



**CONSOLIDATED COMMISSION ON UTILITIES**

Guam Power Authority | Guam Waterworks Authority

P.O. Box 2977 Hagatna, Guam 96932 | (671)649-3002 | guamccu.org

**GUAM POWER AUTHORITY WORK SESSION**

***CCU Conference Room***

***4:30 p.m., November 21, 2017***

**AGENDA**

**1. ISSUES FOR DECISION**

- 1.1 [Tristar Doc Pipeline & RFO Storage Extension / Resolution 2017-43](#)
- 1.2 [Bond Refinancing / Resolution 2017-44](#)
- 1.3 [GPWA Customer Care & Billing Update / Resolution 2017-45 \(GWA Resolution 08-FY2018\)](#)

**2. GM REPORT**

- 2.1 [Updates](#)

**3. ISSUES FOR DISCUSSION**

- 3.1 [LEAC Filing 12/15/17](#)
- 3.2 [Transmission & Distribution Grid Improvement Programs](#)

**4. DIVISION REPORTS**

- 3.1 [Administration: Customer Service, HR, Procurement](#)
- 3.2 [Engineering & Technical: Engineering, IT, Planning & Regulatory, SPORD](#)
- 3.3 [Finance Reports](#)
- 3.4 [Operations: Facilities, Generation, PSCC, T&D, Transportation](#)
- 3.5 [Public Information Office](#)

**4. ANNOUNCEMENTS**

- 4.1 [Next Meeting: CCU Meeting – November 22](#)

**5. ADJOURNMENT**



**GUAM POWER AUTHORITY**  
ATURIDÁT ILEKTRESEDÁT GUAHAN  
P.O.BOX 2977 • AGANA, GUAM U.S.A. 96932-2977

## **Issues for Decision**

### **GPA Resolution No. 2017-43**

#### **AUTHORIZING THE MANAGEMENT OF THE GUAM POWER AUTHORITY TO ENTER INTO AN AGREEMENT EXTENSION TERM WITH TRISTAR TERMINALS GUAM, INC. FOR THE DOCK FACILITY, PIPELINE FACILITIES AND RFO STORAGE**

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

The Guam Power Authority ("GPA" or "Authority") utilizes the services of Tristar Terminals Guam, Inc. ("Tristar" or "TTGI") pier facility for the docking of ocean freight vessels delivering fuel to GPA facilities through a Dock Facility User Agreement.

GPA utilizes the Tristar fuel pipeline facilities for the delivery and transport of Fuel Oil to and from GPA's fuel storage facilities through a Pipeline Agreement.

GPA utilizes the Tristar fuel storage facilities for GPA's additional RFO storage requirements through a RFO Storage Lease Agreement.

TTGI is the sole service provider for the Dock Facility User Agreement, Pipeline Agreement, and RFO Storage Lease Agreement (or "3 Agreements"). The current contracts for the 3 Agreements will expire on August 31, 2018.

##### **How much will it cost?**

The fee schedules for the Pipeline Agreement and RFO Storage Lease Agreement for the 4 year extension period will be at the same annual incremental rate of 4% based on standard Consumer Price Index changes and increased operational cost; and

The estimated total expenses for the 3 Agreements for the 4-year extension period as shown in Exhibit A are as follows: \$6,324,864 for the Dock Agreement; \$2,138,024 for the Pipeline Agreement; and \$6,674,891 for the RFO Storage Agreement.

##### **When will it be completed?**

GPA and TTGI have negotiated for an extension of the 3 Agreements for up to 4 years, renewable annually. The Dock Agreement fee schedule shall remain the same until March 31, 2019.

Extension of the Agreement and the fee schedule thereof is subject to change and is incumbent upon Tristar's contract renewal with the Port Authority of Guam (PAG) beyond March 31, 2019.

##### **What is its funding source?**

LEAC

## EXHIBIT A

TRISTAR AGREEMENTS - Estimated Expenses						
Fee Schedule	Parameters			Contract Extension		
				Sep2018-Aug2022		
					Annual	4-Year Total
				\$/Shipment	\$/yr	\$
<b>A. Dock Agreement</b>						
1. Dock Operator O.T. Fee	Outside 0800H-1600H on Weekdays	\$38.00	per manhour	\$7,296.00	\$80,256.00	\$321,024.00
(Minimum of 4 Operators)	All hrs on weekdays & holidays	48	hrs/shipment			
		11	ships/yr			
2. Excess Laytime	0-36 hrs upon start of discharge	\$0.00	per Hour			
	Over 36 hrs & less than 72 hrs	\$1,000.00	per Hour			
	Over 72 hrs	\$600.00	per Hour			
	Excess hrs	12	hrs/shipment	\$12,000.00	\$132,000.00	\$528,000.00
		11	shipment/yr			
3. Imports (RFO Receiving)						
a. Throughput Fee	RFO received (Gross) - PAG Fee	\$0.50	\$/bbl	\$120,000.00	\$1,320,000.00	\$5,280,000.00
		240,000	bbl/shipment			
		11	shipment/yr			
4. Exports (Bunkering)						
		3000	bbl/shipment			
		24	shipment/yr			
a. Port Royalty Fee	RFO delivered (Gross) - PAG fee	\$0.66	\$/bbl	\$1,980.00	\$47,520.00	\$190,080.00
b. Maritime Security Fee	RFO delivered (Gross) - PAG Fee	\$0.02	\$/bbl	\$60.00	\$1,440.00	\$5,760.00
<b>SUB-TOTAL</b>				<b>\$141,336.00</b>	<b>\$1,581,216.00</b>	<b>\$6,324,864.00</b>
<b>B. Pipeline Agreement</b>					Annual	4-Year Total
1. Pipeline Rental (B-Line)	Pipeline from Dock to Navy tie-in			\$/Month	\$/yr	\$
Sep 2018- Aug 2019				\$41,956.95	\$503,483.39	4%
Sep 2019- Aug 2020				\$43,635.23	\$523,622.72	4%
Sep 2020- Aug 2021				\$45,380.64	\$544,567.63	4%
Sep 2021- Aug 2022				\$47,195.86	\$566,350.34	4%
<b>SUB-TOTAL</b>				<b>\$44,542.17</b> avg	<b>\$534,506.02</b> avg	<b>\$2,138,024.08</b>
<b>C. Storage Agreement</b>	Based contracted storage capacity				Annual	4-Year Total
1. Fixed Lease Fees				\$/Month*	\$/yr	\$
Sep 2018- Aug 2019	Tk1902	0	bbls	\$107,251.80	\$1,287,021.64	4%
Sep 2019- Aug 2020	Tk1903	278,500	bbls	\$111,541.88	\$1,338,502.50	4%
Sep 2020- Aug 2021	Tk1910	0	bbls	\$116,003.55	\$1,392,042.60	4%
Sep 2021- Aug 2022	Tk1911	37,000	bbls	\$120,643.69	\$1,447,724.30	4%
	<b>*Total storage capacity</b>	<b>315,500</b>	<b>bbls</b>			
2. Bunkering Fee	(P/L fee from tanks to navy tie-in)					
	RFO delivered (Net)	\$4.20	\$/bbl	\$12,600.00	\$302,400.00	\$1,209,600.00
<b>SUB-TOTAL</b>				<b>\$93,608.18</b> avg	<b>\$1,153,538.21</b> avg	<b>\$6,674,891.04</b>
				<b>\$279,486.35</b> avg	<b>\$3,269,260.23</b> avg	<b>\$15,137,779.12</b>
				<b>\$/Month</b>	<b>\$/yr</b>	<b>Total for 4 Yrs</b>



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

RESOLUTION NO. 2017-43

**AUTHORIZING THE MANAGEMENT OF THE GUAM POWER AUTHORITY (GPA)  
TO ENTER INTO AN AGREEMENT EXTENSION TERM WITH TRISTAR TERMINALS GUAM, INC. FOR THE  
DOCK FACILITY, PIPELINE FACILITIES AND RFO STORAGE**

**WHEREAS**, the Guam Power Authority ("GPA" or "Authority") utilizes the services of Tristar Terminals Guam, Inc. ("Tristar" or "TTGI") pier facility for the docking of ocean freight vessels delivering fuel to GPA facilities through a **Dock Facility User Agreement**; and

**WHEREAS**, GPA utilizes the Tristar fuel pipeline facilities for the delivery and transport of Fuel Oil to and from GPA's fuel storage facilities through a **Pipeline Agreement**; and

**WHEREAS**, GPA utilizes the Tristar fuel storage facilities for GPA's additional RFO storage requirements through a **RFO Storage Lease Agreement**; and

**WHEREAS**, TTGI is the sole service provider for the **Dock Facility User Agreement, Pipeline Agreement, and RFO Storage Lease Agreement** (or "3 Agreements"); and

**WHEREAS**, the current contracts for the 3 Agreements will expire on August 31, 2018; and

**WHEREAS**, GPA and TTGI have negotiated for an extension of the 3 Agreements for up to 4 years, renewable annually; and

**WHEREAS**, the **Dock Agreement** fee schedule shall remain the same until March 31, 2019. Extension of the Agreement and the fee schedule thereof is subject to change and is incumbent upon Tristar's contract renewal with the Port Authority of Guam (PAG) beyond March 31, 2019; and

**WHEREAS**, the fee schedules for the **Pipeline Agreement and RFO Storage Lease Agreement** for the 4 year extension period will be at the same annual incremental rate of 4% based on standard Consumer Price Index changes and increased operational cost; and

**WHEREAS**, the estimated total expenses for the 3 Agreements for the 4-year extension period as shown in Exhibit A are as follows: **\$6,324,864** for the Dock Agreement; **\$2,138,024** for the Pipeline Agreement; and **\$6,674,891** for the RFO Storage Agreement; and

**WHEREAS**, TTGI is the sole service provider for the 3 Agreements; and



**WHEREAS**, GPA has determined that the contract extension period for the 3 Agreements will serve the best interest of the Authority and its ratepayers by ensuring uninterrupted supply of fuel to GPA through the use of Tristar's fuel handling facilities; and

**WHEREAS**, GPA is requesting the approval of the CCU for the **Dock Facility User Agreement, Pipeline Agreement, and RFO Storage Lease Agreement** for up to four (4) years to commence on September, 2018; and

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

The General Manager of GPA is authorized to petition the Guam Public Utilities Commission for the review and approval of the extension of the **Dock Facility User Agreement, Pipeline Agreement, and Storage Lease Agreement** with Tristar Terminal Guam, Inc.

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

**DULY and REGULARLY ADOPTED this 22<sup>nd</sup> day of November 2017**

**Certified by:**

**Attested by:**

\_\_\_\_\_  
**JOSEPH T. DUENAS**  
**CHAIRMAN**

\_\_\_\_\_  
**J. GEORGE BAMBA**  
**SECRETARY**

**I, J. GEORGE BAMBA**, Secretary for the Consolidated Commission on Utilities do hereby certify that the foregoing is a full, true, and correct copy of the resolution duly adopted at a regular meeting of the members of Guam's Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

Ayes: \_\_\_\_\_

Nays: \_\_\_\_\_

Absent: \_\_\_\_\_

Abstain: \_\_\_\_\_

## EXHIBIT A

TRISTAR AGREEMENTS - Estimated Expenses						
Fee Schedule	Parameters			Contract Extension		
				Sep2018-Aug2022		
					Annual	4-Year Total
				<u>\$/Shipment</u>	<u>\$/yr</u>	<u>\$</u>
<b>A. Dock Agreement</b>						
1. Dock Operator O.T. Fee	Outside 0800H-1600H on Weekdays	\$38.00 per manhour		\$7,296.00	\$80,256.00	\$321,024.00
(Minimum of 4 Operators)	All hrs on weekdays & holidays	48 hrs/shipment				
		11 ships/yr				
2. Excess Laytime	0-36 hrs upon start of discharge	\$0.00 per Hour				
	Over 36 hrs & less than 72 hrs	\$1,000.00 per Hour				
	Over 72 hrs	\$600.00 per Hour				
	Excess hrs	12 hrs/shipment	\$12,000.00		\$132,000.00	\$528,000.00
		11 shipment/yr				
3. Imports (RFO Receiving)						
a. Throughput Fee	RFO received (Gross) - PAG Fee	\$0.50 \$/bbl	\$120,000.00		\$1,320,000.00	\$5,280,000.00
		240,000 bbl/shipment				
		11 shipment/yr				
4. Exports (Bunkering)		3000 bbl/shipment				
		24 shipment/yr				
a. Port Royalty Fee	RFO delivered (Gross) - PAG fee	\$0.66 \$/bbl	\$1,980.00		\$47,520.00	\$190,080.00
b. Maritime Security Fee	RFO delivered (Gross) - PAG Fee	\$0.02 \$/bbl	\$60.00		\$1,440.00	\$5,760.00
<b>SUB-TOTAL</b>			\$141,336.00		\$1,581,216.00	\$6,324,864.00
<b>B. Pipeline Agreement</b>					Annual	4-Year Total
1. Pipeline Rental (B-Line)	Pipeline from Dock to Navy tie-in			<u>\$/Month</u>	<u>\$/yr</u>	<u>\$</u>
Sep 2018- Aug 2019				\$41,956.95	\$503,483.39	4%
Sep 2019- Aug 2020				\$43,635.23	\$523,622.72	4%
Sep 2020- Aug 2021				\$45,380.64	\$544,567.63	4%
Sep 2021- Aug 2022				\$47,195.86	\$566,350.34	4%
<b>SUB-TOTAL</b>			\$44,542.17 avg		\$534,506.02 avg	\$2,138,024.08
<b>C. Storage Agreement</b>	Based contracted storage capacity				Annual	4-Year Total
1. Fixed Lease Fees	Tk1902	0 bbbls		<u>\$/Month*</u>	<u>\$/yr</u>	<u>\$</u>
Sep 2018- Aug 2019	Tk1903	278,500 bbbls	\$107,251.80		\$1,287,021.64	4%
Sep 2019- Aug 2020	Tk1910	0 bbbls	\$111,541.88		\$1,338,502.50	4%
Sep 2020- Aug 2021	Tk1911	37,000 bbbls	\$116,003.55		\$1,392,042.60	4%
Sep 2021- Aug 2022	*Total storage capacity	315,500 bbbls	\$120,643.69		\$1,447,724.30	4%
2. Bunkering Fee	(PIL fee from tanks to navy tie-in)					
	RFO delivered (Net)	\$4.20 \$/bbl	\$12,600.00		\$302,400.00	\$1,209,600.00
<b>SUB-TOTAL</b>			\$93,608.18 avg		\$1,153,538.21 avg	\$6,674,891.04
				\$279,486.35 avg	\$3,269,260.23 avg	\$15,137,779.12
				<u>\$/Month</u>	<u>\$/yr</u>	Total for 4 Yrs

## EXHIBIT B

TRISTAR AGREEMENTS - Fee Comparison					
Fee Schedule		Current Contract	Contract Extn	Variance/Remarks	
		5 Years	4 Years		
		Sep2013-Aug2018	Sep2018-Aug2022		
<b>A. Dock Agreement</b>					
<b>Fees Effective until March 31, 2019</b>				Subject to Port Fee Adjustments	
1. Dock Operator O.T. Fee per Operator (Minimum of 4 Operators) Outside 0800H-1600H on Weekdays All hrs on weedays & holidays	per Hour	\$38.00	\$38.00	\$0.00	No change
2. Excess Laytime	per Hour	\$0.00	\$0.00	\$0.00	No change
0-36 hrs upon start of discharge	per Hour	\$1,000.00	\$1,000.00	\$0.00	No change
Over 36 hrs & less than 72 hrs	per Hour	\$600.00	\$600.00	\$0.00	No change
Over 72 hrs					
3. Imports (RFO Receiving)					
a. Throughput Fee (RFO delivered-Gross)	\$/bbl	\$0.50	\$0.50	\$0.00	No change
4. Exports (Bunkering) (RFO delivered-Gross)					
a. Port Royalty Fee	\$/bbl	\$0.66	\$0.66	\$0.00	No change
b. Maritime Security Fee	\$/bbl	\$0.02	\$0.02	\$0.00	No change
<b>B. Pipeline Agreement</b>					
1. Pipeline Rental Fee				(Pipeline from Dock to Navy tie-in)	
<u>5-Year Agreement</u>					
Sep 2013- Aug 2014	\$/yr	\$418,182.53			
Sep 2014- Aug 2015	\$/yr	\$433,709.83			4% Increase
Sep 2015- Aug 2016	\$/yr	\$449,858.22			4% Increase
Sep 2016- Aug 2017	\$/yr	\$466,652.55			4% Increase
Sep 2017- Aug 2018	\$/yr	<u>\$484,118.65</u>			4% Increase
Total (5-Years)		\$2,252,521.78			
<u>4-Year Extension</u>					
Sep 2018- Aug 2019	\$/yr		\$503,483.39		4% Increase
Sep 2019- Aug 2020	\$/yr		\$523,622.72		4% Increase
Sep 2020- Aug 2021	\$/yr		\$544,567.63		4% Increase
Sep 2021- Aug 2022	\$/yr		<u>\$566,350.34</u>		4% Increase
Total (4-Year Extn)			\$2,138,024.08		
<b>C. Storage Agreement</b>					
<b>1. Lease Fees</b>					
<u>5-Year Agreement</u>				Contract Capacity (bbls)	422,150
Sep 2013- Aug 2014	\$/yr	\$1,413,023.47			
Sep 2014- Aug 2015	\$/yr	\$1,469,544.41			4% Increase
Sep 2015- Aug 2016	\$/yr	\$1,528,326.18			4% Increase
Sep 2016- Aug 2017	\$/yr	\$1,589,459.23			4% Increase
Sep 2017- Aug 2018	\$/yr	<u>\$1,653,037.60</u>			4% Increase
Total (5-Years)		\$7,653,390.89			
<u>4-Year Extension</u>				Contract Capacity (bbls)	315,500
Sep 2018- Aug 2019	\$/yr		\$1,287,021.64		4% Increase
Sep 2019- Aug 2020	\$/yr		\$1,338,502.50		4% Increase
Sep 2020- Aug 2021	\$/yr		\$1,392,042.60		4% Increase
Sep 2021- Aug 2022	\$/yr		<u>\$1,447,724.30</u>		4% Increase
Total (4-Year Extn)			\$5,465,291.04		
<b>2. Bunkering Fee</b>					
(P/L Fee from storage to navy tie-in)					
(RFO delivered-Net)					
	\$/bbl	\$4.20	\$4.20	\$0.00	No change

GPA Work Session - November 21, 2017 - ISSUES FOR DECISION

TRISTAR AGREEMENTS - Fee Comparison

Fee Schedule		Current Contract 5 Years Sep2013-Aug2018	Contract Extn 4 Years Sep2018-Aug2022	Variance/Remarks
<b>A. Dock Agreement</b> Fees Effective until March 31, 2019				Subject to Port Fee Adjustments
1. Dock Operator O.T. Fee per Operator (Minimum of 4 Operators) Outside 0800H-1600H on Weekdays All hrs on weekdays & holidays	per Hour	\$38.00	\$38.00	\$0.00 No change
2. Excess Laytime 0-36 hrs upon start of discharge	per Hour	\$0.00	\$0.00	\$0.00 No change
Over 36 hrs & less than 72 hrs	per Hour	\$1,000.00	\$1,000.00	\$0.00 No change
Over 72 hrs	per Hour	\$600.00	\$600.00	\$0.00 No change
3. Imports (RFO Receiving) a. Throughput Fee (RFO delivered-Gross)	\$/bbl	\$0.50	\$0.50	\$0.00 No change
4. Exports (Bunkering) (RFO delivered-Gross) a. Port Royalty Fee b. Maritime Security Fee	\$/bbl \$/bbl	\$0.66 \$0.02	\$0.66 \$0.02	\$0.00 No change \$0.00 No change
<b>B. Pipeline Agreement</b>				(Pipeline from Dock to Navy tie-in)
1. Pipeline Rental Fee 5-Year Agreement Sep 2013- Aug 2014	\$/yr	\$418,182.53		
Sep 2014- Aug 2015	\$/yr	\$433,709.83		4% Increase
Sep 2015- Aug 2016	\$/yr	\$449,858.22		4% Increase
Sep 2016- Aug 2017	\$/yr	\$466,652.55		4% Increase
Sep 2017- Aug 2018	\$/yr	\$484,118.65		4% Increase
Total (5-Years)		\$2,252,521.78		
4-Year Extension Sep 2018- Aug 2019	\$/yr		\$503,483.39	4% Increase
Sep 2019- Aug 2020	\$/yr		\$523,622.72	4% Increase
Sep 2020- Aug 2021	\$/yr		\$544,567.63	4% Increase
Sep 2021- Aug 2022	\$/yr		\$566,350.34	4% Increase
Total (4-Year Extn)			\$2,138,024.08	
<b>C. Storage Agreement</b>				
1. Lease Fees 5-Year Agreement Sep 2013- Aug 2014	\$/yr	\$1,413,023.47		Contract Capacity (bbls) 422,150
Sep 2014- Aug 2015	\$/yr	\$1,469,544.41		4% Increase
Sep 2015- Aug 2016	\$/yr	\$1,528,326.18		4% Increase
Sep 2016- Aug 2017	\$/yr	\$1,589,459.23		4% Increase
Sep 2017- Aug 2018	\$/yr	\$1,653,037.60		4% Increase
Total (5-Years)		\$7,653,390.89		
4-Year Extension Sep 2018- Aug 2019	\$/yr		\$1,287,021.64	Contract Capacity (bbls) 315,500
Sep 2019- Aug 2020	\$/yr		\$1,338,502.50	4% Increase
Sep 2020- Aug 2021	\$/yr		\$1,392,042.60	4% Increase
Sep 2021- Aug 2022	\$/yr		\$1,447,724.30	4% Increase
Total (4-Year Extn)			\$5,465,291.04	
2. Bunkering Fee (P/L Fee from storage to navy tie-in) (RFO delivered-Net)	\$/bbl	\$4.20	\$4.20	\$0.00 No change

**AMENDED NO. 1  
DOCK AGREEMENT**

This Amendment No. 1 to the Storage Agreement (“1<sup>st</sup> Amendment”) is made by and between **TRISTAR TERMINALS GUAM, INC. (“Tristar”)**, a Guam corporation whose address is P.O. Box 8210, Agat, Guam 96918, and **GUAM POWER AUTHORITY**, a public corporation of Guam, whose address is P.O. Box 2977, Hagatna, Guam 96932.

**WHEREAS**, a Dock Agreement with the reference “TTGI-DA-2013” between the parties dated 1<sup>st</sup> September, 2013 expires on 31<sup>st</sup> August, 2018, and the parties want to extend and continue the said Agreement.

**NOW, THEREFORE**, the parties agree:

1. The said Agreement is extended on a year-to-year basis upon expiration of the original term on August 31, 2018 for a period not exceeding four (4) successive yearly extensions.
2. The extension is further subject to Tristar being the authorized operator of the F1-Dock post the expiration of the current agreement with Port Authority of Guam on 31<sup>st</sup> March, 2019.
3. Except as stated herein all other terms and condition of the Dock Agreement and Amendments thereto shall remain in effect.

**TRISTAR TERMINALS GUAM, INC.**

**GUAM POWER AUTHORITY**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**AMENDED NO. 1  
PIPELINE AGREEMENT**

This Amendment No. 1 to the Storage Agreement (“1<sup>st</sup> Amendment”) is made by and between **TRISTAR TERMINALS GUAM, INC.**, a Guam corporation whose address is P.O. Box 8210, Agat, Guam 96918, and **GUAM POWER AUTHORITY**, a public corporation of Guam, whose address is P.O. Box 2977, Hagatna, Guam 96932.

**WHEREAS**, a Pipeline Agreement with the reference “TTGI-PA-2013” between the parties dated 1<sup>st</sup> September, 2013 expires on 31<sup>st</sup> August, 2018, and the parties want to extend and continue the said Agreement.

**NOW, THEREFORE**, the parties agree:

1. The said Agreement is extended on a year-to-year basis upon expiration of the original term on August 31, 2018 for a period not exceeding four (4) successive yearly extensions.
2. The storage fee for the extended period will be:

<b>Extended Period Year</b>	<b>Period</b>	<b>Monthly Fee</b>	<b>Annual Fee</b>
1	September 2018 - August 2019	\$ 41,956.95	\$ 503,483.39
2	September 2019 - August 2020	\$ 43,635.23	\$ 523,622.72
3	September 2020 - August 2021	\$ 45,380.64	\$ 544,567.63
4	September 2021 - August 2022	\$ 47,195.86	\$ 566,350.34

3. Except as stated herein all other terms and condition of the Pipeline Agreement and Amendments thereto shall remain in effect.

**TRISTAR TERMINALS GUAM, INC.**

**GUAM POWER AUTHORITY**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

**AMENDED NO. 1  
STORAGE AGREEMENT**

This Amendment No. 1 to the Storage Agreement (“1<sup>st</sup> Amendment”) is made by and between **TRISTAR TERMINALS GUAM, INC.**, a Guam corporation whose address is P.O. Box 8210, Agat, Guam 96918, and **GUAM POWER AUTHORITY**, a public corporation of Guam, whose address is P.O. Box 2977, Hagatna, Guam 96932.

**WHEREAS**, a Storage Agreement with the reference “TTGI-SA-2013” between the parties dated 1<sup>st</sup> September, 2013 expires on 31<sup>st</sup> August, 2018, and the parties want to extend and continue the said Agreement.

**NOW, THEREFORE**, the parties agree:

1. The said Agreement is extended on a year-to-year basis upon expiration of the original term on August 31, 2018 for a period not exceeding four (4) successive yearly extensions.
2. The storage fee for the extended period will be:

Extended Period Year	Period	Monthly Fee	Annual Fee
1	September 2018 - August 2019	\$ 107,251.80	\$ 1,287,021.64
2	September 2019 - August 2020	\$ 111,541.88	\$ 1,338,502.50
3	September 2020 - August 2021	\$ 116,003.55	\$ 1,392,042.60
4	September 2021 - August 2022	\$ 120,643.69	\$ 1,447,724.30

3. Except as stated herein all other terms and condition of the Storage Agreement and Amendments thereto shall remain in effect.

**TRISTAR TERMINALS GUAM, INC.**

**GUAM POWER AUTHORITY**

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

# 2010 Bond Refunding

11-22-2017

Consolidated Commission on Utilities





## Summary

2

- Net PV Saving of \$6.74 million, annual debt payment savings of around \$463,000 a year
- Present value savings of over 4.48%
- New Bond Par Amount \$149,270,000
- Par amount of refunded bond \$150,440,000
- Cost of issuance \$2.98 million
- Refunding to be done in December 2017





**GUAM POWER AUTHORITY**  
ATURIDÂT ILEKTRESEDÂT GUAHAN  
P.O.BOX 2977 • AGANA, GUAM U.S.A. 96932-2977

## **Issues for Decision**

### **Resolution No. 2017-44:**

#### **Relative to Authorizing the Approval of a Bond Issuance to Refinancing Portion of the 2010 Revenue Bond**

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

GPA has been pursuing strategies for reducing debt service payments. One strategy that has emerged as a result of historically low interest rates has been the concept of refunding portion of GPA's 2010 Series A revenue bonds for interest rate savings.

GPA expects that opportunities will arise from time to time to refund all or a portion of its other then outstanding revenue bonds for debt service savings, which is expected to result in potential savings to ratepayers. Low interest rate warrants action from the CCU.

After several months of reviewing this strategy with Barclays, GPA Bond Counsel, and GEDA, GPA believes this strategy provides significant benefit for GPA ratepayers. This transaction will need the approval of the Guam Legislature, GEDA, the PUC, and the Governor. The CCU desires to pursue this plan for refinancing of GPA's debt service costs in order to provide a net present value savings to ratepayers.

The present value of debt service on the refunding bonds shall be at least two percent (2%) less than the present value of debt service on the prior bonds, using the yield on the refunding bonds as the discount rate.

The projected NPV savings from refinancing 2010 Series A revenue bonds is \$6.74 million or 4.48% NPV savings.



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

**GUAM CONSOLIDATED COMMISSION ON UTILITIES**

**RESOLUTION NO. 2017-44**

**RELATIVE TO AUTHORIZING THE APPROVAL OF A BOND ISSUANCE TO  
REFINANCE PORTION OF THE 2010 REVENUE BOND.**

**WHEREAS**, the Consolidated Commission on Utilities is the governing body of the Guam Power Authority (“GPA”); and

**WHEREAS**, GPA has been pursuing strategies for reducing debt service payments; and

**WHEREAS**, one strategy that has emerged as a result of historically low interest rates has been the concept of refunding all of GPA’s outstanding 2010 Series A revenue bonds for interest rate savings; and

**WHEREAS**, the projected NPV savings from refinancing 2010 Series A revenue bonds is \$6.74 million or 4.48% NPV savings; and

**WHEREAS**, GPA expects that opportunities will arise from time to time to refund all or a portion of its other then outstanding revenue bonds for debt service savings, which is expected to result in potential savings to ratepayers; and

**WHEREAS**, low interest rate warrants action from the CCU; and

**WHEREAS**, after several months of reviewing this strategy with Barclays, GPA Bond Counsel, and GEDA, GPA believes this strategy has potential for providing significant benefit for GPA ratepayers; and

**WHEREAS**, this transaction will still need the approval of the Guam Legislature, GED, the PUC, and the Governor; and

32       **WHEREAS**, the CCU desires to pursue this plan for refund GPA's debt service costs in order  
33 to provide a net present value savings to ratepayers; and  
34

35       **WHEREAS**, the present value of debt service on the refunding bonds shall be at least two  
36 percent (2%) less than the present value of debt service on the prior bonds, using the yield on the  
37 refunding bonds as the discount rate; and  
38

39  
40       **NOW THEREFORE, BE IT RESOLVED BY THE CONSOLIDATED COMMISSION**  
41 **ON UTILITIES, AS THE GOVERNING BODY OF THE GUAM POWER AUTHORITY, AS**  
42 **FOLLOWS:**  
43

- 44       1.     The General Manager is authorized to proceed forward with the refund of outstanding  
45 revenue bonds.
- 46       2.     The General Manager is authorized to petition the Public Utilities Commission for  
47 authorization to complete the bond refunding initiative.
- 48       3.     The General Manager is authorized to submit the proposed bond refinancing legislation (see  
49 attached) to the Guam Legislature.
- 50       4.     The General Manager is authorized to seek approval to GEDA to proceed with the proposed  
51 bond refunding.  
52

53  
54       **RESOLVED**, that the Chairman of the Commission certifies and the Secretary of the  
55 Commission attests the adoption of this Resolution.  
56

57       **DULY AND REGULARLY ADOPTED AND APPROVED THIS 22<sup>ND</sup> DAY OF**  
58 **NOVERMBER, 2017.**  
59

60 Certified by:

Attested by:

61  
62  
63  
64 \_\_\_\_\_  
65 **JOSEPH T. DUENAS**  
66 **CHAIRMAN**

\_\_\_\_\_

**J. GEORGE BAMBA**  
**SECRETARY**

67  
68  
69 **I, J. George Bamba**, Secretary for the Consolidated Commission on Utilities (CCU),  
70 as evidenced by my signature above do hereby certifies as follows:  
71

72 The foregoing is a full, true, and correct copy of a resolution duly adopted at a regular  
73 meeting of the members of Guam Consolidated Commission on Utilities, duly and legally held at  
74 a place properly noticed and advertised at which meeting a quorum was present and the members  
75 who were present voted as follows:  
76

77  
78 Ayes: \_\_\_\_\_  
79

80 Nays: \_\_\_\_\_  
81

82 Abstentions: \_\_\_\_\_  
83

84 Absent: \_\_\_\_\_  
85  
86  
87  
88  
89

***I MINA' TRENTAI KUATTRO NA LIHESLATURAN GUÅHAN***  
**2017 (FIRST) Regular Session**

Bill No. 139 -34 (COR)

Introduced by:

Telena Cruz Nelson  
William M. Castro  
Fernando Barcinas Esteves *F.B.E.*

**AN ACT TO APPROVE THE TERMS AND CONDITIONS OF  
GUAM POWER AUTHORITY REVENUE BONDS TO  
REFUND OUTSTANDING GUAM POWER AUTHORITY  
REVENUE BONDS.**

1 **BE IT ENACTED BY THE PEOPLE OF GUAM:**

2 **Section 1. Legislative Findings and Intent.**

3 (a) *I Liheslaturan Guåhan* finds that § 8203 of Title 12 of the Guam Code  
4 Annotated provides that Guam Power Authority ("GPA") is authorized to incur  
5 indebtedness by the issuance of revenue bonds with the approval of *I Maga'lahi*  
6 (the Governor) to raise funds for the purpose of establishing the electric power  
7 system of GPA, or of acquiring lands for the system, or of acquiring, constructing,  
8 improving, equipping, maintaining, repairing, renewing, replacing, reconstructing  
9 or insuring the system, or any part thereof, or for the purpose of refunding any such  
10 bonds, or for any combination of such purposes.

11 (b) § 12105 of Title 12 of the Guam Code Annotated provides that the  
12 GPA shall not enter into any contractual agreements or obligations (including  
13 bonds) which could increase rates and charges prior to the written approval of the  
14 Guam Public Utilities Commission (the "GPUC").

15 (c) § 50103 of Title 12 of the Guam Code Annotated provides that public  
16 corporations of the government of Guam, including GPA, shall issue bonds and

2017 JUL -6 PM 3:08  
1cc

1 other obligations only by means of, and through the agency of the Guam Economic  
2 Development Authority ("GEDA"), and that GEDA shall not sell any bond without  
3 the approval by *I Liheslaturan Guahan* of the terms and conditions of the bonds.

4 (d) Based on historical low interest rates and current market conditions,  
5 GPA expects to be able to refund certain maturities of its outstanding 2010 Series  
6 A revenue bonds for debt service savings. In addition, GPA expects that  
7 opportunities will arise from time to time to refund all or a portion of its other then  
8 outstanding revenue bonds for debt service savings, which is expected to result in  
9 potential savings to ratepayers.

10 (e) In order to benefit ratepayers, *I Liheslaturan Guahan* has determined  
11 to approve the issuance of revenue bonds by GPA for the purpose described in the  
12 above immediately preceding paragraph, all subject to approval by the  
13 Consolidated Commission on Utilities ("CCU"), *I Maga'lahaen Guahan*, the  
14 GPUC, and the Board of Directors of GEDA in accordance with law.

15 **Section 2. Approval of the Terms and Conditions of GPA Refunding**  
16 **Bonds.**

17 *I Liheslaturan Guahan*, pursuant to §50103(k) of Title 12 of the Guam Code  
18 Annotated, hereby approves the terms and conditions of the issuance of senior  
19 revenue bonds in one or more series or issues by GPA for the purpose of refunding  
20 all or a portion of its currently outstanding 2010 Series A revenue bonds, in  
21 accordance with the following requirements, limitations, terms and conditions:

22 (a) The aggregate principal amount of the refunding bonds shall not  
23 exceed the sum of (i) the amount determined in accordance with Section 8229 of  
24 Title 12 of the Guam Code Annotated, plus (ii) any additional amount needed to  
25 provide for a deposit to the debt service reserve in connection with the issuance of  
26 the refunding bonds.

1 (b) All obligation of GPA to pay debt service on, and the redemption  
2 price of, the prior bonds shall be discharged concurrently with the issuance of the  
3 refunding bonds. Thereafter, the prior bonds shall be payable solely from and  
4 secured solely by an escrow established for such purpose in accordance with  
5 GPA's existing bond indenture.

6 (c) The final maturity of the refunding bonds shall not exceed the final  
7 maturity of the prior bonds. For clarity, the final maturity of the refunding bonds  
8 may exceed the maturity of an individual series of prior bonds so long as the final  
9 maturity of all such prior bonds is not exceeded.

10 (d) Such bonds shall be issued and sold pursuant to GPA's existing bond  
11 indenture and in compliance with the provisions of Chapter 8 of Title 12 of the  
12 Guam Code Annotated, including approval by the CCU and by *I Maga'laha*  
13 *Guahan* as provided therein.

14 (e) The sale of the bonds shall be approved by the Board of Directors of  
15 GEDA as provided by Chapter 50 of Title 12 of the Guam Code Annotated and the  
16 terms and conditions of the issuance of the bonds shall be approved by the GPUC  
17 as provided by Chapter 12 of Title 12 of the Guam Code Annotated.

18 (f) That the present value of debt service on the refunding bonds shall be  
19 at least two percent (2%) less than the present value of debt service on the prior  
20 bonds, using the yield on the refunding bonds as the discount rate.

21 (g) Promptly following the approval of the issuance of refunding bonds  
22 by GPA under this Section by the CCU, the CCU shall provide *I Liheslaturan*  
23 *Guahan* a copy of the resolution providing for such approval.

24 **Section 3. Severability.** If any provision of this Act or its application to  
25 any person or circumstances is found to be invalid or contrary to law, such  
26 invalidity *shall not* affect other provisions or applications of this Act that can be  
27 given effect without the invalid provisions or application, and to this end the



1. provisions of this Act are severable.



## GUAM POWER AUTHORITY

ATURIDÄT ILEKTRESEDÄT GUAHAN  
P.O.BOX 2977 • AGANA, GUAM U.S.A. 96932-2977

### Issues for Decision

#### GPA Resolution No. 2017-45 & GWA Resolution No. 08-FY2018

#### RELATIVE TO AUTHORIZING THE APPROVAL FOR THE UPGRADE AND COMBINED DATABASE OF GUAM POWER AUTHORITY AND GUAM WATERWORKS AUTHORITY CUSTOMER CARE AND BILLING (CC&B) SYSTEM

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

The Consolidated Commission on Utilities has undertaken a number of initiatives to identify opportunities within, in which the ratepayers of Guam will be better served if both utilities work together as a consolidated utility. GPA and GWA have planned and implemented the replacement of its previous Customer Information System (CIS) with Oracle's Customer Care & Billing (CC&B) system as of March 2015. GPA and GWA both realize that there are efficiencies and cost savings in having a consolidated effort in implementing and maintaining a single CIS.

In April of 2016 GPA and GWA procured the services of Prithibi LLC to provide training, GAP analysis review and ongoing support for the operation of CC&B and extended off site support of the system till June 2018.

In November of 2016, the GAP analysis document was presented to both GPA and GWA which listed deficiencies in the implementation of the CC&B system that impacts the short and long term operation of the CC&B System. In one of the noted deficiencies is that GPA and GWA are utilizing physically separate databases in Oracle CC&B and that there will be efficiencies in terms of cost and resources if one CC&B database is utilized for both utilities.

##### How much will it cost?

###### Change order increase amount:

- GPA – From: \$552,853 to \$1,312,853 (\$760,000)
- GWA – From: \$551,853 to \$1,391,853 (\$840,000)

Total: \$1,600,000

##### When will it be completed?

September 2018

##### What is its funding source?

Revenue Funded



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

**GUAM CONSOLIDATED COMMISSION ON UTILITIES**

**GPA RESOLUTION NO. 2017-45**

**GWA RESOLUTION NO. 08-FY2018**

**RELATIVE TO AUTHORIZING THE APPROVAL FOR THE UPGRADE AND COMBINED  
DATABASE OF GUAM POWER AUTHORITY AND GUAM WATERWORKS AUTHORITY  
CUSTOMER CARE AND BILLING (CC&B) SYSTEM**

**WHEREAS**, the Consolidated Commission on Utilities has undertaken a number of initiatives to identify opportunities within, in which the ratepayers of Guam will be better served if both utilities work together as a consolidated utility; and

**WHEREAS**, GPA and GWA have planned and implemented the replacement of its previous Customer Information System (CIS) with Oracle's Customer Care & Billing (CC&B) system as of March 2015; and

**WHEREAS**, the GPA and GWA both realize that there are efficiencies and cost savings in having a consolidated effort in implementing and maintaining a single CIS; and

**WHEREAS**, in April of 2016 GPA and GWA procured the services of Prithibi LLC to provide training, GAP analysis review and ongoing support for the operation of CC&B and extended off site support of the system till June 2018; and

**WHEREAS**, in November of 2016, the GAP analysis document was presented to both GPA and GWA which listed deficiencies in the implementation of the CC&B system that impacts the short and long term operation of the CC&B System; and

**WHEREAS**, one of the noted deficiencies is that GPA and GWA are utilizing physically separate databases in Oracle CC&B and that there will be efficiencies in terms of cost and resources if one CC&B database is utilized for both utilities and

**WHEREAS**, GPA and GWA has proposed a ten (10) month project with Prithibi LLC, to perform an upgrade to the current CC&B program and to also allow the GPA and GWA databases to co-exist in one instance; and

**WHEREAS**, GPA and GWA now request authorization for additional expenditures to address the professional services for the CC&B upgrade and combining of the two databases that amounts to \$1,600,000, with the portion of GPA (\$760,000) and GWA (\$840,000), respectively.

**NOW, THEREFORE BE IT RESOLVED**, the following policy is adopted by the Consolidated Commission on Utilities;

1. The General Manager of the Guam Power Authority (GPA) and the General Manager of the Guam Waterworks Authority (GWA) is authorized to approve the Change Order Agreement with Prithibi LLC, to increase the authorized amount from \$552,853 to \$1,312,853 for GPA and \$551,853 to \$1,391,853 for GWA, respectively; and

2. The General Manager of GPA and GWA is hereby authorized the additional expenditure (cost share) for each agency as follows:

GPA Share: \$760,000

GWA Share: \$840,000

3. The General Manager of GWA is authorized to petition the Public Utilities Commission for review and approval of the additional expenditures to address the professional services for the CC&B upgrade and database merge.

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

**DULY AND REGULARLY ADOPTED AND APPROVED THIS 22<sup>ND</sup> DAY OF NOVEMBER 2017.**

Certified by:

Attested by:

\_\_\_\_\_  
**JOSEPH T. DUENAS**  
Chairperson  
Consolidated Commission on Utilities

\_\_\_\_\_  
**J. GEORGE BAMBA**  
Secretary  
Consolidated Commission on Utilities

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

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

Ayes: \_\_\_\_\_

Nays: \_\_\_\_\_

Absent: \_\_\_\_\_

Abstain: \_\_\_\_\_



## GUAM POWER AUTHORITY

ATURIDÁT ILEKTRESEDÁT GUAHAN  
P.O.BOX 2977 • AGANA, GUAM U.S.A. 96932-2977

**TO: Consolidated Commission on Utilities**

**FROM: General Manager**

**DATE: November 21, 2017**

**SUBJECT: General Manager's Report**

### **1. Generation System Update:**

- The following table projects the expected reserve level for December 2021. The minimum reserve requirement has to be greater (typically about 20MW more) than the total capacity of the two largest unit. **The table indicates that if we don't build the new power plant, we will lack capacity by about 2021.** The situation is critical because it will take several years to construct base load units and therefore GPA may be face with constructing more emergency units which are less efficient. GPA has adequate standby and emergency power and what it needs are base load units if it is to reduce its operating fuel related cost.
- TEMES 7 will be turned over to GPA on December 4<sup>th</sup>, 2017. The turnover is part of the Build, Operate and Transfer (BOT) Contract signed 20 years ago. GPA has begun shadowing the Independent Power Producer (IPP) TEMES operation since June 2017 in preparation of the transfer.  
GPA has contracted a Professional Service Team for about \$220K to assist in the management, operation and maintenance of the plant utilizing GPA employees. **The annual cost reduction of the takeover is about \$5 Million.**

- We have determined we will need to conduct chemical cleaning of Cabras 1 & 2 boilers in order to reduce frequency of boiler tube outages. The work is being schedule for the period between March and April 2018.

**Summary of System Generating Capacity Thru 2021:**

				<b>With New 180MW</b>
<b>Description</b>	<b>FY 2015</b>	<b>FY2017</b>	<b>FY2021</b>	<b>FY2021</b>
Baseload MW Capacity	299	208	208	268
Emergency/Standby Capacity	120	200	200	200
<b>Total MW Capacity</b>	<b>419</b>	<b>408</b>	<b>408</b>	<b>468</b>
Peak MW Demand	249	263	283	283
Reserve Margin	170	145	125	185
Total Two Largest Units	132	120	120	88
<b>Reserve Less Two Largest Units</b>	<b>38</b>	<b>25</b>	<b>5</b>	<b>97</b>
<b>% Baseload Capacity</b>	<b>71.4%</b>	<b>51.0%</b>	<b>51.0%</b>	<b>57.3%</b>
% Energy from Baseload	98.0%	80.0%	62.2%	72.6%
% Energy from Renewables	0.0%	3.5%	26.4%	26.4%
<b>% Energy from Emergency/Peaker</b>	<b>2.0%</b>	<b>16.5%</b>	<b>11.4%</b>	<b>1.0%</b>

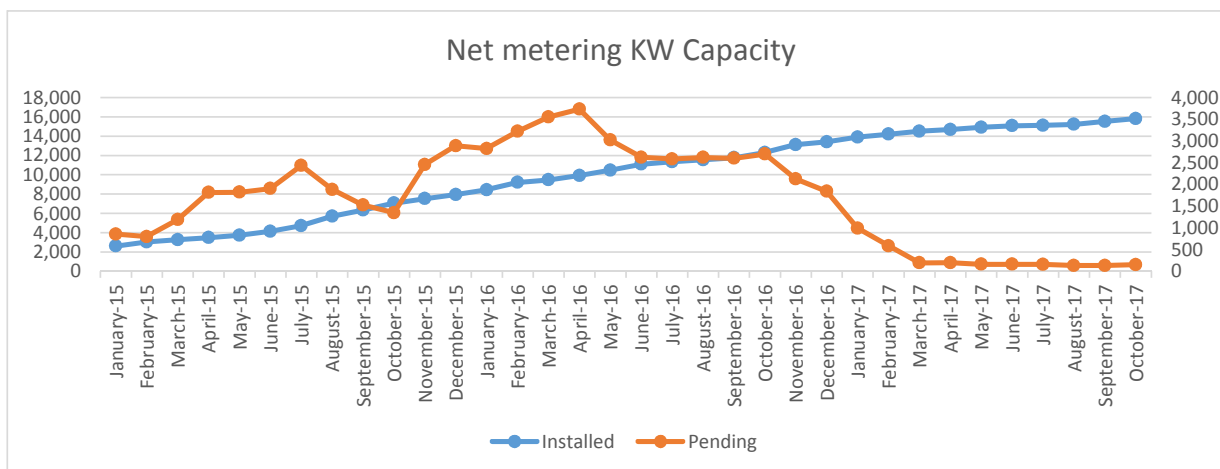
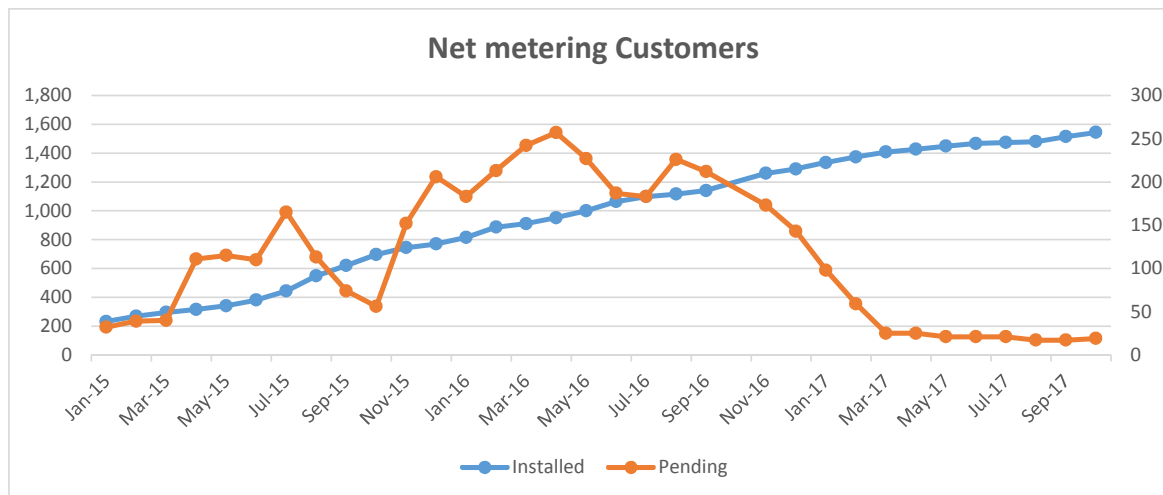
16.5%	11.4%	72.6%
-------	-------	-------

**2. Net metering Summary Ending October 2017:**

<b>Description:</b>	<b>Count</b>	<b>Kw</b>
<b>Active</b>	<b>1,544</b>	<b>15,817</b>
Pending	19	151
Totals:	1,563	15,968

<b>Service:</b>	<b>Count</b>	<b>KW</b>	<b>Kw/Customer</b>
Residential	1,436	13,145	9.2
Others	108	2,672	24.7
Total:	1,544	15,817	10.2
<b>% Residential</b>	<b>93.0%</b>	<b>83.1%</b>	
<b>Estimated 12 Months Revenue Impact:</b>	<b>\$2,932,188</b>		





**3. Renewable Energy Production Summary Thru October 2017:**

<b>Energy Production Source:</b>	<b>Kwh</b>	<b>Oil Barrels Avoided</b>	<b>Fuel Cost Avoided</b>
NRG Total Production beginning Oct 2015	100,180,996	167,504	\$9,212,739
Net Metering Estimated Production beginning Jan 2015	45,829,531	76,628	\$4,214,527
Wind Power Production beginning Jan 2016	725,416	1,213	\$66,710
<b>Renewables Total:</b>	<b>146,735,943</b>	<b>245,345</b>	<b>\$13,493,975</b>
System Heat Rate Kwh/Gal	14.2		
System Fuel \$/Bbl	\$55.00		

**4. Demand Side Management (DSM) Program Expenses Thru October 31, 2017:**

Description	FY16	FY17	FY18 As of Oct 31	Total to Date
Regular/OT Pay	\$11,348.80	\$22,256.00	\$1,391.35	\$34,996.15
Other Contractual	\$28,278.50	\$73,010.05		\$101,288.55
Paid Rebates– Split AC	\$154,700.00	\$557,275.00	\$184,650.00	\$896,625.00
Paid Rebates– Central AC	\$3,400.00	\$8,200.00	\$800.00	\$12,400.00
Paid Rebates– Washer/Dryer	\$2,800.00	\$7,425.00	\$200.00	\$10,425.00
<b>Total Expenses</b>	<b>200,527.30</b>	<b>\$668,166.05</b>	<b>\$188,432.70</b>	<b>\$1,055,734.70</b>

5. **Phase II Renewables:** The OPA hearings on this protest was conducted between October 24 and 26, 2017. The OPA plans to render a decision about 30 days thereafter and we may get the decision within this month.
6. **Phase III Renewables Bid:** The bid has been issued. The bid request is for about 40MW of solar PV renewables to be constructed on Navy leased land. The energy produced would be stored in batteries during the day and released at nighttime to meet peak time load.
7. **Public Power Week:** GPA had a successful public power week. Special thanks to Art Perez and the committee which made it all possible with special events, visits to schools and health care centers and a donation to the American Red Cross. The Communications Division will be working on next year's special events to mark GPA's 50th anniversary as an autonomous agency and now public corporation owned by the ratepayers of Guam. We will present the program to CCU in January 2018.
8. **APPA Award:** Guam Power Authority received an "Award of Merit" from the American Public Power Association in the Web/Social Media category. Thirty-three public power electric utilities earned Excellence in Public Power Communications awards from the American Public Power Association (consist of over 2,000 members). The annual awards recognize excellence in communications. This year's entries were judged in three categories: print/digital, web/social media, and video. Awards were given to utilities that showed ingenuity and creativity in telling their stories through outstanding copy, design, financial data presentation, graphics, social media engagement, video editing, and web layout and interactivity.
9. **PUC Agenda for November 30, 2017:**
  - GPA Docket 18-02, Petition to Approve the Procurement for 180MW Power Plant
  - GPA Docket 17-20, Petition to Refund/Refinance GPA's outstanding 2010 Series A Revenue Bonds

**10. Presentations on New Power Plant:** I have made presentations to the following stakeholders over the past few weeks:

- American Society of Military Engineers – October 19th
- Guam Contractor's Association – November 15<sup>th</sup>
- GHRA Membership - November 16<sup>th</sup>

**11. Integrated Resource Plan-New 180MW Power Plant Chronology:** Attached is the chronology of events on effort towards the construction of the new 180 MW plant. We continue to reach out to stakeholders explaining the need for the new plant and asking for their support on the effort. Our latest outreach included presentations to the general membership of the American Society of Military Engineers, Guam Contractor's Association and last week to the Guam Hotel and Restaurant Association. We are currently scheduling village meetings for Dededo, Tamuning and one in the southern villages. Attached is a summary of questions asked during these outreaches and responses provided.

