

CONSOLIDATED COMMISSION ON UTILITIES

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

GUAM POWER AUTHORITY WORK SESSION

CCU Conference Room 4:30 p.m., January 20, 2021

AGENDA

- 1. CALL TO ORDER
- 2. ISSUES FOR DECISION
 - 2.1 Renewal of GPA/Navy Customer Service Agreement /Resolution No. FY2022-06
 - 2.2 Cabras Unit #2 Major Overhaul / Resolution No. FY2022-07
 - 2.3 Updated Integrated Resource Plan [IRP] / Resolution No. FY2022-08
- 3. GM REPORT UPDATES
 - 3.1 Administration
 - 3.2 Engineering & Technical Services (ETS)
 - 3.3 Financial
 - 3.4 Operations
 - 3.5 Other
- 4. OTHER DISCUSSION
 - 4.1 CCU Rules Update
- 5. ANNOUNCEMENT
 - 5.1 Next Meeting: CCU Mtg: Tuesday, January 25, 2022
- 6. ADJOURNMENT





GUAM POWER AUTHORITY

PRESENTATION TO THE

CONSOLIDATED COMMISSION ON UTILITIES

ON THE

NAVY UTILITY SERVICE CONTRACT

January 20, 2022





NAVY REVENUES

Base Rate: \$19.2 million

Fuel Payments: \$43.7 million

(Last 12 months)





NEGOTIATION TEAM

GPA

- John Benavente

 General Manager
- Melinda Mafnas AGMO
- Joven Acosta Manager, Engineering
- JR Gumataotao Rights of Way Supervisor
- Maripaz Perez Assistant CFO
- John Kim Chief Financial Officer
- Tricee Limtiaco AGMA
- James Borja Utility Services Administrator
- John Cruz AGMETS
- Jennifer Sablan SPORD Manager
- Graham Botha Legal Counsel
- Candice Ananich Management Analyst III

Navy

- Matthew Blaz
- Victoria Zialcita
- Arlene Aromin
- Patricia Borja
- Karianne Camacho
- Glen Camacho
- John Aguon
- Christopher Odoca





GPA NAVY HISTORY

CSA

- CUSTOMER SERVICES AGREEMENT (CSA)
- Signed July 1992 (2 10-year Terms)

LEASE

- GPA NAVY LEASE AGREEMENT
- 50- year Lease Agreement signed September 1996
- allowing GPA to operate and maintain Navy assets prior to conveyance

USC

- UTLITY SERVICES AGREEMENT (USC)
- Signed July 2012 (Expires July 2022)

New USC

- NEW UTILITY SERVICES AGREEMENT
- Effective July 2022 to July 2032





Summary 22 Articles Added Article 22: Cyber Security

5 Tables2 Appendices

- Table 1 GPA Points of Delivery
- Table 2 Distribution, Emergency and Stand-by Facilities to be Retained by Navy
- Table 3 Navy Joint Use Generation and Transmission Facilities
- Table 4 Navy 13.8 kV Distribution and 34.5 kV Assets to be Transferred to GPA
- Table 5 Navy Joint Use Assets Not Incorporated in Lease Table 3 and Table 4 to be transferred to GPA





Article 1 - Recitals

Article 2 – Definitions

Article 3 – Services Navy Will Provide and Navy Will Make Available

Article 4 – Navy Compensation for Services

Article 5 – GPA Compensation

Article 6 – Effective Date and Term

Article 7 – Forecasts of Reimbursable Costs

Article 8 – Dispatch and Control of Navy Dedicated Use Facilities

Article 9 – Dispatch and Control of Navy Joint Use Facilities

Article 10 – Force Majeure

Article 11 – Notices

Article 12 – Rates and Regulation

Article 13 – Changes in Navy Service Requirements

Article 14 – Navy Billing Demands

Article 15 – Power Factor Adjustment

Article 16 – Load Shedding Schedule

Article 17 – Load Restoration Schedule

Article 18 – Termination Liability

Article 19 – Disputes Resolution

Article 20 – Wheeling and Service Exchange

Article 21 – Service Rules and Regulations

Articles 22 - Cyber Security

Appendix A – Procedures for

Developing the Cost to Serve the

Navy and Determining Navy Rates

Appendix B – Fuel Clause Applicable to

Navy Agreement





USC HIGHLIGHTS

Highlights	Comments
Establishes 33 points of delivery for power to the Navy (Table 1)	18 Transmission level metering points (metered at 34.5 kV Transformers) 15 distribution level metering points (metered at 13.8 kV)
Establishes annual Navy minim demands for GPA to forecast expected revenues (Articles 13 & 14)	Navy current demand is approximately 43 MW
Provides for the transfer of Navy assets in compliance with US Public law 100-202 regarding environmental clean-up of sites (Article 3, Tables 3,4,5)	Tables 3, 4 and 5, comprise all of the property intended to be permanently transferred to GPA by the UNITED STATES pursuant to the authority provided by Public Law 100-202 at no compensation to Navy assets may be identified for future transfer from Navy to GPA, at no compensation to Navy.
Provides a mechanism for GPA to provide power system support for Navy distribution systems upon request by the Navy (Article 8);	Navy can request additional operational and maintenance services or inspection of these facilities.
Recognizes and identifies the Public Utilities Commission as the regulating body for establishing electric service rates for GPA customers (Article 12)	PUC is acknowledged to be an eligible regulatory body in accordance with the FAR 52.241-7. Accordingly, the Navy agrees to comply with the current regulations, practices and decisions of the PUC



GUAM POWER AUTHORITY

ATURIDÅT ILEKTRESEDÅT GUÅHAN P.O.BOX 2977 • HAGÅTÑA, GUAM U.S.A. 96932-2977

Issues for Decision

Resolution No. FY2022-06:

Relative to Authorizing the Guam Power Authority to seek PUC Approval to execute the GPA NAVY Utility Services Contract

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

The Navy is GPA's largest customer. GPA currently provides electric service to the US Navy under a Utility Services Contract (USC) that was signed on July 31, 2012 and is expiring on July 31, 2022. GPA is the sole provider of electric service to support the Department of Defense's military mission. GPA and the Navy have successfully negotiated a new contract for GPA to provide electric utility services to Navy's facilities for the next 10 years from August 1, 2022 to July 31, 2032.

The highlights of the Utility Services Contract include

- 1. Establishes 33 points of delivery for power to the Navy (Table 1);
- 2. Establishes annual Navy minimum demands for GPA to forecast expected revenues (Articles 13 & 14);
- 3. Provides for the transfer of Navy assets in compliance with US Public law 100-202 regarding environmental clean-up of sites (Article 3, Tables 3,4,5);
- 4. Provides a mechanism for GPA to provide power system support for Navy distribution systems upon request by the Navy;
- 5. Recognizes and identifies the Public Utilities Commission as the regulating body for establishing electric service rates for GPA customers (Article 12);

Where is at?

Department of Defense facilities island-wide; 33 points of delivery.

How much will it Cost?

The USC provides a revenue stream for GPA from the Navy who is GPA's largest customer. Over the last 12 months, base revenues from the Navy were \$19.2 million and fuel payments were \$43.7 million.

What is the funding Source?

Not applicable

When will it be completed?

The start date of the contract will be August 1, 2022. The contract will expire July 31, 2032



GPA RESOLUTION NO. FY2022-06

AUTHORIZING THE GUAM POWER AUTHORITY TO SEEK PUC APPROVAL TO EXECUTE THE GPA NAVY UTILITY SERVICES CONTRACT

WHEREAS, GPA currently provides electric service to the US Navy under Contract N40192-12-C-5100 approved by the CCU and PUC and signed by GPA on July 31, 2012 and expiring on July 31, 2022; and

WHEREAS, the Navy is charged with the Department of Defense's (DOD) military 10 mission for this region and is GPA's largest customer which provides a consistent revenue

stream that supplements the remainder of GPA's customer base; and

WHEREAS, GPA is the sole company charged with operating and maintaining the Island

Wide Power System in sound physical and financial condition necessary to render adequate and

efficient electric service to support the DOD's military mission; and

WHEREAS, GPA and the Navy have determined that it would be in the best interest and to the economic advantage of both parties to enter into an agreement providing for the electric utility service to the DOD installations on Guam; and

WHEREAS, as a result of these mutual benefits, GPA and the Navy have successfully negotiated and desire to enter into a contract for GPA to provide electric utility services to Navy's facilities for a 10-year term; and

WHEREAS, the updated Utility Services Contract contains the following key features:

- 1. Establishes the points of delivery for power to the Navy;
- 2. Establishes annual Navy minimum demands for GPA to forecast expected revenues;
- Provides for the transfer of Navy assets in compliance with US Public law 100-202 regarding environmental clean-up of sites;
- 4. Provides a mechanism for GPA to provide power system support for Navy distribution systems upon request by the Navy;
- 5. Recognizes and identifies the Public Utilities Commission as the regulating body for establishing electric service rates for GPA customers; and

1	WHEREAS, the Consolidated Commission on Utilities acknowledges and supports the				
2	Utility Services Contract as the vehicle for GPA to fulfill its mission of providing electric services				
3	to the islan	d of Guam.			
4	NO	W, THEREFORE, BE IT RESOLV	/ED , by the Consolidated Commission on Utilities		
5	subject to the review and approval of the Public Utilities Commission as follows:				
6	1.	After careful consideration, t	he Consolidated Commission on Utilities finds the		
7		Utility Services Contract bety	veen GPA and the US Navy to be reasonable and		
8		prudent.			
9	2.	The General Manager of the	Guam Power Authority, subject to PUC approval, is		
10		hereby authorized to execute	any and all documents incidental to executing the		
11		GPA-Navy Utility Services Conf	ract.		
12	RES	OLVED , that the Chairman cer	cifies and the Secretary attests the adoption of this		
13	Resolution.				
14	DUI	Y AND REGULARLY ADOPTED A	ND APPROVED THIS 25 TH DAY OF JANUARY, 2022.		
1 -					
15 16 17 18	Certified by	r:	Attested by:		
16 17	Certified by JOSEPH T. I		Attested by: Michael T. Limtiaco		
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16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	JOSEPH T. I	DUENAS 1	Michael T. Limtiaco Secretary		

1	I, Michael T. Limtiaco, Secretary for the Consolidated Commission on Utilities (CCU), as
2	evidenced by my signature above do certify as follows:
3	The foregoing is a full, true, and accurate copy of the resolution duly adopted at a
4	regular meeting of the members of the Guam Consolidated Commission on Utilities, duly and
5	legally held at a place properly noticed and advertised at which meeting a quorum was present
6	and the members who were present voted as follows:
7	Ayes:
8	Nays:
9	Absent:
10	Abstain:

GUAM POWER AUTHORITY

UTILITY SERVICES CONTRACT

2022

GUAM POWER AUTHORITY UTILITY SERVICES CONTRACT

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Determining Navy Rates
Appendix B – Fuel Clause Applicable to Navy Agreement

Recitals

- 1.1 This agreement describes the terms, conditions and rate setting procedures and service rules and regulations applicable to electricity and capacity sold and delivered by the Guam Power Authority (GPA) to Naval Facilities Engineering Systems Command Marianas (Navy).
- 1.2 Navy operates electrical facilities which are used to primarily supply electricity within Department of Defense (DOD) installations on Guam.
- 1.3 GPA operates electric production, transmission and distribution facilities which are used for the supply of electricity for retail distribution to GPA's customers which includes DOD installations on Guam.
- 1.4 The Island-Wide Power System (IWPS) is dispatched and controlled by GPA from the GPA Power System Control Center.
- 1.5 GPA and Navy desire to continue a relationship whereby Navy (on behalf of all other DOD facilities on Guam) is a transmission-level customer of GPA, and receives firm power service from GPA, and also whereby Navy may request and GPA may agree to provide additional operational and maintenance services or inspection of various facilities.
- GPA and Navy acknowledge that Lease Agreement N6274296RP00101 ("Lease") continues to govern the operations, maintenance and custody of certain United States-owned electric power facilities and pertinent real property and easement interests ("Leased Premises") pending a permanent transfer of those assets to GPA as authorized by Section 111 of P.L. 100-202. As provided in the Lease, and consistent with the intent of the parties under Customer Agreement N62742-89-C-0201, upon completion of remediation actions on the Leased Premises under the requirements of section 120(h) (3) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. § 9620(h) (3)), Navy intends to convey fee title ownership or perpetual rights in the Leased Premises to GPA at no compensation to the Navy. Nothing herein shall abrogate any obligation of the United States related to the permanent conveyance of real property provided for under Customer Agreement N62742-89-C-0201. Such obligation is of continuing force and effect.

Definitions

- 2.1 Accounts. Accounts mean the books and records of GPA and their maintenance in conformance with the Uniform System of Accounts, promulgated by the Federal Energy Regulatory Commission, as described in 18CFR Part 101.
- 2.2 Capital Improvements. Expenditures on real, personal or intangible property (e.g., easements or rights of way) to (i) expand or modify the Island-Wide Power System, (ii) replace a significant component of the existing system or (iii) extend the service life of a significant component of the system are capital improvements. The Uniform System of Accounts promulgated by the Federal Energy Regulatory Commission or its successor agency and interpretations thereof shall be controlling of determinations as to whether an expenditure is a capital improvement. The section of the Uniform System of Accounts that currently prescribes capital improvement issues is in 18CFR Subchapter C, Part 101 Definitions, General Instructions, Electric Plant Instructions, Electric Plant Accounts.
- 2.3 Carrying Charges. Interest or other forms of financing or opportunity cost.
- 2.4 Conjunctive Demand. Conjunctive Demand means the demand, at each measured time interval, of all Navy Points of Delivery added together. Conjunctive demand shall also include the estimated combined demands of Navy customers served through wheeling by GPA, minus the estimated combined demands of GPA customers served through wheeling by Navy. Such estimated combined demands for wheeled customers shall be based on metered monthly kWh consumption and the class load factors from GPA's most recent retail load study.
- 2.5 Cost of Service. The cost of providing electric service to customers is the electrical system O&M expenses, depreciation and debt service costs as may be applicable, taxes and operating return determined on the basis of cost using utility industry accepted principles of cost determination for similar expenditures.
- 2.6 Customer. Customer, when used in Article 2.4, 2.14, and 21.14, refers to DOD facilities on Guam and other customers served and/or billed by NAVFAC.
- 2.7 Dedicated Use Facilities. Navy facilities, as listed in Table 2 that are not a part of the IWPS.
- 2.8 Dispatch and Control. The assignment of load to specific generating units and direction of plant operators to effect the most reliable and economical electrical supply of power as load requirements and unit availability changes, as well as control and operation of high voltage lines, switching, substations and equipment including administration of safety procedures.
- 2.9 Distribution Facilities. Items of utility plant property includable in electric plant accounts 360 373 of the Uniform System of Accounts generally consisting of land and land rights, poles, towers, lines, substations and appurtenances thereto that provide service below 34.5 kV.
- 2.10 FERC. The Federal Energy Regulatory Commission or its successor agencies.
- 2.11 Island-Wide Power System (IWPS). Island-Wide Power System meaning all electric production and transmission facilities on Guam operated by GPA and Navy during the term of this USC that are

- interconnected and jointly used to supply the electric loads of the parties at the respective delivery points, but excluding distribution, emergency and standby facilities listed in Table 2.
- 2.12 Joint Use Assets. Generation and transmission assets dedicated to the IWPS. The Navy joint use assets are listed in Table 3.
- 2.13 NAVFACMAR. Naval Facilities Engineering Systems Command Marianas.
- 2.14 NAVFACMAR Rates. The rate charged by NAVFACMAR to authorized customers.
- 2.15 Operation and Maintenance. Activities performed to obtain the output from or use of the IWPS assets or to preserve the operating efficiency or physical conditions of IWPS assets.
- 2.16 Point of Delivery. The point where the electric power first leaves the line or apparatus of the Island-Wide Power System and enters the Navy system, generally at the outlet side of metering facilities. See Table 1 for listing of the Navy points of delivery.
- 2.17 Power Billing. Monthly GPA billing to Navy for the provision of electric utility service.
- 2.18 PUC. Guam Public Utilities Commission or any successor agency.
- 2.19 Service Billing. Monthly Navy billing to GPA for services Navy has provided in the preceding month.
- 2.20 Transmission Facilities. Items of utility plant property includable in electric plant accounts 350 359 of the Uniform System of Accounts generally consisting of land and land rights, poles, towers, lines, substations and appurtenances thereto that provide service at 34.5 kV or above.
- 2.21 Utility Service Contract (USC). This contract including tables and appendices referenced herein and attached hereto, and all amendments that may be executed from time to time.

Services Navy Will Provide and Navy Will Make Available

- 3.1 The Parties agree that Tables 3, 4 and 5, comprise all of the property intended to be permanently transferred to GPA by the UNITED STATES pursuant to the authority provided by Public Law 100-202 at no compensation to Navy. Real Estate documents such as deeds and easements which are necessary to convey title or access to the properties in the Tables will be prepared in accordance with applicable federal law and regulations, including CERCLA property transfer restrictions, and as soon as practical.
 - Notwithstanding the assets contained in Tables 3, 4 and 5, other assets may be identified for future transfer from Navy to GPA, and shall be included in Table 5, at no compensation to Navy. Navy may unilaterally amend the Tables to include such identified assets. Navy may unilaterally delete assets from the Tables upon conveying fee title or granting easements for those assets to GPA. Otherwise, deletion of assets from the Tables requires bilateral amendment.
- 3.2 Navy will continue to supply fresh water to the Guam Waterworks Authority for the power generation facilities installed on Guam on a best efforts basis at NAVFACMAR rates.
- 3.3 Navy will continue to make certain Government Furnished Property which are intended for transfer and listed in Table 5 available for use at no charge. GPA may request in writing, with necessary plans and drawings, Navy approval of modifications or expansion of GPA facilities in Navy buildings. Modifications cannot begin without written Navy authorization. The criteria Navy will use to evaluate whether to approve the building use include the following:
 - The use proposed by GPA will benefit Navy and not interfere with existing or proposed Navy facilities
 - There are no other suitable buildings available to GPA for the same or similar use
 - The space requested in the building is the minimum space required to accomplish GPA's facilities plans

Navy's approval will not be unreasonably withheld or unnecessarily delayed.

Navy may, at any time delete existing Government Furnished Property from Table 5 if retention of the property is determined to be mission critical. The Contracting Officer may otherwise issue an administrative modification to amend Table 5 only where revisions are mutually agreed upon and signed by the Contracting Officer and the General Manager of GPA.

In addition, FAR clause 52.245-1 shall apply to this contract.

3.4 Navy and GPA understand that the conveyance of a permanent real property interest fee-title transfer is pending environmental remedial actions and determination of suitability for transfer under federal law. Where such remediation activities have not been completed, the United States will continue to undertake such remediation as necessary to render the property suitable for transfer to GPA.

- 3.5 The Navy and GPA expressly acknowledge that the Lease Agreement N6274296RP00101 continues to govern the operations, maintenance and custody of certain United States-owned electric power facilities and the pertinent real property and easement interests to GPA until the termination date of the Lease Agreement or unless sooner ended by the final transfer of Navy-owned real property or granting of perpetual easements as authorized under section 111 of P.L. 100-202.
- 3.6 Should GPA discover that a portion of the properties herein identified for transfer to GPA under section 111 of P.L. 100-202 is without the benefit of a corresponding real estate interest, whether through recordation failure or otherwise, a request for additional area will be documented and requested by GPA to the Navy, as appropriate. The Parties agree to work in good faith to resolve such discrepancies which may include the execution of new or corrected real estate documents. Nothing herein shall obligate the Navy to acquire additional real estate interests from private parties for the benefit of GPA.

Navy Compensation for Services

- 4.1 Navy will make its joint use generation and transmission assets and associated real estate assets as listed in Tables 3 and 5 available for use at no charge. This means that the Navy will not be compensated for depreciation of these assets or carrying charges.
- 4.2 Navy will receive no compensation for capital improvements undertaken by Navy on the Leased Premises.
- 4.3 Both parties may be in a position to provide assistance to either party and will be fully compensated for direct costs incurred in providing such assistance. These services may be out of scope of this contract and will be covered under separate contractual agreements.

GPA Compensation

5.1 GPA may submit invoices to NAVFAC Marianas for the Navy share of the fuel cost associated with GPA's most current fuel billing no more frequently than every seven (7) days. The invoice submittal will include a copy of the fuel bill on which the invoice is based and the calculation of Navy's share. The Navy will make weekly payments no sooner than seven (7) calendar days after receipt of a proper invoice. A summary billing will be submitted on a monthly basis, on the last Monday of the following month, which offsets the fuel payment made by the Navy during the billing month. If the last Monday is a holiday, the summary billing will be submitted on the first working day after the holiday

Effective Date and Term

- 6.1 This Contract shall be effective on 01 August 2022 subject to final approval and ratification as required under applicable Guam and federal laws and regulations as submitted and without modification, including the issuance of an order by the PUC approving the provisions of this Contract.
- 6.2 This Contract shall continue in effect for ten (10) years from the effective date hereof unless terminated at the option of the Navy: (i) by the giving of written notice of not less than one year in advance of the effective date of termination; and (ii) by the discharge of the Navy's obligations including the termination liability under Article 18.

Forecasts of Reimbursable Costs

7.1 Navy will provide five year's forecast information, including energy and conjunctive peak demand forecasts. The annual five (5) year forecast will be provided to GPA by September 1 of each year or when issued. The one (1) year forecast for NAVFACMAR utility water rates will be provided to GPA by September 1 of each year or when set.

Dispatch and Control of Navy Dedicated Use Facilities

- 8.1 Navy operates and maintains certain dedicated use facilities that are not part of the Navy joint use assets. These interconnected dedicated use facilities will remain under Navy Dispatch and control to provide additional assurance that Navy can meet its mission requirements. Navy Dispatch and control shall advise and coordinate with the IWPS Dispatch and control center when there are significant changes in load and/or operations of 13.8kV breakers.
- 8.2 Navy will continue to operate and maintain dedicated use facilities and make required capital improvements without compensation from GPA. Navy can request additional operational and maintenance services or inspection of these facilities. Any additional operational and maintenance services or inspection undertaken by GPA at the request of Navy must be agreed to by the Contracting Officer and the General Manager of GPA, which agreement shall not be unreasonably withheld. This agreement shall follow GPA's work order process and is fully reimbursable by the Navy and invoiced separately by GPA. If required by GPA's governing rules, GPA will also obtain approval by the Consolidated Commission on Utilities and/or the Guam Public Utilities Commission prior to performing the required services.
- 8.3 If requested by GPA, Navy may elect to supply nonfirm energy from Navy dedicated facilities to the IWPS. GPA will compensate Navy for energy supplied from Navy dedicated facilities at prevailing NAVFACMAR rates.
- 8.4 Navy and GPA mutually agree that the Navy may be in a position to supply electrical service to GPA customers from Navy dedicated use distribution lines. The Navy shall use its best effort in good faith to allow the electrical service tap(s) to the GPA designated point(s) on the Navy Dedicated Use Facility. GPA will compensate Navy for energy supplied from Navy dedicated facilities at prevailing NAVFACMAR rates.

Dispatch and Control of Navy Joint Use Facilities

- 9.1 GPA is required to follow GPA operational and maintenance procedures and standards when maintaining Tables 1, 3, 4 and 5. Navy can request additional operational and maintenance services or inspection of the Leased Premises. Any additional operational and maintenance services or inspection undertaken by GPA at the request of Navy must be agreed to by the Contracting Officer and the General Manager of GPA, which agreement shall not be unreasonably withheld. This agreement shall follow GPA's work order process and is fully reimbursable by the Navy and invoiced separately by GPA. If required by GPA's governing rules, GPA will also obtain approval by the Consolidated Commission on Utilities and/or the Guam Public Utilities Commission prior to performing the required services.
- 9.2 The Navy 13.8 kV distribution and 34.5 kV transmission assets to be transferred to GPA listed in Tables 3, 4 and 5 will be made available to GPA for reconfiguration. GPA shall have the right, exercisable in accordance with the terms of the Lease, to make such improvements as it deems necessary. Navy will allow reasonable access to GPA to make each improvement. Each improvement made by GPA shall be at its sole cost and expense.

Force Majeure

- 10.1 The term force majeure, as used herein, means unforeseeable causes beyond the reasonable control of, and without the fault or negligence of the party claiming force majeure, including but not limited to, acts of God and sudden actions of the elements, such as floods, typhoons, earthquakes or tornadoes or in the case of war or acts of the public enemy.
 - 10.1.1 The term force majeure does not include any full or partial curtailment in the electric output which is caused or arises from the act or acts of any third party, vendor or supplier of GPA or Navy.
 - 10.1.2 The term force majeure does not include any full or partial curtailment in the electric output of the IWPS that is caused or arises from a mechanical or equipment breakdown, unless such breakdown is caused by a force majeure.
 - 10.1.3 The term force majeure does not include changes in market conditions that affect the cost of meeting contractual requirements.
- 10.2 If either party, because of force majeure, is rendered wholly or partly unable to perform its obligations under this Contract, that party shall be excused from whatever performance is affected by the force majeure to the extent so affected provided that:
 - 10.2.1 The nonperforming party, within two (2) weeks after the occurrence of the force majeure, gives the other party written notice describing the particulars of the occurrence.
 - 10.2.2 The suspension of performance is of no greater scope and of no longer duration than is necessitated by the force majeure.
 - 10.2.3 The nonperforming party uses its best efforts to remedy its inability to perform.
 - 10.2.4 When the nonperforming party is able to resume performance of its obligations under this Contract that party shall give the other party written notice to that effect.
- 10.3 If a dispute arises over the definition of an event as force majeure, the dispute will be resolved in accordance with the disputes resolution procedures contained in Article 19.

Notices

11.1. Unless specifically provided otherwise, all notices required to be provided to the Government under this Contract shall be mailed to:

Commanding Officer NAVFAC Marianas PSC 455 Box 195 FPO AP 96540-2937

11.2. Unless specifically provided otherwise, all inquiries and notices to GPA regarding this Contract shall be mailed to:

General Manager Guam Power Authority P.O. Box 2977 Hagatna. Guam 96910

Rates and Regulation

- 12.1 The PUC is acknowledged to be an eligible regulatory body in accordance with the FAR 52.241-7. Accordingly, the Navy agrees to comply with the current regulations, practices and decisions of the PUC concerning accounting practices, allowability of costs, cost allocation, pricing and rates, settlement charges, and other charges and fees subject to appeal to the Guam Superior Court and continuing through normal judicial channels.
- 12.2 Base rates for GPA electricity service to Navy, which include all rates other than those established in fuel rate proceedings before the PUC, may be implemented in conjunction with a GPA general rate filing before the PUC that affects the rates of non-Navy customer classes and which reflects the Navy as a customer. In such case, the cost of providing electric service to the Navy shall be determined on an embedded cost basis and shall include only the applicable portion of the cost of service elements approved by the PUC. The total GPA system costs that will be included in the cost of service study, and to which the applicable allocation factors to determine the cost of serving the Navy will be applied, will be those cost elements used by the PUC to determine the basis for the rates charged to all non-Navy customer classes. The debt service coverage ratio (DSCR) used to establish the rates to be charged the Navy will be the same DSCR found appropriate by the PUC for the GPA system and incorporated in the rates charged to all non-Navy customer classes.
- 12.3 GPA will perform a cost of service study to determine the costs properly allocable to Navy, and to determine the rates to be charged to the Navy. Both parties agree that the cost of service methodology applying to Navy shall be subject to the approval of the PUC. The methodology used to develop Navy's rates is set forth in Appendix A.
- 12.4 Fuel rates for Navy will be calculated and invoiced, according to the formula and terms contained in Appendix B.
- 12.5 Notice to Navy regarding proposed changes in GPA rates to Navy or proposed changes in cost of service or rate structure methodology applying to Navy shall be governed by the PUC's rules for notice to GPA customers. No changes in rates to Navy may be made until the PUC has conducted a hearing to consider both parties' positions and has rendered its decision. Any change in rates to be charged the Navy will become effective on the same date that the change in rates for non-Navy customer classes becomes effective. Pending a decision of the PUC, GPA agrees to continue to furnish electric service to the Navy at the rates then applicable.
 - 12.5.1 If GPA or PUC determines it is necessary to seek a change in the methodology in effect for setting rates, GPA shall give Navy forty-five (45) days notice of its desire together with the recommended changes. If Navy agrees to the change in methodology, GPA will submit such modifications to the PUC for its approval or other action.
 - 12.5.2 If Navy determines it is necessary to seek a change in the methodology in effect for setting rates, Navy shall give GPA forty-five (45) days notice of its desire together with Navy's recommended changes. If GPA agrees to the change in methodology, GPA will submit such modifications to the PUC for its approval or other action.

- 12.5.3 If GPA and Navy are unable to reach an agreement as to any matter relating to methodology within an additional forty-five (45) days of one party's notice to the other, GPA will then submit its position to the PUC pursuant to the rules and regulations of the PUC. Navy shall have the right to submit its position to the PUC, and no changes may be made until the PUC has conducted a hearing to consider both parties' positions and has rendered its decision. Pending a decision of the PUC, GPA agrees to continue to furnish electric service to the Navy at the rates then applicable.
- 12.6 If changes in the cost of service or rate design applicable to Navy non-fuel rates are sought by either GPA or Navy outside of a general rate filing applicable to all GPA customer classes, the procedures specified in this Section shall be followed.
 - 12.6.1 If GPA and Navy mutually agree that there is a significant change in IWPS operations and/or system conditions that cause the cost of service methodology approved at the time by the PUC to produce a result that is no longer reflective of the cost of serving the Navy and non-Navy customer classes, GPA may propose and Navy will support a change, which is acceptable to both GPA and Navy, in the cost of service and rate structure methodology in GPA's next general rate filing.
 - 12.6.2 If GPA or PUC determines it is necessary to seek a change in the methodology in effect for setting rates, GPA shall give Navy forty-five (45) days' notice of its desire together with the recommended changes. If Navy agrees to the change in methodology, GPA will submit such modifications to the PUC for its approval or other action.
 - 12.6.3 If Navy determines it is necessary to seek a change in the methodology in effect for setting rates, Navy shall give GPA forty-five (45) days' notice of its desire together with Navy's recommended changes. If GPA agrees to the change in methodology, GPA will submit such modifications to the PUC for its approval or other action.
 - 12.6.4 If GPA and Navy are unable to reach an agreement in Article 12.6.2 and 12.6.3 as to any matter relating to methodology within an additional forty-five(45) days of one party's notice to the other, GPA will then submit its position to the PUC pursuant to the rules and regulations of the PUC. Navy shall have the right to submit its position to the PUC, and no changes may be made until the PUC has conducted a hearing to consider both parties' positions and has rendered its decision. Pending a decision of the PUC, GPA agrees to continue to furnish electric service to the Navy at the rates then applicable.
- 12.7 GPA acknowledges Navy's full rights to participate in any rate setting or other proceeding involving GPA before the PUC and will not oppose Navy's rights to participate.
- 12.8 GPA will prepare and maintain documented work papers in sufficient detail to allow Navy to understand and replicate the calculations performed in any cost of service and rate study. All work papers supporting the cost of service study and rate development will be made available to Navy at least forty-five (45) days prior to the time that GPA proposes to change Navy's rates. For any other cost of service studies and rate developments, these work papers shall be made available upon Navy's request.

- 12.9 In the event that the PUC is not the applicable regulatory authority, then the name of the applicable regulatory authority shall be substituted whenever the word "PUC" appears in this Agreement.
- 12.10 Notwithstanding any other provisions of this Agreement, if any rate increase for any non-Navy customer class is reduced, forgiven or abated; or if the level of rates for any non-Navy customer class is reduced, forgiven or abated, then the rates charged to the Navy shall be decreased by the same percentage and at the same time. However, this provision shall not apply if a decrease in revenue from one non-Navy customer class is compensated by an increase in revenue from another non-Navy customer class. Nor shall it apply if there is a net revenue decrease from the non-Navy customer classes which is compensated by equivalent funds from external sources; provided that such funds can be, and are, recognized and recorded by GPA as revenues, and provided further that GPA's financial ratios are not adversely affected.

Changes in Navy Service Requirements

- 13.1 Navy's initial Minimum Reserved Capacity from GPA under this Agreement shall be set at a level equal to 85 percent of the average Navy monthly peak conjunctive demands over the twelve months preceding the effective date of this Agreement, as measured at 34.5 kV.
 - 13.1.1 Not less than six (6) months prior to the end of the initial Contract Year and not less than six (6) months prior to the end of each subsequent Contract Year, Navy may give notice to GPA of a requested decrease or increase in the Minimum Reserved Capacity. Such annual decrease or increase shall not exceed three and a half (3.5) percent of the Minimum Reserved Capacity in effect at the time of the notice.

Navy Billing Demands

- 14.1 In any month, the Navy's firm billing demand will be equal to the greater of:
 - (A) The maximum actual conjunctive demand of the Navy load for the month (expressed on a thirty (30) minute integrated demand basis) and equal to the demand of all Navy load metered through Navy delivery points, during the thirty (30) minute period when the combination of these loads was at its maximum value, or
 - (B) Eighty-five percent (85%) of the highest of the demand specified in (A) above occurring during the previous eleven (11) month period, or
 - (C) The Minimum Reserved Capacity (see Article 13).
- 14.2 In determining Navy's demand for purposes of this Article, the demands shall be adjusted to reflect service at34.5 kV.

Power Factor Adjustment

- 15.1 For the purposes of this Agreement, power factor is defined as the average ratio of energy in kilowatt-hours (kWH) to kilovolt-Ampere-hours (kVah) for each delivery point as determined for each month. This ratio is expressed as a percentage.
- 15.2 Navy shall endeavor to maintain a power factor of at least eighty-five percent (85%) at each delivery point.
- 15.3 GPA will apply the power factor adjustment at any Navy delivery point if the power factor for the month is below eighty-five percent (85%) or above ninety percent (90%). This will be referred to as the Power Factor Adjustment Range (i.e. 85% 90%). Such adjustment would be to eighty-five percent (85%) if below eighty-five percent (85%) or to ninety percent (90%) if above ninety percent (90%). For each one percent (1%) the average power factor is below eighty-five percent (85%) or above ninety percent (90%), the monthly bill as computed under the demand charges shall be increased or decreased, respectively, by one-tenth percent (0.10%). The power factor will be computed to the nearest percent.
 - 15.3.1 The Navy's Power Factor Adjustment Range (85%-90%) shall be adjusted up or down by the same percentage points as adjustments to GPA customer classes Large Power Service (Schedule "P") and Large Government Service (Schedule "L") may be made from time to time.
- 15.4 The conjunctive monthly demand billings will be adjusted by the power factor adjustments computed at the individual demands received at each delivery point. In no case, however, shall the power factor be taken as more than one hundred percent (100%) in computing the adjustment.
- 15.5 The average monthly power factor will be determined from readings of a revenue meter.

Load Shedding Schedule

- 16.1 In the event of an IWPS electric supply deficiency, priorities are established for a load shedding schedule.
- 16.2 Shedding of load will be performed in accordance with the IWPS Underfrequency Load Shedding (UFLS) Scheme, as amended. Navy shall maintain a high priority on the UFLS Scheme for Navy identified critical loads.
- 16.3 The IWPS UFLS Scheme shall be reviewed and may be revised from time to time by mutual agreement of GPA and Navy. Determination as to appropriateness of the need for revisions to the IWPS UFLS Scheme shall be based upon the priority nature of Navy and GPA loads served by the various feeders, and shall take into account such factors as health, human needs, public safety and national security.

Load Restoration Schedule

- 17.1 In the event of a significant IWPS outage, priorities are established for returning load to service.
- 17.2 Restoration of load will be performed in accordance with the restoration procedures set forth under GPA's Standard Operating Procedure No. SOP-035, System Restoration During Partial or Complete IWPS Blackout, as amended. Navy shall maintain a high priority for load restoration for Navy identified critical loads.
- 17.3 The SOP-035 feeder/circuit restoration sequence shall be reviewed and may be revised from time to time by mutual agreement of GPA and Navy. Determination as to appropriateness of the need for revisions shall be based upon the priority nature of Navy and GPA loads served by the various feeders, and shall take into account such factors as health, human needs, public safety and national security.

Termination Liability

18.1 In the event the Navy terminates this Agreement prior to expiration of the term, the Navy shall pay GPA a termination charge determined as follows:

Termination Charge

$$TC = ((A) \times (C) \times (D)) + ((B) \times (C) \times (E))$$

TC= Termination Charge

- A = Production rate base allocated to Navy as a percent of GPA total Production rate base used in the cost of service study in the rate case prior to the date of termination.
- B = Transmission rate base allocated to Navy as a percent of GPA total Transmission rate base used in the cost of service study in the rate case prior to the date of termination.
- C = The sum of the annual principal payments for the period of time between the termination date and the end of the term of the then current Agreement, associated with all GPA debt incurred since the effective date of the initial Customer Service Agreement between GPA and Navy.
- D = Fraction of GPA rate base that was associated with the Production functions, for facilities that were commonly allocated to Navy and non-Navy customers in the GPA cost of service study in the rate case prior to the date of termination. Any facilities donated or financed by Navy will be excluded from the calculation of this fraction.
- E = Fraction of GPA rate base that was associated with the Transmission functions, for facilities that were commonly allocated to Navy and non-Navy customers in the GPA cost of service study in the rate case prior to the date of termination. Any facilities donated or financed by Navy will be excluded from the calculation of this fraction.
- 18.2 In addition to the above payment for commonly allocated generation and transmission assets, Navy will make a termination payment for facilities, provided subsequent to the effective date of this Agreement, and used exclusively to serve Navy, in accordance with the Federal Acquisition Regulation governing termination liability as follows:
 - (a) If GPA furnishes and installs at its expense new facilities used exclusively to serve Navy, GPA will provide a list of facilities which will be mutually approved and described in Exhibit_____*, attached hereto and made a part hereof,
 - (b) Ownership, Operation, and Maintenance of New Facilities. Unless purchased by the Navy under the provisions of paragraph (e) of this Article, the facilities to be supplied by GPA shall be and remain the property of GPA, and at all times during the life of this Agreement or any renewals thereof shall be operated and maintained by GPA at its expense.

- (c) Termination by GPA. In the event GPA terminates this Agreement or defaults in performance, the Navy shall have no obligation to pay GPA any amount for its connection obligation pursuant to the terms of this Agreement.
- (d) Termination Prior to Completion of Facilities. In the event the Navy terminates this Agreement prior to completion of the facilities provided for herein, GPA shall be paid fair compensation, exclusive of profit, for the work performed with respect to these facilities.

(e)	Termination Subsequent to Completion of Facilities. In the event the Navy terminates this
	Agreement subsequent to completion of the facilities provided for herein, and prior to
	, the Navy shall pay GPA the sum of dollars* less one of that
	amount for each month this Agreement remains in effect. In the event of termination, GPA
	shall remove within twelve (12) months any facilities located on Navy property, provided
	that the Navy shall have the option to purchase the facilities located on Navy property at the
	agreed salvage value of ****dollars.

*** Insert lump sum, not to exceed cost of connection less salvage value. Include breakdown of cost by items in the Exhibit attached. Complete the fraction by inserting the number of months comprising the amortization period. A monthly amount in lieu of a fraction may be used. In that case, divide the lump sum by the number of months to derive the monthly amount and substitute the following language: 'less (insert monthly amount) dollars multiplied by the number of months service has been received and paid for prior to the date of termination. If there is a probability that the facilities furnished under the above clause may be used at a later date to serve new consumers other than the Navy and no allowance for this has been made in computing the charge, additional provision should be included in the clause to assure that the Navy receives such credits as may be equitable under the circumstances.

**** Insert amount

18.3 In addition to the termination charges in Articles 18.1 and 18.2, Navy will be subject upon early termination to settlement charges that shall be negotiated between the Parties, Such settlement charges shall be developed with consideration of the guidance of FAR Part 49 and FAR clauses 52.249-2 and 52.249-3, as well as factors specific to GPA. The PUC shall have review and approval authority, subject to the terms of Article 19.1, over termination or settlement charges.

^{*}Insert identifier.

^{**} Insert the date or length of time as negotiated.

Disputes Resolution

- 19.1 Rate Related Disputes. Matters involving accounting practices, allow ability of costs, pricing and rates, settlement charges, and other charges and fees shall be referred to the PUC for disposition in accordance with the PUC's rule of practice and procedure. Should differences continue, either party may pursue an appeal to the Guam Superior Court and, if necessary, continue through normal judicial channels.
- 19.2 For Other Disputes, this Contract is subject to the Contract Disputes Act of 1978, as amended (41 U.S.C. 601-613) and as contained in the provisions of FAR 52.233-1, as amended.

Wheeling and Service Exchange

- 20.1 Except as otherwise agreed and reflected in Table 1, any Navy loads that are served from GPA distribution lines will be a tariff customer of GPA and will be billed by GPA at GPA's standard rate applicable to loads of comparable size and voltage level and subject to GPA Service Rules and Regulations. These loads are not included in the minimum reserved capacity (as defined in Article 13), billing, cost of service and rate articles of this Agreement. However, Navy may switch these loads to Navy owned facilities at any time.
- 20.2 By mutual agreement, other Navy loads served from GPA distribution lines may be included in the minimum reserved capacity (as defined in Article 13), billing, cost of service and rate articles of this Agreement. In addition to the rates provided for in this Agreement for deliveries to Navy at the specified Navy delivery points, Navy will pay GPA (for the loads referenced in this paragraph) a wheeling rate as developed by GPA's cost of service study.
- 20.3 Any GPA loads that are served from Navy distribution lines shall continue to be GPA customers, and will be billed by GPA. The demand and energy of these GPA customers will be removed from Navy delivery point loads for purposes of determining Navy allocation factors in cost of service studies, and for calculating Navy rates and power billings, and will not be included in Navy's minimum reserved capacity (as defined in Article 13). For each kWh delivered to GPA customers over Navy distribution lines, Navy will be compensated by GPA at a rate equal to the total cost of Navy's distribution facilities (including return), expressed on a kWh basis, as determined annually by Navy.
- 20.4 In determining GPA's and Navy's actual demands and energy usage, any adjustments required as a result of the loads referenced in Articles 20.2 and 20.3 shall include all distribution losses up to the transmission level.

Service Rules and Regulations

21.1 Characteristics of Service

- 21.1.1 Alternating current service of approximate sixty (60) hertz will be regularly supplied. GPA will exercise reasonable diligence and care to regulate and maintain its frequency within reasonable limits as defined in ANSI IEEE Std 446 latest edition. (Direct current will not be supplied.)
- 21.1.2 Voltages referred to herein are cited at nominal levels as normally intended to be delivered. Actual levels may vary within acceptable industry limits as defined in ANSI C84.1 latest edition.
- 21.1.3 The type of service available at any particular location shall be dependent on the size and nature of the load.
- 21.1.4 Service locations are listed in Table 1. The Navy may, at any time, by written request and standard GPA service application process, designate additional or delete existing service locations.

The Contracting Officer may issue an administrative modification to amend Table 1 where:

- (1) Table 1 changes are required because of an additional service location or termination and;
- (2) revisions are mutually agreed upon and signed by the Contracting Officer and the General Manager of GPA and;
- (3) added or deleted service locations have completed the GPA service application process.
- 21.2 Phase and Voltage Specification. Services will be provided at 34.5 kV three phase, three wire, except as noted in Table 1.

21.3 Equipment Protection

- 21.3.1 Protection of Navy's Facilities. The Navy is responsible for furnishing, calibrating, installing, inspecting and keeping in good and safe condition at its own risk and expense, all appropriate protection devices of any kind or character, which may be required to properly protect the Navy's facilities. GPA will not be responsible for any loss or damage caused by the negligence or wrongful act of the Navy or Navy's agents, employees or licensees in omitting, installing, maintaining, using, operating or interfering with any such protective devices.
- 21.3.2 Protection from Service Interruptions. The Navy is responsible for selecting and installing the protective devices as necessary to coordinate properly with GPA's protective devices to avoid exposing other customers to unnecessary service interruptions.

