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8 **BEFORE THE GUAM PUBLIC UTILITIES COMMISSION**

9 **IN THE MATTER OF:**) **GPA DOCKET NO. 19-11**
10 **GUAM POWER AUTHORITY**)
11 **LEVELIZED ENERGY ADJUSTMENT**) **LEAC FILING**
12 **CLAUSE (LEAC)**)

13 **COMES NOW**, the GUAM POWER AUTHORITY (GPA), by and through its counsel
14 of record, D. GRAHAM BOTHA, ESQ., and hereby files GPA's LEAC petition to maintain the
15 current LEAC factor effective August 1, 2019. Guam Power Authority is requesting to maintain
16 the Fuel Recovery Factor at \$.154242/kWh effective for meters read on or after August 1, 2019.
17 The change reflects a no increase in the LEAC factor and no increase for a residential customer
18 utilizing an average of 1,000 kilowatt hours per month. In addition, there is a forecast of the
19 Working Capital Fund Requirement to stay the same, so there will not be a change in the
20 Working Capital surcharge for the period August 1, 2019 through January 31, 2020.

21 The basis for the LEAC filing is due primarily to the continuing instability in worldwide
22 fuel prices. GPA believes that the market will remain within the \$72-74/bbl range during the
23 period. The projected under-recovery is expected to be approximately \$9.7M by January 31,
24 2020, which will have some impact on working capital and other financial ratios. The billing
25 illustrations in Attachment VII show the effect of no change in the Fuel Recovery Factor on
26 customers.


27 The LEAC worksheets are attached herein as Exhibit "A", and incorporated by reference.
28 Pursuant to the PUC Order of November 10, 2008, the Line Loss Reports are now filed as part of
the LEAC Report. The Line Loss Report for December 2018 to May 2019 consists of a Progress
Report, Gross Generation/Sales/Line Losses, Monthly Progress Report on Distribution System

1 Improvements, and Feeder Analysis Summary are attached herein as Exhibit "B", and
2 incorporated by reference herein as if fully set forth.

3 **CONCLUSION**

4 The PUC should approve GPA's request to maintain the Fuel Recovery Factor at
5 \$.154242/kWh effective August 1, 2019, as it is reasonable, prudent, and necessary.

6 **RESPECTFULLY SUBMITTED** this 12th day of June, 2019.

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8 D. Graham Botha, Esq.
9 GPA General Counsel

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RESOLUTION NO. 2019 - 08

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

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

WHEREAS, the deadline for the next filing is June 15, 2019; and

WHEREAS, for the LEAC period covered from February 1, 2019 through July 31, 2019, GPA requested to maintain the LEAC rate of \$0.154242/kWh that was approved by the CCU and GPUC; and

WHEREAS, the average market price of fuel in the initial filing for the current period was approved at \$66.73/bbl for the (6) six-month period ending July 31, 2019, the current projection for the same period is \$72.87/bbl and the projected price of fuel for the period ending January 31, 2020 is \$74.18/bbl; and

WHEREAS, the most recent Morgan Stanley market projections indicate falling fuel prices over the next year and GPA anticipates taking advantage of this market to reduce the current under recovery for fuel; and

WHEREAS, although GPA will file the required LEAC schedules, it has determined that it will not petition for a change in the LEAC factor for secondary voltage service customers as well as alternative voltage customer for the period of August 1, 2019 to January 31, 2020; and

1 **WHEREAS**, based on this status quo approach, an under-recovery of about \$9.7M is
2 anticipated by the end of the LEAC period on January 31, 2020 which will have some impact on
3 the working capital and other financial ratios; however, GPA will be able to manage in the short-
4 term period; and

5
6 **WHEREAS**, if the price of fuel continues to increase above the projected \$74.18/bbl, GPA
7 will file a proposed new LEAC rate adjustment if necessary, at that time; and

8
9 **WHEREAS**, GPA is requesting the Consolidated Commission on Utilities to authorize the
10 Authority to file such petition with the Guam Public Utilities Commission.