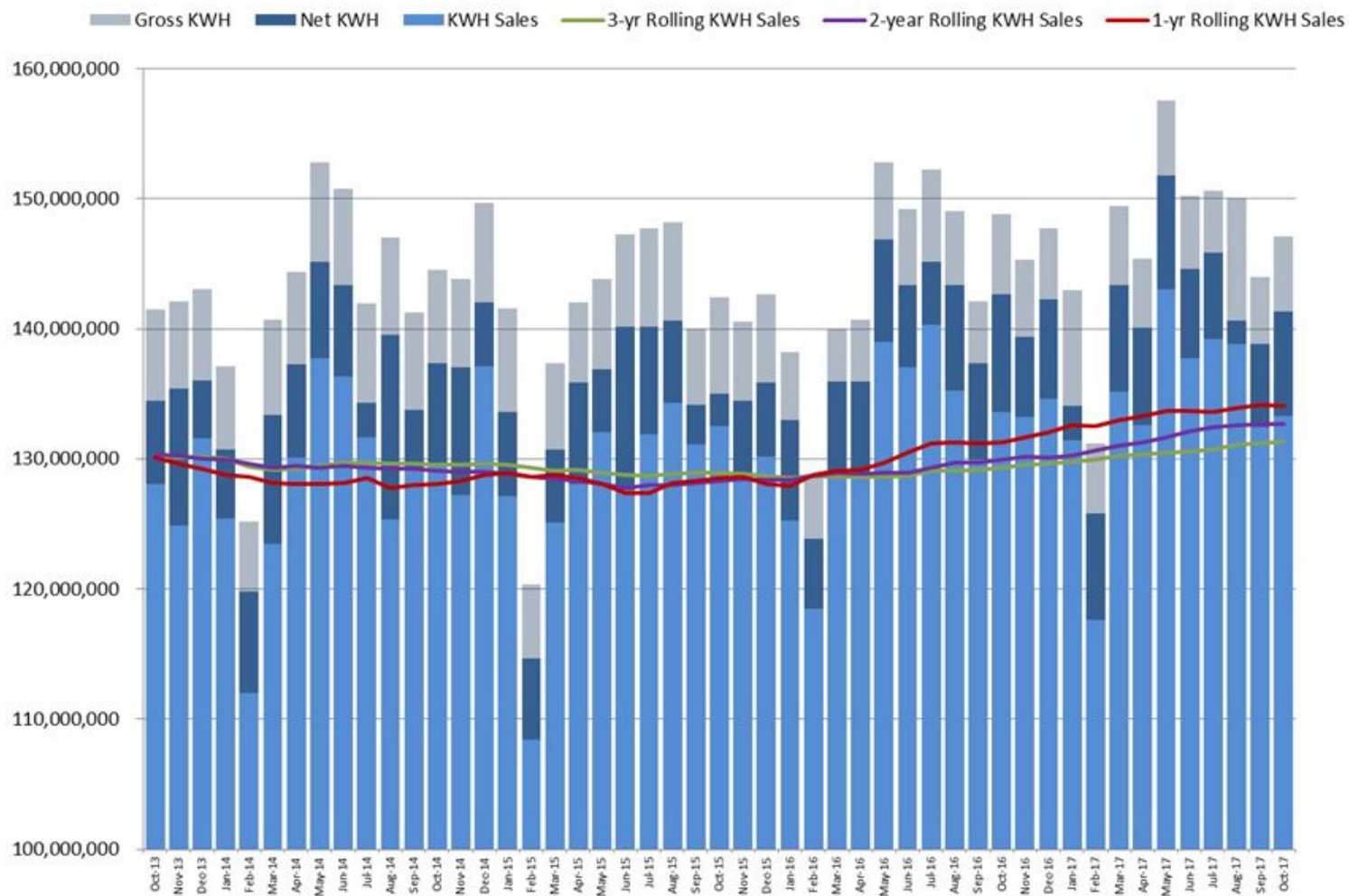
**12. Key Performance Indicators:** The following pages provide updated information thru October 2017.

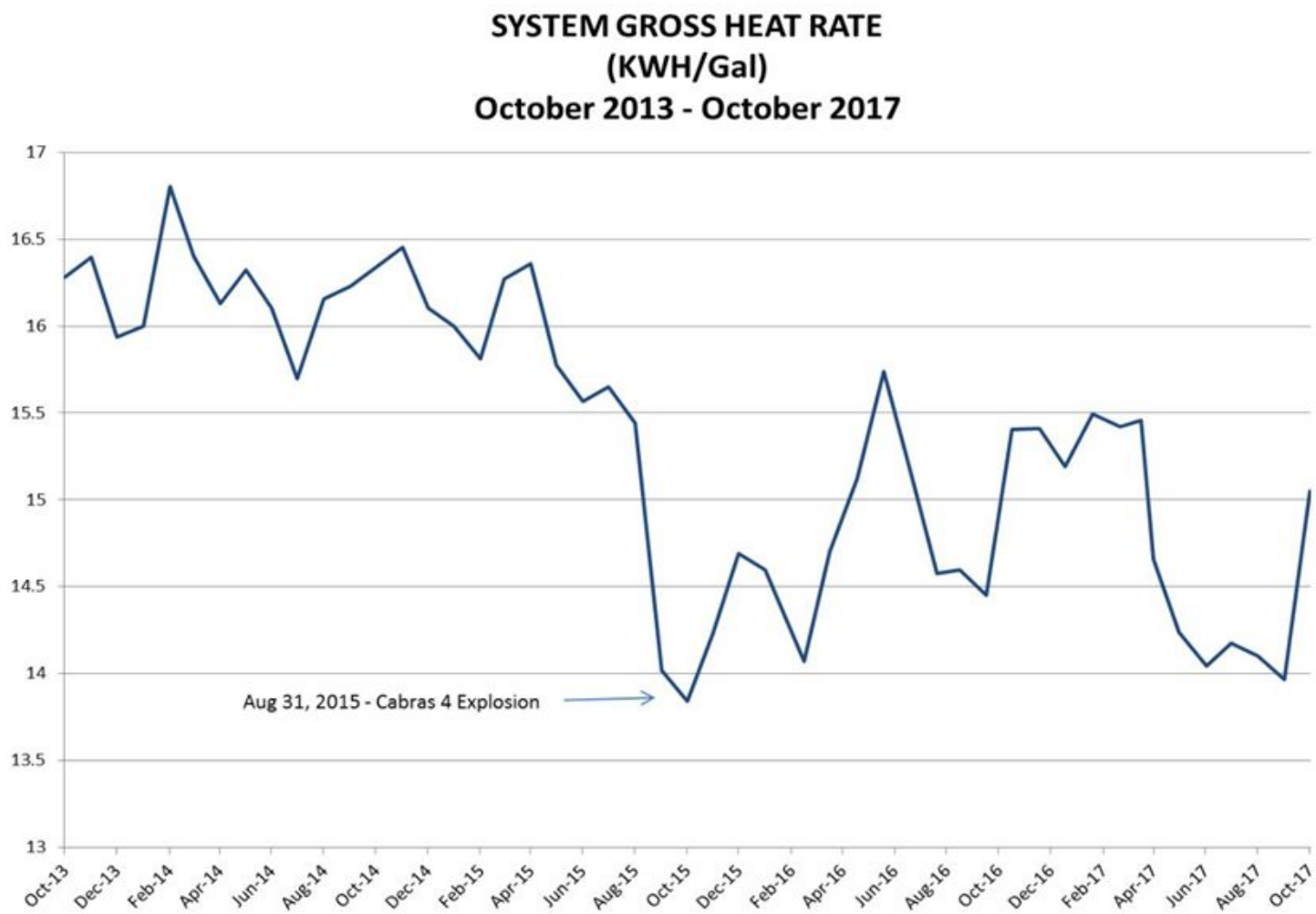
John M. Benavente, P.E.

## Historical Monthly Peak Demand Oct 2011 - October 2017



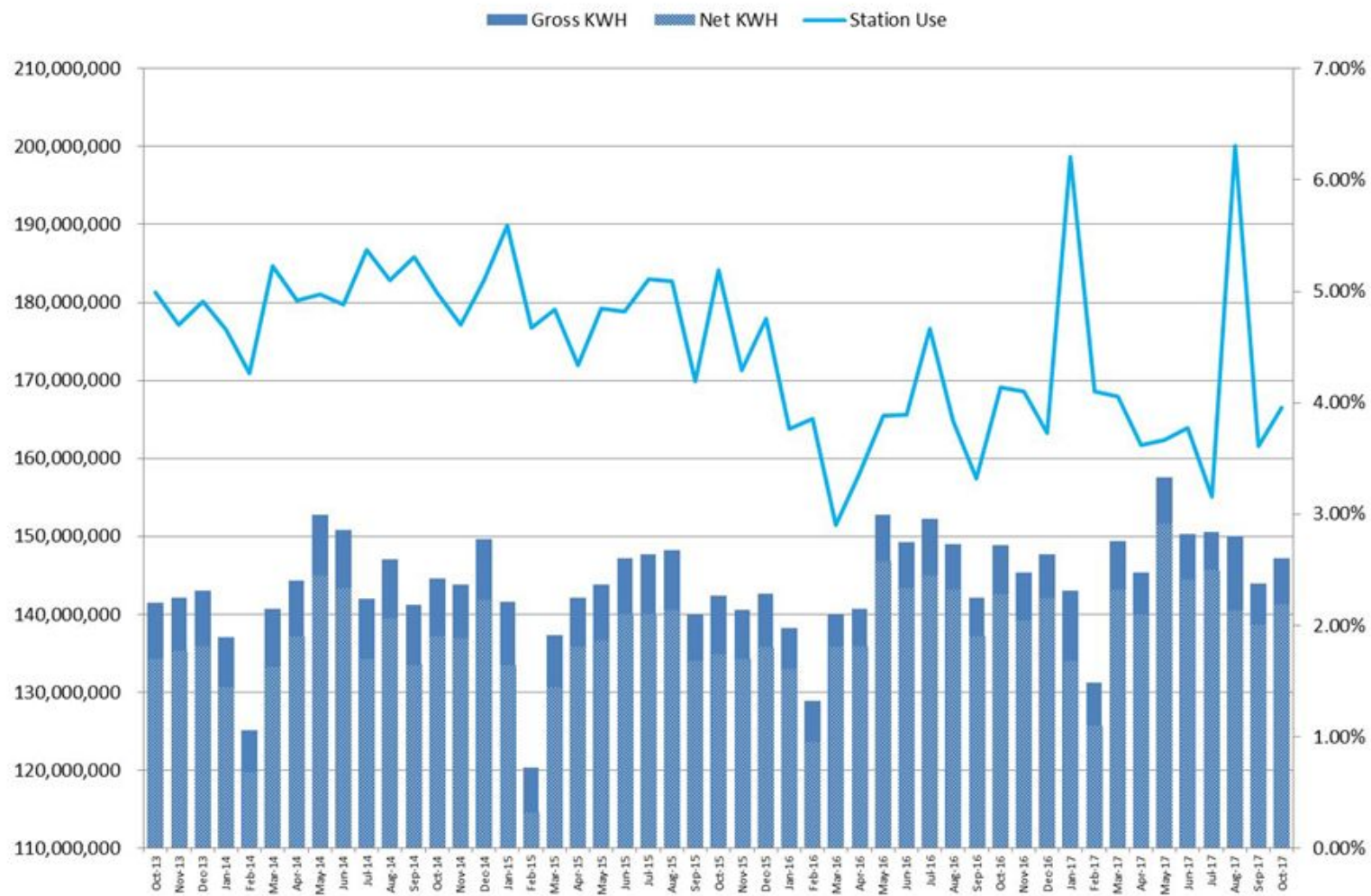
## Historical KWH Sales October 2013 - October 2017



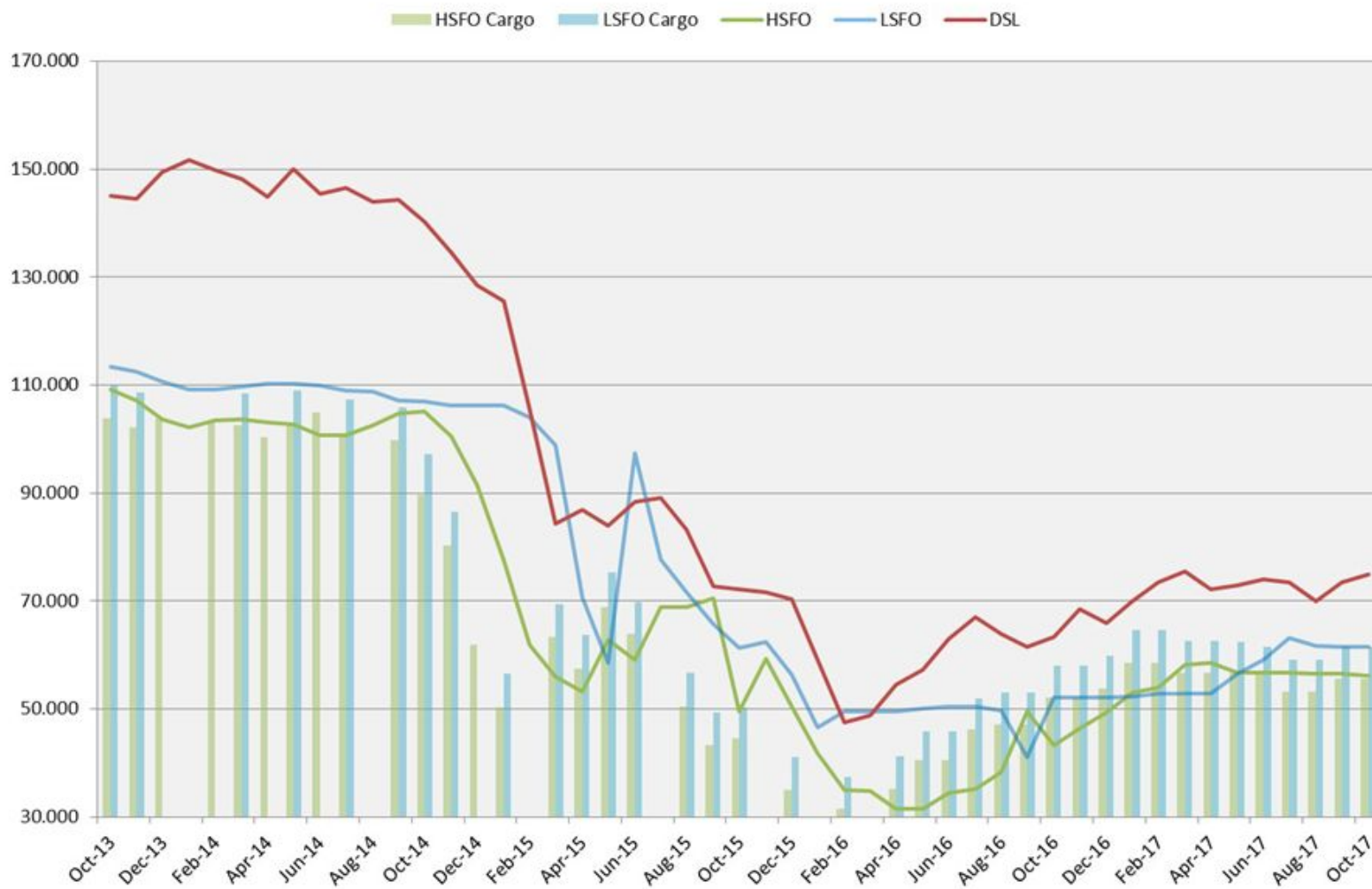




## Gross and Net Generation (KWH) October 2013 - October 2017



## Fuel Cargo and Fuel Consumption Costs (\$/bbl) October 2013 - October 2017



### Timeline of Events for GPA's Integrated Resource Plan (IRP) & 180 MW New Generation Power Plant

	DATE	TOPIC	DESCRIPTION
1.0	DECEMBER 2008	The Guam Public Utility Commission (PUC) approved GPA's 2008 Integrated Resource Plan (IRP). The plan is an open dialogue between GPA and its stakeholders to determine the best strategies for the type, amount and timing of new resource acquisitions to meet future electrical loads.	<ul style="list-style-type: none"> <li>▪ The IRP approval had conditions for GPA to investigate the economics of the liquefied natural gas fuel diversification strategy, investment plan for sea water air conditioning project, and to comply with protocols identified in the MOU for IRP implementation.</li> <li>▪ Prior to approval by PUC, various stakeholders meetings/presentations were held to inform the public about GPA's IRP process and renewable energy initiatives: <ul style="list-style-type: none"> <li>○ Stakeholder Meeting 1 – October 18, 2007</li> <li>○ Stakeholder Meeting 2 – November 29, 2007</li> <li>○ Stakeholder Meeting 3 – February 1, 2008</li> <li>○ Stakeholder Meeting 4 – April 4, 2008</li> </ul> </li> </ul>
2.0	APRIL 2012	IRP update – GPA initiated the 2012 IRP update with a set of stakeholder meetings in April 25, 2012 GPA presented several topics to summarize the drivers impacting energy resource requirements and costs.	<ul style="list-style-type: none"> <li>▪ The topics presented at the stakeholder meetings include: <ul style="list-style-type: none"> <li>○ Demand Forecasting</li> <li>○ Demand Side Management &amp; Smart Grid</li> <li>○ Environmental Compliance Issues</li> <li>○ Existing Supply Side Resource</li> <li>○ Supply Side Options and Renewable Energy Progress</li> <li>○ Fuel</li> </ul> </li> </ul>

	DATE	TOPIC	DESCRIPTION
3.0	JULY 2013	GPA filed the 2013 IRP to the PUC and PUC approved it conditionally requiring GPA to submit a detailed information in the form of a Resource Implementation Plan (RIP)	<ul style="list-style-type: none"> <li>▪ The Resource Implementation Plan (RIP) was to address the following issues: <ul style="list-style-type: none"> <li>○ System Reliability &amp; Plant Life Extension</li> <li>○ Compliance with USEPA Emissions Regulations</li> <li>○ Renewable Energy Integration</li> <li>○ Detailed Implementation Schedule</li> <li>○ Projected project expenditures consistent with project schedule</li> <li>○ Identification of key decision-making milestones, criteria, etc.</li> </ul> </li> </ul>
4.0	NOVEMBER 2013	CCU Resolution (Resolution 2013-50) was approved and adopted on Nov 12 <sup>th</sup> ; additional studies were conducted to further refine the IRP recommendations.	<ul style="list-style-type: none"> <li>▪ The resolution authorized GPA to proceed with implementing the following: <ul style="list-style-type: none"> <li>○ Retirement of Tanguisson 1 &amp; 2 Power Plant by 2016</li> <li>○ New Generation Units by 2019</li> <li>○ New Fuel Supply by 2021</li> </ul> </li> <li>▪ On Nov 27<sup>th</sup> GPA filed with the PUC the IRP Implementation Strategy Decision which outlined key decisions and milestones critical to developing the Resource Implementation Plan (RIP).</li> </ul>
5.0	APRIL 2014	GPA Integrated Resource Plan (IRP) Forum was held on April 14, 2014	<ul style="list-style-type: none"> <li>▪ Topics discussed during the IRP forum include: <ul style="list-style-type: none"> <li>○ Renewables</li> <li>○ Energy Storage</li> <li>○ Fuel and New Power Generation</li> <li>○ Financing for LNG</li> <li>○ Potential Contracts &amp; Legal Structures</li> </ul> </li> </ul>
6.0	OCT 2014	CCU Resolution (Res No. 2014-48) authorized GPA to proceed with the Implementation of the IRP and petition the PUC for the approval of procurement of New Generation combined cycle units.	<ul style="list-style-type: none"> <li>▪ The authorization allows GPA to develop an acquisition strategy for new generation which includes approximately 120 MW of dual fired combined cycle generation and option for an additional 60 MW of dual fired combined cycle generation.</li> <li>▪ It also authorizes management to pursue and integrate utility scale renewable energy plants into GPA's generation profile and to evaluate and implement Demand Side Management programs.</li> </ul>

	DATE	TOPIC	DESCRIPTION
7.0	JAN 2015	PUC deferred GPA's petition for the approval of procurement of new generation combined cycle units and to proceed with Implementation of the Resource Implementation Plan (RIP)	<ul style="list-style-type: none"> <li>▪ PUC concluded that GPA did not present sufficient evidence to justify the need for a new combined cycle generation unit.</li> <li>▪ Further consideration on the petition was deferred pending specific and complete information from GPA as previously requested by PUC related to the IRP and a July 2013 order.</li> <li>▪ PUC has found the information provided by GPA (filed in Nov 2013) in response to the July 2013 order to be generally lacking in at best consistency with its presentations to the CCU and at worst completeness of necessary analysis.</li> <li>▪ Further discussions and collaboration is needed between the PUC Administrative Law Judge (ALJ), Lummus Consultants and GPA to develop updated analysis related to the need for new combined cycle or other types of capacity.</li> <li>▪ GPA was ordered to submit a revised Resource Implementation Plan (RIP) to the PUC that includes all provisions previously ordered in the July 2013 PUC order.</li> </ul>
8.0	MARCH 2015	CCU Resolution (Res No. 2015-21) authorized GPA to petition the PUC for approval of consulting services for implementing USEPA Compliance.	<ul style="list-style-type: none"> <li>▪ The authorization allows GPA to implement its proposed compliance plan which includes procurement, contracting, construction and commissioning support for 180 MW combined cycle power plant.</li> </ul>
9.0	MAY 2015	PUC deferred GPA's petition for consulting services implementing USEPA Compliance.	<ul style="list-style-type: none"> <li>▪ PUC decided to defer its approval of GPA's petition for consulting services for its proposed compliance plan which includes procurement, contracting, construction and commissioning support for 180 MW combined cycle power plant.</li> </ul>
10	AUGUST 2015	On August 31 <sup>st</sup> , GPA experienced a major failure of the Cabras 3 & 4 Power Plants when an explosion and fire occurred.	<ul style="list-style-type: none"> <li>▪ The explosion resulted in the loss of 78MW of base load capacity. The loss of two Cabras power plants only exacerbated our power situation and lack of generation. GPA's strategy moved from a planning to a procurement approach; GPA must work aggressively to procure the 180 MW combined cycle power plant.</li> </ul>

	DATE	TOPIC	DESCRIPTION
11	OCTOBER 2015	PUC considered the impact of the loss of Cabras 3 & 4 Power Plants and the need for additional generation reserve.	<ul style="list-style-type: none"> <li>▪ To further Support GPA's request for 180MW of new generation capacity, the PUC set conditions and required GPA to provide additional information as follows:               <ul style="list-style-type: none"> <li>○ Provide third party condition assessment of the Cabras 1 &amp; 2 Power Plant</li> <li>○ Provide customer rate impact of new capacity</li> <li>○ Initiate the Demand Side Management (DSM) Program</li> <li>○ Evaluate additional renewables into the GPA generation plan</li> </ul> </li> </ul>
12	DECEMBER 2015	PUC ordered GPA under Docket 15-05 to update the IRP in consideration of the Cabras 3 & 4 power plant explosion of August 31, 2015.	<ul style="list-style-type: none"> <li>▪ The PUC order requires the IRP to include or address the following by <i>Feb 26, 2016</i> :               <ul style="list-style-type: none"> <li>○ How much new generation (MW) should be procured?</li> <li>○ What size units should be procured?</li> <li>○ Should technology be specifically for Combined Cycle (CC) or be broader and let proponent specify?</li> <li>○ What should the fuel source for new units be?</li> </ul> </li> </ul>
13	MAY 2016	On May 24, 2016 GPA filed an update by the CCU on the Integrated Resource Plan (IRP)	<ul style="list-style-type: none"> <li>▪ GPA's current plan is to retire the Cabras 1 &amp; 2 Steam Power Plants no later than July 1, 2021. Upon the completion of the construction of 180 MW of dual fired new generation, GPA plans to retire the Cabras 1 &amp; 2 power plant.</li> <li>▪ Although the IRP looks out 30 years, GPA's request for approval concentrates on actions over the next 5 years.</li> <li>▪ CCU Resolution (Resolution No. 2016-36) authorized to petition the PUC for approval of the plan to acquire up to 180 MW of dual fired combined cycle units and retire Cabras 1, 2, 3 &amp; 4 units by July 1, 2021.</li> <li>▪ GPA provided PUC with "estimates" as to rate impact from its proposed procurement. It has developed both "High and Low Capital of Cost Estimates" for insurance settlements of proceeds for Cabras 3 &amp; 4 claim.</li> </ul>

	DATE	TOPIC	DESCRIPTION
14	JULY 2016	GPA completed its response to the October 2015 PUC order	<ul style="list-style-type: none"> <li>▪ GPA completed its response which included a Life Assessment study of the Cabras 1 &amp; 2</li> <li>▪ Expanded the Demand Side Management (DSM) program</li> <li>▪ Completed a Time of Use Study</li> <li>▪ Provided a Customer Rate Impact summary</li> <li>▪ Updated the IRP results to include the following:               <ul style="list-style-type: none"> <li>○ Updated fuel and load forecasts</li> <li>○ Life Assessment report of the MEC Power Plant</li> <li>○ Update to renewable integration with regards to Phase II</li> <li>○ Update on the lease of Navy properties for solar photovoltaic (PV) development</li> <li>○ Evaluation of energy storage for increased PV penetration</li> </ul> </li> </ul>
15	OCTOBER 2016	PUC Administrative Law Judge (ALJ) conducted public hearings on GPA's new generation request to solicit public comment and testimony. GPA provided a presentation on its 2016 Integrated Resource Plan (IRP) which includes the acquisition of new generation resources up to 180 MW in capacity.	<p style="text-align: center;"><b><u>OCTOBER 4-6, 2016:</u></b></p> <ul style="list-style-type: none"> <li>▪ PUC Stakeholder Meetings &amp; Presentation to the Public</li> <li>▪ Dates and Location are as follows:               <ul style="list-style-type: none"> <li>○ October 4, 2016 – Hagatna (PUC, GCIC Bldg)</li> <li>○ October 5, 2016 – Dededo Senior Citizen's Center</li> <li>○ October 6, 2016 – Agat Community Center</li> </ul> </li> <li>➤ <u>October 4<sup>th</sup> - PUC ALJ Questions:</u> <ol style="list-style-type: none"> <li>1. Approximate cost of 180MW of new generation</li> <li>2. How will cost be paid for of 180MW?</li> <li>3. Additional costs of fuel line, land purchase etc.?</li> <li>4. How Cabras insurance proceeds will be applied to costs?</li> <li>5. Potential rate impact?</li> <li>6. Recapitalization/Refunding of existing bonds</li> <li>7. Issuance of new bonds</li> </ol> </li> </ul>

	DATE	TOPIC	DESCRIPTION
15	OCTOBER 2016	<p>All of the testimony supported the procurement by GPA of at least some new combined cycle generation capacity.</p> <p><i>PUC approves GPA's Petition (under PUC Docket 15-05) for approval of Procurement for a New Combined Cycle Plant up to 180 MW and to Proceed with Implementation of the IRP.</i></p>	<ul style="list-style-type: none"> <li>➤ <u>October 5<sup>th</sup></u> - No questions only presentation to the Mayor and one member of the public</li> <li>➤ <u>October 6<sup>th</sup></u> – Questions/Comments from two members of the public (Mr. Babauta &amp; Mr. Ivan Matak) <ul style="list-style-type: none"> <li>• <b><u>Mr. Babauta's Questions/Comments:</u></b> <ul style="list-style-type: none"> <li>✓ How does this affect Southern Guam?</li> <li>✓ What is the status of the Cabras ins. settlement?</li> <li>✓ How will this be done? Will it be privatized?</li> <li>✓ What's the rate impact projection? GPA buying power from private power co.</li> <li>✓ Mr. Babauta fully supports the construction of new power plant. He recommends GPA to fully privatize the power plant, because of history of unstable power he's experienced over the years. Lack of stable power is a big issue.</li> <li>✓ Economic growth, enhanced competition for the economy to better compete with other tourist destination.</li> <li>✓ Impact on small business and quality of life</li> <li>✓ Need better leadership and training for employees</li> </ul> </li> <li>• <b><u>Mr. Ivan Matak</u></b> <ul style="list-style-type: none"> <li>✓ Against privatizing GPA, what will prevent an increase in power rates for the island if power plant is privatized? How do we stop them from increasing the rates? We cannot support high cost of power.</li> </ul> </li> </ul> </li> <li>▪ During its October 27<sup>th</sup> meeting, <i>PUC authorized GPA to procure a combined cycle plant of up to 180 MW.</i></li> <li>▪ The 180 MW combined cycle generation capacity shall be based upon the Independent Power Producer (IPP) model as a Build Operate Transfer (BOT)</li> <li>▪ GPA is authorized to procure an Engineering, Procurement and Construction Management contractor for a new combined cycle plant.</li> </ul>



	DATE	TOPIC	DESCRIPTION
16	NOVEMBER 2016	<p>An Informational Briefing was held on November 1, 2016 for USEPA</p> <p>GPA issues an RFP for Engineering, Procurement and Construction Management (EPCM) Contract</p> <p>CCU authorizes GPA to acquire land for new power plant</p>	<ul style="list-style-type: none"> <li>The information presented to USEPA included: <ul style="list-style-type: none"> <li>Generation capacity before August 31, 2016 explosion</li> <li>Situation after the Cabras 3 &amp; 4 explosion</li> <li>Capacity recovery plan outlined</li> <li>Current status of recovery efforts</li> <li>Interim plan for next 4 years</li> <li>Integrated Resource Plan (IRP) thru 2021 and beyond</li> </ul> </li> <li>On November 10<sup>th</sup> GPA issued RFP-17-001 for Engineering, Procurement and Construction Management (EPCM) Contract for the procurement development of an IPP contract for new generation capacity and to represent GPA as owner's engineer support in the construction of the new power plant.</li> <li>On November 22<sup>nd</sup> CCU passes Resolution 2016-66 which authorizes GPA to acquire land for new power plant.</li> </ul>
17	DECEMBER 2016	Several proposals received from the RFP and EPCM Contractor selected	<ul style="list-style-type: none"> <li>On Dec 19<sup>th</sup> Stanley Consultants, Inc. was determined to be the most qualified firm to be the EPCM to support the construction of a new 180 MW power plant.</li> </ul>
18	JANUARY 2017	<i>CCU Resolution (Res No. 2017-01) authorized GPA to Proceed with a Contract with Stanley Consultants, Inc.</i>	<ul style="list-style-type: none"> <li>CCU authorized the General Manager to contract with Stanley Consultants, Inc. up to \$750,000 for the procurement development of the new generation IPP contract.</li> </ul>
19	FEBRUARY 2017	GPA issues Land Acquisition Bid	<ul style="list-style-type: none"> <li>On February 2 GPA issued GPA-042-17 for land acquisition for the new power plant. Due to non-responsive bids, this bid was cancelled in April.</li> </ul>
20	MAY 2017	GPA meets with Guam Ancestral Lands Commission on acquiring land for new power plant	<ul style="list-style-type: none"> <li>On May 24, with CCU approval, GPA presents to GALC a proposal to acquire property adjacent to the proposed GWA Secondary Water Treatment Facility site.</li> </ul>

	DATE	TOPIC	DESCRIPTION
21	JUNE 2017	GPA issues Solicitation of Interest to acquire land for new power plant	On June 13 <sup>th</sup> GPA issued notice for a Solicitation of Interest to property owners in the Harmon area regarding GPA's interest in acquiring property. This closed on July 3 <sup>rd</sup> .
22	JULY – DEC 2017	Community Outreach for the New 180 MW Power Plant	<ul style="list-style-type: none"> <li>▪ Presentations to various community organizations and government entities on GPA's 180 MW Power Plant project continues, they include:               <ul style="list-style-type: none"> <li>○ Guam Visitor's Bureau</li> <li>○ Dededo Municipal Planning Council (MPC) &amp; Office of the Mayor</li> <li>○ Rotary Club of Tumon Bay</li> <li>○ Guam Chamber of Commerce</li> <li>○ Water and Environmental Research Institute of the Western Pacific (WERI)</li> <li>○ Society of American Military Engineering</li> <li>○ Guam Hotel &amp; Restaurant Assn (GHRA)</li> <li>○ Tamuning MPC</li> <li>○ Guam Land Use Commission (GLUC)</li> </ul> </li> </ul>
23	SEPTEMBER 2017	CCU Resolution (Res No. 2017-39) authorized GPA to petition the PUC for the approval of the Bid Process for 180 MW Power Plant	<ul style="list-style-type: none"> <li>▪ The authorization allows GPA to petition the PUC for the approval of the multi-step bid process and to initiate the IPP Request for Qualifications (RFQ) to establish a bidders list.</li> </ul>
24	OCTOBER 2017	CCU Resolution (Res No. 2017-42) authorized GPA to Acquire Real Property for 180MW Power Plant	<ul style="list-style-type: none"> <li>▪ The authorization allows GPA to execute the real property purchase agreement up to 60 acres of unimproved real property to construct and operate 180MW power generation plant.</li> <li>▪ The CCU authorizes GPA to commence rezoning efforts.</li> <li>▪ The authorization also allows GPA to petition the PUC for approval of the real property purchase.</li> </ul>

	DATE	TOPIC	DESCRIPTION
25	NOV-DEC 2017	<b>Rezoning Process</b>  <b>Outreach to surrounding landowners &amp; Updates to Village and Stakeholders</b>	<ul style="list-style-type: none"> <li>▪ With authorization by the CCU, GPA will begin the rezoning process</li> <li>▪ GPA will continue its outreach efforts to surrounding landowners and continue updates to village &amp; community stakeholders.</li> </ul>

# Q&A from Informational Briefings

## Summary

### GUAM VISITOR'S BUREAU

(Vice Chairman Monte Mesa & Vice President Tony Muna, Jr.) 7/27/17

**EXISTING PLANTS.** Asked if the Cabras and Tanguisson areas be redeveloped for something other than power generation. MM suggested yacht/small harbor, recreational area, etc. for Cabras area, and luxury boutique hotel for Tanguisson.

**FUEL.** Concerned about the safety of natural gas handling and storage. Discussed options, including FSRU and pipeline. LNG storage tanks at Ukudu not anticipated.

**AESTHETIC.** Commented that plant design should be aesthetic with surrounding community. Discussed examples of modern plant design, smoke stack, transmission lines, etc.

**COST.** How will this project affect power rates? Asked whether insurance proceeds from Cabras 3 & 4 will offset construction costs. Asked about the cost of additional water treatment.

### GOVERNOR CALVO, SENIOR STAFF & ECONOMIC DEVELOPMENT SUBCABINET DIRECTORS

8/3/17

**LEGAL CONCERNS:** Governor asked if GPA entered into a consent decree with USEPA. Concerned that current H-2B situation will delay GPA's planned CIPs.

**PROPOSED BID:** Governor asked the definition of "flexible generation" and "combined cycle"

**ENVIRONMENTAL CONCERNS:** Concerned that new plant will pollute the aquifer. How will emissions affect the Ukudu and Tumon areas? Opined that this is main concern of tourism industry.

**RENEWABLE ENERGY:** Why build a traditional power plant when trend is toward renewable energy? How productive will the Hanwha/KEPCO PV systems be? Asked about other renewables (geothermal and wind).

**COST:** What is the total CIP over what period of time? What is the cost of energy storage batteries?

### DEDEDO MUNICIPAL PLANNING COUNCIL & MAYOR SAVARES

8/9/17

**FUEL.** Is there a supply and demand for natural gas? Where would GPA purchase natural gas from? *JB response: Clarified that it's LNG. Yes, supply and demand are present. The US is the biggest producer. Australia, Indonesia and China also produce and export.*

as of 11/20/2017

*GENERAL PLANNING.* Does the military produce their own power? *JB response: No, GPA provides power island wide, although Orote is a standby generator. What if the military needs more power? JB response: We've built that into our considerations.*

*EXISTING PLANTS.* What is the timeline to retire Cabras 1 & 2? *JB response: approximately 6 mos after commissioning of the new plant.*

*PROPOSED BID.* Is a 2021 a realistic time frame for the construction and commissioning? *JB response: Yes.*

## ROTARY CLUB OF TUMON BAY

9/5/17

\*no questions related to the planned 180MW power generation plant\*

## GUAM CHAMBER OF COMMERCE (General Membership Meeting)

9/27/17

*ENVIRONMENTAL CONCERNS.* (Jeff Jones) What type of emissions will this produce? Same type of emissions from Cabras? *JB response: No. Consider Dededo and Macheche power plants; emissions level is minimal and unnoticeable. Emission plume is dependent on stack height. Noise levels will be controlled.*

*SUPPORTING INFRASTRUCTURE.* (Roger Crouthamel) Will GPA use the existing pipeline? *JB response: GPA will construct a new pipeline for ULSD using the same easements. It is considering a new pipeline for LNG although we have not formalized the decision. Discussed regasification of LNG.*

*RENEWABLE ENERGY.* (Matthews Pothen) How many net metering customers does GPA have? *JB response: 1400 customers contributing 15MW in the daytime. 25MW utility scale PV contributes to the system. Explained how weather affects PV production. Discussed battery storage project.*

*RENEWABLE ENERGY.* (Matthews Pothen) Is there difficulty adding more net metering customers? *JB response: No. GPA has several utility renewable projects its preparing for bid, including Phase III. GPA is purchasing energy from utility-scale renewable IPPs at 8 cents/MW.*

## WERI

(Dr. John Jenson, Director) 10/11/17

*ENVIRONMENTAL CONCERNS.* Confirmed that directional flow from lot will be toward coast, not toward basal/parabasal of aquifer.

*FUEL.* Opined interest in LNG. Inquired about fuel lines and storage.

as of 11/20/2017

## SOCIETY OF AMERICAN MILITARY ENGINEERS (General Membership Meeting)

10/19/17

*RENEWABLE ENERGY.* (John Robertson, AmOrient) Is wind energy feasible for Guam? Is the existing wind turbine working? *The turbine has existing 50 kWh so far, but wind energy doesn't look as feasible as solar PV at this time.*

*RENEWABLE ENERGY.* (Zenon Bollinger) Will the transmission lines associated with GPA's Phase II renewable energy project be owned by GPA? *The transmission lines will be turned over to GPA.*

*RENEWABLE ENERGY.* Has GPA considered the use of fuel cells to store energy? *Not at this point.*

*PROPOSED BID.* (Tor Gudmundsen) Will new fuel pipelines be part of the new power plant project? *New pipelines will need to be constructed, although that bid might be separate from the main power plant bid.*

## GUAM CONTRACTORS' ASSOCIATION (General Membership Meeting)

11/15/17

*SUPPORTING INFRASTRUCTURE.* Will GPA seek additional easements for transmission and fuel lines? *JB response: GPA will utilize existing easements, and will request additional easements only where necessary.*

*COST.* (Rey Llaneta) What is the estimated total cost of this plant? *\$400M estimated.* How will GPA pay for this? *Recapped presentation points highlighting operations cost reductions, insurance proceeds, and refunding of existing bonds.*

*PROPOSED BID.* (Rey Llaneta) Has GPA considered a public-private partnership? *Yes, seeking an IPP.* Is GPA seeking interested vendors? *Yes. 10 – 15 companies/groups have expressed interest in this project.* When will GPA issue the bid? *GPA actively seeking CCU and PUC approvals for bid issuance in late 2017 or early 2018.*

## GUAM HOTEL & RESTAURANT ASSOCIATION (General Membership Meeting)

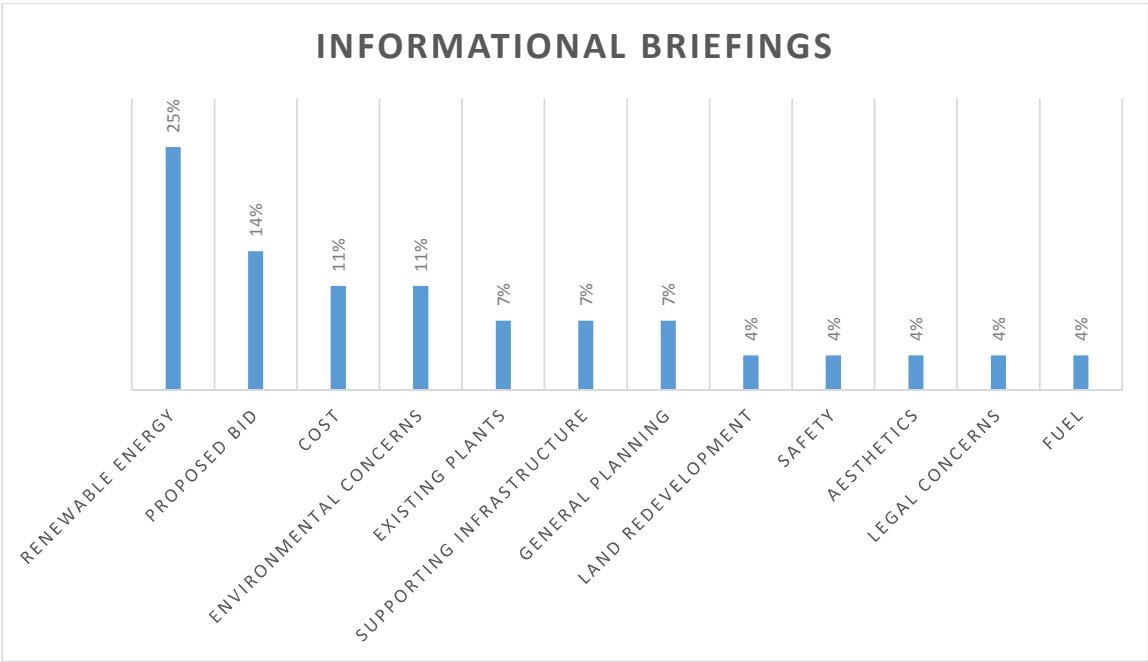
11/16/17

*RENEWABLE ENERGY.* (Joe Blas, Nikko) Is the wind turbine at Cotal generating energy? *Yes, the energy it produces feeds into the grid. It has saved GPA 50k barrels of oil thus far.*

*GENERAL PLANNING.* (Frank Kenney, Jamaican Grill) Is GPA meeting its goals and objectives? What are GPA's forward-looking plans? *GPA will meet the renewable energy legislative goals sooner than required. This new plant will allow GPA and the community to build and expand renewable and sustainable energy projects.*

*EXISTING PLANTS.* (Mary Rhodes, GHRA) What will happen with the Aggreko units? *We may use the individual units for emergency and/or supplemental needs at water wells, emergency shelters, etc.*

as of 11/20/2017



as of 11/20/2017

## Q&A By Category

### RENEWABLE ENERGY

1. Why build a traditional power plant when trend is toward renewable energy? How productive will the Hanwha/KEPCO PV systems be? Asked about other renewables (geothermal and wind).
2. How many net metering customers does GPA have? *JB response: 1400 customers contributing 15MW in the daytime. 25MW utility scale PV contributes to the system. Explained how weather affects PV production. Discussed battery storage project.*
3. Is there difficulty adding more net metering customers? *JB response: No. GPA has several utility renewable projects its preparing for bid, including Phase III. GPA is purchasing energy from utility-scale renewable IPPs at 8 cents/MW.*
4. Is wind energy feasible for Guam? Is the existing wind turbine working? *The turbine has existing 50 kWh so far, but wind energy doesn't look as feasible as solar PV at this time.*
5. Will the transmission lines associated with GPA's Phase II renewable energy project be owned by GPA? *The transmission lines will be turned over to GPA.*
6. Has GPA considered the use of fuel cells to store energy? *Not at this point.*
7. Is the wind turbine at Cotal generating energy? *Yes, the energy it produces feeds into the grid. It has saved GPA 50k barrels of oil thus far.*

### PROPOSED BID

1. Governor asked the definition of "flexible generation" and "combined cycle"
2. Is a 2021 a realistic time frame for the construction and commissioning? *JB response: Yes.*
3. Will new fuel pipelines be part of the new power plant project? *New pipelines will need to be constructed, although that bid might be separate from the main power plant bid.*
4. Has GPA considered a public-private partnership? *Yes, seeking an IPP. Is GPA seeking interested vendors? Yes. 10 – 15 companies/groups have expressed interest in this project. When will GPA issue the bid? GPA actively seeking CCU and PUC approvals for bid issuance in late 2017 or early 2018.*

### COST

1. How will this project affect power rates? Asked whether insurance proceeds from Cabras 3 & 4 will offset construction costs. Asked about the cost of additional water treatment.
2. What is the total CIP over what period of time? What is the cost of energy storage batteries?
3. What is the estimated total cost of this plant? *\$400M estimated. How will GPA pay for this? Recapped presentation points highlighting operations cost reductions, insurance proceeds, and refunding of existing bonds.*

### ENVIRONMENTAL CONCERNS

1. Concerned that new plant will pollute the aquifer. How will emissions affect the Ukudu and Tumon areas? Opined that this is main concern of tourism industry.
2. What type of emissions will this produce? Same type of emissions from Cabras? *JB response: No. Consider Dededo and Macheche power plants; emissions level is minimal and unnoticeable. Emission plume is dependent on stack height. Noise levels will be controlled.*
3. Confirmed that directional flow from lot will be toward coast, not toward basal/parabasal of aquifer.



as of 11/20/2017

## EXISTING PLANTS

1. Asked if the Cabras and Tanguisson areas be redeveloped for something other than power generation. MM suggested yacht/small harbor, recreational area, etc. for Cabras area, and luxury boutique hotel for Tanguisson.
2. What is the timeline to retire Cabras 1 & 2? *JB response: approximately 6 mos after commissioning of the new plant.*
3. What will happen with the Aggreko units? *We may use the individual units for emergency and/or supplemental needs at water wells, emergency shelters, etc.*

## SUPPORTING INFRASTRUCTURE

1. Will GPA use the existing pipeline? *JB response: GPA will construct a new pipeline for ULSD using the same easements. It is considering a new pipeline for LNG although we have not formalized the decision.* Discussed regasification of LNG.
2. Will GPA seek additional easements for transmission and fuel lines? *JB response: GPA will utilize existing easements, and will request additional easements only where necessary.*

## GENERAL PLANNING

1. Does the military produce their own power? *JB response: No, GPA provides power island wide, although Orote is a standby generator.* What if the military needs more power? *JB response: We've built that into our considerations.*
2. Is GPA meeting its goals and objectives? What are GPA's forward-looking plans? *GPA will meet the renewable energy legislative goals sooner than required. This new plant will allow GPA and the community to build and expand renewable and sustainable energy projects.*

## FUEL

1. Concerned about the safety of natural gas handling and storage. Discussed options, including FSRU and pipeline. LNG storage tanks at Ukudu not anticipated.
2. Opined interest in LNG. Inquired about fuel lines and storage.

## AESTHETICS

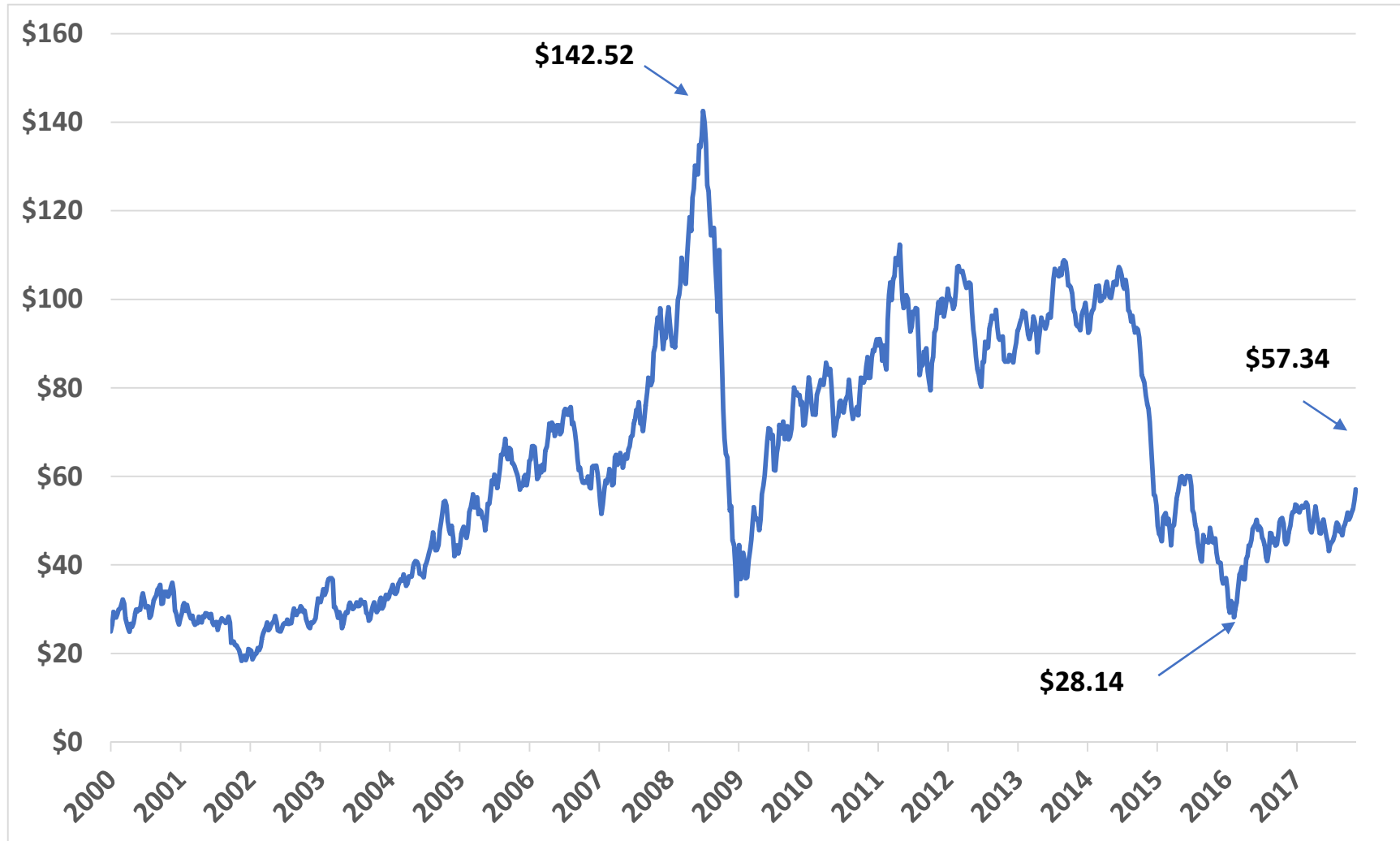
1. Commented that plant design should be aesthetic with surrounding community. Discussed examples of modern plant design, smoke stack, transmission lines, etc.

## LEGAL CONCERNS

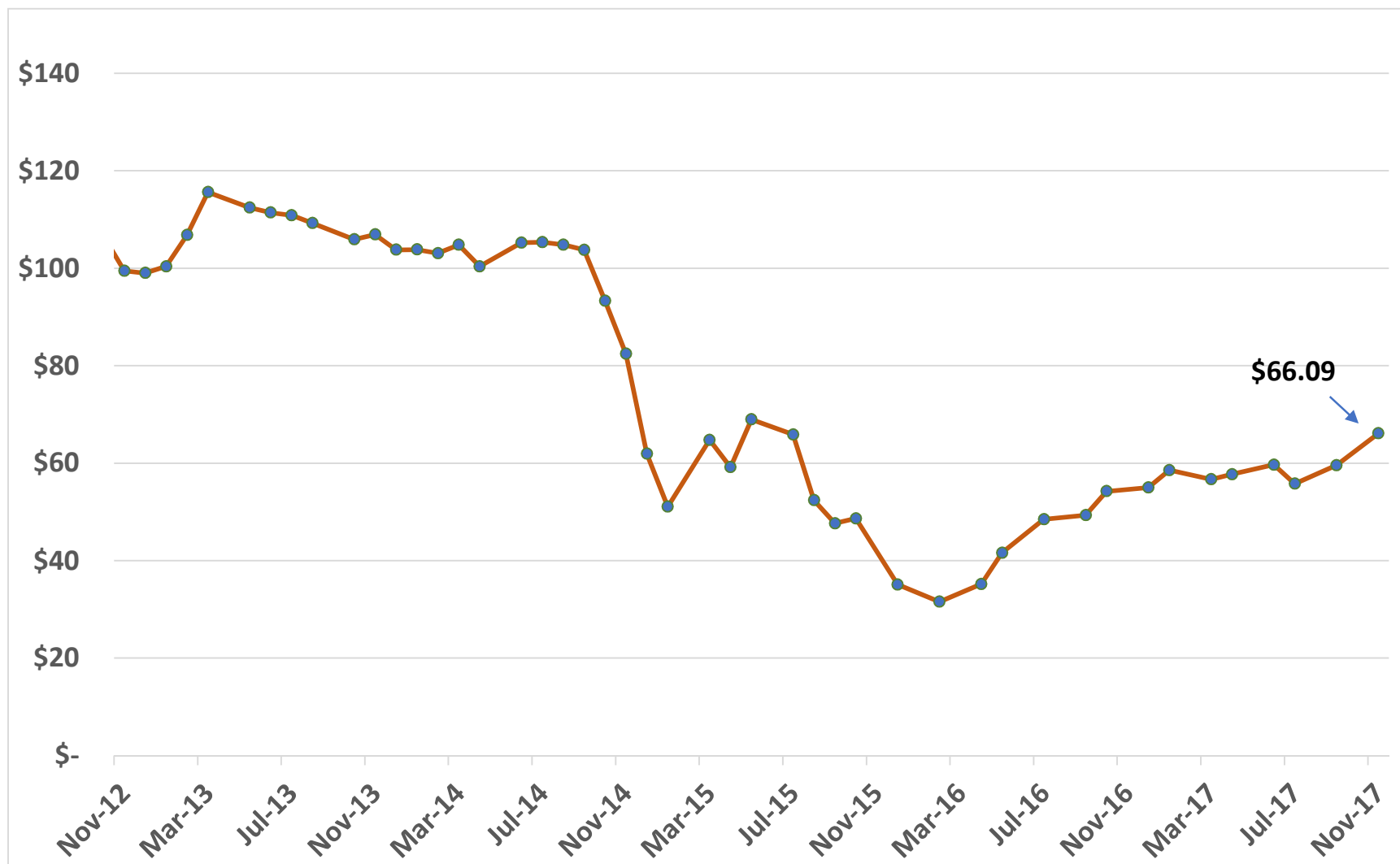
1. Governor asked if GPA entered into a consent decree with USEPA. Concerned that current H-2B situation will delay GPA's planned CIPs.