21.4 Interference with Service

- 21.4.1 Voltage. If the Navy operates equipment which causes detrimental voltage fluctuations, Navy must reasonably limit those fluctuations. The Navy will be required to provide whatever corrective measures are necessary.
- 21.4.2 For Added Voltage Control. Where the Navy requires special facilities to provide increased service reliability or voltage control with unusual close limits, the Navy will provide those facilities at their own expense.
- 21.4.3 Current. If the Navy superimposes a current of any frequency upon any part of its electric system, other than the current supplied by GPA, Navy shall, at its expense, prevent the transmission of such current beyond its electrical system.
- 21.5 Other Conditions of Service. The Navy's loads shall be balanced on the three phases in accordance with good engineering practice. Actual levels may vary within acceptable industry limits as defined in ANSI C84.1 latest edition.
- 21.6 Billings for Electric Utility Service
 - 21.6.1 Navy is required to pay the charges assessed in accordance with this USC, payments hereunder shall not be paid in advance of services rendered. The power billing and/or cost summary that GPA renders to Navy will contain sufficient detail and supporting work papers to allow complete review by Navy.
 - 21.6.2 Billing Period. Electric utility services will be billed monthly. The billing will be provided by GPA to Navy within twenty-one (21) working days of the end of the month to which the billing relates and in accordance with Article 5.
 - 21.6.2.1 All bills shall be paid promptly. All bills are due and payable upon presentation, and are past due if unpaid fifteen (15) days after presentation.
 - 21.6.2.2 Whenever payment of a regular bill for electric service is received after 5:00 P.M. of the date specified in the original bill as the date such payment is due, GPA shall assess a late payment charge.
 - 21.6.2.3 Navy shall pay the same late payment charges required of other customers of GPA.
 - 21.6.2.4 The amount of the late payment charge shall be determined from time to time by GPA, and it shall be approved by GPA's Board of Directors and the PUC before being implemented.
 - 21.6.3 Metered Service. Bills for metered service will be based on meter registration. Meters will be read as required for the preparation of regular bills.
 - 21.6.4 Estimated Bills. If, because of unusual conditions or for reasons beyond its control, GPA is unable to read the Navy's meters on the scheduled reading date, GPA may bill the Navy for estimated demand and consumption during the billing period, and make any necessary corrections when a reading is obtained. Estimated demand and consumption for this purpose will be calculated considering the Navy's prior usage. Adjustments for any under or overestimate of a Navy's demand and consumption will be reflected on the next

regularly scheduled billing based on an actual reading following the period of inaccessibility.

21.6.5 Conjunctive Billing. The Navy's billing will be on a conjunctive basis.

21.7 Meter Test

21.7.1 GPA will conduct meter testing to ensure accurate meter registration.

21.7.2 National Standards

- 21.7.2.1 Meters and associated metering devices will be tested by GPA personnel in conformity with the standards of the American National Standards Institute Code for Electricity Metering (ANSI) C12.1 latest edition, and American National Standards Institute for Electricity Meters 0.2 and 0.5 Accuracy Classes (ANSI) C12.20 latest edition.
- 21.7.2.2 GPA will test meters individually and verify proper performance and accuracy in accordance with ANSI C12.1/C12.20 requirements. No meter will be placed in service or allowed to remain in service if found not in compliance with ANSI C12.1/C12.20 accuracy standards.
- 21.7.2.3 GPA will not install a meter which is known to be defective. The capacity of the meter and the index mechanism shall be consistent with the Navy electric power requirements.
- 21.7.3 Testing Removed Meters. When deemed necessary, meters and/or associated devices will be tested after they are removed from service. These tests will be done before the meters and/or associated devices are adjusted, repaired or retired. No meter will be allowed to remain in service which is found to have an error in registration in excess of the prescribed tolerance limit.
- 21.7.4 Navy Requested Test. Navy may request GPA to test their electric meter at no charge once every six (6) months. The cost of any additional tests will be borne by the Navy if the percentage of error is found to be within ANSI C12.1/C12.20 standards. Tests will be conducted within ten (10) working days of receipt of request.
- 21.7.5 Test Report. The Navy will have the right to witness GPA's test of the meter or, if it desires, have the presence of an expert or other representative appointed by the Navy. A report giving the results of the test will be provided to the Navy within ten (10) working days of the test. A copy of the report, together with a complete record of each test, will be kept on file by GPA for at least three (3) years.

21.8 Adjustment of Bills

21.8.1 For Meter Error

21.8.1.1 If, after testing, any meter is found to be registering more than ANSI C12.1/C12.20 standards, GPA will refund or credit to the Navy the overcharge based on corrected meter readings for the period in which the meter was in use,

- not to exceed one hundred eight (180) days, unless it can be shown that the error was due to a particular cause, the date of which can be reliably established or computed back to but not beyond that date, and in no case beyond twelve (12) months.
- 21.8.1.2 If, after testing, a meter is found to register less than ANSI C12.1/C12.20 standards, GPA's billing adjustment will be for electric energy consumed up to one hundred eighty (180) days prior to date of test. If the actual period of error has been determined to exceed one hundred eighty (180) days, the adjustment will cover that total period, but in no case beyond twelve (12) months.

21.8.2 For Billing Error

- 21.8.2.1 If the Navy is overcharged as a result of incorrect reading of the meter, incorrect application of the rate schedule, incorrect connection of the meter, incorrect multiplier or other similar reasons, the amount of the overcharge will be adjusted, refunded or credited to the Navy based on corrected billing for the preceding one hundred eighty (180) days, subject to the provisions of Article 21.8.2.3 below.
- 21.8.2.2 If the Navy is undercharged as a result of incorrect reading of the meter, incorrect application of the rate schedule, incorrect connection of the meter, incorrect multiplier or other similar reasons, the undercharge will be billed to the Navy based on corrected billing for the preceding one hundred eighty (180) days, subject to the provisions of Article 21.8.2.3 below.
- 21.8.2.3 When it is found that a billing error has been made, the date of which can be reliably established, the overcharge or undercharge will be computed back to but not beyond that date, and not beyond twelve (12) months.
- 21.9 Service Connections and Facilities on Navy's Premises
 - 21.9.1 All meters will be installed by GPA at approved locations on Navy's premises and will be placed so they are easily accessible for inspections, reading and testing.
 - 21.9.2 The Navy will, at its expense, provide an alternate and approved location for all meters in order to comply with the foregoing whenever the existing meter or meters becomes inaccessible for inspection, reading or testing by reason of any changes made by the Navy.
 - 21.9.3 All GPA meters and related metering equipment will be sealed by GPA and no seal will be tampered with or broken except by a duly authorized representative of GPA.
- 21.10 No Unauthorized Work. Only a duly authorized representative of GPA or a Navy employee under the direction of the GPA Chief Electric Power System Dispatcher may connect or disconnect the Navy's conductors to or from GPA's conductors.
- 21.11 Responsibility for Navy Electrical Facilities

- 21.11.1 Good and Safe Condition. The Navy will, at its sole risk and expense, furnish, install, inspect and keep in good and safe condition all electrical facilities beyond the point of delivery required for receiving electric energy, including any necessary protective devices, regardless of the location of the transformers, meters or other GPA equipment.
- 21.11.2 Navy Side (Point of Delivery). The Navy will be solely responsible for the delivery of all electric energy on its side of the point of delivery.
- 21.11.3 Adjusting Protective Equipment. Whenever GPA determines coordination is required between the Navy's protective equipment and that of the GPA, GPA will review and, if it approves, will agree to the arrangement and setting of the Navy's protective equipment. In the interest of service reliability to the Navy and other customers, GPA may from time to time require the Navy to submit evidence that the agreed upon coordination is maintained.
- 21.11.4 Navy Responsibility for Actions. GPA will not be responsible for loss or damage caused by the negligence, lack of proper care or the wrongful act of the Navy, its agents, employees, or licensees in installing lines, machinery, apparatus or equipment.
- 21.11.5 The Navy shall provide, free of charge to GPA, mutually agreeable locations on its premises for the installation of meters and such other equipment furnished and owned by GPA and necessary to supply service to Navy. GPA shall, at all times during the life of this Contract, operate and maintain at its expense such equipment or facilities as for which it has responsibility in accordance with this section, and shall assume all costs or charges in connection therewith. Notwithstanding anything to the contrary in FAR 52.241-5 (Contractor's Facilities (FEB 1995)), such equipment and facilities as for which GPA has responsibility in accordance with this section may be removed or abandoned in place.
- 21.12 Access to Premises. GPA shall have access to any premises served at all reasonable times during the continuance of this Agreement and at its termination for the purposes of installing, repairing and removing GPA's equipment, and for any other proper purpose hereunder provided, however, that Navy may limit or restrict such right of access in any manner considered by the Navy to be necessary or advisable.
- 21.13 Shortage of Electric Supply and Interruption of Delivery
 - 21.13.1 Shortage and Interruption. GPA will exercise reasonable diligence and care to furnish and deliver a continuous and sufficient supply of electric energy to the Navy. However, it does not guarantee continuity or sufficiency of supply since electric service is inherently subject to interruption, suspension, curtailment and fluctuation.
 - 21.13.2 Temporary Suspension for Repairs. Whenever temporary suspension is necessary for the purpose of making repairs or improvements, GPA will notify and coordinate with the Navy and proceed as rapidly as possible to avoid Navy inconvenience.
 - 21.13.3 All outages and clearances will be coordinated through the GPA Chief Electric Power System Dispatcher who is responsible for operation of the system. The GPA Power

System Control Center Dispatcher will maintain a positive control over the work that field crews are performing and will control the related tagging and clearance approval.

- 21.13.4 GPA will dispatch and control the Navy joint use facilities as part of the IWPS.
- 21.14 Resale of Electric Energy. It is expressly understood and agreed that Navy has the right to resell electric utility services to its customers as defined in Article 2.6.
- 21.15 Parallel Operations. The operation of Navy generating facilities in parallel with the IWPS will be planned and coordinated with and approved by the GPA Chief Electric Power System Dispatcher.
- 21.16 Line Extensions. Extensions of lines necessary to furnish permanent service to the Navy will be made by modifications to this Agreement in accordance with the following provisions:

21.16.1 General

- 21.16.1.1 Ownership, Operation and Maintenance. GPA will construct, own, operate and maintain electric lines and equipment only under, along, upon and over public streets, roads and highways where it has the legal right to do so, and on public lands and private property across which it has otherwise obtained rights-of-way or other necessary rights satisfactory to GPA.
- 21.16.1.2 Special Facilities. GPA will install only those facilities which it deems necessary to render service in accordance with GPA's standard facilities for service. If the Navy requests facilities which are acceptable to GPA but are in addition to, or in substitution for, the standard facilities which GPA normally would install, the Navy shall make a contribution to cover the extra cost thereof.
- 21.16.1.3 Refunds. GPA will have the right to connect subsequent customers to all Navy line extensions. If these are permanent connections and are made within five (5) years of the date the line extension is energized, subsequent customers connected will be treated for purposes of extension allowance and charges as if they were included among the customers for whom the extension was originally constructed. Reallocation of these charges among the customers will be made on the same basis. Refunds, if any, to the Navy will also be made on the same basis. The line extension allowance will be calculated from a permanent customer's point of delivery toward the source of supply. No refund will be made on any contribution to GPA for any cost of line extension beyond the free length if the Navy should terminate its original request less than thirty (30) months of the date permanent power was installed.

21.16.2 Overhead Extensions

21.16.2.1 Extension Allowance. Overhead line extensions will be made by GPA at its expense provided the cost of the line required does not exceed thirty (30) months' estimated revenue derived from the line. GPA will install, own, operate and maintain the necessary meters and switching and protective

- equipment at its expense, except where the Navy requests special facilities as covered by Article 21.16.1.2 above.
- 21.16.2.2 Extensions Beyond Allowance. For Overhead line extensions whose estimated cost exceeds the thirty (30) months' estimated revenue to be derived from the line, the Navy shall make a contribution equal to the difference between the estimated line cost and the thirty (30) months' estimated revenue. The estimated line cost will exclude meters, switching and protective equipment, and will be based on the route determined by GPA. When a line extension is to be installed on Navy property, the route of any portion on Navy property must be mutually agreed to by Navy and GPA.

21.16.3 Underground Extensions

- 21.16.3.1 General. Whenever underground line extensions are necessary based on customer load requirements or GPA Policy, the Navy will install supporting structures (ducts, manholes, etc.) and provide the appropriate rights-of-way. GPA will install the cables, splices and transformers only when the Navy makes a contribution of the estimated difference between the cost of the underground system and the cost to the Navy of an equivalent overhead system in accordance with Article 21.16.2.
- 21.16.3.2 Replacement of Overhead with Underground Facilities. When mutually-agreed upon by the Navy and GPA, overhead facilities will be replaced with underground facilities, provided the Navy installs all supporting structures (ducts, manholes, etc.) and makes a contribution of the estimated cost installed of the underground facilities less the estimated net salvage of the overhead facilities removed.
- 21.17 Discontinuance of Service. GPA will not provide service to electrical equipment which, when operated, will be detrimental to GPA's or another customers' equipment. GPA will discontinue service to a Navy delivery point if the Navy continues to operate the equipment at that delivery point after being notified in writing by GPA to discontinue the operation. Discontinuance of service to any Navy delivery point will in no way affect service at other Navy delivery points.
- 21.18 Ability to Serve Other Customers from Facilities on Navy Property. All facilities installed by GPA at its expense on Navy's premises for the purpose of delivering electric energy to the Navy will continue to be the property of GPA and will be removed at the termination of service. These facilities may also be used to supply other customers whether or not on the same premises, provided the proper easement agreements have been obtained.
- 21.19 Navy Responsibility for GPA's Property. In the event of loss or damage to GPA's property on the Navy's premises caused by the Navy's tenants, agents or employees, either intentionally or arising from negligence, carelessness or misuse, the cost of repairs or replacements will be at the Navy's expense.
- 21.20 Unsafe Equipment or Condition

- 21.20.1 Service Refusal. GPA will have the right to refuse or discontinue service to a GPA point of delivery to Navy if Navy wiring or other equipment at that delivery point, or the use thereof, GPA has determined is unsafe or in violation of applicable laws, ordinances, rules or regulations of any public authority. GPA can also refuse service at a GPA point of delivery to Navy if it finds that any condition on the Navy's premises at that delivery point could endanger GPA's service facilities. Refusal or discontinuance of service to any Navy delivery point will in no way affect service at other Navy delivery points.
- 21.20.2 Service Discontinued. GPA may discontinue service to a Navy delivery point immediately and without notice if GPA determines a hazardous condition exists or if the Navy threatens to create a hazardous condition at that delivery point. Service will not be restored until GPA is satisfied changes have been made to eliminate the hazardous condition. Discontinuance of service to any Navy delivery point will in no way affect service at other Navy delivery points.
- 21.20.3 Navy Notification of Defect. GPA does not assume any responsibility to inspect or repair the Navy's electrical system, other equipment or any part thereof. In the event the Navy has knowledge that its service is in any way defective, it is its responsibility to notify GPA at once. GPA will not be liable or responsible for any electrical system, appliances, facilities, or other equipment beyond the point of delivery which it does not own or maintain in accordance with these rules except for damage where GPA's characteristics of service do not meet acceptable industry limits per Article 21.1.
- 21.21 Navy will continue to allow GPA pole attachment to Navy poles. Pole attachments will be governed by the Utilities Pole Agreement established by Navy.

Cybersecurity

22.1 Non-Public Information/Controlled Unclassified Information (CUI)

Definition: Non-public information is defined as information that is not available to the general public. Collectively referred to as "Controlled Unclassified Information (CUI)", it includes information that is not releasable under the Freedom of Information Act (FOIA 5 U.S.C. 552), protected by the Privacy Act (5 U.S.C. 552a), classified (18 U.S.C. § 798), protected by the Procurement Integrity Act (41 U.S.C. § 423), protected by the Trade Secrets Act (18 U.S.C. § 1905), information identified as defense critical infrastructure security information (DCRIT) (10 U.S.C. § 130e), and/or information labeled "For Official Use Only (FOUO)," or "Sensitive But Unclassified (SBU)."

- 22.1.1 Whether generated by GPA or provided by the Navy, GPA will ensure that protective measures, marking/dissemination controls, and disposition actions for Navy CUI are in place. This includes recurring CUI training for GPA personnel and the processing, storing, or transmitting of Navy CUI on GPA Information Systems (IS). GPA will use the following publications and DoD manuals and instructions, or any updated/amended versions thereof, as guidelines:
 - NIST Special Publication 800-171, revision 2, dated February 2020 including updates as of January 28, 2021
 - NIST Special Publication 800-172, dated February 2021
 - DoDM 5200.01, Volume 1, dated February 24, 2012, as amended
 - DoDM 5200.01, Volume 4, dated February 24, 2012, as amended
 - DoDI 8582.01, dated December 9, 2019
- 22.1.2 GPA will monitor Navy CUI for aggregation and compilation based on the potential to generate classified information and report any potential classification of aggregated or compiled CUI to NAVFACMAR.
- 22.1.3 GPA will ensure that only personnel with the appropriate need-to-know are granted access to Navy information.
- 22.1.4 GPA personnel with access to Navy CUI will sign non-disclosure agreements (NDAs) generated by NAVFACMAR stating they will safeguard and process Navy CUI in accordance with NAVFACMAR requirements. GPA will designate a person responsible for ensuring NDAs are executed, tracked, and submitted to NAVFACMAR accordingly.
- 22.1.5 GPA will not release any Navy information to anyone outside the organization, regardless of medium and audience, without proper approval. Requests for approval of releasable information will be submitted to NAVFACMAR and requests will identify the specific information to be released, the medium to be used, and the purpose for the release.

22.2 Work Performed on Navy Systems

- 22.2.1 GPA personnel working on Navy systems/projects will be U.S. Citizens and will properly go through an approved GPA vetting process for suitability.
- 22.2.2 GPA will provide GPA's vetting process to NAVFACMAR.
- 22.2.3 GPA personnel working on Navy systems will only be granted access to Navy systems based on GPA's defined user access roles.

22.3 GPA Representation

- 22.3.1 GPA will work with NAVFAC to achieve appropriate security clearances for GPA selected personnel in order to attend meetings deemed classified.
- 22.3.2 GPA will designate/appoint cybersecurity personnel responsible for any immediate decision making for any cybersecurity incident/event occurrence.

22.4 GPA Considerations

- 22.4.1 GPA shall consider executing best practices for release of GPA information with respect to critical infrastructure and be cognizant of CUI categories listed in the CUI Registry and risks associated with information being made publicly available.
- 22.4.2 GPA shall consider non-utilization of foreign contractors for GPA projects unless each individual has properly gone through an approved GPA vetting process for suitability.

GPA Points of Delivery to Navy

- 1. Agana Substation Transformer T-9 X-48 disconnect switch, transformer side
- 2. Andersen Substation TransformerT-15 X-69 Breaker, transformer side
- 3. Andersen Substation TransformerT-16 X-75 Breaker, transformer side
- 4. Cold Storage Substation TransformerT-25 X-332 Breaker, transformer side
- 5. Harmon Substation TransformerT-22 X-83 disconnect switch, transformer side
- 6. Marbo Substation TransformerT-14 34.5 kV disconnect switch, transformer side
- 7. NCS Substation TransformerT-47 34.5 kV disconnect/fuse, transformer side
- 8. Orote Substation TransformerT-10 X-316 Breaker, transformer side
- 9. Orote Substation TransformerT-11 X-304 Breaker, transformer side
- 10. Orote Substation TransformerT-12 X-308 Breaker, transformer side
- 11. Orote Substation TransformerT-13 X-314 Breaker, transformer side
- 12. Orote Substation TransformerT-28 X-310 Breaker, transformer side
- 13. Piti Substation TransformerT-8 34.5 kV disconnect switch, transformer side
- 14. Potts Junction TransformerT-110 34.5 kV disconnect/fuse, transformer side
- 15. Radio Barrigada Substation TransformerT-23 34.5 kV disconnect switch, transformer side
- 16. Radio Barrigada Substation TransformerT-24 34.5 kV disconnect switch, transformer side
- 17. Substation TransformerT-17 X-322 Breaker, transformer side
- 18. Substation TransformerT-18 X-328 Breaker, transformer side
- 19. P-46 riser poles LC-60 and LC-69 at South Finegayan housing*
- 20. P-222 Apra Substation *
- 21. P-253 Barrigada Water Booster* (GPA Premise ID#8715407892)
- 22. Nexrad Facility (Eagle Field)* (GPA Premise ID#5643500000)
- 23. NCTS Tele Hut Bldg 1067, Adelup * (GPA Premise ID#8364410548)
- 24. Apra Reservoir, Santa Rita* (GPA Premise ID#8364410153)
- 25. Water Tank at South Finegayan Housing, Dededo * (GPA Premise 1D#8364410215)
- 26. South Finegayan Housing Self-Help Storage, Dededo * (GPA Premise ID#83644 I 0628)
- 27. New Apra Heights, Santa Rita* (GPA Premise ID#8364410627)
- 28. US Navy Lift Station #5, Piti * (GPA Premise ID#83644 IO 163)
- 29. Nimitz Hill Water, Piti * (GPA Premise ID#8364410234)
- 30. AF Booster Pump Station, Maite * (GPA Premise ID#8364410788)
- 31. AF, LMR, Communication Facility, Piti * (GPA Premise 10#8364410311)
- 32. Harmon Booster Pump Station* (GPA Premise ID#0380654666)
- 33. AF Bldg. 70, Santa Rosa

NOTE: Billing adjustments, depending upon switch positions and distribution circuit configuration, will be required.

^{*} Service at 13.8 kV

Distribution, Emergency and Stand-by Facilities to be Retained by Navy

- 1. All on-base 4.16 kV, 13.8 kV and 34.5 kV distribution feeder/circuit breakers, lines, and associated buses and equipment, relaying, metering, control systems and miscellaneous equipment except as listed in Table 3, Table 4 and Table 5.
- 2. Agana Substation Breaker and Line P-26 to Naval Hospital
- 3. Andersen Substation Breaker and Line P-67 to Pole ND-30
- 4. Cold Storage Substation Breaker and Line P-528 to Apra Heights and Naval Base Guam (NBG) **Munitions Site**
- 5. Harmon Substation Breaker P-45
- 6. Harmon Substation Breaker and Line P-48 to NBG Telecommunications Site and Ritidian
- 7. Harmon Substation Breaker and Line P-114 to NBG Telecommunications Site
- 8. Marbo Substation Breaker and Line P-51 to AF Wells in the Marbo Annex
- 9. Marbo Substation Breaker and Line P-52 to NBG Barrigada
- 10. Marbo Substation Breaker and Line P-53 to Maui Wells along Marine Drive
- 11. Marbo Substation Breaker and Line P-54 to AF Warehouse in Marbo Annex
- 12. Nimitz Hill Substation Breaker and Line P-136 to Joint Region Marianas Headquarters
- 13. Nimitz Hill Substation Breaker and Line P-137 to Y Puntan Housing Area
- 14. Nimitz Hill Substation Breaker and Line P-138 to Naval Hospital
- 15. Piti Substation Breaker and Section of Line P-1 north to Asan Water Pump Station
- 16. Piti Substation Breaker and Line P-2 to NBG Apra Heights
- 17. Piti Substation Breaker and Line P-4 to Navy Dispatch Control Center
- 18. Piti Substation Breaker and Line P-6 to Nimitz Hill
- 19. Step down 34.5 kV transformers

T-8 Piti	T-17 SRF
T-9 Agana	T-18 SRF
T-10 Orote	T-22 Harmon
T-11 Orote	T-23 Radio Barrigada
T-12 Orote	T-24 Radio Barrigada
T-13 Orote	T-25 Cold Storage
T-14 Marbo	T-28 Orote
T-15 Andersen	T-47 NCS

T-16 Andersen T-110 Potts Junction

- 20. Orote Power Plant
- 21. Harmon Substation Breaker P-113 Bus Tie

Navy Joint Use Generation and Transmission Facilities

- 1. Breakers X-1 through X-3, X-8 through X-14 and X-20 through X-24 at Piti Substation
- 2. Transmission line between breakers Piti X-23 and Agana X-43
- 3. Transmission line between breakers Piti X-24 and Agana X-40 via Anigua Substation
- 4. Transmission line between breakers Agana X-45 and Radio Barrigada X-55
- 5. Breakers X-40, X-41, X-42, X-43, X-45, X-46, X-47 and X-49 at Agana Substation
- 6. Transmission line between breakers Agana X-41 and Harmon X-81 via GIA T Substation
- 7. Transmission line between breakers Agana X-42 and Harmon X-80 via San Vitores Substation
- 8. Breakers X-80, X-81, X-82, X-84, X-86, and X-87 at Harmon Substation
- 9. Transmission line between breakers Andersen X-73 and Harmon X-87
- 10. Breakers X-70, X-71, X-72 and X-73 at Andersen Substation
- 11. Transmission line between breakers Harmon X-82 and Andersen X-70 via Yigo Substation
- 12. Transmission line between breakers Radio Barrigada X-56 and Marbo X-65
- 13. Breakers X-55, X-56, and X-58 at Radio Barrigada Substation
- 14. Breakers X-65 and X-66 at Marbo Substation
- 15. Breakers X-100 and X-101 at Tanguisson Power Plant
- 16. Transmission line between breakers Harmon X-86 and Tanguisson X-101
- 17. Piti Power Plant
- 18. Tanguisson Unit No. 1
- 19. Marbo Power Plant
- 20. The land designated as the Apra Heights Substation property
- 21. The land and easements used by the Cabras-Agana 115 kV transmission lines

Navy 13.8 kV Distribution and 34.5 kV Assets To Be Transferred To GPA

- 1. Piti step down transformer T-7 (34.5kV/13.8kV; 10,500 kV A), Breaker X-7, T-7 bus, 13.8 kV breakers P-3, P-4, P-7 and one spare breaker.
- 2. Harmon transformer T-44 (34.5 kV/13.8 kV; 7000 kVA), Breaker X-94, Breaker P-44, Feeder P-44 and associated equipment.
- 3. Feeder line Piti P-1 from Piti substation to Cabras Island (section North to Asan to be retained by Navy).
- 4. Feeder line Piti P-7 in total.
- 5. Feeder line Agana P-29 in total.
- 6. Feeder line Agana P-31 in total.
- 7. Feeder line Harmon P-46 in total.
- 8. Feeder line Harmon P-47 from two unnumbered poles south of pole DH-17 north to pole DH-128 (any line sections not previously transferred).
- 9. Feeder line Marbo P-53/P-47 (any line section not previously transferred).
- 10. Feeder line Marbo P-54 from pole MC-29 through MC-143/PQ178.
- 11. Feeder line Harmon P-111 in total.
- 12. The line section of Nimitz Hill P-137 from pole KC-55 to pole KC-98.

Navy Joint Use Assets Not Incorporated in Lease Table 3 and Table 4 to be Transferred to GPA

- 1. Breaker X-6 through X-7 and breaker positions X-4 and X-5 at Piti Substation
- 2. Breakers X-301 through X-316 at Orote Substation
- 3. Transmission line between breakers Piti X-20 and Orote X-311 and tap to Cold Storage X-336
- 4. Transmission line between breakers Piti X-21 and Orote X-315 and tap to Cold Storage X-334
- 5. Breaker X-48 at Agana Substation
- 6. Breakers X-62, X-64 thru X-67 at Marbo Substation
- 7. Feeder line Marbo P-54 from pole number MC-143/PQI 78 to Potts Junction
- 8. Breaker and Feeder line P-27 at Agana
- 9. Breaker and Feeder line P-30 at Agana
- 10. Breaker P-31 at Agana
- 11. Breaker P-46 at Harmon
- 12. Breaker P-111 at Harmon
- 13. Breaker P-112 at Harmon
- 14. Agana Power Plant containing approximately six (6) acres of land
- 15. An easement interest to a certain portion of property in the Municipality of Santa Rita (formerly Agat) containing approximately six and a half (6.50) acres of land stretching south and west from the easement centerline of Route 2A as shown on the GPA Tenjo Vista 34.5 kV Transmission Line routing plan
- 16. Transmission line between breakers Andersen X-71 and Dededo CT X-150/X- I 55 and breaker X-155
- 17. Breakers X-332 through X-336 at Cold Storage Substation
- 18. Breakers X-322 through X-328 at SRF Substation
- 19. Transmission line between breakers Orote X-301 and SRF X-324
- 20. Transmission line between breakers Orote X-309 and SRF X-326
- 21. Tanguisson Water Tank and water line from the Harmon Booster Pump station to the Tanguisson Power Plant
- 22. Harmon transformer T-21 (34.5 kV/13.8 kV; 30,000 kVA), Breaker X-85, T-21 bus, TP-21 Breaker and associated equipment
- 23. Breaker and line P-5 at Piti
- 24. An easement interest within the U.S. Government's 40-foot wide fuel line easement located at Tiyan to support GPA oil pipeline for the Tanguisson Power Plant
- 25. An easement interest from the intersection of Polaris Point Road and Rt. I to the NBG Polaris Point access gate
- 26. Breakers X-69, X-74, X-75, X-77 at Andersen Substation
- 27. Two pad mounted capacitor banks and associated controls at Andersen Substation
- 28. Grounding transformers connected to the 34.5 kV breakers at the following substations: Andersen (1 ea), Cold Storage (1 ea), Orote (3 ea), and SRF (2 ea)
- 29. Harmon Substation Breaker and Line P-47 to Tumon Maui Well
- 30. Section of Andersen Line P-67 from Pole ND-30 to Mt. Santa Rosa
- 31. Piti Substation T-7 Bus Tie Breaker
- 32. Transmission line between breakers Harmon X-90 to Andersen X-77 and the supporting infrastructure

- 33. Feeder line Radio Barrigada P-143 from pole number LR-I to LR-43
- 34. Breaker X-83 at Harmon Substation

APPENDIX A

Procedures for Developing the Cost to Serve the Navy and Determining Navy Rates

I. Introduction

This Appendix describes the procedures to be employed to determine the cost of serving the Navy, in accordance with Article 12 of the Utility Service Contract (USC) between the Navy and GPA. The starting point for that determination is the total GPA system costs calculated as described herein. Total GPA costs will be functionalized into the categories of production, transmission, distribution, customer accounting and direct assignment, as described in Sections II and III. These costs will then be classified into customer, demand and energy components as described in Section IV and will be allocated to the Navy as specified in Section V. Rates will be developed as specified in Section VI.

References to account numbers are to the FERC Uniform System of Accounts.

GPA and Navy agree that this Appendix A will be incorporated into GPA's tariff for service to Navy. Navy agrees that this Appendix A will be revised to maintain consistency with any Guam PUC orders that affect the procedures for developing cost-of-service and rates for the Navy.

II. Functionalization of Rate Base Elements

Rate base elements will be functionalized as production, transmission, distribution, customer accounting or direct assignment, using the procedures specified in this Section. This direct assignment category will consist of costs uniquely incurred to serve either GP A or Navy loads. The rate base shall consist of (i)

electric plant in service, plus (ii) intangible plant, plus (iii) completed construction, less (iv) contributions in aid of construction, less (v) accumulated provisions for depreciation, plus (vi) thirteen (13) month average materials and supplies inventory, plus (vii) thirteen (13) month average prepayments, plus (viii) cash working capital equal to one-eighth (I/8) of operation and maintenance expense, excluding fuel cost,

less (ix) thirteen (13) month average retirement fund deferred contributions, less (x) thirteen (13) month average accrued payroll and employee benefits.

A. Plant In Service

Plant in service will be functionalized as herein described.

- 1. Production plant. Investment recorded in Accounts 310 through 316, 320 through 325, 330 through 336, and 340 through 346 will be functionalized to production.
- 2. Transmission plant. Investment recorded in Accounts 350 through 359 will be functionalized to transmission or, if applicable, direct assignment.
- 3. Distribution plant. Investment recorded in Accounts 360 through 373 will be functionalized to distribution or, if applicable, direct assignment.

- 4. General plant. Investments in general plant recorded in Accounts 389 through 398 will be analyzed to determine their specific use. Specific use property will be assigned to the production transmission, distribution, customer accounting or direct assignment functions, as appropriate. General Plant Performing a nonspecific or multiple use will be allocated to two or more of the production, transmission, distribution, customer accounting and direct assignment functions, as appropriate, on the basis of the gross plant previously assigned to these functions in Paragraphs A-1 through A-3.
- 5. Intangible plant. Investment recorded in Accounts 301 through 303 will be assigned or allocated to functions using the same procedure described in Paragraph A-4 for general plant.

B. Completed Construction

Completed construction items will be analyzed to determine the functions to which they relate and assigned to these functions. Amounts that are unassignable will be allocated to functions on gross plant in service.

C. Contributions in Aid of Construction

To the extent that plant in service balances have not been reduced to reflect contributions in aid of construction, contributions in aid of construction will be assigned as a reduction to the appropriate plant-in-service accounts and then to the appropriate function(s) as described in Paragraph A.

D. Accumulated Provision for Depreciation

The accumulated provision for depreciation will be assigned to functions corresponding to the assignment of the related gross plant in service. To the extent that the accumulated provision for depreciation is not isolated by plant items or by plant account, allocations will be made between and within functions in proportion to gross plant. The accumulated provision for depreciation will be adjusted for depreciation associated with assets specifically excluded from the rate base.

E. Thirteen (13) Month Average Materials and Supplies Inventory

The thirteen (13) month average materials and supplies inventory will be analyzed to determine the nature of the various materials and supplies. The inventory will be assigned to functions consistent with the gross plant in service to which the materials and supplies inventory relates. To the extent not specifically assignable, the inventory will be allocated to two or more functions, as appropriate, on the basis of gross plant.

F. Thirteen (13) Month Average Payments

Thirteen (13) month average prepayments will be assigned to functions in accordance with the nature of the prepayments. Prepayments not capable of specific assignment to functions will be allocated to two or more functions, as appropriate, on the basis of gross plant.

G. Cash Working Capital

Cash working capital will be allocated to functions (by account) in proportion to the operation and maintenance expense (excluding fuel cost) assigned to functions in Section III-8.

- H. Thirteen (13) Month Average Retirement Fund Deferred Contributions
 The thirteen (13) month average retirement fund deferred contributions will be allocated to functions (by account) in proportion to the labor component of O&M expenses in Section III-8.
- Thirteen (13) Month Average Accrued Payroll and Employee Benefits
 The thirteen (13) month average accrued payroll and employee benefits will be allocated to functions (by account) in proportion to the labor component of the O&M expenses in Section III-B.

Note:

- (1) Rate base items that are contributed assets shall be valued at zero cost, and the rate base shall be reduced by the full amount of any grants from any unit of the United States Government, the Government of Guam or any other source. Any grants or other deductions that cannot be traced to specific assets will be allocated to two or more functions, as appropriate, on the basis of previously allocated gross plant investment.
- (2) Direct assignment investments are defined to include only those property items and related rate base elements that are used to supply service exclusively either to Navy loads or to GPA loads.

III. Functionalization of Cost of Service Elements

Cost of service elements will be functionalized as production, transmission, distribution, customer accounting or direct assignment, using the procedures specified herein.

A. Return Requirement

The return requirement (return) will be developed from the target debt service coverage ratio (DSCR). The debt service coverage ratio used to establish rates to be charged to Navy will be the same DSCR found appropriate by the PUC for the GP A system and incorporated in the rates charged to all non-Navy customer classes. The return requirement will be allocated to functions in proportion to the rate base assigned or allocated to functions in Section II above.

B. Operation and Maintenance Expenses

Operation and maintenance expenses will be assigned to functions as specified herein. In functionalizing O&M expense, the 'labor' component and the 'other' (remaining) component of each account will be separately functionalized and tracked. Supervision and engineering expenses will be allocated to the related accounts in proportion to the labor component of those accounts prior to accomplishing the functionalization in III.B .1 through 5 below¹.

1. Production O&M expenses. Expenses recorded in Accounts 500 through 507, 510 through 514,517 through 525,528 through 532,535 through 545,546 through 550,551 through 554,

¹ For example, expenses recorded in Account 560 (Transmission Operation Supervision and Engineering) will be allocated to the other transmission operation expense accounts (561-567).

- and 555 through 557 will be assigned to the production function. Cost elements that are recovered through the fuel adjustment clause shall be excluded.
- 2. Transmission O&M expenses. Expenses recorded in Accounts 560 through 573 will be assigned to the transmission function or, if applicable, to the direct assignment function. To the extent not specifically identifiable, the allocation of transmission expenses between the transmission function and the direct assignment function will be on the basis of gross plant.
- 3. Distribution O&M expenses. Expenses recorded in Accounts 580 through 598 will be assigned to the distribution function or, if applicable, to the direct assignment function. To the extent not specifically identifiable, the allocation of distribution expenses between the distribution function and the direct assignment function will be on the basis of gross plant.
- 4. Customer Accounting, Customer Service and Information and Sales O&M expenses.

 Customer Accounting expenses recorded in Accounts 901 through 905, Customer Service and Information expenses recorded in Accounts 907 through 910 and Sales expenses recorded in Accounts 911 through 916 will be assigned to the customer accounting function.
- 5. Administrative and General Expense. Expenses recorded in Accounts 920 through 931 and 935 will be specifically analyzed to determine whether they relate to the production, transmission, distribution, customer accounting or direct assignment functions. Amounts not specifically associated with one of these functions will be allocated to two or more of these functions, if applicable, in proportion to the labor component of the operation and maintenance expense associated with these other functions.

C. Depreciation Expense

Depreciation expense will be assigned to the various functions as specified herein.

- 1. Production plant. Depreciation expense associated with production plant will be assigned to the production function.
- 2. Transmission plant. Depreciation expense associated with transmission plant will be assigned to the transmission function or, if applicable, to the direct assignment function, in proportion to gross plant.
- 3. Distribution. Depreciation expense associated with distribution plant will be assigned to the distribution function or, if applicable, to the direct assignment function, in proportion to gross plant.
- 4. General plant. Depreciation expense associated with general plant will be functionalized in the same manner that the gross investment in general plant is functionalized.

Note: No depreciation expense will be included in the revenue requirement for any contributed asset (including assets transferred or to be transferred to GPA) or for assets resulting from grants from any unit of the United States Government, the Government of Guam or any other source.

D. Taxes

Labor-related taxes will be allocated to the various functions in proportion to the labor component of the O&M expenses for the various functions. Other taxes will be allocated to the various functions in proportion to gross plant.

E. Other Income and Expense, and Other Cost of Service Elements Other income and revenue will be a credit to cost of service. Interest income, Allowance for Funds Used During Construction (AFUDC) or equivalent carrying charges on construction expenditures will be allocated to functions in proportion to rate base; wheeling revenue will be assigned to the distribution demand functions; pole rentals will be assigned to the distribution demand functions; and other items will be specifically assigned, consistent with cost of service principles, or allocated in proportion to rate base if they cannot be specifically assigned.

Other expenses will be an addition to cost of service. Capital-related items will be allocated in proportion to rate base; wheeling expense will be assigned to the distribution demand category; and other items will be specifically assigned, consistent with cost of service principles, or allocated in proportion to rate base if they cannot be specifically assigned.

Other cost of service items are those specifically identified by the PUC and included in determining GP A's revenue requirement. These may include additions to cost such as capital improvement projects, contingencies and equity sinking funds and may also include reductions in expenses such as prior years cash and payment on government of Guam notes. This list of other cost of service items is for purposes of illustrations and is not intended to be all inclusive.

F. Total Cost of Service

The total cost of service by function will be the sum of the functionalized costs in Paragraphs A, B, C, D and E of Section III.

IV. Classification of Costs

The functionalized costs as developed in Section III will be assigned to the customer, demand and energy classifications as specified herein.

- A. Operation and Maintenance Expense (including labor-related taxes)
 - 1. Production O&M expense. The following elements of O&M expense from the production function (including labor-related taxes, related administrative and general expenses and allocated supervision and engineering expenses, but excluding cost elements recovered through the fuel adjustment clause) will be assigned to the energy classification: all of Accounts 501,503,504,512,513,514,518,521,522,530,531,532,543, 544, 545 and 541; the non-labor component of Accounts 502,505,519,520,523 and 538; and the as billed energy component of Account 555. All other expenses will be assigned to the production-demand classification.
 - 2. Transmission O&M expense. All O&M expense (including labor-related taxes, related administrative and general expenses and allocated supervision and engineering expenses) from the transmission function will be assigned to the transmission-demand classification.
 - 3. Distribution O&M expense. All O&M expense (including labor-related taxes, related administrative and general expenses and allocated supervision and engineering expenses) from the distribution function will be assigned to the distribution-demand classification. If this study

is to be used as a basis for determining the rates charged to other GPA customers, further classification into demand and customer components would be appropriate.

- 4. Customer accounting O&M expense. All O&M expense (including labor-related taxes, related administrative and general expenses and allocated supervision and engineering expenses) from the customer accounting function will be assigned to the Customer classification. Uncollectible expenses will be specifically isolated and treated as a sub classification of customer accounting expenses.
- 5. Direct assignment O&M expense. All O&M expense (Including labor-related taxes, related administrative and general expenses and allocated supervision and engineering expenses) from the direct assignment function will be separately isolated for direct assignment either to the Navy or to GPA.

B. Return, Depreciation and Other-Taxes

- 1. Production. Return, depreciation and other taxes associated with the production function will be assigned to the production-demand classification, except for the return, depreciation and other taxes related to the following items, which will be assigned to the energy classification: the variable portions of cash working capital, thirteen (13) month average Retirement Fund Deferred Contributions and thirteen (13) month average Accrued Payroll and Employee Benefits that are associated with energy-related O&M expense in Paragraph A of this Section.
- 2. Transmission. Return, depreciation and other taxes associated with the transmission function will be assigned to the transmission-demand classification.
- 3. Distribution. Return, depreciation and other taxes associated with the distribution function will be assigned to the distribution-demand classification for purposes of this study. If this study is also to be used as a basis for determining the rates charged to other GPA customers, further classification into demand and customer components would be appropriate.
- 4. Customer accounting. Return, depreciation and other taxes associated with the customer accounting function will be assigned to the customer classification.
- 5. Direct assignment. Return, depreciation and other taxes associated with direct assignment investment will be assigned to the customer or demand classification, as appropriate.

V. Allocation of Functionalized and Classified Costs to the Navy

Functionalized and classified costs will be allocated to the Navy as specified herein.

- A. Production demand-related costs will be allocated to the Navy using the twelve (12) coincident peak method, unless the cost allocation methodology for Production demand costs is revised under Article 12.6. Allocation of GPA production demand-related costs to Navy will be set equal to the ratio of the sum of Navy demands in each month coincident with the GPA system peak, to the sum of the monthly maximum demands of the GPA system (all measured at or adjusted to the transmission level) multiplied by the total test year demand-related costs.
- B. Transmission demand-related costs will be allocated to the Navy using the twelve (12) coincident peak method, unless the cost allocation methodology for Transmission demand costs is revised under Article 12.6. Allocation of GPA transmission demand-related costs to Navy will be set equal to the ratio of the sum of Navy demands in each month coincident with the GP A

- system peak, to the sum of the monthly maximum demands of the GPA system (all measured at or adjusted to the transmission level) multiplied by the total test year demand-related costs.
- C. Distribution demand-related costs. No portion of these costs will be assigned or allocated to the Navy.
- D. Production energy costs. The allocation of energy-related costs to Navy will be set equal to the total of kilowatt-hours delivered to Navy divided by the total of all GPA kilowatt-hours delivered (all measured at or adjusted to the transmission level) times the total test year energy costs.
- E. Customer-related costs. Customer accounting costs applicable to the Navy shall be developed from an analysis of the costs associated with meter reading, billing and customer accounting for Navy accounts. In the absence of a special study, a weighted customer allocation shall be utilized, except for those customer-related costs which can be directly assigned. The Navy shall not be assigned or allocated any uncollectible or bad debt expenses associated with any other class. The customer-related costs will include direct assignments of the costs associated with facilities dedicated solely to supplying Navy load (if any) as well as the meter reading, billing and customer accounting related to serving the Navy account.
- F. Navy direct assignment costs. Costs identified as specifically related to the Navy will be assigned to the Navy.

VI. Development of Rate Applicable to the Navy

The rate components applicable to service provided to the Navy will be developed as indicated below.

- A. Customer charge. The customer component of the Navy rate will be determined by dividing the sum of the customer accounting costs from Section V-E and the customer-related Navy direct assignment costs from Section V-F by twelve (12).
- B. Energy charge. The energy rate for the Navy will be determined by dividing the energy-related costs from Section V-D by the forecasted Navy energy consumption.
- C. Demand charge. The demand charge will be developed by dividing the sum of the demand-related costs from Sections V-A and V-B and the demand-related Navy direct assignment costs from Section V-F by the forecasted Navy billing demands.
- D. The methodology for calculating rates to the Navy, and the design of rates to Navy, may be revised under the procedures specified in Article 12.

APPENDIX B

Fuel Clause Applicable to Navy Agreement

Navy's bill shall be subject.to a charge for fuel cost. The charge will be determined by multiplying a Unit Fuel Cost times the total kilowatt hours for which the bill is rendered.

