



**CONSOLIDATED COMMISSION ON UTILITIES**

Guam Power Authority | Guam Waterworks Authority  
P.O. Box 2977 ~~Hagatna~~, Guam 96932 | (671) 648-3002 | [guamccu.org](http://guamccu.org)

**GUAM POWER AUTHORITY WORK SESSION**

*CCU Conference Room*

*4:30 p.m., Thursday, January 21, 2021*

**AGENDA**

1. **CALL TO ORDER**
2. **ISSUES FOR DECISION**
  - 2.1 **Approval of Conversion of Piti 8 & 9 / Resolution No. 2021-01**
  - 2.2 **Approval of Ukudu Power Plant ECA Amendment for relocation of Emergency Diesel Units / Resolution No. 2021-02**
  - 2.3 **Approval for Solicitation to bid for a Three-Year Property Insurance Policy / Resolution No. 2021-03**
3. **GM REPORT**
  - 3.1 **Updates**
4. **ISSUES FOR DISCUSSION**
5. **OTHER DISCUSSION**
  - 5.1 **CCU Rules Update**
6. **DIVISION REPORTS**
  - 6.1 **Administration: Customer Service, HR, Procurement, Safety**
  - 6.2 **Communications**
  - 6.3 **Engineering & Technical: Engineering, IT, Planning & Regulatory, SPORD**
  - 6.4 **Finance**
  - 6.5 **Operations: Facilities, Generation, PSCC, T&D, Transportation**
7. **ANNOUNCEMENTS**
  - 7.1 **Next Meeting: CCU Meeting- January 26**
8. **ADJOURNMENT**



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

## **Issues for Decision**

### **Resolution No. 2021-01**

#### **RELATIVE TO AUTHORIZING THE GUAM POWER AUTHORITY TO CONVERT THE PITI #8 AND #9 SLOW-SPEED DIESEL UNITS TO BURN ULTRA LOW SULFUR DIESEL FUEL**

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

Piti Units 8&9 are under a Consent Decree in Federal Court. The Consent Decree mandates GPA to contract for the conversion of the units to burn ultra-low sulfur diesel (ULSD) to comply with USEPA National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHAP).

The project to be implemented by MEC and BWSC provides a technical solution to eliminate the Sulphur oxide emissions and comply with the Consent Decree and new USEPA NAAQS rules. The Piti 8&9 units are critical for system reliability until the new power plant is commissioned.

##### **Where?**

Piti #8 and #9 Slow Speed Diesel Units

##### **How much will it Cost:**

MEC submitted a proposal of \$14,141,045.28 for the conversion

##### **What is its funding Source?**

Cabras 3&4 Insurance Proceeds

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

MEC proposes the full conversion to be completed within 15 months after contract signing.



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**GPA RESOLUTION NO. 2021-01**

**RELATIVE TO AUTHORIZING THE GUAM POWER AUTHORITY TO CONVERT THE PITI #8 AND #9 SLOW-SPEED DIESEL UNITS TO BURN ULTRA-LOW SULFUR DIESEL FUEL**

**WHEREAS**, Piti #8 and #9 Slow Speed Diesel Units provide up to 88-MW Capacity of the island-wide power system and are crucial in ensuring that GPA is able to provide the required energy for the island between now and the commissioning of the new 198-MW Ukudu Power Plant; and

**WHEREAS**, ownership of the Piti 8 & 9 units transferred from Marianas Energy Company (MEC) to Guam Power Authority (GPA) on January 29, 2019 and GPA extended the Energy Conversion Agreement with MEC until January 29, 2024 upon receiving CCU and PUC approvals, in order to ensure the units' availability and reliability; and

**WHEREAS**, the units are subject to the Consent Decree; approved by the CCU and PUC and filed in Federal Court on February 6, 2020 by the Department of Justice (DOJ) on behalf of the U.S. Environmental Protection Agency (USEPA); which outlines the settlement between GPA and USEPA to comply with National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE NESHA); and

**WHEREAS**, the Consent Decree stipulated that GPA contract for the conversion of the units to burn ultra-low sulfur diesel (ULSD) by July 1, 2020 and for full conversion to ULSD-firing by December 31, 2021; and

**WHEREAS**, GPA resolution No. 2020-14, the CCU authorized GPA to plan for the retirement of Piti 8 & 9 and to request USEPA to modify the consent decree to retire Piti 8 & 9 in lieu of conversion to ULSD; and

**WHEREAS**, as a result of the delay of the commissioning date of the new Ukudu power plant due to COVID-19 and permitting issues, and USEPA's new National Ambient Air Quality Standards (NAAQS) effective April 2023, GPA determined that in order to comply with the April 2023 NAAQS, the Piti 8 & 9 plant capacity burning low sulfur residual fuel oil would need to be limited by as much as 20% which would have a significant impact on system reliability; and

1       **WHEREAS**, this reduction in system capacity would negatively impact system reliability  
2 beginning in April 2023 and continuing on until the Ukudu power plant is commissioned; and

3       **WHEREAS**, to ensure system reliability between now and the commissioning of the new  
4 Ukudu power plant, GPA will proceed with converting Piti 8 & 9 to ULSD thereby achieving  
5 compliance with the both the RICE NESHAP and April 2023 NAAQS without impacting system  
6 reliability; and

7       **WHEREAS**, GPA, USEPA and DOJ are in amicable discussions for the modification of the  
8 consent decree due to delays resulting from COVID-19 and permitting issues; and

9       **WHEREAS**, GPA recently updated the consent decree timelines to USEPA and DOJ, for  
10 their consideration, for the conversion of Piti 8 & 9 to ULSD, to contract with MEC by March 31,  
11 2021 and complete the conversion by August 31, 2022; and

12       **WHEREAS**, the project to be implemented by MEC and BWSC provides a technical  
13 solution and a concept that will fulfill the requirements to comply with USEPA rules in relation  
14 to SOx and CO emissions including meeting the April 2023 NAAQS; and

15       **WHEREAS**, MEC submitted an updated proposal for the conversion of the units, with an  
16 estimated cost of **\$14,141,045.28** as shown in **Appendix A**, excluding the fuel supply system  
17 which is separately funded and handled by GPA; and

18       **WHEREAS**, MEC proposed to complete the conversion of Piti 8 & 9 to ULSD within 15  
19 months after contract signing,

20       **NOW, THEREFORE, BE IT RESOLVED, by the CONSOLIDATED COMMISSION ON**  
21 **UTILITIES (CCU), subject to the review and approval of the PUBLIC UTILITIES COMMISSION**  
22 **(PUC), as follows:**

- 23       1. GPA is authorized to contract with MEC for the conversion of the Piti 8 & 9 Slow  
24       Speed Diesel Units to burn Ultra Low Sulfur Diesel fuel at a cost of **\$14,141,045.28**  
25       with a project completion date of 15 months after contract signing.
- 26       2. GPA shall fund the conversion with Cabras 3 & 4 insurance proceeds.



1           **RESOLVED**, that the Chairman certified, and the Board Secretary attests the adoption of  
2 this Resolution.

3  
4           **DULY AND REGULARLY ADOPTED AND APPROVED THIS 26<sup>TH</sup> DAY OF JANUARY, 2021.**

5 Certified by:

Attested by:

6  
7  
8  
9 \_\_\_\_\_  
10 JOSEPH T. DUENAS  
11 Chairperson  
12 Consolidated Commission on Utilities

\_\_\_\_\_

MICHAEL T. LIMTIACO  
Secretary  
Consolidated Commission on Utilities

13  
14  
15           **I, Michael T. Limtiaco**, Secretary for the Consolidated Commission on Utilities (CCU), as  
16 evidenced by my signature above do certify as follows:

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

21  
22           Ayes: \_\_\_\_\_

23           Nays: \_\_\_\_\_

24           Absent: \_\_\_\_\_

25           Abstain: \_\_\_\_\_  
26  
27  
28



180 Cabras Highway  
Piti, Guam 96915  
Tel: (671) 477-3060  
Fax: (671) 477-3154

January 20, 2021

Melinda C. Mafnas  
Assistant General Manager of Operations  
Guam Power Authority  
P.O. Box 2977  
Hagatna, Guam 96932

**Subject: Proposal for the Conversion of Piti Power Plant Engine #8 and #9 from HFO to ULSD**

Dear Melinda:

We are pleased to provide our current proposal for the ULSD Conversion in coordination with BWSC. Notwithstanding the final details, we further commit to the following:

1. Subject to the final terms and conditions based on industry standards and in accordance with the existing GPA-MEC contract for operations of Piti 8&9, including acceptable force majeure and COVID-19 clauses, MEC (The Contractor) is committed to a delivery time not later than 14.5 months after effective date of the contract.
2. If the Contractor fails to comply with the Time for Completion, the Contractor shall, subject to not being entitled to an extension of time, pay delay damages to GPA for this default. These delay damages shall be in the amount of one-fourth of one percent (1%) of the outstanding order for every day which shall elapse between the relevant Time for Completion and the date stated in the Taking-Over Certificate. However, the total amount due shall not exceed 5% of the whole outstanding order."

The BWSC proposal submitted earlier defines the work scope and the description of the technical solution, which is the basis for MEC's proposal. The proposed price breakdown is as follows:

DESCRIPTION	PROPOSAL (USD Currency)
<b>PITI UNITS 8 &amp; 9 (2 Units)</b>	
ULSD Conversion all-in price proposal	\$ 12,150,600.00
Add: 30% Withholding tax on Foreign Labor (\$486,016 X 30%)	\$ 145,804.80
Add: 5% GRT on Local Labor (\$2,000,000 X 5%)	\$ 100,000.00
<b>Subtotal</b>	<b>\$ 12,396,404.80</b>
Add: 10% MEC EPC Fee	\$ 1,239,640.48
<b>Sub Total</b>	<b>\$ 13,636,045.28</b>
Add: MEC Projects (as requested by GPA)	
1. Boiler Effluent Tanks cleaning	\$ 30,000.00
2. Fuel pipeline flushing	\$ 25,000.00
3. Tank Cleaning Projects	\$ 450,000.00
--- HS HFO & LS HFO Storage Tank (120,000/ea)	240,000.00
--- HS HFO & LS HFO Service Tank (80,000/ea)	160,000.00
--- HFO Buffer Tank	50,000.00
<b>Over-All Total Proposal</b>	<b>\$ 14,141,045.28</b>

Thank you for the opportunity to submit our proposal and I look forward to meeting with your team to address any concerns you may have.

Regards,

Rino T. Manzano  
General Manager

## ULSD Conversion MEC 8 &amp; 9

1	BWSC Proposal	\$	12,150,600.00
	Foreign Labor		\$486,016.00
2	30% wh on foreign labor	\$	145,804.80
	Local Labor		\$2,000,000.00
3	5% grt on local labor	\$	100,000.00
	SUBTOTAL	\$	12,396,404.80
4	10% MEC EPC Fee	\$	1,239,640.48
	<b>TOTAL COST</b>	\$	<b>13,636,045.28</b>

## Additional MEC Projects

Boiler Effluent Tanks cleaning	\$	30,000.00
Fuel pipeline flushing	\$	25,000.00

## Tank Cleaning Projects

HS HFO Storage Tank	\$	120,000.00
LS HFO Storage Tank	\$	120,000.00
HS HFO Service Tank	\$	80,000.00
LS HFO Service Tank	\$	80,000.00
HFO Buffer Tank	\$	50,000.00
<b>TOTAL ADDITIONAL MEC PROJECTS</b>	\$	<b>505,000.00</b>

**GRAND TOTAL MEC CONVERSION      \$            14,141,045.28**

- 1 Schedule: 14 1/2 months from NTP
- 2 Outage: 12 days per unit
- 3 Testing and commissioning: 10 days per unit
- 4 Oxidation catalyst warranty 24,000 running hours  
8,000 annual running hours per unit
- 5 MEC Capacity 85.56 MW after conversion
- 6 Proposal Valid until February 16, 2021



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Regards,

Rino T. Manzano  
General Manager



Marianas Energy Co. (MEC)  
180 Cabras Highway  
Piti, Guam 96915

**Burmeister & Wain Scandinavian Contractor A/S**  
Gydevang 35  
3450 Allerød  
Denmark  
VAT no.: DK 87929116  
bwsc@bwsc.dk • bwsc.com  
T: +45 4814 0022 • F: +45 4814 0150

Att.: Mr. Rino T. Manzano (RTM)  
Mr. Rene Acaín (RA)

10 December 2020

Your ref. RTM & RA  
Our ref. 22296-B\_V10/TEAJ

**Subject: Proposal for the Conversion of Piti Power Plant Engine #8 and #9 from HFO to ULSD**

Dear Sirs,

Based on your meeting and correspondence with our Mr. Brian Jensen in December 2020, we are pleased to submit our BEST AND FINAL Proposal for the required job scope of converting from HFO to Ultra Low Sulphur Diesel Oil (ULSD) operation.

Despite the very limited time available, we have managed to succeed with a full round with all our major sub-suppliers and negotiated all possible discounts, including a full cost review of our own internal costs to meet your request for best and final price.

The price reduction on BWSC scope of supply is more than 5%, although we in order to achieve that were met with sub-suppliers' requirements for orders in the near future, which is reflected in the new validity of our proposal, cf. section 14.

We do hope that we have met your expectations and we are looking forward to discuss how to proceed.

**1 Brief Description of the BWSC Proposal**

This Proposal contains a technical solution and a concept that will fulfil the requirements to eliminate the sulphur oxide emissions and comply with EPA MACT rules in relation to SO<sub>x</sub> & CO emissions.

The proposal also contains some operational benefits when converting the engines to operate on ULSD, incl.:

- Integration of a Fuel Filtration System for the ULSD,
- Blind flange system in the exhaust line to facilitate the replacement of the catalysator boxes by reducing the outage time during replacement.

To minimize the outage during the works, maintain availability high and reduce the costs, the demolition works as well as the mechanical and electrical installation part of the conversion project for engine unit #8 and #9, is planned executed in succession of each other.

In order to accommodate MEC's wish to utilize local labour and ensure financial spin-off to the local community, we have included the cost from Local contractor, Guam, which has been facilitated by MEC. The





Local sub-contractor supplies all labour for the proposed demolition and installation of the equipment, mobile cranes, trucks, welding tools, scaffolding etc. ref section 3.3 under MEC's responsibility.

## **2 The description of the BWSC Technical Solution**

The conversion work from HFO operation to ULSD is for the two Mitsui B&W 10K90MC-S low speed diesel engines unit DE#8 and DE#9 at the Piti Power Plant, where BWSC proposes a solution for reduction of the CO emission from the current level of around 80 ppm to below 23 ppm by installing CO oxidation catalysts in the exhaust ducts, one unit for each engine DE#8 and DE#9.

The reduction of SO<sub>2</sub> emission will be achieved by operating the engines with an ULSD fuel that complies with the EPA MACT rules.

The conversion to ULSD eliminates the requirement for steam and allows a decommissioning of the waste heat recovery system, including boilers, its auxiliary equipment and steam turbine.

The Steam Turbine Generator (STG) will be decommissioned, but not removed, and this will result in a reduction in the net production from the Piti Plant of two (2) MWe.

The proposal includes removal of the exhaust gas boilers in order to create the necessary space between the powerhouse and stack for the installation of a CO oxidation catalyst and at the same time reuse existing structural steel without major alterations.

The exhaust gas duct systems will be adapted for the new components e.g. the existing inlet and outlet hood for the boiler will be replaced and modified to the new catalyst unit. Two blind flange systems will be integrated to facilitate future maintenance work on the catalysts as well as supporting the shortest possible outage time of the engines during the installation.

ULSD operation will no longer require heat tracing of fuel lines and preheating before injection and the only remaining heat consumers will be preheating of lube oil before separation, heating of sludge oil and jacket water heating at engine standstill. Further, the jacket water heating will during plant stand-still need an alternative heat source and therefore this proposal contains the installation of one (1) 450kW electrical jacket water preheater common for both engines.

The conversion will not have an impact on the gross (Generator terminal output) and the NO<sub>x</sub> emissions – it will remain unchanged. Please refer to the separate attached Performance Data document for CO-emission figures after the retrofitting of the Oxidation catalysts.

During most of the project period the loading bay between the Waste Heat Recovery system for Engine DE#8 and DE#9 will be occupied by mobile cranes & trucks and its work.

The proposal includes the engineering from BWSC and the provision of a team of BWSC Supervisors/Superintendents to manage the variety of manpower with different professions such as structural steel workers, pipe fitters, mechanics, welders, electricians, crane & truck operators, insulators etc.

The "Technical File" (enclosure 004 with this proposal) will provide further description of the conversion from HFO to Ultra Low Sulphur Diesel Oil (ULSD).

The necessary manpower as structural steel workers, pipe fitters, mechanics, welders, electricians, crane & truck operators, insulators etc. and cranes & trucks, waste removal, cleaning of fuel tanks, administration work related to work permit/visa for BWSC staff plus DPW permitting is provided by MEC through Local sub-contractors as described in section 3.3.



### **3 Scope of supply**

#### **3.1 BWSC Engineering, supplied equipment & BWSC manpower**

- 3.1.1 Project Management, engineering, configuration and documentation at BWSC head office
- 3.1.2 General support from BWSC head office
- 3.1.3 Mobilisation of Supervisors/Superintendents from BWSC. For cost saving reasons, the number of Supervisors/Superintendents on site will vary during the different stages of the project.
- 3.1.4 Preparation, mobilization (incl. airfare and travel time), board & lodging for the BWSC Supervisors/Superintendents while in Guam.
- 3.1.5 The duration of the work on site is estimated to 6 ½ months, based on ten (10) hours work on site during Monday to Saturday, with manpower proficient in mechanical and electrical installation works for the power plant industry as well as maintenance works of mechanical equipment and engines.
- 3.1.6 The report and As Build documentation will be issued soonest possible after TOC at site.
- 3.1.7 A pre-Survey of the plant by BWSC would be required before the final design of the installation is completed.
- 3.1.8 Coordination of installation works with MEC/Local sub-contractor

#### **3.2 BWSC Option for selected spare parts & consumables**

- 3.2.1 2 layers oxidation catalyst, each containing 143 cassettes (no modules). The cassettes can be put on stock without affecting the lifetime, however the cassettes must be kept dry and protected from rain (and high humidity). Please refer to the Technical File.
- 3.2.2 For the Fuel filter system, it is expected for 2 years of operation to replace on yearly basis one set of inserts on each PTU3 unit and one set of inserts on each HDU unit. The system has 4 PTU3 units each containing 4 pcs inserts = 16 pcs inserts per year to be replaced. The 3 HDU units contains each 16 pcs inserts = 48 pcs inserts per year to be replaced. Additional 3 pcs set of sealings for HDU units and 4 pcs of sealings for PTU3 units to be included (not necessary to replace every year).
- 3.2.3 Emulsifier is not a spare part but a consumable which is dependable of the running hours and operation load. The proposed yearly consumption is based on following calculation:  
One engine with 100% load consume approximately 8.5 ton ULSD plus 35% process water (approx. 3.0 ton) = 11.5 ton per hour -> 23 ton per hour for two engines. With a blend of 0.2% emulsifier the consumption for two engines will be 1.1 ton per 24h/running hours and with 8000 running hours/year the total consumption will be 368 ton/year.  
The emulsifier can be delivered from factory in 20" containers in a plastic bag with an approx. amount of 20 ton.

#### **3.3 MEC & Local subcontractors' scope of supply**

##### **3.3.1 Local Engineering and Permitting:**

Provide required local engineers to review and certify plans and drawings by BWSC, and complete the erection plans to comply with DPW permitting requirements  
Obtain necessary clearances from different government agencies, and especially building permit from Department of Public Works





- 3.3.2 Manpower: Provide all needed manpower and skilled workers to support BWSC's requirement to complete the project.
- 3.3.3 Equipment: Provide required equipment such as cranes, scaffolding, trucks, forklift, etc.
- 3.3.4 Balance of Materials: Provide balance of materials and tools as specified in BWSC's Scope of Supply.
- 3.3.5 Waste Removal, Cleaning & Safety: Maintain jobsite cleanliness and safety at all times.
- 3.3.6 Fuel Tanks & System: Clean all five fuel tanks (HS & LS HFO Storage Tanks, HS & LS HFO Service Tanks, and HFO Buffer Tank), and flush out fuel piping system as required.
- 3.3.7 U.S. Visa/Work Permit: Provide assistance to BWSC in obtaining proper U.S. Visa for its personnel (maximum of 12), as per U.S. Immigration requirements.
- 3.3.8 Insurance: Provide all necessary insurance as required by GPA, MEC or BWSC
- 3.3.9 The scope includes basic day, payroll burden, site overhead, taxes, insurances, mobilization, demobilization, tools (not special plant & equipment) and site office
- 3.3.10 All mechanical, electrical and erection works shall be executed to meet or exceed standard industry practices and in compliance with applicable federal and local laws and regulations.
- 3.3.11 Work Hours: 6 days a week, 10 hours a day or as per agreement by both parties.

#### 3.4 Division List

The "Division List" is part of this proposal letter (enclosure 006) and highlights the projects and the significant scope of jobs, interfaces and boundaries between BWSC and MEC/local subcontractor(s) for the conversion project.

### 4 Terms of delivery and time of delivery

#### 4.1 Terms of Delivery

The equipment and material will be delivered by ship CIF (Incoterms 2010) by sea-freight to the port of Guam. The majority of the supply will be shipped in containers.

#### 4.2 Time of Delivery

BWSC estimates the complete project including shipping can be executed within 14 ½ months from date of effective order subject to availability of manpower. The exact implementation schedule will have to be agreed upon Order between MEC and BWSC.

### 5 Prices

#### 5.1 Price for the BWSC scope

The price in accordance with scope of supply as specified in section 2 & 3.1 and shipping ref. 4.1 of the proposal amounts to:

**EUR 7.880.000, -**  
(Say, EUR Seven Million Eight Hundred Eighty Thousand only)

The price is contingent upon MEC via Local sub-contractor provide the scope ref 3.2 and enclosure 006. BWSC manpower at site will be invoiced according to the enclosed pricelists for the BWSC Superintendents. The additional working days will be invoiced at bi-monthly intervals or when job is completed, whichever occurs first.





5.2 OPTIONAL Price for the BWSC spare part scope and consumables

The price in accordance with scope of supply as specified (option) in section 3.2 and shipping ref. 4.1 of the proposal amounts to:

5.2.1 2 layers oxidation catalyst, each containing 143 cassettes (no modules).

**USD 1,290.000, -**  
(Say, USD One million Two Hundred Ninety Thousand only)

The price is conditioned upon the cassettes are ordered and delivered together with the 2 Oxidation catalyst systems.

5.2.2 128 Filter inserts total for the HDU and PTU3 units & 3 sets of sealings for HDU units and 4 sets of sealings for PTU3 units amounts to:

**USD 28.000, -**  
(Say, USD Twenty-Eight Thousand only)

The price is conditioned upon the filter segments and the set of sealings are ordered and delivered together with the CJC fuel filter system.

5.2.3 Emulsifier ref 3.2.3 for two engines excluding packaging and EXW (supplier in Far East) amounts to:

**USD 4.530, -/ton**  
(Say, USD Four Thousand Five Hundred Thirty only)

*With a yearly approximately consumption of 368-ton ref 3.2.3 the price will amount to USD 1.667.040.*

This price for the OPTIONS is based on the exchange rate 1 EUR = 1,12 USD, and will be adjusted if the exchange rate changes more than +/- 2%:

The payment ref 5.1 & 5.2 shall be remitted to a bank account specified by BWSC.

5.3 Price for the Local sub-contractor's scope (MEC supply)

The price in accordance with the scope of supply as specified in section 2 and 3.3 amounts to:

**USD 3.325.000, -**  
(Say, USD Three million Three Hundred Twenty-Five Thousand only)

The above price is not a BWSC quotation, but MEC's price to conduct the works specified in 2 and 3.3. and is only included to illustrate the overall project costs.



- 5.4 The total price (not including options in 5.2) for the BWSC and MEC/Local sub-contractor scope expressed in USD

EUR 7.880.000 converted to USD according rate 1 EURO = 1.12 USD = USD 8.825.600

TOTAL Price expressed in USD 3.325.000 + USD 8.825.600 =

**USD 12.150.600, -**

**(Say, USD Twelve Million one Hundred and Fifty Thousand six hundred only)**

## **6 Terms of Payment**

The below payments are based on BWSC's total order & scope (i.e. incl. any OPTIONS, if applicable):

- 15 % Down payment at order
- 20 % 60 days after confirmed order
- 25 % at shipment of Oxidation Catalysts
- 10 % by mobilisation at site
- 10% by First engine start
- 10% by Second engine start
- 10 % Upon completion of Test and Commissioning

We have assumed that 85% of the contract sum will be covered by an irrevocable Letter of Credit with a wording acceptable by the Contractor and issued in a bank of the Contractor's country.

Down payment is due immediately and other milestone payments are due 30 days net against submission of the original invoice.

## **7 Date of Effective Order**

Date of Effective Order is when BWSC has received a signed order from MEC and the applicable down payment has been received in BWSC's bank account.

## **8 Additional Services and Supplies**

Any additional days or assistance agreed upon between MEC and BWSC will be invoiced separately according to "BWSC Price list for Manpower in force at the time of confirmed order (2020 enclosed for reference – enclosure 003).

## **9 Interruption of Work**

If any interruption of work occurs caused by circumstances beyond the control of BWSC, such as, but not limited to, non-availability of mobile crane, truck assistance etc., waiting time will be separately charged in accordance with "BWSC Price list for Manpower in force at the time of confirmed order (2020 enclosed for reference – enclosure 003).

## **10 Taxes, Duties, Permits and Other Charges**

The offer does not include payment of any additional charges in Guam, such as, but not limited to, VAT, taxes, withholding taxes, fees, levies, custom duties, permits and the like, which are levied out of, or in connection with, this Proposal.



#### **11 Work Permits**

If required, MEC will arrange necessary Work Permits for the BWSC personnel. Cost for work permits, if any, will be for the account of MEC.

#### **12 Occupational Safety and Health**

MEC shall be responsible for the safety of its own employees and shall comply with all applicable provisions of local laws, regulations and orders affecting safety and health. MEC shall expressly be responsible for the ensuring that all plant equipment and tools that are necessary for completion of the works are in good working order and certified as such when required.

BWSC shall abide by all health, safety and environmental policies and procedures of MEC while working on site.

#### **13 General Conditions of Contract**

Unless otherwise specified in this proposal the "*General Terms and Condition for Sale of Parts March 2020*" & "*General Terms and Conditions for Service Work March 2020*" are valid and apply (enclosed).

BWSC retains the right to assume TOC of services & works rendered, but not completed, due to sudden demobilization resulting from any interruptions to works caused by circumstances beyond the control of BWSC excluding mutually accepted Force Major conditions. If MEC is unable to allow BWSC to resume work within three (3) months of demobilization, against a Variation Order, the value which BWSC has spent in anticipation of the completion of the project will be invoiced to MEC in accordance with BWSC's GTC.

#### **14 Validity**

This proposal is valid until 16 February 2021.

#### **15 Preconditions & Assumptions**

We have made the following assumptions, when preparing this proposal:

- This proposal letter takes precedence over the balance of documents in this proposal
- Our proposal is given and valid as a whole and is subject to agreement on final contract conditions and the approval by the Board of Directors of BWSC.
- BWSC's supply is based on designing and delivering the scope of works according to EN, ISO, IEC and other relevant European standards and documentation in accordance with the KKS system.
- We reserve our rights to assign the Contract, in part or entirely, to a local company established by BWSC for tax, VAT or withholding tax purposes.
- This proposal includes support and assistance, as needed, for MEC in obtaining necessary permits for the project. It is, however, MEC via Local sub-contractor who shall obtain all such permits.
- Testing is done according to our Master Schedule on the assumption that the Employer provides fuels and electric loads for the duration of the 3-day reliability tests.





- We have assumed that the project will not experience any delays in equipment deliveries, shipping to Guam, mobilization of personnel or illness of personnel related to epidemics such as, but not limited to, the Corona virus. Delays as a result of virus events shall result in extension of time and related extra costs shall be reimbursed by the client.

#### **16 MEC scope of supply via Local sub-contractor**

Further, we assume that MEC can provide the following scope/supply for their own costs (this chapter is a supplement to point 3.2:

- A contact person from the power plant management for daily communication & coordination during the whole project period.
- Temporary offices and other facilities (kitchen, toilet and bath).
- Any import duties, taxes etc. to be paid in Guam.
- The necessary mobile cranes with operators and "flat truck" for the duration of the project
- Containers (dumpsters) for waste (metal/iron – wood – paper – plastic – insulation material – housekeeping – cable – electric components/equipment)
- The necessary scaffolding incl. all necessary alterations
- All consumables and utilities necessary for this conversion project including, but not limited to, diesel oil, chemicals, lubricating oil, water, electricity etc.
- All permits and approvals including, but not limited to, work permits and visa for expatriates required for this project.
- Full and unrestricted accessibility to the site areas of Piti Power Plant.
- Sufficient lay-down area for all the "waste" intended for all decommissioned parts from the removed Waste Heat Recovery system and other parts related to this project. The area should be situated either in the Piti Power Plant area or close to the property and easily accessible with a 30-ton mobile crane and a 30 ton "flatbed truck".
- Supply of ULSD, emulsifier, and Cylinder Lubrication oil with slightly reduced TBN as required.
- The sequence of installation will assume that one HFO tank is cleaned for ULSD storage prior to the conversion of the first units and the other HFO storage tank cleaned for ULSD storage subsequent to the conversion of the second unit.
- MEC Operation staff for the outage and testing.
- The disposal of all type of waste created from and related to the conversion project.
- MEC/Local sub-contractor is responsible for customs clearance and transportation from point of entry (port or airport) to the Guam Piti Plant and that this is performed swiftly and without BWSC incurring port storage and demurrage costs of any kind.



**17 Closing remarks**

We trust that this proposal for a technical solution meets your expectations and look forward to assisting you.

Please do not hesitate to contact us, should questions arise or further information be needed.

Yours faithfully,

**Burmeister & Wain Scandinavian Contractor A/S**

A handwritten signature in blue ink, appearing to read "Brian Jensen", with a stylized flourish extending from the end.

Brian Jensen  
Senior Sales Manager  
Service Sales  
D: +45 88160489  
M: +1 832 709 9974  
[brje@bwsc.dk](mailto:brje@bwsc.dk)

A handwritten signature in blue ink, appearing to read "Jon Ploug", with a stylized flourish extending from the end.

Jon Ploug  
General Manager  
Service Sales

**Enclosures:**

- 001 - "General Terms and Condition for Sale of Parts, March 2020"
- 002 - "General Terms and Conditions for Service Work, March 2020"
- 003 - "BWSC Price list for Manpower 2020"
- 004 - "BWSC Technical File – rev5"
- 005 - "SGS & Intertek Certificates of Analysis"
- 006 - "BWSC Division List"
- 007 - "BWSC Performance Data and Guarantee"
- 008 - "BWSC Preliminary Project Plan rev 6"
- 009 - "BWSC diagram of the Fuel Oil Storage Treatment System 2891-M2-F05-001"
- 010 - "BWSC Waste Heat Recovery Boilers General Arrangement Drawing Section Boiler HE-S8 2891-M5-S25-006"



## GENERAL TERMS AND CONDITIONS SALE OF PARTS



### 1 General

1.1 These General Terms and Conditions ("these General Conditions") shall apply to all sales of Parts by Burmeister & Wain Scandinavian Contractor A/S or any of its branches or affiliates, as the case may be ("BWSC") to the customer unless otherwise expressly confirmed in writing by BWSC.

1.2 Parts shall be construed as all materials and otherwise tangible assets supplied by BWSC to the customer. Any Service Work supplied by BWSC in connection with the supply of the Parts shall be regulated separately in accordance with BWSC's prevailing General Terms & Conditions for Service Work.

### 2 Offers and Order Acknowledgements

2.1 Offers are submitted by BWSC as non-binding and subject to the Parts being unsold until an order subject to these General Conditions has been issued by the customer and acknowledged in writing by BWSC.

2.2 After the customer has received an order acknowledgment, the customer may not change or cancel an order unless agreed to in writing by BWSC. Agreed changes and cancellations may be subject to additional charges by BWSC.

2.3 The contract between BWSC and the customer shall consist of the following documents in the following order of priority:

- (I) written order acknowledgement from BWSC;
- (II) order from the customer (with no conditions attached or expressly referred to);
- (III) BWSC's offer;
- (IV) these General Conditions.

2.4 Neither BWSC nor the customer may assign any of its rights or obligations under the contract without the prior consent of the other party except for an assignment of rights to a wholly owned subsidiary.

### 3 Intellectual property and confidentiality

3.1 The intellectual property rights associated with the Parts, or contained in any drawings, specifications or other technical documents, provided by BWSC to the customer, shall remain with BWSC. Drawings, specifications or other technical documents provided by BWSC to the customer and may be used only by the customer for the sole purposes for which such Parts were delivered.

The customer shall defend, indemnify and hold harmless BWSC against all claims, losses and damages, including reasonable attorney's fees, arising out of or resulting from any reuse, modification, reproduction or publication of any documents or data supplied hereunder that contain intellectual property rights.

3.2 Neither party shall copy or disclose to a third party any document or data provided by the other party without the prior written consent of the other party or use such documents or data for purposes other than those for which they were provided.

### 4 Delivery

4.1 The time of delivery stated by BWSC is approximate unless otherwise stated in the offer.

4.2 All information on weights and dimensions is to be considered approximate.

4.3 All deliveries are made "Ex Works" in accordance with Incoterms® 2010 at the named place of delivery specified in the offer or order.

4.4 The customer shall be deemed to have accepted the quantity and quality of the Parts delivered by BWSC as being in accordance with the contract unless the customer has notified BWSC of any omission in the quantity or defects in the Parts supplied within 15 days following receipt of Parts.

4.5 If any quantities of Parts are delivered to the customer by mistake caused by BWSC or are defective then they shall be returned by the customer to BWSC:

- (I) Upon prior notification to BWSC;
- (II) Labelled with BWSC's return reference;
- (III) New and in the same condition, with the same original packaging, as they were delivered to the customer, to the place Ex Works originally supplied by BWSC
- (IV) At the delivery expense and risk of BWSC; and
- (V) Timely so as to reach BWSC within 2 months from the date of delivery. If they are not returned within 2 months or contrary to these terms, then BWSC will have no obligation to credit the customer for the value of the goods returned.

### 5 Payment and Ownership

5.1 Payment shall be made by bank remittance no later than 30 days from the date of the invoice. Payment shall be made in full without any set off, counterclaim or deduction.

5.2 If the dispatch of the Parts is postponed at the request of the customer, payment shall still be made as set forth above if the Parts are ready for dispatch at the date of invoice.

5.3 If payment is not made when due, interest will accrue without reminder on the overdue amount at 1 per cent per each month commenced.

5.4 If any payment is more than 30 days late, BWSC shall be entitled to suspend or terminate the contract by written notice to the customer.



## GENERAL TERMS AND CONDITIONS SALE OF PARTS



5.5 Regardless of the transfer of risk in section 4, title to the Parts supplied by BWSC shall remain with BWSC until payment for the Parts has been made in full.

### 6 Taxes, Duties and Fees

6.1 All taxes, duties, charges, fees and withholdings of any kind, present or future, imposed by any government or any other official body on or in relation to the contract or its performance or in respect of the importation of any of the Parts into any country (other than country of origin) or on the payments or receipt or payment instruments issued under the contract, shall be for the customer's account.

6.2 All bank fees including the cost of establishing letters of credit, other payment securities and confirmation of same shall be for the account of the customer.

6.3 The customer shall reimburse BWSC for any costs related to the collection of overdue amounts, including reasonable attorney fees.

### 7 Force majeure

7.1 Force majeure means any (i) storm, hurricane, flood, lightning, or earthquake (ii) war, riot, rebellion, or civil war (iii) general strike or general labor stoppage (but exclusive of any strike or labor stoppage affecting only BWSC or its customer), (iv) terrorism (v) radioactive or other toxic contamination, (vi) any other event that could not be reasonably foreseen and is beyond the reasonable control of the party claiming force majeure or (vii) whether or not reasonably foreseen (a) epidemics or (b) sanctions of international application in any case which causes a material delay or disruption in the performance of any obligation under the contract.

7.2 Notification of force majeure shall be given within 7 days of becoming aware of the occurrence of the circumstances constituting the force majeure event, and it shall specify the affected obligation.

7.3 Obligations by either party shall be excused to the extent and for the period that the party's inability to perform is caused by force majeure.

Payments including financial and other monetary obligations cannot be excused by reasons of force majeure except where due to sanctions of international application. If force majeure prevents a subcontractor of BWSC from performing its obligations, BWSC shall use his best efforts to procure performance by another subcontractor.

7.4 If a definite time of delivery of the Parts has been expressly agreed upon in writing, such time of delivery is always stated with reservation for delays due to force majeure or other reasons beyond BWSC's control.

7.5 If a delay in delivery or completion, caused by force majeure or reasons beyond the control of BWSC, can be expected to last longer than 6 months, either party shall be entitled to cancel the contract.

7.6 In the event that the contract is cancelled pursuant to clause 7.5 above, BWSC shall be paid the value of any of the Parts already delivered (including the value of any of the Parts ordered by BWSC, if BWSC is legally required to accept delivery thereof). BWSC shall repay any amounts paid by the customer in excess of the foregoing. Beyond this, no claim whatsoever, on account of a delay, can be accepted.

### 8 Warranty

8.1 In the event that the Parts delivered by BWSC prove unusable owing to faulty material or manufacturing attributable to BWSC, BWSC undertakes to replace by delivery in the manner specified in clause 4.3 or repair the Parts as applicable, at its sole discretion, free of charge during the warranty period.

8.2 The warranty period for the Parts begins on the date of delivery and ends 12 months from the date when the Part is placed in service or 18 months from the date of delivery, whichever occurs earlier.

The warranty period in respect of parts which has been repaired or replaced under the warranty shall expire 6 months following the last date when (i) the repaired or replacement part is placed in service or (ii) upon the expiration of the warranty period applicable to the originally supplied Part as set forth above in this clause 8.2, whichever occurs earlier.

The total warranty period shall not extend beyond 24 months from the commencement of the original warranty period for such part.

8.3 A claim under this section 8 must be made in writing to BWSC not later than 15 days after the customer became aware, or should have become aware, of defect concerned. The customer shall have the responsibility to establish that the claim is covered by the warranty.

8.4 BWSC's liability is limited to the above and does not cover defects caused by: normal wear and tear, improper storage or operation, damage caused by carelessness or negligence by the customer or by personnel in the service of the customer (including failure by the customer to comply with original equipment manufacturer's manuals and recommendations and/or prudent engineering practices), corrosion, deposits owing to water, sand or other impurities, chemical or electrolytic processes, grid fluctuations, damage caused by unsuitable lubricants or fuels, insufficient cooling, or by parts and material supplied by the customer himself, or damage caused during constructions/assembly carried out by the customer without the written approval of BWSC.

## GENERAL TERMS AND CONDITIONS SALE OF PARTS



BWSC reserves the right to examine the part concerned before the question of liability is finally decided upon.

8.5 If, after BWSC's warranty investigation, it is found that the customer does not hold a warranty claim within the terms of this contract, then the customer shall be responsible for all applicable costs and expenses for or in connection with inspections, tests, repaired or replaced Parts.

8.6 Except as stipulated in this section 8, BWSC shall not be liable for defects. This section 8 sets forth the only warranty applicable to the Parts provided by BWSC and is in lieu of any other warranties, guarantees, obligations and liabilities, express or implied by law.

### 9 Limitation of liability

9.1 BWSC shall be liable for physical damage to property of the customer if it is proved that such physical damage was caused by negligence on the part of BWSC. BWSC's liability for damage to property is limited to EUR 1,000,000 (one million Euro).

9.2 BWSC and the customer shall mutually indemnify and hold each other harmless from and against all claims, liabilities and causes of action arising out of or resulting from personal injury to or death of their own personnel.

9.3 For all other matters, BWSC's liability to the customer for or in connection with any matters arising under the contract, regardless of the basis of the claim, is limited to 50% (fifty percent) of the contract price.

9.4 BWSC shall under no circumstances be liable for (i) loss of production, loss of profit, loss of revenue, charges regardless of whether considered by applicable law to be direct or indirect loss or (ii) consequential damage or indirect loss.

9.5 The customer shall indemnify BWSC against any product liability caused by or related to the Parts supplied by BWSC to the customer and subsequently re-supplied to any third party by the customer.

9.6 These limitations in BWSC's liability as set in sections 8 and 9 shall not apply where BWSC has been guilty of fraud, deliberate default or reckless misconduct.

9.7 All claims, demands, suits, actions or causes of action brought by one party against the other must be brought, if at all, within two (2) years of the date the party became aware of, or should, of the events or circumstances giving rise to such claim, demands, suits, actions or causes of action.

### 10 Insurance

10.1 Responsibility for the insurance of the Parts shall be in accordance with the delivery terms pursuant to clause 4.3 and the Incoterms referred to therein.

### 11 Law and Disputes

11.1 BWSC's offers and all contracts with the customer, including these General Conditions, shall be governed by and interpreted according to English law.

11.2 Any dispute or claim arising in connection with these General Conditions or other terms of the contract between the customer and BWSC that cannot be settled amicably by the parties themselves, shall be decided by arbitration in accordance with the rules of procedure of the International Chamber of Commerce (ICC). The arbitration proceedings shall take place in London, UK. The language of the arbitration shall be English.

11.3 The above will not, however, prevent either BWSC or the customer from applying to the ordinary courts of law having jurisdiction over such a case for a temporary injunction or other relief of an urgent and temporary nature or for the purpose of enforcement of any award issued under arbitration.



## GENERAL TERMS AND CONDITIONS SERVICE WORK



### 1 General

1.1 These General Terms and Conditions – Service Work (“these General Conditions”) shall apply to all supply of service work (“the Service Work”) by Burmeister & Wain Scandinavian Contractor A/S or any of its branches or affiliates, as the case may be (“BWSC”) to the customer unless otherwise expressly confirmed in writing by BWSC.

1.2 The Service Work shall be construed as any service, work or supervision performed by BWSC personnel for the customer. BWSC’s provision of parts and materials used in connection with the performance of the Service Work shall be regulated separately in accordance with BWSC’s terms and conditions for sale of parts. Unless specifically agreed, title to equipment and tools provided and used by BWSC’s personnel in the performance of the Service Work shall remain with BWSC at all times.

### 2 Offers and Order Acknowledgements

2.1 Offers are submitted by BWSC as non-binding until an order subject to these General Conditions has been issued by the customer and acknowledged in writing by BWSC.

2.2 After the customer has received an order acknowledgement, the customer may not change or cancel an order unless agreed to in writing by BWSC. Agreed changes and cancellations may be subject to additional charges by BWSC.

2.3 Any assistance or work performed by BWSC outside the scope agreed will be charged as extra work in accordance with BWSC’s standard rates then in effect and with these General Conditions.

2.4 The contract between BWSC and the customer shall consist of the following documents in the following order of priority:

- (I) written order acknowledgement from BWSC;
- (II) order from the customer (with no conditions attached or expressly referred to);
- (III) BWSC’s offer;
- (IV) these General Conditions.

2.5 Neither BWSC nor the customer may assign any of its rights or obligations under the contract without the prior consent of the other party except for an assignment of rights to a wholly owned subsidiary.

### 3 Intellectual Property and Confidentiality

3.1 The intellectual property rights contained in any drawings, specifications or other technical documents, provided by BWSC to the customer shall remain with BWSC.

Drawings, specifications or other technical documents provided by BWSC to the customer may only be used by the customer for the sole purpose of the Service Works. The customer shall defend, indemnify and hold harmless BWSC against all claims, losses and damages, including reasonable attorney’s fees, arising out of or resulting from any reuse, modification, reproduction or publication of any documents or data supplied hereunder that contain intellectual property rights.

3.2 Neither party shall copy or disclose to a third party any document or data provided by the other party without the prior written consent of the other party or use such documents or data for purposes other than those for which they were provided.

### 4 Completion

4.1 The time of completion of the Service Work stated by BWSC is approximate unless otherwise stated in the offer.

4.2 All information provided by BWSC’s personnel on weights and dimensions is to be considered approximate.

4.3 The customer shall be deemed to have accepted the Service Work provided by BWSC as being in accordance with the agreed terms unless the customer has notified BWSC of any non-conformity within 5 days following the last day of which the Service Work was performed.

### 5 Payment

5.1 Payment shall be made by bank remittance no later than 30 days after the date of the invoice. Payment shall be made in full without any set off, counterclaim or deduction.

5.2 If payment is not made when due, interest will accrue without reminder on the overdue amount at 1.0 per cent per each month commenced (12% per annum).

5.3 If any payment is more than 30 days late, BWSC shall be entitled to suspend or terminate the contract by written notice to the customer.

5.4 The cost of the Service Work will be charged either as per specific quotation or on an hourly or daily basis, in accordance with BWSC’s current price list for manpower. The time sheets provided by BWSC shall be deemed as evidence of the working time invoiced.

5.5 BWSC’s personnel will be charged to the customer on an hourly or daily fee based on the hours and number of working days from day of departure of such personnel until their return.

A normal working week comprise of 60 hours, 10 hours per working day and 6 working days per week, subject to mandatory applicable laws. Local holidays shall be observed, and any work performed outside normal working hours shall be invoiced to the customer as overtime as per current price list.

5.6 Waiting time and idle days which BWSC is not responsible for shall be charged to the customer as per BWSC’s current price list for manpower as will time spent travelling to and from BWSC’s office, work site and lodging.

5.7 The fees shall be payable during any incapacity caused by sickness of or accident to any of BWSC’s personnel if caused by the failure of customer to maintain safety in the work site environment.



## GENERAL TERMS AND CONDITIONS SERVICE WORK



5.8 In the event of any illness or accident affecting any of BWSC's personnel, whether during the performance of the Service Work or otherwise necessitating medical assistance or hospital treatment, customer shall ensure that the best medical facilities and medications are made available to BWSC's personnel.

If it becomes necessary to repatriate an ill, injured or deceased member of BWSC's personnel, customer shall do its utmost to assist BWSC in arranging such repatriation in the safest and most expedient manner. All costs related to this clause 5.8 shall be borne by BWSC.

5.9 Unless otherwise specifically agreed, all travel expenses, living expenses, telephone calls at customer's request and out-of-pocket expenses related to such Service Work will be charged at cost + 15% administration fee.

### 6 Taxes, Duties and Fees

6.1 All taxes, duties, charges, fees and withholdings of any kind, present or future, imposed by any government or any other official body on or in relation to the contract or its performance or on the payments or receipt or payment instruments issued under the contract, shall be for the customer's account other than taxes imposed on the employees of BWSC or corporate taxes imposed on the net income of BWSC.

6.2 All bank fees including the cost of establishing letters of credit, other payment securities and confirmation of same shall be for the account of the customer.

6.3 The customer shall reimburse BWSC for any costs related to the collection of overdue amounts, including reasonable attorney fees.

### 7 Force Majeure

7.1 Force majeure means any (i) storm, hurricane, flood, lightning, or earthquake (ii) war, riot, rebellion, or civil war (iii) general strike or general labor stoppage (but exclusive of any strike or labor stoppage affecting only BWSC or its customer), (iv) terrorism (v) radioactive or other toxic contamination, (vi) any other event that could not be reasonably foreseen and is beyond the reasonable control of the party claiming force majeure or (vii) whether or not reasonably foreseen (a) epidemics or (b) sanctions of international application in any case which causes a material delay or disruption in the performance of any obligation under the contract.

7.2 Notification of force majeure shall be given within 7 days of the occurrence of the circumstances constituting the force majeure event, and it shall specify the affected obligation.

7.3 Obligations by either party shall be excused to the extent and for the period that the party's inability to perform is caused by force majeure. Payments including financial and other monetary obligations cannot be excused by reasons of force majeure. If force majeure prevents a subcontractor of BWSC from performing its obligations, BWSC shall use its best efforts to procure performance by another subcontractor.

7.4 If a definite time of completion has been expressly agreed upon in writing, such time of delivery is always stated with reservation for delays due to force majeure or other reasons beyond BWSC's control.

7.5 If a delay in completion, caused by force majeure or reasons beyond the control of BWSC, can be expected to last longer than 6 months, either party shall be entitled to cancel the contract.

7.6 In the event that the contract is cancelled pursuant to clause 7.5 above, BWSC shall be paid the value of any of the Service Work already completed and all reasonable additional costs committed or incurred by BWSC as a consequence of the force majeure. BWSC shall repay any amounts paid by the customer in excess of the foregoing. Beyond this, no claim whatsoever, on account of a delay, can be accepted.

### 8 Responsibility for Defects

8.1 BWSC personnel shall exercise reasonable skill, care and diligence in the performance of the Service Work. BWSC shall only be responsible for the Service Work and shall have no express or implied responsibility for the condition or performance of property of the customer other than where caused by a defect in the Service Work in accordance with this section 8.

8.2 BWSC performs the Service Work in accordance with applicable industry standards and on the basis of the information provided by the customer which is assumed in all cases to be correct. In the event that the Service Work performed by BWSC prove deficient due to faulty workmanship during the warranty period, BWSC undertakes to re-perform the Service Work, free of charge during the warranty period.

8.3 The warranty period for the Service Work begins on the date of completion of the Service Work and ends 6 months from the last day of performance of the Service Work. The warranty period in respect of the Service Work which has been re-performed under the warranty shall expire 6 months following the last day on which the Service Work was re-performed under the warranty.

The warranty period for the Service Work shall not extend beyond 12 months from the commencement of the original warranty period for the Service Work. Repair or re-performance under this warranty shall be made in accordance with the original contract terms for the Service Work.

8.4 Claims under this section 8 must be made in writing without delay to BWSC no later than 14 days after the discovery of the defect concerned. The customer shall have the responsibility to establish that the claim is covered by the warranty.

8.5 When the Service Work includes replacing parts provided by BWSC within the warranty period of such parts, replaced parts shall become BWSC's property and upon request returned to BWSC at BWSC's cost.



## GENERAL TERMS AND CONDITIONS SERVICE WORK



8.6 BWSC's liability is limited to the above and does not cover defects caused by any materials, components, tools, parts or software provided by the customer, normal wear and tear, improper operation, damage caused by carelessness or negligence by the customer or by personnel in the service of the customer (including failure by the customer to comply with original equipment manufacturers manuals and recommendations and/or prudent engineering practices).

8.7 This section 8 sets forth the only warranty applicable to the Service Work provided by BWSC and is in lieu of any other warranties, guarantees, obligations and liabilities, express or implied. Customer hereby waives all other remedies, warranties and guarantees express or implied, arising from law or otherwise.

### 9 Environmental, Health and Safety

9.1 The customer shall provide BWSC's personnel with safe access to the site to enable them to perform the Service Work in accordance with the contract.

9.2 The customer shall take all reasonable precautions for ensuring the health and safety of BWSC's personnel whilst on site and shall maintain safe working conditions at the site including taking appropriate measures to protect BWSC's personnel from risks associated with working in confined spaces and with hazardous substances applicable for the Service Work. BWSC's personnel shall comply with the reasonable health and safety instructions and requirements of the customer whilst at the Site.

9.3 The customer is responsible for the safety of its own employees and shall comply with all applicable law, regulations and orders affecting safety and health.

### 10 Equipment Provided by the Customer

10.1 The customer shall provide at no costs all tools, test equipment, test facilities and transport and lifting equipment including rigging tools and slings along with the necessary fuel, lubricants, water, electricity, compressed air and cleaning facility for the performance of the Service Work unless otherwise agreed. Such equipment shall be fully certified.

10.2 The customer is responsible for correct calibration of any measuring equipment controlled by the customer but used by BWSC in the provision of the Service Work.

### 11 Limitation of Liability

11.1 BWSC shall be liable for damage to property if it is proved that such damage was caused by negligence on the part of BWSC. BWSC's liability for damage to property is limited to EUR 1,000,000. BWSC's liability for all other matters which are insured by its insurers shall be capped at the limits stated in such insurance.

11.2 For all other matters, BWSC's liability to the customer for or in connection with any matters arising under the contract, tort (including negligence or otherwise) or strict liability, regardless of the basis of claim, is limited to 50% (fifty percent) of the contract price except where due to fraud, deliberate default or reckless misconduct.

11.3 BWSC shall in no circumstances be liable for (i) loss of production, loss of profit, loss of revenue, charges regardless of whether it is considered by applicable law to be direct or indirect loss or (ii) any consequential damage or indirect loss except where due to fraud, deliberate default or reckless misconduct.

11.4 BWSC and the customer shall mutually indemnify and hold each other harmless from and against all claims, liabilities and causes of action arising out of or resulting from personal injury to or death of their own personnel.

11.5 All claims, demands, suits, actions or causes of action brought by one party against the other must be brought, if at all, within two (2) years of the date the party became aware of, or should, of the events or circumstances giving rise to such claim, demands, suits, actions or causes of action.

### 12 Insurance

12.1 BWSC and customer shall at their own cost provide for and maintain comprehensive insurance coverage to protect its own property and personnel.

### 13 Non-solicitation

13.1 Customer agrees that during the duration of this contract and for one year thereafter, customer shall not induce or attempt to influence directly or indirectly any personnel of BWSC to terminate employment with BWSC or to commence employment or consulting for customer, without BWSC's prior written permission.

### 14 Law and Disputes

14.1 BWSC's offers and all contracts with the customer, including these General Conditions, shall be governed by and interpreted according to English law.

14.2 Any dispute or claim arising in connection with these General Conditions or other terms of the contract between the customer and BWSC that cannot be settled amicably by the parties themselves, shall be decided by arbitration in accordance with the Rules of Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with the said Rules. The arbitration proceedings shall take place in London, UK. The language of the arbitration shall be English.

14.3 The above will not, however, prevent either BWSC or the customer from applying to the ordinary courts of law having jurisdiction over such a case for a temporary injunction or other relief of an urgent and temporary nature or for the purpose of enforcement of any award issued under arbitration.

## BWSC Price List for Manpower

### Service, Operation & Maintenance

### January 2020 - December 2020

Description	Superintendent	Supervisor
Full weekday (Max. 10 Hours)	EUR / Day 1,425. -	EUR / Day
Hourly rate after 10 Working Hours / Day	EUR / Hour 205. -	EUR / Hour
Full Day at Saturdays, Sundays and Local Holidays (Max. 10 Hours)	EUR / Day 1,940. -	EUR / Day
Rate after 10 Hours' Working Day at Saturdays, Sundays and Local Holidays	EUR / Hour 215. -	EUR / Hour
Waiting Time (max. 8 hour/day)	EUR / Hour 115. -	EUR / Hour
Travelling Time (Max. 16 Hours / Day)	EUR / Hour 115. -	EUR / Hour
Preparation Fee (8 Hours / Day)	EUR / Day 930. -	EUR / Day
Reporting Fee (8 Hours / Day)	EUR / Day 930. -	EUR / Day

**Please note** that all prices mentioned are in Euro (EUR). In addition to the service fees, all travelling and living expenses and telephone calls made at the customer's request will be invoiced to the customer inclusive a 15% administrative fee. In the event that external expertise is required, the invoiced amount from such expert will be invoiced to the customer.

#### DESCRIPTION OF WORKING AREAS OF THE SUPERINTENDENT

Expert troubleshooting, special services like supervision and evaluation of various tests, theoretical training as well as evaluation and commissioning.

#### DESCRIPTION OF WORKING AREAS OF THE SUPERVISOR

Advisory work and supervision of the workers during the service agreed upon by the customer and BWSC (i.e. on equipment and on the job training).

#### DESCRIPTION OF WORKING AREAS OF THE SPECIALIST FITTER

Attending repair jobs, erection of new equipment and overhaul work.

Valid as per 1 January 2020



## Burmeister &amp; Wain Scandinavian Contractor A/S



**Project** Proposal 22296-B-V2  
**Date** 26 March 2020  
**Document owner** JNI  
**Verifier/approver** TEAJ/  
**Revised/date** TEAJ/10 December 2020  
**Subject** Engine Conversion from HFO to ULSD

**Document no.**  
 Technical File for  
 PL 22296-B-V2

**Rev.**  
5

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**Technical File**
**Technical File****1 GUAM-Piti Power Plant – Engine conversion from HFO to ULSD operation**

A conversion from HFO to ULSD operation will only require strategic changes to the current plant design, and the associated downtime for such changes will be limited. The outage time for each engine during the modification is planned to approximately 12 site days split into 2 sessions.

Changing fuel from HFO to ULSD will reduce the SO<sub>2</sub> emission drastically, and PM emission will also be reduced, but it will not have any significant effect on the NO<sub>x</sub> or CO emissions. It will therefore still be necessary to reduce NO<sub>x</sub> emission by water emulsion, and the need for a CO-oxidation catalyst remains. The SO<sub>2</sub> emission will be reduced when MEC operates the engines with an ULSD that is compliant with EPA MACT rules.

**1.1 Engine modifications**

As the engines are already capable of running on diesel oil, a conversion to running constantly on ULSD will only require some minor modifications of the engines. The fuel injectors and fuel pumps plunger & barrel will have to be replaced in order to obtain optimal combustion.

**1.2 Fuel system modifications****1.2.1 Water Emulsion System**

The primary required modification of the plant is connected to the water emulsion process, where heavy fuel oil and water are currently emulsified by mechanical/ultrasound mixing in a homogenizer. Due to the low viscosity of the diesel oil, the final mixture will be very unstable, which means that the diesel and water may start to separate again during recirculation.

To ensure stability of the fuel mixture, it is therefore necessary to install an emulsifier dosing unit for each engine, which injects emulsifier to the ULSD/water upstream the homogenizer. Subsequently, the final fuel mixture is led to the engines.

The emulsifier needed for this purpose is of the type Polyglycerol Ester, a well-known product used in the food industry. The production and supply/logistics of such an emulsifier will have to be discussed further with potential suppliers.

The required amount of emulsifier is expected to be a concentration of approx. 0.2% of the final product, which at the current heat rate corresponds to a total consumption of around 46 kg/h when both engine units are running full load.

It is designed so that the emulsifier can be stored in the existing boiler effluent tank, which will not be used after decommissioning of the steam boilers.

This tank has a capacity of 50 m<sup>3</sup>, or around 45 days, at full load operation. The emulsifier can then be pumped from the storage tank and added to the ULSD, after the strainers/filters and before the homogenizer.

## Burmeister &amp; Wain Scandinavian Contractor A/S



**Project** Budget Proposal 22296-B  
**Revised/date** TEAJ /4 June 2020  
**Subject** Engine Conversion HFO to ULSD

**Document no.**  
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As the ULSD does not require any heating, the emulsion water will not have to be heated either, and the emulsion water heater as well as FO pre-heaters (hot water) will be by-passed. FO final heaters will be changed to DO cooler.

The removal of heaters or by-pass arrangement is included in the conversion work. The new configuration can be seen on the attached diagram of the Fuel Oil Injection System 2891. M2.F85.001 with notes and with marking of interfaces and scope of BWSC delivery/installation.

#### 1.2.2 DO Cooler

As the diesel oil will be recirculated, it will be heated when passing through the engine. To ensure sufficiently high viscosity of the fuel entering the engine. The existing FO final heaters will be connected to the LT cooling water system, the capacity will be approx. 225 kW, this cooler will ensure that the temperature of the recirculated diesel oil does not exceed approx. 50°C.

The recirculated diesel oil will, following the diesel oil cooler, be mixed with new diesel oil from the emulsion homogenizer which will have a temperature close to ambient. The diesel oil cooler can also be seen on the above-mentioned fuel injection system diagram.

#### 1.2.3 Homogenizer units

Due to the age and condition of existing homogenizer units these units will be replaced with one new unit per engine (each 2 x 149%) with a capacity of 2 x 20m<sup>3</sup>, this include also the mechanical and electrical installation with piping, valves, cabling etc.

#### 1.2.4 Heat consumers

With ULSD operation, the only remaining heating consumers will be the preheating of lube oil before separation, heating of sludge oil and jacket water heating at standstill. BWSC integrates a solution with heating from the existing HT-cooling water system. Further the jacket water pre-heating will, when both engines are out of service, be heated by an Electrical preheater.

#### 1.2.5 FO Separators

In accordance to BWSC Service report 60182 dated April 2016, the existing HFO separators are in poor condition and will be removed to get room for new diesel oil filtration system.

#### 1.2.6 HFO pumps

To secure the HFO pumps transition from HFO operation to ULSDO following pump will be upgraded with new pump insert, 1 Transfer pump, 4 Supply pumps and 4 booster pumps.