# LEAC Update-WTI Spot Price (Dollars per Barrel)

**(GPA fuel cost is around \$8.61 per barrel above WTI Spot Price)**



# LEAC Update – GPA Fuel Purchases (Per Barrel)



# LEAC Update – LEAC Factor

## **GPA Docket 15-27**

- LEAC fuel forecast price should be based upon the five day period which is ten days before the meeting at which the PUC determines the LEAC factor
- Based on 5 day Morgan Stanley Fuel Price Forecast

# LEAC Update – Sing HSFO 180 CST Price MT

## Sing HSFO 180 CST

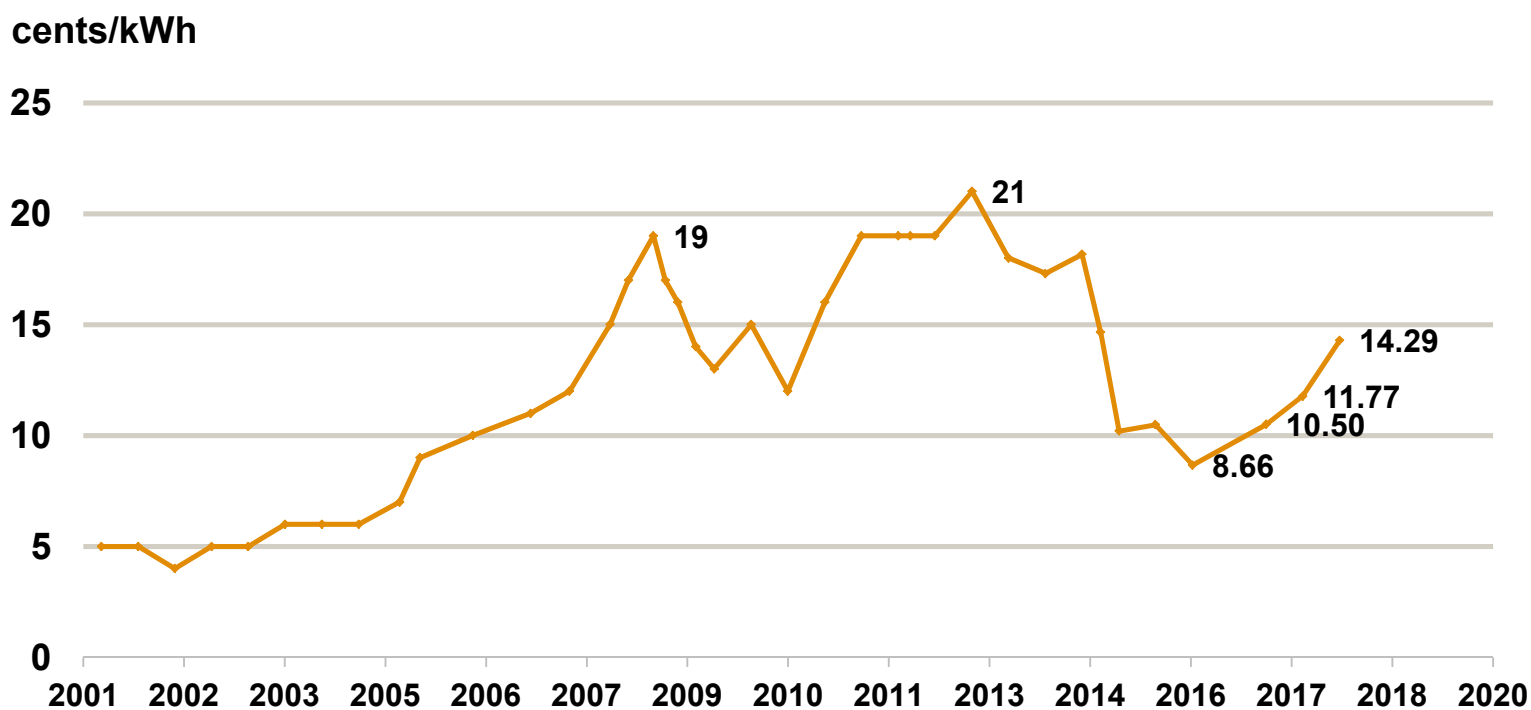
Date	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18
11/15/2017	\$363.40	\$363.40	\$363.15	\$361.90	\$361.98	\$358.90	\$358.90	\$358.90	\$355.48	\$355.48	\$355.48	\$351.90	\$351.90
11/14/2017	\$372.35	\$372.35	\$371.60	\$370.60	\$370.60	\$367.44	\$367.44	\$367.44	\$363.69	\$363.69	\$363.69	\$359.35	\$359.35
11/13/2017	\$377.03	\$376.03	\$375.03	\$373.78	\$373.78	\$370.11	\$370.11	\$370.11	\$365.36	\$365.36	\$365.36	\$360.28	\$360.28
11/10/2017	\$376.47	\$376.22	\$375.72	\$374.22	\$374.31	\$370.56	\$370.56	\$370.56	365.56	365.56	365.56	360.47	360.47
11/9/2017	\$375.13	\$375.63	\$374.88	\$373.38	\$373.46	\$369.46	\$369.46	\$369.46	\$365.46	\$365.46	\$365.46	\$361.29	\$361.29
<b>Average</b>	<b>\$372.88</b>	<b>\$372.73</b>	<b>\$372.08</b>	<b>\$370.78</b>	<b>\$370.83</b>	<b>\$367.29</b>	<b>\$367.29</b>	<b>\$367.29</b>	<b>\$363.11</b>	<b>\$363.11</b>	<b>\$363.11</b>	<b>\$358.66</b>	<b>\$358.66</b>

# LEAC Update – LEAC Rate

	Projected LEAC Rate		Projected Increase from current rate of		Projected Under-
	50% Recovery	100% Recovery	50% Recovery	100% Recovery	50% Recovery
<b>Dispatching 78-22</b>					(mil)
<b>GPA Fuel Cost (\$65-\$70/Bbl) \$</b>	<b>0.142881</b>	<b>\$ 0.165062</b>	<b>\$ 0.0252</b>	<b>\$ 0.0473</b>	<b>14.3</b>

Date	\$/Bbl		Asia Noon Call Forward Prices in MT	Premium - HSFO per barrel	Premium - LSFO per barrel	Weighted Avg Premium	Price/Bbl	Price/Bbl w Premium
Oct-17	\$57.79	Actual						
Nov-17	66.09	Actual						
Dec-17	67.21	Forecast	\$ 372.73	\$ 6.52	\$ 12.49	\$ 8.61	\$ 58.60	\$ 67.21
Jan-18	67.11	Forecast	372.08	6.52	12.49	8.61	58.50	67.11
Feb-18	66.91	Forecast	370.78	6.52	12.49	8.61	58.30	66.91
Mar-18	66.91	Forecast	370.83	6.52	12.49	8.61	58.31	66.91
Apr-18	66.36	Forecast	367.29	6.52	12.49	8.61	57.75	66.36
May-18	66.36	Forecast	367.29	6.52	12.49	8.61	57.75	66.36
Jun-18	66.36	Forecast	367.29	6.52	12.49	8.61	57.75	66.36
Jul-18	65.70	Forecast	363.11	6.52	12.49	8.61	57.09	65.70
Aug-18	65.70	Forecast	363.11	6.52	12.49	8.61	57.09	65.70
Sep-18	\$65.70	Forecast	\$ 363.11	\$ 6.52	\$ 12.49	\$ 8.61	\$ 57.09	\$ 65.70

# LEAC Update – Historical LEAC Rate



# LEAC Update - Sample Residential Bill

	RATE SCHEDULE R					
	Existing Rate		Proposed Rate (50%)		Proposed Rate (100%)	
<b>KWH</b>		1,000		1,000		1,000
<b>Monthly Charge</b>	\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.00	\$ 15.00
<b>Non-Fuel Energy Charge</b>						
<b>First 500 KWH</b>	0.069550	34.78	0.069550	34.78	0.069550	34.78
<b>Over 500 KWH</b>	0.086870	43.44	0.086870	43.44	0.086870	43.44
<b>Emergency Water-well charge</b>	0.002790	1.40	0.002790	1.40	0.002790	1.40
<b>Insurance Charge</b>	0.000000	-	0.000000	-	0.000000	-
<b>Working Capital Fund Surcharge</b>	0.000000	-	0.000000	-	0.000000	-
<b>Total Electric Charge before Fuel Recovery Charges</b>		94.61		94.61		94.61
<b>Fuel Recovery Charge</b>	<b>0.117718</b>	117.72	<b>0.142881</b>	142.88	<b>0.165062</b>	165.06
<b>Total Electric Charge</b>		<u>\$ 212.32</u>		<u>\$ 237.49</u>		<u>\$ 259.67</u>
<b>Increase/(Decrease) in Total Bill</b>				<u>\$ 25.16</u>		<u>\$ 47.34</u>
<b>% Increase/(Decrease) in Total Bill</b>				<b>11.9%</b>		<b>22.3%</b>
<b>% Increase/(Decrease) in LEAC rate</b>				<b>21.4%</b>		<b>40.2%</b>





# Transmission & Distribution Grid Improvement Programs

21 November 2017

Engineering & Technical Services

# AGENDA

- Achieving T&D Operational Excellence
- Advanced Grid Analytics
- Using Grid Analytics to Achieve T&D Operational Excellence
- Renewable Energy Integration Project



# Achieving & Maintaining Operational Excellence: T&D System

Setting up the Performance Management System

# Operational Excellence

- Operational Excellence is achieved when each and every employee can see the flow of value to the customer, and fix that flow before it breaks down. (ASQ)
- Implication (ASQ)
  - Operational excellence applies to every level and every person in the organization
  - Definition is clear, concise, practical and, most importantly, actionable and teachable.
  - Everyone in the organization must have for their respective areas:
    - Access to a visible flow of operational information
    - The ability to recognize if that flow is normal or abnormal and what to do if it is abnormal, all without requiring the assistance of management

# Operational Excellence versus Continuous Improvement

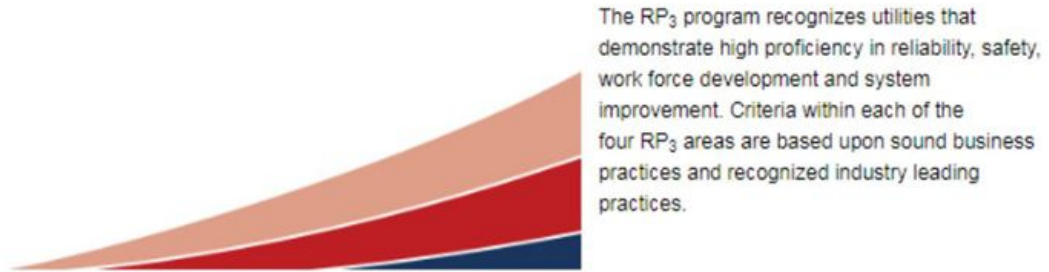
- Operational Excellence is doing the right things right (effectiveness)
- Continuous Improvement is doing things right (efficiency)
- Continuous Improvement is part of the toolbox to achieve Operational Excellence

# Four Areas of T&D Operational Performance

- Reliability and Power Quality
- Safety
- Work Force Development
- System Improvement/Asset Lifecycle Cost Optimization

These are the four panes for T&D operational performance KPIs.

Two-thirds of material covered by GPA whitepaper and presentations forms the basis for APPA RP3 Certification Program



Engineering Performance Goal: GPA shall achieve RP3 Gold Certification by 2019.

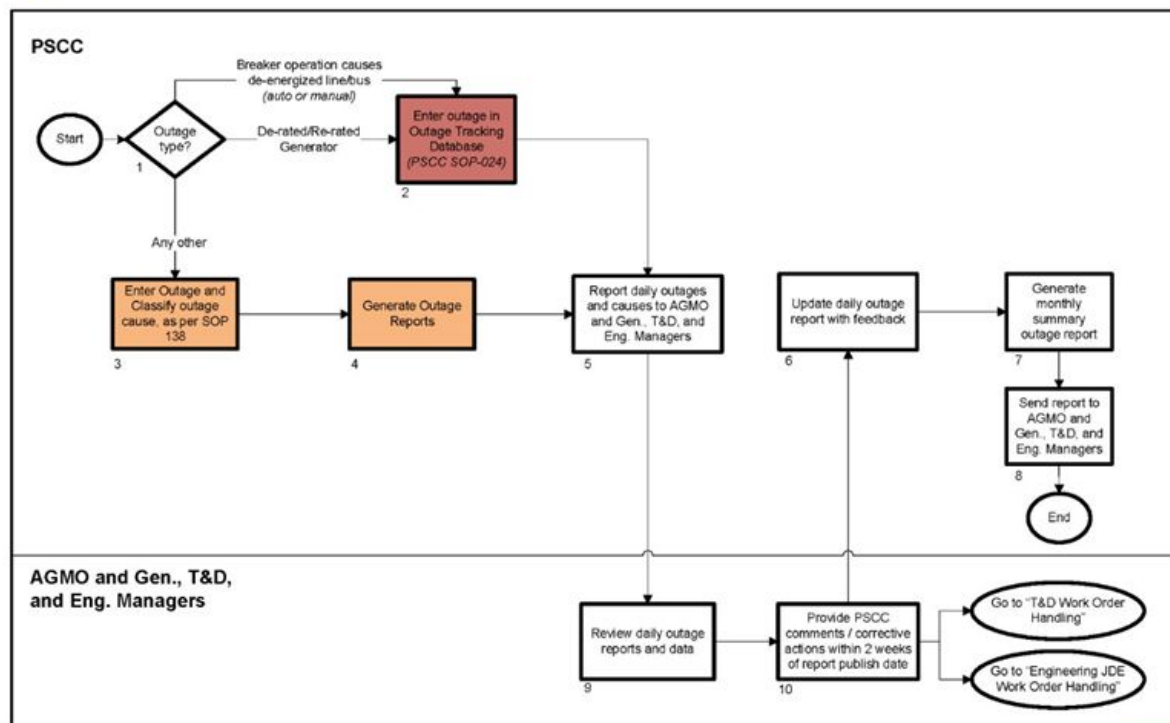
# Reliability

- Two Basic Qualities for Reliability:
  - Availability
  - Resiliency
- Availability refers to our ability to supply the power to all customers at all times
- Resiliency refers to the ability of the GPA electric system to recover from repeated or extreme disturbances such as major storms
- Key elements of the Reliability Performance include:
  - Reliability Indices
  - Mutual Aid Agreements
  - System-Wide Disaster Management Plan/Emergency Response Plan
  - Create, Map, and Execute Business Processes
  - Cyber and physical security/Enterprise Protective Services (EPS)

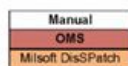
Engineering is  
Responsible



**GPA Smart Grid Process Flows – Future State**  
**Outage Management – Process 1.1.2 Outage Tracking and Reporting**



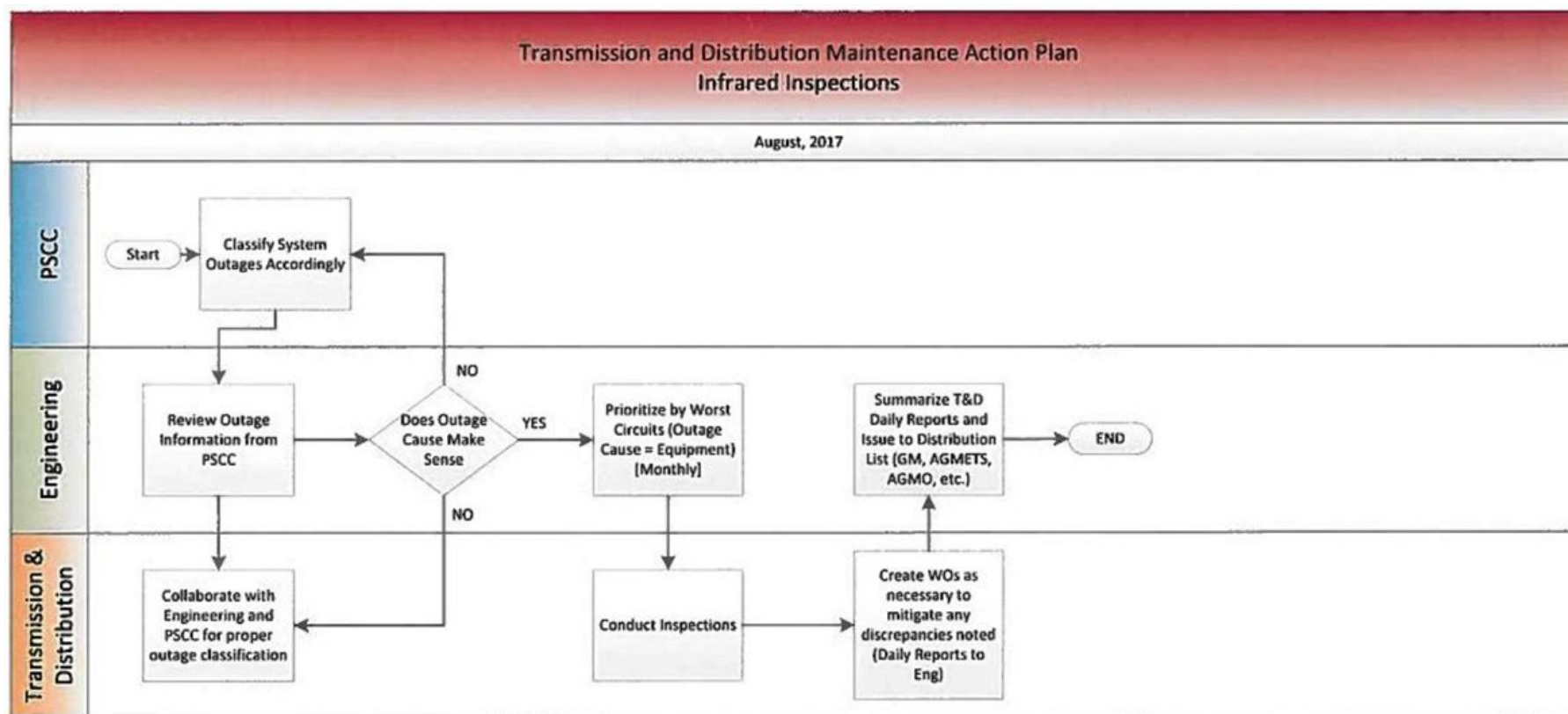
Key:  
Info System/  
Apps

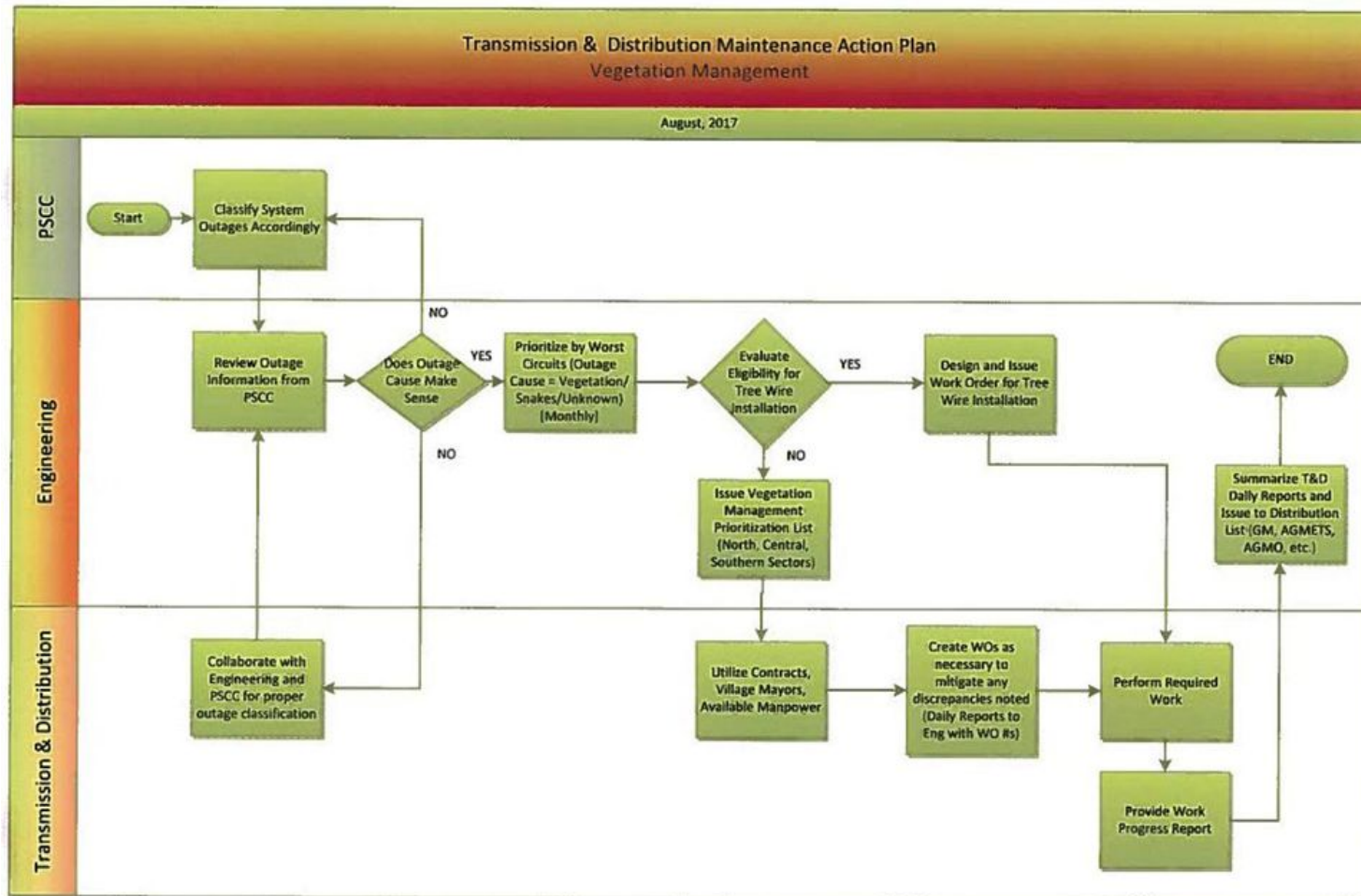


Manual Process  
Outage Tracking Database  
OMS – Milsoft DisSpatch



Copyright 2014 Black & Veatch  
 Developed expressly for  
 Guam Power Authority (GPA)  
 Any use outside GPA is prohibited





# Safety

- AGMA/Safety is Responsible
- Engineering is Support
- T&D is Support

- Employees' safety begins with an established safety program covering all aspects of GPA operations and services including:
  - Using an Accepted Safety Manual
    - <https://ebiz.publicpower.org/APPAEbiz/ProductCatalog/Product.aspx?ID=7310>
    - OSHA Compliant Safety Manual
  - Following Safe Work Practices
  - Safety Training
  - Safety Equipment
- Benchmarking safety statistics by tracking industry-accepted OSHA incident rates
  - APPA Safety Award

# Work Force Development

- Investing in Employees is key for providing reliable and customer-focused service including:
  - Technical Training
  - Leadership Training
  - Delivering High-Quality Customer Service Training
  - Intra-Industry Networking
  - Professional Development

- AGMA/HR is Responsible
- Engineering is Support
- T&D is Support

# System Improvement / Asset Lifecycle Cost Optimization (SI/ALCO)

- Excellent Utility Asset Stewardship Ensures Long-Term System Reliability and Performance
- Utility Asset Stewardship includes:
  - **Comprehensive O&M Programs**
  - **Comprehensive Improvement Programs**
  - **High Quality Standards**
  - **System Loss Management Program**
  - **Asset Lifecycle Cost Optimization**
  - **System Maintenance and Betterment (CMMS) -- Current**
  - **Energy Conservation and DSM**
  - **Enterprise Asset Management (EAM) -- Future**
  - **Research & Development**
  - **Planning**

Engineering is  
Responsible

SPORD is  
Responsible

Specific Responsibilities  
Assigned to  
SPORD/ENG/IT

# SI/ALCO: High Quality Standards

- System Design
- Construction Standards
- Installation Standards
- Standards Enforcement
- Planning and Operational Standards

Engineering is  
Responsible

## SI/ALCO: Planning

- **Long-Range Transmission Plan**
- **Medium-Range Distribution Plan**
- **Integrated Resource Plan**
- **Grid Operational Studies**
- **Renewable Energy Integration**
- **System Protection Plan**

Engineering is  
Responsible

SPORD is Responsible  
Engineering is Support



# SI/ALCO: Asset Lifecycle Cost Optimization

- Track and Evaluate Cost Estimates through the Execution Cycle

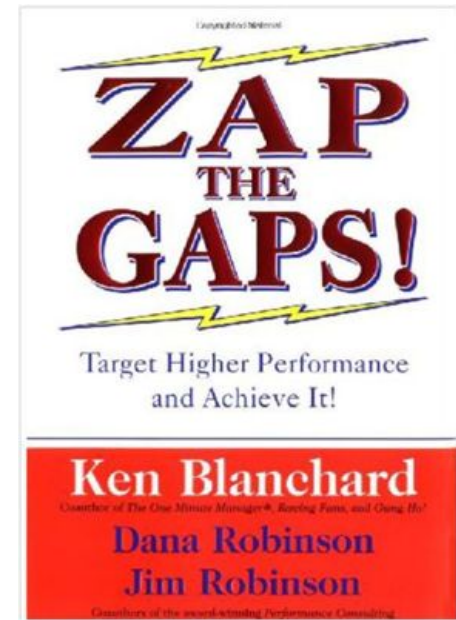
- Work Estimates versus Actuals
- Meaningful Gaps
  - Superior Performance
    - Learn and Improve
  - Poor Performance
    - Zap the Gaps

Engineering is  
Responsible

- Track and Evaluate Quality through the Execution Cycle

- Work Scope versus Performance
- Standards versus Quality of Work
- Meaningful Gaps
  - Superior Performance
    - Learn and Improve
  - Poor Performance
    - Zap the Gaps

Engineering is  
Responsible



# Scope of Work

- Building the Information Infrastructure
- Achieving Operational Excellence
- Maintaining Operational Excellence
- Reset

# Building the Information Infrastructure

- Building the Performance Management System
- Information Infrastructure must provide EVERYONE in the organization for their respective areas:
  - Access to a visible flow of operational information
  - The ability to recognize if that flow is normal or abnormal and what to do if it is abnormal, all without requiring the assistance of management
- In an effective manner
  - Highly Useful
  - Highly Used
  - Low Cost
  - Sustainable

## **Responsibility**

- Engineering is Responsible
- IT is Support
- AGMETS is Guide

# Vision

- GPA will transform data into actionable information to make better strategic and operational decisions to achieve operational excellence across GPA operations, finance, and customer service by 2020.

# Achieving Operational Excellence

1. Set High Standards for T&D System Operational Performance
2. Baseline T&D Operational Performance
3. Characterize the Gap Between the Desired Performance and the Current Performance
4. Zap the Gaps
5. Monitor, Track, Evaluate, and Report Key Performance Indicators
6. Repeat Tasks 3, 4, & 5 Until Standard is Met

Engineering is Responsible

Plan-Do-Check-Act Cycle

# Maintaining Operational Excellence

1. Monitor, Track, Evaluate, and Report Key Performance Indicators
2. Determine Meaningful Deviations From Performance Standard
  - a. Poor Performance
  - b. Superior Performance
3. Bring Poor Performance Back to Standard
  - a. Determine Root Cause of Poor Performance
  - b. Revise O&M Practices to Prevent Future Poor Performance
    - i. Identify Materials/Products Contributing to Poor Performance
    - ii. Identify O&M Practices Contributing to Poor Performance
    - iii. Identify Construction Practices Contributing to Poor Performance
    - iv. Revise Procurement Specifications
  - c. Document
  - d. Train O&M Staff
4. Analyze Superior Performance
  - a. Determine Root Cause for Superior Performance
  - b. Revise O&M Practices to Achieve Future Superior Performance
    - i. Identify Materials/Products Contributing to Superior Performance
    - ii. Identify O&M Practices Contributing to Poor Performance
    - iii. Identify Construction Practices Contributing to Poor Performance
    - iv. Revise Procurement Specifications
  - c. Evaluate whether the Means to Achieve Superior Performance is Worth It
  - d. Document
  - e. Train O&M Staff
5. Repeat Tasks 1 through 4 Ensuring Standard is Met

Engineering is Responsible

# Reset

1. After Maintaining Operational Standards for N Years, Reset the Standards Higher
2. Repeat Achieving Operational Excellence
3. Repeat Maintaining Operational Excellence

Engineering is Responsible

# Setting High Standards for T&D System Operational Performance



# Stretch Goals: The Power of No

In an Ideal World, this is what we want to achieve.

- Reliability
  - No Customer Outages
  - No Customer Power Quality Issues
  - No Transmission System Equipment Failures
  - No Distribution Circuit Element Failures
  - No Cyber or Physical Security Compromises
- Safety
  - No Employees or Customers Hurt by T&D System
- Work Force Development
  - No T&D Employee will lack the equipment, knowledge, experience, and training necessary for the employee to perform excellently
- System Improvement
  - No Excuses for Not Planning in Depth and Breadth

# Advanced Grid/Utility Analytics Project

- Not a Just Technology Project. Technology is Just an Enabler.
- It is a Value Creation Project Transforming Data into Actionable Information to make Better Enterprise-wide Operational and Strategic Decisions
- GPA is in the top 5% of utilities

# Background

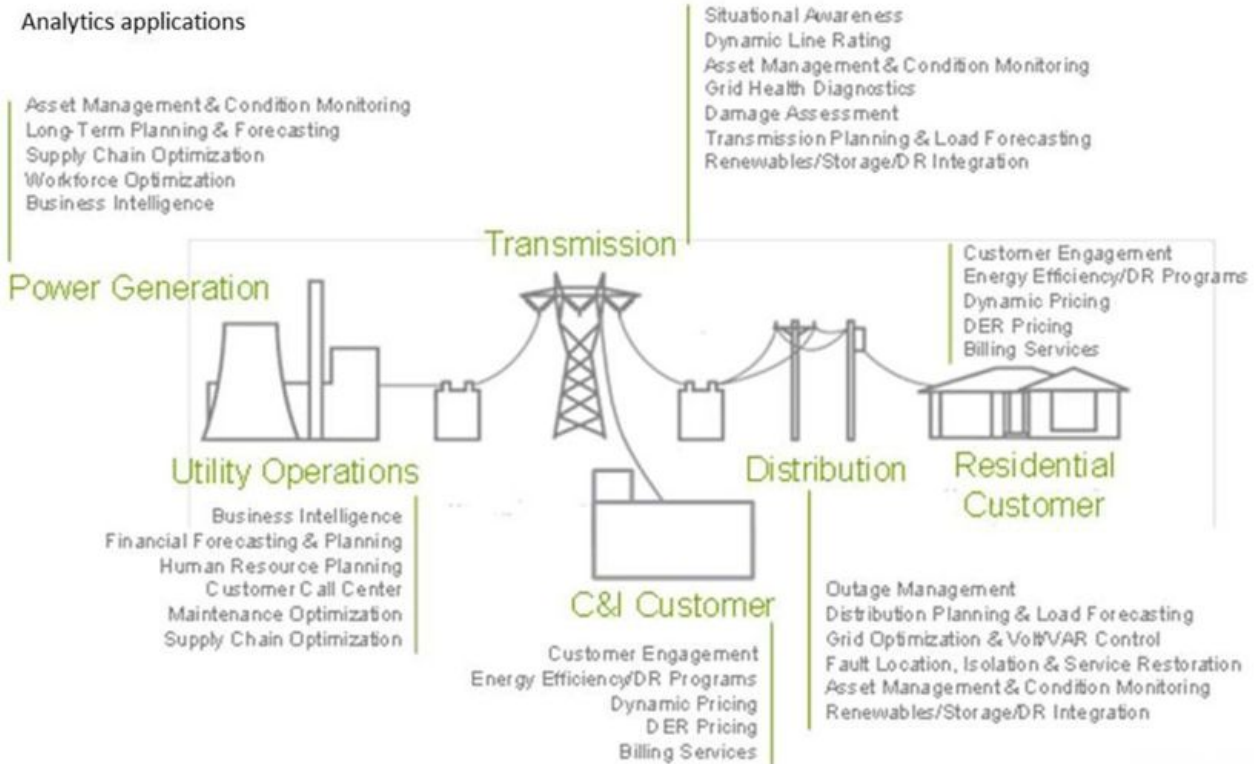
- The amount of Utility Data is exploding exponentially
  - The data deluge is a trend that affects all utilities, regardless of size or business model. In a quick check with investor-owned utilities, co-ops and municipal providers across multiple regions, all affirmed that the increase in data — and the opportunities it presents — are significant. --- UtilityDIVE
  - Figuring out how to manage those data could hold the key to new revenue streams and improved grid operation. --- UtilityDIVE
- Utility Analytics Institute survey results
  - Over half of utilities have “very limited use” for the data they are collecting
  - Almost 40% are “trying to figure out what to do with it”
  - Only 5% to 10% have “standardized data analytics tools and processes.”

## Enabling Infrastructure and Vision

- No utility does nothing with their smart meter data. But using it for billing or outage management doesn't get at the value that could come from using it for utility-wide analysis. It is more common that they don't have the vision to see the potential." --- Lauren Callaway, UtilityDive

# Utility Analytics

- Categories
  - Grid Operations (Operational Effectiveness)
  - Asset Optimization (Asset Utilization)
  - Demand-Side Management (Energy Efficiency)
  - Customer Operations (Customer Service)
- Major Data Sources for Utility Analytics
  - Advanced Metering Infrastructure (AMI) System
  - Customer Information System (CIS)
  - Outage Management System (OMS)
  - Substation Automation (SA)
  - Mobile Workforce Management System (MWMS)
  - Supervisory Control And Data Acquisition (SCADA)



Source: Navigant

# Advanced Grid Analytics

Phase	Phase Description
1	GIS Model, Revenue Protection, Asset Loading, Voltage Visualization (Rev P/AL/VV)
2	Voltage Monitoring, Reliability Planner (VM, Rel P)
3	DER Planner, Capacity Contribution, Energy Diversion (DER, CC) **

***\*\* Need to discuss Energy Diversion and need for installing some Distribution Transformer Monitors (DTM).***



# Using Grid Analytics to Achieve T&D Operational Excellence



# Integrating AGA Into Daily Work Activities

- AGA Work Scripts
  - Model Maintenance
  - Steady State Overvoltage (Single-Phase)
  - Steady State Undervoltage (Single-Phase)
  - Three-Phase Customer Voltage Quality
  - Transformer Overloads
  - Transformer Sizing

# Model Maintenance

- Engineering is responsible for maintaining the integrity of GIS, AGA, and OMS distribution system network models while consistently using these applications
- Engineering will perform this work continuously as it uses these applications on a daily basis
- Where there are issues with GIS information or the AGA models, Engineering shall perform field verification of information or create work orders for T&D to perform the verifications

# Power Quality: Customer Service Voltage

- Steady State Overvoltage
- Steady State Undervoltage
- Three-Phase Customer Voltages
- Voltage Unbalance

# Steady State Voltage Performance Standard

- Steady State Voltage to Customer

ANSI C84.1 Voltage Limits (Service Voltage)

Service Voltage (1)	Range A (2)(4)	Range B (2)(6)
Maximum	5%	5.83%
Minimum	-5%	-8.33%

ANSI C84.1 Voltage Limits (Utilization Voltage)

Utilization Voltage (6)	Range A (2)(4)	Range B (2)(6)
Maximum (equipment rated >600 V)	5%	5.83%
Maximum (equipment rated <600 V)	4.17%	5.83%
Minimum	-8.33%(-10% (3))	-11.67%(-13.33%(3))

1. Service voltage is measured at the point of common coupling between Customer and Company.
2. Voltage limits in % deviation from nominal
3. For circuits with no lighting equipment
4. Range A applies to normal operations
5. Range B applies for short duration and/or abnormal conditions on the utility system (excluding fault conditions and transients).
6. Utilization Voltage is measured at the equipment using the electricity

## Range A versus Range B Voltage

- Range A (Favorable Zone)
  - Voltage range A is the “favorable” zone, in which the voltage level is near optimal.
- Range B (Tolerable Zone)
  - Voltage range B is the “tolerable” zone, in which the voltage level is acceptable but not optimal.
  - Range B includes voltage levels above and below range A limits that necessarily result from operating conditions. Although such conditions result in a practical system, they should be limited in extent, frequency, and duration.
  - Within reasonable timeframes, corrective measures should be taken to upgrade voltage levels in range B to those in range A.
  - For cases where sustained voltage levels will fall outside range B, utilization equipment may not operate satisfactorily, and protective devices may need to operate. Such cases should be considered temporary and subject to immediate improvement

# Priority of Remedial Work (Under/Overvoltage)

- High Priority
  - Customer Service Voltage is outside of Range B
  - Prioritize work first by severity and then by duration
- Medium Priority
  - Prioritize by the duration and frequency customer service voltages are outside Range A and Within Range B
  - Duration is medium or long
  - Frequency is large
- Lower Priority
  - Customer Service Voltages are outside Range A and Within Range B
  - Duration is short
  - Frequency is small
- Engineering will define:
  - Short Duration versus Medium and Long Duration
  - Small Frequency versus Large Frequency

# Steady State Overvoltage Work Script

1. Set AGA date filter to account for a one week (168 hour) period.
2. Set AGA voltage filter for customers experiencing 105% or more of nominal voltage.
3. Call up pie-chart of distribution of customers among GPA feeders. Save chart as a picture for use in report documentation.
4. Choose feeder with largest number of customers experiencing steady state overvoltage conditions.
5. Perform a distribution power flow (DPF) to determine if the model indicates overvoltage conditions. Save DPF results for use in report documentation.
6. If there is reasonable concurrence with DPF and actual voltage measurements, then proceed with step 8. Describe the reasonableness of concurrence and outline steps and insights into how it could be improved.
7. If there is not reasonable concurrence with DPF and actual voltage measurements, assign AGA model owners to verify model parameters and tweak the model to more accurately reflect measured voltages. Proceed with step 8.
8. Use AGA and field work to evaluate/analyze strategies for bringing customers to nominal voltages. Document this analysis, results, and recommendations.
9. Create T&D work orders for appropriate field investigations and remedial actions. Create project schedule for work
10. Follow up with work orders. Monitor, evaluate, and report project performance. Use Weekly Project Dashboard. Discuss weekly progress with Engineering Manager. Engineering Manager will brief AGMETS on progress fortnightly. Incorporate monthly progress into CCU report.
11. After various work orders are completed, evaluate feeder for overvoltage incidence improvements by repeating steps 1 and 2 for the specific feeder. Document whether there are improvements in performance.
12. After all work orders are completed, create a report comparing the before and after performance. Submit to Engineering Manager for review. Submit to AGMETS. Be prepared to present report. Discuss how to improve the process.
13. Repeat for steps 1 through 12.

# Steady State Undervoltage Work Script

1. Set AGA date filter to account for a one week (168 hour) period.
2. Set AGA voltage filter for customers experiencing 85% to 95% of nominal voltage.
3. Call up pie-chart of distribution of customers among GPA feeders. Save chart as a picture for use in report documentation.
4. Choose feeder with largest number of customers experiencing steady state undervoltage conditions.
5. Perform a distribution power flow (DPF) to determine if the model indicates undervoltage conditions. Save DPF results for use in report documentation.
6. If there is reasonable concurrence with DPF and actual voltage measurements, then proceed with step 8. Describe the reasonableness of concurrence and outline steps and insights into how it could be improved.
7. If there is not reasonable concurrence with DPF and actual voltage measurements, assign AGA model owners to verify model parameters and tweak the model to more accurately reflect measured voltages. Proceed with step 8.
8. Use AGA and field work to evaluate/analyze strategies for bringing customers to nominal voltages. Document this analysis, results, and recommendations.
9. Create T&D work orders for appropriate field investigations and remedial actions. Create project schedule for work
10. Follow up with work orders. Monitor, evaluate, and report project performance. Use Weekly Project Dashboard. Discuss weekly progress with Engineering Manager. Engineering Manager will brief AGMETS on progress fortnightly. Incorporate monthly progress into CCU report.
11. After various work orders are completed, evaluate feeder for overvoltage incidence improvements by repeating steps 1 and 2 for the specific feeder. Document whether there are improvements in performance.
12. After all work orders are completed, create a report comparing the before and after performance. Submit to Engineering Manager for review. Submit to AGMETS. Be prepared to present report. Discuss how to improve the process.
13. Repeat for steps 1 through 12.



# Voltage Unbalance Performance Standard

- Voltage Unbalance at Service Entrance
  - The voltage unbalance at the service entrance under no-load conditions should be limited to 3% or less (ANSI C84.1)
- GWA 3-Phase Power Service
  - The voltage unbalance at the GWA motor terminals should be limited to 1% or less

# Voltage Unbalance and GWA 3-Phase Motors

- Unless the motor is lightly loaded, the voltage unbalance should not exceed 1%. Voltage unbalance causes a more severe current unbalance that is 3, 6 or up to 8 times greater. Current unbalance will cause the motor to draw more current than it otherwise would. This in turn causes more heat. Heat deteriorates the motor's winding insulation.
- Voltage unbalance will eventually shorten the life of three-phase motors, which also reduces motor efficiency, causes current unbalance that leads to torque pulsations, increased vibrations, mechanical stresses, increased losses and motor overheating.
- NEMA recommends that voltage unbalances at the motor terminals do not exceed 1%. Unbalances over 1% require derating of the motor in accordance with Figure 20-2 of NEMA MG-1-2003, Revision 1-2004, and will void most manufacturers' warranties. That is because motors built to comply with the NEMA standard MG1 are designed to operate on voltage balanced to within 1%. Operating on a power supply with a larger voltage unbalance will increase the  $I^2R$  losses (that is, current squared times resistance) in the rotor and stator, meaning more of the supplied power will be converted to heat and less to work. The motor therefore will run hotter and consequently, less efficiently. Increased rotor losses also will increase "slip", so the motor will turn a little more slowly and do less work in a given time.

## Three-Phase Customer Service Voltage

- Range A and B voltage must apply to all phases of a three-phase system, even in the presence of voltage imbalance.
- Three-phase customer service voltage on each phase must fall within Range A voltage limits.
- Analysis of Three-Phase Customer Service Voltage and Voltage Imbalance will be performed on a case-by-case basis until AGA is upgraded in a new release to automate this analysis.

# Transformer Loading

- Transformer Overloads
  - Engineering will Clarify the Standard
  - IEEE 242 recommends no more than 125%
- Severely Under Loaded Transformers
  - Severely Oversized Transformers

# Transformer Overloads Work Script

1. Set AGA date filter to account for a one week (168 hour) period.
2. Set AGA transformer loading filter at 90% or greater of nominal rating.
3. Filter the results from highest to lowest loading. Analyze each transformer in the queue.
4. Is the overload reasonable or more likely an indicator that the GIS information is inaccurate?
  - a. If the latter, field verify the transformer ratings. Create a work order for the GIS Technicians to update their information. Proceed with the next highest overloaded transformer.
  - b. If the former proceed to step 5.
5. Create T&D work orders for appropriate field investigations and remedial actions. Create project schedule for work.
6. Follow up with work orders. Monitor, evaluate, and report project performance. Discuss weekly progress with Engineering Manager. Engineering Manager will brief AGMETS on progress fortnightly. Incorporate monthly progress into CCU report.
7. After all work orders are completed, create a report comparing the before and after performance. Submit to Engineering Manager for review. Submit to AGMETS. Be prepared to present report. Discuss how to improve the process.
8. Repeat for steps 1 through 7.

# Line, Lateral, Fuse Overloads Work Script

1. Set AGA date filter to account for a one week (168 hour) period.
2. Set AGA Line, Lateral, Fuse loading filter at 90% or greater of nominal rating.
3. Filter the results from highest to lowest loading. Analyze each transformer in the queue.
4. Is the overload reasonable or more likely an indicator that the GIS information is inaccurate?
  - a. If the latter, field verify the equipment ratings. Create a work order for the GIS Technicians to update their information. Proceed with the next highest overloaded equipment.
  - b. If the former proceed to step 5.
5. Create T&D work orders for appropriate field investigations and remedial actions. Create project schedule for work.
6. Follow up with work orders. Monitor, evaluate, and report project performance. Discuss weekly progress with Engineering Manager. Engineering Manager will brief AGMETS on progress fortnightly. Incorporate monthly progress into CCU report.
7. After all work orders are completed, create a report comparing the before and after performance. Submit to Engineering Manager for review. Submit to AGMETS. Be prepared to present report. Discuss how to improve the process.
8. Repeat for steps 1 through 7.

# Heavily Loaded Transformer Work Script

1. Set AGA date filter to account for a one week (168 hour) period.
2. Set AGA transformer loading filter at 60% to 90% of nominal rating. (ENG to recommend range)
3. Filter the results from highest to lowest loading. Analyze each transformer in the queue.
4. Create T&D work notices to avoid overloading transformers. Identify transformers for upgrade to higher rating on new loads.
5. Follow up with work orders. Monitor, evaluate, and report project performance. Discuss weekly progress with Engineering Manager. Engineering Manager will brief AGMETS on progress fortnightly. Incorporate monthly progress into CCU report.
6. After all work orders are completed, create a report comparing the before and after performance. Submit to Engineering Manager for review. Submit to AGMETS. Be prepared to present report. Discuss how to improve the process.
7. Repeat for steps 1 through 7.

# Severely Under Loaded Transformer Work Script

1. Set AGA date filter to account for a one week (168 hour) period.
2. Set AGA transformer loading filter at 25% of nominal rating.
3. Filter the results from lowest to highest loading. Analyze each transformer in the queue.
4. Is the loading reasonable or more likely an indicator that the GIS information is inaccurate?
  - a. If the latter, field verify the transformer ratings. Create a work order for the GIS Technicians to update their information. Proceed with the next highest overloaded transformer.
  - b. If the former proceed to step 5.
5. Create T&D work orders for appropriate field investigations and remedial actions. Create project schedule for work
6. Follow up with work orders. Monitor, evaluate, and report project performance. Discuss weekly progress with Engineering Manager. Engineering Manager will brief AGMETS on progress fortnightly. Incorporate monthly progress into CCU report.
7. After all work orders are completed, create a report comparing the before and after performance. Submit to Engineering Manager for review. Submit to AGMETS. Be prepared to present report. Discuss how to improve the process.
8. Repeat for steps 1 through 7.



## Vegetation Management Work Script

1. For an area cleared of vegetation, set date filter to account for a one week (168 hour) period prior to vegetation management work completion. For each customer in the area, count number of vegetation touch outage signatures.
2. For the same area, set date filter to account for a one week (168 hour) period after vegetation management work completion. For each customer in the area, count number of vegetation touch outage signatures.
3. Create a report comparing the before and after performance. Submit to Engineering Manager for review. Submit to AGMETS. Be prepared to present report. Discuss how to improve the process.
4. Repeat for steps 1 through 3.

# GWA Power Quality Investigations

- Provide AGA Access to GWA Engineering Support Section
- Train GWA Electrical Engineering Section on AGA
- GPA Engineering & GWA Electrical Engineering Section
  - Coordinate Power Quality Investigations
  - Build and Document Processes for Power Quality Investigations
  - Assign Responsibilities

# Meter Capabilities in support of GWA PQ

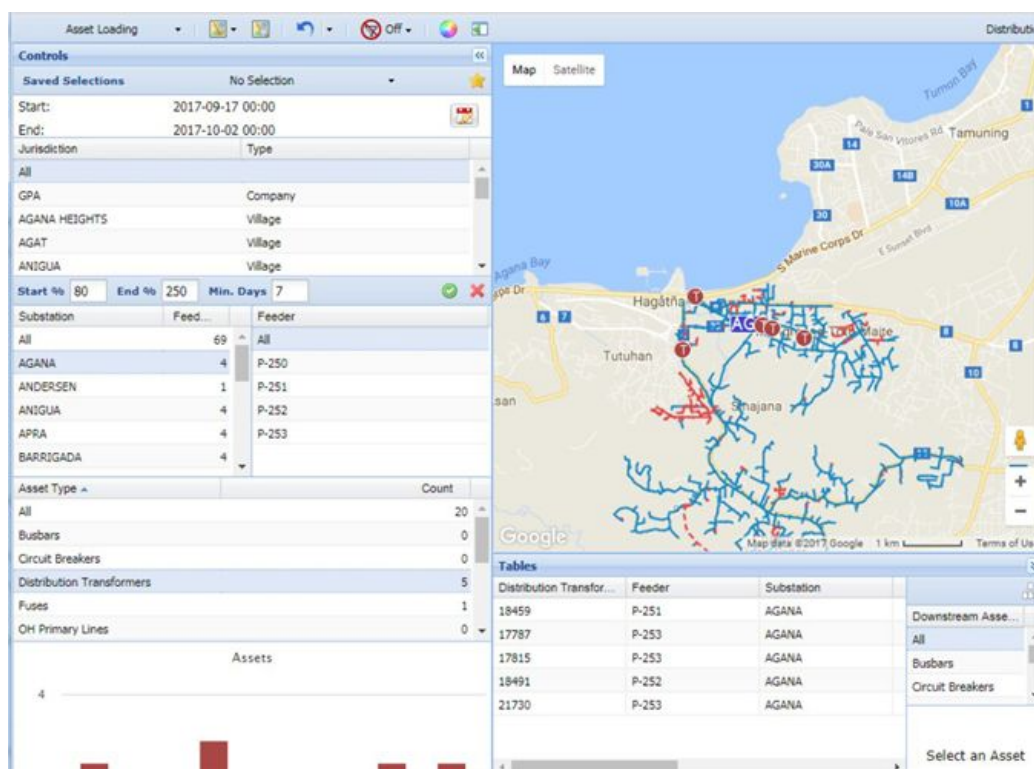
## GWA - L+G Q/A Session

1. Can the L&G smart meters be upgraded to monitor power quality at GWA sites. If so, can it record date/time, voltage, current, kW, and other information the meter detects surges/transients, unbalances and over/under-voltages exceeds safe operating range?
  - **L+G Response**
  - Record date/time – Yes
  - Voltage, current, KW – Yes
  - Surges/Transients – Yes (using following options)
    - Sag and swells events and through interval data. If the average voltage over 1 DSP sample period (250ms on FAX, 200ms on S4x) is greater than a configurable threshold value in meter program, it can get logged as a sag/swell event.
    - D6 check: this checks for current imbalances (with configurable settings in the meter program).
    - D2 check: a voltage RMS magnitude check (with configurable settings in the meter program).
2. Can the minimum(s) and maximum(s) be programmed by GPA?
  - **L+G Response**
  - Believe they are asking about voltages. If so, yes!
3. When can we upgrade the meters? How much will it cost to upgrade?
  - **L+G Response**
  - It depends on their current versions of firmware and meter program configurations on the meters. If it is required for just 200 meters, then it shouldn't be a major work.