The Unit Fuel Cost will be calculated by the following formula for the current month:

Unit Fuel Cost = $(A \pm R) \div C$

Where:

A= Actual cost of fuel consumed in IWPS

C = Actual IWPS kWh production (loss adjusted to delivery at the 34.5 kV level)

R = Refunds or credits from suppliers

The Unit Fuel Cost will be recalculated monthly.

Actual cost of Fuel (A) for a month consists of the purchased commodity cost of fuel burned that month plus the net cost (positive or negative) of price hedging transactions such as swaps, call options and collars, plus, if applicable, other fuel cost elements used by the PUC to determine the fuel rates.

Refunds and/or credits (R) from fuel supplier shall be flowed through to Navy, and other adjustments will be made, as appropriate, to ensure that Navy pays only its proportionate share of GPA's actual fuel cost.

Fuel clause billing will be adjusted on a monthly basis to reflect the difference between the actual fuel cost and the weekly payments by Navy.

Navy will be provided a copy of the computation and support for the Unit Fuel Cost each month.

CABRAS 2 MAJOR OVERHAL

Scope of Work & Costs

System	Description	Est. Cost	
Boiler	Safety Valve Repair/Replacement	\$98,630	
Boiler	Boiler Casing and Refractory Renewal, Including Soot Disposal		
Boiler	Archway Tubes - 50%; Rear Water wall tubes and Boiler Water wall tube replacement	\$31,574	
Boiler	Gas and Air Duct Expansion Joint Replacement	\$191,321	
Boiler	2A & 2B APH Maintenance		
Boiler	Stack Refurbishment and Support Structure Rehabilitation	\$104,578	
Boiler	Burner Front Components Renovation	\$545,745	
Turbine	Condenser A&B banks and service water cooler inspection and jet cleaning	\$58,744	
Turbine	Condenser Expansion Joint Replacement	\$84,842	
Turbine	Turbine Generator Overhaul	\$2,875,000	
Ancillary	Space Heater Installation for 2PT, PPT NGR; CWP control cable replacement, Inverter #2 Maintenance, misc motor inspections	\$98,754	
Ancillary	Service Water Cooler Cooling Water Pipes and Drain Lines Replacement	\$52,779	
Ancillary	125 VDC Battery Bank Replacement		
Ancillary	Fire Pump	\$162,660	
	TOTAL COST	\$4,960,602	

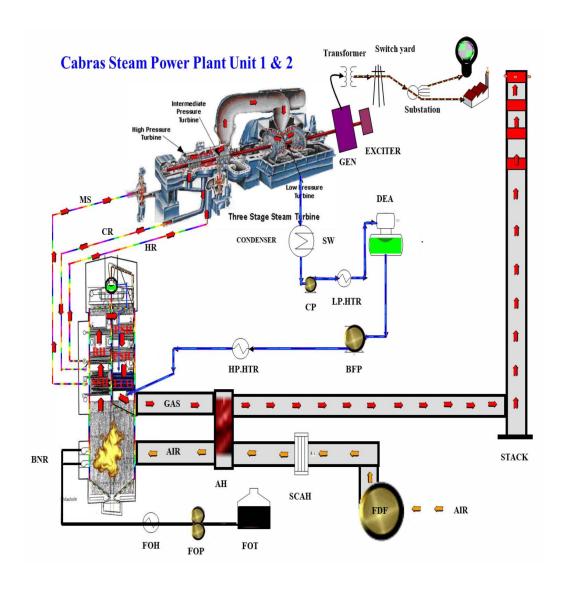
Cost Summary

SUMMARY Cabras 2 Overhaul		
Boiler	\$1,618,350	
Turbine	\$3,018,586	
Ancillary	\$323,667	
TOTAL	\$4,960,602	

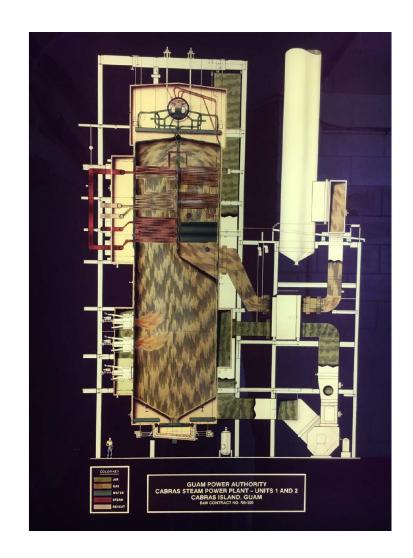
CABRAS 2 OUTAGES

OUTAGES		
2021	127 DAYS	
2022	4 DAYS	

OUTAGES	Days	Reason
2/20/2021	13	APH Cleaning, FDF Troubleshooting, Inspection
4/4/2021	4	Boiler Tube Leaks
4/18/2021	12	Boiler Tube Leaks
4/23/2021	7	Boiler Tube Leaks
5/15/2021	33	Condenser cleaning, APH Cleaning, Soot blowing, Turbine and Generator Inspection
7/7/2021	36	Boiler Tube Leaks
12/7/2021	20	APH Basket Replacement 2A Hot End, Turbine & Generator Inspection
12/25/2021	2	Boiler Tube Leaks



BOILER



BOILER TUBE LEAKS







TURBINE



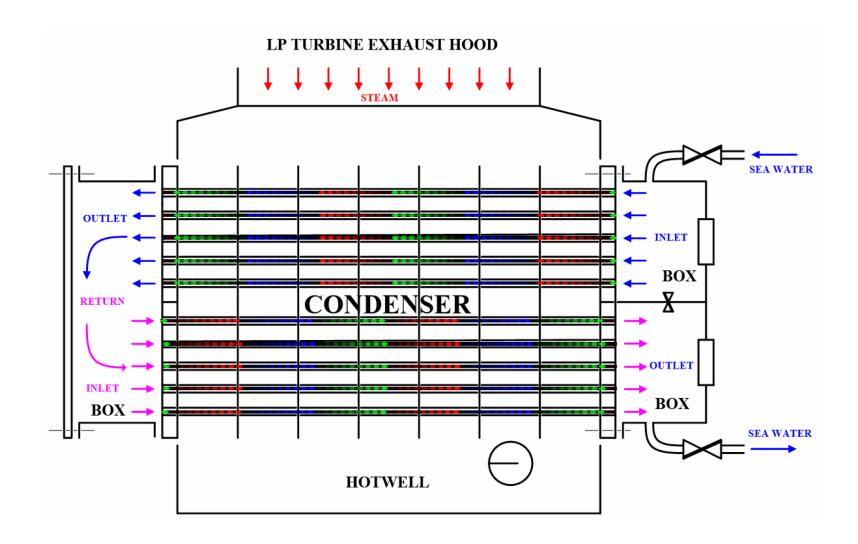
AIR PREHEATER



AIR PREHEATER REPAIRS NEEDED









FORCE DRAFT FAN



SEAWATER PIPE LEAK



CONDENSER REPAIR AND CLEAN



FORCE DRAFT FAN REPAIRS





GUAM POWER AUTHORITY

ATURIDÅT ILEKTRESEDÅT GUÅHAN P.O.BOX 2977 • HAGÅTÑA, GUAM U.S.A. 96932-2977

Issues for Decision

Resolution No. FY2022-07:

Authorizing the Guam Power Authority to Seek Approval from the PUC to Proceed with the Cabras Unit 2 Major Overhaul

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

The last Major Overhaul of Cabras Unit 2 was completed in April, 2016. Historically, the Authority would perform major overhauls every 18-24 months in order to restore plant efficiency, reliability and availability and ensure operational safety. The overhaul of Unit 2 was scheduled for March 2020 but was postponed due to the pandemic. Because it has been 6 years since the last major overhaul, the Authority has been experiencing increased occurrences of boiler tube leaks and restricted air flow that has resulted in mechanical failure and subsequently the de-rating and unavailability of the unit.

Cabras Unit 2 is critically needed to ensure GPA meets customer demand until the new Ukudu power plant is commissioned. This project will implement the major overhaul of Cabras Unit 2 scheduled for September 2022.

Where is at?

Cabras Unit 2

How much will it Cost?

The anticipated cost is \$4,960,602

SUMMARY Cabras 2 Overhaul					
Boiler	\$1,618,350				
Turbine	\$3,018,586				
Ancillary	\$323,667				
TOTAL	\$4,960,602				

What is the funding Source?

Revenue funds

When will it be completed?

The anticipated schedule is as follows:

Planned Start: September, 2022 Planned Finish: November, 2022

Duration: 50 days



GPA RESOLUTION NO. FY2022-07 1 2 AUTHORIZING THE GUAM POWER AUTHORITY TO SEEK APROVAL FROM THE PUC TO 3 PROCEED WITH THE CABRAS UNIT 2 MAJOR OVERHAUL 4 5 WHEREAS, GPA entered into a Performance Management Contract (PMC) with Taiwan 6 Electrical and Mechanical Engineering Services, Inc. (TEMES) to manage the Cabras 1&2 power 7 plant; and 8 WHEREAS, TEMES has been the PMC for Cabras 1&2 power plant since 2002 and the 9 last contract was entered into on October 1, 2020 and expires September 2023; and 10 WHEREAS, the last boiler and turbine overhaul for Cabras Unit 2 was completed in April 11 2016; and 12 WHEREAS, a boiler overhaul for the unit is recommended every 18 months and a 13 turbine overhaul is recommended every 5 years; and 14 WHEREAS, the overhaul was scheduled in March 2020, but was postponed due to the 15 pandemic, and 16 WHEREAS, since the last overhaul, Cabras Unit 2 has experienced unit outages and 17 significant unit down time caused by boiler tube failures; plant safety valve failures; as well as 18 insufficient air flow caused by gas and air duct leakage which has restricted unit output; and 19 WHEREAS, the overhaul will ensure the unit is available, reliable, efficient, and most 20 21 importantly safe to operate until the new Ukudu power plant is commissioned; and WHEREAS, major overhaul activities include replacement of archway tubes in the rear 22 water wall and boiler water wall areas; replacement of gas and air duct expansion joints; 23 maintenance of air preheaters and burner fronts; replacement of safety valves; overhaul of the 24 turbine; cleaning of the condenser, and maintenance of ancillary services including the boiler 25 feed pumps, force draft fans, and cooling water pipes; and 26

WHEREAS, the overhaul is scheduled for September 2022 and will last approximately 50

27

28

days; and

1	W	/HERE/	AS , the ov	verhaul i	s nece	ssary to ma	intair	n the relia	ability, avail	ability, and safe	ety of
2	Cabras U	Jnit 2,	restore	overall	plant	efficiency,	and	support	economic	dispatching of	f the
3	generatio	n syst	em; and								
4	w	/HERE/	AS, the to	tal over	haul co	ost is anticip	ated	to be \$4,	.960,602; a	nd	
5	w	/HERE/	AS, this p	roject is	budge	ted under c	apita	l improve	ement fund	s; and	
6	w	HERE!	AS, appro	oval is re	queste	ed to petition	on the	e PUC to	utilize CIP	funds for the Ca	abras
7	Unit 2 Ov	erhaul	I in the ar	mount o	f \$4,96	60,602.					
8	N	ow, t	HEREFO	RE, BE I	T RESC	DLVED , by	the C	Consolidat	ted Commi	ssion on Utiliti	es as
9	follows:										
10	1.	Aft	er carefu	ul consid	deratio	n, the Con	solida	ated Con	nmission o	n Utilities find	s the
1		Cal	bras Unit	2 overl	naul to	be reason	able,	prudent	and neces	sary for the re	liable
L 2		ор	eration o	f the ger	neratin	g plant.					
13	2.	The	e Genera	al Mana	ger of	the Guan	n Pov	wer Auth	ority is he	ereby authorize	ed to
L 4		pet	tition the	PUC to	utiliz	e revenue	funds	s in the	amount of	\$4,960,602 fo	r the
15		Cal	bras Unit	2 overh	aul						
16	RI	ESOLV	ED , that	the Cha	irman	certifies ar	d the	e Secreta	ry attests	the adoption o	f this
L 7	Resolutio	n.									
.8	D	ULY AI	ND REGU	LARLY A	DOPTE	ED AND API	PROV	ED THIS 2	25 TH DAY O	F JANUARY, 20	22.
19											
20 21	Certified	by:					Atte	ested by:			
22											
23 24	JOSEPH T	DITE	NΔS				Mic	hael T. Li	mtiaco		
25	Chairpers		VA3				_	retary	intiaco		
26	Consolida	ated Co	ommissio	n on Uti	lities		Con	solidated	Commission	on on Utilities	
27 28											
29											
0											
1											

1	I, Michael T. Limtiaco, Secretary for the Consolidated Commission on Utilities (CCU), as
2	evidenced by my signature above do certify as follows:
3	The foregoing is a full, true, and accurate copy of the resolution duly adopted at a
4	regular meeting of the members of the Guam Consolidated Commission on Utilities, duly and
5	legally held at a place properly noticed and advertised at which meeting a quorum was present
6	and the members who were present voted as follows:
7	Ayes:
8	Nays:
9	Absent:
10	Abstain:

2021 INTEGRATED RESOURCE PLAN

January 2022

Overview

The Integrated Resource Plan (IRP) historically focused on the evaluating the need for new generation resources to meet future load growth, address environmental requirements and optimize costs. With the Ukudu Power Plant set for commissioning in 2024 and GPA commitment to a 50% Renewable Portfolio Standard by 2030 the focus has shifted to how to achieve additional operational savings through efficiencies and to implement projects and programs to support these as well as to support grid security, stability and reliability while achieving meaningful GHG emissions reductions.

GPA's balanced approach to reducing GHG emissions includes: *Energy Efficiency, Renewable Energy, Grid Transformation, and Transportation Electrification*.

The American Council for an Energy Efficient Economy as well as studies performed for the US EPA maintain that the United States can achieve up to 50% of its targeted GHG emissions reductions through energy efficiency.

2

Summary

- No additional generation resources are required in the next 10-20 year with New Ukudu Power Plant (CCCP & Reserve Facility)
- To achieve 50% Renewables by 2030 would require:
 - 300,000 MWh (188 MW Capacity) by December 31, 2025
 - 300,000 MWh (188 MW Capacity) by December 31, 2029 for **LOW** load forecast scenario or 350,000 MWh (220 MW Capacity) by December 31, 2029 for **HIGH** load forecast scenario
 - Once CCU and PUC approvals are received, GPA would issue procurements packages
 - IRP adjusted load forecast to project about 30.8 MW of solar roof top renewables thru the next 10 years
- The IRP provides a portfolio of about \$233M in projects and initiatives for integration of renewables.
- Synchronous Condensers are required to support increased solar penetration on the grid for grid stability. Renewable Integration Study recommendations must be completed soonest. Some existing older generators should be converted to Synchronous Condensers
- Increased optimization of infrastructure will enhance and improve operations and reduce costs
- Continued evaluation and implementation of demand side management programs and programs to address EV charging to reduce impacts on peak system, harmonics, 3-phase power unbalance, and power quality.
- CIP Budget for IT/OT Shared Services Transformation is \$2,710,280
- The IRP provides a portfolio of projects and initiatives for:
 - Grid Transformation
 - Customer Experience Transformation
 - Energy Affordability Transformation
 - Digital Transformation
 - Foundational Infrastructure

3

Project Priority	Project Name	Project Description	Tota	l Project Budget (\$)	H	ority Total - No CT Capacity Retired	FY Start	FY End
	Relay Upgrade	Implement RIS recommendation for reduced fault clearing time.	\$	5,000,000.00				
	Adaptive Underfrequency Load	AUFLS study	\$	50,000.00				
1	Shedding (UFLS)	AUFLS imlementation	\$	300,000.00	\$	5,700,000.00	2022	2025
	Adaptive Under Voltage Load Shedding	AUVLS study	\$ 50,000.00 \$ 300,000.00 \$ 7,732,335.96 d motor/static start ** Only if retiring capacity \$ 5,485,680.22					
	(UVLS)	AVULS imlementation	\$	300,000.00				
		Macheche CT - Add clutch	\$	7,732,335.96				
		Macheche CT - Demo CT and add motor/static start ** Only if retiring capacity	\$	5,485,680.22				
		Yigo CT - Add clutch (assumed same costs as Macheche)	\$	7,732,335.96				
	Synchronous Condenser Conversions	Yigo CT - Demo CT and add motor/static start (assumed same cost as Macheche) ** Only if	Ś	5,485,680.22				
	(Based on Leidos Report, 11/12/2021)	retiring capacity	٧	3,403,000.22	¢	32,944,658.59	2023	2025
2	(based on Leidos Report, 11/12/2021)	Dededo CT - Add clutch	\$	7,732,335.96	۰	32,344,038.33	2023	2023
		Dededo CT - Demo CT and add motor/static start ** Only if retiring capacity	\$	5,485,680.22				
		Piti 7 CT - Add clutch	\$	9,747,650.70				
		Piti 7 CT Demo CT and add motor/static start ** Only if retiring capacity	\$	6,598,280.25				
	Stand-alone Synchronous Condenser	Study in Progress to Size Synchronous Condenser		TBD				
	Standalone BESS	75 MW/300 MWH Standalone BESS	\$:	131,250,000.00	\$ 13	31,250,000.00	2022	2024
3	Grid Controller	Implementation of RIS Recommendation	\$	1,500,000.00	- Ś	2 200 000 00	2022	2022
3	Synchrophasor Network	Provide Information for Grid Controller to detect impending system instabilities	\$	1,800,000.00	>	3,300,000.00	2022	2023
4	Malojloj - Hagatna 115 KV Line	Implementation of RIS Recommendation	\$	46,000,000.00	\$ 4	46,000,000.00	2023	2026
		Customer ESS Pilot Project: Use BESS to reduce demand charges for large customers. (Energy Sense Funds)	\$	500,000.00				
5	Demand Response Programs	Water Heater DLC Programs	\$	3,124,588.50	\$	6,124,588.50	2022	2025
		Streetlight Dimming Control	\$	2,500,000.00			ı	
-	Demand Response with GWA	Use of GPA backup generation as demand response resource.		TBD				
		Tenjo Vista Power Plant	\$	430,000.00				
		Yigo CT	\$	950,000.00				
6	Remote Start/Stop/Autostart	Macheche CT	\$	950,000.00	\$	3,280,000.00	2023	2025
		Dededo CT		,				
		Piti 7 CT	\$	950,000.00				
_		Relocation and resiting 15-MW from Yigo to Umatac	\$	4,145,200.00				
7	Umatac Microgrid	Self-forming Microgrid bid specifications	\$	75,000.00	\$	4,220,200.00	2023	2025
		Procure Razon Solar Irradiation Sensors	Ś	61,425.00				
8	Solar Irradiance Sensor Network	Build out Sensor network. Configure data communications from sensors to SCADA. Configure SCADA displays and database.	\$	10,000.00	\$	151,425.00	2023	2023
-		Configure data communications from irradiance sensors to L+G AGA to compute real-time NEM PV output.	\$	80,000.00	1	,		
		TOTAL	1		\$ 2	32,970,872.09		

Contents

- Volume 1 Generation System Reliability, Adequacy and Resiliency
- Volume 2 Generation Expansion Plan
- Volume 3 Addendum to the 2018 Environmental Strategic Plan
- Volume 4 Demand Side Management Plan
- Volume 5 Medium Range Distribution Plan (TBD)
- Volume 6 Information/Operational Technology Plan
- Volume 7 Strategic Plan
- Volume 8 Electric Vehicle Road Map
- Volume 9 Net Metering Plan

Volume 1

GENERATION SYSTEM RELIABILITY, ADEQUACY AND RESILIENCY

An in-depth examination of GPA Generation System Reliability, Adequacy & Resiliency to determine baseline conditions is necessary to support future growth and considerations in retirement of existing units.

The activities in evaluating these requirements include:

- Creation of mathematical models to analyze GPA System Reliability
- Evaluation of how the following affect overall Generation System Reliability (Peak Load Carrying Capability (PLCC)
 - · GPA Legacy Generation Reliability
 - Solar PV + Energy-Shifting BESS additions
 - Retirements of Legacy Generation
- Examination of how increasing renewable energy without energy-shifting Battery Energy Storage System (BESS) affects GPA Costs and Operations.
- Evaluation of how increase additions of inverter-based systems affect the grid requirements and inverter capability requirements

Volume 1 (continued) GENERATION SYSTEM RELIABILITY, ADEQUACY AND RESILIENCY

- Summary and consideration of the FRONTIER Project which evaluates several threat Scenarios to make recommendations to improve Guam Energy Resiliency.
- Evaluation of the need for GPA to implement a state-of-the-art AI-based Grid Controller to manage Solar PV Curtailment, Security Constrained Economic Dispatch, Automatic Generation Control, EV Charging Management, BESS charging Management, Fast Frequency Regulation/Response, Demand Response, Volt/Var Management, System Instability Detection & Proactive Response
- Other evaluations such as System Protection Needs, Demand Response Programs and EV Charging on GPA grid.

The following are the recommendation and conclusions of this study:

- · Maintain a Legacy Generation Availability of 95%
- Schedule Major Maintenance during March (lowest daily System Peak & highest daily Solar PV production)
- Recommend a minimum installed reserve policy of 200 MW for Ukudu Steam Turbine Outages.
- Evaluation of Optimum Generation Outage Scheduling for Ukudu Steam Turbine Outages
- · Complete the Renewable Integration Study Recommended Projects
- Implement Adaptive Under-Frequency Load Shedding (AUFLS) and Adaptive Under Voltage Load Shedding (AUVLS)
- Procure and Implement Grid Transformation Solution Projects

Volume 2 GENERATION EXPANSION PLAN

This plan evaluates new resource options to meet energy requirements for the next 20 years.

Summary of analysis is presented that considers various scenarios based on:

- Forecasted fuel prices
- Forecasted load requirements (MW)
- Reliability study recommendations
- Environmental strategic plan recommendations
- Consent Decree and State Implementation Plan requirements
- Renewable Portfolio Standards (RPS)
- Estimated current generating units' availability

Volume 2 (continued) GENERATION EXPANSION PLAN

+ Phase III RRA
+ Phase IV RRA
+ Phase V RRA

							Units E	Built:				
	Scenario	NPV Cost (MM)	Savings from BASE (MM)	Lowest RM after 2024 (%)	2024	2025	2026	2027	2028	2029	2030	2031
Fuel Price	Forecast for ULSD set to 2030 price	for the rest of	study period;	no escalation.								
RA2-A	Base	\$ 4,260.45		94.45								
RA2-B	Base+345	\$ 4,054.09	\$ 206.37	133.28								
RA2-D	Base+345-Piti89	\$ 4,010.03	\$ 250.42	106.28								
RA2-E	DC	\$ 4,480.55	\$ (220.09)	83.01								
RA2-F	DC+345	\$ 4,284.68	\$ (24.22)	119.56								

Cases assume Phase 1 and 2 renewable resources online:

- <u>No additional renewable contracts and no existing units retiring</u> => No new units built for the Base Case with Base Load Forecast (A) and the Base Case with Data Center (High) Load Forecast (RA2-E)
- Addition of Phases 3,4, and 5 renewable contracts and no existing units retiring => No new units built (RA2-B and RA2-F)
- Base Case with Base Load Forecast and Piti 8&9 retired => No new units built (RA2-D)

9

Volume 2 (continued) GENERATION EXPANSION PLAN



									Units E	Built:				
	Scenario	1	NPV Cost (MM)		ngs from SE (MM)	Lowest RM after 2024 (%)	2024	2025	2026	2027	2028	2029	2030	2031
Fuel Price F	orecast for ULSD set to 2030 price	for	the rest of	stud	y period; i	no escalation. P	iti 8&9	retire o	n 1/1/2	029, all	others i	retire or	1/1/20	024.
RA2-H	DC+345-Piti89	\$	4,279.99	\$	(19.54)	119.56								
RA2-H_R1	DC+345-Piti89Piti7	\$	4,266.35	\$	(5.89)	108.00								
RA2-H_R2	DC+345-Piti89Tenjo	\$	4,257.24	\$	3.22	111.79								
RA2-H_R3	DC+345-Piti89TenjoMDI	\$	4,253.37	\$	7.09	108.73								
RA2-H_R4	DC+345-Piti89TenjoYCT	\$	4,235.43	\$	25.02	106.20								
RA2-H_R5	DC+345-Piti89TenjoMDIYCT	\$	4,231.56	\$	28.89	103.14								
RA2-H_R6	DC+345-Piti89Piti7Tenjo	\$	4,243.59	\$	16.86	100.23								
RA2-H_R7	DC+345-Piti89Piti7TenjoMDI	\$	4,239.72	\$	20.73	97.17								

High Load Forecast with retirement of Piti 8&9 and combination of other units (Piti 7, Tenjo, MDI, Yigo CT) => No new units built

Volume 2 GENERATION EXPANSION PLAN

Recommendations

GPA must commit to:

- Acquisition of energy from renewable resources to meet the RPS (Phase 4 RRA onwards):
 Renewable Energy + Energy-Shifting BESS or firm power renewable technologies
- Continuous investigation of possible unit retirements and capital improvements needed for the existing generating units
- An update of the LNG study with impact of increasing renewable energy in the system
- Complete projects recommended in the Renewable Integration Study including, but not limited to:
 - System impact studies
 - Analysis of short-circuit MVA requirements
 - Conversion of GPA's CT units into synchronous condensers
 - System protection upgrades

Volume 3

2018 Environmental Strategic Plan & Addendum

The Environmental Strategic Plan (ESP) addresses the environmental regulations applicable to GPA power generating plants.

As an addendum to the 2018 ESP, GPA summarizes the most recent requirements from the April 2020 Consent Decree and the 2020 State Implementation Plan (both of which are still in progress).

This includes the following projects:

- Conversion of Cabras 1&2 fuel to 0.2%S RFO, and retirement after the Ukudu Power Plant is placed online
- Conversion of Piti 8&9 fuel to ULSD

Continuous monitoring and managing of USEPA regulations are required to prepare for compliance deadlines. GPA continues to research on and pursue recommendations from the 2018 Environmental Strategic Plan.

Volume 3 (continued) 2018 Environmental Strategic Plan & Addendum

2018 ESP Key Initiatives and Recommendations:

- Expanded, aggressive compliance program
- Inclusion of Fuel Supply System in GPA Continuing Obligations
- Compliance Review for Temporary Power Generation
- Asset Retirement or De-activation
- Continue work on decreasing hazardous air emissions DSM programs, electric vehicles, renewable energy contracts, execution of compliance options for current/older power plants
- Investigation of Utility-scale and Island-wide use of Electric Vehicles
- Investigation on proper disposal of Solar PV Panels and Lithium Ion Batteries
- Regulatory Compliance and Solicitation for New Generation
- Continue tracking, monitoring of compliance requirements, Clean Power Plan (CPP), Affordable Clean Energy (ACE) Rule

Volume 4

Demand Side Management Plan

This Volume discusses the Demand Side Management (DSM) Program. DSM is much more that just the appliance rebate program.

It consists of these major activities:

- · Energy Sense Appliance Rebate Program
- Energy Sense Appliance Residential and Small Non-Residential Energy Audit Program
- Marketing
- Metering & Verification
- Utility Energy Services Contracting (UESC)
- Grant Funded Projects
- Organizational Infrastructure
- Pilot Project Programs
- Demand-Response Programs (Future)

Demand Side Management Plan

- Expanding the appliance rebate program to include commercial customers to fulfill part of PUC Order Docket 13-14.
- Reset of the current residential rebate program incentive levels to ensure that GPA is not over funding the cost of the appliances.
- Adding an online service (DSM (Online) Digitization) will allow GPA to improve the program by increasing efficiency, reduce errors, consolidate business tools, and record and extract data for analysis and reporting.
- Partnering with Siemens under UESC contract allows to provide Navy, UOG, GDOE, private schools (Guam Energy Office) with energy efficient projects and accomplishes the grant funded projects.
- Marketing allows to conduct surveys and promote the commercial rebate program and DSM Digitization
- LEAC funding enable GPA to meet the PUC's DSM mandates.

Demand Side Management Plan - Commercial Rebate Levels

Commercial Program Description	Rebate (\$ Per Ton
Ductless Split Air Conditioning Units	
≥ 18 SEER and < 21 SEER	105
≥ 21 SEER and < 25 SEER	135
≥ 25 SEER	155
Ducted Central Air Conditioning Units	
<5 Ton	
≥ 17 SEER and < 21 SEER	230
≥ 21 SEER and < 25 SEER	300
≥ 25 SEER	350
≥5Ton	
≥ 16 IEER and < 18 IEER or (≥ 11 EER and < 12 EER Expire in 2024)	175
≥ 18 IEER and < 20 IEER or (≥ 12 EER and < 13 EER Expire in 2024)	230
≥ 20 IEER or (≥ 13 EER Expire in 2024)	320

Commercial Program Description	Rebate (\$ Per Ton)
Variable Refrigerant Flow Units	
<5Ton	
≥ 17 SEER and < 21 SEER	230
≥ 21 SEER and < 25 SEER	300
≥ 25 SEER	350
≥5Ton	
≥ 16 IEER and < 18 IEER or (≥ 11 EER and < 12 EER Expire in 2024)	175
≥ 18 IEER and < 20 IEER or (≥ 12 EER and < 13 EER Expire in 2024)	230
≥ 20 IEER or (≥ 13 EER Expire in 2024)	320
Package Rooftop Units	
<5Ton	
≥ 17 SEER and < 21 SEER	230
≥ 21 SEER and < 25 SEER	300
≥ 25 SEER	350
≥5Ton	
≥ 16 IEER and < 18 IEER or (≥ 11 EER and < 12 EER Expire in 2024)	175
≥ 18 IEER and < 20 IEER or (≥ 12 EER and < 13 EER Expire in 2024)	230
≥ 20 IEER or (≥ 13 EER Expire in 2024)	320 ₁₆

Demand Side Management Plan - Residential Rebate Levels (Current vs. Reset)

Programs	Current Rebate (\$)	Reset Rebate (\$ Per Ton)
Ductless Split Air Conditioning Units		
<1Ton		
≥ 18 SEER and < 21 SEER	100	79
≥ 21 SEER and < 23 SEER	200	131
≥ 23 SEER	250	131
≥ 25 SEER		158
≥1Ton		
≥ 16 SEER and < 21 SEER	200	105
≥ 21 SEER and < 22 SEER	300	175
≥ 22 SEER and < 25 SEER	325	175
≥ 25 SEER and < 28 SEER	350	210
≥ 28 SEER	600	210
Ducted Central Air Conditioning Units		
≥ 3 Ton and < 4 Ton		
≥ 16 SEER and < 21 SEER	500	140
≥4Ton		
≥ 18 SEER	800	140

Programs	Current Rebate	Reset Rebate
Washer Units	\$ 200 per Unit	\$ 20 per Unit
Dryer Units	\$ 200 per Unit	\$ 40 per Unit

Demand Side Management Plan

- DSM Digitization
 - Customer fill-out, submit rebate application form and tract rebate status online
 - GPA process and approve rebate online

UESC Contract

- UOG Investment Grade Audit and Energy Efficient Projects
- AAFB Energy Efficient Project
- Navy Base Guam Preliminary Audit
- UOG Energy Efficient Model House Pilot Project
- B.P Carbullido Elementary School Energy Efficient Retrofit Pilot Project
- Guam BEST School Program GDOE and Private Schools (partnered w/ GEO)





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Demand Side Management Plan - On-going Projects Timeline

- Commercial Rebate Program Roll-out
- Soft Roll-out: Ductless Split and Central Ducted (under 5 ton) June 2021
 - Central Ducted (over 5 ton), Variable Refrigerant Flow (VRF)
 and Package Rooftop January 2022
- DSM (Online) Digitization Go Live February 2022
- UOG Energy Efficient Project June 2022
- AAFB Energy Efficient Project January 2022
- NBG Preliminary Audit January 2022

Volume 5

Medium-Range Distribution Plan

Distribution System Analysis and Planning is required to determine the impacts of distributed generation and the locational value of solar.

GPA and its Consultant, Landis + Gyr (L+G), are Finalizing the Medium Range Distribution Plan for 6 substations on GPA's system.

GPA and L+G will complete all 66 feeders over several fiscal years depending upon funding. As GPA gains more familiarity with using the Advanced Grid Analytics (AGA) tools, GPA will perform more of the work.

Several of the scope items in the study investigate existing and future distribution feeder issues due to distributed generation. They also provide instances of locational value of solar. In the Conservation Voltage Reduction (CVR) case, specific customer inverters can be identified for control to improve feeder voltage. These customers may be compensated for their participation.

Medium-Range Distribution Plan

GPA has already put the outputs of some of the analysis to immediate use. GPA has taken the results of distribution transformer overloads analysis and begun to correct the GIS model for overloads that are obvious incorrect transformer parameters as well as fix real overloads. This process ensures that GPA has an increasingly more accurate GIS model of its distribution system. It also means that GPA can prevent customer power quality and safety issues before they cause outages or damage

AGA's voltage platform was used to identify voltage issues. Engineering has used this to change-out faulty transformers, adjust transformer taps, upgrade secondaries, and re-distribute load to regulate voltages.

Volume 5 *(continued)*Medium-Range Distribution Plan

- Results for Scope Item #4 regarding Rooftop PV System impacts on the distribution system
 - Some clusters of net metering systems are causing power quality issues for neighboring non-net metering accounts including but not limited to flicker, high or low voltage, and reverse power flows.
 - As additional penetration of net metering systems are allowed on feeders, these problems become worse without mitigation.
 - Some solutions to these issues include localized energy storage, GPA control of customer inverters, and intelligent charging to support PV (EV's and distributed storage).
 - Leverage intelligent charging EV's to accommodate base load variability related to PV and reduce generation curtailment.

Volume 5 *(continued)*Medium-Range Distribution Plan

- Scope Items 6 & 7
 - Volt-Var Optimization/Conservation Voltage Reduction optimization typically result in savings on both the customer side of the meter as well as on the distribution system (system losses/fuel savings)
 - Savings typically are concentrated on the customer side of the meter.
 - Deferred cost of infrastructure (medium voltage equipment), by leveraging the voltage profiles and consumer inverters, additional net benefit of VVO can be gained by using existing customer assets

Medium Range Distribution Plan Scope

Scope Item	Scope Description	New Schedule
1	A System Assessment for the Advanced Grid Analytics (AGA) software application that uses Smart Meter data and GPA's GIS model to perform various distribution system analysis (GPA has several modules of ADA installed)	11/12/21
2	Using Landis+Gyr AGA Network Model Validator to analyze GPA feeder GIS data input to the AGA models and recommend corrections as required.	11/12/21
3	Using AGA Asset Loading to perform load flow studies and find system issues such as transformer overloads.	2/24/22
4	Using AGA Planning Case Studies to analyze Distributed Renewable Energy Intermittency and Voltage Issue Elimination or Management.	2/24/22
5	Using AGA Voltage Visualization to perform a System Wide Voltage Analysis Study.	2/24/22
6	Using AGA Planning Case Studies to perform a Volt/VAR Optimization Study	2/24/22
7	Using AGA Capacity Contribution, Voltage Visualization, and Planning Case Studies to perform a Conservation Voltage Reduction (CVR) Study	2/24/22
8	Using AGA Capacity Contribution and Planning Case Studies to perform a Demand Response Study	2/24/22
9	Perform an Automated Switching and Communicating Fault Circuit Indicator Study	11/12/21
10	Consolidate the different Scope Reports into a consolidated report	3/9/22 *Pending feedback after delivery of the individual reports above

• Schedule for the 6 substations (22 feeders) in scope: Apra (4 feeders), Dededo (3 feeders), Harmon (4 feeders), Pagat (4 feeders), San Vitores (4 feeders), Yigo (3 feeders)

Volume 6

Information/Operation Technology Plan

The IT/OT Technology Plan is a joint effort between GPA and GWA supporting digital transformation through consolidation of Information and Operations Technology (IT/OT) services and responsibilities across GPWA. GPA and GWA hired Sheffield Scientific to assist GPA and GWA develop the IT/OT Technology Plan.

The principal thrust of Volume VI is developing a GPA/GWA Information Technology (IT) Shared Services Model to increase the operational efficiency and effectiveness of the IT organization for creating a governance, people, process, and technology infrastructure that delivers core IT services across both power and water divisions.

This report advances digital transformation for GPWA. To date, GPA and GWA have taken the initial steps to digitalize their business front ends to provide a deeper level of seamless customer service. By taking the next step of digitalizing backend operations through digital shared services, they can expand efficiently, achieve significant time savings, and avoid outsourcing.

Volume 6 (continued) Information/Operation Technology Plan

Volume VI provides GPWA IT with roadmap to a future state with a connected and integrated efficient IT Shared Service Model providing consistent services, standards, and technology through a common IT roadmap. A concise set of 38 recommendations exist for the following areas:

- Network Infrastructure
- Security Policies and Procedures
- Applications and Software
- Operational Analysis and Network Future Design

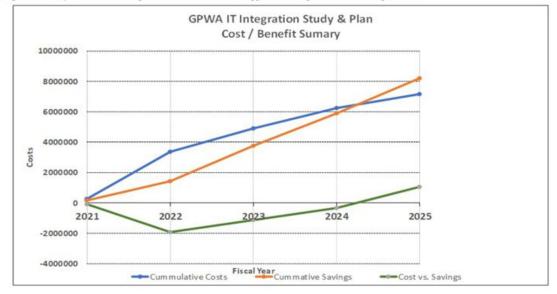
IT Integration Study & Plan Business Case Data Summary





	2021	2022	2023	2024	2025
Total Costs	\$262,500	\$3,092,080	\$1,535,380	\$1,350,700	\$914,700
Capital Costs:	\$262,500	\$1,391,100	\$620,680	\$436,000	\$0
O&M Costs:	\$0	\$1,700,980	\$914,700	\$914,700	\$914,700
Total Savings	\$164,580	\$1,259,444	\$2,346,584	\$2,126,444	\$2,311,304
Capital Savings:	\$164,580	\$780,000	\$1,469,060	\$1,340,040	\$1,529,900
O&M Savings:	\$0	\$479,444	\$877,524	\$786,404	\$781,404
Cummulative Costs:	\$262,500	\$3,354,580	\$4,889,960	\$6,240,660	\$7,155,360
Cummulative Savings:	\$164,580	\$1,424,024	\$3,770,608	\$5,897,052	\$8,208,356
Costs vs. Savings:	-\$97,920	-\$1,930,556	-\$1,119,352	-\$343,608	\$1,052,996

^{*} Savings are currently based on an average between conservative and aggressive savings for a GPWA LT organization



Cost versus
Savings for IT
Integration
Projects and
Organization
Restructure

Volume 7

Strategic Plan

The Strategic Plan is a based on the common results of discussions over time which address GPA's mission and vision. The Mission, Vision, and Critical Success Factors /CCU Key Performance Indicators (KPIs) have not changed.

Over the next 10 years, GPA should strive to achieve goals that will improve service to our customers. These include eliminating underfrequency load shedding, reducing greenhouse gas emissions, obtaining better bond ratings, and achieving operational effectiveness across all GPA activities. These goals can be categorized into 5 general strategic objectives:

- Grid Transformation
- Customer Experience Transformation
- Affordability Transformation
- Digital Transformation
- Investments in Foundational Infrastructure

GPA GRID TRANSFORMATION SOLUTIONS TOWARD A HIGHLY RESILIENT, RELIABLE, AFFORDABLE AND HIGH RENEWABLE ENERGY PRODUCTION GRID



Charge/Discharge-Anytime Battery Energy Storage Systems (BESS) - Provides spinning reserve and frequency regulation. Greatly improves grid response to FIDVR, duck curve ramp ups, and excess solar PV production events. Provides other grid services.



Smart Grid (SG) - Advanced technology for getting the right information to the right people or systems at the right time to make the right strategic and operational decisions.



Grid Controller - Optimizes all resources to provide the most benefit at the least cost. Improves system stability and system economics.



Flexible Efficient Generation - Better follows the changes in demand and available generation online especially when large intermittent sources of power are on the grid. Reduces power rates.



Energy Efficiency - Energy efficiency has a much higher rate of return than just simply installing solar PV. Putting energy efficiency first lowers energy costs for everyone.



Solar Irradiance Sensor Network - Provide real-time estimates of solar PV power production. Forecast solar PV power production. Track cloud cover.



Energy Shifting Battery Energy Storage Systems (ES BESS) - Decreases Excess Solar PV Production Events by storing 100% of energy for nighttime use; Replaces expensive production from peaking generation.



Time-of-Use (TOU) Rates - Provides incentives for customers to change their electricity-use behavior to match the needs of the grid.

Daytime Charging Electric Vehicles (EV) - Prevents curtailment of synchronous generation

production events when solar PV production is

high and daytime loads are low. Slows growth of system peak deferring expensive investments

and solar PV during excessive solar PV

for new capacity.



System Protection - Improve System Protection to operate in an environment with less synchronous generation and more inverter based resources.



Demand Response (DR) - Adjusts customer demand up or down however needed by the grid.

Synchronous Condensers (SC) - Provides

Short-Circuit MVA to power system to keep the

grid stable, prevents grid-tied inverter cessation,

improves fault response and voltage, and allows

GPA grid to operate with 100% renewable energy.



Microgrids - Using synchronous generators and Solar PV + energy-shifting battery energy storage systems with grid forming capability to provide power after natural disasters such as typhoons especially in southern Guam.



Improving Generator Reliability - Improving GPA generator availability results in serving more load using less generation. It also significantly lowers energy costs.



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GPA CUSTOMER EXPERIENCE TRANSFORMATION SOLUTIONS



Guam Transportation Electrification - As customers switch to electric vehicles, their relationship with GPA becomes more critical. Designing the charging experience to delight customers will improve GPA customer experience.



Customer Outreach - Customers want to be informed about GPA outages, rates, and other GPA matters. Building this outreach improves GPA's relationships with its customers. It also defuses disinformation.



Smart Grid (SG) - Smart Grid systems can reduce the number of customer outages improving the GPA customer experience.



Energy Shifting Battery Energy Storage Systems (ES BESS) - Using BESS to provide spinning reserve and frequency regulation improves power quality and reduces customer outages improving the GPA customer experience. GPA addition of renewable energy improves customer satisfaction with GPA as a company.



GPWA Information/Operations Technology (IT/OT) Consolidation - Reduces IT/OT capital and operating costs for GPA and GWA. Reduces costs passed onto customers.



Conversion of Manual Customer-Facing Processes to Digital Ones - Customer expectations for service are being driven by the telecom, virtual commerce, and entertainment industries. Going digital improves the GPA customer experience. Going digital includes online payment portals, mobile apps, and Energy Sense online rebate application processing, and more.



Conservation Voltage Reduction (CVR) -Reduces distribution system line losses lowering LEAC rates. Reduces customer energy consumption.



Energy Efficiency - Energy efficiency has a much higher rate of return than just simply installing solar PV. Customers who get rebates or who have better knowledge of the Energy Sense Appliance Rebate Program do not rate GPA as a company unsatisfactory. Getting rebates is a highly positive customer experience.



Energy Sense Program Outreach - Customers want to be informed about energy efficiency, renewable energy, and ways to lower their power bills. Building this outreach improves GPA's relationships with its customers.

GPA AFFORDABILITY TRANSFORMATION SOLUTIONS



Guam Transportation Electrification - Electric vehicles charging from the grid will increase GPA revenues allowing GPA to reduce rates for everyone. Reduces GPA fleet expenses for fuel and maintenance.



Conservation Voltage Reduction (CVR) -Reduces distribution system line losses lowering LEAC rates. Reduces customer energy consumption.



GPWA Information/Operations Technology (IT/OT) Consolidation - Reduces IT/OT capital and operating costs for GPA and GWA. Reduces costs passed onto customers.



Improving Generator Reliability - Improving GPA generator availability results in serving more load using less generation. It also significantly lowers energy costs.



Energy Efficiency - Energy efficiency has a much higher rate of return than just simply installing solar PV. Putting energy efficiency first lowers energy costs for everyone.



LNG Infrastructure and Supply - Greatly reduces fuel costs. Significantly lower greenhouse gas emissions. Enables Guam to bunker large gas-fueled ships. Enables Guam to be a regional natural gas hub. Increases GPA revenue streams that can be used to reduce base rates.



Daytime Charging Electric Vehicles (EV) -Slows growth of system peak deferring expensive investments for new capacity resulting in lower future energy costs.



Flexible Efficient Generation - Better follows the changes in demand especially when large intermittent sources of power are on the grid. Reduces LEAC rates especially when using natural gas.



Energy Shifting Battery Energy Storage Systems (ES BESS) - Decreases Excess Solar PV Production Events by storing 100% of energy for nighttime use; Replaces expensive production from peaking generation. Lowers and stabilizes LEAC rates.



