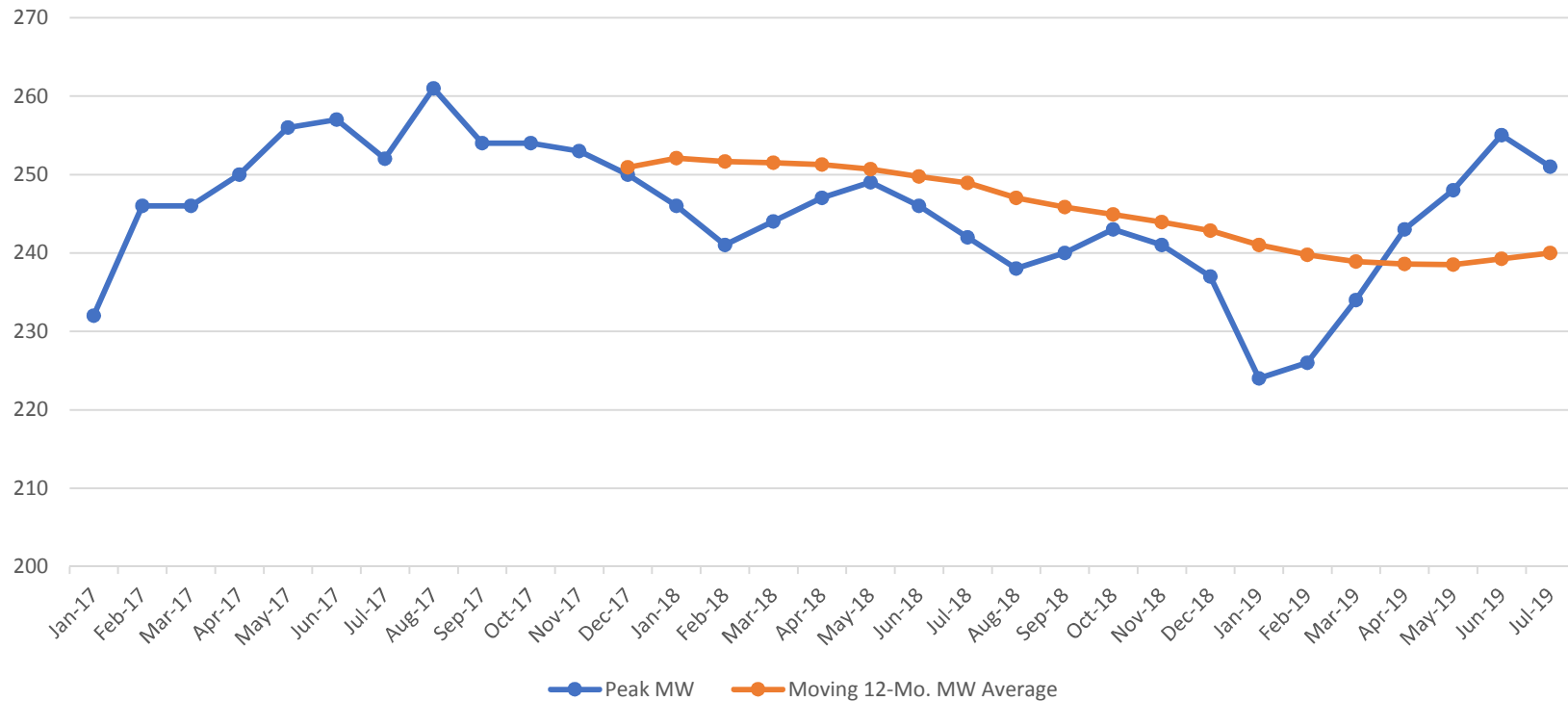
Projected Available Capacity: 370 MW

Projected Demand: 258 MW

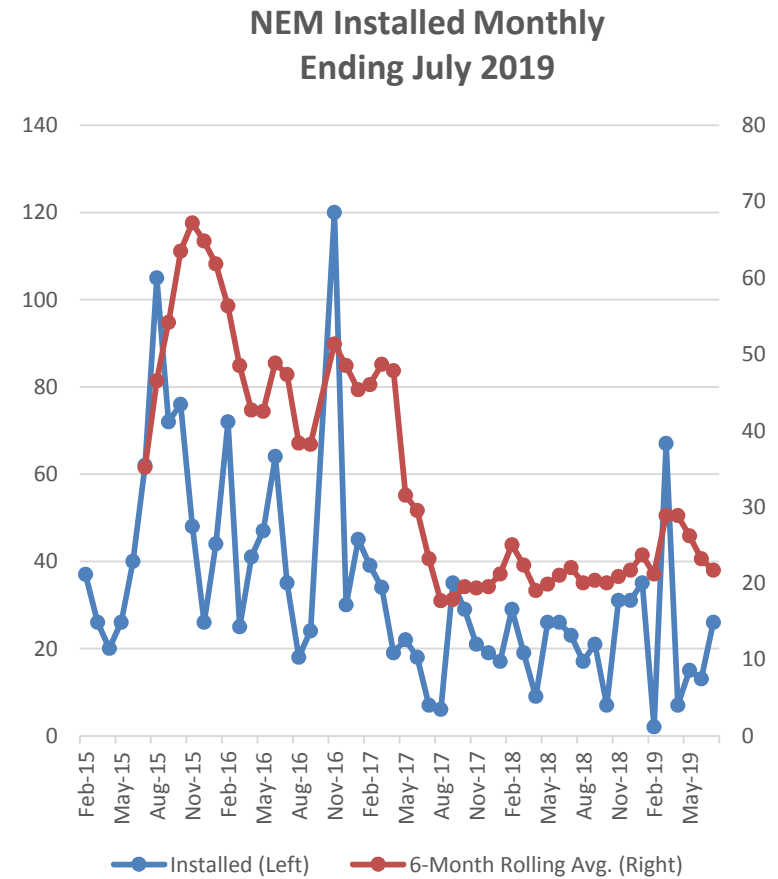
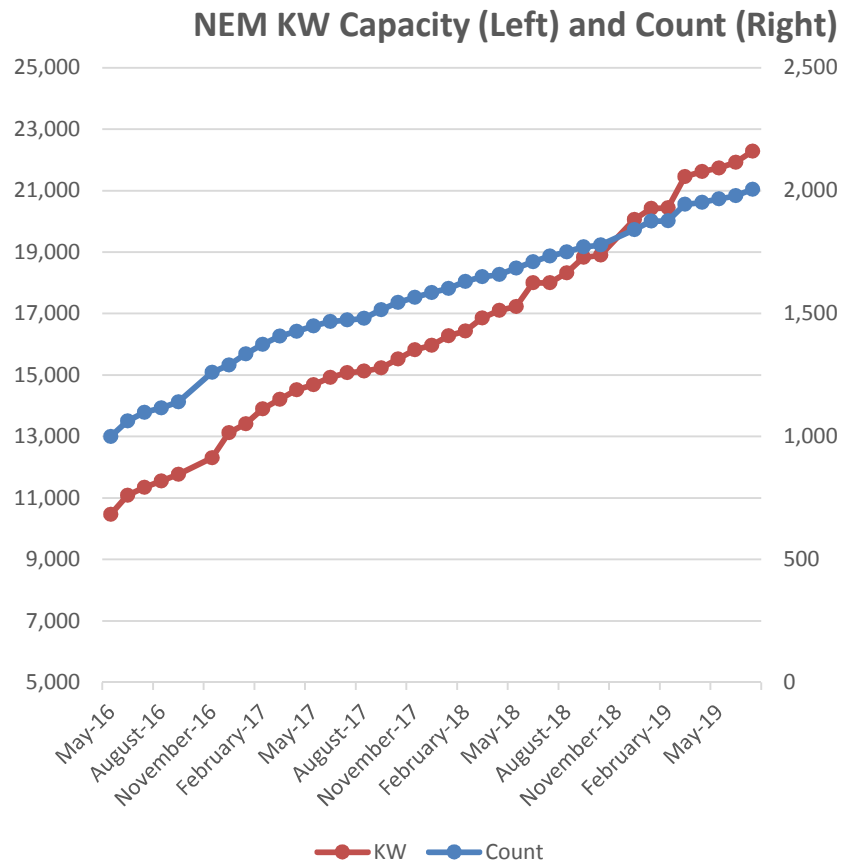
Anticipated Reserve Margin: 112 MW

- The following updates monthly peak demands ending August 20, 2019:

System Peak Demand



2. Net Metering (NEM) Growth:



3. Demand Side Management (DSM)

Program directly reduces energy cost to customer at a one time fixed rebate.

GPA currently funded \$4.3M from base rate.

DSM EXPENSE SUMMARY

Description	FY16	FY17	FY18	FY19 thru 7/31/19*	Total to Date
Regular/OT Pay	\$11,348.80	\$22,256.00	\$26,121.83	\$40,920.10	\$100,646.73
Other Contractual	\$28,278.50	\$85,550.05	\$116,977.50	\$3,025.00	\$233,831.05
Ads & Radio Announcements	-	-	-	\$7,500.00	\$7,500.00
Paid Rebates-Split AC	\$154,700.00	\$557,275.00	\$1,349,825.00	\$856,200.00	\$2,918,000.00
Paid Rebates- Central AC	\$3,400.00	\$8,200.00	\$4,400.00	\$5,000.00	\$21,000.00
Paid Rebates- Washer/Dryer	\$2,800.00	\$7,425.00	\$57,200.00	\$77,800.00	\$145,225.00
Total Expenses	\$200,527.30	\$680,706.05	\$1,554,524.33	\$990,445.10	\$3,426,202.78



4. FY'2020 Budget:

- The FY 2020 budget will be presented in the September work session

5. New 180 MW Power Plant:

- The New Power Plant issue will be presented to the CCU in the August work session August 22, 2019.

6. PUC Dockets: The following dockets are on PUC agenda for their August meeting

- GPA Docket 19-01, Petition for Award of Contract for the Out of Service Inspection and Refurbishment of GPA Bulk Storage Fuel Tanks
- GPA Docket 19-12, Petition for Award of Contract for the Supply of Diesel

7. GPA and GDOE BEST Schools Energy Projects:

- A story was published on the Guam PDN GDOE Supplement on Aug. 19, 2019 on GPA and GDOE's BEST School Energy Project that launched on May 2018. It highlighted our partnership and commitment to assist GDOE. The GPA/GDOE BEST Schools Projects supports CCU's goal to assist GDOE achieve energy cost reduction thru energy efficiency programs. I've attached the story from the Guam PDN for reference.



8. GPA Awards and Recognition:

- On July 10, 2019 Environmental Systems Research Institute (ESRI), the International Supplier of GIS software, Web GIS and Geodatabase recognized GPA as the first in the world electric distribution utility to operate business critical functions on ESRI's Utility Network. A **Special Achievement in GIS (SAG)** award was presented to GPA at the ESRI User Conference in San Diego, CA this past July. Several articles have been written on this, which include the SmartGrid Today and Power Engineers national publications. Kudos to our Team for this achievement award and recognition!
- On July 30, 2019 APPA's Public Power Daily published an article entitled, "Guam Power Authority taps drone to digitally map infrastructure." The article centered around GPA Engineering's pilot project to map out Guam's island wide power system utilizing unmanned aerial vehicles (UAV). This project was of interest to APPA because of its success in utilizing UAV technology to constantly improve reliability.

9. 2019 Vendor Outreach:

- GPA's first annual Vendor Outreach event was held from 9:00 a.m. - 11:00 a.m. on July 30 & 31, 2019 in the GBN Procurement conference room, to provide current and potential vendors an overview of the local government procurement process and requirements, and the Authority's past and current tenders. Seventy-Five attendees registered and/or updated their business information with Procurement/Supply personnel. I have attached some highlights of event. The successful event was well-received. The next Vendor Outreach event is tentatively scheduled for June 2020.



10. Updated Metrics: The following are updates on key metrics





DOI \$1.25M Grant Award GPA and GDOE BEST Schools Energy Projects



In a collaborative effort between the Guam Power Authority (GPA) and the Guam Department of Education (GDOE), the Bringing Energy Savings to Schools Project, or "BEST" Schools Project, was launched on May 16, 2018. The GPA/GDOE BEST Schools Project supports GPA's goal to help GDOE achieve its legislative mandate to deploy and utilize green energy. The program also provides an incentive for GDOE to reduce its energy use and expenditures, while modernizing infrastructure and extending the life of energy equipment with enhanced, proactive maintenance routines.

On September 28, 2018, the Department of the Interior Office of Insular Affairs Energizing Insular Communities Program awarded GPA a \$1.25 million grant award for LED lighting retrofits at two GDOE high schools. The grants earmarked \$954,685 for Southern High School in Santa Rita and \$295,315 for George Washington High School in Mangilao.

The Siemens Industry, Inc. Smart Infrastructure Division is working in collaboration with GPA's Strategic Planning & Operations Research Division (SPORD) engineers and Engineering & Technical Services managers to provide energy solutions to support GDOE's energy goals. These energy goals including reducing energy consumption by a minimum of 10 percent.

Siemens conducted a Preliminary Feasibility Assessment of all 41 GDOE elementary, middle and high schools. Following the review of the Preliminary Feasibility Assessment, GPA and GDOE selected B.P. Carbulido Elementary School as a pilot school for energy efficiency enhancements. GPA, GDOE, and Siemens will retrofit Carbulido Elementary School, to include LED lighting, solar assisted air conditioning, and other energy efficiency technologies. Work on all of these energy-efficient projects for GDOE schools began in June 2019.



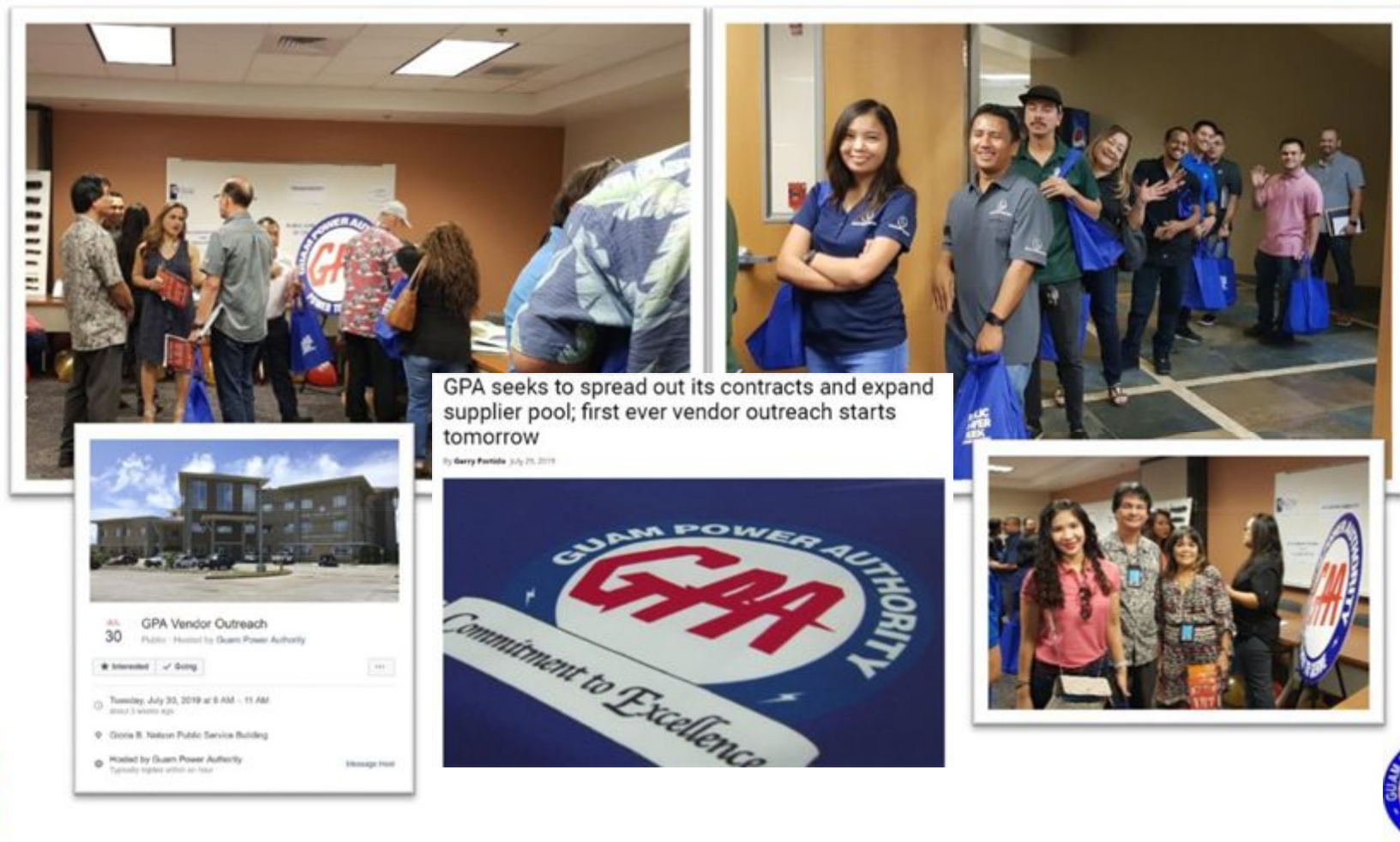
GPA engineers Victor Torres and Jessica Lazitan evaluate plans and the work in progress at the GDOE B.P. Carbulido Elementary School site on July 5, 2019. The school was selected as a pilot school for energy efficiency enhancements and will be retrofitted to include LED lighting, solar assisted air conditioning, and other energy efficiency technologies, of one of the GPA/GDOE BEST Schools Project(s). GPA, GDOE and the Siemens Industry, Inc. Smart Infrastructure Division are the project partners supporting the improvements at the school.

SIEMENS
Ingenuity for Life

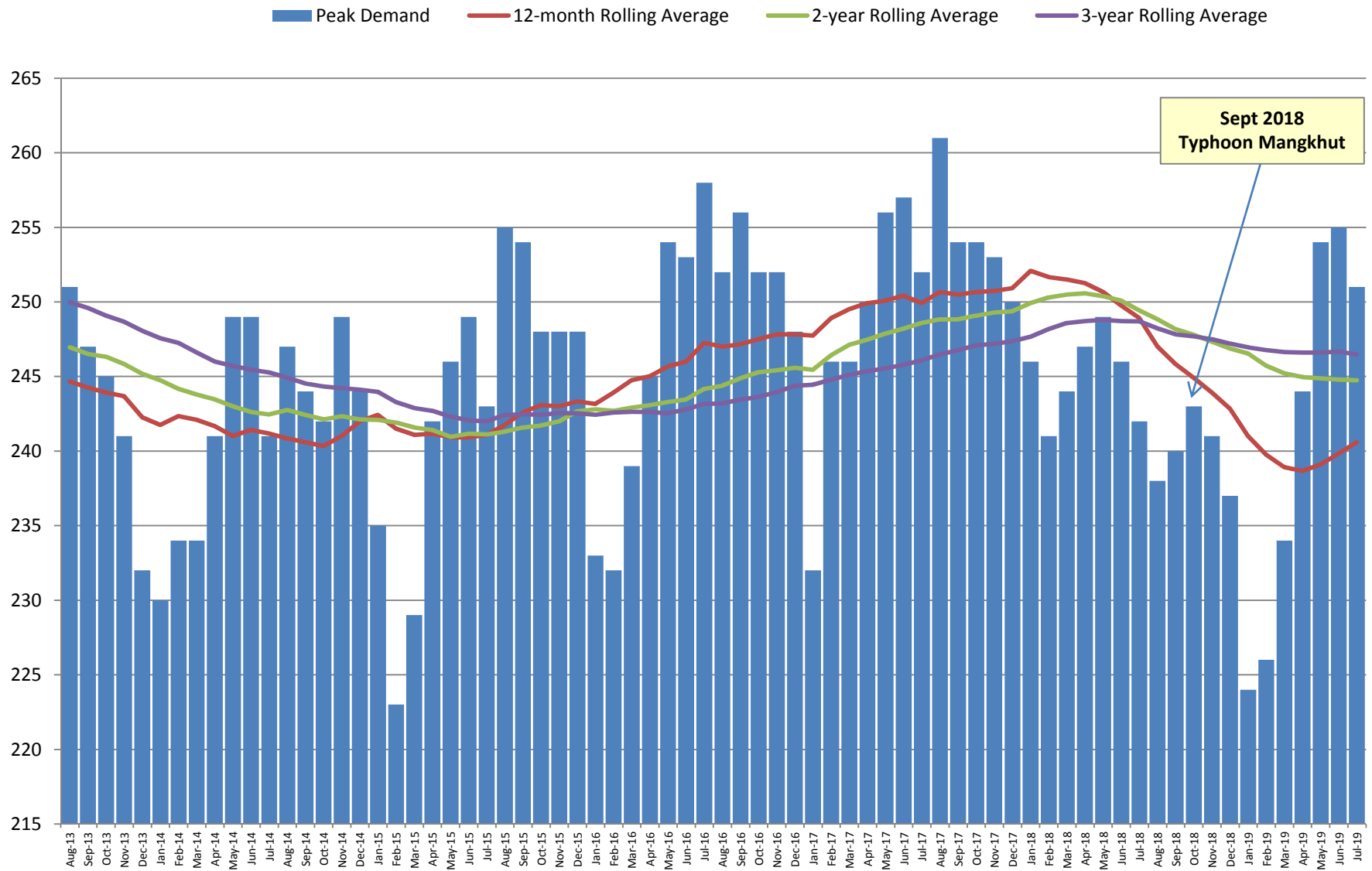
"GPA will work with our partner-stakeholders, to include the Guam Department of Education leadership, school administration, facilities maintenance, Siemens and their lighting and electrical subcontractors through to completion," said GPA General Manager John M. Benavente, P.E. "And, at the end, we will all stand proud of this valuable work which will ultimately have benefited Guam's school children," Benavente concluded.

"The high cost of supporting our schools' energy needs - whether it be lighting for after-school sports activities, or air-conditioning to support comfortable learning environments - continues to grow from year to year," GDOE Superintendent Jon Fernandez said. "It is important to invest in energy efficient technologies that will benefit not only our environment, but our department's ability to invest funding in resources that will provide greater supports for teachers and classrooms. I want to thank GPA for partnering with our schools to make this important project a reality."

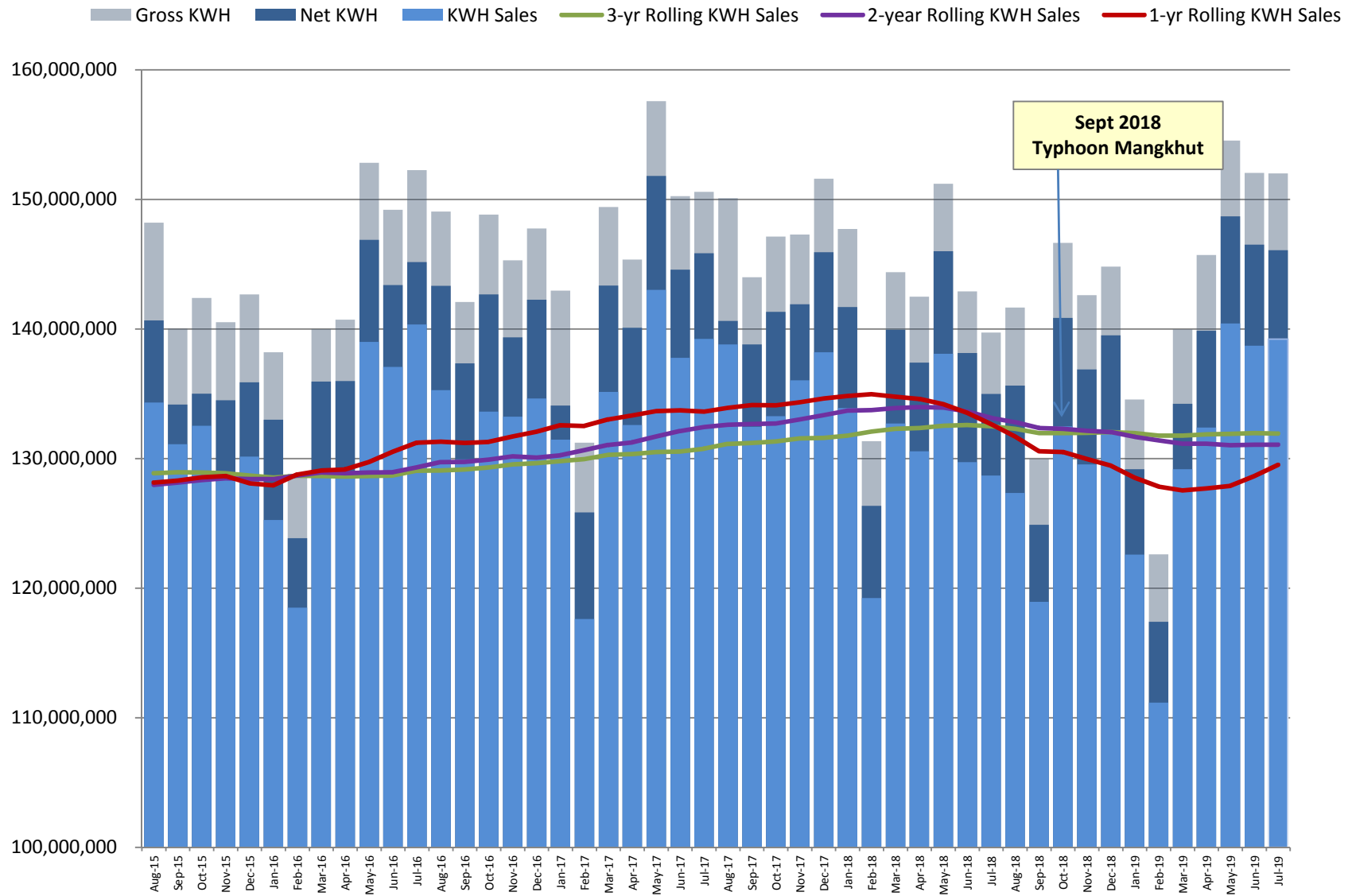
2019 Vendor Outreach



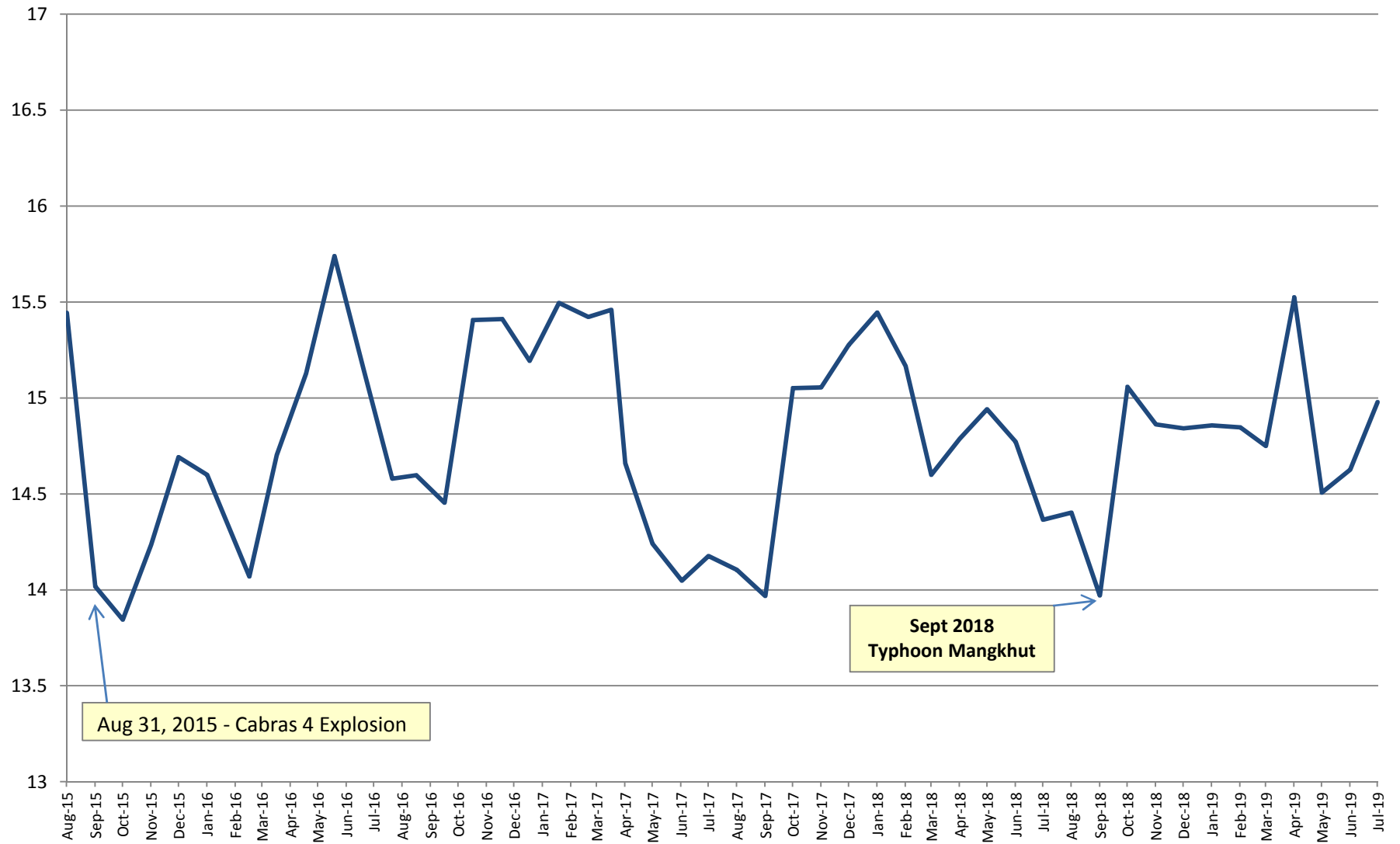
Historical Monthly Peak Demand Aug 2013 - July 2019



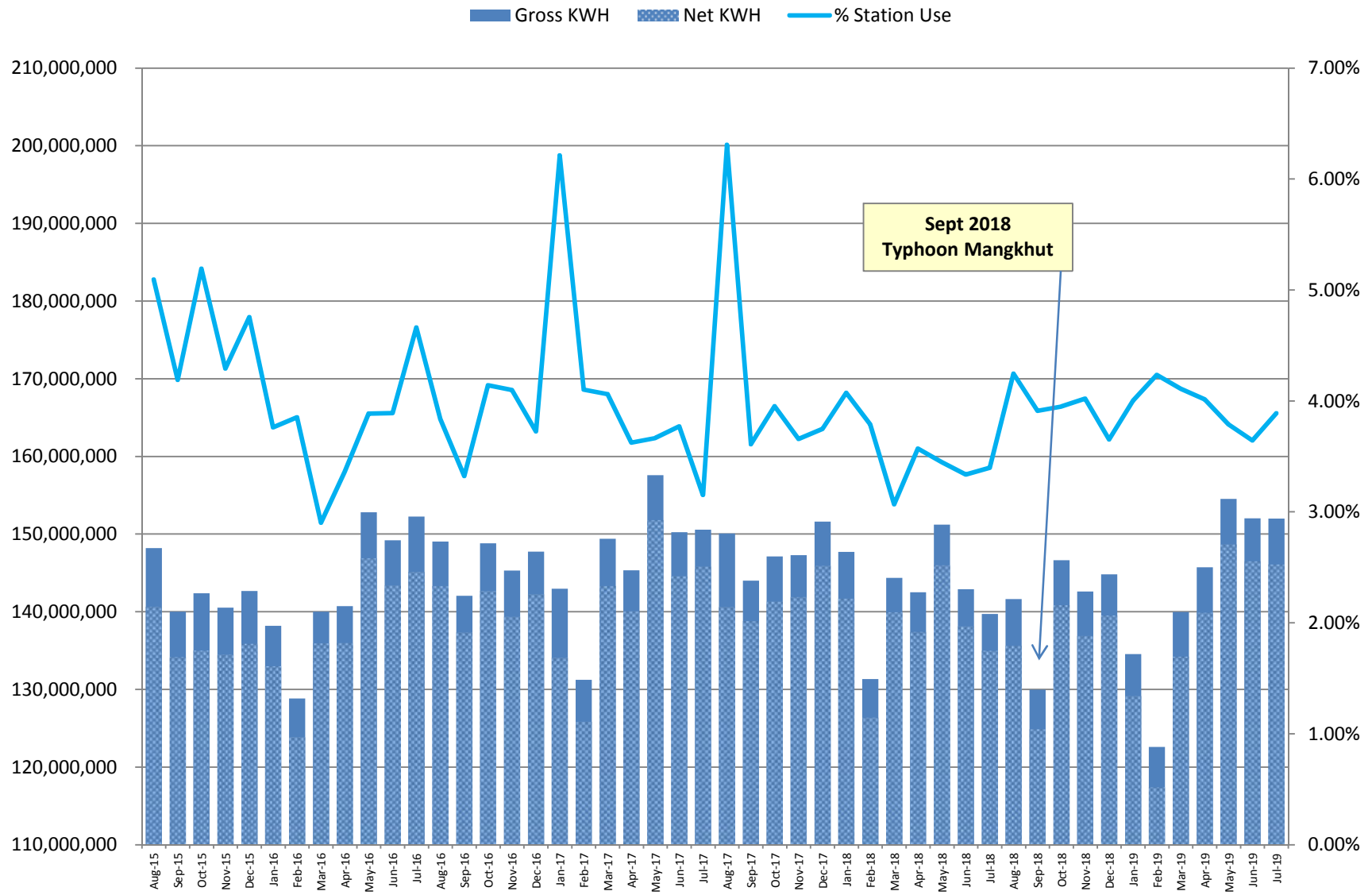
Historical KWH Sales Aug 2015 - July 2019



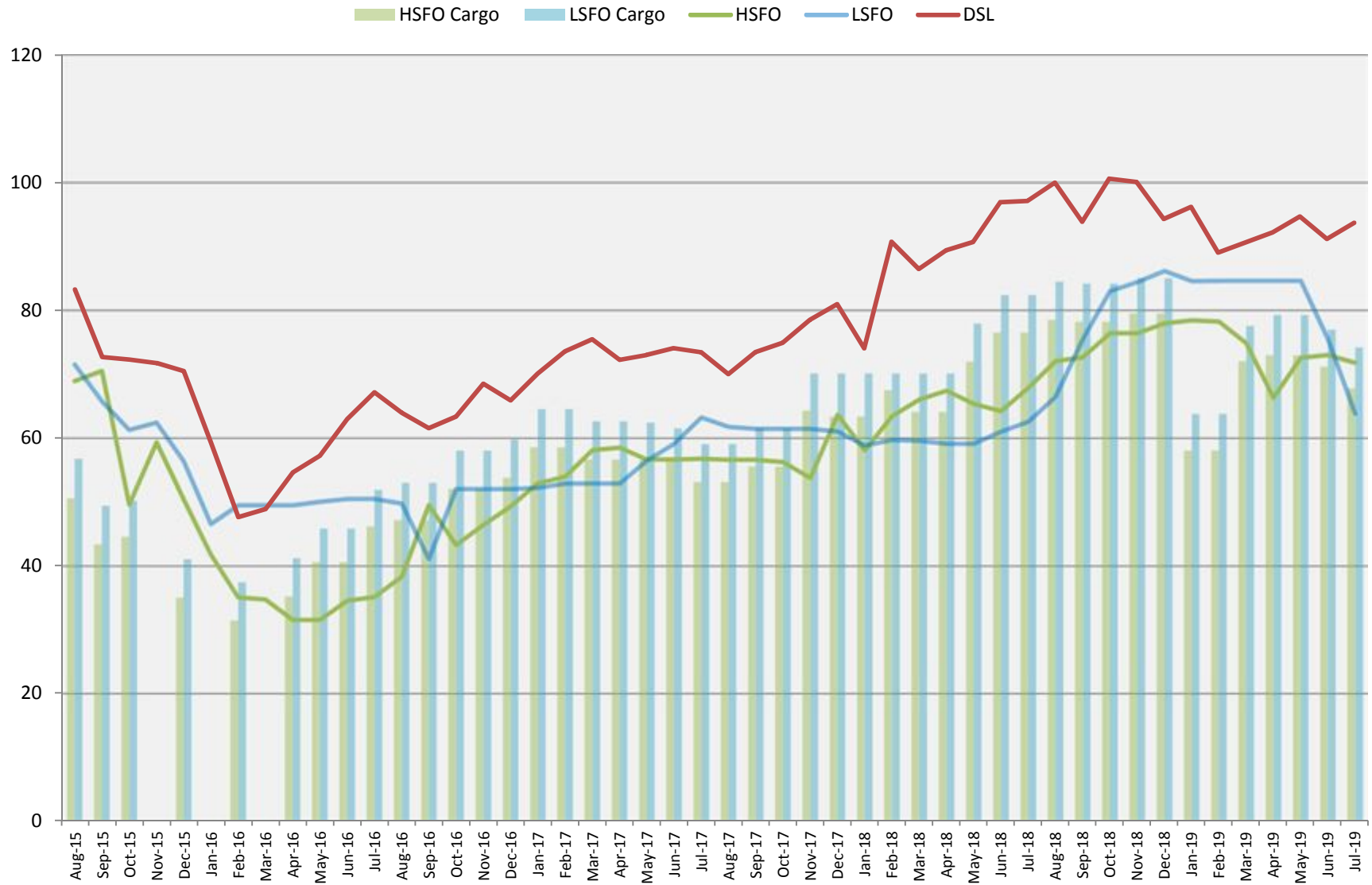
SYSTEM GROSS HEAT RATE (KWH/Gal) Aug 2015 - July 2019



Gross and Net Generation (KWH) Aug 2015 - July 2019



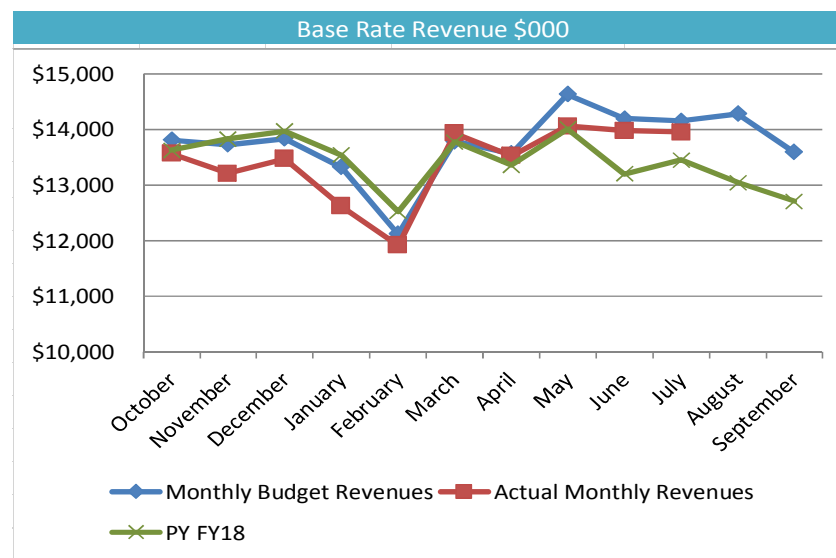
Fuel Cargo and Fuel Consumption Costs (\$/bbl) Aug 2015 - July 2019



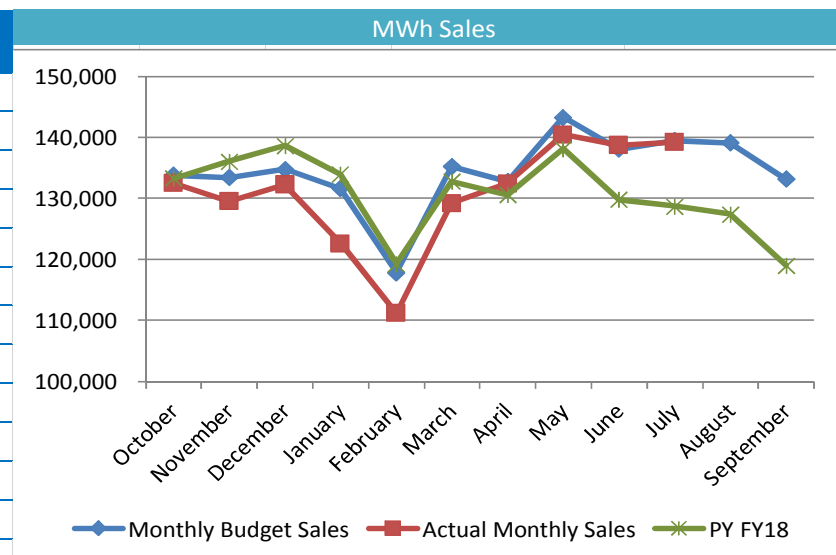
July 2019 Monthly Financial Highlight

1

	Monthly Budget \$000	Monthly Budget Revenues	Actual Monthly Revenues	Variance		PY FY18	CY vs PY Variance	
October	\$	13,811	\$	13,564	\$	(246)	↓	
November		13,723		13,203	\$	(519)	↓	
December		13,833		13,467	\$	(365)	↓	
January		13,321		12,616	\$	(705)	↓	
February		12,114		11,915	\$	(199)	↓	
March		13,790		13,926	\$	135	↑	
April		13,562		13,520	\$	(42)	↓	
May		14,630		14,057	\$	(573)	↓	
June		14,196		13,977	\$	(219)	↓	
July		14,152		13,951	\$	(202)	↓	
August		14,280						
September		13,590						
Total	\$	165,002	\$	134,197	\$	(2,935)	↓	
					\$	161,010	\$	(1,065) ↓



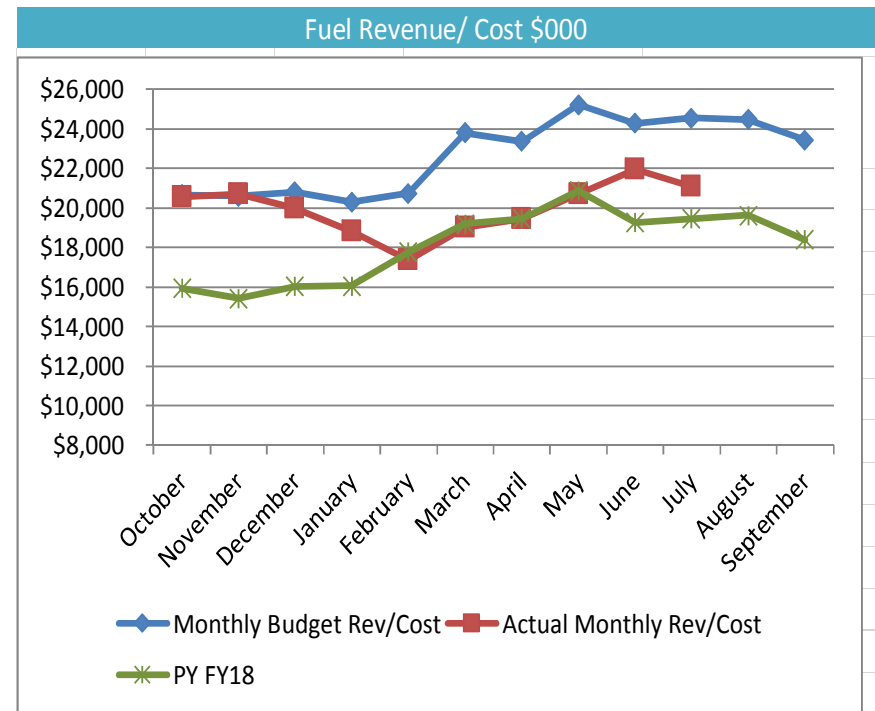
	Monthly Budget gwh	Monthly Budget Sales	Actual Monthly Sales	Variance		PY FY18	CY vs PY Variance	
October		133,797		132,489	(1,308)	↓		
November		133,346		129,537	(3,809)	↓		
December		134,715		132,190	(2,525)	↓		
January		131,547		122,590	(8,958)	↓		
February		117,775		111,159	(6,616)	↓		
March		135,196		129,170	(6,026)	↓		
April		132,763		132,396	(367)	↓		
May		143,236		140,412	(2,824)	↓		
June		138,016		138,704	688	↑		
July		139,434		139,204	(230)	↓		
August		139,030						
September		133,149						
Total		1,612,003		1,307,850	(31,974)	↓		
					1,567,052	(12,919)	↓	



July 2019 Monthly Financial Highlight (Continued)

2

	Monthly Budget		Actual		CY vs PY							
	\$000	Rev/Cost	Monthly Rev/Cost	Variance	PY FY18	Variance						
October	\$	20,637	\$	20,550	\$ (87)	↓	\$	15,936	\$	4,615	↑	
November		20,568		20,711	\$	143	↑		15,400	\$	5,310	↑
December		20,779		19,969	\$	(810)	↓		16,007	\$	3,961	↑
January		20,290		18,822	\$	(1,468)	↓		16,036	\$	2,785	↑
February		20,718		17,368	\$	(3,350)	↓		17,763	\$	(395)	↓
March		23,783		19,017	\$	(4,765)	↓		19,180	\$	(163)	↓
April		23,354		19,442		(3,912)	↓		19,441		2	↑
May		25,197		20,711		(4,486)	↓		20,854		(143)	↓
June		24,279		21,932		(2,347)	↓		19,252		2,680	↑
July		24,528		21,082		(3,446)	↓		19,457		1,624	↑
August		24,457							19,608			
September		23,422							18,390			
Total	\$	272,011	\$	199,603	\$	(24,529)	↓	\$	217,324	\$	20,277	↑

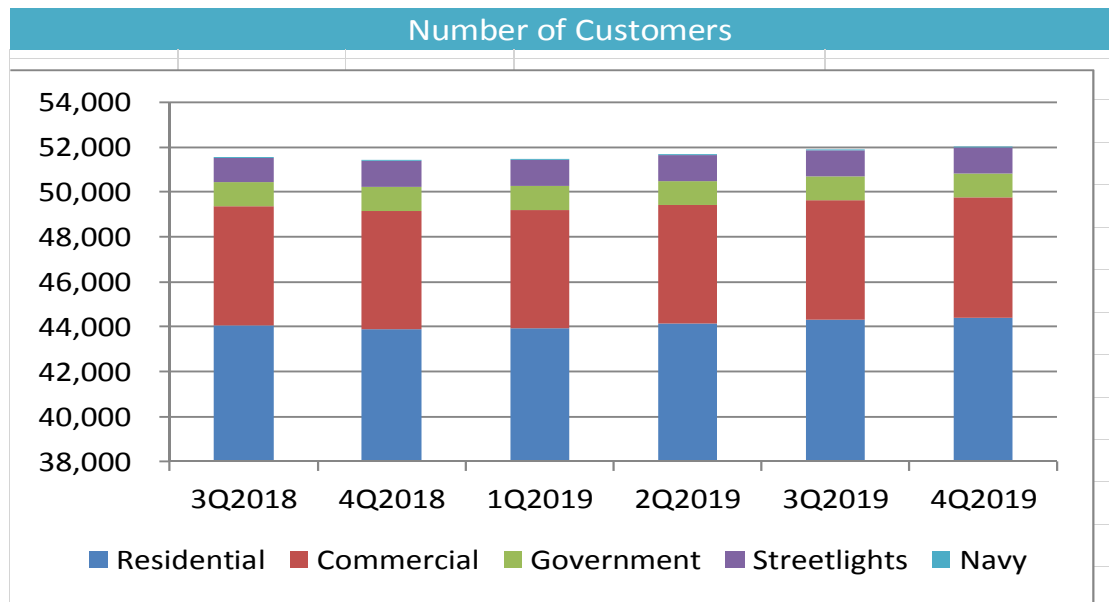


- Under recovery of LEAC - \$10.2 million

July 2019 Monthly Financial Highlight (Continued)

3

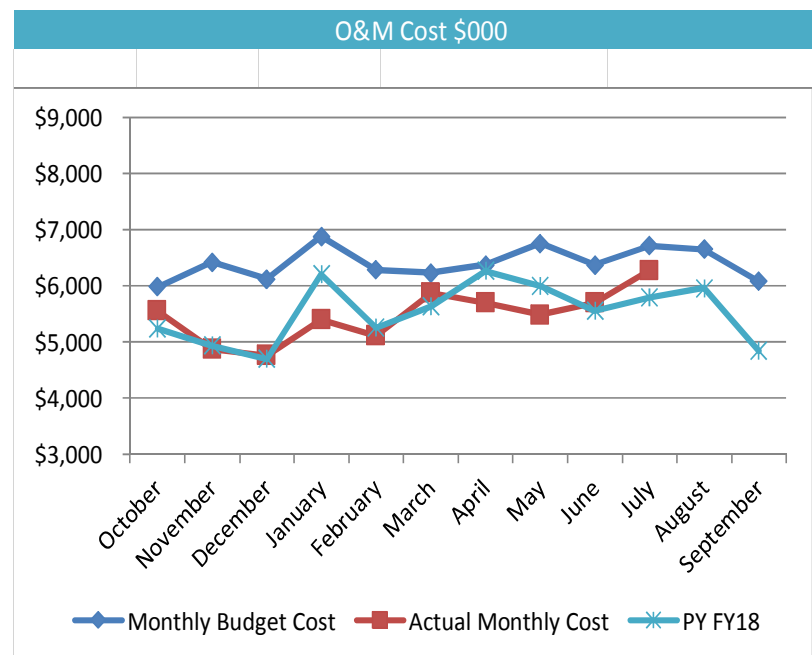
	3Q2018	4Q2018	1Q2019	2Q2019	3Q2019	4Q2019
Residential	44,074	43,887	43,920	44,144	44,329	44,408
Commercial	5,278	5,261	5,273	5,291	5,303	5,333
Government	1,092	1,077	1,090	1,074	1,075	1,095
Streetlights	1,091	1,152	1,151	1,152	1,138	1,138
Navy	1	1	1	1	1	1
	51,536	51,378	51,435	51,662	51,846	51,975



July 2019 Monthly Financial Highlight (Continued)

4

	Monthly Budget \$000	Cost	Actual Monthly Cost	Variance		PY FY18	CY vs PY Variance	
October	\$	5,986	5,551	435	↑	5,239	(312)	↓
November		6,419	4,875	1,544	↑	4,941	66	↑
December		6,119	4,762	1,358	↑	4,694	(68)	↓
January		6,882	5,399	1,483	↑	6,204	805	↑
February		6,291	5,114	1,177	↑	5,252	138	↑
March		6,231	5,869	362	↑	5,638	(231)	↓
April		6,374	5,704	670	↑	6,269	565	↑
May		6,753	5,485	1,268	↑	6,005	520	↑
June		6,373	5,703	670	↑	5,558	(145)	↓
July		6,710	6,276	434	↑	5,797	(479)	↓
August		6,648				5,961		
September		6,079				4,836		
Total	\$	76,866	\$ 54,738	\$ 9,401	↑	\$ 66,394	\$ 859	↑



	2014	2015	2016	2017	2018	YTD June 2019
Debt service coverage (DSC) calculation-indenture						
Senior lien coverage	3.16	3.62	3.28	2.65	2.53	1.99
Aggregate debt service coverage	1.98	2.62	3.28	2.65	2.53	1.99
Debt service coverage (DSC) calculation-IPP as O&M						
Senior lien coverage	2.55	2.56	2.45	1.79	1.65	1.63
Aggregate debt service coverage	1.41	1.85	2.45	1.79	1.65	1.63



New Combined Cycle Power Plant

MANAGEMENT'S BRIEFING AND RECOMMENDATION

John M. Benavente, P.E.
General Manager

August 22, 2019



Briefing Outline

2

1. Purpose of New Power Plant
 - USEPA Regulations Non-Compliance
 - Replace Aged Plants
 - Meet Load Growth
 - Integrate More Renewables
2. Procurement Process of New Plant
 - Chronology
 - Final Results
 - Timeline
3. Characteristics of Ukudu New Plant
4. Rate Impact
5. USEPA Consent Decree
6. Summary & Recommendation



Purpose of New Power Plant



Key Purposes of the New Plant

4

COMPLY WITH USEPA REGULATIONS

- USEPA's RICE-MACT and EGU-MACT regulations became effective in 2013 and 2015 respectively. All base load plants are non-compliant. Penalties accrued to date are in the hundreds of millions.