11
12 **NOW, THEREFORE BE IT RESOLVED**, by the Consolidated Commission on Utilities
13 as follows:

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15
16 1. The General Manager of the Guam Power Authority is authorized to petition the Guam
17 Public Utilities Commission for the LEAC rate to remain at \$0.154242/kWh effective for
18 the period from August 1, 2019 thru January 31, 2020. (LEAC factors for alternative
19 voltage levels are as reflected in the attached spreadsheets in the attached **Exhibit A.**)
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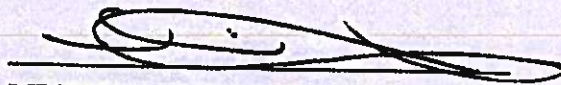
1 **RESOLVED**, that the Chairman certifies and the Board Secretary attests to the adoption
2 of this Resolution.

3
4 **DULY AND REGULARLY ADOPTED AND APPROVED THIS 28th DAY OF MAY**
5 **2019.**

6
7 Certified by:

Attested by:

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10 **JOSEPH T. DUENAS**

MICHAEL T. LIMTIACO

11 Chairperson

Secretary

12 Consolidated Commission on Utilities

Consolidated Commission on Utilities

13
14 **I, Michael T. Limtiaco**, Board Secretary of the Consolidated Commission on Utilities
15 (CCU), as evidenced by my signature above, do hereby certify as follows: The foregoing is a
16 full, true and correct copy of the resolution duly adopted at a regular meeting by the members of
17 the Guam CCU, duly and legally held at a place properly noticed and advertised at which
18 meeting a quorum was present and the members who were present voted as follows:

19
20 Ayes: 5
21 Nays: 0
22 Abstentions: 0
23 Absent: 0



GPA

Proposed LEAC Rate (\$000)

	A	B	C
	No Change in LEAC Proposed Eff 8/01/2019	@50 % Recovery Proposed Eff 8/01/2019	@100 % Recovery Proposed Eff 8/01/2019
2 Average Price per Bbl-RFO	\$ 74.18	\$ 74.18	\$ 74.18
2 Average Price per Bbl-Diesel	\$ 95.19	\$ 95.19	\$ 95.19
4 Number 6 (HSFO/LSFO)	\$ 70,309	\$ 70,309	\$ 70,309
5 Number 2 (Diesel)	44,360	44,360	44,360
6 Renewable (Solar)	4,626	4,626	4,626
7 TOTAL COST	\$ 119,296	\$ 119,296	\$ 119,296
8 Handling Costs	5,711	5,711	5,711
9 Total Current Fuel Expense	\$ 125,007	\$ 125,007	\$ 125,007
10 Civilian Allocation	81.53%	81.53%	81.53%
11 LEAC Current Fuel Expense	\$ 101,921	\$ 101,921	\$ 101,921
12 Deferred Fuel Expense at the beginning of the period	9,225	9,225	9,225
13 Total LEAC Expense	\$ 111,146	\$ 111,146	\$ 111,146
14 Less: Trans. Level Costs	(5,837)	(6,117)	(6,398)
15 Distribution Level Costs	\$ 105,309	\$ 105,029	\$ 104,750
16 Under recovery at the end of the period	\$ (9,699)	\$ (4,850)	\$ -
17 Adjusted Distribution Level Costs	\$ 95,610	\$ 100,179	\$ 104,750
18 Distribution Level Sales (mWh)	619,867	619,867	619,867
19 LEAC Factor Distribution	0.154242	0.161614	0.169908
20 Current LEAC Factor Distribution	0.154242	0.154242	0.154242
21 Increase/(Decrease)	0.00000	0.00737	0.01475
22 Monthly Increase/(Decrease) - 1000 kWh	\$ 0.00	\$ 7.37	\$ 14.75
23 % Increase/(Decrease) in LEAC	0.00%	4.78%	9.56%
24 % Increase/(Decrease) in Total Bill	0.00%	2.96%	5.93%
25 Discount (3%) - Primary 13.8 KV	\$ 0.149579	0.156756	\$ 0.163908
26 Discount (4%) - 34.5 KV	\$ 0.149148	0.156305	\$ 0.163436
27 Discount (5%) - 115 KV	\$ 0.147312	0.154381	\$ 0.161424

Notes: This LEAC filing reflects the actual under recovery through April 30, 2019 and the average forward pricing from May 7-13, 2019.