#### 1.2.7 FO Filtration System

BWSC proposal is an advanced fuel filtration technology consisting of one CJC PTU Filter Separator system with automatic water discharge for "Storage tanks" and "Service Tanks". Between the "Storage Tanks" and the "Service Tanks" Three (one standby) CJC HDU Fine Filters delivers clean and "dry" fuel in the "Service Tanks".



## Burmeister & Wain Scandinavian Contractor A/S



**Project**  
**Revised/date**  
**Subject**

Budget Proposal 22296-B  
TEAJ /4 June 2020  
Engine Conversion HFO to ULSD

**Document no.**  
Technical File for  
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### 1.3 Exhaust Gas System Modifications

#### 1.3.1 CO-Oxidation Catalyst

The CO-oxidation catalyst will be installed in the exhaust ducts of each engine and will thus ensure reduction of CO concentration to comply with EPA regulations.

The catalyst is foreseen to be installed at the current location of the waste heat boilers, which after being removed will leave more than needed free area.

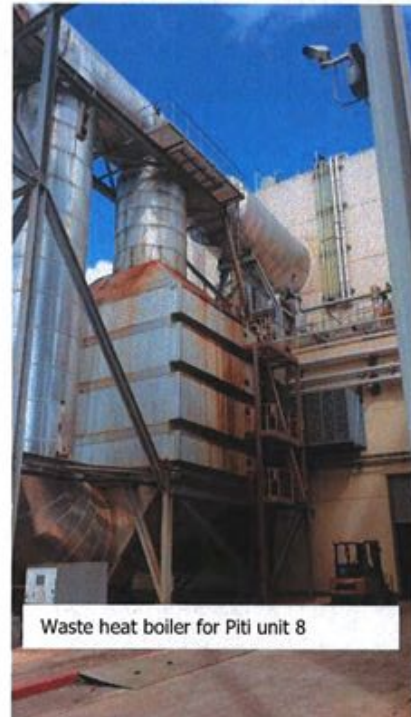
The catalyst consists of one layer of noble metals Oxidation catalyst for oil fired engines. The layer contains 143 cassettes in each CO catalyst reactor. The cassettes are positioned in large modules and are replaceable (photo below).

See photograph of the WHR boiler on Piti unit 8 on the right.

BWSC has included in the proposal that the existing 8 mm thick exhaust gas boiler inlet and outlet hoods will be replaced due to the existing poor condition, and proposes to offer a reactor matching the existing duct dimensions 6300 mm x 5540 mm.

The CO catalyst reactor and dampers can be seen on the attached General Arrangement Drawing Section Boiler HE-S8 2891.M5.S15.006 with notes.

The warranty period on the catalyst material is 24 000 operation hours, however max. 3 calendar years starting from the day the flue gas is passed through the catalyst for the first time and maximum 3,5 calendar years from the delivery of the catalyst.



Waste heat boiler for Piti unit 8



## Burmeister & Wain Scandinavian Contractor A/S



**Project** Budget Proposal 22296-B  
**Revised/date** TEAJ /4 June 2020  
**Subject** Engine Conversion HFO to ULSD

**Document no.**  
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 MEC 22296-B-V2

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### 1.3.2 Exhaust Gas Dampers/Blind Flanges

The existing dampers controlling the direction of the exhaust flow going through the waste heat boiler or the by-pass duct can still be used, but the existing dampers are primarily used for control/regulation of exhaust flow through the WHR boilers and not completely for closing of the flow to the by-pass, which means it is likely to have a small amount of leakage.

The dampers must be inspected. In case the existing damper is not in a satisfactory condition, they will be refurbished/replaced to avoid too much leakage of exhaust gas by-passing the catalysts.

BWSC proposal contains the design and steel structure for the cut of the inlet and outlet ducts and installation of manually operated blind flanges, so the engines can be in operation during the work with removal of existing boilers and installation of the new CO-oxidation reactors.

The catalyst last minimum two year and can be replaced during normal scheduled maintenance. It will also be possible to replace the catalytic cassettes on the engine in operation, and the above described blind flanges shall be used. Thereby, the exhaust gas can be led trough the by-pass duct (without CO reduction) to the stack, and the catalyst will be completely isolated, cooled down and the catalytic cassettes can then be exchanged.

### Closing remarks

MEC is via Local sub-contractor responsible for cleaning all HFO tanks before the conversion of the tanks from HFO to ULSDO operation. The timing, sequence and quality for cleaning to be agreed with BWSC

MEC is via Local sub-contractor responsible for cleaning existing boiler effluent tank, the timing, sequence and quality for cleaning to be agreed with BWSC.



## GUAM POWER AUTHORITY

### Residual Fuel Oil No. 6 (RFO) Receiving Report

Report Period : Jan 2020

Date Received or Sampled	Type of Fuel	Source	wt. % Sulfur	Volume Transferred (barrels)	Receiving Tank Before Transfer			Receiving	
					Tank No.	wt. % Sulfur	Volume (barrels)	Tank No.	
1/31/2020	LSFO	No shipment							
1/31/2020	HSFO	No shipment							



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LA-2012-229A

## CERTIFICATE OF ANALYSIS

**Customer:** Mobil Oil Guam Inc.  
**Address:** Mobil Cabras  
**Product:** ULSD  
**Source:** Tank 28  
**Type of Sample:** UML & Composite  
**Container:** 4 x 1 Quart  
**Date of Sample:** January 23, 2020

**Activity** After Pipeline Transfer  
from TTGI Tank 1908 to Tank 28  
**ITS Job No.:** 5418-2001  
**Lab. Reference No.:** 0036-01/20 PLG  
**Sample No.:** SG-0036A/D-20/10  
**Date Received:** January 23, 2020  
**Date Tested:** January 23-24, 2020  
**Date Reported:** January 24, 2020

The above sample was tested in accordance with the test method(s) stipulated, with the result(s) as follows:-

TEST	METHOD	UNIT	SPECIFICATION LIMITS	RESULT
Appearance @ ambient temp	Visual	-	Report	Clear & Bright
Density @ 15°C	ASTM D 1298	Kg/m <sup>3</sup>	820.0min - 850.0max	831.7
Gravity, API @ 60°F	ASTM D 1298	-	35.0min - 41.0max	38.6
Flash Point	ASTM D 93	°C	52.0min	87.0
Conductivity	ASTM D 2624	pS/m	25min	260
Sulfur	ASTM D 7039	ppm (ug/g)	15max	6.7
Carbon Residue on 10% distillation residue	ASTM D 4530	% mass	0.20 max	0.01
Aromaticity	ASTM D 1319	% vol	35 max	18.5
Guaranteed Heating Value (HHV)	ASTM D 240	MMBTU / bbl	5.70 min	5.77
Lubricity, HFRR @ 60 °C	ASTM D 6079	Micron	480 max	350
Water & Sediment	ASTM D 2709	% vol	0.05 max	< 0.01
Distillation Temp, °C 90% Recovered	ASTM D 86	% vol	282 min - 360 max	331.6
Kinematic Viscosity	ASTM D 445	mm <sup>2</sup> at 40°C	1.9 min - 4.1 max	3.273
Ash	ASTM D 482	% mass	0.01 max	0.0005
Copper Strip Corrosion Rating (3hrs min at 50°C)	ASTM D 130	-	1 max	1A
Cetane Index	ASTM D 4737	-	48.0 min	55.9
Color	ASTM D 1500	ASTM	2.0 max	0.5
Strong Acid No.	ASTM D 974	mgKOH/g	NIL	NIL
Total Acid No.	ASTM D 974	mgKOH/g	0.50 max	<0.02
Stability (Oxidation), 16Hrs	ASTM D 2274	mg/L	25 Max	5.4

Remarks: The samples were taken by Intertek surveyors. Specifications as per Product Quality Specifications stated under IFB GPA-029-14.

Intertek Testing Services Guam

Norman M. Quibuyen  
Laboratory Operations



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FORM: ITSLAB-47A  
REV: 04; 06/26/17





## Certificate of Analysis

*\*Below tests are based on GPA Specification*

MOBIL OIL GUAM, INC.  
642 East Marine Corps Drive,  
Hagatna, Guam 96910

CLIENT:	MOBIL OIL GUAM, INC.	SGS ORDER NO.:	304002
LOCATION:	MOGI - CABRAS	SGS JOB ORDER NO.:	GO20-00016
PRODUCT DESCRIPTION:	Ultra Low Sulfur Diesel - ULSD	VESSEL:	MT STI MAYFAIR M-661
SAMPLE SOURCE:	Tank 28 - After Discharge	ACTIVITY:	16-Jan-20
SAMPLE TYPE:	UML - Composite	RECEIVED:	16-Jan-20
SAMPLED:	16-Jan-20	ANALYSED:	16-Jan-20
SAMPLED BY:	SGS	REPORTED:	17-Jan-20

*Above sample(s) were tested in accordance to the stipulated method(s) below, and results obtained are as followed:*

TEST PARAMETERS	METHODS	UNITS	SPECIFICATION LIMITS	RESULTS
Appearance @ ambient temp	Visual	-	Report	C/B
Color	ASTM D1500	ASTM	2.0 Max	L0.5
Density @ 15°C	ASTM D4052	kg/m3	820.0 – 850.0	831.3
Gravity, API @ 60 °F	ASTM D4052	-	35.0 – 41.0	38.6
Flash Point	ASTM D93	°C	52.0 Min	87
Sulfur	ASTM D5453	ppm	15 Max	6.8
Conductivity	ASTM D2624	pS/m	25 Min	301
Water & Sediment	ASTM D2709	vol%	0.050 Max	<0.01
Kinematic Viscosity	ASTM D445	mm2 @ 40C°	1.9 – 4.1	3.270
Ash	ASTM D482	%mass	0.01 Max	0.0010
Copper Strip Corrosion Rating (3 hrs min at 50 °C)	ASTM D130	-	1 Max	1A
Distillation Temp, °C 90%, recovered	ASTM D86	%vol	282 – 360	332.2
Cetane Index	ASTM D4737	-	46.0 Min	59.7
Aromaticity	ASTM D1319	vol%	35 Max	16.3
Ramsbottom Carbon Residue on 10% distillation residue	ASTM D4530	% mass	0.20 Max	0.01
Strong Acid Number	ASTM D974	mgKOH/g	NIL	NIL
Total Acid Number	ASTM D974	mgKOH/g	0.5 Max	0.006
Guaranteed Heating Value (HHV)	ASTM D240	MMBTU/bbl	5.70 Min	5.75
Lubricity, HFRR @ 60°C	ASTM D6079	µm	460 Max	363
Stability (Oxidation), 16Hrs	ASTM D2274	mg/L	25 Max	6.9
** End of Analytical Results **				

AUTHORIZED SIGNATORY

**Kristine Carol Mejia**  
Laboratory QA/QC Analyst





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LA-2012-229A

## CERTIFICATE OF ANALYSIS

**Customer:** IP & E Guam  
**Address:** Tamuning Guam  
**Product:** ULSD  
**Source:** Tank 1925  
**Container:** 4 x 1 Quart  
**Type Of Sample:** Composite of UML

**Reference:** 0016A-01/20-PLG  
**Sample No.:** SG-0016A/D-01/20  
**Date Sampled:** January 06, 2020  
**Date Received:** January 06, 2020  
**Date Tested:** January 07-08/18, 2020  
**Date Reported:** January 20, 2020

The above sample was tested in accordance with the test method(s) stipulated, with the result(s) as follows:-

TEST	METHOD	UNIT	SPECIFICATION	RESULTS
Haze Rating	ASTM D4176	-	1 max	1
Density @ 15°C	ASTM D4052	kg/m³	820.0 min - 850.0 max	835.0
Colour, ASTM	ASTM D1500	-	2.0 max	0.5
Cetane Index Number (Calc.)	ASTM D976	-	46.0 min	54.7
Viscosity, Kinematic @ 40°C	ASTM D445	cSt	1.9 min - 4.1 max	3.052
Sulfur Content	ASTM D7039	mg/kg	14 max	7.4
Corrosion, copper strip: 3hrs @ 50°C	ASTM D130	-	1 max	1A
Carbon Residue, Micro (10% Bottom)	ASTM D4530	wt %	0.20 max	0.01
Water & Sediment by Centrifuge	ASTM D2709	vol %	0.050 max	<0.01
Ash Content	ASTM D482	wt %	0.01 max	0.0003
Flash Point, PMCC	ASTM D93	°C	60.0 min	78.0
Strong Acid Number	ASTM D974	mgKOH/g	NIL	NIL
Total Acid Number	ASTM D974	mgKOH/g	0.20 max	0.01
Distillation Temp. 90% Recovered	ASTM D86	°C	282.0 min - 360.0 max	333.5
Appearance @ ambient temp.	Visual	-	Report	Clear / Bright
Aromaticity	ASTM D1319	vol %	35 max	23.9
Electrical Conductivity	ASTM D2624	pS/m	100 min - 600 max	134
API Gravity @ 60°F	ASTM D4052	Deg. API	35.0 min - 41.0 max	37.9
Heating Value				
HHV	ASTM D240	MMBTU / bbl	5.70 min	5.75
Oxidation Stability	ASTM D2274	mg/L	25 max	2
Lubricity, HFRR @ 60°C	ASTM D6079	µm	400 Max	322
**Polycyclic Aromatic Hydrocarbons	IP 391	% mass	11 max	2.8
**Hydrocarbon Sulfide in Liquid	IP 570A	mg/kg	2.0 max	<0.60
**Particulate Matter	ASTM D6217	mg/L	10 max	2
**Filter Blocking Tendency	IP 387	-	1.35 max	1.01
**Fatty Acid Methyl Ester	EN 14078	% vol	0.1 max	<0.05

Remarks: Sample tested as received after discharge from M/T TORM AGNES.

[\*\*] Tests performed by Intertek Singapore S/No.: 2020-MIS-002892-001 dated 18 January 2020.

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Norman M. Oubuyen  
Laboratory Operations



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## CERTIFICATE OF ANALYSIS

**Customer:** Mobil Oil Guam Inc.  
**Address:** Mobil Cabras  
**Product:** ULSD  
**Source:** Tank 28  
**Type of Sample:** UML & Composite  
**Container:** 4 x 1 Quart  
**Date of Sample:** January 03, 2020

**Activity:** After Pipeline Transfer  
from TTGI Tank 1908 to Tank 28  
**ITS Job No.:** 5396-2001  
**Lab. Reference No.:** 0007-01/20 PLG  
**Sample No.:** SG-0007A/D-20/10  
**Date Received:** January 03, 2020  
**Date Tested:** January 03-04, 2020  
**Date Reported:** January 04, 2020

The above sample was tested in accordance with the test method(s) stipulated, with the result(s) as follows:-

TEST	METHOD	UNIT	SPECIFICATION LIMITS	RESULT
Appearance @ ambient temp	Visual	-	Report	Clear & Bright
Density @ 15°C	ASTM D 1298	Kg/m <sup>3</sup>	820.0min - 850.0max	831.7
Gravity, API @ 60°F	ASTM D 1298	-	35.0min - 41.0max	38.6
Flash Point	ASTM D 93	°C	52.0min	85.0
Conductivity	ASTM D 2624	pS/m	25min	343
Sulfur	ASTM D 7039	ppm (µg/g)	15max	6.5
Carbon Residue on 10% distillation residue	ASTM D 4530	% mass	0.20 max	0.01
Aromaticity	ASTM D 1319	% vol	35 max	24.6
Guaranteed Heating Value (HHV)	ASTM D 240	MMBTU / bbl	5.70 min	5.74
Lubricity, HFRR @ 60 °C	ASTM D 6079	Micron	460 max	352
Water & Sediment	ASTM D 2709	% vol	0.05 max	< 0.01
Distillation Temp, °C 90% Recovered	ASTM D 88	% vol	282 min - 360 max	331.3
Kinematic Viscosity	ASTM D 445	mm <sup>2</sup> at 40°C	1.9 min - 4.1 max	3.195
Ash	ASTM D 482	% mass	0.01 max	0.0002
Copper Strip Corrosion Rating (3hrs min at 50°C)	ASTM D 130	-	1 max	1A
Cetane Index	ASTM D 4737	-	46.0 min	55.7
Color	ASTM D 1500	ASTM	2.0 max	L0.5
Strong Acid No.	ASTM D 974	mgKOH/g	NIL	NIL
Total Acid No.	ASTM D 974	mgKOH/g	0.50 max	<0.02
Stability (Oxidation), 16Hrs	ASTM D 2274	mg/L	25 Max	2.3

Remarks: The samples were taken by Intertek surveyors. Specifications as per Product Quality Specifications stated under IFB GPA-029-14.

Intertek Testing Services

Norman M. Quibuyen  
Laboratory Operations



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LA-2012-229A

## CERTIFICATE OF ANALYSIS

**Customer:** IP & E Guam  
**Address:** Tamuning Guam  
**Product:** ULSD  
**Source:** Tank 1925  
**Container:** 4 x 1 Quart  
**Type Of Sample:** Composite of UML

**Reference:** 0016-01/20-PLG  
**Sample No.:** SG-0016A/D-01/20  
**Date Sampled:** January 06, 2020  
**Date Received:** January 06, 2020  
**Date Tested:** January 07-08, 2020  
**Date Reported:** January 08, 2020

The above sample was tested in accordance with the test method(s) stipulated, with the result(s) as follows:-

<u>TEST</u>	<u>METHOD</u>	<u>UNIT</u>	<u>SPECIFICATION</u>	<u>RESULTS</u>
Density @ 15°C	ASTM D4052	kg/m <sup>3</sup>	820.0 min - 850.0 max	835.0
Colour, ASTM	ASTM D1500	-	2.0 max	0.5
Cetane Index Number (Calc.)	ASTM D976	-	46.0 min	54.7
Viscosity, Kinematic @ 40°C	ASTM D445	cSt	1.9 min - 4.1 max	3.052
Sulfur Content	ASTM D7039	mg/kg	15 max	7.4
Corrosion, copper strip; 3hrs @ 50°C	ASTM D130	-	1 max	1A
Carbon Residue, Micro (10% Bottom)	ASTM D4530	wt %	0.20 max	0.01
Water & Sediment by Centrifuge	ASTM D2709	vol %	0.050 max	<0.01
Ash Content	ASTM D482	wt %	0.01 max	0.0003
Flash Point, PMCC	ASTM D93	°C	52.0 min	78.0
Strong Acid Number	ASTM D974	mgKOH/g	NIL	NIL
Total Acid Number	ASTM D974	mgKOH/g	0.50 max	0.01
Distillation Temp, 90% Recovered	ASTM D86	°C	282.0 min - 360.0 max	333.5
Appearance @ ambient temp.	Visual	-	Report	Clear / Bright
Aromaticity	ASTM D1319	vol %	35 max	23.9
Electrical Conductivity	ASTM D2624	pS/m	25 min	134
API Gravity @ 60°F	ASTM D4052	Deg. API	35.0 min - 41.0 max	37.9
Heating Value				
HHV	ASTM D240	MMBTU / bbl	5.70 min	5.75
Oxidation Stability	ASTM D2274	mg/L	25 max	2
Lubricity, HFRR @ 60°C	ASTM D6079	µm	460 Max	322

Remarks: Sample tested as received after discharge from M/T TORM AGNES.

Intertek Testing Services Guam

Norman M. Quibuyen  
Laboratory Operations

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REV:04; 06/26/17

Project No.: 22296

Guam Piti CO Catalyst



Performance Data and Guarantees

16<sup>th</sup> of April 2020

## 1 Plant Main Data and Performance Guarantees

### 1.1 Performance-related Main Data

Diesel engine manufacturer	Mitsui MAN B&W
Diesel engine type	10K90MC-S
Number of engines	Two (2) pcs.
Fuel type	Ultra-Low Sulphur Diesel (ULSD)
Nominal exhaust gas flow	333,256 Nm <sup>3</sup> /h ( $\pm 15\%$ )
Nominal exhaust gas temperature	230°C

### 1.2 Performance Guarantees Reference Conditions

Performance data and guarantees are based on the plant running on Ultra-low sulphur diesel within reference fuel specification according to enclosed Certificate for Analysis from SGS and Intertek.

Performance data and guarantees are summarized below. Figures marked in bold are guaranteed.

### 1.3 Exhaust Gas Emissions

The stack exhaust gas emissions after exhaust gas abatement equipment at 100% MCR under guarantee site reference conditions, will not exceed the value stated below, based on the conditions stated.

Component	Emission (100% MCR)	Reference Conditions and Methods
CO emission	<b>&lt;23 mg/Nm<sup>3</sup> @ half-hour avg. value</b>	Raw gas emission CO content not above 100 mg/Nm <sup>3</sup> . US EPA 10 method or equivalent.

Conc. values refer to Norm m<sup>3</sup> (1013 mbar/0°C), dry at ref. O<sub>2</sub> content 15% vol.

Stated CO emission is in compliance with Code of Federal Regulations, Title 40, Part 63, Table 2a.

Pressure drop in the CO catalyst will be approx. 5 mbar.





## Division of Works - Scope of Supply

Project Name: GUAM PITI Engine unit 8 & 9 conversion from HFO to ULSDO

Project No.: 22296-8

Date: 23-04-2020

Rev.: 4

Area	Subject	Pos.	QTY	Description	Supplier		Comments
					BWSC	MEC/ Sub-contr	
Mechanical	Unit 8 & 9	1		<b>Engine Unit #8 &amp; #9 (design, supply, install)</b>			
Mechanical	Unit 8 & 9	2	60	Fuel valves	B		Conversion kit for ULSD operation
Mechanical	Unit 8 & 9	3	20	Fuel pumps	B		Conversion kit (plunger & barrel)
Mechanical	Unit 8 & 9	4		<b>Engine Unit #8 &amp; #9 incl Exhaust Gas system (design, supply, install) &amp; Misc.</b>			
Mechanical	Unit 8 & 9	5	4	DN 2800, length 860 mm compensators	B		Including installation of items
Mechanical	Unit 8 & 9	6	2	DN 2800, length 285 mm compensators	B		
Mechanical	Unit 8 & 9	7	4	DN 2800 blind flanges	B		
Mechanical	Unit 8 & 9	8	4	DN 2800 gaskets	B		
Mechanical	Unit 8 & 9	9	2	Permanent working platforms for the blindflange slide systems	B		
Mechanical	Unit 8 & 9	10	2	Permanent working platform for Oxy cat units for replacing catalyst	B		
Mechanical	Unit 8 & 9	11	2	Complete Oxy cat reactors including soot blowing system	B		
Mechanical	Unit 8 & 9	12	2	Upper hoods for the Oxy cat units	B		
Mechanical	Unit 8 & 9	13	2	Lower hoods for the Oxy cat units	B		
Mechanical	Unit 8 & 9	14	2	DN 2800 exhaust 90°C duct bend from the Oxy cat units	B		
Mechanical	Unit 8 & 9	15	2	DN 2800 exhaust duct pipe upstream to the upper hood for Oxy cat units	B		
Mechanical	Unit 8 & 9	16	2	Set insulation and cladding for all replaced/modified exhaust duct in connection with the installation of the Oxy cat units.			
Mechanical	Unit 8 & 9		2	Set insulation and cladding for the Oxy cat units			
Mechanical	Unit 8 & 9	17	2	Crane arrangement for handling catalyst on working platforms	B		
Mechanical	Unit 8 & 9	18		<b>Fuel &amp; Aux. Systems for Engine Unit #8 &amp; #9 Mechanical Pumps/Motors (design, supply, install) &amp; Misc.</b>			
Mechanical	Unit 8 & 9	19	1	Electrical Heater 450 kW with necessary valves and instruments for hot water system	B		The electrical heater is common for both engines including installation of unit.
Mechanical	Unit 8 & 9	20	1	Emulsifier unloading unit with 1 x 100% pump, capacity 15 m <sup>3</sup> /h, and necessary valves and instruments	B		The unloading unit is common for both engines including the installation.
Mechanical	Unit 8 & 9	21	2	Emulsifier dosing units, each with 2 x 100% pumps, each capacity 40 liter/h, flowmeter and necessary valves and instruments	B		One dosing unit per engine
Mechanical	Unit 8 & 9	22	2	Homogenizer units (each 2 x 149%), each with capacity 2 x 20 m <sup>3</sup> /h and necessary pipes and valves	B		Including installation
Mechanical	Unit 8 & 9	23	2	Bypass of existing 6 pcs FO Pre-Heaters	B		Including installation
Mechanical	Unit 8 & 9	24	4	FO Final Heaters to Diesel Oil Coolers, each capacity 113 kW,	B		Incl installation by cancelling connection to steam system and reconnection to LT cooling water system. 2 heaters per engine
Mechanical	Unit 8 & 9	25	4	Water Separator Units for FO storage tanks and FO service tanks, each capacity 1,5 m <sup>3</sup> /h and necessary pipes and valves	B		Including installation
Mechanical	Unit 8 & 9	26	3	Fine Filter Units (3 x 110%), each with capacity 11,5 m <sup>3</sup> /h and necessary pipes and valves	B		Requires decommissioning of existing HFO units. The mentioned decommissioning and installation included
Mechanical	Unit 8 & 9	27	1	HFO Transfer Pump	B		Delivery and Replace pump insert on one unit
Mechanical	Unit 8 & 9	28	4	HFO Supply Pump	B		Delivery and Replace pump insert on 2 units for each engine
Mechanical	Unit 8 & 9	29	4	HFO Booster Pump	B		Delivery and Replace pump insert on 2 units for each engine
Mechanical	Unit 8 & 9	30	1	Decommissioning of STG Turbine by blocking electrical and mechanical the relevant valves, regulators, breakers etc.	B		No removal of the STG unit and its auxiliary equipment, instrumentation, valves and piping
Mechanical	Unit 8 & 9	31	1	Service Air Compressor with capacity 100 Nm <sup>3</sup> /h	B		Common unit for both Oxy cat sootblowing systems including installation
Mechanical	Unit 8 & 9	32	1	Service Air - 2 m <sup>3</sup> air receiver for the Oxy cat sootblowing system	B		Common unit for both Oxy cat sootblowing systems including installation
Electrical	Unit 8 & 9	33		<b>Engine Unit #8 &amp; #9 Electrical (design, supply, install) &amp; Misc.</b>			
Electrical	Unit 8 & 9	34		Electrical installation of Oxy cat units including integration of the unit to the existing DCS system	B		



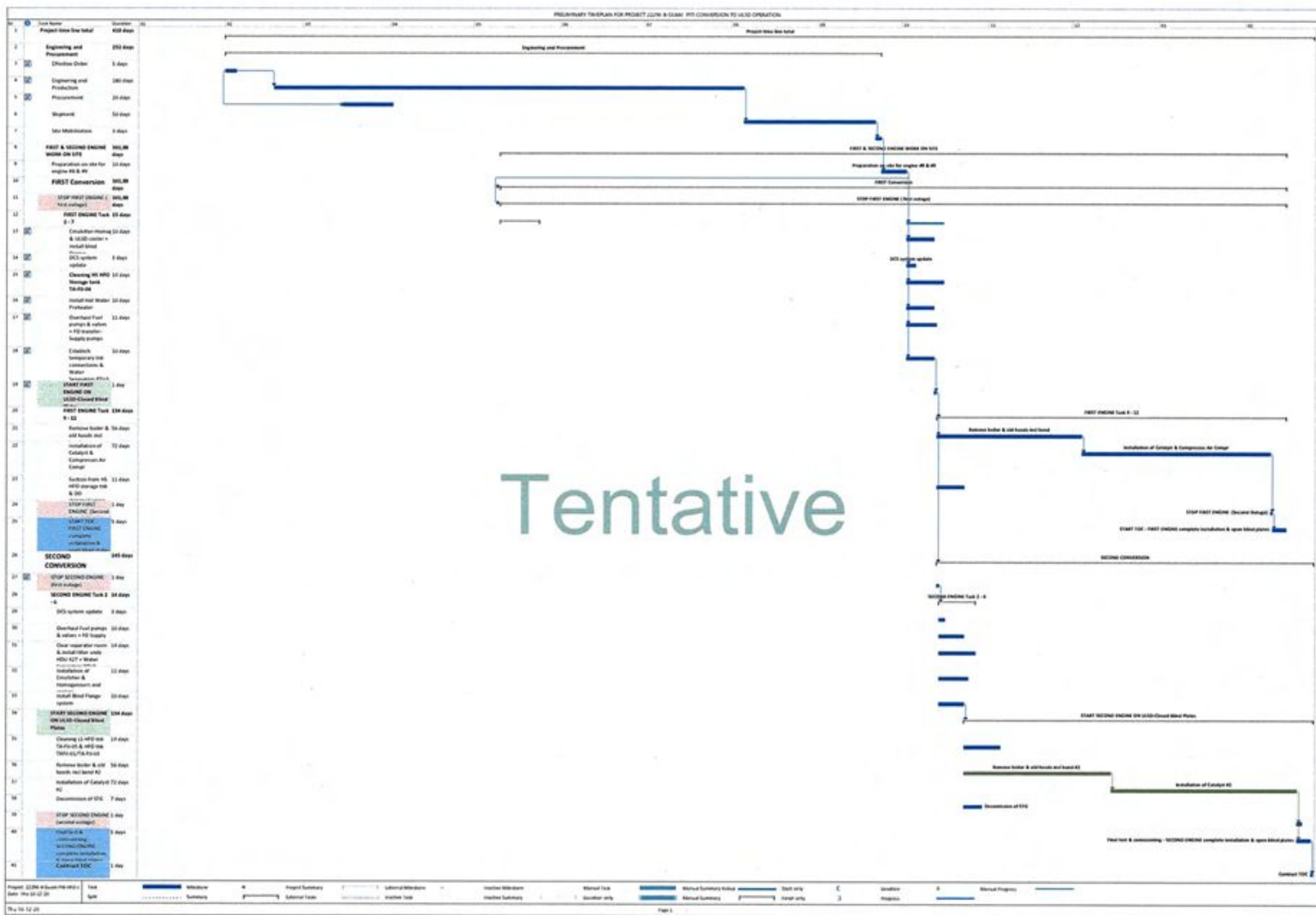
GPA Work Session - January 21, 2021 - ISSUES FOR DECISION

Electrical	Unit 8 & 9	35		Electrical installation of Sootblower system for Oxy cat and integration to existing DCS system	B		
Electrical	Unit 8 & 9	36		Electrical installation of one Compressed Air Compressor with tank for the Oxy cat sootblowing system	B		
Electrical	Unit 8 & 9	37		Electrical installation of DO cooler including integration to the existing DCS system	B		
Electrical	Unit 8 & 9	38	1	Electrical installation for 450 KW jacket cooling water preheater.	B	M	It is a precondition, that MEC provide space in existing power cabinets etc.
Electrical	Unit 8 & 9	39		Existing Motor Control Centers for Unit 8 and Unit 9, and Common Aux. Switchboards will be modified, so they can supply power to all the new electrical auxiliary equipment	B	M	It is a precondition, that MEC provide space in existing power cabinets etc.
Electrical	Unit 8 & 9	41		Outdoor lightning system will be installed on all new exterior staircases, platforms and outdoor equipment or maintenance location related to the CO oxidation reactor.	B		
General	Transportation	42		<b>Logistics</b>			
General	Transportation	43		BWSC arrange all logistics for the parts and equipment delivered by BWSC	B		CIF port of Guam (Incoterms 2010)
General	Transportation	44		<b>Transportation</b>			
General	Transportation	45		Delivery terms acc. Incoterms 2010, DAP GUAM Piti Power Station	B		
General	Transportation	46		Import and Export clearances, cost & handling		M	
General	Transportation	47		All items to be provided by MEC		M	
Training	Training	48		<b>Training</b>			
Training	Training	49		Site training, Operation		M	
Training	Training	50		Site training, Mechanical		M	
Training	Training	51		Site training, Electrical		M	
Training	Training	52		Site training, I & C		M	
Training	Training	53		Factory training		M	
Services	Tools	54		<b>Tools</b>			
Services	Tools	55		Standard tools for engine		M	
Services	Tools	57		Special tools for engine		M	
Services	Tools	58		Workshop tools for mechanical Aux.		M	
Services	Tools	59		Workshop tools for electrical Aux.		M	
Services	Tools	60		Workshop tools, I & C		M	
Services	Tools	61		Laboratory equipment		M	
Services	Tools	62		Workshop machines		M	
Services	Tools	63		Access Workshop facilities		M	
Services	Tools	64		Special tools (OEM provided specific designed equipment tool packages)		M	
Services	Tools	65		Tools for demolition and erection of WHR boiler	B	M	To be agreed BWSC and SECC scope
Services	Tools	66		Special and standard tools, workshop machines etc.		M	
Erection	Test & Commissioning	67		<b>Test &amp; Commissioning</b>			
Erection	Test & Commissioning	68		Commissioning Manager/Superintendent	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Test & Commissioning	69		Heavy Lift Supervisor	B		The amount of Supervisors/Superintendents on site will vary during the project. The HL Supervisor may not attend the TOC
Erection	Test & Commissioning	70		Mechanical Supervisor	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Test & Commissioning	71		Electrical Supervisor	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Test & Commissioning	73		I & C Supervisor	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Test & Commissioning	74		Accommodation of BWSC Superintendents/Supervisors	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Test & Commissioning	75		Testing & Commissioning of systems & components provided by BWSC	B		Systems provided by BWSC
Erection	Test & Commissioning	76		Testing & Commissioning of engines	B	M	Performance of fuel valves and fuel pumps
Erection	Test & Commissioning	77		Performance Testing of Oxycat	B		
Erection	Test & Commissioning	78		Performance test of Fuel Oil filter system	B		
Erection	Test & Commissioning	79		Performance test of Electric Jacket Cooling Water heater (400KW)	B		
Erection	Test & Commissioning	80		Performance test of Diesel Oil Cooler & Emulsifier Dosing Unit	B		
Erection	Test & Commissioning	81		Load test		M	
Erection	Test & Commissioning	82		Exhaust gas emission measurement	B		In cooperation with third party (independent company)
Erection	Supervision of Installation	83		<b>Supervision of Installation</b>	B		

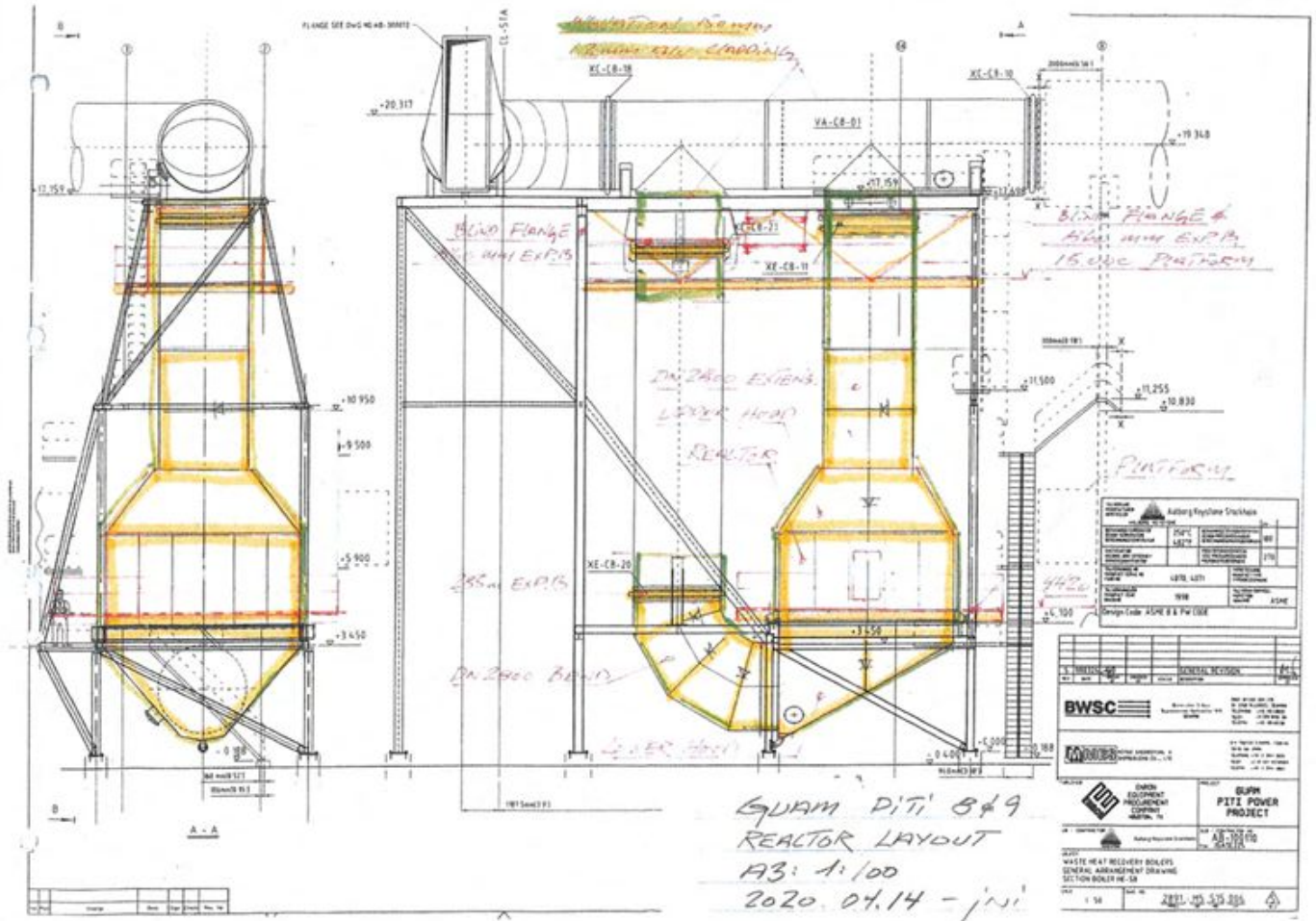
Erection	Supervision of Installation	84		Mechanical & Engine Supervisor	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Supervision of Installation	85		Electrical supervisor	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Supervision of Installation	86		Heavy Lift Supervisor	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Supervision of Installation	87		I & C Supervisor	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Supervision of Installation	89		Site Manager	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Supervision of Installation	90		Accommodation of BWSC Supervisors/Superintendent	B		The amount of Supervisors/Superintendents on site will vary during the project
Erection	Supervision of Installation	91		Temporary offices for Supervisors		M	The amount of Supervisors/Superintendents on site will vary during the project
Erection	Supervision of Installation	92		Welders		M	The amount of blue colour people will vary during the project
Erection	Supervision of Installation	93		Fitters		M	The amount of blue colour people will vary during the project
Erection	Supervision of Installation	94		Mechanics		M	The amount of blue colour people will vary during the project
Erection	Supervision of Installation	95		Electricians		M	The amount of blue colour people will vary during the project
Erection	Supervision of Installation	96		Insulators		M	The amount of blue colour people will vary during the project
Erection	Supervision of Installation	97		Riggers		M	The amount of blue colour people will vary during the project
Erection	Supervision of Installation	98		Accommodation of MEC provided staff		M	The amount of blue colour people will vary during the project
Services	Spare Parts & Consumables	99		<b>Spare Parts and Consumables that is not part of the BWSC scope</b>			
Services	Spare Parts & Consumables	100		Commissioning spare parts if needed	B		
Services	Spare Parts & Consumables	101		Standard spare parts if needed		M	
Services	Spare Parts & Consumables	102		Circulation spare parts if needed		M	
Services	Spare Parts & Consumables	103		Consumables		M	
General	Project administration	105		<b>General</b>			
General	Project administration	106		<b>Project administration</b>			
General	Project administration	107		QHSE overall management	B		
General	Project administration	108	1	Project overall management	B		
General	Project administration	109		Health and Safety Manual		M	
General	Project administration	110		Demolition & Installation time schedule	B		
General	Project administration	111		Import duty/tax/licences etc.		M	
General	Project administration	112		Sales/VAT tax and local taxes		M	
General	Project administration	113		Construction permitting, approvals, stamps, etc.		M	
General	Project administration	114		Local business permit		M	
General	Project administration	115		Environmental study/modeling		M	
General	Project administration	116		Water permit, emission permit etc.		M	
General	Project administration	117		Documents for permitting procedures		M	
General	Project administration	118		Contractors all risk insurance		M	
General	Project administration	119		General third party liability insurance	B		
General	Project administration	121		Workers and employers liability insurance	B	M	BWSC responsible for BWSC staff and SECC for local GUAM staff
General	Project administration	122		Property and liability coverage		M	
General	Project administration	123		Work Permit and VISA		M	BWSC staff for 7 months
General	Project administration	124		Hot Work permits		M	
General	Site finishing	125		Final Landscaping		M	
General	Site finishing	126		Completion of perimeter fences and gates		M	
General	Site finishing	127		Site lighting and security		M	
Erection	Installation	128		<b>Installation</b>			
Erection	Installation	129		Installation of mechanical equipment	B		Conducted by SECC provided blue collar staff and supervised by BWSC Supervisors/Superintendent

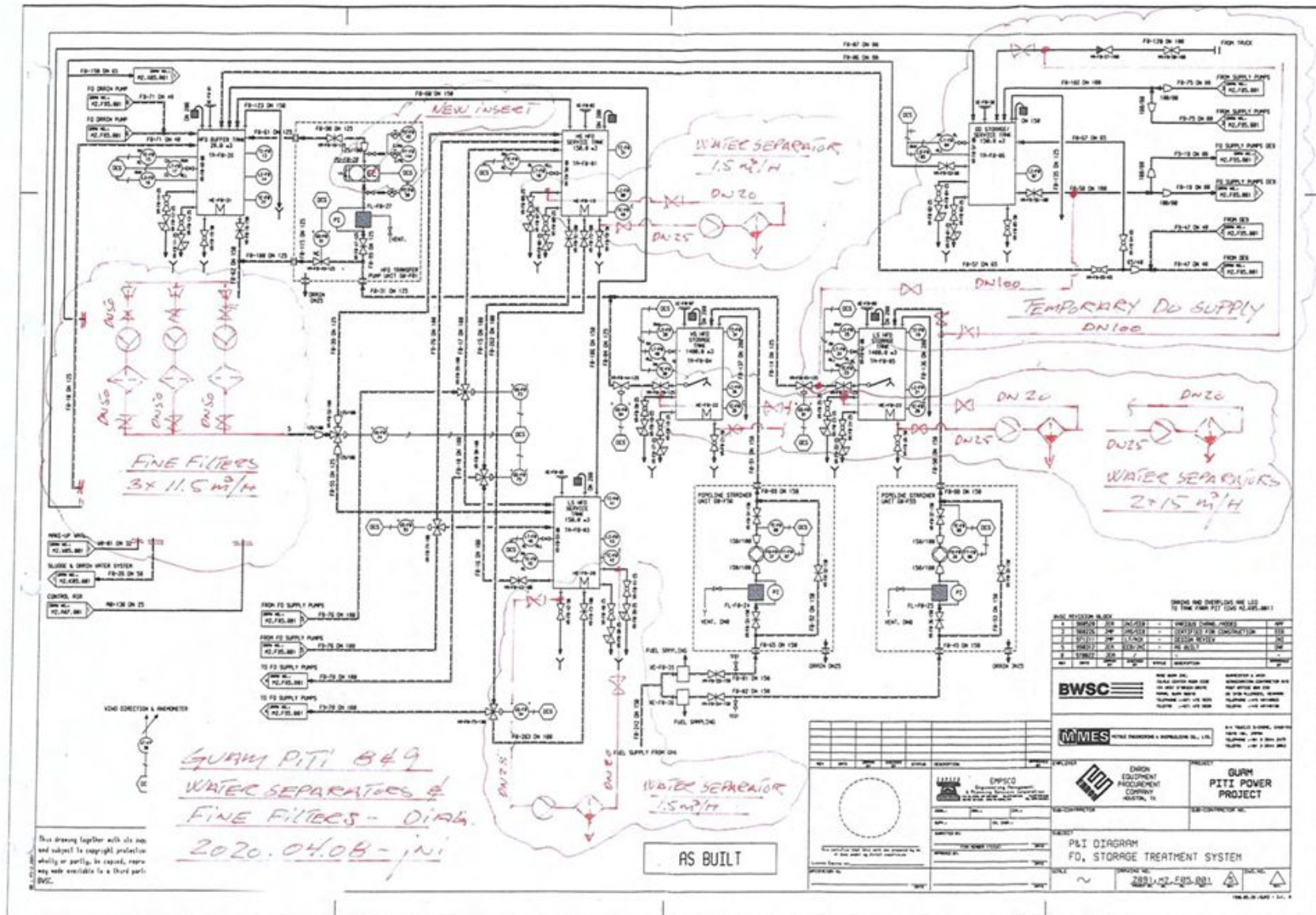
Erection	Installation	130	Installation of electrical equipment	B		Conducted by SECC provided blue collar staff and supervised by BWSC Supervisors/Superintendent
Erection	Installation	131	Mobile Crane rent (one 100ton & one 30ton) with operators		M	
Erection	Installation	132	Forklift rent minimum 3 ton with driver		M	
Erection	Installation	133	Flat truck rent (30ton) with driver		M	
Erection	Installation	134	Fully functional overhead crane available for Unit 8 & 9		M	
Erection	Installation	135	Cleaning of all mechanical and electrical equipment as well as piping and cables and buildings		M	
Erection	Installation	137	Isolation of electrical and mechanical systems		M	
Erection	Installation	138	Waste removal from site		M	
Erection	Installation	139	Scaffolding up to 18 - 19 meter working height		M	
Erection	Installation	140	Board & lodging	B	M	BWSC responsible for BWSC staff and SECC for local GUAM staff
Erection	Installation	141	Local transportation	B	M	BWSC responsible for BWSC staff and SECC for local GUAM staff
Erection	Installation	142	Mobilization	B	M	BWSC responsible for BWSC staff and SECC for local GUAM staff
Erection	Installation	143	Demobilization	B	M	BWSC responsible for BWSC staff and SECC for local GUAM staff
Engineering	Engineering	144	<b>Engineering</b>			
Engineering	Engineering	145	Basic engineering BWSC scope	B		Conducted by BWSC staff at head office
Engineering	Engineering	146	Detail engineering BWSC scope	B		Conducted by BWSC staff at head office
Engineering	Documents User Manuals	147	<b>User Manuals</b>			
Engineering	Documents User Manuals	148	Operations and maintenance manual (set)	B		For scope of supply
Engineering	Documents Detail Design	149	<b>Documents Detail Design</b>			
Engineering	Documents Detail Design	150	P&I diagrams (set)	B		For scope of supply
Engineering	Documents Detail Design	151	Electrical diagrams (set)	B		For scope of supply
Engineering	Documents Basic Design	153	<b>Documents Basic Design</b>			
Engineering	Documents Basic Design	154	Flow diagrams (set) of existing installation		M	If required
Engineering	Documents Basic Design	155	Electrical single line diagrams (set) of existing installation		M	If required
Engineering	Documents Basic Design	156	Supply of technical documentation of existing plant		M	If required
Engineering	Documents As - Build	157	<b>Documents Final Design (as - built)</b>			
Engineering	Documents As - Build	158	1 Drawings (set)	B		For scope of supply
Engineering	Documents As - Build	159	1 P&I diagrams (set)	B		For scope of supply
Engineering	Documents As - Build	160	1 Electrical diagrams (set)	B		For scope of supply
Scope	Delivery	161	Mechanical equipment provided by BWSC	B		For scope of supply
Scope	Delivery	162	Provide Switchboard for 2 pcs Cooling Water Jacket (400KW)	B		
Erection	Consumables	163	<b>Consumables</b>			
Erection	Consumables	164	Initial First Filling of Catalystator for the two Oxy cat units	B		
Erection	Consumables	165	Initial fillings of fuel oil		M	
Erection	Consumables	166	Initial fillings of lubrication oil		M	
Erection	Consumables	167	Initial fillings of chemicals for Diesel Oil treatment		M	
Erection	Consumables	169	Initial fillings of chemicals for water treatment		M	
Erection	Consumables	170	Initial fillings of fresh engine water		M	
Erection	Consumables	171	Fuel for start up-and testing		M	
Erection	Consumables	172	Water treatment chemicals for start-up and testing		M	
Erection	Consumables	173	Electrical supply during demolition and construction		M	
Erection	Consumables	174	Water supply during construction		M	
Erection	Consumables	175	Offices facilities BWSC Superintendents & Supervisors		M	
Erection	Consumables	176	Toilet, Bathroom and Changing facilities for BWSC Staff		M	
Erection	Consumables	177	Access/space for office and welfare facilities		M	
Erection	Consumables	178	Access/space for unloading/loading and storage of containers		M	
Erection	Consumables	179	WIFI/LAN Connections		M	
Erection	Consumables	180	Lay down area for BWSC Containers with tools/equipment/machinery estimate		M	5 X 20' + 20 x 40" container units
Civil Works	Civil Works	181	Building permits		M	
Civil Works	Civil Works	182	Minor modification of existing steel structures	B		WHR Boiler
Civil Works	Civil Works	183	Cleaning of site		M	
Civil Works	Civil Works	185	Site laydown area for scrapped WHR boiler and exhaust duct material and others		M	
Civil Works	Civil Works	186	Temporary Scaffolding, ladders, bridges etc. around WHR boiler - working height 18-19 meter		M	
Civil Works	Civil Works	187	Design & engineering	B		For BWSC Scope
Mechanical	80P	188	<b>Major Mechanical Items of Plant (design, supply, install) - Balance of Plant</b>			

Mechanical	BOP	189	Cleaning of HFO Buffer tank 20m <sup>3</sup>		H	Timing, sequence and quality to be agreed with BWSC
Mechanical	BOP	190	Cleaning of HFO Service tank 150 m <sup>3</sup>		H	Timing, sequence and quality to be agreed with BWSC
Mechanical	BOP	191	Cleaning of DO Service tank 150 m <sup>3</sup>		H	Timing, sequence and quality to be agreed with BWSC
Mechanical	BOP	192	Cleaning of LS Storage tank 1400 m <sup>3</sup>		H	Timing, sequence and quality to be agreed with BWSC
Mechanical	BOP	193	Cleaning of HS Storage tank 1400 m <sup>3</sup>		H	Timing, sequence and quality to be agreed with BWSC
Mechanical	BOP	194	Cleaning of existing boiler effluent tank 50 m <sup>3</sup>		H	Timing, sequence and quality to be agreed with BWSC
Instrumentation	BOP	195	<b>Major Instrumentation Items of Plant (design, supply, install) - Balance of Plant</b>			
Instrumentation	BOP	196	Instruments for monitoring the Oxycat's	B		
Instrumentation	BOP	197	Instruments for monitoring the Diesel Oil coolers	B		
Instrumentation	BOP	198	Instruments for monitoring the 400KW Jacket Coolers	B		
Instrumentation	BOP	199	Instruments for monitoring the 400KW the Oxy Cat Sootblower systems	B		
Instrumentation	BOP	201	Instruments for monitoring the new uel Oil Filtration Systems	B		
Instrumentation	BOP	202	Instruments for monitoring the Emulsifier Dosing units	B		









# PROPOSED AMENDMENT OF THE UKUDU POWER PLANT ENERGY CONVERSION AGREEMENT

January 21, 2021





# CONSENT DECREE KEY PROJECTS:

2

New 198 MW Ukudu Power Plant

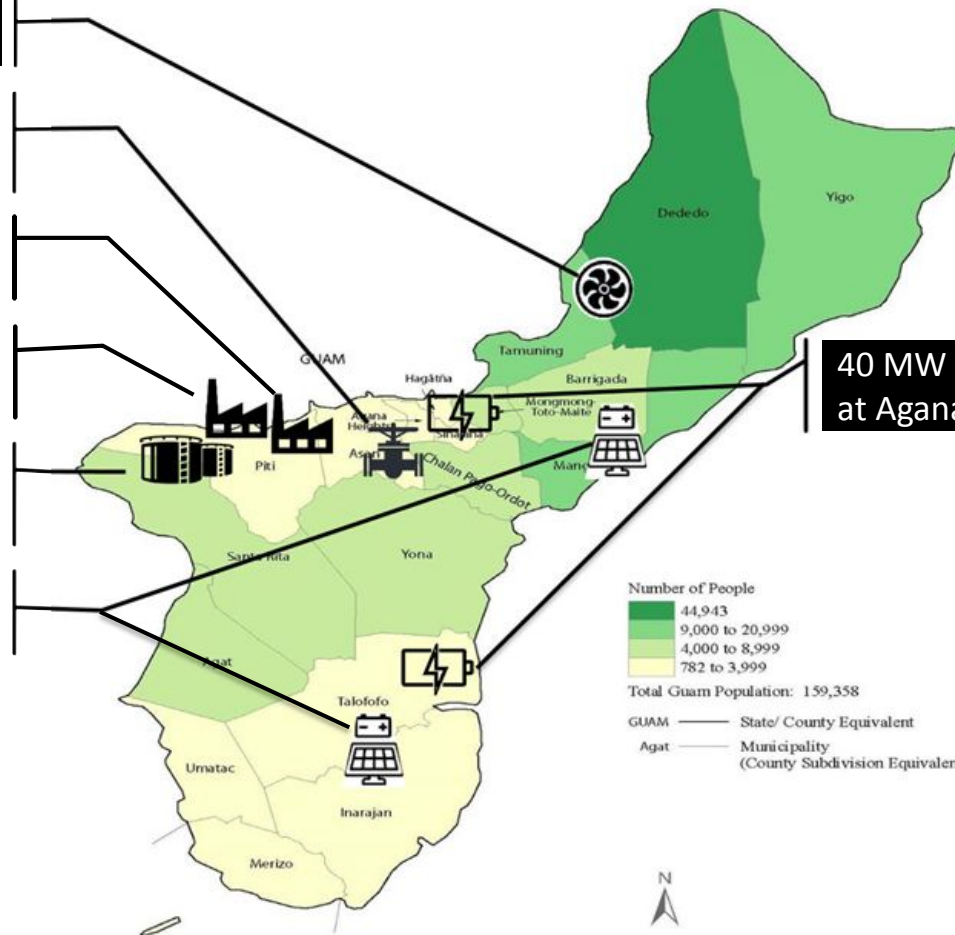
New Cabras-Piti Complex ULSD Pipeline System

Piti 8 & 9 Conversion

Cabras 1 & 2 Changes in Operation and Decommissioning

Storage Tanks 1934 and 1935 Refurbishment

100 MW of Solar Power Projects



40 MW Energy Storage System at Agaña and Talofofo



# Ukudu Power Plant Energy Conversion Agreement (ECA) Amendment



# What is KEPCO Required to Provide to GPA?

4

## Power Plant

### 198 MW

- Combined cycle power generation plant
- Dual-fired: ULSD [Oct 2022]
- Three (3) Siemens ST800 45 MW gas turbines are each connected to its own heat recovery steam generator (HRSG)
- Steam generated by HRSGs is collected in a common pipeline and is sent to a single 63 MW steam turbine
- Steam existing the steam turbine is condensed in mechanical drive cooling tower, and condensate is sent back to the HSRGs

### EFFICIENCY OF MACHINES

- Net heat rate is designed to be 6,648 Btu/kWh when operating on ULSD at 100% load based on fuel higher heating value (HHV), which translates into efficiency of 51%

### AVAILABILITY

- Guaranteed forced outage hours constant at 175.2 hours per Contract Year (2% of the total number of hours in a year)
- Guaranteed total outage hours vary between 2.02% and 6.95% per year depending on the Facility maintenance schedule
- Reserve Unit makes up for Power Plant Facility outages to the limit of its permitted operating hours



## Reserve

### 65 MW

- Twenty-six (26) high speed reciprocating engines operating on ULSD
- Provides system reserve capacity

### AVAILABILITY

- Designed for operation of no more than 500 hours per year and of no more than 300 hours of continuous operation

## BESS

### 25 MW

- Battery energy storage facility
- Peak discharge capacity of 25 MW
- Storage capacity of 30 minutes





# Why is an Amendment Necessary?

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## Air Permitting Challenges

- KEPCO pursued Major Source Permitting to meet its performance obligations
- Major source permitting would result in substantial delays which USEPA was not pleased with
- Minor source permit process results in shorter commissioning period but seemed not economically feasible for KEPCO due to higher capital investment requirements in order to meet contract performance guarantees
- Detrimental impact on GPA, Consent Decree, and system reliability, if contract is terminated or KEPCO walked away because contract was no longer economically feasible; a negotiated alternative solution was the best option
- Termination of contract not in GPA's best interest because at this point termination damages limited to \$3M; GPA would be subjected to substantial stipulated penalties under consent decree; and it would take several years to secure another contract if at all
- Best solution for both parties is to agree on a win-win solution which we did and presented here in form of an amendment



## COVID-19 Related Delays

- Availability of relevant agencies during pandemic due to closures
- Quarantine requirements
- Work inefficiencies resulting from changes in operating mode

## Environmental & Construction Permitting Challenges

- First new power plant construction in 23 years
- Resources of permitting agencies taxed
- Substantially increased scrutiny on Historical preservation and environmental permitting due to military buildup and other community concerns
- Environmental and Archeological assistance resources limited



# ECA Amendment

6

**The proposed ECA Amendment is subject to CCU and PUC approvals and USEPA general acceptance and willingness to modify consent decree**

## KEPCO REQUIREMENTS

- Permit the Ukudu plant under minor source.
- New COD date is no later than April 2024 with best efforts of November 2023.
- Construct, operate and maintain over the term of the ECA 41 MW of continuous operating diesel capacity fully dispatchable by GPA at a Cabras site to be provided.
- Plant to consist of 15 units of 2.75 MW capacity each available for continuous operations.



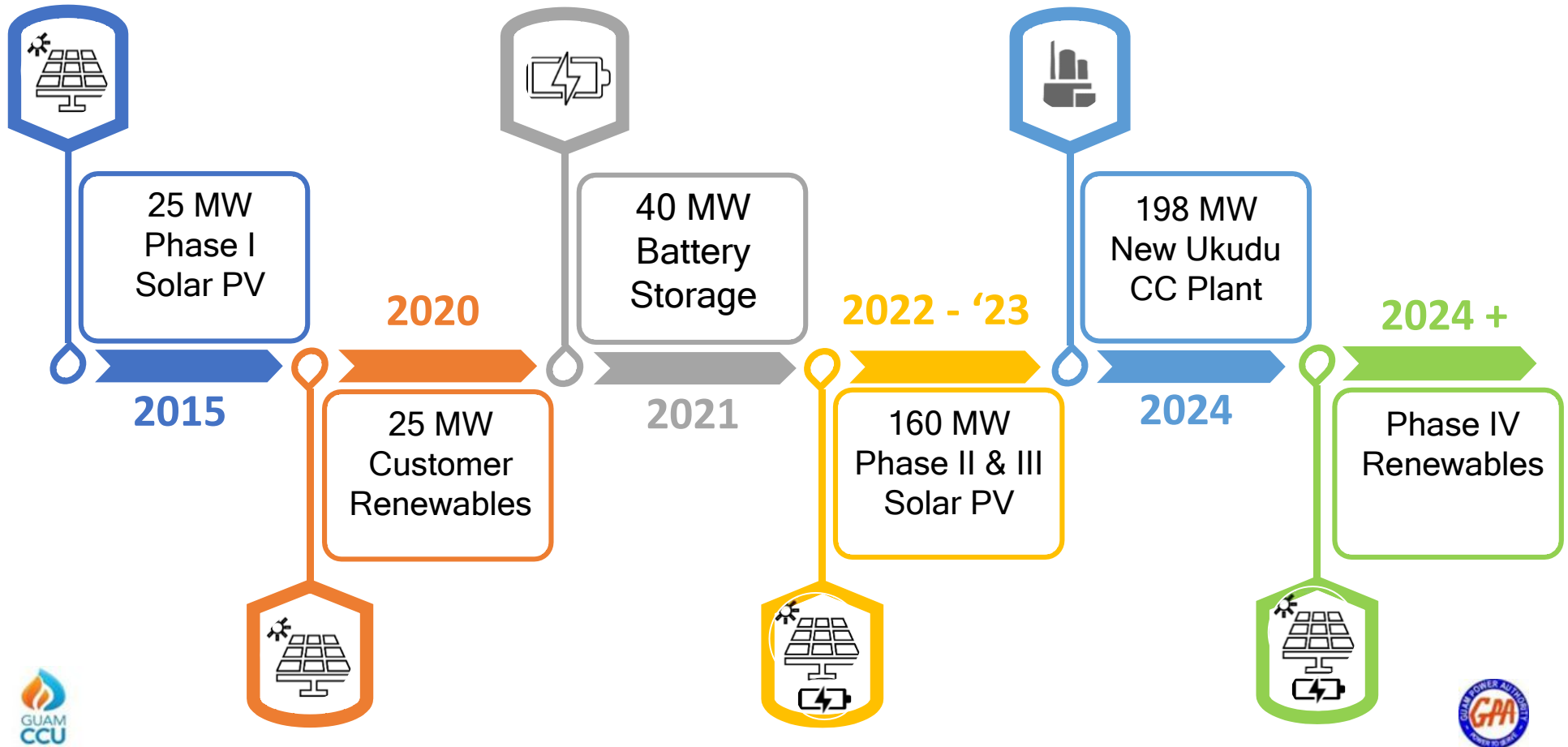
## GPA REQUIREMENTS

- Amend ECA to reflect the agreed-upon changes.
- Provide a Cabras location for siting the new 41 MW diesel plant.
- Fixed OM of \$2M annually; Variable O&M of \$0.025/kWh; GPA provides ULSD.
- Adjust plant availability from 85% to 64% on ULSD during steam turbine overhaul once every 4 years.