Smart Grid (SG) - Smart Grid systems such as Mobile Workforce Management, Advanced Grid Analytics, Distribution Automation increase work productivity reducing energy costs passed onto customers.

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GPA DIGITAL TRANSFORMATION SOLUTIONS

GPWA Information/Operations Technology (IT/OT) Consolidation - A secure, reliable, and responsive IT/OT infrastructure supported by a skilled and capable staff is critical for supporting GPA's Strategic Transformation.

Creating Organizational Alignment & Fit -



Business Analytics - The Smart Grid, Energy Sense Web-sites, Internet of Things (IOT) and Third-party content providers are creating more data and information that any individual(s) can analyze the business value for GPA. The use of artificial intelligence engines with defined logic provides GPA the ability to respond in a proactive manner to grid conditions to determine the best resolution for customers.



Energy Sense Program Outreach - Customer expectations are driven by the customer connection capabilities of the telecom, streaming entertainment, and virtual shopping industries. Building this outreach through relevant content improves GPA's relationships with its customers. The conversion of the manual Energy Sense Rebate Application process to a digital platform supports the objective of digital transformation.





Smart Grid (SG) - The technology enabler for driving operational improvements and efficiencies. The Smart Grid makes possible the transition of GPA manual processes into information-based, digitally enhanced automated processes. Use of smart controls and sensors improves reliability, resiliency, and affordability.



Simulation and the Digital Twin - In response to extreme natural events, the ability to work remotely along with utilize real-time simulation through a Digital Twin of an energy system allows for continuous learning to GPA engineers and operators.



GPA FOUNDATIONAL INFRASTRUCTURE SOLUTIONS



Human Resource Rebalancing - GPA will soon retire several power plants beginning with Cabras 1&2. GPA must plan to rebalance its workforce considering the displacement of these employees. This must be well in advance of the actual plant retirements.



Creating Organizational Alignment & Fit Creating a more resilient, streamlined, and
effective organization through process mapping
& re-engineering. Incorporating and leveraging
information technology into business processes
creates the digital transformation shift.



Smart Grid (SG) - Smart Grid is the grid's information superhighway driving operational improvements and efficiencies.



Grid Transformation Solutions - Without completion of Grid Transformation Projects, the grid will not be stable, reliable, resilient, and affordable.



Cyber and Physical Security (CAPS) - Secure GPA's cyber resources. Secure GPA substations, power plants, and other critical infrastructure facilities.



Aging T&D Infrastructure Replacement - Like all other U.S. power utilities, GPA must plan for replacing its aging infrastructure. GPA should invest in an Asset Management ERP capability to guide and manage the replacement process.



GPWA Information/Operations Technology (IT/OT) Consolidation - A secure, reliable, and responsive IT/OT organization and infrastructure is critical for supporting GPA's Strategic Transformation.



Succession Planning - With over 50% of its workforce eligible to retire within five years, GPA must hire and train new employees to take over. GPA must update its job descriptions and eligibility requirements moving these jobs into the 21st century. Many jobs will have changed because of digital transformation and technology.



Improving Generator Reliability - Achieving 95% GPA generator availability is a cornerstone for grid resiliency, reliability, and affordability.

Volume 8

Electric Vehicle (EV) Roadmap

- This Volume discusses the electrification of vehicles on Guam and the role GPA should play in order to plan and manage energy use to minimize its impact on the grid.
- With automakers releasing new electric vehicles, an Electric Vehicle Roadmap addresses the potential take off on electric vehicle sales locally by evaluating forecasted local sales, requirements for charging stations, new policies and rate incentives, as well as planning activities for execution and marketing.
- EV charging loads can have a great impact on system peaks. Incentivizing or controlling charging at more appropriate times during the day will avoid need for additional generation and could improve grid efficiency. GPA agrees with the Smart Electric Power Alliance (SEPA) recommendation that utilities avail themselves of EV Managed Charging Services.

Survey of Local Car Dealerships Shows New Electric Vehicles Options

Dealerships	AK	CarsPlus	Nissan	Triple J	Prestige
EV sold to date		25	32		
EV Brands/Models		Hyundai Kona EV	Nissan Leaf Hatch back with 220		
Currently for Sale		nyunuai kona Ev	mile range		
	Chevrolet Bolt EV &		Nissan Leaf Hatch back with 220	Ford, Kia, Volvo, Honda, &	
Start Date of new EV	EUV, January 2022	Hyundai Kona EV,	mile range, Now	Commercial Vehicles, Q1	Subaru Solterra SUV, 2023
Brands/Models on Sale	BMW i4 & iX, January	Now	Ariya SUV with greater than 300	2022	Subdru Soilerra Sov, 2025
	2023		miles range, Q1 2022	2022	
Type of charging	Public charging stations	Covered parking	definitely access points around	High traffic areas such as	Adequate locations of charge
infrastructure do you	at high traffic areas e.g.,	area for fast	the island would be needed to	restaurants, Malls,	stations that either private
anticipate may be needed	shopping malls, banks,	charge Level 3	accommodate the growing	Government Agencies,	entities or the government
to accelerate EV adoption?	and hotels	systems	penetration of electric vehicles.	Schools & Universities	operate.

Recommendations

- Electric Vehicle Roadmap
- Procure EV Managed Charging as a service to control EV Charging and mitigate impacts on distribution system.
- Explore behavioral incentives to shift EV charging load such as Time of Use (TOU) rates
- Execute Customer Outreach on EV including strategies on reducing charging costs and preserving battery life.
- Work with Guam Dealerships on rolling out public and Dealership charging infrastructure. GPA is already engaging dealerships and candidate providers of EV charging systems.
- Using AGA, investigate EV impacts and fixes as a guide to infrastructure placement.

Volume 9 Net Metering Plan

This volume provides a review and recommendation on appropriate penetration levels of customer installed solar, revisions to the current rate methodology, and to address PUC Docket TBD

The increase in customer installed solar has created system reliability concerns and financial impacts for **non-NEM** customers.

The study recommends the following:

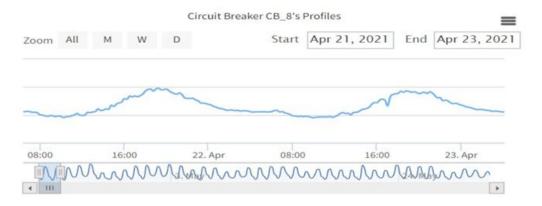
- Solar penetrations on each feeder should not exceed 30% of the minimum respective feeder daytime load
- Above 30%, new solar installations should require "smart" inverters and adequate battery storage capacity
- A value of solar rate methodology should be used to reimburse customers for solar generation
- Modify the current NEM rate methodology to either a Net Billing or Buy All/Sell ALL methodology that more accurately reflects the benefits of solar generation to GPA
- Grandfather current NEM customers for a period of 10 years

Distributed Energy Resource (DER) Impact Study

Agenda

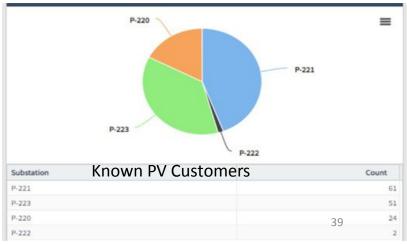
- Existing State APRA Substation
- Reserve Flow Impact
- Power Quality Impact
- Consumer Stress Impact
- Corrective Solutions

Existing State

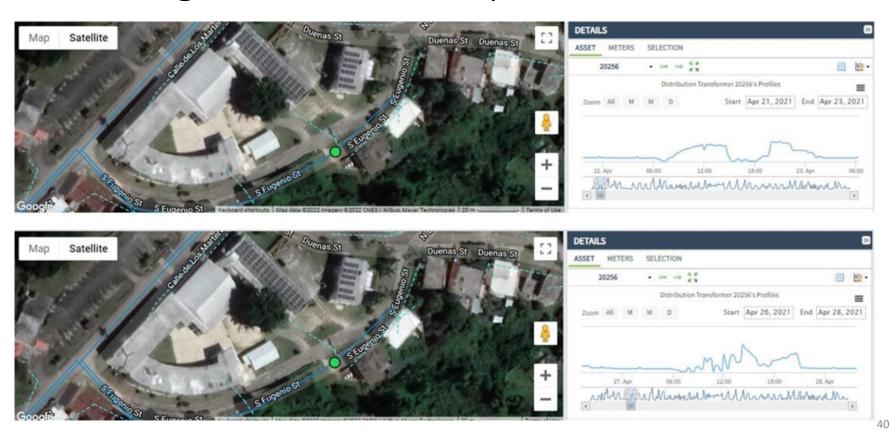


Peak Loading on this substation occurred at 21:00 04/08/2021 PV Customers Account for Approximately 1.33 MW (hidden or masked load)

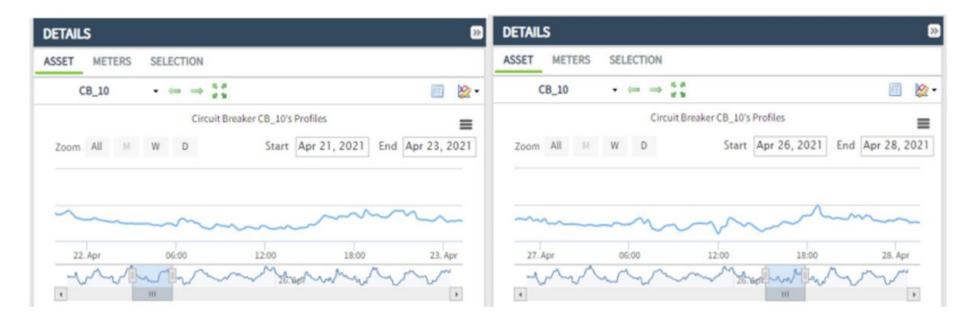




Existing Customer Example



System Example P-222



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Reverse Flow

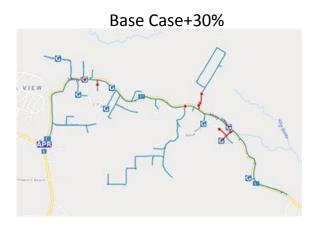
As part of the assumptions of this study we used an assumption of 1KW for the unknown values per connected generation site. This is likely significantly higher and will drive the need to moving forward with recommendations earlier.

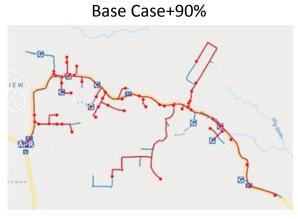


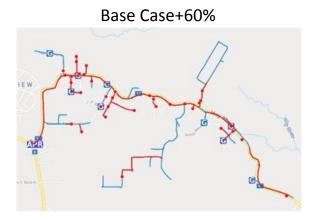
Reverse Flow Impact – Host Capacity



Detailed is the progression from the BC system host capacity through 30, 60, and 90. Note that on this circuit as low as 30% PV host capacity begins to cause reverse flow challenges.

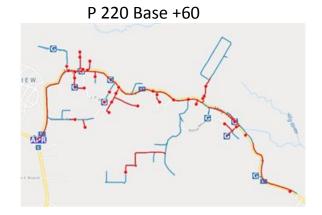




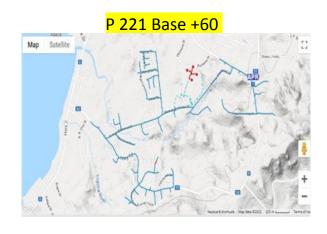


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Reverse Flow Impact



All circuits need to be examined individually, however for APRA at 60% PV host capacity reverse flow will overtake some portions of the respective circuits. The impact varies between circuits, but all would require hardening to prevent risk to protection devices or power quality issues associated with PV fluctuations.







256 core distribution assets will see some level of reverse flow at 60% normalized host capacity. This includes secondary/primary conductor, transformers and protection equipment. By focusing management on the transformer a reduction of reverse power flow occur.⁴⁴

Power Quality

Risks of swell voltage and voltage flickers



PV Impact Contribution to Over Voltage



There is a minimum of 36 transformer banks where power quality issues associated to overvoltage from PV is causing challenges for multiple customers

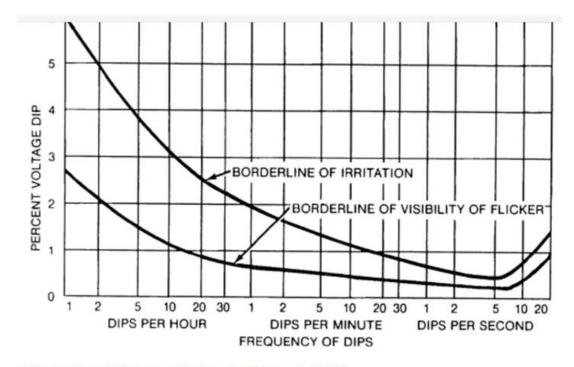
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PV Sites Causing Voltage Swell on Neighboring Customers

Meter	Service Location	Transformer	Feeder	Substation	Highest Voltage%	Day Count
2364694	79361	26814	P-223	APRA	123.26	85
2364383	123862	31125	P-221	APRA	123.11	86
2335232	80314	26634	P-221	APRA	122.99	84
2361814	110564	29227	P-223	APRA	122.9	86
2338264	80234	26233	P-221	APRA	122.58	77
2009819	79359	29223	P-223	APRA	122.43	63
2016613	80216	19136	P-221	APRA	122.07	83
2801563	79400	29223	P-223	APRA	121.81	84
2016612	80221	19136	P-221	APRA	121.75	85

Complete list in the DER and Voltage Visualization reports. Note that the list is based on a min of 15 occurrences and 2+ customers.

Flicker Consumer Irritation



8 The Modified GE Flicker Curve Published in IEEE Standard 141[4].

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Voltage Flicker



Feeder	Percentage Change	Number of Nodes
P 220	VISIBLE RANGE / ELEVATED STRESS LEVEL	308
P 221	VISIBLE RANGE	6
P 222	NEARING VISIBLE RANGE	44
P 223	VISIBLE RANGE / ELEVATED & BEYOND PEAK STRESS	4442

Options for Corrective Action

Distributed Storage Support for PV and DR

Feeder	Average Size Per Distribution Transformer Storage Size	Number of Customers
P 220	32 KW	29
P 221	34 KW	1
P 222	22 KW	2
P 223	13 KW	25
APRA	23 KW	57

Net: 1.3 MW Support

Batteries will smooth the system variability and reduce the voltage fluctuations and provide some stability to PV production dependencies on the weather. Implementing storage on the load side of the distribution transformer reduces the increase burden on protection equipment. A typical 7KW battery bank for GPA consumers coupled with incentive programs that allow GPA to program voltage profiles and PF curves as well as control to charge and discharge to support optimizing management of renewables.

Options for Corrective Action

EV Charging station and support of DR

Feeder	Assuming Automated Control of L2 Chargers	Number of Customers
P 220	8 KW	464
P 221	8 KW	20
P 222	8 KW	12
P 223	8 KW	164
APRA	8 KW	660

Net: 1.3 MW Support (assumes 25% availability)

Implementing a centralized and automated EV charging control solution can also provide the virtual power plant (VPP), and controllable load capacity needed to manage variability associated with the high PV penetration in the GPA service territory. Level 2 charge programs can support from 8-11.5KW support depending on the service voltage.

APRA

Solution Summary:

- Focus on deploying inverter control for PV production and storage at the identified locations in the study.
- If target Inverter or storage control is not adopted see which customer sites are open for load control, specifically EV charging solutions that can supplement load curve flattening, and shifting load volatility.



Issues for Decision

Resolution No. 2022-08:

Relative to Approval of the 2022 Integrated Resource Plan (IRP)

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

The IRP is a 10 year plan that addresses load grow that reduced and lower rates on a sustainable basis, operational efficiencies, environmental compliance, renewable portfolio mandates and other GPA strategic initiatives. The approval of the plan allows GPA to focus near term activities on the recommendations from the IRP.

Where is the location?

Various locations

How much will it cost?

In addition to renewable energy contracts for Phase III – Phase V renewable acquisition that would offset fuel costs, the IRP identifies \$233M of capital projects that will support the recommendations for renewable integration. As projects are developed they will still obtain the necessary contract protocol approvals from CCU and PUC as required. Depending on the eventual nature of the procurement, this amount may change. These project may be bid as capital asset (GPA ownership) or O&M service (Contractor ownership) projects.

When will it be completed?

The IRP is a 10-year CIP and O&M plan analyzed over a 20-year planning horizon.

What is its funding source?

Fuel revenue funds for renewable energy contracts, revenue funds for capital improvement projects.



CONSOLIDATED COMMISSION ON UTILITIES

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

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RESOLUTION NO. FY2022-08

APPROVAL OF THE 2022 INTEGRATED RESOURCE PLAN

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WHEREAS, the Integrated Resource Plan (IRP) is a process that evaluates the need for new generation resources to meet future load growth at reduced and lower rates on a sustainable basis, address environmental requirements and optimize costs and sets the stage for projects and activities over the next 10 years; and

WHEREAS, since 2008, the common strategic initiatives through the past IRP's have been:

- Fuel Diversity, fuel supply risk, and renewable energy;
- Supporting the electric power service requirements for the impending Department of Defense (DOD) build-up and its economic consequences;
- Acquisition of new electric energy supply and its implication on human resource requirements and the Authority business model; and

WHEREAS, through the 2008 IRP recommendations for renewable energy, GPA was able to contract its first renewable energy contract and initiate evaluation of fuel diversification to reduce costs; and

WHEREAS, from the 2012 IRP and its update in 2016, the IRP also considered and addressed environmental compliance requirements which have resulted in the contracting of additional renewable energy contracts and the new Ukudu Power Plant as well as the fuel conversion and retirement plans for Cabras and Piti units; and

WHEREAS, with the Ukudu Power Plant set for commissioning in 2024 and GPA commitment to a 50% Renewable Portfolio Standard by 2030, the 2022 IRP focuses on to how to achieve additional operational savings through efficiencies and to implement projects and programs to support these as well as to support grid security, stability and reliability while also achieving reduction in greenhouse gas emissions; and

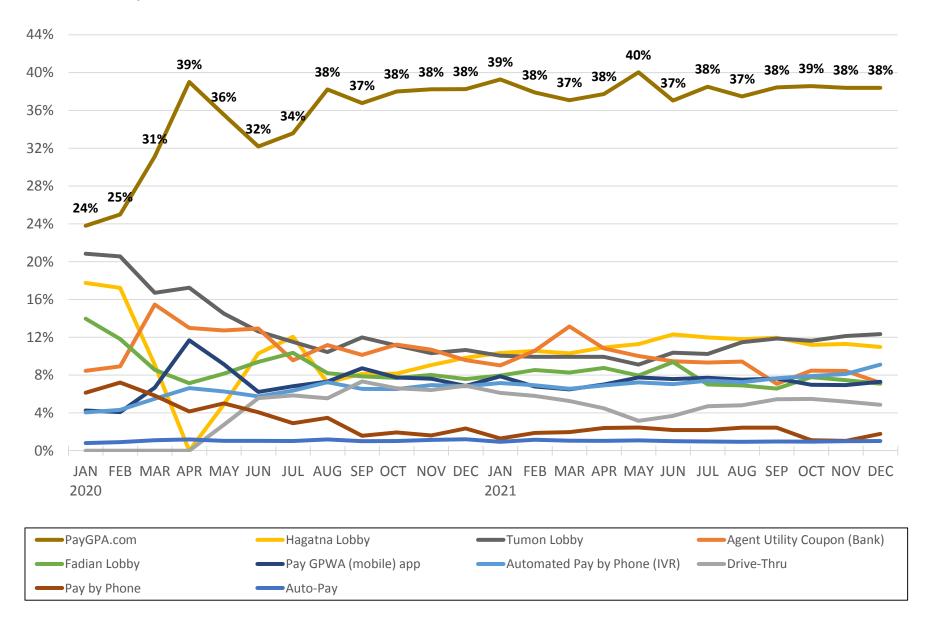
WHEREAS, the 2022 IRP recommends the following:

- No additional synchronous generation resources are required in the next 10-20 year with New Ukudu
 Power Plant (CCCP & Reserve Facility) contingent on the amount of synchronous generation retired;
- Initiate procurement for renewable energy contracts for additional annual 300,000 MWH by 2025 and another 300,000MWH by 2029 to achieve 50% Renewables by 2030;

30	•	Execute portfolio of about \$233M in project	s and initiatives for integration of renewables;		
31	Continued analysis of distributing circuits to determine projects necessary to mitigate negative.				
32		impacts attributed to uncontrolled solar roc	f top generation;		
33	•	Increase optimization of infrastructure to en	nhance and improve operations and reduce costs;		
34	•	Continue to evaluate and implement demai	nd side management programs and programs to address		
35		EV charging to reduce impacts on peak sys	tem, harmonics, 3-phase power unbalance, and power		
36		quality;			
37	•	Evaluate and implement charging facilities	s as necessary to support growth in electric vehicle		
38		utilization;			
39	•	Implement IT/OT Shared Services Transforn	nation between GPA and GWA to support GPA increased		
40		IT operation; and			
41		WHEREAS, the review and approval of the	IRP allows dialogue between GPA, CCU and the Public		
42	Utilitie	es Commission and an understanding and reas	oning of the GPA project planning and activities over the		
43	next 1	0 years;			
44		WHEREAS, the approval of the IRP does not	waive necessary procurement or contract protocols that		
45	may re	equire CCU and PUC approvals and GPA will co	ontinue to follow these processes as required.		
46					
47		NOW THEREFORE, BE IT RESOLVED, by t	he CONSOLIDATED COMMISSION ON UTILITIES as the		
48	goverr	ning body of GPA, and subject to the review ar	nd approval of the Public Utilities Commission as follows:		
49					
50	1.	The General Manager of the Guam Power	Authority is hereby authorized to submit the IRP to the		
51		PUC for review and approval.			
52					
53		RESOLVED, that the Chairman of the Con	nmission certifies and the Board Secretary attests the		
54	adopti	on of this Resolution.			
55					
56		DULY and REGULARY ADOPTED AND APPR	ROVED THIS 25TH DAY of JANUARY, 2022		
57					
	Certified by:		Attested by:		
	JOSE	PH T. DUENAS	MICHAEL LIMTIACO		
		person	Secretary		
	Cons	olidated Commission on Utilities	Consolidated Commission on Utilities		

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66	I, Michael Limtiaco, Secretary for the Consolidated Commission on Utilities (CCU), as evidenced by
67	my signature above do certify as follows:
68	
69	The foregoing is a full, true, and correct copy of the resolution duly adopted at a regular meeting of
70	the members of Guam Consolidated Commission on Utilities, duly and legally held at the meeting place
71	properly noticed and advertised at which meeting a quorum was present and the members who were
72	present voted as follows:
73	
74	Ayes:
75	· ————————————————————————————————————
76	Nays:
77	
78	Absent:
79	
80	Abstain:

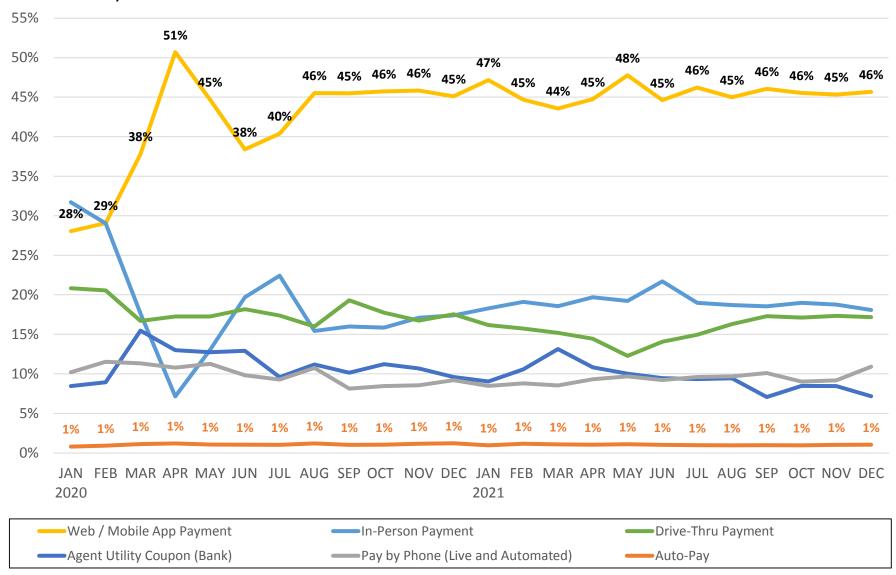
Percentage of transactions by collection point January 2020 - December 2021



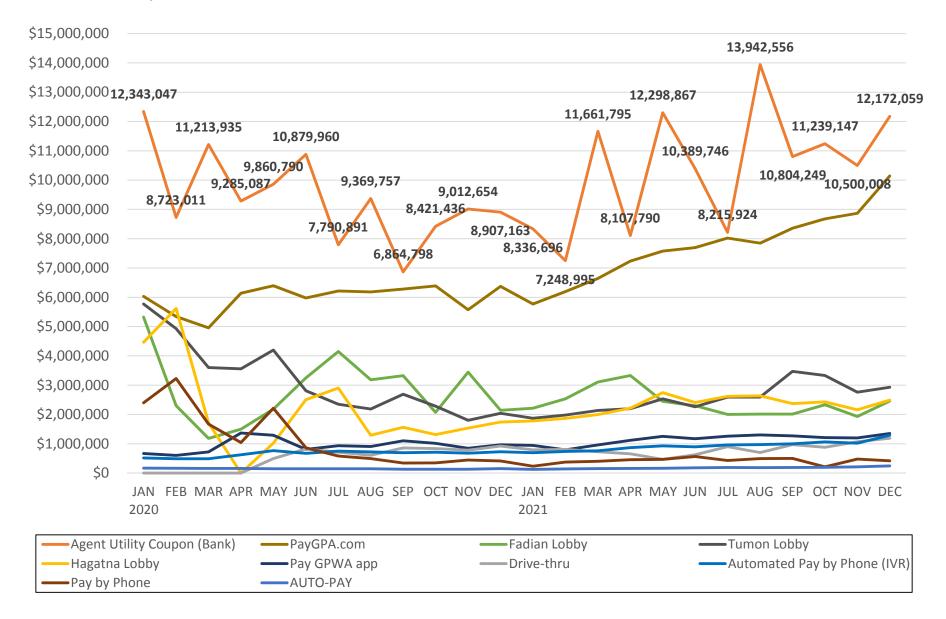
Percentage of transactions by collection platform type

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

January 2020 - December 2021



Dollar amount collected per collection point January 2020 - December 2021



Hagatna

2. Copy of Bill

1. Acct/Billing Question

Top 5 Reasons for Visit by Location

Acct/Billing Question

Tumon

Acct / Billing Question

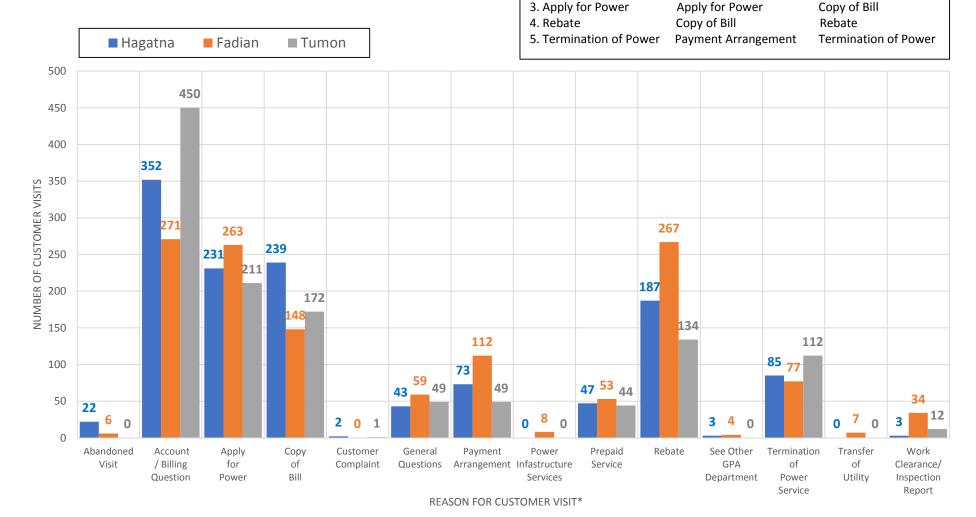
Apply for Power

Fadian

Rebate

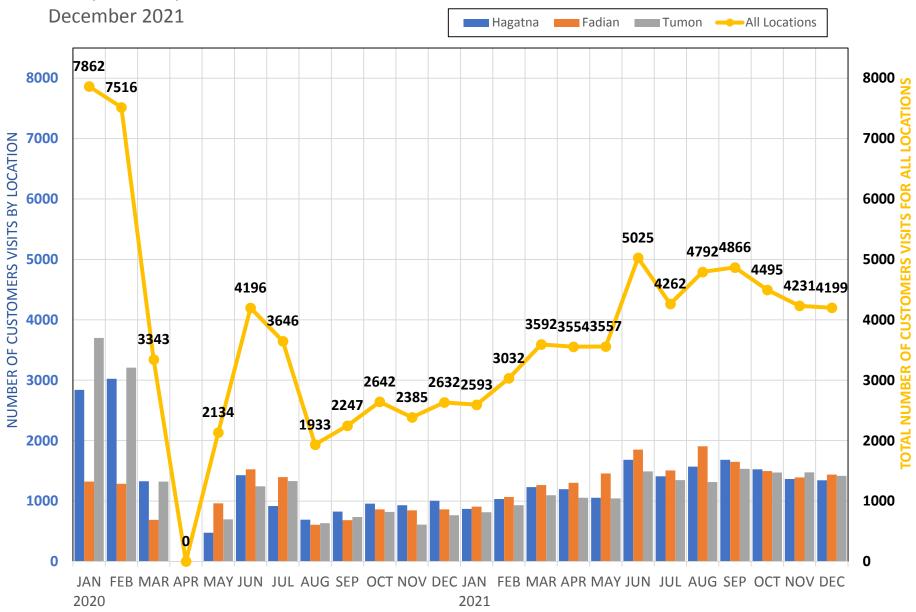
Customer Service (Administration Division)

Reason for Visit by Location December 2021



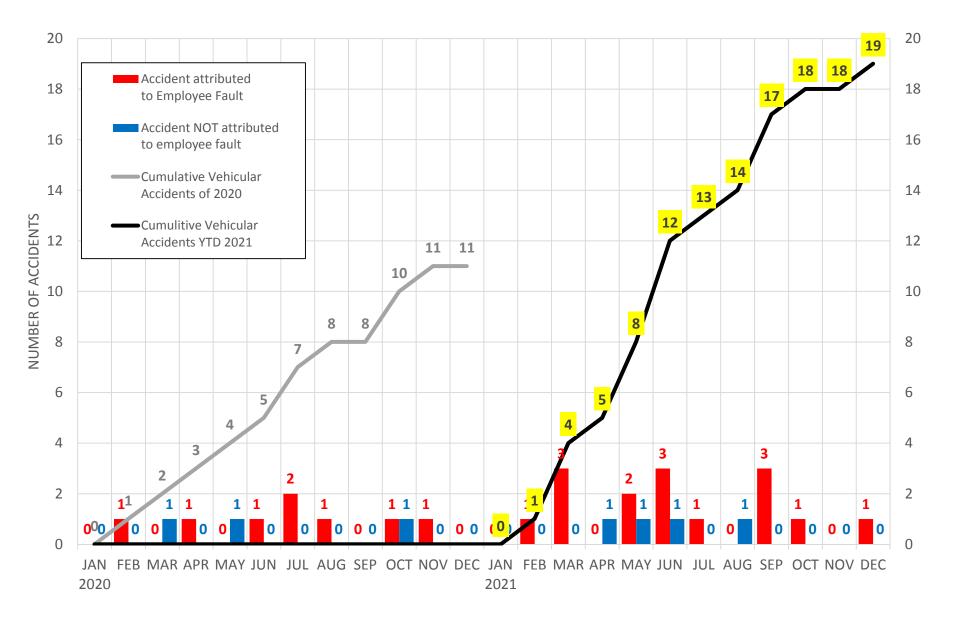
^{*}Each count per **Reason for Customer Visit** represents a customer who visits one of our lobbies. During their visit, the customer will only be counted once, regardless of the number of services provided to the customer. Their reason for visit will be coded based on their initial or primary reason 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.

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



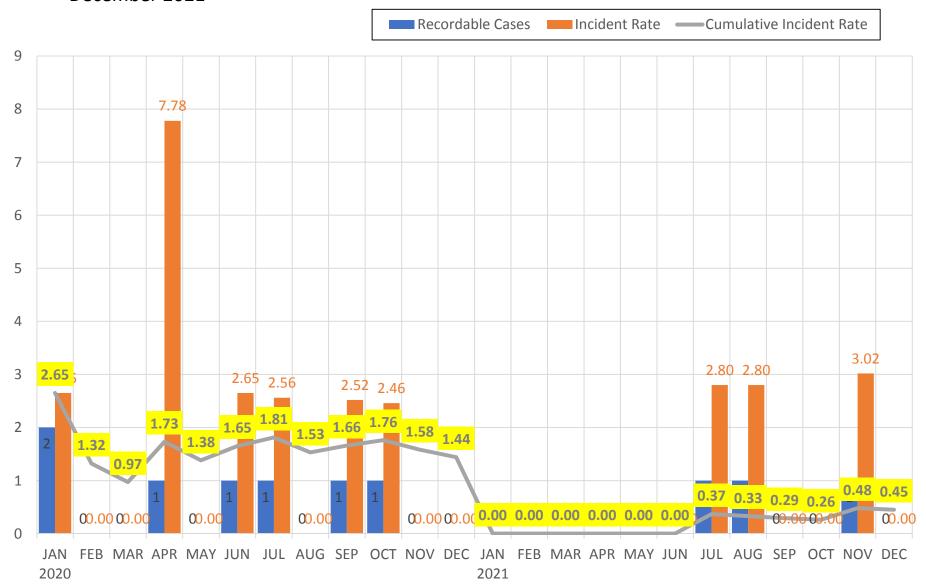
Safety (Administration Division)

Vehicular Accidents December 2021



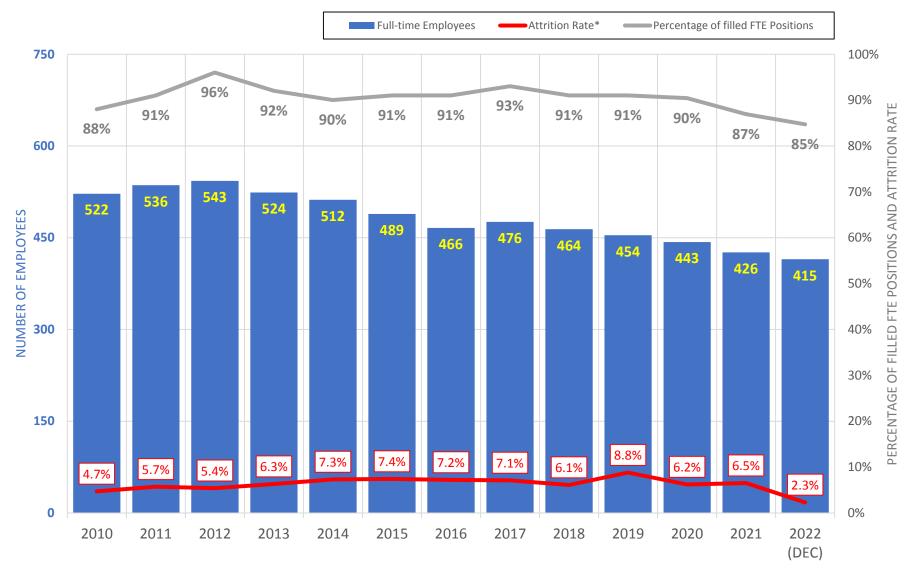
Safety (Administration Division)

Incident Rate December 2021



Human Resources (Administration Division)

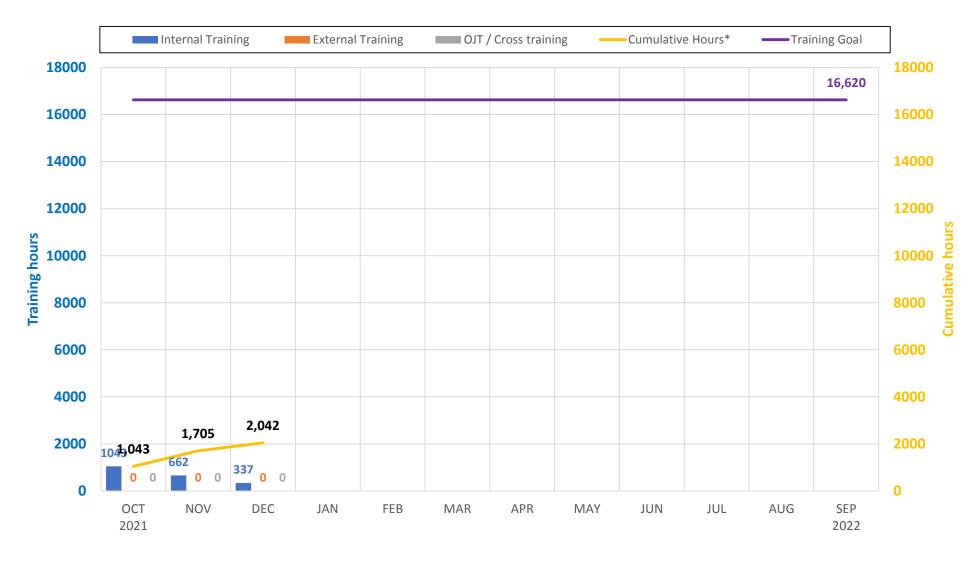
Recruitment Analysis
December 2021 (FY 2022)



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

Human Resources (Administration Division)

Cumulative Training Hours for Fiscal Year 2022 as of December 2021



^{*}For fiscal year 2022, the training goal has been set at 16,620 hours, 2% of total straight (831,013 hours) worked for FY 2021. As of December 2021, GPA has achieved <u>12.29%</u> progress towards its cumulative hours training goal.