REPLACE AGED CABRAS STEAM PLANTS

- ⑩ The Cabras steam plant, commissioned in 1974, is nearing the end of its useful life and is a source of significant USEPA non-compliance penalties.

MEET LOAD GROWTH

- To meet load growth in order to avoid rolling load shedding again. There would be challenges meeting load growth over the next three years but doable. However without new capacity beyond 2022, load shedding would again impact ratepayers.

INCREASE RENEWABLES INTEGRATION

- ⑩ The existing units are not able to operate well with intermittent renewables. Plant needed in order to achieve higher Renewable Portfolio Standards.



Chronology of Key Events

5

August
2010

USEPA Promulgated Rule

August
2012

GPA Files for Exemption to Rule

January
2013

USEPA Denies Additional Exemptions from Clean Air Act

April
2013

GPA and Consultants meet with USEPA Region IX

November
2014

GPA, PUC representative and their consultant meet with USEPA Region IX. USEPA issues GPA January 30, 2015 deadline to submit compliance schedule.

- OPTION 1 Retire Slow Speed Diesels (SSD)
- OPTION 2 Convert SSD to ULSD and Install Catalyst
- OPTION 3 Convert to Low Sulfur RFO, Install Scrubbers and Catalyst
- OPTION 4 Convert SSD to LNG



Alternatives for Compliance

6

vetted
2014 The Cabras 1&2 and MEC 8&9 baseload plants are noncompliant and require fuel conversion to Ultra Low Sulfur Diesel to comply with air emission regulations.

These plants require additional investments to address existing and future air and water USEPA regulations.

GPA is facing significant penalties from USEPA if compliance plan is not implemented.

The new plant will be compliant and is more economical compared to conversion for compliance, life extension and operating costs of the Cabras 1&2 units.

	CONVERT EXISTING PLANTS	INVEST IN NEW PLANT	
<i>clean emission investments</i>	\$460M	\$600M	<i>fuel-efficient, compliant generators</i>
<i>additional O&M</i>	\$15M		
	\$475M	\$600M	



Potential Penalties Accrued to Date

7

RICE-MACT and EGU-MACT Non-Compliance

12-Aug-19

	Compliance Date	Days Penalty	\$/Day Penalty	Total
EGU MACT				
Cabras 1	16-Apr-15	1578	\$37,500	\$59,175,000
Cabras 2	16-Apr-15	1578	\$37,500	\$59,175,000
			Subtotal	\$118,350,000
RICE MACT				
MEC 8	13-May-13	2280	\$37,500	\$85,500,000
MEC 9	13-May-13	2280	\$37,500	\$85,500,000
Cabras 3 (Thru 8/31/15)	13-May-13	838	\$37,500	\$31,425,000
Cabras 4 (Thru 8/31/15)	13-May-13	838	\$37,500	\$31,425,000
			Subtotal	\$233,850,000
			Total Penalties	\$352,200,000



Resolution 2014-48

8

October
2014

CCU Passes Resolution 2014-48, authorizing GPA to:

Petition the PUC to commence procurement of 120 MW of Combined Cycle (CC) capacity at Harmon with the option for an additional 60 MW

Determine an Acquisition Strategy and a Procurement Strategy including proposed statutory changes, within 120 days

Continue to increase and integrate renewable energy

Continue to evaluate and implement Demand Side Management (DSM)

Evaluate Demand Response options

Evaluate additional battery storage options

Evaluate options for retention of emergency units

Continue to evaluate conversion to LNG



Resolution 2014-48

9

October
2014

Conclusions supporting CCU Resolution 2014-48:

GPA, CCU and PUC must step up all efforts in order for GPA to be in a position to minimize impacts to ratepayers when fuel oil prices rise again. We have no control on commodity prices, but we have control on how much and what type of fuel we burn to minimize rate impacts.

The dual fired combined cycle units provides GPA fuel firing diversity it needs to provide reliable service while minimizing the impacts of volatile fuel oil pricing.

GPA should investigate how to reduce ULSD premium cost. Historically premium cost has been substantial due to low volume usage. It appears a premium cost of about \$3/bbl. is possible when volumes increase to 2M bbl.

When RFO commodity price is below \$50/bbl., operating a combined cycle plant on ULSD provides the least cost.

When the RFO commodity price rise above \$50/bbl., the LNG options become the least cost. The savings become substantial and in most cases over \$1B at an RFO commodity price of \$100/bbl., which was what GPA experienced between 2010 to 2014.



Fuel Conversion

10

Changing fuel from RFO to ULSD and LNG is in the best interest of ratepayers.

	Ultra-Low Sulfur Diesel (ULSD)	Liquefied Natural Gas (LNG)
Meets USEPA Requirements	✓	✓
Supply Adequate for Guam Requirements	✓	✓
Transportation to Guam*	✓	✓
Industry Movement**		✓

* Shipment costs dependent on applicability of Jones Act

** Natural gas is dominant fuel choice for US power companies, as coal and other “dirty” fuel sources are abandoned due to changes in USEPA regulations



Proposed Compliance Schedule

11

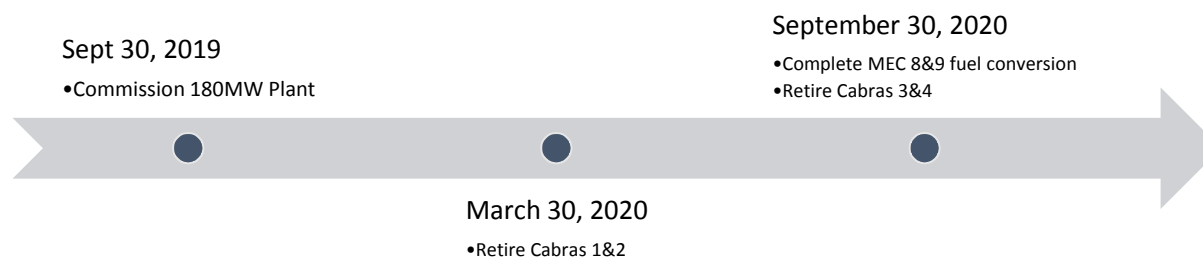
January 2015 GPA Submits Proposed Compliance Schedule to USEPA:

Construct 180MW of combined cycle units and commission units fired on ULSD and/or LNG no later than September 30, 2019.

Retire Cabras 1&2 Steam Plant six months after the commissioning of the combined cycle plant, but no later than March 30, 2020.

Convert MEC 8&9 units to ULSD and/or LNG within one year after the commissioning of the 180MW combined cycle plant, but no later than September 30, 2020.

Retire the Cabras 3&4 Slow Speed Plant within one year after the commissioning of the 180MW combined Cycle Plant, but no later than September 30, 2020.



Aged Plants



Power Supply Update

13

Authority Plants would be 24 - 48 years old by 2023

Overview		Ownership / Operation	
<ul style="list-style-type: none">GPA has approximately 398 MW of available generation capacityCabras1 & 2 de-rated to 55 MW eachGPA's peak demand in 2019 was 256 MWGPA's primary generating units are 100% fueled by fuel oil, except for 25.3 MW of renewables		<ul style="list-style-type: none">As IPP contracts expired GPA's ownership of power resources has increasedThe Power Purchase Agreement model is being used for renewable resources and the Independent Power Producer model is being used for the new combined cycle project	

Primary Generating Units					
	Unit	Year Installed	Owner	Operator	Capacity Available (MW)
Baseload	Cabras Unit 1	1974	Authority	TEMES/Authority	55.0
	Cabras Unit 2	1975	Authority	TEMES/Authority	55.0
	MEC - Piti Unit 8 ¹	1999	Authority	MEC	44.2
	MEC - Piti Unit 9 ¹	1999	Authority	MEC	44.2
Intermediate	Macheche - CT	1993	Authority	Authority	20.0
	Yigo – CT	1993	Authority	Authority	20.0
	Piti Unit 7	1997	Authority	Authority	40.0
	Dededo CT Plant	1993	Authority	Authority	40.0
	Aggreko ²	2016	Aggreko	Aggreko	40.0
Peaking	Diesel Units (10 units)	1993	Authority	Authority	40.0
Subtotal:					398.4
Renewable	Dandan Solar Project	2015	GPS Solar	GPS Solar	25.0
	Wind Turbine	2016	Authority	Authority	0.3
Total:					423.7

1. BOT expired in January 2019; ownership reverted to GPA.

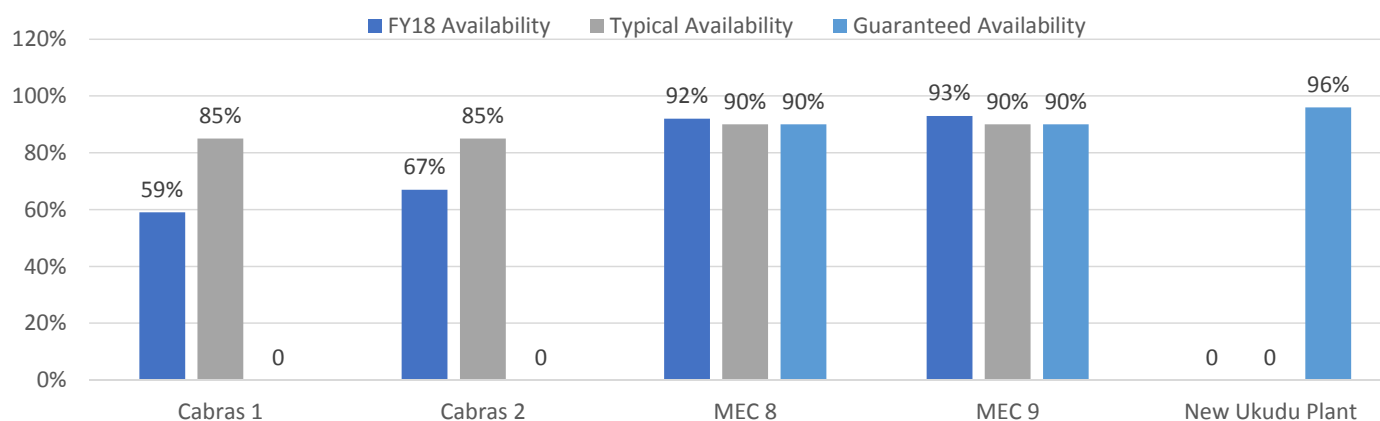
2. Current lease expires in 2020; ownership reverts to GPA.



System Reliability & Plant Life Extension

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CABRAS 1 & 2		CABRAS 3 & 4	NEW BASELOAD
Degraded Due to Age >45 years old		79 MW loss (2015 fire)	High Reliability
Plant Life Extension Requires Significant Capital Investment		Negatively Affected System Reliability	Significant Fuel Efficiency
Inadequate Capacity for Future Growth			Savings from Fuel Efficiency will Minimize Impact of Conversion to More Expensive but Clean Fuel
Not Compatible with Renewables Systems			Compatible with Renewable Systems



Meeting Load Growth



Growth Forecast at Current Capacity

16

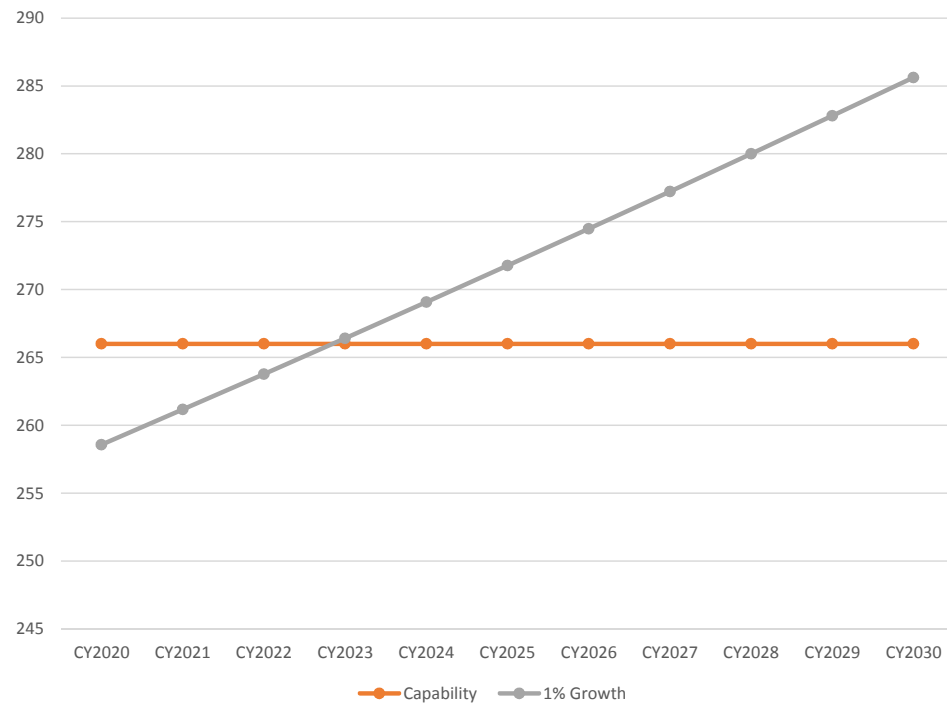
Load Growth Above 1% Overcomes Existing Capacity by 2023

Description	MW
TOTAL FIRM CAPACITY	398

Less Largest Unit	55
Less 2nd Largest Unit	55
Less 50% of 3rd Largest Unit	22
Total Reserve Requirement	132

Available Capacity For Peak Demand	266
2019 Highest Peak Demand	256
Available Growth Capacity	10

Peak Demand Capacity meeting Reliability Criteria

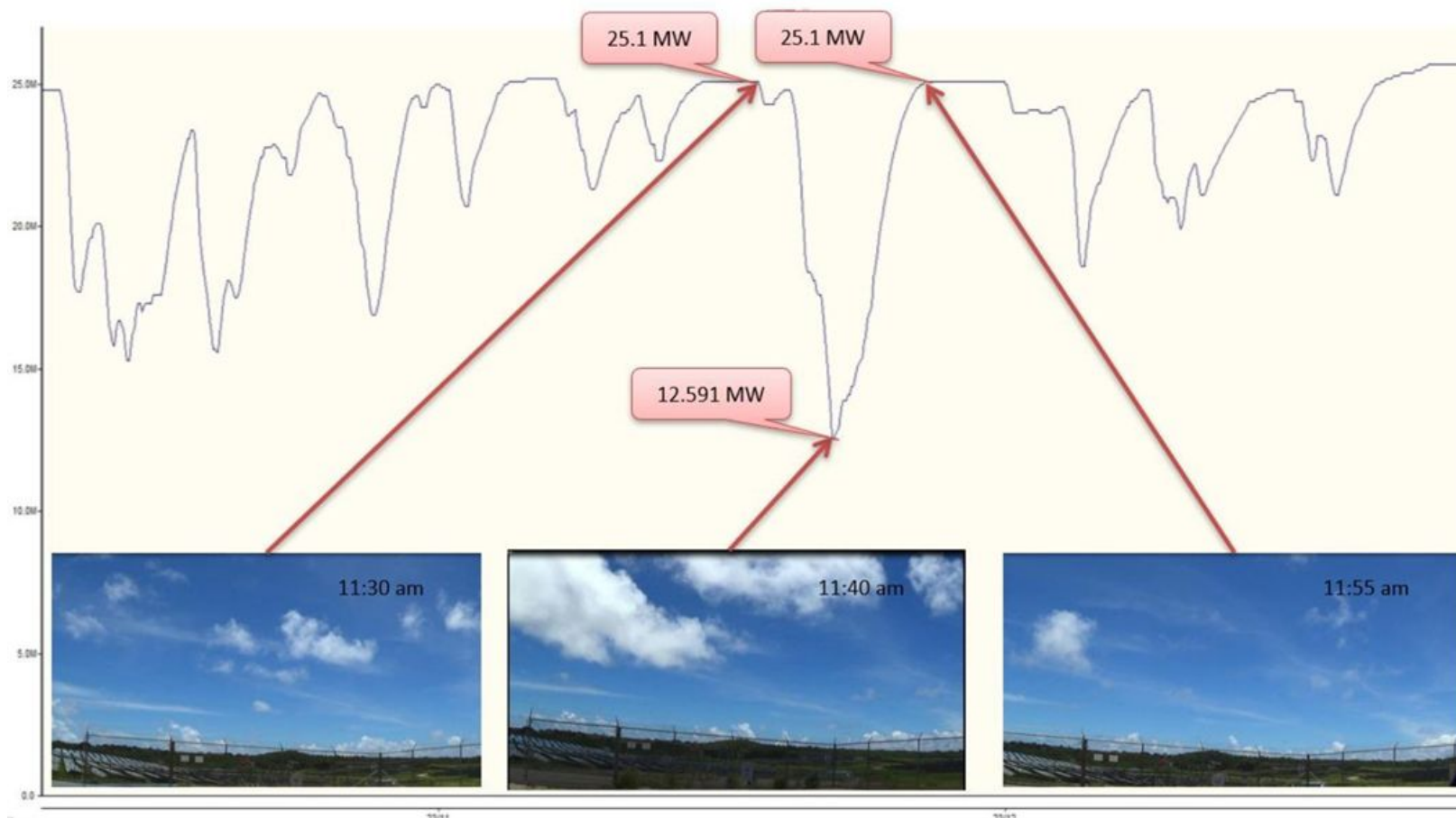


Integrate More Renewables



Intermittency of Solar PV Production

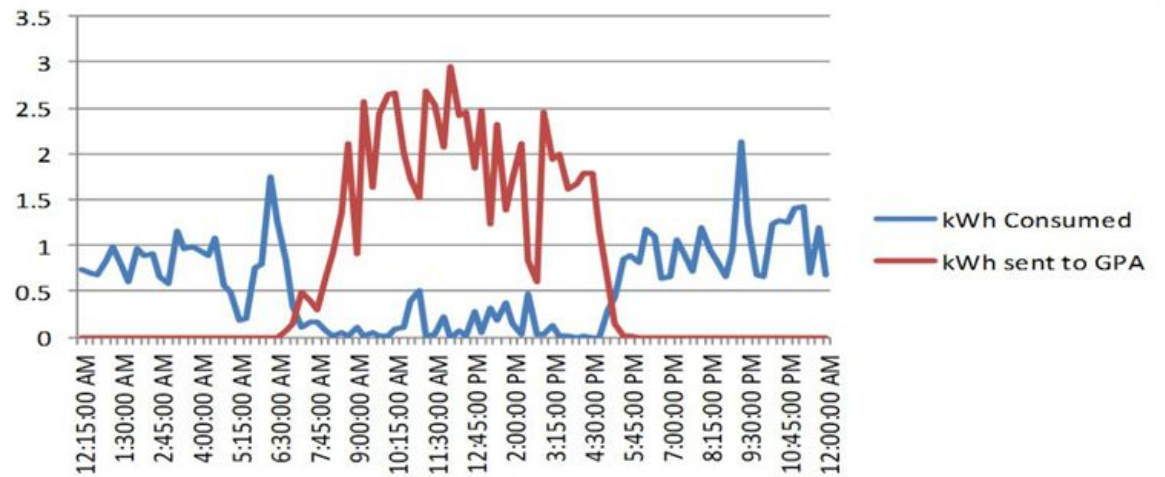
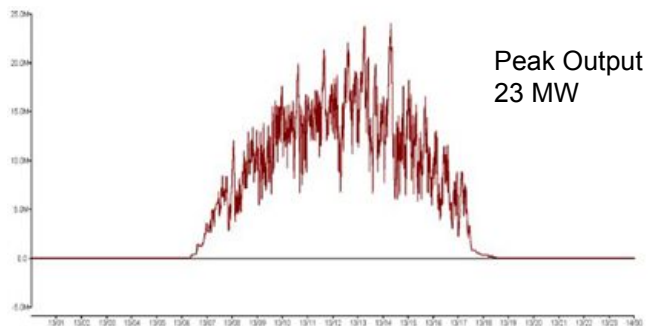
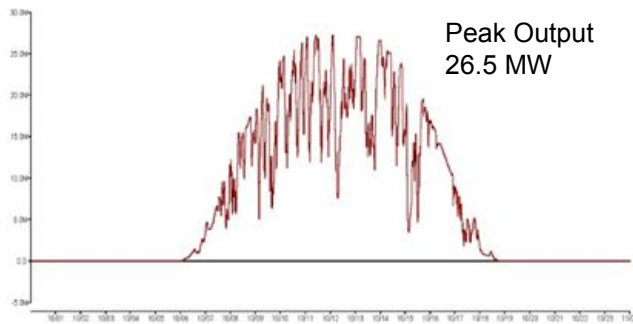
18



Intermittency of Solar PV Production

19

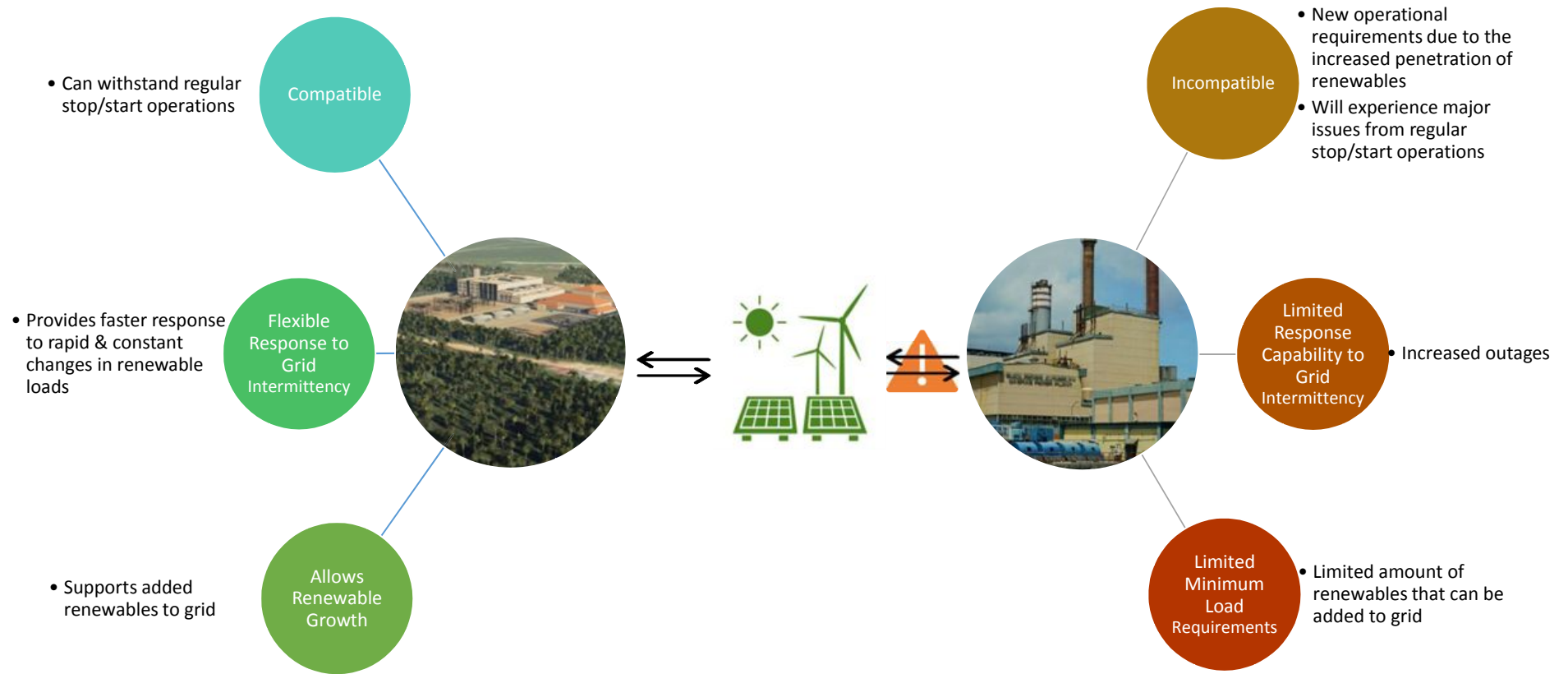
Typical PV Output



14-Jun-16		
PV System KW Size		24.70
GPA kWh 12am to 7am		22.56
GPA kWh 7am to 6pm		7.44
GPA kWh 6pm to 12am	Evening Peak	24.67
NEM kWh 7am to 6pm		69.35
Net GPA kWh		-14.68



Renewables Integration

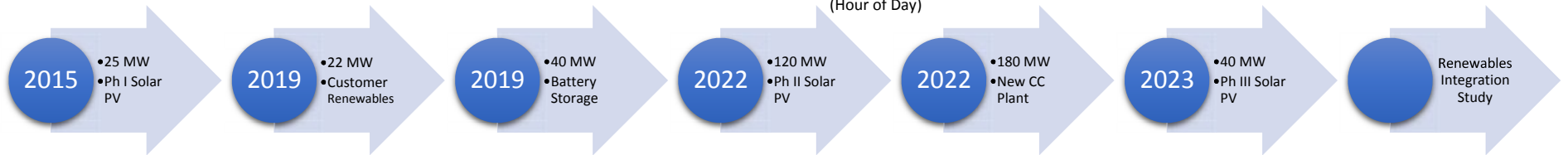
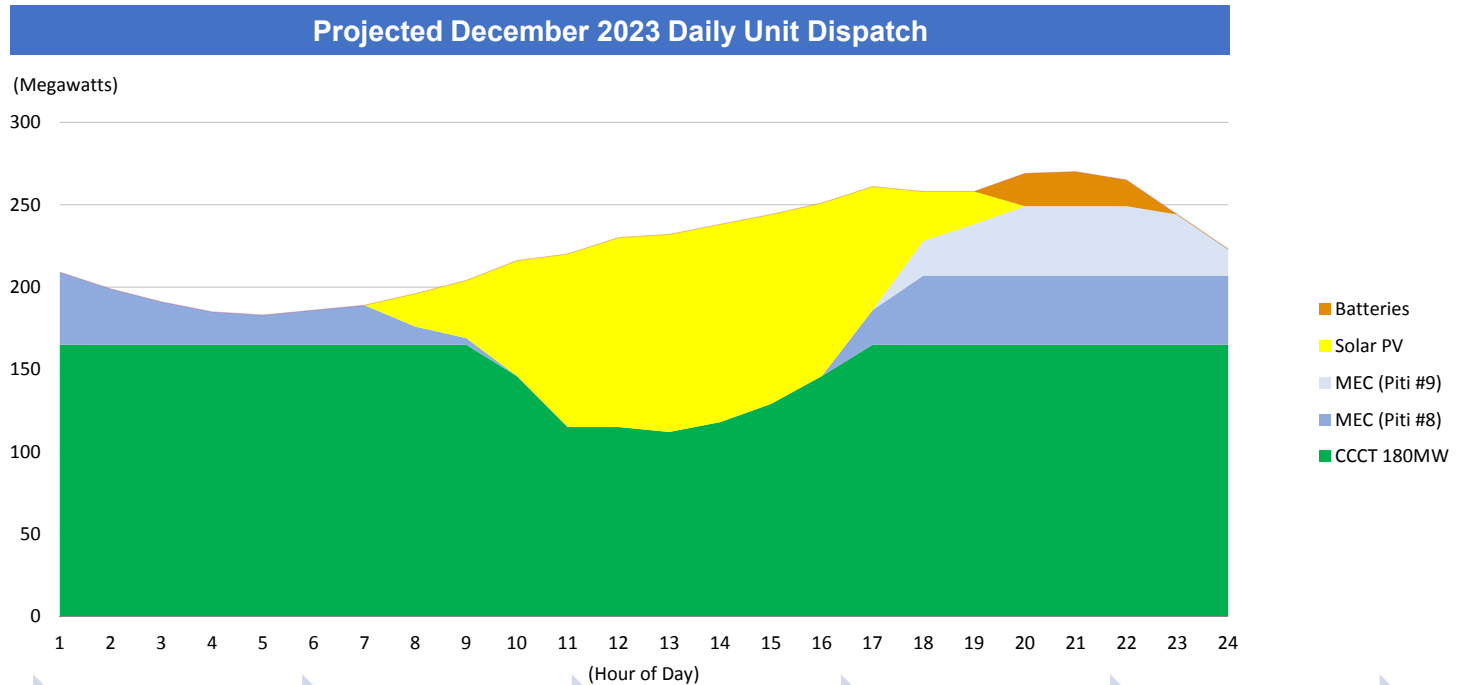


Future Energy Supply

21

New combined cycle units and expanded renewable portfolio will supply over 75% of GPA energy supply

GPA is on track to achieve 25% of energy from renewables in 2022



Procurement Process of New Power Plant

- Chronology
- Final Results
- Project Timeline



Chronology of New Power Plant Approval

23

December 2008	PUC approves Integrated Resource Plan (IRP), and best strategies for the type, amount and timing of new resource acquisitions to meet future load. Requires GPA to investigate the economics of fuel diversity of liquefied natural gas (LNG) among other conditions
July 2013	GPA files the 2013 IRP to the PUC. IRP to address system reliability, compliance with USEPA new emission regulations, and renewable energy integration.
November 2013	CCU authorizes retirement of Tanguisson Power Plant, implementing new generation units by 2016 and new fuel supply by 2019 (Resolution 2013-50)
October 2014	CCU authorizes GPA to petition PUC for approval of new dual fired combined cycle plant, utility-scale renewables and Demand Side Management (DSM) programs



Chronology of New Power Plant Approval

24

January 2015	PUC defers approval of new combined cycle plant pending submittal of additional information, but to proceed with other provisions of the IRP, such as renewables and DSM
March 2015	CCU authorizes GPA to petition PUC for consulting services for implementing USEPA compliance plan. Consulting services provides resources for procurement, contracting, construction and commissioning support for combined cycle plant.
August 2015	GPA loses 79 MW of base load capacity due to explosion and fire at Cabras 3&4. GPA's strategy moved from a planning to a procurement approach.
December 2015	PUC orders GPA to update the Integrated Resource Plan in consideration of the Cabras 3&4 loss and capacity shortfall



Chronology of New Power Plant Approval

25

May
2016

GPA files updated IRP to PUC

CCU authorizes GPA to petition PUC to acquire 180 MW dual fired combine cycle plant (Resolution 2016-36)

October
2016

PUC authorizes the acquisition of 180 MW combined cycle plant based upon the Independent Power Producer (IPP) model as a Build-Operate-Transfer (BOT) procurement



New Combined Cycle Units

26

GPA is progressing with its proposed combined cycle units.

Three proponents submitted price proposals on June 3, 2019.

Lowest bidder determined June 10, 2019.

Energy Conversion Agreement (ECA) negotiations completed August 16, 2019.



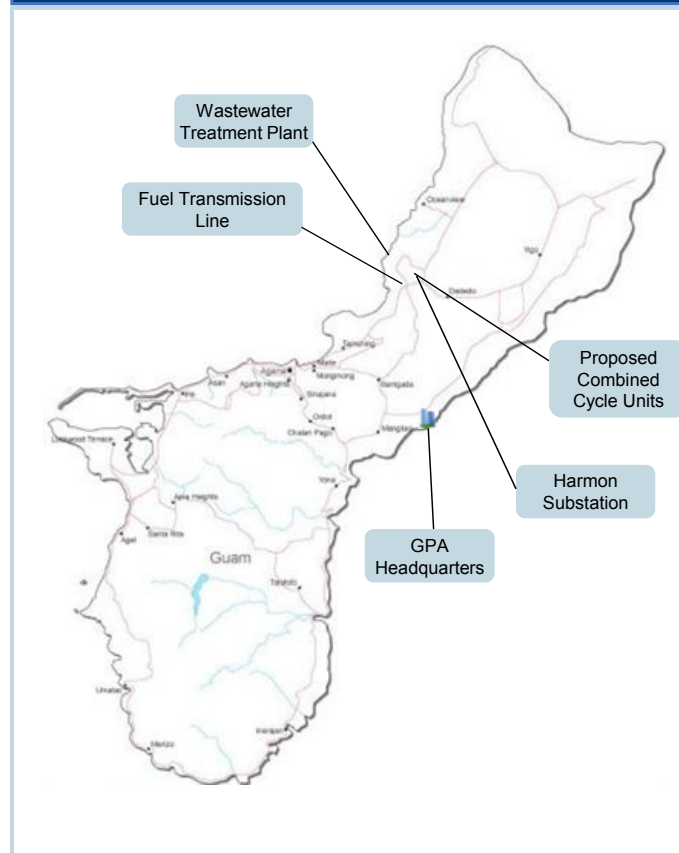
Combined Cycle Project

- Proposed combined cycle generation of 180 MW
- Dual fuel capabilities: ultra-low sulfur diesel (ULSD) and liquefied natural gas
- Site located in close proximity to key transmission line, Harmon substation and GWA wastewater plant
- MEC Units to be converted to ULSD Firing upon commissioning of new plant
- Cabras 1 & 2 to be retired within 3 months after new plant commissioning
- All GPA plants compliant with USEPA Regulations by December 31, 2022

Timing

Milestone	Date
GPUC Order Docket 15-05 filed	Jan 2016
GPUC Order Docket 15-05 approved	Oct 2016
GPA hired Stanley Consultants, Inc. to assist in creation and evaluation of bids	2017
Land acquired	2018
GPUC approved procurement parameters	2018
Bid award	Oct 2019
Construction	2019 - 2022

Location



Site Infrastructure

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Impact on System Reliability & Resiliency

28

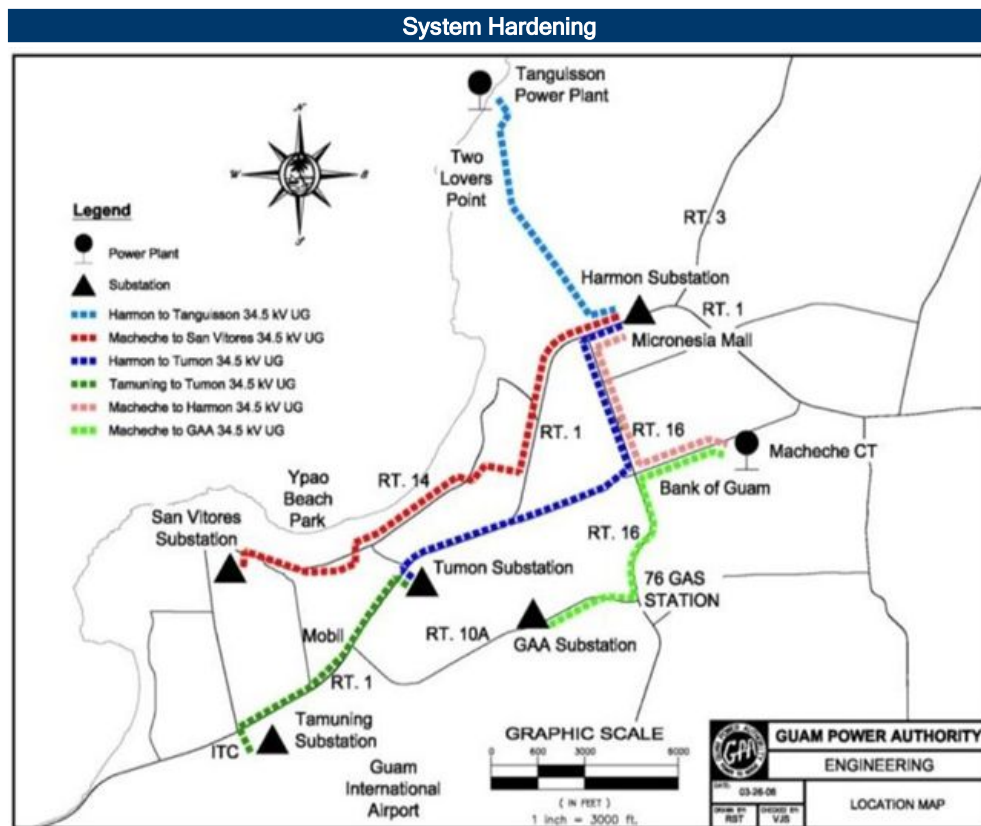
- Substantially improves system reliability and reduces line losses
- Allows for significant loads to be served through storms

Vital power transmission lines that connect system to key components of Guam's economy including Tumon hotel row, Harmon, Tamuning, Hospital, and the Airport are currently underground

60% of system load is served through these underground transmission infrastructure

GPA continues to harden its overhead system by replacing wood poles with concrete (over 87% hardened to date)

GPA continues its village underground hybrid system which places secondary lines underground (20% completed)



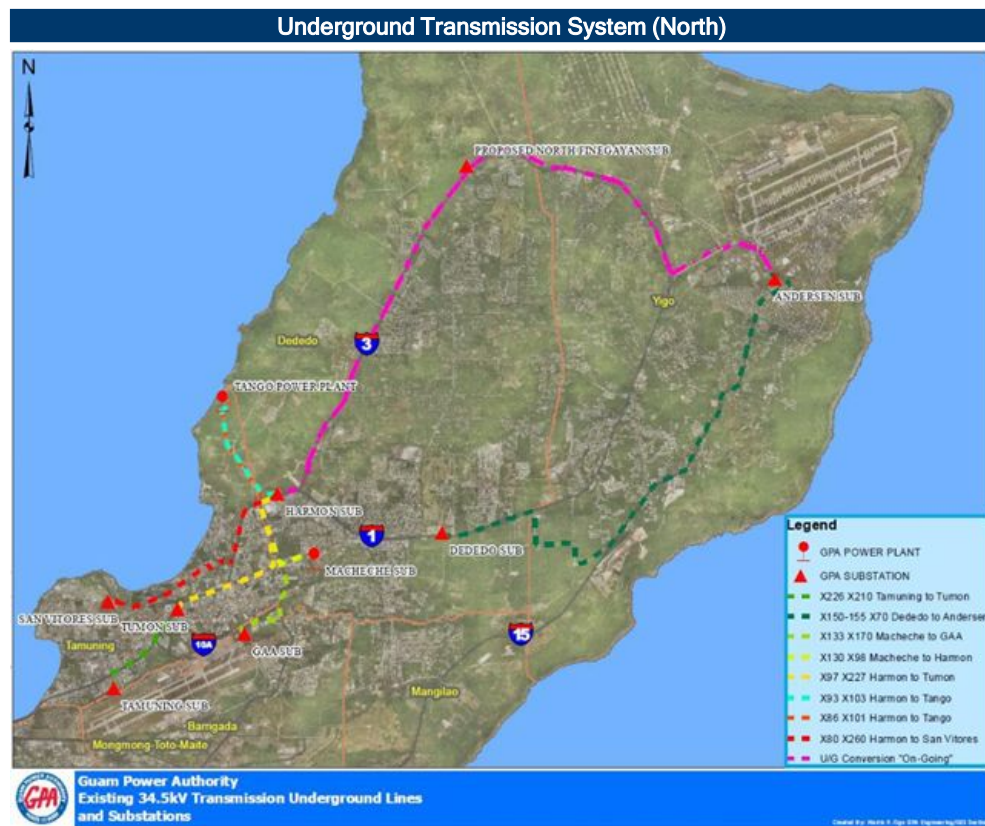
Impact on System Reliability & Resiliency

29

- Substantially improves system reliability and reduces line losses
- Allows for significant loads to be served through storms

Andersen Air Force Base and new Marine Base to be served through new underground transmission line under construction by Navy. This line ties in to an existing underground between Anderson Air Force Base and the 40MW Dededo Combustion Turbine Plant.

A future underground transmission line between Dededo Substation and the Harmon Substation will loop the load centers of the north.