APPENDIX A

Progress Reporting for December 2018 – May 2019

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
1	Accurate metering and billing of the U.S. Navy		
1.1	Process Ongoing	Navy account set in CC&B for electronic meters (SEL-734, SEL-735, Q1000) at all Navy metering points.	<ul style="list-style-type: none"> Actual billing of Navy is reviewed by GPA prior to issuing to Navy. On March 9, 2015, GPA “went live” with the new Customer Care & Billing software from Oracle. Although nearly all features of the software have been implemented, the unique nature and complexity of the Navy billing required additional effort to implement. During the period of <i>December 2018 to May 2019</i>, the readings from the Navy quantum meters continued to be entered manually. Until such time that GPA changes out these meters with AMI meters, the Navy billing process will have to continue in this manual format. It is uncertain when this change out will occur. GPA uses handheld devices to read the Navy quantum meters for consumption. However, the readings cannot be electronically uploaded to the Meter Data Management System (MDMS) because of some incompatibilities.
1.2	Process Ongoing	Exploring the feasibility of aggregate reading	<ul style="list-style-type: none"> Harmon Substation & Tanguisson Substation WAN link installation completed; this is to provide capability of remote Navy Metering. The actual replacement of navy meters is a work in progress. On March 9, 2015, GPA “went live” with the new Customer Care & Billing software from Oracle. Although nearly all features of the software have been implemented, the unique nature and complexity of the Navy billing required additional effort to implement. During the period <i>December 2018 to May 2019</i>, the readings from the Navy quantum meters continued to be entered manually. Until such time that GPA changes out these meters with AMI meters, the Navy billing process will have to continue in this manual format. It is uncertain when this change out will occur. However, aggregate billing is now possible in CC&B and reconciled to the manual calculations each month. GPA uses handheld devices to read the Navy quantum meters for consumption. However, the readings cannot be electronically uploaded to the Meter Data Management System (MDMS) because of some incompatibilities.
2	Accurate metering and billing of civilian loads		

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
2.1	Process Ongoing	Meter Task Force (MTFC) continues to oversee, assess, and issue recommendations for QA/QC of metering and billing accuracy	<p>System Losses Report Data</p> <ul style="list-style-type: none"> • December 2018 –May 2019 <ul style="list-style-type: none"> ◦ Ongoing Single & Three phase meter field investigations (MFI) <ul style="list-style-type: none"> ▪ Accounts with meter discrepancies found & corrected: <ul style="list-style-type: none"> ❖ 3892 Blank Display ❖ 923 No Communication ❖ 5 Defective Switch <p><u>For December 2018 thru May 2019:</u></p> <ul style="list-style-type: none"> ▪ 3588 accounts identified with zero consumption; they are active smart meters assigned to customer with no reading. This is with no load/minimal consumption. <p>A report is created to identify age of the meters servicing these addresses for possible testing whether they are defective, etc. and to monitor previous consumption history.</p> <p><i>*There are 25 opt out customers that GPA manually reads their consumptions.</i></p>
2.2	Process Ongoing	Identify all zero consumption billings and perform required field investigations	
3	Systematic analysis of billing accounts for possible outliers		
3.1	Process Ongoing	Documentation for systematic billing analysis	<ul style="list-style-type: none"> • Descriptive statistics are performed to identify customer accounts for further investigations. • Analysis/refinements addressed on a monthly basis as problems are encountered. With the completion of the installation of Smart Meters for nearly all customers (Residential, Commercial and Government) meter readings are now collected electronically every day and transmitted to CC&B for billing once a month. In the event that a meter reading is not available on the day of the reading uploads the most recent previous or subsequent day's readings (within one or two days of the read date) are used. If available readings are not available for that range of days, the Revenue Accounting section notifies Customer Services to perform a meter investigation to resolve the issue and an estimated bill is generated. There are some residential customers who have opted out of using a Smart Meter and continue to use the legacy meters. There have been no significant issues with these customers. During the period of <i>December 2018 to May 2019</i>, the same process continues.
3.2	Process Ongoing	Monitoring of reading exception reports in the CC&B system	<ul style="list-style-type: none"> • As of <i>March 9, 2015</i>, the new CC&B system generates reading exception reports. These reports are also verified for accuracy and statistics of reading exception errors are tracked by Accounting. Any item requiring service order