# Updated Milestones - Greater than 25% Renewables by Jan 2024

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# UPDATED CONSENT DECREE FUEL COST IMPACT:

8

Calendar Year	2019	2021	2022	2023	2024	2025
Annual Net Kwh	1,707,338,991	1,707,338,991	1,732,566,512	1,758,555,009	1,784,933,335	1,811,707,335
Average HSRFO/LSRFO \$/BBL	\$75.00	\$65.00	\$65.00	DISCONTINUED	DISCONTINUED	DISCONTINUED
ULSD \$/BBL	\$94.00	\$85.00	\$85.00	\$85.00	\$80.00	\$80.00
0.2% S LSRFO NEW 2023				\$80.00	\$80.00	DISCONTINUED
Net KWH Production						
Cabras 1/2	644,466,000	644,466,000	644,466,000	644,466,000	219,118,440	RETIRED
Piti 8&9 RFO	625,632,000	625,632,000	419,173,440	DISCONTINUED		
Piti 8&9 ULSD			206,458,560	625,632,000	212,714,880	92,650,502
New Ukudu Plant					837,814,722	1,300,860,000
Total Baseload	1,270,098,000	1,270,098,000	1,270,098,000	1,270,098,000	1,269,648,042	1,393,510,502
ULSD Reserve Units Production	390,044,158	390,044,158	415,271,679	300,260,176	102,088,460	5,000,000
Renewables Production						
Phase I @ \$0.215/kWh	47,196,833	47,196,833	47,196,833	47,196,833	47,196,833	47,196,833
Phase I KEPCO @ \$0.085/kWh				141,000,000	141,000,000	141,000,000
Phase II HANWAH @ \$0.085/kWh					141,000,000	141,000,000
Phase III ENGIE @ \$0.110/kWh					84,000,000	84,000,000
Total Renewables:	47,196,833	47,196,833	47,196,833	188,196,833	413,196,833	413,196,833
Total Production:	1,707,338,991	1,707,338,991	1,732,566,512	1,758,555,009	1,784,933,335	1,811,707,335
Fuel/Renewables Cost:						
Base Load	\$144,230,220	\$125,283,058	\$134,289,496	\$168,933,960	\$135,595,670	\$135,277,051
Intermediate	\$76,507,973	\$69,182,742	\$73,657,386	\$53,257,617	\$17,042,437	\$834,690
Renewables	\$10,147,319	\$10,147,319	\$10,147,319	\$22,132,319	\$43,357,319	\$43,357,319
Total Direct Fuel Cost:	\$230,885,512	\$204,613,118	\$218,094,201	\$244,323,895	\$195,995,426	\$179,469,060
Add Fuel Infrastructure Cost:	\$17,500,000	\$17,500,000	\$17,500,000	\$17,500,000	\$17,500,000	\$5,000,000
Total Fuel Cost:	\$248,385,512	\$222,113,118	\$235,594,201	\$261,823,895	\$213,495,426	\$184,469,060
Fuel Cost Savings:		-\$26,272,394	-\$12,791,311	\$13,438,383	-\$34,890,086	-\$63,916,452
\$/kWh LEAC	\$0.145	\$0.130	\$0.136	\$0.149	\$0.120	\$0.102
Fuel Oil Barrels Reduction		4,362	97,984	-58,814	-829,008	-1,035,587
% renewables	6.0%	6.0%	5.9%	14.8%	28.6%	28.1%



## COMPARISON OF PRODUCTION COST:

9

Description	MEC	Aggreko	Medium Speed	Northern CTs	TEMES 7	Cabras 41 MW
Total kW Capacity:	85,000	40,000	40,000	80,000	40,000	41,000
Annual Non-Fuel All-In Cost:	\$10,000,000	\$5,500,000	\$3,466,027	\$3,714,415	\$1,336,614	\$4,316,263
Annual Capacity Factor:	12.7%	27.9%	27.9%	13.9%	27.9%	27.2%
Annual Net kWh:	97,650,502	97,650,502	97,650,502	97,650,502	97,650,502	97,650,502
Non-Fuel \$/kWh:	\$0.102	\$0.056	\$0.035	\$0.038	\$0.014	\$0.044
Net Heat Rate kWh/Gal ULSD:	15.5	12.5	13.5	10.0	9.0	14.0
\$/BBL ULSD:	\$80.00	\$85.00	\$85.00	\$85.00	\$85.00	\$80.00
\$/kWh ULSD Fuel Cost:	\$0.12	\$0.16	\$0.15	\$0.20	\$0.22	\$0.14
<b>TOTAL PRODUCTION COST</b>	<b>\$0.2253</b>	<b>\$0.2182</b>	<b>\$0.1854</b>	<b>\$0.2404</b>	<b>\$0.2386</b>	<b>\$0.1803</b>
Age (Years):	23	6	28	28	24	0
Number of Units:	2	40	10	4	1	15
Annual Availability:	92%	95%	90%	90%	90%	95%



## Recommendation:

10

### **Approval of Resolution 2021-02 will authorize the General Manager to amend the ECA:**

- To allow KEPCO to pursue minor source air permit and commission the Ukudu plant by no later than April 2024 with best efforts of a completion by November 2023
- To allow the relocation of the standby diesel units from Ukudu site to a Cabras site near the GPA bulk fuel oil storage tank facility.
  - The diesel plant shall consist of 41 MW continuous operating capacity permitted to the maximum allowable operating hours under a minor source permit.
  - GPA will pay a fixed O&M fee of \$2,000,000 annually and a variable O&M fee of \$0.025/kWh for energy delivered to the GPA system for the term of the ECA agreement.
  - Ownership of the plant is to be transferred to GPA at that time at no cost.

This solution provides a win-win solution for both parties which would provide for the expeditious execution of the contract.







**GUAM POWER AUTHORITY**  
ATURIDÂT ILEKTRESEDÂT GUAHAN  
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## **Issues for Decision**

### **Resolution No. 2021-02:**

### **RELATIVE TO AUTHORIZATION OF UKUDU POWER PLANT ENERGY CONVERSION AGREEMENT (ECA) AMENDMENT FOR RELOCATION OF EMERGENCY DIESEL UNITS AND PURSUIT OF MINOR SOURCE AIR PERMIT**

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

Guam Power Authority (GPA) and Guam Ukudu Power (GUP) LLC signed the Energy Conversion Agreement (ECA) for the construction, operation and transfer of a 198 MW power plant to be sited on GPA owned property in Ukudu, Dededo. Guam Ukudu Power (GUP) LLC is a local company formed by the KEPCO-EWP consortium (“KEPCO-EWP”).

The relocation of the emergency diesel units will allow the Ukudu Power Plant to be permitted as a minor source air permit plant which will significantly reduce the permit process and overall construction and commissioning schedule of the new plant. This would minimize delays on the retirement of the Cabras 1&2 Power Plant as per the consent decree. The consideration for the relocation of these diesel units includes a separate O&M cost that would also provide GPA access and use of these units to support the Island-Wide Power System (IWPS) outside of any Ukudu Power Plant outages. Its efficiency and operating costs along with the Yigo Diesel Units (formerly Aggreko units) would allow for the retirement of older and costlier Power Plants.

**Where is the location?**

The site for the relocated diesel units is adjacent to the GPA bulk storage tanks in Piti.

**How much will it cost?**

GPA has negotiated for a 41MW diesel plant with improved engines for continuous operations with a fixed O&M cost of \$2,000,000 annually and a variable O&M cost of \$0.025/kWh net production when dispatched by GPA.

**When will it be completed?**

Guam Ukudu Power LLC has provided a schedule for minor source air permit path with the new COD of the Ukudu plant to be no later than April 2024 with best efforts to achieve a target COD of November 2023.

**What is its funding source?**

Revenue Funds





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

**RESOLUTION NO. 2021-02**

**RELATIVE TO AUTHORIZATION OF UKUDU POWER PLANT ENERGY CONVERSION  
AGREEMENT (ECA) AMENDMENT FOR RELOCATION OF EMERGENCY DIESEL UNITS AND  
PURSUIT OF MINOR SOURCE AIR PERMIT**

**WHEREAS**, Guam Power Authority (GPA) and Guam Ukudu Power (GUP) LLC signed the Energy Conversion Agreement (ECA) for the construction, operation and transfer of a 198 MW power plant to be sited on GPA owned property in Ukudu, Dededo; and

**WHEREAS**, GUP LLC is a local company formed by the KEPCO-EWP consortium ("KEPCO-EWP"); and

**WHEREAS**, the anticipated Commercial Operation Date (COD) of the Ukudu Power Plant was October 2022; and

**WHEREAS**, GPA expected that the new plant would be permitted under a minor source air permit application process, although not specifically noted in the RFP, which would provide the shortest timeframe to commission a new power plant; and

**WHEREAS**, to comply with bid reserve requirements, GUP LLC added 65 MW of standby generators with a maximum 500 hours of operations to the site; and

**WHEREAS**, it was determined that the emergency diesel units required to operate during Ukudu unit outages would significantly limit plant operations under a minor source permit during a scheduled 23-day steam turbine outage which occurs every four years; and

**WHEREAS**, GPA and GUP LLC attempted to negotiate a minor source permit process early in 2020 but GUP LLC noted significant estimated cost overruns causing negotiations to fail and GUP LLC pursued a major source air permit path; and

**WHEREAS**, USEPA expressed significant concerns on GUP LLC'S major source air permit path because of significant delays which would occur because of lengthy air monitoring requirements before a major source permit could be issued which would move COD past 2025; and

**WHEREAS**, USEPA encouraged GPA to work out an alternative which would permit the plant under minor source; and



31           **WHEREAS**, in August 2020 GPA and GUP LLC again initiated discussions for a minor source  
32 path and reached an agreement, **Attachment A**, which included the following:

- 33           • Permit the UKUDU Combined Cycle Plant as a minor source air permit.
- 34           • Install forty- one megawatts (41 MW) of diesel engines with continuous operation  
35           capability near the GPA Cabras Bulk Fuel Oil Storage Facility and permit the plant for  
36           maximum operational hours (~5000hrs).
- 37           • Agreed on a Fixed and Variable O&M rate to compensate for the operation and  
38           maintenance of the new diesel plant fully dispatchable anytime by GPA; and  
39

40           **WHEREAS**, a minor source air permit path would alleviate USEPA concerns on the overall  
41 permitting and construction schedule of the Ukudu Power Plant and any further delays in the  
42 retirement of the Cabras 1&2 Power Plant; and

43           **WHEREAS**, although the diesel engines are for a reduced capacity, the diesel engines are units  
44 which could be operated in excess of 500 hours to support the entire Island-Wide Power System  
45 (IWPS) and its efficiency and operating costs along with the Yigo Diesel Units (formerly Aggreko units)  
46 could allow for the eventual retirement of older units; and

47           **WHEREAS**, GPA's analysis of future generation system reliability shows that relocating the  
48 GUP LLC Diesel Plant provides significant additional value to GPA significantly increasing the peak load  
49 carrying capability of the GPA system, in addition to allowing retirements of older generating units  
50 which would reduce costs; and

51           **WHEREAS**, the proposed location of the new diesel plant eliminates costly fuel trucking cost  
52 and will have minimal interconnection costs because of its proximity to GPA's future ULSD bulk  
53 storage fuel tanks and also GPA transmission lines; and

54           **WHEREAS**, GUP LLC recently replaced its Engineering, Procurement and Construction  
55 contractor Hyundai due to delays and potential cost overrun issues with schedule uncertainty, and  
56 contracted Doosan Industries in December 2020 on a minor source path and based on the GPA  
57 August 2020 proposal; and

58           **WHEREAS**, over the past year, GUP LLC and its contractors and consultants have gained  
59 considerable experience for construction on Guam and has completed substantial work on the air  
60 permit and the Environmental Impact Assessment (EIA), which are also required for minor source  
61 permitting and supports the new schedule as achievable; and

62           **WHEREAS**, GPA would urgently seek support from air permitting agencies to prioritize the  
63 power plant work to ensure progress on the plant schedule will meet the USEPA consent decree and  
64 to minimize any further delays due to the COVID pandemic; and

**WHEREAS**, an amendment is required of the GUP LLC/GPA ECA which increases the contract cost above the GPA General Manager's approval authority; and

**WHEREAS**, GPA is in discussions with USEPA for a modification of the consent decree to reflect the proposed new power plant minor source air permit schedule and appears to be on track towards such modification.

**NOW, THEREFORE, BE IT RESOLVED, by the CONSOLIDATED COMMISSION ON UTILITIES (CCU), subject to the review and approval of the PUBLIC UTILITIES COMMISSION (PUC), as follows:**

1. The CCU authorizes GPA to amend the Ukudu Power Plant Energy Conversion Agreement (ECA) for the relocation and operation of 41MW diesel units with a fixed O&M cost of \$2,000,000 annually and a variable O&M cost of \$0.025/kWh net production when dispatched by GPA.
2. The CCU authorizes GPA to amend the ECA to require Guam Ukudu Power (GUP) LLC to pursue a minor source air permit with the new COD of the Ukudu plant to be no later than April 2024 with best efforts to achieve a target COD of November 2023.

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

**DULY and REGULARY ADOPTED AND APPROVED THIS 26<sup>th</sup> DAY of JANUARY, 2021**

**Certified by:**

**Attested by:**

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**JOSEPH T. DUENAS**

Chairperson  
Consolidated Commission on Utilities

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**MICHAEL LIMTIACO**

Secretary  
Consolidated Commission on  
Utilities

**I, Michael Limtiaco**, Secretary for the Consolidated Commission on Utilities (CCU), as evidenced by my signature above do certify as follows:

The foregoing is a full, true, and correct copy of the resolution duly adopted at a regular meeting of the members of Guam Consolidated Commission on Utilities, duly and legally held at the meeting 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: \_\_\_\_\_



RESOLUTION 2021-02  
ATTACHMENT A

**Conditions for DG Plant relocation and Minor Air Permit Acquisition for Ukudu Project**

No.	Item	Issue
1.	Site and Pre-existing Condition	<p>GPA shall lease the site for Reserve Facility at Cabras and provide the rights of way and easement of the site to Guam Ukudu Power LLC. The Pre-existing Condition and Pre-existing Condition Period in ECA shall cover the Cabras site, fuel line, power interconnection line and water line.</p> <p>Pre-existing Reserve Facility (DG Site) Condition means any artificial obstructions on, under, in, or affecting the Reserve Facility Site or any contamination (whether occurring before or after the ECA Amendment Date, but not resulting from Project Company's or Contractor's activities on the Reserve Facility Site) that could not reasonably discovered prior to the ECA Amendment Date by an experienced engineering and construction contractor using the most sophisticated devices and personnel available at the time of Reserve Facility Site investigation by such contractor but shall not, for the avoidance of doubt, include archaeological discoveries on the Reserve Facility Site.</p>
2.	Reserve Facility, DG Spec	<p>41MW (Gross) Continuous Operating Prime (COP) model shall be selected to maximize operating hours of diesel plant.</p>
3.	Commercial Operation Date	<p>Even though the COD for Facility and Reserve Facility shall be the same (FC + 29 months), however, the required construction period for Reserve Facility is EIA approval for Reserve Facility Site + 27 months. Irrespective of the Reserve Facility COD achievement, the Facility COD shall be achieved separately and the Capacity Charge shall be paid in accordance with ECA. For avoidance of doubt, payment of FOMC and VOMC for the Reserve Facility do not start until the COD for Reserve Facility is achieved.</p>

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No.	Item	Issue
4.	FOMC and VOMC for DG plant	<p>FOMC: \$2M per year VOMC: \$0.025/kWh</p> <p>Both FOMC and VOMC shall be escalated as per ECA for 25 years and start to be paid from Reserve Facility COD.</p> <p>Same condition regarding Deemed Capacity for CCPP FOMC payment in ECA shall be applied to Reserve Facility as well.</p> <p>Above charges are based on the following conditions:</p> <ul style="list-style-type: none"> <li>- The design assumption complies with GPA's requirement in the GPA proposal dated August 20, 2020</li> <li>- The finalized design assumption shall be attached later in this document</li> <li>- Transmission, Fuel line and Communication line terminal points are at the Reserve Facility Site boundary. For avoidance of doubt, communication line for SCADA and PABX between the Reserve Facility and GPA dispatch center shall be provided by GPA. Project Company is responsible for telephone and internet line for office.</li> <li>- Project company is responsible for water and sewer connections.</li> </ul>
5.	First Fill and Commissioning Fuel for DG Plant	The i) First Fill of 3-days-tank 840 m <sup>3</sup> and ii) Commissioning Fuel (ULSD) capped at 103,871 MMBtu based on 3-day Reliability Run Test shall be provided by GPA
6.	Electricity for Commissioning and Testing for DG	The electricity for commissioning and testing for DG to be provided by GPA capped at 369,375 kWh.
7.	Limitation of Annual Capacity Factor for CCPP Plant	<p>Annual Capacity Factor shall be limited to Air Permit condition.</p> <p>Currently,</p> <ul style="list-style-type: none"> <li>- 85% on both ULSD and NG operation for Contract Years without steam turbine maintenance, and</li> <li>- 58% on ULSD, 83% on NG for Contract Years with steam turbine maintenance.</li> </ul> <p>* 58%-64% capacity factor on ULSD based on the number of startup/shutdown, which is subject to GEPA's approval on equation basis permit application</p>




No.	Item	Issue
8.	ECA amendment	The items listed above are subject to GPA regulatory approvals. GPA will make best effort to obtain CCU, PUC and USEPA approvals for amendment to the ECA accommodating Minor Air Permit, relocation of the Reserve Facility and other issues by 31 Mar., 2021. The Construction Contract will be executed on Dec 17, 2020 based on Minor Air Permit and relocation of Reserve Facility.

The target COD for Facility and Reserve Facility shall be November 30, 2023. Guam Ukudu Power, LLC and GPA shall make all best efforts to reduce the projected April 2024 COD date to meet this target COD.

Acknowledged and Accepted by

Guam Power Authority



Name : John M. Benavente, P.E. – General Manager

Date : Dec 11, 2020

Guam Ukudu Power, LLC



Name : Jeong-irl Min – CEO of Guam Ukudu Power, LLC

Date : Dec. 11, 2020

**GPA PROPOSAL FOR MINOR SOURCE PATH**

**AUGUST 20, 2020**

**OBJECTIVE:**

Determine an alternative to expedite the completion of the new Ukudu Power Plant. KEPCO is proceeding on major source permitting which in GPA's opinion would delay project completion by more than 18 months. Delay of COD is not in either party's interest and is a significant issue to USEPA under the consent decree.

**Cause of Delay:**

- The permitting of the 198MW CCPP together with 65 MWs of Diesels is not practical under minor source because emissions would be substantially more than the 100 tons/year emission limitation of minor source. There will be severe limitation of CT simple cycle operations coupled with operations of the 65MW diesels whenever the 63MW steam turbine experiences a forced outage or is under its typically 23 days overhaul approximately every 4 years of operations.
- The Commercial Operations Date (COD) of October 2022 was premise on a minor source permitting process but plant capacity will be significant limited during steam turbine outages and its overhaul every four years because of significant limitation on operations of plant on combustion turbine simple cycle coupled with 65 MW of diesel capacity due to maximum emission allowed under minor source.
- Major source permitting may potentially permit plant for intended use but the permitting requirements include stringent ambient air monitoring analysis which typically takes a minimum of 1 year. Therefore, this process would likely extend COD by 18 months to 30 months.
- USEPA is quite concerned by the potential significant delay of COD and is looking to both parties to work on an alternative solution which has the plant permitted under minor source.

**GPA's PROPOSED ALTERNATIVE:**

- **Permit UKUDU Combined Cycle Power Plant (CCPP) under minor source process as follows:**
  - Permit CCPP at Ukudu site for not less than 85% capacity factor under minor source. Plant availability of CCPP would remain as per ECA but for each of the steam turbine overhaul years plant capacity factor is reduced to 85%.
  - Plant to be permitted under a 12-month rolling average which would require coordination and planning between the parties to dispatch plant as necessary in combined cycle to insure simple cycle operations is achievable during planned steam turbine outages.

- Construct, operate and maintain the 49 MW (15 units @ 3.2 MW peaking capacity and 2.75 MW continuous capacity) of diesel generators (in accordance with the draft specifications provided herein as Attachment A) at a Cabras site which would be leased to KEPCO similar to conditions of the ECA.
  - GPA to provide KEPCO the property site for the 49 MW plant within one year of this agreement.
  - GPA to approve new plant generating unit specifications including layout and plant design within 6 months of ECA amendment.
  - Units are to be equipped with remote starting capabilities for startup from GPA power system control center.
- The COD of both the CCP and the Diesel plant is to be reset to November 2023, subject to USEPA approval.
- **GPA would pay an annual fixed O&M Fee of \$2.0 M and a variable fee of \$0.025 / kWh for following:**
  - Plant Peaking Capacity Of 49 MW Gross
  - Continuous Operating Plant (COP) Capacity of 41 MW
  - KEPCO to pursue maximum permissible hours or ULSD fuel consumption under minor source
  - Plant availability 94%
- Plant to be dispatchable by GPA up to EPA approved minor source limitation.

#### **Financial Closing and Performance Bond:**


- An amendment of the ECA would be required of the parties
- The financial closing date is to be re-adjusted based on minor source permitting
- KEPCO will provide GPA a minimum of 50% (Approximately \$40M) of the performance bond amount set in ECA within 15 days after ECA amendment. The performance bond is currently due at financial closing in the amount of about \$78M. The balance of the bond to be provided at financial closing.
- All other provisions of the ECA contract remains in place.

#### **ECA Amendment Process: The following is the process for the ECA amendment.**

- KEPCO and GPA agree on proposed amendment
- GPA discusses agreement with USEPA in order to get their buy-in to the change in permit process and the proposed new COD schedule
- GPA pursues CCU and PUC approvals (typically accomplished within 1 to 2 months
- Amendment signed. Both parties work together to achieve COD date.



## Attachment A

No.	Item	Design Assumption
	Permits	KEPCO responsible for all construction and operating permits for plant and would be responsible for compliance until Plant turnover is made after 25 years. GPA will make best efforts to assist KEPCO.
A		Design Assumption
A-1	Location	As per preliminary review about location, HEC assumed the project location to reduce fuel system and transmission line as follows. 
A-2	Out of Scope	Following items are not considered in scope of supply. 1) Demolition work in existing area 2) New Transmission Line or Transmission line modification. KEPCO provides DG Substation and provides GPA 115KV terminal point for tie in of 115KV transmission line 3) ROW, Easement
A-3	MEC	MEC is not considered for site and ROW area for temp. facility
No.	Item	Design Assumption
A-4	Utility Design (Storm Water)	KEPCO Responsibility

A-5	Utility Design (Potable Water, well pump))	<b>KEPCO Responsibility</b>
A-6	Utility Design (Sewer)	<b>KEPCO Responsibility</b>
A-7	Utility Design (Oily Waste Water)	<b>KEPCO Responsibility</b>
<b>No.</b>	<b>Item</b>	<b>Design Assumption</b>
A-8	Utility Design (compressed air)	<b>KEPCO Responsibility</b>
A-9	Utility Design (Fuel Supply)	It is assumed that Diesel oil to be supplied from new ULSD pipeline. For standby, One (1) of Unloading connection point is considered. KEPCO to provide fuel oil line and valve at edge of property line for GPA to tie in supply line.
A-10	Capacity of fuel storage	Followings are assumed. 1) New fuel storage tank is not necessary 2) One day tank is considered <b>for 3-day supply</b> And each fuel tanks for DG will be installed additionally inside the container of DG for reliable operation.
A-11	Capacity of fire water tank	<b>KEPCO Responsibility</b>
A-12	Terminal point of electrical system	Terminal point of electrical system - Power Delivery Point : at cable terminal of transmission line of <b>115KV Breaker</b> - Telecommunication (to SCADA) : at cable terminal of RTU located in <b>115 kV</b> Substation Building - Communication (by PABX) : at cable terminal of PABX located in DG Control Building
A-13	Building List	<b>KEPCO Responsibility: provide adequate buildings for management, operations and maintenance and ware housing needs.</b>
A-14	Civil	
A-15	<b>115 kV</b> Substation Telecommunication to SCADA	1) <b>Subsurface(geotechnical) condition of the site is suitable for cutting and excavation without any breaker, blasting and etc.</b> 2) <b>upon agreement, GPA to pursue boring data</b>
		A RTU for <b>115 kV</b> substation telecommunication to SCADA is considered.
A-16	Communication System	PABX, PA system, LAN system, CCTV are considered for DG Power Plant.
A-17	Lighting System	<b>KEPCO Responsibility</b>

A-18	Diesel Engine	<p>Followings are design for DG</p> <ul style="list-style-type: none"> <li>- Emission Limit : Tier 4 Diesel Engine - To be permitted to maximum production under minor source</li> <li>- Diesel Engine Rating : COP (Continuous Power)</li> <li>- Gross Output : 2.75MW /unit x 15ea = 41.25 MW COP ; Peaking plant capacity 48.75 MW Gross</li> <li>- Net Power : To be confirmed at future date</li> </ul>
A-19	Control System	No integration of control system (Electrical & I&C) between CCPP in Ukudu and DG Plant in Cabras; DG to have remote starting capability and GPA will provide communications to DG remote starting terminal.
A-20	Operator	KEPCO Responsibility
A-21	Fire Fighting System	KEPCO Responsibility
A-22	Level Difference	KEPCO Responsibility
A-23	Maintenance Area	KEPCO Responsibility



## GUAM POWER AUTHORITY

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

### Issues for Decision

#### Resolution No. 2021-03

#### **Relative to Authorizing GPA Management to Procure Property Insurance for FY'2022 To FY'2024**

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

The Consolidated Commission on Utilities has determined that it is a prudent and reasonable business practice to maintain insurance coverage on GPA's assets to the extent practical. In addition, Guam Power Authority's Bond Indenture agreement requires GPA to "secure and maintain property insurance on all facilities constituting the system against risks of loss or damage to the extent that such insurance is obtainable at reasonable cost. The indenture further requires GPA to carry insurance "of a scope and nature as that usually carried in the industry.

GPA's existing Property Insurance policy including Boiler and Machinery coverage and Terrorism coverage will expire on November 1, 2021.

The Authority would like to issue its insurance bid as soon as possible in order to allow sufficient time for insurance vendors to prepare their bids. The Property insurance coverage will include boiler and machinery coverage and terrorism coverage for a three (3) year period (FY'2022 thru FY'2024) with options for two (2) additional one (1) year extensions.

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

The current property insurance cost for FY'2021 is \$5.3 million and this procurement will exceed the PUC contract review threshold.





**CONSOLIDATED COMMISSION ON UTILITIES**

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

**RESOLUTION NO. 2021-03**

**AUTHORIZING THE MANAGEMENT OF GUAM POWER AUTHORITY TO  
PROCURE PROPERTY INSURANCE FOR FY'2022 TO FY'2024**

**WHEREAS**, the Consolidated Commission on Utilities (CCU) has determined that it is a prudent and reasonable business practice to maintain insurance coverage on Guam Power Authority's (GPAs) assets to the extent practical; and

**WHEREAS**, the Guam Power Authority's Bond Indenture agreement requires GPA to "secure and maintain property insurance on all facilities constituting the system against risks of loss or damage to the extent that such insurance is obtainable at reasonable cost"; and

**WHEREAS**, the indenture further requires GPA to carry insurance "of a scope and nature as that usually carried in the industry"; and

**WHEREAS**, the contract review protocol established by the Public Utilities Commission (PUC) requires that all contracts in excess of \$1.5 million be authorized by the PUC in advance of the procurement; and

**WHEREAS**, the current property insurance cost for FY'2021 is \$5.3 million and this procurement will exceed the PUC contract review threshold; and

**WHEREAS**, GPA's existing Property Insurance policy including Boiler and Machinery coverage and Terrorism coverage will expire on November 1, 2021; and

**WHEREAS**, GPA desires to issue its insurance Multi-Step Bid as soon as possible in order to allow sufficient time for insurance vendors to prepare their bid; and

**WHEREAS**, the term of the insurance bid being requested will be for a three (3) year period (FY'2022 thru FY'2024) with options for two (2) additional one (1) year extensions.; and

**NOW, THEREFORE, BE IT RESOLVED, by the CONSOLIDATED COMMISSION ON UTILITIES (CCU), subject to the review and approval of the PUBLIC UTILITIES COMMISSION (PUC), as follows:**

1. GPA General Manager is authorized to issue a Multi-Step Bid for property insurance coverage to include boiler and machinery coverage and terrorism coverage for a three (3) year period (FY'2022 thru FY'2024) with options for two (2) additional one (1) year extensions.
2. The proposed contract resulting from the Multi-Step Bid would require CCU approval.

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

**DULY AND REGULARLY ADOPTED AND APPROVED THIS 26<sup>TH</sup> DAY OF JANUARY 2021.**

Certified by:

Attested by:

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

\_\_\_\_\_  
**MICHAEL T. LIMTIACO**

Chairperson

Secretary

Consolidated Commission on Utilities

Consolidated Commission on Utilities

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

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

Ayes: \_\_\_\_\_  
Nays: \_\_\_\_\_  
Abstentions: \_\_\_\_\_  
Absent: \_\_\_\_\_

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**GUAM POWER AUTHORITY**  
**ATURIDAT ILEKTRESEDAT GUAHAN**  
**P.O. BOX 2977 HAGATNA, GUAM U.S.A. 96932-2977**

**PROPERTY INSURANCE BID**

Ladies and Gentlemen:

The Guam Power Authority (“GPA”) invites qualified insurance, reinsurance intermediaries and underwriters to submit their credentials for the placement and servicing of the GPA’s property insurance program for the term November 1, 2021 to November 1, 2024. The current contract term of the incumbent insurance, reinsurance intermediaries and underwriters will expire on October 31, 2021. This tender is open to qualified incumbent and non-incumbent insurance and reinsurance entities.

Insurance services will be for a three-year term with two one-year option and insurance policies may be written for a fixed three-year term or the standard one-year policy with annual renewals.

GPA is looking for Property, Boiler & Machinery, Catastrophe, Terrorism, Business Interruption and Cyber liability coverage.

The deadline to submit proposals is **2:30 p.m. June 23, 2021** to give GPA enough time for discussion and negotiations to meet GPA target selection deadline of July 9, 2021. GPA is undertaking this procurement through the multi-step bidding process.

Please convey your questions and inquiries in writing to GPA no later than **May 19, 2021** so that you may have proper responses in time for the **2:30 p.m. June 23, 2021** submittal deadline.

Please submit your bid according to the detailed instructions and requirements herein; types of insurance underwriting information as set forth in the Appendices thereto.

Thank you for your interest.

Sincerely,

John Benavente  
General Manager

DUE: **June 23, 2021 (2:30 p.m.)**

**\*\*\* PRICE PROPOSAL MUST BE SUBMITTED IN A SEPARATE  
SEALED ENVELOPE MARKED “PRICE PROPOSAL.”**

TO: GENERAL MANAGER, GUAM POWER AUTHORITY

RE: PROPOSAL PREMIUMS AND COVERAGE

This transmittal sheet serves only as index of proposals more fully described in the attached documents. Please complete with your bid price.

Coverages	Standard Annual Premium	or Fixed Three-Year Coverage (Annual Premium)
Property (Policy limit \$200 Million)	\$ _____	\$ _____
-Terrorism (\$200 million limit)		
-Business Interruption (\$5 million sublimit)		
Cyber Liability	\$ _____	\$ _____
<b>Total</b>	\$ _____	\$ _____
<b>Optional:</b>		
Optional coverage: _____	\$ _____	\$ _____
Optional coverage: _____	\$ _____	\$ _____

Bidder:

Signed by: \_\_\_\_\_  
(Print Name/Title)

\_\_\_\_\_  
Authorized Signatory of Bidder

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

Telephone No.: \_\_\_\_\_ E-mail: \_\_\_\_\_

#### OVERVIEW: THE GUAM POWER AUTHORITY

The Guam Power Authority (The Authority) was created in 1968 as a public corporation and autonomous instrumentality of the Government of Guam. Since that time the Authority has maintained and expanded the island wide power system on Guam. The Authority now has 420 megawatts of generation capacity, 663 miles of transmission and distribution lines, 29 substations, \$1 billion in assets, and \$333 million in annual revenues. GPA currently serves approximately 51,000 customers with the U.S. Navy being the largest representing about 17% of the revenues.

The Guam Power Authority was changed into a public corporation of the Government of Guam in 2002 and is governed by a five-member publicly elected Commission – the Consolidated Commission on Utilities (CCU). The CCU retains contracting authority, establishes policies and has control over the selection of top management of the Authority.

The Authority is regulated by the Guam Public Utilities Commission – a rate setting body made up of Commissioners appointed by the Governor of Guam. The PUC has established rules of operation that are similar to those of other jurisdictions within the United States. The PUC has broad regulatory authority over GPA including approval of any contracts that might have an impact on GPA's rates.

#### SECTION I: INTRODUCTION:

The Guam Power Authority (GPA), hereinafter referred to as GPA, invites qualified insurance, reinsurance intermediaries, carriers and underwriters, hereinafter referred to as Bidder(s), to participate in a Multi-Step Bid (MSB) for Property Insurance Coverage. Minimum Property Insurance coverage specifications are described later in this MSB.

The bidder shall be responsible, at a minimum, for the following services:

- Respond to e-mails and voice mails within 24 hours.
- Provide certificates of insurance within 3 business days.
- Provide notice of claims to underwriters (carriers) and facilitate claims communication in coordination with GPA and underwriters (carriers).
- All other services deemed necessary by GPA.

GPA is hereby inviting bids for Property insurance contracts (policies) on a long-term basis (e.g., three years) with a term to commence November 1, 2021 to November 1, 2024. GPA understands that most insurance policies have 12-month terms, however three-year policy is preferred. GPA fully expects to stay with the selected insurance program for at least three years and renewing on an annual basis if needed.

The Technical and Price Proposals are due on or before the Cut-off Date of Receipt of Proposals which is **2:30 p.m., June 23, 2021.**

The bid evaluation shall be a two-step process. Step one will involve a Technical Proposal that consists of bidder qualifications and insurance coverage offered. This will allow GPA to establish a Qualified Bidders List (QBL). Step two will involve the evaluation of the Price Proposal (Priced Offers) from the Bidders identified on the QBL.

**STEP ONE: TECHNICAL OR QUALITATIVE PROPOSALS**

Interested bidders at minimum should provide the following information:

Bidder's Firm information including:

- Years in business
- Total property and total liability insurance premiums placed annually
- Ownership legal structure and ownership details
- Office location that would serve GPA
- Claims, loss control/engineering and other core services performed
- List of Power Generation accounts serviced by the account team
- Key personnel who would be placing and servicing the GPA's program
- Biography, certificates, designations, and licenses of account team and key personnel
- Other information that the respective firm believes GPA should consider
- Any key alignments with other insurance entity or intermediary (retail, wholesale, reinsurance, Lloyds, etc.)
- Bidder's experience with electric utilities or Energy Companies, especially those with hurricane or earthquake exposure and boiler & machinery exposure.
- Copies of currently active Licenses of all intermediaries
- Primary (Fronting) Carriers' or underwriters' Certificate of Authority to Transact business on Guam
- Most recent AM Best rating for Primary (Fronting) Carrier

Insurance coverage terms including but not limited to:

- Full policy forms and applicable endorsements
- If multi-year agreements, endorsements, continuity credits, or similar pricing mechanisms are used to offer reduced pricing; a detailed explanation of situations that may lead to any applicable penalties or increases of premium during the policy term must be attached.
- Explanation of any and all exceptions to the minimum coverage specifications
- Explanation of any and all enhancements exceeding minimum specifications
- Explanation of any and all coverage deficiencies not meeting minimum coverage specifications
- Specifically noting which requested coverage enhancements have been achieved, which cannot be achieved and, if applicable, detail any additional enhancements that were obtained.
- Fronting carrier or Primary insurers must be rated A- or better by AM Best with minimum financial size of IX or greater.
- Identification of Lead markets utilized to achieve the 70% commitment or market support.
- This insurance shall be governed by and construed in accordance with the laws of The Territory of Guam and the exclusive jurisdiction of the Territory of Guam courts. Should the policy require an arbitration clause then the seat of arbitration shall be Guam.
- Premium pricing should not be included in the Technical and Qualitative proposal, and should be separately packaged and submitted with the "Price Proposal".

**STEP TWO: PRICE PROPOSALS**

- All Premiums and optional coverage pricing must be submitted on the format outlined in this MSB. and must be submitted in a separate sealed envelope marked "Price Proposal"
- Price Proposal format as outlined in this bid must be used, and Price Proposal must be signed by person authorized to bind contracts on behalf of bidder.



- If multi-year agreements, endorsements, continuity credits, or similar pricing mechanisms is used to offer reduced pricing; a detailed explanation of situations that may lead to any applicable penalties or increases of premium during the policy term must be attached.

Price proposals from unqualified Bidders shall be returned, unopened, after the Technical Proposal evaluation. GPA will perform a comprehensive evaluation of each price proposal submitted from the QBL and select the BIDDER with the best proposal. If the selected bidder cannot bind the terms as proposed within GPA's timeframe, at any time and its sole discretion GPA reserves the right to:

- Go to the next BIDDER or
- Cancel the bid

**Table 1:** Bid Milestones indicate the projected start and end dates for milestones in the Bid Process. GPA reserves the right to change the Bid Milestones at any time and at its sole discretion. All changes to the Bid Milestones shall be communicated to all bidders via an Amendment or Official Correspondence from GPA. It is the sole responsibility of the bidder to promptly register for the MSB at GPA and provide accurate correspondence addresses and email addresses and to check promptly for any updates to the bid or the Bid Milestones.

**Table 1: Bid Milestones**

Bid Process Milestones		From Date	To Date
<b>Announcement:</b>	Bid Announcement	3/18/2021	3/25/2021
	Bid Documents Available	3/18/2021	6/08/2021
<b>Optional Facility Tour/Walkthrough for Safety and Engineering personnel.</b>		<b>TBD upon request</b>	
Submit Questions		3/18/2021	5/19/2021
<b>Cut Off Date for Receipt of Questions</b>		<b>5/19/2021, 4:00 P.M.</b>	
GPA Review and Answer Questions		3/18/2021	6/01/2021
<b>Cut Off Date for Receipt of Proposals (BOTH Technical and Price Proposals)</b>		<b>6/23/2021 2:30 P.M.</b>	
<b>EVALUATION Step One:</b>	Technical Proposal (Bid) Evaluation	7/06/2021	7/09/2021
	Determine & Notify Qualified Bidders	7/12/2021	7/13/2021
<b>EVALUATION Step Two:</b>	Opening of Price Proposals	<b>7/21/2021</b>	
	Evaluation of Price Proposal	7/21/2021	7/23/2021
	Evaluation Approval	7/26/2021	7/27/2021
	Notification of Qualified Bidder	7/28/2021	7/30/2021
Contract Finalization		TBD	TBD
Contract Approval & Award		TBD	TBD
Contract Signing		TBD	
Contract Mobilization		TBD	TBD

Insurance Policy Inception Date	11/01/2021
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## SECTION II: INSTRUCTIONS AND PROCEDURES FOR BIDDERS:

### 1. INTRODUCTION

This is a multi-step bid procurement. The Technical and Price Proposals should both be submitted on or before the Cut-off Date of Receipt of Proposals, **2:30 p.m., June 23, 2021**. In Step One, only the submitted Technical Proposals will be evaluated. Bidders whose qualifications and technical proposal have been satisfied will be qualified for Step Two. In Step Two, the Bidder with the best proposal will be considered for award.

### 2. TIME AND SCHEDULE

The deadline for the submission of bids is **June 23, 2021 at 2:30 p.m.** One (1) Original and five (5) copies of all responsive materials must be received by GPA (not postmarked) no later than that date and hour. It is advisable to hand deliver or use courier services to expedite delivery of your bid, as Guam is served by several such courier services. It is bidder's responsibility to ensure the bid is received as required above. Late bids will not be considered.

### 3. PREPARATION AND SUBMISSION OF PROPOSALS

Envelopes containing proposals shall be sealed and marked on the face with the name and address of the Bidder, the Proposal Number and the time and date of submission. Prices should be in a separately sealed envelope. Telegraphic proposals will not be considered, nor will modifications by telegraph of proposals already submitted be considered. Proposals shall be delivered and received at the place of opening on or before the opening date and time. Proposals received through the mail will not be accepted if such mail is received at the address showing after the submission date and time. Proposals will not be opened publicly.

All submittals must strictly conform to the Multi Step Bid rules and any addenda.

One (1) Original and five (5) copies of each proposal must be submitted including all addenda, if any. Any and all documentation (proposed insurance policy forms and endorsements) will assist towards Bidder's evaluation and must be furnished with each proposal.

The proposal must be submitted before **June 23, 2021 at 2:30 p.m.** in a sealed envelope indicating the MSB number and addressed as follows:

TO: Guam Power Authority  
GPWA Procurement Office  
Gloria B. Nelson Public Service Building  
688 Route 15  
1<sup>st</sup> Floor, Room 101  
Fadian, Guam 96913

Attn: Jamie L.C. Pangelinan  
Supply Management Administration

Examination of MSB Document: Bidder shall examine the MSB Documents to inform themselves of all conditions and requirements for the execution of the proposed work. Ignorance on the part of Bidder of any part of the MSB will in no way relieve him/her of the obligation and responsibly assumed under the Contract.

Familiarity with Laws: Bidder is assumed to be familiar with Federal and Local laws, ordinances, rules and regulations that in any manner affect the work. Ignorance on the part of Bidder of any part of the MSB will in no way relieve him/her of the obligation and responsibly assumed under the Contract.

3. EXPLANATION TO BIDDERS

No oral explanation regarding the meaning of the specifications will be made and no oral instructions will be given before the award of the proposal. Discrepancies, omissions, or doubts as to the meaning of the specifications must be communicated in writing to the named procurement contact individual of the Guam Power Authority for interpretation. Bidder should act promptly and allow sufficient time for a reply to reach them before the submission of their proposals. Interpretation, if required, shall be made in the form of an amendment to the specifications, which will be forwarded to all prospective Bidders, and its receipt by the Bidder should be acknowledged on the proposal form. All questions, questions, queries should be received by GPA no later than the **cutoff date for the receipt of questions 5/19/2021 at 4:00 p.m.** Submit written queries, questions, and requests for clarification to:

TO: Guam Power Authority  
GPWA Procurement Office  
Gloria B. Nelson Public Service Building  
688 Route 15  
1<sup>st</sup> Floor, Room 101  
Fadian, Guam 96913

Attn: Jamie L.C. Pangelinan  
Supply Management Administration

Email: jcpangelinan@gpagwa.com

4. CLARIFICATION ON MULTI STEP BID

Each Bidder must carefully examine the MSB and all addenda. If any Bidder (a) finds any discrepancies, omission or ambiguities in the MSB documents, (b) is uncertain as to the intent or meaning of any provision of the MSB, or (c) has any question regarding the MSB, the Bidder must promptly notify GPA in writing no later than **Friday 5/19/2021 at 4:00 p.m.** at the address specified for submission of proposal. Replies to such notices may be made in the form of addenda, which will be issued simultaneously to all prospective Bidders.

5. FORM

All bids must be in writing and submitted in a sealed envelope and must be signed by an officer of the bidder having authority to bind the bidder's insurance contracts as proposed. The bids should respond in an organized fashion to all requirements of this Invitation for Bid.

6. MODIFICATION OR WITHDRAWAL OF BIDS

Bids may be modified or withdrawn prior to submittal date. Any bid withdrawal, or modification received at GPA after the due date is late and, as such, renders the underlying bid in compliance only as to that which is on hand at the submittal date and hour.

7. RECORDING BIDS.

Bids and modifications shall be submitted to GPA officials on or before **June 23, 2021 at 2:30 p.m.** in a sealed envelope indicating the MSB number and addressed as follows:

To: Guam Power Authority  
GPWA Procurement Office  
Gloria B. Nelson Public Service Building  
688 Route 15,  
1<sup>st</sup> floor, Room 101  
Fadian, Guam 96913

Attn: Jamie L.C. Pangelinan  
Supply Management Administration

Bidders shall be responsible for ensuring the written bid (and all required documents) is received by the due date and hour. Any bid received after the due date and hour is late and will not be considered by GPA. After the due date and hour, a Register of Bids shall be prepared which shall include for all initial bids the name of each bidder, the number of modifications received, if any, and an indication of the coverage proposed, i.e. coverage of all risks of loss (a) as requested by GPA, (b) less than GPA request, and/or (c) alternate coverage as requested.

8. CONFIDENTIAL DATA

Bidders should designate trade secrets or other proprietary data to be confidential. The Guam procurement laws and regulations shall govern confidentiality.

9. AWARD

Determination of the winning bidder shall be made on or about July 28 - July 30, 2021. GPA intends to have all discussions and negotiations completed no later than July 27, 2021, after which date the Bid Evaluation Committee and the General Manager shall prepare their final report and recommendations. Appropriate notification of award shall be issued promptly after the CCU and PUC approval.

10. CANCELLATION OF INVITATION; DELAYS

GPA reserves the right to cancel or to withdraw this MSB, to delay determination on this MSB, or to reject all bids, in whole or in part, at any time prior to final award. The reasons for the cancellation, delay or rejection shall be made a part of the procurement file and shall be available for public inspection.

11. INSPECTION OF GPA PROPERTIES

Prospective bidders may inspect GPA properties by appointment upon request and on mutually agreed dates. GPA will provide a representative to conduct the inspections and answer questions on-site. Please advise the Supply Management Administrator, Ms. Jamie Pangelinan, if you plan to inspect the properties. Each person that plans to inspect GPA properties must be cleared by Homeland Security through GPA. Therefore, each person must submit a copy of their Passport to GPA a minimum of 5 business days prior to the inspection date to get security clearance to be allowed on GPA property.



12. SUMMARY OF SERVICES

All bidders should include a summary of how they envision servicing GPA account. Policy servicing should be identified specifically with a list and delivery timeline of services offered. Bidders should also identify the “Account Executive” that will be assigned to GPA and their support team along with frequency of visits, etc.

13. CCU and PUC APPROVAL

Contracts will be subject to the written approval of the Consolidated Commission on Utilities and the Public Utilities Commission on Guam.

14. REPRESENTATION REGARDING GRATUITIES AND KICKBACKS.

The bidder or contractor represents that it has not violated, is not violating, and promises that it will not violate the prohibition against gratuities and kickbacks set forth in Section 11-206 (Gratuities and Kickbacks) of the Guam Procurement Regulations.

15. REPRESENTATION REGARDING CONTINGENT FEES.

Contractor represents that it has not retained a person to solicit or secure a territorial contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies for the purpose of securing business.

16. BID BOND

Along with the Bid Proposals on or before June 23, 2021 at 2:30 p.m., all bidders shall submit to GPA a bid bond in the amount of TEN THOUSAND U.S. DOLLARS (U.S. \$10,000) made payable to the Guam Power Authority. In lieu of a bid bond, bidders may submit US currency valued at TEN THOUSAND U.S. DOLLARS (USD 10,000) in the form of cash in USD, bank draft, certified check, or by wire transfer to Guam Power Authority, Routing/Transit #121405115, Account No. 0601-026246, Bank of Guam, Hagatna, Guam. Bidders with unselected bids will have bid bonds returned with written notices of rejection. Bid bonds submitted in cash or certified check will be returned by wire transfer. Bidders shall advise GPA of bank, location and account number to facilitate delivery. In the absence of a telegraphic address, bid bonds will be returned by mail in check form payable to bidder. The bidder with the acceptable bid will have bid bond returned within ten business days of delivery of Insurance Binders for selected insurance policies by GPA. For the purposes of this solicitation, the bid bond is being required as an indication of “good faith” by the bidder and is in the best interest of GPA in accordance with the procurement laws, rules and regulations of the Government of Guam and GPA.

SECTION III: INSURANCE COVERAGE SPECIFICATIONS

1. INSURANCE COVERAGE

GPA seeks coverage for “all risks of loss” basis coverage to include but not limited to the following lines of business:

- a. Property
- b. Boiler and Machinery breakdown
- c. Catastrophe Coverage including earthquake, flood, typhoon, and tsunami

- d. Business Income/Extra Expense
- e. Terrorism, both certified and non-certified acts
- f. Cyber liability

The property, boiler & machinery, catastrophe, business income/extra expense, and terrorism is placed under one cover. GPA is seeking comparable or superior coverage to include all of the above coverage.

GPA is anticipating the new 198MW combined cycle power to be operational in mid-2024. At that time, GPA anticipates to decommission Cabras 1 and 2. GPA requires that the insurer return the unearned premium when Cabras 1 & 2 is decommissioned and insured at salvage value.

GPA will award based on the lowest overall price for the term.

Primary Insurance Carriers or Fronting Carriers must have at least an A.M. Best Rating of A-, IX or greater to be considered.

Reinsurance companies or underwriters must be of demonstrated size and capacity to underwrite a Property program of the size of GPA.

## 2. BID FORMAT

Bidders are free to submit their bids in a convenient format, however, at a minimum; the bids should provide:

Bidder's Firm information including:

- Years in business
- Total property and total liability insurance premiums placed annually
- Ownership legal structure and ownership details
- Office location that would serve GPA
- Claims, loss control/engineering and other core services performed
- List of Power Generation accounts serviced by the account team
- Key personnel who would be placing and servicing the GPA's program
- Biography, certificates, designations, and licenses of account team and key personnel
- Other information that the respective firm believes GPA should consider
- Any key alignments with other insurance entity or intermediary (retail, wholesale, reinsurance, Lloyds, etc.)
- Bidder's experience with electric utilities or Energy Company, especially those with hurricane or earthquake exposure and boiler & machinery exposure.
- Copies of currently active Licenses of all intermediaries
- Primary (Fronting) Carriers' or underwriters' Certificate of Authority to Transact business on Guam
- Primary (Fronting) Carriers' or underwriters' Most recent AM Best rating

Insurance coverage terms including but not limited to:

- Explanation of any exceptions to the minimum coverage specifications
- Explanation of any coverage enhancements exceeding minimum specifications
- Explanation of any coverage deficiencies not meeting minimum coverage specifications
- Specifically noting which requested coverage enhancements have been achieved, which cannot be achieved and, if applicable, detail any additional enhancements that were obtained.

- Identification of Lead markets utilized to achieve the 70% commitment or market support. Lead markets and/or carriers must be rated A- or better by AM Best with minimum financial size of IX or greater.
- This insurance shall be governed by and construed in accordance with the laws of The Territory of Guam and the exclusive jurisdiction of the Territory of Guam courts. Should the policy require an arbitration clause then the seat of arbitration shall be Guam.
- Proposed policy forms and applicable endorsements in their entirety must be attached to proposals.
- Firm quotes or written confirmation of at least 70% support from insurers, underwriters, or reinsurers.

In order to show bidder's reliability and responsibility, bidder should substantiate its insurer financial capacity and industry reputation to honor and service the size and type of insurance proposed. Bidder should identify its service team, lead market, underwriters, and or insurers represented in as much detail as practical. All proposals must have, at a minimum, 70% of total lines substantiated by firm quotes from proposing underwriters, insurers, or reinsurers. Bidder should include proof of firm quotes either by signed/stamped slips or letters from underwriters, insurers, or reinsurers.

If bidder fails to supply information requested by GPA concerning the bidder's insurer's financial capacity and rating, which GPA may request any time prior to award, GPA shall base determination of responsibility on any available information, or GPA may find bidder non-responsive.

- RATING DATA

Information about GPA and its experience in peril exposure and risk retention and/or transfer is contained in the Rating Data attachment. Prospective bidders requiring additional rating data should address their inquiry to the Procurement Officer identified in this bid. Replies with significant data will be furnished to all persons who, on record, have registered for this multi-step bid (MSB) and have agreed in writing by signing the Non-Disclosure Agreement.

#### SECTION IV: CONTRACT TERMS

GPA is hereby inviting bids for insurance contracts (policies) on a multi-year or long-term basis (e.g., three years) with term to commence November 1, 2021 to November 1, 2024. GPA understands that most insurance policies have 12-month terms, however three-year policy is preferred. GPA fully expects to stay with selected insurance program for at least three years and renewing on an annual basis if needed.

Insurance policies proposed are acceptable for 12-month terms or 36-month terms billed annually.

Bidders will need to furnish the proposed contract which shall include at a minimum the following:

- Detailed description of the coverage terms proposed including but not limited to:
  - Any exceptions to the minimum coverage specifications outlined in this MSB
  - Specifically noting which requested coverage enhancements have been achieved, which cannot be achieved and, if applicable, detail any additional enhancements that were obtained.
- Premiums for proposed coverage comparable to the expiring coverage as set out in Appendix A, and, any incremental premiums resulting from coverage enhancements. Also, detail any premium increases or decreases for optional limits and deductibles requested in the coverage specifications.
- Lead markets that are utilized to achieve the 70% commitment. Fronting carriers or Primary insurers must be rated A-, IX or better by AM Best.

#### SECTION V: EVALUATION OF BIDS

In evaluating bids, GPA will consider which proposal offers the most robust and comprehensive insurance coverage available in the market by reputable and highly rated underwriters and carriers with the financial capacity to honor insurance terms for a program the size and quality as the Guam Power Authority with its assets of \$1 Billion. GPA reserves the sole right to determine the acceptability and ranking of bids in any respect to meet GPA's needs. In the evaluation process, the following factors will be considered:

<u>CRITERIA</u>	<u>POINTS</u>
• Ability to service GPA/past and current performance of similar contracts	5
• Utility, Municipality, and other large program insurance experience	5
• Intermediary, Underwriter, Insurance Carrier personnel and qualifications	10
• Industry reputation, Client References	10
• Financial capacity and current AM Best rating of carriers and re-insurers	20
• Breadth of Policy coverage and extent of restrictions or exclusions	40
• Additional coverages	<u>10</u>
TOTAL POINTS	100



GUAM POWER AUTHORITY  
PROPERTY INSURANCE SPECIFICATIONS  
MINIMUM COVERAGE REQUIREMENTS

POLICY INFORMATION:

Named Insured:

Guam Power Authority  
and/or its Subsidiary, affiliates,  
and/or Associated Agencies as now or hereafter constituted  
P.O. Box 2977  
Hagatna, Guam 96932-2977

Additional Named Insured as their interest may appear:

1. Bank of Guam

Notification of claims: Bidder's Guam Office

Policy Period:

From the 1<sup>st</sup> of November 2021 to the 1<sup>st</sup> of November 2022 both days at 00:01 hours Local Standard Time at the locations of the Property Insured.

- Minimum annual renewal. Three-year policy is preferred.

Property and Interest Insured

Material Damage

Real and personal property including, but not limited to Buildings, Furniture, Fixtures and Equipment, Law and Ordinance Coverage for all property, Contents, Plant, Fuel oil tanks and pipelines, Fuel Stocks including fuel stocks whilst in fuel tanks and pipelines irrespective of whether above or below ground, and above ground Transmission and Distribution lines on Generating Premise and within 1,000 feet of premises, Underground Transmission and Distribution lines, Machinery and Boilers of every kind, nature and description (including improvements and betterments) owned, leased, acquired, used or intended for use by the insured, or hereafter Erected, Installed or Acquired including whilst in the Incidental Course of Construction, Erection, Installation and Assembly and Real and Personal Property of Others in the Insured's Care, Custody, and Control and including Property in the Care, Custody, and Control of Third Parties and the Insured's liability imposed by law or assumed by contract (by an officer of the Insured) for such Property and/or at the option of the Insured Personal Property of the Insured's Officials and Employees while on the Premises of the Insured and/or Contractors' and Vendors' interests in property covered to the extent of the Insured liability imposed by law or assumed by contract, (by an officer of the Insured) and/or Property in Transit and/or Storage including Raw Materials, Expediting Expenses, Valuable Paper, Bullion, Manuscripts, Drawings, Blueprints and/or Specifications, Leasehold Interest and Records, Accounts Receivable, Electronic Data Processing Equipment, Computer Equipment, Computer Data and Media including Business Interruption and Extra Expense. Petroleum Products which are liquid form at normal atmospheric pressures and temperatures while such products are in underground storage, and foundations, piers or other supports of brick, stone or concrete, and shafts, tunnels, and dams, and all structural parts and all

appurtenant structures and equipment at the side of underground power houses, and cables, wires and underground conduit and underground Transmission and Distribution lines.

Territorial Limits

Various locations in Guam and whilst in inland transit

Sum Insured

1. USD \$200,000,000 each and every occurrence in respects Property Damage/Business Interruption/Extra Expense combined for 100% subject to sub-limits stated below.
2. USD \$200,000,000 (separate limit) Certified and Non-Certified Acts of Terrorism including SRCC each and every occurrence of Property Damage/ Business Interruption/Extra Expense combined for 100% subject to sub-limits below.

Sub-limits

Business Interruption – USD \$5,000,000 each and every occurrence

Extra Expense – USD \$15,000,000 each and every occurrence

Earthquake, Flood, Windstorm, Cyclone, Typhoon, and Tsunami – USD \$100,000,000 each and every occurrence

Debris Removal – USD \$10,000,000 or 10% of loss whichever the greater

Seepage and pollution – USD \$5,000,000

Ingress/Egress – 30 days and limited to loss occurring within five (5) statute miles of the insured's premises

Military/Civil Authorities Clause – 30 days and limited to loss occurring within five (5) statute miles of the insured's premises

Protection and Preservation of Property – USD \$2,000,000 each and every occurrence

Property in the Incidental Course of Construction – USD \$25,000,000

Basis of Valuation:

Replacement Cost value for all property regardless of age or condition. See attached property schedule for values.