Combined Cycle Plant Bid Characteristics and Results



Multi-Step Invitation For Bid - Key Points

31

Technology

- Neutral, allowing reciprocating engines and renewable energy proposals

Size

- 180 MW \pm 10% : Levelized bids due to variety of Technologies and Unit Sizes

Location

- Near Harmon substation
- Property purchased by GPA and rezoned for power plant construction and operation

Model

- Independent Power Producer (IPP), Build-Operate-Transfer (BOT) for 25 years plus additional 5-year option (30 years total)

Bid Preparation

- Four (4) months bid development time allowed for selected pre-qualified proponents



Technical Proposal Requirements

32

- ✓ 180 MW \pm 10%
- ✓ Dual fuel capable with ULSD initially
- ✓ Fully dispatchable base load
- ✓ Project Company will complete a Grid Study [steady state and dynamics modeling using Positive Sequence Load Flow (PSLF) software]
- ✓ Transient response [5% within 1 second; 10% within 2 seconds. 25 MW per minute regulation]
- ✓ Capable of providing the full Dependable Capacity at any given time regardless of the weather conditions
- ✓ Construction shall comply with Guam wind rating and seismic zone requirements
- ✓ Meet GPA Reliability Standards
- ✓ Project Company will provide environmental permitting
- ✓ Synchronous condenser capability
- ✓ The loss of a single generating unit should not cause loss of capacity of more than 45MW
- ✓ Rights of way for fuel pipeline and 115 KV transmission interconnection from to the Harmon substation provided by GPA
- ✓ Natural gas pipeline (FERC compliant) installed into same right of way as ULSD pipeline and protected while not in use
- ✓ HV transmission line and pipeline transferred to GPA after COD



Technical Proposal Requirements - continued

33

- ✓ Noise level at the site boundary shall not exceed 3 dB above existing noise level
- ✓ Utilize GWA grey water for makeup – if cooling tower is required
- ✓ Discharge to GWA or Zero Liquid Discharge system
- ✓ Potable water supplied from GWA; sea water makeup not allowed
- ✓ 7-day on-site water storage
- ✓ 30-day on-site fuel storage
- ✓ Transfer facility for loading and unloading fuel delivery trucks (for resiliency)
- ✓ Buffer zone around plant
- ✓ Utilize only part of provided property (~25 acres for plant)
- ✓ Architectural requirements:
 - ✓ *Low-rise buildings unless taller required for equipment enclosure*
 - ✓ *Building designs approved by GPA*
 - ✓ *Style, colors and finishes compatible with Guam's island heritage*
 - ✓ *Exterior colors and finishes blend in with surrounding*



Proponent Proposal Requirements

34

- ✓ Maximum debt to equity ratio of 80% to 20%
- ✓ Minimum 35% total equity required of lead developer
- ✓ Financing capacity plan
- ✓ Provide separate technical and commercial proposals in two separate envelopes
- ✓ Proposal security required (\$3M bid bond)
- ✓ One original and five copies
- ✓ Complete Section D Forms
- ✓ Responsive test Section B, Appendix A



Successful Proponent Requirements

35

- ✓ Hiring opportunities for GPA employees who may be impacted by impending retirement of Cabras 1&2
- ✓ Construction security of \$63.8M at financial closing (released 3 months after COD Section B 7.3 and ECA Section 9.6)
- ✓ Transfer Security of approximately \$15M – to replace Operational Security and released 1 year after transfer
- ✓ Liquidated damages
 - ✓ Delay in achieving COD
 - ✓ Failure to meet Contracted Capacity
 - ✓ Excessive outages
- ✓ Reliability test 7 days with 72 hours at maximum dependable capacity
- ✓ Annual dependable capacity test
- ✓ Maintenance and testing prior to transfer in the end of the Term
- ✓ Progress meetings
- ✓ Schedule updates
- ✓ OSHA safety conformance
- ✓ Monthly reports



MS-IFB Responses

36

TECHNICAL PROPOSALS	
Proposals Received (Qualified Proponents)	Evaluation Criteria
<p>Osaka Gas Co., Ltd.</p> <p>Powerflex LLC (c/o Wartsila Development & Financial Services)</p> <p>Hanwha Energy Corporation</p> <p>Korea Electric Power Corporation</p>	<p>Financial Capacity</p> <p>Experience</p> <p>Qualifications</p> <p>Technical Proposal</p>



MS-IFB Evaluation & Results

COMMERCIAL EVALUATION

Evaluation Key Points

Economic evaluation based on:

- Net Present Value incorporating all costs over the 25-year period
- Fixed Capacity Cost
- Fixed Operation and Maintenance Cost
- Variable Operation and Maintenance Cost
- Fuel Cost

Evaluation Results

Rank based on NPV (high to low)	NPV Cost
Powerflex (Wartsila)	\$4,019,294,000
Hanwha Energy	\$3,199,004,000
Korea Electric Power	\$3,121,230,000

Conclusion

Korea Electric Power Company (KEPCO)

✓ Lowest NPV Cost



KEPCO Key Technical Points

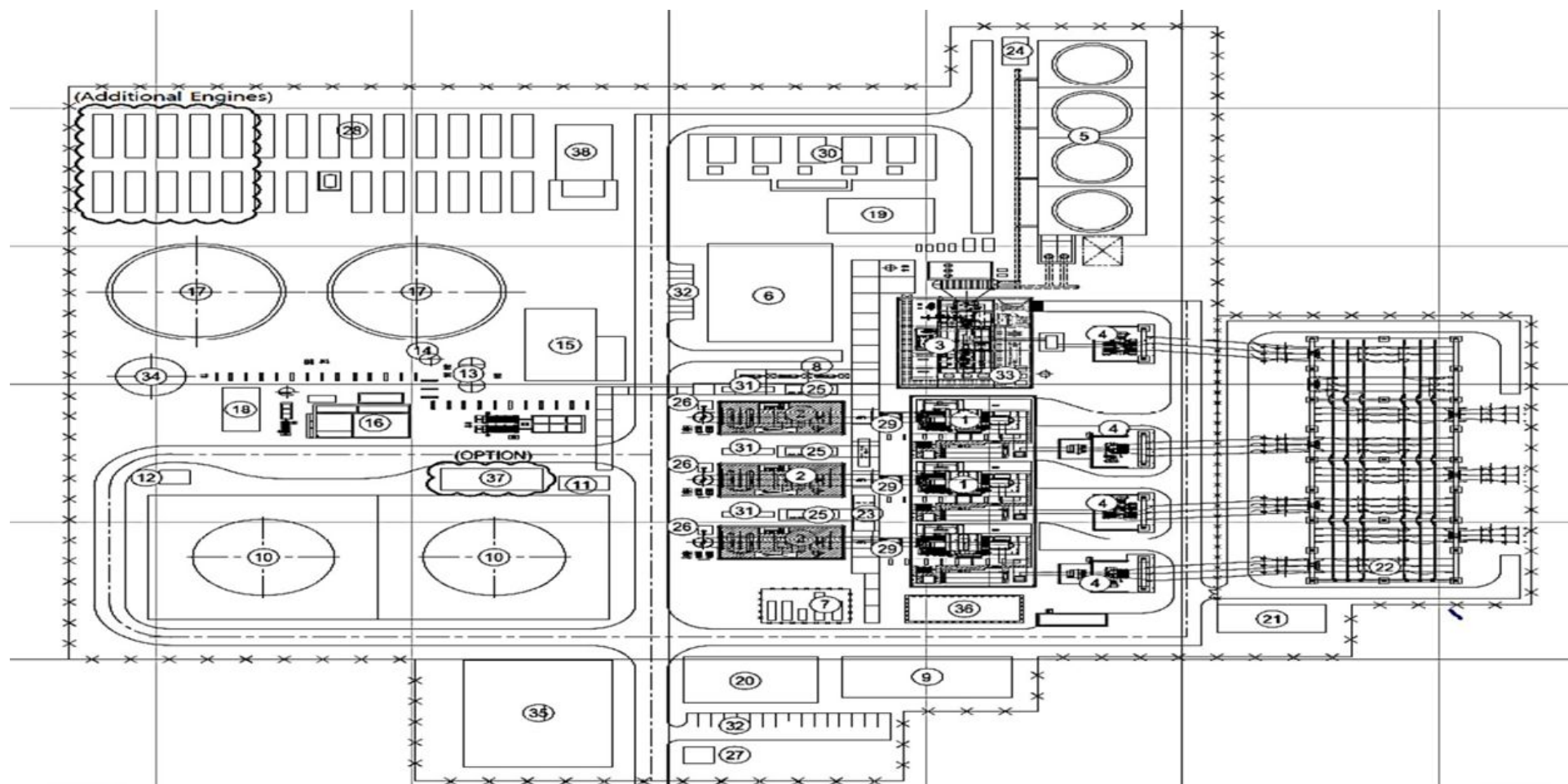
38

- Combined Cycle Unit
 - Three (3) Siemens ST 800 45 MW combustion turbines with individual Heat Recovery Steam Generator (HRSG) feeding steam to a 63 MW Siemens steam turbine
- 198 MW Total Firm Capacity
- SCR and CO catalyst pollution controls in the HRSGs
- 25 MW Battery Energy Storage System (BESS) to offset single unit loss
- Additional diesel units and CT capacity beyond rating totaling 64 MW to offset the loss of single largest unit
 - Single unit loss will total 66 MW
 - Offset by BESS and diesels
- Combustion Turbine provide quick start
- Regular on/off capability
- 6663 Btu/kWh heat rate on ULSD at 100% load in Combined Cycle makes the plant one of most efficient in the world.



NEW UKUDU POWER PLANT LAYOUT

39



Rate Impact



Projection Summary - Existing System (\$000)

41

Fiscal Year	Net Energy Sent Out	Production Fuel Costs	Generation Operation and Maintenance Expense	Debt Service Payments	Operating Expense	Total Expense Including DS
2019						
2020	1,756,633	\$ 261,786	\$ 35,706	\$ 47,737	\$ 297,492	\$ 345,228
2021	1,803,316	\$ 281,536	\$ 36,492	\$ 47,736	\$ 318,028	\$ 365,764
2022	1,820,163	\$ 295,429	\$ 37,295	\$ 47,824	\$ 332,723	\$ 380,547
2023	1,836,945	\$ 277,972	\$ 38,115	\$ 48,004	\$ 316,087	\$ 364,091
2024	1,855,423	\$ 279,008	\$ 38,954	\$ 47,993	\$ 317,962	\$ 365,954
2025	1,874,814	\$ 295,027	\$ 39,811	\$ 47,997	\$ 334,837	\$ 382,834
2026	1,876,545	\$ 307,234	\$ 40,686	\$ 47,998	\$ 347,920	\$ 395,918
2027	1,895,286	\$ 324,949	\$ 41,581	\$ 47,998	\$ 366,531	\$ 414,529
2028	1,906,812	\$ 340,869	\$ 42,496	\$ 48,004	\$ 383,365	\$ 431,369
2029	1,923,684	\$ 360,187	\$ 43,431	\$ 48,006	\$ 403,619	\$ 451,625
2030	1,943,895	\$ 379,180	\$ 44,387	\$ 48,002	\$ 423,567	\$ 471,568
2031	1,954,166	\$ 396,770	\$ 45,363	\$ 42,242	\$ 442,133	\$ 484,375
2032	1,944,530	\$ 408,413	\$ 46,361	\$ 42,241	\$ 454,774	\$ 497,014
2033	1,959,215	\$ 429,339	\$ 47,381	\$ 42,240	\$ 476,720	\$ 518,960
2034	1,971,878	\$ 450,712	\$ 48,423	\$ 42,242	\$ 499,136	\$ 541,377
2035	1,987,719	\$ 475,315	\$ 49,489	\$ 16,531	\$ 524,804	\$ 541,335
2036	1,981,674	\$ 491,913	\$ 50,578	\$ 22,720	\$ 542,491	\$ 565,211
2037	1,993,164	\$ 515,269	\$ 51,690	\$ 22,729	\$ 566,959	\$ 589,688
2038	1,997,321	\$ 537,519	\$ 52,827	\$ 22,724	\$ 590,346	\$ 613,070
2039	2,009,529	\$ 573,811	\$ 53,990	\$ 22,724	\$ 627,800	\$ 650,524
2040	2,014,527	\$ 600,208	\$ 55,177	\$ 22,723	\$ 655,386	\$ 678,108
2041	2,053,505	\$ 640,254	\$ 56,391	\$ 5,085	\$ 696,645	\$ 701,731
2042	2,069,216	\$ 670,281	\$ 57,632	\$ 5,084	\$ 727,913	\$ 732,997
2043	2,075,591	\$ 695,692	\$ 58,900	\$ 5,083	\$ 754,592	\$ 759,675
2044	2,082,030	\$ 723,162	\$ 60,196	\$ 5,087	\$ 783,358	\$ 788,445
2045	2,098,860	\$ 754,845	\$ 61,520	\$ -	\$ 816,365	\$ 816,365



Projection Summary - New Generation (\$000)

42

Fiscal Year	Net Energy Sent Out	Production Fuel Costs	Generation Operation and Maintenance Expense ¹	Debt Service Payments ²	Operating Expense	Total Expense Including DS
2020	1,756,633	\$ 265,226	\$ 35,706	\$ 47,737	\$ 300,932	\$ 348,669
2021	1,803,316	\$ 281,536	\$ 36,492	\$ 47,736	\$ 318,028	\$ 365,764
2022	1,820,163	\$ 295,429	\$ 37,295	\$ 22,775	\$ 332,723	\$ 355,498
2023	1,836,945	\$ 220,972	\$ 77,007	\$ 28,583	\$ 297,979	\$ 326,562
2024	1,855,423	\$ 222,363	\$ 78,624	\$ 28,578	\$ 300,988	\$ 329,565
2025	1,874,814	\$ 233,606	\$ 78,889	\$ 28,578	\$ 312,495	\$ 341,073
2026	1,876,545	\$ 199,605	\$ 69,611	\$ 28,579	\$ 269,216	\$ 297,795
2027	1,895,286	\$ 209,983	\$ 69,874	\$ 28,583	\$ 279,857	\$ 308,440
2028	1,906,812	\$ 218,133	\$ 70,152	\$ 28,585	\$ 288,285	\$ 316,870
2029	1,923,684	\$ 227,388	\$ 70,399	\$ 28,585	\$ 297,787	\$ 326,372
2030	1,943,895	\$ 238,102	\$ 70,640	\$ 28,581	\$ 308,742	\$ 337,323
2031	1,954,166	\$ 248,133	\$ 71,047	\$ 40,482	\$ 319,179	\$ 359,662
2032	1,944,530	\$ 255,255	\$ 72,776	\$ 40,479	\$ 328,030	\$ 368,509
2033	1,959,215	\$ 267,290	\$ 77,177	\$ 40,479	\$ 344,467	\$ 384,946
2034	1,971,878	\$ 279,446	\$ 82,000	\$ 40,480	\$ 361,446	\$ 401,927
2035	1,987,719	\$ 293,450	\$ 87,285	\$ 40,480	\$ 380,735	\$ 421,215
2036	1,981,674	\$ 303,257	\$ 92,072	\$ 40,481	\$ 395,329	\$ 435,810
2037	1,993,164	\$ 317,198	\$ 92,341	\$ 40,480	\$ 409,539	\$ 450,019
2038	1,997,321	\$ 330,517	\$ 92,616	\$ 40,483	\$ 423,133	\$ 463,616
2039	2,009,529	\$ 348,424	\$ 92,905	\$ 40,482	\$ 441,328	\$ 481,811
2040	2,014,527	\$ 363,565	\$ 93,200	\$ 8,720	\$ 456,764	\$ 465,484
2041	2,053,505	\$ 386,244	\$ 93,513	\$ 7,141	\$ 479,757	\$ 486,898
2042	2,069,216	\$ 404,092	\$ 93,816	\$ 5,484	\$ 497,908	\$ 503,392
2043	2,075,591	\$ 419,725	\$ 94,120	\$ 3,744	\$ 513,845	\$ 517,589
2044	2,082,030	\$ 437,388	\$ 94,432	\$ 1,917	\$ 531,819	\$ 533,737
2045	2,098,860	\$ 456,039	\$ 94,759	\$ -	\$ 550,798	\$ 550,798



1 – Gross

2 – Includes refunding of 2012 Bonds



Projection Summary - New Generation (\$000) ULSD

43

Fiscal Year	Production Fuel Costs	Generation Operation and Maintenance Expense ¹	Debt Service Payments ²	Production Fuel and Operating Expense Total	Total Expense Including DS
2020					
2021					
2022	\$ -	\$ -	\$ (25,049)	\$ -	\$ (25,049)
2023	\$ (57,000)	\$ 38,892	\$ (19,421)	\$ (18,108)	\$ (37,528)
2024	\$ (56,645)	\$ 39,671	\$ (19,415)	\$ (16,974)	\$ (36,389)
2025	\$ (61,421)	\$ 39,079	\$ (19,419)	\$ (22,342)	\$ (41,761)
2026	\$ (64,204)	\$ 38,457	\$ (19,420)	\$ (25,747)	\$ (45,166)
2027	\$ (69,074)	\$ 37,826	\$ (19,416)	\$ (31,248)	\$ (50,664)
2028	\$ (74,512)	\$ 37,189	\$ (19,419)	\$ (37,322)	\$ (56,741)
2029	\$ (81,873)	\$ 36,503	\$ (19,422)	\$ (45,370)	\$ (64,791)
2030	\$ (87,640)	\$ 35,790	\$ (19,421)	\$ (51,850)	\$ (71,271)
2031	\$ (92,469)	\$ 35,221	\$ (1,760)	\$ (57,248)	\$ (59,008)
2032	\$ (94,516)	\$ 35,952	\$ (1,762)	\$ (58,564)	\$ (60,326)
2033	\$ (100,383)	\$ 39,333	\$ (1,761)	\$ (61,050)	\$ (62,811)
2034	\$ (106,369)	\$ 43,115	\$ (1,761)	\$ (63,255)	\$ (65,016)
2035	\$ (113,411)	\$ 47,336	\$ 23,949	\$ (66,075)	\$ (42,126)
2036	\$ (116,908)	\$ 51,034	\$ 17,761	\$ (65,874)	\$ (48,113)
2037	\$ (123,036)	\$ 50,191	\$ 17,751	\$ (72,845)	\$ (55,094)
2038	\$ (128,427)	\$ 49,328	\$ 17,759	\$ (79,099)	\$ (61,340)
2039	\$ (142,704)	\$ 48,456	\$ 17,758	\$ (94,249)	\$ (76,491)
2040	\$ (149,642)	\$ 47,564	\$ (14,003)	\$ (102,078)	\$ (116,081)
2041	\$ (162,740)	\$ 46,664	\$ 2,056	\$ (116,076)	\$ (114,020)
2042	\$ (170,993)	\$ 45,728	\$ 400	\$ (125,265)	\$ (124,865)
2043	\$ (177,088)	\$ 44,764	\$ (1,339)	\$ (132,324)	\$ (133,663)
2044	\$ (183,189)	\$ 43,780	\$ (3,170)	\$ (139,409)	\$ (142,579)
2045	\$ (192,083)	\$ 42,783	\$ -	\$ (149,300)	\$ (149,300)



1 – Net of MEC cost reduction, CT savings, Aggreko, and insurance
 2 – Includes refunding of 2012 Bonds



Projection Summary - New Generation (\$000) LNG

44

Fiscal Year	Net Energy Sent Out	Production Fuel Costs	Generation Operation and Maintenance Expense ¹	Debt Service Payments ²	Operating Expense	Total Expense Including DS
2020	1,756,633	\$ 265,226	\$ 35,706	\$ 47,737	\$ 300,932	\$ 348,669
2021	1,803,316	\$ 281,536	\$ 36,492	\$ 47,736	\$ 318,028	\$ 365,764
2022	1,820,163	\$ 295,429	\$ 37,295	\$ 22,775	\$ 332,723	\$ 355,498
2023	1,836,945	\$ 220,972	\$ 77,007	\$ 28,583	\$ 297,979	\$ 326,562
2024	1,855,423	\$ 222,363	\$ 78,624	\$ 28,578	\$ 300,988	\$ 329,565
2025	1,874,814	\$ 233,606	\$ 78,889	\$ 28,578	\$ 312,495	\$ 341,073
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2027	1,895,286	\$ 209,983	\$ 69,874	\$ 28,583	\$ 279,857	\$ 308,440
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2032	1,944,530	\$ 255,255	\$ 72,776	\$ 40,479	\$ 328,030	\$ 368,509
2033	1,959,215	\$ 267,290	\$ 77,177	\$ 40,479	\$ 344,467	\$ 384,946
2034	1,971,878	\$ 279,446	\$ 82,000	\$ 40,480	\$ 361,446	\$ 401,927
2035	1,987,719	\$ 293,450	\$ 87,285	\$ 40,480	\$ 380,735	\$ 421,215
2036	1,981,674	\$ 303,257	\$ 92,072	\$ 40,481	\$ 395,329	\$ 435,810
2037	1,993,164	\$ 317,198	\$ 92,341	\$ 40,480	\$ 409,539	\$ 450,019
2038	1,997,321	\$ 330,517	\$ 92,616	\$ 40,483	\$ 423,133	\$ 463,616
2039	2,009,529	\$ 348,424	\$ 92,905	\$ 40,482	\$ 441,328	\$ 481,811
2040	2,014,527	\$ 363,565	\$ 93,200	\$ 8,720	\$ 456,764	\$ 465,484
2041	2,053,505	\$ 386,244	\$ 93,513	\$ 7,141	\$ 479,757	\$ 486,898
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2043	2,075,591	\$ 419,725	\$ 94,120	\$ 3,744	\$ 513,845	\$ 517,589
2044	2,082,030	\$ 437,388	\$ 94,432	\$ 1,917	\$ 531,819	\$ 533,737
2045	2,098,860	\$ 456,039	\$ 94,759	\$ -	\$ 550,798	\$ 550,798



1 – Net of MEC cost reduction, CT savings, Aggreko, and insurance
 2 – Includes refunding of 2012 Bonds



Projection Summary - New Generation (\$000) LNG

45

Fiscal Year	Production Fuel Costs	Generation Operation and Maintenance Expense ¹	Debt Service Payments ²	Production Fuel and Operating Expense Total	Total Expense Including DS
2020			\$ -		
2021					
2022	\$ -	\$ -	\$ (25,049)	\$ -	\$ (25,049)
2023	\$ (57,000)	\$ 38,892	\$ (19,421)	\$ (18,108)	\$ (37,528)
2024	\$ (56,645)	\$ 39,671	\$ (19,415)	\$ (16,974)	\$ (36,389)
2025	\$ (61,421)	\$ 39,079	\$ (19,419)	\$ (22,342)	\$ (41,761)
2026	\$ (107,628)	\$ 28,925	\$ (19,420)	\$ (78,704)	\$ (98,123)
2027	\$ (114,967)	\$ 28,293	\$ (19,416)	\$ (86,674)	\$ (106,089)
2028	\$ (122,736)	\$ 27,656	\$ (19,419)	\$ (95,081)	\$ (114,499)
2029	\$ (132,799)	\$ 26,968	\$ (19,422)	\$ (105,831)	\$ (125,253)
2030	\$ (141,078)	\$ 26,254	\$ (19,421)	\$ (114,825)	\$ (134,246)
2031	\$ (148,638)	\$ 25,684	\$ (1,760)	\$ (122,954)	\$ (124,713)
2032	\$ (153,158)	\$ 26,415	\$ (1,762)	\$ (126,743)	\$ (128,505)
2033	\$ (162,049)	\$ 29,796	\$ (1,761)	\$ (132,253)	\$ (134,015)
2034	\$ (171,266)	\$ 33,576	\$ (1,761)	\$ (137,689)	\$ (139,450)
2035	\$ (181,866)	\$ 37,796	\$ 23,949	\$ (144,069)	\$ (120,120)
2036	\$ (188,656)	\$ 41,494	\$ 17,761	\$ (147,162)	\$ (129,401)
2037	\$ (198,071)	\$ 40,651	\$ 17,751	\$ (157,420)	\$ (139,669)
2038	\$ (207,001)	\$ 39,788	\$ 17,759	\$ (167,213)	\$ (149,454)
2039	\$ (225,387)	\$ 38,915	\$ 17,758	\$ (186,472)	\$ (168,714)
2040	\$ (236,644)	\$ 38,022	\$ (14,003)	\$ (198,622)	\$ (212,625)
2041	\$ (254,010)	\$ 37,121	\$ 2,056	\$ (216,889)	\$ (214,833)
2042	\$ (266,190)	\$ 36,185	\$ 400	\$ (230,005)	\$ (229,606)
2043	\$ (275,967)	\$ 35,221	\$ (1,339)	\$ (240,747)	\$ (242,086)
2044	\$ (285,775)	\$ 34,236	\$ (3,170)	\$ (251,539)	\$ (254,708)
2045	\$ (298,806)	\$ 33,239	\$ -	\$ (265,567)	\$ (265,567)



Key Rate Factors

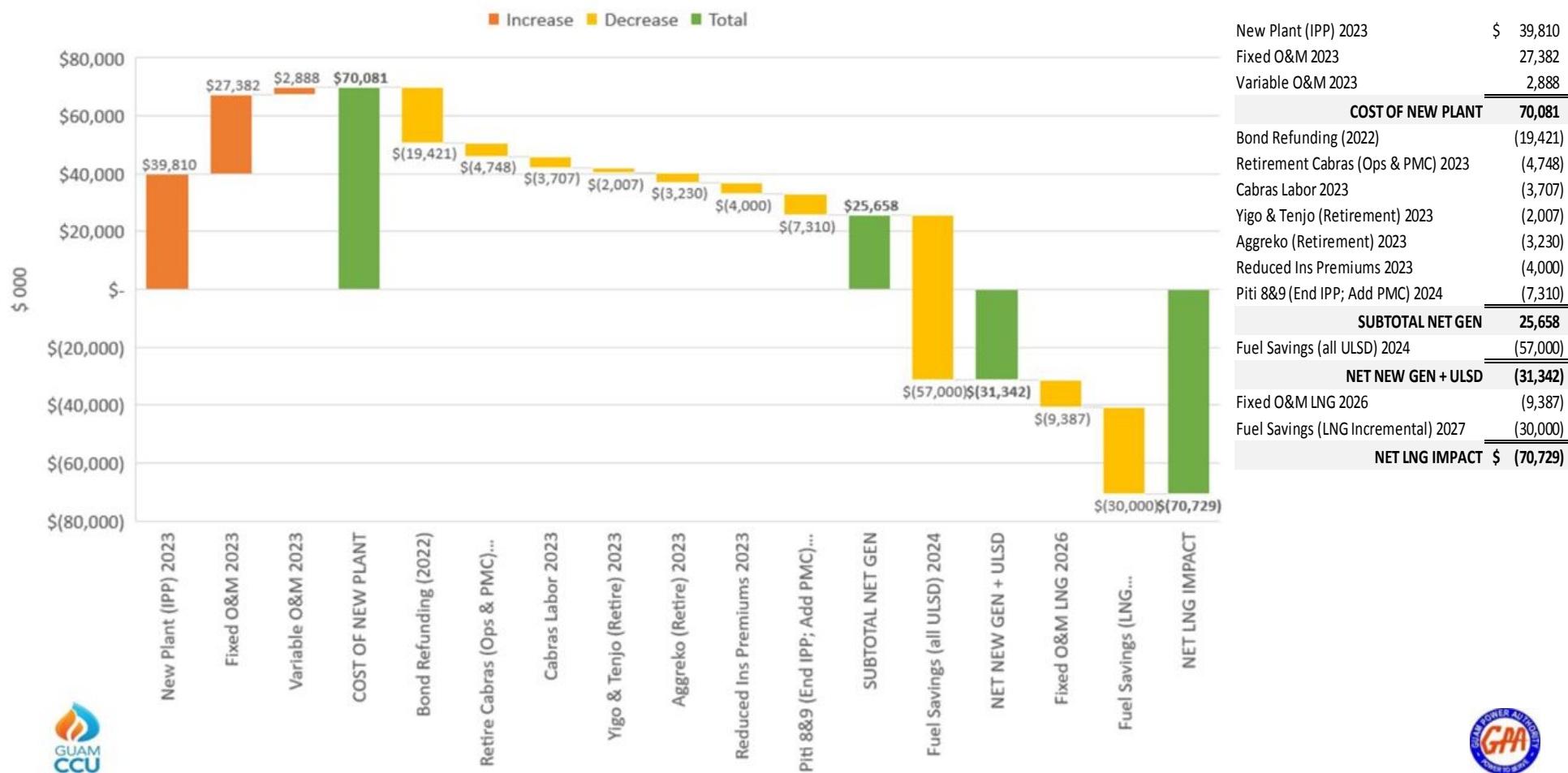
46

- There would be a net savings on rate payers total bill
- Substantial fuel savings due to efficiency of new Ukudu plant
 - New plant production offset existing intermediate and peaker production cost
 - New plant more efficient than MEC units
 - Renewables integrated in 2023
 - Storage tanks rentals reduced due to single fuel
- Increased fixed capacity and O&M payments of new Ukudu plant offset by fuel cost reduction due to plants high efficiency
- Reduction in cost in FY 2023 due to:
 - Cabras 1&2 retirement
 - Aggreko contract expiration
 - MEC operating cost reduced due to lower load factor
 - Some peakers candidates for retirement
- Refinancing of 2012 bonds will levelized payments in 2022
- Base rate increased but LEAC decreased resulting in Total Bill Savings

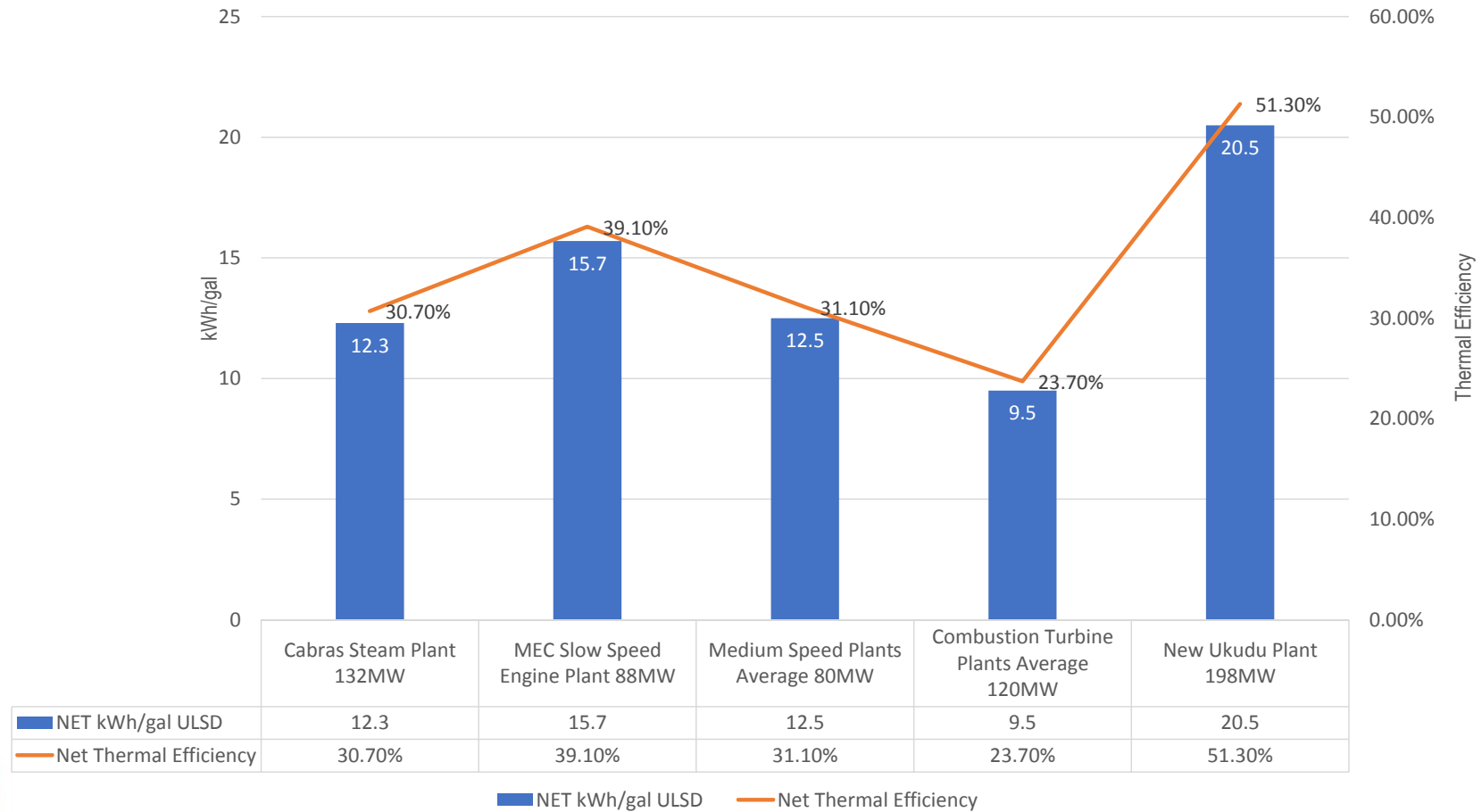


Cost Reduction Strategy

47



Comparison of Plant Efficiencies



Targeted Cost Reductions

49

All existing generation plants will be evaluated over the next 2-years for potential retirement or change in operations in 2023 due to the new power plant and the magnitude of military buildup growth.

Description	KW	Amount
Yigo CT KW Retired	20,000	\$ 478,465
Tenjo Diesel KW Retired	26,000	\$ 2,695,441
Aggreko Re-Distributed with ATS		\$ 11,243,703
MEC Under PMC/GPA Employee Model		\$ 10,770,445
TOTALS	46,000	\$ 25,188,054




Generation Plant Transfers Resulting in Cost Reductions

50

Transfer of IPP generating units reduced GPA costs following the expiration of their capital leases

- In late 1990s, GPA entered into capital lease transactions for new generation
 - Approximately 128MW of capacity
 - MEC 8: 44MW Baseload
 - MEC 9: 44MW Baseload
 - PITI 7: 40MW Intermediate
- Aggreko 40MW Temporary Lease to Own Power Contract began January 2016 and expires Jan 2021 with ownership to GPA. Annual cost about \$13M

PITI 7
<ul style="list-style-type: none"> ■ GPA paid \$6 million per year as part of capital lease, which expired in 2017 ■ GPA now spends less than \$1 million to operate and maintain the plant


MEC 8 and 9
<ul style="list-style-type: none"> ■ In January 2019, GPA took ownership of the MEC units 8 and 9 ■ GPA paid about \$30 million per year for the capital lease ■ GPA paying \$15 million annually to MEC to continue to operate and recapitalize plant up to January 2024


Load Growth Capacity with New Plant

51

Description	Quantity	MW	Total MW Capacity
Ukudu Combustion Turbines	3	45	135
Ukudu Steam Turbine	1	63	63
MEC 8	1	44	44
MEC 9	1	44	44
Total Baseload Capacity			286
<i>GPA Standby Generators</i>			
Dededo CT 1	1	20	20
Dededo CT 2	1	20	20
Macheche CT	1	20	20
Yigo CT	1	20	20
Piti 7 CT	1	40	40
Tenjo Diesels	6	4	24
Talofofo Diesels	2	4	8
Manenggon Diesels	2	4	8
Aggreko Diesels	38	1.1	40
Total Peakers/Reserves			200
TOTAL FIRM CAPACITY			486
Largest Unit			45
2 nd Largest Unit			45
3 rd Largest Unit			45
Total Reserve Requirement			135
Peak Demand Capacity			351
2019 Peak Demand			256
AVAILABLE GROWTH CAPACITY			95



Load Growth Accommodated with New Plant

52



USEPA Consent Decree



USEPA Compliance Schedule

54

- New power plant is central to compliance with USEPA regulations.
- Negotiations with USEPA continues and indications are that a Consent Decree is imminent soon.
- GPA has provided USEPA a workable updated compliance timeline to insure the electrical grid reliability is maintained while the new combined cycle plant is constructed.
- Retiring 264MW of its 352MW base load capacity within a 7 year period is a complex and challenging task to achieve as proposed in the plan submitted in Jan 2015.
- The retirement of 264MW of base load and the conversion of 88MW to clean ULSD fuel will result in the substantial reduction of pollutants above what the 2013 and 2015 USEPA regulations targeted. Additionally, retirements will result in the discontinuance of thermal effluent discharges into ocean waters further improving the environment.
- CCU and PUC have been aggressively implementing renewable energy and demand side management programs resulting in additional benefits to the environment.



Summary & Recommendations



Summary

56

- **The New Power Plant is critical to the future of the power system and we need to proceed in commissioning the plant by October 2022:**
 - New power plant is central to compliance with USEPA regulations of 2013 and 2014. Non-compliance has resulted in accrued potential penalties in the hundreds of millions.
 - GPA plants are aged and will be between 24 to 48 years old by 2023.
 - Load growth beyond 2022 will result in load shedding unless new capacity is added.
 - Integration of more renewables beyond 2022 without the new plant is unlikely and will limit the grid's ability to increase Guam's Renewable Portfolio Standard.
- **The new plant is much more reliable than the existing units.** Its characteristics and location will substantially improve the reliability of the system.
 - Its location, in northern Guam, near large and critical load centers having underground transmission lines reduces line losses and improves operation during and recovery after storms.
- **The new plant is much more efficient than existing units.**
 - Reduction of GPA's annual fuel consumption by about 35 million gallons.
- **The new plant improves the sustainability and resilience of the island.**
 - Tertiary-treated wastewater is used for cooling, substantially reducing demand on aquifer.
 - Eliminates sea water usage to cool generators thereby protecting our ocean environment.
 - Complies with USEPA regulations by burning clean fuel and much less fuel thereby reducing the island's carbon footprint and its impact on climate change.
- **The new plant utilizing ULSD provides the opportunity for a net reduction in cost by 2023.**
 - The fuel savings pay for the cost of the new plant.
 - The dual-fuel new plant can also burn natural gas and provides GPA the opportunity to reduce energy cost more if LNG is integrated into the system mix.



Recommendations

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- GPA is requesting the CCU and the PUC to approve the Energy Conversion Agreement with KEPCO for the New Combined Cycle Plant and its supporting schedules and documents:
 - Energy Conversion Agreement (ECA)
 - ECA Schedules & Supporting Documents
 - Schedule 1 Functional Specifications
 - Schedule 2 Technical Limits and Contracted Characteristics
 - Schedule 3 GPA Provided Items
 - Schedule 4 Commissioning and Testing
 - Schedule 5 Determination of Tariff
 - Schedule 6 Metering System
 - Schedule 7 ULSD Specifications
 - Schedule 8 Not Used
 - Schedule 9 LNG Specifications
 - Schedule 10 Transfer Price
 - Schedule 11 Performance Bond
 - Schedule 12 ULSD Metering and Fuel Settlement
 - Schedule 13 Not Used
 - Schedule 14 Adjustment In case Natural Gas is available after Year 3
 - Real Property Lease Agreement
 - Lender's Direct Agreement



Project Milestones

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CCU APPROVAL

August 2019

PUC APPROVAL

September 2019

Sign Contract

October 2019

Permitting & Financial Close

June 2020

Commercial Operations Date

October 2022



Guam Power Authority

Review of New Generating Rate Impacts

Presentation

August 18, 2019

Mark Beauchamp, President

Utility Financial Solutions, LLC

Phone: 616-403-5450

Email: mbeauchamp@ufswb.com



International consulting firm providing cost of service,
financial plans and financial services to utilities

Combined Cycle & New Solar Generating Units

- Identified fuel expenses under the following:
 - Combined cycle generating unit
 - Current power supply portfolio (Included new solar)
- Projected changes in capacity and operational and debt service restructuring
- Compared changes in costs with new generating unit
- Identified impacts on average residential customer (All other changes excluded)



Projected Change in Costs from New Generation

Fiscal Year	Production Fuel Costs	Generation Operation and Maintenance Expense	Debt Service Payments	Total Expense Including DS
2023	\$ (57,000)	\$ 38,892	\$ (19,421)	\$ (37,528)
2024	\$ (56,645)	\$ 39,671	\$ (19,415)	\$ (36,389)
2025	\$ (61,421)	\$ 39,079	\$ (19,419)	\$ (41,761)
2026	\$ (107,628)	\$ 28,925	\$ (19,420)	\$ (98,123)
2027	\$ (114,967)	\$ 28,293	\$ (19,416)	\$ (106,089)
2028	\$ (122,736)	\$ 27,656	\$ (19,419)	\$ (114,499)
2029	\$ (132,799)	\$ 26,968	\$ (19,422)	\$ (125,253)
2030	\$ (141,078)	\$ 26,254	\$ (19,421)	\$ (134,246)
2031	\$ (148,638)	\$ 25,684	\$ (1,760)	\$ (124,713)
2032	\$ (153,158)	\$ 26,415	\$ (1,762)	\$ (128,505)
2033	\$ (162,049)	\$ 29,796	\$ (1,761)	\$ (134,015)
2034	\$ (171,266)	\$ 33,576	\$ (1,761)	\$ (139,450)
2035	\$ (181,866)	\$ 37,796	\$ 23,949	\$ (120,120)
2036	\$ (188,656)	\$ 41,494	\$ 17,761	\$ (129,401)
2037	\$ (198,071)	\$ 40,651	\$ 17,751	\$ (139,669)
2038	\$ (207,001)	\$ 39,788	\$ 17,759	\$ (149,454)
2039	\$ (225,387)	\$ 38,915	\$ 17,758	\$ (168,714)
2040	\$ (236,644)	\$ 38,022	\$ 17,757	\$ (180,865)
2041	\$ (254,010)	\$ 37,121	\$ 35,396	\$ (181,493)
2042	\$ (266,190)	\$ 36,185	\$ 35,395	\$ (194,611)
2043	\$ (275,967)	\$ 35,221	\$ 35,396	\$ (205,351)
2044	\$ (285,775)	\$ 34,236	\$ 35,396	\$ (216,143)
2045	\$ (298,806)	\$ 33,239	\$ -	\$ (265,567)

- Fuel Cost Decreasing by \$50 - \$60 million between 2023 – 2025
- LNG anticipated 2026, savings increase an additional \$40 - \$45 million
- Savings partially off set by \$40 million in additional operating expenses
- Debt service restructuring increases customer savings by \$19 million between 2023 - 2030

Residential Rate Impacts

Change in Fuel Costs

Year	LEAC Projection (Cents per kWh)		
	Projected Fuel Costs - Current	Projected Fuel Costs - New Generating Unit	Monthly Dollar Savings
2023	\$ 0.151	\$ 0.120	\$ 29.48
2024	0.150	0.120	29.00
2025	0.157	0.125	31.12
2026	0.164	0.106	54.49
2027	0.171	0.111	57.63
2028	0.179	0.114	61.15
2029	0.187	0.118	65.58
2030	0.195	0.122	68.95

Base Rate Adjustment Average Residential Customer

Year	Change in Base Rates - Percent	Average Monthly Base Rate Charges	Monthly Dollar Change
2022		91.26	
2023	11.8%	102.06	10.80
2024	-	102.06	10.80
2025	-	102.06	10.80
2026	-	102.06	10.80
2027	-	102.06	10.80
2028	-	102.06	10.80
2029	-	102.06	10.80
2030	-	102.06	10.80

Net Residential Rate Impacts

Year	Current	New Generating	Dollar Change	Percent Change
2023	\$ 235.01	\$ 216.34	\$ (18.68)	-7.95%
2024	\$ 244.91	\$ 215.91	(29.00)	-11.84%
2025	\$ 251.55	\$ 220.43	(31.12)	-12.37%
2026	\$ 257.59	\$ 203.11	(54.49)	-21.15%
2027	\$ 264.94	\$ 207.31	(57.63)	-21.75%
2028	\$ 271.88	\$ 210.73	(61.15)	-22.49%
2029	\$ 279.93	\$ 214.35	(65.58)	-23.43%
2030	\$ 287.37	\$ 218.42	(68.95)	-23.99%



Customer Service Division

July 2019

SITE	Less than 10 Mins.	%	10-15 Mins.	%	15-30 Mins.	%	30-45 Mins.	%	TOTAL	Location %
GBN	669	3%	175	10%	375	20%	621	34%	1,840	30%
HAGATNA	1,193	59%	343	17%	359	18%	127	6%	2,022	33%
UPPER TUMON	1,541	70%	336	15%	272	12%	54	2%	2,203	36%
TOTAL:	3,403	56%	854	14%	1,006	17%	802	13%	6,065	100%

Government Accounts Receivable: CSD reports invoices for the month of June 2019, for 75 active government accounts with an overall total of \$7,292,321.09. 61 accounts were current (81%), 14 accounts arrears (19%). 6 fax/emails issued to government accounts totaling \$2,238,138.91. June 2019 invoices, 69 accounts paid in full.

Credit and Collection

Delinquent Ratio: As of July 2019, the authority reported a total 47,913 active customers. The "Delinquent Ratio" was recorded at 5.17% with 2,477 total delinquent accounts, total arrears of 1,222,101.52; 974,311.09; 2,300(4.80% / 28-45 days) category; 32,310.44; 134 (0.28% / 46-60 days); 33,612.29; 107(0.22% 61-90 days); and 181,867.70; 93(0.19% / Over 90 days).

Bankruptcy: During July 2019 the Bankruptcy reports one (1) customer account filed, totaling \$2,094.25.

Damage Claim: The Damage claim committee received two (2) Damage claims at \$2,077.45 for the month of July 2019.

ACTIVE DELINQUENT – NON-PAYMENT

Command Center / Disconnection / Reconnections

Single Phase Meters: Credit and Collection issued orders to Command Center to perform remote disconnect/reconnect for a total of 1,032 customers; 699(68%) were disconnected; 321(31%) deferred; 12(1%) incompletes.