Notable RFP monthly status update December 2021

		DATE		STATUS
RFP NO.	DESCRIPTION	ADVERTISTED	RFP Closing	(as of 01/07/2022)
		09/09/2021	10/07/2021	In progress:
GPA-RFP-21-008	Application Support Services	09/16/2021	@ 4pm	Pending bid committee clarification memo
		09/09/2021	09/28/2021	
GPA-RFP-21-011	Archaeological Services for various locations	09/16/2021	@ 4pm	In progress: Evaluation "Best & Final"
	Geographic Information Systems (GIS) Support	10/14/2021	11/12/2021	
GPA-RFP-22-001	Services	10/21/2021	@ 4pm	In progress: Pending price proposal submission
RE-SOLICITATION-	Professional Services for the Maintenance of	12/16/2021	03/17/2022	
GPA-RFP-22-02	the GPA Compensation and Classification Plan	12/23/2021	@ 4pm	In progress

Notable IFB monthly status update December 2021

		DATE	DID.	CTATUS
IFB NO.	DESCRIPTION	DATE ADVERTISTED	BID OPENING	STATUS (as of 01/07/2022)
Re-Bid	Upgrade of Fire Protection & Smoke Alarm	09/14/2021	10/21/2021	In progress:
GPA-001-21	Systems at Manenggon Diesel Power Plant	09/21/2021	@ 10am	Pending bid committee recommendation
		03/18/2021		In progress:
GPA-032-21	Portable Generators (WSD)	03/25/2021	04/20/2021	w/GM as of 08/09/2021
		07/27/2021	08/11/2021	In progress:
GPA-043-21	Protection Relays	08/03/2021	@ 11am	To re-award to A.B.EWomen's Business Cited
Re-Bid	Corrective Maintenance for Wind Turbine	10/28/2021	12/30/2021	In progress:
GPA-044-21	Power Plant	11/04/2021	@ 10am	Evaluation
MS	Petroleum Inspection & Testing Services for	06/10/2021	09/20/2021	In progress:
GPA-046-21	Diesel Fuel Oil #2	06/17/2021	@ 10am	14 Days Protest Period
MS		06/10/2021	10/15/2021	In progress:
GPA-047-21	Bulk Supply Diesel Oil #2	06/17/2021	@ 10am	Pending insurance requirements
		06/17/2021	07/07/2021	In progress:
GPA-048-21	New, 2021 65 Foot 4x4 Bucket Trucks	06/24/2021	@ 11am	Pending Legal Guidance
	Electrical Transient Analyzer Program	10/14/2021	10/28/2021	In progress:
GPA-061-21	(ETAP)	10/21/2021	@ 10am	Pending GM approved Committee Selection Memo
		10/28/2021	11/16/2021	In progress:
GPA-001-22	Pad Mounted Transformer 1500 kVA	11/04/2021	@ 11am	Pending budget certification
		10/28/2021	11/16/2021	In progress:
GPA-002-22	Pad Mounted Transformer 750 kVA	11/04/2021	@ 11am	OP/Status letters sent for mgmt review/approval
		11/09/2021	11/23/2021	In progress:
GPA-004-22	Wire	11/16/2021	@ 10am	Evaluation
		11/09/2021	12/02/2021	In progress:
GPA-005-22	New 2022 50 Ton Trailer	11/16/2021	@ 10am	Pending budget certification
		11/18/2021	12/14/2021	In progress:
GPA-006-22	Pad Mount Transformer	11/25/2021	@ 9am	Pending vendor clarification response
		11/18/2021	12/15/2021	In progress:
GPA-007-22	Pad Mount Transformer	11/25/2021	@ 9am	Evaluation

Notable IFB monthly status update December 2021

		DATE	BID	STATUS
IFB NO.	DESCRIPTION	ADVERTISTED	OPENING	(as of 01/07/2022)
		11/18/2021	12/15/2021	In progress:
GPA-009-22	Pole Mounted Transformer	11/25/2021	@ 10am	Evaluation
		12/14/2021	12/30/2021	In progress:
GPA-010-22	Substation Controller Units	12/21/2021	@ 9am	Committee evaluation scheduled for 01/12/2022
		12/30/2021	02/03/2022	
GPA-011-22	Vacuum Circuit Breaker, 13.8 kV	01/06/2022	@ 10am	In progress
	Diesel Fuel Oil No.2 for GPA's Water		STEP 1	
	Systems Distribution (WSD) and GWA	12/14/2021	02/11/2022	
MS-GPA-012-22	Emergency Generators	12/21/2021	@ 4pm	In progress
	Performance Management Contract for		STEP 1	
	the Guam Power Authority Fuel Bulk	01/06/2022	02/28/2022	
MS-GPA-015-22	Storage Facility	01/13/2022	@ 4pm	In progress
		42/20/2024	04 /42 /2022	
		12/30/2021	01/13/2022	
GPA-017-22	Pad Mounted Transformers	01/06/2020	@ 9am	In progress

Protests and Appeals monthly status December 2021

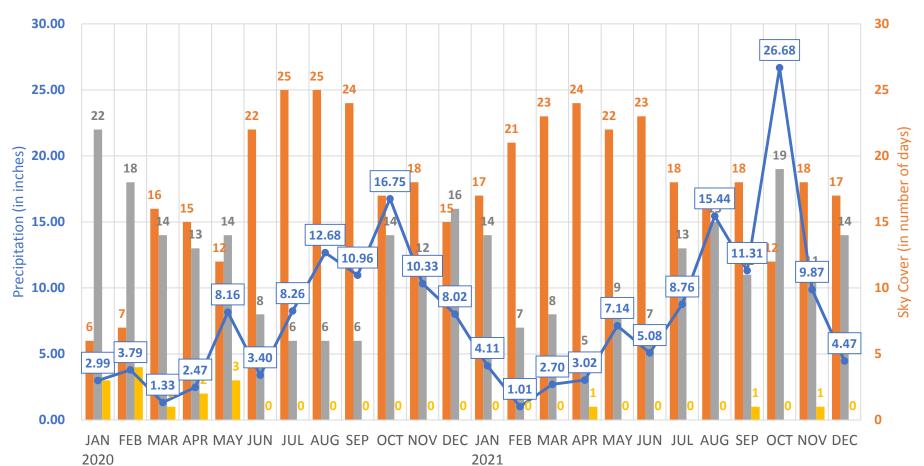
			Protest or		Stay of Procurement	Stay of Procurement	
No.	IFB / MS Bid / RFP	Description	Appeal	Protest filed by:	Issue date	Lift date	Status / Comments
							Roberts Folwer & Visosky
1	GPA-IFB-081-18	2018, 2-wheel steel body step van	Protest	Morrico	06-15-2018		Office filed protest
				Pacific Data			
2	GPA-IFB-043-20	Voice and data services	Protest	System	06-09-2020		
				Pacific Data			
3	GPA-IFB-059-21	Substation network switch	Protest	System	09-09-2021		
		Bolts, double arming, galvanize 5/8"					
4	GPA-IFB-057-21	x 20'	Protest	R&D Marketing	09-10-2021		
5	GPA RFP-21-005	Merchant services	Protest	Bank of Guam	10-04-2021		
		LED Luminaire Unit, 250W		America's Best			Pending legal
6	GPA-052-21	Equivalent	Protest	Electricmart	11-09-2021		determination
				America's Best			Pending legal
7	GPA-054-21	LED Luminaire Unit	Protest	Electricmart	11-11-2021		determination

N	o. IFB / MS Bid / RFP		Protest or Appeal	OPA or Civil Case No.	Notice of Appeal Received date	Notice of Appeal Hearing date	Status / Comments
	, ii b / ivis bia / ivi	Description		OPA-PA-19-010,	neceived date	ricaring date	Status / Comments
				OPA-PA-20-001,			
				OPA-PA-20-007,			
				and Superior			
				Court of Guam			
				Civil Case			Appeal currently at
1	MS GPA-007-18	Renewable energy resource phase III	Appeal	#CV0797-20			Superior Court of Guam
		Fleet and fuel management					
2	GPA-024-21	software services	Appeal	OPA-PA-21-002	07-01-2021	9/7/2021	With merit - to be re-bid
		Professional print, mailing and					Mr. James M Maher, Esq.
		processing services related to utility					Attorney for Appellant
3	GPA RFP-21-002	customer billing	Appeal	OPA-PA-21-012	10-25-2021		Graphic Center

Guam Climate Summary

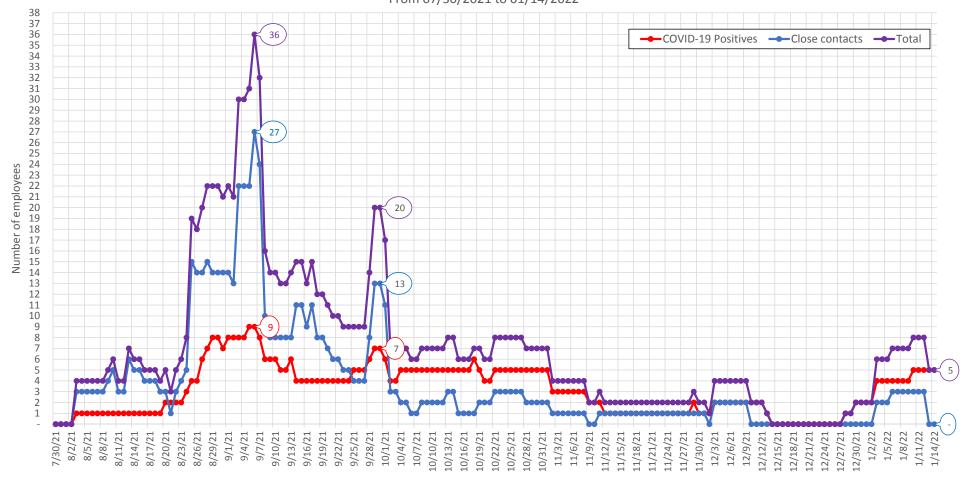
Sky Cover and Precipitation January 2020 - December 2021





55		34,57	emperatu Fahrenh	270	1000000	pitation iches)	Sky Cover (in days)		Weather Conditions (no. of days with)						Weather Event		
Month	Year	High	Mean	Low	Total	Greatest 24-hour	Fair	Partly Cloudy	Cloudy	Thunder storm	Heavy Rain	Rain	Light Rain	Fog	Haze	Name	Day
DEC	2021	87	81.0	72	4.47	2.33	17	14	0	0	6	5	25	0	0	n/a	n/a

GPA Employee Availability COVID-19 count (Positives and Close Contacts) From 07/30/2021 to 01/14/2022



E&TS Divisional Report Summary

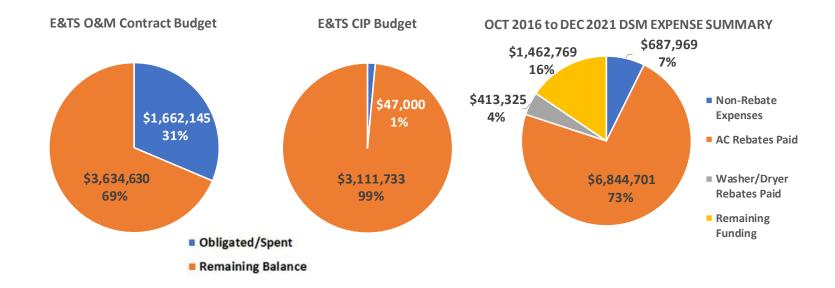
December 31, 2021

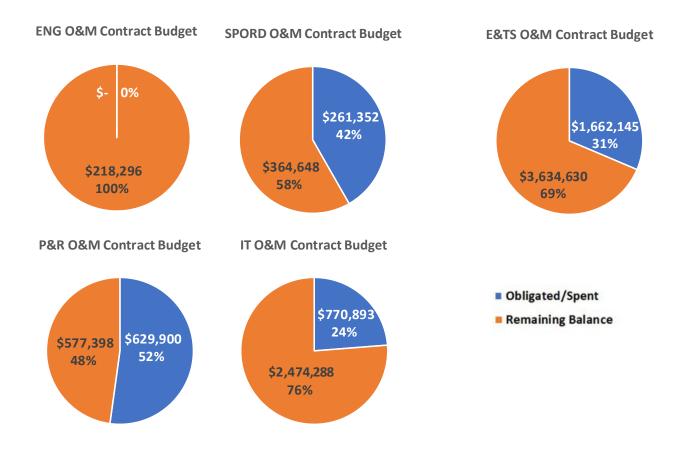
*Data still being gathered for 12/2021

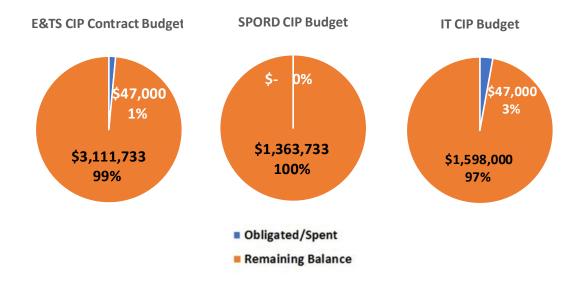
Contents

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

E&TS Budget Execution Performance







FY 2022 Procurement Status

Business Unit			Current T	уре			Current Stati	us		Pla	nned	
	RFP	Bid	Multistep Bid	Total	Resolicited	QBL Established	Evaluation Completed	Associated /NITD	RFP	Bid	Multistep Bid	Total
SPORD		1	1	2				2	2		3	5
Engineering				0								0
SPORD/Engineering				0								0
IT	3	1		4					4			4
P&R		2	1	3			1		1	1		2
Total	3	4	2	9	0	0	1	2	7	1	3	11

Environmental Compliance

P&R Inspections Status Ending December 31, 2021

Inspection Type	Organization Responsibility	Violations Not Remediated	Number
		New Violation Notifications Issued	5
Spill Prevention,	Generation	Remediations Past Due	20
Control, and		Remediations Not Past Due	0
Countermeasure		New Violation Notifications Issued	0
(SPCC)	T&D	Remediations Past Due	3
		Remediations Not Past Due	0
Doot Management		New Violation Notifications Issued	1
Best Management	Generation	Remediations Past Due	9
Practices (BMPs)		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

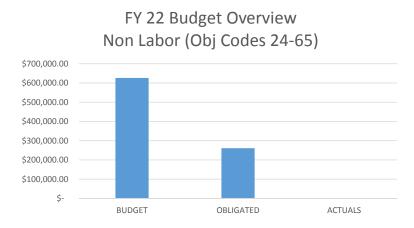
SPORD CCU Report

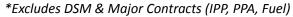
Update thru October 31, 2021

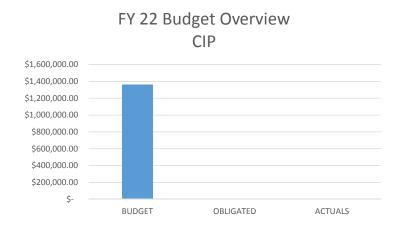
*Data still being gathered for 12/2021

SPORD FY 2022 Budget Status

thru October 31, 2021







SPORD FY 2022 Budget Status

Major Contracts (Non-O&M) thru October 2021

	Budgeted	Obligated			
Contract Description	A mount	A mount	Actuals	F	PO Balance
Fuel Contracts	\$ 238,975,062	\$ 188,032,154	\$ 27,443,118	\$	160,589,036
MEC IPP (Piti 8&9)	\$ 20,542,768	\$ 18,253,110	\$ -	\$	18,253,110
Glidepath Contract					
(Renewable)	\$ 10,210,938	\$ 10,293,842	\$ -	\$	10,293,842

Preliminary and subject to final postings.

SPORD FY 2022 Budget Status

Demand Side Management

Description	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Total to Date
Regular/OT Pay	\$11,348.80	\$22,256.00	\$26,121.83	\$50,715.19	\$47,402.18	\$162,395.40	\$11,296.75	\$331,536.15
Other Contractual	\$28,278.50	\$85,550.05	\$116,977.50	\$3,025.00	-	\$107,854.90		\$341,685.95
Ads & Radio Announcements		-	y.	\$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	\$1,855,550.00	\$55,900.00	\$6,815,901.00
Paid Rebates- Central AC	\$3,400.00	\$8,200.00	\$4,400.00	\$6,500.00	\$2,400.00	\$3,900.00		\$28,800.00
Paid Rebates- Washer/Dryer	\$2,800.00	\$7,425.00	\$57,200.00	\$110,800.00	\$91,003.00	\$134,497.00	\$9,600.00	\$413,325.00
Total Expenses	\$200,527.30	\$680,706.05	\$1,554,524.33	\$1,554,690.19	\$1,608,806.18	\$2,264,197.30	\$76,796.75	\$7,940,248.10
Bank Interest (+)	\$1,676.42	\$1,722.74	\$1,222.29	\$730.05	\$439.12	\$320.72	\$63.97	\$6,175.31
Bank Fees	\$155.00	\$1,032.06	\$1,085.08	\$1,247.54	\$1,702.64	\$475.00	\$50.00	\$5,747.32

*Preliminary Data as of 10/31/21

DSM Ending Balance: \$1,540,658.05

Ongoing Activities

- Contract Performance Management (IPP)
- 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
- Smart Grid/Network Support
- Planning Studies (Integrated Resource Plan, Distribution Study)
- Project Management
 - Procurement
 - October 2021 Project Activities

PROCUREMENT ACTIVITIES

PENDING AWA	ARD / NTP						
			CCU Date	PUC Date			
			Approved	Approved	Projected	Projected	
Responsible	PROJECT	Description	(Resolution No.)	(Docket No.)	Start*	Completion	Status
SPORD (ANF)	FUEL	Diesel Inspection and Testing	NA	NA	12/1/2021	11/15/2021	Contract commencement date: Dec 1, 2021
		Services					
SPORD (ANF)	FUEL	Bulk ULSD Supply	MS Bid	MS GPA-047-21	6/10/2021	11/30/2021	Contract commencement date: Jan 1, 2022

ONGOING PROCUREMENT

						Bid Opening	
Responsible	PROJECT	Description	Bid or RFP	Bid/RFP No	Announced	/ Due	Notes
SPORD (LOS)	RENEWABLES	Renewable Energy Resource Phase	MS Bid	GPA-007-18	11/16/2017	9/12/2019	OPA Released decision in favor of GPA. Protest filed to
		III				(Price)	Superior Court as of Oct 2020. Hearing scheduled for
							9/22/21
SPORD (JGS)	EPCM	Engineering, Procurement &	RFP	GPA-RFP-21-010	9/9/2021	10/14/2021	
		Construction Management (for					
		Ukudu Power Plant)					
SPORD (ANF)	FUEL	Diesel Supply to WSD	MS Bid	MS GPA-012-22	12/14/2021	2/11/2022	

DEVELOPING PROCUREMENT

					Projected	
Responsible	PROJECT	Description	Bid or RFP	Projected Start	Completion	Status
SPORD (ANF)	FUEL	GPA Bulk Fuel Storage Facility PMC	MS Bid	Jan-22	Jul-21	Bid Package Preparation In Progress.
CDODD (LOC)	DENEMARIES	Phase IV Renewable Resource	(TDD)	lan 20	lum 21	Scope of Work & Bid Documents currently under AGMETS & SPORD Management review. Changes based on 2021 Reliabilty Study and 2021 Generation Expansion Plan recommendations will be included.
SPORD (LOS)		Acquisition	(TBD)	Jan-20	Jun-21	·
SPORD (RAC)	SCADA	Replicated Database	RFP	TBD	TBD	Developing Scope of Work & RFP Documents (No budget this fiscal year)
SPORD (JTL)	ESS	Standby Generator & Automatic Transfer Switch for Talofofo ESS	RFP	FY 2021	FY 2022	RFP package pending, need management approval prior to submittal to PMM for advertisement
SPORD (JTL)	RENEWABLES	Installation of Solar Canopy at Fadian Public Parking Area	(TBD)	FY 2021	FY 2023	Bid Package Preparion Ongoing. Developing Concept design & Interconnection Requirement Details (Fadian Electrical Room Site Visit 11/05/21) Canopy Structure Location Approval pending
SPORD (ANF)	FUEL	RFO Inspection and Testing Services	MS Bid	Feb-22	Jul-22	Bid Package Preparation In Progress.

Assigned to	No.	Project Description	October 2021 Activities	Status / Est. Completion	RFP/Bid No
LOS	1	Energy Storage System (Phase I)	,	Construction phase of contract completed.	MS Bid GPA-082-15
			batteries at the Talofofo ESS site commenced 8/30/21. Replacement of fire	O&M phase on-going. Talofofo ESS	
			suppression system aerosol for the Talofofo ESS control container was	battery replacements completed. Agana	
			completed on 12/3/21 and the ESS resumed service on 12/3/21. Replacement of	ESS battery replacements completed.	
			recalled batteries at the Agana ESS site commenced on 12/6/21 and was		
			completed on 12/23/21. The Agana ESS resumed service on 12/23/21.		
FJI	2	Renewable Energy Resource		KEPCO PV plant COD is extended from	MS Bid GPA-070-16
		Phase II	and Battery Inverters Stations installed. Samsung is still working with GEPA on	January 21, 2022 to May 20, 2022.	
			NOV compliance. The new target for commissioning is March 2022.	l <u></u>	
				Hanwha's COD is extended from Aug 22,	
				2022 to Dec 22, 2023.	
			Hanwha is anticipating to complete the site clearing and grading work by		
	_	Nava Barras Blant Bid (FBOM)	February 2022.	FOA Project COD Towns	MO ODA 004 40
FJI	3	New Power Plant Bid (EPCM)	Progress includes:	ECA Project COD -Target	MS GPA-034-18
			Guam EPA/ USEPA - Revision to Ukudu Plant air permit under USEPA/GEPA	November 2023 (NLT April 2024)	
			review. Minor Source permit for the reserve engine facility is being pursued after		
			GPA's meeting with USEPA. GWA - GWA hasn't signed off on the agreement. GPA/GEPA/Doosan met with		
			DPW to discuss water source for the power plant.		
			Pipeline Activities - Pigging and removal for the Tanguisson pipeline are		
			ongoing. Another oil leak incident occured and clean-up completed.		
			EPCM Contract - New EPCM RFP was cancelled due to lack of competitive bid.		
			Buffer Zone Issue- GPA seeking to get waiver through legislature for Piti location		
			of the Ukudu back up diesel units.		
			Section 106 - Pending the Harmon Substation design drawings.		
			Substation (Single Line Diagram) Design - Doosan visited Harmon Substation		
			for design assessment. GPA's team met with Doosan to discuss substation		
			design. Design still under review.		
			Construction Activities - Ukudu Power Plant site clearing/grading is ongoing.		
			Temporary power work is ongoing (most of the power poles are installed). Doosan		
			completed asbestos removal from site.		
			<u>Design Activities</u> - KEPCO/Doosan has submitted power plant and pipeline		
			design drawings for review. KEPCO/Doosan have requested information for the		
			Naw easement at the Chaot Bridge so they can finalize their design.		
			Zone Variance for Height - Notice of action to be finalized.		
			<u>Lender's Questions</u> - GPA's team is still addressing additional questions.		
			I .		I

Assigned to	No.	Project Description	October 2021 Activities	Status / Est. Completion	RFP/Bid No
FJI	4	DSM Marketing	- The following tasks - EV dealership survey, K-12 Stem marketing kit, commercial rebate program - factsheets, website updates, media press plan, and Energy Sense Survey are in progress.	Continuos	
FJI	5	DSM Rebate Program	Processed 557 applications for rebates totaling \$152K in the reporting period (Dec 2021).	Continuous	
RAC	6	Wireless Network Expansion	Commenced Southern Expansion	Dec-22	
			Dandan Substation Installation Design - Waiting on Materials for installation Apra Heights Installation Design - Waiting on Materials for installation	Dec-22	GPA-RFP-19-010
RAC	7	Smartworks MDM and Eportal	Data Migration from Oracle to Postgres Planned on jan-22 (Upgrade to latest version pre-requisite) MDM Upgrade on Existing Test and Production System Completed. Eportal Upgrade Completed	Feb-22	GPA-RFP-19-007
JTL	8	GDOE BEST Schools	2019 DOI Award Projects: Agueda Johnston Middle School LED Lighting Retrofit (\$586,771) and Maria Ulloa Elementary School LED Lighting Retrofit (\$522,616). - LED Retrofit at Maria Ulloa Elementary School substantially completed, pending punchlist. LED Retrofit at Agueda Johnston Middle substantially completed, pending punchlist. - GPA requested for reallocation/reprogram of funds in excess of Ulloa & Johnston schools updated costs (~\$80,480) for Southern High School exterior HPS lighting fixtures to LEDs and Agueda Johnston SOW modifications. Approval from Department of Interior pending. GPA received Authorization to Proceed from DOI on 9/11/20. Guam DOE signed MOAs for both schools on 3/10/21. Notice to Proceed was provided to Siemens on 3/10/21.	Construction Start: June 2021 Est. Completion: Feb 2022	GPA-RFP-16-013
RAC	9	Consulting Services for Smart Grid Analytics Enabled Distribution System Planning, Technical, and Economic Feasibility Studies	L+G submitted remaining reports. LG updating GPA comments on reports. Reports updates due for the Apra Substation - Due Jan-22 (Delay due to reporter had CoVid) 5 remaining Substation update reports - Due Feb -22	Continuous	RE-SOLICITATION GPA-RFP-19-002
VAT	10	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) ULSD Conversion CIP finalized with MEC & BWSC. Second Milestone Payment completed on April I2021. 100% Design est. completion by October 2021.	IN PROGRESS	(N/A)

	No.	Project Description	October 2021 Activities	Status / Est. Completion	RFP/Bid No
RAC	11	EV Infrastructure	Fast charge station scope for Mangilao offices.	On-Hold	
			Developing fast charge station scope for Mangilao offices.		
JGS	12	Renewable Energy Resource	OPA released decision 9/2020. Protest filed to Superior Court in October 2020.	TBD	GPA-007-18
		Phase III	Hearing in September 2021 but no oral arguments.		222.
FJI	13	Utility Energy Services Contract (UESC)	- Continued work with GDOE on Best Schools Program (Grant & Pilot) Obtained extension through March 2022 approval on AAFB parking lot lighting upgrade due to site condition findings (~\$198K) Siemens continued work on the Investment Grade Audit for UOG	Ongoing	
ANF	14	GPA Fuel Farm ULSD Pipeline Upgrade		Project Timeline: Estimated Start: Jan 2020 Est. Completion: Dec 2021-Mar 2022	IFB GPA-027-19
ANF	15	Tk 1934 & Tk1935 API 653 Internal Inspection	experienced for Tank 1935 due to COVID and sludge processing however the total	Project Timeline: Estimated Start: Feb 2020 Est. Completion: Dec 2022	IFB GPA-028-19
RAC	16	Milsoft Systems Software Services	OMS Training being completed on week of Sept 12. Upgrade of OMS production planned December pending resources. Integration to SEL devices ongoing	Continuous	GPA-RFP-18-003
RAC	17	MV90 Integration Services	Production Implementation Completed	Oct-21	GPA-RFP-18-001
VAT	18	Grant Support	Continued grant development and execution. For Guam Energy Office Grant: 1. Energy Management Plan ongoing. 2. EnergySmart Schools Conference Nov. 17, 2021. 3. Project closeout in progress	GEO MOA Finalize: Sept '19 Grant Scope Completion: Dec. '21	
ANF	19	GPA Fuel Farm- OWS Upgrading	Internal Inspection and repair. Implementation in progress	Project Timeline: Estimated Start: Feb 2020 Est. Completion: Dec 2022	IFB GPA-028-19
ANF	20	GPA Fuel Farm- LD System Upgrading	Internal Inspection and repair. Implementation in progress	Project Timeline: Estimated Start: Feb 2020 Est. Completion: Dec 2022	IFB GPA-028-19
LOS	21	Integrated Resource Plan	IRP Kickoff Meeting completed on January 29, 2021, and 2nd meeting completed on March 26, 2021. 3rd Meeting completed on December 10, 2021. Vols 1,2,3,4,7 and 8 are printed, signed and submitted to CCU.	Oct-21	GPA-RFP-17-002 / UFS / S&P
LOS	22	Energy Storage Development Support	Consultant provided support for third-party commissioning services.	Work Completed - PO expired 9/30/21	GPA-RFP-13-007

	No.	Project Description	October 2021 Activities	Status / Est. Completion	RFP/Bid No
LOS	23	Utility Resource Planning Software RFP.	RFP cancelled. A new RFP is being developed and scheduled for announcement in FY 2022. Budget is approved for FY 2023, so work will be planned to commence in FY 2023.	Planned Completion: 9/30/2023	TBD
LOS	24	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: TBD Est. Completion: TBD	
ANF	25	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
ANF	26	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: Completed 09/30/20 2nd & 3rd Yr Extn: 10/01/20 to 09/30/22	MS IFB GPA-014-17
ANF	27	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	MS IFB GPA-050-20
LOS	28	Reliability Studies	RFQ to complete SC-MVA analysis supplementing Reliability Study and Generation Expansion Plan issued and awarded in Sept 2021.	Est. Completion: 9/30/2022	S&C
ANF	29	RFO Testing Services Contract	Contract awarded to SGS Guam ContractTerm: 2-year base period w/ 3 Year Extn Option	2-year base period: 9/1/2020-8/31/2022	MS IFB GPA-013-20
HJC	30	DSM Digitization	UAT concluded but did not pass. Vendor is making necessary updates based on UAT results. Migration to production, marketing plan, and training are all currently still in progress. Target Go Live is 2/2/2022.	Project Start: Sep 2020 Est. Completion: 3/15/2022	TBD
ANF	31	Diesel Supply (except Tenjo Vista & WSD)	Resolution 2021-09 passed by CCU. PUC approved GPA Docket 21-09 (3 consecutive year extension.	2-year base period: 01/01/19-12/31/21 3-Yrs extension: 01/01/22-12/31/24	GPA-008-18

CCU Report- DSM

As of October 31, 2021

*Data still being gathered for 12/2021

All Expenses – Fiscal Year

Description	FY16	FY17	FY18	FY19	FY20	FY21	FY22	Total to Date
Regular/OT Pay	\$11,348.80	\$22,256.00	\$26,121.83	\$50,715.19	\$47,402.18	\$162,395.40	\$11,296.75	\$331,536.15
Other Contractual	\$28,278.50	\$85,550.05	\$116,977.50	\$3,025.00	-	\$107,854.90		\$341,685.95
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	\$1,855,550.00	\$55,900.00	\$6,815,901.00
Paid Rebates- Central AC	\$3,400.00	\$8,200.00	\$4,400.00	\$6,500.00	\$2,400.00	\$3,900.00		\$28,800.00
Paid Rebates- Washer/Dryer	\$2,800.00	\$7,425.00	\$57,200.00	\$110,800.00	\$91,003.00	\$134,497.00	\$9,600.00	\$413,325.00
Total Expenses	\$200,527.30	\$680,706.05	\$1,554,524.33	\$1,554,690.19	\$1,608,806.18	\$2,264,197.30	\$76,796.75	\$7,940,248.10
Bank Interest (+)	\$1,676.42	\$1,722.74	\$1,222.29	\$730.05	\$439.12	\$320.72	\$63.97	\$6,175.31
Bank Fees	\$155.00	\$1,032.06	\$1,085.08	\$1,247.54	\$1,702.64	\$475.00	\$50.00	\$5,747.32

^{*}Preliminary Data as of 10/31/21

DSM Funding

No.	Description	Amount
1	Initial DSM Budget FY 2016	\$1,806,014.00
2	Interest Income	\$6,175.31
3	Bank Fees	\$5,747.32
4	Additional Funding Source 2017 Bond Refunding savings FY 2019 Revenue Funding FY 2020 Revenue Funding FY2020 LEAC (June to September)	\$1,139,189.00 \$1,031,500.00 \$348,075.00 \$1,296,397.67
_	FY2021 LEAC (October 2020 to Aug 2021)	\$3,859,302.49
5	Total Funding Source	\$9,480,906.15
6	Total Expense FY2016 -FY2022	\$7,940,248.10
	DSM Ending Balance - LEAC Funds	\$1,540,658.05

^{*}Preliminary Data as of 10/31/21

FY 2020- Rebate Amount Paid Monthly

			Central A/C	
Month	Total	Split A/C Units	Units	Washers/ Dryers
OCT '19	\$130,450.00	\$119,350.00	\$500.00	\$10,600.00
NOV '19	\$14,900.00	\$14,300.00	\$0.00	\$600.00
DEC '19	\$116,775.00	\$105,875.00	\$500.00	\$10,400.00
JAN '20	\$39,050.00	\$36,650.00	\$0.00	\$2,400.00
FEB '20	\$65,050.00	\$60,450.00	\$0.00	\$4,600.00
MAR '20	\$96,425.00	\$86,825.00	-	\$9,600.00
APR '20	-		_	
MAY '20	\$21,325.00	\$19,525.00	-	\$1,800.00
JUN '20	\$148,825.00	\$141,225.00	_	\$7,600.00
JUL '20	\$139,450.00	\$127,150.00	\$500.00	\$11,800.00
AUG '20	\$50,775.00	\$45,175.00	-	\$5,600.00
SEP '20	\$381,725.00	\$360,925.00	\$0.00	\$20,800.00
TOTALS	\$1,204,750.00	\$1,117,450.00	\$1,500.00	\$85,800.00

FY 2021- Rebate Amount Paid Monthly

Month	Total	Split	A/C Units	Central	A/C Units	Washers	s/ 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	\$ 180,075.00	\$	173,975.00	\$	500.00	\$	5,600.00
JAN '21	\$ 158,450.00	\$	153,650.00	\$	_	\$	4,800.00
FEB '21	\$ 91,100.00	\$	86,100.00	\$	-	\$	5,000.00
MAR '21	\$ 310,600.00	\$	295,200.00	\$	_	\$	15,400.00
APR '21	\$ 154,750.00	\$	146,650.00	\$	500.00	\$	7,600.00
MAY '21	\$ 300,000.00	\$	278,000.00	\$	_	\$	22,000.00
JUN '21	\$ 47,975.00	\$	41,575.00	\$	800.00	\$	5,600.00
JUL '21	\$ 301,875.00	\$	280,675.00	\$	1,000.00	\$	20,200.00
AUG '21	\$ 178,575.00	\$	164,875.00	\$	_	\$	13,700.00
SEP '21	\$ 195,800.00	\$	180,000.00	\$	1,600.00	\$	14,200.00
TOTALS	\$ 2,181,950.00	\$	2,053,450.00	\$	5,400.00	\$	123,100.00

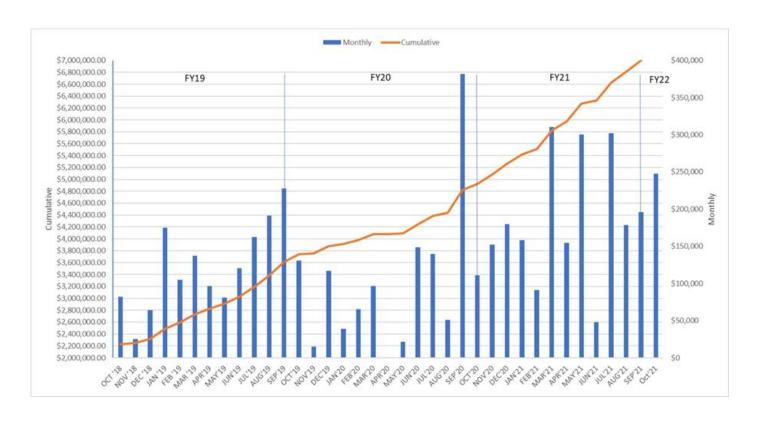
^{*}Preliminary Data as of 9/30/21

FY 2022- Rebate Amount Paid Monthly

				Central A/C		
Month	Total	Spl	it A/C Units	Units	Washer	s/ Dryers
OCT '21	\$ 247,325.00	\$	221,125.00		\$	26,200.00
NOV '21						
DEC '21						
JAN '22						
FEB '22						
MAR '22						
APR '22						
MAY '22						
JUN '22						
JUL '22						
AUG '22						
SEP '21						
TOTALS	\$ 247,325.00	\$	221,125.00	\$ -	\$	26,200.00

^{*}Preliminary Data as of 9/30/21

FY'19- FY'22 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

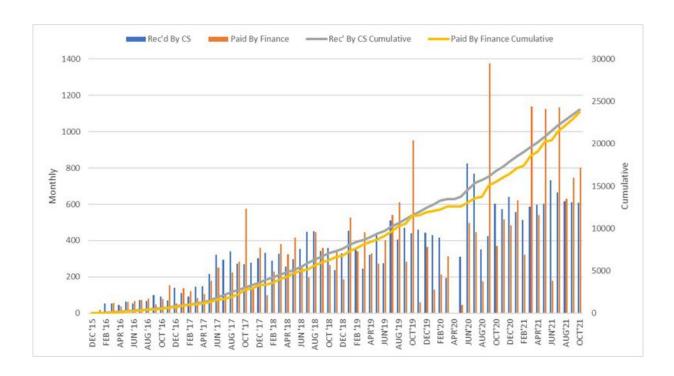
FY 2021 Number of Applications Received By Customer Service and Paid Monthly

Month	Rec'd By CS	Paid By Finance
OCT '20	603	370
NOV '20	573	516
DEC '20	640	484
JAN'21	557	621
FEB '21	512	322
MAR '21	587	1139
APR '21	598	540
MAY '21	603	1124
JUN '21	733	178
JUL '21	665	1133
AUG '21	590	631
SEP '21	603	747

FY 2022 Number of Applications Received By Customer Service and Paid Monthly

Month	Rec'd By CS	Paid By Finance
OCT '21	608	801
NOV '21		
DEC '21		
JAN'22		
FEB '22		
MAR '22		
APR '22		
MAY '22		
JUN '22		
JUL '22		
AUG '22		
SEP '22		

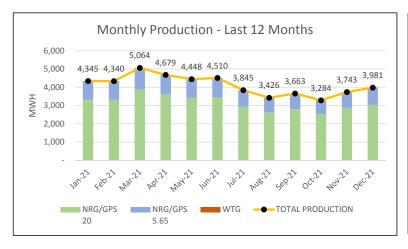
FY'18 - FY'21 Number of Applications Received By Customer Service and Paid

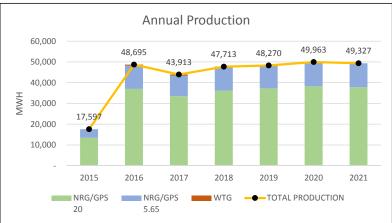


Renewable Energy Production CCU Report

December 31, 2021

Renewable Energy Charts





Renewable Energy Data

Monthly Renewable Production - Last 12 Months (LTM)

	wonding nenev	Last 12 Iviolitiis (Livi)			
Data	Date NRG/GPS NRG/GPS WTG 5.65		WTG	TOTAL	
Date			VVIG	PRODUCTION	
Jan-21	3,323.45	1,021.14	-	4,344.60	
Feb-21	3,318.26	1,021.24	-	4,339.50	
Mar-21	3,880.61	1,183.49	-	5,064.10	
Apr-21	3,613.77	1,064.99	-	4,678.76	
May-21	3,428.20	1,019.55	-	4,447.75	
Jun-21	3,443.80	1,066.39	-	4,510.19	
Jul-21	2,938.64	906.25	-	3,844.90	
Aug-21	2,627.57	798.27	-	3,425.84	
Sep-21	2,799.56	863.31	-	3,662.87	
Oct-21	2,539.45	744.89	-	3,284.35	
Nov-21	2,891.96	851.21	-	3,743.16	
Dec-21	3,036.19	944.45	-	3,980.63	
Total	37,841.47	11,485.18	-	49,326.65	

Annual Renewable Production

Date	NRG/GPS	NRG/GPS	WTG	TOTAL					
Date	20	5.65	WIG	PRODUCTION					
2015	13,522.50	4,074.07	•	17,596.57					
2016	37,037.15	11,183.91	473.53	48,694.59					
2017	33,472.41	9,983.29	456.90	43,912.60					
2018	36,158.00	11,228.24	327.02	47,713.25					
2019	37,247.12	10,792.06	231.26	48,270.44					
2020	38,249.82	11,393.79	319.85	49,963.46					
2021	37,841.47	11,485.18	•	49,326.65					
Total	233,528.47	70,140.53	1,808.57	305,477.57					

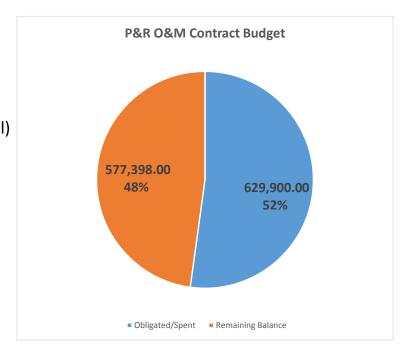
- •Dandan / GPS = Phase I Solar commissioned on 10/2015
- •WTG = Wind Turbine Generation
- •Data as of December 2021 in MWH

Planning & Regulatory CCU Report

December 31, 2021

Planning & Regulatory O&M Contract Budget

- Revenue Funded
- Target
 - 46.80% O&M Obligation as of October 31, 2021 (Actual)
 - 52.17% O&M Obligation as of December 31, 2021 (Actual)



33

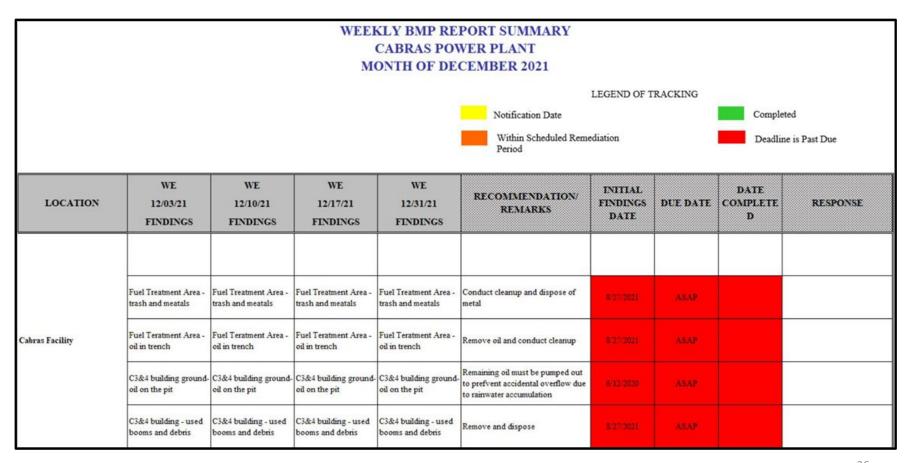
P&R Weekly & Monthly Inspection Reports

- 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

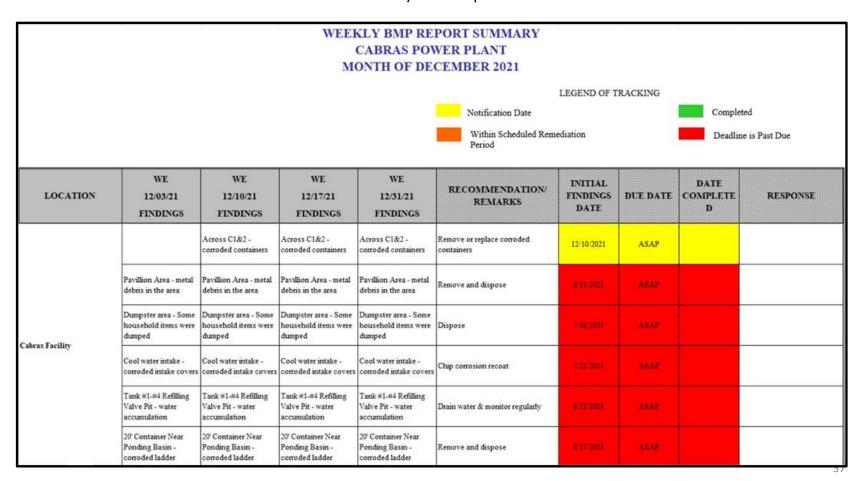
P&R Inspection Report Purpose

- 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



T&D SPCC Inspection Report

		SUMM	IARY OF SPCC MONTHLY MONTH OF DECEM		REPORT		LEGEND OF TRACKIN	NG
						Notification Da		Completed
SUBSTATIONS						Within Schedu	led Remediation	Deadline is Past Due
LOCATIONS	FINDINGS		RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
DEDEDO SUBSTATION (T-55, T 191, & T-192))	Clean							
×	Sump Area	Debris around the area	Dispose				ASAP	Oct. 2021
DEDEDO SUBSTATION WAREHOUSE	Transformer Storage Area	Scrap metal in the area	Dispose				ASAP	July 2021
MACHECHE SUBSTATION	Secondary Containment	NO CORRI	ECTIVE ACTION					
TALOFOFO SUBSTATION	Secondary Containment	Water accumulation in sec. containment ifT80 transformer	Drain Water				ASAP	Nov. 2021
TENJO SUBSTATION		NO CORRECTIVE ACTION						
YIGO SUBSTATION	Secondary Containment	NO CORRECTIVE ACTION						

Generation SPCC Inspection Report

		SUMMA	ARY OF SPCC MONTH MONTH OF DEC		PORT		LEGEND OF TRAC	CKING
						Notification Da	te	Completed
						Within Schedu	led Remediation	Deadline is Past Due
LOCATIONS	FIN	DINGS	RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
CABRAS POWER PLANT	Cabras 8" supply line	No secondary containment	Frequent monitoring for leaks, corrosion & deterioration must				ASAP	Nov. 2021
CABRAS POWER PLANT	Cabras 3&4 Generator Building	Oil coming out from the trenches	Remove oil and conduct cleanup					July-2021
	Cabras I&2 Diesel Tank & C3&4 Service Tanks Secondary Containment	Water accumulation	Drain Water	Corrective action completed		Dec.2021	ASAP	Nov. 2021
	Tank 3 Pipelines	Corroded pipelines	Conduct repair	; ;			ASAP	Sept 2021
	OWS Containment	Rainwater in secondary containment	Drain water	Corrective action completed		Dec.2021	ASAP	July 2021
DEDEDO CT	OWS Containment	mold/corroded tank surface	remove molds & repaint tank surf.				ASAP	Dec. 2021
	Pipeline	Surface corrosion	Repaint				ASAP	Aug 2021
	Tank No. 140	Corroded flange	Remove rust and repaint				ASAP	Aug 2021
MACHECHE CT	Tank T-130/140	Surface corrosion	Remove corrosion, repaint				ASAP	July 2021
	Water Softener Tank	Corroded	Verify/repair				ASAP	July 2021
	ows	Rainwater & algae, disconnected pipe	Remove water & algae & repair pipeline connection				ASAP	Dec.2021
	Tank No. 140	Rust buildup on foundation (several locations)	Remove rust, repaint				ASAP	Jans. 2021

Generation SPCC Inspection Report (cont.)

		SUMIN	SUMMARY OF SPCC MONTHLY INSPECTION REPORT MONTH OF DECEMBER 2021				LEGEND OF TRA	CKING
						Notification Da	te	Completed
						Within Schedu	led Remediation	Deadline is Past Due
LOCATIONS	F	INDINGS	RECOMMENDATION/REMARKS	STATUS	RESPONSIBLE	COMPLETION DATE	DUE DATE	INITIAL FINDINGS DATE
	Fuel Punifier	Oil spill	Conduct cleanup		V-	Dec. 2021	ASAP	Oct.2021
	Tank - 140	Mild corrossion on tank surface	Repaint tank				ASAP	Dec. 2021
TIGO CT	Tank - 140	Corroded bolts on flange	Replace bolts				ASAP	Dec. 2021
	Oil Water Separator secondary containment	Algae & rainwater	Remove algae & water				ASAP	Oct 2021
	Tank No. 1 Shell	Corroded tank shell	Chip corrosion and recoat				ASAP	May 2021
MANENGGON DIESEL	Secondary Containment	Water accumulation	Drain water and regularly monitor during rainy season				ASAP	Dec. 2021
TALOFOFO DIESEL	Fuel Storage Tank Area	Algae buil up in containment deck	Remove algae				ASAP	Nov. 2021

Generation SPCC Inspection Report (cont.)

SUMMARY OF SPCC MONTHLY INSPECTION REPORT MONTH OF DECEMBER 2021 LEGEND OF TRACKING Notification Date Completed Deadline is Past Due Within Scheduled Remediation POWER PLANT FINDINGS RECOMMENDATION/REMARKS RESPONSIBLE COMPLETION DATE INITIAL FINDINGS DATE LOCATIONS STATUS DUE DATE Generator #13 Oil on the floor of storage Conduct cleanup ASAP No secondary pipeline on Pipeline Install secondary containment ASAP YIGO DIESEL aboveground pipeline Contaminated soil from oil leak found Clean up and properly dispose of Generator #20 & #26 ASAP on ground outside of generator contaminated soil Site Facility Overgrown vegetation Cut vegetation Main Fuel Tank No integrity testing Integrity testing is required ASAP Improper storage of drum full of Old Piti PP Facility Structure Properly dispose of drum ASAP containinated soil from spill Portion of pipeline on pipe support is PITI #7 POWER PLANT Main Fuel Tank Chip corrosion and repair ASAP improper storage of open drums filled Old Piti PP structure Properly dispose of drums ASAP with resin, mixed water& soil Main Fuel Tank Chip corrosion and repair Portion of pipeline is corroded ASAP

ENGINEERING WORK ORDERS

Engineering Work Order Summary - December 2021						
Work Orders Received from CSR	74					
Work Orders Processed & Released to T&D	93					
Work Orders Processed & Released to CSR	N/A					
Work Orders Cancelled	N/A					
Work Orders Pending Survey	25					
Total Pending WO at Engineering	700					

	·	·	Engineering	Large Custo	omer, GPI and N	et Metering Tracking
Date Received	Customer Name	Work Order Numbers	Location	KVA	Meter Qty	Status
1/27/2015	TG Engineers	422182-85, 90-93, 96-98	Agana Heights	100	11	10 Unit Apartment, 100 kVA, 80% Completed. Work restarted 12/2021
6/1/2017	New Underground Line (P-047)	466064	Tumon	1,500	1	New Undergound line 99% completed, Riser terminated. Mandrelling completed on completed sections. T&D started pullin wire and installing splices in August 2019. Pending final outage at SV1A and SV1B and repair of existing arms and metal brackets on P-047. Design for P-047 Repair of Support Arms on going 95% completed.
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 pending updates from designer.
10/10/18	Don Sadwahni	465341	Harmon	2,000	1	New Industrial Subdivision, Inspection of civil work only, Proposed 12 Pad Mounted Xfmrs 100% Completed, pending submission of meter applications.
05/14/19	Joyrich Group LLC	Multiple	Tamuning	150	17	New 17 Unit Apartments, 75% completed, 150 kVA. No recent progress.
10/01/19	Don Don Donkey "Don Quijote" Shopping Center	Pending Application	Tamuning	5,500	1	New Shopping Center at the intersection of Route 1 and 10A. 35% Completed. GPA reminded their designers to finalize plan and submit applictions as soon as possible to avoid delays with energizing their new facility.
07/07/20	Guam Waterworks Authority New Northern Wastewater Plant	479663	Dededo	3,000	1	New Northern Wastewater Plant, 95% completed, 3500kVA. Temp. power work order for testing purposes at T&D. Power will be limited to 20% of capacity until completion of P-046, P-271 and P-112 Load redistribution.
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.
01/31/21	Songsong Hills Subdivision	484158	Yigo	160	1	New 16 Unit Subdivision, 85% completed, multiple xfmrs. Temp power completed, pending submission of meter application
01/31/21	GWA -Kaiser Reservoir	484070	Dededo	225	1	New GWA Reservoir, 50% completed.
06/30/21	Guam Five Star Corporation	Multiple	Dededo	1,160	16	New 116 Unit Subdivision, 16 application submitted, 100 Applications pending, 40% completed.
09/10/21	University of Guam	489070	Mangilao	500	1	New Cultural Depository, 90% Completed, 500 kVA.
09/24/21	Guam Advance Ent. Inc (Ukudo Power Plant)	489288	Dededo	2,200	1	Temp Power for New Ukudo Power Plant. 27 ea. 45' C/P and 7 Pad Mtd X-Fmr 2200 KVA total load. 50% completed.
10/31/21	GTA Data Center	Pending Application	Tamuning	2,000	1	New Data Center, 2000 kVA, pending submission of plans and permitting.
11/01/21	IT&E Data Center	Pending Application	Tamuning	2,500	1	New Data Center, 2500 kVA, pending submission of plans and permitting.
Varies	Pending Net Metering Customers	Varies	Various Locations Islandwide		1	Pending Net Metering Customers as of December 31, 2021.