# Action Items

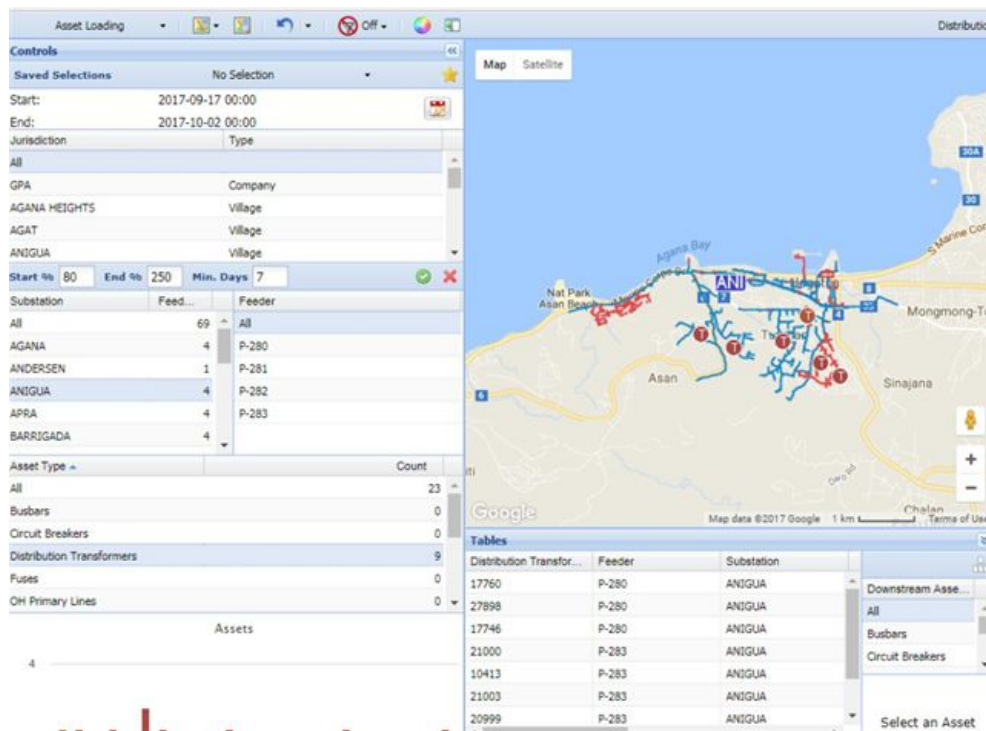
- Engineering
  - Coordinate with Roel for immediate implementation
    - Incorporate AGA use into daily work
    - Execute Work Scripts
  - Overloads and System Model Cleaning
    - Work Orders Created by October 9, 2017
    - GIS information Corrected by October 9, 2017
    - Presentation to JohnB and Executive Team on or before Friday Morning, October 20, 2017
- Engineering will define work priority definitions:
  - Short Duration versus Medium and Long Duration
  - Small Frequency versus Large Frequency
- Roel
  - GWA Training (Mid October)
  - AGA Access for GWA (Immediately)
- GPA Engineering & GWA Engineering Support Section
  - Kick off these activities and set up timelines and milestones
    - Coordinate Power Quality Investigations
    - Build and Document Processes for Power Quality Investigations
    - Assign Responsibilities

# Clear Agana Feeder Asset Overloads



- Five Potentially Overloaded Transformers identified
  - Perform Field Verification
  - Update GIS Information
  - Create T&D Work Orders
- Use AGA to determine other asset overloads
  - Perform Field Verification
  - Update GIS Information
  - Create T&D Work Orders
- Create Report and Deliver to JJC copy RAC

# Clear Anigua Feeder Asset Overloads



- Nine Potentially Overloaded Transformers identified
  - Perform Field Verification
  - Update GIS Information
  - Create T&D Work Orders
- Use AGA to determine other asset overloads
  - Perform Field Verification
  - Update GIS Information
  - Create T&D Work Orders
- Create Report and Deliver to JJC copy RAC

# Execute Vegetation Management Work Script

- Execute the Vegetation Management Work Script for several areas recently cleared of vegetation.

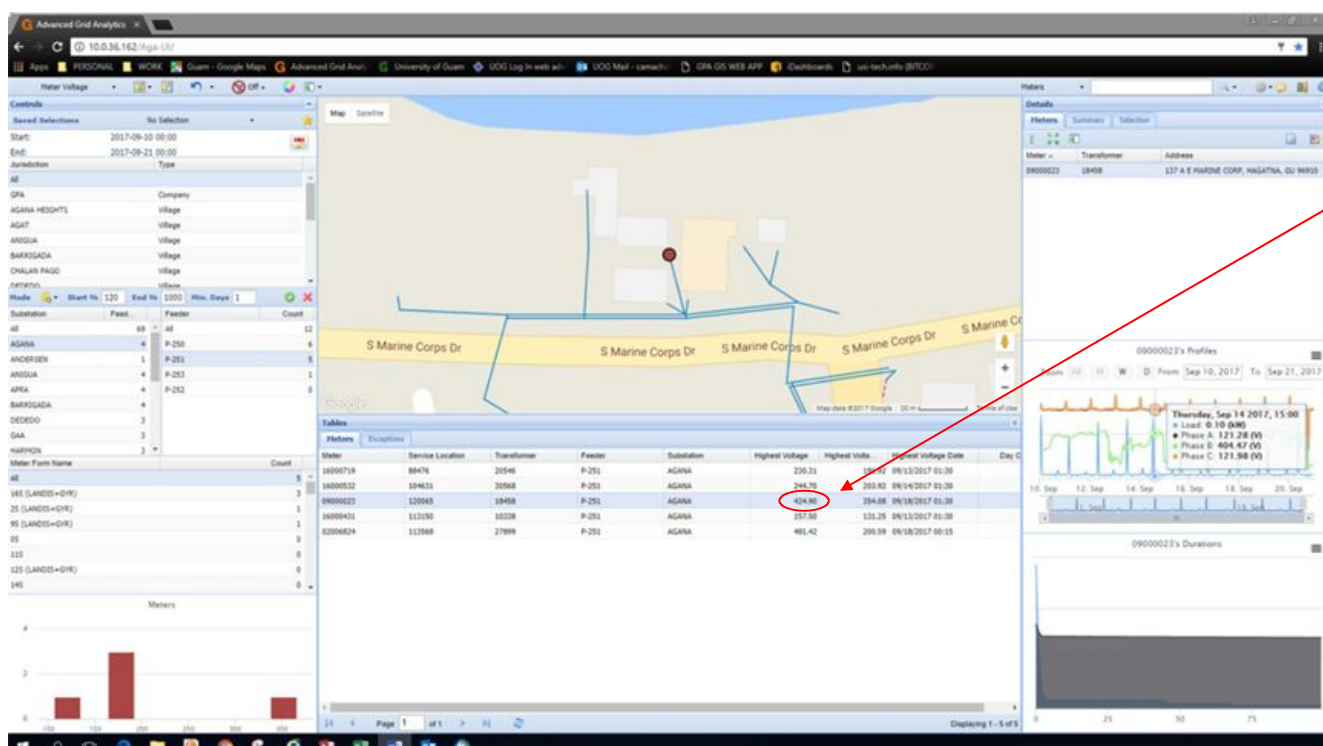
# Advanced Grid Analytics In Use

Item	Issue	Date Identified	Engineering Action	Activity	Issue Closure	Problem or Failed Equipment
1	1 of 3 phases showing high voltage	2017 Sep 19	ENG alerted Van Quichocho @ Command Center; Van created trouble ticket	T&D troubleshooters changed out one defective transformer	2017 Sep 20	Transformer
2	Confirmation of Southern High School loading	2017 Oct 19	Verified loading to fuse the risers	Design	2017 Oct 19	Information for Design provided by AGA
3	Obtained P-111 lateral loading to Nikko for new Hotel	2017 Oct 19	To perform power flow and verify loading and assume spot load issues	Design	2017 Oct 19	Information for Design provided by AGA
4	Erratic Voltages	2017 Oct 27	ENG alerted Van Quichocho @ Command Center; Van created trouble ticket	Command Center (CC) performed meter testing and spoke with customer. CC concluded all was normal and the installed meter was faulty. Meter was changed out.	2017 Nov 03	Meter
5	High Voltage during daytime	2017 Nov 01	Evaluated power quality of surrounding customers on same xfmr and identified the source of high voltages are the solar company inverter.	GPA requested that the solar company evaluate its inverter regulation; not a GPA source issue	Resolution pending findings from solar company	Customer side issue
6	Extremely high voltage all the time 120/240; 324V per MDMS	2017 Nov 01	ENG alerted Van Quichocho @ Command Center; Van created trouble ticket	False meter reads, meter changed out	2017 Nov 06	Meter
7	Low Voltage	2017 Sep 17	Created WO to split load and installed new x-fmr	Split Load and installed new Xfmr	2017 Sep 17	Customer increased load over time such that the existing service and transformer was undersized for the new loads.



# Item 1. Defective Transformer Bank

## *Advanced Grid Analytics*

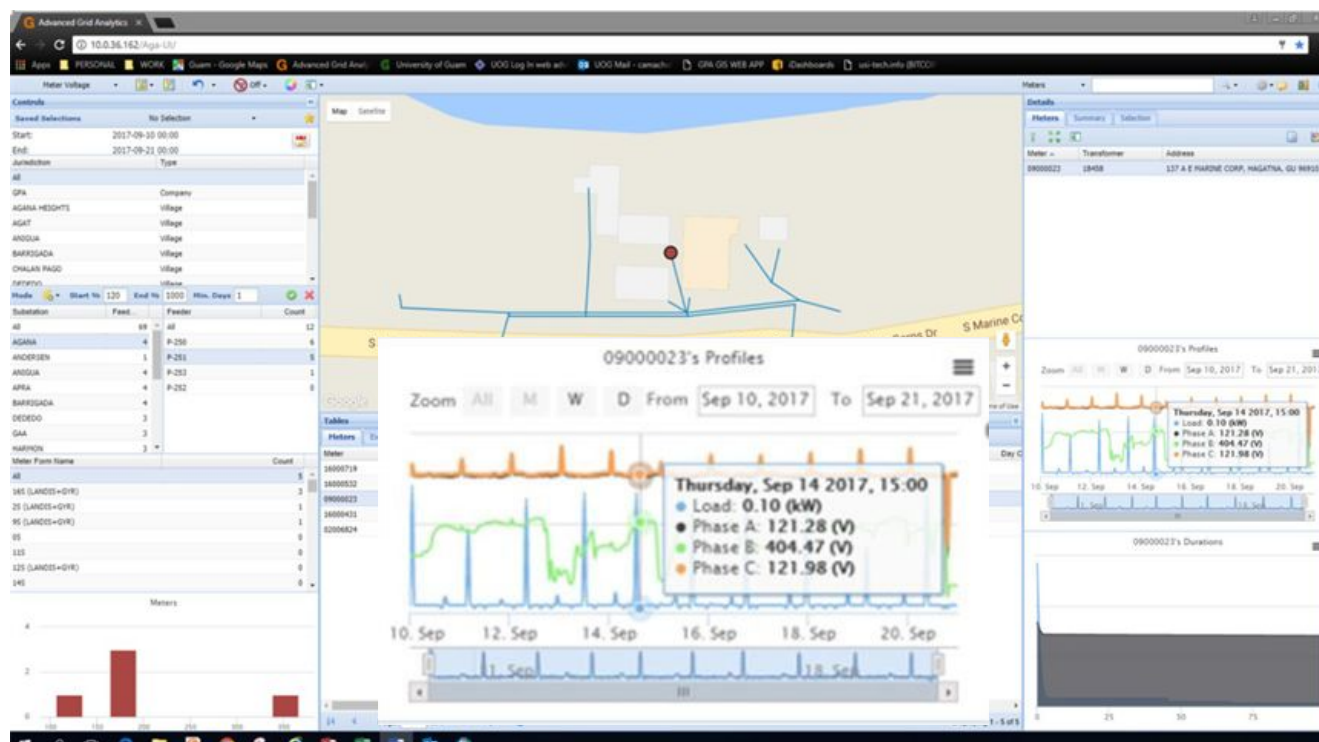


1. DEFECTIVE TRANSFORMER BANK – Voltage B shows high voltage. A trouble ticket was created and T&D investigated and replaced a damaged transformer. This is item 1 on the AGA troubleshooting spreadsheet.

# Item 1. Defective Transformer Bank

## *Advanced Grid Analytics*

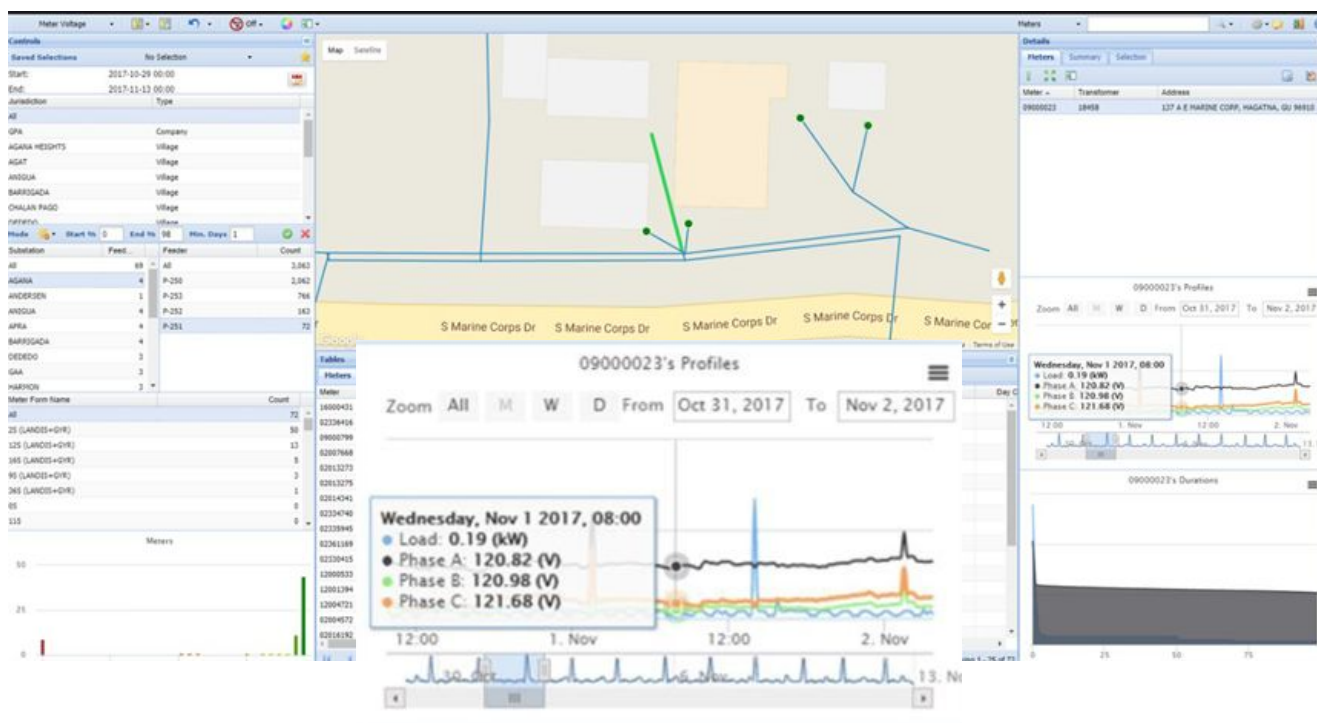
### BEFORE



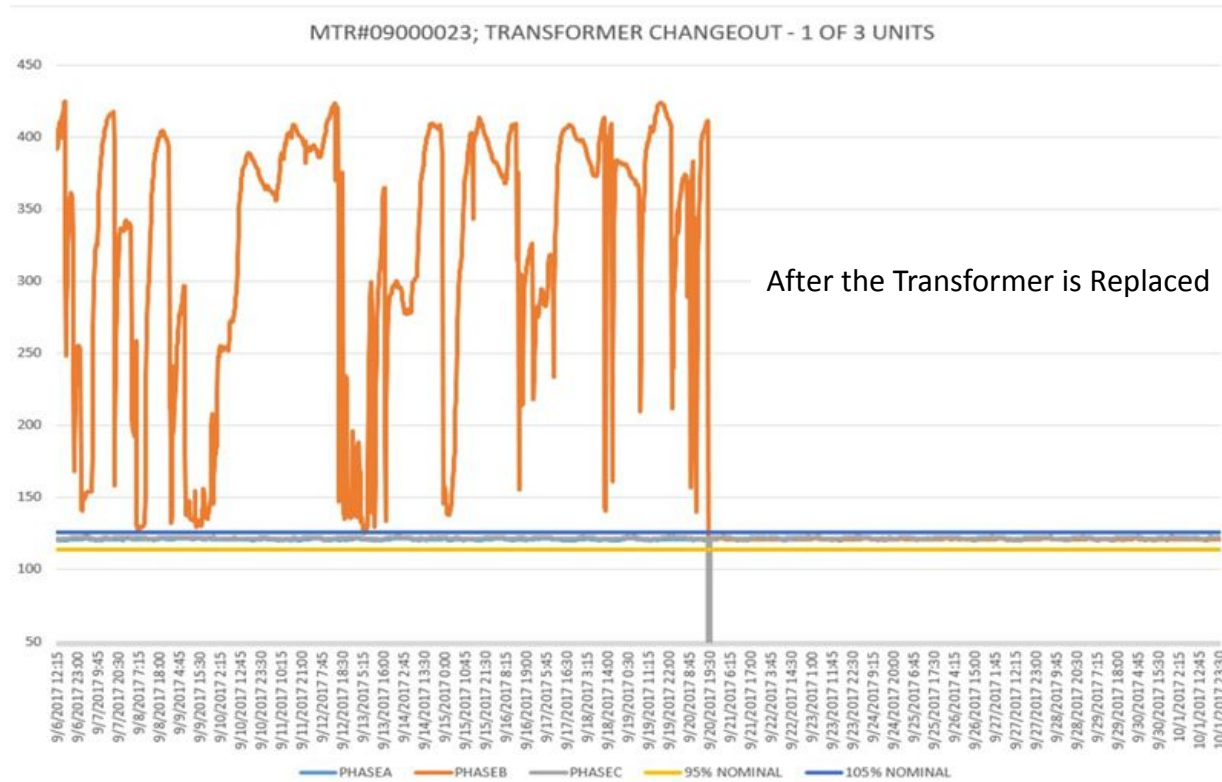
# Item 1. Defective Transformer Bank

## *Advanced Grid Analytics*

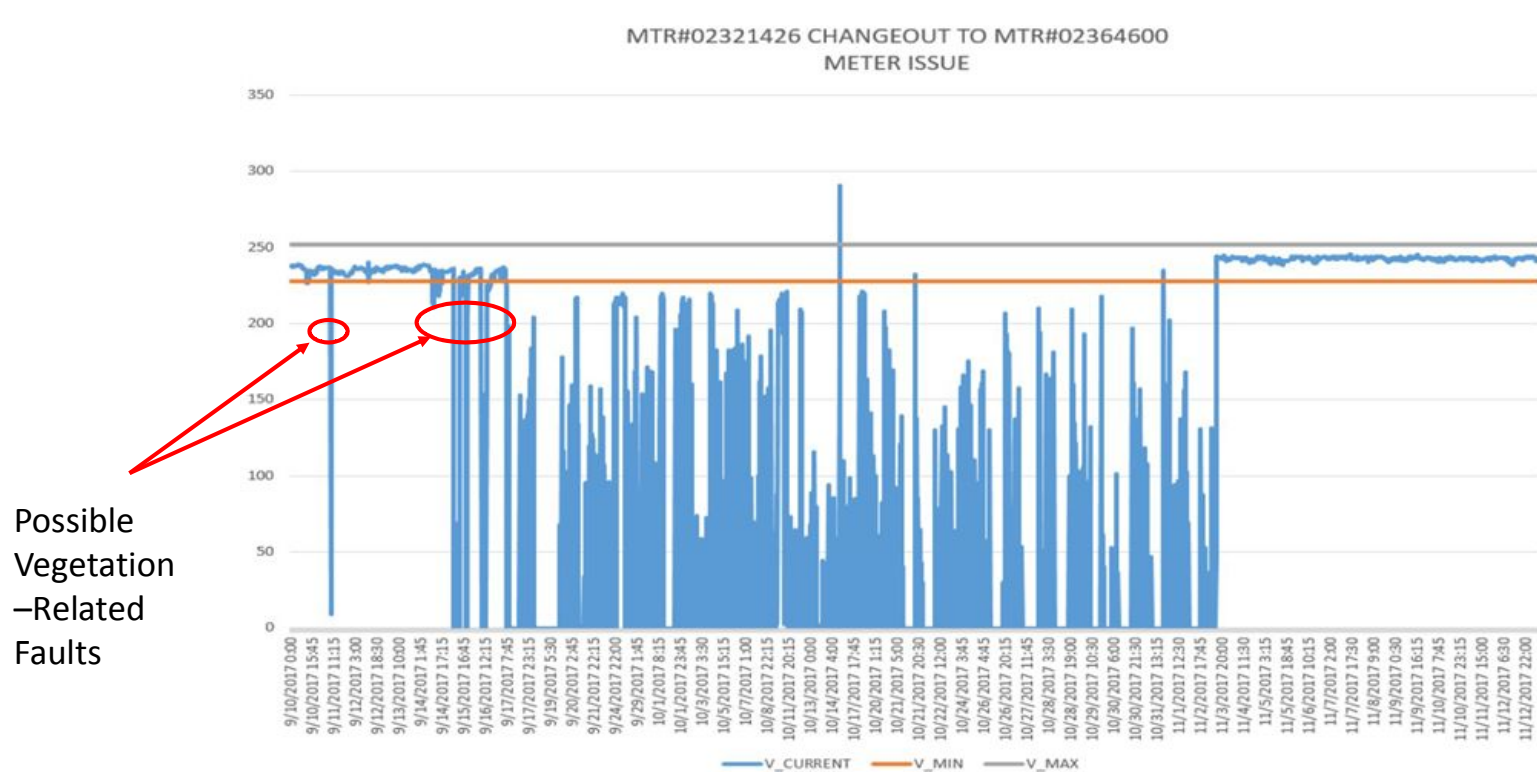
AFTER



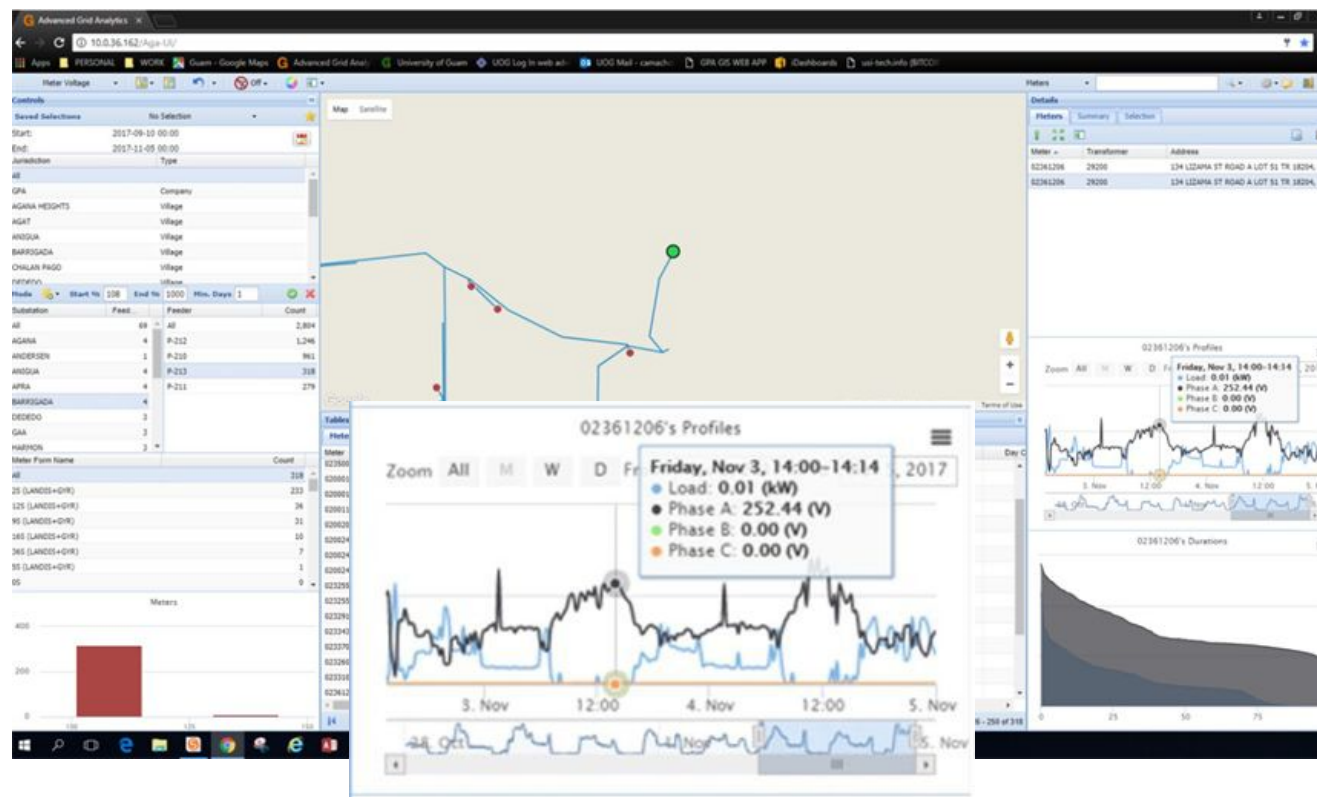
# Item 1. Voltages Before and After Transformer Change-out



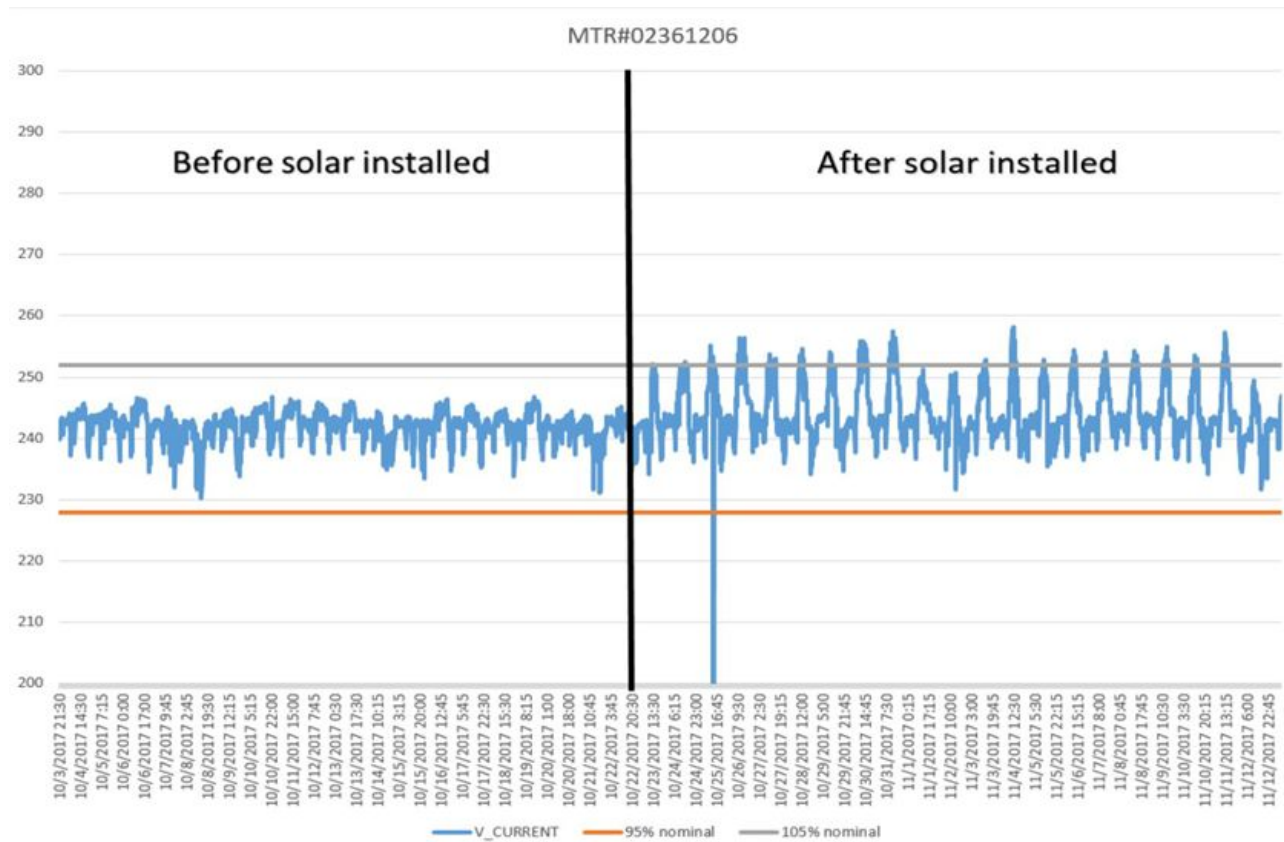
Item 4. Erratic Voltage – Meter found to be defective and replaced.



Item 5. INVERTER FAILURE TO REGULATE VOLTAGE (CUSTOMER SIDE) – High voltage during daytime hours for net metering customer. GPA Engineering asked customer to contact solar provider to check inverter regulation. No other customers affected.



Item 5. Graph showing effects of Solar Installation.





# Enhanced Outage Detection

- Improves outage identification, root cause analysis and restoration
- Used by Operators, Planners, Engineering, and Customer Service
- Two methods for outage detection and analysis – using meter events or using fault impedance method
- Utility operators can pinpoint to a more accurate outage location
- Identifies nested outages and assists operators and crews to reduce restoration time
- Includes Momentary Outage Tracking
  - Review/analyze momentary events , confirm and direct crews to reduce outage duration and improve restoration times..
  - Use momentary outages to properly calculate the outage index MAIFI.
  - **Momentary outages caused by tree branches touching circuits can also be analyzed to predict and prevent outages**



# Internal Audit Use of AGA

<b>GUAM POWER AUTHORITY INTERNAL AUDIT - REVENUE PROTECTION SERVICE</b>			
Investigated Cases from AGA Alerts			
No.	INVESTIGATION DATE	Reference (WO/MFI)	IAO-RPS MAIN FINDINGS
1	7/5/17	AGA	Unregistered Net Metering
2	7/5/17	AGA	Unregistered Net Metering
3	7/6/17	AGA	Unregistered Net Metering
4	9/12/17	AGA Stopped Meter Report	No Issues Noted Upon Inspection. Customer may have been Off-Island
5	9/12/17	AGA Stopped Meter Report	Vacant Unit
6	9/13/17	AGA Stopped Meter Report	Vacant Unit
7	9/13/17	AGA Slowed Meter Report	Work Order Close Out in CC&B Not Yet Completed
8	11/8/2017	AGA Stopped Meter Report	Vacant Unit
9	11/8/2017	AGA Tamper/Reverse Energy Flow Alert	Unregistered Net Metering
10	11/8/2017	AGA Tamper/Reverse Energy Flow Alert	Unregistered Net Metering
11	11/8/2017	AGA Tamper/Reverse Energy Flow Alert	Not Used (Under Renovation)
12	11/8/2017	AGA Tamper/Reverse Energy Flow Alert	Vacant Unit

Some Examples of  
Investigations Triggered by  
AGA Revenue Protection  
Module



# Outage Management System



A. E. Balajadia Consulting

## Renewable Energy Integration Study

# GPA Grid Operational Standards

- Submitted 17 proposed standards for GPA review and modification if required prior to adoption.
- Standards are critical for system design and operation
- Standards form the basis for IPP operation requirements
  - Must be submitted as part of New Generation Bid Package
- Standards form the basis for how GPA is required to operate and plan the system for IPP integration into the grid

# GPA Standards

- **Proposed Standards:**

- GPABAL-001 -> Steady-State Frequency Control – AK base
- GPABAL-001 -> Steady-State Frequency Control – Hi base
- GPABAL-002 -> Disturbance Control Performance – Ak Base
- GPABAL-002 -> Disturbance Control Performance – Hi Base
- GPABAL-003 -> Frequency Response & Bias
- GPABAL-005 -> Automatic Generation Control
- GPABAL-502 -> Resource Adequacy & Evaluation
- GPATPL-001-4 -> Transmission Planning Performance Requirements
- GPAPRC-006 -> Underfrequency Loadshedding
- GPAMOD-025 -> Real and Reactive Power Verification
- GPAMOD-026 -> Excitation Verification & Modeling
- GPAMOD-027 -> Governor Verification & Modeling
- GPAMOD-032 -> Data for Power System Modeling & Analysis
- GPAMOD-033 -> Steady-State & Dynamic System Model Validation

# Renewable Study

- Have completed much of renewable study
- Issues with adding renewables beyond existing are:
  - Inadequate Short Circuit Current
  - Response of existing units
  - Minimum operating limits of existing units
  - Long-fault clearing times on 35 kV
  - Long-fault clearing times on 115 kV
  - Fault Induced Delayed Voltage Recovery (FIDVR)
  - No AGC control
  - Lack of load at Solar PV Peak

## Renewables – Going Forward

- Flexible generation – must replace existing GPA base-loaded units
- AGC control on all PV, ESS, and thermal generation
- Load-shifting batteries on future PV
- Some additional PV could be absorbed in afternoon
- Synchronous condensers required to add Short Circuit (SC) strength
- Faster fault clearing times on 34.5 kV and 115 kV lines
  - Fiber Optics Communications Between Substation
  - 5 cycle or less clearing times required
- Synchronous condensers may be required at different locations
- “Micro-Grids” using PV must include synchronous condenser or generation

# NEMS

- Increase in NEMS either reduces station PV or increases ESS requirements
- NEMS increase may require changes to regulators or LTCs, but forecast levels are not high enough to be considered an issue
- Only 15 MW of NEMS forecast in the next 10 years



## Station PV

- Almost all station PV beyond Phase II will require ESS load-shifting
- To reduce Short-circuit requirement, future PV should be connected to a common DC buss with ESS
- All energy scheduled through ESS via AGC
- ESS filters all PV variations from GPA generation
- Phase III + IV PV/ESS could reach 180 MW
  - This is ESS capacity limited
  - PV capacity can be greater than ESS capacity
- ESS systems will be by far largest in world
- GPA to complete production cost simulations on economic limits

## Station PV

- GPA system will have extremely low Short-Circuit Ratio (SCR)
  - GPA system has a low SCR
- $SCR > 2.0$  is required for reliable operation of PV/ESS inverters
- Manufacturers must show inverters can operate with the forecast SCR of the GPA system
- Manufacturers must provide simulations and models to ensure inverters operate and do not interfere with other inverters
- Will be a technical challenge
- Technical challenge will not be near as hard as the administrative challenge

## New Flexible Generation

- Without New Flexible Generation, GPA will have to terminate future renewable energy projects

## Future Generation

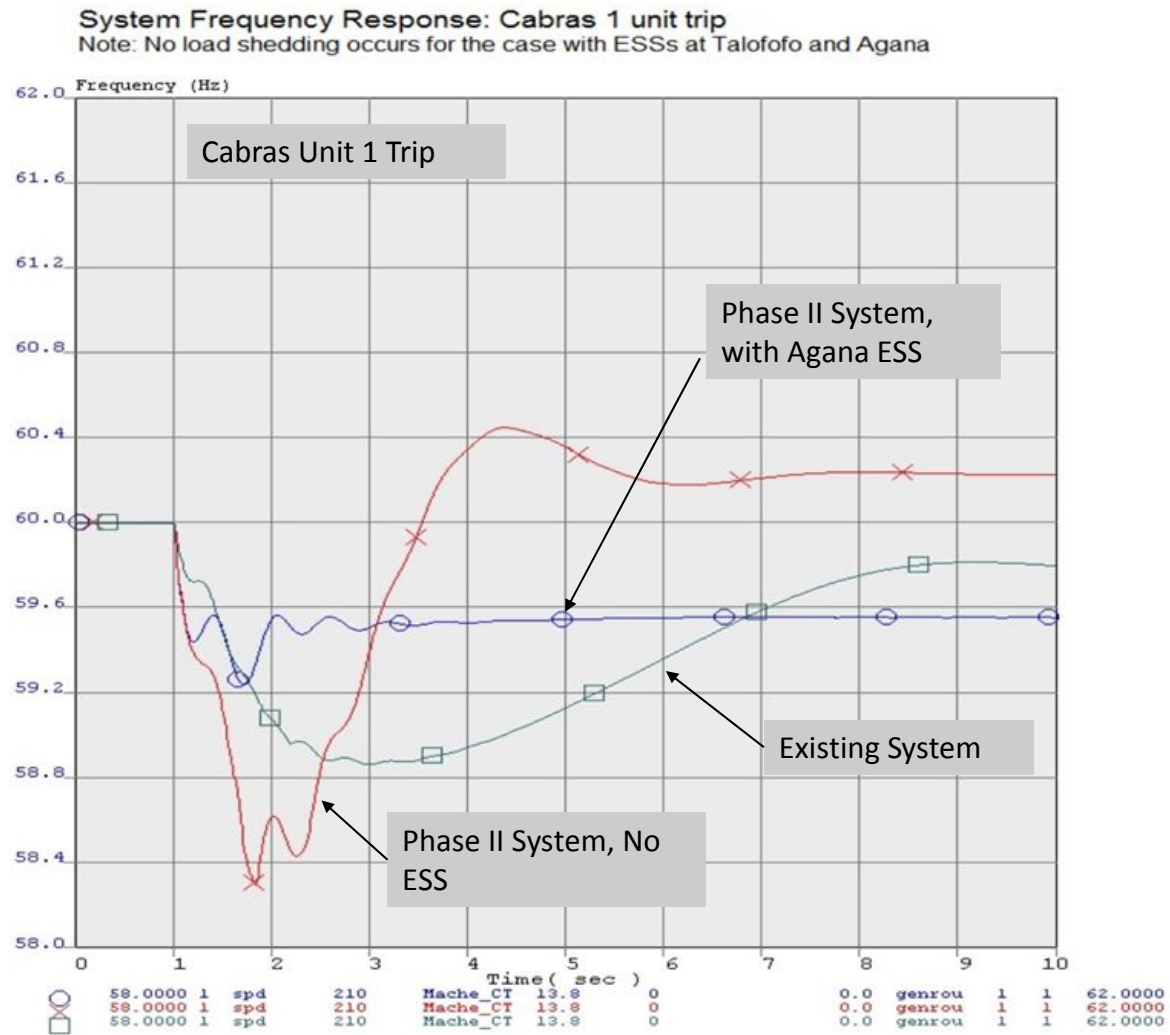
- Could be significant system benefit with a Navy/GPA Orote plant with efficient unit and/or synchronous condenser
- Generation must have low minimums/ fast start times
- Generation must have high ramp rates available through AGC
- Synchronous condenser option may be beneficial
- Centralized power plant may present some challenges (115 KV Faults) that requires additional consideration
- Either new generation or synchronous condensers must be in place prior to Phase III
- Curtailment or synchronous condensers may be required for Phase II

## Transmission Improvements

- Improved relaying on all 34.5 kV/115 kV lines
- Only minor issues identified with existing loads
- Waiting on future loads
- Significant improvements not identified with existing loads
- However, centralized generation presents some challenges not addressed yet.

# Transmission Improvements

- Improved relaying on all 34.5 kV/115 kV lines
- Only minor issues identified with existing loads
- Waiting on future loads
- Significant improvements not identified with existing loads
- However, centralized generation presents some challenges not addressed yet.



## Summary

- Once started, system improvements associated with renewables must be completed
- Improvements required for renewables will help system today but are required after renewable addition.
- GPA can accept renewables up to the economic limit, with mitigating measures.
- These improvements will
  - Virtually eliminate Under frequency Load Shedding
  - Improve Power Quality
  - Improve System Stability
  - Increase the Amount of Renewable Energy the GPA System can Accommodate.



**CUSTOMER SERVICE  
CREDIT COLLECTION  
Bankruptcy Report  
FY 2018**

Prepared by: \_\_\_\_\_  
Carla Cruz

Approved by: \_\_\_\_\_  
Jamie Pinault

MONTH	FISCAL YEAR 2018	October 31, 2017		Grand Total as of October 2017		November 30, 2017		Grand Total as of November 2017		December 31, 2017		Grand Total as of December 2017	
Chapter		No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount
7													
11		1	\$47,917.79	1	\$47,917.79								
13													
Total		1	\$47,917.79	1	\$47,917.79	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00

MONTH	Balance Forward		January 31, 2018		Grand Total as of January 2018		February 28, 2018		Grand Total as of February 2018		March 31, 2018		Grand Total as of March 2018	
Chapter	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount
7														
11														
13														
<b>Total</b>	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00

MONTH	Balance Forward		April 30, 2018		Grand Total as of April 2018		May 31, 2018		Grand Total as of May 2018		June 30, 2018		Grand Total as of June 2018	
Chapter	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount
7														
N/A														
<b>Total</b>	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00

MONTH	Balance Forward		July 31, 2018		Grand Total as of July 2018		August 31, 2018		Grand Total as of August 2018		September 30, 2018		Grand Total as of September 2018	
Chapter	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount	No. of Acct.	Bankruptcy Amount
7														
11														
13														
<b>Total</b>	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00	0	\$0.00

# GPA Work Session - November 21, 2017 - DIVISION REPORTS

DATA: CSD PERSONNEL WORK ACTIVITIES  
COMPILED BY: V.M. CEPEDA  
REPORTING MONTH: OCTOBER 2017

## MTD CONSOLIDATED REPORT

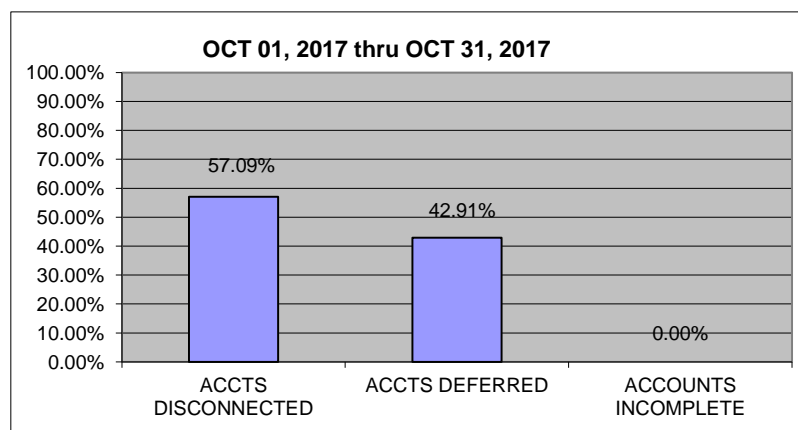
APPROVED BY:  
E.D.MENDIOLA (CSS)

BUSINESS OFFICE/ SATELLITE EMPLOYEE MTD (CONSOLIDATED) REPORT	GLORIA B. NELSON	% MTD	HAGATNA	% MTD	UPPER TUMON	% MTD	MTD TOTAL
TRANSACTION (TYPE)							
<b>APPLICATION</b>							
NEW INSTALL-PERMANENT (NI1)	13	72%	0	0%	5	28%	18
NEW INSTALL- TEMP (NI2)	8	73%	0	0%	3	27%	11
NEW INSTALL - ST LIGHT (NI3)	2	40%	3	60%	0	0%	5
REC W/OUT METER (NI4)	5	28%	8	44%	5	28%	18
REC W/METER (NI5)	99	25%	131	33%	173	43%	403
NON METERED ACCT (NI6)	0	0%	1	100%	0	0%	1
NAME CHANGE (NC1)	89		82	32%	88	34%	259
NAME CHANGE ST LIGHT (NC2)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
<b>TERMINATION</b>							
TERMINATION REGULAR (TE1)	90	25%	109	30%	162	45%	361
TERMINATION N/C (TE2)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
TERMINATION NON/PAYMENT (TE3)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
TERMINATION TYPHOON (TE4)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
TERMINATION REMOVAL (TE5)	0	0%	1	100%	0	0%	1
TERM (TE6)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
<b>OTHER(S)</b>							
WORK CLEARANCE (WC)	37	73%	0	0%	14	27%	51
INVESTIGATION (INV)	1	20%	1	20%	3	60%	5
METER C/O - CALIBRATION (MC1)	0	0%	0	0%	1	100%	1
METER UP/DOWN GRADE (MC3)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
MTR RDR FIELD INVESTIGATION (MF1)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
MISC PUBLIC SRVC (MPS)	26	60%	4	9%	13	30%	43
REFUND (RFD)	15	45%	4	12%	14	42%	33
RELOCATE METER (RM1)	10	83%	1	8%	1	8%	12
ST LIGHT REPAIR (ST1)	16	100%	0	0%	0	0%	16
OFFICIAL RECEIPT (OR)	11	5%	81	33%	151	62%	243
UPDATE SPECIAL CHARGE (USC)	17	8%	33	15%	169	77%	219
INSPECTION REPORT (IR)	1	4%	4	16%	20	80%	25
COPY OF BILL (COB)	426	28%	410	27%	697	45%	1533
BILL INQUIRY (BILL INQ)	563	26%	877	41%	702	33%	2142
BILL ADJUSTMENT (BILL ADJ)	2	25%	3	38%	3	38%	8
ADDRESS CHANGE (ADDR CHG)	36	23%	62	39%	62	39%	160
DEFERRED PAYMENT AGREEMENT (DPA)	6	55%	2	18%	3	27%	11
<b>ACTIVE DELINQUENTS</b>							
INQUIRY (INQ)	214	31%	297	42%	188	27%	699
PAYMENT (PYMT)	193	43%	205	46%	48	11%	446
DO NOT DISCONNECT (DND)	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
EXTENSION (EXT)	196	38%	166	32%	160	31%	522
RECONNECT (REC)	133	71%	30	16%	24	13%	187
RETURNED CHECKS	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
<b>INACTIVES</b>							
INQUIRY (INQ)	15	21%	39	55%	17	24%	71
PAYMENT (PYMT)	10	37%	17	63%	0	0%	27
TRANSFER BALANCE (TRF BAL)	2	8%	6	24%	17	68%	25
SMALL CLAIMS	0	#DIV/0!	0	#DIV/0!	0	#DIV/0!	0
<b>TOTAL TRANSACTION(S)</b>	<b>2236</b>		<b>2577</b>		<b>2743</b>		<b>7556</b>
						192	
<b>INQUIRIES</b>							
VISIT (V)	1511	31%	1534	32%	1788	37%	4833
TELEPHONE (T)	56	39%	30	21%	56	39%	142
MAIL (M)	184	28%	220	34%	243	38%	647
FAX (F)	47	65%	25	35%	0	0%	72
TRANSFER CALL (TRF CALL)	29	64%	13	29%	3	7%	45
OTHER (OTHER)	67	17%	165	41%	173	43%	405
<b>TOTAL INQUIRIES</b>	<b>1894</b>		<b>1987</b>		<b>2263</b>		<b>6144</b>
<b>SERVICE LEVEL</b>							
LESS THAN 10 MINUTES	1574	37%	1100	26%	1532	36%	4206
10-15 MINUTES	183	12%	720	47%	623	41%	1526
16-30 MINUTES	101	34%	120	40%	76	26%	297
> 30 MINUTES	36	31%	47	41%	32	28%	115
<b>TOTAL SERVICE LEVEL</b>	<b>1894</b>		<b>1987</b>		<b>2263</b>		<b>6144</b>

NOTE: INQUIRY TYPE (OTHERS) = INCLUSIVE OF DESK WORK (E.G., NON PAYMENT COMPLETIONS, COMMERCIAL COMPLETIONS, ETC.)

**NON PAYMENT "ACTIVE DELINQUENTS" (SINGLE PHASE) OCT 01, 2017 - OCT 31, 2017**

DATE	ACCTS SCHEDULED	ACCTS DISCONNECTED	ACCTS DEFERRED	ACCOUNTS INCOMPLETE
OCTOBER	550	314	236	0
<b>TOTALS:</b>	550	314	236	0
		57.09%	42.91%	0.00%



## Justifications:

**Deferred:** Cust. placed on Installment Payment Agreement  
- DND due to account payments received /posted.

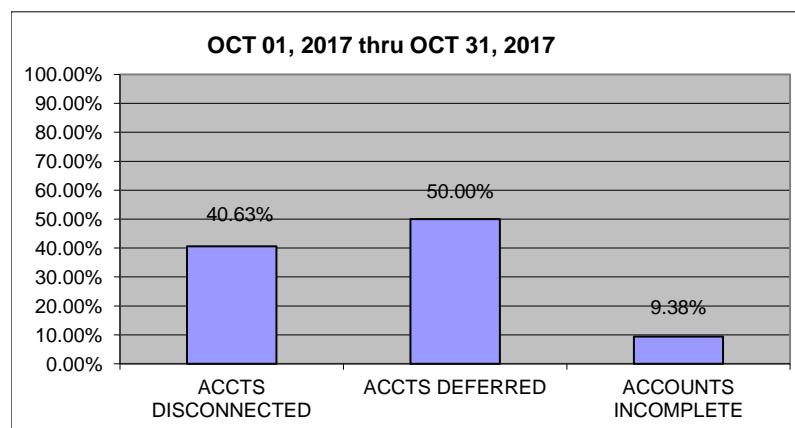
**Accts. Incomplete:** Inaccessible (Gate/Door Locked/ Dog Hazard), requires legible sketch, no file, insufficient time due to work priorities caused by call In(s) thus hampering work assignments.

**Note:** Command Center under went upgrade

Prepared by: Nadine R Blake, CSR  
Approved by: Jaime C. Pinuala, CSS

**NON PAYMENT "ACTIVE DELINQUENTS" (3 PHASE) OCT 01, 2017 - OCT 31, 2017**

DATE	ACCTS SCHEDULED	ACCTS DISCONNECTED	ACCTS DEFERRED	ACCOUNTS INCOMPLETE
OCTOBER	32	13	16	3
<b>TOTALS:</b>	32	13	16	3
		40.63%	50.00%	9.38%



## Justifications:

**Deferred:** Cust. placed on Installment Payment Agreement  
- DND due to account payments received /posted.

**Accts. Incomplete:** Inaccessible (Gate/Door Locked/ Dog Hazard), requires legible sketch, no file, insufficient time due to work priorities caused by call In(s) thus hampering work assignments.