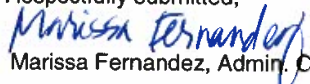
3 Phase Meters: Credit and Collection issued orders to Disconnect Reconnect crew to perform truck roll out disconnect/reconnect for a total of 24 customers; 15(62%) were disconnected; 9(38%) deferred; 0(0%) incompletes.

FY 2019 (July 01-31, 2019)								
	Scheduled	Disc	Deferred	Complete Vs. Scheduled	Incomplete Disconnections	Disc Vs. Scheduled	Deferred Vs. Scheduled	Incomplete Vs. Scheduled
Jul-19	1,056	714	330	1,044 100%	12	68%	31%	1%
3 rd	2,160	1,487	626	2,113 98%	44	69%	29%	2%
2 nd	2,869	2,089	711	2,800 98%	69	73%	25%	2%
1 st	8,855	2,720	6,013	8,733 99%	122	31%	68%	1%
TOTAL:	14,940	7,010	7,680	14,690 98%	247	47%	51%	2%

FY 2018 (October 01, 2017 – September 30, 2018)								
QTR	Scheduled	Disc	Deferred	Complete Vs. Scheduled	Incomplete Disconnections	Disc Vs. Scheduled	Deferred Vs. Scheduled	Incomplete Vs. Scheduled
4 th	2,923	2,137	768	2,905 99%	18	73%	26%	1%
3 rd	4,824	2,635	2,167	4,802 100%	22	55%	45%	0%
2 nd	4,092	2,010	2,032	4,042 99%	50	49%	50%	1%
1 st	3,890	2,237	1,646	3,883 100%	7	58%	42%	0%
TOTAL:	15,729	9,019	6,613	15,632 99%	97	57%	42%	1%

This concludes the Summary Report for the Customer Service Division for the month of July 2019.

Respectfully submitted,


Marissa Fernandez, Admin. Officer

Reviewed / Approved by:


Richard J. Bersamin, ACSM

Run Date: 8/6/2019
Run Time: 2:45:32AM

Guam Power Authority
Delinquent Active Accounts Summary Report
As of - 08/06/2019

Report ID: DELRATIO
Page 67 of 67

<u>Rate Classification</u>	<u>Total Cust</u>	<u>Del Cust</u>	<u>Del 28-45</u>	<u>Del 46-60</u>	<u>Del 61-90</u>	<u>Over-90</u>	<u>Current Balance</u>	<u>28-45 Days</u>	<u>46-60 Days</u>	<u>61-90 Days</u>	<u>>90 Days</u>	<u>Total Arrears</u>	<u>Total I</u>
Residential(ERES-R)	42,250	2,417	2,274	104	70	67	6,040,695.91	568,981.40	21,297.45	19,629.06	22,008.09	631,916.00	6,672,611
		5.72%	5.38%	0.25%	0.17%	0.16%							
Small Gen Non Demand(EGEN-G)	4,048	206	194	18	7	9	919,963.04	82,825.18	7,731.00	2,661.06	4,016.35	97,233.59	1,017,196
		5.09%	4.79%	0.44%	0.17%	0.22%							
Small Gen Demand(EGEND-J)	1,008	49	48	5	0	3	2,643,880.61	274,410.36	4,226.02	0.00	146,821.63	425,458.01	3,069,338
		4.86%	4.76%	0.50%	0.00%	0.30%							
Large General(ELPS-P)	120	8	7	0	0	1	6,134,538.83	139,987.52	0.00	0.00	5,527.55	145,515.07	6,280,053
		6.67%	5.83%	0.00%	0.00%	0.83%							
Private Streetlight(EPOL-H)	519	24	21	15	11	13	16,228.43	843.58	579.99	443.46	4,063.73	5,930.76	22,159
		4.62%	4.05%	2.89%	2.12%	2.50%							
<u>Sub-Total (Private)</u>	47,945	2,704	2,544	142	88	93	15,755,306.82	1,067,048.04	33,834.46	22,733.58	182,437.35	1,306,053.43	17,061,360
		5.64%	5.31%	0.30%	0.18%	0.19%							
Small Gov Non Demand(ESGS-S)	661	66	65	48	0	1	449,572.17	43,859.50	58,611.68	0.00	8,848.22	111,319.40	560,891
		9.98%	9.83%	7.26%	0.00%	0.15%							
Small Gov Demand(ESGSD-K)	359	84	84	77	0	1	3,594,864.66	458,340.92	566,262.89	0.00	226.19	1,024,830.00	4,619,694
		23.40%	23.40%	21.45%	0.00%	0.28%							
Large Government(ELGS-L)	43	20	20	20	0	0	2,843,892.31	480,736.96	603,172.18	0.00	0.00	1,083,909.14	3,927,801
		46.51%	46.51%	46.51%	0.00%	0.00%							
Gov Streetlight(ESTL-F)	619	22	17	5	0	6	484,082.13	2,262.07	273.92	0.00	718.00	3,253.99	487,336
		4%	2.75%	0.81%	0.00%	0.97%							
<u>Sub-Total (Government)</u>	1,682	192	186	150	0	8	7,372,411.27	985,199.45	1,228,320.67	0.00	9,792.41	2,223,312.53	9,595,723
		11.41%	11.06%	8.92%	0.00%	0.48%							
<u>GRAND TOTAL</u>	49,627	2,896	2,730	292	88	101	23,127,718.09	2,052,247.49	1,262,155.13	22,733.58	192,229.76	3,529,365.96	26,657,084
		5.84%	5.50%	0.59%	0.18%	0.20%							

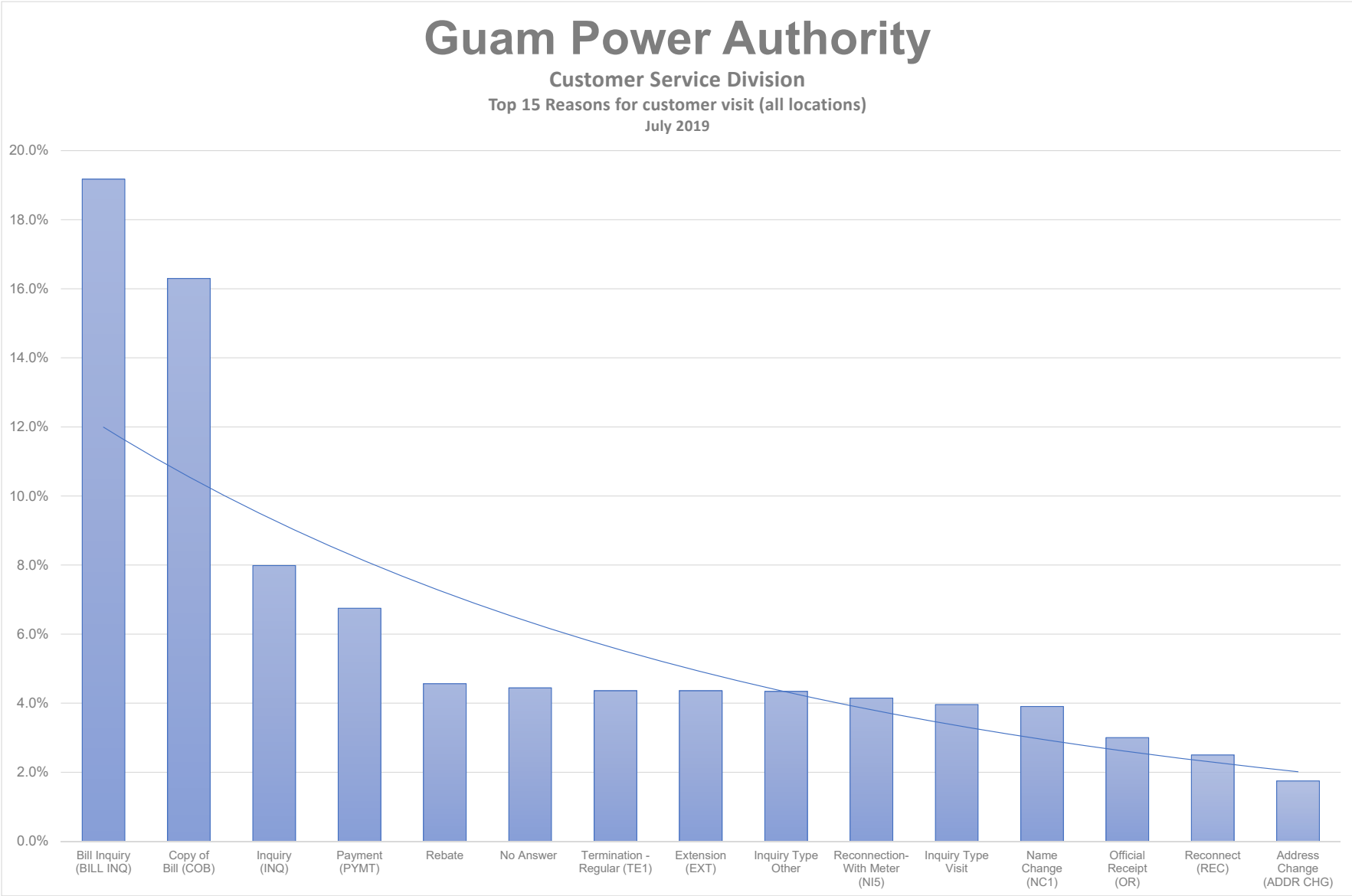
Guam Power Authority
Customer Service Division
Employee Month-To-Date (MTD) Consolidated Report
JULY 2019

Reason(s) for visit	Transaction type	Fadian	% MTD	Hagatna	% MTD	Tumon	% MTD	TOTAL
New Install - Permanent (NI1)	Application	61	1.8%	2	0.1%	5	0.1%	68
New Install - Temporary (NI2)	Application	21	0.6%	4	0.1%	3	0.1%	28
New Install - Street Light (NI3)	Application	0	0.0%	2	0.1%	0	0.0%	2
Reconnection - Without Meter (NI4)	Application	2	0.1%	1	0.0%	5	0.1%	8
Reconnection - With Meter (NI5)	Application	128	3.9%	136	3.7%	182	4.8%	446
Name Change (NC1)	Application	108	3.3%	141	3.8%	171	4.5%	420
Name Change - Street Light (NC2)	Application	2	0.1%	1	0.0%	2	0.1%	5
Termination - Regular (TE1)	Termination	136	4.1%	165	4.5%	168	4.5%	469
Termination - Name Change (TE2)	Termination	0	0.0%	1	0.0%	0	0.0%	1
Termination - Non Payment (TE3)	Termination	0	0.0%	0	0.0%	0	0.0%	0
Termination - Typhoon (TE4)	Termination	0	0.0%	0	0.0%	0	0.0%	0
Termination - Removal (TE5)	Termination	2	0.1%	2	0.1%	1	0.0%	5
Termination (TE6)	Termination	0	0.0%	0	0.0%	1	0.0%	1
Work Clearance - Emergency (WCE)	Other	0	0.0%	1	0.0%	1	0.0%	2
Work Clearance - Underground (UG)	Other	43	1.3%	0	0.0%	0	0.0%	43
Work Clearance - Overhead (OH)	Other	25	0.8%	2	0.1%	2	0.1%	29
Meter Investigation (INV)	Other	2	0.1%	6	0.2%	3	0.1%	11
Meter Change Out / Calibration (MC1)	Other	5	0.2%	3	0.1%	5	0.1%	13
Meter Upgrade /Downgrade (MC3)	Other	1	0.0%	0	0.0%	0	0.0%	1
Misc Public Service (MPS)	Other	18	0.5%	6	0.2%	12	0.3%	36
Refund (RFD)	Other	21	0.6%	11	0.3%	18	0.5%	50
Relocation of Meter (RM1)	Other	12	0.4%	2	0.1%	3	0.1%	17
Street Light Repair (ST1)	Other	31	0.9%	3	0.1%	1	0.0%	35
Official Receipt (OR)	Other	32	1.0%	145	4.0%	146	3.9%	323
Update Special Charge (USC)	Other	0	0.0%	110	3.0%	42	1.1%	152
Inspection Report (IR)	Other	21	0.6%	4	0.1%	5	0.1%	30
Copy of Bill (COB)	Other	460	13.9%	625	17.0%	668	17.7%	1,753
Bill Inquiry (BILL INQ)	Other	520	15.7%	641	17.5%	901	23.9%	2,062
Bill Adjustment (BILL ADJ)	Other	5	0.2%	4	0.1%	0	0.0%	9
Address Change (ADDR CHG)	Other	43	1.3%	86	2.3%	59	1.6%	188
Deferred Payment Agreement (DPA)	Other	12	0.4%	0	0.0%	0	0.0%	12
Prepaid	Other	38	1.1%	71	1.9%	35	0.9%	144
Rebate	Other	219	6.6%	169	4.6%	103	2.7%	491
ACH/EFT	Other	8	0.2%	2	0.1%	4	0.1%	14
No Answer	Other	297	9.0%	98	2.7%	83	2.2%	478
Inquiry Type Visit	Other	170	5.1%	239	6.5%	17	0.5%	426
Inquiry Type Other	Other	215	6.5%	51	1.4%	201	5.3%	467
Inquiry (INQ)	Active Delinquent	254	7.7%	400	10.9%	205	5.4%	859
Payment (PYMT)	Active Delinquent	167	5.0%	197	5.4%	362	9.6%	726
Do Not Disconnect (DND)	Active Delinquent	2	0.1%	1	0.0%	2	0.1%	5
Extension (EXT)	Active Delinquent	117	3.5%	179	4.9%	173	4.6%	469
Reconnect (REC)	Active Delinquent	68	2.1%	70	1.9%	131	3.5%	269
Inquiry (INQ)	Inactive	28	0.8%	62	1.7%	17	0.5%	107
Payment (PYMT)	Inactive	8	0.2%	11	0.3%	14	0.4%	33
Transfer Balance (TRF BAL)	Inactive	12	0.4%	14	0.4%	23	0.6%	49
Total transactions by location		3,314		3,668		3,774		
Grand total for all locations								10,756

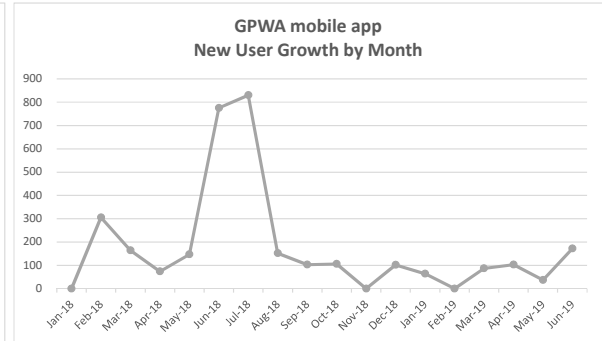
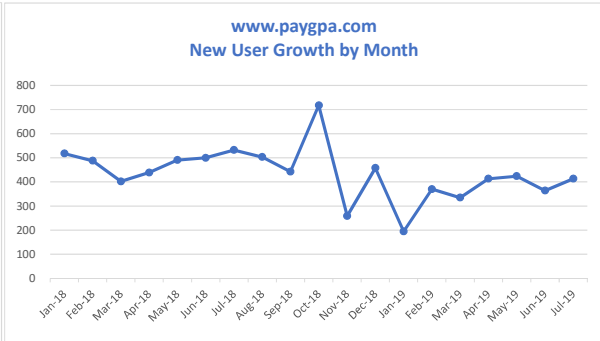
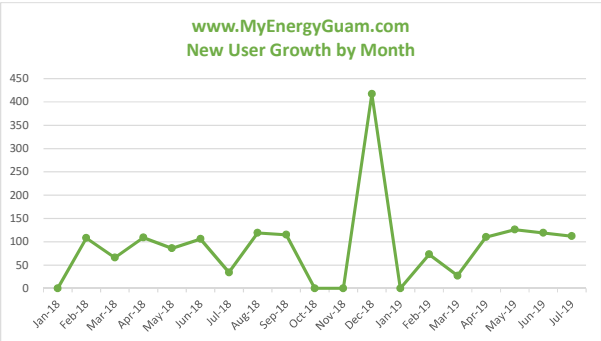
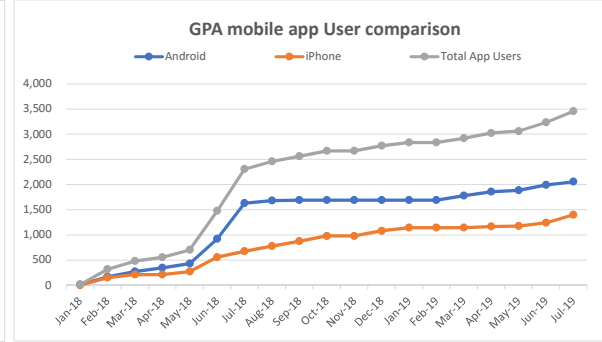
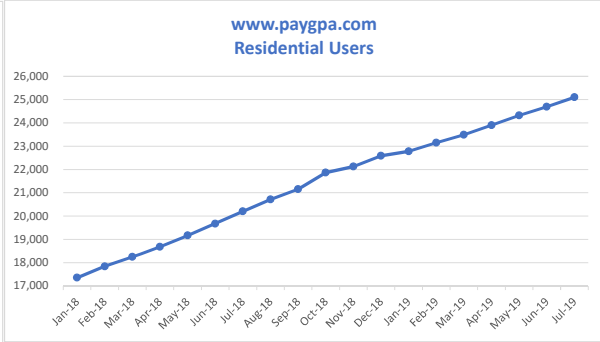
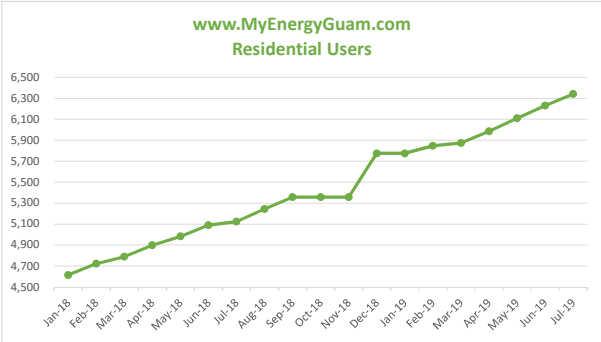
Customer contact by type	Fadian	%	Hagatna	%	Tumon	%
Visit (V)*	1,840	97.6%	2,021	85.1%	2,203	93.6%
Telephone (T)	1	0.1%	146	6.1%	50	2.1%
Mail (M)	15	0.8%	17	0.7%	50	2.1%
Fax (F)	0	0.0%	11	0.5%	0	0.0%
Transfer Call (TRF CALL)	5	0.3%	28	1.2%	0	0.0%
Other (OTHER)	25	1.3%	153	6.4%	50	2.1%
Total customer contacts	1,886		2,376		2,353	

*Visit (V) type customer contact may have more than one reason code applied in JDE Customer Login Service Tracking System.

Duration of wait time for "Visit (V)" type customer contact	Fadian	%	Hagatna	%	Tumon	%
Less than 10 minutes	669	36%	1,193	59%	1,541	70%
10-15 minutes	175	10%	343	17%	336	15%
16-30 minutes	375	20%	359	18%	272	12%
More than 30 minutes	621	34%	127	6%	54	2%
Total "Visit (V)" customers contacts	1,840		2,022		2,203	



Guam Power Authority
Customer Service Division
Online resources usage and growth - Residential Users
as of 07/31/2019

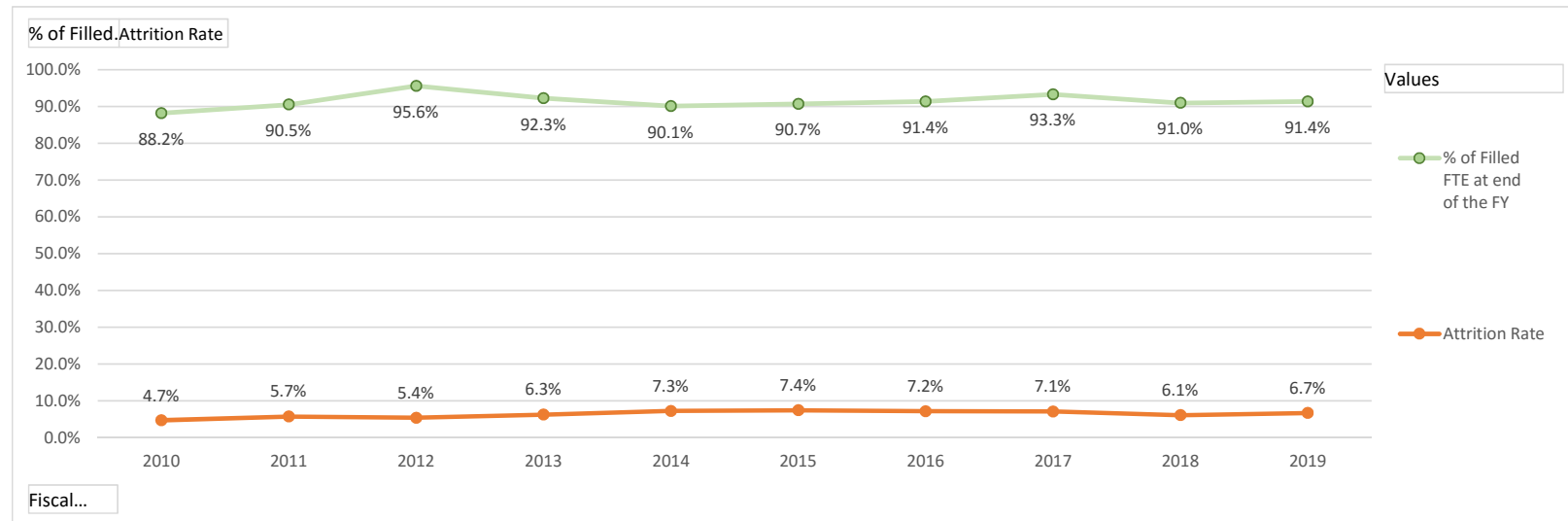


Guam Power Authority

Human Resources Division

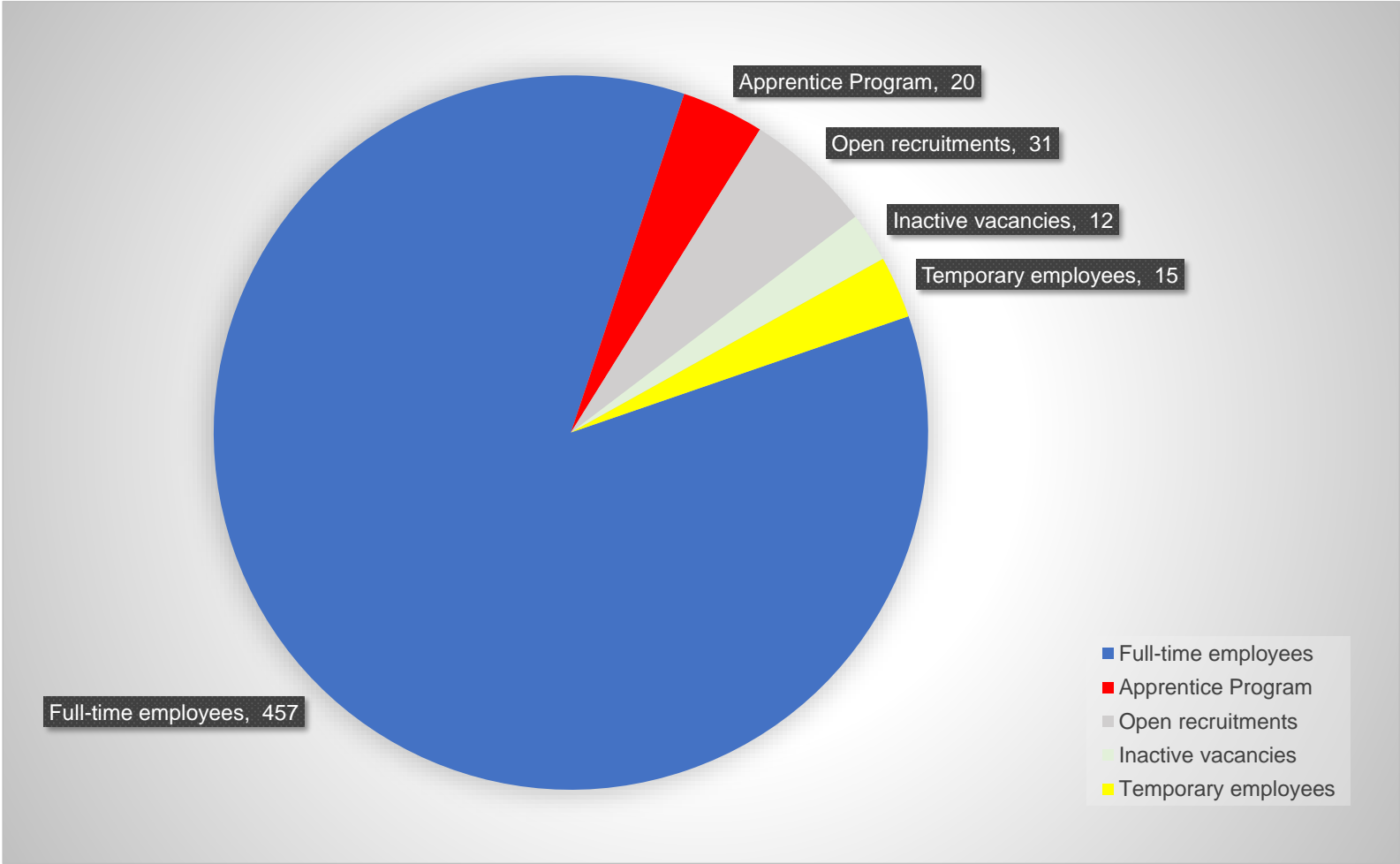
FY 2019 Recruitment Analysis

as of July 31, 2019



Fiscal Year	New Hire	Promotion	Termination	Death	Resignation	Retirement	Attrition Rate	Total Authorized FTE	Total Filled FTE at end of the FY	% of Filled FTE at end of the FY
2010	13	20	0	1	12	12	4.7%	592	522	88.2%
2011	44	23	4	0	14	12	5.7%	592	536	90.5%
2012	36	24	1	2	19	7	5.4%	568	543	95.6%
2013	15	26	1	3	14	16	6.3%	568	524	92.3%
2014	26	27	1	0	13	24	7.3%	568	512	90.1%
2015	15	25	2	1	19	16	7.4%	539	489	90.7%
2016	12	20	3	1	15	16	7.2%	510	466	91.4%
2017	42	15	0	1	13	19	7.1%	510	476	93.3%
2018	17	16	0	3	15	11	6.1%	510	464	91.0%
2019	26	19	3	3	11	14	6.7%	500	457	91.4%

Guam Power Authority
Human Resources Division
FY 2019 Staffing Report
as of July 31, 2019



Guam Power Authority

Human Resources Division

FY 2019 Staffing Report

as of July 31, 2019

Department / Division / Program	Prior Month Employee Count	Current Month Employee Count	No. of Vacancies Prior Month	No. of Vacancies Current Month	Total Staffing
Assistant GM - Administration	2	2	-	-	2
Assistant GM - Engineering & Technical Services	1	1	-	-	1
Assistant GM - Operations	2	2	-	-	2
Consolidated Commission on Utilities Board	2	2	-	-	2
Customer Service	31	31	3	3	34
Engineering	38	38	1	1	39
Facilities	9	9	-	-	9
Finance	42	42	2	2	44
General Manager (GM)	4	4	-	-	4
Generation	119	118	11	12	130
Human Resources	9	9	1	1	10
Information Technology	15	15	1	1	16
Internal Audit / Revenue Protection	3	3	-	-	3
Planning and Regulatory	8	8	-	-	8
Power System Control Center	25	25	2	2	27
Procurement	19	18	3	4	22
Public Information Office	2	2	-	-	2
Safety	6	6	1	1	7
Strategic Planning and Operations Research Division	10	10	1	1	11
Transmission and Distribution	102	102	14	14	116
Transportation	10	10	1	1	11
Total full-time permanent employees	459	457	41	43	500
Apprenticeship Program	20	20	-	-	20
JOBS Program / GETP / SCSEP*	-	-	-	-	-
Summer Engineering Internship Program	7	9	-	-	9
Temporary hires (Public Law 34-116)	5	5	-	-	5
Work Experience Program	1	1	-	-	1
Total contractual / temporary employees	33	35	-	-	35
Work Force Grand Total	492	492	41	43	535

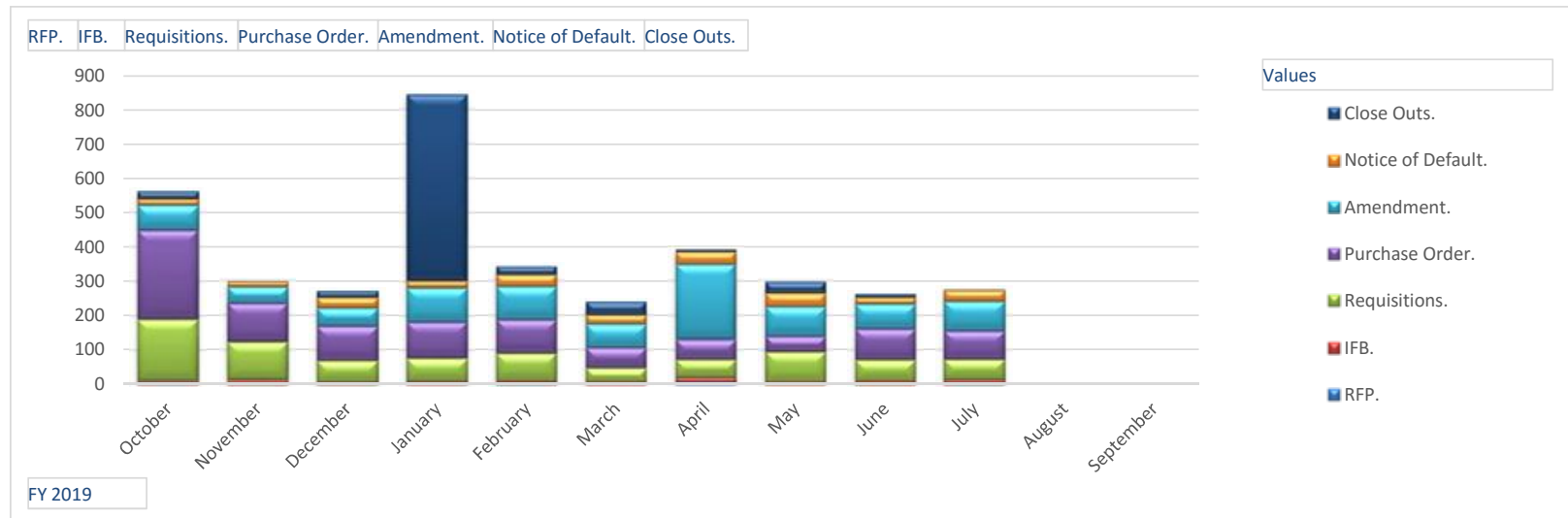
*Job Opportunities & Basic Skills (JOBS) Program, Guam Employment & Training Program (GETP), Senior Community Service Employment Program (SCSEP)

Guam Power Authority

Procurement Division

FY 2019 GPA Buyer's Monthly Report

as of 7/31/2019

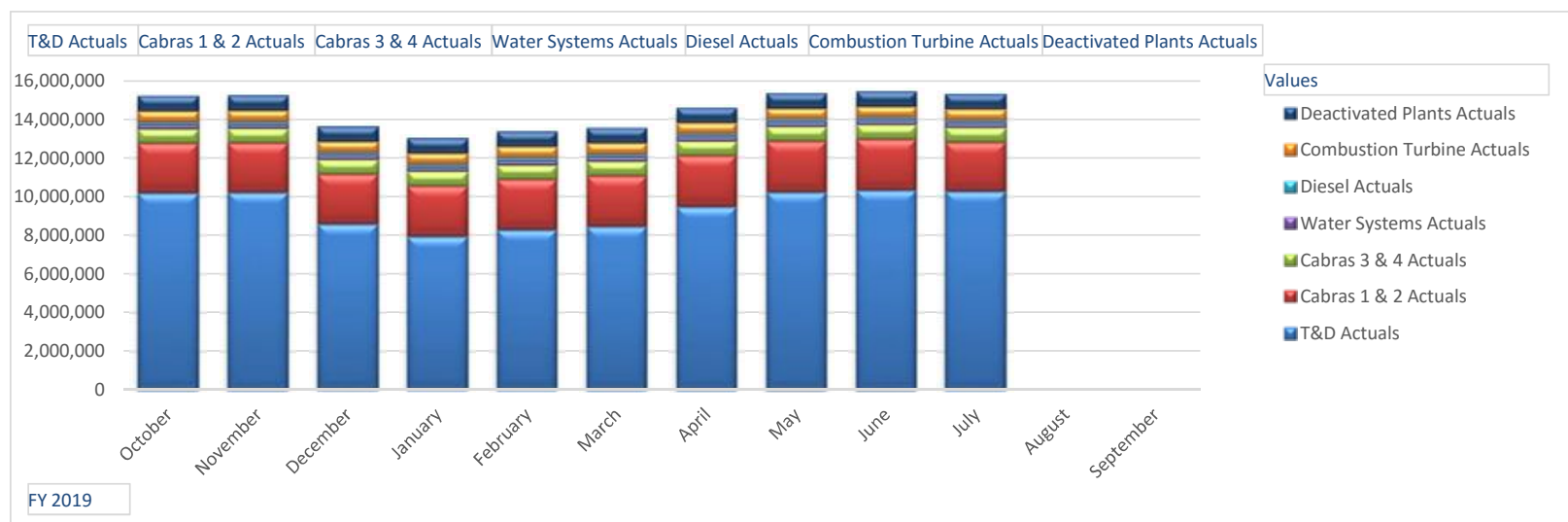


FY 2019	RFP	IFB	Requisitions	Purchase Order	Amendment	Notice of Default	Close Outs
October	2	7	180	260	72	18	23
November	1	11	110	112	47	15	1
December	1	5	63	99	52	30	19
January	1	8	67	106	99	20	543
February	3	6	81	97	96	34	25
March	0	7	40	59	68	26	39
April	6	14	52	58	217	37	6
May	0	6	88	45	85	39	33
June	0	9	62	90	72	19	10
July	2	12	59	82	85	32	2
August							
September							

Guam Power Authority

Procurement Division

FY 2019 GPA Inventory Actuals
as of 07/31/2019

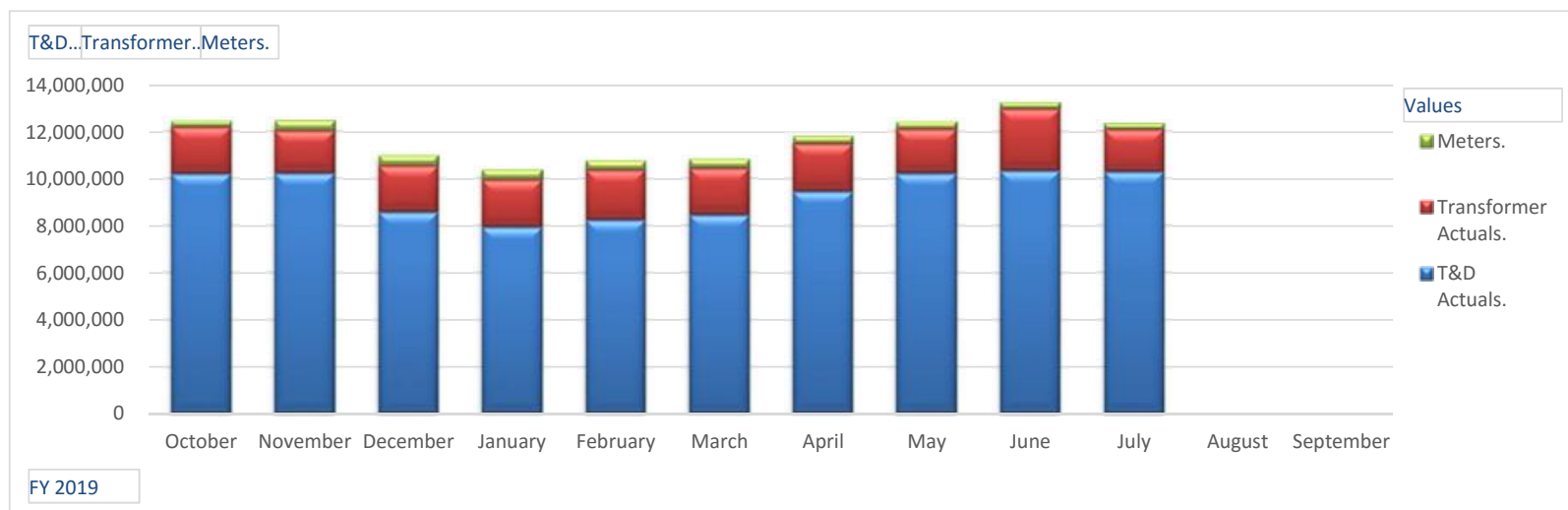


FY 2019	T&D Actuals	Cabras 1 & 2 Actuals	Cabras 3 & 4 Actuals	Water Systems Actuals	Diesel Actuals	Combustion Turbine Actuals	Deactivated Plants Actuals
October	10,192,560	2,576,234	747,186	205,212	146,311	575,635	790,114
November	10,212,445	2,574,016	747,186	219,148	146,311	575,635	790,114
December	8,581,316	2,582,779	747,186	221,514	144,680	575,635	790,114
January	7,923,172	2,614,746	747,186	223,659	144,680	575,635	790,114
February	8,260,305	2,615,482	747,186	224,309	144,680	575,635	790,114
March	8,435,835	2,613,717	747,674	232,164	144,680	574,489	788,968
April	9,458,745	2,634,422	747,674	230,236	144,680	573,623	788,101
May	10,217,712	2,640,723	747,587	238,396	144,683	573,623	788,101
June	10,331,617	2,637,035	747,587	240,915	144,680	573,375	788,101
July	10,272,739	2,547,074	747,587	240,126	144,680	573,330	788,101
August							
September							

Guam Power Authority

Procurement Division

FY 2019 Transmission and Distribution (T&D) Inventory Actuals as of 07/31/2019



FY 2019	T&D Actuals	Transformer Actuals	Meters
October	10,192,560	1,992,628	263,348
November	10,212,445	1,814,087	445,204
December	8,581,316	1,973,234	452,004
January	7,923,172	2,020,094	430,380
February	8,230,305	2,138,182	405,900
March	8,435,835	1,992,878	397,740
April	9,458,745	2,041,378	332,460
May	10,217,712	1,879,987	325,660
June	10,331,617	2,637,035	277,964
July	10,272,739	1,802,361	268,948
August			
September			



GPA Communications/PIO

KPI Status

22 August 2019

Ratepayer Newsletter



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

Status

1. June "Insights" newsletter content compiled and in circulation;
2. Standard features of recipe, village fiesta schedule for newsletter content;
3. Featured

Accomplishments

1. Completed July *Insights* Ratepayer Newsletter
2. August issue planning; will meet deadline

Risks and Issues

1. None to report;

Resolution

Financial

Budgeted for FY20

8/21/2019



No corrective action required



Legend:
Near-term corrective action required



Requires immediate attention

2018 Annual Report Project



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

Status

1. FY2018 Annual Report production ongoing;
2. Inclusion of Citizens Centric Report on project bid;
3. Write up content under review for editing;
4. Pending inclusion of GM/Chairman/Administration Letter

Accomplishments

1. Completed report;

Risks and Issues

1. None to Report

Resolution

Financial

None to report	Within Budget

8/21/2019



No corrective action required



Legend:
Near-term corrective action required



Requires immediate attention

Vendor Outreach Support



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

Status

- Coordinated with Procurement on the following:
 - Distribution of Promotional items;
 - Media/Promotion (News & Talk Radio)
 - Printing of notices in print media;
 - Posting of event on social media;
 - Stakeholder outreach (GCA, Chamber, GHRA)

Accomplishments

- Successful event with vendor (
- Completed Registrants with Planning & Regulatory, SPORD and Engineering

Risks and Issues

- None to report

Resolution

Financial

Within budget

8/21/2019



No corrective action required



Near-term corrective action required



Requires immediate attention

Energy Sense Marketing



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

Status

1. Continued outreach via advertising mediums;

Accomplishments

1. Electronic billboards on display with Cherry Media Vision, Tri Vision Media and Vantage Advertising;
2. Channel 9 promotion
3. Print advertisements with Pacific Island Times publication.

Risks and Issues

1. SPORD support pending additional funding;

Resolution

PIO supporting DSM marketing pending additional SPORD funding

Financial

Budget Support for SPORD for Phase II & III

8/21/2019



No corrective action required



Legend:
Near-term corrective action required



Requires immediate attention

Live Streaming of CCU Meetings & Work Sessions



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

Status	Accomplishments
<ol style="list-style-type: none"> 1. Completion of AV Control Room construction. 2. Inventory and installation of equipment completed; 3. Ongoing testing of systems in progress; 4. Training of in-house staff being coordinated 	<ol style="list-style-type: none"> 1. AV Control Room and equipment installation completed.

Risks and Issues	Resolution	Financial
<ol style="list-style-type: none"> 1. None to report at this time 		<p>Funding with IT Division & GWA for audio & video equipment expected;</p> <p>Amendment to PO to include training on equipment;</p>

8/21/2019



No corrective action required



Legend:

Near-term corrective action required



Requires immediate attention

50th Anniversary Activities



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

Status	Accomplishments
1. 50 th Anniversary Wall completed;	50 th Anniversary Wall completed

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

8/21/2019



No corrective action required



Legend:
Near-term corrective action required



Requires immediate attention

Super Typhoon Yutu Recovery Documentary Video



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

Status	Accomplishments
<ol style="list-style-type: none"> Video Documentary Project Phase II completed 	<ol style="list-style-type: none"> Shared video project with American Public Power Association; Posted video project on YouTube.

Risks and Issues	Resolution	Financial
<ol style="list-style-type: none"> None 		<ol style="list-style-type: none"> None to report

8/21/2019

No corrective action
required

Legend:
Near-term corrective
action required

Requires immediate
attention

Graphic Projects/Social Media



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

Status

1. Tumon UG Project completed;
2. LED Streetlight campaign ongoing via social media;
3. LEAC graphic pending feedback

All graphic projects are produced for social media and web page inclusion.