Total 24,165 7

PLANNING & REGULATORY DIVISION REPORT

The following summarizes P&R's activities for the month of December 2021

INSPECTIONS/MONITORING

- Best Management Practices (BMP) Weekly Inspection/Report Cabras Power Plant
- Monthly Spill Prevention, Control and Countermeasures (SPCC) Inspection/Report Cabras Power Plant, Macheche, Dededo, Yigo CT, Talofofo, MDI, Tenjo Diesel, Piti 7 Power Plants, IP&E fuel Farm.
- Reviews monthly Continuous Emissions Monitoring System (CEMS) report and monitors TRC's O
 & M for Tenjo Diesel. Coordinates Operations and Maintenance with TRC.
- Emissions and Limits Tracking for GPA and Yigo Diesel
 - Monitoring CO and NOx emissions of the Yigo Diesel generators not to exceed the allowable limit.
 - o GPA Plants Limits based on Hours and/or Fuel Use
- Fuel switching data monitoring

CONSENT DECREE

- Working on Emissions Netting Analysis. Providing data to TRC
- Working on getting status update on the ULSD Pipeline to Piti 8&9 to include Contractor response and new deadline

ENVIRONMENTAL DISPOSAL & MITIGATION

- KEPCO/Guam Advance pipeline demolition project fuel leak near Old Pangilinan Pole Yard,
 Barrigada clean-up monitoring, coordination with GEPA and assistance provided to Contractor.
- Marbo Diesel tank drained, diesel fuel #2 shipped off-island via 3rd party contractor.

PROCUREMENT

Purchase Orders

Coordination with procurement on the following bids/continuing contracts:

- OR#33750 Environmental Emergency Response Contractor- Bid is on going
- OR# 35418 Office Supplies PO's ISSUED
- OR# 35413 Contaminated Wastes Disposal PO ISSUED
- GPA-RFP-21-009 GPA Committee meeting to procure Professional Land Survey Services for Various Locations
- GPA-RFP-21-011 Price Proposal Review: GPA-RFP-21-011, Archaeological Services for Various Locations
- OR 35319 Environmental Engineering and Technical Services Submitted SOW to Procurement

 Bid Committee Evaluation, MS GPA-046-21, Petroleum Inspection & Testing Services for Diesel Fuel Oil No.2

NPDES PERMIT GU00200001

 Prepare response letter to USEPA, a resolution to Seek Settlement for Clean Water Act Violations.

REPORTING

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

TESTING

• Yigo Diesel Coordination and quarterly Testing/Monitoring

UKKUDU POWER PLANT

- Weekly update conference calls:
 - o Prep Call between GPA and Stanley
 - Air Permitting with contractors
 - o All other Permitting and status updates with contractors
 - o GPA Internal discussions with Stanley
- Other:
 - o Compiled New Plant public hearing and public outreach for internal use
 - Attended meeting between GUP and GEPA. GUP submitted paper copy of Reserve facility Permit Application

OTHER

- Abandoned Derelict Vessels ADV Project monitoring
 - ADV Metallic Waste Disposal at PAG site completed. Will continue with the last ADV (aka Guahan 2) by mid-January 2022.
 - Roughly 60 metric tons of scrap metal was removed from the site.
- Voiceover work for GPA Radio advertisement on 101.9

NET METERING December 2021

	<u>Quantity</u>	Connected kVA
Completed	2,295	28,222
Pending	1	7
Grand Total	2,296	28,229

Rate Class and Technology									
Technology Schedule Customer Count Total kW									
Solar Energy	R - Residential	2,131	20,477.21						
	J - Gen Service Dmd	65	4,086.45						
	K - Small Gov Dmd	13	448.10						
	L - Large Government	2	122.80						
	P - Large Power	13	1,182.70						
	G - Gen Serv Non-Dmd	62	1,821.92						
	S - Sm Gov Non-Dmd	7	78.80						
Wind Turbine	R - Residential	2	3.60						
Grand Total		2,295	28,221.58						

	Projection Date Ending 12/31/2022								
Customer Rate Class	Sum of Size (kW)	*Annual Projected kWh Generated	Non-Fuel Yield \$/kWh		timated Annual Revenue Loss				
R	20,480.81	33,362,343	0.087492	\$	2,918,939.06				
J	4,086.45	6,714,865	0.125682	\$	843,937.89				
K	448.10	730,656	0.133883	\$	97,822.45				
L	122.80	200,522	0.129809	\$	26,029.59				
P	1,182.70	1,949,085	0.109950	\$	214,302.00				
G	1,821.92	2,992,831	0.145397	\$	435,148.73				
S	78.80	123,265	0.147902	\$	18,231.16				
Grand Total	28,221.58	46,073,568		\$	4,554,410.90				

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

Estimated	Estimated Annual Revenue Loss							
Year	Estimated kWh	*Total Estimated Cost						
2021	42,545,416	\$ 4,146,394.89						
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 2021 Customer Count and Connected kW by Feeder								
tatus	·-	Feeder	Net Metering Connected kW					
Complete	ea .	P-005 P-046	373.03 323.09	33 38	21.6% 7.6%	43.4% 11.6%		
		P-040	843.38	84	14.0%	22.2%		
		P-089	738.79	83	16.5%	39.8%		
		P-111	216.00	5	4.0%	7.0%		
		P-203	776.09	46	10.4%	29.4%		
		P-204	164.18	18	3.5%	7.2%		
		P-205	128.00	6	2.7%	4.6%		
		P-210	855.73	70	16.7%	22.7%		
		P-212	1,117.96	107	27.0%	70.0%		
		P-213	353.33	16	13.5%	18.1%		
		P-220	225.41	24	37.0%	116.2%		
		P-221	635.60	64	14.5%	28.8%		
		P-223	737.91	69	31.0%	44.2%		
		P-240	148.55	4	2.3%	19.9%		
		P-245	259.60	7	5.2%	11.1%		
		P-250	1,434.85	132	22.1%	38.8%		
		P-251	160.50	8	6.5%	10.0%		
		P-253	1,031.55	100	22.9%	36.2%		
		P-262	1,243.12	124	32.7%	78.3%		
		P-270 P-271	562.21 433.37	44 20	11.0% 7.4%	22.3% 15.6%		
		P-271 P-272		20 22	12.0%	27.2%		
		P-280	306.25 649.45	35	36.1%	67.2%		
		P-281	204.90	5	7.3%	20.4%		
		P-282	231.75	6	6.2%	18.7%		
		P-283	786.75	62	21.7%	37.3%		
		P-294	1,391.46	130	32.1%	63.7%		
		P-301	233.76	24	16.5%	29.4%		
		P-311	1,362.84	71	34.2%	58.5%		
		P-322	2,268.37	125	29.9%	59.4%		
		P-323	316.52	21	6.7%	20.8%		
		P-330	767.35	93	14.1%	28.3%		
		P-331	848.03	93	13.5%	21.8%		
		P-332	897.98	83	15.9%	23.3%		
		P-340	624.29	53	34.5%	75.8%		
		P-087	1,633.30	160	41.6%	65.1%		
		P-252	688.73	38	16.3%	33.3%		
		P-321 P-260	471.70	39	8.4%	9.5%		
		P-067	99.76 86.20	10 10	14.5% 1.0%	49.9% 1.3%		
		P-312	144.64	6	8.7%	10.1%		
		P-206	106.08	6	10.9%	19.6%		
		P-242	23.75	2	0.4%	1.1%		
		P-310	181.57	8	6.6%	12.1%		
		P-261	522.06	55	18.9%	32.4%		
		P-201	115.86	10	3.3%	5.8%		
		P-007	85.86	8	11.9%	25.3%		
		P-244	86.56	3	4.9%	5.0%		
		P-202	113.70	6	3.5%	8.4%		
		P-341	4.30	1	0.4%	1.6%		
		P-401	117.00	2	10.3%	17.3%		
		P-400	68.88	5	7.2%	7.3%		
		P-241	19.72	1	0.5%	0.7%		
	Completed Total		28,221.58	2,295				
ending		Pending	7.31	1	0.0%	0.0%		
	pending Total		7.31	1	0.0%	0.0%		
and Total			28,228.89	2,296				

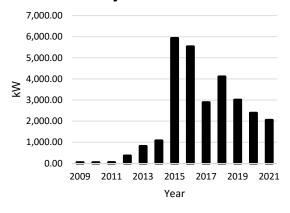
Feeders highlighted in yellow indicates renewable energy capacity has reached 25% of minimum daytime load. Feeders highlighted in red indicates renewable energy capacity has reached 75% of minimum daytime load.

NET METERING December 2021

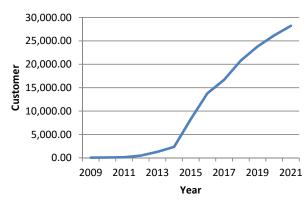
Installe	Installed kW by Year									
Year	Total	Cumulative								
2009	39.46	39.46								
2010	39.20	78.66								
2011	41.61	120.27								
2012	354.61	474.88								
2013	808.15	1,283.03								
2014	1,072.04	2,355.07								
2015	5,926.44	8,281.51								
2016	5,527.93	13,809.43								
2017	2,881.10	16,690.53								
2018	4,103.13	20,793.66								
2019	3,002.17	23,795.83								
2020	2,380.16	26,175.99								
2021	2,045.59	28,221.58								
Grand Total	28,221.58									

Custom	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	292	1,883								
2019	190	2,073								
2020	97	2,170								
2021	125	2,295								
Grand Total	2,295									

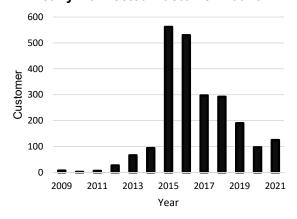
Yearly Installed kW



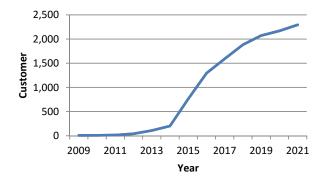
Cumulative Installed kW



Yearly Connected Customer Count



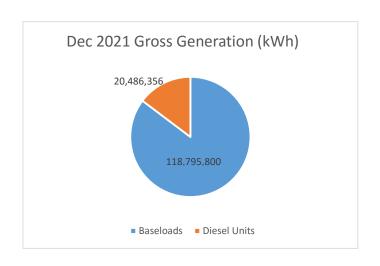
Cumulative Connected Customer Count



Production Data December 2021

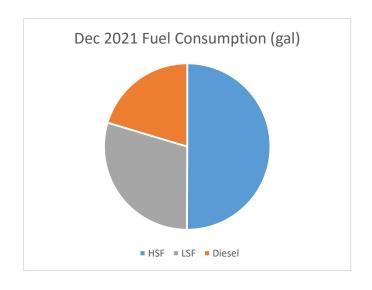
2021 Gross Generation (kWh)

2021 Gross Generation (KVVII)									
Month	Baseloads	Diesel Units							
January	121,809,600	12,656,252							
February	98,398,300	25,379,502							
March	99,635,600	38,706,615							
April	110,195,900	30,909,258							
May	103,328,300	37,604,671							
June	99,389,500	43,650,908							
July	124,081,100	22,778,648							
August	122,100,200	19,702,072							
September	119,786,300	19,642,693							
October	118,795,800	20,486,356							
November	103,522,200	36,259,369							
December	99,332,390	39,686,045							



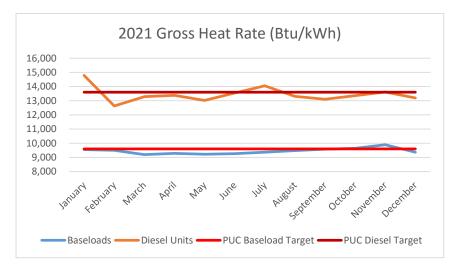
2021 Fuel Consumption (gal)

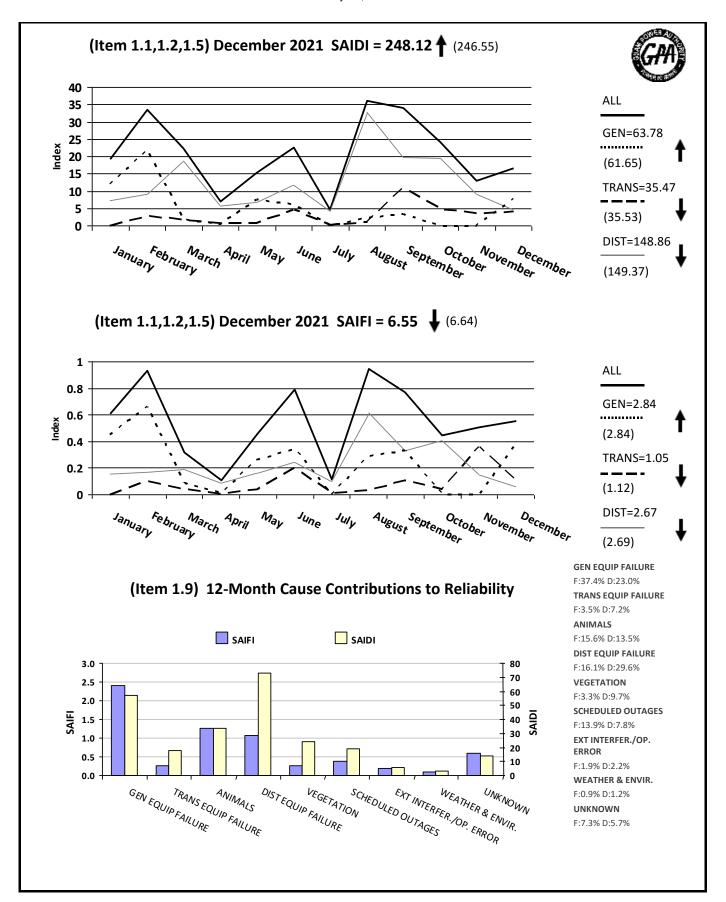
Month Baseloads Diesel Unit										
	HSF	LSF	Diesel							
January	7,754,685	252,919	1,355,551							
February	6,196,905	241,268	2,361,550							
March	5,930,287	385,344	3,790,705							
April	4,872,098	2,170,263	3,047,806							
May	4,956,847	1,607,352	3,605,472							
June	4,690,486	1,650,915	4,350,746							
July	5,289,339	2,715,782	2,359,128							
August	5,442,359	2,523,369	1,931,220							
September	3,483,312	4,416,730	1,864,021							
October	4,957,375	2,931,094	2,016,632							
November	5,834,957	1,216,727	3,635,738							
December	5,624,851	778,183	3,857,805							

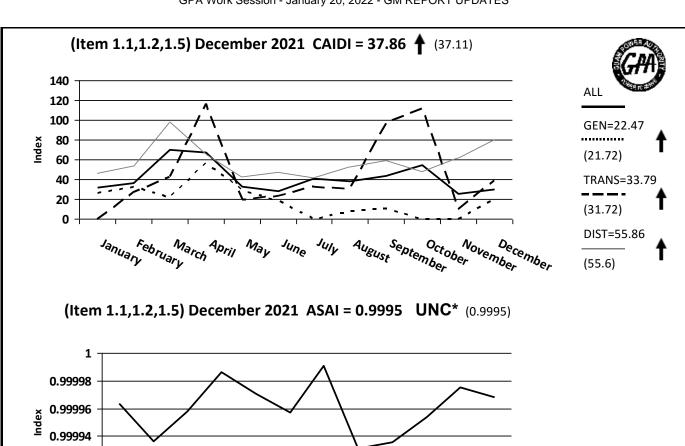


2021 Gross Heat Rate (Btu/kWh)

Month	Baseloads	Diesel Units
January	9,548	14,783
February	9,503	12,628
March	9,198	13,291
April	9,282	13,382
May	9,227	13,024
June	9,267	13,540
July	9,370	14,056
August	9,475	13,303
September	9,579	13,105
October	9,638	13,359
November	9,893	13,608
December	9,365	13,193







June July August

(Item 1.4) Top 5 Worst Feeders Distribution Causes

January Mary

0.99992

0.9999

#	Feeder	Outage Count
1	P340	11
2	P250	8
3	P294	8
4	P046	7
5	P088	7

(Item 1.3) Outage Count

TOTAL	UFLS	Non-UFLS
425	193	232

(Item 1.4) Top 5 Distribution Outage Causes

November

#	Outage Cause	Count
1	Overhead Equipment	44
2	Snakes	19
3	Underground Equipment	18
4	Vegetation	14
5	Substation Equipment	6

September

(Item 1.3) UFLS Contribution to Reliability

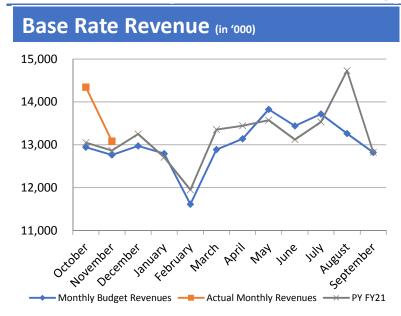
SAIDI	SAIFI	CAIDI			
59.53	2.96	20.10			

CFO FINANCIAL HIGHLIGHTS November 2021





November 2021 Monthly Financial Highlights

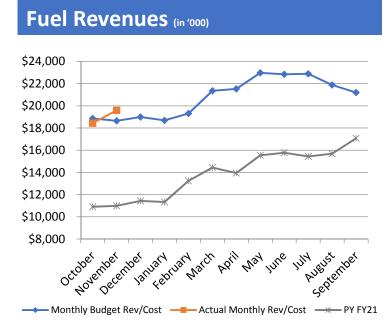


	Through November 30, 2021											
	N	Monthly		Actual								
		Budget	IV	onthly						CY	vs PY	
\$000	Re	evenues	Re	evenues	Var	iance		P	Y FY21	Variance		
October	\$	12,946	\$	14,345	\$ 1	L,400	1	\$	13,053	\$	1,292	<u> </u>
November	\$	12,762	\$	13,085	\$	323	1	\$	12,869	\$	216	<u>†</u>
December	\$	12,975						\$	13,254			
January	\$	12,796						\$	12,712			
February	\$	11,615						\$	11,954			
March	\$	12,891						\$	13,357			
April	\$	13,142						\$	13,444			
May	\$	13,826						\$	13,574			
June	\$	13,443						\$	13,121			
July	\$	13,719						\$	13,534			
August	\$	13,264						\$	14,729			
September	\$	12,822						\$	12,825			
Total	\$	156,200	\$	27,430	\$ 1	L,723		\$	158,427	\$	1,508	

	i hrough November 30, 2021								
	Monthly Budget	Actual Monthly				CY vs PY			
mwh	Sales	Sales	Variance		PY FY21	Variance			
October	125,120	129,175	4,055	†	127,515	1,660	<u> </u>		
November	123,655	130,597	6,943	1	128,440	2,157	1		
December	125,973				128,053				
January	123,970				129,208				
February	112,638				115,199				
March	124,550				129,958				
April	125,540				125,268				
May	133,995				137,960				
June	133,212				137,774				
July	133,451				136,012				
August	127,675				130,812				
September	123,646				128,768				
Total	1,513,425	259,772	10,997		1,554,967	3,817			



November 2021 Monthly Financial Highlights (Continued)



	Through November 30, 2021													
		Monthly Budget										C	Y vs PY	
\$000	Re	Rev/Cost		ev/Cost	Vai	riance		P	Y FY21	Variance				
October	\$	18,868	\$	18,431	\$	(437)	1	\$	10,910	\$	7,521	1		
November	\$	18,647	\$	19,600	\$	953	1	\$	10,984	\$	8,616	1		
December	\$	18,997						\$	11,435					
January	\$	18,695						\$	11,335					
February	\$	19,313						\$	13,241					
March	\$	21,355						\$	14,442					
April	\$	21,525						\$	13,932					
May	\$	22,975						\$	15,547					
June	\$	22,840						\$	15,770					
July	\$	22,881						\$	15,446					
August	\$	21,891						\$	15,685					
September	\$	21,200						\$	17,080					
Total	\$	249,186	\$	38,031	\$	516		\$:	165,807	\$	16,137			

O&M Costs (in '000)
\$9,000 \$8,500 \$8,000 \$7,500 \$7,000 \$6,500 \$6,000 \$5,500 \$5,000 \$4,500 \$4,000
October noet noet natural natu

				Through	h No	ovembe	r <mark>30, 20</mark> 2	21				
7	Monthly											
	E	Budget	N	lonthly						CY	vs PY	
\$000		Cost		Cost	Va	riance		P	Y FY21	Vai	riance	
October	\$	6,394	\$	4,979	\$	1,415	†	\$	5,515	\$	(536)	↓
November	\$	6,439	\$	6,039	\$	400	†	\$	5,389	\$	650	1
December	\$	6,524						\$	5,645			
January	\$	6,474						\$	5,620			
February	\$	6,206						\$	5,193			
March	\$	6,969						\$	6,231			
April	\$	7,095						\$	6,634			
May	\$	7,171						\$	6,106			
June	\$	6,978						\$	6,390			
July	\$	6,863						\$	5,871			
August	\$	6,648						\$	5,852			
September	\$	8,421						\$	6,023			
Total	\$	82,182	\$	11,018	\$	1,816		\$	70,469	\$	114	



November 2021 Monthly Financial Highlights (Continued)

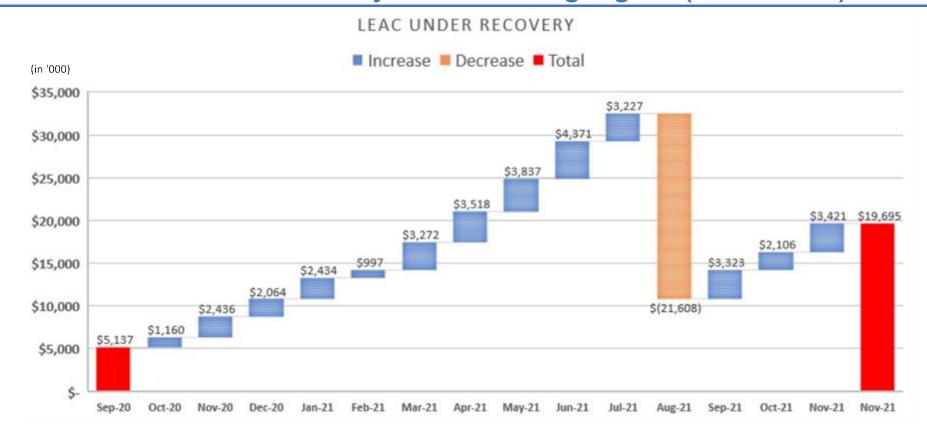
Through November 30, 2021													
	1Q2019	2Q2019	3Q2019	4Q2019	1Q2020	2Q2020	3Q2020	4Q2020	1Q2021	2Q2021	3Q2021	4Q2021	1Q2022
Residential	43,920	44,144	44,329	44,479	44,203	44,509	45,069	44,191	44,503	44,575	45,247	45,317	45,232
Commercial	5,273	5,291	5,303	5,289	5,154	5,352	5,309	5,366	5,301	5,307	5,330	5,338	5,347
Government	1,090	1,074	1,075	1,070	1,072	1,059	1,061	1,081	1,063	1,060	1,049	1,058	1,087
Streetlights	1,151	1,152	1,138	1,138	1,135	1,128	1,139	1,132	1,133	1,132	1,132	1,134	1,162
Navy	1	1	1	1	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	52,001	52,075	52,759	52,848	52,829

Dakt comics covered (DCC) coloulation indonture	2010	2010	2020	2024	2022
Debt service coverage (DSC) calculation-indenture	2018	2019	2020	2021	2022
Senior lien coverage	2.53	1.78	1.42	1.72	1.95
Debt service coverage (DSC) calculation-IPP as O&M					
Senior lien coverage	1.65	1.46	1.23	1.67	1.95





November 2021 Monthly Financial Highlights (Continued)



(in '000)
Opening Recovery Balance
Under/(Over)
Closing Recovery Balance

		,	2020		2021																						
	Oct	Nov Dec		Dec	Jan		Feb Mar		Mar	Apr		May		June		July		July Au		Sept		pt Oct		Nov			
\$	5,137	\$	6,297	\$	8,733	\$	10,797	\$	13,231	\$	14,228	\$	17,500	\$	21,018	\$	24,855	\$	29,226	\$	32,453	\$	10,845	\$	14,168	\$	16,274
	1,160		2,436		2,064		2,434	_	997		3,272	_	3,518		3,837	_	4,371		3,227		(21,608)		3,323		2,106	_	3,421
Ś	6.297	\$	8.733	Ś	10.797	Ś	13.231	Ś	14.228	Ś	17.500	Ś	21.018	Ś	24.855	Ś	29.226	Ś	32.453	Ś	10.845	Ś	14.168	Ś	16.274	\$	19.695







Guam Power Authority

Financial Report

November 30, 2021



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 2021

Attached are the financial statements and supporting schedules for the month and fiscal year ended November 30, 2021.

Summary

The increase in net assets for the month ended was \$1.5 million as compared to the anticipated net decrease of \$0.5 million projected at the beginning of the year. The total kWh sales for the month were 5.61% more than projected and non-fuel revenues were \$323k more than the estimated amounts. O & M expenses for the month were \$6.0 million which was \$0.4 million under 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 \$2.8 million, which was \$0.1 million greater than projected amounts. There were no other significant departures from the budget during the period.

Analysis

Description	Previous	Current Month	Target		
_	Month				
Quick Ratio	2.88	2.58	2		
Days in Receivables	51	53	52		
Days in Payables	30	33	30		
LEAC (Over)/Under	\$16,274,331	\$19,695,128	\$7,847,664		
Recovery Balance -YTD					
T&D Losses	5.44%	5.39%	<7.00%		
Debt Service Coverage	2.23	1.95	1.75		
Long-term equity ratio	4.88%	5.17%	30 – 40%		
Days in Cash	169	145	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 \$66 million and approximately \$169 million in cash and current receivables. The LEAC under-recovery for the month was \$3.4 million. Debt Service Coverage ratio is calculated using the methodology in use before the Fiscal Year 2002 change in accounting practice.

Financial Statements November 2021

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.

Reviewed by:

Prepared by:

Maripaz N. Perez

Assistant Chief Financial Officer

Chief Einancial Officer

Approved by:

John M. Benavente, P.E.

General Manager

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) **Statements of Net Position** November 30, 2021 and September 30, 2021 Unaudited Unaudited Change from November September Sept 30 2021 2021 2021 ASSETS AND DEFERRED OUTFLOWS OF RESOURCES Current assets: Cash and cash equivalents: Held by trustee for restricted purposes: (26,674,985) Interest and principal funds 13,010,411 39.685.396 Bond indenture funds 3,068,451 7,636,028 (4,567,577)Held by Guam Power Authority: Bond indenture funds 120,323,627 146,602,303 (26,278,676) Self insurance fund-restricted 10,088,750 9,478,718 610,032 Energy sense fund 2,564,298 2,478,883 85,414 Total cash and cash equivalents (56,825,790) 149,055,537 205,881,327 Accounts receivable, net 6,785,310 48,621,604 41,836,294 Total current receivables 6,785,310 48.621.604 41.836.294 Materials and supplies inventory 13,524,241 12,999,867 524,374 22,529,698 Fuel inventory 58,764,181 36,234,483 Prepaid expenses 4,611,412 3,307,390 1,304,022 Total current assets 274,576,975 300,259,361 (25,682,386) Utility plant, at cost: Electric plant in service 1,164,965,173 1,164,457,692 507,481 Construction work in progress 25,068,580 24,018,930 1,049,650 1,190,033,753 1,188,476,622 1,557,131 Less: Accumulated depreciation (709,771,932) (703,965,760) (5,806,172) Total utility plant (4,249,041) 480,261,821 484,510,861 Other non-current assets: Investment - bond reserve funds held by trustee 48.014.948 48.502.496 (487,548) Unamortized debt issuance costs 1,658,211 1,684,472 (26, 261)49,673,159 (513,809) Total other non-current assets 50,186,968 (30,445,236) Total assets 804,511,955 834,957,191 Deferred outflow of resources: Deferred fuel revenue 19,695,128 14,168,085 5,527,042 Unamortized loss on debt refunding 19,792,324 20,172,384 (380,060) 17,005,307 Pension 17,005,307 0 Other post employment benefits 44,664,204 44,664,204 0 Unamortized forward delivery contract costs 0 Total deferred outflows of resources 101,156,963 96,009,981 5,146,982 905,668,918 930,967,172 (25, 298, 254)

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statement of Net Position, Continued November 30, 2021 and September 30, 2021 Unaudited Unaudited Change from November September Sept 30 2021 2021 2021 LIABILITIES, DEFERRED INFLOWS OF RESOURCES AND NET POSITION Current liabilities: Current maturities of long-term debt 22,705,000 21,540,000 1,165,000 Current obligations under capital leases Accounts payable Operations 24,873,000 24,791,092 81,908 Others 396,598 363,933 32,664 Accrued payroll and employees' benefits 630,321 389.833 240,489 3,059,947 Current portion of employees' annual leave 3,068,936 8,989 (8,735,399) Interest payable 5,260,562 13,995,961 9,095,907 (193,141) Customer deposits 8,902,766 Total current liabilities 65,837,184 73,236,674 (7,399,490) Regulatory liabilities: Provision for self insurance 10,556,258 9,955,323 600,934 Total regulatory liabilities 10,556,258 9,955,323 600,934 Long term debt, net of current maturities 511,964,053 535,280,390 (23,316,337) Obligations under capital leases, net of current portion Net Pension liability 85,058,321 85,644,960 (586,639) Other post employment benefits liability 161,936,073 161,936,073 DCRS sick leave liability 1,502,154 1,502,154 0 Employees' annual leave net of current portion 1,204,085 1,204,085 0 Customer advances for construction 470,165 470,165 0 Total liabilities 838,528,294 869,229,824 (30,701,531)Deferred inflows of resources: Unearned forward delivery contract revenue 292,009 292,009 0 Pension 1,663,500 1,663,500 0 Other post employment benefits 39,067,668 39,067,668 0 Total deferred inflows of resources 41,023,177 0 41,023,177 Commitments and contigencies Net Position: Net investment in capital assets (3,793,999)12,847,171 (16,641,170) Restricted 25,682,151 66,343,958 (40,661,808) Unrestricted 4,229,296 (28,988,618) 33,217,914 5,403,277 Total net position 26,117,447 20,714,171

905,668,918

\$ 930,967,172

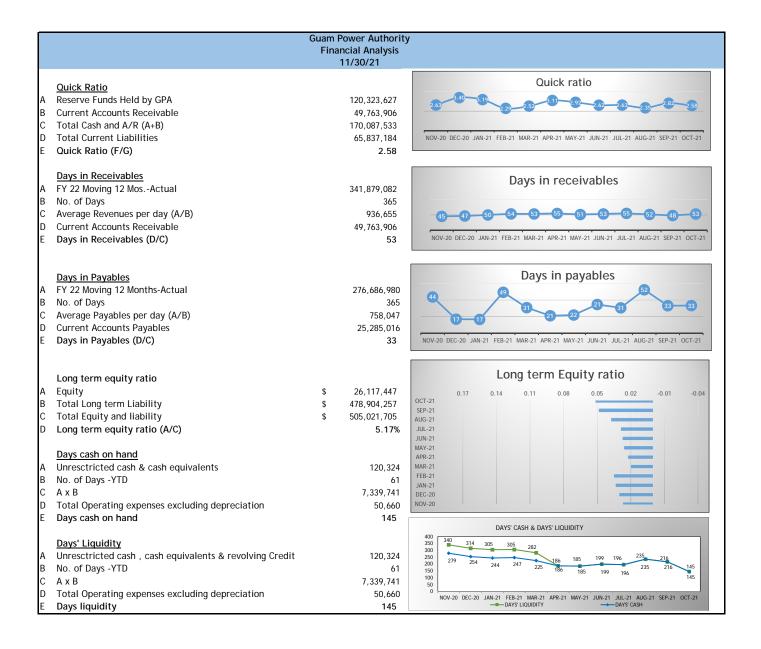
(25, 298, 254)

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM Statement of Revenues, Expenses and Changes in Net Assets Two Months Ending November 30 % of November 30 % of Unaudited Unaudited Unaudited Unaudited change change 2021 Inc (dec) 2021 2020 Inc (dec) Revenues Sales of electricity \$ 32,685,303 23,853,184 37 65,461,554 \$ 47,816,837 37 DSM-Rebates 329,116 322,469 644,243 625,329 Miscellaneous 138,686 217,043 262,673 280,243 (36)(6) Total 33,153,105 24,392,696 36 66,368,470 48,722,409 36 Bad debt expense (101,917) (87,083) <u>17</u> (203,834) (174,166) <u>17</u> Total revenues 33,051,188 24,305,613 36 66,164,636 48,548,243 36 Operating and maintenance expenses Production fuel 19,600,460 10,984,229 78 38,031,355 21,894,551 74 Other production 1,367,885 1,321,410 2,535,291 2,270,011 12 70 20,968,345 12,305,639 40,566,646 24,164,562 <u>68</u> 2,932,929 Depreciation (10)3,761,362 (22)5,907,933 6,588,893 2,161,496 2,391,427 Energy conversion cost 791,433 1,059,870 (25)1.610.710 (25)(17) Transmission & distribution 1,045,373 1,110,532 1,981,211 (6) Customer accounting 688.749 401.099 1 141 265 796.441 72 43 Administrative & general 2,936,753 2,555,715 <u>15</u> 5,359,976 5,445,763 (2) Total operating and maintenance expenses 29,363,582 21,194,217 56,567,740 41,548,582 <u> 39</u> 36 Operating income 9,596,896 6,999,661 37 3,687,606 3,111,396 19 Other income (expenses) Interest income 51,359 (77)91,761 (97) 11,868 3,167 Interest expense and amortization (2,279,797) (2,189,177) (4,382,568) (4,295,272) Bond issuance costs 102,507 89,228 15 205,015 178,456 15 Allowance for funds used during construction 18,256 0 44,125 0 Pandemic-COVID19 (42,686)(45, 187)0 (42,686)(48, 204)0 Losses due to typhoon (12,090) 0 0 (12,090) 0 0 Grant from GovGuam 0 0 0 0 Reduction in Under Recovery of Fuel 0 0 0 Other expense (4,291) (4,291) (0) (8,582) (8,582)(0)Total other income (expenses) 5 (4,081,841) (2,206,233) (2,098,068) (4,193,620) 3 Income (loss) before capital contributions 1,481,373 1,013,328 46 5.403.276 2.917.820 85 Capital contributions 0 0 0 0 0 Increase (decrease) in net assets 1,481,373 1.013.328 5,403,276 2,917,820 85 46 Total net assets at beginning of period 610 24,636,075 3,470,713 20,714,172 1,566,221 1,223 Total net assets at end of period \$ 26,117,448 4,484,041 26,117,448 4,484,041 482

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) **Statements of Cash Flows** Period Ended November 30, 2021

	Month Ending 11/30/2021	YTD Ending 11/30/2021
Increase(decrease) in cash and cash equivalents		
Cash flows from operating activities:		
Cash received from customers	\$30,059,584 \$	59,393,725
Cash payments to suppliers and employees		
for goods and services	41,343,625	79,911,573
Net cash provided by operating activities	(\$11,284,041)	(20,517,848)
Cash flows from investing activities:		
Interest and dividends on investments and		
bank accounts	11,868	3,167
Net cash provided by investing activities	11,868	3,167
Cash flows from non-capital financing activities		
Interest paid on short term debt	(14,867)	(20,093)
Provision for self insurance funds	(610,032)	(610,032)
Net cash provided by noncapital financing activities	(624,899)	(630,125)
Cash flows from capital and related financing activities		
Acquisition of utility plant	(941,346)	(1,658,893)
Principal paid on bonds and other long-term debt	· · · · · · · · · · · · · · · · · · ·	(21,540,000)
Interest paid on bonds(net of capitalized interest)	18,256	(13,053,750)
Interest paid on capital lease obligations	-	-
Interest & principal funds held by trustee	(3,977,544)	26,674,985
Reserve funds held by trustee	477,384	487,548
Bond funds held by trustee	4,567,640	4,567,577
Principal payment on capital lease obligations	(0)	(0)
Grant from DOI/FEMA	-	-
Grant from GovGuam	-	-
Reduction in Under Recovery of Fuel	-	-
Debt issuance costs/loss on defeasance	(314,900)	(611,337)
Net cash provided by (used in) capital and related		
financing activities	(170,509)	(5,133,870)
Net (decrease) increase in cash and cash equivalents	(12,067,582)	(26,278,676)
Cash and cash equivalents, beginning	132,391,209	146,602,303
Cash and cash equivalents-Funds held by GPA, November 30, 2021	\$ 120,323,627 \$	120,323,627

GUAM POWER AUTHORITY (A COMPONENT UNIT OF THE GOVERNMENT OF GUAM) Statements of Cash Flows, continued Period Ended November 30, 2021 Month Ending YTD Ending 11/30/2021 11/30/2021 Reconciliation of operating earnings to net cash provided by operating activities: Operating earnings net of depreciation expense and excluding interest income \$3,687,606 \$9,596,896 Adjustments to reconcile operating earnings to net cash provided by operating activities: Depreciation and amortization 2,932,929 5,907,933 Other expense 43,440 141,657 (Increase) decrease in assets: Accounts receivable (2,998,690) (6,785,310)Materials and inventory (569,824) (524, 374)(13,029,630) (22,529,698) Fuel inventory Prepaid expenses 736,442 (1,304,022)Unamortized debt issuance cost 22,362 26,261 Deferred fuel revenue (3,420,796)(5,527,042)Unamortized loss on debt refunding 190,030 380,060 Unamortized forward delivery contract costs Increase (decrease) in liabilities: Accounts payable-operations 81,908 1,674,148 Accounts payable-others (52,750)(461,410)Accrued payroll and employees' benefits 187,479 240,489 Provision for Self-Insurance 306,991 600,934 Net pension liability (298,953)(586, 639)Employees' annual leave 14,860 8,989 Customers deposits (301,026)(193, 141)Customer advances for construction Unearned forward delivery contract revenue Net cash provided by operating activities (\$11,284,041) \$ (20,517,848)



GUAM POWER AUTHORITY ACCRUED REVENUE NOVEMBER 2021

	FOR THE MO	NTH ENDED EMBER	TWO MONT	HS ENDED EMBER
	2021	2020	2021	2020
KWH SALES:				
Residential	48,087,642	47,924,589	94,296,909	94,941,650
Residential - Apt & Condo	662,924		1,324,595	
Small Gen. Non Demand	6,873,816	5,490,013	13,770,190	11,212,266
Small Gen. Demand	16,599,417	15,180,559	32,689,395	30,930,898
Large General	17,942,248	18,776,244	35,479,193	37,312,279
Independent Power Producer	41,173	74,692	69,815	108,017
Private St. Lights	33,774	33,159	65,127	67,432
Sub-total	90,240,994	87,479,256	177,695,224	174,572,543
Government Service:	054.040		4.070.407	4 040 000
Small Non Demand	954,648	785,007	1,973,105	1,612,222
Small Demand	9,376,567	7,754,428	18,737,986	15,619,195
Large	4,066,393	4,826,626	8,403,344	10,008,048
Street Lighting	403,673	557,701	980,949	1,192,327
Sub-total	14,801,282	13,923,762	30,095,384	28,431,792
Total	105,042,276	101,403,018	207,790,608	203,004,335
U. S. Navy	25,554,904	27,037,233	51,981,082	52,950,589
GRAND TOTAL	130,597,180	128,440,251	259,771,691	255,954,924
DEVENUE.				
REVENUE:	44.070.040	0.504.000	00 007 455	47 004 500
Residential	11,676,919	8,561,989	23,387,455	17,001,508
Residential - Apt & Condo Small Gen. Non Demand	155,449	4 0 40 220	310,823	2 540 004
	1,963,390	1,242,336	4,011,776	2,548,901
Small Gen. Demand	4,258,463	3,031,479	8,559,378	6,204,224
Large General	4,531,785	3,471,380	9,041,551	7,069,475
Independent Power Producer	11,236	8,640	18,460	15,186
Private St. Lights Sub-total	25,776 22,623,049	23,400	50,711	47,687
Government Service:	22,623,018	16,339,223	45,380,155	32,886,981
Small Non Demand	291,714	192,813	600,490	396,045
Small Demand	2,601,332	1,687,099	5,196,916	3,409,879
Large	1,059,790	1,003,746	2,191,427	
Street Lighting	392,968	387,718	820,590	2,103,429 785,908
Sub-total	4,345,805	3,271,376	8,809,423	6,695,261
Total	26,968,822	19,610,598	54,189,578	39,582,242
U. S. Navy	5,716,481	4,242,586	11,271,976	8,234,596
•	, ,	, ,		
GRAND TOTAL	32,685,303	23,853,184	65,461,554	47,816,837
NUMBER OF CUSTOMERS:				
Residential	45,227	44,271	45,232	43,994
Residential - Apt & Condo	5	-	6	-
Small Gen. Non Demand	4,523	4,380	4,519	4,180
Small Gen. Demand	737	823	738	983
Large General	85	97	85	118
Independent Power Producer	2	2	2	3
Private St. Lights	521	517	520	526
Sub-total	51,100	50,090	51,100	49,802
Government Service:				
Small Non Demand	709	684	702	677
Small Demand	358	355	351	340
Large	20	40	20	43
Street Lighting	641	618	640	618
Sub-total	1,728	1,697	1,713	1,677
Total	52,828	51,787	52,813	51,479
US Navy	1	1	1	1
	52,829	51,788	52,814	51,480