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
3.3	Process Ongoing	Additional reports generated monthly in the CC&B system to assist in billing analysis	<p>or investigations are being routinely communicated to Customer Services. This process continued during the period of <i>December 2018 to May 2019</i>.</p> <ul style="list-style-type: none"> ○ Reports are generated monthly to assist in billing analysis.
4	Accurate Monitoring, Measurement and Reporting of System Losses		<ul style="list-style-type: none"> ● December 2018: <ul style="list-style-type: none"> ▪ Meter Discrepancies: 920 ▪ Meter Change Outs: 920 ▪ Meter Preventive Maintenance: 17 ● January 2019: <ul style="list-style-type: none"> ▪ Meter Discrepancies: 347 ▪ Meter Change Outs: 37 ▪ Meter Preventive Maintenance: 61 ● February 2019: <ul style="list-style-type: none"> ▪ Meter Discrepancies: 268 ▪ Meter Change Outs: 268 ▪ Meter Preventive Maintenance: 62 ● March 2019: <ul style="list-style-type: none"> ▪ Meter Discrepancies: 739 ▪ Meter Change Outs: 739 ▪ Meter Preventive Maintenance: 13 ● April 2019: <ul style="list-style-type: none"> ▪ Meter Discrepancies: 1080 ▪ Meter Change Outs: 1080 ▪ Meter Preventive Maintenance: 0 ● May 2019: <ul style="list-style-type: none"> ▪ Meter Discrepancies: 1466 ▪ Meter Change Outs: 1466 ▪ Meter Preventive Maintenance: 1 <p>Investigate meters reported by Customer Service and/or Dispatch for meter discrepancies. Perform maintenance on large residential/commercial consumers. Conduct load analysis and meter change outs.</p>
4.1	Process Ongoing	Identify present metering discrepancies	

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
4.2	Process Ongoing	Procure equipment & system	<ul style="list-style-type: none"> Ongoing meter change outs due to defective meters, RMA meters under warranty to be shipped to manufacturer.
4.3	Process Ongoing	Replace, install, upgrade substation metering reporting systems	<ul style="list-style-type: none"> December 2018 to May 2019 - None
5	Process Ongoing	<p>Process in place to identify and minimize occurrences in Unlisted consuming meters.</p> <p>Various reports are generated to identify unlisted energy consumers (i.e., exception, UNLISTEDMTR report for meter readings that were not captured in Utility & CC&B and therefore ran after each upload).</p>	<p>Identification of unlisted electric energy consumer</p> <p><u>December 2018</u></p> <ul style="list-style-type: none"> RPS inspected 4 meters from the MDMS Zero Consumption – GOV report. All meters were found registering properly with sealing devices intact. RPS inspected 7 meters from the MDMS Non-Consuming Active Meter report. Of that number, 5 were vacant, not in use, and 2 were seldom used. RPS inspected 6 meters from the MDMS Inactive Consuming Meters report. Of that number, 1 meter was registering properly with a cut seal and 5 were recent change outs on active accounts. <p><u>January 2019</u></p> <ul style="list-style-type: none"> RPS inspected 1 meter from the MDMS Zero Consumption – GOV report. The meter was found registering properly with sealing devices intact. RPS inspected 9 meters from the MDMS Non-Consuming Active Meter report. Of that number, 3 were services not in use, 4 locations were vacant, and 2 had minimal usage, seldom used. <p><u>February 2019</u></p> <ul style="list-style-type: none"> RPS inspected 11 meters from the MDMS Zero Consumption – GOV report. 8 meters were found registering properly, 1 meter was defective, 1 location was vacant, and 1 service was not in use. RPS inspected 20 meters from the MDMS Non-Consuming Active Meter report. Of that number, 9 locations were vacant, 2 were possible defective meters, 1 was found without a seal, 3 were seldom used, 1 tenant was just moving in, 2 meters tied into load side of separate meter), 1 was not in use and 1 meter was terminated. RPS inspected 9 meters from the MDMS Inactive Consuming Meters report. Of that number, 8 meters was registering properly and 1 was a recent change out on active account. <p><u>March 2019</u></p> <ul style="list-style-type: none"> RPS inspected 8 meters from the MDMS Zero Consumption – GOV report. Of that number, 6 were registering properly, 1 was found defective (needs c/o), and 1 system was converted to net metering.