Retentions:

- Property damage
  - USD \$2,500,000 each and every occurrence in respect of all perils other than Earthquake, Flood, Typhoon, and Tsunami (for 100%) for locations with a declared estimated Replacement Cost value equal to or greater than USD \$10,000,000
  - USD \$1,000,000 each and every occurrence in respect all perils other than Earthquake, Flood, Typhoon, and Tsunami (for 100%) for locations with a declared estimated Replacement Cost value less than USD \$10,000,000

- USD \$10,000,000 each and every occurrence in respect of Earthquake, Flood, Typhoon, and Tsunami (for 100%);
- Business Interruption: 60 days each and every occurrence
- Extra expense: 60 days each and every occurrence

Terrorism Retention: \$100,000 each and every occurrence

Co-insurance

None

Additional Coverages:

- Cyber Liability Coverage  
Limits: USD 5,000,000 each claim and in the aggregate (including claims expenses)  
Deductible: USD 50,000 each and every claim including claims expenses
- Full prior acts

Including at a minimum:

Security and Privacy Liability

Multimedia and Intellectual Property Liability

Network Interruption and Recovery (Including any unintentional or unplanned outage, excess of 8 hours)

Event Support Expenses

Privacy Regulatory Defense and Penalties

Network Extortion

Electronic Theft, Computer Fraud and Telecommunications Fraud (Sub-limit \$100,000)

Social Engineering Fraud (Sub-limit \$25,000)

Reputational Damage

Underwriting Information

Please find attached a list of underwriting information

Property Schedule is replacement cost

Policy Form

All risk property form

Appendix AGPA Current Insurance Program

COVERAGE	LIMITS	RETENTIONS
Property, Boiler & Machinery, and Underground T&D lines	\$200,000,000 Blanket	\$2,500,000/\$1,000,000
Terrorism, All Risk	\$200,000,000	\$2,500,000
Business Interruption	\$5,000,000	60 days
Extra Expense	\$15,000,000	60 days
Cyber Liability Coverage	\$5,000,000 each claim/aggregate	\$25,000
Earthquake, Flood, Typhoon and Tsunami	SUBLIMITS: \$100,000,000 Blanket	\$10,000,000

Appendix B

GPA INSURANCE RATING DATA



Appendix C

GPA LOSS HISTORY

# GM REPORT

## January 2021



# Generation Status:

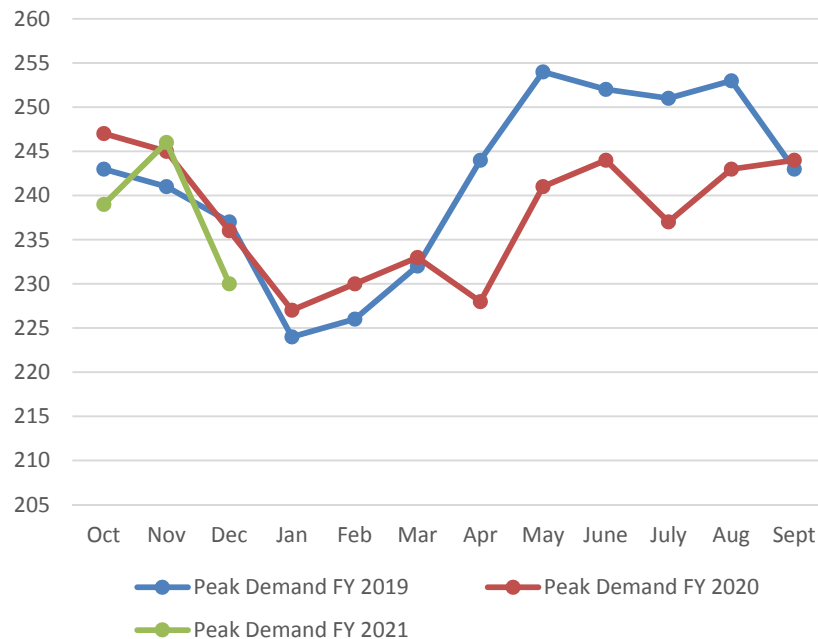
2

## 1. Reserve Margin Forecast for January 2021:

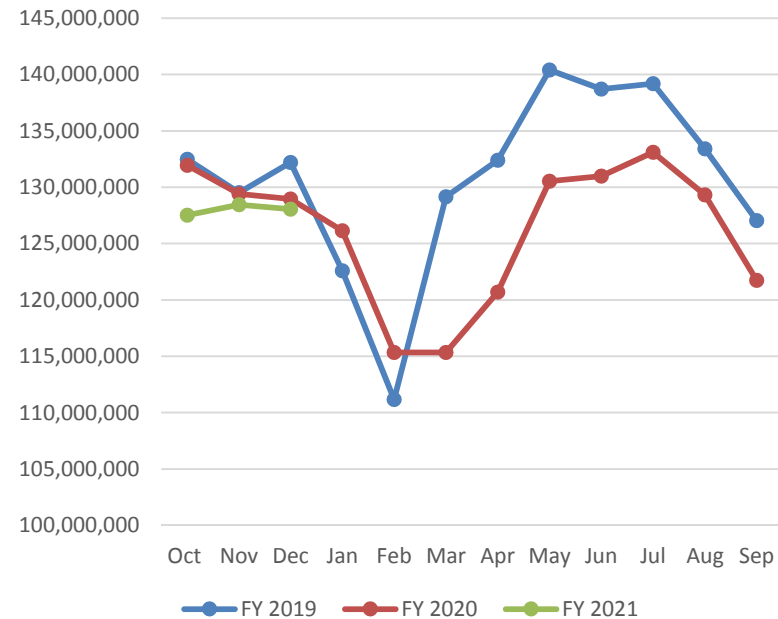
Projected Available Capacity: 365 MW  
 Projected Demand: 230 MW  
 Anticipated Reserve Margin: 135 MW

## 2. Production Characteristics Thru December 2020

Peak MW Demand



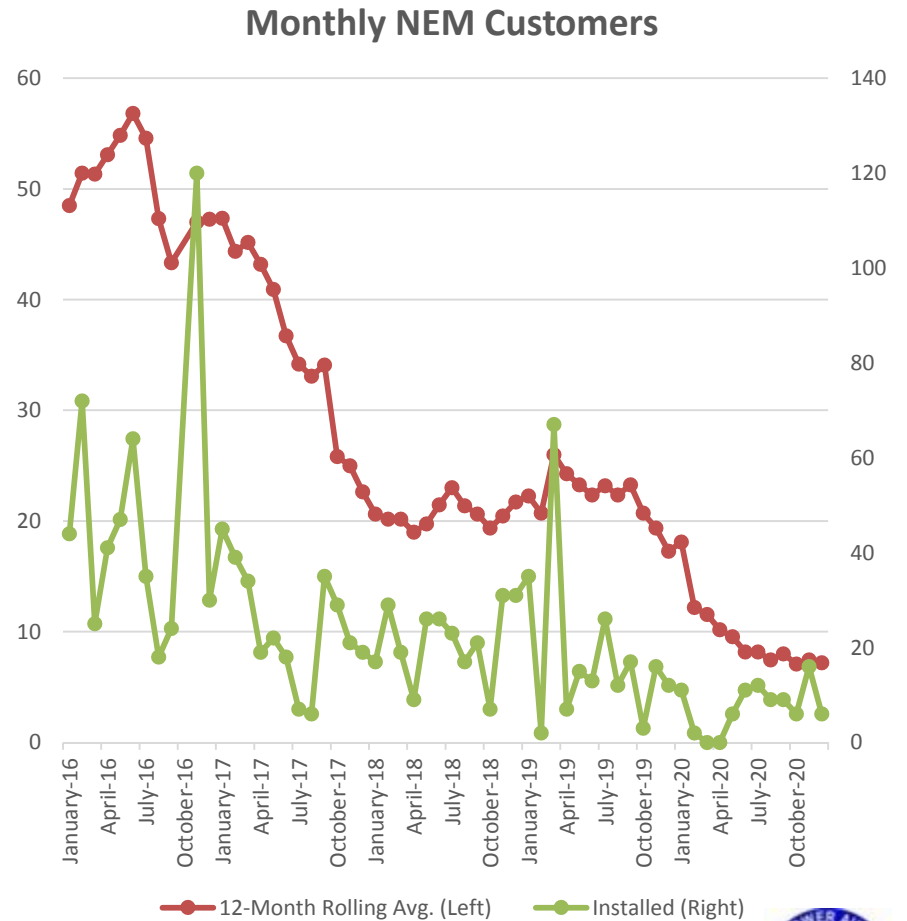
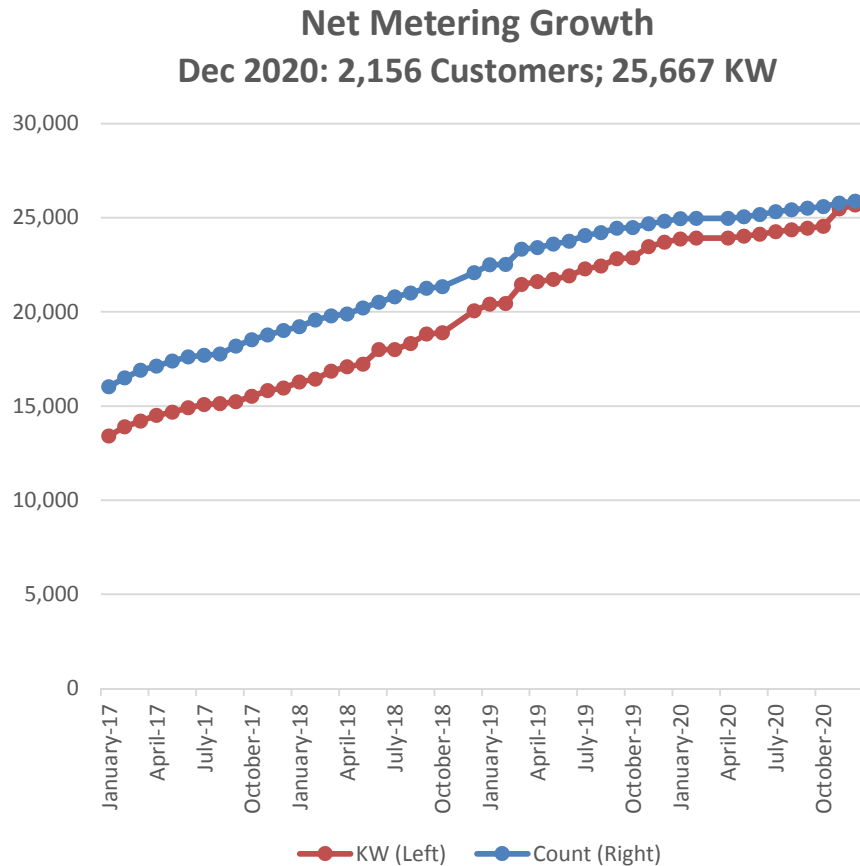
kWh Sales



# NET METERING

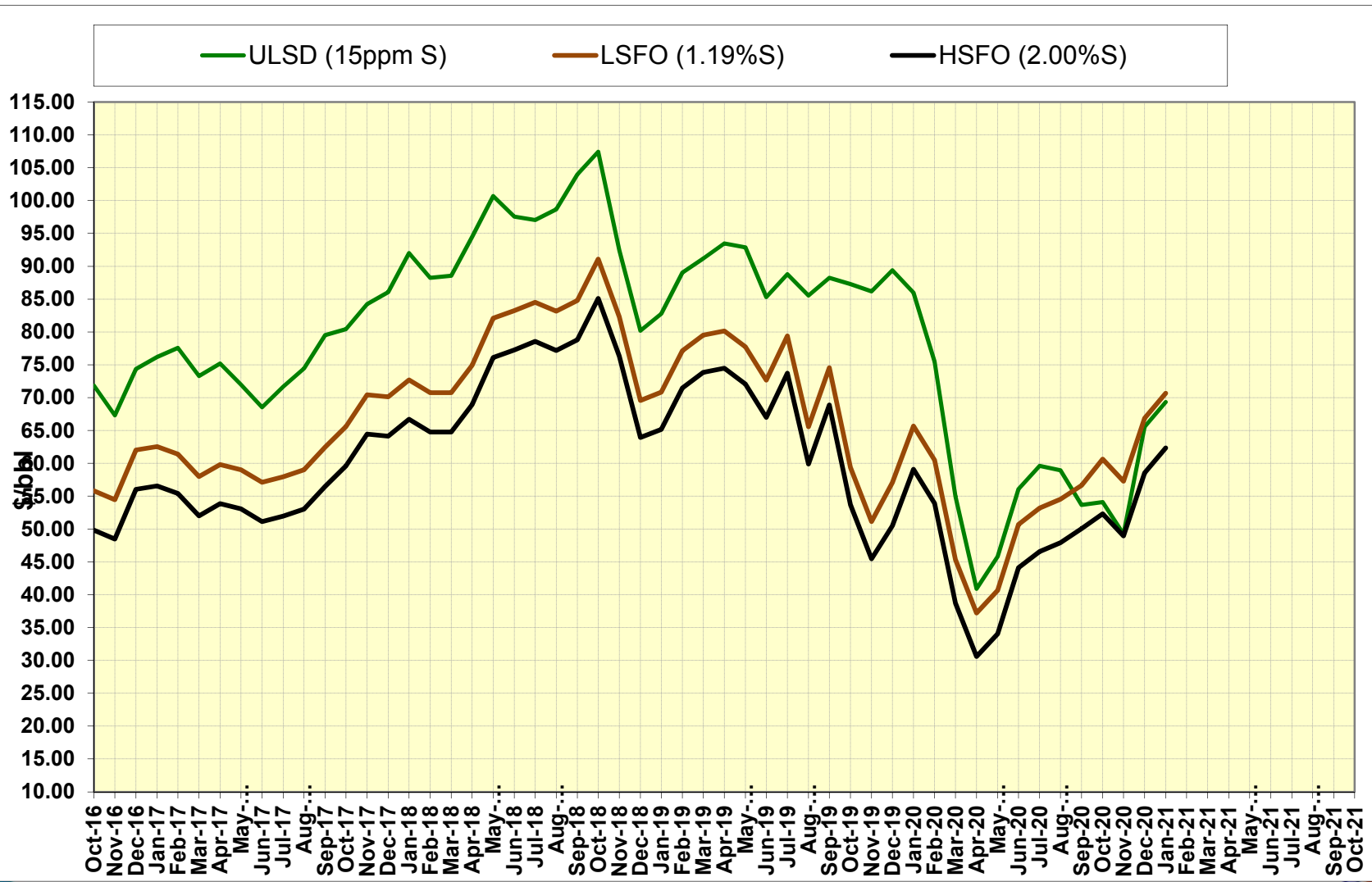
3

## 3. Net Metering (NEM) Growth Thru December 2020:



# GPA Fuel Landed Cost (Per Barrel) Jan 14, 2021

4. HSRFO-\$62.35; LSRFO-\$70.69; ULSD-\$69.33





## 5. Demand Side Management Funding

No.	Description	Amount
1	Initial DSM Budget FY 2016	\$1,806,014.00
2	Interest Income	\$5,855.10
3	Bank Fees	\$5,367.32
4	Additional Funding Source 2017 Bond Refunding savings FY 2019 Revenue Funding FY 2020 Revenue Funding FY2020 LEAC (June to September) FY2021 LEAC (October to December)	\$1,139,189.00 \$1,031,500.00 \$348,075.00 \$1,296,397.67 \$625,329.23
5	Total Expense FY2016– FY2020 (Ending May 2020)	\$4,355,078.30
6	Total Expense FY2020 –FY2021 (June 2020 to December 2020)*	\$1,295,107.75
	<b>DSM Ending Balance – LEAC Funds</b>	<b>\$596,806.63</b>

\*Preliminary Data as of 12/31/2020.

\*\*December 2020 LEAC Revenues pending



# General Manager's Report (con't)

## 6. PUC Update:

- Public hearings for “*Docket 20-10 Petition to Establish Condominium Rate*” were held on January 13 & 14, 2021 in Hagatna, Asan, and Dededo respectively. We expect the PUC to address the matter in their January 28, 2021 meeting.

## 7. Legislative Matters:

- Bill 219-35** *Renewable Energy Purchase or Lease-Back for Educational Facilities* was placed on the 35<sup>th</sup> Legislature’s December session agenda. The legislation would have resulted in higher rates for non net-metering customers, as well as violated bond covenants. Bill 219-35 was sent from the 3<sup>rd</sup> Reading File to the 2<sup>nd</sup> Reading File during the December session, and did not advance to the voting file.
- Bills 9-36 & 10-36 Introduced:** Both Bills which were introduced in the 35<sup>th</sup> Legislature have been re-introduced in the current 36<sup>th</sup> Legislature. The Bills are related to back billing and net metering respectively. Public hearing dates have not been announced.

## 8. Yigo Diesel Generator PMC Update:

- Issued bid GPA-061-20 for Management, Operation and Maintenance of the now GPA-owned Yigo 40MW Diesel Power Plant (formerly AGGREKO). Price proposals were opened on 10/30/2020. GPA cancelled the bid and plans to make adjustments to specifications. GPA began operating and maintaining units on January 9, 2021.



## General Manager's Report (con't)

7

### 9. Phase III Renewable Project Update:

- GlidePath filed an appeal in the Superior Court of the OPA's decision which favored a GPA award to Engie for 40 MW of solar with full energy shifting ESS. GPA has no update at this time on the process or the timeline of the court.

### 10. Energy Storage System (ESS) Update:

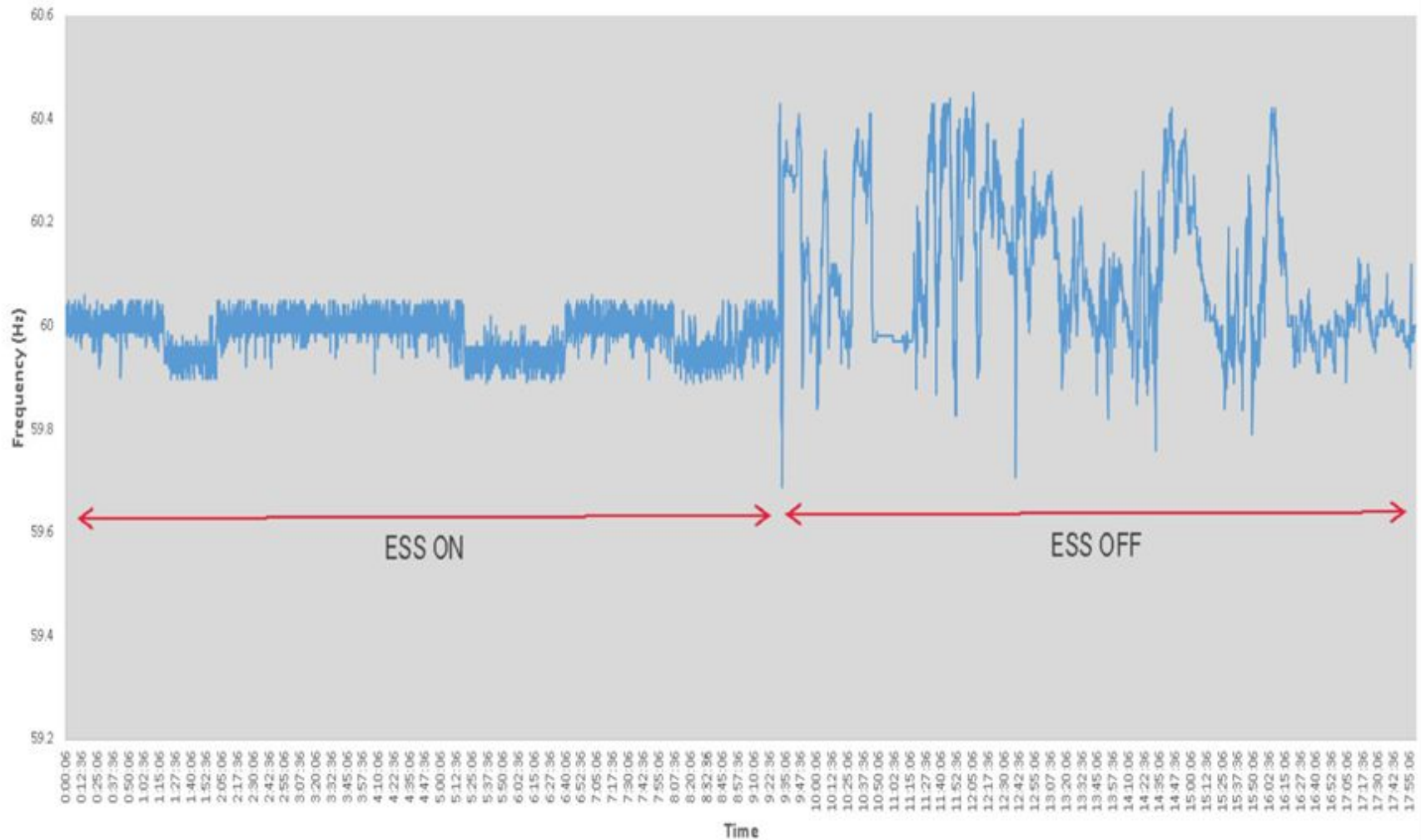
- The construction of ESS projects in Talofofo and Hagåtña have been completed; the energization and commissioning work continues. The following graphs provide a preliminary indication of the **positive impact** the ESS has on frequency regulation of intermittent solar production energy. The ESS is being operated mainly during weekdays for fine tuning which will continue into February. Commissioning is anticipated no later than March 31, 2021.



# ESS Frequency Regulation Performance Hagåtña ESS Online; Talofofo ESS Offline

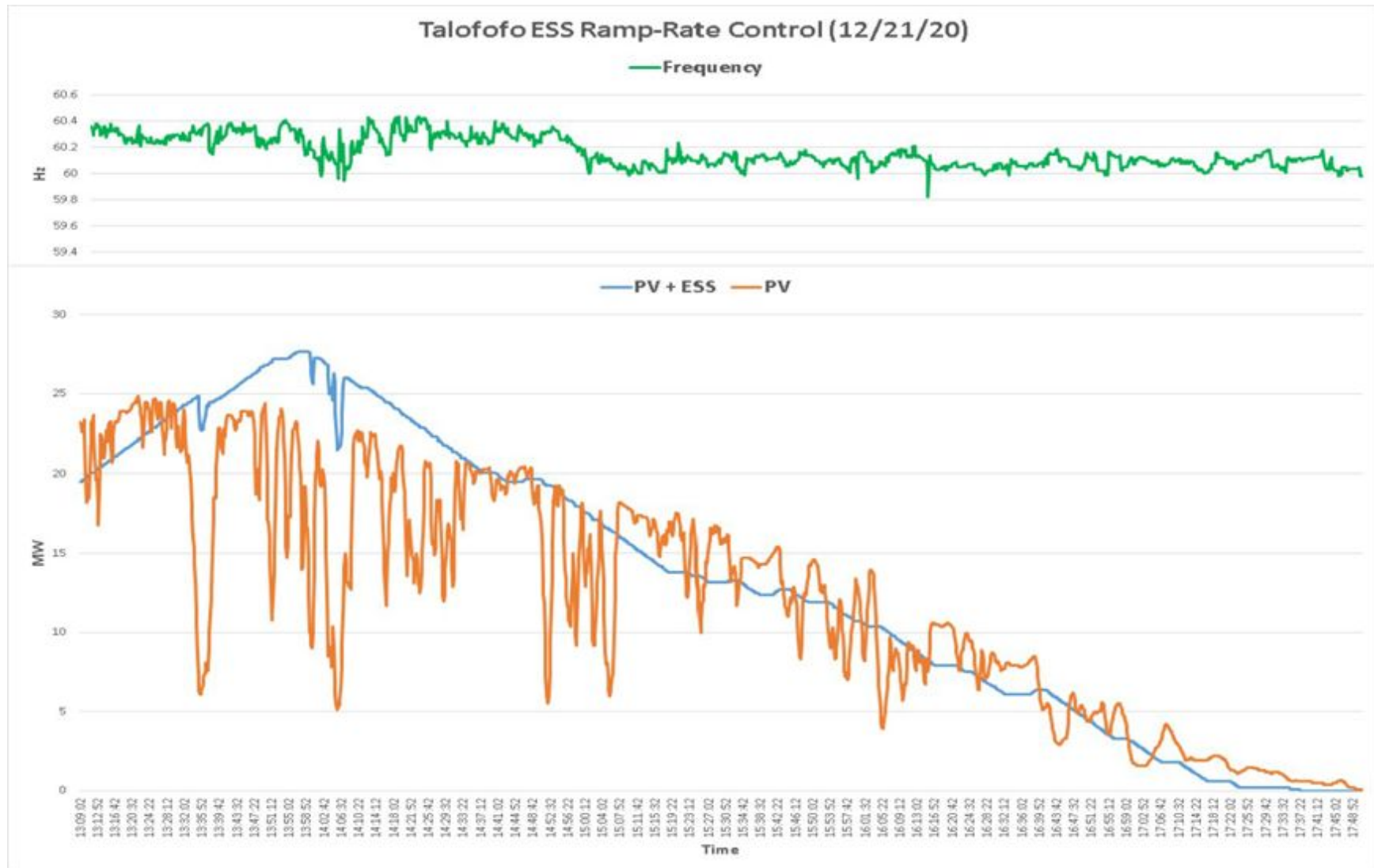
8

Agana ESS Frequency Regulation (12/31/20)



# ESS Frequency Regulation Performance Talofofo ESS Online; Hagåtña ESS Offline

9





# General Manager's Report (con't)

10

## 11. COVID-19 Impact Report:

- The following graph is a summary of GPA's Workforce Availability from October 30 - December 31, 2020

## 12. Customer Engagement Survey:

- Conducted October 21, 2020 - November 21, 2020
- Quantitative baseline
- Mixed-mode internet & telephone

The following slides provide the findings and insights of the survey

## 13. Generation KPIs:

- The following graphs show updated information through Dec. 2020:

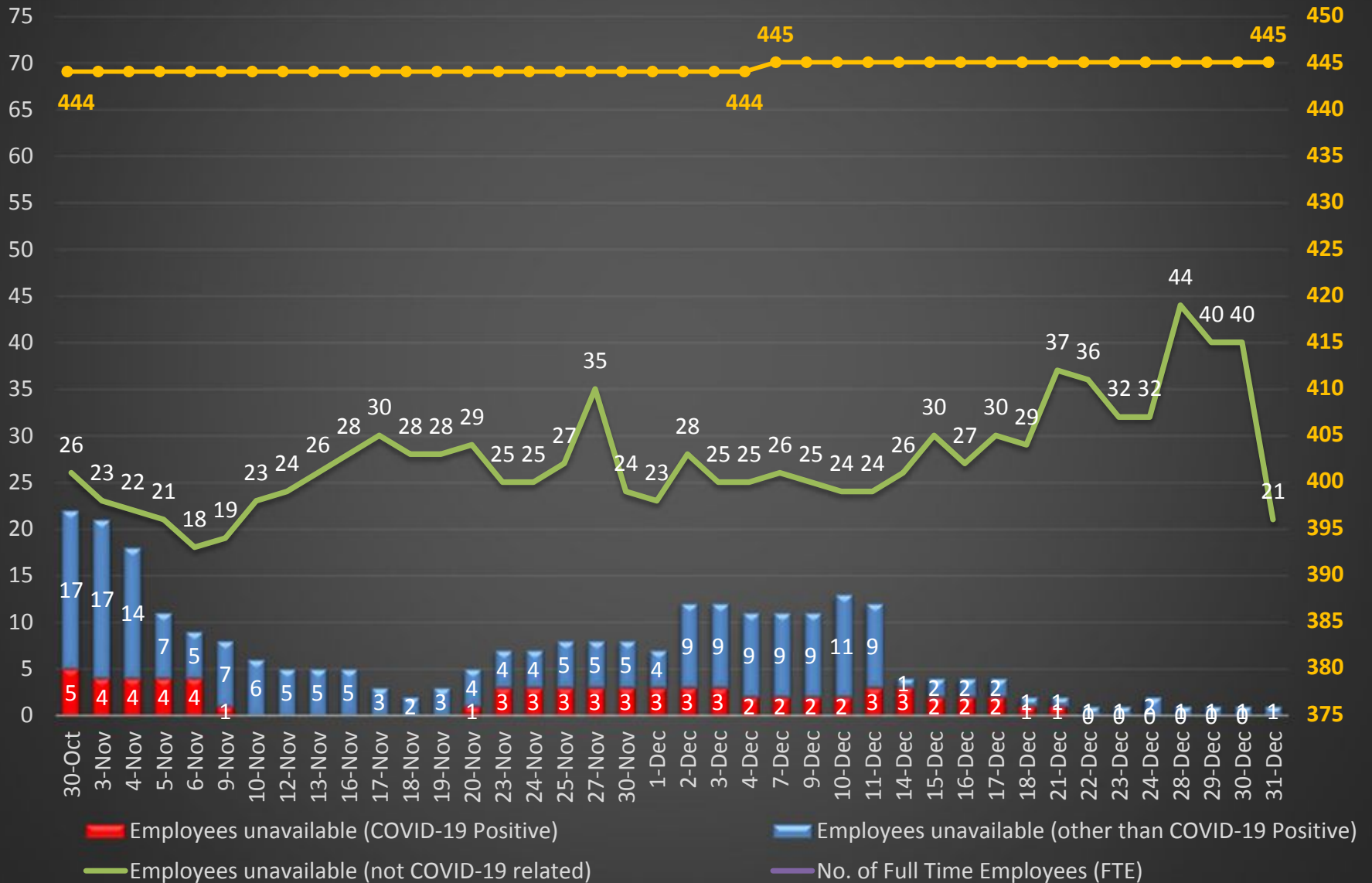


## 11. COVID-19 Impact Report

### GPA Workforce Availability Summary - All Divisions

(KPI 3.3.1. Reduce Safety incidents through awareness and training)

October 30 - December 31, 2020



# 12. Customer Engagement Survey

12



**Customer satisfaction levels are good**  
(We aim for *great* customer satisfaction)

Goal: Improve mean score to 8.5+ with 50% in top box

Conducted October 21,  
2020 - November 21, 2020

- Quantitative baseline
- Mixed-mode internet & telephone

A total of 1,035 surveys were collected, with quotas set by customer classification.

- Residential post-pay: n=677
- Residential pre-pay: n=120
  - Commercial: n=238

Margin of error for overall sample is +/- 3.05% at a 95% confidence level.

**Nearly 6 in 10 customers say  
GPA is IMPROVING**



Opportunities to improve customer engagement & satisfaction

- Reduce outages
- Improve clarity and timeliness of customer communications
- Provide friendly and professional customer call center
- Better communicate variety of options for contacting GPA
- Better communicate customers ways to conserve energy

Most important factors for customers (top 3)

- Being able to pay my bill online (18%)
- Ability to communicate clearly and in a timely manner (12%)
- Supports renewable energy such as photovoltaic (12%)

Preferred modes of communication

- Email
- Text Messaging



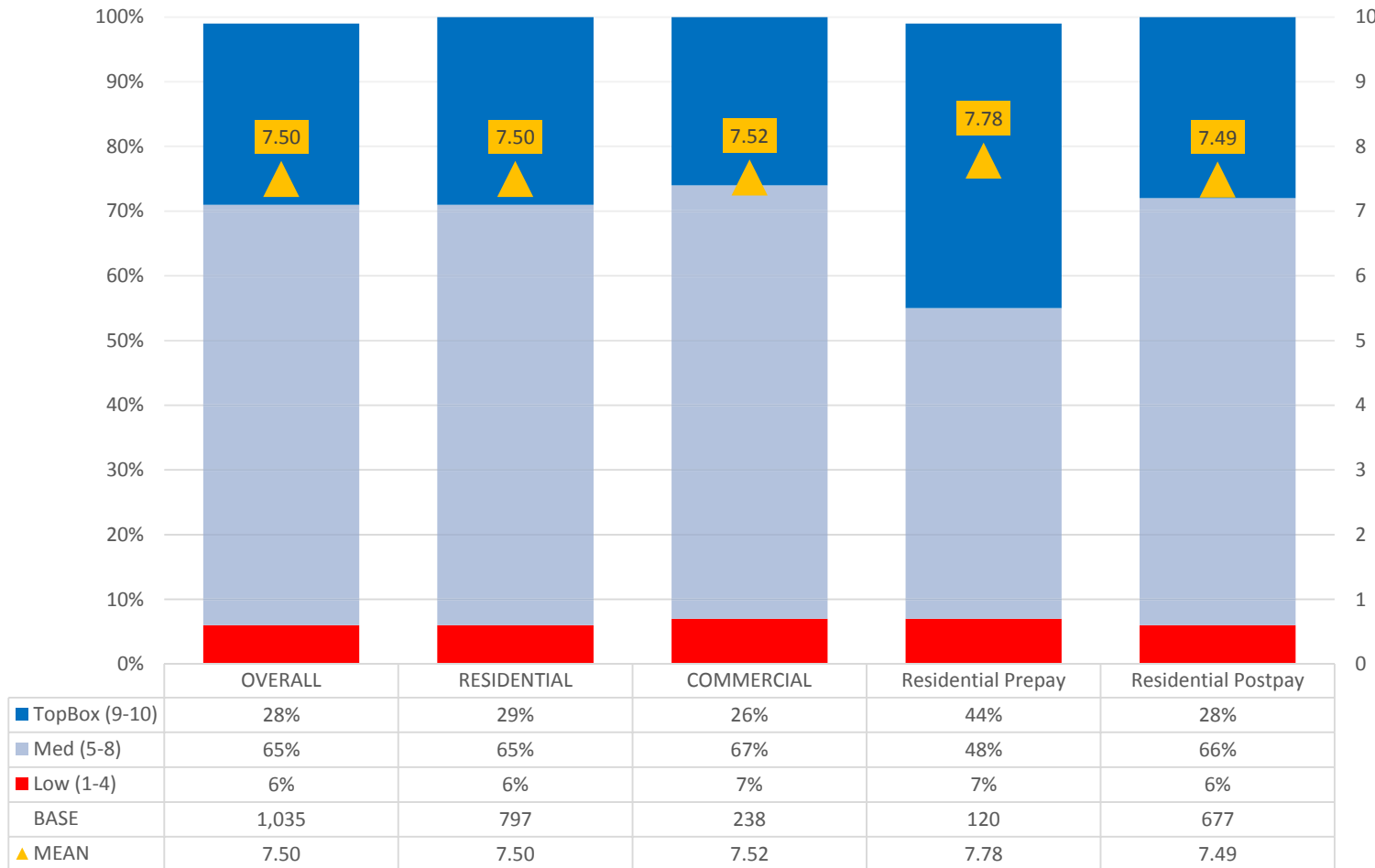
Anthology Group December 2020



# Customer Engagement Survey

13

## OVERALL CUSTOMER SATISFACTION



- *Residential: those who live in single-family homes gave higher satisfaction scores*
- *Residential: customers who live in the southern part of the island provide statistically lower satisfaction scores*

Q2. Generally speaking, how would you rate your overall satisfaction with GPA and the services they provide to you? On a scale of one to ten with 10 being very satisfied and 1 being very dissatisfied, how satisfied are you with GPA?



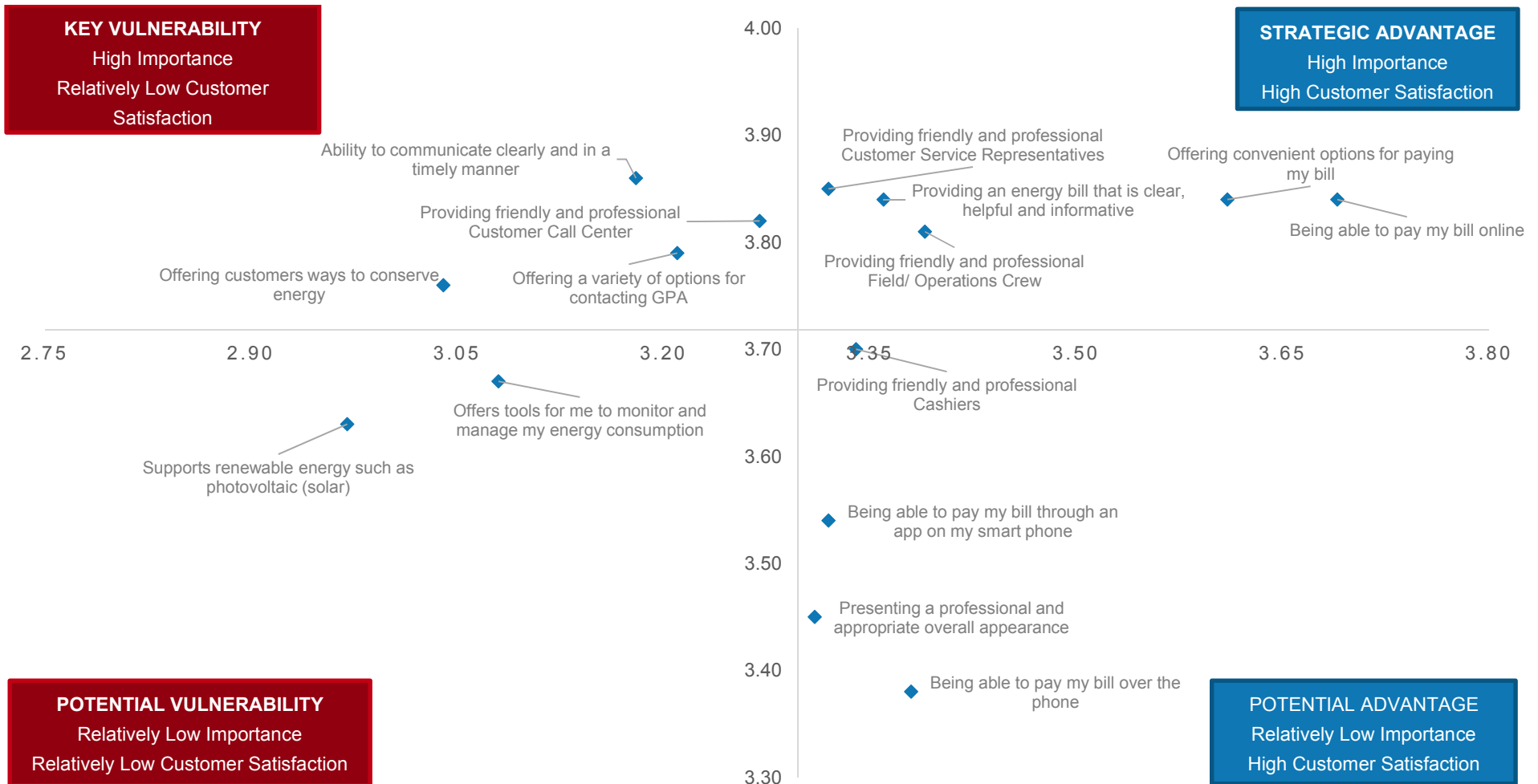
Anthology Group December 2020



# Customer Engagement Survey

14

## NEED-GAP ANALYSIS



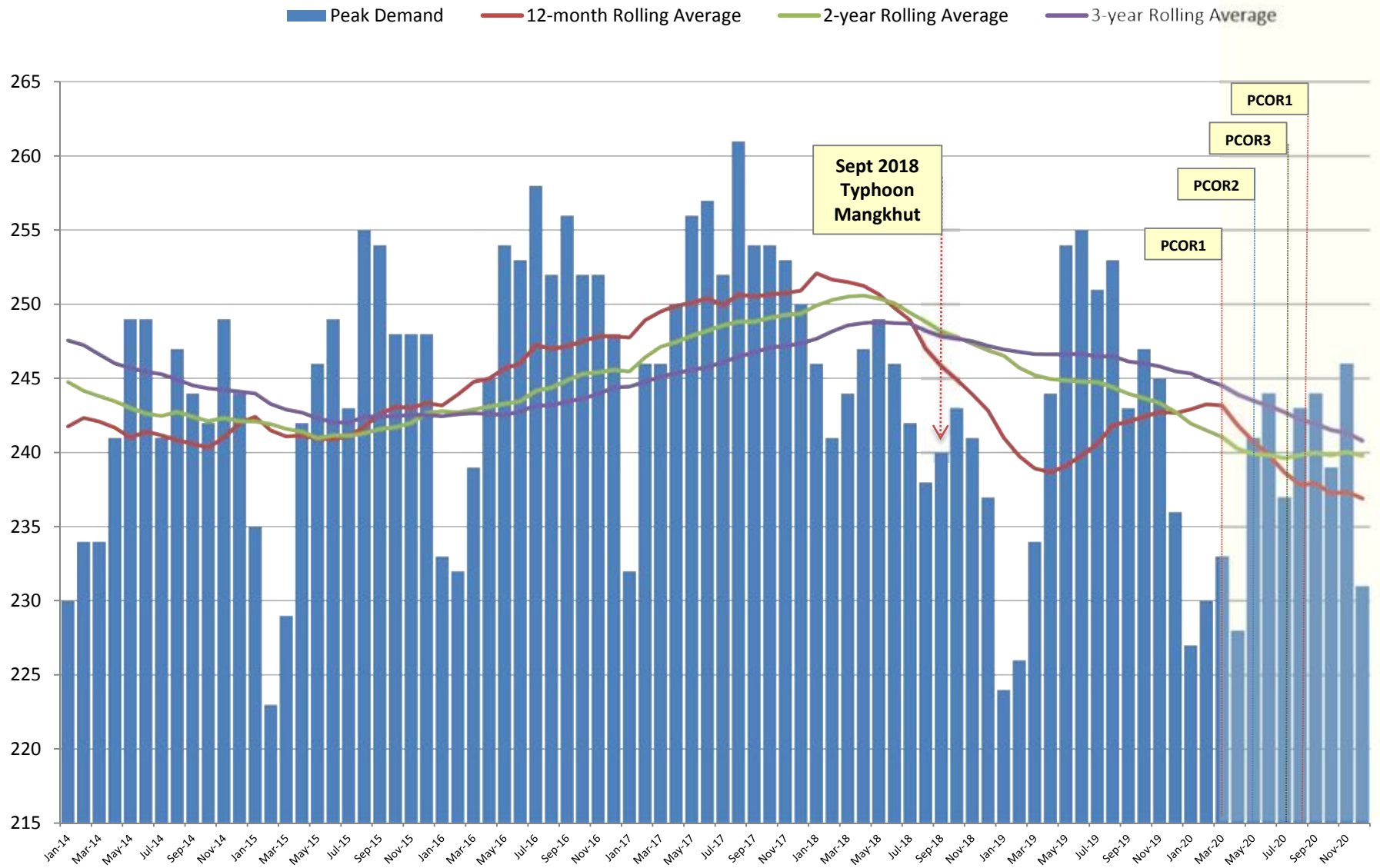
Anthology Group December 2020





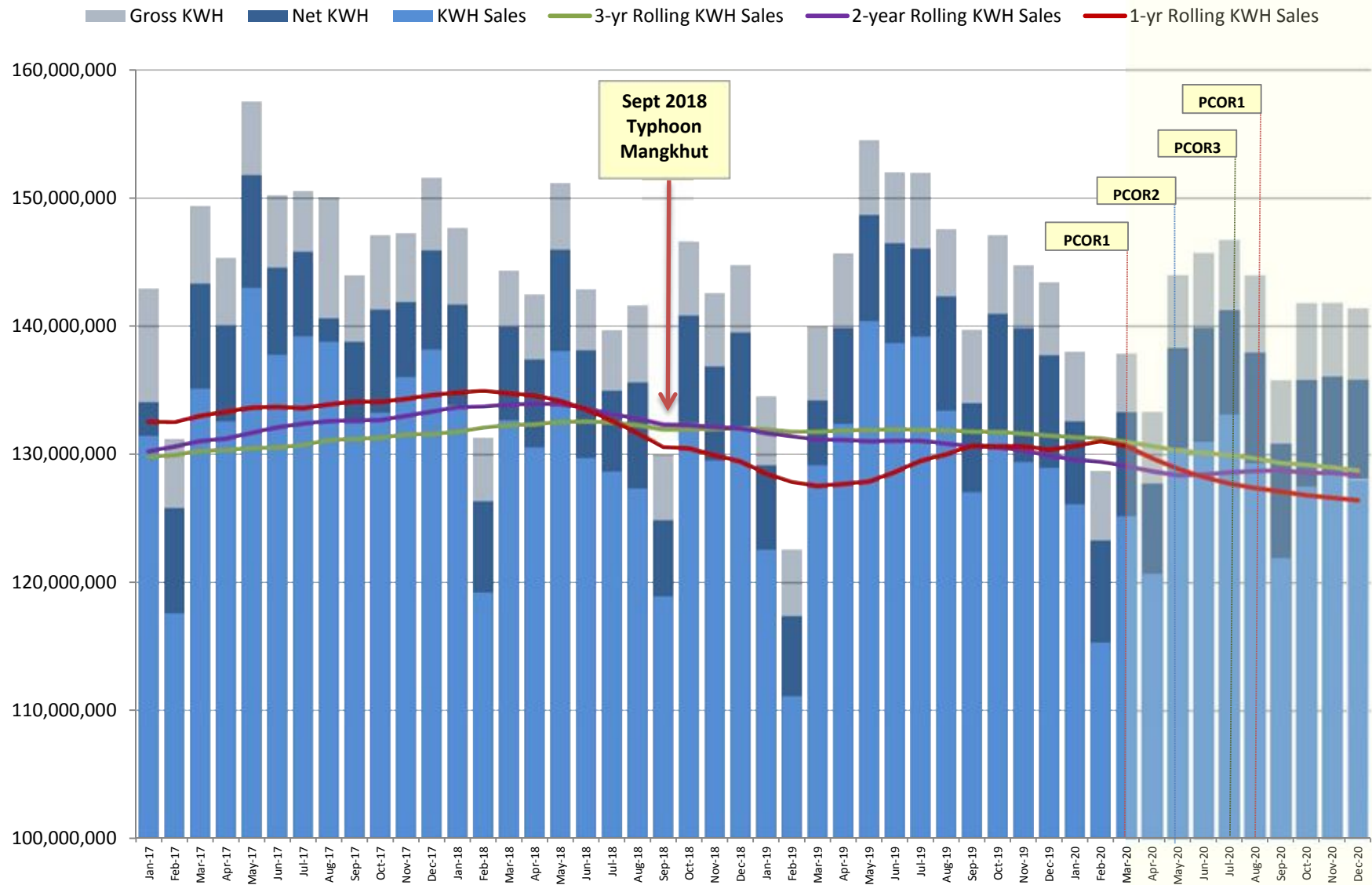
# 13. Historical Monthly Peak Demand Jan 2014 - Dec 2020

COVID 19 Pandemic

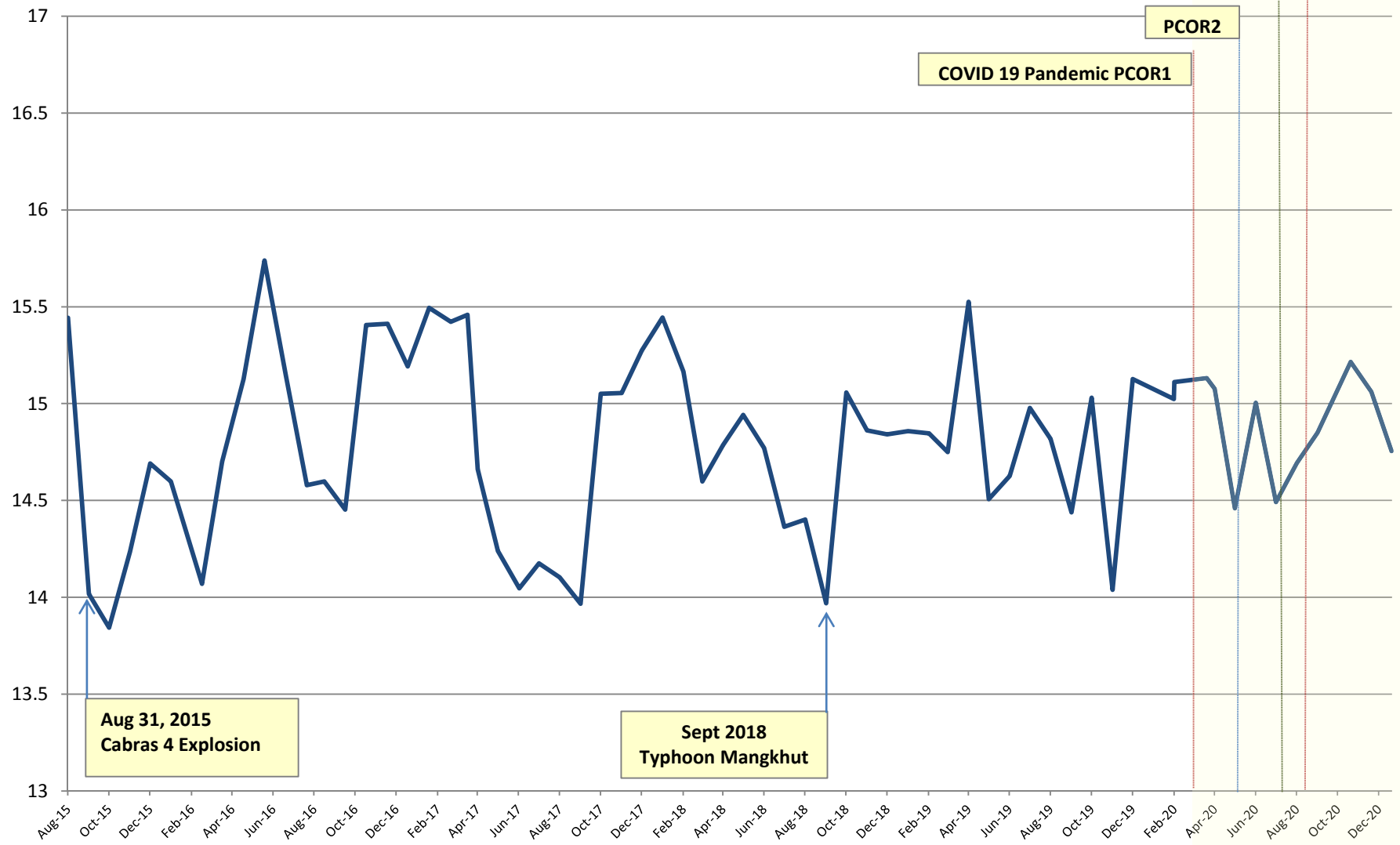


## Historical KWH Sales Jan 2017 - Dec 2020

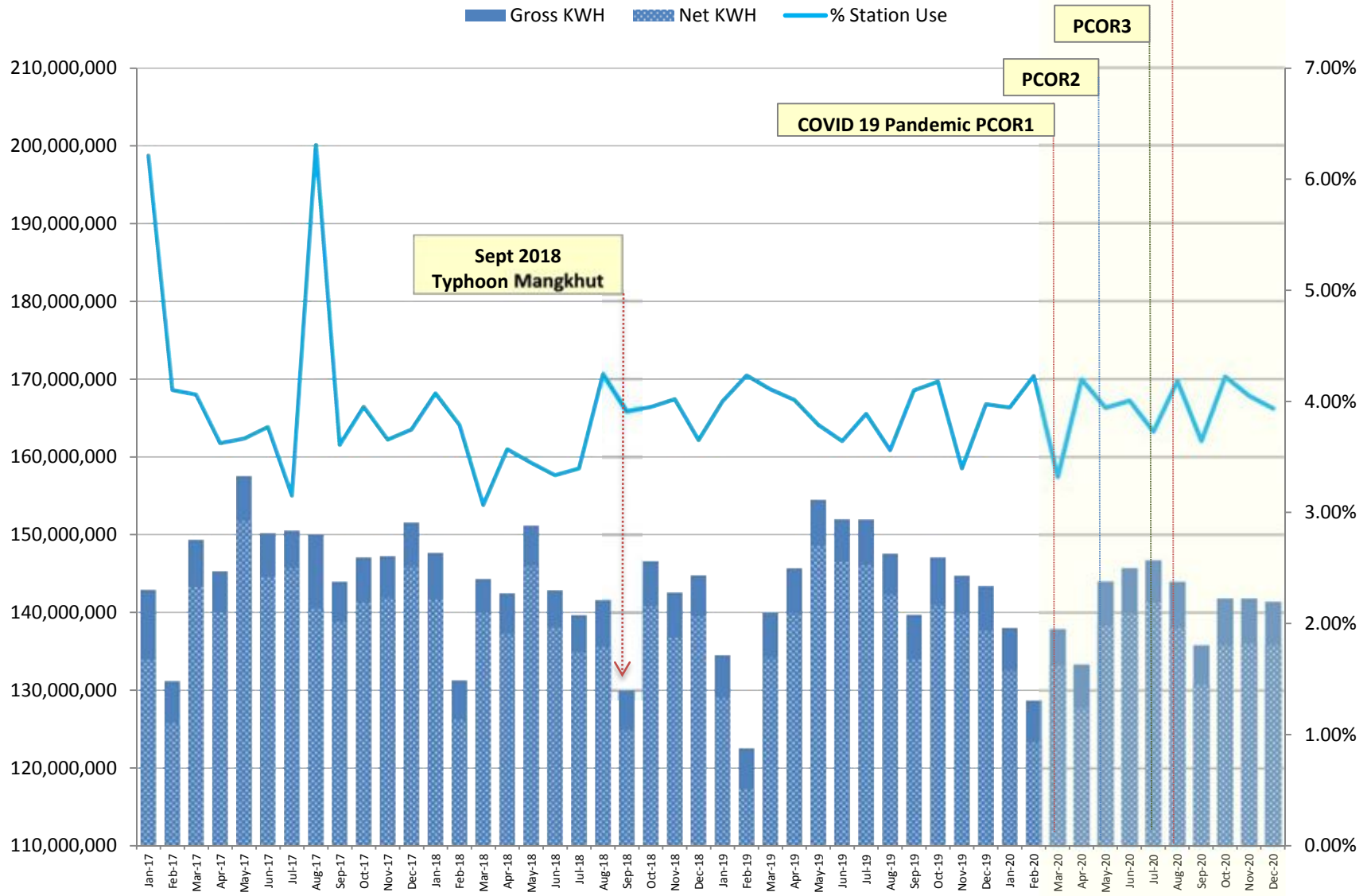
COVID 19 Pandemic



# SYSTEM GROSS HEAT RATE (KWH/Gal) Aug 2015 - Dec 2020

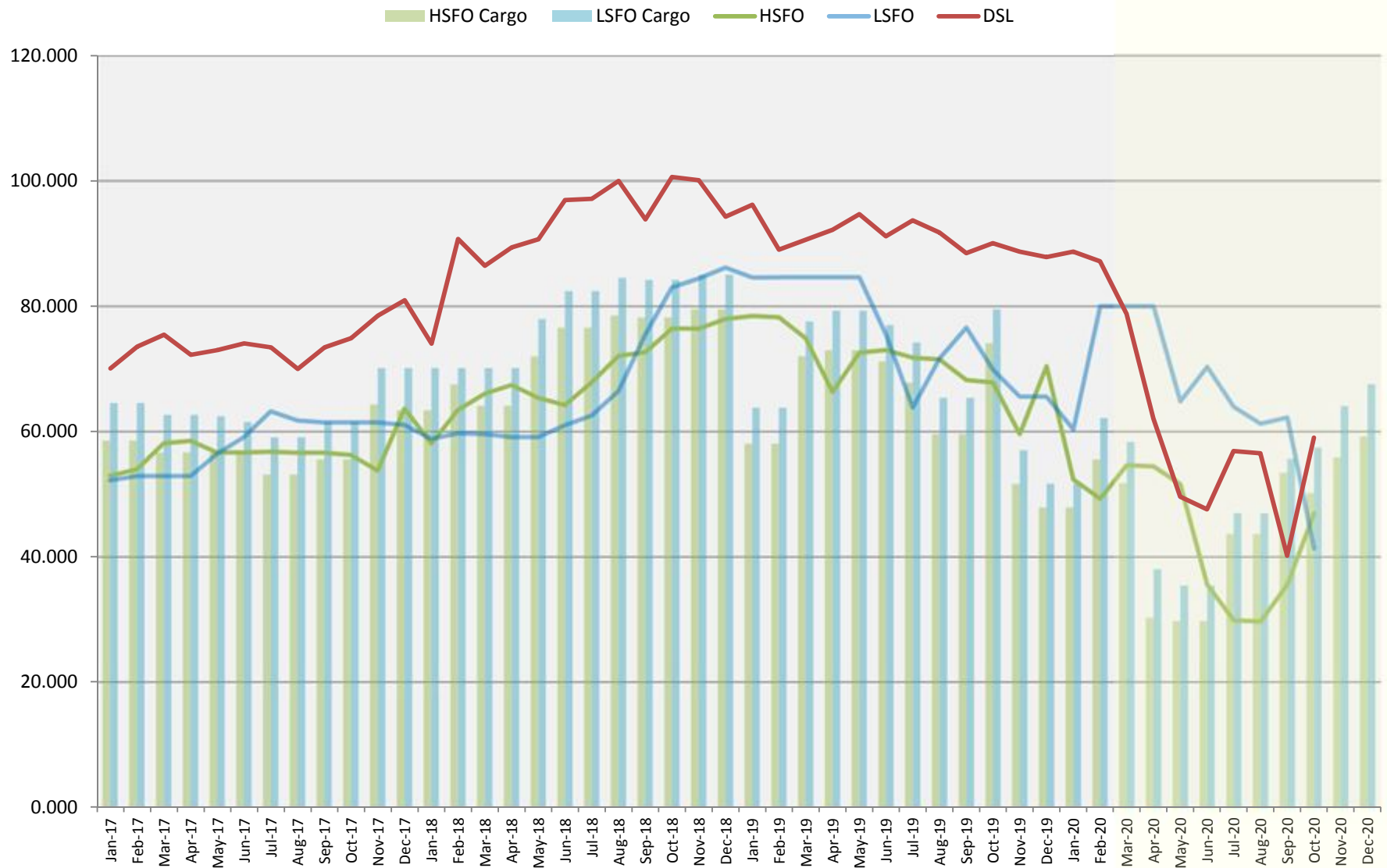


## Gross and Net Generation (KWH) Jan 2017 - Dec 2020



## Fuel Cargo and Fuel Consumption Costs (\$/bbl) Jan 2017 - Dec 2020

COVID 19 Pandemic





# **CFO**

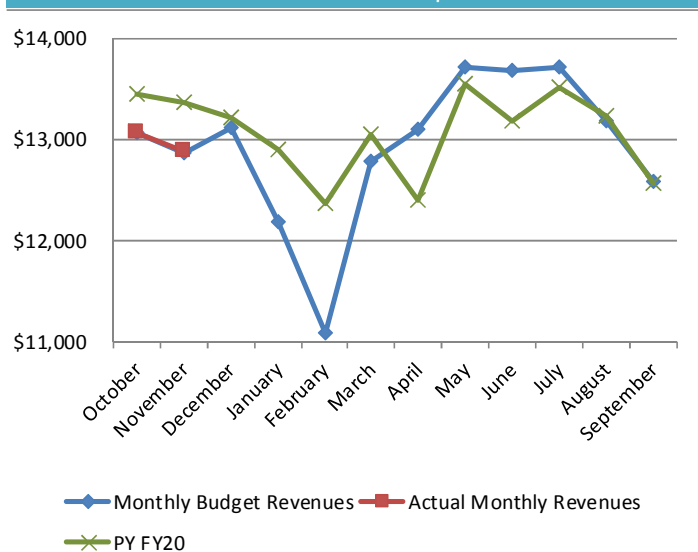
# **FINANCIAL HIGHLIGHTS**

## **November 2020**

# November 2020 Monthly Financial Highlights

21

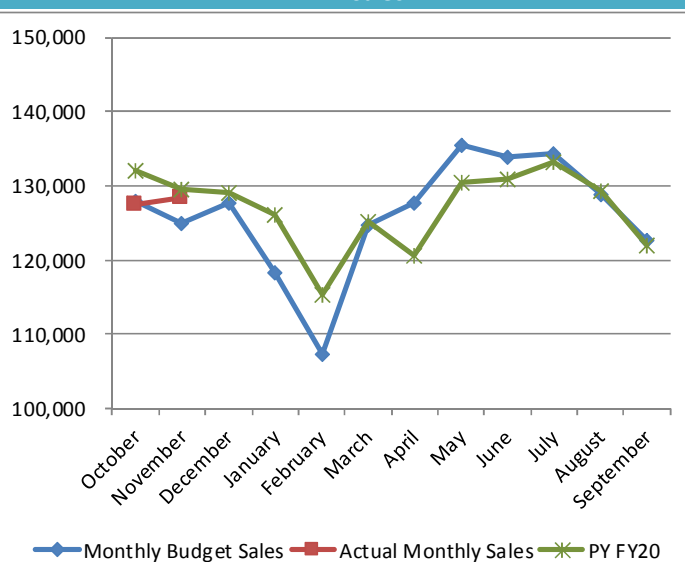
Base Rate Revenue \$000



Through November 30, 2020

	Monthly Budget Revenues \$000	Actual Monthly Revenues	Variance		PY FY20	CY vs PY Variance	
October	\$ 13,064	13,053	\$ (11)	↓	\$ 13,440	\$ (386)	↓
November	12,857	12,869	\$ 12	↑	13,358	\$ (489)	↓
December	13,106				13,216		
January	12,174				12,888		
February	11,078				12,357		
March	12,780				13,039		
April	13,085				12,385		
May	13,712				13,550		
June	13,682				13,176		
July	13,708				13,514		
August	13,180				13,220		
September	12,574				12,567		
<b>Total</b>	<b>\$ 155,000</b>	<b>\$ 25,922</b>	<b>\$ 1</b>		<b>\$ 156,709</b>	<b>\$ (875)</b>	