GUAM POWER AUTHORITY ACCRUED REVENUE

	TWELVE	NOVEMBER	OCTOBER	SEPTEMBER	AUGUST	JULY	JUNE	MAY	APRIL	MARCH	FEBRUARY	JANUARY	DECEMBER
	MONTHS ENDED	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2021	2020
KWH SALES:													
Residential	580,543,356	48,087,642	46,209,267	47,028,402	46,760,737	50,202,955	54,956,782	52,850,154	46,568,762	48,771,669	42,297,847	49,701,539	47,107,600
Residential - Apt & Condo	4,480,760	662,924	661,671	637,015	632,147	653,330	677,455	556,219	0	0	0	0	0
Small General Non Demand	77,753,632		6,896,374	6,593,068	6,793,429	7,108,892	6,924,843	7,276,536	6,491,718	6,181,821	5,320,594	5,647,220	5,645,321
Small General Demand	190,842,444	16,599,417	16,089,978	15,455,731	16,098,295	16,688,580	16,243,376	16,369,442	16,491,201	15,846,106	14,414,603	14,940,853	15,604,863
Large General	217,331,425		17,536,945	17,704,888	18,597,960	18,930,932	17,898,901	18,958,969	17,748,417	18,590,234	16,494,154	17,811,468	19,116,309
Private Outdoor Lighting	388,530	33,774	28,642	33,440	32,913	32,435	33,557	31,625	34,507	30,651	31,009	34,202	31,775
Independent Power Producer	384,895		31,353	27,693	34,376	29,999	28,733	21,893	34,625	31,495	33,249	35,152	35,155
Sub-Total	1,071,725,041	90,240,994	87,454,230	87,480,236	88,949,856	93,647,123	96,763,645	96,064,839	87,369,230	89,451,976	78,591,456	88,170,433	87,541,022
Government Service:													
Small Non Demand	11,066,599	954,648	1,018,457	973,499	999,588	979,317	933,456	1,021,708	968,685	887,301	735,075	798,105	796,758
Small Demand	105,666,236	9,376,567	9,361,419	8,781,057	9,198,450	9,188,345	8,996,648	9,426,469	9,008,025	8,477,141	7,585,311	8,032,905	8,233,899
Large	52,686,407	4,066,393	4,336,950	4,083,142	4,412,625	4,354,590	4,202,613	4,307,222	4,168,906	4,895,498	4,438,169	4,651,006	4,769,294
Street Lighting (Agencies)	6,866,782		577,276	634,577	558,806	634,626	557,701	576,932	634,691	538,470	557,701	557,750	634,577
Sub-Total	176,286,023	14,801,282	15,294,102	14,472,274	15,169,469	15,156,878	14,690,418	15,332,331	14,780,307	14,798,411	13,316,257	14,039,765	14,434,528
Total	1,248,011,064	105,042,276	102,748,332	101,952,511	104,119,326	108,804,002	111,454,063	111,397,170	102,149,537	104,250,386	91,907,713	102,210,199	101,975,550
U.S. Navy	310,772,797	25,554,904	26,426,178	26,815,294	26,692,993	27,207,666	26,320,152	26,562,916	23,118,519	25,707,988	23,290,980	26,998,129	26,077,078
Grand Total	1,558,783,862	130,597,180	129,174,510	128,767,804	130,812,319	136,011,668	137,774,215	137,960,086	125,268,057	129,958,374	115,198,693	129,208,328	128,052,627
REVENUE:													
Residential					\$ 10,967,335	, ., ., .	, . ,	,,	\$ 10,189,207	,	, .,	, . ,	, . , .
Residential - Apt & Condo			\$ 155,374	\$ 136,108	\$ 136,247				*			\$ -	\$ -
Small General Non Demand		, , , , , , , , ,	\$ 2,048,385	\$ 1,754,981	. ,,		. ,,	. , . ,					\$ 1,281,222
Small General Demand		. , ,		\$ 3,694,240		,. ,	,,.					,,	\$ 3,144,237
Large General	\$ 47,736,578		\$ 4,509,766	\$ 4,083,273	\$ 4,358,675			, , , , , , ,					\$ 3,673,430
Private Outdoor Lighting	\$ 290,003		\$ 24,936	\$ 24,609	\$ 24,904			\$ 23,633					\$ 22,998
Independent Power Producer Sub-Total	\$ 91,555 \$ 235,045,792		\$ 7,224	\$ 6,610	\$ 9,000 \$ 21,378,144		\$ 8,011	\$ 5,021 \$ 20,077,688		\$ 8,082 \$ 19,118,189		,	\$ 6,783 \$ 16,579,946
Government Service:	\$ 235,045,792	\$ 22,623,016	\$ 22,757,137	\$ 20,182,200	\$ 21,376,144	\$ 19,004,294	\$ 19,429,067	\$ 20,077,000	\$ 19,127,353	\$ 19,110,109	\$ 17,642,760	\$ 16,465,995	\$ 16,579,946
Small Non Demand	\$ 3,020,876	\$ 291,714	\$ 308,775	\$ 275,673	\$ 284,291	\$ 258,104	\$ 246,769	\$ 268,911	\$ 254,670	\$ 237,132	\$ 200,646	\$ 197,714	\$ 196,477
Small Demand	\$ 25,906,464			\$ 2,265,374	\$ 2,374,691								\$ 1,777,805
	,,				\$ 1,065,159								
Large					\$ 1,065,159								
Street Lighting (Agencies) Sub-Total	\$ 4,873,891 \$ 45,917,297		\$ 427,622 \$ 4,463,619		\$ 4,137,162			\$ 403,719 \$ 3,859,122					\$ 398,184 \$ 3,355,197
Total	\$ 280.963.089			\$ 24.136.184		,, .						,,.	\$ 19.935.143
U.S. Navy	\$ 60,915,993	,,.	\$ 5,555,495	. , , .	\$ 4,899,219	, . ,	, .,	,,.	\$ 4,539,687	, , , , ,			\$ 4,753,332
•													
Grand Total	\$ 341,879,082	\$ 32,685,303	\$ 32,776,251	\$ 29,905,448	\$ 30,414,525	\$ 28,980,204	\$ 28,890,955	\$ 29,120,903	\$ 27,376,674	\$ 27,798,789	\$ 25,194,553	\$ 24,047,000	\$ 24,688,476
NUMBER OF CUSTOMERS:													
Residential	44,909		45,237	45,285	45,311	45,071	45,241	44,555	44,502	44,575	45,051	44,503	44,345
Residential - Apt & Condo	6		6	7	6	6	6	5	0	0	0	0	0
Small General Non Demand	4,458		4,515	4,511	4,508	4,501	4,502	4,491	4,433	4,386	4,367	4,381	4,378
Small General Demand	775	737	738	743	743	742	741	741	834	824	820	821	821
Large General	90	85	84	85	85	85	85	86	95	95	95	97	97
Private Outdoor Lighting	515	521	518	511	514	511	514	514	517	514	517	515	517
Independent Power Producer	2		2	2	2	2	2	2	2	2	2	2	2
Sub-Total	50,755	51,100	51,100	51,144	51,169	50,918	51,091	50,394	50,383	50,396	50,852	50,319	50,160
Government Service:													
Small Non Demand	689	709	695	696	694	686	686	687	692	679	675	682	685
Small Demand	348	358	344	344	344	343	343	344	360	350	350	350	349
Large	25		20	20	20	20	20	20	31	31	31	31	34
Street Lighting (Agencies)	622		639	620	620	618	618	618	619	618	618	618	618
Sub-Total	1,684	1,728	1,698	1,680	1,678	1,667	1,667	1,669	1,702	1,678	1,674	1,681	1,686
Total	52,439	-	52,798	52,824	52,847	52,585	52,758	52,063	52,085	52,074	52,526	52,000	51,846
U.S. Navy	1	1	1	1	1	1	1	1	1	1	1	1	1
Grand Total	52,440	52,829	52,799	52,825	52,848	52,586	52,759	52,064	52,086	52,075	52,527	52,001	51,847

GUAM POWER AUTHORITY ACCRUED REVENUE NOVEMBER 2021

NEW RATE

LEAC 0.150800

DSM 0.003109

FUEL RATE 0.147691

March Corporation Corpor		NUMBER		TOTAL RE	VENUE	BASE RA	TE REVENUE	AVERAGE PE	R CUSTOMER	<u> </u>			
Month Mont	RATE		KWH			27.02.10					NON-FUEL	OIL	
R. Residential Age 20 40,877,847 11,776,791 21,2329 24,2329 11,776,791 21,076,791 12,076 12,076 11,076,791 12,081		CUSTOMERS	SALES	AMOUNT	C/KWH	C/KWH	AMOUNT	KWH	REVENUE	C/KWH	AMOUNT	C/KWH	AMOUNT
D. Residential-Agel & Condo S. 64,229 (195,449) 23,4409 (294,049) 155,446 (294,049) 155,446 (294,049) 155,446 (294,049) 157,447 (194,789) 179,847 (195,249) 157,447 (195,249)										-			
Small Chambor Small Chambo			.,,										
J. Small Gen. Demand 779 16,099.41 4.28.461 2.86.451 2.85.541 4.29.48 4.													
P. Large General 88 17,942,248 4,81,786 22,2376 22,2376 23,2378 23,2378 23,088 33,1612 0,0000 1,982,398 14,6770 2,283,397 17,0000 1,0000 1,982,398 14,6770 2,283,397 1,0000 1,0000 1,982,398 14,6770 2,283,397 1,0000													
Independent Prover Productor 2													
Private Sil Lighter 19 19 19 19 19 19 19 1													
Sub-Total Sub-Total 90,00 90,240,94 22,633,016 25,006 26,006 22,623,016 1,766 442,72 10,3201 3,312,59 14,7405 13,310,059 00cmment Service: Samil Non-Damand 388 337,6597 26,01332 22,727 27,227 27,													
Small Non-Demand 70													
S Small Non Demand 709 954,648 291,714 30,5773 221,714 1,346 411,44 15,7852 150,722 14,7691 13,848,855		51,100	90,240,994	22,623,018	25.0696	25.0696	22,623,018	1,766	442.72	10.3201	9,312,959	14.7495	13,310,059
K Small Demand 358 9,375,657 2,601,332 27,7429 2,601,332 25,192 7,362,00 22,738 1,216,487 14,7691 1,324,835 2,601,000 2,601,	Government Service:												
K Small Dammed 358 9,376,657 2,601,332 27,7429 2,619,32 25,192 7,362,0 12,9738 1,216,487 14,7691 1,324,435 1,520 1,725 1,7	S Small Non Demand	709	954.648	291.714	30.5573	30.5573	291.714	1.346	411.44	15.7882	150.722	14.7691	140.993
Lung (
F. Street Lighting (Agencies) 641 43,872 14,901.92 23,928 23,941 37,346 32,986 23,048 32,048 22,049 23,049 24,048,050 22,048 22,049 23,049 24,048,050 2					-								
Sub-Total 1,728 14,801,922 105,042,776 12,554,904 11,728 12,554,904 11,228 130,597,100 12,554,904 11,228 14,45,058 12,369,302 12,369,302 12,472 16,807 16,801,700 16,802,776 16,801 16,802,776 16,802,776 16,801 16,802,776 16,802,776 16,802,776 16,802,776 16,802,776													
U.S. Navy 1 1 050.42.276													
U.S. Navy 1 22,654,904 5,716,481 22,3894 22,3894 5,716,481 22,3894 22,3894 5,716,481	Sub-Total	1,720			23.3010	23.3010		0,500	2,314.33	14.0003	2,103,310	14.7007	
We Months Ended November 2021 R Residential Apt & Condo 6 1,324,965 310,823 2,3465 22,48019 R Residential Apt & Condo 6 1,324,965 310,823 2,3465 23,4865 310,823 2,4865 310,824 2,4865 310	U.S. Navy	1			22.3694	22.3694				6.2687	1,601,968	16.1007	
We Months Ended November 2021 R Residential Apt & Condo 6 1,324,965 310,823 2,3465 22,48019 R Residential Apt & Condo 6 1,324,965 310,823 2,3465 23,4865 310,823 2,4865 310,824 2,4865 310										44.6:			
R Residential Apt & Condo Resi	TOTAL	52,829	130,597,180	32,685,303	25.0276	25.0276	32,685,303	2,472	618.70	10.0192	13,084,843	15.0083	19,600,460
DR Residential -Apt & Condo 6 1,324,999 310,823 23.4655 310,823 23.4655 310,823 22.4655 310,823 22.4655 310,823 22.4655 310,823 22.4655 310,823 22.4655 310,823 22.4655 32.4655 310,823 22.4655 32.4655 310,823 22.4655 32.4655 32.4655 32.4655 32.4655 32.4655 32.4655 32.4655 32.4655 32.4655 32.4655 32.4655 22.4655 22.4655 22.4655 22.4455 22.4451 41.4325 11.690,9456 33.830,933 14.5355 5.715,1252 21.4706 22.4451 24.4415 24.441 24.4415 24.4415 24.4415 24.4415 24.4415 24.4415 24.249 29.201 11.1806 13.867,337 14.3576 25.512,818 24.4415 24.4415 24.4415 24.4415 24.2415 24.242 24.242,918 24.44179 24.242,918 24.242,918 24.44179 24.242,918 24.242,918 24.44179 24.242,918 24.242,914 24.242,914	Two Months Ended November 2021												
Small Gen. Non Demand 4,519 13,770,190 4,011,776 29,138 29,138 29,138 29,147,76 29,138 29,148 29,041,756 14,8486 2,044,863 14,2851 1,957,092 1,959,194 1,959,195 1,959,194 1,959,195 1	R Residential	45,232	94,296,909	23,387,455	24.8019	24.8019	23,387,455	2,085	517.06	10.5235	9,923,341	14.2784	13,464,114
Jamil Gen, Demand 738 32,689,395 8,559,376 26,1800 26,4415 28,441 9,4155 14,645 28,441 28	D Residential - Apt & Condo	6	1,324,595	310,823	23.4655	23.4655	310,823	240,835	56,513.27	8.7329	115,675	14.7326	195,148
P. Large General 85 3.5.478,193 9.041,551 25.4841 5.2.4441 9.041,551 419,872 107,000.60 10.9456 3.83,338 14.5358 5.158,152 H. Private St. Lights 520 65.127 50,711 77,8654 77,8654 57,8654 50,711 12.96 8.6.75 11.806 19,867,337 14.2449 9.945 H. Private St. Lights 520 65.127 50,711 77,8654 77,8654 50,711 12.96 88.075 11.806 19,867,337 14.3576 25,512,818 Government Service: S. Small Non Demand 702 19,73,105 600,400 0.04337 0.04337 0.000,400 0.04337 0.000,400 S. Small Demand 772 19,73,105 600,400 0.04337 0.000,400 0.04337 0.000,400 S. Small Demand 731 13,73,965 13,73,965 13,73,73,73,965 13,73,73,965 13,73,73,965 13,73,73,965 13,73,73,73,73,73,73,73,73,73,73,73,73,73	G Small Gen. Non Demand	4,519	13,770,190	4,011,776	29.1338	29.1338	4,011,776	3,047	887.76	14.8486	2,044,683	14.2851	1,967,092
Large General 85 35,479,193 9,041,551 25,4841 24,445 26,4451 24,4551 24,4551	J Small Gen. Demand	738	32,689,395	8,559,378	26.1840	26.1840	8,559,378	44,325	11,605.94	11.7795	3,850,632	14.4045	4,708,747
Independent Power Protucer 2 69,815 18,460 26,4415 19,460 34,908 9,230.11 12,1966 8,515 14,2449 9,945 14,1461 17,695,224 45,380,155 25,5382 25,5382 45,380,155 3,477 888.07 11,1806 19,867,337 14,3576 25,512,818 18,600 177,695,224 45,380,155 25,5382 25,5382 45,380,155 3,477 888.07 11,1806 19,867,337 14,3576 25,512,818 18,000 177,695,224 45,380,155 25,5382 25,5382 45,380,155 3,477 888.07 11,1806 19,867,337 14,3576 25,512,818 18,000 19,867,337 14,3576 25,512,818 18,000 19,867,337 14,3576 25,512,818 18,000 18,000 14,000 18,000 14,7691 27,67,432 18,000 14,000 14,000 14,000 14,7691 27,67,432 14,000 14	P Large General	85	35,479,193	9,041,551	25.4841	25.4841	9,041,551	419,872	107,000.60	10.9456	3,883,398	14.5385	
H Private St. Lights 520 65,127 45,380,155 25,5382 45,380,155 25,5382 45,380,155 3,477 888.07 11,806 19,867,337 14,376 25,512,818 Government Service: S Small Non Demand 702 1,973,105 600,400 30,4337 30,4337 500,400 52,512,818 85,40 18,867,337 14,3579,88 5,198,916 27,7347 5,198,916 27,734,918 27,738,918 27,339,134 5,198,918 27,339,138 5,198,918 27,339,134 5,198,918 27,339,134 5,198,918 27,339,13		2			26.4415	26.4415			9.230.11	12.1966		14.2449	
Sub-Total 51,00 177,695,224 45,380,155 25,5382 25,5382 45,380,155 3,477 888.07 11.1806 19,867,337 14.3576 25,512,818 Government Service: S Small Non Demand 702 1,1973,105 600,490 30,4337 30,4337 600,490 2,191,427 420,67 109,571,35 11,5398 969,732 14,585 14,7691 2,774,422 1,774 20,167 109,571,35 11,5398 969,732 14,585 14,7691 144,877 30,040,040 1,774 30,040,040 1,774 30,040,040 14,7691 2,774,422 1,774 1,775 1,774 1,7		520											
Government Service: S Small Non Demand 702 1,973,105 600,490 30,4337 600,490 2,811 85,306 53,385 14,806,03 12,9656 2,429,485 14,7891 291,410 K Small Demand 351 18,737,986 5,196,916 20 8,403,344 2,191,427 28,0730 28,073,347 5,196,916 29,7747 20,1878 30,900 11,733 30,908,394 30,909,99 30,9													
S. Small Non Demand		,	,,	,,			,,	-,			,,		
S. Small Non Demand	Government Service:												
K Small Domand 351 18,737,986 5,196,916 277,347 27,7347 5,196,916 53,385 14,806.03 12,9666 2,429,485 14,7691 2,767,432 1,121,985 1,121,9		702	1 973 105	600 490	30 4337	30 4337	600 490	2 811	855 40	15 6646	309 080	14 7691	291 410
Large													
F Street Lighting (Agencies) Sub-Total Sub-Tot													
Sub-Total 1,713 30,095,384 8,809,423 29,2717 29,2717 8,809,423 17,569 5,142.69 14.5670 4,384,009 14.7046 4,425,414 29,398,232 U.S. Navy 1 51,981,082 11,271,976 21.6848 21.6848 11,271,976 6.61.154 3,178,853 15.5694 29,398,232 TOTAL 52,814 259,771,691 65,461,554 25.1996 25.1996 65,461,554 4,919 1,239,47 10.5593 27,430,199 14.6403 38,031,355 Towelve Months Ended November 2021 R Residential Apt & Condo 6 4,480,760 947,917 21.1553 12.1553 19,346,371 17,441 4,474.29 14.3212 11,135,243 11,3321 8,311,128 1,3321 8,341,128 1,3321 8,341,128 1,3321 8,341,128 1,3321 8,341,128 1,3321 8,341,128 1,341,128													
U.S. Navy 1 51,981,082 11,271,976 21.6848 21.6848 11,271,976													
TOTAL 52,814 259,771,691 65,461,554 25.1996 25.1996 65,461,554 4,919 1,239,47 10.5593 27,430,199 14.6403 38,031,355 Twelve Months Ended November 2021 R Residential 44,909 580,543,356 122,338,629 21.0731 21.0731 122,338,629 21	Sub-Total	1,713	30,095,364	0,009,423	29.2111	29.2111		17,569	5,142.09	14.5670	4,364,009	14.7040	
TOTAL 52,814 259,771,691 65,461,554 25.1996 25.1996 65,461,554 4,919 1,239.47 10.5593 27,430,199 14.6403 38,031,355 Twelve Months Ended November 2021	II C No		E4 004 000	44 074 070	24 6040	04 0040				C 4454	2 470 052	45.5004	
Twelve Months Ended November 2021 R Residential R Residential A44,909 S80,543,356 D Residential - Apt & Condo G 4,480,760 D 947,917 D September 2021 R Residential - Apt & Condo G 4,480,760 D Residential - Apt & Condo G 5,135,928 D Residential - Apt & Condo G 5,135,928 D Residential - Apt & Condo G 5,135,928 D Residential - Apt & Condo G 7,753,632 D 19,946,371 D September 2021 D September 2021 D September 2021 D September 2021 R Residential - Apt & Condo G 4,480,760 D 947,917 D 1,1553	U.S. Navy	1	51,961,062	11,271,976	21.0040	21.0040	11,2/1,9/6			6.1154	3,170,053	15.5694	6,093,123
R Residential R Residential A4,909 S80,543,356 122,338,629 21.0731 21.07431 21.	TOTAL	52,814	259,771,691	65,461,554	25.1996	25.1996	65,461,554	4,919	1,239.47	10.5593	27,430,199	14.6403	38,031,355
R Residential R Residential A4,909 S80,543,356 122,338,629 21.0731 21.07431 21.	Twolve Months Ended November 2024												
D Residential - Apt & Condo G 4,480,760 D Residential - Apt & Condo G 5,632 D Residential - Apt & Condo G 6 4,480,760 D 947,917 D Residential - Apt & Condo G 7,755,632 D 19,946,371 D 14,321 D 14,321 D 11,135,243 D 11,321 D 11,135,243 D 11,321 D 11,135,243 D 11,321 D 11,32		44 000	E00 E42 2EC	122 220 620	24 0724	24 0724	122 220 620	12 027	2 724 17	0.0522	E7 202 700	11 2100	65 425 020
G Small Gen. Non Demand J Smal													
J Small Gen. Demand 775 190,842,444 43,694,738 22.8957 22.8957 43,694,738 246,116 56,350.01 11.6023 22,142,152 11.2934 21,552,586 P Large General 90 217,331,425 47,736,578 21.9649 47,736,578 24,282,845 533,369.59 10.7531 23,369,866 11.2118 24,366,693 1 lindependent Power Producer 2 384,895 91,555 23.7870 91,555 23.7870 91,555 19,071,725,041 235,045,792 21.9315 21.9315 235,045,792 21.116 4,631.02 10.6870 114,535,684 11.2445 120,510,108	2 Hooladiila Apra Gonag	_											
P Large General 90 217,331,425 47,736,578 21.9649 47,736,578 23.866,93 1 10.7531 23,369,886 11.2118 24,366,693 1 10.00													
I Independent Power Producer H Private St. Lights Sub-Total Sub-To													
H Private St. Lights Sub-Total 515 388,530 290,003 74.6412 74.6412 290,003 754 562.84 63.239 245,703 11.4020 44,300 Sub-Total 50,755 1,071,725,041 235,045,792 21.9315 235,045,792 21,116 4,631.02 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 10.6870 114,535,684 11.2445 120,510,108 11.4020 11.245 120,510,108 11.4020 11.245 120,510,108 11.4020 11.245 120,510,108 11.4020 11.245 120,510,108 11.4020 11.245 120,510,108 120,510,108 11.245 120,510,108 120,510,108 120,510,108 120,510,510,510,510,510,510,510,510,510,51													
Sub-Total 50,755 1,071,725,041 235,045,792 21.9315 235,045,792 21,116 4,631.02 10.6870 114,535,684 11.2445 120,510,108 Government Service: S Small Non Demand 689 11,066,599 3,020,876 27.2972 27.2972 3,020,876 16,066 4,385.50 15.8527 1,754,358 11.4445 1,266,518 (X Small Demand 348 105,666,236 25,906,464 24.5173 24.51073 25,906,464 303,421 74,390.42 13.1149 13,858,051 11.4023 12,048,413 L Large 2 5 5,686,407 1,116,067 22.9966 22.9966 12,116,067 21,116,067 2													
Government Service: S Small Non Demand 689 11,066,599 3,020,876 27.2972 27.2972 3,020,876 16,066 4,385.50 15.8527 1,754,358 11.4445 1,266,518 K Small Demand 348 105,666,236 25,906,464 24.5173 24.5173 25,906,464 303,421 74,390.42 13.1149 13,858,051 11.4023 12,048,413 L Large 25 52,686,407 12,116,067 22,9966 22,9966 12,116,067 2,121,600 487,895.30 11.8941 6,266,552 11.1025 5,849,515 F Street Lighting (Agencies) 622 6,866,782 4,873,881 70,977 78 70,9778 4,873,881 11,048 176,286,023 45,917,297 26.0470 45,917,297 104,683 27,266.80 14.7386 25,982,148 11.3084 19,935,149 Sub-Total 52,439 1,248,011,064 280,963,089 22.5129 22.5129 280,963,089 23,799 5,357.94 11.2593 140,517,832 11.2535 140,445,257 U.S. Navy 1 310,772,797 60,915,993 19.6015 60,915,993						-							
S Small Non Demand 689 11,066,599 3,020,876 27.2972 27.2972 3,020,876 16,066 4,385.50 15.8527 1,754,358 11.4445 1,266,518 1 1.4023 12,048,413 1 1.	Sub-lotal	50,755	1,071,725,041	235,045,792	21.9315	21.9315	235,045,792	21,116	4,631.02	10.6870	114,535,684	11.2445	120,510,108
K Small Demand 348 105,666,236 25,906,464 24.5173 25,906,464 303,421 74,390.42 13.1149 13,858,051 11.4023 12,048,413 L Large 25 52,686,407 12,116,067 22,9966 12,116,067 2,121,600 487,895.30 11.8941 6,266,552 11.1025 5,849,515 F Street Lighting (Agencies) 622 6,866,782 4,873,881 70,977 78 70,9778 4,873,881 11,038 7,834-79 5,7542 4,103,188 11.225 770,703 Sub-Total 1,684 176,286,023 45,917,297 26.0470 26.0470 45,917,297 104,683 27,266.80 14,7386 25,982,148 11.3084 19,935,149 U.S. Navy 1 310,772,797 60,915,993 19.6015 19.6015 60,915,993 5,357.94 11.2593 140,517,832 11.2535 140,445,257 60,915,993 19.6015 60,915,915 60,915,993 19.6015 60,915,993 19.6015 60,915,993 19.6015 60,915,993 19.6015 60,915,993 19.6015 60,915,993 19.6015 60,915,993 1													
L Large													
F Street Lighting (Agencies) Sub-Total 1,684 1,76,286,023 5,24,4873,891 1,248,011,064 5,24,399 1,248,011,064 1,310,772,797 60,915,993 1,96015													
Sub-Total 1,684 176,286,023 45,917,297 26.0470 26.0470 45,917,297 104,683 27,266.80 14.7386 25,982,148 11.3084 19,935,149 52,439 1,248,011,064 280,963,089 22.5129 22.5129 280,963,089 23,799 5,357.94 11.2593 140,517,832 11.2535 140,445,257 U.S. Navy 1 310,772,797 60,915,993 19.6015 19.6015 60,915,993 27,99 5,357.94 11.2593 140,517,832 11.2535 140,445,257 140,44													
U.S. Navy 52,439 1,248,011,064 280,963,089 22.5129 22.5129 280,963,089 23,799 5,357.94 11.2593 140,517,832 11.2535 140,445,257 140,517,832 13.5535 140,909			6,866,782	4,873,891			4,873,891	11,038		59.7542	4,103,188	11.2236	770,703
U.S. Navy 1 310,772,797 60,915,993 19.6015 19.6015 60,915,993 6.2480 19,416,984 13.3535 41,499,009	Sub-Total										25,982,148		
		52,439						23,799	5,357.94				
TOTAL 52.440 1.558.783.862 341.879.082 22 21.9324 341.879.082 29.725 6.519.48 10.2602 159.934.846 14.6722 181.944.266	U.S. Navy	1	310,772,797	60,915,993	19.6015	19.6015	60,915,993			6.2480	19,416,984	13.3535	41,499,009
	TOTAL	52,440	1,558,783,862	341,879,082	22	21.9324	341,879,082	29,725	6,519.48	10.2602	159,934,816	11.6722	181,944,266

GPA-318 ENERGY ACCOUNT FOR INTERNAL USE ONLY
318Nov21 FY 2022 Versus FY 2021

	November 202	1	November 20)20	Y T D 202	2	Y T D 2021		MOVING TWEL	VE MONTHS
Gross Generation		T								
Number of days in Period	30		30		61		61		365	
Peak demand	251		246		254		246		258	
Date	11/11/21		11/03/20		10/27/21		11/03/20		05/14/21	
E	KWH	% change	KWH	% change	KWH	% change	KWH	% change	KWH	% change
Energy Account: Kilowatt hours GPA:										
Cabras 1 & 2	70,184,000		66,509,000		140,297,000		132,013,000		694,069,000	
Cabras No. 3	70,184,000		00,509,000		140,297,000		132,013,000		094,009,000	
Cabras No. 4	0		0		0		0		0	
MEC (ENRON) Piti 8 (IPP)	29,171,100		28,494,100		59,744,300		52,697,200		333,650,200	
MEC (ENRON) Piti 9 (IPP)	4,167,600		23,059,500		22,276,300		51,967,400		305,035,500	
TEMES Piti 7 (IPP)	15,431,376		1,121,054		23,169,742		1,621,138		81,814,847	
Tanguisson 2	0		1,121,034		23,109,742		1,021,138		01,014,047	
Tanguisson 1	0		0		0		0		0	
Diesels/CT's & Others:	U		Ü		U		0		U	
MDI 10MW	0		3,832		0		6,162		251,011	
NRG Solar Dandan	3,743,210		3,808,520		7,026,550		7,577,473		50,382,060	
Dededo CT #1	2,572,640		48,180		3,854,050		90,190		21,360,860	
Dededo CT #1 Dededo CT #2	4,122,030		125,310		5,585,190		164,690		26,593,000	
Macheche CT	349,832		3,184,395		1,743,154		5,417,869		71,845,152	
							4,928,866		47,493,421	
Yigo CT (Leased)	8,619,720		2,612,190		14,609,521					
Tenjo Talofofo 10 MW	2,159,660 43,010		1,974,360		3,851,880		4,310,020		23,951,325	
			3,410		43,010		5,750		8,511,930	
Aggreko/Yigo Diesel Units Wind Turbine*	2,894,631		10,906,765		3,809,700		22,865,264		54,321,257 0	
	0		0		0		0		0	
Orote	0		0		0		0		0	
Marbo	143,458,809		141,850,616		286,010,397		283,665,022		1,719,279,562	
Ratio to last year	143,430,007	101.13	141,030,010	100.13	200,010,377	100.83	203,003,022	98.23	1,717,277,302	102.25
,										
Station use	6,080,872		5,709,658		12,273,399		11,488,514		67,814,425	
Ratio to Gross generation		4.24		4.03		4.29		4.05		3.94
NT	127 277 027		126 140 050		272 727 000		272 177 500		1 (51 4(5 127	
Net send out	137,377,937	100.01	136,140,958	00.51	273,736,998	100.57	272,176,508	07.00	1,651,465,137	400.04
Ratio to last year		100.91		99.51		100.57		97.92		102.24
KWH deliveries:										
Sales to Navy (@34.5kv)	25,554,904		27,037,233		51,981,082		52,950,590		310,773,079	
Ratio to last year	-,,-	94.52	,,	107.80	- , - ,	98.17	. , ,	104.46	, -,-	99.73
lan	444.000.000		400 402 727		224 555 046		240 227 040		4 2 40 402 070	
GPA-metered	111,823,033		109,103,725		221,755,916		219,225,918		1,340,692,058	
Ratio to last year		102.49	_	97.64		101.15	_	96.46		102.84
Power factor adj.	0		0		0		0		0	
Adjusted	111,823,033		109,103,725		221,755,916		219,225,918		1,340,692,058	
GPA KWH Accountability:										
Sales to civilian customers-										
accrual basis	105,042,276		101,403,018		207,790,608		203,004,334		1,248,011,065	
Ratio to last year		103.59		97.18		102.36		96.35		103.45
GPA use-KWH	287,168		346,983		581,001		632,769		3,940,220	
Unaccounted For	6,493,588		7,353,724		13,384,307		15,588,815		88,740,774	
Ratio to deliveries		5.81		6.74		6.04		7.11		6.62
Ratio to Gross Generation		4.53		5.18		4.68		5.50		5.16
Ratio to Net Send Out		4.74		5.42		4.89		5.73		5.

GPA-317Nov21

Guam Power Authority Fuel Consumption FY 2021

	Novembe	r 20	021	YEAR-	TO	D-DATE	MOVING	12	MONTHS
Description	BARRELS	A	MOUNT	BARRELS		AMOUNT	BARREL S		AMOUNT
FUEL FURNISHED:									
NAVY:									
Diesel	0		0	0		0	0		0
Low Sulfur	0		0	<u>0</u>		<u>0</u>	<u>0</u>		<u>0</u>
	0		0	0		0	0		0
GPA:									
RFO	139,267		\$10,436,165	256,707	\$	19,277,289	1,567,281	\$	103,382,443
Diesel	86,305		\$8,811,992	135,135	\$	13,199,918	769,433	\$	62,435,104
Low Sulfur	28,919		\$2,328,029	100,010	\$	8,058,647	497,000	\$	32,958,729
Deferred Fuel Costs	0		-\$3,420,796	0	\$	(5,527,042)	0	\$	(35,961,987)
Fuel Adjustments	0		\$0		\$	-	0	\$	715,067
Fuel Handling Costs	0		\$1,445,070	0	\$	3,022,543	0	\$	18,414,910
	254,491		\$19,600,460	491,852	\$	38,031,355	2,833,714	\$	181,944,267
IWPS:									
GPA RFO	139,267		\$10,436,165	256,707	\$	19,277,289	,, -	\$	103,382,443
Diesel	86,305		\$8,811,992	135,135	\$	13,199,918		\$	62,435,104
Low Sulfur	28,919		\$2,328,029	100,010	\$	8,058,647	497,000	\$	32,958,729
Deferred Fuel Costs	0		-\$3,420,796	0	\$	(5,527,042)	0	\$	(35,961,987)
Fuel Variance	0		\$0	0	\$	-		\$	715,067
Fuel Handling Costs	0		\$1,445,070	0	\$	3,022,543	0		18,414,910
	254,491		\$19,600,460	491,852	\$	38,031,355	2,833,714	\$	181,944,267
AVERAGE COST/Bbl.									
GPA RFO			\$74.94			\$75.09			\$65.96
Diesel			\$102.10			\$97.68			\$81.14
Low Sulfur			\$80.50			\$80.58			\$66.32
AS BURNED									
Cabras 1 & 2	400.004			455.400		42.200.442	00=000		
RFO	100,601	\$	7,590,917	176,492	\$	13,290,142	907,088	\$	60,016,527
Low Sulfur	22,144	\$	1,782,658	69,705	\$	5,616,064		\$	20,132,611
Diesel	65 122 810	\$	5,253		\$	8,891	1,512		111,132
Calman 2 8 4	122,810	\$	9,378,828	246,308	\$	18,915,097	1,205,316	\$	80,260,271
Cabras 3 & 4 RFO	0	\$		0	\$		0	\$	
Low Sulfur	0	\$ \$	-	0	\$	-	0	\$	-
Diesel	0	\$	-	0	\$	-	0	\$	-
Diesei	0		-	0	\$	<u></u>	0	\$	
	0	\$		U	Э	<u> </u>	U	Э	-
MEC (Piti Units 8&9)		_						_	
RFO	38,666	\$	2,845,249	80,215	\$	5,987,148	660,193	\$	43,365,916
Low Sulfur	6,775	\$	545,372	30,305	\$	2,442,582	· ·	\$	12,826,118
Diesel	19 45 450	\$	1,679	<u>39</u>	\$	3,443	67	1 -	5,924
Divide CTI: CDA	45,459	\$	3,392,299	110,558	5	8,433,173	860,544	\$	56,197,958
Diesel & CT's - GPA:	0	6		0	e		427	e.	42.047
MDI Dsl		\$	72 692		\$	210.020	148 000		43,847
Macheche CT	847		72,682	3,729	\$	319,938	-	\$	11,630,803
Yigo CT	17,725	\$ \$	1,843,573	-	\$	2,988,025	98,317		8,188,522
Talofofo 10 MW	146 5,505	\$	12,768 558,188	146 7,328	\$ \$	12,768 716,877	14,359 102,149	\$	1,182,819 7,224,846
Aggreko			-	-					
Tenjo TEMES (IPP)	3,797 38,480	\$ \$	334,933 3,982,284	6,661 57,668	\$ \$	587,483 5 727 577	42,075 216,126		3,692,781 18,232,410
GWA Generators	38,480 <u>13</u>		2,053	37,008 <u>43</u>		5,727,577	216,126 <u>147</u>		20,757
G WA Generators	86,221	\$	8,805,060		\$	6,679 13 187 584	767,854		62,318,048
	00,221	Φ	0,003,000	134,700	Þ	13,187,584	707,634	Ф	02,510,048
Deferred Fuel Costs	0	\$	(3,420,796)		\$	(5,527,042)		\$	(35,961,987)
Adjustment		\$	(3,740,790)		\$	(3,327,042)		\$	715,067
Adjustment Fuel Handling Costs	0	\$	1,445,070		\$	3,022,543		\$	18,414,910
TOTAL	254,491	. —	19,600,460	491,852	<u>\$</u>	38,031,355	2,833,714		181,944,267

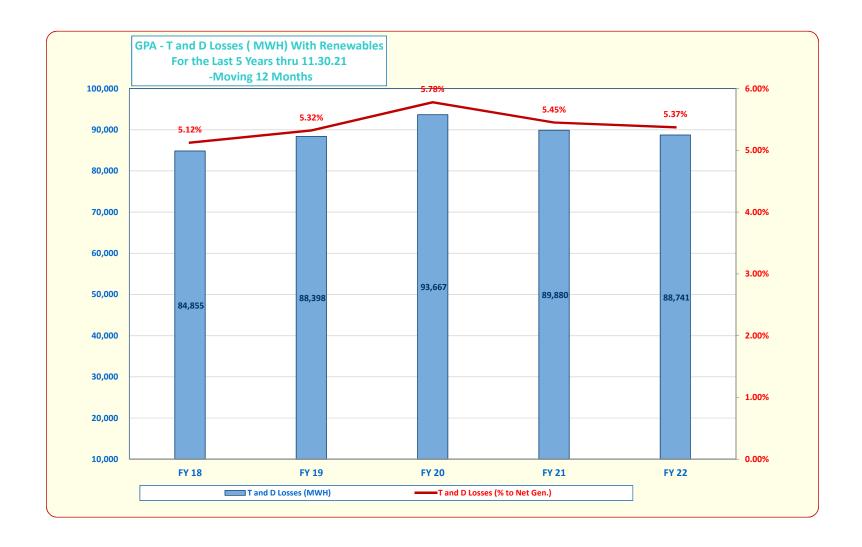
	For		npar	tatement of op ison-Budget ve ear to date en	ersus	s Actual	30, 2021			
				A - 4 1						
		Budget	No	Actual vember-21	V	ariance	YTD Budget		YTD Actual	Variance
KwH Sales-Civilian		99,015		105,042		-6,027	198,4		207,791	-9,310
Non-fuel yield KwH Sales-Navy	\$	0.113308 24,640	\$	0.109317 S	\$	0.003992 -915	\$ 0.11365 50,2		0.116711 51,981	\$ (0.003053) -1,688
Non-fuel yield	\$	0.062602	\$	0.062687	\$ ((0.000086)				
Operating revenue										
Civilian sales		11,219		11,483		-264	22,5		24,251	-1,692
Oil Navy		18,647 1,542		19,600 1,602		-953 -59	37,5 3,1		38,031 3,179	-516 -30
DSM-Rebates		0		329		-329	5,1	0	644	-644
Other income		248		139		109	3	20	263	58
		31,657		33,153		-1,496	63,5	43	66,368	-2,826
Bad debts expense		102		102		0	2	04	204	0
Total operating revenues		31,555		33,051		-1,496	63,3	39	66,165	-2,826
Operating expenses:										
Production fuel		18,647		19,600		-953	37,5	15	38,031	-516
O & M expenses:		1 507		1.2/0		222	2.0	04	2 525	25/
Other production Transmission distribution		1,597 1,007		1,368 1,045		229 -39	2,8 2,1		2,535 1,981	356 137
Administrative expense		3,472		2,937		535	7,0		5,360	1,680
Customer accounting		364		689		-325		84	1,141	-357
		6,439		6,039		400	12,8	33	11,018	1,816
IPP costs		994		791		202	1,9	87	1,611	376
Depreciation		3,999		2,933		1,066	7,0	06	5,908	1,098
		30,080		29,364		716	59,3	41	56,568	2,774
Operating income		1,475		3,688		-2,212	3,9	98	9,597	-5,599
Other revenue (expenses):										
Investment income		77		12		65		54	3	151
Interest expense Allowance for funds used during construction		(2,103) 0		(2,280) 18		177 (18)	(4,20	6) 0	(4,383) 44	176 (44)
Pandemic -COVID19		0		(43)		43		0	(43)	43
Losses due to typhoon		0		(12)		12		0	(12)	12
Bond issuance costs/Other expenses		40		98		(59)	7	9	196	(117)
Net income before capital contribution		(511)		1,481		(1,993)	2	4	5,403	(5,380)
Grants from the U.S. Government		-		· _		-	-		· -	-
Increase (decrease) in net assets		(511)		1,481		(1,993)	2	4	5,403	(5,380)
Sales Budget versus Actual		(= /		1,101			Expense	es		(2,233)
-					0000		Budget versus	Actu	191	
300,000 250,000				9 20	0000					
8 200,000 150,000				100	0000					
150,000				50	0000	~				
50,000	Navy	Other income		-50	0000	fuel Other prod	√RD Kg	ç _{etar} ı	et Wilder Abs Contr.	Edition Herest
		out. modifi								
→ YTD budget						-	YTD budget	-	YTD Actual	

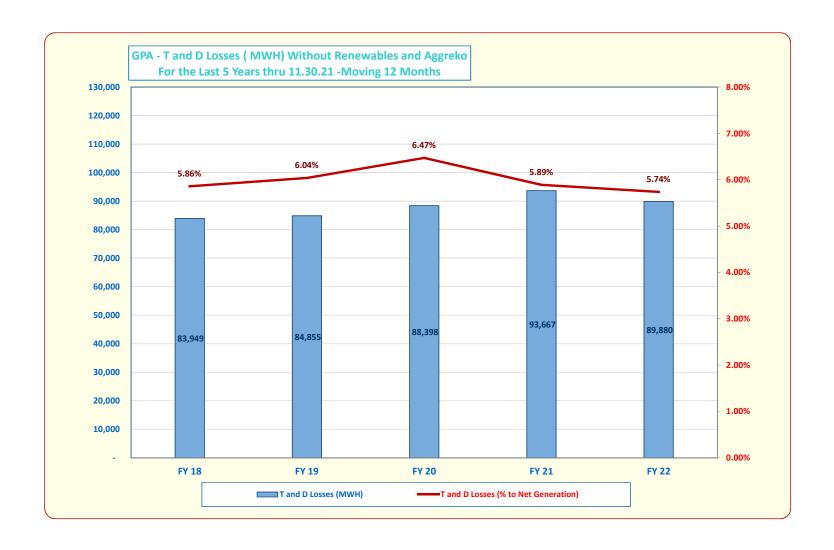
Guam Power Authority						
Debt service coverage						
November 30, 2021						
					YTD	YTD
	Restated	Audited	Audited	Audited	Unaudited	Unaudited
	2017	2018	2019	2020	2021	2022
Funds Available for Debt Service						
Earnings from Operations	\$36,522	\$38,164	\$39,053	\$27,703	\$43,532	\$9,597
Interest Income	\$122	\$620	\$2,746	\$2,377	1,087	(6)
Depreciation Expense	44,292	37,184	36,999	37,645	38,235	5,908
Balance Available for Debt Service	\$80,936	\$75,968	\$78,798	\$67,725	\$82,854	\$15,499
IPP - Capital Costs						
Principal	\$20.796	\$23,210	\$13,470	\$8.399	\$2,217	
Interest	5,609	3,159	1,068	531	28	0
Total IPP Payments	\$26,405	\$26,369	\$14,538	\$8,930	\$2,245	\$0
Total ii i Tayliichts	Ψ20, 403	\$20,507	Ψ14,550	ψ0,730	Ψ2,243	40
Bond Debt Service						
Principal (1993 & 1999 Revenue Bond)	\$0	\$0	\$0	\$0	\$0	\$0
Interest (1993 & 1999 Revenue Bond)	0	0	0	0	0	0
Principal and Interest (2010 Subordinate Bond)	0	0	0	0	0	0
Principal and Interest (2010 Senior TE Bond)	7,999	2,000	0	0	0	0
Principal and Interest (2012 Senior TE Bond)	17,449	17,086	31,467	35,232	35,232	5,872
Principal and Interest (2014 Senior TE Bond)	5,084	5,083	5,084	5,087	5,088	848
Principal and Interest (2017 Senior TE Bond)		5,916	7,607	7,418	7,416	1,236
Total	\$30,532	\$30,086	\$44,158	\$47,737	\$47,736	\$7,956
Debt Service Coverage (DSC) Calculation						
Existing DSC Methodology (Senior)	1.79 x	1.65	(1.46 x	1.23 x	1.69 x	1.95 x
Existing DSC Methodology (Senior+Subordinate)	1.79 x	1.65		1.23 x		1.95 x
Bond Covenant DSC	2.65 x	2.53 >		1.42 x		1.95 x
Debt Service Coverage Requirements						
Existing Ratemaking DSC Target	1.75 x	1.75 >	(1.75 x	1.75 x	1.75 x	1.75 x
Minimum Bond Covenant Requirement (Senior Bond)	1.30 x	1.30		1.30 x		1.30 x
Minimum Bond Covenant Requirement (Subordinate Bond)	1.20 x	1.20		1.20 x		1.20 x
				T SERVICE COV	ERAGE	
				FY2021		
Notes:		Existing	Methodology ——Bond co	ovenant calc ——Targ	et ——Bond requirement	
(1) Source: Guam Power Authority, 2017 - 2020 Audited Financial Stateme	nts	2.5				
and 2020-2021 Unaudited Financial Statements		2.5			1.75	
(2) Interest income is net of interest earnings in the Construction Fund an the amortization of deferred credit	d	1.5			1.30	
(3) Existing DSC Methodology (Rating Agency Method):		1				
(Operating Earnings + Depreciation Expense - IPP Principal & Interest F	ayments)/	0.5				
(Senior and Subordinate Bond Principal & Interest Payments)		0	12 de de 12	6 A A	Q. Q. Q.	
(4) Bond Covenant DSC Methodology: (Operating Earnings + Depreciation E	xpense)/	MAID. M	ALLY WINE WILL WAS	1341 M3T1 MADE MASS	hanga neede neede	