Accomplishments

1. UG Tumon Graphics ready for rollout;
2. LED Streetlight Campaign on Facebook and website;

Risks and Issues

1. None to report;

Resolution

Financial

Budgeted for FY19

8/21/2019



No corrective action required



Near-term corrective action required



Requires immediate attention

Miscellaneous Activities



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

Status

1. GPA Web page redesign work online and updated as necessary
2. Monitoring of CS Business Centers
3. Standard Media Releases for outage and news reporting is on-going;
 1. UFLS
 2. Wire Theft
 3. Utility Phone Scam
4. Procurement Cards for upcoming Vendor Fair in July 2019;
5. SEP (Smart Energy Provider) Award coordination;
6. BEST Schools feature article coordination with GDOE;

Accomplishments

1. APPA Conference Support
 1. APPA Video/Presentation Production;
 2. Mutual Aid application facilitation;
2. Citizens Centric Report completed

Financial

None to report

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

Legend:



No corrective action required



Near-term corrective action required



Requires immediate attention

8/21/2019

10

PLANNING & REGULATORY DIVISION REPORT

The following summarizes P&R's activities for the month of July 2019

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
 - CEMS upgrade coordination with TRC
- Inspected and trouble shoot RICE MACT monitoring equipment at Tenjo, Talofofo and MDI
- Emissions and Limits Tracking for GPA and Aggreko Power Plants
 - Monitoring CO and NOx emissions of the Aggreko generators not to exceed the allowable limit.
 - GPA Plants Limits based on Hours and/or Fuel Use
 - Modified format of report to show remaining balance for the month in terms of MWH as per request of PSCC
- Accompanied KEPCO Engineers in the Tanguisson Pipeline Assessment
- USEPA-GEPA SPCC inspection at Tenjo Power Plant

PROCUREMENT

- Prepared and submitted bid for PCB quantifiable used transformer oil disposal
- Prepared and submitted bid for contaminated waste disposal
- Prepared and submitted bid for Vacuum truck rental for Piti tanks used oil disposal
- MSB GPA-007-18 – continued evaluation of contractor submittals for Multi-Step Bid for Renewable Energy Resource Phase III

REPORTING

- Submitted Quarterly Fuel Switching Report USEPA
- Submitted Quarterly Continuous Emissions Monitoring (CEMS) report to GEPA
- Submitted Monthly and Quarterly NSPS report to Guam EPA

STATE IMPLEMENTATION PLAN (SIP)

- Had conference call with TRC and SPORD to update progress and action items to finalize SIP

TRAINING / CONFERENCES

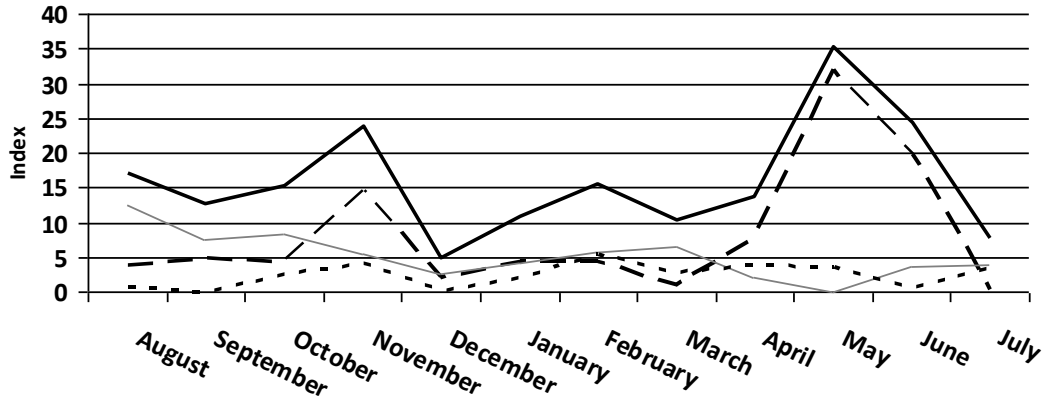
- APPA Webinar on ACE Final Rule- Understanding the State Process
 - Affordable Clean Energy (ACE) Rule
- ICIS NPDES Training – Multiple Webinar Training Sessions on NPDES offered by Integrated Compliance Information System (ICIS)
- Attended Accident & Injury Reporting and Workman's Comp Training
- Attended Microsoft Access Level 1 & 2 Training

OTHERS

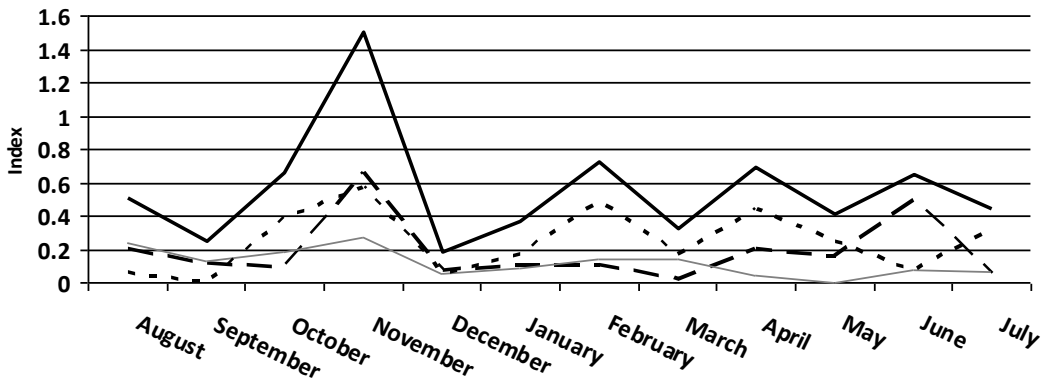
- Sent Data and Calculations to SPORD regarding Greenhouse Gas Emissions from RFO and ULSD
- Reviewed and sent comments on Navy Land Use Control Draft Report with Engineering
- AMSTech conducted Semi-Annual Audit of MET Tower



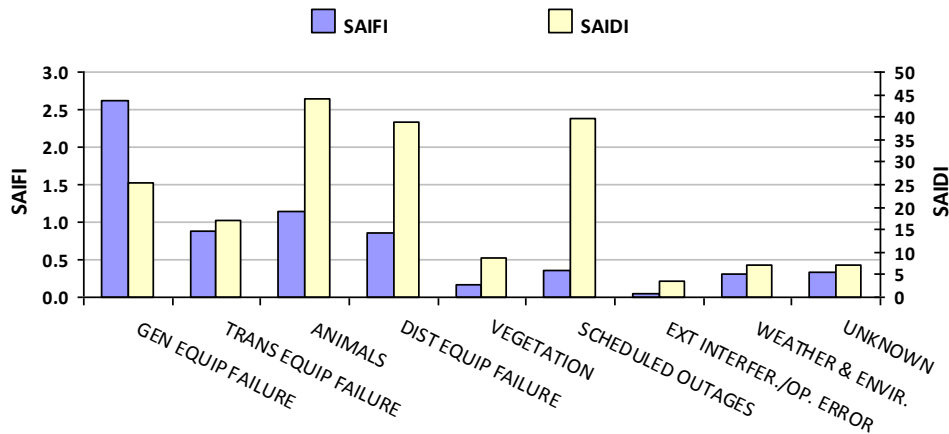
(Item 1.1,1.2,1.5) July 2019 SAIDI = 191.83 ↓ (197.65)



(Item 1.1,1.2,1.5) July 2019 SAIFI = 6.70 ↓ (6.78)



(Item 1.9) 12 - Month Cause Contributions to Reliability



GEN EQUIP FAILURE
F:37.4% D:13.3%

TRANS EQUIP FAILURE
F:12.5% D:8.8%

ANIMALS
F:15.5% D:23.0%

DIST EQUIP FAILURE
F:13.5% D:20.3%

VEGETATION
F:2.8% D:4.6%

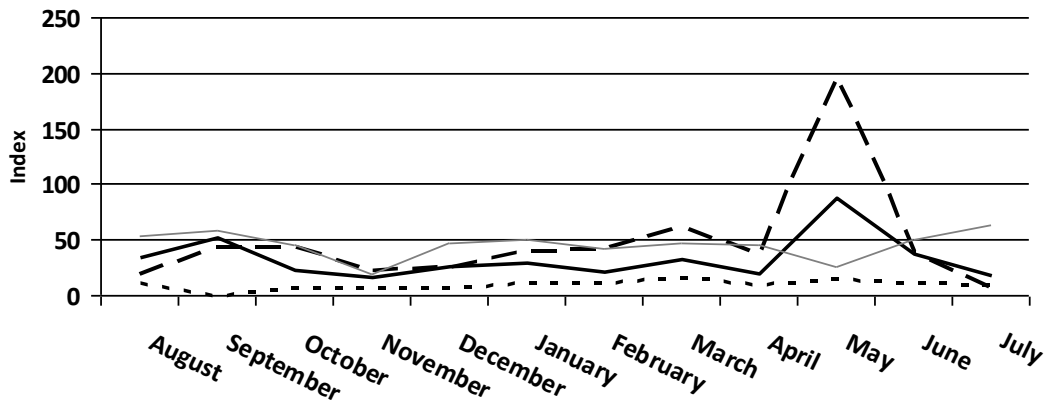
SCHEDULED OUTAGES
F:6.9% D:20.6%

EXT INTERFER./OP. ERROR
F:1.3% D:1.9%

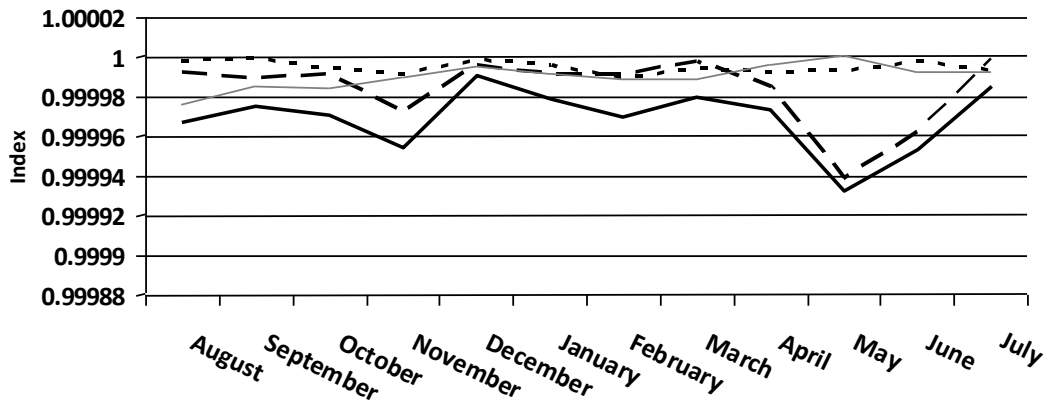
WEATHER & ENVIR.
F:5.4% D:3.7%

UNKNOWN
F:4.7% D:3.7%

(Item 1.1,1.2,1.5) July 2019 CAIDI = 28.64 ↓ (29.14)



(Item 1.1,1.2,1.5) July 2019 ASAI = 0.9996 UNC* (0.9996)



(Item 1.4) Top 5 Worst Feeders Distribution Causes

#	Feeder	Outage Count
1	P340	12
2	P261	12
3	P341	7
4	P262	7
5	P223	7

(Item 1.3) Outage Count

TOTAL	UFLS	Non-UFLS
620	266	354

(Item 1.4) Top 5 Distribution Outage Causes

#	Outage Cause	Count
1	Wind	96
2	Overhead Equipment	49
3	Substation Equipment	16
4	Vegetation	10
5	Underground Equipment	9

(Item 1.3) UFLS Contribution to Reliability

SAIDI	SAIFI	CAIDI
44.45	3.89	11.44

E&TS Divisional Report Summary

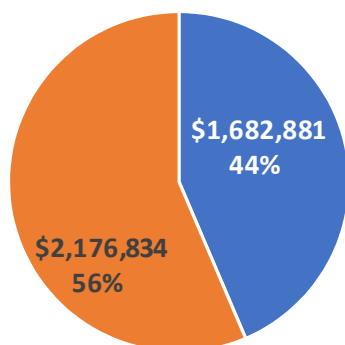
August 19, 2019

Contents

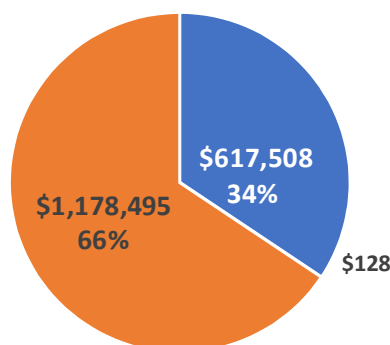
- E&TS Budget Execution Performance
 - O&M Contract Budget
 - CIP Budget
 - DSM Budget
- Environmental Compliance (SPCC and BMP Inspections)

E&TS Budget Execution Performance

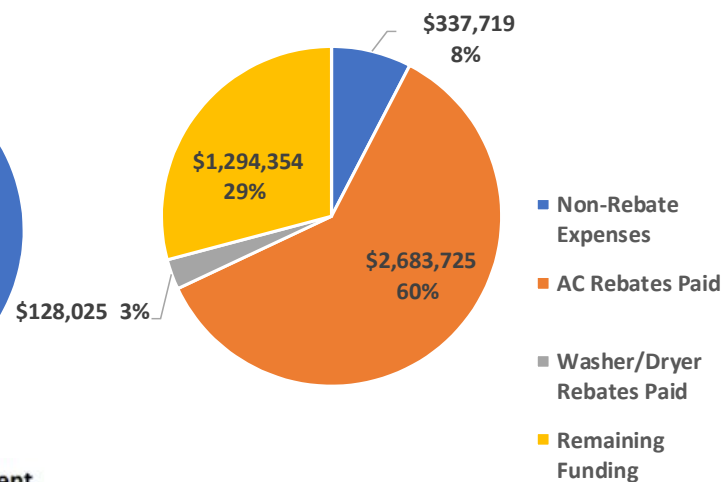
E&TS O&M Contract Budget



E&TS CIP Budget



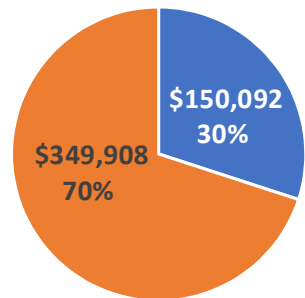
DEC 2015 to JUN 2019 DSM EXPENSE SUMMARY



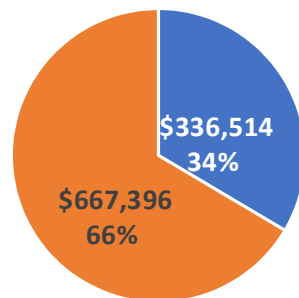
■ Obligated/Spent
■ Remaining Balance

■ Non-Rebate Expenses
■ AC Rebates Paid
■ Washer/Dryer Rebates Paid
■ Remaining Funding

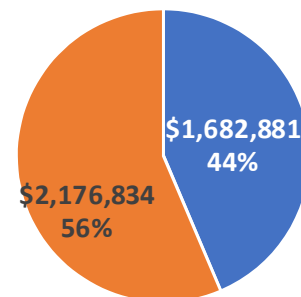
ENG O&M Contract Budget



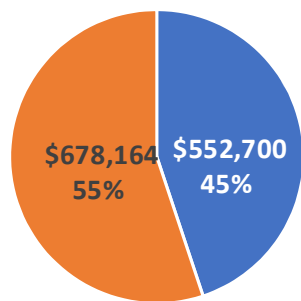
SPORD O&M Contract Budget



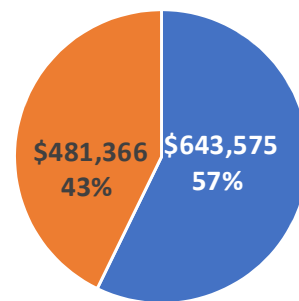
E&TS O&M Contract Budget



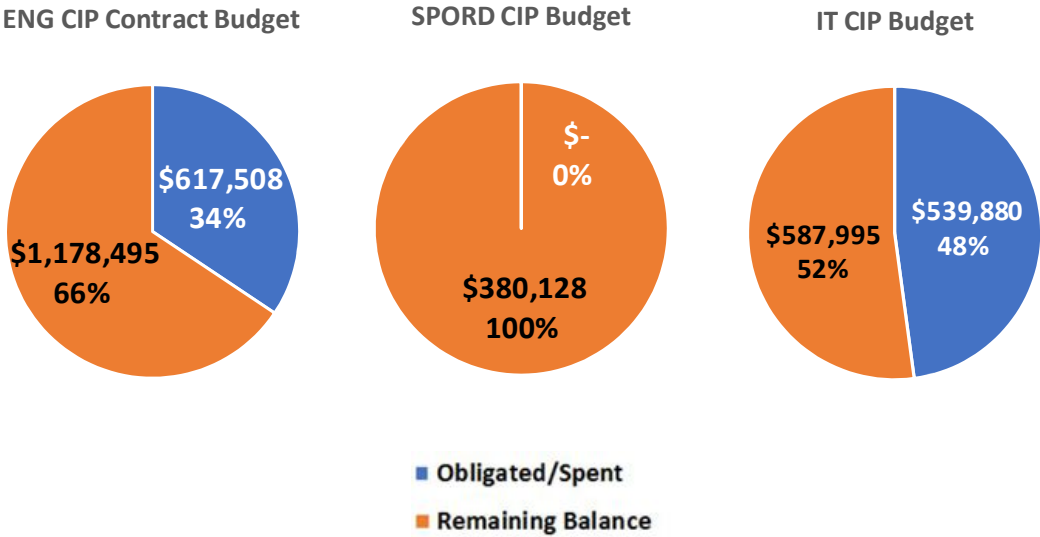
P&R O&M Contract Budget



IT O&M Contract Budget



■ Obligated/Spent
■ Remaining Balance



FY 2019 Procurement Status

Business Unit	Current Type					Current Status			Planned			
	RFP	Bid	Multistep Bid	Total	Resolicited	QBL Established	Evaluation Completed	Award/NTP	RFP	Bid	Multistep Bid	Total
SPORD	1		9	10			6		1		3	4
Engineering	3	24		27			7	7	2	10		12
SPORD/Engineering				0			2					0
IT	3	1		4			2	1	3	1		4
P&R		2	3	5		2	2	2		2		2
Total	7	27	12	46	0	2	19	10	6	13	3	22

Environmental Compliance

P&R Inspections Status Ending July 31, 2019

Inspection Type	Organization Responsibility	Violations Not Remediated	Number
Spill Prevention, Control, and Countermeasure (SPCC)	Generation	New Violation Notifications Issued	5
		Remediations Past Due	17
		Remediations Not Past Due	0
	T&D	New Violation Notifications Issued	3
		Remediations Past Due	1
		Remediations Not Past Due	0
Best Management Practices (BMPs)	Generation	New Violation Notifications Issued	0
		Remediations Past Due	0
		Remediations Not Past Due	0

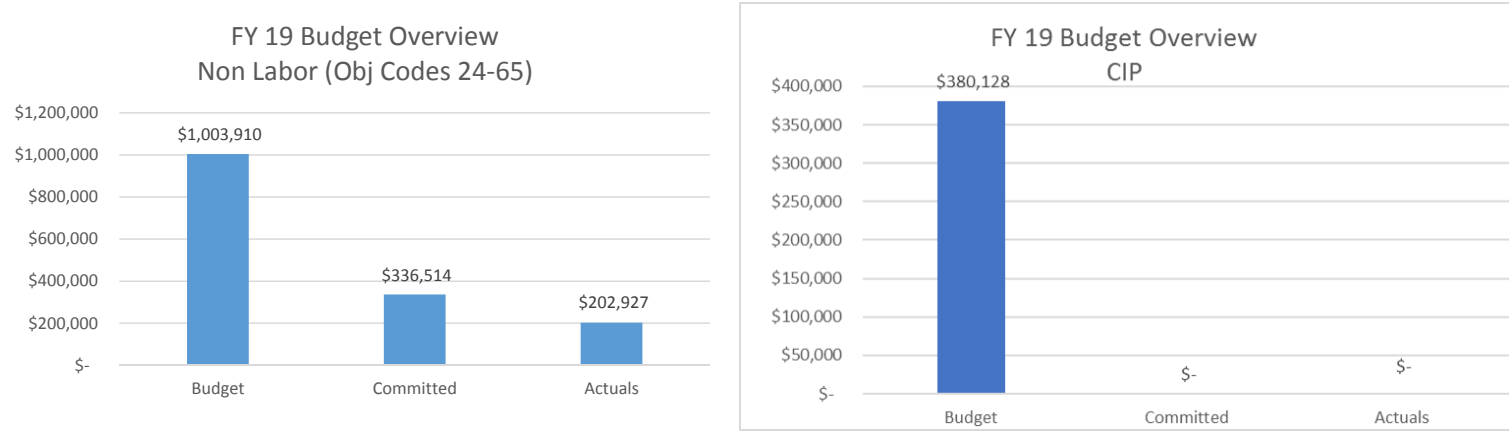
- SPCC rule purpose is to help facilities prevent oil discharges into navigable waters or adjoining shorelines
- BMP refers to a type of auxiliary pollution controls in the fields of industrial wastewater control and municipal sewage control, storm water management, and wetland management

SPORD CCU Report

Update thru July 31, 2019

SPORD FY 2019 Budget Status

thru July 31, 2019



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

SPORD FY 2019 Budget Status

- Major Contracts (Non-O&M) thru July 2019

	Budgeted Amount	Committed Amount	Actuals	PO Balance
Aggreko Contract	\$ 12,822,000	\$ 12,703,831	\$ 9,146,989	\$ 3,556,842
Fuel Contracts	\$ 272,011,115	\$ 260,535,571	\$ 171,770,293	\$ 88,765,279
MEC IPP (Piti 8&9)	\$ 21,183,000	\$ 17,962,570	\$ 15,360,752	\$ 2,601,818
NRG Contract (Renewable)	\$ 10,463,361	\$ 10,178,157	\$ 7,404,497	\$ 2,773,660

SPORD FY 2019 Budget Status

Demand Side Management

Description	FY16	FY17	FY18	FY19 thru 7/31/19*	Total to Date
Regular/OT Pay	\$11,348.80	\$22,256.00	\$26,121.83	\$40,920.10	\$100,646.73
Other Contractual	\$28,278.50	\$85,550.05	\$116,977.50	\$3,025.00	\$233,831.05
Ads & Radio Announcements	-	-	-	\$7,500.00	\$7,500.00
Paid Rebates-Split AC	\$154,700.00	\$557,275.00	\$1,349,825.00	\$856,200.00	\$2,918,000.00
Paid Rebates- Central AC	\$3,400.00	\$8,200.00	\$4,400.00	\$5,000.00	\$21,000.00
Paid Rebates- Washer/Dryer	\$2,800.00	\$7,425.00	\$57,200.00	\$77,800.00	\$145,225.00
Total Expenses	\$200,527.30	\$680,706.05	\$1,554,524.33	\$990,445.10	\$3,426,202.78
Bank Interest (+)	\$1,676.42	\$1,722.74	\$1,222.29	\$640.23	\$5,261.68
Bank Fees	\$155.00	\$1,032.06	\$1,085.08	\$330.00	\$2,602.14
Ending Balance					\$921,659.76

- Expenses for July 2019 are preliminary and may be subject to adjustment during reconciliation process.

Ongoing Activities

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

PROCUREMENT ACTIVITIES

PENDING AWARD / NTP

Responsible	PROJECT	Description	CCU Date Approved (Resolution No.)	PUC Date Approved (Docket No.)	Projected Start*	Projected Completion	Status
SPORD (RAC)	SMART GRID	Mobile Workforce Management System (MWMS) **RE-BID**	MS Bid		3/30/2019	12/31/2019	Contract Negotiations
SPORD (MAT)	OPERATIONS	MEC Waste Oil Hauling	*not required*	*not required*	Est. 5/1/2019	1/30/2024 (5 Year contract)	Final stages of procurement processes.
SPORD (RAC)	PLANNING	MV90 Integration Services	RFP	*not required*	TBD	TBD	Vendor acquiring business license
SPORD (RAC)	PLANNING	Milsoft Systems Software Services	RFP	*not required*	Aug 2019	Aug 2019	Scheduling of Training August 2019
SPORD (LOS)	STUDIES	Power System Analyses and Studies	RFP		TBD	TBD	Pending Scope & Proposal for initial tasks
SPORD (RAC)	SCADA	DNP3 SA training	RFP		TBD	TBD	Price Negotiations Ongoing
SPORD (RAC)	SMARTWORK SYSTEMS	Smartworks Systems Software Services	RFP	RFP-19-007	Feb-19	4/11/2019	Price Negotiations Ongoing

ONGOING PROCUREMENT

Responsible	PROJECT	Description	Bid or RFP	Bid/RFP No	Announced	Bid Opening / Due	Notes
SPORD (FJI)	NEW POWER PLANT	Build, Operate & Transfer Contract for 120-180MW of New Generation Capacity.	MS Bid	GPA-034-18	1/16/2018	6/3/2019	Completed Price Proposal evaluation of proposals from 3 Bidders. Notice of Selection issued on 6/26/19. Pending negotiations and CCU and PUC approvals.
SPORD (ANF)	FUEL	Supply of Diesel Fuel Oil No. 2	MS Bid	GPA-008-18	11/16/2017	5/3/19, 5/10/2019, 5/17/2019, 5/24/2019	Completed Price Proposal evaluation for proposals from 2 Bidders. Notice of Selection issued on 6/26/19. Pending negotiations and CCU and PUC approvals.
SPORD (JTL)	RENEWABLES	Renewable Energy Resource Phase III	MS Bid	GPA-007-18	11/16/2017	6/3/2019	11 technical proposals received and evaluation ongoing. Notice of selection anticipated in July pending review progress.

PROCUREMENT ACTIVITIES

ONGOING PROCUREMENT (continued)

Responsible	PROJECT	Description	Bid or RFP	Bid/RFP No	Announced	Bid Opening / Due	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	8/5/2019	Extended as requested by Senator Clynton E. Ridgell.
SPORD (MAT)	SPORD Software	Planning & Optimization Software	RFP	RFP-19-004		4/4/2019	No proposals received. Conducting market research prior to resolicitation if modifications to RFP are required.
SPORD (RAC)	STUDIES	Consulting Services for Distribution Study using Smart Grid Analytics	RFP	RE-SOLICITATION RFP-19-002	Feb-19	3/28/2019	Evaluation ongoing (3 vendors)
SPORD (RAC)	ELECTRIC VEHICLE	Electric Vehicle	MS Bid			TBD	Bid Evaluation ongoing

DEVELOPING PROCUREMENT

Responsible	PROJECT	Description	Bid or RFP	Projected Start	Projected Completion	Status
SPORD (RAC)	ELECTRIC VEHICLE	Electric Vehicle Infrastructure	RFP	Oct-19	Jun-20	Developing Requirements (hold)
Responsible	PROJECT	Description	Bid or RFP	Projected Start	Projected Completion	Status
SPORD (ANF/MAT)	FUEL	GPA Bulk Fuel Storage Facility PMC	Bid	FY2019	Sep-19	Developing Specifications to convert to PMC
SPORD (ANF)	FUEL	Bulk ULSD Supply	Re- Bid	FY2019	FY2019	Developing/revising specifications
SPORD (ANF)	FUEL	WSD ULSD Supply	Re- Bid	FY2019	FY2019	Developing/revising specifications

Project Activities

No.	Project Description	July 2019 Activities	Status / Est. Completion	RFP/Bid No
1	Energy Storage System (Phase I)	Final design completed. Clearing and grading permit work commenced in November 2017. Foundation permit work commenced in January 2018. Construction is 82% completed.	Oct 2019	MS Bid GPA-082-15
2	Renewable Energy Resource Phase II	On-going review for KEPCO-LGCNS substation design drawings for permitting. 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)	Price proposals submitted on June 3 and Notice of Selection completed on 6/26/19. GPA and Company will initiate contract negotiations to finalize contract for CCU approval.	Projected Award (2019 Q3) COD (2022 Q2)	MS GPA-034-18
4	DSM Marketing	No additional activities funded for remaining of the year.	Continuous	
5	DSM Rebate Program	Processed about 554 applications for rebates totaling ~ \$160k	Continuous	
6	Wireless Network Expansion	Commenced Southern Expansion in collaboration with GWA: 30% Router Equipment and Accessories purchase Preparing next router order and installation documents	Dec-18 June 2019 October 2019	GPA-019-18
7	Electric Grid Analysis Software	Training on Planning and Analysis Cases Software Upgrade completed and access restored to employees	Aug-19 May-19	GPA-064-16
8	GDOE BEST Schools	<u>Pilot Project: Carbullido Elementary School & Lighting Grant Project:</u> <u>Southern High and George Washington High</u> - commenced retrofit activities July 03,2019	Lighting Installations: Southern HS: 08/09/2019 GWHS: 08/04/2019 Layouts, Audit Check & Close Out: 08/31/2019	GPA-RFP-16-013

Project Activities

No.	Project Description	July 2019 Activities	Status / Est. Completion	RFP/Bid No
9	Supervisory Control and Data Acquisition (SCADA) System	Project Substantially completed	Feb 2019 (Punchlist items by Sept 2019)	GPA-066-16
10	Mobile Workforce Management System	Initiated kickoff meetings. Developing workscope and deliverables	Mar-20	GPA-023-17
11	Consulting Services for Smart Grid Analytics Enabled Distribution System Planning, Technical, and Economic Feasibility Studies	Evaluation ongoing (3 vendors)	AUG 2019 (Contract Award)	RE-SOLICITATION GPA-RFP-19-002
12	MEC Piti & #8 and #9 - ECA Extension	Contract Extension commenced 12:00 Noon January 29, 2019. (No issues) Need to request PUC approval for Retrofit to ULSD ASAP, to be able to start planning and procurement.	IN PROGRESS	
13	Generation Software (GADS open software)	Pending data entry from Generation & SPORD.	(PENDING)	
14	IFB for ULSD Supply for Baseloads and Peaking Units	Completed price proposal evaluations and submitted notice of selection on 6/26/19.	Start Date: Nov 2017 Est. completion: 2019	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	
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.	6/3/2019 Tech Proposal Due	GPA-007-18
17	Utility Energy Services Contract (UESC)	Continued work with GDOE on Best Schools Program (Grant & Pilot) Continued discussions with Navy, KenCorp, Bank of Guam, UOG on potential scope.	Ongoing	
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 extension options	Completed	IFB GPA-009-18

Project Activities

No.	Project Description	June 2019 Activities	Status / Est. Completion	RFP/Bid No
19	GPA Fuel Farm RFO Pipeline Repair & Upgrade	c/o Engineering Project Mgt.	Project Implementation in progress. Estimated completion: FY 2019	IFB GPA-047-18
20	GPA Fuel Farm ULSD Pipeline Upgrade	c/o Engineering Project Mgt. Solicitation for Contractor(s) services in progress. Awaiting PUC approval.	Solicitation in progress Estimated Start: October 2019 Est. Completion: Feb 2020	IFB GPA-027-19
21	Tk 1934 & Tk1935 API 653 Internal Inspection	c/o Engineering Project Mgt. Solicitation for Contractor(s) services in progress. For PUC approval.	Solicitation in progress Estimated Start: Oct 2019 Est. Completion: Feb 2022	IFB GPA-028-19
22	Milsoft Systems Software Services	Scheduling of Training August 2019	Continuous	GPA-RFP-18-003
23	MV90 Integration Services	Contract Negotiations	Jun-19	GPA-RFP-18-001
24	Grant Support	Continued grant development and execution. Initiated Kickoff meeting for project start in July. 1. Execution of GW & Southern HS Lighting Retrofit with Siemens (UESC Partner) 2. Guam Energy Office EnergySmart School Grant finalizing scope and MOU 3. Development & Submittal of USDA Revolving Loan Grant 4. Development & Submittal for Dept of Interior Energizing Insular Communities (EIC) Grant (award announcement end of September 2019)		
25	Redesignation of Cabras-Piti / Guam	Re-designation received 12/2018. P&R leading SIP Modeling, SIP draft, with TRC assistance. SPORD standing by for support. 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; approval of SIP will come later.	RFP-11-001
26	Environmental Strategic Planning	Final Plan distributed to Executive Management and key managers. Will start work on recommendations.	Start: April 2018 Completed: Feb 2019	RFP-11-001

Project Activities

No.	Project Description	July 2019 Activities	Status / Est. Completion	RFP/Bid No
27	GPA Fuel Farm- OWS Upgrading	c/o Engineering Project Mgt. Scope included in Tk 1934 & Tk1935 API 653 Internal Inspection and repair.	Solicitation in progress Estimated Start: Oct 2019 Est. Completion: Sep 2020	IFB GPA-028-19
28	GPA Fuel Farm- LD System Upgrading	c/o Engineering Project Mgt. Scope included in Tk 1934 & Tk1935 API 653 Internal Inspection and repair.	Solicitation in progress Estimated Start: Oct 2019 Est. Completion: Sep 2020	IFB GPA-028-19
29	MSB for Supply of Reprocessed Waste Oil Meeting GPA's ULSD Specifications	Multi-step 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 Est. Award: September 2019	MS GPA-118-18
30	IFB for MEC Waste Oil Hauling	Bid for the Hauling of MEC Waste Oil.	Recommendation approved, awaiting completion of insurance requirements c/o procurement. Est. Commencement July 2019	GPA-019-19
31	Energy Storage Development Support	Consultant preparing proposal for third-party commissioning services	Sept/Oct 2019	GPA-RFP-13-007
32	Wind Turbine Maintenance Supervision and Materials	Consultant to supervise turbine repairs & replacement parts.	May/Jun 2019	Sole Source
33	Planning Software Contract	Procurement of Planning Software, including installation, design, implementation, training and consulting services. No bids received. Finalizing change to bid specifications & may change from RFP to IFB.	TBD	RFP-19-004
34	Strategic Planning	On-going discussions for final & detailed SOW with consultant. (c/o Finance Contract w/ Mark Beauchamp)	Estimated Start: TBD Est. Completion: TBD	
35	Power System Analyses and Studies	S&C selected as most qualified proponent. Cost proposal is pending scope of work.	Estimated Start: TBD Est. Completion: Sept 2019	

CCU Report- DSM

As of July 31, 2019

All Expenses – Fiscal Year

Description	FY16	FY17	FY18	FY19 thru 7/31/19*	Total to Date
Regular/OT Pay	\$11,348.80	\$22,256.00	\$26,121.83	\$40,920.10	\$100,646.73
Other Contractual	\$28,278.50	\$85,550.05	\$116,977.50	\$3,025.00	\$233,831.05
Ads & Radio Announcements	-	-	-	\$7,500.00	\$7,500.00
Paid Rebates–Split AC	\$154,700.00	\$557,275.00	\$1,349,825.00	\$856,200.00	\$2,918,000.00
Paid Rebates– Central AC	\$3,400.00	\$8,200.00	\$4,400.00	\$5,000.00	\$21,000.00
Paid Rebates– Washer/Dryer	\$2,800.00	\$7,425.00	\$57,200.00	\$77,800.00	\$145,225.00
Total Expenses	\$200,527.30	\$680,706.05	\$1,554,524.33	\$990,445.10	\$3,426,202.78
Bank Interest (+)	\$1,676.42	\$1,722.74	\$1,222.29	\$640.23	\$5,261.68
Bank Fees	\$155.00	\$1,032.06	\$1,085.08	\$330.00	\$2,602.14
Ending Balance					\$921,659.76

- Expenses for July 2019 are preliminary and may be subject to adjustment during reconciliation process.

DSM Funding

No.	Description	Amount
1	Initial DSM Budget FY 2016	\$1,806,014.00
2	Interest Income as of July 31, 2019	\$5,261.68
3	Bank Fees as of July 31, 2019	\$2,602.14
4	Additional Budget:	
	▪ Bond Refinance 2017	\$1,139,189.00
	▪ Revenue Funds FY2019	\$1,400,000.00
5	Total Expense as of July 31, 2019	\$3,426,202.78
	DSM Ending Balance	\$921,659.76

FY 2017- Rebate Amount Paid Monthly

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

FY 2018- Rebate Amount Paid Monthly

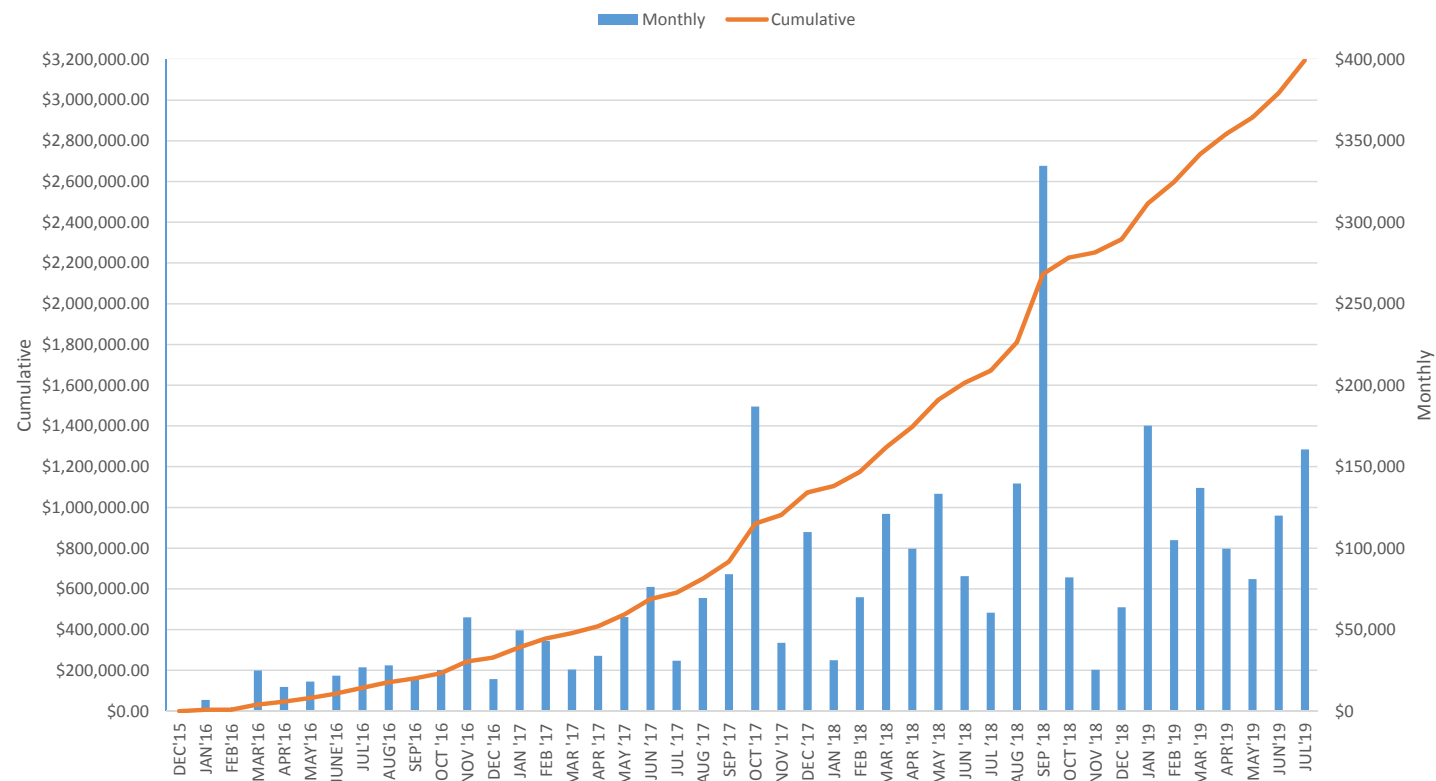
Month	Total	Split A/C Units	Central A/C Units	Washers/ Dryers
OCT '17	\$186,850.00	\$185,850.00	\$800.00	\$200.00
NOV '17	\$41,900.00	\$41,700.00		\$200.00
DEC '17	\$109,875.00	\$108,475.00		\$1,400.00
JAN '18	\$31,175.00	\$31,175.00		
FEB '18	\$69,825.00	\$68,825.00		\$1,000.00
MAR '18	\$121,100.00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

FY 2019- Rebate Amount Paid Monthly

Month	Total	Split A/C Units	Central A/C Units	Washers/ Dryers
OCT '18	\$ 82,000.00	\$ 75,400.00	\$ -	\$ 6,600.00
NOV '18	\$ 25,425.00	\$ 23,425.00	\$ -	\$ 2,000.00
DEC '18	\$ 63,725.00	\$ 62,325.00	\$ -	\$ 1,400.00
JAN '19	\$ 174,550.00	\$ 157,550.00	\$ -	\$ 17,000.00
FEB '19	\$ 105,725.00	\$ 96,925.00	\$ -	\$ 8,800.00
MAR '19	\$ 137,025.00	\$ 119,825.00	\$ 3,400.00	\$ 13,800.00
APR '19	\$ 99,650.00	\$ 89,250.00	\$ -	\$ 10,400.00
*	\$ (111,225.00)	\$ (102,825.00)		\$ (8,400.00)
MAY '19	\$ 80,950.00	\$ 72,950.00	\$ -	\$ 8,000.00
JUN '19	\$ 119,925.00	\$ 109,725.00	\$ 800.00	\$ 9,400.00
JUL '19	\$ 160,650.00	\$ 151,250.00	\$ 800.00	\$ 8,600.00
AUG '19				
SEP '19				
TOTALS	\$ 938,400.00	\$ 855,800.00	\$ 5,000.00	\$ 77,600.00

* FY18 Finance Adjustment

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

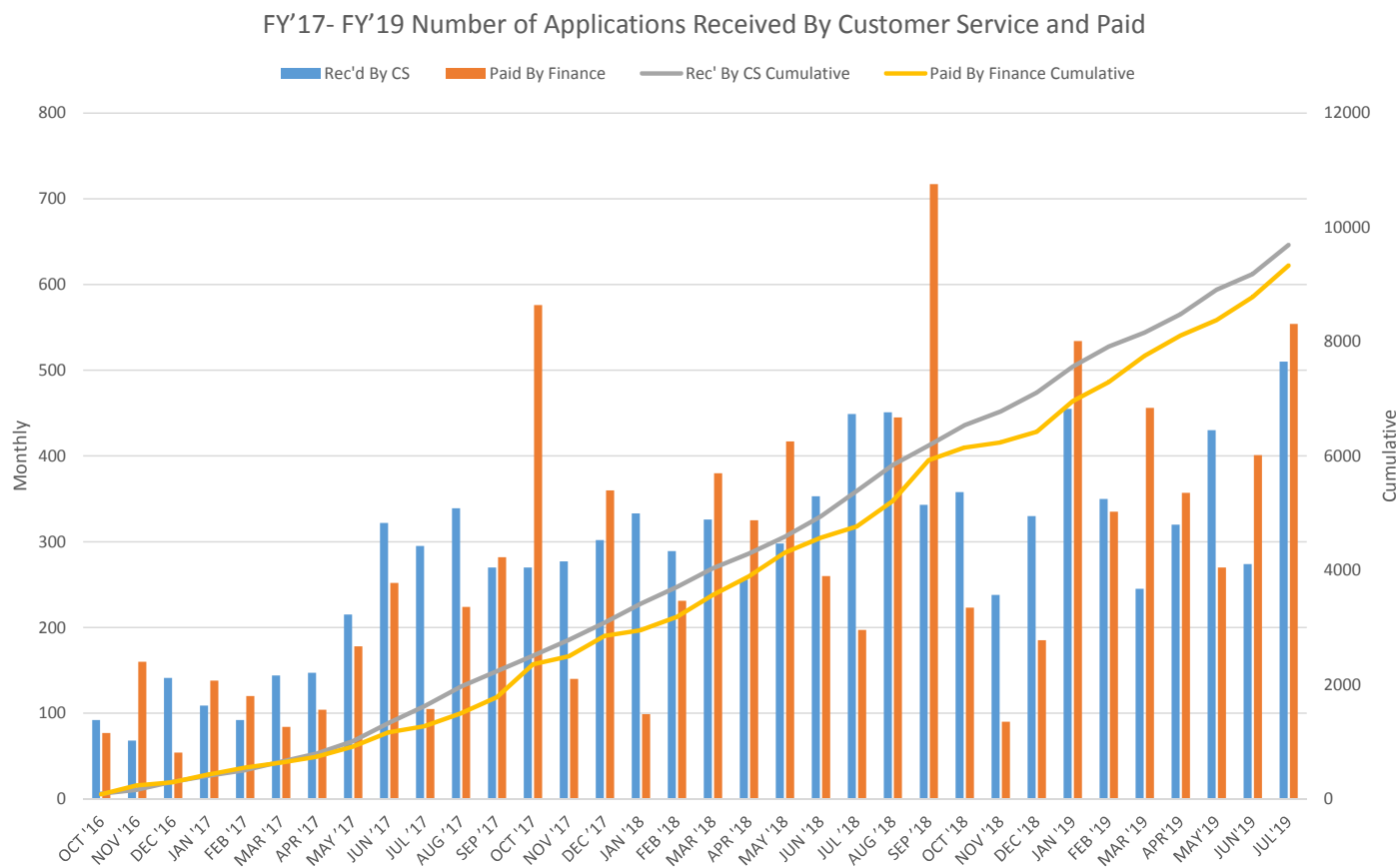
FY 2018- Number of Applications Received By Customer Service and Paid Monthly

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

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

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

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

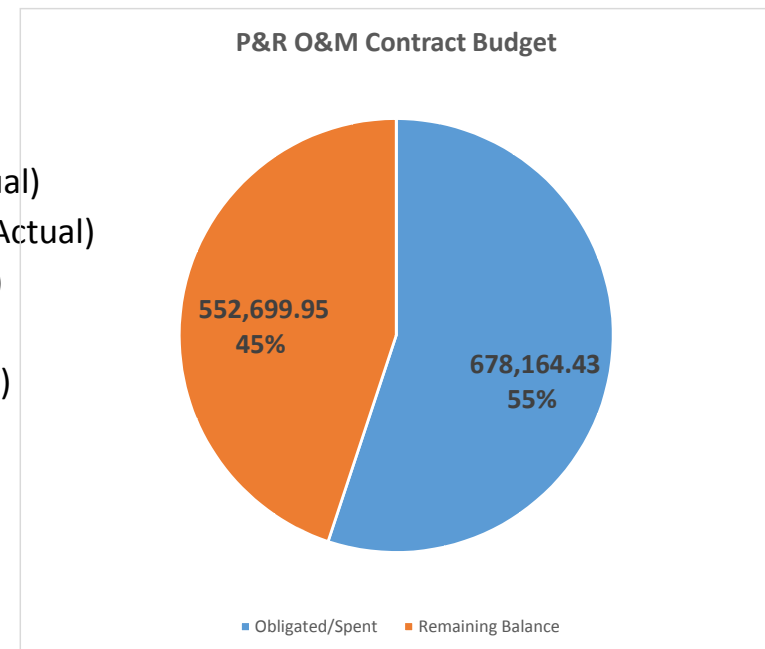


Planning & Regulatory CCU Report

July 31, 2019

Planning & Regulatory O&M Contract Budget

- Revenue Funded
- Target
 - 0.10% O&M Obligation as of October 31, 2018 (Actual)
 - 24.24% O&M Obligation as of November 30, 2018 (Actual)
 - 32.68% O&M Obligation as of Dec. 31, 2018 (Actual)
 - 38.66% O&M Obligation as of Feb. 28, 2019 (Actual)
 - 55.10 % O&M Obligation as of May 31, 2019 (Actual)
 - 55.10% O&M Obligated as of July 31, 2019 (Actual)



P&R Weekly & Monthly Inspection Reports

- Best Management Practices (BMP) Report Summary [Weekly]
- Generation Spill Prevention, Control, and Countermeasures (SPCC) Report Summary [Monthly]
- T&D Spill Prevention, Control, and Countermeasures (SPCC) Report Summary [Monthly]
- GPA is responsible to employees, the island environment, and the community to take all reasonable steps necessary to prevent spills from its facilities in order to protect human health and the environment

P&R Inspection Report Purpose

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

Weekly BMP Report

**WEEKLY BMP REPORT SUMMARY
CABRAS POWER PLANT
MONTH OF JULY 2019**

LEGEND OF TRACKING



Notification Date

Within Scheduled Remediation
Period

Completed



Deadline is Past Due

INSPECTOR: LORINA SABANGAN

LOCATION	WE 07/05/19 FINDINGS	WE 07/12/19 FINDINGS	WE 07/19/19 FINDINGS	WE 07/26/19 FINDINGS	RECOMMENDATION/ REMARKS	INITIAL FINDINGS DATE	DUE DATE	DATE COMPLETE D	RESPONSE
Infiltration Pond (Cabras 3&4)	Container van with used insulation	Container van with used insulation	Corrective action completed		Remove	11/16/2018	ASAP	7/19/2019	
Pavilion Area (Cabras 3&4 side, generator building)	Debris and soil pile near pavilion	Debris and soil pile near pavilion	Corrective action completed		Corrective action ongoing. Soil and debris sorted. Disposal of debris scheduled and soil will be spread out around area adjacent to substation	2/8/2013	ASAP	7/19/2019	
Cooling Water Intake	Rusted steel cover plates	Corrective action completed			Replace or remove rust & repaint steel plate covers Corrective action ongoing	2/8/2019	ASAP	7/12/2019	
		Rusted steel fence/railing	Corrective action completed			7/10/2019		7/19/2019	
	Engine parts, motor shaft, etc. next to container van near intake area	Corrective action completed			Relocate to storage area. (Per Generation, concern was coordinated with TEMES)	5/17/2019	ASAP	7/12/2019	
Facility Area			Corroded supply line crossing the bridge	Corrective action completed	Remove rust and repaint. Regular/close monitoring is required	7/19/2019	ASAP	7/26/2019	

T&D SPCC Inspection Report

SUMMARY OF SPCC MONTHLY INSPECTION REPORT
MONTH OF JULY, 2019

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	Facility Area	Clogged drain in transformer storage area	Fix clogged drainage	Corrective action completed		July 2019		June 2019
MACHECHE SUBSTATION	Secondary Containment	NO CORRECTIVE ACTION						
TALOFOFO SUBSTATION	Secondary Containment	Water accumulation in sec. containment						July 2019
		Algae accumulation in sec. containment						July 2019
		Used absorbent pads in sec. containment						July 2019
TENJO SUBSTATION	Security Fence	Tilting on the side	Fix and secure fence and gate					December 2018
YIGO SUBSTATION	Secondary Containment	NO CORRECTIVE ACTION						

Generation SPCC Inspection Report

SUMMARY OF SPCC MONTHLY INSPECTION REPORT
MONTH OF JULY, 2019

LEGEND OF TRACKING

Notification Date

Completed

Within Scheduled Remediation

Deadline is Past Due

POWER PLANT

LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
CABRAS POWER PLANT	Used Oil Tank	Corroded and damaged tank shell coating	Chip corrosion and recoat	Repair work ongoing			ASAP	Sept 2018
	Supply Pipeline	Pipeline crossing the outfall; Pitting corrosion at several locations	Install secondary means of containment on the pipeline	Corrective action completed			ASAP	Sept 2018
	RFO Supply Pipe Along Pipeline	Pitting corrosion	Conduct immediate repair & recoat pipeline	Corrective action completed			ASAP	January 2019
	Lube Oil Tank (Cabras 3 & 4)	Corroded lube oil pipeline	Conduct repair				ASAP	February 2018
DEDEDO CT	Raw Fuel Tank	Heavily corroded 2" fuel line	Conduct repair				ASAP	May 2019
	Secondary Containment	Water accumulation	Drain water				ASAP	June 2019
		Standing water inside OWS 1 & 2	Drain water				ASAP	July 2019
		Soil and rock debris in raw tank	Conduct cleanup				ASAP	June 2019

Generation SPCC Inspection Report (cont.)