MWh Sales



Through November 30, 2020

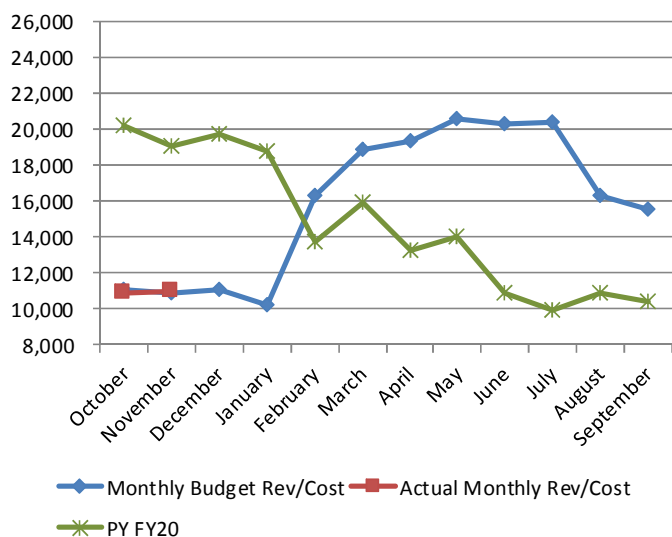
	Monthly Budget Sales mwh	Actual Monthly Sales	Variance		PY FY20	CY vs PY Variance	
October	127,852	127,515	(337)	↓	131,953	(4,438)	↓
November	125,004	128,440	3,437	↑	129,421	(981)	↓
December	127,563				128,958		
January	118,299				126,130		
February	107,268				115,346		
March	124,649				125,185		
April	127,762				120,688		
May	135,527				130,531		
June	133,849				130,987		
July	134,332				133,116		
August	128,752				129,337		
September	122,569				121,927		
<b>Total</b>	<b>1,513,426</b>	<b>255,955</b>	<b>3,100</b>		<b>1,523,579</b>	<b>(5,419)</b>	



# November 2020 Monthly Financial Highlights (Continued)

22

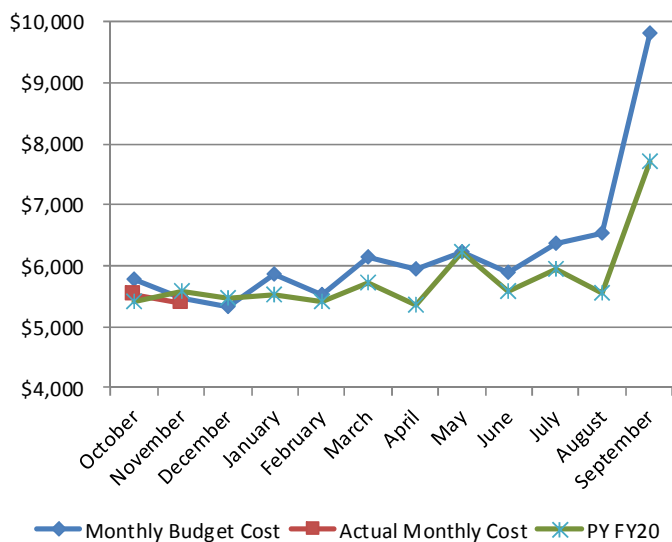
Fuel Revenue/ Cost \$000



Through November 30, 2020

	Monthly Budget \$000	Actual Monthly Rev/Cost	Variance		PY FY20	CY vs PY Variance	
October	11,098	10,910	\$ (187)	↓	\$ 20,165	\$ (9,255)	↓
November	10,850	10,984	\$ 134	↑	19,088	\$ (8,104)	↓
December	11,072				19,697		
January	10,268				18,820		
February	16,274				13,701		
March	18,911				15,968		
April	19,383				13,254		
May	20,561				14,001		
June	20,307				10,867		
July	20,380				9,935		
August	16,352				10,925		
September	15,566				10,438		
<b>Total</b>	<b>\$ 191,023</b>	<b>\$ 21,895</b>	<b>\$ (53)</b>		<b>\$ 176,860</b>	<b>\$ (17,359)</b>	

O&amp;M Cost \$000



Through November 30, 2020

	Monthly Budget \$000	Actual Monthly Cost	Variance		PY FY20	CY vs PY Variance	
October	\$ 5,790	5,515	275	↑	5,421	(94)	↓
November	5,469	5,389	80	↑	5,572	184	↑
December	5,334				5,460		
January	5,857				5,521		
February	5,530				5,417		
March	6,143				5,723		
April	5,956				5,357		
May	6,211				6,215		
June	5,889				5,578		
July	6,363				5,957		
August	6,543				5,539		
September	9,806				7,700		
<b>Total</b>	<b>\$ 74,892</b>	<b>\$ 10,904</b>	<b>\$ 355</b>		<b>\$ 69,461</b>	<b>\$ 89</b>	



# November 2020 Monthly Financial Highlights (Continued)

23

Through November 30, 2020									
	1Q2019	2Q2019	3Q2019	4Q2019	1Q2020	2Q2020	3Q2020	4Q2020	1Q2021
Residential	43,920	44,144	44,329	44,479	44,203	44,509	45,069	44,191	44,271
Commercial	5,273	5,291	5,303	5,289	5,154	5,352	5,309	5,366	5,302
Government	1,090	1,074	1,075	1,070	1,072	1,059	1,061	1,081	1,079
Streetlights	1,151	1,152	1,138	1,138	1,135	1,128	1,139	1,132	1,135
Navy	1	1	1	1	1	1	1	1	1
Total	51,435	51,662	51,846	51,977	51,565	52,049	52,579	51,771	51,788

Debt service coverage (DSC) calculation-indenture	2015	2016	2017	2018	2019	2020	2021
Senior lien coverage	3.62	3.28	2.65	2.53	1.97	1.67	1.71
Aggregate debt service coverage	2.62	3.28	2.65	2.53	1.97	1.67	1.71
Debt service coverage (DSC) calculation-IPP as O&M							
Senior lien coverage	2.56	2.45	1.79	1.65	1.64	1.48	1.52
Aggregate debt service coverage	1.85	2.45	1.79	1.65	1.64	1.48	1.52

# November 2020 Monthly Financial Highlights (Continued)

24

Date	# Prepaid Customers	Balance in arrear	Payment Plan	Total
July 31, 2020	951	\$ 579,651	\$ 98,276	\$ 677,927
Aug .31, 2020	955	\$ 133,710	\$ 565,383	\$ 699,093
Sept. 30, 2020	996	\$ 360,861	\$ 546,949	\$ 907,810
Oct. 31, 2020	1000	\$ 534,346	\$ 544,028	\$ 1,078,374
Nov. 30, 2020	988	\$ 688,253	\$ 527,062	\$ 1,215,315
Dec. 31, 2020	1002	\$ 802,879	\$ 514,058	\$ 1,316,937



# November 2020 Monthly Financial Highlights (Continued)

25

## Proposed LEAC Rate (\$000)

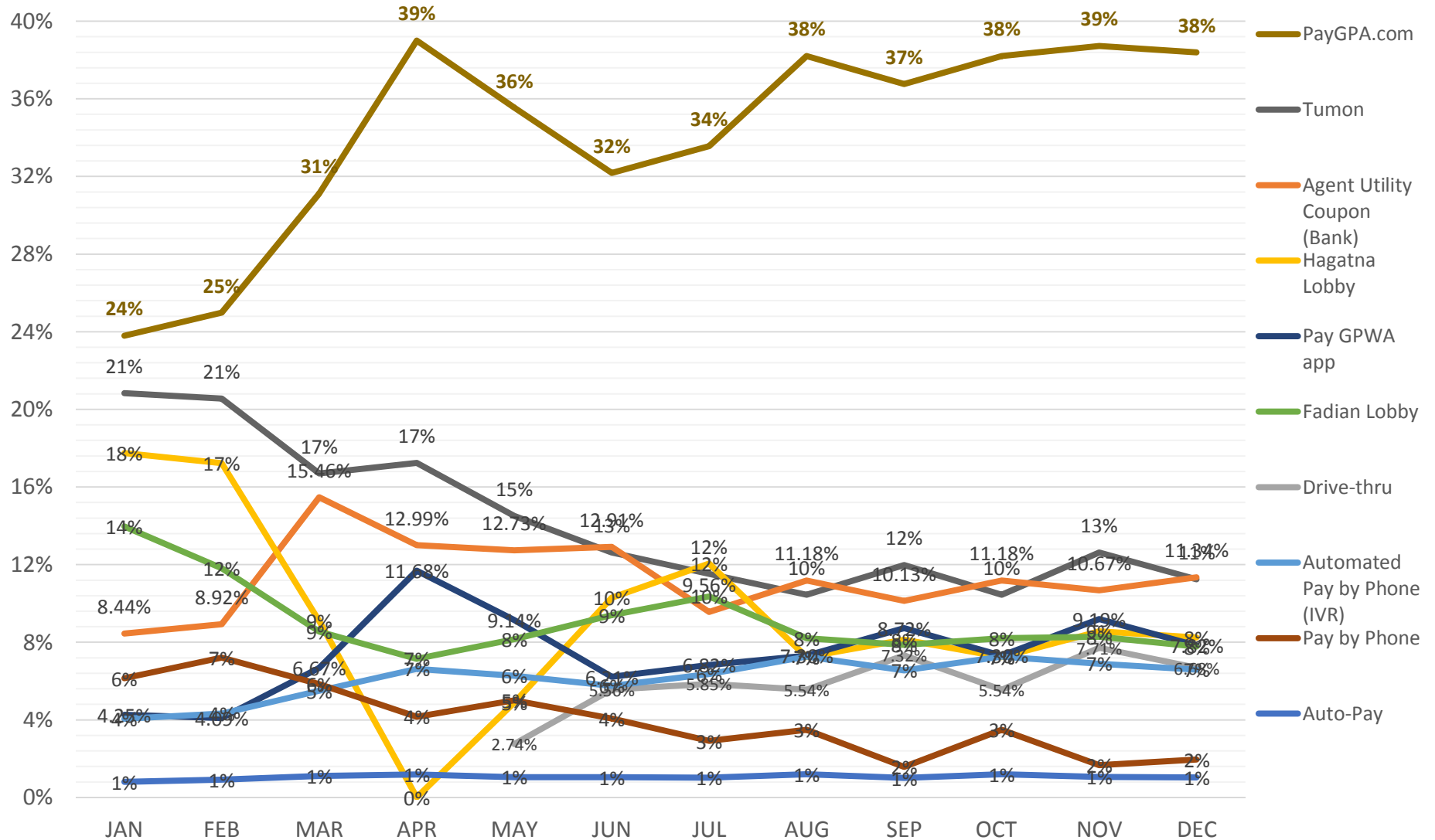
## With Actuals thru December 2020

	Status Quo	Full Recovery	50% Recovery
	MS Pricing 1.11.21 to 1.15.21 Feb 21- Jul 21	MS Pricing 1.11.21 to 1.15.21 Feb 21- Jul 21	MS Pricing 1.11.21 to 1.15.21 Feb 21- Jul 21
Average Price per Bbl-RFO	\$ 60.61	\$ 60.61	\$ 60.61
Average Price per Bbl-Diesel	\$ 71.13	\$ 71.13	\$ 71.13
Number 6 (HSFO/LSFO)	\$ 49,796	\$ 49,796	\$ 49,796
Number 2 (Diesel)	37,869	37,869	37,869
Renewable (Solar)	4,690	4,690	4,690
TOTAL COST	\$ 92,355	\$ 92,355	\$ 92,355
Handling Costs	6,443	6,443	6,443
Total Current Fuel Expense	\$ 98,798	\$ 98,798	\$ 98,798
Civilian Allocation	80.530%	80.530%	80.530%
LEAC Current Fuel Expense	\$ 79,563	\$ 79,563	\$ 79,563
Estimated DSM for this period	\$ 1,500	\$ 1,500	\$ 1,500
Deferred Fuel Expense at the beginning of the period	14,709	14,709	14,709
Total LEAC Expense	\$ 95,772	\$ 95,772	\$ 95,772
Less: Trans. Level Costs	(2,660)	(4,819)	(3,740)
Distribution Level Costs	\$ 93,112	\$ 90,953	\$ 92,032
Over recovery/(Under) at the end of the period	\$ (42,902)	\$ -	\$ (21,451)
Adjusted Distribution Level Costs	\$ 50,210	\$ 90,953	\$ 70,581
Distribution Level Sales (mWh)	578,459	578,459	578,459
LEAC Factor Distribution	0.086800	0.157233	0.122016
Current LEAC Factor Distribution	0.086800	0.086800	0.086800
Increase/(Decrease)	(0.00000)	0.07043	0.03522
Monthly Increase/(Decrease) - 1000 kWh	\$ (0.00)	\$ 70.43	\$ 35.22
% Increase/(Decrease) in LEAC	0.00%	81.14%	40.57%
% Increase/(Decrease) in Total Bill	0.00%	38.83%	19.41%
Discount (3%) - Primary 13.8 KV	0.084200	\$ 0.152544	\$ 0.118377
Discount (4%) - 34.5 KV	0.083957	\$ 0.152104	\$ 0.118036
Discount (5%) - 115 KV	0.082924	\$ 0.150232	\$ 0.116583



## Customer Service (Administration Division)

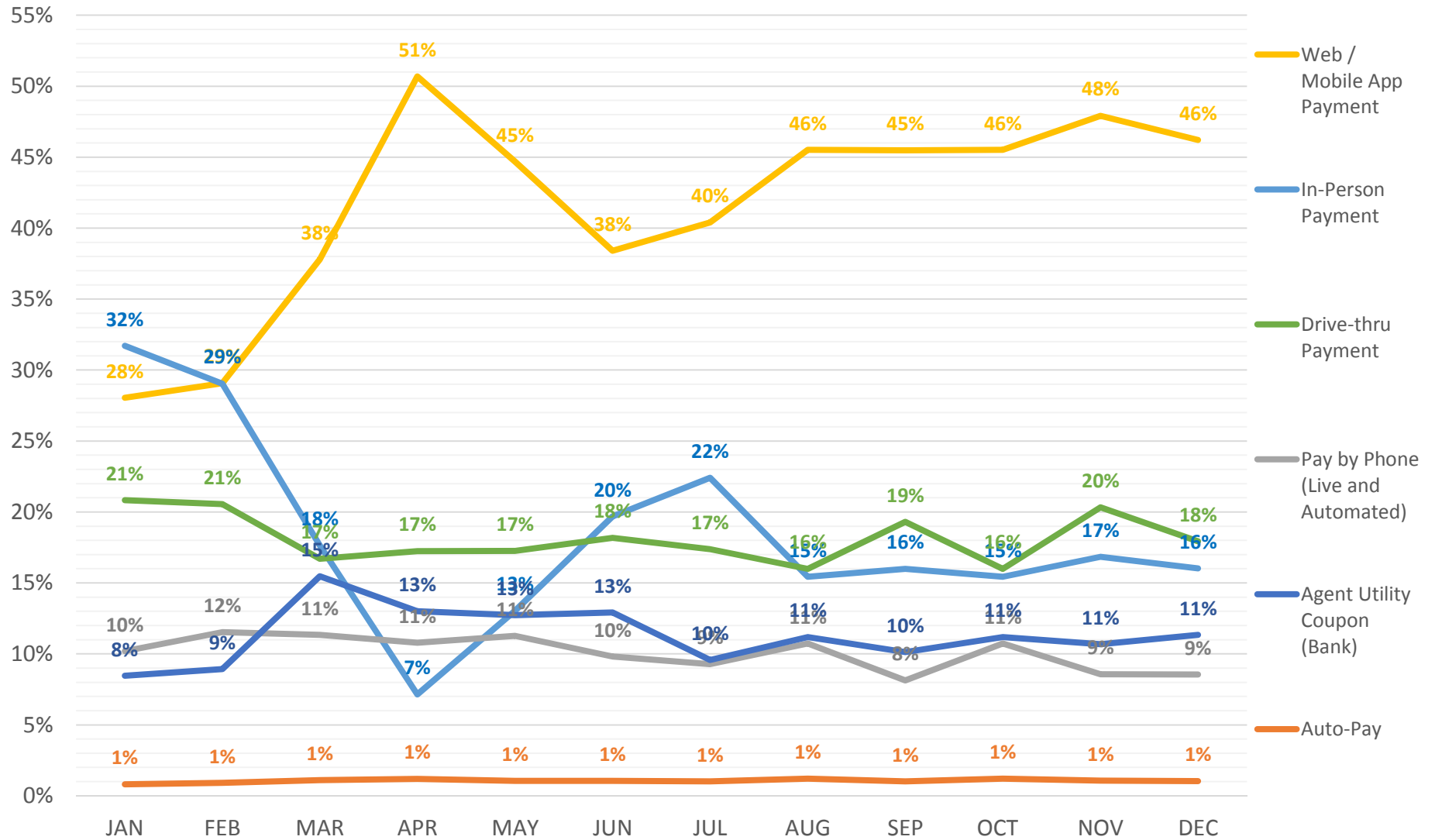
% of Payments made by Collection Point  
January - December 2020



## Customer Service (Administration Division)

Payment Collection by Platform (KPI 1.2.4 – Increase web, pay-by-phone, and prepay payments)

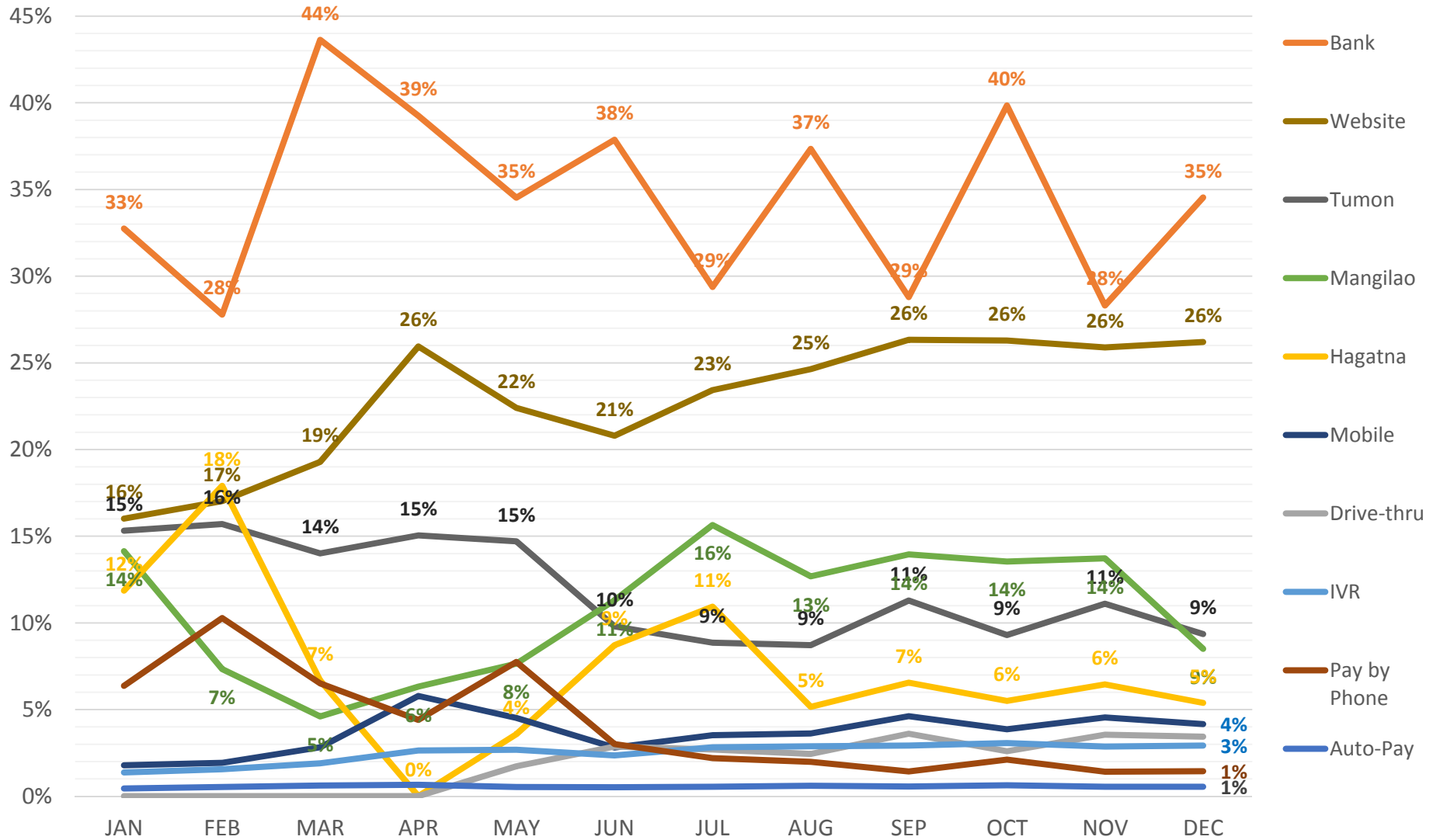
January - December 2020



## Customer Service (Administrative Division)

% Percentage of Total \$ Amount by Collection Point

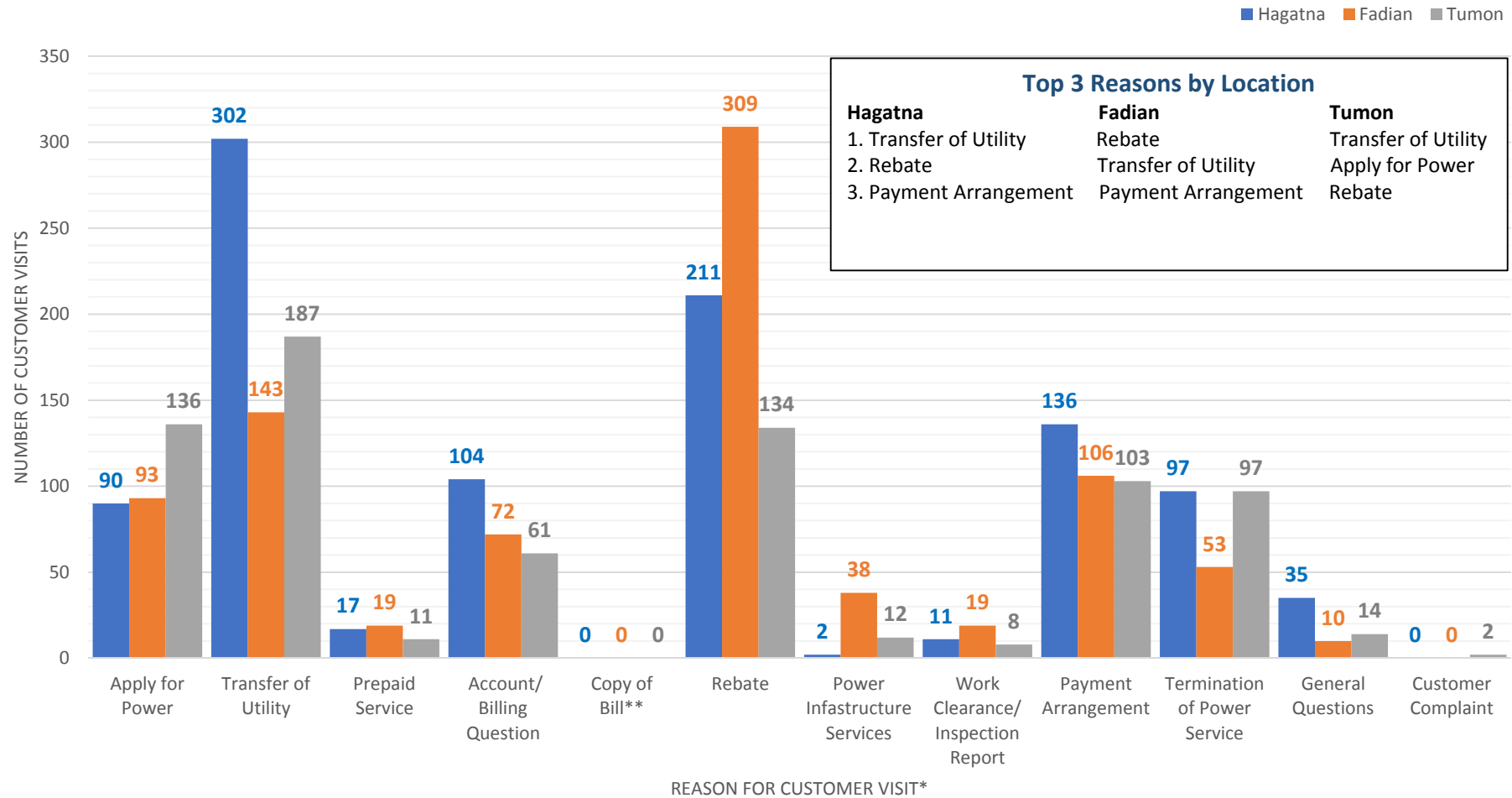
January - December 2020



## Customer Service (Administration Division)

### Reason for Visit by Location

December 2020



\*Each count per **Reason for Customer Visit** represents a customer who visits one of our lobbies. During their visit, the customer will only be counted once, regardless of the number of services provided to the customer. Their reason for visit will be coded based on their initial or primary reason for visit. Each reason for customer visit option shall include but not be limited to, an inquiry of service, submission of an application, submission of multiple applications, submission of supporting documents, customer question regarding the service, customer follow-up, etc.

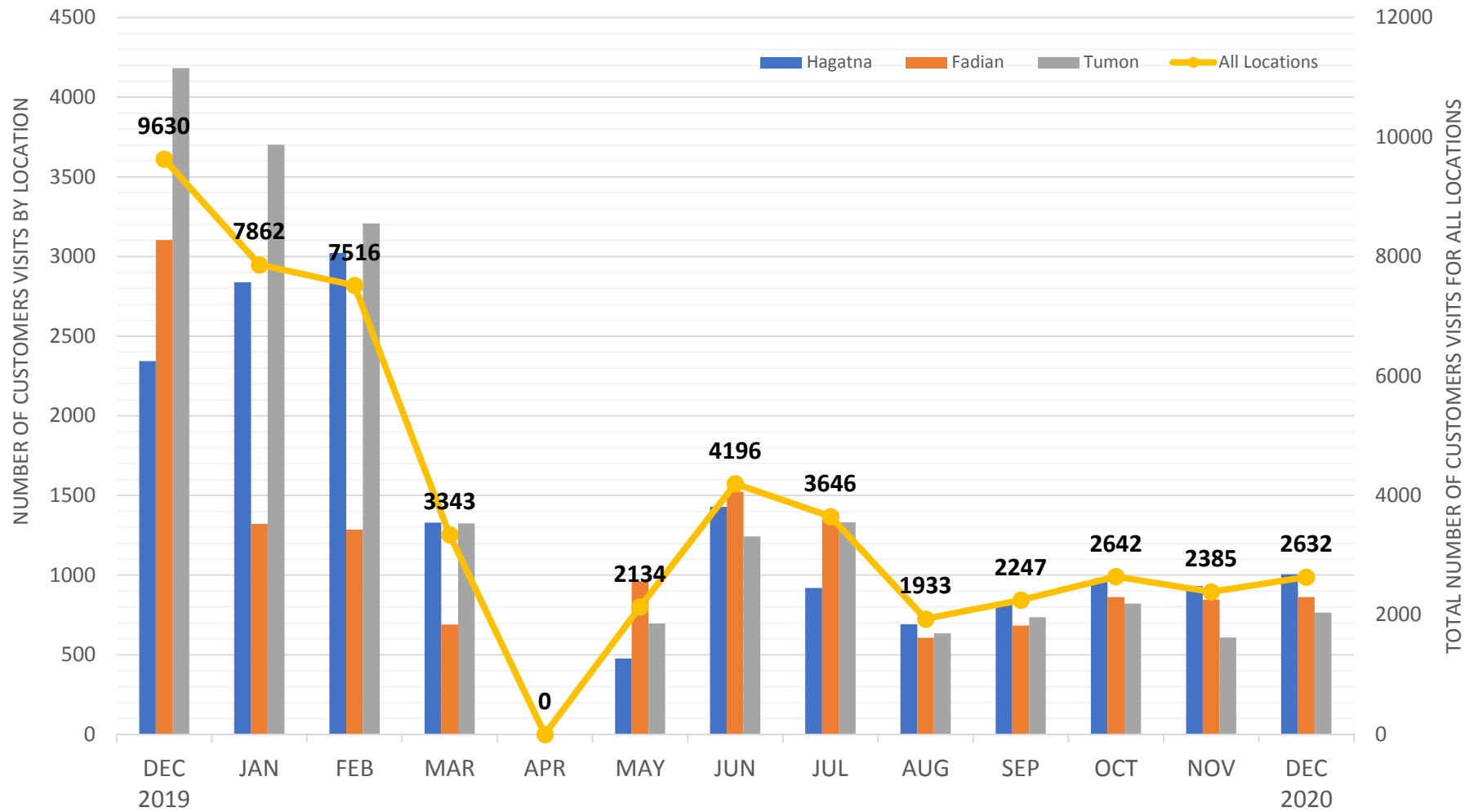
\*\* Copy of Bill option data not available for December 2020 in Lobby Central. Updates have been made to capture this data for future reporting.



## Customer Service (Administration Division)

Lobby Traffic by Location (KPI 1.2.3. Reduce Service Center Traffic)

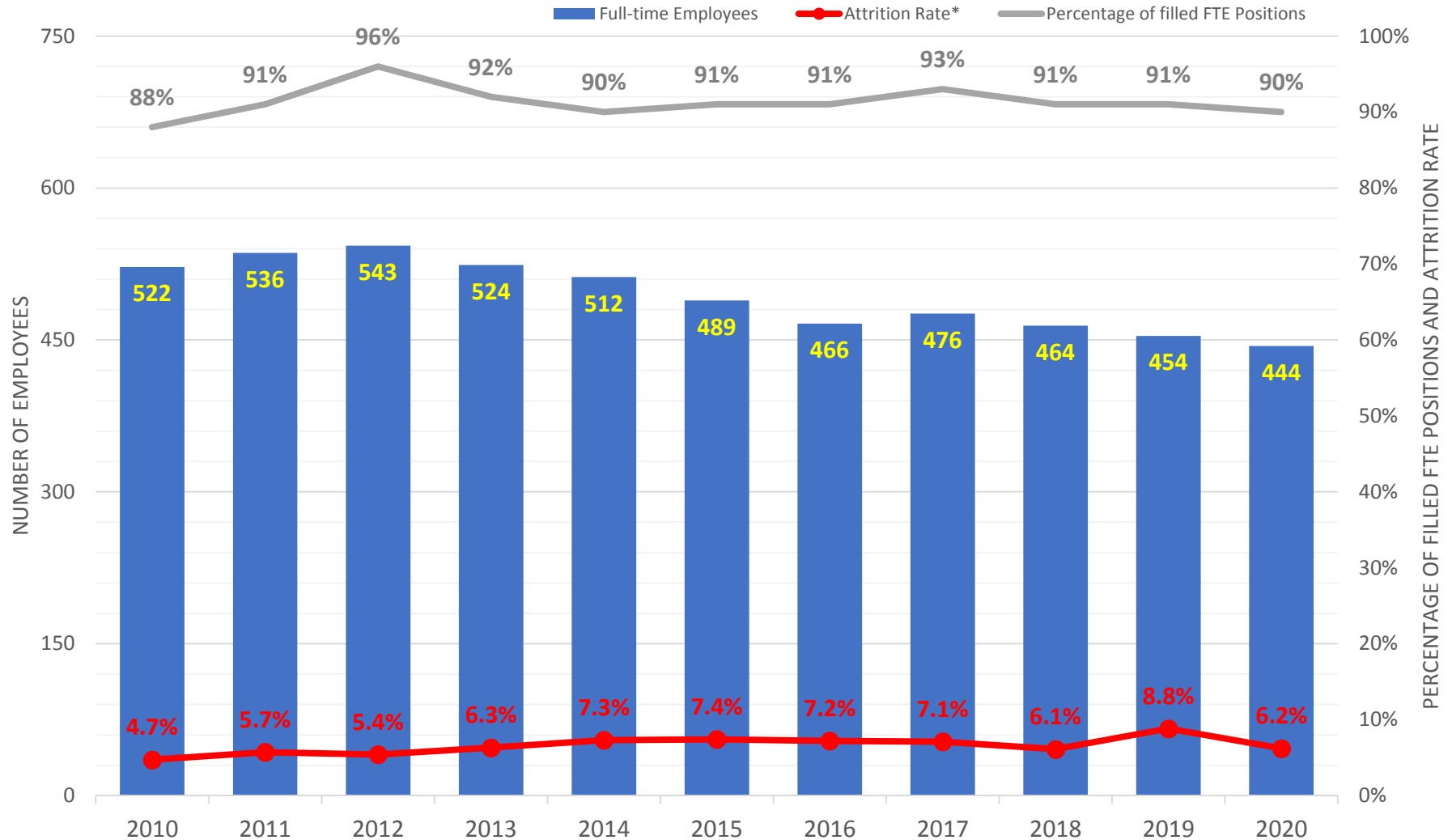
December 2020



## Human Resources (Administration Division)

### Recruitment Analysis

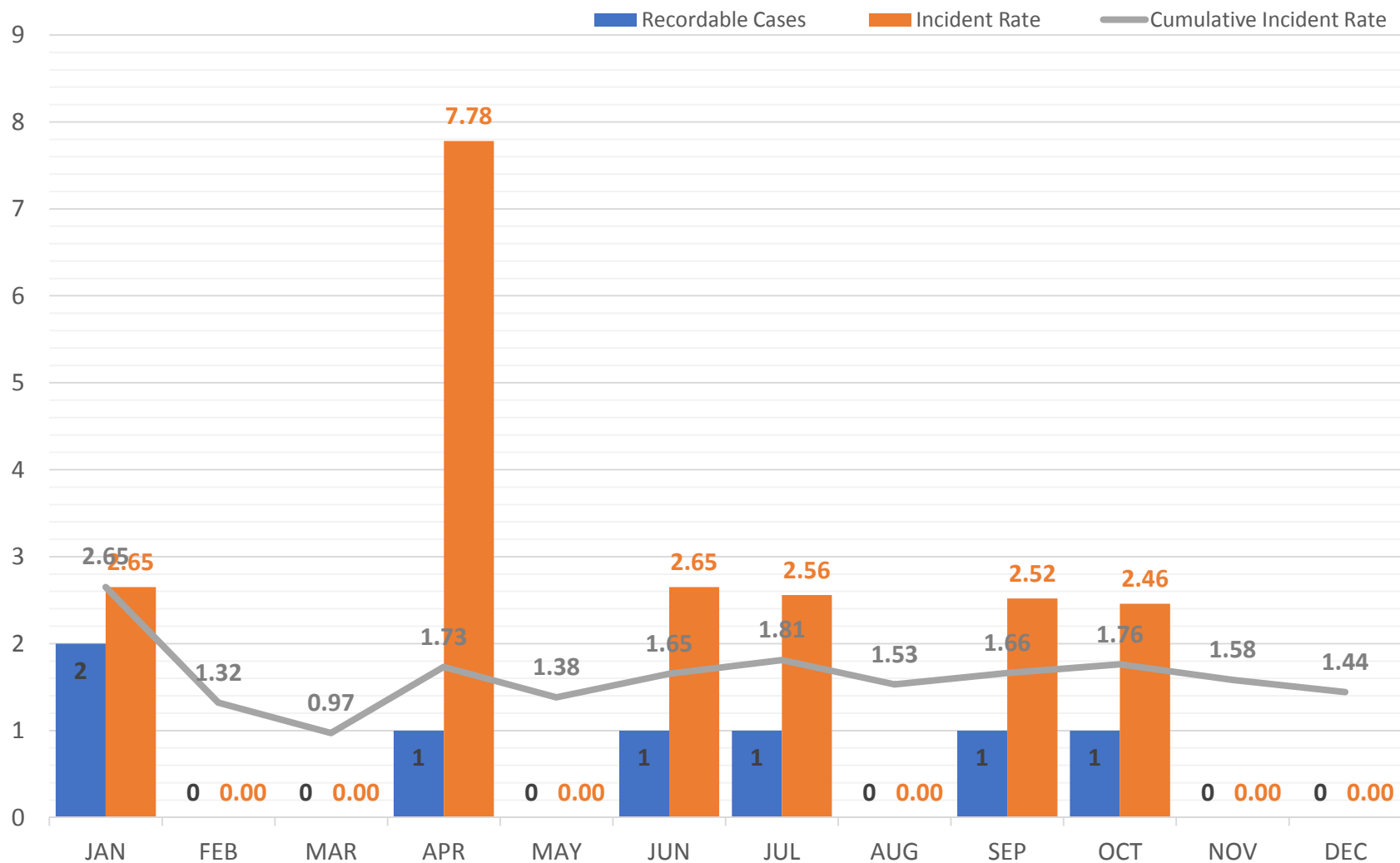
December 2020



\*Attrition rate is calculated by dividing the sum of resignations, retirements, deaths, and terminations by the total filled FTE positions.

## Safety (Administration Division)

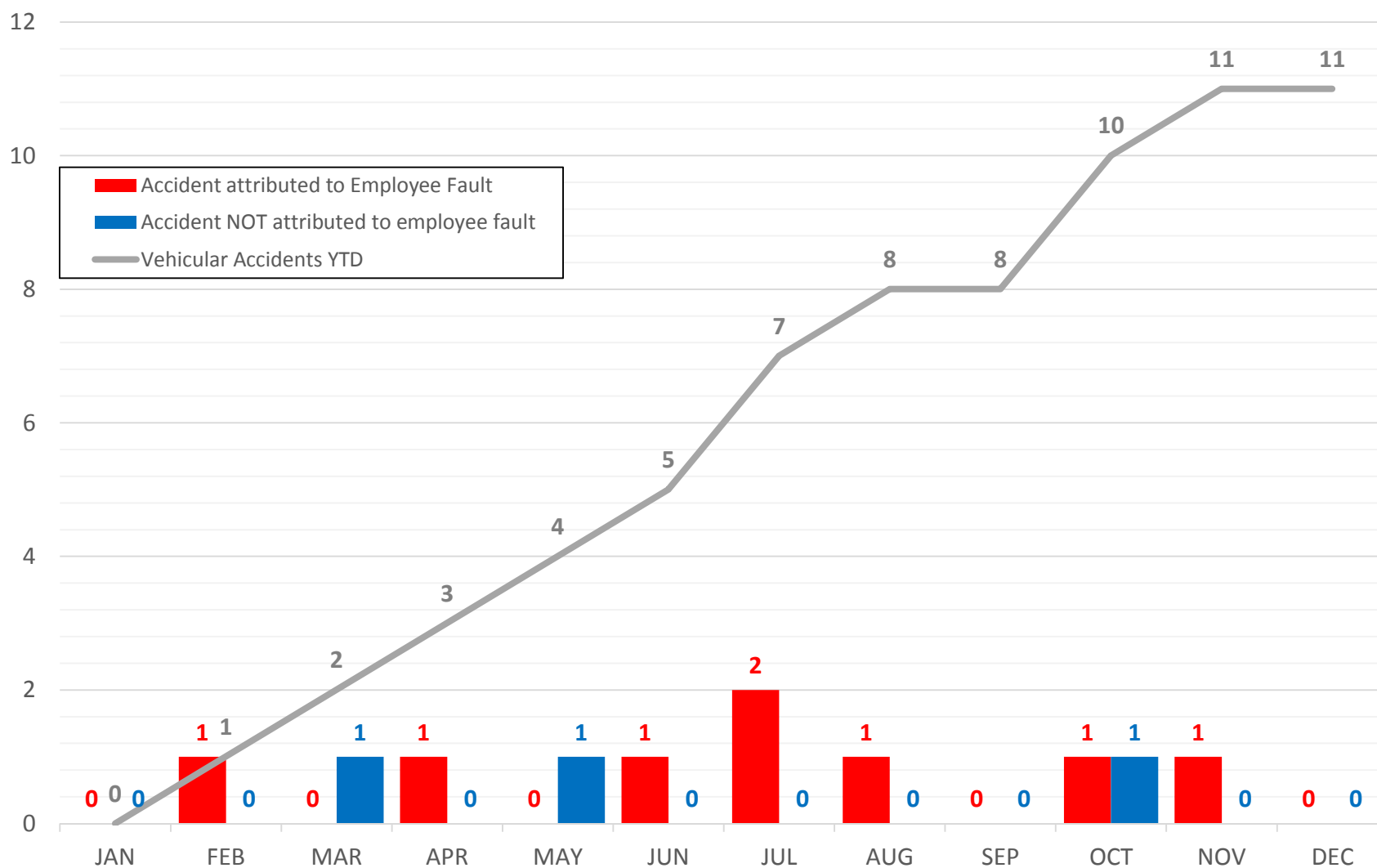
### Incident Rate December 2020



**Safety** (Administration Division)

## Vehicular Accidents

December 2020



**Procurement** (Administration Division)Notable BID (IFB & RFP) Monthly Status Update  
December 2020

BID / RFP NO.	DESCRIPTION	DATE ADVERTISED	BID OPENING	STATUS
GPA-007-18	Renewable Energy Resource Phase III	11/16/2017	9/10/2019	Pending appeal filed with Superior Court of Guam
GPA-027-20	Services for the Transfer and Hauling of Used Oil form Tanks Located at the Old Piti Power Plant to Guam Port	1/23/2020	3/10/2020	Pending additional documents from vendor
RE-BID GPA-072-19	Dededo Main Supply Warehouse Office Building Repairs	11/10/2020	12/3/2020	Evaluation on-going
GPA-021-20	New 2020 55 Foot 4x4 Bucket Trucks	1/28/2020	6/17/2020	14 Day Protest Period (01/08/2021 – 01/22/2021)
RE-BID GPA-044-20	New 2021 Pressure Digger	1/14/2021	2/3/2021	Re-bid due to original bid price validity has expired
GPA-049-20	Generator Protection Relays	7/28/2020	8/12/2020	14 Day Protest Period (01/05/2021 – 01/19/2021)
GPA-053-20	New 2020 Heavy Duty Tractor Truck	6/18/2020	7/16/2020	14 Day Protest Period (01/06/2021 – 01/20/2021)
GPA-014-21	Potential Transformers	1/7/2021	1/26/2021	Bid Opening 01/26/2021
GPA-017-21	Wires	1/12/2021	1/27/2021	Bid Opening 01/27/2021
GPA-019-21	Pole Mounted Transformers (15kVA, 50 kVA & 75 kVA)	1/12/2021	1/28/2021	Bid Opening 01/28/2021
GPA-020-21	Pad Mounted Transformers (75 kVA & 100 kVA)	1/7/2021	1/26/2021	Bid Opening 01/26/2020
GPA-021-21	Pad Mounted Transformers (300 kVA & 500 kVA)	1/12/2021	1/27/2021	Bid Opening 01/21/2021
GPA-022-21	Pad Mounted Transformers (1500 kVA)	1/14/2021	02/02/202	Bid Opening 02/02/2021
GPA-024-21	Fleet & Fuel Management Software Services for the Authority's Fleet	1/7/2021	1/21/2021	Bid Opening 01/21/2021
GPA-RFP-20-006	Network Vulnerability Assessment	3/5/2020	Pending	Pending end user memo to cancel
GPA-RFP-20-007	GPWA Physical Security Services Proof of Concept (POC)	3/10/2020	8/21/2020	Price Proposal due 01/25/2021
GPA-RFP-20-008	Fiber Swap Services	6/19/2019	8/23/2019	Pending finalization of draft contract for proponents
GPA-RFP-21-001	Robotic Process Automation Solution Support Services	10/13/2020 & 10/20/2020	11/6/2020	Best & Final Offer due 01/20/2021
GPA-RFP-21-002	Professional Printing, Mailing and Processing Services Relating to Utility Customer Billing	12/29/2020	2/10/2021	Bid opening scheduled for 02/10/2021

## **PLANNING & REGULATORY DIVISION REPORT**

The following summarizes P&R's activities for the month of December 2020

### **INSPECTIONS/MONITORING**

- Best Management Practices (BMP) Weekly Inspection/Report – Cabras Power Plant
- Monthly Spill Prevention, Control and Countermeasures (SPCC) Inspection/Report – Cabras Power Plant, Macheche, Dededo, Yigo CT, Talofoto, MDI, Tenjo Diesel, Piti 7 Power Plants, IP&E fuel Farm.
- Reviews monthly Continuous Emissions Monitoring System (CEMS) report and monitors TRC's O & M for Tenjo Diesel. Coordinates Operations and Maintenance with TRC.
- Emissions and Limits Tracking for GPA and Aggreko Power Plants
  - Monitoring CO and NOx emissions of the Aggreko generators not to exceed the allowable limit.
  - GPA Plants Limits based on Hours and/or Fuel Use
- Monitoring of the catalyst replacement at Tenjo power plant Coordination in the relocation of the Miratech RICE MACT monitors in Tenjo PP
- Conduct observation on AGGREKO's annual and quarterly emissions testing

### **CONSENT DECREE**

- Provided updates relevant to the timeline of key obligations under the consent decree.
- Performed various emission calculations for GM using different scenarios. Asked TRC to provide some calculations as well.
- Review updated document from Lawyer, JS, AGMA "Timeline of Key Obligations Under Consent Decree - Chart 4830-6458-7706 ..\_r6 jb.docx"

### **ENVIRONEMENTAL RESPONSE**

- Responded to transformer spill at E. Antonio Dededo

### **NEW UKKUDU POWER PLANT**

- Weekly update conference calls:
  - Air Permitting with contractors
  - All other Permitting with contractors
  - GPA Internal discussions with Stanley
  - Discussion on GWA Permit: Water quality and discharge
- Other:
  - Review of Air Permit Draft Documents
  - Review of EIA



## **PROCUREMENT**

### **Coordination with procurement on the following bids:**

- OR#33750 – Environmental Emergency Response Contractor- Procurement review
- OR#33816 – Transfer of Used Oil from Piti Power Plant- Awaiting for the purchase order
- Amendment to PO No. 28387 to GEPA for 2020 AST Registration for GPA/GWA aboveground storage tanks all over the island; this has been coordinated with GEPA, payment will be processed pending issuance of invoice from the Agency.
- OR 34384 - Service to pick up, process, transport and dispose – Reviewed contractors proposal
- RFQ 34386 – Contractual services for laboratory analysis. Ongoing with procurement
- RFQ 34377 – Contractual services for vacuum truck – Ongoing with procurement

## **REPORTING**

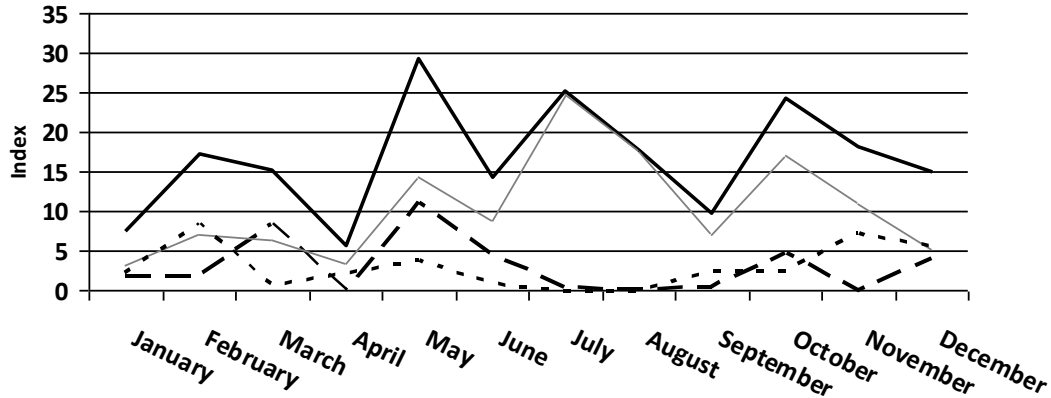
- Monthly NSPS reporting for Cabras, CT's and Diesel plants submitted to GEPA

## **OTHERS**

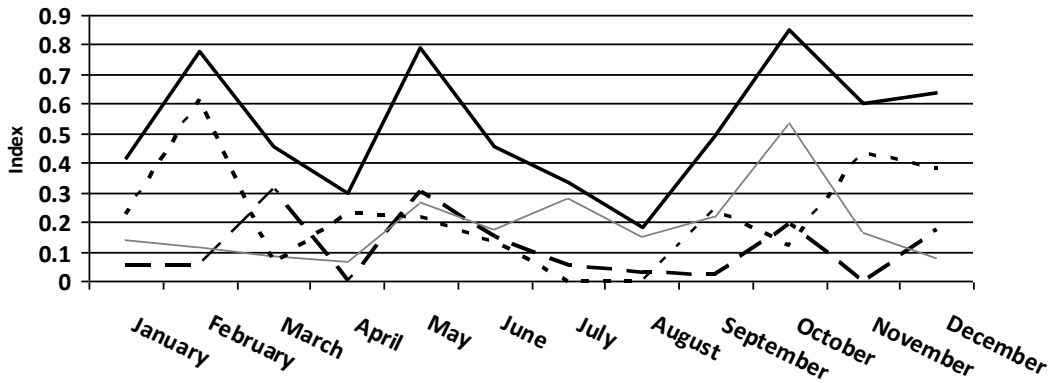
- In connection with the audit of the FY 2020 Financial Statements, provided updates to the statements in the Deloitte document on Understanding the Entity and Its Environment.
- Attended USCG MIAC TeleCon (Marianas Island Area Contingency Plan Committee) with GEPA and other Stakeholders
- New ULSD Pipeline System – attended ConCall with Project Management and SPORD



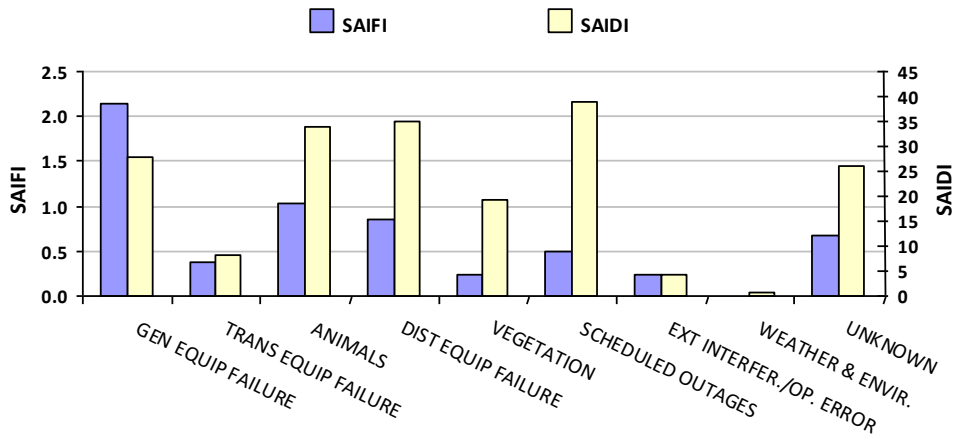
**(Item 1.1,1.2,1.5) December 2020 SAIDI = 199.67 ↑ (192.16)**



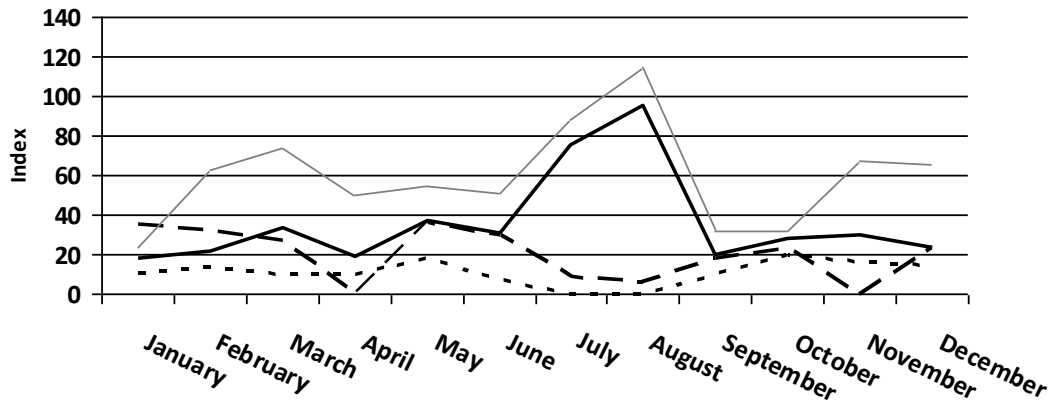
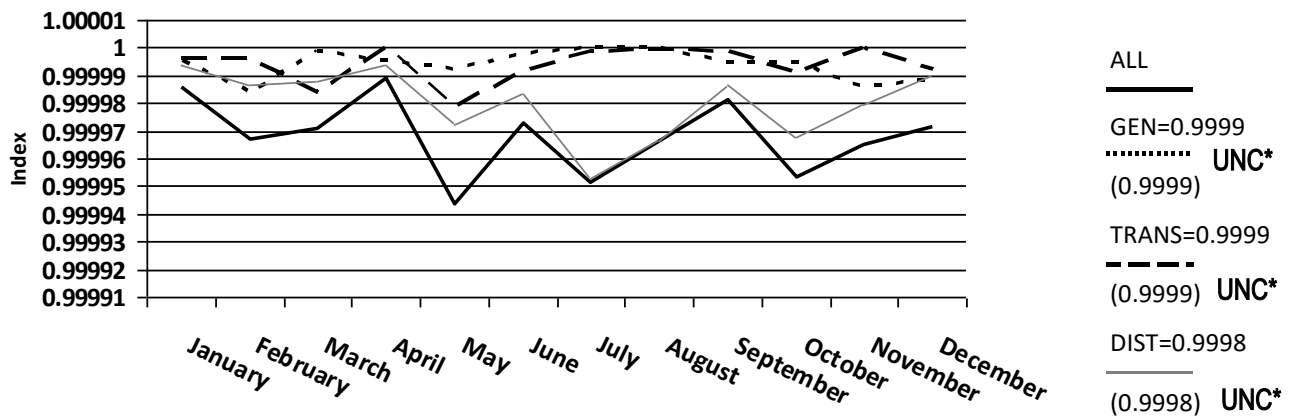
**(Item 1.1,1.2,1.5) December 2020 SAIFI = 6.30 ↑ (6.06)**



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



**GEN EQUIP FAILURE**  
 F:32.1% D:14.4%  
**TRANS EQUIP FAILURE**  
 F:5.5% D:4.3%  
**ANIMALS**  
 F:14.4% D:17.5%  
**DIST EQUIP FAILURE**  
 F:12.2% D:18.0%  
**VEGETATION**  
 F:4.8% D:9.9%  
**SCHEDULED OUTAGES**  
 F:15.4% D:20.0%  
**EXT INTERFER./OP. ERROR**  
 F:5.3% D:2.1%  
**WEATHER & ENVIR.**  
 F:0.2% D:0.3%  
**UNKNOWN**  
 F:10.1% D:13.4%

**(Item 1.1,1.2,1.5) December 2020 CAIDI = 31.68 ↓ (31.74)****(Item 1.1,1.2,1.5) December 2020 ASAI = 0.9996 UNC\* (0.9996)****(Item 1.4) Top 5 Worst Feeders Distribution Causes**

#	Feeder	Outage Count
1	P340	15
2	P111	5
3	P283	5
4	P223	4
5	P271	4

**(Item 1.3) Outage Count**

TOTAL	UFLS	Non-UFLS
450	217	233

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

#	Outage Cause	Count
1	Overhead Equipment	46
2	Vegetation	20
3	Snakes	15
4	Underground Equipment	7
5	Switching Errors	1

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

SAIDI	SAIFI	CAIDI
47.75	3.37	14.16

**GPA Work Session - January 21, 2021 - DIVISION REPORTS**

**ENGINEERING WORK ORDERS**

<b>Engineering Work Order Summary - December 2020</b>	
Work Orders Received from CSR	72
Work Orders Processed & Released to T&D	60
Work Orders Processed & Released to CSR	22
Work Orders Cancelled	17
Work Orders Pending Survey	26
Total Pending WO at Engineering	323

<b>Engineering Large Customer, GPI and Net Metering Tracking</b>						
Date Received	Customer Name	Work Order Numbers	Location	KVA	Meter Qty	Status
12/20/2013	CoreTech International	Multiple	Dededo	300	48	Lada Estates, 450 kVA, Phase I, II and III are 100% Completed - 308 units energized. Phase IV currently in Construction phase, 100% completed, pending completion of easements.
1/27/2015	TG Engineers	422182-85, 90-93, 96-98	Agana Heights	100	11	10 Unit Apartment, 100 kVA, 80% Completed. Work currently on hold.
6/1/2017	New Underground Line (P-047)	466064	Tumon	1,500	1	New Underground line 99% completed, Riser terminated. Mandrelling completed on completed sections. T&D started pulling wire and installing splices in August 2019. Pending final outage at SV1A and SV1B.
3/1/2018	Docomo Pacific Inc., New Data Center	Pending Application	Talofofo	3,000	1	New Data Center. Planned to come off P-260 and P-262. 0% Completed. Still in Design Phase.
10/10/18	Don Sadwahn	465341	Harmon	2,000	1	New Industrial Subdivision, Inspection of civil work only, Proposed 12 Pad Mounted Xfmrs 97% Completed. Pending completion of switch redesign.
05/14/19	Joyrich Group LLC	Multiple	Tamuning	150	17	New 17 Unit Apartments, 50% completed, 150 kVA.
10/01/19	Don Don Donkey "Don Quijote" Shopping Center	Pending Application	Tamuning	2,000	1	New Shopping Center at the intersection of Route 1 and 10A. Permitting phase.
12/01/19	Pacific Unlimited Inc. (Cold Storage)	471784	Tiyan	1,500	1	New Cold Storage, 75% Completed, Temp Power installed, 1500kVA, Pending Easement and Pole Stakeout
12/01/19	Ironwood Villa Del Mar Phase II	Multiple Applications	Toto	440	88	New 88 Unit Apartment complex, 75% Completed, multiple xfmrs.
02/25/20	Yang, Kexin	Multiple	Mangilao	100	12	New 12 Unit Subdivision (4 applications submitted and permitted), 25% completed.
02/25/20	The Church of Jesus Christ LDS	474921	Yigo	750	1	New Church across Yigo Substation, 100% completed, 750 kVA. Released to T&D.
03/11/20	Citi Development & Construction	478020-23, 25, 27-30	Tamuning	60	10	New 10 Unit Town Homes, 10% completed, 100 kVA.
07/07/20	Guam Waterworks Authority New Northern Wastewater Plant	479663	Dededo	3000	1	New Northern Wastewater Plant, 10% completed, 3000kVA.
08/04/20	Guam Waterworks Authority Southern Link Pump Station Upgrade	Pending Application	Dededo		1	Southern Link Pump Station Upgrades, 10 % completed, pending work clearance application.
10/06/20	GCA Trades Academy	481587	Tiyan	500	1	New Trades Academy Classrooms, 100% Completed, 500 kVA, Released to T&D.
11/19/20	Paradise Subdivision	Pending Applications	Mangilao	170	17	17 unit subdivision, pending submission of plans and permitting.
11/01/20	Agat Pole Relocation GPI	Pending	Agat			5 Pole Relocation due to easement issues.
11/01/20	Barrigada Pole Relocation GPI	Pending	Barrigada			Pole Relocation due to easement issues.
11/01/20	Agat/Ocean View Service Relocation GPI	Pending	Agat			Overhead and underground line relocation due to easement and access issues.
11/01/20	Mataguac Pole Relocation	Pending	Dededo			Overhead line relocation due to easement and access issues.
12/30/20	Huang, Long	483772-483780	Tamuning	90	9	New 9 Unit Apartment
Varies	Pending Net Metering Customers	Varies	Various Locations Islandwide		1	Pending Net Metering Customers as of December 31, 2020.
<b>Total</b>				<b>15,660</b>	<b>222</b>	

# E&TS Divisional Report Summary

December 31, 2020

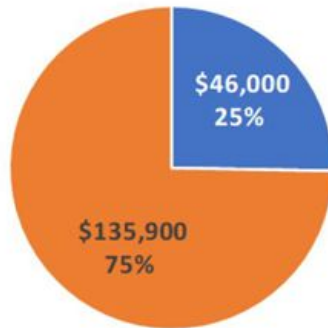
# Contents

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

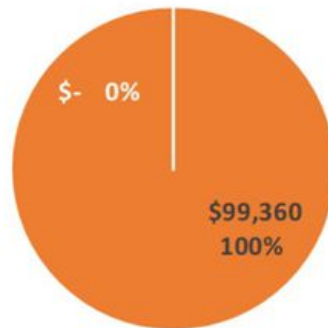


# E&TS Budget Execution Performance

E&TS O&M Contract Budget

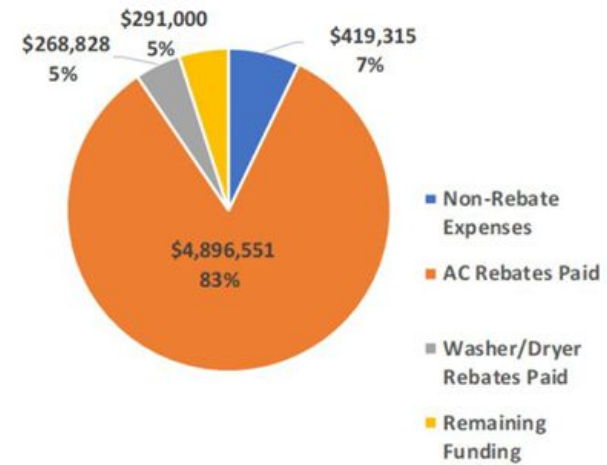


E&TS CIP Budget



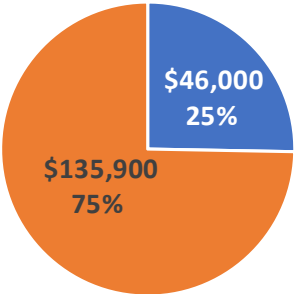
■ Obligated/Spent  
■ Remaining Balance

OCT 2016 to DEC 2020 DSM EXPENSE SUMMARY

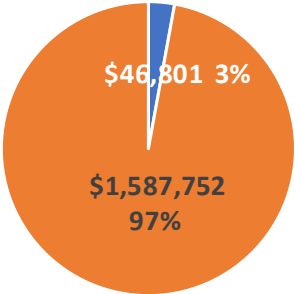


■ Non-Rebate Expenses  
■ AC Rebates Paid  
■ Washer/Dryer Rebates Paid  
■ Remaining Funding