**Note:** Command Center under went upgrade

Prepared by: Nadine R Blake, CSR  
Approved by: Jaime C. Pinuala, CSS

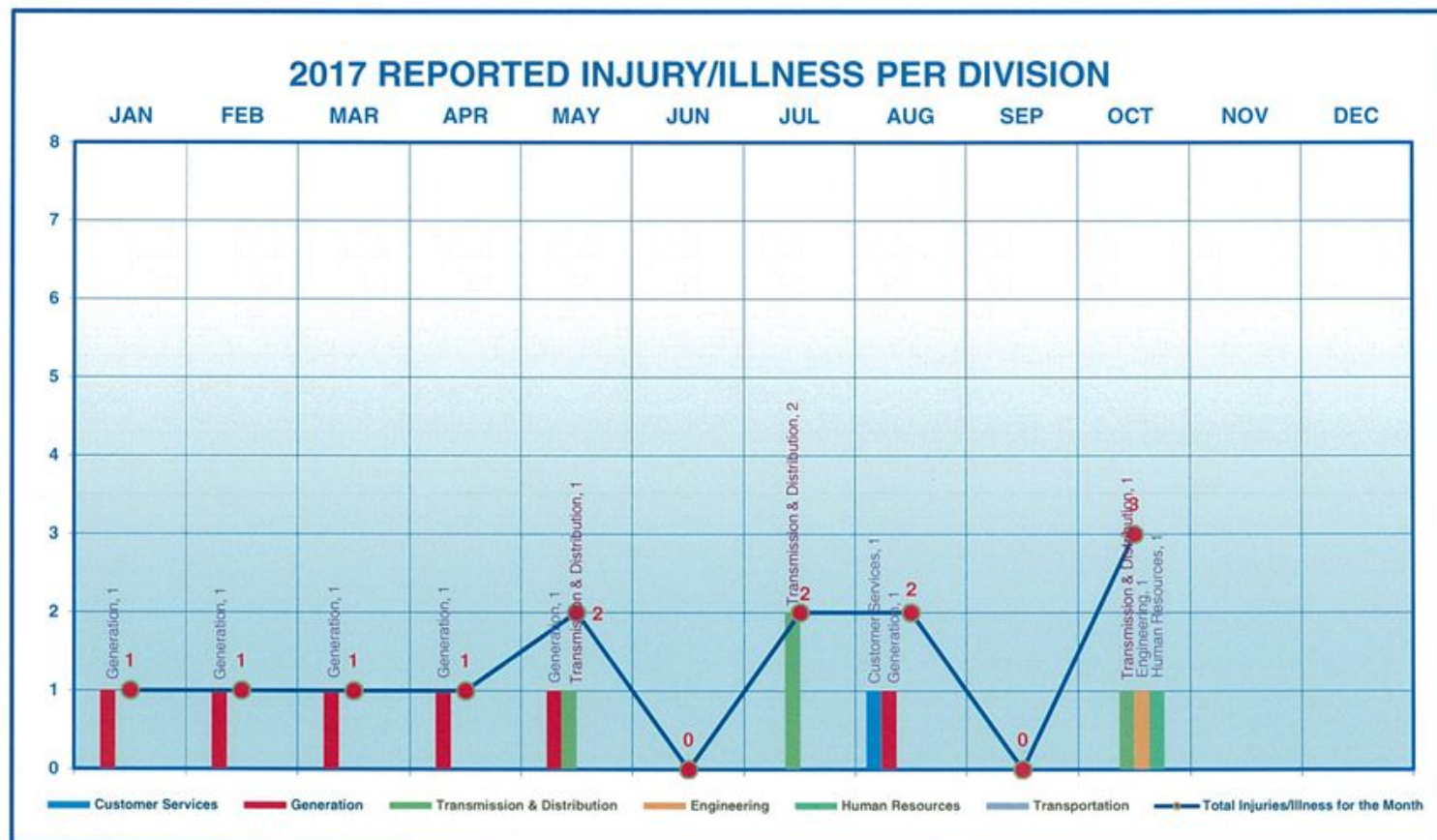
Run Date: 11/3/2017  
Run Time: 4:00:09PM

**Guam Power Authority  
Delinquent Accounts Summary  
ACTIVE ACCOUNTS**

Report ID: DELRATIO  
Page 1 of 1

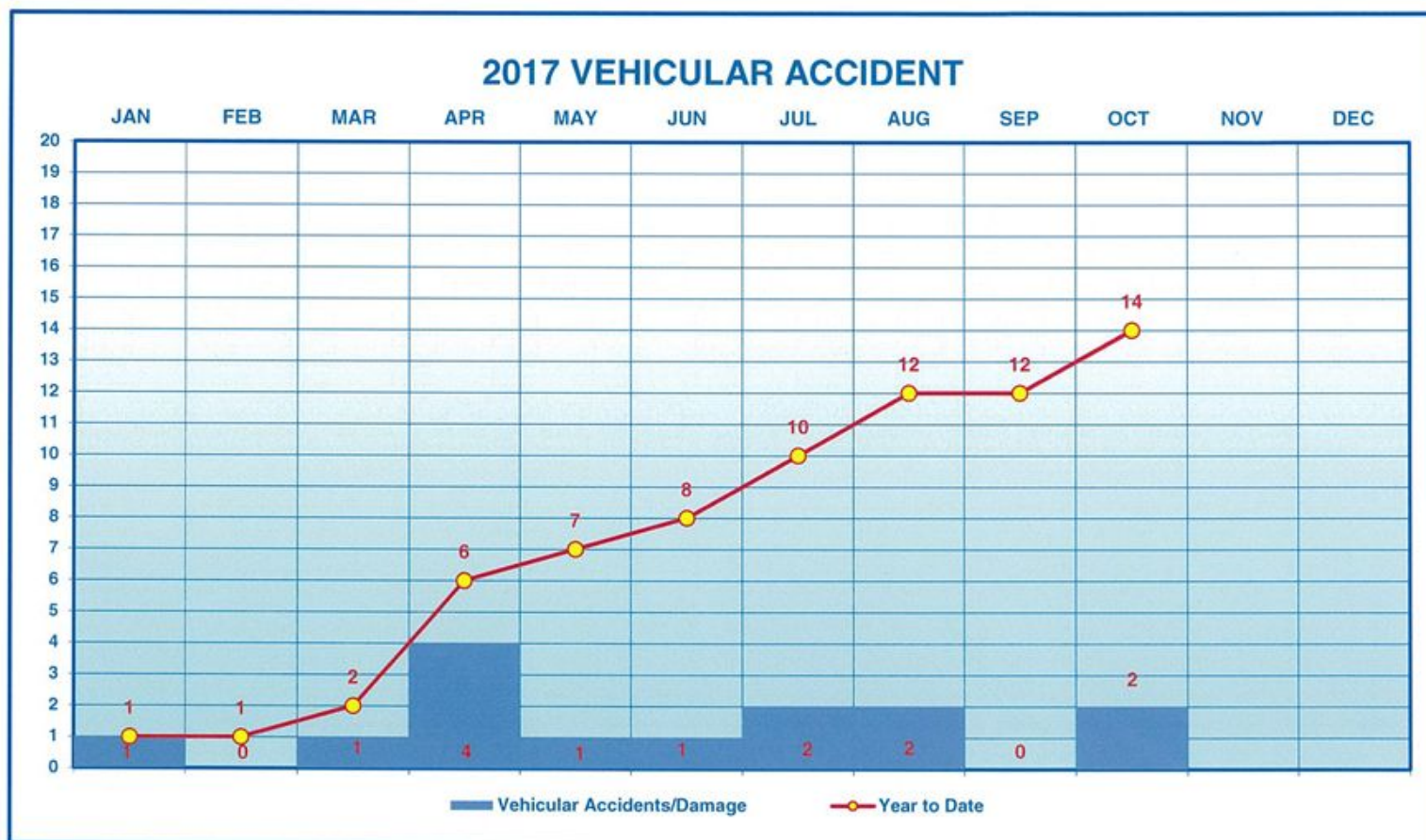
Residential									
<u>Rate Classification</u>	<u>Total Cust</u>	<u>Del Cust</u>	<u>Current Bill</u>	<u>28-45 days</u>	<u>46-60 days</u>	<u>61-90 days</u>	<u>Over 90 days</u>	<u>Total Arrears</u>	<u>Total Due</u>
	43,081	3,733 8.67%	615,230.42	387,200.04 2,437 5.66%	117,113.96 846 1.96%	39,970.18 387 0.90%	16,841.62 63 0.15%	561,125.80	1,176,356.22
Small Gen Non-Dem	4,005	275 6.87%	97,171.99	66,310.49 168 4.19%	16,079.87 56 1.40%	14,818.58 36 0.90%	52,743.24 15 0.37%	149,952.18	247,124.17
Small Gen Demand	960	64 6.67%	125,696.64	117,127.57 40 4.17%	46,616.25 14 1.46%	13,423.62 5 0.52%	181,842.01 5 0.52%	359,009.45	484,706.09
Large General	113	4 3.54%	214,212.48	511,149.88 4 3.54%	0.00 0 - %	0.00 0 - %	0.00 0 - %	511,149.88	725,362.36
Private Street Light	523	59 11.28%	853.11	486.43 17 3.25%	428.35 14 2.68%	421.96 20 3.82%	1,222.54 8 1.53%	2,559.28	3,412.39
<b>Sub Total (Private)</b>	<b>48,682</b>	<b>4,135 8.49%</b>	<b>1,053,164.64</b>	<b>1,082,274.41 2,666 5.48%</b>	<b>180,238.43 930 1.91%</b>	<b>68,634.34 448 0.92%</b>	<b>252,649.41 91 0.19%</b>	<b>1,583,796.59</b>	<b>2,636,961.23</b>
Small Gov Non-Dem	56	6 10.71%	6.20	2,586.05 6 10.71%	0.00 0 - %	0.00 0 - %	0.00 0 - %	2,586.05	2,592.25
Small Gov Demand	47	7 14.89%	77.09	12,777.09 7 14.89%	0.00 0 - %	0.00 0 - %	0.00 0 - %	12,777.09	12,854.18
Large Government	15	1 6.67%	0.00	20,176.17 1 6.67%	0.00 0 - %	0.00 0 - %	0.00 0 - %	20,176.17	20,176.17
Gov Street Light	32	5 15.63%	63.50	4,459.02 5 15.63%	0.00 0 - %	0.00 0 - %	0.00 0 - %	4,459.02	4,522.52
<b>Sub Total (Govt)</b>	<b>150</b>	<b>19 12.67%</b>	<b>146.79</b>	<b>39,998.33 19 12.67%</b>	<b>0.00 0 0.00%</b>	<b>0.00 0 0.00%</b>	<b>0.00 0 0.00%</b>	<b>39,998.33</b>	<b>40,145.12</b>
<b>GRAND TOTAL</b>	<b>48,832</b>	<b>4,154 8.51%</b>	<b>1,053,311.43</b>	<b>1,122,272.74 2,685 5.50%</b>	<b>180,238.43 930 1.90%</b>	<b>68,634.34 448 0.92%</b>	<b>252,649.41 91 0.19%</b>	<b>1,623,794.92</b>	<b>2,677,106.35</b>

## SAFETY DIVISION MONTHLY REPORT



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Customer Services								1				
Generation	1	1	1	1	1			1				
Transmission & Distribution					1		2			1		
Human Resources										1		
Engineering										1		
Transportation												
Total Injuries/Illness for the Month	1	1	1	1	2	0	2	2	0	3		

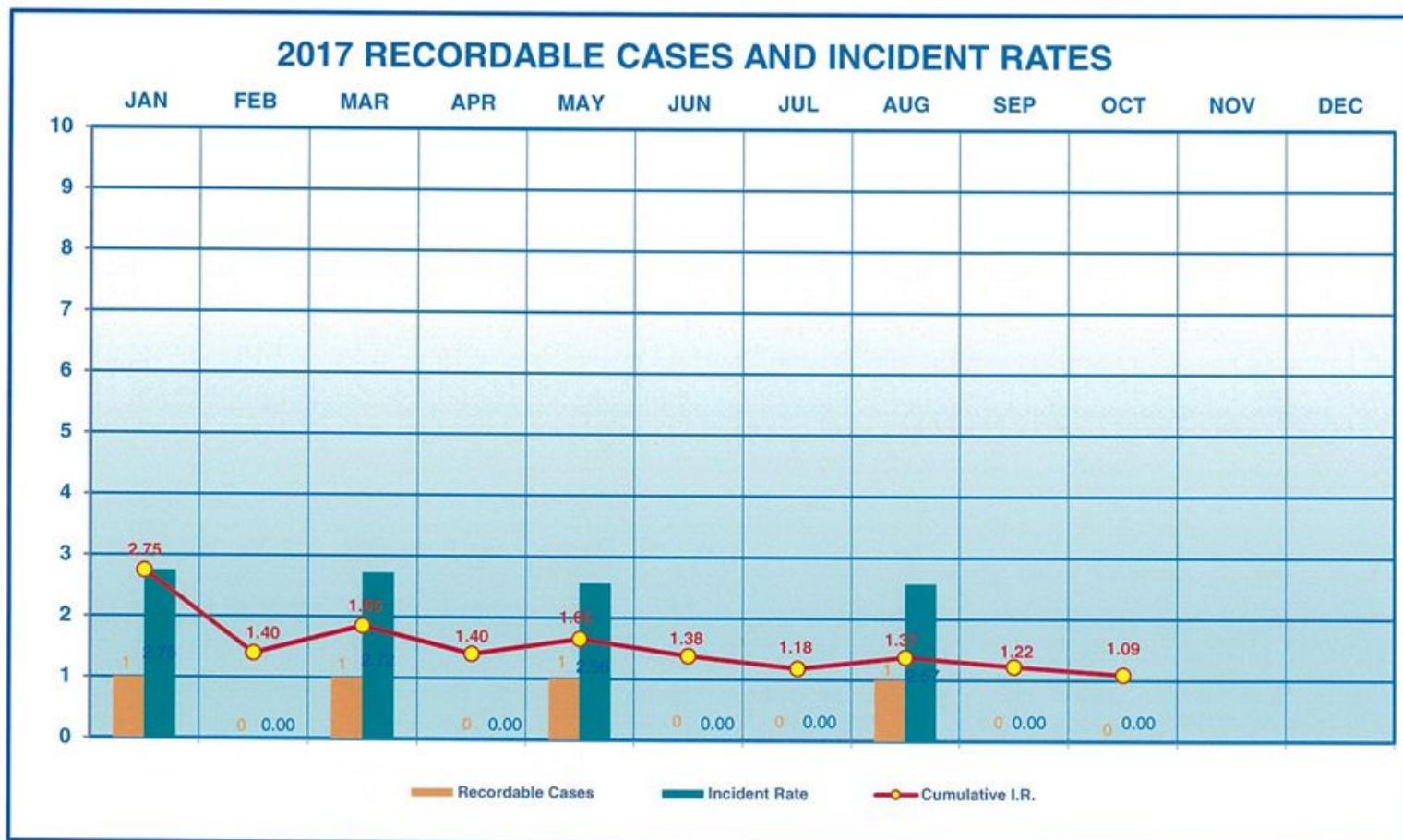
## SAFETY DIVISION MONTHLY REPORT



	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Vehicular Accidents/Damage	1	0	1	4	1	1	2	2	0	2		
Year to Date	1	1	2	6	7	8	10	12	12	14		
Accidents attributed to Employee fault	1	0	0	3	1	1	2	2	0	1		



## SAFETY DIVISION MONTHLY REPORT



**Total Case Incident Rates = (# recordable cases x 200,000 hours) / # total annual work hours**

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Recordable Cases	1	0	1	0	1	0	0	1	0	0		
Incident Rate	2.75	0.00	2.72	0.00	2.56	0.00	0.00	2.57	0.00	0.00		
Cumulative I.R.	2.75	1.40	1.85	1.40	1.65	1.38	1.18	1.37	1.22	1.09		



**CUSTOMER SERVICE DIVISION - Oct 2017****SUMMARY REPORT**

SITE	Less than 10 Mins.	%	10-15 Mins.	%	15-30 Mins.	%	30-45 Mins.	%	TOTAL	Location %
GBN	1,574	83%	183	10%	101	5%	36	2%	1,894	31%
HAGATNA	1,100	55%	720	36%	120	6%	47	3%	1,987	32%
UPPER TUMON	1,532	68%	623	28%	76	3%	32	1%	2,263	37%
TOTAL:	4,206	68%	1,526	25%	297	5%	115	2%	6,144	100%

**Government Accounts Receivable:** CSD reports invoices for the month of September 2017, for 71 active government accounts with an overall total of \$4,300,222.85. 67 accounts were current (94%), 4 account arrears (6%). 4 fax/emails issued to government accounts totaling \$1,203,677.53. September 2017 invoices, 67 accounts paid in full.

**CREDIT AND COLLECTION**

**Delinquent Ratio:** As of Oct 2017 the authority reported a total 48,682 active customers. The "Delinquent Ratio" was recorded at 8.49% with 4,135 total delinquent accounts, total arrears of 1,583,796.59; 1,082,274.41; 2,666 (5.48% / 28-45 days) category; 180,238.43; 930 (1.91% / 46-60 days); 68,634.34; 448 (0.92% 61-90 days); and 252,649.41; 91 (0.19% / Over 90 days).

**Return Check(s):** During Oct 2017, 100 returned checks (114 customer accounts), were received valued at \$49,307.90 of this, 87 checks were cleared amounting to \$37,139.87. The remaining 27 accounts totaling \$12,168.03 were scheduled for disconnection. Customer accounts that were not paid or reconnected were terminated and are pursued through inactive collection efforts (small claims).

**Bankruptcy:** During Oct the Bankruptcy reports eight (8) customer accounts filed, totaling \$47,917.79, Chapter 11.

**Damage Claim:** The Damage claim committee received two (2) Damage claim at \$1,465.00 for the month of October 2017.

**COMMAND CENTER**

**Meter Changed Outs:** For the month of Oct 2017, there were a total of sixty-four (64) meters changed outs due to defective meter non-communicating.

**ACTIVE DELINQUENT - NON PAYMENT****COMMAND CENTER /DISCONNECTIONS/RECONNECTIONS/**

**Single Phase Meters:** Credit and Collection issued orders to Command Center to perform remote disconnect/reconnect for a total of 550 customers; 314(57%) were disconnected; 236(43%) deferred; 0(0%) incompletes.

**3 Phase Meters:** Credit and Collection issued orders to Disconnect Reconnect crew to perform truck roll out disconnect/reconnect for a total of 32 customers; 13(41%) were disconnected; 16(50%) deferred; 3(9%) incompletes.

<b>FY 2018 (Oct 01-31,2017)</b>								
	Scheduled	Disc	Deferred	Complete Vs. Scheduled	Incomplete Disconnections	Disc Vs. Scheduled	Deferred Vs. Scheduled	Incomplete Vs. Scheduled
Oct-17	582	327	252	579 99%	3	56%	43%	1%
TOTAL:	582	327	252	579	3	56%	43%	1%
<b>FY 2017 (October 01, 2016 - September 30, 2017)</b>								
QTR	Scheduled	Disc	Deferred	Complete Vs. Scheduled	Incomplete Disconnections	Disc Vs. Scheduled	Deferred Vs. Scheduled	Incomplete Vs. Scheduled
4 <sup>th</sup>	3,621	2,067	1,553	3,620 100%	1	57%	43%	0%
3 <sup>rd</sup>	4,021	2,683	1,332	4,015 100%	6	67%	33%	0%
2 <sup>nd</sup>	5,125	3,053	2,055	5,108 100%	17	60%	40%	0%
1 <sup>st</sup>	10,187	5,462	4,689	10,151 100%	36	54%	46%	0%
TOTAL:	22,954	13,265	9,629	22,894 100%	60	58%	42%	0%

This concludes the Summary Report for Customer Service Division for the month of Oct 2017.

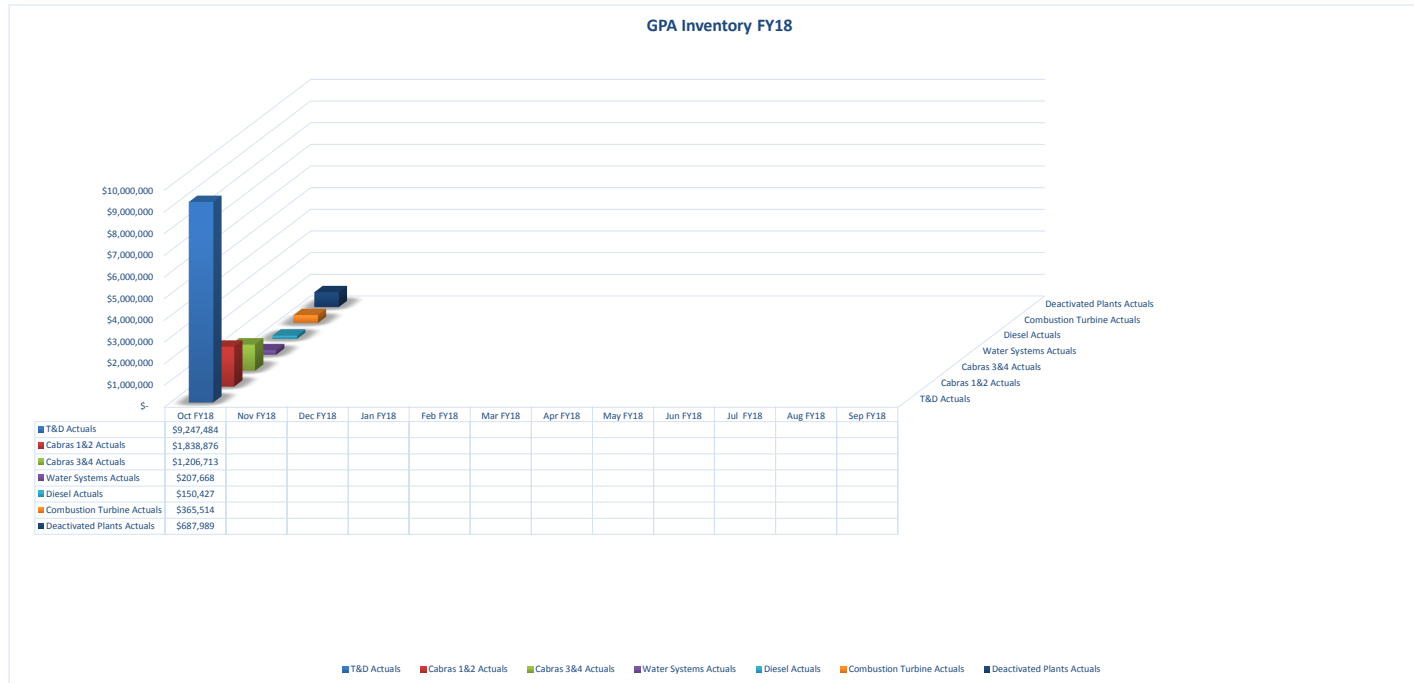
Respectfully submitted,

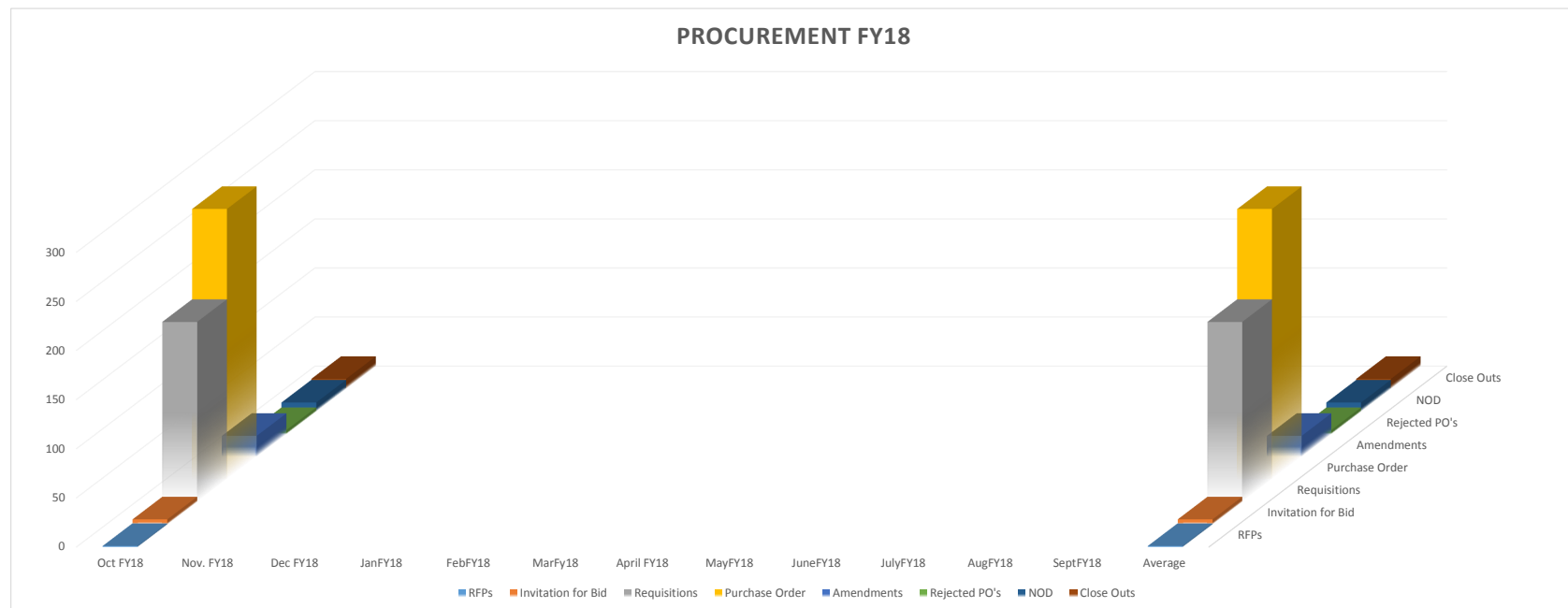
  
Marissa Fernandez, Admin. Officer

Reviewed / Approved by:

  
Mercy A. F. Castro, USA

# GPA Work Session - November 21, 2017 - DIVISION REPORTS





	Oct FY18	Nov. FY18	Dec FY18	JanFY18	FebFY18	MarFY18	April FY18	MayFY18	JuneFY18	JulyFY18	AugFY18	SeptFY18	Average
RFPs	1												1
Invitation for Bid	5												5
Requisitions	183												183
Purchase Order	275												275
Amendments	21												21
Rejected PO's	4												4
NOD	9												9
Close Outs	10												10

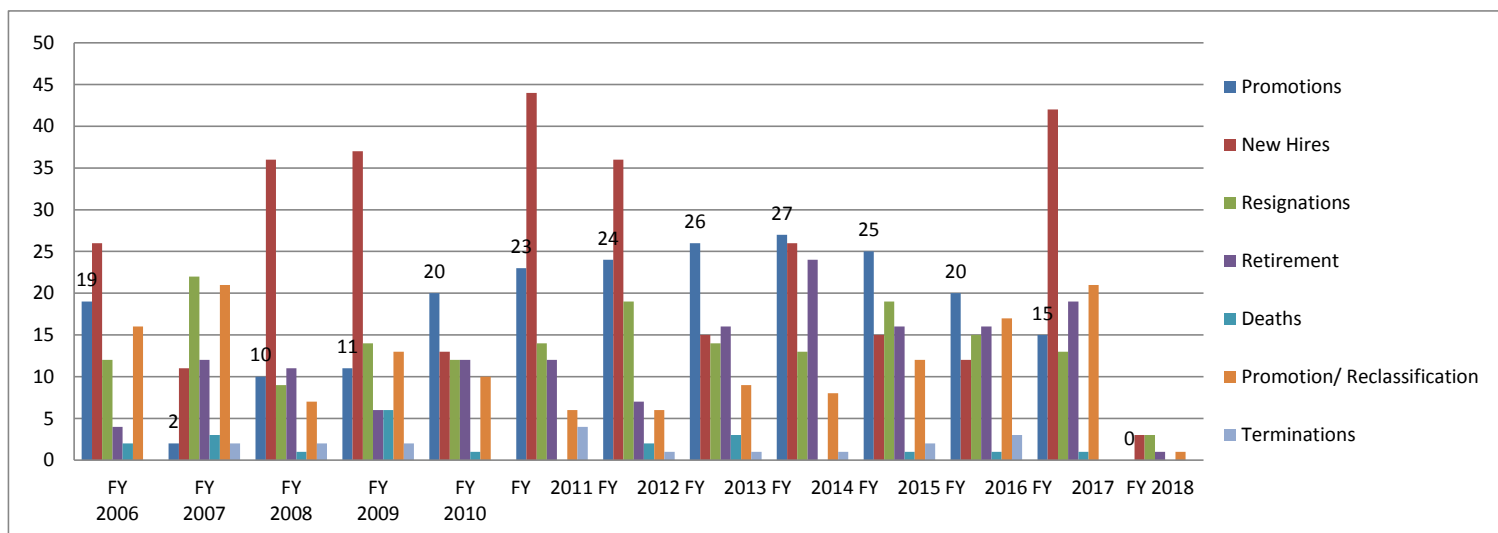
## RECRUITMENT ANALYSIS

Fiscal Year	Promotions	New Hires	Resignations	Retirement	Deaths	Promotion/ Reclassification	Terminations	Total Authorized FTE	Attrition Rate	Total Filled FTE at end of Fiscal Year	Percentage of Filled FTE at end of Fiscal Year
2006	19	26	12	4	2	16	0	584	3.3%	536	91.8%
2007	2	11	22	12	3	21	2	584	7.2%	510	87.3%
2008	10	36	9	11	1	7	2	592	4.5%	525	88.7%
2009	11	37	14	6	6	13	2	592	5.3%	534	90.2%
2010	20	13	12	12	1	10	0	592	4.7%	522	88.2%
2011	23	44	14	12	0	6	4	592	5.7%	536	90.5%
2012	24	36	19	7	2	6	1	568	5.4%	543	95.6%
2013	26	15	14	16	3	9	1	568	6.3%	524	92.3%
2014	27	26	13	24	0	8	1	568	7.3%	512	90.1%
2015	25	15	19	16	1	12	2	539	7.4%	489	90.7%
2016	20	12	15	16	1	17	3	510	7.2%	466	91.4%
2017	15	42	13	19	1	21	0	510	7.1%	476	93.3%
2018	0	3	3	1	0	1	0	510	0.8%	475	93.1%

*Recruitment Analysis (FY 2018) ..1 of 2*

*as of 10/31/17*

GPA Work Session - November 21, 2017 - DIVISION REPORTS



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

TOTAL NO. OF EMPLOYEES	536	510	525	534	522	536	543	524	512	489	466	476	475
------------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Recruitment Analysis (FY 2018) .. 2 of 2

as of 10/31/17

**GUAM POWER AUTHORITY  
HUMAN RESOURCES DIVISION  
STAFFING REPORT (FY 2018)  
AS OF OCTOBER 31, 2017**

<b>DIVISION</b>	<b>B1 ACTIVE EMP</b>	<b>B2 LAST EMP</b>	<b>C PROMOTE /TRANS</b>	<b>D PROM. RECLASS</b>	<b>E NEW HIRES</b>	<b>F RESIGN/ TERM</b>	<b>G RETIRE</b>	<b>H CURR VAC</b>	<b>I LAST VAC</b>	<b>(B1+H=K) TOTAL STAFFING</b>
INTERNAL AUDIT/REVENUE PROTECTION	3	3	0	1	0	0	0	1	1	4
BOARD(10200)	2	2	0	0	0	0	0	0	0	2
GENERAL MANAGER (CUS) [10100]	0	0	0	0	0	0	0	0	0	0
GENERAL MANAGER (20500)	4	4	0	0	0	0	0	0	0	4
PUBLIC INFORMATION OFFICE	2	2	0	0	0	0	0	0	0	2
ASSIST GM-ENG/TECH SVCS (30500)	1	1	0	0	0	0	0	0	0	1
ASSISTANT GENERAL MGR (30800)	1	1	0	0	0	0	0	1	1	2
ASSISTANT GENERAL MGR (AGMO) 50900	2	2	0	0	0	0	0	0	0	2
STRAT PLANN & OPTNS RESEARCH DIV	10	10	0	0	0	0	0	1	1	11
FACILITIES	9	9	0	0	0	0	0	0	0	9
HUMAN RESOURCES	10	10	0	0	0	0	0	0	0	10
CUSTOMER SERVICES	35	35	0	0	0	1	0	3	2	38
INFORMATION TECHNOLOGY	15	14	0	0	1	0	0	1	2	16
FINANCE	42	42	0	0	0	0	0	4	4	46
PROCUREMENT	21	21	0	0	0	0	0	1	1	22
TRANSPORTATION	9	9	0	0	0	0	0	2	2	11
SAFETY	6	6	0	0	0	0	0	1	1	7
PLANNING & REG	8	7	0	0	1	0	0	0	1	8
ENGINEERING	37	37	0	0	0	0	0	2	2	39
GENERATION	138	140	0	0	0	1	0	6	5	144
TRANSMISSION/DISTRIBUTION	98	100	0	0	0	1	1	9	7	107
POWER SYSTEM CONTROL CENTER	22	21	0	0	1	0	0	3	4	25
	<b>475</b>	<b>476</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>35</b>	<b>34</b>	<b>510</b>
JOBS/SCSEP/GETP PARTICIPANTS	1	1								1
APPRENTICESHIP PROGRAM	0	1								0
SUMMER ENGINEERING INTERNS	0	0								0
TEMPORARY (P.L. 34-32)	1	1								1
<b>GRAND TOTAL WORKFORCE:</b>	<b>477</b>	<b>479</b>	<b>0</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>1</b>	<b>35</b>	<b>34</b>	<b>512</b>

*FTE Count per FY18 FMP: 510*

**Current vacancies adjusted to reflect FTE of 510**

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

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

\*\* SCSEP = Senior Community Service Employment Program

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

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

\*\* P.L. 34-32 -Temporary employee(s)

Staffing Report as of October 31, 2017 - PREPARED BY: J.Aguigui

# SPORD CCU Report

October 2017



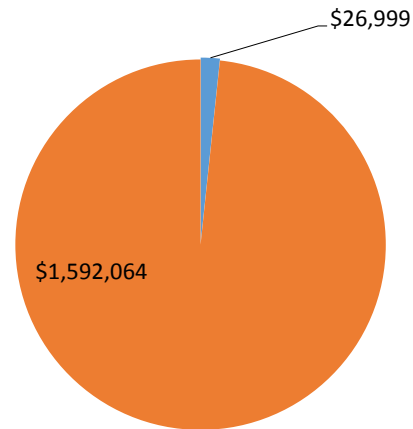
# SPORD FY 2018 Budget Status

## SPORD O&M:

### O&M (Non-Labor) Budget Status

thru 10/31/17

- Obligated
- Budget Balance



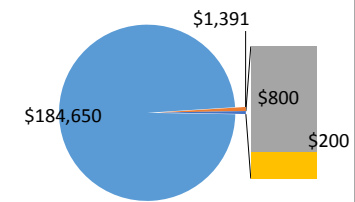
Approved Budget	\$	1,619,063
Adjusted Budget	\$	1,619,063
Actuals	\$	-

## DSM Expenses:

### FY17 DSM Program Costs

thru 10/31/17

- Paid Rebates-Split AC
- Regular / Overtime Pay
- Paid Rebates- Central AC
- Paid Rebates- Washer/Dryers

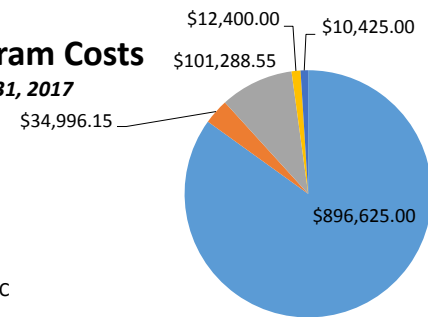


FY 17 Total = \$ 187,041

### Total DSM Program Costs

December 2015 thru Oct 31, 2017

- Paid Rebates-Split AC
- Regular / Overtime Pay
- Other Contractual
- Paid Rebates- Central AC
- Paid Rebates- Washer/Dryers



Total to Date = \$1,055,735

# Ongoing Activities

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

# October Project Activities

No.	Project Description	October Activities	Status / Est. Completion
1	Energy Storage System (Phase I)	GPA review of 90% design completed. Clearing and Grading Permit obtained. Mobilization for clearing and grading scheduled for November 2017.	May 2018
2	Renewable Energy Resource Phase II	Project is under protest. OPA meeting scheduled for Oct. 24. Continued internal discussions on System Impact Study.	(Under Protest)
3	New Power Plant Bid (EPCM)	Review of draft IPP bid documents for new power plant. Discussion on land details and RFQ process. GPA seeking PUC approval for prequalification on experience and financial capability as part of the multi-step bid.	2017 Q4 (Issue Solicitation)
4	DSM Marketing	Completed DSM Point of Sales Kits, GPA marketing signage, EV vehicle wrap (prepped for parade), various media ads, waiver form, etc.	Continuous
5	DSM Rebate Program	Processed over 820 equipment in applications for rebates totaling ~ \$185K	Continuous
6	Wireless Network Expansion (LML)	Commenced Southern Expansion in collaboration with GWA: 30% Assessment of GWA Well Locations: Completed Assessment of Existing Tropos Units: 20%	To be Updated Completed Continuous
7	Performance Metrics Automation Project	Target Completion, Phase I: Dashboard build out Started Phase II: Automating and consolidating data sources Roll-out and Change Management Initiatives commenced	Aug 2017 Sept 2017 Sept 2017
8	Electric Grid Analysis Software	Completed training for users.	Sep-17
9	Services to Develop Business Performance Indices using iDashboards	Dashboard builds 95%	Dec 2017
10	Supervisory Control and Data Acquisition (SCADA) System	Benson reviewing GPA required SCADA Systems Architecture and providing updated equipment quotes for servers and switches	Mar 2018

# October Project Activities

No.	Project Description	September Activities	Status / Est. Completion
11	Mobile Workforce Management System	Rebid ongoing (announced Oct. 5).	Jan 2018 (Bid Award)
12	Consulting Services for Smart Grid Analytics Enabled Distribution System Planning, Technical, and Economic Feasibility Studies	Scheduling RFP evaluation	Sept 2017 (RFP Award)
13	TEMES Piti # 7 ECA Expiration & Transition to GPA	Coordinating tasks under AGMETS for Transition. ECA & Technical Assessment - Data Compilation in Progress - ESA Visit completed, awaiting LEIDOS report - Technical Assessment Visit completed, awaiting LEIDOS report Assisting Generation with Transition	Deadline: 11/30/2017 Deadline: 11/30/2017  Deadline: 12/4/2017
14	MEC Piti #8 and #9 - ECA Expiration	ESA & Technical Assessment pending completion of discussions with LEIDOS/BWSC. Bid Document Preparation for New IPP Procurement. Data Compilation in Progress.	Deadline: 1/31/2018  Deadline: 12/1/2017 Deadline: 1/31/2018
15	Planning Software Upgrades & Training (Capacity Expansion/ Portfolio Optimization / Stochastics)	Training of 2 SPORD Engineers for PO use commenced 10/3/2017. Upcoming task: Configuration and management of database, training for PSCC & SPORD	Start Date: Oct 2017 Completion Date: Sept 2018
16	Generation Software (GADS open software)	Installation at Generation Division completed. Database configuration in progress. Training Scheduled for November 14-16, 2017.	Target Comp. Date: FY 2018
17	IFB for ULSD Supply for Baseloads and Peaking Units	New Bid Documents approved and being prepped for bid announcement.	Oct/Nov 2017 (Issue Solicitation)
18	Contract for Lease of Bulk ULSD Storage	Lease procurement approved. Reviewing and finalizing lease contract.	Early 2018 (Tank Available)
19	EV Infrastructure	Developing fast charge station scope for Mangilao offices.	Sept 2018

# October Project Activities

No.	Project Description	September Activities	Status / Est. Completion
20	Consulting Support, new procurements for Piti 7,8,9	Data compilation and bid document preparation (GPA side) in progress. Awaiting LEIDOS recommendations and draft.	Start: October 2017, Announce in Jan/Feb 2018 Completion: August 2018
21	Fuel Conversion Plan	Initial discussion commenced, detailed discussions in November after submission of Assessment Report. Data Requests being addressed.	Start: October 2017 Completion: June 2018
22	Fuel Bulk Storage Facility Assessment	Data compilation in progress. Consultant Assessment tentatively to start Oct. 16, 2017	Start Date: Sept/Oct 2017 Start Date: Oct. 16, 2017
23	Design and Engineering Consulting for Remote Start of GPA Plants	SOW being discussed. Initial assessment scheduled for Nov/Dec 2017.	Start Date: Sept 2017 Completion Date: Dec 2017
24	Renewable Energy Resource Phase III	Documents being prepped for announcement. Discussions with Navy on lease requirements.	
25	Utility Energy Services Contract (UESC)	Kicked off discussions with UOG, Guam Energy Office, Dept. of Navy, and GPA team on project development and opportunities. Discussed DSM Model House.	

# Planned Procurements

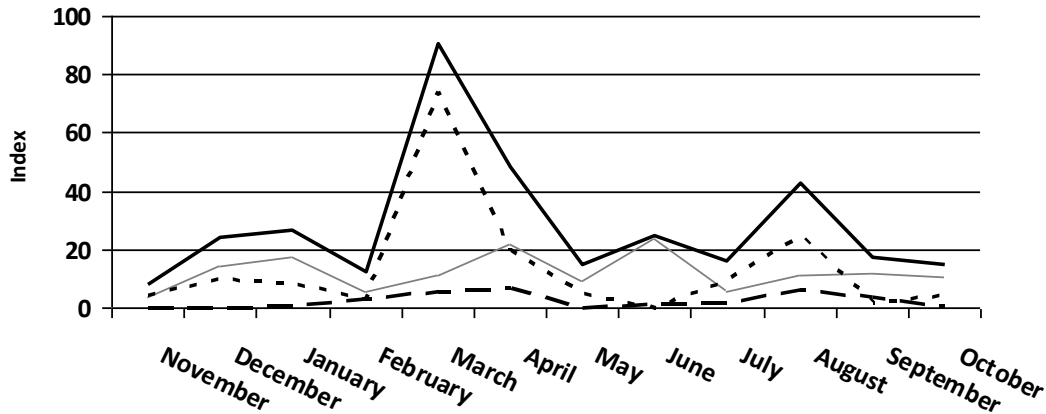
- Phase III Renewable Acquisition on Navy Leased Lands (Solar PV)
  - Documents being prepped for solicitation. (Announced 11/16/17)
- Piti #7 Additional Procurements
  - Pending Technical Assessment of plant potential procurements may include Maintenance Services Contract or a Re-capitalization Contract.
- Piti #8 and #9
  - Exploring options for re-capitalization contract after expiration of ECA in 2018. Projecting solicitation early 1<sup>st</sup> Quarter 2018.
- IPP Contracts for up to 180 MW Generation Resources
  - Documents being drafted. Projecting solicitation early 1<sup>st</sup> Quarter 2018.
- ULSD Supply & Delivery to Baseload and Peaking Units
  - Processing Documents through PMM to be re-solicited in November 2017 (Announced 11/16/17)

# Planned Procurements

- Petroleum Inspection Services
  - Processing Documents through PMM to be solicited in November 2017.
- RFO Supply
  - Solicitation documents being finalized. Target solicitation in December 2017.
- Tristar Lease Agreements (Dock/Pipeline/ and Storage)
  - Documents for 4 year extension being drafted for CCU & PUC approval
- MV90 Integration and Training Services
  - Processing Documents through PMM to be solicited in December 2017
- Network Communication Substation/Plant Metering
  - Processing Documents through PMM to be solicited in December 2017
- Engineering Analysis Trainings Services
  - Processing Documents through PMM to be solicited in December 2017



**(Item 1.1,1.2,1.5) October 2017 SAIDI = 341.67 ↓ (352.89)**



ALL

GEN=165.75

(173.80)

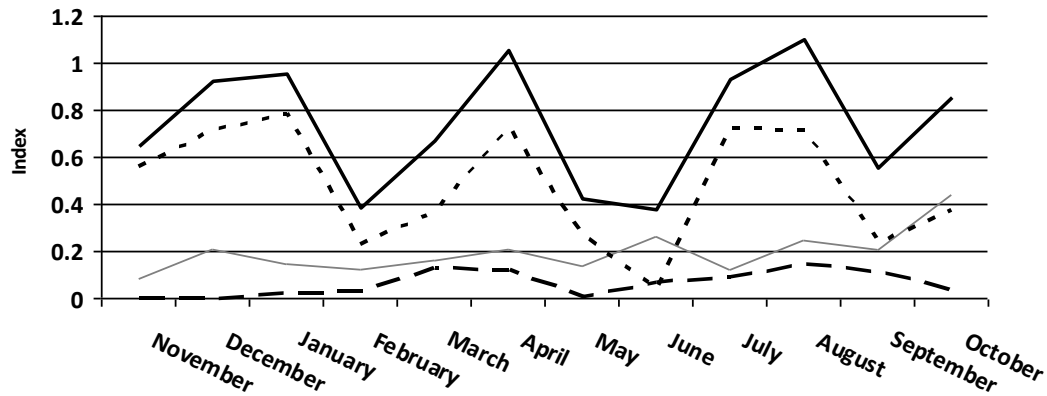
TRANS=29.86

(37.75)

DIST=146.06

(141.35)

**(Item 1.1,1.2,1.5) October 2017 SAIFI = 8.87 ↓ (9.21)**



ALL

GEN=5.74

(6.28)

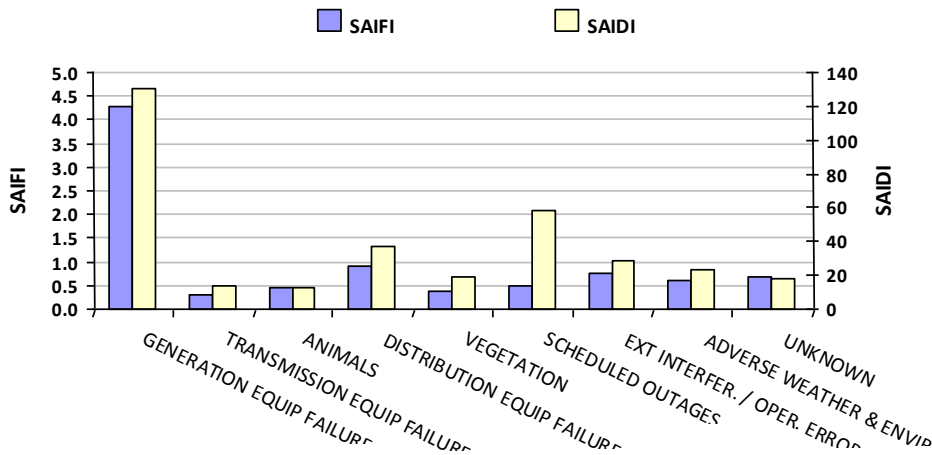
TRANS=0.77

(0.94)

DIST=2.36

(1.98)

**(Item 1.9) 12-Month Cause Contributions to Reliability**



GENERATION EQUIP  
FAILURE  
F:43.7% D:38.3%

TRANSMISSION EQUIP  
FAILURE  
F:5.5% D:3.9%

ANIMALS  
F:5.3% D:3.8%

DISTRIBUTION EQUIP  
FAILURE  
F:10.9% D:10.8%

VEGETATION  
F:5.1% D:5.6%

SCHEDULED OUTAGES  
F:8.9% D:17.0%

EXT INTERFER. / OPER.  
ERROR  
F:7.9% D:8.5%

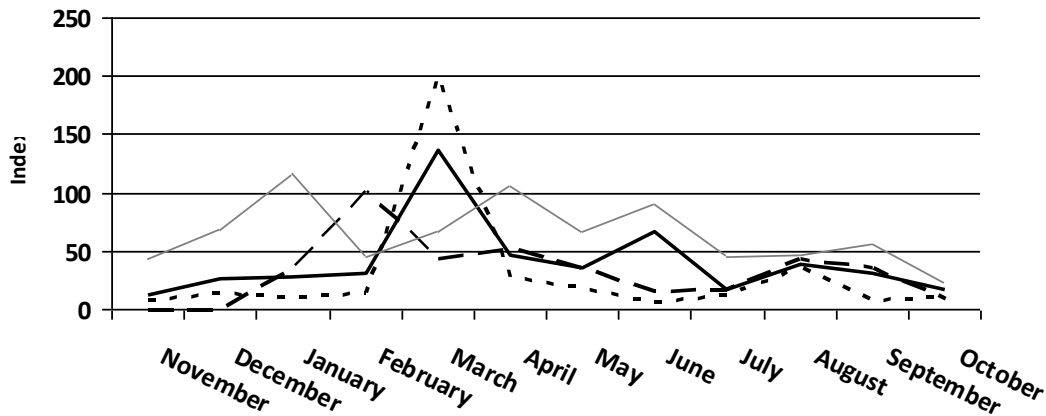
ADVERSE WEATHER &  
ENVIR.  
F:5.1% D:6.7%

UNKNOWN  
F:7.5% D:5.3%

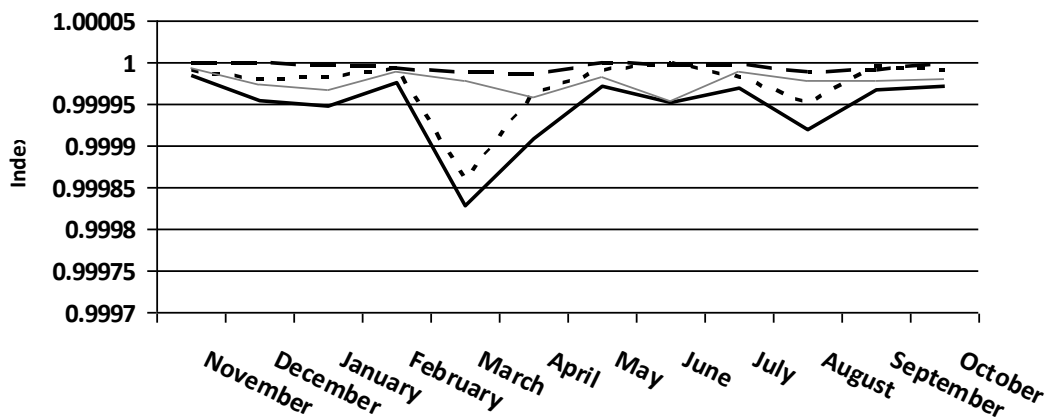
As of October 31, 2017



**(Item 1.1,1.2,1.5) October 2017 CAIDI = 38.53 ↑ (38.32)**



**(Item 1.1,1.2,1.5) October 2017 ASAI = 0.9993 UNC\* (0.9993)**



**(Item 1.4) Top 5 Worst Feeders Distribution Causes**

#	Feeder	Outage Count
1	P340	13
2	P261	10
3	P403	7
4	P221	7
5	P332	6

**(Item 1.4) Top 5 Distribution Outage Causes**

#	Outage Cause	Count
1	Overhead Equipment	38
2	Vegetation	17
3	Underground Equipment	17
4	Snakes	9
5	Vehicles	7

**(Item 1.3) Outage Count**

TOTAL	UFLS	Non-UFLS
506	275	231

**(Item 1.3) UFLS Contribution to Reliability**

SAIDI	SAIFI	CAIDI
155.35	5.52	28.14

**WEEKLY BMP REPORT SUMMARY  
CABRAS POWER PLANT  
MONTH OF OCTOBER, 2017**

## LEGEND OF TRACKING

<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Notification Date	<span style="background-color: green; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Deadline is Met
<span style="background-color: orange; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Within Scheduled Remediation Period	<span style="background-color: red; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span> Deadline is Past D

INSPECTOR: LORINA SABANGAN

LOCATION	WE 10/06/17 FINDINGS	WE 10/13/17 FINDINGS	WE 10/20/17 FINDINGS	WE 10/27/17 FINDINGS	RECOMMENDATION/ REMARKS	DATES			RESPONSE
						Initial Findings	Due	Completed	
OWS next to outfall (Cabras 3&4)	Corroded OWS	Corroded OWS	Corroded OWS	Corroded OWS		12/11/2015	Dec. 2017		No action to be done until Cabras 3&4 restoration completed  6/16/17 Inspection report indicated corrective action to be completed by 12/2017
Infiltration Pond (Cabras 3&4)	Oil sheen on the pond	Clean	Clean	Clean	Clean up conducted	10/4/2017	ASAP	10/13/17	C
Oil/Sludge Tank (Cabras 1&2)	Algae and rainwater in sec. containment	Clean	Clean	Clean	Clean up conducted	9/20/2017	ASAP	Corrective action completed as of 10/11/17	
Cabras 1&2 Basement	Water leak	Water leak	Water leak	Water leak		1/10/2014	Dec. 2018		No action to be done. Continuous monitoring per Cabras 1&2 Asst. Supt. (A)  6/16/17 inspection report indicated that corrective action to be completed by 12/2018

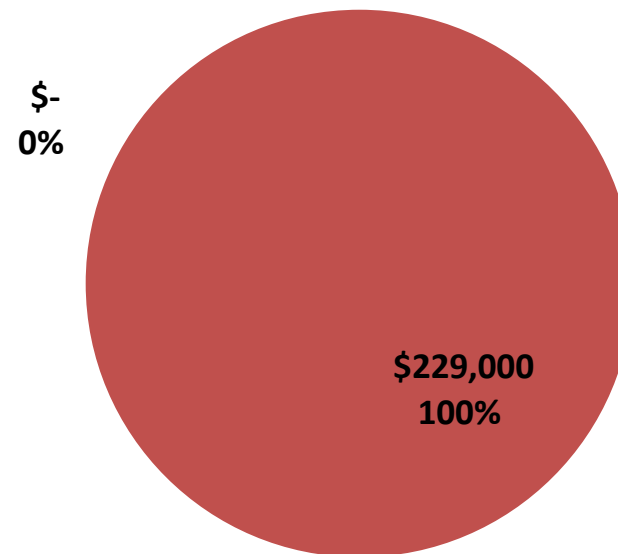
# ENG Budget Execution Performance

October 31, 2017

# ENG Revenue CIP Budget

- Revenue Funded
- Target
  - 50% CIP Obligation by June 1, 2018
  - 100% CIP Spend by September 30, 2018

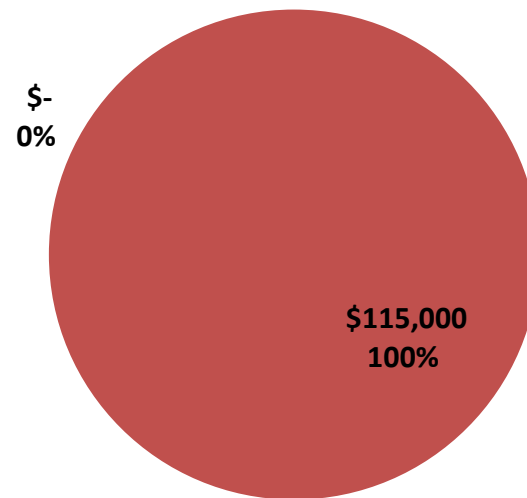
**ENG Revenue CIP Budget**



# ENG O&M Contract Budget

- Revenue Funded
- Target
  - 25% CIP Obligated by April 30, 2018
  - 75% CIP Obligation by August 30, 2018
  - 100% CIP Spend by September 30, 2018