SUMMARY OF SPCC MONTHLY INSPECTION REPORT

MONTH OF JULY, 2019

LEGEND OF TRACKING

Notification Date

Completed

Within Scheduled Remediation

Deadline is Past Due

POWER PLANT

MACHECHE CT	Facility Area	Corroded tank shells at T-130/140	Chip corrosion and recoat	Corrective action on-going			ASAP	October 2015
		Level gauge is not working (Tank 140)	Fix level gauge				ASAP	April 2019
		Algae accumulation in secondary containment	Conduct cleanup	Corrective action completed		July 2019	ASAP	June 2019
		Improper storage of HCl	Store in proper chemical storage				ASAP	June 2019
		Housekeeping	Need to utilize drum storage area for drum found inside generator room				ASAP	July 2019
YIGO CT	Tanks 130 and 140	Corroded tank shells	Chip corrosion & recoat tanks	Corrective action on-going			ASAP	February 2019
	Secondary Containment Trench	Algae, weeds accumulation	Conduct cleanup				ASAP	November 2018
	Tank 120	Corroded drain line pipe	Chip corrosion and recoat				ASAP	April 2019
	Drums Storage Area	Corroded oil drums stored in drum storage area	Frequently monitor drums and use oil ASAP				ASAP	March 2019
	Fuel Filtration Area	Oil spill in the area	Conduct cleanup	Corrective action completed		July 2019	ASAP	April 2019
	Secondary Containment	Dirt and sludge in OWS sec. containment	Conduct cleanup				ASAP	April 2019
MANENGON DIESEL	Pipeline	Corroded fuel supply pipeline	Chip corrosion & recoat				ASAP	July 2019
	Secondary Containment	Algae accumulation in secondary containment	Conduct cleanup				ASAP	July 2019
TALOFOFO DIESEL	Facility Area	Manway emergency vent corroded	Repair/repaint	Corrective action completed		July 2019	ASAP	February 2019

Generation SPCC Inspection Report (cont.)

SUMMARY OF SPCC MONTHLY INSPECTION REPORT MONTH OF JULY, 2019								
LEGEND OF TRACKING								
		Notification Date		Completed				
		Within Scheduled Remediation		Deadline is Past Due				
POWER PLANT								
TENJO DIESEL	Facility Area	Corroded tank shell	Chip corrosion & recoat				ASAP	July 2019
		Corroded supply pipe	Chip corrosion & recoat				ASAP	July 2019
PITI #7	Main Fuel Tank, Day Tank # 1 & 2	No integrity test	Integrity testing is required				ASAP	January 2018
	Main Fuel Tank	Corrosion forming under pipes and pipe support	Chip corrosion and recoat				ASAP	October 2018
	Old Piti Power plant structure	Improper storage of drums and wood pallets	Move or dispose drums and wood pallets				ASAP	May 2019

GPA INFORMATION TECHNOLOGY

JULY 2019

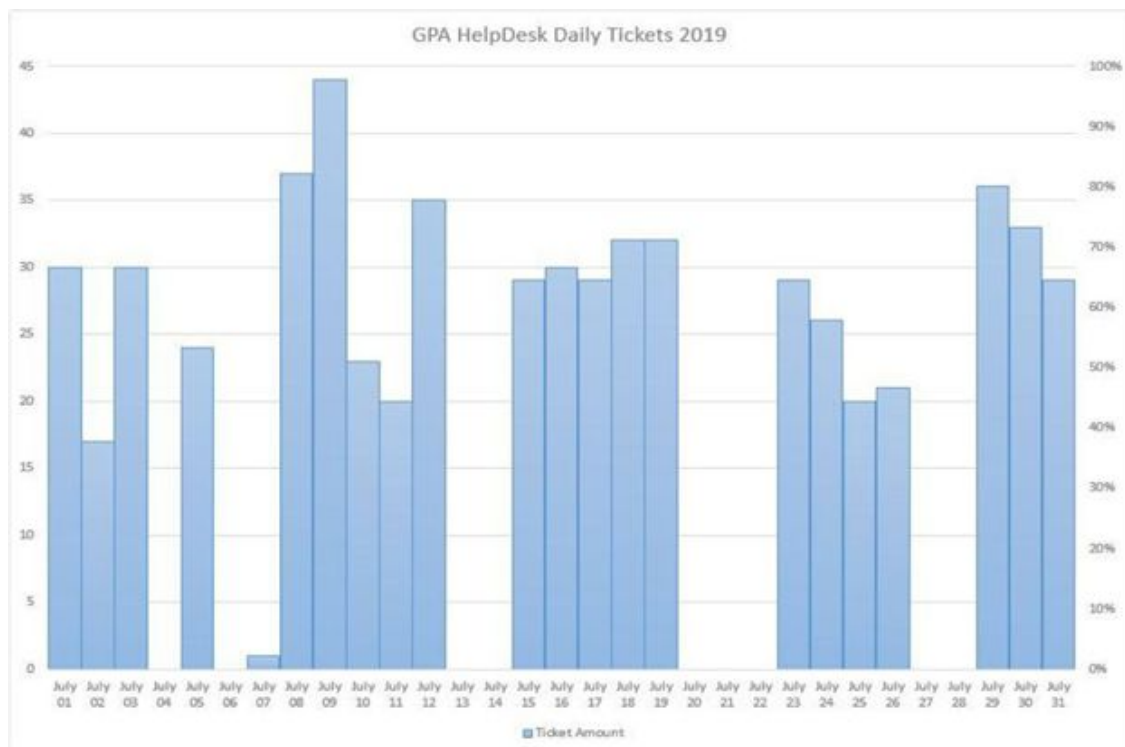
SUMMARY:

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).

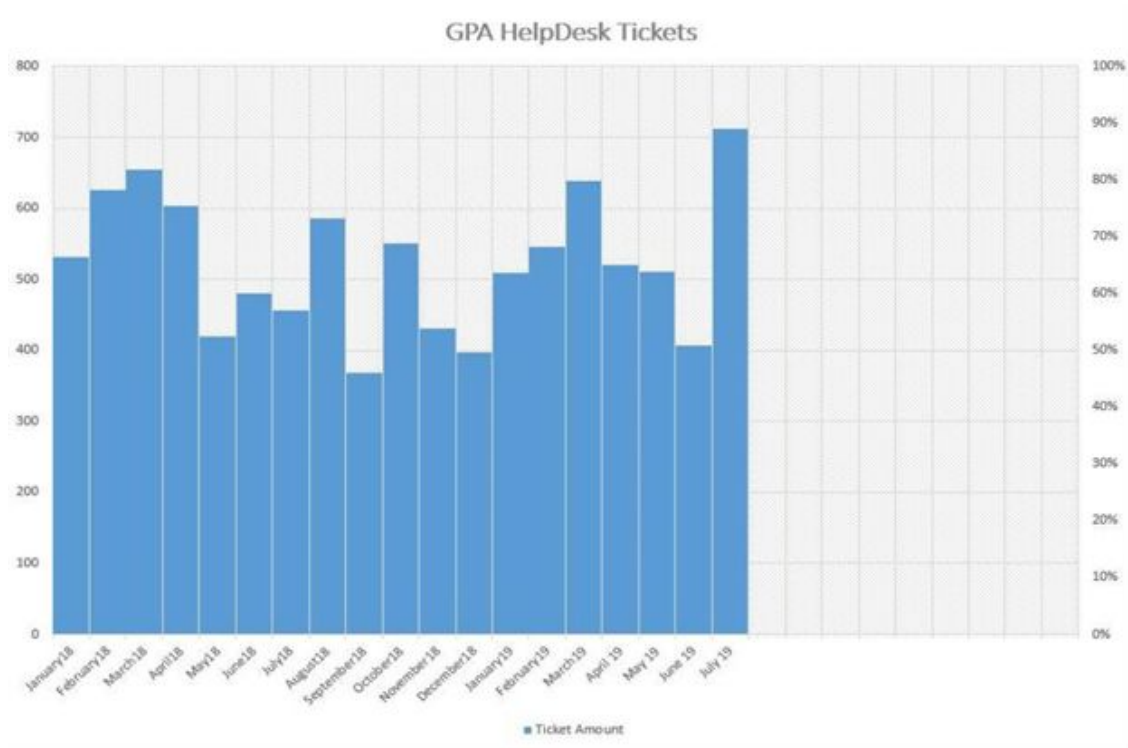
INCIDENT CALL SUMMARY:

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.

JULY 2019 TICKETS



19 MONTH COMPARATIVE



For July 2019, Computer Services responded to 696 Help Desk calls from GPA internal and external customers. Breakdown as follows:

RESOLVED TICKETS BY PRIORITY

Low	Medium	High	Critical	Total
406	150	131	9	696

RESOLVED TICKET TYPES

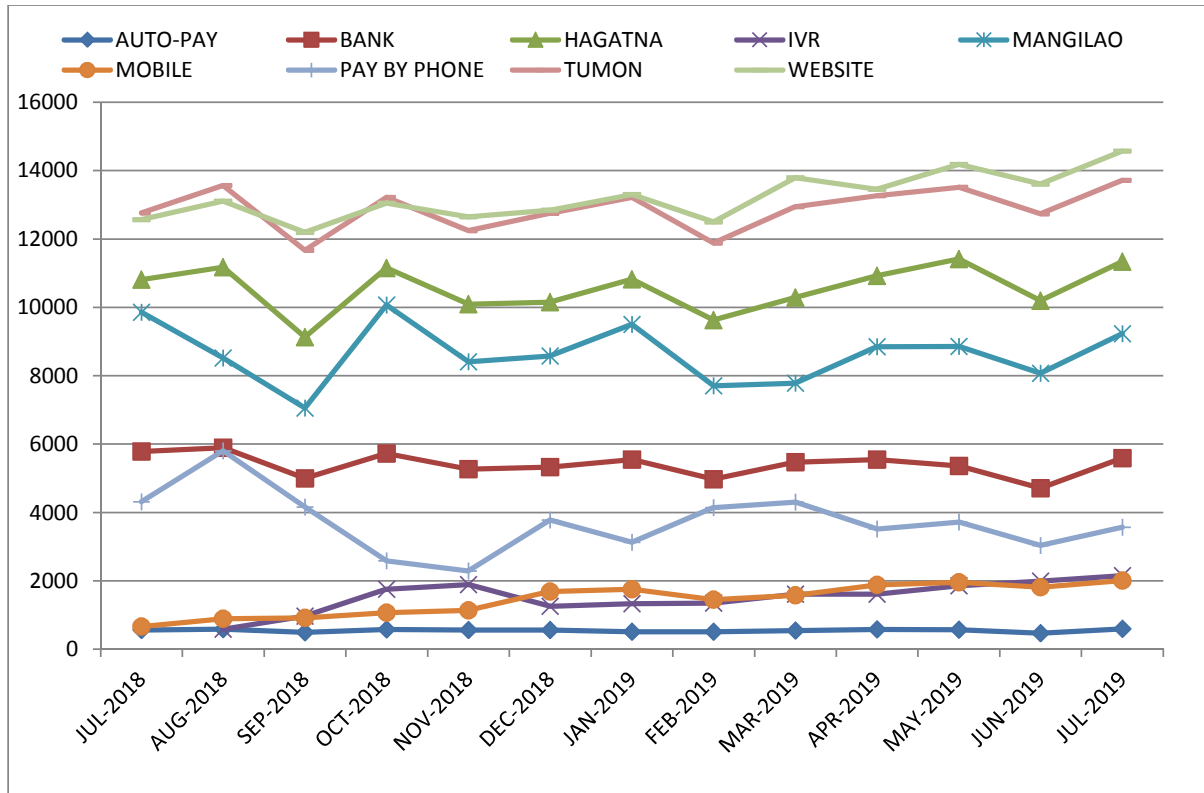
End User	Hardware	Software	Network	Total
638	23	33	2	696

RESOLVED TICKETS REPORTED BY ORIGIN

Phone	E-mail	Internal	Walk-In	Self Service Portal	Total
526	63	97	9	1	696

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
JUL-2018	557	5787	10812	588	9852	661	4312	12761	12563
AUG-2018	590	5890	11178	588	8517	895	5804	13562	13102
SEP-2018	493	4995	9127	966	7050	916	4158	11668	12189
OCT-2018	582	5728	11151	1755	10067	1069	2587	13218	13047
NOV-2018	558	5266	10095	1893	8410	1139	2290	12246	12646
DEC-2018	562	5327	10148	1254	8574	1683	3775	12751	12840
JAN-2019	506	5544	10824	1333	9498	1758	3127	13215	13299
FEB-2019	513	4968	9627	1346	7706	1448	4140	11880	12494
MAR-2019	546	5474	10284	1608	7781	1577	4305	12948	13790
APR-2019	577	5548	10926	1608	8849	1882	3512	13264	13449
MAY-2019	568	5360	11415	1853	8859	1957	3717	13514	14179
JUN-2019	467	4705	10193	1993	8073	1814	3036	12731	13609
JUL-2019	592	5585	11333	2153	9232	2008	3562	13719	14574
Grand Total	7,111	70,177	137,113	18,350	112,468	18,807	48,325	167,477	171,781

MAJOR APPLICATION ISSUES FOR APRIL 2019

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)
Application is currently undergoing a system upgrade.
11. MOBILE APP PAYMENT PROGRAM
No system issue reported.
12. IVR PHONE PAYMENT SYSTEM
No system issue reported.

ONGOING PROJECT UPDATES:

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.

Update: RFP is in protest with one of the vendors. Awaiting decision from OPA.

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.

Update: Phase 1 – Installation of Camera's and Public Announcement (PA) system is currently ongoing at the Fadian. PA System has passed initial testing.

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 has been awarded and project is ongoing.

Update: Project is ongoing.

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.

Update: Deployment to GuamPowerAuthority.com is online. Pending Facebook and PAYGPA.COM.

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.

Update: Working on clarifying the Scope of Work

VPlex and Unity Storage and Replication Implementation: New data storage and replication solution that will be implemented in conjunction with GPA's new disaster recovery solution. This will allow GPA to retire existing Storage Area Network (SAN) devices which are End of Life (EOL) and will allow Active to Active data replication between the GPA Fadian Data Center and the proposed new Disaster Recovery (DR) site.

Substation Surveillance Camera Installation (Proof of Concept): Installation and testing of remote cameras at substations to test GPA Tier 2 wireless network. An initial camera has been installed at the Umatac Substation with additional sites identified at Piti, Harmon, Agana and Tamuning Substation.

Submitted by:
Melvyn Kwek
Chief Information Technology Officer

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	FY2019	4
9		P270		
10		P046	FY2018	1
11		P087		
12		P321	FY2019	4
13		P088	FY2017	4
14		P331		
15		P323	FY2019	4
16		P245		
17		P272		
18		P240		
19		P242		
20	Central	P212	FY2019	4
21		P213	FY2019	4
22		P202	FY2019	4
23		P201	FY2019	4
24		P210	FY2019	4
25		P007		
26		P250	FY2019	4
27		P205	FY2019	4
28		P206	FY2019	4
29		P203	FY2019	4
30		P253	FY2019	4
31		P283	FY2019	4
32		P280	FY2019	4
33		P311	FY2019	4
34		P007		
35		P211	FY2019	4
36		P202	FY2019	4
37		P251	FY2019	4
38		P252	FY2019	4
39		P201		
40		P282	FY2019	4
41		P310	FY2019	4
42		P204	FY2019	4
43		P312	FY2019	4
44		P281	FY2019	4
45		P400		
46	South	P340	FY2019	4
47		P261	FY2019	4
48		P221	FY2019	4
49		P294	FY2019	4
50		P341	FY2019	4
51		P005	FY2019	4
52		P260		
53		P003	FY2019	4
54		P220	FY2019	4
55		P298		
56		P262	FY2019	4
57		P223	FY2019	4
58		P301	FY2019	4
59		P005		
60		P260	FY2019	4

Top 10 Worst Circuits

GPA Work Session - August 22, 2019 - DIVISION REPORTS

ENGINEERING WORK ORDERS

Engineering Work Order Summary - July 2019	
Work Orders Received from CSR	78
Work Orders Processed & Released to T&D	159
Work Orders Processed & Released to CSR	14
Work Orders Cancelled	13
Work Orders Pending Survey	25
Total Pending WO at Engineering	466

Engineering Large Customer and Net Metering Tracking						
Date Received	Customer Name	Work Order Numbers	Location	KVA	Meter Qty	Status
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, 8 completed, 58 Pending, 97% Completed, 300 kVA. Phase IV currently in design phase by EMCE.
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, Tower 101, 102, 103, and 104	426021	Tamuning	3300	45	New condominiums, 2-1500kVA and 1 300 kVA, Tower 101 and 102 100% Completed, Tower 103 and 104 are 50% completed. 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. Work on Tower 103 (90% Completed) and 104 ongoing.
6/1/2017	New Underground Line (P-047)	466064	Tumon	1500	1	New Underground line 90% completed. Mandrelling completed on completed sections. T&D will begin pulling wire and installing splices in August 2019.
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.
04/01/18	HG Northeast Inc	459085	Mangilao	100	14	New 14 Unit Subdivision, 15% Completed, 100 kVA, Pending Applications
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. 99% Completed. Materials returned to GPA Warehouse.
05/12/18	Bestry Corporation	450085	Hagatna	500	8	Hamilton Hotel Renovation and Rehabilitation, 8 Meters, 100% Completed, 500 kVA. Pending Completion of punchlist items.
06/14/18	Guam Waterworks Authority	461363	Umatac-Merizo	300	1	New Umatac-Merizo Wastewater Treatment, 40% Completed, 300 kVA
12/13/18	Simpson, Henry M	466907, 8, 466658	Santa Rita			New Subdivision. Design Ongoing. Demand load pending completion of subdivision design.
02/01/19	Ironwood Villa Del Mar, LLC	Multiple	Mongmong/Toto	350	50	New 50 Unit Apartments, 75% completed, multiple buildings with multiple transformers.
10/01/18	Ada's Trust & Investments	464891	Hagatna	300	1	New Commercial Building. 100% completed. Released to T&D.
10/10/18	Don Sadwahni	465341	Harmon	2000	1	New Industrial Subdivision, Inspection of civil work only, Proposed 12 Pad Mounted Xfmrs 77% Completed.
11/19/18	TNN Guam Primary Meter	466064	Tumon	1800	1	Permanent primary meter for Tsubaki Hotel and Nikko Hotel (1800 + 3000kVA Nikko), 92% Completed.
04/26/19	JohnDel International	469700-2,5, 6	Tamuning		5	New Office Building, pending transformer sizing.
Varies	Pending Net Metering Customers	Varies	Various Locations Islandwide		1	Pending Net Metering Customers as of June 30, 2019.
Total				13550	204	

NET METERING

July 2019

	<u>Quantity</u>	<u>Connected kVA</u>
Completed	2,005	22,279
Pending	1	7
Grand Total	2,006	22,287

Rate Class and Technology			
Technology	Schedule	Customer Count	Total kW
Solar Energy	R - Residential	1,895	17,679.43
	J - Gen Service Dmc	37	2,030.41
	K - Small Gov Dmd	9	317.80
	L - Large Governme	2	122.80
	P - Large Power	7	640.70
	G - Gen Serv Non-D	46	1,405.76
	S - Sm Gov Non-Dm	7	78.80
Wind Turbine	R - Residential	2	3.60
Grand Total		2,005	22,279.29

Projection Date Ending 12/31/2019					
Customer Rate Class	Sum of Size (kW)	*Annual Projected kWh Generated	Non-Fuel Yield \$/kWh	Estimated Annual Revenue Loss	
R	17,683.03	28,597,298	0.087492	\$	2,502,035.61
J	2,030.41	3,129,116	0.125682	\$	393,273.64
K	317.80	523,052	0.133883	\$	70,027.73
L	122.80	205,378	0.129809	\$	26,659.90
P	640.70	1,051,985	0.109950	\$	115,665.83
G	1,405.76	2,275,366	0.145397	\$	330,831.39
S	78.80	126,250	0.147902	\$	18,672.63
Grand Total	22,279.3	35,908,444		\$	3,457,166.73

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

Estimated Annual Revenue Loss (prior to 2019 model changes)

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

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

NET METERING

July 2019

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	263.73	25	15.3%	30.7%	
	P-046	290.29	35	6.8%	10.4%	
	P-088	692.94	75	11.5%	18.2%	
	P-089	597.47	74	13.4%	32.2%	
	P-111	190.00	3	3.5%	6.2%	
	P-203	475.98	38	6.4%	18.0%	
	P-204	150.38	17	3.2%	6.6%	
	P-205	44.00	5	0.9%	1.6%	
	P-210	579.17	56	11.3%	15.4%	
	P-212	1,074.12	104	26.0%	67.2%	
	P-213	322.13	13	12.3%	16.5%	
	P-220	179.22	20	29.4%	92.4%	
	P-221	598.28	61	13.6%	27.1%	
	P-223	563.33	61	23.7%	33.8%	
	P-240	58.55	2	0.9%	7.9%	
	P-245	192.60	4	3.8%	8.2%	
	P-250	1,206.15	120	18.5%	32.6%	
	P-251	145.50	7	5.9%	9.0%	
	P-253	599.03	61	13.3%	21.0%	
	P-262	1,135.02	115	29.8%	71.5%	
	P-270	419.64	36	8.2%	16.6%	
	P-271	268.33	16	4.6%	9.7%	
	P-272	263.81	19	10.3%	23.4%	
	P-280	350.04	28	19.5%	36.2%	
	P-281	204.90	5	7.3%	20.4%	
	P-282	31.75	4	0.8%	2.6%	
	P-283	593.70	54	16.4%	28.1%	
	P-294	1,244.88	117	28.8%	56.9%	
	P-301	213.66	23	15.1%	26.9%	
	P-311	1,061.31	60	26.6%	45.5%	
	P-322	1,653.68	111	21.8%	43.3%	
	P-323	316.52	21	6.7%	20.8%	
	P-330	675.81	85	12.4%	25.0%	
	P-331	827.91	91	13.1%	21.2%	
	P-332	629.10	68	11.2%	16.3%	
	P-340	549.58	49	30.3%	66.7%	
	P-087	1,310.05	141	33.4%	52.3%	
	P-252	599.13	32	14.2%	29.0%	
	P-321	363.46	34	6.5%	7.3%	
	P-260	81.76	8	11.8%	40.9%	
	P-067	86.20	10	1.0%	1.3%	
	P-312	82.24	5	4.9%	5.7%	
	P-206	26.08	3	2.7%	4.8%	
	P-242	23.75	2	0.4%	1.1%	
	P-310	181.57	8	6.6%	12.1%	
	P-261	475.88	52	17.2%	29.5%	
	P-201	60.35	8	1.7%	3.0%	
	P-007	85.86	8	11.9%	25.3%	
	P-244	36.56	2	2.1%	2.1%	
	P-202	39.50	3	1.2%	2.9%	
	P-341	4.30	1	0.4%	1.6%	
	P-401	117.00	2	10.3%	17.3%	
	P-400	43.14	3	4.5%	4.6%	
Completed Total		22,279.29	2,005			
Pending	Pending	7.31	1	0.0%	0.0%	
Pending Total		7.31	1	0.0%	0.0%	
Grand Total		22,286.60	2,006			

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

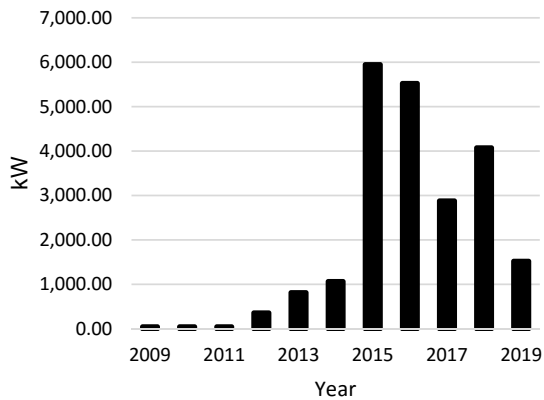
NET METERING

July 2019

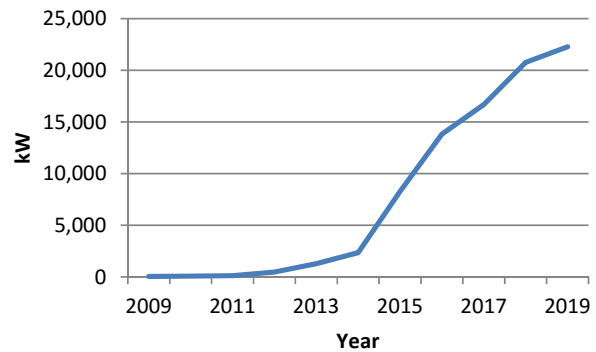
Installed kW by Year		
Year	Total	Cumulative
2009	39.46	39.46
2010	39.20	78.66
2011	41.61	120.27
2012	354.61	474.88
2013	808.15	1,283.03
2014	1,060.04	2,343.07
2015	5,947.40	8,290.47
2016	5,522.76	13,813.22
2017	2,877.15	16,690.37
2018	4,071.10	20,761.47
2019	1,517.82	22,279.29
Grand Total	22,279.29	

Customer Count by Year		
Year	Total	Cumulative
2009	7	7
2010	2	9
2011	6	15
2012	27	42
2013	66	108
2014	94	202
2015	566	768
2016	531	1,299
2017	297	1,596
2018	290	1,886
2019	119	2,005
Grand Total	2,005	

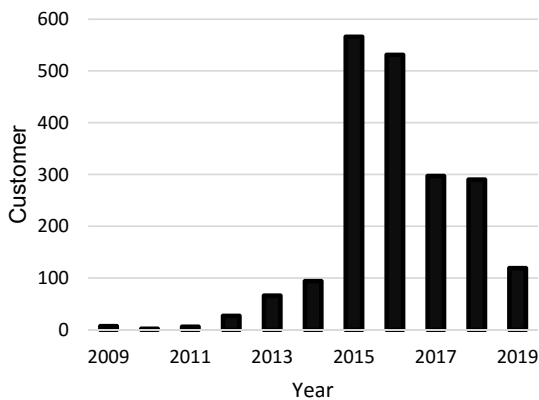
Yearly Installed kW



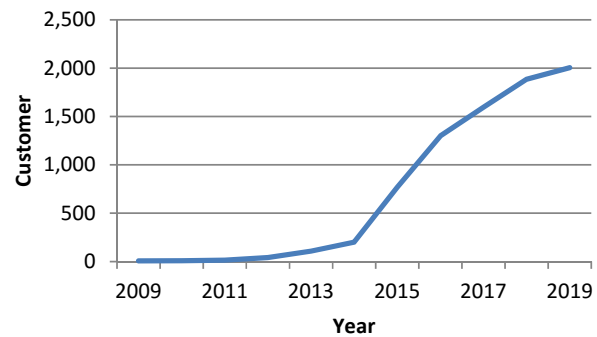
Cumulative Installed kW



Yearly Connected Customer Count



Cumulative Connected Customer Count





Production Data
31-Jul-19

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)						
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	149,090,501	10,752,842	256,020	13.87	\$ 0.1592	9,870.49	12,783.94	200	243
	Nov	30	139,840,706	9,348,494	222,583	14.96	\$ 0.1446	9,772.22	12,091.07	194	241
	Dec	31	144,799,157	9,756,460	232,297	14.84	\$ 0.1497	9,443.41	11,943.41	195	237
2019	Jan	31	134,551,799	9,056,271	215,626	14.86	\$ 0.1172	9,677.80	11,506.72	181	224
	Feb	28	122,596,954	8,257,791	196,614	14.85	\$ 0.1152	9,592.63	11,923.40	182	226
	Mar	31	139,964,506	9,489,626	225,943	14.75	\$ 0.1309	9,586.39	12,331.54	188	234
	Apr	30	143,583,892	9,385,611	223,467	15.30	\$ 0.1249	9,597.50	11,794.45	199	244
	May	31	154,541,037	10,653,233	253,648	14.51	\$ 0.1378	9,854.93	12,008.47	208	254
	June	30	152,035,851	10,394,927	247,498	14.63	\$ 0.1378	9,756.34	11,985.93	211	255
	July	31	151,991,559	10,148,056	241,620	14.98	\$ 0.1230	9,789.72	11,505.06	204	251

GPA Work Session - August 22, 2019 - DIVISION REPORTS

T&D Vegetation Management

Percent Completion (per Sector Feeder)

Note: Feeders priority listing based on outages due to vegetation

Northern Sector

Feeder	Estimated Distance (LF)	Distance Trimmed by T&D Crew (LF)	Distance Trimmed by Contractor (LF)	% Completion
P332	6,830	12,375	9,561	321%
P322	7,265	500	4,800	73%
P330	2,635		12,599	478%
P087	4,245	4,550		107%
P046	1,245	200		
P321	4,045	250		
P088	3,310	240		
P089	670	240		36%
P331	1,925	190		10%
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	25,180	26,960	133%

Central Sector

Feeder	Estimated Distance (LF)	Distance Trimmed by T&D Crew (LF)	Distance Trimmed by Contractor (LF)	% Completion
P250	33,290	14,495	10,392	75%
P212	17,560	630		4%
P253	15,240	600		
P283	2,230	350	7,000	330%
P210	10,120	140		1%
P280	1,675	380		23%
P311	1,360			
P007	778			
P211	6,050			
P202	420	550		
P251	280			
P213	3,500	50		
P252	1,520		4,586	302%
P201	100			
P203	370			
P282	525			
P310	370	100		27%
P205	350			
P206	140	150		
P204	530			
P312	200			
P281	525			
P400	150			
Total	97,283	17,445	21,978	41%

Southern Sector

Feeder	Estimated Distance (LF)	Distance Trimmed by T&D Crew (LF)	Distance Trimmed by Contractor (LF)	% Completion
P294	9,430	1,195	22,801	254%
P261	4,930	2,660	9,939	256%
P340	13,240	1,660	27,675	222%
P262	5,185	1,170	19,236	394%
P221	1,570	2,445		156%
P223	2,500	5,590		224%
P341	880	2,240	450	306%
P301	19,915	2,074	1,675	19%
P005	990	150		15%
P220	1,250	480		38%
P260	12,630	2,650		21%
Total	72,520	22,314	81,776	144%



GUAM POWER AUTHORITY

ATURIDAT ILEKTRESEDAT GUAHAN
 P O BOX 2977, AGANA, GUAM 96932-2977
 Telephone: (671) 648-3066 Fax: (671) 648-3168

GUAM POWER AUTHORITY FINANCIAL STATEMENT OVERVIEW June 2019

Attached are the financial statements and supporting schedules for the month and fiscal year ended June 30, 2019.

Summary

The increase in net assets for the month ended was \$2.5 million as compared to the anticipated net increase of \$1.2 million projected at the beginning of the year. The total kWh sales for the month were 0.50% more than projected and non-fuel revenues were \$0.2 million less than the estimated amount. O & M expenses for the month were \$5.6 million which was \$0.8 million less than our projections for the month. Other expenses for the month such as interest expense, IPP costs, (net of interest income and other income) totaled to \$2.9 million, which was \$0.6 less than the projected amounts. There were no other significant departures from the budget during the period.

Analysis

Description	Previous Month	Current Month	Target
Quick Ratio	2.42	2.57	2
Days in Receivables	41	44	52
Days in Payables	29	30	30
LEAC (Over)/Under Recovery Balance -YTD	\$12,975,911	\$12,019,721	\$10,999,598
T&D Losses	5.44%	5.37%	<7.00%
Debt Service Coverage	1.58	1.62	1.75
Long-term equity ratio	-0.009%	-0.43%	30 – 40%
Days in Cash	200	213	60

The Quick Ratio has been a challenge for GPA historically. However, the influx of cash from insurance proceeds continued to improve this ratio. GPA has current obligations of approximately \$77 million and approximately \$198 million in cash and current receivables. The LEAC over recovery for the month is nearly \$1.0 million. Debt Service Coverage ratio is calculated using the methodology in use before the Fiscal Year 2002 change in accounting practice.

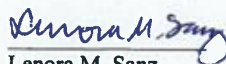
Financial Statements
June 2019

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:



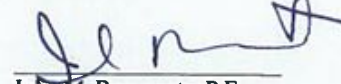
Lenora M. Sanz
Controller

Reviewed by:



John J.E. Kim
Chief Financial Officer

Approved by:



John M. Benavente, P.E.
General Manager

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statements of Net Position June 30, 2019 and September 30, 2018			
	Unaudited June 2019	Audited September 2018	Change from Sept 30 2018
ASSETS AND DEFERRED OUTFLOWS OF RESOURCES			
Current assets:			
Cash and cash equivalents:			
Held by trustee for restricted purposes:			
Interest and principal funds	\$ 21,496,017	\$ 17,997,927	\$ 3,498,090
Bond indenture funds	30,710,464	49,970,719	(19,260,255)
Held by Guam Power Authority:			
Bond indenture funds	149,988,444	142,583,470	7,404,974
Self insurance fund-restricted	19,330,274	19,258,353	71,921
Energy sense fund	258,840	1,085,472	(826,632)
Total cash and cash equivalents	<u>221,784,039</u>	<u>230,895,941</u>	<u>(9,111,902)</u>
Accounts receivable, net	<u>47,061,625</u>	<u>37,851,906</u>	<u>9,209,719</u>
Total current receivables	<u>47,061,625</u>	<u>37,851,906</u>	<u>9,209,719</u>
Materials and supplies inventory	13,231,421	12,812,072	419,349
Fuel inventory	45,200,735	67,993,103	(22,792,368)
Prepaid expenses	<u>5,041,847</u>	<u>979,828</u>	<u>4,062,019</u>
Total current assets	<u>332,319,667</u>	<u>350,532,850</u>	<u>(18,213,183)</u>
Utility plant, at cost:			
Electric plant in service	1,071,243,434	1,063,192,955	8,050,479
Construction work in progress	41,159,960	28,021,290	13,138,670
Total	<u>1,112,403,394</u>	<u>1,091,214,245</u>	<u>21,189,149</u>
Less: Accumulated depreciation	<u>(624,062,642)</u>	<u>(597,426,905)</u>	<u>(26,635,737)</u>
Total utility plant	<u>488,340,752</u>	<u>493,787,340</u>	<u>(5,446,588)</u>
Other non-current assets:			
Investment - bond reserve funds held by trustee	48,499,616	48,600,660	(101,044)
Unamortized debt issuance costs	<u>2,291,732</u>	<u>2,503,448</u>	<u>(211,716)</u>
Total other non-current assets	<u>50,791,348</u>	<u>51,104,108</u>	<u>(312,760)</u>
Total assets	<u>871,451,767</u>	<u>895,424,298</u>	<u>(23,972,531)</u>
Deferred outflow of resources:			
Deferred fuel revenue	12,019,721	8,370,542	3,649,179
Unamortized loss on debt refunding	25,323,237	27,093,636	(1,770,399)
Pension	8,932,987	8,932,987	0
Other post employment benefits	13,798,017	13,798,017	0
Unamortized forward delivery contract costs	<u>358,478</u>	<u>477,998</u>	<u>(119,520)</u>
Total deferred outflows of resources	<u>60,432,440</u>	<u>58,673,180</u>	<u>1,759,260</u>
	<u>\$ 931,884,207</u>	<u>\$ 954,097,478</u>	<u>\$ (22,213,271)</u>

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statement of Net Position, Continued June 30, 2019 and September 30, 2018			
	Unaudited June 2019	Audited September 2018	Change from Sept 30 2018
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION			
Current liabilities:			
Current maturities of long-term debt	\$ 16,130,000	\$ 1,630,000	\$ 14,500,000
Current obligations under capital leases	3,304,531	13,613,066	(10,308,535)
Accounts payable			
Operations	35,348,918	47,761,928	(12,413,010)
Others	1,083,301	662,541	420,760
Accrued payroll and employees' benefits	1,387,190	1,949,080	(561,890)
Current portion of employees' annual leave	2,244,916	2,101,168	143,748
Interest payable	7,636,598	14,745,285	(7,108,687)
Customer deposits	9,980,585	9,387,519	593,066
Total current liabilities	<u>77,116,039</u>	<u>91,850,587</u>	<u>(14,734,548)</u>
Regulatory liabilities:			
Provision for self insurance	19,345,291	19,345,291	0
Total regulatory liabilities	<u>19,345,291</u>	<u>19,345,291</u>	<u>0</u>
Long term debt, net of current maturities	585,858,601	604,881,434	(19,022,833)
Obligations under capital leases, net of current portion	9,551,236	10,808,951	(1,257,715)
Net Pension liability	73,838,073	76,554,735	(2,716,662)
Other post employment benefits liability	145,955,861	145,955,861	0
DCRS sick leave liability	1,331,151	1,331,151	0
Employees' annual leave net of current portion	1,204,085	1,204,085	0
Customer advances for construction	394,540	385,293	9,247
Total liabilities	<u>914,594,877</u>	<u>952,317,388</u>	<u>(37,722,511)</u>
Deferred inflows of resources:			
Unearned forward delivery contract revenue	1,314,040	1,752,053	(438,013)
Pension	3,532,642	3,532,642	0
Other post employment benefits	14,804,043	14,804,043	0
Total deferred inflows of resources	<u>19,650,725</u>	<u>20,088,738</u>	<u>(438,013)</u>
Commitments and contingencies			
Net Position:			
Net investment in capital assets	(47,688,078)	(38,960,024)	(8,728,053)
Restricted	42,795,879	47,856,103	(5,060,224)
Unrestricted	2,530,803	(27,204,727)	29,735,530
Total net position	<u>(2,361,396)</u>	<u>(18,308,648)</u>	<u>15,947,254</u>
	<u>\$ 931,884,207</u>	<u>\$ 954,097,478</u>	<u>\$ (22,213,271)</u>

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statement of Revenues, Expenses and Changes in Net Assets						
	June 30		% of change Inc (dec)	Nine Months Ending June 30		% of change Inc (dec)
	Unaudited 2019	Audited 2018		Unaudited 2019	Audited 2018	
Revenues						
Sales of electricity	\$ 35,909,269	\$ 32,452,830	11	\$ 298,767,040	\$ 281,683,917	6
Miscellaneous	184,650	243,628	(24)	2,462,576	1,500,393	64
Total	36,093,919	32,696,458	10	301,229,616	283,184,310	6
Bad debt expense	(91,500)	(83,583)	9	(823,500)	(752,247)	9
Total revenues	36,002,419	32,612,875	10	300,406,116	282,432,063	6
Operating and maintenance expenses						
Production fuel	21,931,788	19,251,793	14	178,520,894	159,874,077	12
Other production	1,475,936	1,554,727	(5)	11,535,941	12,598,786	(8)
	23,407,724	20,806,520	13	190,056,835	172,472,863	10
Depreciation	3,154,763	3,114,859	1	28,072,897	28,695,086	(2)
Energy conversion cost	1,014,878	1,464,271	(31)	10,881,268	13,434,660	(19)
Transmission & distribution	1,294,227	1,042,628	24	9,083,632	9,677,179	(6)
Customer accounting	464,330	463,397	0	3,950,639	3,966,430	(0)
Administrative & general	2,376,864	2,413,973	(2)	23,067,965	22,805,498	1
Total operating and maintenance expenses	31,712,786	29,305,648	8	265,113,236	251,051,716	6
Operating income	4,289,633	3,307,227	30	35,292,880	31,380,347	12
Other income (expenses)						
Interest income	484,131	358,124	35	3,406,121	2,045,632	67
Interest expense and amortization	(2,417,791)	(2,568,549)	(6)	(21,786,248)	(24,028,642)	(9)
Bond issuance costs	88,022	67,464	30	791,198	(1,911,665)	(141)
Bid bond forfeiture	0	0	0	(1,245,000)	0	
Allowance for funds used during construction	0	130,360	(100)	0	1,310,450	(100)
Losses due to typhoon	16,584	0		(688,612)	(491,854)	
Other expense	(4,287)	(4,291)	0	(38,622)	(38,619)	0
Total other income (expenses)	(1,833,341)	(2,016,892)	(9)	(19,561,163)	(23,114,698)	(15)
Income (loss) before capital contributions	2,456,292	1,290,335	90	15,731,717	8,265,649	90
Capital contributions	0	0	0	215,537	102,672	0
Increase (decrease) in net assets	2,456,292	1,290,335	90	15,947,254	8,368,321	91
Total net assets at beginning of period (restated)	(4,817,688)	117,254,543	0	(18,308,650)	110,176,557	(117)
Total net assets at end of period	\$ (2,361,396)	\$ 118,544,878	(102)	\$ (2,361,396)	\$ 118,544,878	(102)

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statements of Cash Flows Period Ended June 30, 2019		
	Month Ended 6/30/2019	YTD Ended 6/30/2019
Increase(decrease) in cash and cash equivalents		
Cash flows from operating activities:		
Cash received from customers	\$ 31,982,958	\$ 291,186,798
Cash payments to suppliers and employees for goods and services	<u>12,213,720</u>	<u>235,584,442</u>
Net cash provided by operating activities	\$ 19,769,238	\$ 55,602,356
Cash flows from investing activities:		
Interest and dividends on investments and bank accounts	<u>484,131</u>	<u>3,406,121</u>
Net cash provided by investing activities	\$ 484,131	\$ 3,406,121
Cash flows from non-capital financing activities		
Interest paid on short term debt	(7,914)	(61,034)
Provision for self insurance funds	<u>(54,541)</u>	<u>(71,921)</u>
Net cash provided by noncapital financing activities	\$ (62,455)	\$ (132,955)
Cash flows from capital and related financing activities		
Acquisition of utility plant	(2,110,864)	(22,626,308)
Principal paid on bonds and other long-term debt	-	(1,630,000)
Interest paid on bonds(net of capitalized interest)	-	(28,066,875)
Interest paid on capital lease obligations	(95,188)	(767,028)
Interest & principal funds held by trustee	(3,680,639)	(3,498,090)
Reserve funds held by trustee	(44,192)	101,044
Bond funds held by trustee	380,220	19,260,255
Principal payment on capital lease obligations	(628,858)	(11,566,250)
Grant from DOI/FEMA	-	215,537
Debt issuance costs/loss on defeasance	(321,537)	(2,892,833)
Net cash provided by (used in) capital and related financing activities	<u>(6,501,058)</u>	<u>(51,470,548)</u>
Net (decrease) increase in cash and cash equivalents	\$ 13,689,855	\$ 7,404,974
Cash and cash equivalents, beginning	<u>136,298,589</u>	<u>142,583,470</u>
Cash and cash equivalents-Funds held by GPA, June 30, 2019	\$ 149,988,444	\$ 149,988,444