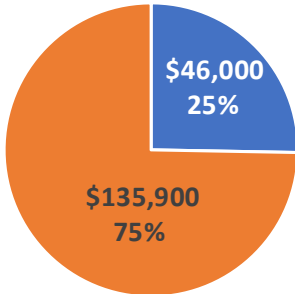
ENG O&M Contract Budget



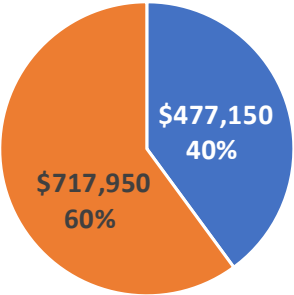
SPORD O&M Contract Budget



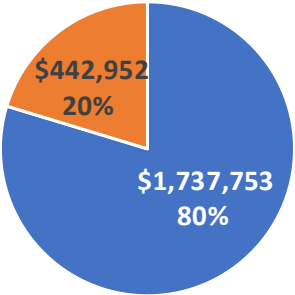
E&TS O&M Contract Budget



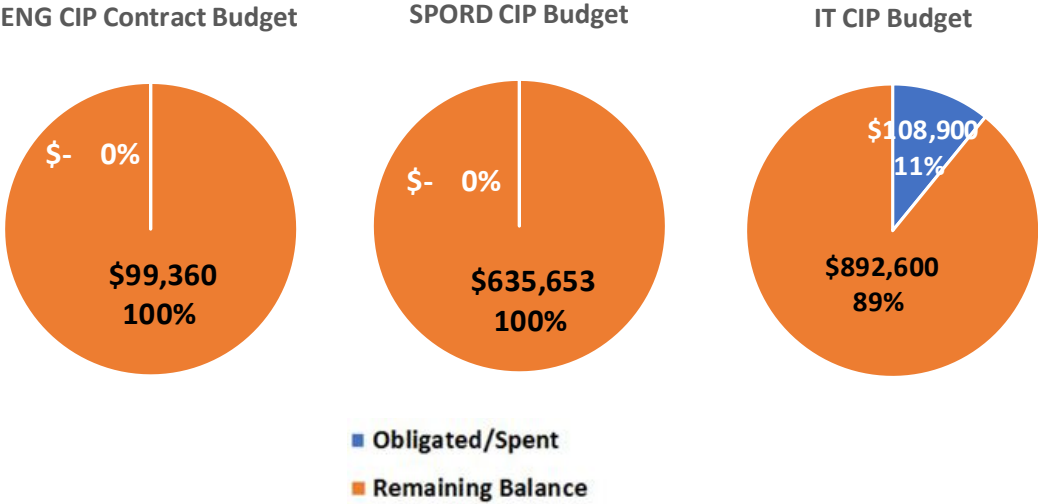
P&R O&M Contract Budget



IT O&M Contract Budget



■ Obligated/Spent  
■ Remaining Balance



# FY 2021 Procurement Status

Business Unit	Current Type					Current Status			Planned			
	RFP	Bid	Multistep Bid	Total	Resolicited	QBL Established	Evaluation Completed	Award/NTP	RFP	Bid	Multistep Bid	Total
<b>SPORD</b>			1	1			6	2	2		6	8
<b>Engineering</b>	3	24		27			7	7	2	10		12
<b>SPORD/Engineering</b>				0			0					0
<b>IT</b>	3	1	1	5								0
<b>P&amp;R</b>		2	1	3			1		1	1		2
<b>Total</b>	<b>6</b>	<b>27</b>	<b>3</b>	<b>36</b>	<b>0</b>	<b>0</b>	<b>14</b>	<b>9</b>	<b>5</b>	<b>11</b>	<b>6</b>	<b>22</b>

# Environmental Compliance

## P&R Inspections Status Ending December 31, 2020

Inspection Type	Organization Responsibility	Violations Not Remediated	Number
Spill Prevention, Control, and Countermeasure (SPCC)	Generation	New Violation Notifications Issued	4
		Remediations Past Due	11
		Remediations Not Past Due	0
	T&D	New Violation Notifications Issued	0
		Remediations Past Due	1
		Remediations Not Past Due	0
Best Management Practices (BMPs)	Generation	New Violation Notifications Issued	0
		Remediations Past Due	6
		Remediations Not Past Due	0

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

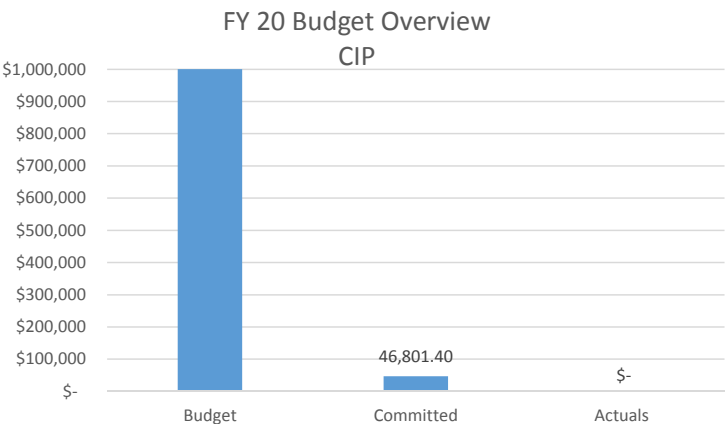
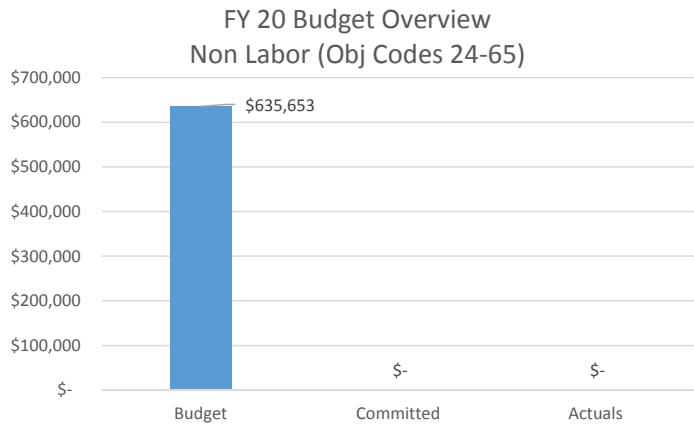
# SPORD CCU Report

Update thru December 31, 2020



# SPORD FY 2020 Budget Status

thru December 31, 2020



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

# SPORD FY 2020 Budget Status

- Major Contracts (Non-O&M) thru December 2020

<b>Contract Description</b>	<b>Budgeted Amount</b>	<b>Committed Amount</b>	<b>Actuals</b>	<b>PO Balance</b>
Aggreko Contract	\$ 3,461,541	\$ 3,461,541	\$ 1,141,461	\$ 2,320,080
Fuel Contracts	\$ 172,702,457	\$ 167,378,781	\$ 35,081,710	\$ 132,297,071
MEC IPP (Piti 8&9)	\$ 18,764,855	\$ 16,955,569	\$ 3,600,572	\$ 13,354,997
Glidepath Contract (Renewable)	\$ 10,190,073	\$ 10,190,073	\$ 2,319,226	\$ 7,870,847

# SPORD FY 2020 Budget Status

## Demand Side Management

Description	FY16	FY17	FY18	FY19	FY20	FY21	Total to Date
						Posting Thru 12/31**	
Regular/OT Pay	\$11,348.80	\$22,256.00	\$26,121.83	\$50,715.19	\$47,402.18	\$50,607.00	\$208,451.00
Other Contractual	\$28,278.50	\$85,550.05	\$116,977.50	\$3,025.00	-		\$233,831.05
Ads & Radio Announcements	-	-	-	\$9,000.00	-		\$9,000.00
Paid Rebates-Split AC	\$154,700.00	\$557,275.00	\$1,349,825.00	\$1,374,650.00	\$1,468,001.00	\$325.00	\$4,904,776.00
Paid Rebates- Central AC	\$3,400.00	\$8,200.00	\$4,400.00	\$6,500.00	\$2,400.00		\$24,900.00
Paid Rebates- Washer/Dryer	\$2,800.00	\$7,425.00	\$57,200.00	\$110,800.00	\$91,003.00		\$269,228.00
<b>Total Expenses</b>	<b>\$200,527.30</b>	<b>\$680,706.05</b>	<b>\$1,554,524.33</b>	<b>\$1,554,690.19</b>	<b>\$1,608,806.18</b>	<b>\$50,932.00</b>	<b>\$5,650,186.05</b>
Bank Interest (+)	\$1,676.42	\$1,722.74	\$1,222.29	\$730.05	\$439.12	\$64.48	\$5,855.10
Bank Fees	\$155.00	\$1,032.06	\$1,085.08	\$1,247.54	\$1,702.64	\$145.00	\$5,367.32

\*Preliminary Data as of 12/31/2020

\*\* Rebates totaling \$402,050.00 were paid from October 1 – December 31, 2020 and accrued in FY20

<b>DSM Ending Balance – LEAC Funds</b>	<b>\$596,806.63</b>
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# Ongoing Activities

- Contract Performance Management (IPP, Aggreko)
- Generation Fuel Supply & Fuel Farm Management
- DSM Rebate Processing & UESC Program
- Renewables (DOAg MOA, Phase I, II & III Projects)
- Energy Storage System
- New Power Plant Procurement
- Smart Grid/Network Support
- Project Management
  - Procurement
  - *December Project Activities*

**PROCUREMENT ACTIVITIES****PENDING AWARD / NTP**

Responsible	PROJECT	Description	CCU Date Approved (Resolution No.)	PUC Date Approved (Docket No.)	Projected Start*	Projected Completion	Status
SPORD (RAC)	PLANNING	MV90 Integration Services	*not required*	*not required*	Sep-20	Feb-21	Server and software preparation ongoing
SPORD (RAC)	STUDIES	Consulting Services for Distribution Study using Smart Grid Analytics					Procurement finalizing PO Contract signed

**PROCUREMENT ACTIVITIES****ONGOING PROCUREMENT**

Responsible	PROJECT	Description	Bid or RFP	Bid/RFP No	Announced	Bid Opening / Due	Notes
SPORD (RAC)	SCADA	DNP3 SA training			TBD	TBD	Vendor decline to provide price proposal - Re-Bid Plan
SPORD (MAT)	RENEWABLES	Renewable Energy Resource Phase III	MS Bid	GPA-007-18	11/16/2017	9/12/2019 (Price)	OPA Released decision in favor of GPA. Protest filed to Supreme Court as of Oct 2020.
SPORD (RAC)	STUDIES	Consulting Services for Distribution Study using Smart Grid Analytics	RFP	RE-SOLICITATION RFP-19-002	Feb-19	3/28/2019	Procurement finalizing PO Contract signed
SPORD (MAT)	SPORD Software	Utility Resource Planning Software	RFP	GPA-RFP-20-003	Jan-20	Jun-20	Currently under protest, Legal Counsel and Procurement reviewing & addressing protest.
SPORD (MAT)	PMC	PMC for Yigo Diesel Generators (currently Aggreko Diesel Units)	IFB	GPA-061-20	Jul-20	Sep-20	Bid is cancelled. Review of Scope of Work and potential re-bid scheduled for 1st or 2nd Quarter 2021.

**DEVELOPING PROCUREMENT**

Responsible	PROJECT	Description	Bid or RFP	Projected Start	Projected Completion	Status
SPORD (RAC)	ELECTRIC VEHICLE	Electric Vehicle Infrastructure	RFP	Oct-19	Jun-21	Developing Requirements (hold)
SPORD (ANF/MAT)	FUEL	GPA Bulk Fuel Storage Facility PMC	Bid	FY2021	Sep-21	Developing Specifications to convert to PMC
SPORD (ANF)	FUEL	Bulk ULSD Supply	MS Bid	FY2021	Aug-21	Bid Package Prepared. Pending upper management advise on issuance date for the solicitation.
SPORD (ANF)	FUEL	Diesel Supply to WSD	MS Bid	FY2021	TBD	Bid Package Preparation In Progress.
SPORD (MAT)	RENEWABLES	Phase IV Renewable Resource Acquisition	(TBD)	Jan-20	Jun-21	Scope of Work & Bid Documents currently under management review.
SPORD (RAC)	SCADA	Replicated Database	RFP	TBD	TBD	Developing Scope of Work & RFP Documents
SPORD (JTL)	ESS	Standby Generator & Automatic Transfer Switch for Talofofo ESS	RFP	FY 2021	FY 2022	Bid Package Prepared. Pending plan procurement documentation.
SPORD (JTL)	RENEWABLES	Installation of Solar Canopy at Fadian Public Parking Area	(TBD)	FY 2021	FY 2022	Bid Package Prepared. Pending upper management review & plan procurement documentation.



GPA Work Session - January 21, 2021 - DIVISION REPORTS

No.	Project Description	December 2020 Activities	Status / Est. Completion	RFP/Bid No
1	Energy Storage System (Phase I)	Final design completed. Clearing and grading permit work commenced in November 2017. Foundation permit work commenced in January 2018. Construction is 100% completed. Interconnection commissioning completed on 9/21. ESS commissioning and stabilization completion is expected in Jan 2021.	Jan-21	MS Bid GPA-082-15
2	Renewable Energy Resource Phase II	KEPCO is continuing with construction - site clearing. Submittals of construction material and equipment for GPA's review and approval are ongoing. Hanwha's design is ongoing. Hanwha is looking for a new EPC so they have put the Substation design on hold. GPA has approved 16 months of Hanwha's COD extension request.	KEPCO PV plant COD is extended to January 21, 2022. Hanwha's COD is extended from Aug 22, 2022 to Dec 22, 2023.	MS Bid GPA-070-16
3	New Power Plant Bid (EPCM)	Biological Survey/Wetland Survey work is near completion. KEPCO finalized new EPC agreement. GPA/Stamley continued work on the boring Research Design for SHPO. Draft EIA and technical documents for minor source permit were submitted to GEPA.	ECA Project COD - Oct. 31, 2022	MS GPA-034-18
4	DSM Marketing	No additional activities funded for remaining of the year.	Continuous	
5	DSM Rebate Program	Processed 590 applications for rebates totaling \$164k	Continuous	
6	Wireless Network Expansion	Commenced Southern Expansion Dandan Substation Installation Design Apra Heights Installation Design	Feb-21 April 2021	GPA-RFP-19-010
7	Smartworks MDM and Eportal	MDMS Training completed E-PORTAL training scheduled for February 2021 Data Migration from Oracle to Postgres (Upgrade to latest version pre-requisite) Upgrade on Existing System Planning	Feb-21 Mar-21	GPA-RFP-19-007
8	GDOE BEST Schools	<b>FY 20 DOI Award Projects:</b> <b>1. Agueda Johnston Middle School LED Lighting Retrofit (\$586,771)</b> <b>2. Maria Ulloa Elementary School LED Lighting Retrofit (\$522,616)</b>  GPA received Authorization to Proceed from DOI on 9/11/20. Coordinating with GDOE on Memorandum of Agreement and projected start schedule.	Estimated Start: May 2021 Est. Completion: August 2021	GPA-RFP-16-013

GPA Work Session - January 21, 2021 - DIVISION REPORTS

No.	Project Description	December 2020 Activities	Status / Est. Completion	RFP/Bid No
9	Supervisory Control and Data Acquisition (SCADA) System	Project Substantially completed Completed OMS and Scada Integration Testing - IT reviewing Network integration requirements(Delayed due to CoVid - Need to meet with Siemens Germany)	Feb 2019 (Punchlist items by Marchr 2021 due to COVID)	GPA-066-16
10	Mobile Workforce Management System	Final UAT and User Training schedule on Jan 2021	March '21 (due to COVID delay)	GPA-RFP-18-013
11	Consulting Services for Smart Grid Analytics Enabled Distribution System Planning, Technical, and Economic Feasibility Studies	Procurement finalizing PO Contract signed	Continuous	RE-SOLICITATION GPA-RFP-19-002
12	MEC Piti &8 and #9 - ECA Extension	Contract Extension commenced 12:00 Noon January 29, 2019. (No issues) Review and adjustment of Recapitalization Projects in-progress. (No issues) MEC provided BWSC Proposal for ULSD May/June 2020, currently under GPA review. Review and processing of monthly invoices	IN PROGRESS	(N/A)
13	Cabars 1&2 PMC	New contract commenced. Will assist Generation with contract matters and performance evaluation.	COMPLETED	GPA-035-20
14	EV Infrastructure	Fast charge station scope for Mangilao offices. Developing fast charge station scope for Mangilao offices.	On-Hold	
15	Renewable Energy Resource Phase III	OPA released decision 9/2020. Protest filed to Superior Court. Hearing/Trial dates pending.	TBD	GPA-007-18
16	Utility Energy Services Contract (UESC)	Continued work with GDOE on Best Schools Program (Grant & Pilot) Continued discussions with Navy on preliminary assessment and grant opportunities. Basic Ordering Agreement renewed. GPA awarded first task at AAFB to upgrade parking lot lighting (~\$198K).	Ongoing	
17	GPA Fuel Farm RFO Pipeline Repair & Upgrade	c/o Engineering Project Mgt. Repairs completed.	COMPLETED	IFB GPA-047-18
18	GPA Fuel Farm ULSD Pipeline Upgrade	c/o Engineering Project Mgt. Design in progress. Delays due to COVID will move project completion into Summer 2021.	Project Timeline: Estimated Start: Jan 2020 Est. Completion: Summer 2021	IFB GPA-027-19
19	Tk 1934 & Tk1935 API 653 Internal Inspection	c/o Engineering Project Mgt. Implementation in progress. Delays were experienced for Tank 1935 due to COVID however the total project schedule may still be within the projection completion date.	Project Timeline: Estimated Start: Feb 2020 Est. Completion: Dec 2022	IFB GPA-028-19

## GPA Work Session - January 21, 2021 - DIVISION REPORTS

No.	Project Description	December 2020 Activities	Status / Est. Completion	RFP/Bid No
20	Milsoft Systems Software Services	OMS-Test Server Re-Installation Completed	Continuous	GPA-RFP-18-003
21	MV90 Integration Services	Server and software preparation ongoing	Feb-21	GPA-RFP-18-001
22	Grant Support	Continued grant development and execution.  1. Guam Energy Office EnergySmart School Grant (~\$64K) - GPA working with Siemens to schedule audit of 4 schools under this grant. Energy Audits scheduled for January, 2021 due to COVID-19.	GEO MOA Finalize: Sept '19 Grant Scope Completion: Dec. '21	
23	Redesignation of Cabras-Piti / Guam	Re-designation received 12/2018. SIP Draft sent to Guam EPA week of 10/21/2019. Final clarifications and changes made to Control Strategy and SIP Modeling Protocol and submitted by GPA Guam EPA via email and hand delivery of printed copy, week of February 10, 2020. Awaiting final decision on AAQM.  *AAQM Plan submitted to EPA week of originally submitted on Oct. 21, 2019, and acknowledged by USEPA/Guam EPA. Final clarifications and changes made to Control Strategy and SIP Modeling Protocol and submitted by GPA Guam EPA via email and hand delivery of printed copy, week of February 10, 2020. Awaiting final decision on proceeding (or not) w/ AAQM. SIP original completion date was April 2020, but awaiting P&R advise on new deadline from USEPA and Guam EPA.	Start: October 2011 Est. Completion: TBD	RFP-11-001
24	GPA Fuel Farm- OWS Upgrading	c/o Engineering Project Mgt. Scope included in Tk 1934 & Tk1935 API 653 Internal Inspection and repair. Implementation in progress	Project Timeline: Estimated Start: Feb 2020 Est. Completion: Dec 2022	IFB GPA-028-19
25	GPA Fuel Farm- LD System Upgrading	c/o Engineering Project Mgt. Scope included in Tk 1934 & Tk1935 API 653 Internal Inspection and repair. Implementation in progress	Project Timeline: Estimated Start: Feb 2020 Est. Completion: Dec 2022	IFB GPA-028-19
27	Integrated Resource Plan	Gathering data & establishing baselines. Planning in progress.	TBD	GPA-RFP-17-002 / UFS / S&P
28	Energy Storage Development Support	Consultant providing support for third-party commissioning services	Jan 2021	GPA-RFP-13-007
29	Utility Resource Planning Software RFP.	Stay of Procurement due to protest.	Planned Completion: 9/30/2021	RFP-20-003
30	Power System Analyses and Studies	Signed contract and PO Acknowledgement received from S&C. System impact studies for Phase III are on hold due to Phase III Protest.	Estimated Start: Nov 2019 Est. Completion: TBD	

GPA Work Session - January 21, 2021 - DIVISION REPORTS

No.	Project Description	December 2020 Activities	Status / Est. Completion	RFP/Bid No
31	CT PMC Extension	Contract expires February 28, 2021. CCU and PUC approvals received. Pending Amendment 1.	Start Date: Mar 2020 Est. Completion: Feb 2021	TBD
35	Diesel Supply to Tenjo Vista	Bid Package prepared. Approved by CCU (Resolution 2020-02) and PUC (Docket 20-07). For solicitation	Project Timeline: Estimated Start: TBD Est. Completion: TBD	TBD
36	GPA Fuel Farm Mgt Contract	2nd & 3rd Year Contract Extension (10/01/20-09/30/22) approved by CCU (Resolution 2020-03) and PUC (Docket 20-08).	2-year base period: Completed 09/30/19 1st Year Extn: 10/01/19 to 09/30/20 2nd & 3rd Yr Extn: 10/01/20 to 09/30/22	MS IFB GPA-014-17
37	RFO Supply to Baseload Plants	Contract awarded to Hyundai Corporation ContractTerm: 3-year base period: 09/01/20 to 08/31/23 w/ 2 Year Extn Option	3-year base period: 9/1/2020-8/31/2023 1st Year Extn: 2nd Year Extn:	MS IFB GPA-050-20
38	Reliability Studies	Completed evaluation and set-up of initial scenarios to determine options for maintaining reliability standard, after new power plant commences operation. Initial analysis focused on determining if Piti 8&9 can be retired.	Est. Completion: 3/31/2021 (same as IRP)	(No consultant)
39	RFO Testing Services Contract	Solicitation in progress- Contract award finalization ContractTerm: 2-year base period: 10/01/20 to 09/30/22 w/ 3 Year Extn Option	Estimated Start: Dec 2019 Est. Completion: Sep 2020	MS IFB GPA-013-20
40	PMC for Yigo Diesel Units (currently Aggreko Diesel Units)	Bid was cancelled. Bid documents to be evaluated and scope to be updated before resolicitation.	Project Start: July 2020 (procurement) Est. Completion: TBD	GPA-061-20
41	DSM Digitization	Website User Interface for accepting DSM rebate applications online is currently under review. Design approval to be sent to web developer by 1/15/2021. Reporting requirements and database sharing is also being discussed internally.	Project Start: Sep 2020 Est. Completion: TBD	TBD

# CCU Report- DSM

As of December 31, 2020

# All Expenses – Fiscal Year

Description	FY16	FY17	FY18	FY19	FY20	FY21	Total to Date
						Posting Thru 12/31**	
Regular/OT Pay	\$11,348.80	\$22,256.00	\$26,121.83	\$50,715.19	\$47,402.18	\$50,607.00	\$208,451.00
Other Contractual	\$28,278.50	\$85,550.05	\$116,977.50	\$3,025.00	-	-	\$233,831.05
Ads & Radio Announcements	-	-	-	\$9,000.00	-	-	\$9,000.00
Paid Rebates-Split AC	\$154,700.00	\$557,275.00	\$1,349,825.00	\$1,374,650.00	\$1,468,001.00	\$325.00	\$4,904,776.00
Paid Rebates-Central AC	\$3,400.00	\$8,200.00	\$4,400.00	\$6,500.00	\$2,400.00	-	\$24,900.00
Paid Rebates-Washer/Dryer	\$2,800.00	\$7,425.00	\$57,200.00	\$110,800.00	\$91,003.00	-	\$269,228.00
<b>Total Expenses</b>	<b>\$200,527.30</b>	<b>\$680,706.05</b>	<b>\$1,554,524.33</b>	<b>\$1,554,690.19</b>	<b>\$1,608,806.18</b>	<b>\$50,932.00</b>	<b>\$5,650,186.05</b>
Bank Interest (+)	\$1,676.42	\$1,722.74	\$1,222.29	\$730.05	\$439.12	\$64.48	\$5,855.10
Bank Fees	\$155.00	\$1,032.06	\$1,085.08	\$1,247.54	\$1,702.64	\$145.00	\$5,367.32

\*Preliminary Data as of 12/31/2020

\*\* Rebates totaling \$402,050.00 were paid from October 1 – December 31, 2020 and accrued in FY20



## DSM Funding

No.	Description	Amount
1	Initial DSM Budget FY 2016	\$1,806,014.00
2	Interest Income	\$5,855.10
3	Bank Fees	\$5,367.32
4	Additional Funding Source 2017 Bond Refunding savings FY 2019 Revenue Funding FY 2020 Revenue Funding FY2020 LEAC (June to September) FY2021 LEAC (October to December)	\$1,139,189.00 \$1,031,500.00 \$348,075.00 \$1,296,397.67 \$625,329.23
5	Total Expense FY2016- FY2020 (Ending May 2020)	\$4,355,078.30
6	Total Expense FY2020 -FY2021 (June 2020 to December 2020)*	\$1,295,107.75
	<b>DSM Ending Balance – LEAC Funds</b>	<b>\$596,806.63</b>

\*Preliminary Data as of 12/31/2020.

\*\*December 2020 LEAC Revenues pending

## FY 2020- Rebate Amount Paid Monthly

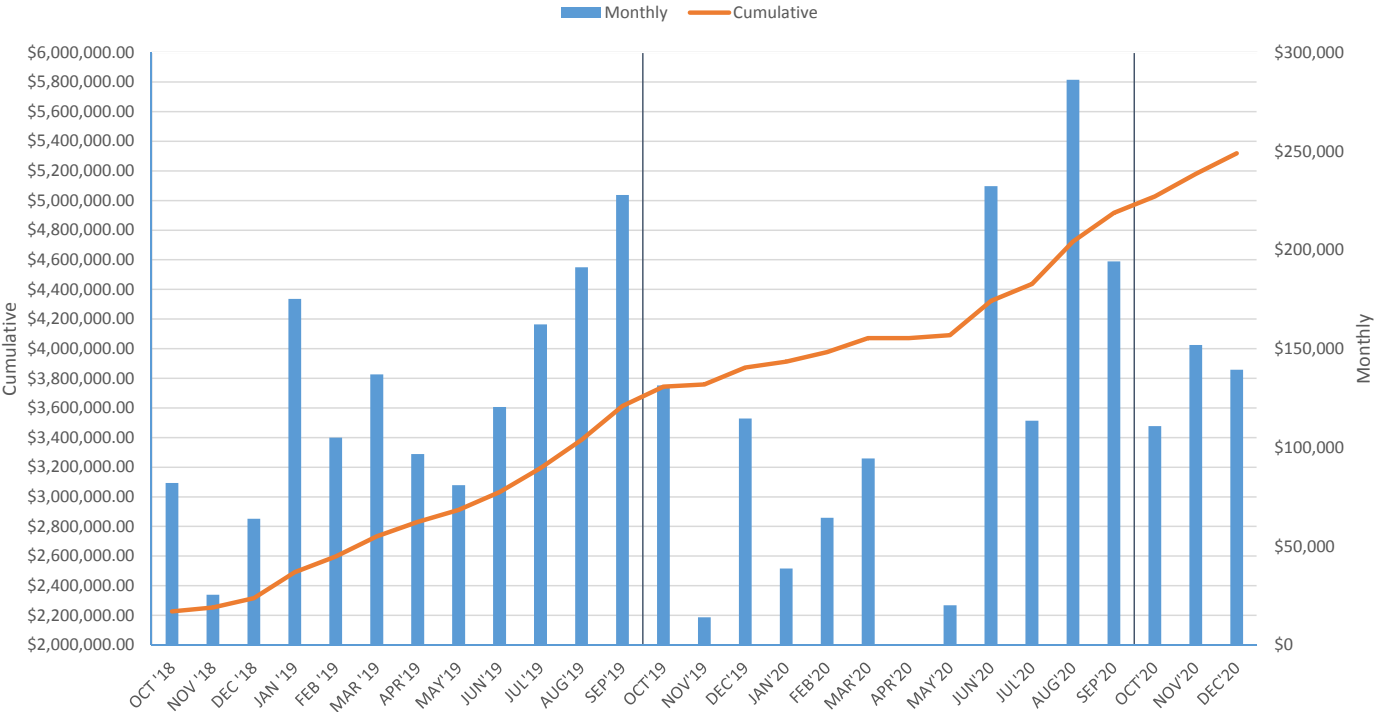
Month	Total	Split A/C Units	Central A/C Units	Washers/ Dryers
OCT '19	\$131,400.00	\$120,100.00	\$500.00	\$10,800.00
NOV '19	\$14,050.00	\$13,650.00	\$0.00	\$400.00
DEC '19	\$114,775.00	\$104,275.00	\$500.00	\$10,000.00
JAN '20	\$38,650.00	\$36,650.00	\$0.00	\$2,000.00
FEB '20	\$64,450.00	\$59,850.00	\$0.00	\$4,600.00
MAR '20	\$94,475.00	\$84,875.00	–	\$9,600.00
APR '20	–	–	–	–
MAY '20	\$20,075.00	\$18,275.00	–	\$1,800.00
JUN '20	\$232,300.00	\$219,100.00	–	\$13,200.00
JUL '20	\$113,575.00	\$101,275.00	\$500.00	\$11,800.00
AUG '20	\$286,100.00	\$270,700.00	–	\$15,400.00
SEP '20	\$194,250.00	\$182,050.00	\$0.00	\$12,200.00
TOTALS	\$1,304,100.00	\$1,210,800.00	\$1,500.00	\$91,800.00

## FY 2021- Rebate Amount Paid Monthly

Month	Total	Split A/C Units	Central A/C Units	Washers/ Dryers
OCT '20*	\$ 110,825.00	\$ 110,325.00	\$ 500.00	–
NOV '20*	\$ 151,925.00	\$ 142,425.00	\$ 500.00	\$ 9,000.00
DEC '20*	\$ 139,300.00	\$ 135,500.00		\$ 3,800.00
JAN '21				
FEB '21				
MAR '21				
APR '21				
MAY '21				
JUN '21				
JUL '21				
AUG '21				
SEP '21				
TOTALS	\$ 402,050.00	\$ 388,250.00	\$ 1,000.00	\$ 12,800.00

\* Accrued in FY2020

# FY'19- FY'21 Rebate Amount Paid



## FY 2020 Number of Applications Received By Customer Service and Paid Monthly

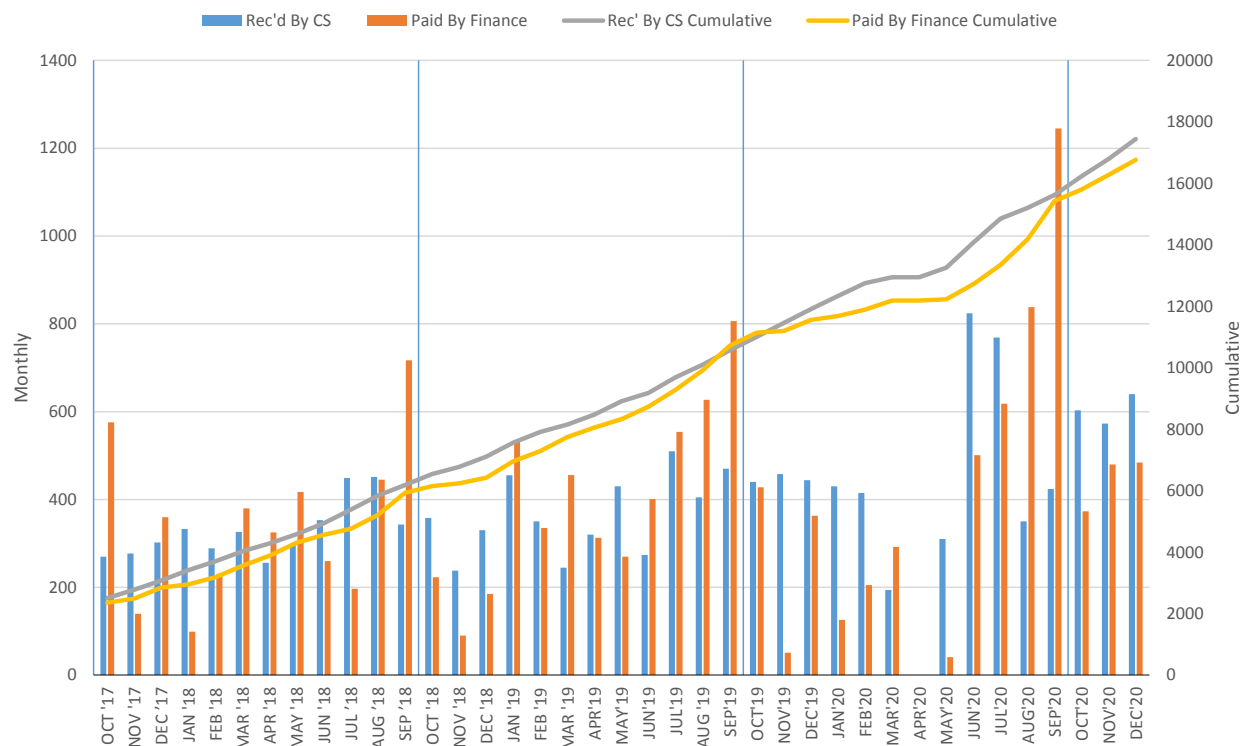
Month	Rec'd By CS	Paid By Finance
OCT '19	440	428
NOV '19	353	51
DEC '19	445	363
JAN'20	431	126
FEB '20	394	205
MAR '20	194	292
APR '20	-	-
MAY '20	435	41
JUN '20	825	501
JUL '20	824	618
AUG '20	410	838
SEP '20	425	500

FY 2021 Number of Applications Received By Customer Service  
and Paid Monthly

Month	Rec'd By CS	Paid By Finance
OCT '20	637	373
NOV '20	573	480
DEC '20	640	484
JAN'21		
FEB '21		
MAR '21		
APR '21		
MAY '21		
JUN '21		
JUL '21		
AUG '21		
SEP '21		



## FY'18 - FY'21 Number of Applications Received By Customer Service and Paid

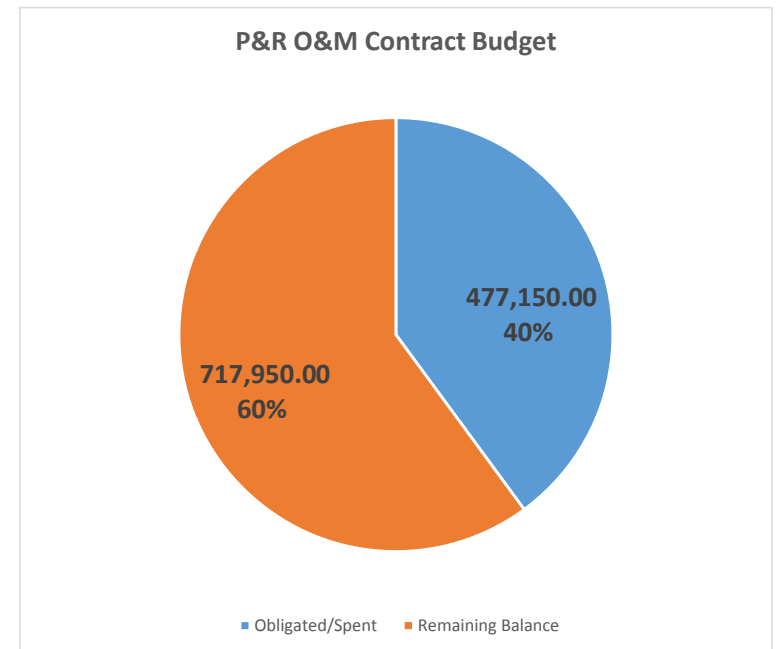


# Planning & Regulatory CCU Report

December 31, 2020

# Planning & Regulatory O&M Contract Budget

- Revenue Funded
- Target
  - 38.0% O&M Obligation as of October 31, 2020 (Actual)
  - 40.0% O&M Obligation as of December 31, 2020 (Actual)



## P&R Weekly & Monthly Inspection Reports

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

## P&R Inspection Report Purpose

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

## Weekly BMP Report

**WEEKLY BMP REPORT SUMMARY  
CABRAS POWER PLANT  
MONTH OF DECEMBER 2020**

## LEGEND OF TRACKING



Notification Date



Completed



Within Scheduled Remediation



Deadline is Past Due

INSPECTOR: NOEL P. CRUZ

LOCATION	WE 12/04/20 FINDINGS	WE 12/11/20 FINDINGS	WE 12/18/20 FINDINGS	WE 12/18/20 FINDINGS	WE 12/31/20 FINDINGS	RECOMMENDATION/ REMARKS	INITIAL FINDINGS DATE	DUE DATE	DATE COMPLETED	RESPONSE
CABRAS FACILITY	Standing oily water at engine bay, Cabras 3 area	Standing oily water at engine bay, Cabras 3 area	Standing oily water at engine bay, Cabras 3 area	Standing oily water at engine bay, Cabras 3 area	Standing oily water at engine bay, Cabras 3 area; Absorbent pads need replacement	Conduct cleanup	8/28/2020	ASAP		
	Metal debris from Cabras 3&4 near the outfall	Metal debris from Cabras 3&4 near the outfall	Metal debris from Cabras 3&4 near the outfall	Metal debris from Cabras 3&4 near the outfall	Metal debris from Cabras 3&4 near the outfall	Dispose metal structure and debris	2/7/2020	ASAP		
	Oil in sump pit, Cabras 3&6	Oil in sump pit, Cabras 3&6	Oil in sump pit, Cabras 3&4	Oil in sump pit, Cabras 3&4	Oil in sump pit, Cabras 3&4	Remaining oil must be pumped out to prevent accidental overflow due to rainwater accumulation	6/12/2020	ASAP		
	Fuel line corrosion at refilling valve pit	Fuel line corrosion at refilling valve pit	Fuel line corrosion at refilling valve pit	Fuel line corrosion at refilling valve pit	Fuel line corrosion at refilling valve pit	Repair	8/14/2020	ASAP		
	Standing water inside refilling valve pit	Standing water inside refilling valve pit	Standing water inside refilling valve pit	Standing water inside refilling valve pit	Standing water inside refilling valve pit	Remove water	8/28/2020	ASAP		
				Rusted top railings at used oil tank (WOT)	Rusted top railings at used oil tank (WOT)	Finish up tank rust resurfacing and repaint	12/22/2020	ASAP		

## T&amp;D SPCC Inspection Report

### SUMMARY OF SPCC MONTHLY INSPECTION REPORT MONTH OF DECEMBER 2020

## LEGEND OF TRACKING



Notification Date



Completed



Within Scheduled Remediation







Deadline is Past Due

**SUBSTATIONS**

LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
DEDEDO SUBSTATION	T-191 & T-192	NO CORRECTIVE ACTION						
DEDEDO SUBSTATION WAREHOUSE	Transformer Storage Area	Large accumulation of used transformers and scrap metal in yard for salvage	Schedule disposal ASAP				ASAP	December 2019
MACHECHE SUBSTATION	Secondary Containment	Vegetation growing in the area	Vegetation needs to be cleared for easy access in case of spill	CORRECTIVE ACTION COMPLETED		December 2020		November 2020
TALOFOFO SUBSTATION	Secondary Containment	NO CORRECTIVE ACTION						
TENJO SUBSTATION	Facility Area	NO CORRECTIVE ACTION						
YIGO SUBSTATION	Secondary Containment	NO CORRECTIVE ACTION						



## Generation SPCC Inspection Report

SUMMARY OF SPCC MONTHLY INSPECTION REPORT MONTH OF DECEMBER 2020								
LEGEND OF TRACKING								
		Notification Date				Completed		
		Within Scheduled Remediation				Deadline is Past Due		
POWER PLANT								
LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
CABRAS POWER PLANT	Supply line 8" from the tank farm	No secondary containment	Regular monitoring is required				ASAP	September 2019
	Cylinder and Lube Oil Storage Tanks	Corroded supply pipe lines	Repair				ASAP	November 2019
	Used Oil Transfer Area	Tank covers and pipe flange of sludge tanks - heavily corroded	Replace sludge tank covers				ASAP	February 2020
	LS Pipe Flange and HS-LS Diesel Service Tanks Secondary Containment	Leaking pipe flange and corroded pipeline	Conduct repair and clean up				ASAP	May 2020
	Tank No. 2 Bypass Pipe on Supply Line	Heavily corroded bypass pipe	Replace pass pipe				ASAP	May 2020
	Tank No. 2 Return Line	Corroded return line	Replace pipeline				ASAP	May 2020
	Used Oil Tank (WOT)	Heavy corrosion at tank railing; Reconditioning and repainting of exterior tank not completed	Complete reconditioning of WOT and tank railing/ladder				ASAP	December 2020
DEDED0 CT	OWS	Algae accumulation in secondary containment	Conduct clean up	CORRECTIVE ACTION COMPLETED		December 2020	ASAP	October 2020

## Generation SPCC Inspection Report (cont.)

SUMMARY OF SPCC MONTHLY INSPECTION REPORT

MONTH OF DECEMBER 2020

LEGEND OF TRACKING

Notification Date

Completed

Within Scheduled Remediation

Deadline is Past Due

POWER PLANT

LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
MACHECHE CT	Tanks No. 130 & 140	Corroded tank shells	Chip corrosion and recoat	50% completed			ASAP	August 2020
	In front of Tanks No. 130 & 140	Corroded loading & unloading pipeline	Chip corrosion and recoat				ASAP	December 2020
	OWS	Algae and sludge in sec. containment	Conduct clean up	CORRECTIVE ACTION COMPLETED		December 2020	ASAP	October 2020
YIGO CT	Tank 140	Corroded tank shell	Chip corrosion and recoat				ASAP	October 2020
	Fuel Transfer Pipelines	Corroded flanges, nuts and bolts	Repair/repaint flanges	CORRECTIVE ACTION COMPLETED		December 2020	ASAP	July 2020
MANENGGON DIESEL		NO CORRECTIVE ACTION						
TALOFOFO DIESEL		NO CORRECTIVE ACTION						

## Generation SPCC Inspection Report (cont.)

SUMMARY OF SPCC MONTHLY INSPECTION REPORT

MONTH OF DECEMBER 2020

LEGEND OF TRACKING

Notification Date

Completed

Within Scheduled Remediation

Deadline is Past Due

POWER PLANT

LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
TENJO DIESEL		NO CORRECTIVE ACTION						
PITI #7 POWER PLANT	Main Fuel Tank	No integrity testing	Integrity testing is required				ASAP	January 2018
	Old Piti Power Plant Area	Improper storage of drums and wood pallets	Move or dispose drums and wood pallets				ASAP	February 2020
		Improper storage of empty oil drums	Dispose old drums				ASAP	October 2020
	Day Tank Pump	Oil sheen found in secondary containment	Clean up oil sheen				ASAP	December 2020
	Main Fuel Tank Pump	Oil sheen found in secondary containment	Clean up oil sheen				ASAP	December 2020

## NET METERING

### December 2020

	<u>Quantity</u>	<u>Connected kVA</u>
Completed	2,156	25,667
Pending	1	7
Grand Total	2,157	25,674

Rate Class and Technology			
Technology	Schedule	Customer Count	Total kW
Solar Energy	R - Residential	2,018	19,259.23
	J - Gen Service Dmd	57	3,460.05
	K - Small Gov Dmd	9	317.80
	L - Large Government	2	122.80
	P - Large Power	10	940.70
	G - Gen Serv Non-Dmd	51	1,483.62
	S - Sm Gov Non-Dmd	7	78.80
Wind Turbine	R - Residential	2	3.60
Grand Total		2,156	25,666.60

Projection Date Ending 12/31/2020				
Customer Rate Class	Sum of Size (kW)	*Annual Projected kWh Generated	Non-Fuel Yield \$/kWh	Estimated Annual Revenue Loss
R	19,262.83	30,988,839	0.087492	\$ 2,711,276.39
J	3,460.05	4,679,078	0.125682	\$ 588,076.00
K	317.80	518,889	0.133883	\$ 69,470.44
L	122.80	203,743	0.129809	\$ 26,447.73
P	940.70	1,056,495	0.109950	\$ 116,161.70
G	1,483.62	2,368,889	0.145397	\$ 344,429.39
S	78.80	125,245	0.147902	\$ 18,524.03
Grand Total	25,666.60	39,941,179		\$ 3,874,385.68

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

Estimated Annual Revenue Loss		
Year	Estimated kWh	*Total Estimated Cost
2020	39,941,816	\$ 3,874,385.68
2019	36,806,287	\$ 3,546,649.04
2018	34,981,036	\$ 3,521,130.12
2017	28,242,917	\$ 2,828,834.71
2016	21,867,383	\$ 2,200,794.56
2015	7,383,621	\$ 856,921.27
2014	3,137,212	\$ 410,558.94
2013	1,556,949	\$ 178,996.00
2012	494,672	\$ 58,545.89
2011	170,070	\$ 18,177.13
2010	98,830	\$ 8,483.27
2009	23,912	\$ 1,656.87

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

## NET METERING

December 2020

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	315.23	28	18.3%	36.7%	
	P-046	300.29	36	7.1%	10.8%	
	P-088	762.98	81	12.5%	19.9%	
	P-089	638.51	78	14.3%	34.4%	
	P-111	211.00	4	3.9%	6.9%	
	P-203	664.09	44	7.5%	21.4%	
	P-204	150.38	17	3.2%	6.6%	
	P-205	44.00	5	0.9%	1.6%	
	P-210	749.74	62	12.7%	17.2%	
	P-212	1,098.52	106	26.6%	68.7%	
	P-213	329.73	14	12.6%	16.9%	
	P-220	202.41	22	33.2%	104.3%	
	P-221	612.80	63	13.9%	27.7%	
	P-223	663.15	62	23.7%	33.8%	
	P-240	58.55	2	0.9%	7.9%	
	P-245	259.60	7	5.2%	11.1%	
	P-250	1,425.85	131	21.8%	38.3%	
	P-251	160.50	8	6.5%	10.0%	
	P-253	721.03	63	13.8%	21.8%	
	P-262	1,176.14	118	30.9%	74.1%	
	P-270	562.21	44	9.8%	19.8%	
	P-271	333.37	19	5.5%	11.7%	
	P-272	280.91	20	11.0%	24.9%	
	P-280	540.45	33	21.7%	40.4%	
	P-281	204.90	5	7.3%	20.4%	
	P-282	31.75	4	0.8%	2.6%	
	P-283	666.95	59	18.4%	31.6%	
	P-294	1,359.82	127	30.7%	60.8%	
	P-301	233.76	24	16.5%	29.4%	
	P-311	1,350.59	70	31.4%	53.7%	
	P-322	2,108.43	118	27.8%	55.2%	
	P-323	316.52	21	6.7%	20.8%	
	P-330	722.51	89	13.3%	26.7%	
	P-331	834.73	92	13.2%	21.4%	
	P-332	849.18	79	13.3%	19.4%	
	P-340	589.49	51	32.5%	71.5%	
	P-087	1,563.18	153	39.8%	62.4%	
	P-252	646.73	37	15.3%	31.3%	
	P-321	389.86	36	7.0%	7.8%	
	P-260	99.76	10	14.5%	49.9%	
	P-067	86.20	10	1.0%	1.3%	
	P-312	82.24	5	4.9%	5.7%	
	P-206	26.08	3	2.7%	4.8%	
	P-242	23.75	2	0.4%	1.1%	
	P-310	181.57	8	6.6%	12.1%	
	P-261	510.06	54	18.4%	31.6%	
P-201	115.86	10	3.3%	5.8%		
P-007	85.86	8	11.9%	25.3%		
P-244	86.56	3	2.1%	2.1%		
P-202	39.50	3	1.2%	2.9%		
P-341	4.30	1	0.4%	1.6%		
P-401	117.00	2	10.3%	17.3%		
P-400	58.34	4	6.1%	6.2%		
P-241	19.72	1	0.0%	0.0%		
Completed Total		25,666.60	2,156			
pending	Pending	7.31	1	0.0%	0.0%	
pending Total		7.31	1	0.0%	0.0%	
Grand Total		25,673.91	2,157			
	Feeder highlighted in yellow indicates renewable energy capacity has reached 25% of minimum daytime load.					
	Feeder highlighted in red indicates renewable energy capacity has reached 75% of minimum daytime load.					

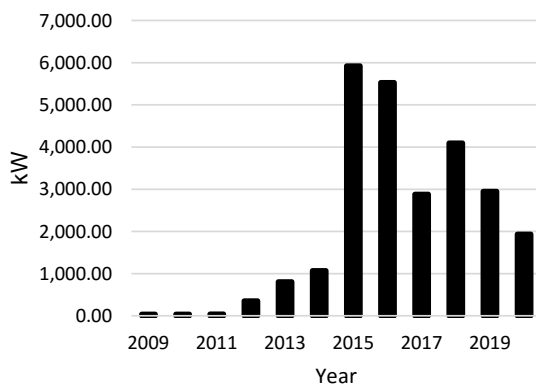
## NET METERING

December 2020

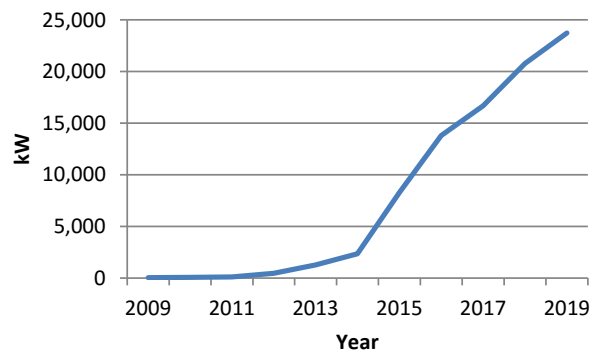
Installed kW by Year		
Year	Total	Cumulative
2009	39.46	39.46
2010	39.20	78.66
2011	41.61	120.27
2012	354.61	474.88
2013	808.15	1,283.03
2014	1,072.04	2,355.07
2015	5,923.43	8,278.50
2016	5,527.93	13,806.42
2017	2,881.10	16,687.52
2018	4,095.63	20,783.15
2019	2,949.09	23,732.24
2020	1,934.36	25,666.60
<b>Grand Total</b>	<b>25,666.60</b>	

Customer Count by Year		
Year	Total	Cumulative
2009	7	7
2010	2	9
2011	6	15
2012	27	42
2013	66	108
2014	94	202
2015	562	764
2016	530	1,294
2017	297	1,591
2018	291	1,882
2019	186	2,068
2020	88	2,156
<b>Grand Total</b>	<b>2,156</b>	

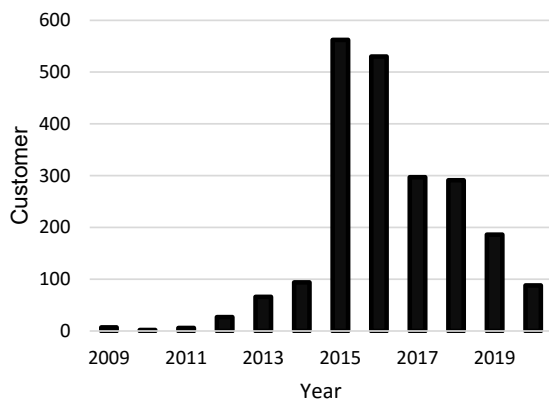
Yearly Installed kW



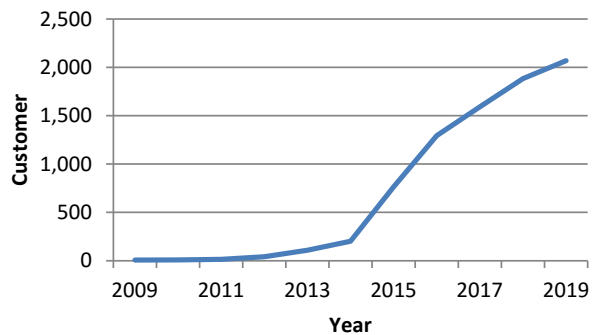
Cumulative Installed kW



Yearly Connected Customer Count



Cumulative Connected Customer Count





## Production Data

10-Dec-20 \*

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)						
2018	July	31	139,718,862	9,726,750	231,589	14.36	\$ 0.1468	9,647.53	11,909.20	188	242
	Aug	31	141,640,237	9,834,936	234,165	14.40	\$ 0.1437	9,817.09	13,623.96	190	238
	Sept	30	129,965,486	9,303,709	221,517	13.97	\$ 0.1526	9,383.54	13,625.29	181	240
	Oct	31	149,090,501	10,752,842	256,020	13.87	\$ 0.1592	9,870.49	12,783.94	200	243
	Nov	30	139,840,706	9,348,494	222,583	14.96	\$ 0.1446	9,772.22	12,091.07	194	241
	Dec	31	144,799,157	9,756,460	232,297	14.84	\$ 0.1497	9,443.41	11,943.41	195	237
2019	Jan	31	134,551,799	9,056,271	215,626	14.86	\$ 0.1172	9,677.80	11,506.72	181	224
	Feb	28	122,596,954	8,257,791	196,614	14.85	\$ 0.1152	9,592.63	11,923.40	182	226
	Mar	31	139,964,506	9,489,626	225,943	14.75	\$ 0.1309	9,586.39	12,331.54	188	234
	Apr	30	143,583,892	9,385,611	223,467	15.30	\$ 0.1249	9,597.50	11,794.45	199	244
	May	31	154,541,037	10,653,233	253,648	14.51	\$ 0.1378	9,854.93	12,008.47	208	254
	June	30	152,035,851	10,394,927	247,498	14.63	\$ 0.1378	9,756.34	11,985.93	211	255
	July	31	151,991,559	10,148,056	241,620	14.98	\$ 0.1230	9,789.72	11,505.06	204	251
	Aug	31	147,598,476	9,960,397	237,152	14.82	\$ 0.1259	9,622.68	11,430.55	198	253
	Sept	30	139,744,390	9,678,417	230,438	14.44	\$ 0.1259	10,019.86	11,676.24	194	243
	Oct	31	147,131,892	9,789,114	233,074	15.03	\$ 0.1294	9,742.17	12,670.15	198	247
	Nov	30	144,772,854	10,312,356	245,532	14.04	\$ 0.1437	9,631.16	12,353.82	201	245
	Dec	31	143,448,641	9,483,024	225,786	15.13	\$ 0.0993	9,649.19	11,794.69	193	236
2020	Jan	31	138,041,863	9,188,575	218,776	15.02	\$ 0.1286	9,706.87	11,592.61	186	227
	Feb	29	128,740,982	8,519,225	202,839	15.11	\$ 0.1226	9,833.72	11,408.84	192	230
	Mar	31	137,889,276	9,112,959	216,975	15.13	\$ 0.1034	9,421.93	11,671.89	185	233
	Apr	30	133,331,694	8,843,365	210,556	15.08	\$ 0.0847	9,991.96	11,780.63	185	228
	May	31	143,999,526	9,958,957	237,118	14.46	\$ 0.0623	10,067.47	12,493.35	194	241
	June	30	145,724,133	9,712,001	231,238	15.00	\$ 0.0566	9,939.81	11,940.43	202	244
	July	31	146,742,897	10,126,538	241,108	14.49	\$ 0.0628	9,981.69	12,019.94	197	240
	Aug	31	143,983,197	9,799,046	233,311	14.69	\$ 0.0637	10,056.45	11,585.62	194	243
	Sept	30	135,803,486	9,144,712	217,731	14.85	\$ 0.0699	9,634.17	11,744.73	189	244
	Oct	31	141,816,663	9,320,961	221,928	15.21	\$ 0.0908	9,702.37	11,532.45	191	239
	Nov	30	137,435,116	9,072,447	216,011	15.15	\$ 0.0906	9,388.94	11,791.83	191	246
	Dec	10*	45,695,738	3,262,508	77,679	14.01	\$ 0.0872	9,350.20	12,991.55	190	229

\* Data for December is only up to December 10, 2020. Report will be updated upon availability of data.