**ENG O&M Contract Budget**

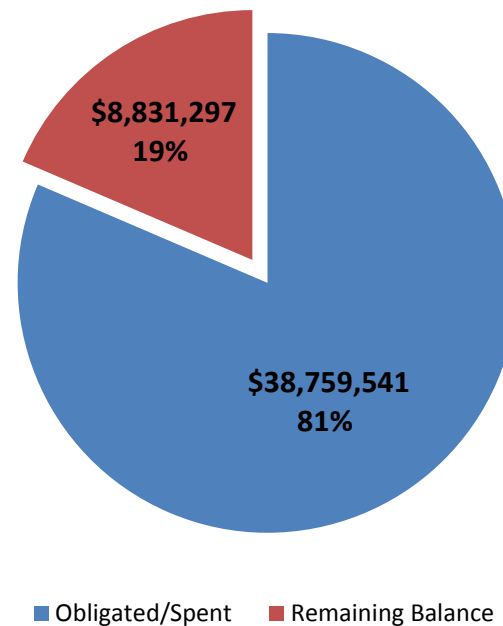


■ Obligated/Spent ■ Remaining Balance

# ENG 2010 Bond Series CIP Budget

- Bond Funded
- Target
  - Pending

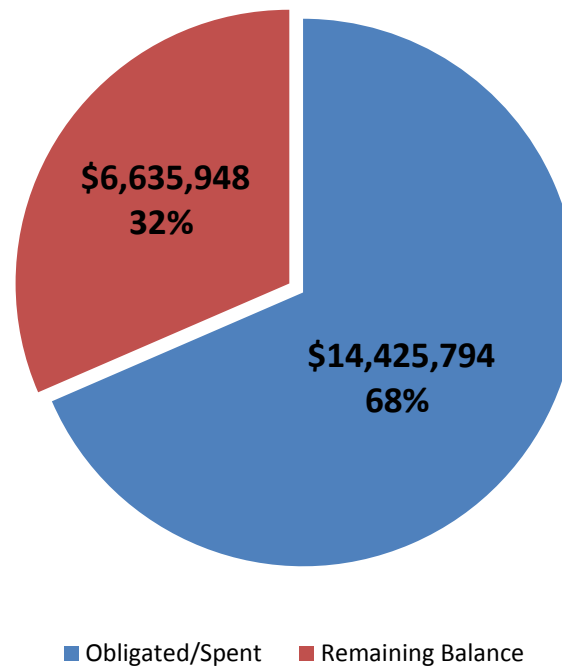
**ENG 2010 Bond CIP Project Burn**



# ENG 2014 Bond Series CIP Budget

- Bond Funded
- Target
  - Pending

**ENG 2014 Bond CIP Project Burn**



GPA Work Session - November 21, 2017 - DIVISION REPORTS

Engineering Work Orders

Engineeirng Work Order Summary -September 2017	
Work Orders Received from Customer Services	107
Work Orders Processed & Released to T&D	219
Work Orders Processed & Released to CSR	24
Work Orders Canceled	84
Work Orders Pending Survey	37
Pending Work Orders at Engineering	408

Engineering Large Customer and Net Metering Tracking						
Date Received	Customer Name	Work Order Number(s)	Location	KVA	Meter Qty	Status
05/07/14	Port Authority of Guam	412337	Piti			Upgrades of existing facilities, includes line relocations and service conversions from overhead to underground 75% completed. Currently on hold pending Port Authority direction for final removal.
12/20/13	CoreTech International	Multiple	Dededo	250	50	Lada Estates, 450 kVA, Phase I 100% Completed 242 units energized, Phase II 300 kVA, applications received for 93 units, Phase II 100% Completed. Phase III on hold due to Labor and Permit issues.
01/27/15	TG Engineers PC	422182-85, 90-93, 96-98	Agana Heights	100	11	11 Unit Apartment, 100 kVA, 85% Completed
06/02/15	Docomo Pacific Inc.	Multiple	Various Locations Islandwide	50		New Comm Towers and Power Supplies, 10 sites, 9 completed
10/20/16	Guam Waterworks	442465	Upper Tumon	300	1	GWA Compliance Laboratory, 300 kVA, 90% completed.
05/13/15	CoreTech International Towers	426021	Tamuning	3300	104	New condominiums, 2-1500kVA and 1 300 kVA, Tower 101 100% Completed, Tower 102, 103, and 104 are 42% completed. Temporary power pending for Community Center, 100% Completed. First 52 Service Orders for Tower 101 is 100% completed.
05/11/16	Korando Corp (DPW Bile Pigua Bridge)	437716	Merizo			Bile and Pigua Bridge Reconstruction - 65 % Completed, Route 25/26 Road Widening, currently on hold.
12/09/16	Maeda Pacific	443952	Harmon			Route 1 and Route 3 road improvements - 50% completed, involves new underground 34.5kV and 13.8kV lines and the removal of overhead ples and lines. Pulling of wires initiated 10/9/17.
Pending	New Nikko Expansion	Pending	Tumon	1500	1	New Nikko Expansion, pending submittal of work order application. Redesign of primary feed ongoing.
03/10/17	Best Housing Corp Ltd	446924-30	Mangilao	60	6	New 6-Unit Townhomew, 40% completed
03/20/17	Pangilinan, Marciano V (Docomo)	447355	Tamuning	1000	1	Old Ben Franklin Renovation, 99% completed, Pening Archaeological work
06/01/17	GWA Pump Stations 2 and 3	450278-9	Santa Rita	150	2	New GWA Pump Stations. 12% Completed.
06/01/17	WM Eng Office Building	450280	Tamuning	150	1	New office building. 90% Completed.
07/17/17	Keystone Pacific Realty Corp	451488	Hagatna	100	10	New apartment. 92% Completed. Pending additional applications.
07/17/17	Grand Rock Corp.	451490, 1	Santa Rita	50	4	New Subdivision. 55% Completed.
08/07/17	Matsumoto, Akiyoshi	452146-49, 51, 4, 6	Tumon	60	7	New 6 Unit Apartment with Common Meter. 5% Completed.
08/17/17	Micronesian Community Corp.	Pending	Mangilao	130	13	New 13 unit subdivison, 5% completed
09/11/17	Grand Harvest Inc.	453016,19,22,24-30,32,34,35,38,40	Dededo	225	17	New 17 Unit Apartment, 60 % Completed.
10/02/17	Sumitomo Mitsui (Baza Gardens Waste water)	453369	Yona	300	1	Baza ardens Wastewater Treatment Plant Improvements, 0% Completed
Varies	Pending Net Metering Customers	Varies	Various Locations Islandwide		17	Pending Net Metering Customers
Total				7725	246	



GPA Work Session - November 21, 2017 - DIVISION REPORTS

<b>TALOFOFO DIESEL</b> <i>Inspector: Jonathan Medina</i>	<b>Findings</b>	<b>Recommendation/Remarks</b>	<b>Initial Findings</b>	<b>Due</b>	<b>Completed</b>
<i>Facility Area</i>	Damaged window screen	Repair/replace screen	October 2017	ASAP	
<b>TENJO DIESEL</b> <i>Inspector: M.C. Poliarco</i>	<b>Findings</b>	<b>Recommendation/Remarks</b>	<b>Initial Findings</b>	<b>Due</b>	<b>Completed</b>

Response
Response

## GPA INFORMATION TECHNOLOGY OCTOBER 2017

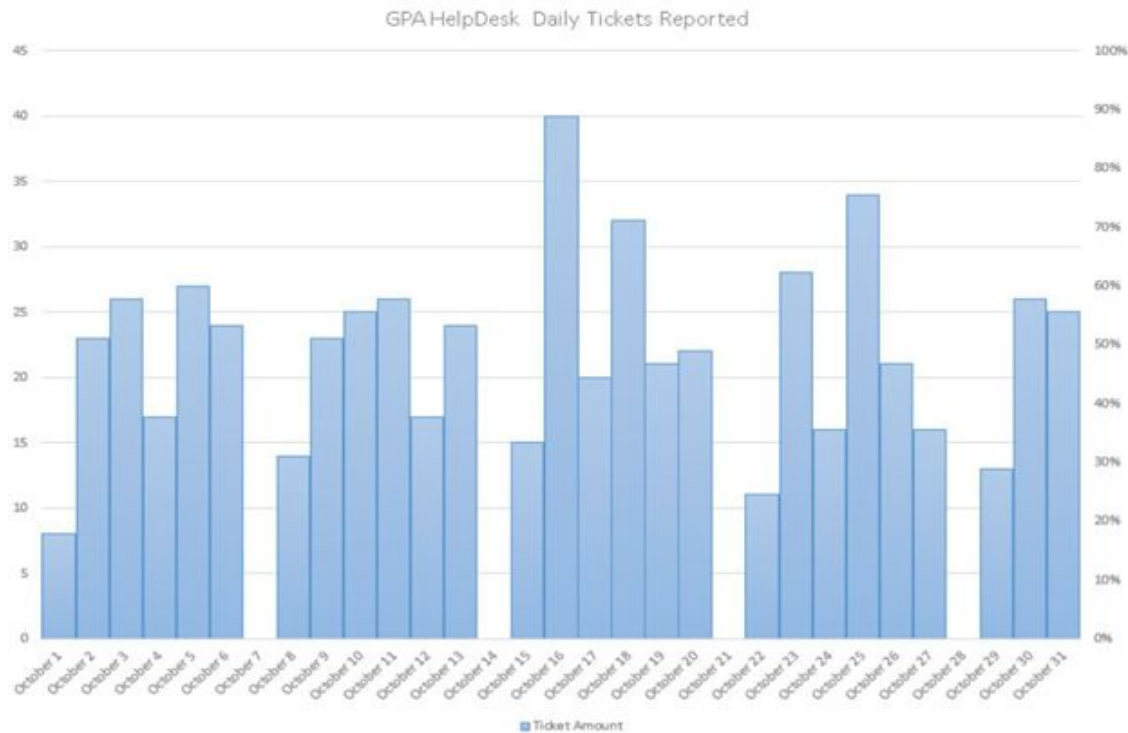
### **SUMMARY:**

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

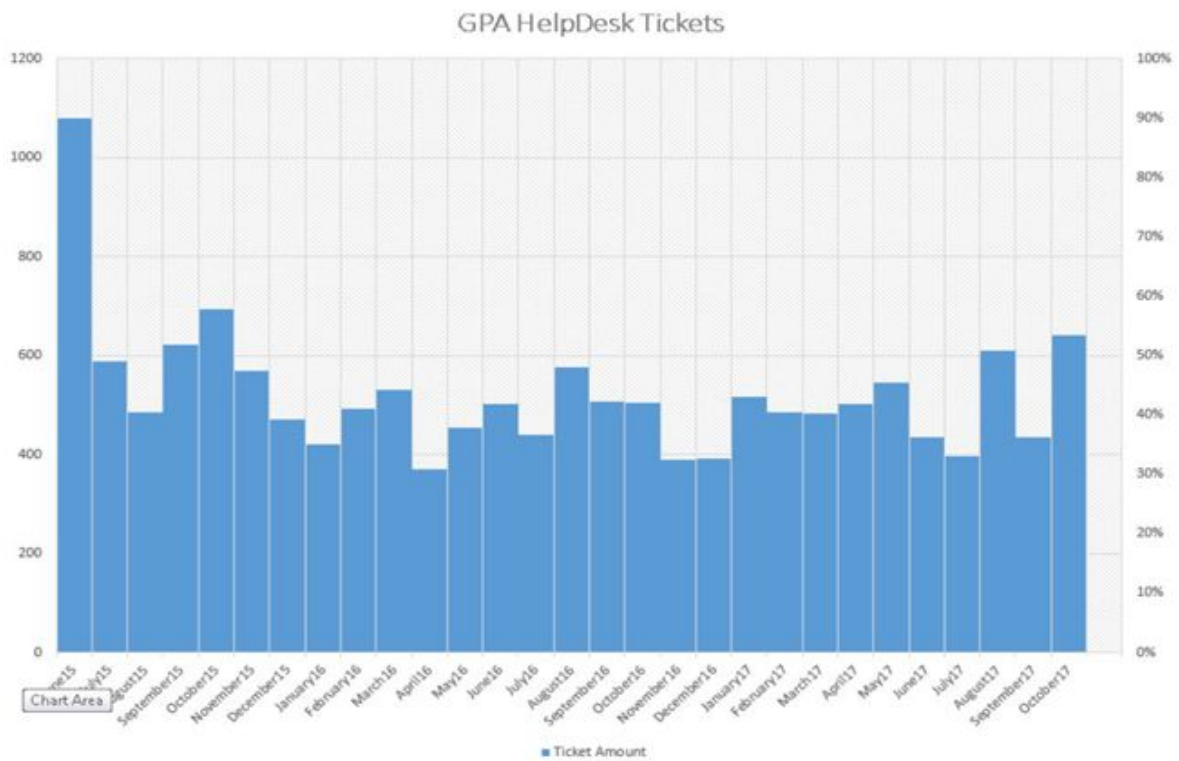
### **INCIDENT CALL SUMMARY:**

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

### OCTOBER 2017 TICKETS



## 22 MONTH COMPARATIVE



For October 2017, Computer Services responded to 641 help desk calls from GPA internal Customers. Breakdown as follows:

**CLOSED TICKETS**

Low	Medium	High	Critical	
230	166	237	8	

**TICKET TYPES**

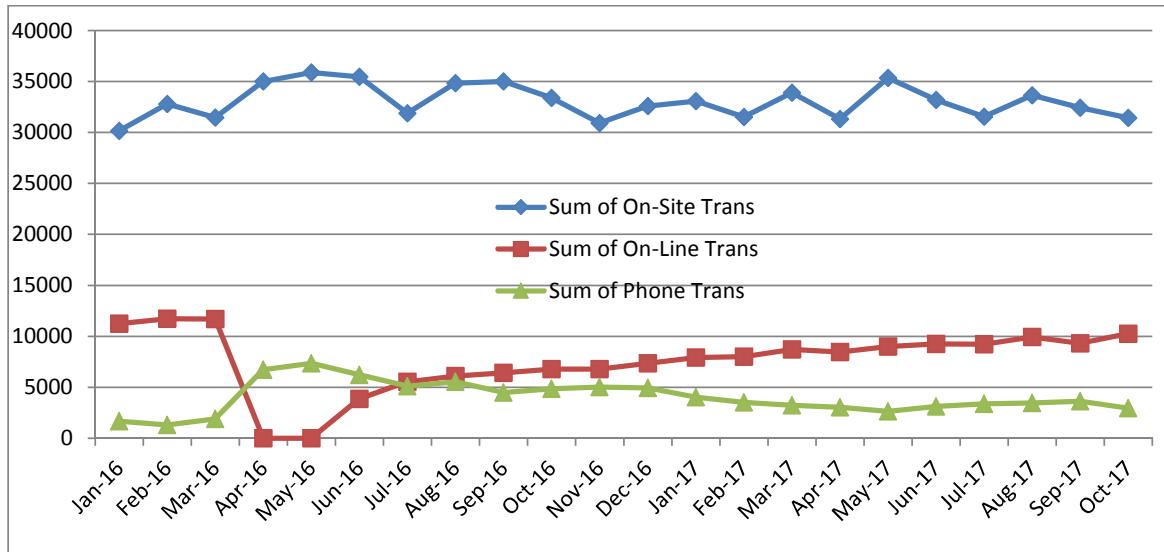
End User	Hardware	Software	Network	
523	31	64	23	

**OPEN TICKETS**

Low	Medium	High	Critical	
9	16	35	1	

**TICKET TYPES**

End User	Hardware	Software	Network	
32	9	16	3	

**CC&B PAYMENT SUMMARY TRANSACTIONS:**

Row Labels	Sum of On-Site Trans	Sum of On-Line Trans	Sum of Phone Trans
Jan-16	30156	11246	1664
Feb-16	32797	11731	1318
Mar-16	31451	11696	1907
Apr-16	35008	0	6722
May-16	35892	0	7339
Jun-16	35459	3850	6223
Jul-16	31874	5540	5121
Aug-16	34820	6091	5527
Sep-16	35014	6404	4494
Oct-16	33392	6788	4854
Nov-16	30904	6777	5017
Dec-16	32601	7340	4929
Jan-17	33075	7924	4031
Feb-17	31516	8002	3513
Mar-17	33886	8722	3241
Apr-17	31315	8452	3025
May-17	35331	8999	2635
Jun-17	33180	9244	3113
Jul-17	31532	9217	3364
Aug-17	33646	9934	3451
Sep-17	32416	9302	3630
Oct-17	31435	10234	2959
<b>Grand Total</b>	<b>726700</b>	<b>167493</b>	<b>88077</b>

**ESTIMATED BILLING**

Category	Quantity	<i>Total Meters 53,529</i> Percentage vs Total Meters	Notes
Meters with assigned FA's	1239	2.31%	Meters with assigned Field Activity (FA) for change out as of Oct. 31, 2017 but not yet completed.
Unassigned Meters without SA	74	0.14%	Meters that have been installed but not linked to a Service Agreement (SA) in CC&B as of Oct. 31, 2017. This means the customer has a new meter but it is not reflected on their CC&B account and thus they will still see an estimated reading during their billing cycle.
Meters that are not communicating	67	0.13%	Meters that are not responding during the October billing read cycle. This could be because of communication or meter failure. Meter needs to be checked to determine cause.
TOTAL	1380	2.58%	# of meters with estimated reads for the month of October, 2017

Based on the above we have a large number of meters which are slated for change out based on the Field Activities pending which is causing the majority of the estimated reads. The remaining 67 estimated reads would need to be investigated to determine if a communication or meter failure is causing the lack of reads. As of today we have 53,529 meters deployed versus the 67 meters not communicating which amounts to only 0.13% of the total population.

**MAJOR APPLICATION ISSUES FOR OCTOBER 2017**

On October 24, 2017, the IT Datacenter in Fadian was shut down due to an issue with a power outage and that the primary UPS Battery Backup system was not 100% operational. Total downtime for the GPA Datacenter was 5 hrs. and 27 minutes (11:13 am to 4:40 pm). Please note the following:

- All servers, databases and application were brought down cleanly and no production data was lost.
- Critical applications were brought online by 7 pm the same day after the initial shutdown at around 11:30 am.
- There was no impact to daily billing reads and statement processing.
- Current UPS is being serviced by local vendor for maintenance and programming.
- Engineering is working on procuring a 2<sup>nd</sup> UPS to provide redundancy to the battery backup solution.

1. ORACLE CUSTOMER CARE & BILLING

No system issue reported.

2. LANDIS & GYR AMI METERS (SMART METERS)

Reported issue with Demand Reset for commercial customers. A workaround is being used to ensure that the indicator for the Demand Reset is done on a monthly basis. Working with the vendor on issue resolution. (ISSUE STILL PENDING)

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.

ONGOING PROJECT UPDATES:

**Network Penetration Testing and Vulnerability Assessment:** Project to provide network testing and vulnerability assessment to benchmark GPA and GWA's network and host systems. This will also include IT Controls Systems testing and Business Impact Analysis for GPA and GWA critical IT systems. Vendor has been selected and PO will be issued shortly.

**SMS Emergency Outage Notification:** Project to provide SMS text alerts for Emergency Outages notification for customers and emergency response agencies. Awaiting next steps from operations. In testing process at the moment with PSCC.

**Pay by Phone Project:** Working with vendor for Pay by Phone system to allow customers to call after hours and make automated payments to their GPA account. Expected completion by October 2017.

**Mobile APP Project:** Project to create a mobile payment APP for ANDROID and APPLE IOS smartphones. This will allow customers to review their accounts and make payments from their Smartphones. Expected completion by October 2017. Currently in testing phase.

**Oracle Business Intelligence (BI) Project:** Project to install Oracle's BI tool to allow for reporting from CC&B and JDE. Expected completion by December 2017.

**Customer Care & Billing (CC&B) Upgrade:** Upgrade of the current Oracle CC&B program from version 2.4 to version 2.5. The current version of CC&B 2.4 will be end of life by Sept. 30, 2017 and support thereafter will be limited. Expected completion by September 2018.

**Disaster Recovery Site:** Project to procure a Disaster Recovery (DR) site to provide redundancy for critical GPA applications and databases in case of disruption of the primary Fadian Data Center. Expected completion by March 2018

Submitted by:

Melvyn Kwek  
Chief Information Technology Officer



### NET METERING October 2017

	Quantity	Connected kVA
Completed	1,544	15,817
Pending	19	151
Grand Total	1,563	15,968

Rate Class		
Schedule	Count	Total kW
R - Residential	1,466	13,144.85
J - General Service Demand	30	1,523.51
K - Small Government Demand	7	157.80
L - Large Government	1	22.80
P - Large Power	4	340.70
G - General Service Non-Demand	29	548.12
S - Small Government Non-Demand	7	78.80
<b>Grand Total</b>	<b>1,544</b>	<b>15,816.58</b>

Rate Class and Technology			
Technology	Schedule	Count	Total kW
<b>Solar Energy</b>	R - Residential	1,464	13,141.25
	J - Gen Service Dmc	30	1,523.51
	K - Small Gov Dmd	7	157.80
	L - Large Governmei	1	22.80
	P - Large Power	4	340.70
	G - Gen Serv Non-D	29	548.12
	S - Sm Gov Non-Dm	7	78.80
<b>Wind Turbine</b>	R - Residential	2	3.60
<b>Grand Total</b>		<b>1,544</b>	<b>15,816.58</b>

Projected FY 2018 Non-Fuel Revenue Loss				
Customer Rate Class	Renewable Energy Capacity (kW)	Annual kWh Generated (@5,092 hours/day)*	Average Non-Fuel Yield \$/kWh	Estimated Annual Revenue Loss**
R	13,144.85	24,374,833.3	0.09293	\$ 2,265,177.63
J	1,523.51	2,831,379.9	0.13112	\$ 371,253.36
K	157.80	293,264.7	0.13932	\$ 40,858.23
L	22.80	42,372.9	0.13525	\$ 5,730.84
P	340.70	633,176.8	0.11539	\$ 73,061.63
G	548.12	1,018,658.2	0.15084	\$ 153,650.33
S	78.80	146,446.5	0.15334	\$ 22,456.26
<b>Grand Total</b>	<b>15,816.58</b>	<b>29,340,132.2</b>		<b>\$ 2,932,188.27</b>

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

\*\*Source: FY 2014 Annual Non Fuel Revenues, The Self Insurance surcharge was deactivated effective 8/1/2015  
The Working Capital Fund Surcharge was deactivated effective 10/1/2015.

#### Estimated Annual Revenue Loss

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

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

## NET METERING

October 2017

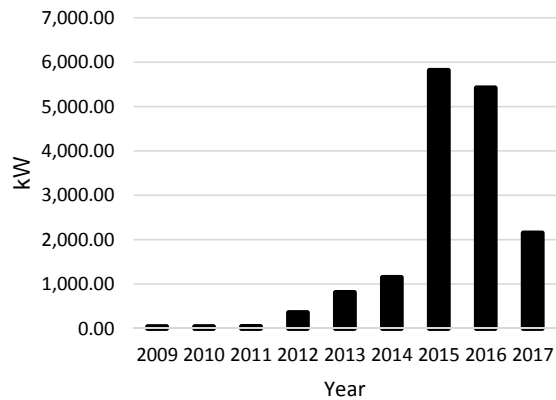
Customer Count and Connected kW by Feeder					
Status	Feeder	Net Metering Connected kW	Customer Count	% of Feeder Maximum kW	% of Feeder Minimum Daytime kW
Completed	P-005	297.57	22	17.3%	34.6%
	P-046	193.57	24	4.6%	7.0%
	P-088	603.78	67	10.0%	15.9%
	P-089	423.35	53	9.5%	22.8%
	P-111	60.00	1	1.1%	2.0%
	P-203	401.36	31	5.4%	15.2%
	P-204	109.48	14	2.4%	4.8%
	P-205	36.40	4	0.8%	1.3%
	P-210	435.96	45	8.5%	11.6%
	P-212	794.07	75	19.2%	49.7%
	P-213	195.33	10	7.5%	10.0%
	P-220	133.89	14	22.0%	69.0%
	P-221	437.52	45	10.0%	19.8%
	P-223	487.96	53	20.5%	29.3%
	P-240	58.55	2	0.9%	7.9%
	P-245	25.00	1	0.5%	1.1%
	P-250	863.32	89	13.0%	22.9%
	P-251	145.50	7	5.9%	9.0%
	P-253	453.71	49	10.1%	15.9%
	P-262	917.25	95	24.1%	57.8%
	P-270	291.42	24	5.7%	11.5%
	P-271	80.28	11	1.4%	2.9%
	P-272	221.03	16	8.6%	19.6%
	P-280	311.59	25	17.3%	32.2%
	P-281	129.70	3	4.6%	12.9%
	P-282	21.00	2	0.6%	1.7%
	P-283	472.55	45	13.1%	22.4%
	P-294	915.02	89	21.1%	41.9%
	P-301	196.79	22	13.9%	24.8%
	P-311	508.11	45	12.7%	21.8%
	P-322	785.44	83	10.4%	20.6%
	P-323	274.41	17	5.8%	18.0%
	P-330	513.25	64	9.4%	19.0%
	P-331	694.84	80	10.8%	17.4%
	P-332	369.46	45	6.5%	9.6%
	P-340	497.37	43	27.4%	60.4%
	P-087	973.80	107	24.8%	38.8%
	P-252	407.01	23	9.7%	19.7%
	P-321	246.63	24	4.4%	4.9%
	P-260	45.99	5	6.7%	23.0%
	P-067	68.25	10	0.8%	1.0%
	P-312	68.90	4	4.1%	4.8%
	P-206	18.33	2	1.9%	3.4%
	P-242	23.75	2	0.4%	1.1%
	P-310	181.57	8	6.6%	12.1%
	P-261	299.92	32	10.8%	18.6%
	P-201	40.00	5	1.1%	2.0%
	P-007	42.33	4	5.8%	12.5%
	P-244	18.00	1	1.0%	1.0%
	P-202	22.00	1	0.7%	1.6%
	P-341	4.30	1	0.4%	1.6%
Completed Total		15,816.58	1,544		
Pending	P-221	7.00	1	0.2%	0.3%
	P-332	15.00	1	0.3%	0.4%
	Pending	129.41	17	0.0%	0.0%
Pending Total		151.41	19	0.4%	0.7%
Grand Total		15,967.99	1,563		
Feeders highlighted in red indicates renewable energy capacity has exceeded 25% of minimum daytime load.					
Feeders highlighted in yellow indicates renewable energy capacity has reached 15% to 24% of minimum daytime load.					

## NET METERING OCTOBER 2017

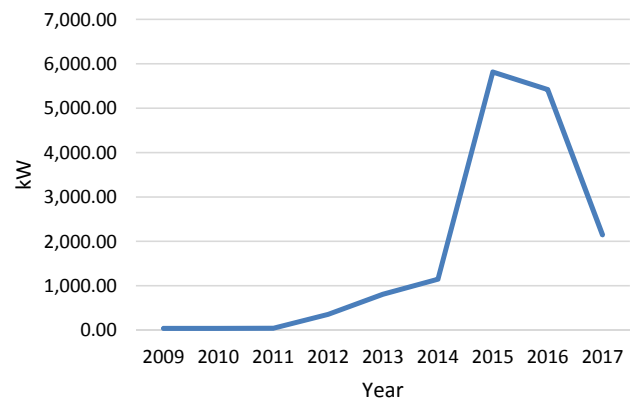
Installed kW by Year		
Year	Total	Cumulative
2009	39.46	39.46
2010	39.20	78.66
2011	43.61	122.27
2012	354.61	476.88
2013	808.45	1,285.33
2014	1,146.54	2,431.87
2015	5,815.59	8,247.46
2016	5,420.96	13,668.41
2017	2,148.17	15,816.58
<b>Grand Total</b>	<b>15,816.58</b>	

Customer Count by Year		
Year	Total	Cumulative
2009	7	7
2010	2	9
2011	7	16
2012	27	43
2013	67	110
2014	95	205
2015	561	766
2016	528	1,294
2017	250	1,544
<b>Grand Total</b>	<b>1,544</b>	

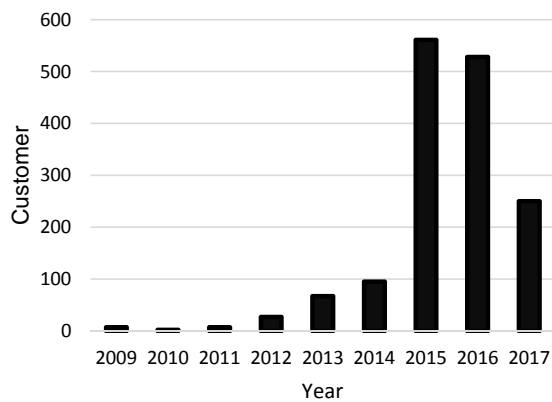
### Annual Installed kW



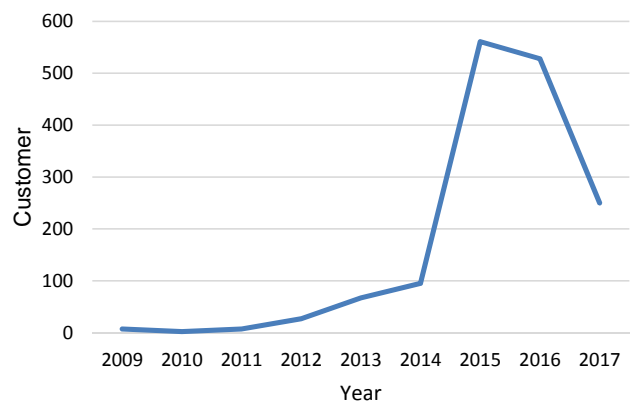
### Cumulative Installed kW



### Annual Connected Customer Count



### Cumulative Connected Customer Count



# Planning & Regulatory CCU Report

November 16, 2018

# Planning & Regulatory O&M Contract Budget

- Revenue Funded
- Target
  - 7.41% O&M Obligated by November 16, 2017
  - 30.09% O&M Obligation by December 31, 2017



## 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



### Production Data 31-Oct-17

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)						
2015	Oct	31	142,387,859	10,285,716	244,898	13.84	\$ 0.1076	9,797.11	12,360.42	191	258
	Nov	30	140,522,664	9,871,651	235,039	14.23	\$ 0.1185	9,731.04	12,945.82	195	248
	Dec	31	142,668,711	9,711,263	231,221	14.69	\$ 0.0951	9,538.53	12,579.77	192	239
2016	Jan	31	138,191,484	9,446,289	224,912	14.63	\$ 0.0676	9,662.86	13,413.90	186	233
	Feb	29	128,816,826	8,860,399	210,962	14.54	\$ 0.0706	9,692.42	12,038.19	185	232
	Mar	31	139,991,832	9,522,573	226,728	14.70	\$ 0.0732	9,172.99	11,597.00	188	239
	Apr	30	140,706,546	9,301,856	221,473	15.13	\$ 0.0734	9,368.24	11,041.70	195	245
	May	31	152,815,417	9,751,521	232,179	15.67	\$ 0.0681	9,459.10	11,388.57	205	254
	June	30	149,191,844	9,851,575	234,561	15.14	\$ 0.0805	9,666.70	11,074.48	207	253
	July	31	151,248,202	10,443,028	248,644	14.48	\$ 0.0920	9,477.71	12,208.87	203	258
	Aug	31	149,051,031	10,210,429	243,105	14.60	\$ 0.0935	9,431.70	11,155.10	200	252
	Sept	30	142,069,206	9,829,773	234,042	14.45	\$ 0.0956	9,509.75	11,393.73	197	256
	Oct	31	148,824,965	9,660,319	230,008	15.41	\$ 0.0729	9,749.38	10,738.69	200	252
	Nov	30	145,293,562	9,427,636	224,468	15.41	\$ 0.0901	9,714.47	10,786.30	202	252
	Dec	31	147,753,552	9,725,521	231,560	15.19	\$ 0.0934	9,661.13	10,645.44	199	248
2017	Jan	31	142,960,618	9,226,278	219,673	15.49	\$ 0.0913	9,620.29	10,965.71	192	234
	Feb	28	113,499,400	7,270,830	173,115	15.61	\$ 0.0900	9,609.08	11,503.12	195	246
	Mar	31	149,402,182	9,664,440	230,106	15.46	\$ 0.1014	9,719.35	11,440.45	201	246
	Apr	30	145,351,026	9,913,757	236,042	14.66	\$ 0.1101	9,750.73	11,392.12	202	250
	May	31	157,573,506	11,065,930	263,475	14.24	\$ 0.1170	10,067.14	11,323.20	212	256
	June	30	150,240,751	10,654,196	253,671	14.10	\$ 0.1101	10,209.74	11,248.62	209	257
	July	31	150,580,050	10,622,458	252,916	14.18	\$ 0.1169	9,544.54	11,837.62	202	252
	Aug	31	150,084,827	10,642,044	253,382	14.10	\$ 0.1177	9,206.15	11,917.58	202	261
	Sept	30	143,990,208	10,309,304	245,460	13.97	\$ 0.1152	9,541.20	13,107.05	200	254
	Oct	31	147,122,071	9,774,857	232,735	15.05	\$ 0.1079	9,590.71	11,375.81	198	254



# Annual Financial Review

## Consolidated Commission on Utilities

November 21, 2017



# Performance Summary

2

(in '000)	Unaudited 2017	Budget 2017	Variance to Budget	Audited 2016	Variance to PY
Sales of Electricity					
Base Rate	\$ 164,649	\$ 157,720	\$ 6,929	\$ 159,567	\$ 5,082
LEAC	166,425	200,015	(33,590)	146,340	20,085
Working Capital	-	-	-	-	-
Others	2,245	2,600	(355)	2,294	(49)
<b>Total operating revenues</b>	<b>333,319</b>	<b>360,335</b>	<b>(27,016)</b>	<b>308,201</b>	<b>25,118</b>
Cost of electricity	166,425	200,015	33,590	146,340	(20,085)
Operating and maintenance	80,981	93,229	12,248	77,012	(3,969)
Depreciation	47,607	41,804	(5,803)	44,240	(3,367)
<b>Total operating expenses</b>	<b>295,013</b>	<b>335,048</b>	<b>40,035</b>	<b>267,592</b>	<b>(27,421)</b>
<b>Operating Income</b>	<b>38,306</b>	<b>25,287</b>	<b>13,019</b>	<b>40,609</b>	<b>(2,303)</b>
Interest income	1,722	1,384	338	1,101	621
Interest expense	(33,750)	(32,821)	(929)	(33,989)	239
Allowance for funds used during construction	3,676	1,420	2,256	4,137	(461)
Other expense, net	(76)	1,522	(1,598)	(451)	375
Extraordinary item	-	-	-	(19,806)	19,806
<b>Income</b>	<b>\$ 9,878</b>	<b>\$ (3,208)</b>	<b>\$ 13,086</b>	<b>\$ (8,399)</b>	<b>\$ 18,277</b>



# Electric Sales Information

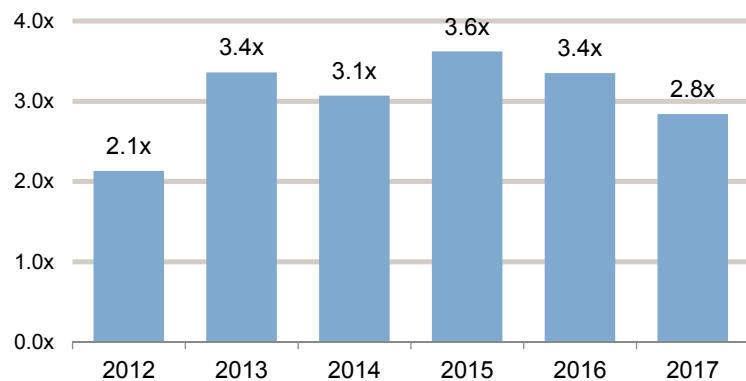
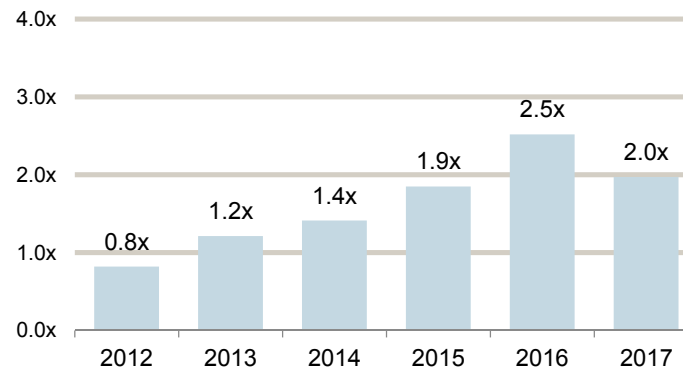
3

	2012	2013	2014	2015	2016	2017
Peak Demand (MW)	263	257	249	255	258	261
Total Electric Sales (GWh)	1,563	1,566	1,533	1,540	1,574	1,610
Sales Growth (%)	-3.4	0.2	-0.2	0.4	2.2	2.3
Total Customers	48,512	48,598	48,918	49,530	50,207	51,114



# Historical Debt Service Coverage

4

**Senior DSC - Indenture****Aggregate DSC – Capital Lease Payments as O&M Expense**

# Investment Grade Credit

5

## Credit Summary

Long-Term Senior Debt	Rating	Long-Term Outlook
Standard & Poor's	BBB	Stable
Moody's Rating	Baa2	Stable
Fitch Rating	BBB-	Stable



# GUAM POWER AUTHORITY

ATURIDÂT ILEKTRESEDÂT GUAHAN  
P.O.BOX 2977 • AGANA, GUAM U.S.A. 96932-2977

## GUAM POWER AUTHORITY FINANCIAL STATEMENT OVERVIEW September 2017

Attached are the financial statements and supporting schedules for the month and fiscal year ended September 30, 2017.

### Summary

The increase in net assets for the year ended was \$10.0 million as compared to the anticipated net decrease of \$4.2 million at the beginning of the year. This was primarily due to the under-expenditure of O&M expenses. The total kWh sales for the year were 4.49% more than projected and non-fuel revenues were \$6.9M more than the estimated amounts. O & M expenses for the year were \$60.6 million which was \$14.8 million less than our projections for this year. Other expenses for the year such as interest expense, IPP costs, (net of interest income and other income) totaled to \$47.0 million which was about \$0.3 million more than the projected amount. There were no other significant departures from the budget during the period.

### Analysis

Description	Previous Month	Current Month	Target
Quick Ratio	2.02	1.55	2
Days in Receivables	41	41	52
Days in Payables	29	48	30
LEAC (Over)/Under Recovery Balance -YTD	\$15,640,990	\$16,751,048	\$11,277,708
T&D Losses	4.96%	4.95%	7.00%
Debt Service Coverage	2.05	1.95	1.75
Long-term equity ratio	13%	13%	30 – 40%
Days in Cash	183	196	60

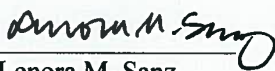
The Quick Ratio reflects the basic challenge facing GPA. However, this fiscal year has shown improvement over the previous fiscal year. This is due to the receipt of \$84M in cash advances of insurance proceeds. GPA has current obligations of approximately \$108.3 million and approximately \$168.1 million in cash and current receivables. The LEAC under recovery for the month is \$1.1 million. The Debt Service Coverage ratio is calculated using the methodology in use before the Fiscal Year 2002 change in accounting practice.

**Financial Statement**  
**September 2017**  
**Significant Assumptions**

The significant assumptions in the financial statements are as follows:

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


Prepared by:

  
\_\_\_\_\_  
Lenora M. Sanz  
Controller

Reviewed by:

  
\_\_\_\_\_  
John J.E. Kim  
Chief Financial Officer

Approved by:

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

GPA Work Session - November 21, 2017 - DIVISION REPORTS

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statements of Net Position September 30, 2017 and September 30, 2016			
	Unaudited September 2017	Unaudited September 2016	Change from Sept 30 2016
<b>ASSETS AND DEFERRED OUTFLOWS OF RESOURCES</b>			
Current assets:			
Cash and cash equivalents:			
Held by trustee for restricted purposes:			
Interest and principal funds	\$ 18,061,879	\$ 16,005,063	\$ 2,056,816
Bond indenture funds	56,907,535	69,821,815	(12,914,280)
Held by Guam Power Authority:			
Bond indenture funds	132,579,889	126,992,587	5,587,302
Self insurance fund-restricted	19,251,372	19,506,796	(255,424)
Energy sense fund	1,074,491	1,646,041	(571,550)
Total cash and cash equivalents	227,875,166	233,972,302	(6,097,136)
Accounts receivable, net	35,603,289	62,635,764	(27,032,475)
Total current receivables	35,603,289	62,635,764	(27,032,475)
Materials and supplies inventory	11,989,745	13,555,719	(1,565,974)
Fuel inventory	52,387,369	31,326,367	21,061,002
Prepaid expenses	682,814	754,024	(71,210)
Total current assets	328,538,383	342,244,176	(13,705,793)
Utility plant, at cost:			
Electric plant in service	1,037,419,517	990,594,593	46,824,924
Construction work in progress	18,382,414	17,206,429	1,175,985
Total	1,055,801,931	1,007,801,022	48,000,909
Less: Accumulated depreciation	(565,144,900)	(540,262,575)	(24,882,325)
Total utility plant	490,657,031	467,538,447	23,118,584
Other non-current assets:			
Investment - bond reserve funds held by trustee	48,576,863	48,550,887	25,976
Unamortized debt issuance costs	4,267,305	4,646,601	(379,296)
Total other non-current assets	52,844,168	53,197,488	(353,320)
Total assets	872,039,582	862,980,111	9,059,471
Deferred outflow of resources:			
Deferred fuel revenue	16,751,048	1,492,325	15,258,723
Unamortized loss on debt refunding	11,076,064	12,324,400	(1,248,336)
Pension	8,168,718	8,168,718	0
Unamortized forward delivery contract costs	637,358	796,718	(159,360)
Total deferred outflows of resources	36,633,188	22,782,161	13,851,027
	\$ 908,672,770	\$ 885,762,272	\$ 22,910,498



GPA Work Session - November 21, 2017 - DIVISION REPORTS

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statement of Net Position, Continued September 30, 2017 and September 30, 2016			
	Unaudited September 2017	Unaudited September 2016	Change from Sept 30 2016
LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION			
Current liabilities:			
Current maturities of long-term debt	\$ 1,780,000	\$ 115,000	\$ 1,665,000
Current obligations under capital leases	16,949,416	16,737,242	212,174
Accounts payable			
Operations	56,671,898	24,622,615	32,049,283
Others	5,425,336	23,012,732	(17,587,396)
Accrued payroll and employees' benefits	1,546,860	1,533,906	12,954
Current portion of employees' annual leave	2,324,895	2,405,799	(80,904)
Interest payable	15,065,830	15,146,696	(80,866)
Customer deposits	8,503,783	8,381,571	122,212
Total current liabilities	108,268,018	91,955,561	16,312,457
Regulatory liabilities:			
Provision for self insurance	19,550,977	19,550,977	0
Total regulatory liabilities	19,550,977	19,550,977	0
Long term debt, net of current maturities	590,568,862	595,057,769	(4,488,907)
Obligations under capital leases, net of current portion	30,343,708	22,872,720	7,470,988
Net Pension liability	64,596,253	71,049,220	(6,452,967)
DCRS sick leave liability	4,008,397	3,436,738	571,659
Employees' annual leave net of current portion	806,762	806,762	0
Customer advances for construction	369,180	319,321	49,859
Total liabilities	818,512,157	805,049,068	13,463,089
Deferred inflows of resources:			
Unearned forward delivery contract revenue	2,336,071	2,920,088	(584,017)
Pension	732,788	732,788	0
Total deferred inflows of resources	3,068,859	3,652,876	(584,017)
Commitments and contingencies			
Net Position:			
Net investment in capital assets	(43,869,737)	(49,190,903)	5,321,166
Restricted	15,232,832	4,645,344	10,587,488
Unrestricted	115,728,658	121,605,887	(5,877,229)
Total net position	87,091,753	77,060,328	10,031,425
	\$ 908,672,770	\$ 885,762,272	\$ 22,910,498

GPA Work Session - November 21, 2017 - DIVISION REPORTS

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statement of Revenues, Expenses and Changes in Net Assets						
	September 30		% of change Inc (dec)	Twelve Months Ending September 30		% of change Inc (dec)
	Unaudited 2017	Unaudited 2016		Unaudited 2017	Unaudited 2016	
Revenues						
Sales of electricity	\$ 29,769,728	\$ 24,899,890	20	\$ 331,074,055	\$ 306,896,751	8
Miscellaneous	103,178	72,856	42	2,244,718	2,293,862	(2)
Total	29,872,906	24,972,746	20	333,318,773	309,190,613	8
Bad debt expense	514,895	324,776	59	(472,466)	(989,762)	(52)
Total revenues	30,387,801	25,297,522	20	332,846,307	308,200,851	8
Operating and maintenance expenses						
Production fuel	15,895,300	11,374,557	40	166,424,781	146,339,925	14
Other production	3,229,759	1,710,869	89	17,783,902	15,834,797	12
	19,125,059	13,085,426	46	184,208,683	162,174,722	14
Depreciation	4,146,953	5,996,850	(31)	47,607,153	44,240,396	8
Energy conversion cost	1,769,267	1,440,066	23	19,935,334	16,800,170	19
Transmission & distribution	940,814	592,494	59	11,703,969	10,816,589	8
Customer accounting	455,568	(215,792)	(311)	4,283,747	4,501,922	(5)
Administrative & general	3,026,543	3,091,975	(2)	26,801,217	29,057,726	(8)
Total operating and maintenance expenses	29,464,204	23,991,019	23	294,540,103	267,591,525	10
Operating income	923,597	1,306,503	(29)	38,306,204	40,609,326	(6)
Other income (expenses)						
Interest income	346,969	258,874	34	1,722,482	1,100,891	56
Interest expense and amortization	(2,666,837)	(2,903,243)	(8)	(33,749,477)	(34,812,432)	(3)
Bond issuance costs	76,827	68,617	12	921,924	823,404	12
Assets written off	0	0		0	0	
Allowance for funds used during construction	272,277	323,642	(16)	3,675,581	4,137,428	(11)
Other expense	(229,740)	(19,809,899)	(99)	(998,654)	(21,502,593)	(95)
Total other income (expenses)	(2,200,504)	(22,062,009)	(90)	(28,428,144)	(50,253,302)	(43)
Income (loss) before capital contributions	(1,276,907)	(20,755,506)	(94)	9,878,060	(9,643,976)	(202)
Capital contributions	8,654	650,256	0	153,365	2,385,071	(94)
Increase (decrease) in net assets	(1,268,253)	(20,105,250)	(94)	10,031,425	(7,258,905)	(238)
Total net assets at beginning of period (restated)	88,360,007	94,474,120	(6)	77,060,329	81,627,775	(6)
Total net assets at end of period	\$ 87,091,754	\$ 74,368,870	17	\$ 87,091,754	\$ 74,368,870	17

<b>GUAM POWER AUTHORITY</b> <b>(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)</b> <b>Statements of Cash Flows</b> <b>Period Ended September 30, 2017</b>		
	Month Ended 9/30/2017	YTD Ended 9/30/2017
<b>Increase(decrease) in cash and cash equivalents</b>		
Cash flows from operating activities:		
Cash received from customers	\$30,258,059	\$ 359,968,418
Cash payments to suppliers and employees for goods and services	<u>7,288,185</u>	<u>271,322,632</u>
Net cash provided by operating activities	\$22,969,875	88,645,786
Cash flows from investing activities:		
Interest and dividends on investments and bank accounts	<u>346,969</u>	<u>1,722,482</u>
Net cash provided by investing activities	346,969	1,722,482
Cash flows from non-capital financing activities		
Interest paid on short term debt	(8,020)	(79,141)
Provision for self insurance funds	<u>(1,802)</u>	<u>255,424</u>
Net cash provided by noncapital financing activities	(9,822)	176,283
Cash flows from capital and related financing activities		
Acquisition of utility plant	(9,937,101)	(70,725,727)
Principal paid on bonds and other long-term debt	-	(115,000)
Interest paid on bonds(net of capitalized interest)	272,273	(25,078,544)
Interest paid on capital lease obligations	(270,804)	(4,997,077)
Interest & principal funds held by trustee	(2,744,752)	(2,056,816)
Reserve funds held by trustee	(5,916)	(25,976)
Bond funds held by trustee	2,994,928	12,914,280
Principal payment on capital lease obligations	(1,976,645)	7,683,162
Grant from DOI/FEMA	8,653	153,365
Debt issuance costs/loss on defeasance	(225,743)	(2,708,916)
Net cash provided by (used in) capital and related financing activities	<u>(11,885,107)</u>	<u>(84,957,249)</u>
Net (decrease) increase in cash and cash equivalents	11,421,914.49	5,587,301
Cash and cash equivalents, beginning	<u>121,157,974</u>	<u>126,992,587</u>
<b>Cash and cash equivalents-Funds held by GPA, September 30, 2017</b>	<b>\$ 132,579,888</b>	<b>\$ 132,579,888</b>

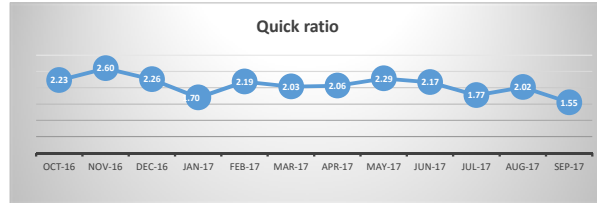
GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statements of Cash Flows, continued Period Ended September 30, 2017		
	Month Ended 9/30/2017	YTD Ended 9/30/2017
<b>Reconciliation of operating earnings to net cash provided by operating activities:</b>		
Operating earnings net of depreciation expense and excluding interest income	\$940,679	\$38,306,204
Adjustments to reconcile operating earnings to net cash provided by operating activities:		
Depreciation and amortization	4,146,953	47,607,153
Other expense	(152,900)	(76,730)
(Increase) decrease in assets:		
Accounts receivable	(172,223)	27,032,475
Materials and inventory	170,874	1,565,974
Fuel inventory	(9,658,943)	(21,061,002)
Prepaid expenses	942,112	71,210
Unamortized debt issuance cost	31,608	379,296
Deferred fuel revenue	(1,110,058)	(15,258,723)
Unamortized loss on debt refunding	104,028	1,248,336
Unamortized forward delivery contract costs	13,280	159,360
Increase (decrease) in liabilities:		
Accounts payable-operations	27,662,542	32,049,283
Accounts payable-others	(4,448)	(17,015,846)
Accrued payroll and employees' benefits	147,025	12,954
Net pension liability	(728,717)	(6,452,967)
DCRS Sick leave liability	571,659	571,659
Employees' annual leave	(92,358)	(80,904)
Customers deposits	188,200	122,212
Customer advances for construction	19,230	49,859
Unearned forward delivery contract revenue	(48,668)	(584,017)
<b>Net cash provided by operating activities</b>	<b>\$22,969,875</b>	<b>\$88,645,786</b>

GPA Work Session - November 21, 2017 - DIVISION REPORTS

Guam Power Authority  
Financial Analysis  
September 30, 2017

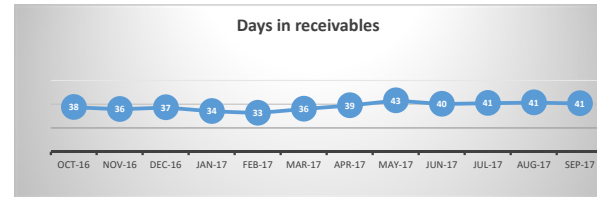
**Quick Ratio**

A	Reserve Funds Held by GPA	132,579,889
B	Current Accounts Receivable	35,473,016
C	Total Cash and A/R (A+B)	168,052,905
D	Total Current Liabilities	108,268,018
E	<b>Quick Ratio (F/G)</b>	<b>1.55</b>



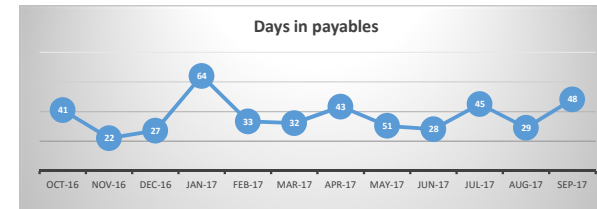
**Days in Receivables**

A	FY 16 Moving 12 Mos.-Actual	317,390,300
B	No. of Days	365
C	Average Revenues per day (A/B)	869,562
D	Current Accounts Receivable	35,473,016
E	<b>Days in Receivables (D/C)</b>	<b>41</b>



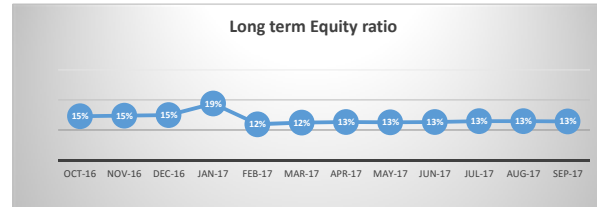
**Days in Payables**

A	FY 16 Moving 12 Months-Actual	468,278,485
B	No. of Days	365
C	Average Payables per day (A/B)	1,282,955
D	Current Accounts Payables	62,097,234
E	<b>Days in Payables (D/C)</b>	<b>48</b>



**Long term equity ratio**

A	Equity	\$ 87,091,753.00
B	Total Long term Liability	\$ 588,069,074.00
C	Total Equity and liability	\$ 675,160,827.00
D	<b>Long term equity ratio (A/C)</b>	<b>13%</b>