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statements of Cash Flows, continued Period Ended June 30, 2019		
	Month Ended 6/30/2019	YTD Ended 6/30/2019
Reconciliation of operating earnings to net cash provided by operating activities:		
Operating earnings net of depreciation expense and excluding interest income	\$ 4,289,633	\$ 35,292,880
Adjustments to reconcile operating earnings to net cash provided by operating activities:		
Depreciation and amortization	3,154,763	28,072,897
Other expense	100,319	(1,181,036)
(Increase) decrease in assets:		
Accounts receivable	(3,982,041)	(9,209,719)
Materials and inventory	(187,752)	(419,349)
Fuel inventory	15,378,244	22,792,368
Prepaid expenses	(148,681)	(4,062,019)
Unamortized debt issuance cost	23,524	211,716
Deferred fuel revenue	956,190	(3,649,179)
Unamortized loss on debt refunding	196,711	1,770,399
Unamortized forward delivery contract costs	13,280	119,520
Increase (decrease) in liabilities:		
Accounts payable-operations	542,739	(12,413,010)
Accounts payable-others	(204,719)	1,247,392
Accrued payroll and employees' benefits	(5,011)	(561,890)
Net pension liability	(276,941)	(2,716,662)
Employees' annual leave	(112,188)	143,748
Customers deposits	70,779	593,066
Customer advances for construction	9,057	9,247
Unearned forward delivery contract revenue	(48,668)	(438,013)
Net cash provided by operating activities	\$ 19,769,238	\$ 55,602,356

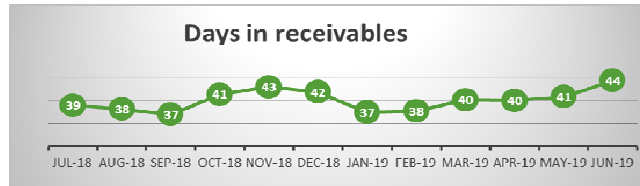
**Guam Power Authority
Financial Analysis
June 30, 2019**

Quick Ratio

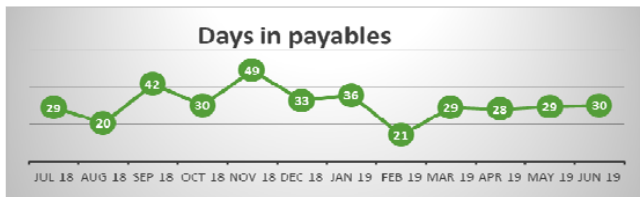
A	Reserve Funds Held by GPA	149,988,444
B	Current Accounts Receivable	48,052,661
C	Total Cash and A/R (A+B)	198,041,105
D	Total Current Liabilities	77,116,039
E	Quick Ratio (F/G)	2.57

**Days in Receivables**

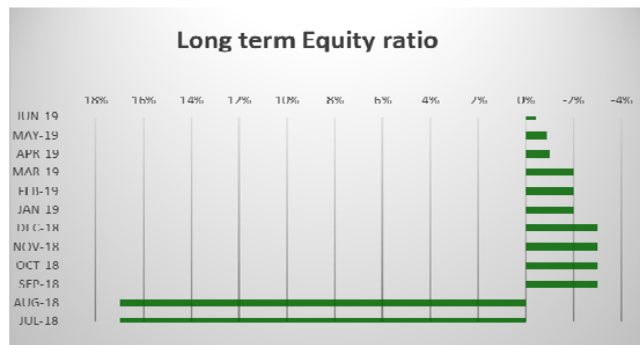
A	FY 18 Moving 12 Mos.-Actual	395,411,994
B	No. of Days	365
C	Average Revenues per day (A/B)	1,083,321
D	Current Accounts Receivable	48,052,661
E	Days in Receivables (D/C)	44

**Days in Payables**

A	FY 18 Moving 12 Months-Actual	442,155,390
B	No. of Days	365
C	Average Payables per day (A/B)	1,211,385
D	Current Accounts Payables	36,432,218
E	Days in Payables (D/C)	30

**Long term equity ratio**

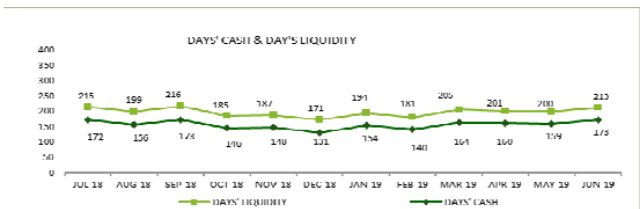
A	Equity	\$	(2,361,396.00)
B	Total Long term Liability	\$	552,485,333.00
C	Total Equity and liability	\$	550,123,937.00
D	Long term equity ratio (A/C)		-0.43%

**Days cash on hand**

A	Unrestricted cash & cash equivalents	149,988
B	No. of Days -YTD	273
C	A x B	40,946,845
D	Total Operating expenses excluding depreciation	237,040
E	Days cash on hand	173

Days' Liquidity

A	Unrestricted cash , cash equivalents & revolving Credit	184,988
B	No. of Days -YTD	273
C	A x B	50,501,845
D	Total Operating expenses excluding depreciation	237,040
E	Days liquidity	213



GPA 302
10-Jul-19

GUAM POWER AUTHORITY
ACCRUED REVENUE
JUNE 2019

		FOR THE MONTH ENDED JUNE		NINE MONTHS ENDED JUNE	
		2019	2018	2019	2018
KWH SALES:					
Residential		46,454,816	42,056,621	369,561,477	377,029,802
Small Gen. Non Demand		7,135,817	6,840,318	59,583,506	61,810,282
Small Gen. Demand		16,196,923	15,360,000	137,926,578	140,141,697
Large General		25,905,882	25,263,128	225,016,484	233,730,450
Auxillary/Standby		33,644	25,238	284,404	389,667
Private St. Lights		34,779	37,088	297,543	300,324
	Sub-total	95,761,862	89,582,394	792,669,993	813,402,222
Government Service:					
Small Non Demand		1,225,034	1,157,839	10,512,056	10,903,421
Small Demand		7,970,826	7,404,715	71,697,778	71,039,472
Large		5,952,146	5,896,149	53,694,497	56,889,846
Street Lighting		710,958	795,661	6,694,525	6,565,753
	Sub-total	15,858,964	15,254,364	142,598,856	145,398,492
	Total	111,620,826	104,836,757	935,268,849	958,800,713
U. S. Navy		27,082,742	24,891,007	233,377,122	233,287,223
	GRAND TOTAL	138,703,568	129,727,764	1,168,645,971	1,192,087,936
REVENUE:					
Residential		11,569,285	10,487,819	92,589,975	88,136,315
Small Gen. Non Demand		2,060,263	1,969,294	17,397,807	16,947,442
Small Gen. Demand		4,374,426	4,150,658	37,807,746	35,987,200
Large General		6,673,278	6,533,909	57,980,742	55,810,359
Auxillary/Standby		8,701	6,601	78,866	91,175
Private St. Lights		26,200	27,542	232,642	230,156
	Sub-total	24,712,154	23,175,823	206,087,778	197,202,646
Government Service:					
Small Non Demand		373,461	354,533	3,199,673	3,111,749
Small Demand		2,319,401	2,159,463	20,618,280	19,140,680
Large		1,659,702	1,667,786	14,881,717	14,829,359
Street Lighting		471,543	477,183	4,352,052	4,012,366
	Sub-total	4,824,107	4,658,965	43,051,723	41,094,153
	Total	29,536,261	27,834,788	249,139,500	238,296,800
U. S. Navy		6,373,008	4,618,042	49,627,538	43,387,117
	GRAND TOTAL	35,909,269	32,452,830	298,767,038	281,683,917
NUMBER OF CUSTOMERS:					
Residential		44,329	44,074	44,148	44,019
Small Gen. Non Demand		4,211	4,173	4,186	4,152
Small Gen. Demand		971	984	983	985
Large General		119	119	119	119
Auxillary/Standby		2	2	2	2
Private St. Lights		520	532	522	530
	Sub-total	50,152	49,884	49,960	49,807
Government Service:					
Small Non Demand		676	694	677	685
Small Demand		356	351	353	351
Large		43	47	43	47
Street Lighting		618	559	625	447
	Sub-total	1,693	1,651	1,698	1,530
	Total	51,845	51,535	51,657	51,337
US Navy		1	1	1	1
		51,846	51,536	51,658	51,338

GPA Work Session - August 22, 2019 - DIVISION REPORTS

GPA403		GUAM POWER AUTHORITY ACCRUED REVENUE											
	TWELVE MONTHS ENDING	JUNE 2019	MAY 2019	APRIL 2019	MARCH 2019	FEBRUARY 2019	JANUARY 2019	DECEMBER 2018	NOVEMBER 2018	OCTOBER 2018	SEPTEMBER 2018	AUGUST 2018	JULY 2018
KWH SALES:													
Residential	487,878,424	46,454,816	45,901,332	42,026,049	40,399,698	33,484,048	36,661,215	41,291,151	41,148,899	42,194,270	37,207,511	39,748,314	41,361,122
Small General Non Demand	79,192,828	7,135,817	6,785,836	7,066,118	6,549,399	5,421,847	6,252,665	6,871,789	6,712,433	6,787,602	6,128,698	6,737,467	6,743,157
Small General Demand	182,390,034	16,196,923	16,473,837	15,551,604	15,250,813	13,414,678	14,926,054	15,425,672	15,054,686	15,632,311	14,018,162	15,283,605	15,161,689
Large General	298,654,283	25,905,882	25,831,230	24,717,184	24,793,966	22,118,423	24,846,497	25,790,483	26,074,017	24,938,803	23,573,240	24,724,982	25,339,577
Private Outdoor Lighting	400,276	34,779	33,473	30,560	32,171	32,766	32,878	33,401	33,984	33,531	34,933	33,511	34,288
Auxiliary/Standby	374,451	33,644	31,329	28,130	34,407	25,891	36,117	28,494	35,867	30,526	29,708	30,251	30,088
Sub-Total	1,048,890,297	95,761,862	95,057,036	89,419,645	87,060,454	74,497,653	82,755,426	89,440,990	89,059,886	89,617,042	80,992,253	86,558,130	88,669,920
Government Service:													
Small Non Demand	13,935,620	1,225,034	1,265,906	1,195,401	1,192,582	1,019,279	1,066,520	1,218,540	1,096,422	1,232,371	1,089,787	1,205,730	1,128,046
Small Demand	93,604,244	7,970,826	8,650,402	8,019,578	8,144,760	7,207,579	7,752,635	8,107,721	7,758,614	8,085,662	7,082,161	7,641,330	7,182,975
Large	71,454,958	5,952,146	6,344,614	5,914,002	5,983,823	5,273,740	5,782,397	6,098,140	5,989,384	6,356,251	5,873,776	6,179,381	5,707,305
Street Lighting (Agencies)	9,174,989	710,958	838,818	763,841	710,856	791,792	714,935	805,684	744,605	613,035	734,966	842,364	903,135
Sub-Total	188,169,811	15,858,964	17,099,740	15,892,823	16,032,021	14,292,390	15,316,487	16,230,084	15,589,026	16,287,319	14,780,690	15,868,805	14,921,461
Total	1,237,060,108	111,620,826	112,156,776	105,312,468	103,092,475	88,790,044	98,071,914	105,671,074	104,648,912	104,648,912	95,772,942	102,426,935	103,591,381
U.S. Navy	306,550,072	27,082,742	28,255,054	27,083,234	26,077,843	22,368,909	24,517,651	26,518,827	24,888,490	26,584,373	23,161,867	24,921,140	25,089,942
Grand Total	1,543,610,180	138,703,568	140,411,830	132,395,702	129,170,318	111,158,952	122,589,564	132,189,902	129,537,402	132,488,734	118,934,809	127,348,076	128,681,323
REVENUE:													
Residential	122,277,091	11,569,285	11,457,009	10,559,992	10,171,326	8,491,117	9,109,499	10,347,514	10,286,420	10,597,812	9,335,975	9,971,178	10,379,963
Small General Non Demand	23,129,205	2,060,263	1,943,284	2,086,044	1,927,366	1,599,494	1,844,100	2,002,603	1,938,660	1,995,993	1,793,407	1,962,561	1,975,429
Small General Demand	50,074,496	4,374,426	4,442,708	4,275,919	4,237,399	3,714,204	4,135,462	4,234,344	4,091,967	4,301,317	3,892,588	4,192,538	4,181,623
Large General	77,089,445	6,673,278	6,615,844	6,321,363	6,456,767	5,778,637	6,433,966	6,618,506	6,715,109	6,367,272	6,170,948	6,427,049	6,510,707
Private Outdoor Lighting	311,525	26,200	25,670	25,155	25,651	25,784	26,100	25,860	26,021	26,392	26,189	26,302	26,302
Auxiliary/Standby	104,801	8,701	8,600	7,310	9,896	7,681	10,117	7,355	10,699	8,507	8,392	7,924	9,619
Sub-Total	272,986,563	24,712,154	24,493,115	23,275,783	22,828,405	19,616,918	21,559,243	23,236,182	23,068,875	23,297,103	21,227,703	22,587,439	23,083,643
Government Service:													
Small Non Demand	4,245,814	373,461	383,585	361,853	364,404	311,171	328,284	373,332	335,403	368,179	335,723	366,623	343,795
Small Demand	27,017,860	2,319,401	2,465,281	2,284,016	2,363,416	2,065,940	2,248,023	2,372,119	2,230,742	2,269,343	2,104,471	2,213,718	2,081,391
Large	19,904,969	1,659,702	1,743,611	1,632,794	1,668,683	1,492,275	1,614,932	1,688,786	1,646,650	1,734,285	1,680,530	1,733,549	1,609,173
Street Lighting (Agencies)	5,897,169	471,543	497,965	482,529	472,435	488,836	465,560	498,967	479,197	495,021	477,638	499,032	568,447
Sub-Total	57,065,812	4,824,107	5,090,441	4,761,191	4,868,938	4,358,222	4,656,799	4,933,204	4,691,993	4,866,827	4,598,362	4,812,921	4,602,806
Total	330,052,375	29,536,261	29,583,556	28,036,974	27,697,343	23,975,139	26,216,042	28,169,387	27,760,868	28,163,930	25,826,065	27,400,361	27,686,449
U.S. Navy	65,359,620	6,373,008	5,183,974	4,925,354	5,245,421	5,307,473	5,221,857	5,266,617	6,152,798	5,951,036	5,271,574	5,243,314	5,217,194
Grand Total	395,411,994	35,909,269	34,767,531	32,962,328	32,942,764	29,282,613	31,437,899	33,436,004	33,913,666	34,114,966	31,097,639	32,643,674	32,903,643
NUMBER OF CUSTOMERS:													
Residential	44,102	44,329	44,640	44,200	44,144	44,018	44,091	43,920	43,876	44,112	43,887	44,005	44,003
Small General Non Demand	4,183	4,211	4,213	4,185	4,183	4,173	4,180	4,166	4,176	4,183	4,159	4,185	4,183
Small General Demand	983	971	983	985	985	984	986	987	981	984	982	984	982
Large General	119	119	119	118	121	119	119	119	119	117	118	118	119
Private Outdoor Lighting	524	520	520	522	523	521	522	523	524	527	525	525	531
Auxiliary/Standby	2	2	2	2	2	2	2	2	3	3	3	3	3
Sub-Total	49,913	50,152	50,477	50,012	49,958	49,817	49,900	49,716	49,679	49,926	49,674	49,820	49,821
Government Service:													
Small Non Demand	679	676	676	672	675	678	679	683	667	686	677	683	690
Small Demand	353	356	355	356	357	357	356	360	327	352	353	354	351
Large	44	43	42	42	42	42	42	47	38	47	47	47	47
Street Lighting (Agencies)	623	618	618	621	629	628	628	628	628	629	627	614	612
Sub-Total	1,699	1,693	1,691	1,691	1,703	1,705	1,705	1,718	1,660	1,714	1,704	1,698	1,700
Total	51,611	51,845	52,168	51,703	51,661	51,522	51,605	51,434	51,339	51,640	51,378	51,518	51,521
U.S. Navy	1	1	1	1	1	1	1	1	1	1	1	1	1
Grand Total	51,612	51,846	52,169	51,704	51,662	51,523	51,606	51,435	51,340	51,641	51,379	51,519	51,522

GPA Work Session - August 22, 2019 - DIVISION REPORTS

GPA303

**GUAM POWER AUTHORITY
ACCRUED REVENUE
JUNE 2019**

RATE	NUMBER OF CUSTOMERS	KWH SALES	TOTAL REVENUE		BASE RATE REVENUE		AVERAGE PER CUSTOMER		NON-FUEL		OIL	
			AMOUNT	C/KWH	C/KWH	AMOUNT	KWH	REVENUE	C/KWH	AMOUNT	C/KWH	AMOUNT
Month												
R Residential	44,329	46,454,816	\$ 11,569,285	\$ 24.90	\$ 24.90	\$ 11,569,285	1,048	\$ 261	\$ 9.48	\$ 4,404,001	\$ 15.42	\$ 7,165,284
G Small Gen. Non Demand	4,211	7,135,817	\$ 2,060,263	\$ 28.87	\$ 28.87	\$ 2,060,263	1,695	\$ 489	\$ 13.45	\$ 959,621	\$ 15.42	\$ 1,100,643
J Small Gen. Demand	971	16,196,923	\$ 4,374,426	\$ 27.01	\$ 27.01	\$ 4,374,426	16,681	\$ 4,505	\$ 11.59	\$ 1,877,194	\$ 15.42	\$ 2,497,232
P Large General	119	25,905,882	\$ 6,673,278	\$ 25.76	\$ 25.76	\$ 6,673,278	217,696	\$ 56,078	\$ 10.40	\$ 2,694,996	\$ 15.36	\$ 3,978,282
I Independent Power Producer	2	33,644	\$ 8,701	\$ 25.86	\$ 25.86	\$ 8,701	16,822	\$ 4,351	\$ 10.99	\$ 3,698	\$ 14.87	\$ 5,003
H Private St. Lights	520	34,779	\$ 26,200	\$ 75.33	\$ 75.33	\$ 26,200	67	\$ 50	\$ 59.91	\$ 20,836	\$ 15.42	\$ 5,364
Sub-Total	50,152	95,761,862	\$ 24,712,154	\$ 25.81	\$ 25.81	\$ 24,712,154	1,909	\$ 493	\$ 10.40	\$ 9,960,346	\$ 15.40	\$ 14,751,808
Government Service:												
S Small Non Demand	676	1,225,034	\$ 373,461	\$ 30.49	\$ 30.49	\$ 373,461	1,812	\$ 552	\$ 15.06	\$ 184,510	\$ 15.42	\$ 188,952
K Small Demand	356	7,970,826	\$ 2,319,401	\$ 29.10	\$ 29.10	\$ 2,319,401	22,390	\$ 6,515	\$ 13.67	\$ 1,089,965	\$ 15.42	\$ 1,229,436
L Large	43	5,952,146	\$ 1,659,702	\$ 27.88	\$ 27.88	\$ 1,659,702	138,422	\$ 38,598	\$ 12.65	\$ 752,927	\$ 15.23	\$ 906,775
F Street Lighting (Agencies)	618	710,958	\$ 471,543	\$ 66.32	\$ 66.32	\$ 471,543	1,150	\$ 763	\$ 50.90	\$ 361,883	\$ 15.42	\$ 109,660
Sub-Total	1,693	15,858,964	\$ 4,824,107	\$ 30.42	\$ 30.42	\$ 4,824,107	9,367	\$ 2,849	\$ 15.07	\$ 2,389,284	\$ 15.35	\$ 2,434,822
U.S. Navy	51,845	111,620,826	\$ 29,536,261	\$ 56.22	\$ 56.22	\$ 29,536,261	2,153	\$ 570	\$ 40.83	\$ 12,349,631	\$ 15.40	\$ 17,186,630
	1	27,082,742	\$ 6,373,008	\$ 23.53	\$ 23.53	\$ 6,373,008			\$ 6.01	\$ 1,627,850	\$ 17.52	\$ 4,745,158
TOTAL	51,846	138,703,568	\$ 35,909,269	\$ 25.89	\$ 25.89	\$ 35,909,269	2,675	\$ 693	\$ 10.08	\$ 13,977,481	\$ 15.81	\$ 21,931,788
Nine Months Ended June 2019												
R Residential	44,148	369,561,477	\$ 92,589,975	\$ 25.05	\$ 25.05	\$ 92,589,975	8,371	\$ 2,097	\$ 9.63	\$ 35,588,074	\$ 15.42	\$ 57,001,901
G Small Gen. Non Demand	4,186	59,583,506	\$ 17,397,807	\$ 29.20	\$ 29.20	\$ 17,397,807	14,236	\$ 4,157	\$ 13.77	\$ 8,207,528	\$ 15.42	\$ 9,190,279
J Small Gen. Demand	983	137,926,578	\$ 37,807,746	\$ 27.41	\$ 27.41	\$ 37,807,746	140,328	\$ 38,466	\$ 11.99	\$ 16,542,910	\$ 15.42	\$ 21,264,836
P Large General	119	225,016,484	\$ 57,980,742	\$ 25.77	\$ 25.77	\$ 57,980,742	1,894,433	\$ 488,145	\$ 10.42	\$ 23,435,632	\$ 15.35	\$ 34,545,109
I Independent Power Producer	2	284,404	\$ 78,866	\$ 27.73	\$ 27.73	\$ 78,866	127,982	\$ 35,490	\$ 12.85	\$ 36,546	\$ 14.88	\$ 42,321
H Private St. Lights	522	297,543	\$ 232,642	\$ 78.19	\$ 78.19	\$ 232,642	570	\$ 445	\$ 62.76	\$ 186,748	\$ 15.42	\$ 45,894
Sub-Total	49,960	792,669,993	\$ 206,087,778	\$ 26.00	\$ 26.00	\$ 206,087,778	15,866	\$ 4,125	\$ 10.60	\$ 83,997,437	\$ 15.40	\$ 122,090,340
Government Service:												
S Small Non Demand	679	10,512,056	\$ 3,199,673	\$ 30.44	\$ 30.44	\$ 3,199,673	15,493	\$ 4,716	\$ 15.01	\$ 1,578,273	\$ 15.42	\$ 1,621,401
K Small Demand	353	71,697,778	\$ 20,618,280	\$ 28.76	\$ 28.76	\$ 20,618,280	203,206	\$ 58,436	\$ 13.33	\$ 9,559,471	\$ 15.42	\$ 11,058,809
L Large	44	53,694,497	\$ 14,881,717	\$ 27.72	\$ 27.72	\$ 14,881,717	1,224,970	\$ 339,507	\$ 12.48	\$ 6,699,402	\$ 15.24	\$ 8,182,315
F Street Lighting (Agencies)	623	6,694,525	\$ 4,352,052	\$ 65.01	\$ 65.01	\$ 4,352,052	10,740	\$ 6,982	\$ 49.58	\$ 3,319,475	\$ 15.42	\$ 1,032,577
Sub-Total	1,699	142,598,856	\$ 43,051,723	\$ 30.19	\$ 30.19	\$ 43,051,723	83,956	\$ 25,347	\$ 14.84	\$ 21,156,622	\$ 15.35	\$ 21,895,101
U.S. Navy	1	233,377,122	\$ 49,627,538	\$ 21.26	\$ 21.26	\$ 49,627,538			\$ 6.47	\$ 15,092,085	\$ 14.80	\$ 34,535,452
TOTAL	51,659	1,168,645,971	\$ 298,767,038	\$ 25.57	\$ 25.57	\$ 298,767,038	22,622	\$ 5,783	\$ 10.29	\$ 120,246,144	\$ 15.28	\$ 178,520,894
Twelve Months Ended June 2019												
R Residential	44,102	487,878,424	\$ 122,277,091	\$ 25.06	\$ 25.06	\$ 122,277,091	11,062	\$ 2,773	\$ 9.64	\$ 47,025,747	\$ 15.42	\$ 75,251,344
G Small Gen. Non Demand	4,183	79,192,828	\$ 23,129,205	\$ 29.21	\$ 29.21	\$ 23,129,205	18,932	\$ 5,529	\$ 13.78	\$ 10,914,344	\$ 15.42	\$ 12,214,860
J Small Gen. Demand	983	182,390,034	\$ 50,074,496	\$ 27.45	\$ 27.45	\$ 50,074,496	185,576	\$ 50,949	\$ 12.04	\$ 21,954,018	\$ 15.42	\$ 28,120,477
P Large General	119	298,654,283	\$ 77,089,445	\$ 25.81	\$ 25.81	\$ 77,089,445	2,516,750	\$ 649,630	\$ 10.46	\$ 31,232,563	\$ 15.35	\$ 45,856,881
I Independent Power Producer	2	374,451	\$ 104,801	\$ 27.99	\$ 27.99	\$ 104,801	154,945	\$ 43,366	\$ 13.10	\$ 49,070	\$ 14.88	\$ 55,732
H Private St. Lights	524	400,276	\$ 311,525	\$ 77.83	\$ 77.83	\$ 311,525	764	\$ 595	\$ 62.40	\$ 249,786	\$ 15.42	\$ 61,739
Sub-Total	49,913	1,048,890,297	\$ 272,986,563	\$ 26.03	\$ 26.03	\$ 272,986,563	21,015	\$ 5,469	\$ 10.62	\$ 111,425,529	\$ 15.40	\$ 161,561,034
Government Service:												
S Small Non Demand	679	13,935,620	\$ 4,245,814	\$ 30.47	\$ 30.47	\$ 4,245,814	20,539	\$ 6,258	\$ 15.04	\$ 2,096,356	\$ 15.42	\$ 2,149,458
K Small Demand	353	93,604,244	\$ 27,017,860	\$ 28.86	\$ 28.86	\$ 27,017,860	265,293	\$ 76,574	\$ 13.44	\$ 12,580,154	\$ 15.42	\$ 14,437,706
L Large	44	71,454,958	\$ 19,904,969	\$ 27.86	\$ 27.86	\$ 19,904,969	1,630,151	\$ 454,106	\$ 12.62	\$ 9,016,335	\$ 15.24	\$ 10,888,634
F Street Lighting (Agencies)	623	9,174,989	\$ 5,897,169	\$ 64.27	\$ 64.27	\$ 5,897,169	14,719	\$ 9,461	\$ 48.85	\$ 4,482,000	\$ 15.42	\$ 1,415,169
Sub-Total	1,699	188,169,811	\$ 57,065,812	\$ 30.33	\$ 30.33	\$ 57,065,812	110,786	\$ 33,598	\$ 14.97	\$ 28,174,845	\$ 15.35	\$ 28,890,967
U.S. Navy	51,611	1,237,060,108	\$ 330,052,375	\$ 26.68	\$ 26.68	\$ 330,052,375	23,969	\$ 39,067	\$ 11.28	\$ 139,600,374	\$ 15.40	\$ 190,452,000
	1	306,550,072	\$ 65,359,620	\$ 21.32	\$ 21.32	\$ 65,359,620			\$ 6.47	\$ 19,840,283	\$ 14.85	\$ 45,519,337
TOTAL	51,612	1,543,610,180	\$ 395,411,994	\$ 25.62	\$ 25.62	\$ 395,411,994	29,908	\$ 7,661	\$ 10.33	\$ 159,440,657	\$ 15.29	\$ 235,971,337

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GPA-318

318Jun19

ENERGY ACCOUNT

FY 2019 Versus FY 2018

FOR INTERNAL USE ONLY

	June 2019	June 2018	Y T D 2019	Y T D 2018	MOVING TWELVE MONTHS
Gross Generation					
Number of days in Period	30	30	273	61	365
Peak demand	255	246	254	254	249
Date	06/06/19	06/24/18	05/30/19	10/30/17	05/14/18
	KWH % change	KWH % change	KWH % change	KWH % change	KWH % change
Energy Account:					
Kilowatt hours GPA:					
Cabras 1 & 2	62,215,000	46,097,000	562,021,000	499,851,000	713,405,000
Cabras No. 3	0	0	0	0	0
Cabras No. 4	0	0	0	0	0
MEC (ENRON) Piti 8 (IPP)	23,319,000	28,196,200	197,763,300	240,757,100	275,380,100
MEC (ENRON) Piti 9 (IPP)	27,410,100	25,629,100	229,326,300	248,089,300	305,072,900
TEMES Piti 7 (IPP)	2,963,612	470,632	42,787,036	16,619,463	66,481,070
Tanguisson 2	0	0	0	0	0
Tanguisson 1	0	0	0	0	0
Diesels/CT's & Others:					
MDI 10MW	79,301	8,300	702,690	954,880	1,048,068
NRG Solar Dandan	4,568,477	4,124,597	37,173,024	36,471,192	47,003,178
Dededo CT #1	236,870	940,750	4,816,370	6,637,600	9,984,840
Dededo CT #2	998,630	1,482,510	7,414,970	6,051,410	13,590,030
Macheche CT	5,786,071	4,686,859	41,020,151	41,051,132	48,323,760
Yigo CT (Leased)	5,719,152	5,153,150	40,019,632	33,203,399	55,729,398
Tenjo	2,142,790	4,989,050	20,197,360	35,360,620	26,334,870
Talofofo 10 MW	622,900	2,276,710	5,773,030	12,803,970	6,280,960
Aggreko	15,808,673	18,774,983	99,575,548	128,499,436	131,804,202
Wind Turbine*	35	14,539	123,182	308,131	127,355
Orote	0	0	0	0	0
Marbo	0	0	0	0	0
	151,870,611	142,844,380	1,288,713,592	1,306,658,633	1,700,565,730
Ratio to last year		106.32	95.00	98.63	99.22
Station use	5,477,621	4,769,686	49,752,379	47,367,461	65,100,858
Ratio to Gross generation		3.61	3.34	3.86	3.63
Net send out	146,392,990	138,074,694	1,238,961,213	1,259,291,172	1,635,464,872
Ratio to last year		106.02	95.38	98.39	99.53
KWH deliveries:					
Sales to Navy (@34.5kv)	27,082,742	24,891,007	233,377,123	233,287,223	306,550,072
Ratio to last year		108.81	98.55	100.04	98.36
GPA-metered	119,310,248	113,183,687	1,005,584,090	1,026,003,949	1,328,914,800
Ratio to last year		105.41	94.71	98.01	99.80
Power factor adj.	0	0	0	0	0
Adjusted	119,310,248	113,183,687	1,005,584,090	1,026,003,949	1,328,914,800
GPA KWH Accountability:					
Sales to civilian customers- accrual basis	111,620,826	104,836,757	935,268,850	958,800,712	1,237,060,108
Ratio to last year		106.47	93.17	97.55	99.68
GPA use-KWH	336,259	351,775	3,057,119	2,909,403	4,035,285
Unaccounted For	7,353,163	7,995,155	67,258,121	64,293,834	87,819,407
Ratio to deliveries		6.16	7.06	6.69	6.27
Ratio to Gross Generation		4.84	5.60	5.22	4.92
Ratio to Net Send Out		5.02	5.79	5.43	5.11

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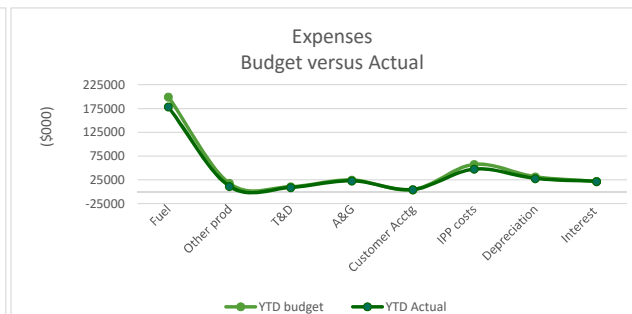
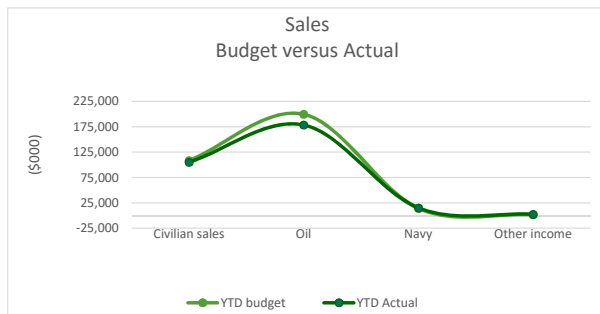
GPA-317Jun19

**Guam Power Authority
Fuel Consumption
FY 2019**

Description	June 2019		YEAR-TO-DATE		MOVING 12 MONTHS	
	BARRELS	AMOUNT	BARRELS	AMOUNT	BARREL S	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	143,631	\$10,485,950	1,084,751	\$ 80,325,138	1,353,743	\$ 99,280,426
Diesel	71,271	\$6,497,686	555,066	\$ 52,623,412	769,720	\$ 73,338,205
Low Sulfur	30,743	\$2,322,322	427,143	\$ 35,844,906	624,051	\$ 49,354,477
Deferred Fuel Costs	0	\$956,190	0	\$ (3,649,180)	0	\$ (3,114,849)
Fuel Adjustments	0	\$0		\$ 54,766	0	\$ (196,436)
Fuel Handling Costs	0	\$1,669,640	0	\$ 13,321,850	0	\$ 17,309,515
	245,645	\$21,931,788	2,066,960	\$ 178,520,894	2,747,514	\$ 235,971,337
IWPS:						
GPA RFO	143,631	\$10,485,950	1,084,751	\$ 80,325,138	1,353,743	\$ 99,280,426
Diesel	71,271	\$6,497,686	555,066	\$ 52,623,412	769,720	\$ 73,338,205
Low Sulfur	30,743	\$2,322,322	427,143	\$ 35,844,906	624,051	\$ 49,354,477
Deferred Fuel Costs	0	\$956,190	0	\$ (3,649,180)	0	\$ (3,114,849)
Fuel Variance	0	\$0	0	\$ 54,766		\$ (196,436)
Fuel Handling Costs	0	\$1,669,640	0	\$ 13,321,850	0	\$ 17,309,515
	245,645	\$21,931,788	2,066,960	\$ 178,520,894	2,747,514	\$ 235,971,337
AVERAGE COST/Bbl.						
GPA RFO		\$73.01		\$74.05		\$73.34
Diesel		\$91.17		\$94.81		\$95.28
Low Sulfur		\$75.54		\$83.92		\$79.09
AS BURNED						
Cabras 1 & 2						
RFO	84,159	\$ 6,144,138	759,739	\$ 56,699,011	902,670	\$ 66,840,412
Low Sulfur	21,722	\$ 1,603,819	182,532	\$ 15,131,607	301,117	\$ 23,276,222
Diesel	<u>160</u>	<u>\$ 12,986</u>	<u>1,400</u>	<u>\$ 133,689</u>	<u>2,061</u>	<u>\$ 195,835</u>
	106,041	\$ 7,760,943	943,671	\$ 71,964,306	1,205,848	\$ 90,312,469
Cabras 3 & 4						
RFO	0	\$ -	0	\$ -	0	\$ -
Low Sulfur	0	\$ -	0	\$ -	0	\$ -
Diesel	<u>0</u>	<u>\$ -</u>	<u>0</u>	<u>\$ -</u>	<u>0</u>	<u>\$ -</u>
	0	\$ -	0	\$ -	0	\$ -
MEC (Piti Units 8&9)						
RFO	59,472	\$ 4,341,812	325,012	\$ 23,626,128	451,074	\$ 32,440,013
Low Sulfur	9,020	\$ 718,503	244,611	\$ 20,713,300	322,934	\$ 26,078,255
Diesel	<u>3</u>	<u>\$ 229</u>	<u>30</u>	<u>\$ 2,095</u>	<u>59</u>	<u>\$ 4,159</u>
	68,495	\$ 5,060,543	569,653	\$ 44,341,522	774,066	\$ 58,522,428
Diesel & CT's - GPA:						
MDI Dsl	128	\$ 12,091	1,072	\$ 89,260	1,697	\$ 135,720
Macheche CT	12,292	\$ 1,100,730	88,688	\$ 8,321,481	103,919	\$ 9,796,511
Yigo CT	12,057	\$ 1,082,013	86,331	\$ 8,088,115	118,728	\$ 11,218,703
Talofofo 10 MW	1,170	\$ 108,008	10,161	\$ 928,846	11,018	\$ 1,013,743
Aggreko	29,794	\$ 2,654,691	183,861	\$ 17,128,672	243,076	\$ 22,970,826
Tenjo	3,758	\$ 408,243	35,721	\$ 3,765,267	46,502	\$ 4,858,031
TEMES (IPP)	8,111	\$ 762,956	110,051	\$ 10,573,768	170,358	\$ 16,326,427
GWA Generators	<u>25</u>	<u>\$ 3,213</u>	<u>883</u>	<u>\$ 113,792</u>	<u>2,237</u>	<u>\$ 272,917</u>
	71,107	\$ 6,484,472	553,636	\$ 52,487,628	767,600	\$ 73,138,210
Deferred Fuel Costs	0	\$ 956,190		\$ (3,649,180)		\$ (3,114,849)
Adjustment		\$ -		\$ 54,766		\$ (196,436)
Fuel Handling Costs	<u>0</u>	<u>\$ 1,669,640</u>		<u>\$ 13,321,850</u>		<u>\$ 17,309,515</u>
TOTAL	245,644	\$ 21,931,788	2,066,960	\$ 178,520,894	2,747,514	\$ 235,971,337

Statement of operations
Comparison-Budget versus Actual
For the month and year to date ended June 30, 2019

	Budget	Actual June-19	Variance	YTD Budget	YTD Actual	Variance
KwH Sales-Civilian	113,486	112,157	1,329	970,056	935,804	34,252
Non-fuel yield	\$ 0.105436	\$ 0.110114	\$ (0.004678)	\$ 0.105436	\$ 0.112368	\$ (0.006932)
KwH Sales-Navy	24,529	28,255	(3,726)	230,334	234,549	(4,215)
Non-fuel yield	\$ 0.062350	\$ 0.057618	\$ 0.004732	\$ 0.062350	\$ 0.064349	\$ (0.001999)
Operating revenue						
Civilian sales	\$ 12,667	\$ 12,350	\$ 317	\$ 108,618	\$ 105,154	\$ 3,464
Oil	24,279	21,932	2,347	199,604	178,522	21,082
Navy	1,529	1,628	(99)	14,361	15,093	(732)
Other income	168	185	(16)	1,515	2,463	(948)
	\$ 38,643	\$ 36,095	\$ 2,548	\$ 324,098	\$ 301,232	\$ 22,867
Bad debts expense	92	92	-	824	824	-
Total operating revenues	\$ 38,552	\$ 36,003	\$ 2,548	\$ 323,275	\$ 300,408	\$ 22,867
Operating expenses:						
Production fuel	\$ 24,279	\$ 21,932	\$ 2,347	\$ 199,604	\$ 178,521	\$ 21,083
O & M expenses:						
Other production	2,093	1,476	617	17,978	11,536	6,442
Transmission distribution	1,223	1,294	(71)	10,846	9,084	1,762
Administrative expense	2,671	2,377	294	25,013	23,068	1,945
Customer accounting	386	464	(78)	3,592	3,951	(358)
	6,373	5,611	762	57,429	47,638	9,791
IPP costs	1,347	1,015	332	12,126	10,881	1,244
Depreciation	3,501	3,155	347	31,512	28,073	3,439
	\$ 35,500	\$ 31,713	\$ 3,788	\$ 300,670	\$ 265,113	\$ 35,557
Operating income	\$ 3,051	\$ 4,290	\$ (1,239)	\$ 22,604	\$ 35,295	\$ (12,691)
Other revenue (expenses):						
Investment income	177	484	(307)	1,593	3,406	(1,813)
Interest expense	(2,414)	(2,418)	4	(21,883)	(21,786)	(97)
AFUDC	202	-	202	1,815	-	1,815
Bid bond forfeiture	-	-	-	-	(1,245)	1,245
Losses due to typhoon	-	17	(17)	-	(689)	689
Bond issuance costs/Other expenses	142	84	59	1,281	752	529
Net income before capital contribution	1,159	2,457	(1,299)	5,410	15,733	(10,324)
Grants from the U.S. Government	-	-	-	-	216	(216)
Increase (decrease) in net assets	\$ 1,159	\$ 2,457	\$ (1,299)	\$ 5,410	\$ 15,949	\$ (10,540)



Guam Power Authority
Debt service coverage
June 30, 2019

	2015	2016	Restated 2017	Audited 2018	YTD Unaudited 2019
Funds Available for Debt Service					
Earnings from Operations	\$ 48,758	\$ 37,981	\$ 36,522	\$ 38,164	\$ 35,293
Interest Income	256	57	122	620	2,557
Depreciation Expense	41,766	44,240	44,292	37,184	28,073
Balance Available for Debt Service	<u>\$ 90,780</u>	<u>\$ 82,278</u>	<u>\$ 80,936</u>	<u>\$ 75,968</u>	<u>\$ 65,922</u>
IPP - Capital Costs					
Principal	\$ 18,144	\$ 14,819	\$ 20,796	\$ 23,210	\$ 11,584
Interest	8,478	5,970	5,609	3,159	843
Total IPP Payments	<u>\$ 26,622</u>	<u>\$ 20,789</u>	<u>\$ 26,400</u>	<u>\$ 26,369</u>	<u>\$ 12,427</u>
Bond Debt Service					
Principal (1993 & 1999 Revenue Bond)	\$ -	\$ -	\$ -	\$ -	\$ -
Interest (1993 & 1999 Revenue Bond)	-	-	-	-	-
Principal and Interest (2010 Subordinate Bond)	9,605	-	-	-	-
Principal and Interest (2010 Senior TE Bond)	7,999	7,999	7,999	2,000	-
Principal and Interest (2012 Senior TE Bond)	17,096	17,098	17,449	17,086	23,600
Principal and Interest (2014 Senior TE Bond)	-	10	5,084	5,083	3,813
Principal and Interest (2017 Senior TE Bond)	-	-	-	5,916	5,705
Total	<u>\$ 34,700</u>	<u>\$ 25,107</u>	<u>\$ 30,532</u>	<u>\$ 30,086</u>	<u>\$ 33,119</u>
Debt Service Coverage (DSC) Calculation					
Existing DSC Methodology (Senior)	2.56 x	2.45 x	1.79 x	1.65 x	1.62 x
Existing DSC Methodology (Senior+Subordinate)	1.85 x	2.45 x	1.79 x	1.65 x	1.62 x
Bond Covenant DSC	3.62 x	3.28 x	2.65 x	2.53 x	1.99 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:

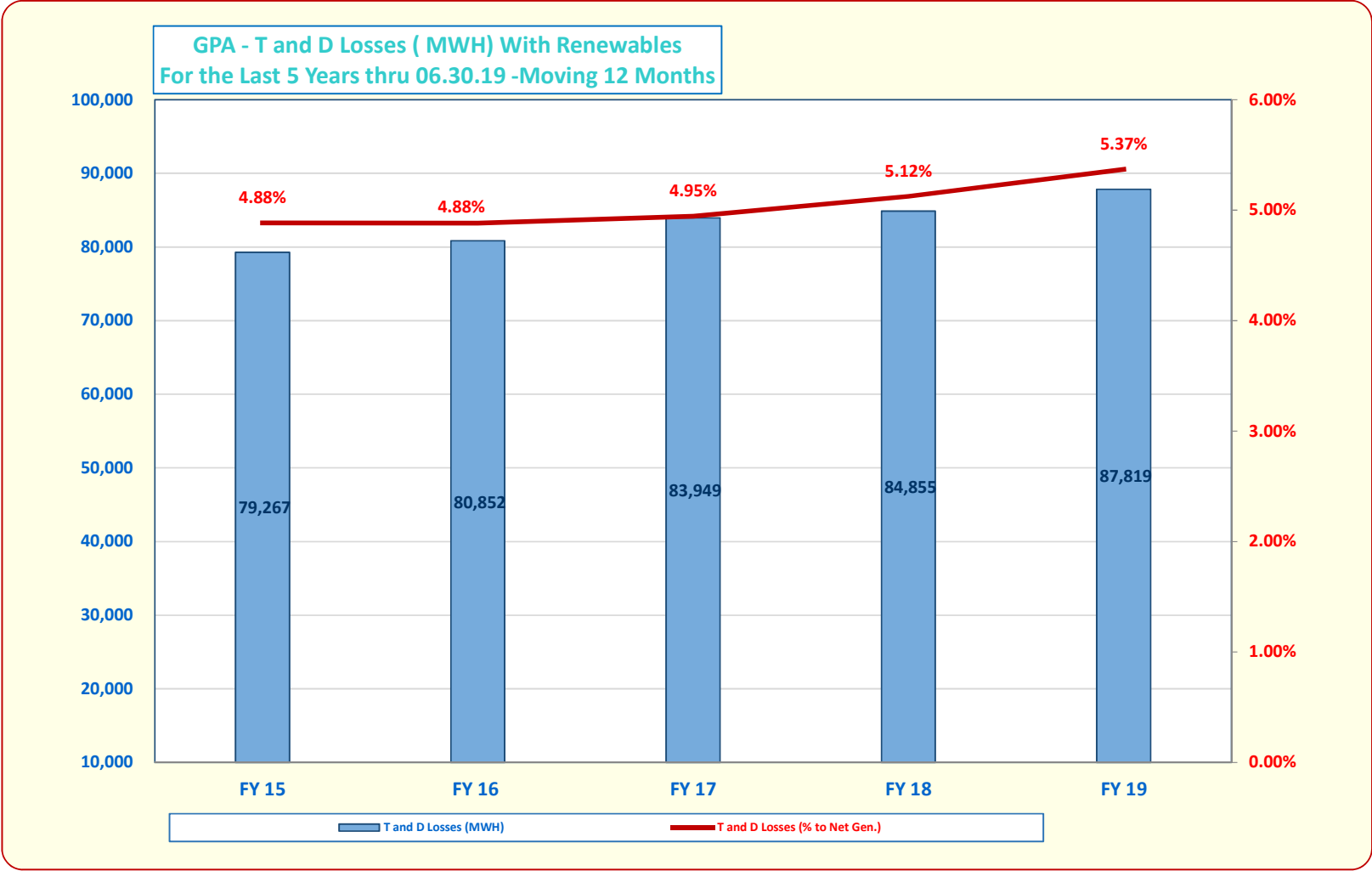
- (1) Source: Guam Power Authority, 2015 - 2018 Audited Financial Statements
- (2) Interest income is net of interest earnings in the Construction Fund and the amortization of deferred credit.
- (3) Existing DSC Methodology (Rating Agency Method):
 (Operating Earnings + Depreciation Expense - IPP Principal & 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)