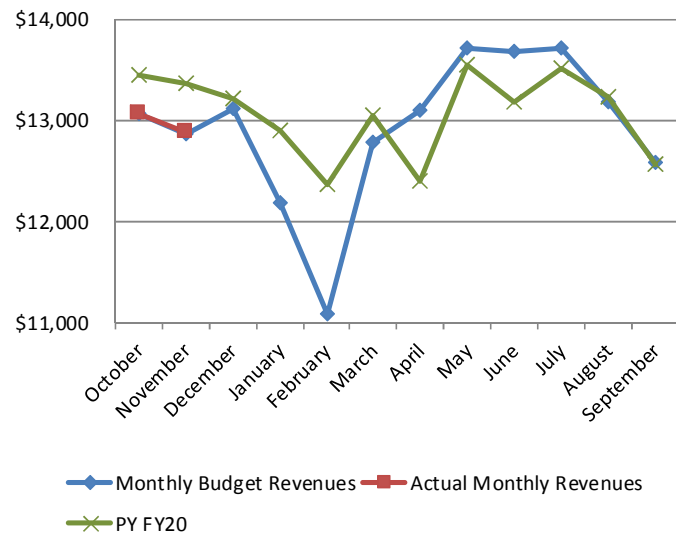
# **CFO**

# **FINANCIAL HIGHLIGHTS**

## **November 2020**

# November 2020 Monthly Financial Highlights

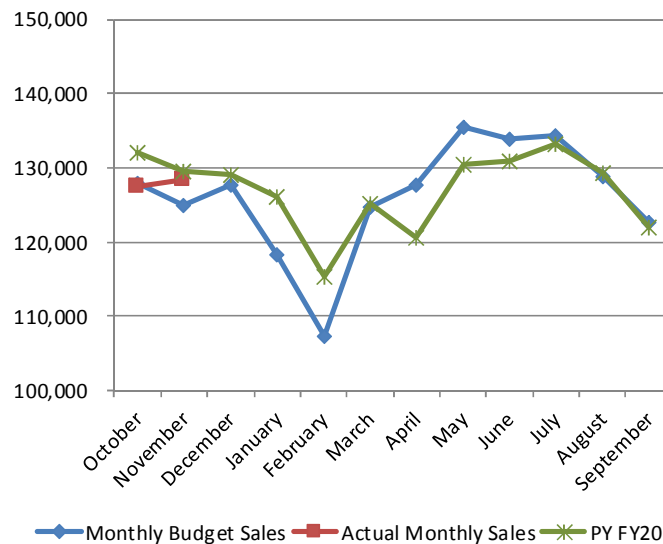
Base Rate Revenue \$000



Through November 30, 2020

	Monthly Budget Revenues \$000	Actual Monthly Revenues	Variance		PY FY20	CY vs PY Variance	
October	\$ 13,064	13,053	\$ (11)	↓	\$ 13,440	\$ (386)	↓
November	12,857	12,869	\$ 12	↑	13,358	\$ (489)	↓
December	13,106				13,216		
January	12,174				12,888		
February	11,078				12,357		
March	12,780				13,039		
April	13,085				12,385		
May	13,712				13,550		
June	13,682				13,176		
July	13,708				13,514		
August	13,180				13,220		
September	12,574				12,567		
<b>Total</b>	<b>\$ 155,000</b>	<b>\$ 25,922</b>	<b>\$ 1</b>		<b>\$ 156,709</b>	<b>\$ (875)</b>	

MWh Sales



Through November 30, 2020

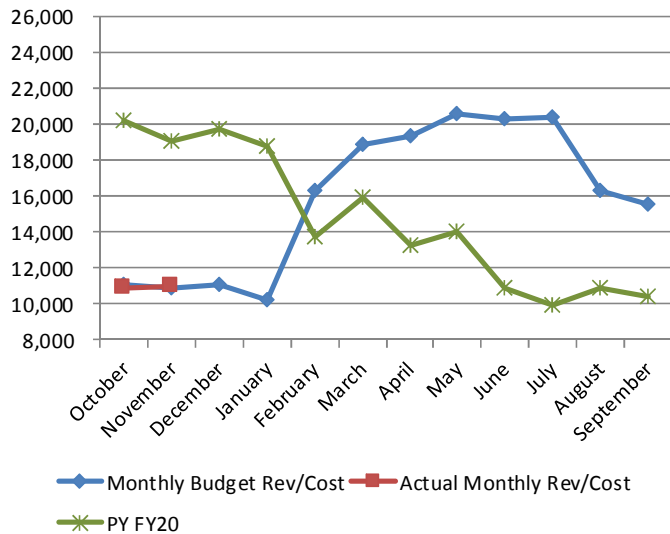
	Monthly Budget Sales mwh	Actual Monthly Sales	Variance		PY FY20	CY vs PY Variance	
October	127,852	127,515	(337)	↓	131,953	(4,438)	↓
November	125,004	128,440	3,437	↑	129,421	(981)	↓
December	127,563				128,958		
January	118,299				126,130		
February	107,268				115,346		
March	124,649				125,185		
April	127,762				120,688		
May	135,527				130,531		
June	133,849				130,987		
July	134,332				133,116		
August	128,752				129,337		
September	122,569				121,927		
<b>Total</b>	<b>1,513,426</b>	<b>255,955</b>	<b>3,100</b>		<b>1,523,579</b>	<b>(5,419)</b>	



# November 2020 Monthly Financial Highlights (Continued)

3

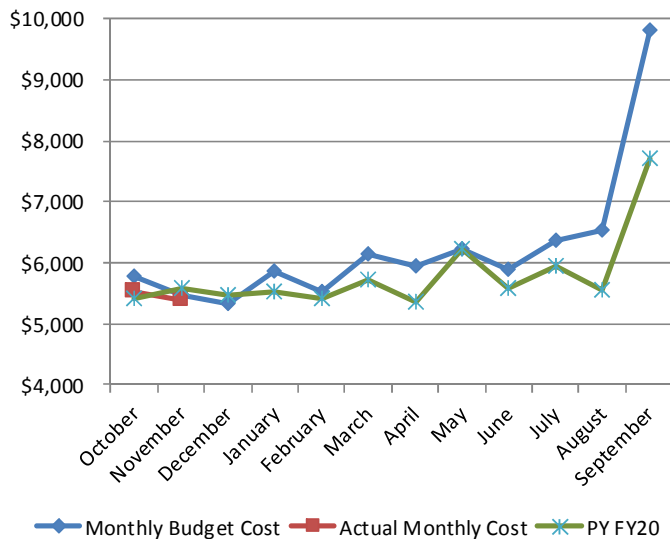
Fuel Revenue/ Cost \$000



Through November 30, 2020

	Monthly Budget \$000	Actual Monthly Rev/Cost	Variance		PY FY20	CY vs PY Variance	
October	11,098	10,910	\$ (187)	↓	\$ 20,165	\$ (9,255)	↓
November	10,850	10,984	\$ 134	↑	19,088	\$ (8,104)	↓
December	11,072				19,697		
January	10,268				18,820		
February	16,274				13,701		
March	18,911				15,968		
April	19,383				13,254		
May	20,561				14,001		
June	20,307				10,867		
July	20,380				9,935		
August	16,352				10,925		
September	15,566				10,438		
<b>Total</b>	<b>\$ 191,023</b>	<b>\$ 21,895</b>	<b>\$ (53)</b>		<b>\$ 176,860</b>	<b>\$ (17,359)</b>	

O&amp;M Cost \$000



Through November 30, 2020

	Monthly Budget \$000	Actual Monthly Cost	Variance		PY FY20	CY vs PY Variance	
October	\$ 5,790	5,515	275	↑	5,421	(94)	↓
November	5,469	5,389	80	↑	5,572	184	↑
December	5,334				5,460		
January	5,857				5,521		
February	5,530				5,417		
March	6,143				5,723		
April	5,956				5,357		
May	6,211				6,215		
June	5,889				5,578		
July	6,363				5,957		
August	6,543				5,539		
September	9,806				7,700		
<b>Total</b>	<b>\$ 74,892</b>	<b>\$ 10,904</b>	<b>\$ 355</b>		<b>\$ 69,461</b>	<b>\$ 89</b>	



# November 2020 Monthly Financial Highlights (Continued)

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Through November 30, 2020									
	1Q2019	2Q2019	3Q2019	4Q2019	1Q2020	2Q2020	3Q2020	4Q2020	1Q2021
Residential	43,920	44,144	44,329	44,479	44,203	44,509	45,069	44,191	44,271
Commercial	5,273	5,291	5,303	5,289	5,154	5,352	5,309	5,366	5,302
Government	1,090	1,074	1,075	1,070	1,072	1,059	1,061	1,081	1,079
Streetlights	1,151	1,152	1,138	1,138	1,135	1,128	1,139	1,132	1,135
Navy	1	1	1	1	1	1	1	1	1
Total	51,435	51,662	51,846	51,977	51,565	52,049	52,579	51,771	51,788

Debt service coverage (DSC) calculation-indenture	2015	2016	2017	2018	2019	2020	2021
Senior lien coverage	3.62	3.28	2.65	2.53	1.97	1.67	1.71
Aggregate debt service coverage	2.62	3.28	2.65	2.53	1.97	1.67	1.71
Debt service coverage (DSC) calculation-IPP as O&M							
Senior lien coverage	2.56	2.45	1.79	1.65	1.64	1.48	1.52
Aggregate debt service coverage	1.85	2.45	1.79	1.65	1.64	1.48	1.52

# November 2020 Monthly Financial Highlights (Continued)

5

Date	# Prepaid Customers	Balance in arrear	Payment Plan	Total
July 31, 2020	951	\$ 579,651	\$ 98,276	\$ 677,927
Aug .31, 2020	955	\$ 133,710	\$ 565,383	\$ 699,093
Sept. 30, 2020	996	\$ 360,861	\$ 546,949	\$ 907,810
Oct. 31, 2020	1000	\$ 534,346	\$ 544,028	\$ 1,078,374
Nov. 30, 2020	988	\$ 688,253	\$ 527,062	\$ 1,215,315
Dec. 31, 2020	1002	\$ 802,879	\$ 514,058	\$ 1,316,937

# November 2020 Monthly Financial Highlights (Continued)

6

## Proposed LEAC Rate (\$000)

	With Actuals thru December 2020		
	Status Quo	Full Recovery	50% Recovery
	MS Pricing 1.11.21 to 1.15.21 Feb 21- Jul 21	MS Pricing 1.11.21 to 1.15.21 Feb 21- Jul 21	MS Pricing 1.11.21 to 1.15.21 Feb 21- Jul 21
Average Price per Bbl-RFO	\$ 60.61	\$ 60.61	\$ 60.61
Average Price per Bbl-Diesel	\$ 71.13	\$ 71.13	\$ 71.13
Number 6 (HSFO/LSFO)	\$ 49,796	\$ 49,796	\$ 49,796
Number 2 (Diesel)	37,869	37,869	37,869
Renewable (Solar)	4,690	4,690	4,690
TOTAL COST	\$ 92,355	\$ 92,355	\$ 92,355
Handling Costs	6,443	6,443	6,443
Total Current Fuel Expense	\$ 98,798	\$ 98,798	\$ 98,798
Civilian Allocation	80.530%	80.530%	80.530%
LEAC Current Fuel Expense	\$ 79,563	\$ 79,563	\$ 79,563
Estimated DSM for this period	\$ 1,500	\$ 1,500	\$ 1,500
Deferred Fuel Expense at the beginning of the period	14,709	14,709	14,709
Total LEAC Expense	\$ 95,772	\$ 95,772	\$ 95,772
Less: Trans. Level Costs	(2,660)	(4,819)	(3,740)
Distribution Level Costs	\$ 93,112	\$ 90,953	\$ 92,032
Over recovery/(Under) at the end of the period	\$ (42,902)	\$ -	\$ (21,451)
Adjusted Distribution Level Costs	\$ 50,210	\$ 90,953	\$ 70,581
Distribution Level Sales (mWh)	578,459	578,459	578,459
LEAC Factor Distribution	0.086800	0.157233	0.122016
Current LEAC Factor Distribution	0.086800	0.086800	0.086800
Increase/(Decrease)	(0.00000)	0.07043	0.03522
Monthly Increase/(Decrease) - 1000 kWh	\$ (0.00)	\$ 70.43	\$ 35.22
% Increase/(Decrease) in LEAC	0.00%	81.14%	40.57%
% Increase/(Decrease) in Total Bill	0.00%	38.83%	19.41%
Discount (3%) - Primary 13.8 KV	0.084200	\$ 0.152544	\$ 0.118377
Discount (4%) - 34.5 KV	0.083957	\$ 0.152104	\$ 0.118036
Discount (5%) - 115 KV	0.082924	\$ 0.150232	\$ 0.116583





## GUAM POWER AUTHORITY

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

### GUAM POWER AUTHORITY FINANCIAL STATEMENT OVERVIEW November 2020

Attached are the financial statements and supporting schedules for the month and fiscal year ended November 30, 2020.

#### Summary

The increase in net assets for the month ended was \$1.0 million as compared to the anticipated net increase of \$0.8 million projected at the beginning of the year. The total kWh sales for the year were 2.75% more than projected and non-fuel revenues were in line with the estimated amounts. O & M expenses for the month were \$5.4 million which was also in line with our projections for this year. Other expenses for the month such as interest expense, IPP costs, (net of interest income and other income) totaled to \$2.9 million, which was \$0.3 million less than the projected amounts. There were no other significant departures from the budget during the period.

#### Analysis

Description	Previous Month	Current Month	Target
Quick Ratio	3.56	2.63	2
Days in Receivables	43	45	52
Days in Payables	18	44	30
LEAC (Over)/Under Recovery Balance -YTD	\$6,296,650	\$8,733,140	\$10,970,556
T&D Losses	5.77%	5.79%	<7.00%
Debt Service Coverage	1.50	1.52	1.75
Long-term equity ratio	2.54%	2.72%	30 - 40%
Days in Cash	330	340	60

The Quick Ratio has been a challenge for GPA historically. However, the influx of cash from insurance proceeds continues to improve this ratio. GPA has current obligations of approximately \$75 million and approximately \$199 million in cash and current receivables. The LEAC under-recovery for the month was \$2.4 million. Debt Service Coverage ratio is calculated using the methodology in use before the Fiscal Year 2002 change in accounting practice.



**Financial Statements**  
**November 2020**


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**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

<b>GUAM POWER AUTHORITY</b> <b>(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)</b> <b>Statements of Net Position</b> <b>November 30, 2020 and September 30, 2020</b>			
	Unaudited November 2020	Unaudited September 2020	Change from Sept 30 2020
<b>ASSETS AND DEFERRED OUTFLOWS OF RESOURCES</b>			
Current assets:			
Cash and cash equivalents:			
Held by trustee for restricted purposes:			
Interest and principal funds	\$ 11,889,773	\$ 38,059,527	\$ (26,169,754)
Bond indenture funds	22,030,383	22,590,787	(560,404)
Held by Guam Power Authority:			
Bond indenture funds	159,663,287	175,309,549	(15,646,262)
Self insurance fund-restricted	19,469,799	19,469,799	0
Energy sense fund	891,886	261,171	630,715
Total cash and cash equivalents	213,945,128	255,690,833	(41,745,705)
Accounts receivable, net	37,591,461	35,364,783	2,226,678
Total current receivables	37,591,461	35,364,783	2,226,678
Materials and supplies inventory	14,356,725	14,501,590	(144,865)
Fuel inventory	41,069,470	32,346,582	8,722,888
Prepaid expenses	9,131,889	1,876,268	7,255,621
Total current assets	316,094,673	339,780,056	(23,685,383)
Utility plant, at cost:			
Electric plant in service	1,098,325,423	1,097,908,313	417,110
Construction work in progress	47,039,893	46,936,698	103,195
Total	1,145,365,316	1,144,845,011	520,305
Less: Accumulated depreciation	(674,431,530)	(669,124,765)	(5,306,765)
Total utility plant	470,933,786	475,720,246	(4,786,460)
Other non-current assets:			
Investment - bond reserve funds held by trustee	48,490,461	48,532,630	(42,169)
Unamortized debt issuance costs	1,908,092	1,952,816	(44,724)
Total other non-current assets	50,398,553	50,485,446	(86,893)
Total assets	837,427,012	865,985,748	(28,558,736)
Deferred outflow of resources:			
Deferred fuel revenue	8,733,140	5,137,018	3,596,122
Unamortized loss on debt refunding	22,072,684	22,452,744	(380,060)
Pension	12,264,214	12,264,214	0
Other post employment benefits	19,869,789	19,869,789	0
Unamortized forward delivery contract costs	132,718	159,278	(26,560)
Total deferred outflows of resources	63,072,545	59,883,043	3,189,502
	\$ 900,499,557	\$ 925,868,791	\$ (25,369,234)

<b>GUAM POWER AUTHORITY</b> <b>(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)</b> <b>Statement of Net Position, Continued</b> <b>November 30, 2020 and September 30, 2020</b>			
	Unaudited November 2020	Unaudited September 2020	Change from Sept 30 2020
<b>LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION</b>			
Current liabilities:			
Current maturities of long-term debt	\$ 21,540,000	\$ 20,515,000	\$ 1,025,000
Current obligations under capital leases	748,228	2,226,222	(1,477,994)
Accounts payable			
Operations	33,368,580	28,907,900	4,460,680
Others	1,083,118	830,203	252,915
Accrued payroll and employees' benefits	959,985	2,464,369	(1,504,384)
Current portion of employees' annual leave	3,127,620	2,828,972	298,648
Interest payable	5,178,129	14,417,948	(9,239,819)
Customer deposits	9,519,702	8,729,186	790,516
<b>Total current liabilities</b>	<b>75,525,362</b>	<b>80,919,800</b>	<b>(5,394,438)</b>
Regulatory liabilities:			
Provision for self insurance	19,345,291	19,345,291	0
<b>Total regulatory liabilities</b>	<b>19,345,291</b>	<b>19,345,291</b>	<b>0</b>
Long term debt, net of current maturities	538,429,390	560,599,190	(22,169,800)
Obligations under capital leases, net of current portion	0	0	0
Net Pension liability	77,735,966	78,277,138	(541,172)
Other post employment benefits liability	120,278,682	120,278,682	0
DCRS sick leave liability	1,331,151	1,331,151	0
Employees' annual leave net of current portion	1,204,085	1,204,085	0
Customer advances for construction	430,741	425,814	4,927
<b>Total liabilities</b>	<b>834,280,668</b>	<b>862,381,151</b>	<b>(28,100,483)</b>
Deferred inflows of resources:			
Unearned forward delivery contract revenue	486,682	584,018	(97,336)
Pension	2,371,109	2,371,109	0
Other post employment benefits	49,240,169	49,240,169	0
<b>Total deferred inflows of resources</b>	<b>52,097,960</b>	<b>52,195,296</b>	<b>(97,336)</b>
Commitments and contingencies			
Net Position:			
Net investment in capital assets	(19,693,730)	(36,922,563)	17,228,834
Restricted	27,682,249	57,080,028	(29,397,779)
Unrestricted	6,132,409	(8,865,122)	14,997,531
<b>Total net position</b>	<b>14,120,928</b>	<b>11,292,344</b>	<b>2,828,586</b>
	<b>\$ 900,499,557</b>	<b>\$ 925,868,791</b>	<b>\$ (25,369,234)</b>

<b>GUAM POWER AUTHORITY</b> <b>(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)</b> <b>Statement of Revenues, Expenses and Changes in Net Assets</b>						
	November 30			Two Months Ended November 30		
	Unaudited 2020	Unaudited 2019	% of change Inc (dec)	Unaudited 2020	Unaudited 2019	% of change Inc (dec)
<b>Revenues</b>						
Sales of electricity	\$ 23,853,184	\$ 32,446,278	(26)	\$ 47,816,837	\$ 66,051,140	(28)
DSM-Rebates	322,469	-	0	625,329	-	0
Miscellaneous	217,043	158,017	37	280,244	282,436	(1)
Total	24,392,696	32,604,295	(25)	48,722,410	66,333,576	(27)
Bad debt expense	(87,083)	(90,917)	(4)	(174,166)	(181,834)	(4)
Total revenues	24,305,613	32,513,378	(25)	48,548,244	66,151,742	(27)
<b>Operating and maintenance expenses</b>						
Production fuel	10,984,229	19,088,151	(42)	21,894,551	39,253,360	(44)
Other production	1,321,410	1,426,919	(7)	2,270,010	2,705,672	(16)
	12,305,639	20,515,070	(40)	24,164,561	41,959,032	(42)
Depreciation	3,761,362	3,103,969	21	6,588,893	6,202,636	6
Energy conversion cost	1,059,870	1,020,920	4	2,161,496	2,028,012	7
Transmission & distribution	1,110,532	1,005,152	10	2,391,427	2,060,742	16
Customer accounting	401,099	374,740	7	796,441	876,089	(9)
Administrative & general	2,555,715	2,674,685	(4)	5,445,763	5,159,467	6
Total operating and maintenance expenses	21,194,217	28,694,536	(26)	41,548,581	58,285,978	(29)
Operating income	3,111,396	3,818,842	(19)	6,999,663	7,865,764	(11)
<b>Other income (expenses)</b>						
Interest income	51,359	314,663	(84)	91,761	530,088	(83)
Interest expense and amortization	(2,189,177)	(2,320,981)	(6)	(4,384,500)	(4,630,019)	(5)
Bond issuance costs	89,228	89,228	0	178,456	178,456	0
Bid bond forfeiture	-	-	0	-	-	0
Pandemic-COVID19	(45,187)	-	0	(48,204)	-	0
Losses due to typhoon	-	-	0	-	-	0
Bid bond forfeiture	-	-	0	-	-	0
Other expense	(4,298)	(4,291)	0	(8,592)	(8,582)	0
Total other income (expenses)	(2,098,075)	(1,921,381)	9	(4,171,079)	(3,930,057)	6
Income (loss) before capital contributions	1,013,321	1,897,461	(47)	2,828,584	3,935,707	(28)
Capital contributions	-	-	0	-	-	0
Increase (decrease) in net assets	1,013,321	1,897,461	(47)	2,828,584	3,935,707	(28)
Total net assets at beginning of period	13,107,607	5,179,841	153	11,292,345	3,141,595	259
Total net assets at end of period	\$ 14,120,928	\$ 7,077,302	100	\$ 14,120,928	\$ 7,077,302	100

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statements of Cash Flows Period Ended November 30, 2020			
	Month Ended 11/30/2020		YTD Ended 11/30/2020
Increase(decrease) in cash and cash equivalents			
Cash flows from operating activities:			
Cash received from customers	\$	23,439,637	\$ 46,313,431
Cash payments to suppliers and employees for goods and services		<u>9,201,672</u>	<u>50,726,032</u>
Net cash provided by operating activities	\$	14,237,965	\$ (4,412,601)
Cash flows from investing activities:			
Interest and dividends on investments and bank accounts		<u>51,359</u>	<u>91,761</u>
Net cash provided by investing activities		51,359	91,761
Cash flows from non-capital financing activities			
Interest paid on short term debt		(4,435)	4,971
Provision for self insurance funds		<u>-</u>	<u>-</u>
Net cash provided by noncapital financing activities		(4,435)	4,971
Cash flows from capital and related financing activities			
Acquisition of utility plant		(1,187,878)	(1,802,432)
Principal paid on bonds and other long-term debt		-	(20,515,000)
Interest paid on bonds(net of capitalized interest)		(45,187)	(13,658,954)
Interest paid on capital lease obligations		(6,197)	(18,540)
Interest & principal funds held by trustee		(3,977,984)	26,169,754
Reserve funds held by trustee		(425)	42,169
Bond funds held by trustee		(191)	560,404
Principal payment on capital lease obligations		(742,070)	(1,477,994)
Grant from DOI/FEMA		-	-
Debt issuance costs/loss on defeasance		(314,900)	(629,800)
Net cash provided by (used in) capital and related financing activities		<u>(6,274,832)</u>	<u>(11,330,393)</u>
Net (decrease) increase in cash and cash equivalents		8,010,057	(15,646,262)
Cash and cash equivalents, beginning		<u>151,653,230</u>	<u>175,309,549</u>
Cash and cash equivalents-Funds held by GPA, November 30, 2020	\$	<u>159,663,287</u>	\$ <u>159,663,287</u>

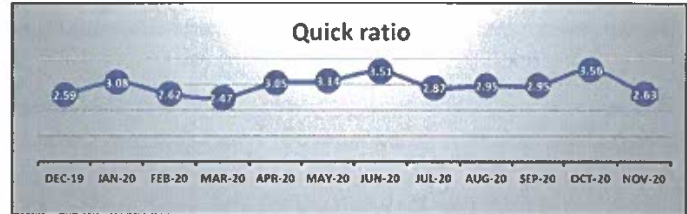
<b>GUAM POWER AUTHORITY</b> <b>(A COMPONENT UNIT OF THE GOVERNMENT OF GUAM)</b> <b>Statements of Cash Flows, continued</b> <b>Period Ended November 30, 2020</b>		
	<b>Month Ended</b> <b>11/30/2020</b>	<b>YTD Ended</b> <b>11/30/2020</b>
<b>Reconciliation of operating earnings to net cash provided by operating activities:</b>		
Operating earnings net of depreciation expense and excluding interest income	\$3,111,396	\$6,999,663
Adjustments to reconcile operating earnings to net cash provided by operating activities:		
Depreciation and amortization	3,761,362	6,588,893
Other expense	84,930	169,864
(Increase) decrease in assets:		
Accounts receivable	(853,229)	(2,226,678)
Materials and inventory	73,120	144,865
Fuel inventory	(4,285,676)	(8,722,888)
Prepaid expenses	(5,282,618)	(7,255,621)
Unamortized debt issuance cost	22,362	44,724
Deferred fuel revenue	(2,436,490)	(3,596,122)
Unamortized loss on debt refunding	190,030	380,060
Unamortized forward delivery contract costs	13,280	26,560
Increase (decrease) in liabilities:		
Accounts payable-operations	19,545,833	4,460,680
Accounts payable-others	(462,505)	(377,800)
Accrued payroll and employees' benefits	231,013	(1,504,384)
Net pension liability	(269,916)	(541,172)
Employees' annual leave	112,964	298,648
Customers deposits	725,850	790,516
Customer advances for construction	4,927	4,927
Unearned forward delivery contract revenue	(48,668)	(97,336)
<b>Net cash provided by operating activities</b>	<b>\$14,237,965</b>	<b>\$ (4,412,601)</b>



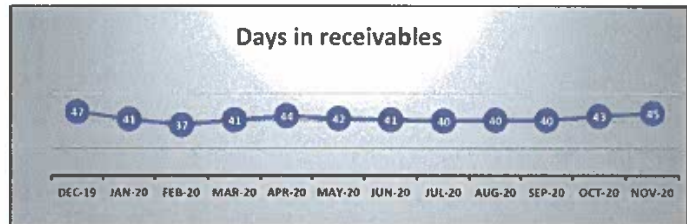
**Guam Power Authority**  
**Financial Analysis**  
**11/30/20**

**Quick Ratio**

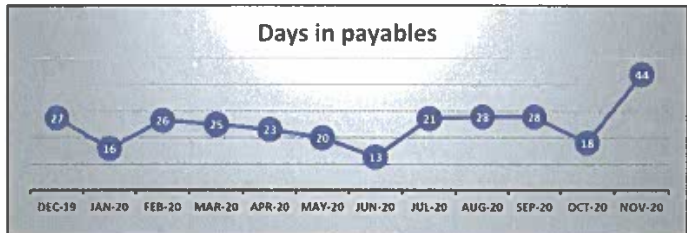
A	Reserve Funds Held by GPA	159,663,287
B	Current Accounts Receivable	39,266,272
C	Total Cash and A/R (A+B)	198,929,559
D	Total Current Liabilities	75,525,362
E	<b>Quick Ratio (F/G)</b>	<b>2.63</b>

**Days in Receivables**

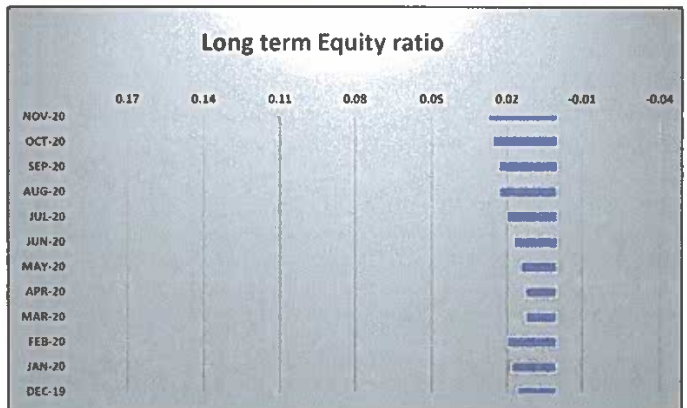
A	FY 20 Moving 12 Mos.-Actual	315,332,819
B	No. of Days	365
C	Average Revenues per day (A/B)	863,926
D	Current Accounts Receivable	39,266,272
E	<b>Days in Receivables (D/C)</b>	<b>45</b>

**Days in Payables**

A	FY 20 Moving 12 Months-Actual	287,534,642
B	No. of Days	365
C	Average Payables per day (A/B)	787,766
D	Current Accounts Payables	34,451,697
E	<b>Days in Payables (D/C)</b>	<b>44</b>

**Long term equity ratio**

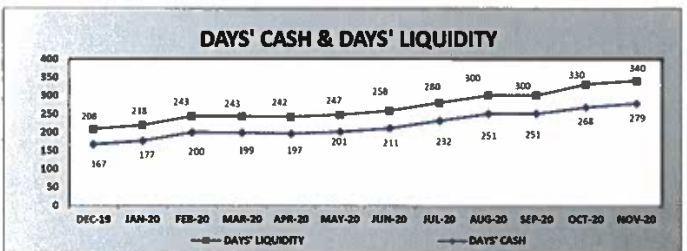
A	Equity	\$ 14,120,928.00
B	Total Long term Liability	\$ 505,515,513.00
C	Total Equity and liability	\$ 519,636,441.00
D	<b>Long term equity ratio (A/C)</b>	<b>2.72%</b>

**Days cash on hand**

A	Unrestricted cash & cash equivalents	159,663
B	No. of Days -YTD	61
C	A x B	9,739,461
D	Total Operating expenses excluding depreciation	34,960
E	<b>Days cash on hand</b>	<b>279</b>

**Days' Liquidity**

A	Unrestricted cash , cash equivalents & revolving (	194,663
B	No. of Days -YTD	61
C	A x B	11,874,461
D	Total Operating expenses excluding depreciation	34,960
E	<b>Days liquidity</b>	<b>340</b>





GPA 302

**GUAM POWER AUTHORITY  
ACCRUED REVENUE  
NOVEMBER 2020**

	FOR THE MONTH ENDED NOVEMBER		TWO MONTHS ENDED NOVEMBER	
	2020	2019	2020	2019
<b>KWH SALES:</b>				
Residential	47,924,589	41,832,586	94,941,650	83,840,140
Small Gen. Non Demand	5,490,013	5,409,659	11,212,266	10,960,215
Small Gen. Demand	15,180,559	16,236,716	30,930,898	32,741,025
Large General	18,776,244	24,973,240	37,312,279	50,254,075
Independent Power Producer	74,692	33,926	108,017	63,077
Private St. Lights	33,159	33,968	67,432	67,628
Sub-total	87,479,256	88,520,094	174,572,543	177,926,160
<b>Government Service:</b>				
Small Non Demand	785,007	739,934	1,612,222	1,518,528
Small Demand	7,754,428	8,287,162	15,619,195	17,218,001
Large	4,826,626	6,140,795	10,008,048	12,504,877
Street Lighting	557,701	652,963	1,192,327	1,517,238
Sub-total	13,923,762	15,820,854	28,431,792	32,758,644
Total	101,403,018	104,340,948	203,004,335	210,684,805
U. S. Navy	27,037,233	25,080,100	52,950,589	50,689,087
GRAND TOTAL	128,440,251	129,421,048	255,954,924	261,373,892
<b>REVENUE:</b>				
Residential	8,561,989	10,464,359	17,001,508	20,985,599
Small Gen. Non Demand	1,242,336	1,595,257	2,548,901	3,243,516
Small Gen. Demand	3,031,479	4,449,885	6,204,224	8,984,357
Large General	3,471,380	6,456,820	7,069,475	12,954,099
Independent Power Producer	8,640	8,849	15,186	16,477
Private St. Lights	23,400	25,875	47,687	51,742
Sub-total	16,339,223	23,001,043	32,886,981	46,235,789
<b>Government Service:</b>				
Small Non Demand	192,813	236,107	396,045	482,346
Small Demand	1,687,099	2,407,924	3,409,879	4,961,225
Large	1,003,746	1,709,248	2,103,429	3,463,746
Street Lighting	387,718	459,553	785,908	962,781
Sub-total	3,271,376	4,812,832	6,695,261	9,870,098
Total	19,610,598	27,813,875	39,582,242	56,105,888
U. S. Navy	4,242,586	4,632,403	8,234,596	9,945,252
GRAND TOTAL	23,853,184	32,446,278	47,816,837	66,051,140
<b>NUMBER OF CUSTOMERS:</b>				
Residential	44,271	44,602	44,237	43,994
Small Gen. Non Demand	4,380	4,092	4,378	4,180
Small Gen. Demand	823	1,085	822	983
Large General	97	120	96	118
Independent Power Producer	2	2	2	3
Private St. Lights	517	515	517	526
Sub-total	50,090	50,416	50,051	49,802
<b>Government Service:</b>				
Small Non Demand	684	644	681	677
Small Demand	355	383	364	340
Large	40	44	41	43
Street Lighting	618	618	618	618
Sub-total	1,697	1,689	1,704	1,677
Total	51,787	52,105	51,754	51,479
US Navy	1	1	1	1
	51,788	52,106	51,755	51,480

GPA Work Session - January 21, 2021 - DIVISION REPORTS

GUAM POWER AUTHORITY  
ACCURED REVENUE

	TWELVE MONTHS ENDED	NOVEMBER 2020	OCTOBER 2020	SEPTEMBER 2020	AUGUST 2020	JULY 2020	JUNE 2020	MAY 2020	APRIL 2020	MARCH 2020	FEBRUARY 2020	JANUARY 2020	DECEMBER 2019
<b>KWH SALES:</b>													
Residential	543,340,090	47,924,589	47,017,061	46,940,702	46,488,288	46,383,562	46,198,510	50,104,381	46,696,841	43,674,314	36,110,181	38,780,879	41,139,080
Small General Non Demand	61,520,278	5,490,013	5,722,353	5,245,960	5,102,926	5,435,917	5,182,411	4,878,649	4,175,437	5,015,822	4,775,437	5,360,912	5,151,168
Small General Demand	179,204,943	15,180,559	16,750,339	14,377,515	14,642,313	15,197,638	14,741,087	14,874,000	13,085,335	14,883,043	14,757,497	16,007,245	16,007,245
Large General	246,564,615	18,776,244	18,536,034	17,253,967	20,245,066	20,805,621	19,721,335	19,502,425	18,150,138	21,597,825	22,344,580	24,478,138	25,153,208
Private Outdoor Lighting	396,683	33,159	34,273	34,037	33,040	33,276	34,682	31,190	33,682	31,188	32,183	34,228	31,725
Independent Power Producer	429,812	74,692	33,326	32,898	31,941	29,903	27,636	37,603	28,802	29,018	40,116	29,711	34,266
Sub-Total	1,031,456,322	87,479,256	87,083,287	83,885,069	88,543,514	90,665,918	88,885,660	89,128,032	81,170,246	85,133,221	77,063,477	84,691,941	87,516,681
<b>Government Services:</b>													
Small Non Demand	8,468,842	785,007	827,215	836,611	712,443	718,063	688,682	667,053	614,102	657,442	659,590	688,336	732,088
Small Demand	96,980,169	7,754,428	7,864,767	7,885,747	8,089,781	8,245,957	7,975,785	8,146,861	7,757,273	8,380,160	8,059,004	8,429,943	8,610,483
Large	62,744,178	4,826,626	5,181,422	5,039,602	5,187,440	5,281,566	4,947,321	5,002,187	4,644,794	5,576,414	5,396,114	5,741,099	5,917,003
Street Lighting (Agencies)	6,718,034	557,701	634,626	582,996	571,842	617,089	578,122	557,584	634,494	540,958	578,539	615,219	270,787
Sub-Total	174,909,223	13,923,762	14,508,029	13,985,156	14,581,306	14,882,665	14,189,891	14,373,665	13,650,863	15,146,971	14,701,547	15,474,596	16,530,972
Total	1,206,365,544	101,403,018	101,601,316	97,870,225	103,104,820	105,728,582	103,075,551	103,501,717	94,820,909	100,280,192	91,765,024	100,166,537	103,047,653
U.S. Navy	311,613,684	27,037,233	26,913,357	23,876,626	26,232,462	27,387,340	27,911,353	27,928,828	25,887,160	24,906,070	23,881,439	25,863,789	25,910,039
Grand Total	1,517,979,228	128,440,251	127,514,673	121,745,850	129,337,281	133,115,922	130,986,913	130,530,645	120,888,068	126,185,282	116,346,464	126,130,305	128,957,692
<b>REVENUE:</b>													
Residential	107,999,946	8,561,989	8,439,520	8,393,434	8,672,639	8,773,199	8,214,601	10,392,144	8,909,987	10,095,552	7,812,383	9,600,770	10,333,720
Small General Non Demand	15,385,688	1,242,335	1,306,566	1,291,673	1,160,148	1,239,053	1,104,294	1,268,804	1,024,880	1,415,897	1,295,574	1,582,611	1,544,644
Small General Demand	40,780,245	3,031,479	3,172,745	2,879,855	2,971,923	3,105,577	2,846,493	3,427,018	2,911,833	3,642,607	3,863,388	4,444,883	4,481,685
Large General	64,065,071	3,471,380	3,598,095	3,378,106	3,949,892	4,065,239	3,759,470	4,354,446	4,024,701	5,250,941	5,323,864	6,364,878	6,436,132
Private Outdoor Lighting	291,198	23,400	24,287	23,624	23,615	23,702	24,011	23,692	24,175	25,151	25,787	25,341	25,341
Independent Power Producer	90,644	6,646	6,545	6,321	5,783	5,748	5,424	6,483	6,483	6,916	10,647	7,776	9,864
Sub-Total	218,581,783	16,339,223	16,647,768	15,882,813	16,784,897	17,212,527	16,364,415	19,415,530	16,802,039	20,833,525	18,130,995	22,026,703	22,801,366
<b>Government Service:</b>													
Small Non Demand	2,304,603	192,813	203,232	173,827	176,557	177,715	168,968	184,693	169,814	200,532	200,103	221,791	232,560
Small Demand	23,612,903	1,637,039	1,722,780	1,632,505	1,764,894	1,732,843	1,595,149	2,004,357	1,895,149	2,255,934	2,164,921	2,445,544	2,461,603
Large	14,909,876	1,003,746	1,099,683	1,071,829	1,101,797	1,116,547	1,058,309	1,214,020	1,120,057	1,451,876	1,404,984	1,608,235	1,642,284
Street Lighting (Agencies)	4,782,775	387,718	398,191	388,439	389,613	398,843	391,487	402,336	414,838	412,839	419,563	438,899	342,012
Sub-Total	45,610,156	3,271,376	3,423,885	3,316,400	3,432,851	3,485,389	3,305,415	3,803,415	3,608,857	4,332,879	4,189,580	4,714,468	4,678,469
Total	264,191,949	19,610,598	19,971,643	19,199,213	20,217,758	20,697,916	19,305,022	23,220,945	20,416,896	25,016,404	22,320,576	26,741,172	27,479,226
U.S. Navy	51,140,871	4,242,586	3,992,010	3,806,204	3,926,923	2,760,547	4,735,469	4,330,362	5,228,169	3,990,233	3,736,519	4,966,520	5,433,030
Grand Total	315,332,819	23,853,184	23,963,653	23,004,417	24,144,681	23,448,443	24,043,491	27,551,306	25,639,065	29,006,637	26,057,395	31,707,692	32,912,856
<b>NUMBER OF CUSTOMERS:</b>													
Residential	44,351	44,271	44,202	44,191	44,854	44,773	44,168	43,948	43,707	44,509	44,748	44,755	44,203
Small General Non Demand	4,239	4,380	4,376	4,364	4,289	4,282	4,246	4,255	4,245	4,233	4,166	4,116	3,953
Small General Demand	959	923	920	880	929	940	948	948	948	988	1,109	1,088	1,079
Large General	116	97	94	120	120	120	119	120	120	119	120	121	120
Private Outdoor Lighting	516	517	517	520	515	522	511	512	511	512	512	510	517
Independent Power Producer	2	2	2	2	2	2	2	2	2	2	2	2	2
Sub-Total	50,192	50,090	50,011	50,077	50,709	50,608	49,997	49,783	49,533	50,373	50,647	50,601	49,874
<b>Government Services:</b>													
Small Non Demand	646	684	678	663	635	635	633	634	636	630	643	650	644
Small Demand	382	355	373	386	385	385	384	385	385	385	385	385	384
Large	43	40	41	42	43	43	44	45	44	44	44	44	44
Street Lighting (Agencies)	617	618	618	618	618	618	617	616	616	616	616	616	618
Sub-Total	1,668	1,687	1,689	1,689	1,682	1,678	1,678	1,680	1,682	1,675	1,681	1,695	1,690
Total	51,880	51,787	51,721	51,776	52,391	52,289	51,675	51,463	51,215	52,048	52,335	52,298	51,584
U.S. Navy	1	1	1	1	1	1	1	1	1	1	1	1	1
Grand Total	51,881	51,788	51,722	51,777	52,392	52,290	51,676	51,464	51,216	52,049	52,336	52,297	51,585

**GUAM POWER AUTHORITY  
ACCURED REVENUE  
NOVEMBER 2020**

GPA.303

RATE	NUMBER OF CUSTOMERS	KWH SALES	TOTAL REVENUE		BASE RATE REVENUE		AVERAGE PER CUSTOMER		NON-FUEL		OIL	
			AMOUNT	CRKWH	AMOUNT	CRKWH	KWH	REVENUE	AMOUNT	CRKWH	Fuel rate	AMOUNT
Month												
R Residential	44,271	47,924,589	\$ 8,561,989	\$ 17,8655	\$ 17,86554	\$ 8,561,989	1,083	\$ 193	\$ 0.083891	\$ 4,551,132	\$ 8,3691	\$ 4,010,857
G Small Gen. Non Demand	4,380	5,490,013	\$ 1,242,336	\$ 22,6290	\$ 22,62901	\$ 1,242,336	284	\$ 284	\$ 14,2599	\$ 782,871	\$ 8,3691	\$ 459,465
J Small Gen. Demand	823	15,180,559	\$ 3,031,479	\$ 19,9695	\$ 19,96948	\$ 3,031,479	18,445	\$ 3,683	\$ 11,5995	\$ 1,760,875	\$ 8,3699	\$ 1,270,604
P Large General	97	18,776,244	\$ 3,471,380	\$ 18,4881	\$ 18,48815	\$ 3,471,380	193,570	\$ 35,787	\$ 10,1090	\$ 1,898,095	\$ 8,3791	\$ 1,573,285
I Independent Power Producer	2	74,692	\$ 8,640	\$ 11,5674	\$ 11,56743	\$ 8,640	37,346	\$ 4,320	\$ 3,1912	\$ 2,384	\$ 8,3762	\$ 6,256
H Private St. Lights	517	33,159	\$ 23,400	\$ 70,5702	\$ 70,57024	\$ 23,400	64	\$ 45	\$ 62,2011	\$ 20,625	\$ 8,3691	\$ 2,775
Sub-Total	50,090	87,479,256	\$ 16,339,223	\$ 18,6778	\$ 18,67783	\$ 16,339,223	1,746	\$ 326	\$ 10,3064	\$ 9,015,981	\$ 8,3714	\$ 7,323,242
Government Service:												
S Small Non Demand	684	785,007	\$ 192,813	\$ 24,5620	\$ 24,5620	\$ 192,813	282	\$ 282	\$ 16,1929	\$ 127,115	\$ 8,3691	\$ 65,698
K Small Demand	355	7,754,428	\$ 1,687,099	\$ 21,7566	\$ 21,7566	\$ 1,687,099	21,843	\$ 4,752	\$ 13,3875	\$ 1,038,123	\$ 8,3691	\$ 648,976
L Large	40	4,828,626	\$ 1,003,746	\$ 20,7980	\$ 20,7980	\$ 1,003,746	120,666	\$ 25,094	\$ 12,1515	\$ 599,241	\$ 8,3807	\$ 404,505
F Street Lighting (Agencies)	618	557,701	\$ 387,718	\$ 69,5207	\$ 69,5207	\$ 387,718	902	\$ 627	\$ 61,1516	\$ 341,043	\$ 8,3691	\$ 46,675
Sub-Total	1,697	13,923,762	\$ 3,271,376	\$ 23,4949	\$ 23,4949	\$ 3,271,376	8,205	\$ 1,928	\$ 15,1218	\$ 2,105,523	\$ 8,3731	\$ 1,165,853
U.S. Navy	1	27,037,233	\$ 4,242,586	\$ 15,6916	\$ 15,6916	\$ 4,242,586		\$	\$ 6,4631	\$ 1,747,451	\$ 9,2285	\$ 2,495,134
TOTAL	61,788	128,440,251	\$ 23,853,184	\$ 18,5714	\$ 18,5714	\$ 23,853,184	2,480	\$ 461	\$ 10,0194	\$ 12,868,865	\$ 8,5520	\$ 10,984,229
Two Months Ended November 2020												
R Residential	44,237	94,941,650	\$ 17,001,508	\$ 17,9073	\$ 17,9073	\$ 17,001,508	2,146	\$ 384	\$ 9,5382	\$ 9,055,747	\$ 8,3691	\$ 7,945,762
G Small Gen. Non Demand	4,378	11,212,266	\$ 2,546,901	\$ 22,7332	\$ 22,7332	\$ 2,546,901	2,961	\$ 582	\$ 14,3641	\$ 1,610,586	\$ 8,3691	\$ 938,366
J Small Gen. Demand	822	30,930,986	\$ 6,204,224	\$ 20,0593	\$ 20,0593	\$ 6,204,224	37,652	\$ 7,552	\$ 11,6884	\$ 3,815,337	\$ 8,3699	\$ 2,688,888
P Large General	96	37,312,279	\$ 7,069,475	\$ 18,9468	\$ 18,9468	\$ 7,069,475	390,704	\$ 74,026	\$ 10,5684	\$ 3,943,328	\$ 8,3783	\$ 3,126,146
I Independent Power Producer	2	108,017	\$ 15,186	\$ 14,0588	\$ 14,0588	\$ 15,186	54,009	\$ 7,593	\$ 5,6794	\$ 6,135	\$ 8,3794	\$ 9,051
H Private St. Lights	517	67,432	\$ 47,687	\$ 70,7185	\$ 70,7185	\$ 47,687	130	\$ 92	\$ 62,3494	\$ 42,043	\$ 8,3691	\$ 5,643
Sub-Total	50,051	174,572,543	\$ 32,886,981	\$ 18,8396	\$ 18,8396	\$ 32,886,981	3,488	\$ 657	\$ 10,4674	\$ 18,273,126	\$ 8,3712	\$ 14,613,855
Government Service:												
S Small Non Demand	681	1,612,222	\$ 396,045	\$ 24,5652	\$ 24,5652	\$ 396,045	2,367	\$ 582	\$ 16,1961	\$ 261,116	\$ 8,3691	\$ 134,828
K Small Demand	364	15,619,195	\$ 3,409,679	\$ 21,8313	\$ 21,8313	\$ 3,409,679	42,910	\$ 9,369	\$ 13,4622	\$ 2,102,693	\$ 8,3691	\$ 1,307,186
L Large	41	10,008,048	\$ 2,103,239	\$ 21,0174	\$ 21,0174	\$ 2,103,239	247,112	\$ 51,937	\$ 12,0369	\$ 1,264,698	\$ 8,3805	\$ 838,729
F Street Lighting (Agencies)	618	1,192,327	\$ 785,908	\$ 65,9138	\$ 65,9138	\$ 785,908	1,929	\$ 1,272	\$ 57,6447	\$ 686,121	\$ 8,3691	\$ 98,787
Sub-Total	1,704	28,431,792	\$ 6,695,281	\$ 23,5485	\$ 23,5485	\$ 6,695,281	16,690	\$ 3,930	\$ 15,1734	\$ 4,314,630	\$ 8,3731	\$ 2,380,631
U.S. Navy	1	52,950,589	\$ 8,234,596	\$ 15,5515	\$ 15,5515	\$ 8,234,596		\$	\$ 6,2974	\$ 3,334,531	\$ 9,2540	\$ 4,900,065
TOTAL	51,755	255,954,924	\$ 47,816,837	\$ 18,6817	\$ 18,6817	\$ 47,816,837	4,946	\$ 924	\$ 10,1277	\$ 25,922,286	\$ 8,5541	\$ 21,894,551
Twelve Months Ended November 2020												
R Residential	44,381	543,340,090	\$ 107,999,946	\$ 19,8770	\$ 19,8770	\$ 107,999,946	12,248	\$ 2,435	\$ 9,3413	\$ 51,841,627	\$ 10,3358	\$ 56,158,319
G Small Gen. Non Demand	4,239	61,520,278	\$ 15,385,688	\$ 25,0091	\$ 25,0091	\$ 15,385,688	14,514	\$ 3,630	\$ 14,5091	\$ 8,925,425	\$ 10,5010	\$ 6,460,263
J Small Gen. Demand	959	179,204,943	\$ 40,749,245	\$ 22,7389	\$ 22,7389	\$ 40,749,245	186,802	\$ 42,477	\$ 12,0928	\$ 21,870,630	\$ 10,6461	\$ 19,078,415
P Large General	116	246,564,515	\$ 54,065,071	\$ 21,9274	\$ 21,9274	\$ 54,065,071	2,128,615	\$ 468,749	\$ 10,0340	\$ 26,959,325	\$ 10,9834	\$ 27,105,746
I Independent Power Producer	2	429,812	\$ 90,644	\$ 21,0892	\$ 21,0892	\$ 90,644	214,906	\$ 45,322	\$ 10,7053	\$ 46,013	\$ 10,3839	\$ 44,631
H Private St. Lights	516	396,683	\$ 291,198	\$ 73,4082	\$ 73,4082	\$ 291,198	770	\$ 565	\$ 62,5892	\$ 248,277	\$ 10,8200	\$ 42,921
Sub-Total	50,192	1,031,458,322	\$ 218,581,793	\$ 21,1916	\$ 21,1916	\$ 218,581,793	20,550	\$ 4,355	\$ 10,6346	\$ 109,691,497	\$ 10,5569	\$ 108,890,296
Government Service:												
S Small Non Demand	646	8,466,842	\$ 2,304,603	\$ 27,2192	\$ 27,2192	\$ 2,304,603	13,101	\$ 3,566	\$ 16,4022	\$ 1,388,751	\$ 10,8169	\$ 915,852
K Small Demand	382	96,980,169	\$ 23,612,903	\$ 24,3482	\$ 24,3482	\$ 23,612,903	254,208	\$ 61,895	\$ 13,4282	\$ 13,022,720	\$ 10,9199	\$ 10,590,183
L Large	43	62,744,178	\$ 14,909,876	\$ 23,7630	\$ 23,7630	\$ 14,909,876	1,450,732	\$ 344,737	\$ 12,8711	\$ 8,075,892	\$ 10,8918	\$ 6,833,983
F Street Lighting (Agencies)	617	6,718,034	\$ 4,782,775	\$ 71,1931	\$ 71,1931	\$ 4,782,775	10,887	\$ 7,751	\$ 60,5535	\$ 4,068,004	\$ 10,6396	\$ 714,771
Sub-Total	1,688	174,905,223	\$ 45,810,156	\$ 26,0765	\$ 26,0765	\$ 45,810,156	103,614	\$ 27,019	\$ 15,1824	\$ 26,555,367	\$ 10,8941	\$ 19,054,799
U.S. Navy	1	1,206,365,544	\$ 264,191,949	\$ 21,8998	\$ 21,8998	\$ 264,191,949	23,253	\$ 5,092	\$ 11,2940	\$ 136,246,864	\$ 10,6058	\$ 127,945,084
TOTAL	61,881	1,517,979,228	\$ 315,332,819	\$ 20,7732	\$ 20,7732	\$ 315,332,819	29,259	\$ 6,078	\$ 10,2688	\$ 155,832,090	\$ 10,5074	\$ 158,500,740

GPA-318  
318Nov20

ENERGY ACCOUNT  
FY 2021 Versus FY 2020

FOR INTERNAL USE ONLY

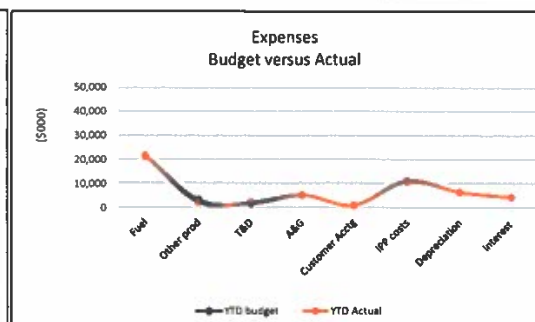
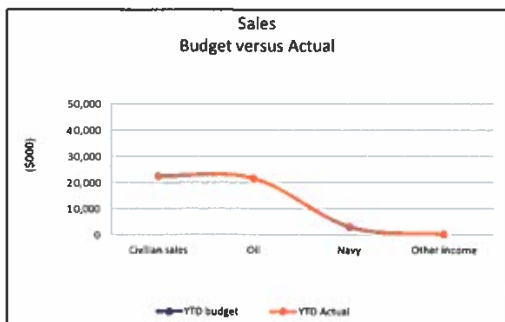
Gross Generation Number of days in Period Peak demand Date	November 2020		November 2019		Y T D 2021		Y T D 2020		MOVING TWELVE MONTHS	
	KWH	% change	KWH	% change	KWH	% change	KWH	% change	KWH	% change
	11/03/20		11/04/19		10/29/21		10/23/19		10/23/19	
Energy Account:										
Kilowatt hours GPA:										
Cabarras 1 & 2	66,509,000		38,684,000		132,013,000		103,284,000		729,507,000	
Cabarras No. 3	0		0		0		0		0	
Cabarras No. 4	0		0		0		0		0	
MEC (ENRON) Pkt 8 (IPP)	28,494,100		26,303,200		52,697,200		56,594,000		327,387,800	
MEC (ENRON) Pkt 9 (IPP)	23,059,500		26,440,100		51,967,400		57,095,100		303,706,400	
TEMES Pkt 7 (IPP)	1,121,054		11,037,475		1,621,138		15,711,956		16,159,921	
Tanguisson 2	0		0		0		0		0	
Tanguisson 1	0		0		0		0		0	
Diesels/CT's & Others:										
MD1 10MW	3,832		101,736		6,162		101,736		34,356	
NRG Solar Dandan	3,808,520		3,640,317		7,577,473		7,698,685		49,583,734	
Dedelo CT #1	48,180		1,300,700		90,190		1,376,910		509,450	
Dedelo CT #2	125,310		1,968,030		164,690		2,243,650		1,541,760	
Mariche CT	3,184,395		7,601,788		5,417,869		12,178,768		45,726,246	
Vigo CT (Leased)	2,612,190		6,788,998		4,928,866		9,017,749		42,291,353	
Tenjo	1,974,360		6,151,880		4,310,020		9,941,300		30,538,620	
Talofolo 10 MW	3,410		352,680		5,750		1,051,400		94,060	
Aggreko	10,906,765		11,298,451		22,865,264		12,467,825		134,255,174	
Wind Turbine*	0		0		0		12,221		158,359	
Orate	0		0		0		0		0	
Marbo	0		0		0		0		0	
Ratio to last year	141,850,616	100.13	141,669,555	99.33	283,665,022	98.23	288,775,301	99.64	1,681,494,232	97.38
Station use	5,709,658	4.03	4,854,260	3.43	11,488,514	4.05	10,820,496	3.75	66,154,836	3.93
Ratio to Gross generation	136,140,958	99.51	136,815,295	99.86	272,176,508	97.92	277,954,805	99.80	1,615,339,396	97.29
Net send out	27,037,233	107.80	25,080,100	100.77	52,950,590	104.46	50,689,087	98.48	311,613,685	99.55
KWH deliveries:										
Sales to Navy (@34.5kV)	109,103,725	97.64	111,735,195	99.66	219,225,918	96.46	227,265,718	100.10	1,303,722,707	96.77
Ratio to last year	0		0		0		0		0	
GPA-metered	109,103,725	97.64	111,735,195	99.66	219,225,918	96.46	227,265,718	100.10	1,303,722,707	96.77
Ratio to last year	0		0		0		0		0	
Power factor adj.	109,103,725	97.64	111,735,195	99.66	219,225,918	96.46	227,265,718	100.10	1,303,722,707	96.77
Adjusted	109,103,725	97.64	111,735,195	99.66	219,225,918	96.46	227,265,718	100.10	1,303,722,707	96.77
GPA KWH Accountability:										
Sales to civilian customers-										
accrual basis	101,403,018	97.18	104,340,548	99.71	203,004,334	96.35	210,684,804	100.06	1,206,365,547	96.15
Ratio to last year	346,983		330,917		632,769		685,631		3,999,278	
GPA use-KWH	7,353,724	6.74	7,063,330	6.32	15,588,815	7.11	15,895,283	6.99	93,357,882	7.16
Unaccounted For	0		0		0		0		0	
Ratio to deliveries	0		0		0		0		0	
Ratio to Gross Generation	0		0		0		0		0	
Ratio to Net Send Out	0		0		0		0		0	

GPA-317Sep20

**Guam Power Authority  
Fuel Consumption  
FY 2020**

Description	September 2020		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
	0	0	0	0	0	0
<b>GPA:</b>						
RFO	75,895	\$2,701,213	1,643,720	\$ 81,349,972	1,643,720	\$ 81,349,972
Diesel	61,204	\$3,809,862	613,080	\$ 44,898,458	613,080	\$ 44,898,458
Low Sulfur	80,958	\$3,249,794	442,650	\$ 27,133,424	442,650	\$ 27,133,424
Deferred Fuel Costs	0	-\$800,126	0	\$ 4,806,714	0	\$ 4,806,714
Fuel Adjustments	0	-\$387,299	0	\$ (290,514)	0	\$ (290,514)
Fuel Handling Costs	0	\$1,864,154	0	\$ 18,961,499	0	\$ 18,961,499
	<b>218,056</b>	<b>\$10,437,597</b>	<b>2,699,450</b>	<b>\$ 176,859,552</b>	<b>2,699,450</b>	<b>\$ 176,859,552</b>
<b>IWPS:</b>						
GPA RFO	75,895	\$2,701,213	1,643,720	\$ 81,349,972	1,643,720	\$ 81,349,972
Diesel	61,204	\$3,809,862	613,080	\$ 44,898,458	613,080	\$ 44,898,458
Low Sulfur	80,958	\$3,249,794	442,650	\$ 27,133,424	442,650	\$ 27,133,424
Deferred Fuel Costs	0	-\$800,126	0	\$ 4,806,714	0	\$ 4,806,714
Fuel Variance	0	-\$387,299	0	\$ (290,514)	0	\$ (290,514)
Fuel Handling Costs	0	\$1,864,154	0	\$ 18,961,499	0	\$ 18,961,499
	<b>218,056</b>	<b>\$10,437,597</b>	<b>2,699,450</b>	<b>\$ 176,859,552</b>	<b>2,699,450</b>	<b>\$ 176,859,552</b>
<b>AVERAGE COST/Bbl.</b>						
GPA RFO		\$35.59		\$49.49		\$49.49
Diesel		\$62.25		\$73.23		\$73.23
Low Sulfur		\$40.14		\$61.30		\$61.30
<b>AS BURNED</b>						
<b>Cabras 1 &amp; 2</b>						
RFO	38,268	\$ 1,371,857	990,613	\$ 48,559,971	990,613	\$ 48,559,971
Low Sulfur	44,606	\$ 1,793,899	224,624	\$ 13,637,456	224,624	\$ 13,637,456
Diesel	2	\$ 419	653	\$ 60,421	653	\$ 60,421
	<b>82,879</b>	<b>\$ 3,166,175</b>	<b>1,215,890</b>	<b>\$ 62,257,848</b>	<b>1,215,890</b>	<b>\$ 62,257,848</b>
<b>Cabras 3 &amp; 4</b>						
RFO	0	\$ -	0	\$ -	0	\$ -
Low Sulfur	0	\$ -	0	\$ -	0	\$ -
Diesel	0	\$ -	0	\$ -	0	\$ -
	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>
<b>MEC (Piti Units 8&amp;9)</b>						
RFO	37,627	\$ 1,329,356	653,106	\$ 32,790,001	653,106	\$ 32,790,001
Low Sulfur	36,352	\$ 1,455,895	218,026	\$ 13,495,968	218,026	\$ 13,495,968
Diesel	0	\$ -	54	\$ 3,853	54	\$ 3,853
	<b>73,978</b>	<b>\$ 2,785,251</b>	<b>871,187</b>	<b>\$ 46,289,823</b>	<b>871,187</b>	<b>\$ 46,289,823</b>
<b>Diesel &amp; CT's - GPA:</b>						
MDI Dsl	0	\$ -	188	\$ 17,724	188	\$ 17,724
Macheche CT	9,981	\$ 589,149	116,513	\$ 8,298,209	116,513	\$ 8,298,209
Yigo CT	7,843	\$ 463,164	102,273	\$ 7,159,494	102,273	\$ 7,159,494
Talofoto 10 MW	0	\$ -	1,924	\$ 167,981	1,924	\$ 167,981
Aggreko	31,809	\$ 1,875,430	231,061	\$ 15,714,145	231,061	\$ 15,714,145
Tenjo	5,445	\$ 496,501	62,369	\$ 5,750,779	62,369	\$ 5,750,779
TEMES (IPP)	5,015	\$ 289,803	81,042	\$ 6,192,948	81,042	\$ 6,192,948
GWA Generators	2	\$ 347	243	\$ 32,469	243	\$ 32,469
	<b>61,199</b>	<b>\$ 3,809,443</b>	<b>612,373</b>	<b>\$ 44,834,183</b>	<b>612,373</b>	<b>\$ 44,834,183</b>
Deferred Fuel Costs	0	\$ (800,126)	0	\$ 4,806,714	0	\$ 4,806,714
Adjustment	0	\$ (387,299)	0	\$ (290,514)	0	\$ (290,514)
Fuel Handling Costs	0	\$ 1,864,154	0	\$ 18,961,499	0	\$ 18,961,499
<b>TOTAL</b>	<b>218,056</b>	<b>\$ 10,437,597</b>	<b>2,699,450</b>	<b>\$ 176,859,552</b>	<b>2,699,450</b>	<b>\$ 176,859,552</b>