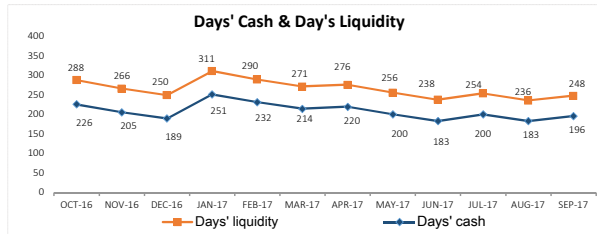


**Days cash on hand**

A	Unrestricted cash & cash equivalents	132,580
B	No. of Days -YTD	365
C	A x B	48,391,659
D	Total Operating expenses excluding depreciation	246,930
E	<b>Days cash on hand</b>	<b>196</b>

**Days' Liquidity**

A	Unrestricted cash , cash equivalents & revolving Credit	167,580
B	No. of Days -YTD	365
C	A x B	61,166,659
D	Total Operating expenses excluding depreciation	246,930
E	<b>Days liquidity</b>	<b>248</b>



**GUAM POWER AUTHORITY  
ACCruED REVENUE  
SEPTEMBER 2017**

		FOR THE MONTH ENDED SEPTEMBER		TWELVE MONTHS ENDED SEPTEMBER	
		2017	2016	2017	2016
<b>KWH SALES:</b>					
Residential		41,491,015	41,186,530	506,335,602	487,022,560
Small Gen. Non Demand		7,022,092	6,885,525	83,899,700	80,284,067
Small Gen. Demand		15,509,408	14,741,107	190,050,925	190,587,125
Large General		25,432,034	25,176,509	314,573,231	308,834,877
Independent Power Producer		76,532	62,052	1,003,769	767,880
Private St. Lights		34,586	56,235	450,462	629,744
	Sub-total	89,565,666	88,107,957	1,096,313,688	1,068,126,254
<b>Government Service:</b>					
Small Non Demand		1,246,106	1,164,666	13,902,246	13,428,264
Small Demand		8,084,368	7,858,530	96,878,602	93,302,996
Large		6,493,449	5,804,148	74,897,969	70,055,104
Street Lighting		697,002	995,613	9,514,606	11,344,681
	Sub-total	16,520,925	15,822,957	195,193,422	188,131,044
	Total	106,086,591	103,930,914	1,291,507,110	1,256,257,298
U. S. Navy		26,906,320	26,000,826	318,585,901	318,082,773
	<b>GRAND TOTAL</b>	<b>132,992,911</b>	<b>129,931,741</b>	<b>1,610,093,011</b>	<b>1,574,340,071</b>
<b>REVENUE:</b>					
Residential		\$ 8,887,320	\$ 7,492,970	\$ 100,601,977	\$ 92,057,360
Small Gen. Non Demand		\$ 1,783,997	\$ 1,523,079	\$ 20,040,732	\$ 18,390,954
Small Gen. Demand		\$ 3,692,273	\$ 3,075,598	\$ 42,069,517	\$ 40,501,958
Large General		\$ 5,643,059	\$ 4,802,289	\$ 64,178,060	\$ 60,787,284
Independent Power Producer		\$ 17,076	\$ 13,572	\$ 211,031	\$ 160,467
Private St. Lights		\$ 25,361	\$ 28,980	\$ 306,957	\$ 345,133
	Sub-total	\$ 20,049,087	\$ 16,936,487	\$ 227,408,274	\$ 212,243,155
<b>Government Service:</b>					
Small Non Demand		\$ 333,079	\$ 277,519	\$ 3,513,008	\$ 3,299,460
Small Demand		\$ 2,050,292	\$ 1,746,819	\$ 22,830,078	\$ 21,324,151
Large		\$ 1,575,080	\$ 1,250,824	\$ 16,979,365	\$ 15,453,317
Street Lighting		\$ 436,808	\$ 431,835	\$ 5,438,696	\$ 5,383,255
	Sub-total	\$ 4,395,259	\$ 3,706,997	\$ 48,761,148	\$ 45,460,182
	Total	\$ 24,444,346	\$ 20,643,484	\$ 276,169,422	\$ 257,703,338
U. S. Navy		\$ 5,325,383	\$ 4,256,406	\$ 54,904,634	\$ 49,193,414
	<b>GRAND TOTAL</b>	<b>\$ 29,769,728</b>	<b>\$ 24,899,890</b>	<b>\$ 331,074,056</b>	<b>\$ 306,896,751</b>
<b>NUMBER OF CUSTOMERS:</b>					
Residential		43,991	43,408	43,756	43,252
Small Gen. Non Demand		4,127	4,092	4,127	4,071
Small Gen. Demand		980	987	987	1,000
Large General		116	116	116	115
Independent Power Producer		3	2	3	2
Private St. Lights		526	525	526	531
	Sub-total	49,743	49,130	49,515	48,971
<b>Government Service:</b>					
Small Non Demand		675	696	681	689
Small Demand		353	348	348	341
Large		45	45	45	45
Street Lighting		297	163	253	161
	Sub-total	1,370	1,252	1,328	1,235
	Total	51,113	50,382	50,842	50,206
US Navy		1	1	1	1
		51,114	50,383	50,843	50,207

GPA Work Session - November 21, 2017 - DIVISION REPORTS

403 RPT

GUAM POWER AUTHORITY  
ACCRUED REVENUE

	TWELVE MONTHS ENDED	SEPTEMBER 2017	AUGUST 2017	JULY 2017	JUNE 2017	MAY 2017	APRIL 2017	MARCH 2017	FEBRUARY 2017	JANUARY 2017	DECEMBER 2016	NOVEMBER 2016	OCTOBER 2016
<b>KWH SALES:</b>													
Residential	506,335,602	41,491,015	44,434,719	45,094,364	45,699,553	46,940,445	42,105,054	40,911,781	35,936,337	39,423,550	41,105,614	40,882,645	42,310,523
Small General Non Demand	83,899,700	7,022,092	7,347,440	7,087,373	7,546,692	7,375,238	6,926,353	6,767,505	6,497,885	6,647,367	6,987,263	6,646,441	7,048,061
Small General Demand	190,050,925	15,509,408	16,488,257	15,839,125	16,853,701	16,415,592	15,638,177	16,300,307	13,890,958	15,535,910	16,033,983	15,504,615	16,040,892
Large General	314,573,231	25,432,034	27,038,013	27,119,633	26,399,095	27,209,329	25,771,823	26,173,462	23,699,969	26,550,140	26,487,608	26,823,315	25,868,811
Private Outdoor Lighting	450,462	34,586	33,324	35,412	36,199	31,956	34,275	34,097	32,325	36,736	39,997	52,271	49,285
Independent Power Producer	1,003,769	76,532	57,754	82,800	93,447	97,039	78,158	83,841	67,797	92,493	96,065	87,525	90,319
Sub-Total	1,096,313,688	89,565,666	95,399,508	95,258,706	96,628,687	98,069,599	90,553,840	90,270,993	80,125,270	88,286,197	90,750,519	89,996,812	91,407,891
<b>Government Service:</b>													
Small Non Demand	13,902,246	1,246,106	1,243,487	1,254,979	1,154,625	1,242,514	1,118,738	1,123,675	996,603	1,079,470	1,121,641	1,122,985	1,197,422
Small Demand	96,878,602	8,084,368	8,147,386	7,962,644	7,847,651	8,507,100	7,890,703	8,171,598	7,382,544	7,897,069	8,060,205	8,436,888	8,490,446
Large	74,897,969	6,493,449	6,520,699	6,219,351	6,043,966	6,712,069	6,145,212	6,340,287	5,654,767	6,032,854	6,238,617	6,094,610	6,402,088
Street Lighting (Agencies)	9,514,606	697,002	877,130	638,971	843,815	771,506	720,057	829,968	707,509	539,658	994,072	997,687	897,232
Sub-Total	195,193,422	16,520,925	16,788,702	16,075,944	15,890,058	17,233,190	15,874,710	16,465,529	14,741,423	15,549,052	16,414,534	16,652,169	16,987,187
Total	1,291,507,110	106,086,591	112,188,210	111,334,651	112,518,745	115,302,789	106,428,550	106,736,522	94,866,692	103,835,249	107,165,053	106,648,982	108,395,078
U.S. Navy	318,585,901	26,906,320	26,608,721	27,892,205	25,258,344	27,710,121	26,158,807	28,394,970	22,750,741	27,625,278	27,468,943	26,586,150	25,225,302
<b>Grand Total</b>	<b>1,610,093,011</b>	<b>132,992,911</b>	<b>138,796,930</b>	<b>139,226,856</b>	<b>137,777,089</b>	<b>143,012,910</b>	<b>132,587,357</b>	<b>135,131,492</b>	<b>117,617,433</b>	<b>131,460,526</b>	<b>134,633,996</b>	<b>133,235,131</b>	<b>133,620,381</b>
<b>REVENUE:</b>													
Residential	\$ 100,601,977	\$ 8,887,320	\$ 9,762,810	\$ 9,056,344	\$ 9,109,920	\$ 9,464,539	\$ 8,447,732	\$ 8,255,658	\$ 7,648,484	\$ 7,213,121	\$ 7,527,553	\$ 7,455,636	\$ 7,772,860
Small General Non Demand	\$ 20,040,732	\$ 1,783,997	\$ 1,902,660	\$ 1,709,931	\$ 1,790,832	\$ 1,782,557	\$ 1,661,818	\$ 1,647,869	\$ 1,650,380	\$ 1,468,355	\$ 1,572,329	\$ 1,481,078	\$ 1,588,926
Small General Demand	\$ 42,069,517	\$ 3,692,273	\$ 3,964,157	\$ 3,527,191	\$ 3,704,661	\$ 3,828,208	\$ 3,333,389	\$ 3,674,304	\$ 3,310,305	\$ 3,290,532	\$ 3,341,792	\$ 3,195,498	\$ 3,297,206
Large General	\$ 64,178,060	\$ 5,643,059	\$ 6,028,539	\$ 5,589,484	\$ 5,443,855	\$ 5,621,797	\$ 5,382,999	\$ 5,370,285	\$ 5,066,026	\$ 4,998,015	\$ 5,049,240	\$ 5,084,685	\$ 4,900,077
Private Outdoor Lighting	\$ 306,957	\$ 25,361	\$ 25,094	\$ 25,099	\$ 25,329	\$ 24,432	\$ 25,014	\$ 25,012	\$ 24,793	\$ 25,546	\$ 25,575	\$ 25,575	\$ 28,060
Independent Power Producer	\$ 211,031	\$ 17,076	\$ 14,804	\$ 17,270	\$ 19,157	\$ 20,386	\$ 16,006	\$ 17,451	\$ 15,045	\$ 18,807	\$ 19,759	\$ 16,793	\$ 18,478
Sub-Total	\$ 227,408,274	\$ 20,049,087	\$ 21,698,063	\$ 19,925,320	\$ 20,093,753	\$ 20,741,919	\$ 18,866,957	\$ 18,990,578	\$ 17,715,032	\$ 16,924,376	\$ 17,536,247	\$ 17,261,335	\$ 17,605,607
<b>Government Service:</b>													
Small Non Demand	\$ 3,513,008	\$ 333,079	\$ 332,325	\$ 319,135	\$ 297,031	\$ 313,817	\$ 289,279	\$ 289,226	\$ 258,835	\$ 258,411	\$ 268,979	\$ 268,355	\$ 284,537
Small Demand	\$ 22,830,078	\$ 2,050,292	\$ 2,052,253	\$ 1,907,628	\$ 1,885,990	\$ 1,985,615	\$ 1,919,140	\$ 1,956,670	\$ 1,819,228	\$ 1,746,554	\$ 1,798,184	\$ 1,851,599	\$ 1,856,926
Large	\$ 16,979,365	\$ 1,575,080	\$ 1,573,445	\$ 1,424,292	\$ 1,393,449	\$ 1,572,201	\$ 1,374,482	\$ 1,454,690	\$ 1,331,459	\$ 1,286,951	\$ 1,334,239	\$ 1,303,344	\$ 1,355,735
Street Lighting (Agencies)	\$ 5,438,696	\$ 436,808	\$ 516,047	\$ 418,012	\$ 451,933	\$ 439,403	\$ 431,759	\$ 447,332	\$ 447,721	\$ 351,576	\$ 548,266	\$ 512,699	\$ 437,139
Sub-Total	\$ 48,761,148	\$ 4,395,259	\$ 4,474,070	\$ 4,069,066	\$ 4,028,403	\$ 4,311,036	\$ 4,014,660	\$ 4,147,918	\$ 3,857,244	\$ 3,643,492	\$ 3,949,668	\$ 3,935,996	\$ 3,934,337
Total	\$ 276,169,422	\$ 24,444,346	\$ 26,172,133	\$ 23,994,386	\$ 24,122,156	\$ 25,052,955	\$ 22,881,617	\$ 23,138,496	\$ 21,572,276	\$ 20,567,868	\$ 21,485,915	\$ 21,197,330	\$ 21,539,944
U.S. Navy	\$ 54,904,634	\$ 5,325,383	\$ 5,019,382	\$ 5,331,702	\$ 4,458,411	\$ 5,160,265	\$ 4,283,028	\$ 5,232,508	\$ 3,632,683	\$ 4,519,844	\$ 4,245,316	\$ 3,640,144	\$ 4,055,968
<b>Grand Total</b>	<b>\$ 331,074,056</b>	<b>\$ 29,769,728</b>	<b>\$ 31,191,516</b>	<b>\$ 29,326,087</b>	<b>\$ 28,580,567</b>	<b>\$ 30,213,220</b>	<b>\$ 27,164,645</b>	<b>\$ 28,371,004</b>	<b>\$ 25,204,958</b>	<b>\$ 25,087,712</b>	<b>\$ 25,731,231</b>	<b>\$ 24,837,474</b>	<b>\$ 25,595,912</b>
<b>NUMBER OF CUSTOMERS:</b>													
Residential	43,756	43,991	43,969	43,866	43,902	43,803	43,807	43,718	43,647	43,710	43,582	43,594	43,487
Small General Non Demand	4,127	4,127	4,134	4,131	4,145	4,130	4,137	4,128	4,119	4,127	4,125	4,110	4,114
Small General Demand	987	980	981	984	988	988	988	989	992	994	991	980	985
Large General	116	116	115	116	116	117	115	116	116	116	116	116	115
Private Outdoor Lighting	526	526	527	526	527	530	528	528	527	525	517	519	526
Independent Power Producer	3	3	3	3	3	3	3	3	3	3	3	3	3
Sub-Total	49,515	49,743	49,729	49,626	49,681	49,571	49,578	49,482	49,404	49,475	49,334	49,322	49,230
<b>Government Service:</b>													
Small Non Demand	681	675	678	678	677	684	684	684	682	684	680	683	684
Small Demand	348	353	351	352	349	346	347	348	347	346	346	346	345
Large	45	45	45	45	45	45	45	45	45	45	45	45	45
Street Lighting (Agencies)	253	297	297	297	297	293	290	272	271	211	205	155	155
Sub-Total	1,328	1,370	1,371	1,372	1,368	1,368	1,366	1,349	1,345	1,287	1,276	1,229	1,229
Total	50,842	51,113	51,100	50,998	51,049	50,939	50,944	50,831	50,749	50,762	50,610	50,551	50,459
U.S. Navy	1	1	1	1	1	1	1	1	1	1	1	1	1
<b>Grand Total</b>	<b>50,843</b>	<b>51,114</b>	<b>51,101</b>	<b>50,999</b>	<b>51,050</b>	<b>50,940</b>	<b>50,945</b>	<b>50,832</b>	<b>50,750</b>	<b>50,763</b>	<b>50,611</b>	<b>50,552</b>	<b>50,460</b>

GPA Work Session - November 21, 2017 - DIVISION REPORTS

GPA303

GUAM POWER AUTHORITY  
ACCRUED REVENUE  
SEPTEMBER 2017

RATE	NUMBER		TOTAL REVENUE		BASE RATE REVENUE		AVERAGE PER CUSTOMER			NON-FUEL		FUEL	
	OF CUSTOMERS	KWH SALES	AMOUNT	C/KWH	C/KWH	AMOUNT	KWH	REVENUE	C/KWH	AMOUNT	C/KWH	AMOUNT	
Month													
R Residential	43,991	41,491,015	\$ 8,887,320	\$ 21.42	\$ 21.42	\$ 8,887,320	943	\$ 202	9.6481	\$ 4,003,081	\$ 11.7718	\$ 4,884,239	
G Small Gen. Non Demand	4,127	7,022,092	\$ 1,783,997	\$ 25.41	\$ 25.41	\$ 1,783,997	1,702	\$ 432	13.6337	\$ 957,371	\$ 11.7718	\$ 826,627	
J Small Gen. Demand	980	15,509,408	\$ 3,692,273	\$ 23.81	\$ 23.81	\$ 3,692,273	15,826	\$ 3,768	12.0388	\$ 1,867,150	\$ 11.7678	\$ 1,825,123	
P Large General	116	25,432,034	\$ 5,643,059	\$ 22.19	\$ 22.19	\$ 5,643,059	219,242	\$ 48,647	10.4766	\$ 2,664,424	\$ 11.7121	\$ 2,978,635	
I Independent Power Producer	3	76,532	\$ 17,076	\$ 22.31	\$ 22.31	\$ 17,076	25,511	\$ 5,692	10.9191	\$ 8,357	\$ 11.3936	\$ 8,720	
H Private St. Lights	526	34,586	\$ 25,361	\$ 73.33	\$ 73.33	\$ 25,361	66	\$ 48	61.5558	\$ 21,289	\$ 11.7718	\$ 4,071	
Sub-Total	49,743	89,565,666	\$ 20,049,087	\$ 22.38	\$ 22.38	\$ 20,049,087	1,801	\$ 403	10.6309	\$ 9,521,672	\$ 11.7539	\$ 10,527,415	
Government Service:													
S Small Non Demand	675	1,246,106	\$ 333,079	\$ 26.73	\$ 26.73	\$ 333,079	1,846	\$ 493	14.9578	\$ 186,389	\$ 11.7718	\$ 146,689	
K Small Demand	353	8,084,368	\$ 2,050,292	\$ 25.36	\$ 25.36	\$ 2,050,292	22,902	\$ 5,808	13.5894	\$ 1,098,616	\$ 11.7718	\$ 951,676	
L Large	45	6,493,449	\$ 1,575,080	\$ 24.26	\$ 24.26	\$ 1,575,080	144,299	\$ 35,002	12.6242	\$ 819,746	\$ 11.6322	\$ 755,334	
F Street Lighting (Agencies)	297	697,002	\$ 436,808	\$ 62.67	\$ 62.67	\$ 436,808	2,347	\$ 1,471	50.8978	\$ 354,759	\$ 11.7718	\$ 82,050	
Sub-Total	1,370	16,520,925	\$ 4,395,259	\$ 26.60	\$ 26.60	\$ 4,395,259	12,059	\$ 3,208	14.8872	\$ 2,459,511	\$ 11.7169	\$ 1,935,748	
U.S. Navy	51,113	106,086,591	\$ 24,444,346	\$ 48.99	\$ 48.99	\$ 24,444,346	2,076	\$ 478	11.2938	\$ 11,981,182	\$ 11.7481	\$ 12,463,163	
	1	26,906,320	\$ 5,325,383	\$ 19.79	\$ 19.79	\$ 5,325,383			7.0364	\$ 1,893,246	\$ 12.7559	\$ 3,432,137	
TOTAL	51,114	132,992,911	\$ 29,769,728	\$ 22.38	\$ 22.38	\$ 29,769,728	2,602	\$ 582	10.4325	\$ 13,874,428	\$ 11.9520	\$ 15,895,300	
Twelve Months Ended September 2017													
R Residential	43,756	506,335,602	\$ 100,601,977	\$ 19.87	\$ 19.87	\$ 100,601,977	11,572	\$ 2,299	9.6242	\$ 48,730,504	\$ 10.2445	\$ 51,871,474	
G Small Gen. Non Demand	4,127	83,899,700	\$ 20,040,732	\$ 23.89	\$ 23.89	\$ 20,040,732	20,328	\$ 4,856	13.6440	\$ 11,447,234	\$ 10.2426	\$ 8,593,498	
J Small Gen. Demand	987	190,050,925	\$ 42,069,517	\$ 22.14	\$ 22.14	\$ 42,069,517	192,619	\$ 42,638	11.9302	\$ 22,673,489	\$ 10.2057	\$ 19,396,028	
P Large General	116	314,573,231	\$ 64,178,060	\$ 20.40	\$ 20.40	\$ 64,178,060	2,715,740	\$ 554,055	10.3044	\$ 32,414,812	\$ 10.0973	\$ 31,763,248	
I Independent Power Producer	3	1,003,769	\$ 211,031	\$ 21.02	\$ 21.02	\$ 211,031	334,590	\$ 70,344	11.1629	\$ 112,050	\$ 9.8610	\$ 98,982	
H Private St. Lights	526	450,462	\$ 306,957	\$ 68.14	\$ 68.14	\$ 306,957	857	\$ 584	58.1765	\$ 262,063	\$ 9.9663	\$ 44,894	
Sub-Total	49,515	1,096,313,688	\$ 227,408,274	\$ 20.74	\$ 20.74	\$ 227,408,274	22,141	\$ 4,593	10.5481	\$ 115,640,151	\$ 10.1949	\$ 111,768,124	
Government Service:													
S Small Non Demand	681	13,902,246	\$ 3,513,008	\$ 25.27	\$ 25.27	\$ 3,513,008	20,412	\$ 5,158	15.1371	\$ 2,104,396	\$ 10.1323	\$ 1,408,613	
K Small Demand	348	96,878,602	\$ 22,830,078	\$ 23.57	\$ 23.57	\$ 22,830,078	278,320	\$ 65,588	13.4742	\$ 13,053,603	\$ 10.0915	\$ 9,776,475	
L Large	45	74,897,969	\$ 16,979,365	\$ 22.67	\$ 22.67	\$ 16,979,365	1,664,399	\$ 377,319	12.6110	\$ 9,445,414	\$ 10.0590	\$ 7,533,951	
F Street Lighting (Agencies)	253	9,514,606	\$ 5,438,696	\$ 57.16	\$ 57.16	\$ 5,438,696	37,558	\$ 21,469	47.1113	\$ 4,482,455	\$ 10.0502	\$ 956,241	
Sub-Total	1,328	195,193,422	\$ 48,761,148	\$ 24.98	\$ 24.98	\$ 48,761,148	147,038	\$ 36,732	14.9010	\$ 29,085,867	\$ 10.0799	\$ 19,675,280	
U.S. Navy	1	318,585,901	\$ 54,904,634	\$ 17.23	\$ 17.23	\$ 54,904,634			6.2537	\$ 19,923,387	\$ 10.9802	\$ 34,981,246	
TOTAL	50,843	1,610,093,011	\$ 331,074,056	\$ 20.56	\$ 20.56	\$ 331,074,056	31,668	\$ 6,512	10.2261	\$ 164,649,406	\$ 10.3363	\$ 166,424,650	
Twelve Months Ending September 2017													
R Residential	43,756	506,335,602	\$ 100,601,977	\$ 19.87	\$ 19.87	\$ 100,601,977	11,572	\$ 2,299	9.6242	\$ 48,730,504	\$ 10.2445	\$ 51,871,474	
G Small Gen. Non Demand	4,127	83,899,700	\$ 20,040,732	\$ 23.89	\$ 23.89	\$ 20,040,732	20,328	\$ 4,856	13.6440	\$ 11,447,234	\$ 10.2426	\$ 8,593,498	
J Small Gen. Demand	987	190,050,925	\$ 42,069,517	\$ 22.14	\$ 22.14	\$ 42,069,517	192,619	\$ 42,638	11.9302	\$ 22,673,489	\$ 10.2057	\$ 19,396,028	
P Large General	116	314,573,231	\$ 64,178,060	\$ 20.40	\$ 20.40	\$ 64,178,060	2,715,740	\$ 554,055	10.3044	\$ 32,414,812	\$ 10.0973	\$ 31,763,248	
I Independent Power Producer	3	1,003,769	\$ 211,031	\$ 21.02	\$ 21.02	\$ 211,031	334,590	\$ 70,344	11.1629	\$ 112,050	\$ 9.8610	\$ 98,982	
H Private St. Lights	526	450,462	\$ 306,957	\$ 68.14	\$ 68.14	\$ 306,957	857	\$ 584	58.1765	\$ 262,063	\$ 9.9663	\$ 44,894	
Sub-Total	49,515	1,096,313,688	\$ 227,408,274	\$ 20.74	\$ 20.74	\$ 227,408,274	22,141	\$ 4,593	10.5481	\$ 115,640,151	\$ 10.1949	\$ 111,768,124	
Government Service:													
S Small Non Demand	681	13,902,246	\$ 3,513,008	\$ 25.27	\$ 25.27	\$ 3,513,008	20,412	\$ 5,158	15.1371	\$ 2,104,396	\$ 10.1323	\$ 1,408,613	
K Small Demand	348	96,878,602	\$ 22,830,078	\$ 23.57	\$ 23.57	\$ 22,830,078	278,320	\$ 65,588	13.4742	\$ 13,053,603	\$ 10.0915	\$ 9,776,475	
L Large	45	74,897,969	\$ 16,979,365	\$ 22.67	\$ 22.67	\$ 16,979,365	1,664,399	\$ 377,319	12.6110	\$ 9,445,414	\$ 10.0590	\$ 7,533,951	
F Street Lighting (Agencies)	253	9,514,606	\$ 5,438,696	\$ 57.16	\$ 57.16	\$ 5,438,696	37,558	\$ 21,469	47.1113	\$ 4,482,455	\$ 10.0502	\$ 956,241	
Sub-Total	1,328	195,193,422	\$ 48,761,148	\$ 24.98	\$ 24.98	\$ 48,761,148	147,038	\$ 36,732	14.9010	\$ 29,085,867	\$ 10.0799	\$ 19,675,280	
U.S. Navy	50,842	1,291,507,110	\$ 276,169,422	\$ 21.38	\$ 21.38	\$ 276,169,422	25,402	\$ 41,324	11.2060	\$ 144,726,018	\$ 10.1775	\$ 131,443,404	
	1	318,585,901	\$ 54,904,634	\$ 17.23	\$ 17.23	\$ 54,904,634			6.2537	\$ 19,923,387	\$ 10.9802	\$ 34,981,246	
TOTAL	50,843	1,610,093,011	\$ 331,074,056	\$ 20.56	\$ 20.56	\$ 331,074,056	31,668	\$ 6,512	10.2261	\$ 164,649,406	\$ 10.3363	\$ 166,424,650	



GPA Work Session - November 21, 2017 - DIVISION REPORTS

GPA-318  
318Sep17

ENERGY ACCOUNT  
FY 2017 Versus FY 2016

FOR INTERNAL USE ONLY

	September 2017		September 2016		Y T D 2017		Y T D 2016		MOVING TWELVE MONTHS	
Gross Generation	30		30		365		305		365	
Number of days in Period	254		256		261		258		261	
Peak demand	09/19/17		09/05/16		08/01/17		07/25/16		08/01/17	
Date	KWH	% change	KWH	% change	KWH	% change	KWH	% change	KWH	% change
Energy Account:										
Kilowatt hours GPA:										
Cabras 1 & 2	43,379,000		34,919,000		694,993,000		640,287,000		694,993,000	
Cabras No. 3	0		0		0		0		0	
Cabras No. 4	0		0		0		0		0	
MEC (ENRON) Piti 8 (IPP)	28,279,500		29,192,500		319,633,700		281,612,350		319,633,700	
MEC (ENRON) Piti 9 (IPP)	27,521,700		23,932,900		308,062,300		314,537,200		308,062,300	
TEMES Piti 7 (IPP)	9,342,829		11,037,200		46,981,369		97,482,153		46,981,369	
Tanguisson 2	0		0		0		0		0	
Tanguisson 1	0		0		0		0		0	
Diesels/CT's & Others:										
MDI 10MW	0		1,227,212		2,257,627		10,784,474		2,257,627	
NRG Solar Dandan	3,971,229		3,420,080		43,190,802		49,550,327		43,190,802	
Dededo CT #1	2,801,170		0		7,123,300		0		7,123,300	
Dededo CT #2	1,214,370		0		5,832,592		0		5,832,592	
Macheche CT	7,734,370		0		55,567,556		50,634,675		55,567,556	
Yigo CT (Leased)	6,967,293		7,794,820		41,375,947		48,405,494		41,375,947	
Tenjo	5,274,540		4,594,580		45,457,480		47,918,189		45,457,480	
Talofofo 10 MW	1,703,310		1,935,110		18,771,390		11,208,933		18,771,390	
Aggreko	6,609,790		23,037,937		173,446,539		168,092,181		173,446,539	
Wind Turbine*	6,766		15,904		387,195		381,279		387,195	
Orote	0		0		0		0		0	
Marbo	0		0		0		0		0	
	<b>144,805,867</b>		<b>141,107,243</b>		<b>1,763,080,797</b>		<b>1,720,894,255</b>		<b>1,763,080,797</b>	
Ratio to last year		102.62		98.20		102.45		100.53		102.45
Station use	5,200,512		4,562,720		65,894,996		64,951,789		65,894,996	
Ratio to Gross generation		3.59		3.23		3.74		3.77		3.74
Net send out	139,605,354		136,544,523		1,697,185,801		1,655,942,466		1,697,185,801	
Ratio to last year		102.24		99.07		102.49		101.66		102.49
KWH deliveries:										
Sales to Navy (@34.5kv)	26,906,320		26,000,826		318,585,903		315,510,883		318,585,903	
Ratio to last year		103.48		96.17		100.97		100.22		100.16
GPA-metered	112,699,034		110,543,697		1,378,599,898		1,340,431,583		1,378,599,898	
Ratio to last year		101.95		99.78		102.85		102.01		103.05
Power factor adj.	0		0		0		0		0	
Adjusted	112,699,034		110,543,697		1,378,599,898		1,340,431,583		1,378,599,898	
GPA KWH Accountability:										
Sales to civilian customers-accrual basis	106,086,591		103,930,914		1,291,507,112		1,256,257,297		1,291,507,112	
Ratio to last year		102.07		99.87		102.81		102.79		102.81
GPA use-KWH	252,156		250,698		3,144,238		3,321,842		3,144,238	
Unaccounted For	6,360,287		6,362,085		83,948,548		80,852,444		83,948,548	
Ratio to deliveries		5.64		5.76		6.09		6.03		6.09
Ratio to Gross Generation		4.39		4.51		4.76		4.70		4.76
Ratio to Net Send Out		4.56		4.66		4.95		4.88		4.95

GPA Work Session - November 21, 2017 - DIVISION REPORTS

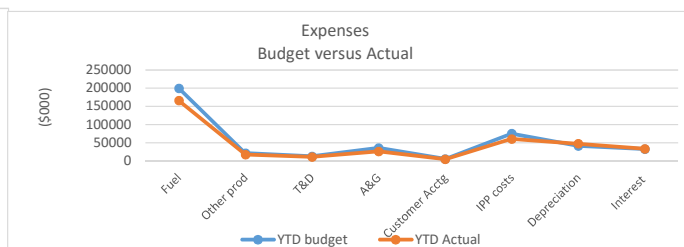
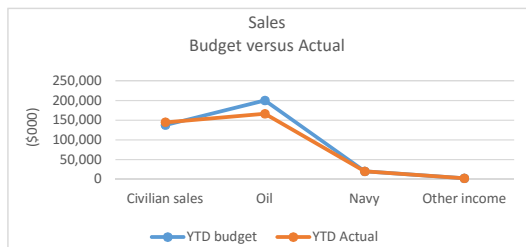
GPA-317Sep17

**Guam Power Authority  
Fuel Consumption  
FY 2017**

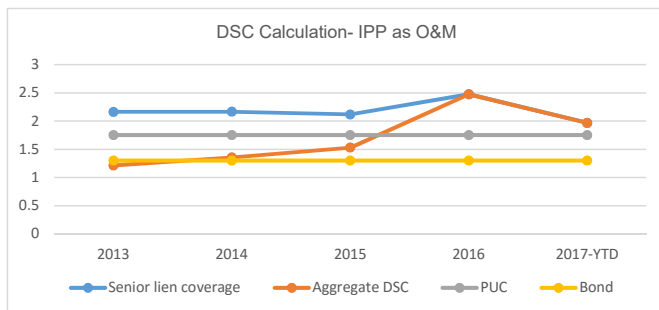
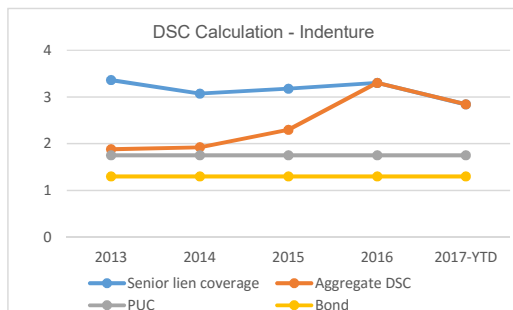
Description	September 2017		YEAR-TO-DATE		MOVING 12 MONTHS	
	BARRELS	AMOUNT	BARRELS	AMOUNT	BARREL S	AMOUNT
<b>FUEL FURNISHED:</b>						
<b>NAVY:</b>						
Diesel	0	0	0	0	0	0
Low Sulfur	0	0	0	0	0	0
	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>GPA:</b>						
RFO	85,453	\$4,837,376	1,524,120	\$ 80,917,744	1,524,120	\$ 80,917,744
Diesel	88,950	\$6,532,395	797,873	\$ 57,031,451	797,873	\$ 57,031,451
Low Sulfur	59,213	\$3,639,737	488,847	\$ 27,946,899	488,847	\$ 27,946,899
Deferred Fuel Costs	0	-\$1,110,058	0	\$ (15,258,723)	0	\$ (15,258,723)
Fuel Adjustments	0	-\$138,595		\$ (203,380)	0	\$ (203,380)
Fuel Handling Costs	0	\$2,134,446	0	\$ 15,990,792	0	\$ 15,990,792
	<b>233,617</b>	<b>\$15,895,300</b>	<b>2,810,840</b>	<b>\$ 166,424,782</b>	<b>2,810,840</b>	<b>\$ 166,424,782</b>
<b>IWPS:</b>						
GPA RFO	85,453	\$4,837,376	1,524,120	\$ 80,917,744	1,524,120	\$ 80,917,744
Diesel	88,950	\$6,532,395	797,873	\$ 57,031,451	797,873	\$ 57,031,451
Low Sulfur	59,213	\$3,639,737	488,847	\$ 27,946,899	488,847	\$ 27,946,899
Deferred Fuel Costs	0	-\$1,110,058	0	\$ (15,258,723)	0	\$ (15,258,723)
Fuel Variance	0	-\$138,595	0	\$ (203,380)		\$ (203,380)
Fuel Handling Costs	0	\$2,134,446	0	\$ 15,990,792	0	\$ 15,990,792
	<b>233,617</b>	<b>\$15,895,300</b>	<b>2,810,840</b>	<b>\$ 166,424,782</b>	<b>2,810,840</b>	<b>\$ 166,424,782</b>
<b>AVERAGE COST/Bbl.</b>						
GPA RFO		<b>\$56.61</b>		<b>\$53.09</b>		<b>\$53.09</b>
Diesel		<b>\$73.44</b>		<b>\$71.48</b>		<b>\$71.48</b>
Low Sulfur		<b>\$61.47</b>		<b>\$57.17</b>		<b>\$57.17</b>
<b>AS BURNED</b>						
<b>Cabras 1 &amp; 2</b>						
RFO	39,989	\$ 2,263,687	967,470	\$ 51,608,686	967,470	\$ 51,608,686
Low Sulfur	32,209	\$ 1,979,852	201,434	\$ 11,337,564	201,434	\$ 11,337,564
Diesel	<u>276</u>	<u>\$ 20,176</u>	<u>2,823</u>	<u>\$ 186,425</u>	<u>2,823</u>	<u>\$ 186,425</u>
	72,474	\$ 4,263,714	1,171,726	\$ 63,132,676	1,171,726	\$ 63,132,676
<b>Cabras 3 &amp; 4</b>						
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	\$ -
<b>MEC (Piti Units 8&amp;9)</b>						
RFO	45,465	\$ 2,573,689	556,651	\$ 29,309,058	556,651	\$ 29,309,058
Low Sulfur	27,004	\$ 1,659,885	287,413	\$ 16,609,335	287,413	\$ 16,609,335
Diesel	<u>0</u>	<u>\$ -</u>	<u>40</u>	<u>\$ 2,194</u>	<u>40</u>	<u>\$ 2,194</u>
	72,469	\$ 4,233,574	844,104	\$ 45,920,588	844,104	\$ 45,920,588
<b>Diesel &amp; CT's - GPA:</b>						
MDI Dsl	0	\$ -	3,605	\$ 229,124	3,605	\$ 229,124
Macheche CT	16,721	\$ 1,225,895	120,598	\$ 8,733,592	120,598	\$ 8,733,592
Yigo CT	13,794	\$ 1,016,643	86,459	\$ 6,112,513	86,459	\$ 6,112,513
Talofofo 10 MW	2,848	\$ 207,327	31,482	\$ 2,251,892	31,482	\$ 2,251,892
Aggreko	12,089	\$ 877,608	313,889	\$ 22,101,465	313,889	\$ 22,101,465
Tenjo	9,283	\$ 697,424	79,249	\$ 5,824,613	79,249	\$ 5,824,613
TEMES (IPP)	22,485	\$ 1,648,483	118,326	\$ 8,556,670	118,326	\$ 8,556,670
GWA Generators	<u>326</u>	<u>\$ 38,434</u>	<u>509</u>	<u>\$ 59,948</u>	<u>509</u>	<u>\$ 59,948</u>
	88,674	\$ 6,512,219	795,011	\$ 56,842,831	795,011	\$ 56,842,831
Deferred Fuel Costs	0	\$ (1,110,058)		\$ (15,258,723)		\$ (15,258,723)
Adjustment		\$ (138,595)		\$ (203,380)		\$ (203,380)
Fuel Handling Costs	<u>0</u>	<u>\$ 2,134,446</u>		<u>\$ 15,990,792</u>		<u>\$ 15,990,792</u>
<b>TOTAL</b>	<b>233,617</b>	<b>\$ 15,895,300</b>	<b>2,810,840</b>	<b>\$ 166,424,782</b>	<b>2,810,840</b>	<b>\$ 166,424,782</b>

GPA Work Session - November 21, 2017 - DIVISION REPORTS

Statement of operations Comparison-Budget versus Actual For the month and year to date ended September 30, 2017						
	Budget	Actual September-17	Variance	YTD Budget	YTD Actual	Variance
KwH Sales-Civilian	100,886	106,087	-5,201	1,208,787	1,291,509	-82,722
Non-fuel yield	\$ 0.113412	\$ 0.112936	\$ 0.000477	\$ 0.113639	\$ 0.112058	\$ 0.001581
KwH Sales-Navy	28,351	26,906	1,445	332,182	318,585	13,597
Non-fuel yield	\$ 0.061275	\$ 0.070356	\$ (0.009081)	\$ 0.061275	\$ 0.062539	\$ (0.001264)
Operating revenue						
Civilian sales	11,442	11,981	(539)	137,365	144,724	(7,359)
Oil	16,775	15,895	880	200,015	166,423	33,592
Navy	1,737	1,893	(156)	20,355	19,924	431
Other income	217	103	113	2,600	2,245	355
	30,171	29,872	298	360,334	333,316	27,019
Bad debts expense	83	(515)	598	1,000	472	528
Total operating revenues	30,087	30,387	(300)	359,334	332,843	26,491
Operating expenses:						
Production fuel	16,775	15,895	880	200,015	166,425	33,590
O & M expenses:						
Other production	1,827	3,230	(1,403)	21,926	17,784	4,142
Transmission distribution	1,080	941	139	12,960	11,704	1,256
Administrative expense	2,993	3,027	(33)	35,921	26,798	9,123
Customer accounting	382	456	(73)	4,587	4,284	303
	6,283	7,653	(1,370)	75,394	60,570	14,824
IPP costs	1,486	1,769	(283)	17,835	19,935	(2,100)
Depreciation	3,484	4,147	(663)	41,804	47,607	(5,803)
	28,028	29,464	(1,437)	335,048	294,537	40,511
Operating income	2,060	923	1,137	24,286	38,306	(14,020)
Other revenue (expenses):						
Investment income	115	347	(232)	1,384	1,722	(338)
Interest expense	(2,735)	(2,667)	(68)	(32,821)	(33,749)	929
AFUDC	118	272	(154)	1,420	3,676	(2,256)
Bond issuance costs/Other expenses	127	(153)	280	1,522	(77)	1,599
Net income before capital contribution	(315)	(1,278)	962	(4,208)	9,878	(14,087)
Grants from the U.S. Government	-	9	(9)	-	153	(153)
Increase (decrease) in net assets	(315)	(1,269)	953	(4,208)	10,031	(14,240)



Guam Power Authority Debt service coverage September 30, 2017					
	2013	2014	2015	2016	YTD 9/30/2017
Operating revenues					
Sales	449,029	434,462	366,185	306,896	331,071
Miscellaneous	2,927	2,156	4,775	2,294	2,245
Total revenues	451,956	436,618	370,960	309,190	333,316
Bad debts expense	1,223	178	959	990	472
Total operating revenues	450,733	436,440	370,001	308,200	332,843
Operating expenses					
Production fuel	295,473	271,175	204,136	146,340	166,425
Other production	22,009	19,305	20,079	15,835	17,784
Energy conversion costs	20,264	20,632	18,404	16,800	19,935
Transmission and distribution	13,368	12,950	11,170	10,817	11,704
Customer accounting	3,878	3,821	3,780	4,502	4,284
Admin and General	31,589	28,393	21,908	29,058	26,798
Total Expenses	386,581	356,276	279,477	223,352	246,930
Operating income	64,152	80,164	90,524	84,848	85,913
Interest/Other income (expenses)	720	157	256	57	(32)
Debt service and lease payments					
IPP lease payments	23,084	23,084	26,622	20,790	20,796
Capital lease payments-Aggreko	-	-	-	-	5,609
2014 bonds	-	-	-	10	5,084
2012 bonds	16,309	17,455	17,096	17,098	17,450
2010 senior bonds	2,997	7,999	7,999	7,999	7,999
2010 subordinate	15,163	15,193	9,605	-	-
Total Debt service-bonds	34,469	40,647	34,700	25,106	30,532
Total Debt service and capital lease	57,553	63,731	61,322	45,896	56,937
Debt service coverage (DSC) calculation-indenture					
Senior lien coverage	3.36	3.16	3.62	3.38	2.81
Aggregate debt service coverage	1.88	1.98	2.62	3.38	2.81
Debt service coverage (DSC) calculation-IPP as O&M					
Senior lien coverage	2.16	2.25	2.56	2.55	1.95
Aggregate debt service coverage	1.21	1.41	1.85	2.55	1.95

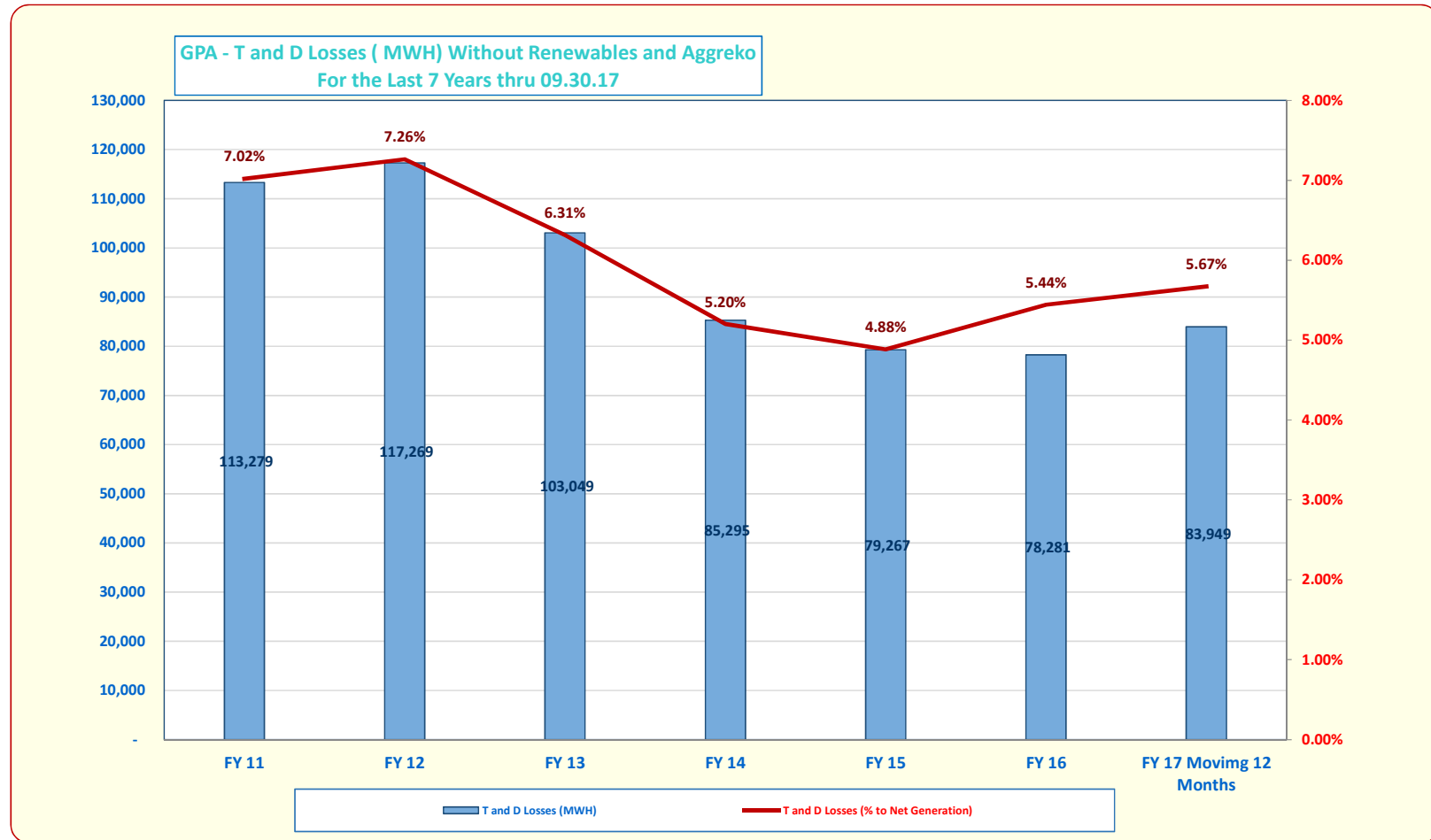


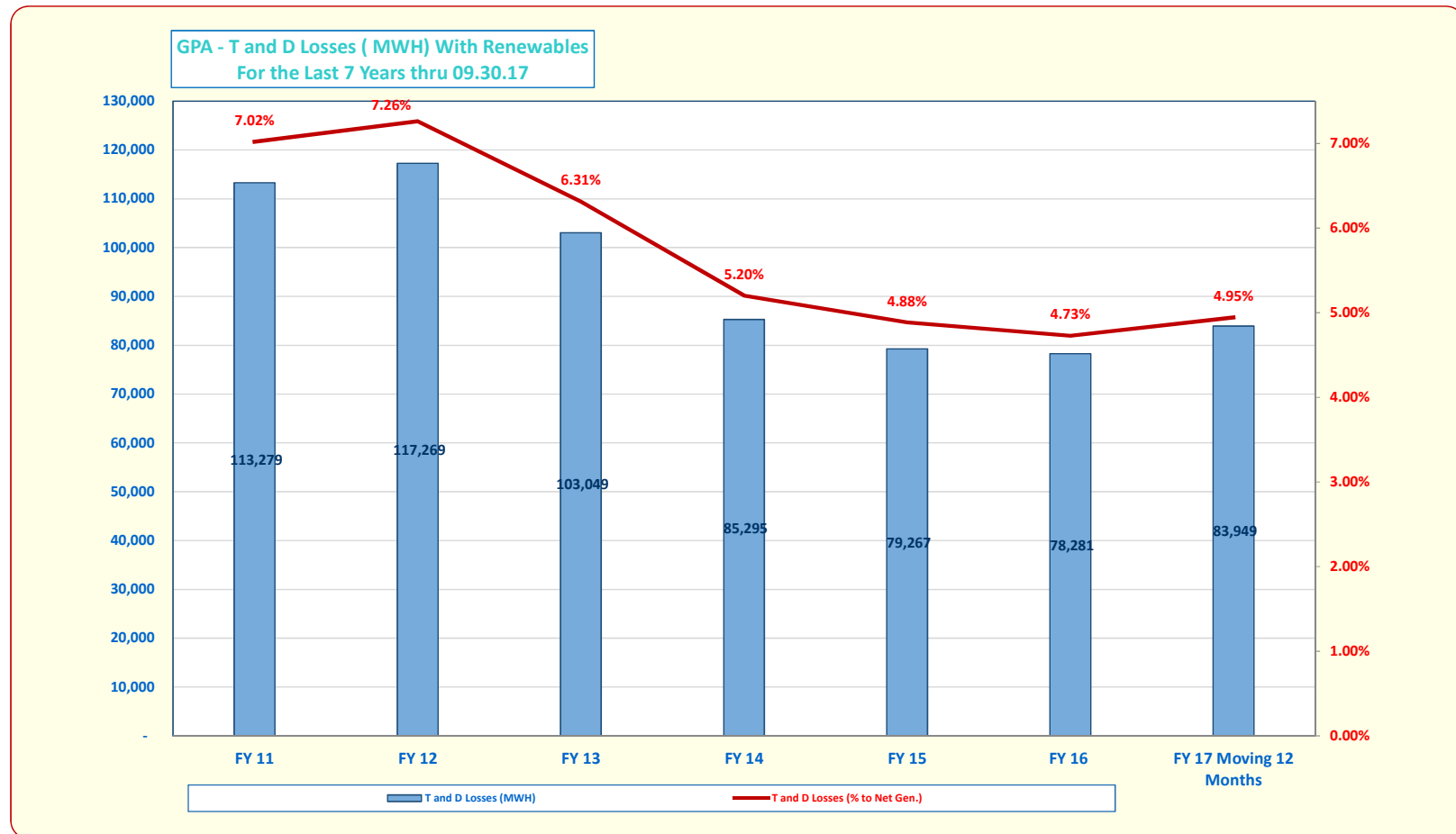
GPA Work Session - November 21, 2017 - DIVISION REPORTS