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
5.1	Process Ongoing	Process in place to identify and minimize occurrences in Unlisted consuming meters. Various reports are generated to identify unlisted energy consumers (i.e., exception, UNLISTEDMTR report for meter readings that were not captured in Utility & CC&B and therefore ran after each upload).	<ul style="list-style-type: none"> RPS inspected 10 meters from the MDMS Non-Consuming Active Meter report. Of that number, 8 locations were vacant and 2 meters were registering properly with sealing devices intact. <p><u>April 2019</u></p> <ul style="list-style-type: none"> RPS inspected 1 meter from the MDMS Zero Consumption – GOV report. That meter was registering properly. RPS inspected 8 meters from the MDMS Non-Consuming Active Meter report. Of that number, 5 locations were vacant, 2 services were not in use and 1 service had minimal usage (seldom used). RPS inspected 3 meters from the MDMS Inactive Consuming Meters report. 2 meters were registering properly and 1 account was terminated in the system by still found energized. <p><u>May 2019</u></p> <ul style="list-style-type: none"> RPS did not investigate any meters from the different reports this month due to high volume of tamper/theft and wire theft reports, especially on utility-owned facilities. RPS also conducted site visits to several recycling companies on island in efforts to assist law enforcements with information in the identification of the perpetrators.
5.2	Process Ongoing	Tampering and illegal connections investigated and documented through GPA Revenue Protection Section, Internal Audit Section.	<p><u>December 2018</u></p> <ul style="list-style-type: none"> RPS investigated 8 meters from the Command Center Reverse Rotation Detected report. Of that number, 6 were converted to net metering and 2 recent change outs are pending completion of documents. RPS investigated 6 meters from the Command Center Tamper or Reverse Energy Flow report. Of that number, 4 were found registering properly, 1 location was vacant, and 1 was converted to net metering. RPS also investigated 15 locations for reported/suspected meter tampering or theft of service/property. Of that number, 4 were direct hook-ups, 1 damaged meter, 1 tampered meter, and 4 unauthorized removals of meters. The remaining 5 yielded negative findings. <p><u>January 2019</u></p> <ul style="list-style-type: none"> RPS investigated 29 meters from the Command Center Reverse Rotation Detected report. Of that number, 25 were converted to net metering, 3 were registering properly, and 1 was still in "install" status, not communicating to Command Center. RPS investigated 12 meters from the Command Center Tamper or Reverse Energy Flow report. Of that number, 9 were found registering properly, 2 were recent change outs and 1 location was vacant.

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
5.2	Process Ongoing	Tampering and illegal connections investigated and documented through GPA Revenue Protection Section, Internal Audit Section	<ul style="list-style-type: none"> RPS also investigated 4 meters from the Command Center Lost Meter Report. 1 location had no service drop line, 1 location was no longer in service, and 2 were defective meters (need c/o). RPS also investigated 7 meters reported/suspected of meter tampering or theft of service/property. Of that number, 3 were unauthorized removal of meters, 1 stolen squid connector from hand hole, 2 stolen conductors, and 1 stolen conduits report. <p>February 2019</p> <ul style="list-style-type: none"> RPS inspected 13 meters from the Command Center Reverse Rotation Detected report. Of that number, 7 were converted to net metering, 3 were recent change outs, 2 were registering properly, and 1 was defective requiring change out. RPS inspected 18 meters from the Command Center Tamper or Reverse Energy Flow report. Of that number, 14 were converted to net metering, 3 were registering properly and 1 service was not in use. RPS also investigated 9 meters reported/suspected of meter tampering/theft. 4 unauthorized removals, 2 stolen conductors, 2 damaged meters and 1 terminated service was connected on load side to active neighbor's panel box. <p>March 2019</p> <ul style="list-style-type: none"> RPS investigated 11 meters from the Command Center Reverse Rotation Detected report. Of that number, 7 were registering properly, 2 systems were converted to net metering, 1 was a recent change out on a new net metering customer, and 1 was vacant. RPS investigated 14 meters from the Command Center Tamper or Reverse Energy Flow report. Of that number, 2 were registering properly, 1 location was vacant, and 11 were converted to net metering systems. RPS responded to 9 reported/suspected meter tampering or theft of service/property reports. Of that number, 2 were cases of stolen conductors, 1 was damaged meter, 1 seal cut, boots removed on disconnected service, 1 direct hook-up to service line, and 2 unauthorized removals of meters. The 2 remaining yielded negative findings for tampering/theft. <p>April 2019</p> <ul style="list-style-type: none"> RPS investigated 6 meters from the Command Center Reverse Rotation Detected report. Of that number, 3 were found registering properly and 3 were recently changed out, pending updates on accounts. RPS investigated 5 meters from the Command Center Tamper or Reverse Energy Flow report. Of that number, 3 were new net metering systems, 1 location was vacant, and 1 meter was found registering properly. RPS responded to 19 reported/suspected meter tampering or theft of service/property reports. Of that number, 7 stolen conductors, 6 unauthorized removals of meters, 1 damaged meter, 1 jumped meter socket and 1 direct hook – up to service drop line. All cases were reported to GPD and services were secured. The 3 remaining yielded negative findings.