Statement of operations Comparison-Budget versus Actual For the month and year to date ended November 30, 2020						
	Actual					
	Budget	November-20	Variance	YTD Budget	YTD Actual	Variance
KwH Sales-Civilian	100,986	101,601	-615	203,184	203,202	(18)
Non-fuel yield	\$ 0.112184	\$ 0.109467	\$ 0.002716	\$ 0.112023	\$ 0.111160	\$ 0.000862
KwH Sales-Navy	24,017	23,876	141	49,671	51,826	(2,155)
Non-fuel yield	\$ 0.063624	\$ 0.067418	\$ (0.003794)	\$ 0.063624	\$ 0.064331	\$ (0.000707)
Operating revenue						
Civilian sales	11,329	11,122	207	22,761	22,588	173
Oil	10,850	10,984	(134)	21,948	21,894	54
Navy	1,528	1,747	(219)	3,160	3,334	(174)
DSM-Rebates	-	322	(322)	-	625	(625)
Other income	180	217	(37)	360	280	80
	23,887	24,393	(505)	48,229	48,722	(492)
Bad debts expense	87	87	0	174	174	0
Total operating revenues	23,800	24,305	(505)	48,055	48,547	(492)
Operating expenses:						
Production fuel	10,850	10,984	(134)	21,948	21,895	53
O & M expenses:						
Other production	1,670	1,321	349	3,339	2,270	1,069
Transmission distribution	820	1,111	(291)	1,748	2,391	(644)
Administrative expense	2,593	2,556	38	5,312	5,446	(134)
Customer accounting	386	401	(15)	861	796	64
	5,469	5,389	80	11,259	10,904	355
IPP costs	1,383	1,060	323	2,765	2,161	604
Depreciation	3,291	3,761	(471)	6,582	6,589	(7)
	20,993	21,194	(201)	42,553	41,549	1,005
Operating income	2,808	3,111	(304)	5,502	6,999	(1,497)
Other revenue (expenses):						
Investment income	83	51	32	167	92	75
Interest expense	(2,185)	(2,189)	4	(4,371)	(4,385)	14
Pandemic -COVID19	-	(45)	45	-	(48)	48
Losses due to typhoon	-	-	-	-	-	-
Bond issuance costs/Other expenses	89	85	4	179	170	9
Net income before capital contribution	795	1,013	(219)	1,476	2,828	(1,352)
Grants from the U.S. Government	-	-	-	-	-	-
Increase (decrease) in net assets	795	1,013	(219)	1,476	2,828	(1,352)

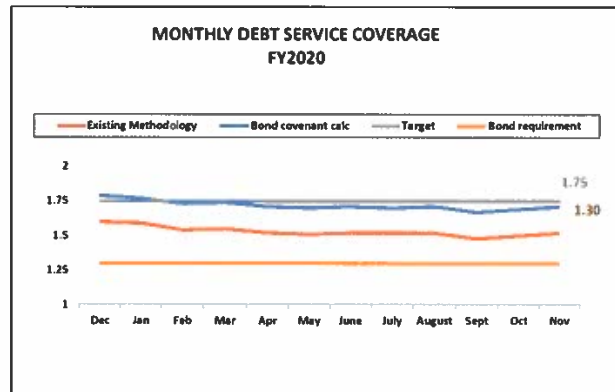


**Guam Power Authority**  
**Debt service coverage**  
**November 30, 2020**

	Restated 2017	Audited 2018	Audited 2019	Unaudited 2020	YTD Unaudited 2021
<b>Funds Available for Debt Service</b>					
Earnings from Operations	\$ 36,522	\$ 38,164	\$ 39,053	\$ 39,440	\$ 7,000
Interest Income	122	620	2,746	2,377	(15)
Depreciation Expense	44,292	37,184	36,999	37,958	6,589
Balance Available for Debt Service	\$ 80,936	\$ 75,968	\$ 78,798	\$ 79,776	\$ 13,574
<b>IPP - Capital Costs</b>					
Principal	\$ 20,796	\$ 23,210	\$ 13,470	\$ 8,399	\$ 1,478
Interest	5,609	3,159	1,068	531	18
Total IPP Payments	\$ 26,405	\$ 26,369	\$ 14,538	\$ 8,930	\$ 1,496
<b>Bond Debt Service</b>					
Principal (1993 & 1999 Revenue Bond)	\$ -	\$ -	\$ -	\$ -	\$ -
Interest (1993 & 1999 Revenue Bond)	-	-	-	-	-
Principal and Interest (2010 Subordinate Bond)	-	-	-	-	-
Principal and Interest (2010 Senior TE Bond)	7,999	2,000	-	-	-
Principal and Interest (2012 Senior TE Bond)	17,449	17,086	31,467	35,232	5,872
Principal and Interest (2014 Senior TE Bond)	5,084	5,083	5,084	5,087	848
Principal and Interest (2017 Senior TE Bond)	-	5,916	7,607	7,418	1,236
Total	\$ 30,532	\$ 30,086	\$ 44,158	\$ 47,737	\$ 7,956
<b>Debt Service Coverage (DSC) Calculation</b>					
Existing DSC Methodology (Senior)	1.79 x	1.65 x	1.46 x	1.48 x	1.52 x
Existing DSC Methodology (Senior+Subordinate)	1.79 x	1.65 x	1.46 x	1.48 x	1.52 x
Bond Covenant DSC	2.65 x	2.53 x	1.78 x	1.67 x	1.71 x
<b>Debt Service Coverage Requirements</b>					
Existing Ratemaking DSC Target	1.75 x	1.75 x	1.75 x	1.75 x	1.75 x
Minimum Bond Covenant Requirement (Senior Bond)	1.30 x	1.30 x	1.30 x	1.30 x	1.30 x
Minimum Bond Covenant Requirement (Subordinate Bond)	1.20 x	1.20 x	1.20 x	1.20 x	1.20 x

**Notes:**

- (1) Source: Guam Power Authority, 2017 - 2019 Audited Financial Statements and 2020-2021 Unaudited Financial Statements
- (2) Interest income is net of interest earnings in the Construction Fund and the amortization of deferred credit
- (3) Existing DSC Methodology (Rating Agency Method):  
 (Operating Earnings + Depreciation Expense - IPP Principal & Interest Payments)/  
 (Senior and Subordinate Bond Principal & Interest Payments)
- (4) Bond Covenant DSC Methodology: (Operating Earnings + Depreciation Expense)/  
 (Senior and Subordinate Bond Principal & Interest Payments)



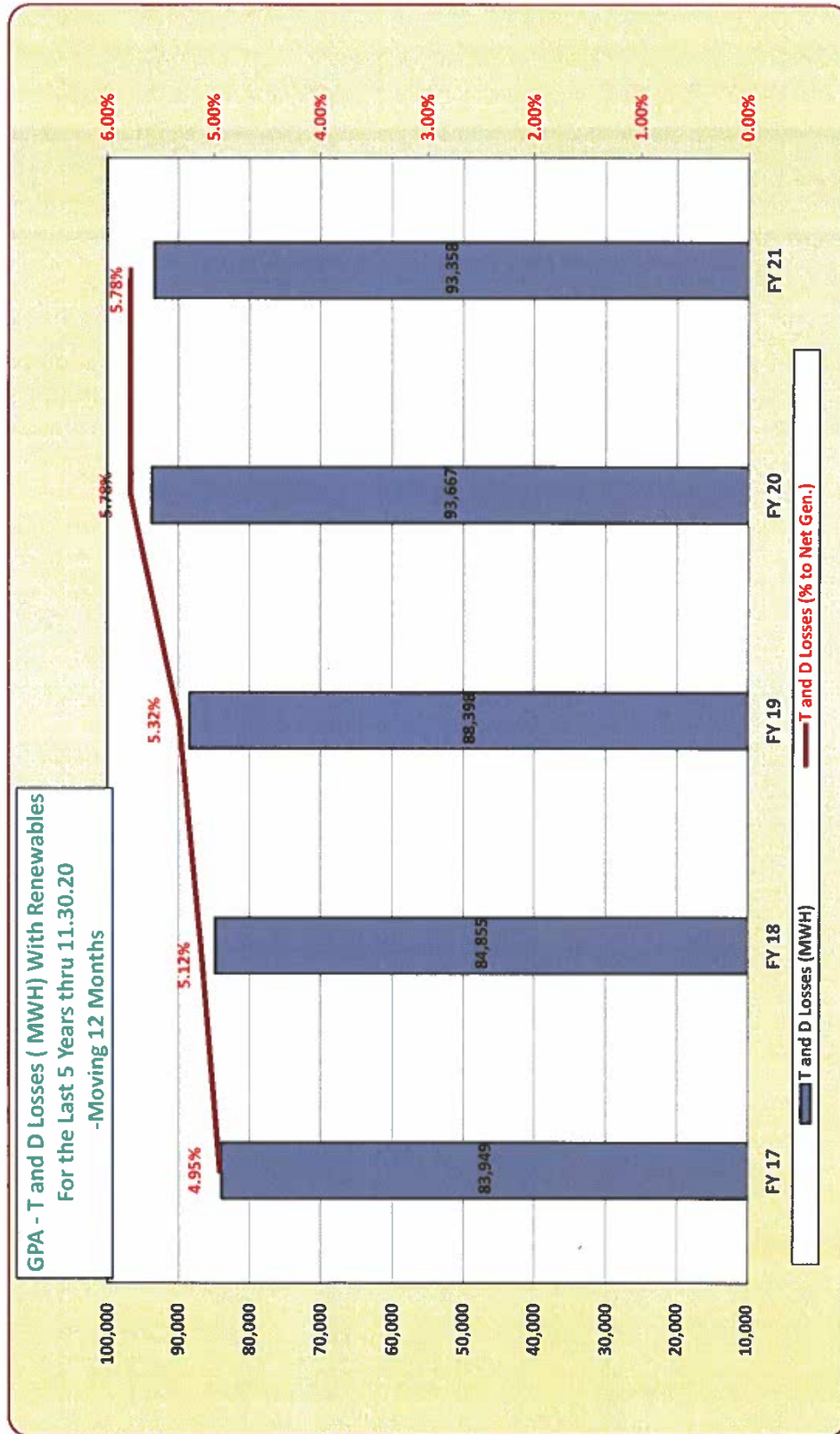


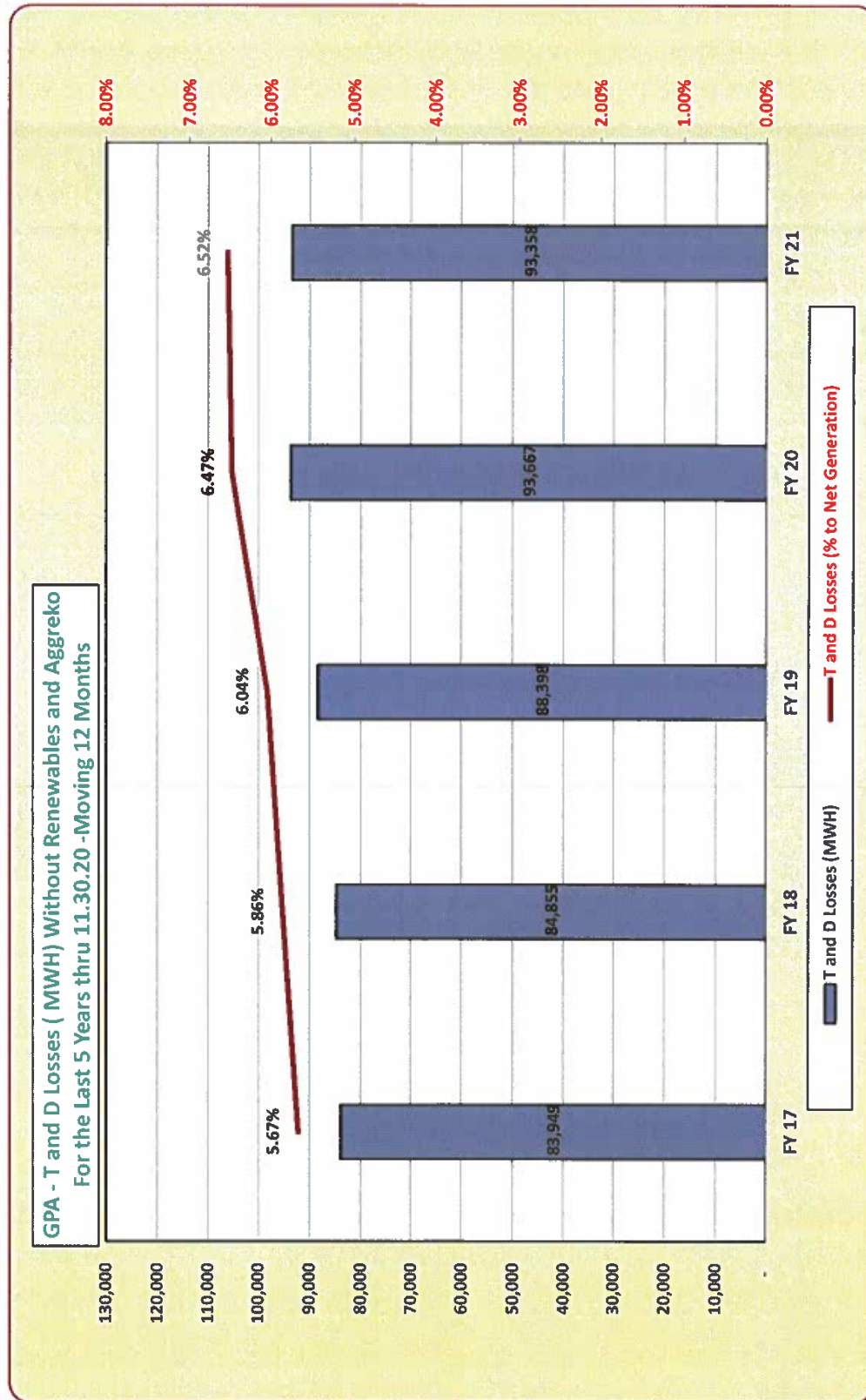
GPA Work Session - January 21, 2021 - DIVISION REPORTS

REVENUES-ACTUAL VS PROJECTIONS								
MONTHLY - NOVEMBER 2020					YTD THRU 11/30/20			
	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE
<b>KWH</b>								
Residential	39,708,687	47,924,589	8,215,902	20.69%	80,426,157	94,941,650	14,515,493	18.05%
Small General-Non-Demand	6,477,498	5,490,013	(987,485)	-15.24%	13,027,534	11,212,266	(1,815,267)	-13.93%
Small General-Demand	14,527,772	15,180,559	652,787	4.49%	28,812,952	30,930,898	1,317,946	4.45%
Large	25,181,426	18,776,244	(6,385,182)	-25.38%	49,227,371	37,312,279	(11,915,092)	-24.20%
Independent Power Producers	34,811	74,692	40,080	115.80%	64,070	108,017	43,947	68.58%
Private St. Lites	32,795	33,159	364	1.11%	65,152	67,432	2,280	3.50%
Sub-total	85,942,790	87,479,258	1,536,466	1.79%	172,423,236	174,572,543	2,149,307	1.25%
Government								
Small_Non Demand	1,058,048	785,007	(273,041)	-25.81%	2,247,288	1,612,222	(635,067)	-28.28%
Small-Demand	7,487,063	7,754,428	267,366	3.57%	15,289,727	15,619,195	329,468	2.15%
Large	5,779,756	4,826,626	(953,130)	-16.49%	11,913,538	10,008,048	(1,905,489)	-15.99%
Public St. Lites	718,544	557,701	(160,843)	-22.38%	1,310,123	1,192,327	(117,796)	-8.99%
Sub-total	15,043,410	13,923,762	(1,119,648)	-7.44%	30,760,676	28,431,792	(2,328,884)	-7.57%
Total-Civilian	100,986,200	101,403,018	416,819	0.41%	203,183,912	203,004,335	(179,577)	-0.09%
USN	24,017,393	27,037,233	3,019,840	12.57%	49,671,313	52,950,589	3,279,277	6.60%
Grand Total	125,003,593	128,440,251	3,436,659	2.75%	252,855,224	255,954,924	3,099,700	1.23%
<b>Non-Oil Yield</b>								
Residential	0.096307	0.094964	(0.001343)	-1.39%	0.096307	0.095382	(0.000925)	-0.96%
Small General-Non-Demand	0.138862	0.142599	0.003737	2.69%	0.138862	0.143641	0.004779	3.44%
Small General-Demand	0.120116	0.115995	(0.004121)	-3.43%	0.120116	0.116884	(0.003232)	-2.69%
Large	0.103865	0.101090	(0.002775)	-2.67%	0.103865	0.105684	0.001819	1.75%
Independent Power Producers	0.024112	0.031912	(0.007800)	-31.92%	0.024112	0.036794	(0.012682)	-52.60%
Private St. Lites	0.128477	0.022011	(0.106466)	-82.86%	0.128477	0.023494	(0.104983)	-81.73%
Sub-total	0.105977	0.103064	(0.002913)	-2.75%	0.105977	0.104674	(0.001304)	-1.23%
Government								
Small_Non Demand	0.152623	0.161929	0.009306	6.10%	0.152623	0.161961	0.009338	6.12%
Small-Demand	0.133106	0.133875	0.000769	0.58%	0.133106	0.134622	0.001516	1.14%
Large	0.124944	0.124153	(0.000790)	-0.63%	0.124944	0.126368	0.001424	1.14%
Public St. Lites	0.074388	0.071516	(0.002872)	-3.87%	0.074388	0.075447	0.001059	1.42%
Sub-total	0.147644	0.151218	0.003574	2.42%	0.147644	0.151754	0.004110	2.78%
Total-Civilian	0.112184	0.109676	(0.002508)	-2.24%	0.112184	0.111267	(0.000917)	-0.82%
USN	0.063624	0.064631	0.001008	1.58%	0.063624	0.062974	(0.000650)	-1.02%
Grand Total	0.102854	0.100194	(0.002660)	-2.59%	0.102854	0.101277	(0.001577)	-1.53%
<b>Non-Oil Revenues</b>								
Residential	3,824,243	4,551,132	726,889	19.01%	7,745,840	9,055,747	1,310,107	16.91%
Small General-Non-Demand	899,476	782,871	(116,605)	-12.96%	1,809,024	1,610,536	(198,488)	-10.97%
Small General-Demand	1,745,024	1,780,875	35,851	2.05%	3,557,002	3,615,337	58,335	1.64%
Large	2,613,395	1,898,095	(715,300)	-27.37%	5,113,008	3,943,328	(1,169,679)	-22.88%
Independent Power Producers	21,601	2,384	(19,218)	-88.97%	39,987	8,135	(31,852)	-79.66%
Private St. Lites	4,213	20,625	16,412	389.51%	8,371	42,043	33,672	402.28%
Sub-total	9,107,952	9,015,981	(91,971)	-1.01%	18,273,030	18,273,126	96	0.00%
Government								
Small_Non Demand	161,482	127,115	(34,367)	-21.28%	342,987	281,116	(61,870)	-18.02%
Small-Demand	996,574	1,038,123	41,549	4.17%	2,035,157	2,102,693	67,536	3.32%
Large	722,144	599,241	(122,903)	-17.02%	1,488,522	1,264,699	(223,823)	-15.04%
Public St. Lites	340,869	341,043	175	0.05%	621,506	688,121	66,615	10.72%
Sub-total	2,221,069	2,105,523	(115,546)	-5.20%	4,488,172	4,314,630	(173,542)	-3.87%
Total-Civilian	11,329,021	11,121,504	(207,518)	-1.83%	22,761,202	22,587,756	(173,446)	-0.76%
USN	1,528,074	1,747,451	219,378	14.36%	3,160,269	3,334,531	174,261	5.51%
Grand Total	12,857,095	12,868,955	11,860	0.09%	25,921,472	25,922,286	815	0.00%
% of Total Revenues	54.23%	53.95%			54.15%	54.21%		
<b>Oil Revenues</b>								
Residential	3,446,714	4,010,857	564,143	16.37%	6,980,990	7,945,762	964,771	13.82%
Small General-Non-Demand	562,247	459,465	(102,782)	-18.28%	1,130,790	938,368	(192,424)	-17.02%
Small General-Demand	1,261,011	1,270,604	9,594	0.76%	2,570,404	2,588,886	18,482	0.72%
Large	2,184,012	1,573,285	(610,727)	-27.96%	4,272,936	3,126,148	(1,146,789)	-26.84%
Independent Power Producers	3,004	6,258	3,254	108.25%	5,581	9,051	3,470	62.15%
Private St. Lites	2,847	2,775	(72)	-2.51%	5,655	5,643	(12)	-0.21%
Sub-total	7,459,834	7,323,242	(136,592)	-1.83%	14,966,337	14,613,855	(352,482)	-2.36%
Government								
Small_Non Demand	91,839	85,898	(5,941)	-6.47%	195,065	134,928	(60,136)	-30.83%
Small-Demand	649,877	648,976	(901)	-0.14%	1,327,148	1,307,186	(19,962)	-1.50%
Large	501,883	404,505	(97,378)	-19.37%	1,034,095	838,729	(195,366)	-18.89%
Public St. Lites	62,370	46,675	(15,695)	-25.16%	113,719	99,787	(13,932)	-12.25%
Sub-total	1,305,768	1,165,853	(139,915)	-10.72%	2,670,027	2,380,631	(289,396)	-10.84%
Total-Civilian	8,765,602	8,489,095	(276,507)	-3.15%	17,636,364	16,994,486	(641,878)	-3.64%
USN	2,084,710	2,495,134	410,424	19.69%	4,311,470	4,900,085	588,615	13.65%
Grand Total	10,850,312	10,984,229	133,917	1.23%	21,947,833	21,894,571	(53,263)	-0.24%
% of Total Revenues	45.77%	46.05%			45.85%	45.79%		
<b>Grand Total</b>								
Residential	7,270,957	8,581,989	1,291,031	17.76%	14,726,630	17,001,508	2,274,878	15.45%
Small General-Non-Demand	1,461,723	1,242,336	(219,387)	-15.01%	2,939,814	2,548,901	(390,913)	-13.30%
Small General-Demand	3,006,035	3,031,479	25,445	0.85%	6,127,406	6,204,224	76,818	1.25%
Large	4,797,407	3,471,380	(1,326,027)	-27.64%	9,385,943	7,089,475	(2,296,468)	-24.46%
Independent Power Producers	24,608	8,640	(15,968)	-64.89%	45,548	15,186	(30,362)	-66.66%
Private St. Lites	7,060	23,400	16,340	231.45%	14,026	47,687	33,661	240.00%
Sub-total	16,567,787	16,339,223	(228,564)	-1.38%	33,239,387	32,888,981	(350,406)	-1.06%
Government								
Small_Non Demand	253,320	192,813	(60,507)	-23.89%	538,052	396,045	(142,007)	-26.39%
Small-Demand	1,646,451	1,687,099	40,648	2.47%	3,362,305	3,409,879	47,574	1.41%
Large	1,223,827	1,003,748	(220,081)	-17.98%	2,522,817	2,103,429	(419,389)	-16.62%
Public St. Lites	403,238	387,718	(15,520)	-3.85%	735,225	785,908	50,683	6.89%
Sub-total	3,526,837	3,271,376	(255,461)	-7.24%	7,158,199	6,695,261	(462,938)	-6.47%
Total-Civilian	20,094,624	19,610,598	(484,026)	-2.41%	40,397,586	39,582,242	(815,344)	-2.02%
USN	3,612,784	4,242,586	629,802	17.43%	7,471,739	8,234,596	762,856	10.21%
Grand Total	23,707,407	23,853,184	145,777	0.61%	47,869,305	47,816,837	(52,468)	-0.11%

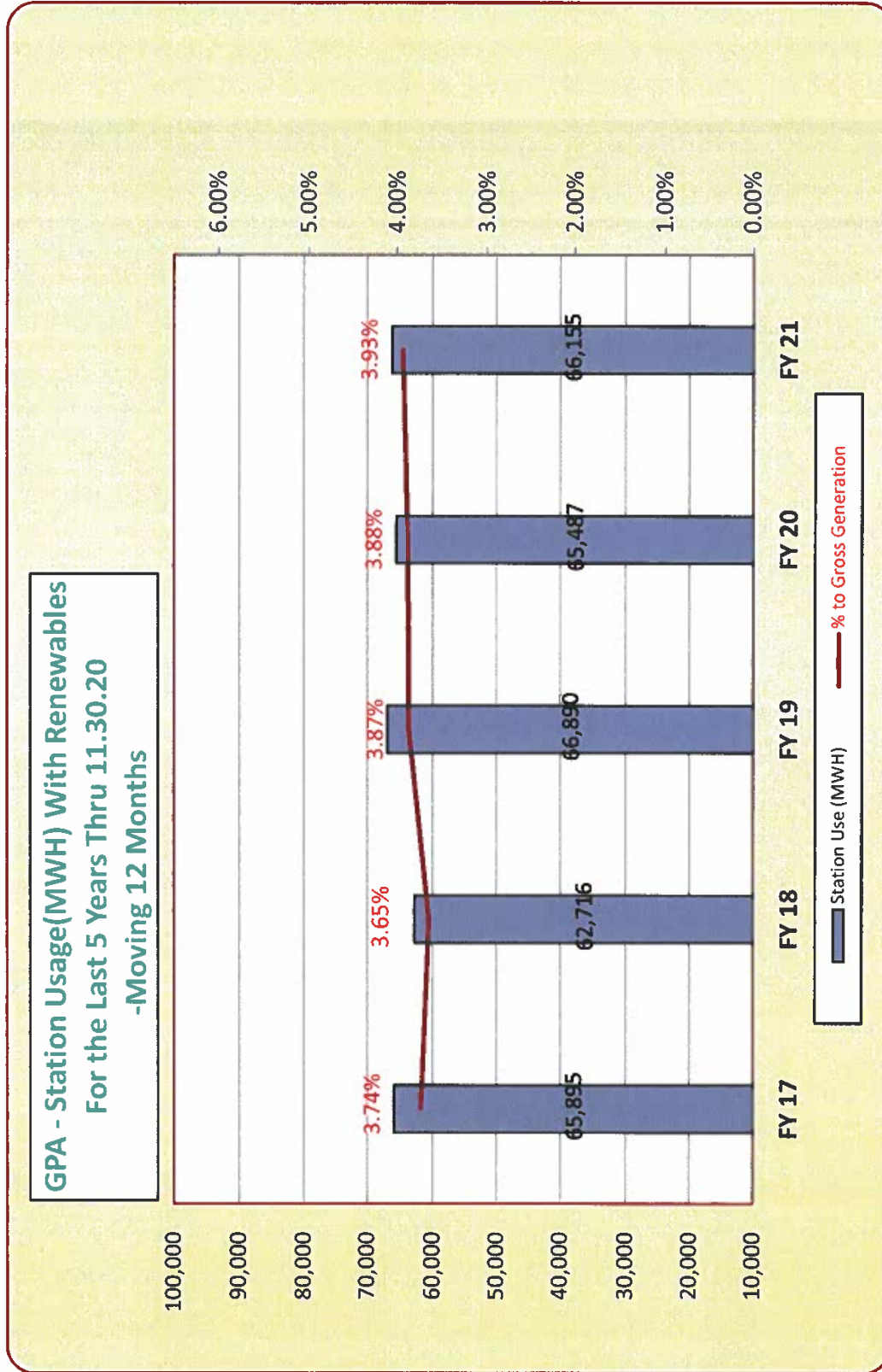
GPA Work Session - January 21, 2021 - DIVISION REPORTS

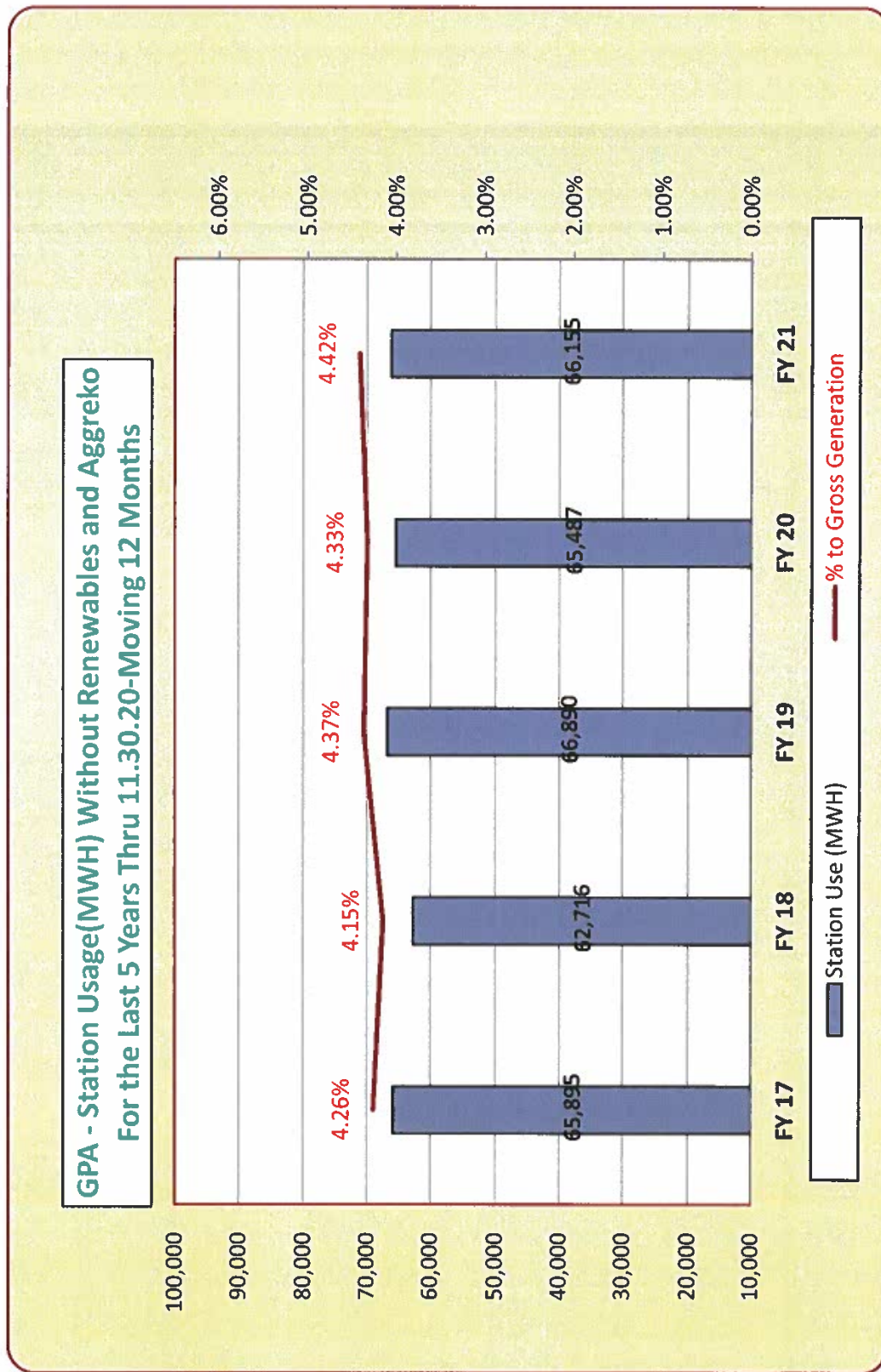
YTD REVENUES - CURRENT YEAR VS PRIOR YEAR					MTD REVENUES - CURRENT YEAR VS PRIOR YEAR				
ACTUALS - 2 MONTHS ENDED NOVEMBER 30					ACTUALS - MONTH ENDED NOVEMBER 30				
	2020	2019	VARIANCE	% VARIANCE	2020	2019	VARIANCE	% VARIANCE	
<b>KWH</b>									
Residential	94,941,650	83,840,140	11,101,510	13.24%	47,824,589	41,832,586	6,092,004	14.56%	
Small General-Non-Demand	11,212,266	10,960,215	252,052	2.30%	5,490,013	5,409,659	80,354	1.49%	
Small General-Demand	30,930,898	32,741,025	(1,810,127)	-5.53%	15,180,559	16,236,716	(1,056,157)	-6.50%	
Large	37,312,279	50,254,075	(12,941,796)	-25.75%	18,776,244	24,973,240	(6,196,996)	-24.81%	
Independent Power Producers	108,017	83,077	44,940	71.25%	74,692	33,926	40,766	120.16%	
Private St. Lites	67,432	67,628	(196)	-0.29%	33,159	33,968	(809)	-2.38%	
Sub-total	174,572,543	177,926,160	(3,353,617)	-1.88%	87,479,256	88,520,094	(1,040,838)	-1.18%	
Government									
Small_Non Demand	1,612,222	1,518,528	93,694	6.17%	785,007	739,934	45,073	6.09%	
Small-Demand	15,619,195	17,218,001	(1,598,806)	-9.29%	7,754,428	8,287,162	(532,733)	-6.43%	
Large	10,008,048	12,504,877	(2,496,829)	-19.97%	4,826,626	6,140,795	(1,314,169)	-21.40%	
Public St. Lites	1,192,327	1,517,238	(324,911)	-21.41%	557,701	652,963	(95,262)	-14.59%	
Sub-total	28,431,792	32,758,644	(4,326,853)	-13.21%	13,923,762	15,820,854	(1,897,091)	-11.99%	
Total-Civilian	203,004,335	210,684,805	(7,680,470)	-3.65%	101,403,018	104,340,948	(2,937,930)	-2.82%	
USN	52,950,589	50,689,087	2,261,502	4.46%	27,037,233	25,080,100	1,957,133	7.80%	
Grand Total	255,954,924	261,373,892	(5,418,968)	-2.07%	128,440,251	129,421,048	(980,797)	-0.76%	
<b>Non-Oil Yield</b>									
Residential	0.095322	0.096063	-0.000681	-0.71%	0.094964	0.095908	-0.000942	-0.98%	
Small General-Non-Demand	0.143641	0.141693	0.001947	1.37%	0.142599	0.140648	0.001951	1.39%	
Small General-Demand	0.116884	0.120234	-0.003349	-2.79%	0.115995	0.119889	-0.003894	-3.25%	
Large	0.105684	0.104242	0.001442	1.38%	0.101090	0.105008	-0.003918	-3.73%	
Independent Power Producers	0.056794	0.112280	-0.055486	-49.41%	0.031912	0.111854	-0.079942	-71.47%	
Private St. Lites	0.623494	0.610848	0.012646	2.07%	0.622011	0.607490	0.014521	2.39%	
Sub-total	0.104874	0.105833	-0.000959	-0.90%	0.103064	0.105810	-0.002746	-2.59%	
Government									
Small_Non Demand	0.161961	0.163399	-0.001438	-0.88%	0.161929	0.164850	-0.002921	-1.77%	
Small-Demand	0.134622	0.133900	0.000723	0.54%	0.133875	0.136319	-0.002444	-1.79%	
Large	0.126368	0.124815	0.001553	1.24%	0.124153	0.125986	-0.001833	-1.45%	
Public St. Lites	0.575447	0.480320	0.095128	19.81%	0.611516	0.549554	0.061962	11.28%	
Sub-total	0.151754	0.147767	0.003986	2.70%	0.151218	0.150697	0.000520	0.35%	
Total-Civilian	0.111267	0.112353	-0.001086	-0.97%	0.109876	0.112816	-0.002940	-2.61%	
USN	0.062974	0.061883	0.001092	1.77%	0.064631	0.064101	0.000530	0.83%	
Grand Total	0.101277	0.102527	-0.001250	-1.22%	0.100194	0.103214	-0.003020	-2.93%	
<b>Non-Oil Revenues</b>									
Residential	9,055,747	8,053,928	1,001,819	12.44%	4,551,132	4,012,017	539,115	13.44%	
Small General-Non-Demand	1,610,536	1,552,991	57,545	3.71%	782,871	760,880	22,011	2.89%	
Small General-Demand	3,615,337	3,936,571	(321,234)	-8.16%	1,780,875	1,948,604	(167,729)	-8.54%	
Large	3,943,328	5,238,596	(1,295,268)	-24.73%	1,898,095	2,822,393	(924,298)	-32.76%	
Independent Power Producers	8,135	7,081	1,054	14.89%	2,384	3,795	(1,411)	-37.19%	
Private St. Lites	42,043	41,311	733	1.77%	20,825	20,635	190	0.92%	
Sub-total	18,273,126	18,830,478	(557,352)	-2.96%	9,016,981	9,366,305	(350,324)	-3.74%	
Government									
Small_Non Demand	261,116	248,125	12,991	5.24%	127,115	121,978	5,137	4.21%	
Small-Demand	2,102,893	2,305,486	(202,593)	-8.80%	1,038,123	1,129,895	(91,772)	-8.11%	
Large	1,264,899	1,558,292	(293,393)	-18.84%	599,241	773,651	(174,410)	-22.54%	
Public St. Lites	686,121	728,759	(42,638)	-5.85%	341,043	358,838	(17,795)	-4.96%	
Sub-total	4,314,630	4,840,662	(526,033)	-10.87%	2,105,523	2,384,163	(278,640)	-11.69%	
Total-Civilian	22,587,756	23,671,141	(1,083,385)	-4.58%	11,121,504	11,750,467	(628,964)	-5.35%	
USN	3,334,531	3,126,639	207,892	6.65%	1,747,451	1,607,660	139,792	8.70%	
Grand Total	25,922,286	26,797,779	(875,493)	-3.27%	12,868,955	13,358,127	(489,172)	-3.66%	
<b>% of Total Revenues</b>									
<b>Oil Revenues</b>									
Residential	7,945,762	12,931,671	(4,985,909)	-38.56%	4,010,857	6,452,342	(2,441,485)	-37.84%	
Small General-Non-Demand	938,366	1,690,525	(752,160)	-44.49%	459,465	834,397	(374,932)	-44.93%	
Small General-Demand	2,588,888	5,047,785	(2,458,897)	-48.71%	1,270,804	2,503,281	(1,232,477)	-49.24%	
Large	3,126,146	7,715,503	(4,589,356)	-59.48%	1,573,285	3,834,426	(2,261,142)	-58.97%	
Independent Power Producers	9,051	9,396	(345)	-3.67%	6,256	5,054	1,202	23.79%	
Private St. Lites	5,643	10,431	(4,788)	-45.90%	2,775	5,239	(2,464)	-47.03%	
Sub-total	14,613,855	27,405,311	(12,791,456)	-46.68%	7,323,242	13,634,739	(6,311,497)	-46.29%	
Government									
Small_Non Demand	134,926	234,221	(99,295)	-42.39%	65,686	114,129	(48,443)	-42.44%	
Small-Demand	1,307,186	2,655,739	(1,348,553)	-50.78%	648,976	1,278,228	(629,253)	-49.23%	
Large	838,729	1,905,454	(1,066,725)	-55.98%	404,505	935,597	(531,093)	-56.77%	
Public St. Lites	99,787	234,022	(134,235)	-57.36%	48,675	100,714	(52,039)	-51.66%	
Sub-total	2,389,631	5,029,436	(2,640,805)	-52.67%	1,165,853	2,428,689	(1,262,836)	-52.00%	
Total-Civilian	16,994,486	32,434,747	(15,440,261)	-47.60%	8,489,095	16,063,408	(7,574,313)	-47.15%	
USN	4,900,085	8,818,613	(3,918,528)	-44.44%	2,495,134	3,024,743	(529,609)	-17.51%	
Grand Total	21,894,571	39,253,360	(17,358,789)	-44.22%	10,984,229	19,088,151	(8,103,921)	-42.46%	
<b>% of Total Revenues</b>									
<b>Grand Total</b>									
Residential	17,001,508	20,985,599	(3,984,091)	-18.98%	8,561,989	10,464,359	(1,902,370)	-18.18%	
Small General-Non-Demand	2,548,901	3,243,516	(694,615)	-21.42%	1,242,336	1,595,257	(352,921)	-22.12%	
Small General-Demand	6,204,224	8,984,357	(2,780,133)	-30.94%	3,031,479	4,449,885	(1,418,406)	-31.88%	
Large	7,069,475	12,954,099	(5,884,624)	-45.43%	3,471,380	8,456,820	(4,985,440)	-59.04%	
Independent Power Producers	15,186	16,477	(1,291)	-7.84%	8,640	8,849	(209)	-2.36%	
Private St. Lites	47,887	51,742	(3,855)	-7.44%	23,400	25,875	(2,474)	-9.56%	
Sub-total	32,886,981	46,235,789	(13,348,808)	-28.87%	16,339,223	23,001,043	(6,661,820)	-28.96%	
Government									
Small_Non Demand	396,045	482,346	(86,301)	-17.89%	192,813	238,107	(45,294)	-19.03%	
Small-Demand	3,409,879	4,961,225	(1,551,347)	-31.27%	1,687,099	2,407,924	(720,825)	-29.94%	
Large	2,103,429	3,463,746	(1,360,318)	-39.27%	1,003,746	1,709,248	(705,502)	-41.28%	
Public St. Lites	785,908	962,781	(176,873)	-18.37%	387,718	459,553	(71,835)	-15.63%	
Sub-total	6,695,261	9,870,098	(3,174,838)	-32.17%	3,271,376	4,812,832	(1,541,456)	-32.03%	
Total-Civilian	39,582,242	56,105,886	(16,523,644)	-29.45%	19,610,598	27,813,875	(8,203,276)	-29.49%	
USN	8,234,596	9,945,252	(1,710,657)	-17.20%	4,242,586	4,832,403	(589,817)	-12.21%	
Grand Total	47,816,837	66,051,140	(18,234,303)	-27.61%	23,853,184	32,646,278	(8,793,094)	-26.94%	







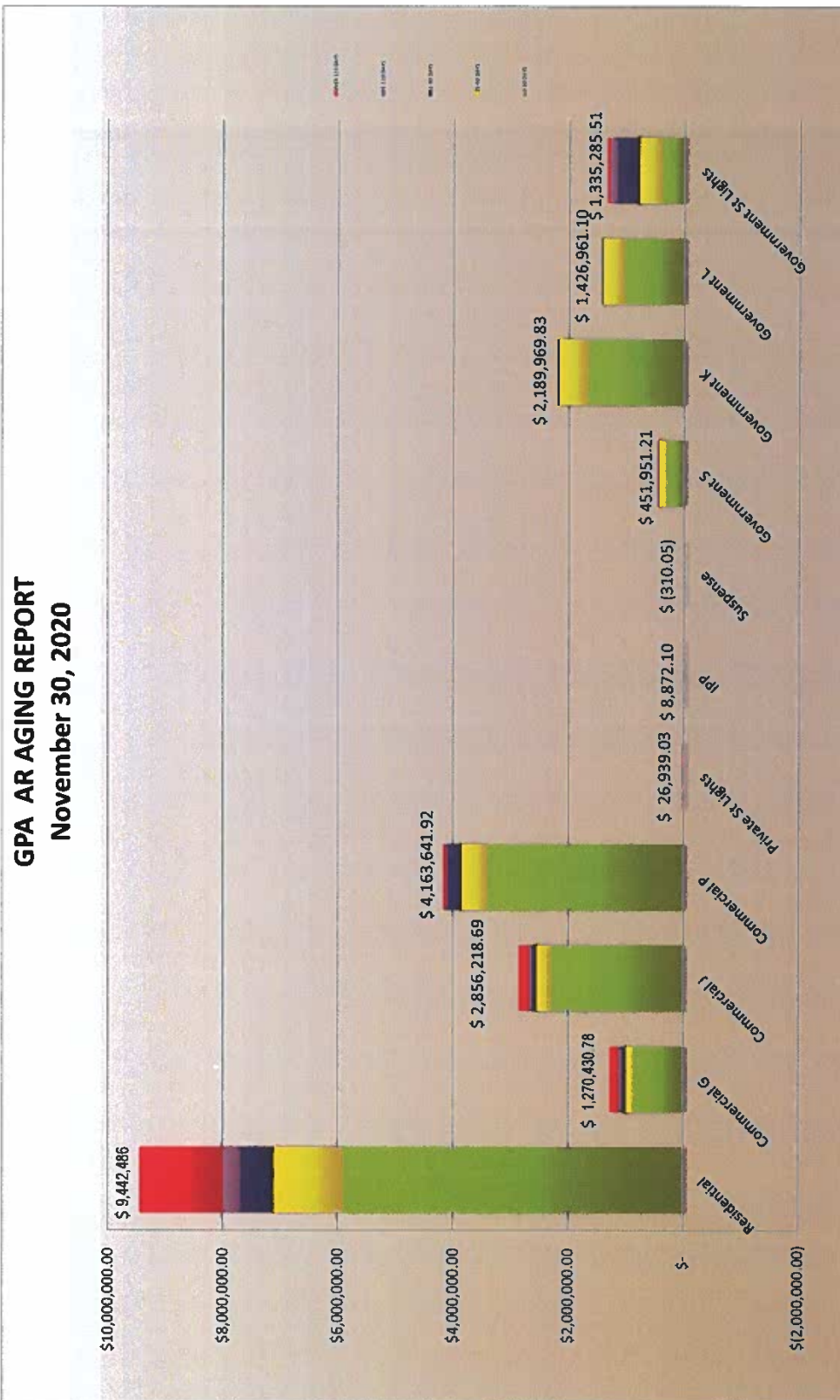




ACCOUNTS RECEIVABLE BY RATE - ACTIVE  
AR AGING REPORT  
AS OF November 30, 2020

GL ACCOUNT	RATE	TOTAL DUE	0-30 DAYS	31-60 DAYS	61-90 DAYS	91-120 DAYS	OVER 120 DAYS
1000.142000.10	Residential	\$ 8,717,010.94	5,859,296	1,206,480	547,244	302,482	801,509
1000.142000.11	Residential	\$ 725,475.09	44,962.00	49.63	25,510.24	347.17	654,606.05
1000.142000.12	Commercial G	\$ 1,270,430.78	850,651.02	145,269.03	69,469.54	50,955.36	154,085.83
1000.142000.13	Commercial J	\$ 2,856,218.69	2,293,052.60	257,607.48	82,677.12	36,406.37	186,475.12
1000.142000.14	Commercial P	\$ 4,163,641.92	3,403,276.15	452,474.23	236,486.03	-	71,405.51
1000.142000.15	Private St Lights	\$ 26,939.03	15,485.15	3,516.41	890.10	557.67	6,489.70
1000.142000.16	IPP	\$ 8,872.10	8,872.10	-	-	-	-
1000.142000.98	Suspense	\$ (310.05)	(310.05)	-	-	-	-
	<b>TOTAL PRIVATE</b>	<b>\$ 17,768,278.50</b>	<b>\$ 12,475,285.15</b>	<b>\$ 2,065,396.76</b>	<b>\$ 962,276.92</b>	<b>\$ 390,748.85</b>	<b>\$ 1,874,570.82</b>
1000.142000.19	Government S	\$ 451,951.21	287,312.78	140,062.55	13,913.38	7,709.47	2,953.03
1000.142000.20	Government K	\$ 2,189,969.83	1,666,831.49	500,457.74	22,309.49	371.11	-
1000.142000.21	Government L	\$ 1,426,961.10	1,041,181.16	373,291.23	12,488.71	-	-
1000.142000.22	Government St Lights	\$ 1,335,285.51	389,451.71	393,989.10	379,893.09	132,119.95	39,831.66
	<b>TOTAL GOVERNMENT</b>	<b>\$ 5,404,167.65</b>	<b>\$ 3,384,777.14</b>	<b>\$ 1,407,800.62</b>	<b>\$ 428,604.67</b>	<b>\$ 140,200.53</b>	<b>\$ 42,784.69</b>
	<b>GRAND TOTAL</b>	<b>\$ 23,172,446.15</b>	<b>\$ 15,860,062.29</b>	<b>\$ 3,473,197.38</b>	<b>\$ 1,390,881.59</b>	<b>\$ 530,949.38</b>	<b>\$ 1,917,355.51</b>
					\$ 20,724,141.26		
		\$ 9,442,486.03	\$ 5,904,258.18	\$ 1,206,529.61	\$ 572,754.13	\$ 302,829.45	\$ 1,456,114.66





# GPA Work Session - January 21, 2021 - DIVISION REPORTS

GUAM POWER AUTHORITY  
GOVERNMENT ACCOUNTS RECEIVABLE  
Billing up to December 31, 2020 and payments as of 01/14/2021

Current (12/31/20 Billing due 01/31/2021)  
30 days Arrears (1/30/20 due 12/31/20)  
60 days and over Arrears (01/31/20 billing due 1/30/20)

CC&B New Acct Number	DEPARTMENT	CC&B BALANCE 1/10/2020	CANCEL/REBL/ SPEC CHARGE 12/10/20	BILLING 12/31/2020	PAYMENT UP TO 01/14/2021	CC&B BALANCE 01/14/2021
<b>Line Agencies</b>						
3404311949	Guam Environmental Protect	10,442.02		5,182.05	(10,442.02)	5,182.05
4554808900	Nieves Flores Library	16,281.60		8,481.79	(16,281.60)	8,481.79
6060461850	Dept of Youth Affairs (Federal)	305.53		327.01	(305.53)	327.01
6293410000	Office of the Governor	21,104.38		15,955.97	(21,104.38)	15,955.97
6841080463	Guam Behavioral Health & Wellness	1,644.99		1,559.26	(1,644.99)	1,559.26
7528924534	Guam Visitors Bureau	3,201.35		3,156.02	(3,201.35)	3,156.02
8227759962	Mental Health/Subject	36,433.01	(14.16)	34,977.61	(36,418.85)	34,977.61
7813165805	Pacific Energy Resource Center	260.34		453.81	-	714.15
2913461537	Dept. of Youth Affairs* (Local)	10,060.47		9,272.47	(9,660.47)	9,672.47
1073430238	Dept. of Corrections	118,888.71	904.01	57,117.83	(61,067.87)	115,842.88
3558733700	Dept of Chamorro Affairs/Chamorro Village (N	139.15		14.16	(110.83)	42.48
1099514147	Dept of Chamorro Affairs/Repository	463.71		256.32	-	720.03
9541109130	General Services Agency	478.36		242.61	-	720.97
2663706771	Yona Senior Citizen Center	1,003.47		531.72	-	1,535.19
8564647541	DOA Supply Mgmt (NET METERED)	1,833.35		927.79	-	2,760.14
6070861777	Veteran Affairs	3,259.47		1,673.74	-	4,933.21
5247210000	Mayors Council	3,591.40	17,102.53	1,932.74	-	17,626.67
4129948191	Dept of Chamorro Affairs/Chamorro Village	7,978.73		2,376.90	(2,392.93)	7,962.73
4211873236	Dept. of Administration	5,097.83		2,537.22	-	7,635.05
1621790133	DOA-Data Processing	14,152.83		7,146.38	-	21,299.21
1559188609	Dept of Agriculture	15,445.44		7,634.07	-	23,079.51
8304153173	Civil Defense (Military Affairs)	19,292.87		9,196.92	-	28,489.79
9571070939	Guam Fire Department	27,013.95		13,684.57	-	40,698.52
8055858369	Dept of Chamorro Affairs (Guam Museum)	29,615.06	50.00	16,101.27	-	45,766.33
1896187753	Dept. of PH&SS	62,455.88		29,998.15	-	92,454.03
2040515913	Dept. of Parks & Rec.	19,344.31		9,724.93	-	29,069.23
2535590089	DPW-FAC Adm Account	49,255.00		24,727.26	-	73,982.26
725821074	Dept. of Education	1,237,350.95		662,935.13	-	1,900,286.08
0266069082	Guam Police Department	113,264.99		55,120.80	-	148,385.79
<b>Sub-total</b>		<b>1,830,058.15</b>	<b>13,042.38</b>	<b>963,646.50</b>	<b>(163,030.62)</b>	<b>2,643,716.41</b>

AGING

6-30 Days	31-60 Days	61-90 Days	91-120 Days	>120 Days	Total
5,182.05	-	-	-	-	5,182.05
8,481.79	-	-	-	-	8,481.79
327.01	-	-	-	-	327.01
15,955.97	-	-	-	-	15,955.97
1,559.26	-	-	-	-	1,559.26
3,156.02	-	-	-	-	3,156.02
34,967.61	14.16	-	-	-	34,977.61
714.15	260.34	-	-	0.00	714.15
9,672.47	400.00	-	-	-	9,672.47
58,021.84	57,821.04	-	-	0.00	115,842.88
42.48	14.16	14.16	-	-	42.48
720.03	266.42	197.29	-	-	720.03
720.97	235.75	242.61	-	-	720.97
1,535.19	430.39	573.44	-	-	1,535.19
2,760.14	926.92	905.43	-	-	2,760.14
4,933.21	1,673.74	1,583.89	-	-	4,933.21
17,626.67	14,035.27	1,903.71	1,687.69	-	17,626.67
7,962.73	2,573.32	2,789.02	2,600.36	-	7,962.73
7,635.05	2,537.22	2,443.75	2,654.08	-	7,635.05
21,299.21	7,146.38	7,094.86	7,057.97	-	21,299.21
23,079.51	7,634.07	7,857.75	7,587.69	-	23,079.51
28,489.79	9,196.92	9,830.71	9,462.16	-	28,489.79
40,698.52	13,684.57	13,952.42	13,061.53	-	40,698.52
45,766.33	16,151.27	15,214.79	14,400.27	-	45,766.33
92,454.03	29,998.15	32,622.66	29,833.22	-	92,454.03
29,069.23	9,724.93	9,609.80	9,734.51	-	29,069.23
73,982.26	24,727.26	24,311.69	24,053.63	-	73,982.26
1,900,286.08	662,935.13	678,491.42	557,180.99	-	1,900,286.08
148,385.79	55,120.80	36,607.31	36,246.38	-	148,385.79
976,785.51	904,774.59	719,077.00	3,580.59	39,498.72	2,643,716.41

<b>Mayors</b>						
6393530237	Hagatna Mayor	1,179.47		532.11	-	1,711.58
4469579998	Merizo Mayor	1,570.25		760.76	-	2,331.01
1180297613	Tafeloa Mayor	1,516.07		780.43	-	2,300.50
0492244686	Asan/Maina/Adelpup Mayor	1,656.36		807.89	-	2,464.25
1293808984	Piti Mayor	1,685.97		944.12	-	2,630.09
2202265287	Umatac Mayor	1,646.24		787.80	-	2,434.04
1837525655	Yona Mayor	1,864.12		927.65	-	2,801.77
5763167341	Barrigada Mayors Office	2,892.27		1,647.71	-	4,539.98
8715052935	Mongmong/Toto/Maite Mayor	3,444.20		1,838.67	-	5,282.87
7017824246	Tigo Mayor	4,138.05		2,243.82	-	6,381.87
8438582004	Sinajana Mayor	4,432.69		2,243.66	-	6,676.35
8472200165	Agaña Hts. Mayor	4,872.97		2,557.47	-	7,430.44
3832227736	Santa Rita Mayor	5,074.71		2,880.96	-	7,955.67
3831627996	Mongmong Mayor	5,602.47		3,168.14	-	8,770.61
8041115847	Desdado Mayor	6,087.69		4,060.72	-	10,148.41
6952205325	Tamuning Mayor	6,467.45		4,262.51	-	10,729.96
8078244037	Inarajan Mayor	3,891.23		2,099.05	-	5,990.28
7247791662	Agat Mayor	4,632.19		2,465.24	-	7,097.43
951070242	Ordot/Chan Pago Mayor	1,803.16		728.06	-	2,531.22
<b>Sub-total</b>		<b>67,640.65</b>	<b>-</b>	<b>34,506.80</b>	<b>-</b>	<b>102,147.45</b>

532.11	491.82	687.65	-	-	1,711.58
760.76	841.42	728.83	-	0.00	2,331.01
780.43	724.69	781.38	-	0.00	2,300.50
807.89	850.00	806.36	-	0.00	2,464.25
944.12	871.85	814.12	-	0.00	2,630.09
787.80	826.87	819.37	-	0.00	2,434.04
927.65	912.46	891.66	-	0.00	2,801.77
1,647.71	1,361.54	1,530.73	-	0.00	4,539.98
1,838.67	1,821.49	1,622.71	-	0.00	5,282.87
2,243.82	2,201.73	2,128.92	-	0.00	6,381.87
2,243.66	2,232.21	2,157.88	-	0.00	6,676.35
2,557.47	2,490.78	2,382.19	-	0.00	7,430.44
2,880.96	2,649.25	2,425.46	-	0.00	7,955.67
3,168.14	3,283.44	3,219.03	-	0.00	9,670.61
4,060.72	4,165.66	3,922.03	-	0.00	12,148.41
4,262.51	4,354.51	4,112.94	-	0.00	12,729.96
2,099.05	2,000.31	1,770.60	-	120.32	5,990.28
2,465.24	2,413.86	2,208.42	-	131.69	7,097.43
728.06	624.44	580.91	-	597.81	2,531.22
34,375.11	33,291.33	33,631.19	-	849.82	102,147.45

<b>DPW Accounts</b>						
6832698062	DPW-Signal Lights	16,994.67		8,341.11	-	25,345.78
930959866	DPW-Primary St. Lights	310,773.00		68,240.10	-	379,013.10
3045433600	DPW-Village St. Lights	968,530.29		307,982.29	-	1,276,512.58
3088040552	DPW-Sec/Coil St. Lights	63,261.58		18,764.17	-	82,025.75
<b>Sub-total</b>		<b>1,359,869.54</b>	<b>-</b>	<b>403,327.67</b>	<b>-</b>	<b>1,763,197.21</b>

8,341.11	8,483.71	8,420.96	-	0.00	25,345.78
68,240.10	66,743.73	68,044.76	67,213.47	108,771.04	379,013.10
307,982.29	298,112.92	307,982.29	72,555.19	290,279.89	1,276,512.58
18,764.17	18,294.10	18,751.72	18,067.39	8,148.37	82,025.75
403,327.67	391,634.46	403,199.73	157,836.05	407,199.30	1,763,197.21

<b>Autonomous/Public Corp</b>						
6838495949	Guam Waterworks Authority	992,696.54	100.00	1,002,552.61	(992,696.54)	1,002,652.61
1540692986	Retirement Fund	5,266.40		5,129.90	(10,396.30)	-
4075914809	GPA	-	(72,928.96)	72,928.96	-	(72,928.96)
5357510000	University of Guam (NET METERED)	56,309.68		53,193.30	(56,309.68)	53,193.30
6518220019	Guam Community College	34,599.39	125.00	34,073.80	(34,599.39)	34,198.80
7736362694	Guam Airport Authority	339,034.12		338,978.56	(339,034.12)	338,978.56
3302137726	Guam Memorial Hospital	29,650.82		28,453.19	(29,650.82)	28,453.19
8426836906	Guam Memorial Hospital (NET METERED)	119,773.59		118,799.50	(119,773.59)	118,799.50
9157510000	Guam Community College (NET METERED)	23,634.85		23,638.59	(24,034.85)	23,638.59
2563872892	Guam Housing Corp Rental Division	840.06	50.00	860.82	(1,750.88)	-
9178210000	Guam Solid Waste Authority	5,397.48		5,442.78	-	10,840.26
5434075703	University of Guam	126,453.28		123,634.62	(128,453.28)	123,634.62
1694072388	G H U R A	29,656.98	25.00	20,900.75	(33,005.69)	17,577.04
4474308144	Port Authority of Guam	121,795.01	(4,074.54)	63,712.77	(61,116.45)	120,316.79
699407595	GUAM POWER AUTHORITY - WAKE ST LT	221.44		221.44	-	221.44
<b>Sub-total</b>		<b>1,887,729.64</b>	<b>(76,703.50)</b>	<b>1,892,300.15</b>	<b>(1,830,821.59)</b>	<b>1,872,504.70</b>

1,002,652.61	-	-	-	-	1,002,652.61
-	-	-	-	-	-
-	-	-	-	-	-
53,193.30	-	-	-	-	53,193.30
34,198.80	-	-	-	-	34,198.80
338,978.56	-	-	-	-	338,978.56
28,453.19	-	-	-	-	28,453.19
118,799.50	-	-	-	-	118,799.50
23,638.59	-	-	-	-	23,638.59
5,442.78	5,397.48	-	-	0.00	10,840.26
123,634.62	-	-	-	-	123,634.62
13,700.47	3,876.57	-	-	0.00	17,577.04
59,638.22	56,604.02	4,074.54	-	0.00	120,316.79
-	-	-	-	221.44	221.44
1,802,330.65	65,878.07	4,074.54	-	221.44	1,872,504.70

Others						
1209463043	Dept. of Military Affairs (NET METERED)	24,978.18		11,078.46	(24,978.18)	11,078.46
4530787043	U.S. Post Office	31,675.64		36,363.72	(31,675.64)	36,363.72
6000770566	MGTF	11,006.50		5,596.40		16,602.90
6602566745	Tamuning Post Office	4,626.87		4,776.71	(4,626.87)	4,776.71
11045128173	Guam Legislature	932.42		343.49	(343.49)	341.88
1108458168	Guam Post Office (Agnaga)	5,033.15		5,127.49	(5,033.15)	5,127.49
8353274954	Superior Court of Guam	43,739.77	25.00	47,736.08	(43,739.77)	43,801.00
8607446612	Dept. of Military Affairs	127,645.63		64,901.96	(127,645.63)	64,901.96
8972327005	Customs & Quarantine Agency	4,380.15		4,631.31		2,024.44
9503134539	Guam Legislature (NET METERED)	7,020.04		7,303.25	(7,020.04)	7,303.25
Sub-total		257,438.35	25.00	179,908.69	(245,051.66)	192,320.94