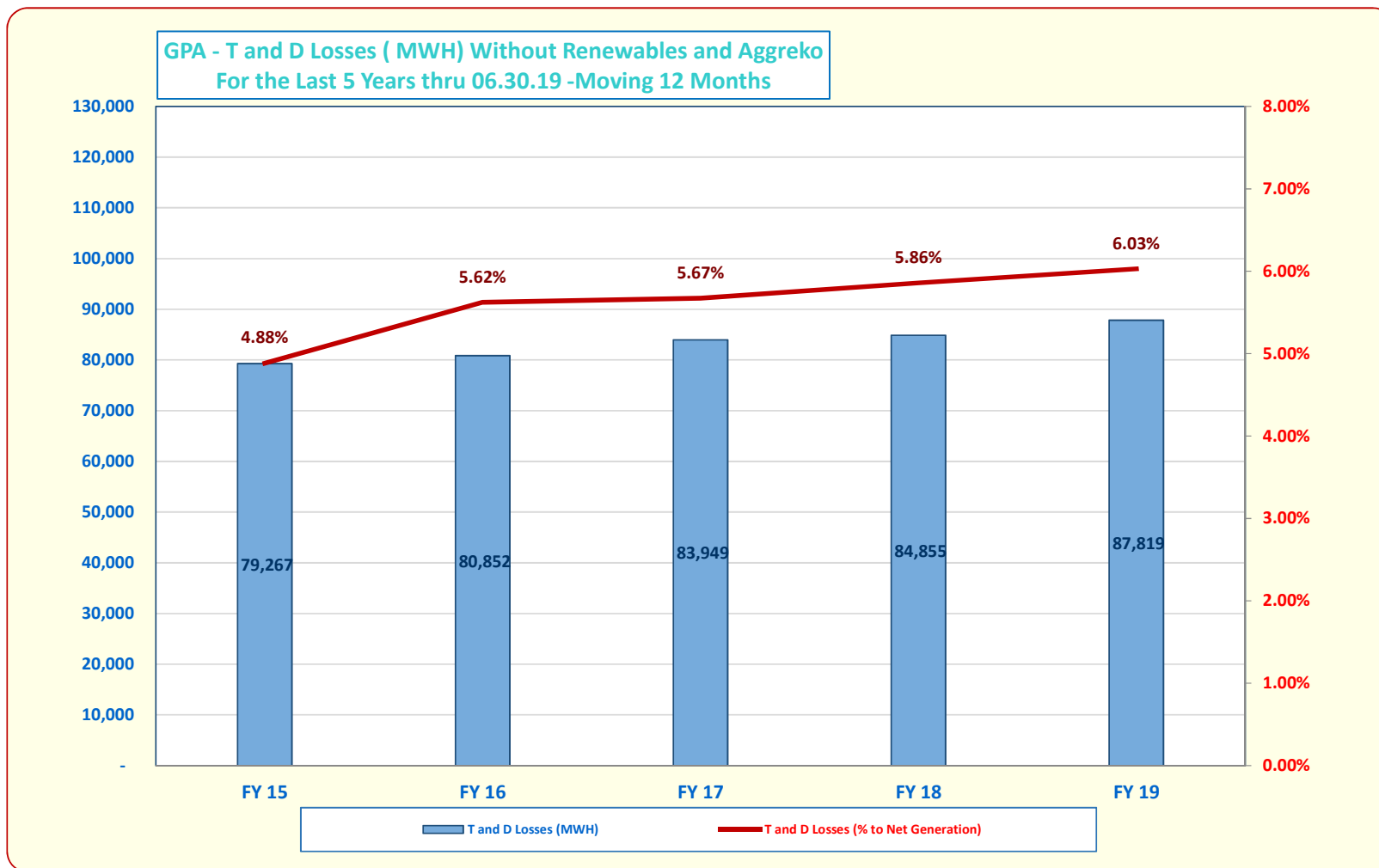
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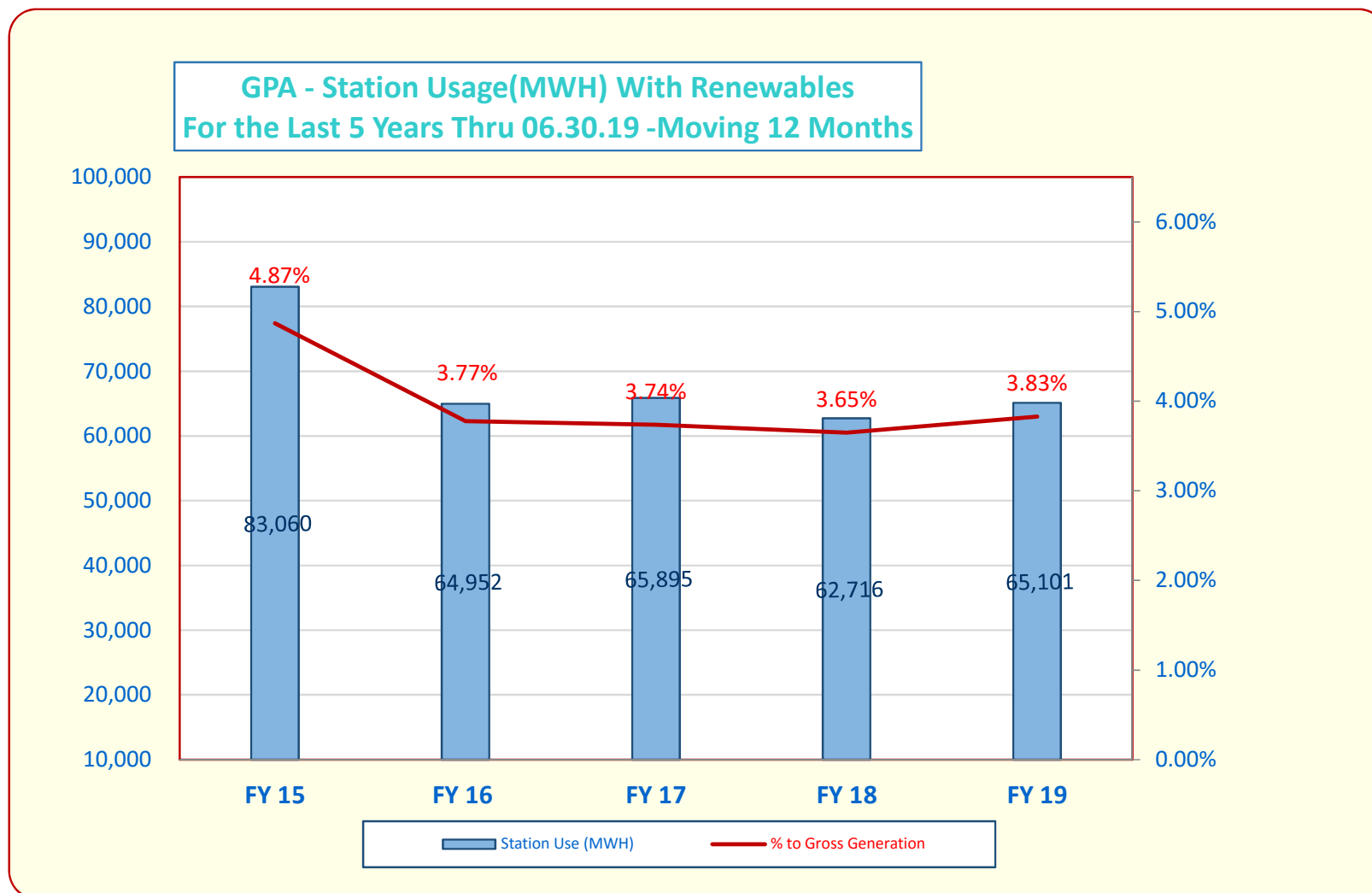
REVENUES-ACTUAL VS PROJECTIONS								
MONTHLY - JUNE 2019					YTD THRU 06/30/19			
	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE
KWH								
Residential	46,551,422	46,454,816	(96,606)	-0.21%	382,311,625	369,561,477	(12,750,148)	-3.34%
Small General-Non-Demand	7,699,724	7,135,817	(563,907)	-7.32%	63,709,015	59,583,506	(4,125,508)	-6.48%
Small General-Demand	16,514,239	16,196,923	(317,316)	-1.92%	139,349,706	137,926,578	(1,423,128)	-1.02%
Large	26,714,976	25,905,882	(809,094)	-3.03%	237,795,273	225,016,484	(12,778,788)	-5.37%
Independent Power Producers	46,679	33,644	(13,035)	-27.93%	415,500	284,404	(131,095)	-31.55%
Private St. Lites	30,504	34,779	4,275	14.01%	292,531	297,543	5,012	1.71%
Sub-total	97,557,545	95,761,862	(1,795,684)	-1.84%	823,873,648	792,669,993	(31,203,655)	-3.79%
Government								
Small_Non Demand	1,202,910	1,225,034	22,125	1.84%	10,582,448	10,512,056	(70,392)	-0.67%
Small-Demand	7,789,979	7,970,826	180,847	2.32%	72,150,052	71,697,778	(452,273)	-0.63%
Large	6,163,535	5,952,146	(211,389)	-3.43%	56,765,686	53,694,497	(3,071,190)	-5.41%
Public St. Lites	772,456	710,958	(61,499)	-7.96%	6,684,041	6,694,525	10,484	0.16%
Sub-total	15,928,880	15,858,964	(69,916)	-0.44%	146,182,227	142,598,856	(3,583,371)	-2.45%
Total-Civilian	113,486,425	111,620,826	(1,865,599)	-1.64%	970,055,876	935,268,849	(34,787,026)	-3.59%
USN	24,529,421	27,082,742	2,553,321	10.41%	230,333,985	233,377,122	3,043,137	1.32%
Grand Total	138,015,846	138,703,568	687,722	0.50%	1,200,389,861	1,168,645,971	(31,743,889)	-2.64%
Non-Oil Yield								
Residential	0.096102	0.094802	(0.001300)	-1.35%	0.096102	0.096298	0.000196	0.20%
Small General-Non-Demand	0.136352	0.134479	(0.001873)	-1.37%	0.136352	0.137748	0.001396	1.02%
Small General-Demand	0.119289	0.115898	(0.003391)	-2.84%	0.119289	0.119940	0.000651	0.55%
Large	0.103671	0.104030	0.000359	0.35%	0.103671	0.104151	0.000480	0.46%
Independent Power Producers	0.120485	0.109929	(0.010556)	0.00%	0.120485	0.128500	0.008015	0.00%
Private St. Lites	0.568458	0.599093	0.030635	5.39%	0.568458	0.627633	0.059175	10.41%
Sub-total	0.105436	0.104012	(0.001424)	-1.35%	0.105501	0.105968	0.000467	0.44%
Government								
Small_Non Demand	0.150024	0.150616	0.000592	0.39%	0.150024	0.150139	0.000115	0.08%
Small-Demand	0.134359	0.136744	0.002385	1.78%	0.134359	0.133330	(0.001029)	-0.77%
Large	0.126658	0.126497	(0.000161)	-0.13%	0.126658	0.124769	(0.001889)	-1.49%
Public St. Lites	0.482817	0.509008	0.026191	5.42%	0.482817	0.495849	0.013032	2.70%
Sub-total	0.149460	0.150658	0.001198	0.80%	0.148435	0.148365	(0.000071)	-0.05%
Total-Civilian	0.175911	0.110639	(0.065272)	-37.11%	0.166315	0.112432	(0.053883)	-32.40%
USN	0.062350	0.060107	(0.002243)	-3.60%	0.062350	0.064668	0.002318	3.72%
Grand Total	0.102859	0.100772	(0.002087)	-2.03%	0.102450	0.102894	0.000444	0.43%
Non-Oil Revenues								
Residential	4,473,685	4,404,001	(69,684)	-1.56%	36,740,912	35,588,074	(1,152,838)	-3.14%
Small General-Non-Demand	1,049,873	959,621	(90,252)	-8.60%	8,686,852	8,207,528	(479,324)	-5.52%
Small General-Demand	1,969,967	1,877,194	(92,773)	-4.71%	16,622,887	16,542,910	(79,977)	-0.48%
Large	2,769,568	2,694,996	(74,573)	-2.69%	24,652,474	23,435,632	(1,216,841)	-4.94%
Independent Power Producers	5,624	3,698	(1,926)	-34.24%	50,061	36,546	(13,515)	-27.00%
Private St. Lites	17,340	20,836	3,496	20.16%	166,292	186,748	20,456	12.30%
Sub-total	10,286,057	9,960,346	(325,711)	-3.17%	86,919,477	83,997,437	(2,922,040)	-3.36%
Government								
Small_Non Demand	180,465	184,510	4,044	2.24%	1,587,621	1,578,273	(9,349)	-0.59%
Small-Demand	1,046,654	1,089,965	43,311	4.14%	9,694,009	9,559,471	(134,537)	-1.39%
Large	780,661	752,927	(27,734)	-3.55%	7,189,828	6,699,402	(490,426)	-6.82%
Public St. Lites	372,955	361,883	(11,072)	-2.97%	3,227,168	3,319,475	92,307	2.86%
Sub-total	2,380,735	2,389,284	8,549	0.36%	21,698,627	21,156,622	(542,005)	-2.50%
Total-Civilian	12,666,793	12,349,631	(317,162)	-2.50%	108,618,104	105,154,059	(3,464,045)	-3.19%
USN	1,529,409	1,627,850	98,441	6.44%	14,361,324	15,092,085	730,761	5.09%
Grand Total	14,196,202	13,977,481	(218,721)	-1.54%	122,979,428	120,246,144	(2,733,284)	-2.22%
% of Total Revenues	36.90%	38.92%			38.12%	40.25%		
Oil Revenues								
Residential	8,188,925	7,165,284	(1,023,641)	-12.50%	63,639,070	57,001,901	(6,637,168)	-10.43%
Small General-Non-Demand	1,354,469	1,100,643	(253,826)	-18.74%	10,602,926	9,190,279	(1,412,647)	-13.32%
Small General-Demand	2,905,042	2,497,232	(407,810)	-14.04%	23,173,074	21,264,836	(1,908,238)	-8.23%
Large	4,699,468	3,978,282	(721,186)	-15.35%	39,512,378	34,545,109	(4,967,269)	-12.57%
Independent Power Producers	8,211	5,003	(3,209)	-39.07%	69,040	42,321	(26,719)	-38.70%
Private St. Lites	5,366	5,364	(2)	-0.03%	48,204	45,894	(2,310)	-4.79%
Sub-total	17,161,482	14,751,808	(2,409,674)	-14.04%	137,044,692	122,090,341	(14,954,351)	-10.91%
Government								
Small_Non Demand	211,605	188,952	(22,654)	-10.71%	1,759,497	1,621,401	(138,097)	-7.85%
Small-Demand	1,370,346	1,229,436	(140,910)	-10.28%	11,984,663	11,058,809	(925,854)	-7.73%
Large	1,084,236	906,775	(177,461)	-16.37%	9,438,401	8,182,315	(1,256,086)	-13.31%
Public St. Lites	135,884	109,660	(26,224)	-19.30%	1,107,785	1,032,577	(75,208)	-6.79%
Sub-total	2,802,071	2,434,822	(367,249)	-13.11%	24,290,346	21,895,101	(2,395,245)	-9.86%
Total-Civilian	19,963,553	17,186,630	(2,776,922)	-13.91%	161,335,039	143,985,442	(17,349,597)	-10.75%
USN	4,315,004	4,745,158	430,153	9.97%	38,268,642	34,535,452	(3,733,190)	-9.76%
Grand Total	24,278,557	21,931,788	(2,346,769)	-9.67%	199,603,681	178,520,894	(21,082,786)	-10.56%
% of Total Revenues	63.10%	61.08%			61.88%	59.75%		
Grand Total								
Residential	12,662,609	11,569,285	(1,093,325)	-8.63%	100,379,982	92,589,975	(7,790,007)	-7.76%
Small General-Non-Demand	2,404,342	2,060,263	(344,078)	-14.31%	19,289,778	17,397,807	(1,891,971)	-9.81%
Small General-Demand	4,875,010	4,374,426	(500,583)	-10.27%	39,795,961	37,807,746	(1,988,215)	-5.00%
Large	7,469,036	6,673,278	(795,759)	-10.65%	64,164,852	57,980,742	(6,184,110)	-9.64%
Independent Power Producers	13,836	8,701	(5,134)	-37.11%	119,101	78,867	(40,234)	-33.78%
Private St. Lites	22,706	26,200	3,494	15.39%	214,495	232,642	18,146	8.46%
Sub-total	27,447,539	24,712,154	(2,735,385)	-9.97%	223,964,170	206,087,778	(17,876,391)	-7.98%
Government								
Small_Non Demand	392,071	373,461	(18,609)	-4.75%	3,347,119	3,199,673	(147,445)	-4.41%
Small-Demand	2,417,000	2,319,401	(97,599)	-4.04%	21,678,671	20,618,280	(1,060,391)	-4.89%
Large	1,864,897	1,659,702	(205,195)	-11.00%	16,628,230	14,881,717	(1,746,513)	-10.50%
Public St. Lites	508,839	471,543	(37,296)	-7.33%	4,334,954	4,352,052	17,099	0.39%
Sub-total	5,182,806	4,824,107	(358,700)	-6.92%	45,988,973	43,051,722	(2,937,251)	-6.39%
Total-Civilian	32,630,345	29,536,261	(3,094,084)	-9.48%	269,953,143	249,139,501	(20,813,642)	-7.71%
USN	5,844,413	6,373,008	528,594	9.04%	52,629,966	49,627,538	(3,002,428)	-5.70%
Grand Total	38,474,759	35,909,269	(2,565,490)	-6.67%	322,583,109	298,767,039	(23,816,070)	-7.38%

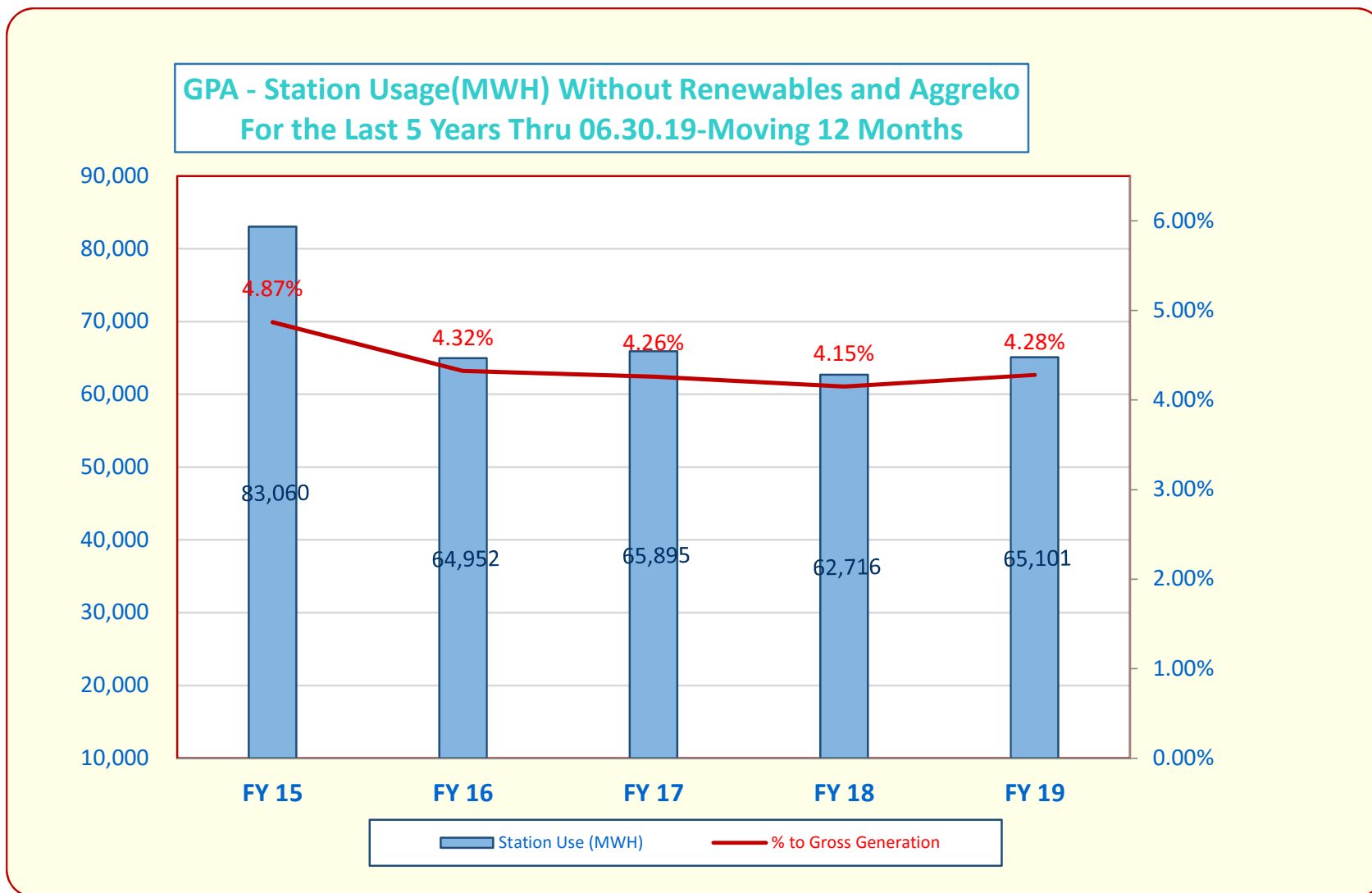
GPA Work Session - August 22, 2019 - DIVISION REPORTS

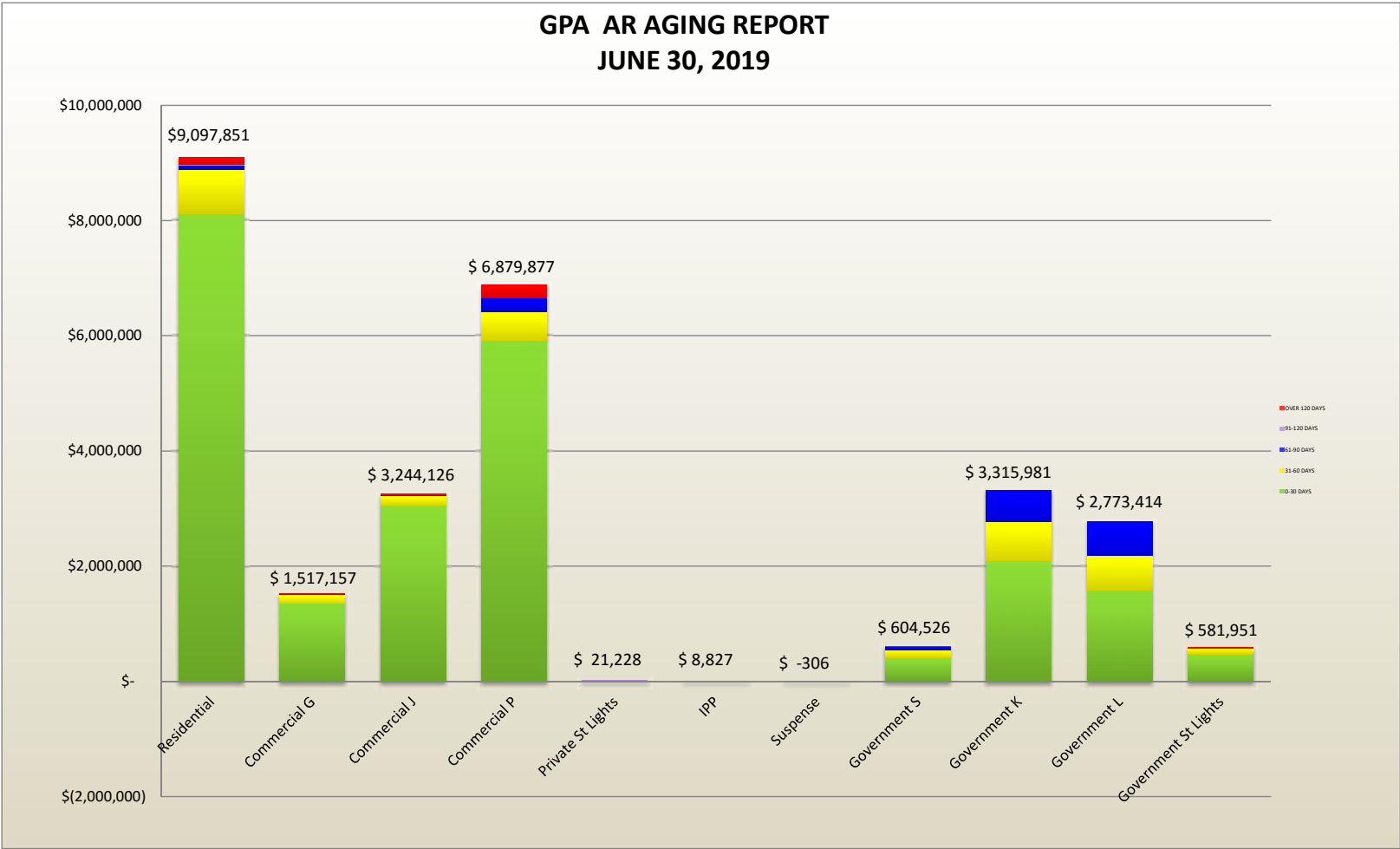
YTD REVENUES - CURRENT YEAR VS PRIOR YEAR					MTD REVENUES - CURRENT YEAR VS PRIOR YEAR			
ACTUALS - 9 MONTHS ENDED JUNE 30					ACTUALS - MONTH ENDED JUNE 30			
	2019	2018	VARIANCE	% VARIANCE	2019	2018	VARIANCE	% VARIANCE
KWH								
Residential	369,561,477	377,029,802	(7,468,324)	-1.98%	46,454,816	42,056,621	4,398,195	10.46%
Small General-Non-Demand	59,583,506	61,810,282	(2,226,776)	-3.60%	7,135,817	6,840,318	295,499	4.32%
Small General-Demand	137,926,578	140,141,697	(2,215,119)	-1.58%	16,196,923	15,360,000	836,923	5.45%
Large	225,016,484	233,730,450	(8,713,965)	-3.73%	25,905,882	25,263,128	642,754	2.54%
Independent Power Producers	284,404	389,667	(105,263)	-27.01%	33,644	25,238	8,406	33.31%
Private St. Lites	297,543	300,324	(2,781)	-0.93%	34,779	37,088	(2,309)	-6.22%
Sub-total	792,669,993	813,402,222	(20,732,228)	-2.55%	95,761,862	89,582,394	6,179,468	6.90%
Government								
Small_Non Demand	10,512,056	10,903,421	(391,365)	-3.59%	1,225,034	1,157,839	67,196	5.80%
Small-Demand	71,697,778	71,039,472	658,307	0.93%	7,970,826	7,404,715	566,112	7.65%
Large	53,694,497	56,889,846	(3,195,349)	-5.62%	5,952,146	5,896,149	55,997	0.95%
Public St. Lites	6,694,525	6,565,753	128,771	1.96%	710,958	795,661	(84,703)	-10.65%
Sub-total	142,598,856	145,398,492	(2,799,636)	-1.93%	15,858,964	15,254,364	604,601	3.96%
Total-Civilian	935,268,849	958,800,713	(23,531,864)	-2.45%	111,620,826	104,836,757	6,784,069	6.47%
USN	233,377,122	233,287,223	89,899	0.04%	27,082,742	24,891,007	2,191,734	8.81%
Grand Total	1,168,645,971	1,192,087,936	(23,441,965)	-1.97%	138,703,568	129,727,764	8,975,803	6.92%
Non-Oil Yield								
Residential	0.096298	0.096137	0.000161	0.17%	0.094802	0.095132	-0.000330	-0.35%
Small General-Non-Demand	0.137748	0.136508	0.001240	0.91%	0.134479	0.133653	0.000826	0.62%
Small General-Demand	0.119940	0.119532	0.000408	0.34%	0.115898	0.116038	-0.000140	-0.12%
Large	0.104151	0.103680	0.000470	0.45%	0.104030	0.105098	-0.001068	-1.02%
Independent Power Producers	0.128500	0.109347	0.019152	17.52%	0.109929	0.112411	-0.002482	-2.21%
Private St. Lites	0.627633	0.630857	-0.003224	-0.51%	0.599093	0.588382	0.010711	1.82%
Sub-total	0.105968	0.105607	0.000361	0.34%	0.104012	0.104678	-0.000666	-0.64%
Government								
Small_Non Demand	0.150139	0.150221	-0.000082	-0.05%	0.150616	0.151961	-0.001345	-0.88%
Small-Demand	0.133330	0.134187	-0.000857	-0.64%	0.136744	0.137391	-0.000647	-0.47%
Large	0.124769	0.127043	-0.002275	-1.79%	0.126497	0.130505	-0.004009	-3.07%
Public St. Lites	0.495849	0.475215	0.020635	4.34%	0.509008	0.445489	0.063519	14.26%
Sub-total	0.148365	0.147994	0.000370	0.25%	0.150658	0.151906	-0.001248	-0.82%
Total-Civilian	0.112432	0.112035	0.000397	0.35%	0.110639	0.111550	-0.000910	-0.82%
USN	0.064668	0.061687	0.002981	4.83%	0.060107	0.060526	-0.000419	-0.69%
Grand Total	0.102894	0.102182	0.000712	0.70%	0.100772	0.101760	-0.000987	-0.97%
Non-Oil Revenues								
Residential	35,588,074	36,246,626	(658,553)	-1.82%	4,404,001	4,000,922	403,079	10.07%
Small General-Non-Demand	8,207,528	8,437,625	(230,097)	-2.73%	959,621	914,229	45,392	4.97%
Small General-Demand	16,542,910	16,751,395	(208,486)	-1.24%	1,877,194	1,782,343	94,851	5.32%
Large	23,435,632	24,233,264	(797,632)	-3.29%	2,694,996	2,655,115	39,881	1.50%
Independent Power Producers	36,546	42,609	(6,063)	-14.23%	3,698	2,837	861	30.36%
Private St. Lites	186,748	189,461	(2,714)	-1.43%	20,836	21,822	(986)	-4.52%
Sub-total	83,997,437	85,900,981	(1,903,544)	-2.22%	9,960,346	9,377,268	583,078	6.22%
Government								
Small_Non Demand	1,578,273	1,637,922	(59,650)	-3.64%	184,510	175,946	8,564	4.87%
Small-Demand	9,559,471	9,532,581	26,891	0.28%	1,089,965	1,017,345	72,620	7.14%
Large	6,699,402	7,227,481	(528,079)	-7.31%	752,927	769,479	(16,552)	-2.15%
Public St. Lites	3,319,475	3,120,142	199,334	6.39%	361,883	354,458	7,425	2.09%
Sub-total	21,156,622	21,518,126	(361,504)	-1.68%	2,389,284	2,317,228	72,056	3.11%
Total-Civilian	105,154,059	107,419,107	(2,265,048)	-2.11%	12,349,631	11,694,497	655,134	5.60%
USN	15,092,085	14,390,739	701,346	4.87%	1,627,850	1,506,545	121,305	8.05%
Grand Total	120,246,144	121,809,846	(1,563,702)	-1.28%	13,977,481	13,201,042	776,439	5.88%
% of Total Revenues								
Oil Revenues								
Residential	57,001,901	51,889,688	5,112,213	9.85%	7,165,284	6,486,897	678,386	10.46%
Small General-Non-Demand	9,190,279	8,509,817	680,462	8.00%	1,100,643	1,055,064	45,578	4.32%
Small General-Demand	21,264,836	19,235,804	2,029,032	10.55%	2,497,232	2,368,314	128,918	5.44%
Large	34,545,109	31,577,095	2,968,015	9.40%	3,978,282	3,878,794	99,488	2.56%
Independent Power Producers	42,321	48,566	(6,245)	-12.86%	5,003	3,764	1,239	32.92%
Private St. Lites	45,894	40,695	5,199	12.78%	5,364	5,721	(356)	-6.22%
Sub-total	122,090,341	111,301,665	10,788,676	9.69%	14,751,808	13,798,555	953,253	6.91%
Government								
Small_Non Demand	1,621,401	1,473,826	147,574	10.01%	188,952	178,587	10,364	5.80%
Small-Demand	11,058,809	9,608,099	1,450,710	15.10%	1,229,436	1,142,118	87,318	7.65%
Large	8,182,315	7,601,878	580,437	7.64%	906,775	898,307	8,468	0.94%
Public St. Lites	1,032,577	892,224	140,352	15.73%	109,660	122,724	(13,065)	-10.65%
Sub-total	21,895,101	19,576,028	2,319,073	11.85%	2,434,822	2,341,736	93,086	3.98%
Total-Civilian	143,985,442	130,877,692	13,107,749	10.02%	17,186,630	16,140,291	1,046,339	6.48%
USN	34,535,452	28,996,378	5,539,075	19.10%	4,745,158	3,111,497	1,633,661	52.50%
Grand Total	178,520,894	159,874,070	18,646,824	11.66%	21,931,788	19,251,788	2,680,000	13.92%
% of Total Revenues								
Grand Total								
Residential	92,589,975	88,136,315	4,453,660	5.05%	11,569,285	10,487,819	1,081,465	10.31%
Small General-Non-Demand	17,397,807	16,947,442	450,365	2.66%	2,060,263	1,969,294	90,970	4.62%
Small General-Demand	37,807,746	35,987,200	1,820,547	5.06%	4,374,426	4,150,658	223,768	5.39%
Large	57,980,742	55,810,359	2,170,383	3.89%	6,673,278	6,533,909	139,368	2.13%
Independent Power Producers	78,867	91,175	(12,308)	-13.50%	8,701	6,601	2,101	31.82%
Private St. Lites	232,642	230,156	2,486	1.08%	26,200	27,542	(1,342)	-4.87%
Sub-total	206,087,778	197,202,646	8,885,132	4.51%	24,712,154	23,175,823	1,536,331	6.63%
Government								
Small_Non Demand	3,199,673	3,111,749	87,924	2.83%	373,461	354,533	18,928	5.34%
Small-Demand	20,618,280	19,140,680	1,477,600	7.72%	2,319,401	2,159,463	159,938	7.41%
Large	14,881,717	14,829,359	52,358	0.35%	1,659,702	1,667,786	(8,084)	-0.48%
Public St. Lites	4,352,052	4,012,366	339,686	8.47%	471,543	477,183	(5,640)	-1.18%
Sub-total	43,051,722	41,094,153	1,957,569	4.76%	4,824,107	4,658,965	165,142	3.54%
Total-Civilian	249,139,501	238,296,800	10,842,701	4.55%	29,536,261	27,834,788	1,701,473	6.11%
USN	49,627,538	43,387,117	6,240,421	14.38%	6,373,008	4,618,042	1,754,966	38.00%
Grand Total	298,767,039	281,683,917	17,083,122	6.06%	35,909,269	32,452,830	3,456,439	10.65%











GPA Work Session - August 22, 2019 - DIVISION REPORTS

GUAM POWER AUTHORITY
GOVERNMENT ACCOUNTS RECEIVABLE
Billing as of 07/31/2019 and Payments as of 08/15/2019

Current (07/19 Billing due 08/31/19)
 30 days Arrears (6/30/19 due 07/31/19)
 60 days and over Arrears (05/31/19 billing due 6/30/19)

CC&B ACCT NUMBER	CC&B New Acct Number	DEPARTMENT	BALANCE 06/30/2019	CANCEL/REBILL/ SPEC CHARGE 08/15/2019	BILLING 07/31/2019	PAYMENT 08/15/2019	BALANCE 08/15/2019
Line Agencies							
0237100000	1073430238	Dept. of Corrections	84,268.29	(1.11)	91,077.26	(84,268.29)	91,076.15
0437100000	0040515913	Dept. of Parks & Rec.	43,878.09	(3,616.42)	29,345.55	(22,086.24)	47,520.98
0537100000	0453170939	Guam Fire Department	16,903.81		18,952.74	(16,903.81)	18,952.74
6995000000	8564647941	DOA Supply Mgmt (NET METERED)	1,676.44		1,668.66	(1,676.44)	1,668.66
7895000000	4211873236	Dept. of Administration	4,426.26		4,020.67	(4,426.26)	4,020.67
1337100000	4554808900	Nieves Flores Library	10,910.32	(0.38)	11,539.97	(10,910.32)	11,539.59
2206200000	9541109130	General Services Agency	257.29	1.93	262.38		521.60
2237100000	1621790133	DOA-Data Processing	8,874.99		9,952.21	(8,874.99)	9,952.21
2337100000	1896187753	Dept. of PH&SS	63,325.51	(3,931.52)	75,056.28	(63,325.51)	71,124.76
3237100000	7252821074	Dept. of Education	2,196,777.57	33,021.84	1,061,303.14	(1,291,626.84)	1,999,475.71
3337100000	0266069082	Guam Police Department	50,402.35	(1.11)	57,293.46	(50,402.35)	57,292.35
3569100000	6069461950	Dept of Youth Affairs (Federal)	768.93		939.13	(768.93)	939.13
4437100000	2913461537	Dept. of Youth Affairs (Local)	12,369.74	-	12,925.90	(12,369.74)	12,925.90
4737100000	3404311949	Guam Environmental Protect	6,919.86	51.90	7,278.23		14,249.99
5437100000	3227759982	Mental Health/Subst.	46,028.33	-	53,967.05	(46,028.33)	53,967.05
	6841080463	Guam Behavioral Health & Wellness			25.00		25.00
7200300000	0070861777	Veteran Affairs	2,266.38	8.19	1,159.93	(1,174.05)	2,260.45
	6243861917	Guam Veterans Affairs Office	2,594.75		1,521.47	(2,595.75)	1,520.47
7437100000	8300435373	Civil Defense (Military Affairs)	23,163.39	84.75	12,952.46	(11,863.38)	24,337.22
7463300000	7813165805	Pacific Energy Resource Center	650.24		686.15	(650.24)	686.15
8137100000	1595188609	Dept. of Agriculture	9,925.98	-	10,805.85	(9,925.98)	10,805.85
8337100000	2535590089	DPW-FAC Adm Account	30,677.38		33,526.62	(30,677.38)	33,526.62
8437100000	7928924534	Guam Visitors Bureau	4,541.76		4,779.14	(4,541.76)	4,779.14
8446300000	7663706771	Yona Senior Citizen Center	1,039.32		1,157.33	(1,039.32)	1,157.33
9437100000	4129948191	Dept of Chamorro Affairs/Chamorro Village	4,332.51		3,917.54	(4,332.51)	3,917.54
	3558733700	Dept of Chamorro Affairs/Chamorro Village (NET METER)	455.92		954.95	(455.92)	954.95
5247210000	5247210000	Mayors Council	8,524.65		11,352.96	(8,524.65)	11,352.96
6293410000	6293410000	Office of the Governor	26,971.54		30,406.31	(26,971.54)	30,406.31
8555858369	8555858369	Dept of Chamorro Affairs (Guam Museum)	23,416.73		24,590.68	(23,416.73)	24,590.68
	1099514147	Dept of Chamorro Affairs/Repository	292.78		307.93	(292.78)	307.93
		Sub Total	2,686,641.11	25,618.07	1,573,726.95	(1,740,130.04)	2,545,856.09
MAYORS							
0637100000	3832327736	Santa Rita Mayor	3,298.17	-	4,173.93	(3,298.17)	4,173.93
0737100000	9351070242	Ordof/Chalan Pago Mayor	1,435.46		1,996.11	(1,435.46)	1,996.11
1537100000	6393530237	Hagatna Mayor	1,708.07		916.42	(1,708.07)	916.42
1637100000	3293808984	Piti Mayor	1,284.24		1,797.95	(1,284.24)	1,797.95
1737100000	8715052935	Mongmong/Toto/Maite Mayor	1,645.25		1,892.07	(1,645.25)	1,892.07
2637100000	0492244686	Asan/Maina/Adelup Mayor	805.05		810.88	(805.05)	810.88
2737100000	8433959204	Sinajana Mayor	5,188.73		5,793.69	(5,188.73)	5,793.69
3637100000	8041715847	Dededo Mayor	6,722.43		7,664.32	(6,722.43)	7,664.32
4637100000	7037924246	Yigo Mayor	4,804.97		5,555.59	(4,804.97)	5,555.59
5637100000	7202265287	Umatac Mayor	1,412.08		1,512.74	(1,412.08)	1,512.74
6537100000	8472200165	Agana Hts. Mayor	4,046.23	-	4,528.16	(4,046.23)	4,528.16
6637100000	4469579998	Merizo Mayor	941.50		1,136.01	(941.50)	1,136.01
6737100000	5763167341	Barrigada Mayors Office	2,603.19		3,298.17	(2,603.19)	3,298.17
7537100000	7247791682	Agat Mayor	2,585.96		3,083.24	(2,585.96)	3,083.24
7637100000	6078244037	Inarajan Mayor	2,609.32		498.14	(2,609.32)	498.14
8537100000	6957205325	Tamuning Mayor	5,788.96		6,945.53	(5,788.96)	6,945.53
8637100000	1880297633	Talofoto Mayor	1,448.64	(869.87)	2,774.54	(1,448.64)	1,904.67
9537100000	3631627996	Mangilao Mayor	4,520.24	30.79	4,728.14	(4,520.24)	4,758.93
9637100000	1837525565	Yona Mayor	1,565.98		1,855.42	(1,565.98)	1,855.42
		Sub Total	\$ 54,414.47	\$ (839.08)	\$ 60,961.05	\$ (54,414.47)	\$ 60,121.97
DPW ACCOUNTS							
4337100000	3045433600	DPW-Village St. Lights	358,016.83		366,026.71	(358,016.83)	366,026.71
5337100000	0930959866	DPW- Primary St. Lights	171,939.38		85,964.03	(171,939.38)	85,964.03
6337100000	3088040552	DPW-Sec/Coll St. Lights	52,325.53		25,982.15	(52,325.53)	25,982.15
7337100000	0832698062	DPW-Signal Lights	9,606.91		11,213.24	(9,606.91)	11,213.24
		Sub Total	\$ 591,888.65	\$ -	\$ 489,186.13	\$ (591,888.65)	\$ 489,186.13
(B) AUTONOMOUS/PUBLIC CORP							
1437100000	1540692986	Retirement Fund	6,849.67		7,294.53	(14,144.36)	(0.16)
1915500000	0563872892	Guam Housing Corp Rental Division	1,486.86	47.49	1,121.52	(1,452.86)	1,203.01
2437100000	5434075703	University of Guam	182,018.81		199,703.78	(381,740.27)	(17.68)
4237100000	7736362694	Guam Airport Authority	522,386.12	3,866.99	546,312.94	(522,386.12)	550,179.93
5357510000	5357510000	University of Guam (NET METERED)	77,083.89		87,485.59	(164,569.48)	-
6237100000	1699407298	G H U R A	14,138.97		28,821.98	(25,780.53)	17,180.42
6437100000	6518220019	Guam Community College	51,715.08		58,144.72	(51,715.08)	58,144.72
7237100000	8302337726	Guam Memorial Hospital	36,888.87		42,866.41	(36,888.87)	42,866.41
8426836906	8426836906	Guam Memorial Hospital (NET METERED)	140,804.18		155,382.99	(140,804.18)	155,382.99
9137100000	4474308144	Port Authority of Guam	95,255.31	2,440.94	104,709.47	(95,255.31)	107,150.41
9157510000	9157510000	Guam Community College (NET METERED)	35,509.64		39,127.99	(35,509.64)	39,127.99
9173210000	9173210000	Guam Solid Waste Authority	6,437.43		7,118.26	(6,437.43)	7,118.26
9337100000	0838495949	Guam Waterworks Authority	1,236,489.73	25.00	1,465,621.64	(1,236,260.86)	1,465,875.51
8237100000	4075914809	GPA	-	(113,523.65)	113,523.65		-
	9699497595	GUAM POWER AUTHORITY - WAKE ST LT	221.44	-	-	-	221.44
		Sub Total	\$ 2,407,286.00	\$ (107,143.23)	\$ 2,857,235.47	\$ (2,712,944.99)	\$ 2,444,433.25
(C) OTHERS							
0337100000	7541928173	Guam Legislature	515.84		458.39	(974.23)	-
9503154359	9503154359	Guam Legislature (NET METERED)	8,187.21		9,327.84	(8,187.21)	9,327.84
1237100000	8353274954	Superior Court of Guam	64,211.36		72,405.51	(64,211.36)	72,405.51
2537100000	8108458168	Guam Post Office (Agana)	6,444.70		7,212.11	(13,656.81)	-
2570200000	8972267005	Customs & Quarantine Agency	734.48		751.15	(734.48)	751.15
3537100000	4530787043	U.S. Post Office	39,129.15		45,603.49	(39,129.15)	45,603.49
5537100000	8607446612	Dept. of Military Affairs	79,912.56		88,127.44	(79,912.56)	88,127.44
3209463043	3209463043	Dept. of Military Affairs (NET METERED)	15,477.60		18,756.75	(15,477.60)	18,756.75
5737100000	6000770566	KGTF	7,159.53		7,618.12	(7,159.53)	7,618.12
7281000000	6602566745	Tamuning Post Office	5,169.38		5,548.69	(10,718.08)	-
		Sub Total	\$ 226,941.82	\$ -	\$ 255,809.49	\$ (240,161.01)	\$ 242,590.30
GRAND TOTAL			\$ 5,967,172.05	\$ (82,364.24)	\$ 5,236,919.09	\$ (5,339,539.16)	\$ 5,782,187.74