REVENUES-ACTUAL VS PROJECTIONS								
MONTHLY - SEPTEMBER 2017					YTD THRU 09/30/2017			
	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE
<b>KWH</b>								
Residential	36,992,280	41,491,015	4,498,736	12.16%	440,300,279	506,335,601	66,035,323	15.00%
Small General-Non-Demand	5,646,081	7,022,092	1,376,011	24.37%	67,885,283	83,899,700	16,014,417	23.59%
Small General-Demand	16,407,816	15,509,408	(898,409)	-5.48%	195,739,863	190,050,925	(5,688,938)	-2.91%
Large	26,337,125	25,432,034	(905,091)	-3.44%	317,130,819	314,573,231	(2,557,588)	-0.81%
Independent Power Producers	38,355	76,532	38,177	99.53%	620,291	1,003,769	383,478	61.82%
Private St. Lites	52,224	34,586	(17,639)	-33.78%	624,262	450,462	(173,801)	-27.84%
<b>Sub-total</b>	<b>85,473,881</b>	<b>89,565,666</b>	<b>4,091,785</b>	<b>4.79%</b>	<b>1,022,300,797</b>	<b>1,096,313,688</b>	<b>74,012,891</b>	<b>7.24%</b>
Government								
Small_Non Demand	1,139,148	1,246,106	106,959	9.39%	14,036,252	13,902,246	(134,006)	-0.95%
Small-Demand	7,855,757	8,084,368	228,611	2.91%	96,127,340	96,878,602	751,262	0.78%
Large	5,534,122	6,493,449	959,326	17.33%	65,004,253	74,897,969	9,893,715	15.22%
Public St. Lites	883,590	697,002	(186,588)	-21.12%	11,318,896	9,514,606	(1,804,290)	-15.94%
<b>Sub-total</b>	<b>15,412,617</b>	<b>16,520,925</b>	<b>1,108,308</b>	<b>7.19%</b>	<b>186,486,741</b>	<b>195,193,422</b>	<b>8,706,681</b>	<b>4.67%</b>
<b>Total-Civilian</b>	<b>100,886,498</b>	<b>106,086,591</b>	<b>5,200,093</b>	<b>5.15%</b>	<b>1,208,787,538</b>	<b>1,291,507,110</b>	<b>82,719,572</b>	<b>6.84%</b>
USN	28,351,464	26,906,320	(1,445,143)	-5.10%	332,182,218	318,585,902	(13,596,316)	-4.09%
<b>Grand Total</b>	<b>129,237,962</b>	<b>132,992,911</b>	<b>3,754,949</b>	<b>2.91%</b>	<b>1,540,969,756</b>	<b>1,610,093,012</b>	<b>69,123,256</b>	<b>4.49%</b>
<b>Non-Oil Yield</b>								
Residential	0.096854	0.096481	(0.000373)	-0.39%	0.096854	0.096242	(0.000613)	-0.63%
Small General-Non-Demand	0.139795	0.136337	(0.003458)	-2.47%	0.139795	0.136440	(0.003355)	-2.40%
Small General-Demand	0.119750	0.120388	0.000638	0.53%	0.119750	0.119302	(0.000448)	-0.37%
Large	0.106324	0.104766	(0.001557)	-1.46%	0.106324	0.103044	(0.003280)	-3.08%
Independent Power Producers	0.124400	0.109191	(0.015209)	-0.00%	0.124400	0.111629	(0.012771)	-0.00%
Private St. Lites	0.461908	0.615558	0.153650	33.26%	0.461908	0.581765	0.119857	25.95%
<b>Sub-total</b>	<b>0.107239</b>	<b>0.106309</b>	<b>(0.000930)</b>	<b>-0.87%</b>	<b>0.107267</b>	<b>0.105481</b>	<b>(0.001786)</b>	<b>-1.66%</b>
Government								
Small_Non Demand	0.152742	0.149578	(0.003165)	-2.07%	0.152742	0.151371	(0.001371)	-0.90%
Small-Demand	0.133985	0.135894	0.001909	1.43%	0.133985	0.134742	0.000757	0.57%
Large	0.128378	0.126242	(0.002136)	-1.66%	0.128378	0.126110	(0.002268)	-1.77%
Public St. Lites	0.383229	0.508978	0.125748	32.81%	0.383229	0.471113	0.087884	22.93%
<b>Sub-total</b>	<b>0.147647</b>	<b>0.148872</b>	<b>0.001226</b>	<b>0.83%</b>	<b>0.148570</b>	<b>0.149010</b>	<b>0.000440</b>	<b>0.30%</b>
<b>Total-Civilian</b>	<b>0.113412</b>	<b>0.112938</b>	<b>(0.000474)</b>	<b>-0.42%</b>	<b>0.113639</b>	<b>0.112060</b>	<b>(0.001579)</b>	<b>-1.39%</b>
USN	0.061275	0.070364	0.009089	14.83%	0.061275	0.062537	0.001262	2.06%
<b>Grand Total</b>	<b>0.101975</b>	<b>0.104325</b>	<b>0.002350</b>	<b>2.30%</b>	<b>0.102351</b>	<b>0.102261</b>	<b>(0.000090)</b>	<b>-0.09%</b>
<b>Non-Oil Revenues</b>								
Residential	3,582,853	4,003,081	420,228	11.73%	42,644,877	48,730,504	6,085,627	14.27%
Small General-Non-Demand	789,292	957,371	168,079	21.29%	9,490,002	11,447,234	1,957,232	20.62%
Small General-Demand	1,964,834	1,867,150	(97,683)	-4.97%	23,439,820	22,673,489	(766,331)	-3.27%
Large	2,800,258	2,664,424	(135,835)	-4.85%	33,718,495	32,414,812	(1,303,683)	-3.87%
Independent Power Producers	4,771	8,357	3,586	75.14%	77,164	112,050	34,885	45.21%
Private St. Lites	24,123	21,289	(2,833)	-11.75%	288,352	262,063	(26,289)	-9.12%
<b>Sub-total</b>	<b>9,166,131</b>	<b>9,521,672</b>	<b>355,540</b>	<b>3.88%</b>	<b>109,658,710</b>	<b>115,640,151</b>	<b>5,981,441</b>	<b>5.45%</b>
Government								
Small_Non Demand	173,996	186,389	12,394	7.12%	2,143,926	2,104,396	(39,530)	-1.84%
Small-Demand	1,052,550	1,098,616	46,066	4.38%	12,879,576	13,053,603	174,028	1.35%
Large	710,462	819,746	109,284	15.38%	8,345,145	9,445,414	1,100,269	13.18%
Public St. Lites	338,618	354,759	16,141	4.77%	4,337,734	4,482,455	144,721	3.34%
<b>Sub-total</b>	<b>2,275,625</b>	<b>2,459,511</b>	<b>183,885</b>	<b>8.08%</b>	<b>27,706,380</b>	<b>29,085,867</b>	<b>1,379,487</b>	<b>4.98%</b>
<b>Total-Civilian</b>	<b>11,441,757</b>	<b>11,981,182</b>	<b>539,426</b>	<b>4.71%</b>	<b>137,365,090</b>	<b>144,726,018</b>	<b>7,360,928</b>	<b>5.36%</b>
USN	1,737,247	1,893,246	155,999	8.98%	20,354,595	19,923,387	(431,208)	-2.12%
<b>Grand Total</b>	<b>13,179,004</b>	<b>13,874,428</b>	<b>695,425</b>	<b>5.28%</b>	<b>157,719,685</b>	<b>164,649,406</b>	<b>6,929,720</b>	<b>4.39%</b>
% of Total Revenues	44.00%	46.61%			44.09%	49.73%		
<b>Oil Revenues</b>								
Residential	4,801,528	4,884,239	82,711	1.72%	57,150,145	51,871,474	(5,278,671)	-9.24%
Small General-Non-Demand	732,851	826,627	93,776	12.80%	8,811,382	8,593,498	(217,884)	-2.47%
Small General-Demand	2,129,704	1,825,123	(304,581)	-14.30%	25,406,665	19,396,028	(6,010,637)	-23.66%
Large	3,418,509	2,978,635	(439,874)	-12.87%	41,162,982	31,763,248	(9,399,734)	-22.84%
Independent Power Producers	4,978	8,720	3,741	75.15%	80,771	98,982	18,211	22.55%
Private St. Lites	6,779	4,071	(2,707)	-39.94%	80,770	44,894	(35,875)	-44.42%
<b>Sub-total</b>	<b>11,094,348</b>	<b>10,527,415</b>	<b>(566,933)</b>	<b>-5.11%</b>	<b>132,692,714</b>	<b>111,768,124</b>	<b>(20,924,590)</b>	<b>-15.77%</b>
Government								
Small_Non Demand	147,859	146,689	(1,170)	-0.79%	1,821,879	1,408,613	(413,266)	-22.68%
Small-Demand	1,019,662	951,676	(67,987)	-6.67%	12,477,147	9,776,475	(2,700,672)	-21.64%
Large	718,319	755,334	37,015	5.15%	8,437,429	7,533,951	(903,478)	-10.71%
Public St. Lites	114,688	82,050	(32,639)	-28.46%	1,469,171	956,241	(512,930)	-34.91%
<b>Sub-total</b>	<b>2,000,529</b>	<b>1,935,748</b>	<b>(64,780)</b>	<b>-3.24%</b>	<b>24,205,627</b>	<b>19,675,280</b>	<b>(4,530,347)</b>	<b>-18.72%</b>
<b>Total-Civilian</b>	<b>13,094,877</b>	<b>12,463,163</b>	<b>(631,714)</b>	<b>-4.82%</b>	<b>156,898,340</b>	<b>131,443,404</b>	<b>(25,454,936)</b>	<b>-16.22%</b>
USN	3,679,966	3,432,137	(247,830)	-6.73%	43,116,625	34,981,246	(8,135,379)	-18.87%
<b>Grand Total</b>	<b>16,774,843</b>	<b>15,895,300</b>	<b>(879,543)</b>	<b>-5.24%</b>	<b>200,014,965</b>	<b>166,424,650</b>	<b>(33,590,315)</b>	<b>-16.79%</b>
% of Total Revenues	56.00%	53.39%			55.91%	50.27%		
<b>Grand Total</b>								
Residential	8,384,381	8,887,320	502,939	6.00%	99,795,022	100,601,977	806,956	0.81%
Small General-Non-Demand	1,522,143	1,783,997	261,855	17.20%	18,301,384	20,040,732	1,739,348	9.50%
Small General-Demand	4,094,537	3,692,273	(402,264)	-9.82%	48,846,484	42,069,517	(6,776,967)	-13.87%
Large	6,218,767	5,643,059	(575,708)	-9.26%	74,881,476	64,178,060	(10,703,417)	-14.29%
Independent Power Producers	9,750	17,076	7,327	75.15%	157,935	211,031	53,096	33.62%
Private St. Lites	30,901	25,361	(5,541)	-17.93%	369,122	306,957	(62,164)	-16.84%
<b>Sub-total</b>	<b>20,260,480</b>	<b>20,049,087</b>	<b>(211,393)</b>	<b>-1.04%</b>	<b>242,351,423</b>	<b>227,408,274</b>	<b>(14,943,149)</b>	<b>-6.17%</b>
Government								
Small_Non Demand	321,855	333,079	11,224	3.49%	3,965,805	3,513,008	(452,796)	-11.42%
Small-Demand	2,072,212	2,050,292	(21,920)	-1.06%	25,356,723	22,830,078	(2,526,644)	-9.96%
Large	1,428,781	1,575,080	146,299	10.24%	16,782,575	16,979,365	196,791	1.17%
Public St. Lites	453,306	436,808	(16,498)	-3.64%	5,806,905	5,438,696	(368,210)	-6.34%
<b>Sub-total</b>	<b>4,276,154</b>	<b>4,395,259</b>	<b>119,105</b>	<b>2.79%</b>	<b>51,912,007</b>	<b>48,761,148</b>	<b>(3,150,860)</b>	<b>-6.07%</b>
<b>Total-Civilian</b>	<b>24,536,634</b>	<b>24,444,346</b>	<b>(92,288)</b>	<b>-0.38%</b>	<b>294,263,430</b>	<b>276,169,422</b>	<b>(18,094,009)</b>	<b>-6.15%</b>
USN	5,417,213	5,325,383	(91,831)	-1.70%	63,471,220	54,904,634	(8,566,586)	-13.50%
<b>Grand Total</b>	<b>29,953,847</b>	<b>29,769,728</b>	<b>(184,119)</b>	<b>-0.61%</b>	<b>357,734,650</b>	<b>331,074,056</b>	<b>(26,660,595)</b>	<b>-7.45%</b>

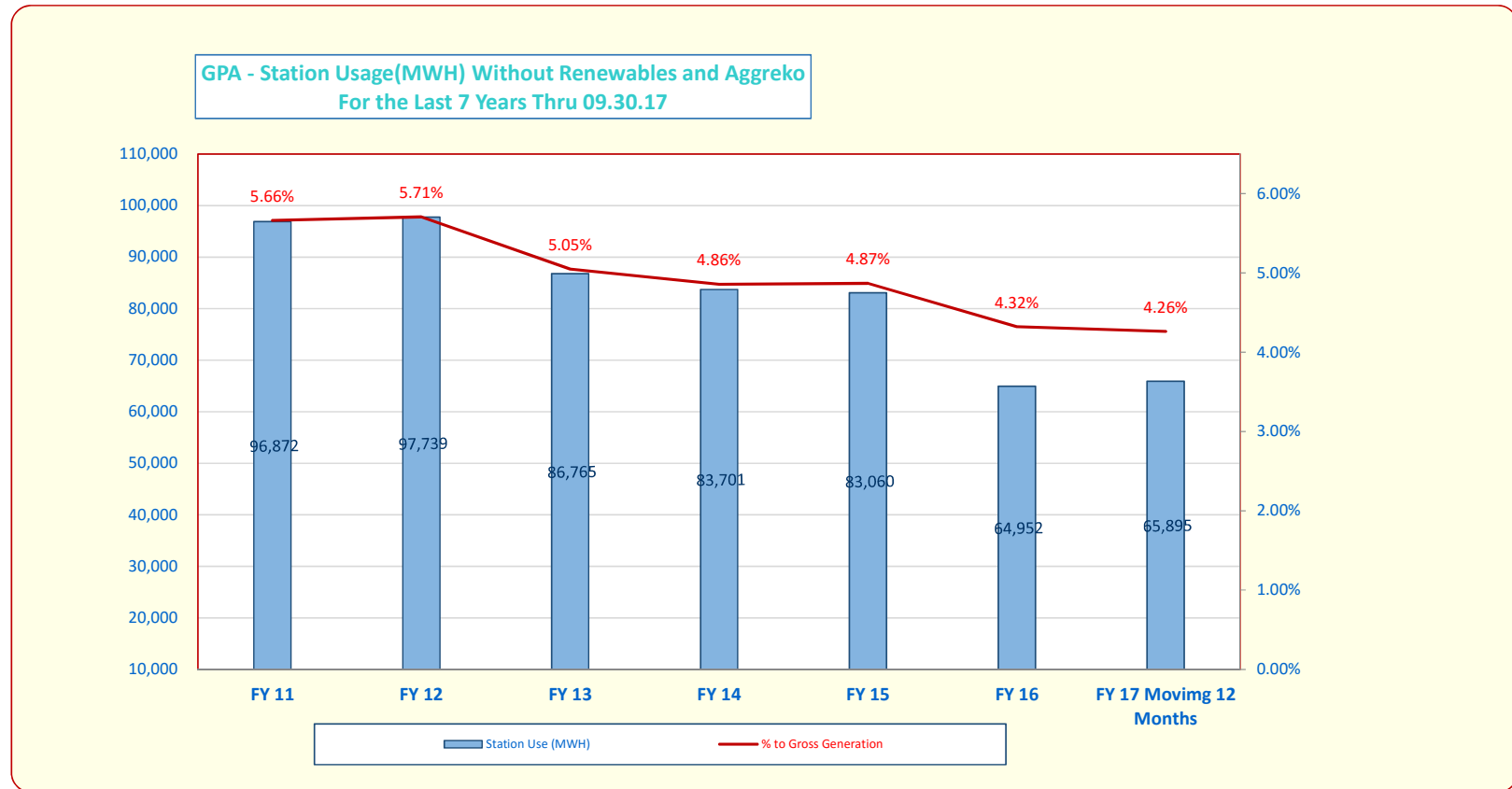
GPA Work Session - November 21, 2017 - DIVISION REPORTS

	YTD REVENUES - CURRENT YEAR VS PRIOR YEAR				MTD REVENUES - CURRENT YEAR VS PRIOR YEAR			
	ACTUALS - 12 MONTHS ENDED SEPTEMBER 30				ACTUALS - MONTH ENDED SEPTEMBER 30			
	2017	2016	VARIANCE	% VARIANCE	2017	2016	VARIANCE	% VARIANCE
<b>KWH</b>								
Residential	506,335,601	487,022,560	19,313,041	3.97%	41,491,015	41,186,530	304,485	0.74%
Small General-Non-Demand	83,899,700	80,284,067	3,615,633	4.50%	7,022,092	6,885,525	136,567	1.98%
Small General-Demand	190,050,925	190,587,125	(536,200)	-0.28%	15,509,408	14,741,107	768,300	5.21%
Large	314,573,231	308,834,877	5,738,353	1.86%	25,432,034	25,176,509	255,525	1.01%
Independent Power Producers	1,003,769	767,880	235,889	30.72%	76,532	62,052	14,480	23.34%
Private St. Lites	450,462	629,744	(179,282)	-28.47%	34,586	56,235	(21,650)	-38.50%
<b>Sub-total</b>	<b>1,096,313,688</b>	<b>1,068,126,254</b>	<b>28,187,434</b>	<b>2.64%</b>	<b>89,565,666</b>	<b>88,107,957</b>	<b>1,457,709</b>	<b>1.65%</b>
Government								
Small_Non Demand	13,902,246	13,428,264	473,981	3.53%	1,246,106	1,164,666	81,440	6.99%
Small-Demand	96,878,602	93,302,996	3,575,606	3.83%	8,084,368	7,858,530	225,838	2.87%
Large	74,897,969	70,055,104	4,842,865	6.91%	6,493,449	5,804,148	689,301	11.88%
Public St. Lites	9,514,606	11,344,681	(1,830,074)	-16.13%	697,002	995,613	(298,611)	-29.99%
<b>Sub-total</b>	<b>195,193,422</b>	<b>188,131,044</b>	<b>7,062,378</b>	<b>3.75%</b>	<b>16,520,925</b>	<b>15,822,957</b>	<b>697,968</b>	<b>4.41%</b>
<b>Total-Civilian</b>	<b>1,291,507,110</b>	<b>1,256,257,298</b>	<b>35,249,812</b>	<b>2.81%</b>	<b>106,086,591</b>	<b>103,930,914</b>	<b>2,155,677</b>	<b>2.07%</b>
USN	318,585,902	318,082,773	503,129	0.16%	26,906,320	26,000,826	905,494	3.48%
<b>Grand Total</b>	<b>1,610,093,012</b>	<b>1,574,340,071</b>	<b>35,752,941</b>	<b>2.27%</b>	<b>132,992,911</b>	<b>129,931,741</b>	<b>3,061,170</b>	<b>2.36%</b>
<b>Non-Oil Yield</b>								
Residential	0.096242	0.096203	0.000038	0.04%	0.096481	0.095315	0.001166	1.22%
Small General-Non-Demand	0.136440	0.136364	0.000075	0.06%	0.136337	0.134587	0.001750	1.30%
Small General-Demand	0.119302	0.119423	-0.000121	-0.10%	0.120388	0.122062	-0.001674	-1.37%
Large	0.103044	0.103705	-0.000661	-0.64%	0.104766	0.104526	0.000240	0.23%
Independent Power Producers	0.000000	0.117983	-0.117983	-100.00%	0.109191	0.135051	-0.025860	-19.15%
Private St. Lites	0.581765	0.454278	0.127487	28.06%	0.615558	0.428715	0.186843	43.58%
<b>Sub-total</b>	<b>0.105481</b>	<b>0.105761</b>	<b>-0.000280</b>	<b>-0.26%</b>	<b>0.106309</b>	<b>0.105732</b>	<b>0.000578</b>	<b>0.55%</b>
Government								
Small_Non Demand	0.151371	0.152255	-0.000884	-0.58%	0.149578	0.151669	-0.002092	-1.38%
Small-Demand	0.134742	0.135082	-0.000340	-0.25%	0.135894	0.135670	0.000224	0.16%
Large	0.126110	0.128102	-0.001992	-1.55%	0.126242	0.129803	-0.003560	-2.74%
Public St. Lites	0.471113	0.380746	0.090367	23.73%	0.508978	0.347125	0.161853	46.63%
<b>Sub-total</b>	<b>0.149010</b>	<b>0.148523</b>	<b>0.000488</b>	<b>0.33%</b>	<b>0.148872</b>	<b>0.148001</b>	<b>0.000872</b>	<b>0.59%</b>
<b>Total-Civilian</b>	<b>0.112060</b>	<b>0.112165</b>	<b>-0.000105</b>	<b>-0.09%</b>	<b>0.112938</b>	<b>0.112167</b>	<b>0.000771</b>	<b>0.69%</b>
USN	0.062537	0.061774	0.000763	1.24%	0.070364	0.065818	0.004547	6.91%
<b>Grand Total</b>	<b>0.102261</b>	<b>0.101984</b>	<b>0.000277</b>	<b>0.27%</b>	<b>0.104325</b>	<b>0.102892</b>	<b>0.001433</b>	<b>1.39%</b>
<b>Non-Oil Revenues</b>								
Residential	48,730,504	46,853,221	1,877,283	4.01%	4,003,081	3,925,681	77,400	1.97%
Small General-Non-Demand	11,447,234	10,947,876	499,358	4.56%	957,371	926,703	30,668	3.31%
Small General-Demand	22,673,489	22,760,513	(87,024)	-0.38%	1,867,150	1,799,327	67,823	3.77%
Large	32,414,812	32,027,609	387,203	1.21%	2,664,424	2,631,610	32,814	1.25%
Independent Power Producers	112,050	90,597	21,453	23.68%	8,357	8,380	(24)	-0.28%
Private St. Lites	262,063	286,079	(24,016)	-8.39%	21,289	24,109	(2,819)	-11.69%
<b>Sub-total</b>	<b>115,640,151</b>	<b>112,965,895</b>	<b>2,674,256</b>	<b>2.37%</b>	<b>9,521,672</b>	<b>9,315,809</b>	<b>205,862</b>	<b>2.21%</b>
Government								
Small_Non Demand	2,104,396	2,044,514	59,882	2.93%	186,389	176,644	9,745	5.52%
Small-Demand	13,053,603	12,603,536	450,067	3.57%	1,098,616	1,066,168	32,448	3.04%
Large	9,445,414	8,974,202	471,212	5.25%	819,746	753,393	66,353	8.81%
Public St. Lites	4,482,455	4,319,445	163,010	3.77%	354,759	345,602	9,156	2.65%
<b>Sub-total</b>	<b>29,085,867</b>	<b>27,941,696</b>	<b>1,144,171</b>	<b>4.09%</b>	<b>2,459,511</b>	<b>2,341,807</b>	<b>117,703</b>	<b>5.03%</b>
<b>Total-Civilian</b>	<b>144,726,018</b>	<b>140,907,591</b>	<b>3,818,427</b>	<b>2.71%</b>	<b>11,981,182</b>	<b>11,657,617</b>	<b>323,566</b>	<b>2.78%</b>
USN	19,923,387	19,649,233	274,155	1.40%	1,893,246	1,711,315	181,930	10.63%
<b>Grand Total</b>	<b>164,649,406</b>	<b>160,556,823</b>	<b>4,092,582</b>	<b>2.55%</b>	<b>13,874,428</b>	<b>13,368,932</b>	<b>505,496</b>	<b>3.78%</b>
% of Total Revenues								
<b>Oil Revenues</b>								
Residential	51,871,474	45,204,139	6,667,335	14.75%	4,884,239	3,567,289	1,316,950	36.92%
Small General-Non-Demand	8,593,498	7,443,078	1,150,420	15.46%	826,627	596,376	230,251	38.61%
Small General-Demand	19,396,028	17,741,444	1,654,583	9.33%	1,825,123	1,276,271	548,851	43.00%
Large	31,763,248	28,759,676	3,003,573	10.44%	2,978,635	2,170,679	807,957	37.22%
Independent Power Producers	98,982	69,870	29,112	41.67%	8,720	5,192	3,528	67.95%
Private St. Lites	44,894	59,055	(14,160)	-23.98%	4,071	4,871	(799)	-16.41%
<b>Sub-total</b>	<b>111,768,124</b>	<b>99,277,261</b>	<b>12,490,863</b>	<b>12.58%</b>	<b>10,527,415</b>	<b>7,620,677</b>	<b>2,906,738</b>	<b>38.14%</b>
Government								
Small_Non Demand	1,408,613	1,254,946	153,667	12.24%	146,689	100,875	45,814	45.42%
Small-Demand	9,776,475	8,720,615	1,055,860	12.11%	951,676	680,651	271,025	39.82%
Large	7,533,951	6,479,115	1,054,836	16.28%	755,334	497,431	257,903	51.85%
Public St. Lites	956,241	1,063,810	(107,569)	-10.11%	82,050	86,233	(4,183)	-4.85%
<b>Sub-total</b>	<b>19,675,280</b>	<b>17,518,486</b>	<b>2,156,794</b>	<b>12.31%</b>	<b>1,935,748</b>	<b>1,365,190</b>	<b>570,558</b>	<b>41.79%</b>
<b>Total-Civilian</b>	<b>131,443,404</b>	<b>116,795,747</b>	<b>14,647,657</b>	<b>12.54%</b>	<b>12,463,163</b>	<b>8,985,867</b>	<b>3,477,296</b>	<b>38.70%</b>
USN	34,981,246	29,544,181	5,437,065	18.40%	3,432,137	2,545,091	887,046	34.85%
<b>Grand Total</b>	<b>166,424,650</b>	<b>146,339,928</b>	<b>20,084,722</b>	<b>13.72%</b>	<b>15,895,300</b>	<b>11,530,958</b>	<b>4,364,342</b>	<b>37.85%</b>
% of Total Revenues								
<b>Grand Total</b>								
Residential	100,601,977	92,057,360	8,544,618	9.28%	8,887,320	7,492,970	1,394,351	18.61%
Small General-Non-Demand	20,040,732	18,390,954	1,649,778	8.97%	1,783,997	1,523,079	260,919	17.13%
Small General-Demand	42,069,517	40,501,958	1,567,559	3.87%	3,692,273	3,075,598	616,674	20.05%
Large	64,178,060	60,787,284	3,390,776	5.58%	5,643,059	4,802,289	840,771	17.51%
Independent Power Producers	211,031	160,467	50,565	31.51%	17,076	13,572	3,504	25.82%
Private St. Lites	306,957	345,133	(38,176)	-11.06%	25,361	28,980	(3,619)	-12.49%
<b>Sub-total</b>	<b>227,408,274</b>	<b>212,243,155</b>	<b>15,165,119</b>	<b>7.15%</b>	<b>20,049,087</b>	<b>16,936,487</b>	<b>3,112,600</b>	<b>18.38%</b>
Government								
Small_Non Demand	3,513,008	3,299,460	213,549	6.47%	333,079	277,519	55,559	20.02%
Small-Demand	22,830,078	21,324,151	1,505,927	7.06%	2,050,292	1,746,819	303,473	17.37%
Large	16,979,365	15,453,317	1,526,048	9.88%	1,575,080	1,250,824	324,256	25.92%
Public St. Lites	5,438,696	5,383,255	55,441	1.03%	436,808	431,835	4,973	1.15%
<b>Sub-total</b>	<b>48,761,148</b>	<b>45,460,182</b>	<b>3,300,965</b>	<b>7.26%</b>	<b>4,395,259</b>	<b>3,706,997</b>	<b>688,262</b>	<b>18.57%</b>
<b>Total-Civilian</b>	<b>276,169,422</b>	<b>257,703,338</b>	<b>18,466,084</b>	<b>7.17%</b>	<b>24,444,346</b>	<b>20,643,484</b>	<b>3,800,862</b>	<b>18.41%</b>
USN	54,904,634	49,193,414	5,711,220	11.61%	5,325,383	4,256,406	1,068,976	25.11%
<b>Grand Total</b>	<b>331,074,056</b>	<b>306,896,751</b>	<b>24,177,304</b>	<b>7.88%</b>	<b>29,769,728</b>	<b>24,899,890</b>	<b>4,869,838</b>	<b>19.56%</b>

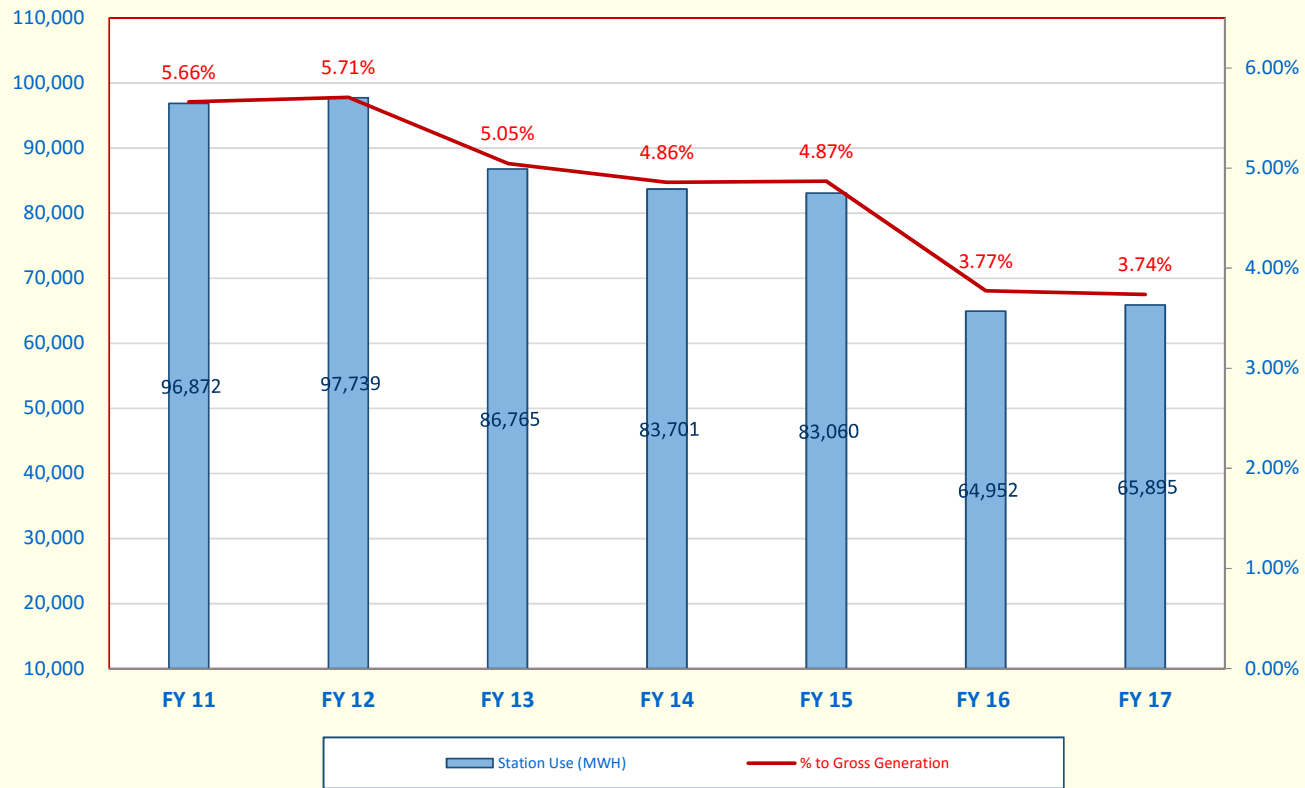


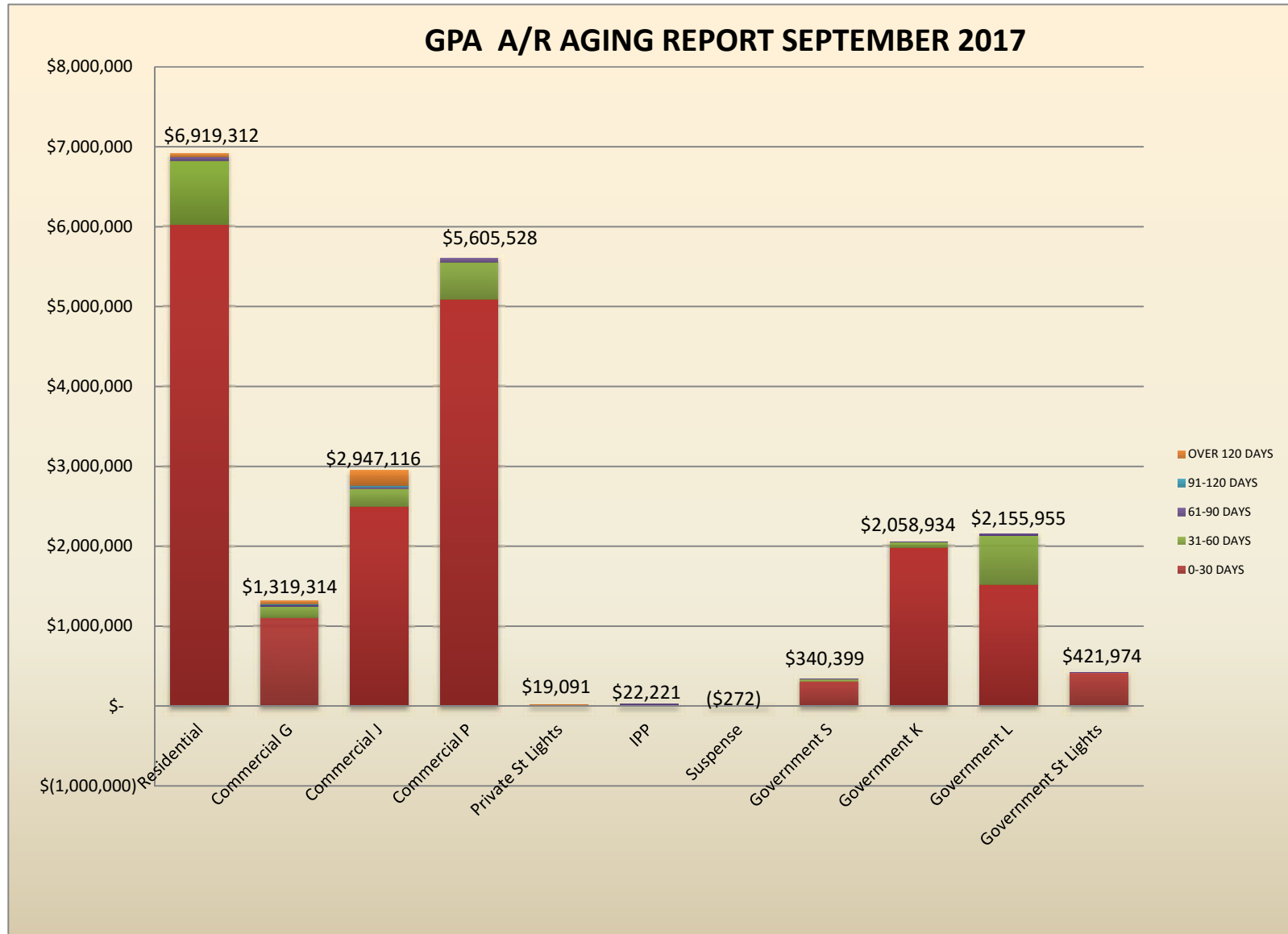






**GPA - Station Usage(MWH) With Renewables  
For the Last 7 Years Thru 09.30.17**





## GUAM POWER AUTHORITY

## GOVERNMENT ACCOUNTS RECEIVABLE

BILLING UP TO 10/31/2017 and Payment Applied as of 11/08/2017

NEW ACCT NUMBER		DEPARTMENT	ARREARS BALANCE 9/30/2017
		<b>Line Agencies</b>	
124378	0237100000	Dept. of Corrections	\$ 69,838.18
124401	0437100000	Dept. of Parks & Rec.	\$ 19,095.59
124415	0537100000	Guam Fire Department	\$ 17,147.35
108818	6995000000	DOA-Supply Management	\$ 1,385.92
108799	7895000000	Dept. of Administration	\$ 3,877.28
124392	1337100000	Nieves Flores Library	\$ 9,366.93
140297	2206200000	General Services Agency	\$ 244.69
124380	2237100000	DOA-Data Processing	\$ 6,514.66
124393	2337100000	Dept. of PH&SS	\$ 67,055.44
124381	3237100000	Dept. of Education	\$ 1,041,563.71
124394	3337100000	Guam Police Department	\$ 33,197.21
128478	3569100000	Dept of Youth Affairs (Federal)	\$ 851.12
124407	4437100000	Dept. of Youth Affairs* (Local)	\$ 12,949.24
124445	4737100000	Guam Environmental Protect	\$ 5,865.93
124408	5437100000	Mental Health/Subst.	\$ 35,969.53
148823	7200300000	Veteran Affairs	\$ 749.94
124412	7437100000	Civil Defense (Military Affairs)	\$ 23,700.56
158935	7463300000	Pacific Energy Resource Center	\$ 500.53
124374	8137100000	Dept. of Agriculture	\$ 8,652.71
124399	8337100000	DPW-FAC Adm Account	\$ 25,451.27
	8437100000	Guam Visitors Bureau	\$ 3,974.72
166560	8446300000	Yona Senior Citizen Center	\$ 743.52
124414	9437100000	Chamorro Village	\$ 3,767.92
292266	5247210000	Mayors Council	\$ 2,399.43
309494	6293410000	Office of the Governor	\$ 45,719.45
	8555858369	Dept of Chamorro Affairs (Guam Museum)	\$ 17,043.40
		<b>Sub Total</b>	<b>\$ 1,457,626.23</b>
		<b>MAYORS</b>	
124427	0637100000	Santa Rita Mayor	\$ 3,153.89
124437	0737100000	Ordot/Chalan Pago Mayor	\$ 984.42
124417	1537100000	Agana Mun Planning Council	\$ 1,200.03
124428	1637100000	Piti Mayor	\$ 932.62
124438	1737100000	Mongmong/Toto/Maite Mayor	\$ 1,226.84
124429	2637100000	Asan/Maina/Adelup Mayor	\$ 892.26
124439	2737100000	Sinajana Mayor	\$ 4,185.22
124430	3637100000	Dededo Mayor	\$ 4,955.54

124431	4637100000	Yigo Mayor	\$ 3,582.77
124432	5637100000	Umatac Mayor	\$ 641.18
124423	6537100000	Agana Hts. Mayor	\$ 4,176.48
124433	6637100000	Merizo Mayor	\$ 1,581.71
124453	6737100000	Barrigada Mayors Office	\$ 1,996.56
124424	7537100000	Agat Mayor	\$ 2,623.07
124434	7637100000	Inarajan Mayor	\$ 1,527.33
124425	8537100000	Tamuning Mayor	\$ 5,408.43
124435	8637100000	Talofofo Mayor	\$ 2,106.84
124426	9537100000	Mangilao Mayor	\$ 4,557.25
124436	9637100000	Yona Mayor	\$ 793.97
		<b>Sub Total</b>	<b>\$ 46,526.41</b>
		<b>DPW ACCOUNTS</b>	
124395	4337100000	DPW-Village St. Lights	\$ 328,951.26
124396	5337100000	DPW- Primary St. Lights	\$ 77,893.74
124397	6337100000	DPW-Sec/Coll St. Lights	\$ 23,962.79
124398	7337100000	DPW-Signal Lights	\$ 9,899.57
		<b>Sub Total</b>	<b>\$ 440,707.36</b>
		<b>(B) AUTONOMOUS/PUBLIC CORP</b>	
124402	1437100000	Retirement Fund	\$ 5,591.39
208988	1915500000	Guam Housing Corp Rental Division	\$ 1,906.00
124403	2437100000	University of Guam	\$ 165,420.33
124383	4237100000	Guam Airport Authority	\$ 480,238.36
	5357510000	University of Guam (NET METERED)	\$ 72,958.06
124387	6237100000	G H U R A	\$ 9,318.30
124409	6437100000	Guam Community College	\$ 44,251.19
124388	7237100000	Guam Memorial Hospital	\$ 160,977.37
124377	9137100000	Port Authority of Guam	\$ 84,855.04
	9157510000	Guam Community College (NET METERED)	\$ 34,793.00
288441	9173210000	Guam Solid Waste Authority	\$ 4,970.64
124400	9337100000	Guam Waterworks Authority	\$ 1,084,620.75
		<b>Sub Total</b>	<b>\$ 2,149,900.43</b>
		<b>(C) OTHERS</b>	
124391	0337100000	Guam Legislature	\$ 164.91
	9503154359	Guam Legislature (NET METER)	\$ 5,431.76
124379	1237100000	Superior Court of Guam	\$ 67,900.53
124418	2537100000	Agana Post Office	\$ 4,766.23
130431	2570200000	Customs & Quarantine Agency	\$ 823.54
124419	3537100000	U.S. Post Office	\$ 32,004.56
124422	5537100000	Dept. of Military Affairs	\$ 80,580.17
	3209463043	Dept. of Military Affairs (NET METERED)	\$ 3,024.95
124446	5737100000	KGTF	\$ 5,956.15
102783	7281000000	Tamuning Post Office	\$ 5,109.62
		<b>Sub Total</b>	<b>\$ 205,762.42</b>

		Sub Total (w/out Promissory Note)	\$ 4,300,522.85
--	--	-----------------------------------	-----------------



Current (10/17 Billing due 11/30/17)

30 days Arrears (09/17 due 10/15/17)

60 days and over Arrears (08/17 billing due 09/15/17)

CURRENT BILL FOR 10/31/2017 BILL DATE 11/08/2017	BILLING ADJUSTMENT 11/8/2017	PAYMENTS AS OF 11/8/2017	BILLING BALANCE 11/8/2017	
\$ 75,206.73	\$ -	\$ (69,838.18)	\$ 75,206.73	
\$ 19,584.36	\$ -	\$ (19,095.59)	\$ 19,584.36	
\$ 18,401.57	\$ -	\$ (17,147.35)	\$ 18,401.57	
\$ 1,405.51	\$ -	\$ (1,385.92)	\$ 1,405.51	
\$ 3,872.06	\$ -	\$ (3,877.28)	\$ 3,872.06	
\$ 10,275.88	\$ -	\$ (9,366.93)	\$ 10,275.88	
\$ 257.28	\$ -	\$ (244.69)	\$ 257.28	
\$ 8,120.43	\$ -	\$ (6,514.66)	\$ 8,120.43	
\$ 69,556.87	\$ -	\$ (67,055.44)	\$ 69,556.87	
\$ 1,081,526.93	\$ 0.25	\$ (1,041,530.19)	\$ 1,081,560.70	
\$ 35,509.02	\$ -	\$ (33,197.21)	\$ 35,509.02	
\$ 886.90	\$ -	\$ (851.12)	\$ 886.90	
\$ 13,849.84	\$ -	\$ (12,949.24)	\$ 13,849.84	
\$ 5,802.98	\$ -	\$ (5,865.93)	\$ 5,802.98	
\$ 42,365.55	\$ -	\$ (35,969.53)	\$ 42,365.55	
\$ 925.20	\$ -	\$ (749.94)	\$ 925.20	
\$ 11,231.40	\$ 76.84	\$ (13,454.81)	\$ 21,553.99	<b>1</b>
\$ 524.27	\$ -	\$ (500.53)	\$ 524.27	
\$ 9,566.91	\$ -	\$ (8,652.71)	\$ 9,566.91	
\$ 26,834.92	\$ -	\$ (25,451.27)	\$ 26,834.92	
\$ 4,135.61	\$ -	\$ (3,974.72)	\$ 4,135.61	
\$ 778.41	\$ -	\$ (743.52)	\$ 778.41	
\$ 4,112.79	\$ 28.25	\$ (3,767.92)	\$ 4,141.04	
\$ 2,387.47	\$ 354.86	\$ (2,399.43)	\$ 2,742.33	
\$ 22,712.42	\$ -	\$ (45,719.45)	\$ 22,712.42	
\$ 18,526.91	\$ -	\$ (17,043.40)	\$ 18,526.91	
<b>\$ 1,488,358.22</b>	<b>\$ 460.20</b>	<b>\$ (1,447,346.96)</b>	<b>\$ 1,499,097.69</b>	
\$ 3,202.06	\$ -	\$ (3,153.89)	\$ 3,202.06	
\$ 872.46	\$ (300.00)	\$ (684.42)	\$ 872.46	
\$ 1,200.33	\$ -	\$ (1,200.03)	\$ 1,200.33	
\$ 1,353.22	\$ -	\$ (932.62)	\$ 1,353.22	
\$ 989.30	\$ 4.94	\$ (868.38)	\$ 1,352.70	
\$ 987.77	\$ -	\$ (892.26)	\$ 987.77	
\$ 4,384.25	\$ -	\$ (4,185.22)	\$ 4,384.25	
\$ 6,706.53	\$ -	\$ (4,955.54)	\$ 6,706.53	

## GPA Work Session - November 21, 2017 - DIVISION REPORTS

\$	3,670.42	\$	-	\$	(3,582.77)	\$	3,670.42	
\$	1,160.07	\$	-	\$	(641.18)	\$	1,160.07	
\$	4,379.00	\$	-	\$	(4,176.48)	\$	4,379.00	
\$	1,439.20	\$	-	\$	(1,581.71)	\$	1,439.20	
\$	2,102.80	\$	-	\$	(1,996.56)	\$	2,102.80	
\$	2,135.41	\$	448.35	\$	(2,623.07)	\$	2,583.76	
\$	1,502.25	\$	-	\$	(1,527.33)	\$	1,502.25	
\$	5,762.07	\$	-	\$	(5,408.43)	\$	5,762.07	
\$	2,143.61	\$	-	\$	(2,106.84)	\$	2,143.61	
\$	4,364.24	\$	-	\$	(4,557.25)	\$	4,364.24	
\$	886.73	\$	-	\$	(793.97)	\$	886.73	
<b>\$</b>	<b>49,241.72</b>	<b>\$</b>	<b>153.29</b>	<b>\$</b>	<b>(45,867.95)</b>	<b>\$</b>	<b>50,053.47</b>	
\$	330,978.68	\$	-	\$	(328,951.26)	\$	330,978.68	
\$	82,912.21	\$	-	\$	(77,893.74)	\$	82,912.21	
\$	25,366.46	\$	-	\$	(23,962.79)	\$	25,366.46	
\$	10,997.29	\$	-	\$	(9,899.57)	\$	10,997.29	
<b>\$</b>	<b>450,254.64</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>(440,707.36)</b>	<b>\$</b>	<b>450,254.64</b>	
\$	5,621.48	\$	-	\$	(5,591.39)	\$	5,621.48	
\$	1,607.25	\$	37.93	\$	(1,382.66)	\$	2,168.52	
\$	179,299.15	\$	-	\$	(165,420.33)	\$	179,299.15	
\$	482,204.95	\$	(3,827.97)	\$	(476,410.39)	\$	482,204.95	
\$	78,483.76	\$	129.76	\$	(72,958.06)	\$	78,613.52	
\$	24,192.98	\$	218.54	\$	(21,475.86)	\$	12,253.96	
\$	48,161.81	\$	-	\$	(44,251.19)	\$	48,161.81	
\$	171,330.68	\$	1,207.33	\$	(160,977.37)	\$	172,538.01	
\$	90,735.35	\$	-	\$	(84,855.04)	\$	90,735.35	
\$	37,672.96	\$	-	\$	(34,793.00)	\$	37,672.96	
\$	5,609.06	\$	-	\$	(20,116.20)	\$	(9,536.50)	
\$	1,192,165.86	\$	285.57	\$	(1,084,620.75)	\$	1,192,451.43	
<b>\$</b>	<b>2,317,085.29</b>	<b>\$</b>	<b>(1,948.84)</b>	<b>\$</b>	<b>(2,172,852.24)</b>	<b>\$</b>	<b>2,292,184.64</b>	
\$	165.84	\$	-	\$	(164.91)	\$	165.84	
\$	6,367.58	\$	-	\$	(5,431.76)	\$	6,367.58	
\$	69,610.93	\$	-	\$	(67,900.53)	\$	69,610.93	
\$	5,476.19	\$	-	\$	(4,766.23)	\$	5,476.19	
\$	902.52	\$	-	\$	(823.54)	\$	902.52	
\$	39,465.89	\$	-	\$	(32,004.56)	\$	39,465.89	
\$	88,468.50	\$	-	\$	(80,580.17)	\$	88,468.50	
\$	3,050.24	\$	-	\$	(3,024.95)	\$	3,050.24	
\$	6,493.88	\$	-	\$	(5,956.15)	\$	6,493.88	
\$	5,449.04	\$	-	\$	(5,109.62)	\$	5,449.04	
<b>\$</b>	<b>225,450.61</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>(205,762.42)</b>	<b>\$</b>	<b>225,450.61</b>	



\$	4,530,390.48	\$	(1,335.35)	\$	(4,312,536.93)	\$	4,517,041.05	
----	--------------	----	------------	----	----------------	----	--------------	--



# GPA Communications/PIO KPI Status

Week of 20 November 2017

# Ratepayer Newsletter



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

## Status

1. Compiling December newsletter;
2. Featuring Guampedia recipe for December Ratepayer Newsletter;
3. Inclusion of Public Health Immunization Advisory
4. No village festival to promote in upcoming newsletter;

## Accomplishments

1. Completed November Ratepayer Newsletter;

## Risks and Issues

1. None to report;

## Resolution

## Financial

Budgeted for FY17

11/20/2017



No corrective action required



Legend:  
Near-term corrective action required



Requires immediate attention

# 2017 Annual Report



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

## Status

1. Requisition in process for FY17 Annual Report;
2. Surveying Divisions for FY17 Accomplishments;

## Accomplishments

1. Completed FY2016 Annual Report.

## Risks and Issues

1. None to Report

## Resolution

## Financial

None to report	Within Budget

11/20/2017



No corrective action required



Legend:  
Near-term corrective action required



Requires immediate attention

# Special Projects – Social Media



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

## Status

1. Coordinating with various departments for any updates to share on social media;
2. Reached “Likes” number @ 2202 (13 Nov 17);

## Accomplishments

1. Fiscal Year Goal of 2,500 “Likes” ongoing;

Risks and Issues	Resolution	Financial
1. Timely Updates on Forced Outages;	1. Close monitoring of outages and trouble desk for updates;	Within budget

11/20/2017



No corrective action required



Legend:  
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. Adztech Advertising continuing Phase II DSM Marketing Plan Goals & Objectives;
2. Renewing contract with KUAM Think Green segment;

## Accomplishments

1. On track to with DSM Phase II Marketing Goals & Objectives

## Risks and Issues

1. SPORD support pending additional funding;

## Resolution

PIO supporting DSM marketing in pending additional SPORD funding

## Financial

Budget Support for SPORD for Phase II

11/20/2017



No corrective action required



Legend:  
Near-term corrective action required



Requires immediate attention

# Prepaid & SMS (text) Project



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

## Status

1. None to report

## Accomplishments

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

## Risks and Issues

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

## Resolution

## Financial

None to report

11/20/2017



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	
1. Forwarded specifications to IT for OR processing;		1. None to report	
Risks and Issues	Resolution	Financial	
1. None to report at this time		Funding with IT Division & GWA for audio & video equipment & training	

11/20/2017



No corrective action required



Legend:  
Near-term corrective action required



Requires immediate attention



# 50<sup>th</sup> Anniversary Activities



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

## Status

1. Compiling planning activities for 50<sup>th</sup> Anniversary Celebration for October 2018; upon completion, will present to GM for final disposition.

## Accomplishments

1. None to report

## Financial

None to report

## Risks and Issues

## Resolution

1. None to report at this time

11/20/2017



No corrective action required



Legend:  
Near-term corrective action required



Requires immediate attention

# Miscellaneous Activities



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

## Status

1. Continuous updates and verification of web pages with current information; currently “refreshing” pages to meet different formats e.g. mobile devices etc. in preparation for total web redesign in FY17
2. Monitoring of CS Business Centers along with recommendations for improvement e.g. reduce wait times;
3. GPA will participate in Xmas Festival @ Government House on 15 Dec 17 from 1800hrs to 2000hrs
4. Preparing for GPA Service Awards in CY2018

## Accomplishments

1. Updates on web & social media page ongoing;
2. PIO received Award of Merit for Web/Social Media Category for Ratepayer Newsletter Social Media Project.

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

### Legend:



No corrective action required



Near-term corrective action required



Requires immediate attention

11/20/2017

9





**PUBLIC  
POWER  
WEEK**

OCTOBER 1-7, 2017

## POWERING OUR ISLAND COMMUNITY

### SCHEDULE OF EVENTS | October 1-7, 2017

#### FRIDAY September 22, 2017

**10:30a.m.**  
2017 GPA/PUBLIC POWER WEEK  
PROCLAMATION SIGNING  
CEREMONY; GPA Fadian CCU  
Boardroom

**11:00a.m.**  
2017 GPA EMPLOYEE RETIREES'  
RECOGNITION CEREMONY; GPA  
Fadian CCU Boardroom

#### MONDAY October 2, 2017 through FRIDAY October 6, 2017

**Collections all week;  
see your work division  
coordinators**  
'POWER OF \$1' GPA EMPLOYEE  
DONATIONS DRIVE FOR  
HURRICANE RELIEF EFFORTS

#### MONDAY October 2, 2017

**9:00a.m.**  
GPA/PPW CUSTOMER  
APPRECIATION TABLE; Fadian,  
Julale, Upper Tumon

#### TUESDAY October 3, 2017

**10:00a.m.**  
GPA/PPW EDUCATIONAL  
OUTREACH - TAMUNING  
ELEMENTARY SCHOOL  
CLASSROOMS

#### WEDNESDAY October 4, 2017

**9:00a.m.-11:00a.m.**  
'LIFE'S LITTLE NECESSITIES'  
DONATION AND MUSIC SERENADE  
AT ST. DOMINIC'S SENIOR CARE  
FACILITY; Barrigada Heights

**2:00p.m.-4:00p.m.**  
GMHA PEDIATRIC WARD VISIT;  
Guam Memorial Hospital

**6:00p.m.-10:00p.m.**  
GPA/PPW ROCK & BOWL FUN  
NIGHT; Central Lanes Bowling  
Alley-Tamuning

#### THURSDAY October 5, 2017

**8:00a.m. -3:00p.m.**  
GPA/PPW AND GPA EA RODEO;  
GPA T&D Compound

#### FRIDAY October 6, 2017

**9:00a.m.**  
GPA/PPW CUSTOMER  
APPRECIATION TABLE; Fadian,  
Julale, Upper Tumon

**8:00a.m.-4:00p.m.**  
GPA 'ENERGY SENSE' EXHIBITOR  
TABLE - 2017 SOCIETY FOR  
HUMAN RESOURCES  
MANAGEMENT (SHRM) -GUAM  
CHAPTER ANNUAL CONFERENCE;  
Dusit Thani Hotel

**6:00p.m.-10:00p.m.**  
GPA KARAOKE & DANCING NIGHT;  
Belle's Lounge-Tamuning

#### TUESDAY October 10, 2017

**10:00a.m.**  
'POWER OF \$1' CHECK DONATION  
TO GUAM CHAPTER OF THE  
AMERICAN RED CROSS FOR  
HURRICANE RELIEF (TO BE  
TRANSMITTED TO THE NATIONAL  
AMERICAN RED CROSS); GPA  
Executive Office Foyer

