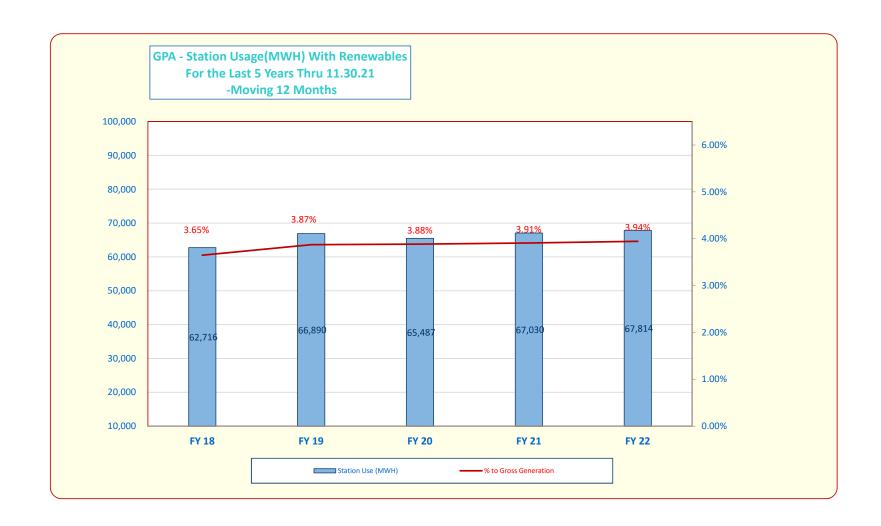
(Senior and Subordinate Bond Principal & Interest Payments)

				REV	ENUES-ACTUAL VS PROJECT	TIONS		
		MONTHLY - NO	VEMPED 2024			YTD THRU	44/20/24	
		WONTHLY - NO	VEIVIDER 2021			TID IHKU	11/30/21	
	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE	PROJECTIONS	ACTUAL	VARIANCE	% VARIANCE
KWH	PROJECTIONS	ACTUAL		% VARIANCE		ACTUAL		% VARIANCE
Residential	45,740,734	48,087,642	2,346,909	5.13%	91,310,545	94,296,909	2,986,364	3.27%
Residential - Apt & Condo Small General-Non-Demand	623,364 5,369,946	662,924 6,873,816	39,560 1,503,870	6.35% 28.01%	1,240,556 11,139,408	1,324,595 13,770,190	84,039 2,630,782	6.77% 23.62%
Small General-Demand	14,603,046	16,599,417	1,996,371	13.67%	29,453,741	32,689,395	3,235,653	10.99%
Large	18,773,292	17,942,248	(831,044)	-4.43%	36,978,618	35,479,193	(1,499,425)	-4.05%
Independent Power Producers Private St. Lites	34,611 32,795	41,173 33,774	6,562 979	18.96% 2.99%	64,070 65,152	69,815 65,127	5,746 (25)	8.97% -0.04%
Sub-total	85,177,788	90,240,994	5,063,206	5.94%	170,252,089	177,695,224	7,443,135	4.37%
Government Small Non Demand	789,424	954,648	165,224	20.93%	1,652,086	1,973,105	321,019	19.43%
Small-Demand	7,525,856	9,376,567	1,850,712	24.59%	15,368,948	18,737,986	3,369,038	21.92%
Large Public St. Lites	4,911,295 610,576	4,066,393 403,673	(844,902) (206,904)	-17.20% -33.89%	9,996,296	8,403,344 980,949	(1,592,952)	-15.94% -19.02%
Sub-total	13,837,151	14,801,282	964,131	6.97%	1,211,351 28,228,680	30,095,384	(230,402) 1,866,704	6.61%
Total-Civilian	99,014,939	105,042,276	6,027,337	6.09%	198,480,770	207,790,608	9,309,839	4.69%
USN Grand Total	24,639,605 123,654,544	25,554,904 130,597,180	915,299 6,942,636	3.71% 5.61%	50,293,525 248,774,295	51,981,082 259,771,691	1,687,557 10,997,396	3.36% 4.42%
	.,,		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-	-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Non-Oil Yield Residential	0.095521	0.095135	(0.000386)	-0.40%	0.096953	0.105235	0.008282	8.54%
Residential - Apt & Condo	0.095521	0.086799	(0.008722)	-9.13%	0.095521	0.087329	(0.008192)	-8.58%
Small General-Non-Demand	0.144739	0.137942	(0.006796)	-4.70% -10.36%	0.144739	0.148486 0.117795	0.003748	2.59%
Small General-Demand Large	0.121493 0.108878	0.108911 0.105806	(0.012582) (0.003072)	-10.36% -2.82%	0.121493 0.108878	0.117795	(0.003698) 0.000577	-3.04% 0.53%
Independent Power Producers	0.122012	0.130653	0.008641	0.00%	0.623726	0.121966	(0.501760)	0.00%
Private St. Lites Sub-total	0.623726 0.107467	0.615480 0.103201	(0.008246) (0.004266)	-1.32% -3.97%	0.122012 0.107112	0.630963 0.111806	0.508952 0.004693	417.13% 4.38%
Government					· · · · · ·	0.111000		
Small_Non Demand	0.164306	0.157882	(0.006424)	-3.91%	0.164306	0.156646	(0.007660)	-4.66%
Small-Demand Large	0.134162 0.128286	0.129738 0.115421	(0.004424) (0.012864)	-3.30% -10.03%	0.134162 0.128286	0.129656 0.115398	(0.004506) (0.012887)	-3.36% -10.05%
Public St. Lites	0.583654	0.825790	0.242136	41.49%	0.583654	0.688836	0.105182	18.02%
Sub-total Total-Civilian	0.152656 0.114005	0.146603 0.109317	(0.006053) (0.004689)	-3.97% -4.11%	0.153134 0.150800	0.145670 0.116711	(0.007463) (0.034089)	-4.87% -22.61%
USN	0.062602	0.062687	0.000086	0.14%	0.062602	0.061154	(0.001448)	-2.31%
Grand Total	0.103466	0.100192	(0.003273)	-3.16%	0.103336	0.105593	0.002258	2.18%
Non-Oil Revenues								
Residential	4,412,879	4,574,807	161,928	3.67%	8,852,797	9,923,341	1,070,543	12.09%
Residential - Apt & Condo Small General-Non-Demand	59,544 777,239	57,541 948,189	(2,003) 170,951	-3.36% 21.99%	118,499 1,612,303	115,675 2,044,683	(2,824) 432,380	-2.38% 26.82%
Small General-Demand	1,774,168	1,807,857	33,689	1.90%	3,578,423	3,850,632	272,208	7.61%
Large	2,044,003	1,898,398	(145,606)	-7.12%	4,026,167	3,883,398	(142,769)	-3.55%
Independent Power Producers Private St. Lites	21,588 4,001	5,379 20,787	(16,209) 16,786	-75.08% 419.51%	39,962 7,949	8,515 41,093	(31,447) 33,143	-78.69% 416.94%
Sub-total	9,093,423	9,312,959	219,536	2.41%	18,236,101	19,867,337	1,631,236	8.95%
Government Small Non Demand	129,707	150,722	21,014	16.20%	271,448	309,080	37,632	13.86%
Small-Demand	1,009,681	1,216,497	206,816	20.48%	2,061,923	2,429,485	367,562	17.83%
Large Public St. Lites	630,049 356,365	469,348 333,349	(160,700) (23,016)	-25.51% -6.46%	1,282,381 707,009	969,732 675,713	(312,649) (31,297)	-24.38% -4.43%
Sub-total	2,125,802	2,169,916	44,114	2.08%	4,322,761	4,384,009	61,248	1.42%
Total-Civilian	11,219,225	11,482,875	263,650	2.35%	22,558,862	24,251,346	1,692,484	7.50%
USN Grand Total	1,542,483 12,761,708	1,601,968 13,084,843	59,485 323,135	3.86% 2.53%	3,148,465 25,707,327	3,178,853 27,430,199	30,388 1,722,872	0.97% 6.70%
% of Total Revenues Oil Revenues	40.63%	40.03%			40.66%	41.90%		
Residential	6,897,703	7,102,112	204,409	2.96%	13,769,630	13,464,114	(305,516)	-2.22%
Residential - Apt & Condo	94,003	97,908	3,905	25 279/	187,076	195,148 1.967.092	8,072	4.31%
Small General-Non-Demand Small General-Demand	809,788 2.202.139	1,015,201 2,450,607	205,413 248,467	25.37% 11.28%	1,679,823 4,441,624	4,708,747	287,270 267,123	17.10% 6.01%
Large	2,831,012	2,633,387	(197,625)	-6.98%	5,576,376	5,158,152	(418,223)	-7.50%
Independent Power Producers Private St. Lites	5,219 4,945	5,857 4,988	637 43	12.21% 0.86%	9,662 9,825	9,945 9,619	283 (206)	2.93% -2.10%
Sub-total	12,844,810	13,310,059	465,249	3.62%	25,674,015	25,512,818	(161,197)	-0.63%
Government Small Non Demand	119,045	140,993	21,948	18.44%	249,135	291,410	42,275	16.97%
Small-Demand	1,134,899	1,384,835	249,936	22.02%	2,317,637	2,767,432	449,794	19.41%
Large Public St. Lites	740,623 92,075	590,442 59,619	(150,181) (32,456)	-20.28% -35.25%	1,507,441 182,672	1,221,695 144,877	(285,746) (37,794)	-18.96% -20.69%
Sub-total	2,086,642	2,175,888	89,246	4.28%	4,256,885	4,425,414	168,529	3.96%
Total-Civilian	14,931,453	15,485,948	554,495	3.71%	29,930,900	29,938,232	7,332	0.02%
USN Grand Total	3,715,652 18,647,105	4,114,512 19,600,460	398,860 953,355	10.73% 5.11%	7,584,264 37,515,164	8,093,123 38,031,355	508,859 516,191	6.71% 1.38%
% of Total Revenues	59.37%	59.97%			59.34%	58.10%		
Grand Total Residential	11,310,582	11,676,919	366,337	3.24%	22.622.428	23,387,455	765,028	3.38%
Residential - Apt & Condo	153,547	155,449	1,901		305,575	310,823	5,248	1.72%
Small General-Non-Demand Small General-Demand	1,587,027	1,963,390	376,363	23.72%	3,292,126	4,011,776	719,650	21.86%
Large	3,976,307 4,875,016	4,258,463 4,531,785	282,156 (343,231)	7.10% -7.04%	8,020,048 9,602,543	8,559,378 9,041,551	539,331 (560,992)	6.72% -5.84%
Independent Power Producers	26,807	11,236	(15,571)	-58.09%	49,624	18,460	(31,163)	-62.80%
Private St. Lites Sub-total	8,947 21,938,233	25,776 22,623,018	16,829 684,785	188.10% 3.12%	17,774 43,910,116	50,711 45,380,155	32,937 1,470,039	185.31% 3.35%
Government					-			
Small_Non Demand Small-Demand	248,752 2,144,580	291,714 2,601,332	42,962 456,752	17.27% 21.30%	520,582 4,379,560	600,490 5,196,916	79,907 817,356	15.35% 18.66%
Large	1,370,672	1,059,790	(310,882)	-22.68%	2,789,823	2,191,427	(598,396)	-21.45%
Public St. Lites	448,440	392,968	(55,472)	-12.37%	889,681	820,590	(69,091)	-7.77%
Sub-total Total-Civilian	4,212,444 26,150,678	4,345,805 26,968,822	133,360 818,145	3.17% 3.13%	8,579,646 52,489,762	8,809,423 54,189,578	229,777 1,699,816	2.68% 3.24%
USN	5,258,136	5,716,481	458,345	8.72%	10,732,728	11,271,976	539,248	5.02%
Grand Total	31,408,813	32,685,303	1,276,490	4.06%	63,222,491	65,461,554	2,239,063	3.54%

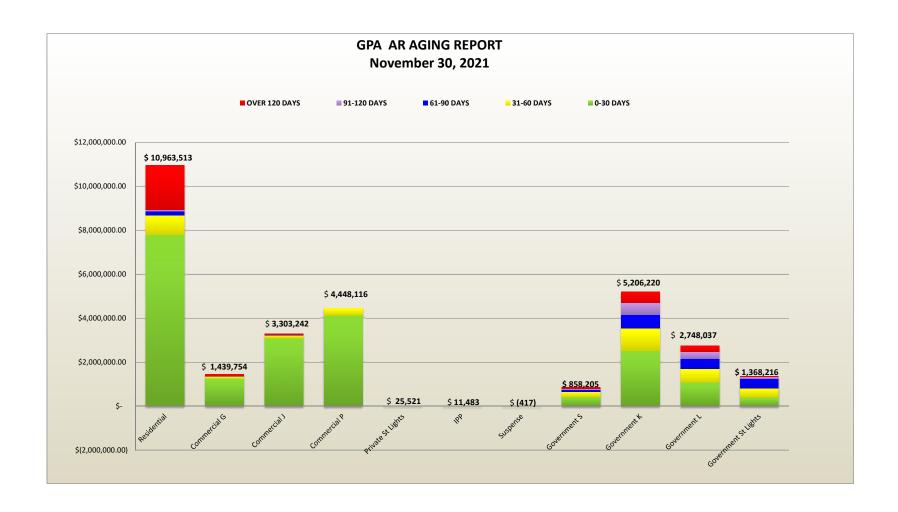
	YTD REVE	NUES - CURREN	T YEAR VS PRIO	R YEAR		MTD REVE	NUES - CURREN	T YEAR VS PRIO	R YEAR
	ACTUA	LS - 2 MONTHS E	NDED NOVEMBE	ER 30	ACTUALS - MONTH ENDED NOVEMBER 30				
	2021	2020	VARIANCE	% VARIANCE		2021	2020	VARIANCE	% VARIANCE
KWH Residential	94.296.909	94.941.650	(644,741)	-0.68%		48,087,642	47,017,061	1,070,581	2.28%
Residential - Apt & Condo	1,324,595	-	1,324,595	0.0070		662,924	· -	662,924	
Small General-Non-Demand	13,770,190	11,212,266	2,557,924	22.81%		6,873,816	5,722,253	1,151,563	20.12%
Small General-Demand	32,689,395 35,479,193	30,930,898 37,312,279	1,758,496 (1,833,086)	5.69% -4.91%		16,599,417 17,942,248	15,750,339 18,536,035	849,078	5.39% -3.20%
Large Independent Power Producers	69,815	108,017	(38,202)	-4.91%		41,173	33,326	(593,787) 7,847	23.55%
Private St. Lites	65,127	67,432	(2,305)	-3.42%		33,774	34,273	(499)	-1.46%
Sub-total Government	177,695,224	174,572,543	3,122,682	1.79%		90,240,994	87,093,287	3,147,707	3.61%
Small_Non Demand	1,973,105	1,612,222	360,883	22.38%		954,648	827,215	127,433	15.41%
Small-Demand Large	18,737,986 8,403,344	15,619,195 10,008,048	3,118,791 (1,604,705)	19.97% -16.03%		9,376,567 4,066,393	7,864,767 5,181,422	1,511,801 (1,115,029)	19.22% -21.52%
Public St. Lites	980,949	1,192,327	(211,378)	-17.73%		403,673	634,626	(230,953)	-36.39%
Sub-total	30,095,384	28,431,792	1,663,592	5.85%		14,801,282	14,508,029	293,252	2.02%
Total-Civilian	207,790,608	203,004,335	4,786,274	2.36%		105,042,276	101,601,316	3,440,960	3.39%
USN Grand Total	51,981,082 259,771,691	52,950,589 255,954,924	(969,507) 3,816,767	-1.83% 1.49%		25,554,904 130,597,180	25,913,357 127,514,673	(358,452) 3,082,508	-1.38% 2.42%
Non-Oil Yield	0.405025	0.005303	0.057700	424.00%		0.005425	0.005000	0.000672	0.70%
Residential Residential - Apt & Condo	0.105235 0.087329	0.095382 0.000000	0.057789 0.000000	121.80% 0.00%		0.095135 0.086799	0.095808 #DIV/0!	-0.000673 #DIV/0!	-0.70% #DIV/0!
Small General-Non-Demand	0.148486	0.143641	0.004846	3.37%		0.137942	0.144640	-0.006697	-4.63%
Small General-Demand	0.117795	0.116884	0.000910	0.78%		0.108911	0.117741	-0.008830	-7.50%
Large	0.109456	0.105684	0.003771	3.57%		0.105806	0.110338	-0.004532	-4.11% 16.07%
Independent Power Producers Private St. Lites	0.121966 0.630963	0.056794 0.623494	0.065172 0.007469	114.75% 1.20%		0.130653 0.615480	0.112561 0.624928	0.018092 -0.009449	16.07% -1.51%
Sub-total Government	0.111806	0.104674	0.007132	6.81%		0.103201	0.106290	-0.003089	-2.91%
Small_Non Demand	0.156646	0.161961	-0.005314	-3.28%		0.157882	0.161991	-0.004109	-2.54%
Small-Demand	0.129656	0.134622	-0.004967	-3.69%		0.129738	0.135359	-0.005621	-4.15%
Large Public St. Lites	0.115398 0.688836	0.126368 0.575447	-0.010970 0.113388	-8.68% 19.70%		0.115421 0.825790	0.128431 0.543751	-0.013010 0.282040	-10.13% 51.87%
Sub-total	0.145670	0.151754	-0.006083	-4.01%		0.146603	0.152268	-0.005665	-3.72%
Total-Civilian	0.116711	0.111267	0.005443	4.89%		0.109317	0.112855	-0.003539	-3.14%
USN	0.061154	0.062974	-0.001820	-2.89%		0.062687	0.061246	0.001442	2.35%
Grand Total	0.105593	0.101277	0.004317	4.26%		0.100192	0.102367	-0.002175	-2.12%
Non-Oil Revenues Residential	9,923,341	9,055,747	867,594	9.58%		4 574 907	4 504 615	70,192	1.56%
Residential - Apt & Condo	115,675	9,055,747	115,675	0.00%		4,574,807 57,541	4,504,615	57,541	#DIV/0!
Small General-Non-Demand	2,044,683	1,610,536	434,148	26.96%		948,189	827,665	120,525	14.56%
Small General-Demand	3,850,632	3,615,337	235,294	6.51%		1,807,857	1,854,462	(46,606)	-2.51%
Large	3,883,398	3,943,328	(59,930)	-1.52%		1,898,398	2,045,234	(146,836)	-7.18%
Independent Power Producers Private St. Lites	8,515 41,093	6,135 42,043	2,380 (951)	38.80% -2.26%		5,379 20,787	3,751 21,418	1,628 (631)	43.41% -2.95%
Sub-total Government	19,867,337	18,273,126	1,594,211	8.72%		9,312,959	9,257,145	55,813	0.60%
Small_Non Demand	309,080	261,116	47,963	18.37%		150,722	134,001	16,720	12.48%
Small-Demand	2,429,485	2,102,693	326,792	15.54%		1,216,497	1,064,570	151,927	14.27%
Large Public St. Lites	969,732 675,713	1,264,699 686,121	(294,967) (10,409)	-23.32% -1.52%		469,348 333,349	665,458 345,078	(196,109) (11,729)	-29.47% -3.40%
Sub-total	4,384,009	4,314,630	69,379	1.61%		2,169,916	2,209,107	(39,191)	-1.77%
Total-Civilian	24,251,346	22,587,756	1,663,590	7.37%		11,482,875	11,466,252	16,622	0.14%
USN Grand Total	3,178,853 27,430,199	3,334,531 25,922,286	(155,678) 1,507,913	-4.67% 5.82%		1,601,968 13,084,843	1,587,079 13,053,332	14,889 31,511	0.94% 0.24%
% of Total Revenues		25,522,266	1,507,513	5.82 /6		13,004,043	13,053,332	31,311	0.24%
Oil Revenues Residential	13,464,114	7,945,762	5,518,353	69.45%		7,102,112	3,934,905	3,167,207	80.49%
Residential - Apt & Condo	195,148	-	195,148	#DIV/0!		97,908	· · · ·	97,908	#DIV/0!
Small General-Non-Demand	1,967,092	938,366	1,028,727	109.63%		1,015,201	478,901	536,300	111.99% 85.89%
Small General-Demand Large	4,708,747 5,158,152	2,588,886 3,126,146	2,119,860 2,032,006	81.88% 65.00%		2,450,607 2,633,387	1,318,282 1,552,862	1,132,324 1,080,526	85.89% 69.58%
Independent Power Producers	9,945	3, 126, 146 9,051	2,032,006	9.88%		2,633,367 5,857	2,795	3,062	109.55%
Private St. Lites	9,619	5,643	3,975	70.44%		4,988	2,868	2,120	73.90%
Sub-total	25,512,818	14,613,855	10,898,963	74.58%		13,310,059	7,290,613	6,019,446	82.56%
Government Small_Non Demand	291,410	134,928	156,481	115.97%		140,993	69,230	71,763	103.66%
Small-Demand	2,767,432	1,307,186	1,460,246	111.71%		1,384,835	658,210	726,624	110.39%
Large	1,221,695	838,729	382,966	45.66%		590,442	434,225	156,217	35.98%
Public St. Lites	144,877	99,787	45,090	45.19%		59,619	53,112	6,506	12.25%
Sub-total Total-Civilian	4,425,414 29,938,232	2,380,631 16,994,486	2,044,783 12,943,746	85.89% 76.16%		2,175,888 15,485,948	1,214,778 8,505,391	961,111 6,980,557	79.12% 82.07%
USN	8,093,123	4,900,065	3,193,058	65.16%		4,114,512	2,404,931	1,709,582	71.09%
Grand Total	38,031,355	21,894,551	16,136,804	73.70%		19,600,460	10,910,322	8,690,139	79.65%
Grand Total									
Residential	23,387,455	17,001,508	6,385,947	37.56%		11,676,919	8,439,520	3,237,399	38.36%
Residential - Apt & Condo Small General-Non-Demand	310,823 4,011,776	2,548,901	310,823 1,462,874	#DIV/0! 57.39%		155,449 1,963,390	1,306,566	155,449 656,824	#DIV/0! 50.27%
Small General-Demand	8,559,378	6,204,224	2,355,155	37.96%		4,258,463	3,172,745	1,085,719	34.22%
Large	9,041,551	7,069,475	1,972,076	27.90%		4,531,785	3,598,095	933,690	25.95%
Independent Power Producers	18,460	15,186	3,274	21.56%		11,236	6,546	4,690	71.65%
Private St. Lites Sub-total	50,711 45,380,155	47,687 32,886,981	3,025 12,493,174	6.34% 37.99%		25,776 22,623,018	24,287 16,547,758	1,489 6,075,260	6.13% 36.71%
Government	600 400	306 045	204 445	E4 600/		204 744	202 222	00 402	49 E40/
Small_Non Demand Small-Demand	600,490 5,196,916	396,045 3,409,879	204,445 1,787,038	51.62% 52.41%		291,714 2,601,332	203,232 1,722,780	88,483 878,552	43.54% 51.00%
Large	2,191,427	2,103,429	87,998	4.18%		1,059,790	1,099,683	(39,892)	-3.63%
Public St. Lites	820,590	785,908	34,682	4.41%		392,968	398,191	(5,223)	-1.31%
Sub-total Total-Civilian	8,809,423 54,189,578	6,695,261 39,582,242	2,114,163 14,607,336	31.58% 36.90%		4,345,805 26,968,822	3,423,885 19,971,643	921,919 6,997,179	26.93% 35.04%
USN	54,189,578 11,271,976	8,234,596	3,037,380	36.89%		5,716,481	3,992,010	6,997,179 1,724,470	35.04% 43.20%
Grand Total	65,461,554	47,816,837	17,644,717	36.90%		32,685,303	23,963,653	8,721,650	36.40%











ACCOUNTS RECEIVABLE BY RATE - ACTIVE AR AGING REPORT AS OF November 30, 2021

RATE	TOTAL DUE	0-30 DAYS	31-60 DAYS	61-90 DAYS	91-120 DAYS	OVER 120 DAYS
Residential - R	\$ 8,962,769.95	7,646,254.64	888,017.16	168,951.22	76,833.41	182,713.52
Residential - PP	\$ 1,840,822.06	(2,566.63)	-	-	-	1,843,388.69
Residential - D	\$ 159,921.42 \$	159,921.42				
Commercial G	\$ 1,439,754.12	1,247,683.02	119,342.46	17,504.51	8,715.12	46,509.01
Commercial J	\$ 3,303,241.70	3,093,724.38	143,694.20	12,458.74	11,187.89	42,176.49
Commercial P	\$ 4,448,116.36	4,133,379.16	314,737.20			
Private St Lights	\$ 25,520.86	15,668.30	1,437.12	469.87	815.08	7,130.49
IPP	\$ 11,483.34	11,483.34	-	-	-	-
Suspense	\$ (417.18)	(417.18)	-	-	-	-
TOTAL PRIVATE	\$ 20,191,212.63	16,305,130.45	\$ 1,467,228.14	\$ 199,384.34 \$	97,551.50	\$ 2,121,918.20
Government S	\$ 858,204.56 \$	427,193.62	\$ 239,805.40	\$ 74,227.06 \$	64,477.08	\$ 52,501.40
Government K	\$ 5,206,220.37 \$	2,528,190.78	\$ 1,016,391.14	\$ 608,042.74 \$	562,116.21	\$ 491,479.50
Government L	\$ 2,748,036.97 \$	1,084,225.40	\$ 616,092.30	\$ 458,539.04 \$	313,517.54	\$ 275,662.69
Government St Lights	\$ 1,368,215.95 \$	395,393.60	\$ 423,115.85	\$ 418,388.91 \$	101,727.07	\$ 29,590.52
TOTAL GOVERNMENT	\$ 10,180,677.85 \$	4,435,003.40	\$ 2,295,404.69	\$ 1,559,197.75 \$	1,041,837.90	\$ 849,234.11
004ND T0741	<u> </u>	00 740 400 07	A 0 700 000 00	A 4 550 500 00 A	1 100 000 10	<u> </u>
GRAND TOTAL	\$ 30,371,890.48 \$	20,740,133.85	, -, - ,	\$ 1,758,582.09 \$	1,139,389.40	\$ 2,971,152.31
				\$ 26,261,348.77		
Total Residential	\$ 10,963,513.43	7,803,609.43	\$ 888,017.16	\$ 168,951.22 \$	76,833.41	\$ 2,026,102.21

GUAM POWER AUTHORITY
GOVERNMENT ACCOUNTS RECEIVABLE
Billing up to NOV 30, 2021 and payments as of 11/30/2021

Current (11/30/2021 Billing due 12/30/2021) 31 days Arrears 10/30/2021 due 11/30/2021) 61 days and over Arrears (09/30/21 billing due 10/30/2021)

Cold Inform									AGING					
			DEPARTMENT						0-30 Days	31-60 Days	61-90 Days	91-120 Days	>120 Days	Total
Security Mathematical Mathemat			l ine Agencies											
	3404311949	LINE AGENCIES		13,439.05		6.813.33	(6.400.40)	13.851.98	6.813.33	7.038.65				13,851.98
December														25,798.74
					-								-	614.08
	6293410000	LINE AGENCIES	Office of the Governor	40,305.60	-	20,531.91	(19,404.93)	41,432.58	20,531.91	20,900.67				41,432.58
12777970 M. CARDESS Marie Mathebode 93-92-90 48,12-29 (46,12-20) 77-92-90 40,12-29 40,12-10 40,12-29 40,12-10 40,12-29 40,12-10 40,12-29 40,12-10 40,12-29 40,12-10 40,12-29 40,12-10 40,12-29	6841080463	LINE AGENCIES	Guam Behavioral Health & Wellness	4,423.93		2,599.99	(2,305.16)	4,718.76	2,599.99	2,118.77	-			4,718.76
	7928924534	LINE AGENCIES	Guam Visitors Bureau	4,245.47	-	4,157.28	(4,245.47)	4,157.28	4,157.28	-			-	4,157.28
\$13,461.52 M. A. ARDECKS Out of Trans After South M. A.	3227759982	LINE AGENCIES	Mental Health/Subst.	95,293.40		48,712.39	(46,162.26)	97,843.53		49,131.14				97,843.53
1979-1979 1979													-	1,186.63
SERTING INC. ACCOUNTS 14.00 1													-	27,996.35
													-	153,926.03
\$1,000,000,000,000,000,000,000,000,000,0													-	28.32
PASTREET Intel Activities Pastreet 1,107.00														432.40
					-									521.83
Company Dies Authorics Security Company Compan											-		-	1,180.28 2,030.13
1,275,000 URL ARRICKES Depart Channer Ministry Department 2,1807.48					-		(1,117.06)				1 746 07	1 041 12	-	7,552.25
19998597 URL ARRIVES Deep of Chameror Miles (Chamerostee) 5,000.70					-		(5 711 11)						9 205 12	18,921.92
111717913 JUNE ADRICKIS Doub of Amministration 2,00.078 9,441.31 (0,21.376) 2,746.65 (0,31.776) 7,766.65 7,766.75											2,430.13	3,214.30	0,233.13	5,728.28
											179 84			19,238.59
199518000 UMF AGRICUS Conf. Office Section 1,256.07 1,256.07 1,257.07 1,26											173.04			20,756.86
\$50053779 JAM CARROUSS Coat Price politrary Affairs) 12,288.77											7.136.62		0.00	29,411.39
Section Content Cont							(0)02000)				.,			24,496.71
\$6555858 UNA CARRINES UNA CARRINES CARRINGS Superior Parks Carring Carri					-		(16,310.24)						-	33,687.00
199818773 UNFASCRICTOR Dipt. of PRISS 133,870.92				43,393.55				45,700.12			-			45,700.12
\$2,555,000 UNE ACTION COLUMN \$6,528,437	1896187753	LINE AGENCIES	Dept. of PH&SS					83,300.98	37,659.73		7,278.78			83,300.98
\$2,555,000 UNE ACTION COLUMN \$6,528,437	0040515913	LINE AGENCIES	Dept. of Parks & Rec.	21,641.98		11,363.71	(10,439.13)	22,566.56		11,202.85	-		-	22,566.56
Mayors	2535590089			65,814.37	-	32,285.97	(32,531.25)	65,569.09	32,285.97	33,283.12			-	65,569.09
Sub-total 4,546,006.70 1,415,404.11 (432,408.83) 5,531,001.36 1,415,404.11 1,423,577.15 940,818.34 934,306.92 816,895.46					-							929,250.81	808,600.33	4,646,180.66
Company Comp	0266069082	LINE AGENCIES	Guam Police Department								10) 122100		-	132,172.65
69353227 MAYORS Hagatra Mayor 1,76.07 661.57 (606.71 1,330.92)			Sub-total	4,548,006.70	-	1,415,404.11	(432,408.83)	5,531,001.98	1,415,404.11	1,423,577.15	940,818.34	934,306.92	816,895.46	5,531,001.98
693933277 MAYORS Magres Mayor 1,776.07 661.57 (606.72) 1,339.93 1,004.17 849.93 1,004.17 1,00			Mayors											
### MAYORS Tallofo Mayor	6393530237	MAYORS		1.276.07		661.57	(606.71)	1.330.93	661.57	669.36				1,330,93
1880979833 MAYORS Talofolo Mayor 2,767.25														1,853.55
1929308984 MAYORS PILM Mayor 1,315.07 983.98 (2,226.08) 1,893.97 1,772.82 1,807.000 1,807.000 1,727.82 1,807.000 1,807.000 1,727.82 1,807.000 1,807.000 1,807.000 1,727.82 1,807.000 1,8					-								-	2,825.41
193936984 MAYORS Pit Mayor 1,81251	0492244686	MAYORS	Asan/Maina/Adelup Mayor	2,232.12	-	1,054.78	(1,118.02)	2,168.88	1,054.78	1,114.10				2,168.88
183752555 MAYORS Yone Mayor 2,162.02	3293808984			3,136.07		983.98	(2,226.08)	1,893.97	983.98	909.99	-			1,893.97
17551741 MAYORS Barrigada Mayors Office 4,838.83	7202265287	MAYORS	Umatac Mayor	1,812.51	-	804.98	(879.67)	1,737.82	804.98	932.84			-	1,737.82
1.691.82 1.691.82 1.599.89	1837525565	MAYORS	Yona Mayor	2,162.02	-	1,464.08	(1,119.59)	2,506.51	1,464.08	1,042.43			-	2,506.51
1037924246 MAYORS Yigo Mayor 5.091.76 2.616.81 (2.41.08) 5.295.49 3.286.05 2.616.81 2.678.68 - - -	5763167341	MAYORS	Barrigada Mayors Office	4,838.83		2,216.86	(673.43)		2,216.86		1,795.97			6,382.26
### 18-899204 MAYORS Sinajana Mayor	8715052935		Mongmong/Toto/Maite Mayor	3,155.37		1,691.82	(1,555.48)						-	3,291.71
8472200155 MAYORS Agana HIX Mayor 6,103.62 - 3,728.42 (3,036.84) 6,795.00 3,228.13 (3,036.84) 6,795.00 33,228.13 (3,036.84) 6,795.00 33,228.13 (3,036.84) 6,795.00 33,228.13 (3,036.84) 6,795.00 33,228.13 (3,036.84) 6,795.00 33,228.13 (3,036.84) 6,795.00 3,228.13 (3,036.84) 6,795.00 3,228.13 (3,036.84) 6,795.00 3,228.13 (3,036.84) 6,795.00 3,228.13 (3,036.84) 6,795.00 3,228.13 (3,036.85) 6,273.91 3,228.13 (3,036.85) 6,273.91 3,228.13 (3,036.85) 6,273.91 3,228.13 (3,036.85) 6,228.15 (3,036.85) 6,228.15 (3,034.15) 6,228.15 (3,036.85) 6,244.12 (-								-	5,295.49
\$32327736 MAYORS Santa Rita Mayor \$.888.03 . 3,205.38 (2,789.50) 6,273.91 5,286.76													-	6,289.73
3631679996 MAYORS Mangliao Mayor 4,997.16 - 2,541.26 (2,251.66) 5,286.76 2,541.26 2,745.50								6,795.20						6,795.20
BOA1715847 MAYORS Decleo Mayor 8,856.73 - 4,461.18 4,165.40 - 9,152.51 4,461.18 4,691.33					-			6,273.91						6,273.91
					-								-	5,286.76
6078244037 MAYORS Inarajan Mayor 5,905.92					-								-	9,152.51
247791682 MAYORS Agat Mayor 2,381.98 - 3,071.10 (2,88.02) 6,064.46 3,071.10 2,981.51 11.85					-					0,0.0.00	-	-	-	10,263.46
Sub-total Sub-					-						-	-	-	6,144.12
Sub-total 84,075.71					-							-	-	6,064.46 2,031.39
DBW ACCOUNTS DPW ACCOUNTS DPW Signal Lights 18,618.96 9,403.14 (8,949.40) 19,072.70 9,403.14 9,669.56 72,853.71 70,792.15 32,338.65 30,443.800 DPW ACCOUNTS DPW - Primary St. Lights 322,303.69 70,431.10 (72,853.71) 319,881.08 70,431.10 73,465.47 73,465.47 73,465.47 70,792.15 32,338.65 30,443.650 DPW ACCOUNTS DPW - Dev ACCOUNTS DPW - Dev ACCOUNTS DPW - Dev ACCOUNTS DPW - Sec/Coll St. Lights 66,442.00 18,753.86 (20,077.67) 65,118.19 18,753.86 20,148.57 20,077.67 6,138.09 Sub-total 1,432,672.34 399,435.63 433,107.75 1,399,000.22 399,435.63 435,960.56 424,158.35 107,107.03 32,338.65 40,000.000.000.000.000.000.000.000.000.0	9351070242				-							-	-	
0832698062 DPW ACCOUNTS DPW-Signal Lights 18,618.96 - 9,403.14 (8,949.40) 19,072.70 19			Sub-total	84,075.71	-	43,296.99	(39,784.63)	87,588.07	43,296.99	41,885.45	2,405.63	-	-	87,588.07
0832698062 DPW ACCOUNTS DPW-Signal Lights 18,618.96 - 9,403.14 (8,949.40) 19,072.70 19			DPW Accounts											
0930959866 DPW ACCOUNTS DPW. Primary St. Lights 322,303.69 - 70,431.10 (72,833.71) 319,881.08 319,881.08 319,881.08 306,847.53 312,676.96 311,225.97 30,176.79 - 300,847.53 312,676.96 311,225.97 30,176.79 - 300,847.53 312,676.96 311,225.97 30,176.79 - 300,847.53 312,676.96 311,225.97 30,176.79 - 300,847.53 312,676.96 311,225.97 30,176.79 - 300,847.53 312,676.96 311,225.97 30,176.79 - 300,847.53 312,676.96 311,225.97 30,176.79 - 300,847.53 312,676.96 311,225.97 30,176.79 - 300,847.53 312,676.96 311,225.97 30,176.79 - 300,847.53 312,676.96 311,225.79 30,176.79 - 300,847.53 312,676.96 311,225.79 30,176.79 - 300,847.53 312,676.96 311,225.79 30,176.79 -	0832698062	DPW ACCOUNTS		18.618.96	-	9,403.14	(8,949.40)	19.072.70	9,403.14	9,669.56	-	-	-	19,072.70
2045433600 DPW ACCOUNTS DPW-VIllage St. Lights 1,025,307.69 . 300,847.53 (331,226.97) 994,928.25 300,847.53 332,676.96 331,226.97 30,176.79 .											72,853.71	70,792.15	32,338.65	319,881.08
398,040552 DPW ACCOUNTS DPW-Sec/Coll St. Lights 66,442.00 - 18,753.86 (20,077.67) 65,118.19 18,753.86 20,148.57 20,077.67 6,138.09 -					-									994,928.25
Sub-total 1,432,672.34 - 399,435.63 (433,107.75) 1,399,000.22 399,435.63 435,960.56 424,158.35 107,107.03 32,338.65 Autonomous/Public Corp 0838495949 AUTONOMOUS/figuam Waterworks Authority 1,312,892.24 (145.66) 1,245,903.28 (1,312,746.58) 1,245,903.28 1,245,903					-								-	65,118.19
Autonomous/Public Corp 0838495949					-								32.338.65	1,399,000.22
0838495949 AUTONOMOUS/ Guam Waterworks Authority 1,312,892.24 (145.66) 1,245,903.28 (1,312,746.58) 1,245,903.28				, - ,- ===		,		,, <u>-</u>	,	,,	,	- ,	. ,	,,-
154662986 AUTONOMOUS/fl Retirement Fund 6,201.89 - 5,945.77 (5,201.89) 5,945.77 5,945.77						.		-						
4075914809 AUTONOMOUS/fiGPA (81,723.42) 81,723.42					(145.66)					-	-		-	1,245,903.28
5357510000 AUTONOMOUS/f University of Guam (NET METERED) 79,963.31 - 77,973.48 (79,963.31) 7,973.48 77,973				6,201.89	-		(6,201.89)	5,994.57	5,994.57	-	-		-	5,994.57
6518220019 AUTONOMOUS/RGuam Community College 46,034.87 - 45,626.33 (46,034.87) 45,626.33 45,626.33					(81,723.42)		-			-	-		-	
7736362694 AUTONOMOUS/¶Guam Airport Authority 453,909.64 460,889.00 (453,909.64) 460,889.00 460,889.00					-					-	-		-	77,973.48
					-					-	-	-	-	45,626.33
18302337/26 IAUTUNUMUUS/NGUAM MEMORIA HOSDITAI 107.379.39 - 36.499.63 133.590.75 110.288.27 36.499.63 36.789.81 36.574.88 473.95 -					-					20 700 01	20 574 22	422.00	-	460,889.00
	8302337726	AUTUNUMOUS/R	Guarn Memoriai Hospital	107,379.39	-	36,499.63	(33,590.75)	110,288.27	36,499.63	36,789.81	36,574.88	423.95	-	110,288.27

GUAM POWER AUTHORITY
GOVERNMENT ACCOUNTS RECEIVABLE
Billing up to NOV 30, 2021 and payments as of 11/30/2021

Current (11/30/2021 Billing due 12/30/2021) 31 days Arrears 10/30/2021 due 11/30/2021) 61 days and over Arrears (09/30/21 billing due 10/30/2021)

CC&B New Acct Numer		DEPARTMENT	CC&B BALANCE 10/31/2021	CANCEL/REBILL/ SPEC CHARGE 11/30/2021	BILLING 11/30/2021	PAYMENT UP TO 11/30/2021	CC&B BALANCE 11/30/2021	0-30 Days	31-60 Days	61-90 Days	91-120 Days	>120 Days	Total
		Line Agencies											
8426836906	AUTONOMOUS/	Guam Memorial Hospital (NET METERED)	475,599.72		160,307.41	(154,553.73)	481,353.40	160,307.41	166,541.43	154,504.56			481,353.40
9157510000		Guam Community College (NET METERED)	37,905.63		38,746.52	(37,905.63)	38,746.52	38,746.52	-	-			38,746.52
0563872892	AUTONOMOUS/	Guam Housing Corp Rental Division	975.12		1,012.75	(975.12)	1,012.75	1,012.75	219.23	(219.23)			1,012.75
9173210000	AUTONOMOUS/	Guam Solid Waste Authority	13,866.63		7,714.77	(6,405.50)	15,175.90	7,714.77	7,461.13	-			15,175.90
5434075703	AUTONOMOUS/	University of Guam	170,962.03	-	175,462.47	(170,962.03)	175,462.47	175,462.47	-	-	-	-	175,462.47
1699407298	AUTONOMOUS/	GHURA	25,264.69	(12,064.33)	25,328.19	(13,200.88)	25,327.67	25,327.67				-	25,327.67
4474308144	AUTONOMOUS/	Port Authority of Guam	73,675.89		63,204.39		136,880.28	63,204.39	73,675.89	-			136,880.28
		Sub-total Sub-total	2,804,631.05	(93,933.41)	2,426,386.21	(2,316,449.93)	2,820,633.92	2,344,662.27	284,687.49	190,860.21	423.95		2,820,633.92
	Tomuses.	Others			20.074.62			 20 274 52	22.225.52				
3209463043		Dept. of Military Affairs (NET METERED)	20,925.68		20,274.63		41,200.31	20,274.63	20,925.68				41,200.31
4530787043		U.S. Post Office	47,879.13		44,991.40	(47,879.13)	44,991.40	44,991.40			-	-	44,991.40
6000770566	OTHERS	KGTF	15,964.39		7,706.85	(7,241.20)	16,430.04	7,706.85	7,767.97	955.22	-	-	16,430.04
6602566745	OTHERS	Tamuning Post Office	5,978.18		5,842.11	(5,978.18)	5,842.11	5,842.11		-	-	-	5,842.11
7541928173	OTHERS	Guam Legislature	377.75		417.79	(377.75)	417.79	417.79					417.79
8108458168	OTHERS	Guam Post Office (Agana)	6,042.74		6,162.35	(6,042.74)	6,162.35	6,162.35					6,162.35
8353274954	OTHERS	Superior Court of Guam	52,466.73		52,913.70	(52,466.73)	52,913.70	52,913.70					52,913.70
8607446612	OTHERS	Dept. of Military Affairs	79,990.78		83,484.18		163,474.96	83,484.18	79,990.78				163,474.96
4329984895	OTHERS	DEPT OF MILITARY AFFAIRS			235.84		235.84	235.84	-	-			235.84
8972267005	OTHERS	Customs & Quarantine Agency	1,247.71		615.61	(638.10)	1,225.22	615.61	609.61	-			1,225.22
9503154359	OTHERS	Guam Legislature (NET METERED)	9,153.46	-	9,559.94	(9,153.46)	9,559.94	9,559.94	-	-	-	-	9,559.94
		Sub-total	240,026.55	-	232,204.40	(129,777.29)	342,453.66	232,204.40	109,294.04	955.22	-	-	342,453.66
Grand Total			9,109,412.35	(93,933.41)	4,516,727.34	(3,351,528.43)	10,180,677.85	4,435,003.40	2,295,404.69	1,559,197.75	1,041,837.90	849,234.11	10,180,677.85