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
			<p><u>May 2019</u></p> <ul style="list-style-type: none"> RPS responded to 29 reported/suspected meter tampering or theft of service/property reports. Of that number, 6 stolen conductors, 11 unauthorized removals of meters, 2 damaged meters, 1 stolen meter, and 4 direct hook-ups to service drop line. All cases were reported to GPD and services were secured. The 5 remaining yielded negative findings.
6	Power system design and procurement guides considering optimization of system costs and losses		
6.1	Process Ongoing	Prepare conductor economics selection and evaluation guidelines	<ul style="list-style-type: none"> Conductor sizing guidelines based on voltage drop prepared for single-phase loads is completed. Three-phase guidelines are still being finalized. Analysis of existing system will be conducted through the Medium Range Plan. 17 out of the 63 distribution feeders will be re-conducted based on back-feeding capability, loading, voltage drop, and line losses. To date, P-111, P-261, P-046, P-205, P-087, P-245, and sections of P-283 have been completed. P-261 and P-262 were re-configured to limit the amount of customer outages by snake and vegetation faults. P-244 loads shifted to P-312 and P-240 Tunnon lateral shifted to P-244 express line to provide load and backfeed support for the Tunnon area. Hawaiian rock shifted from P-321 to P-323 and P-323 load south of Hawaiian rock shifted onto P-321 to provide full backfeed of P-210 and extended backfeed of P-250 as well as P-294. P-211 breaker and line energization completed. GPI work to shift load between P-210, P-211, P-250, and P-321 in progress. GPI work to shift load between P-087, P-046 and P-112 in progress. Completed full loading of GRMC to determine final load requirement. GPI work to shift load between P-332 and P-320 in progress. Relocation of switch from P-210 to P-211 to provide backfeed between P-211 and P-321 completed. Installation of switches between P-220 and P-223 and between P-221 and P-223 to be able to isolate Apra breakers. Re-configuration of P-221 and P-223 to clean up road crossing completed. Installation of switch on P-294 at H-frame near GHURA to provide isolation point completed. CIP for underground connection of P-005 and P-007 pending GPI work to install underground conductors, install switch, and re-locate station power to new infrastructure. Civil work completed; electrical work pending environmental concerns. Benavente St. Bello area customer relocation due to back-lot poles pending surveyor.

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
			<ul style="list-style-type: none"> North Sabana access road to existing GWA pump in Bello area pending final pole removals. Calvo beach road GPI to mitigate voltage issues and inaccessible poles pending surveyor. GPI Chalan Bada 10 pole extension to catch main line P-330 at Route 9 to remove line by Golf course pending completed. Pending easement issues for 3 remaining poles due to road not on easement.
6.2	Process Ongoing	Stock appropriate transformers	<ul style="list-style-type: none"> GPI Route 15: 32 pole extension to reduce loading on P-332 and provide viable backfeeds for P-067, P-332, and Pagat Substation. P-320 breaker commissioning, installation of relay and meter, and replacement of underground cables. GPI: San Ramon Hill 4 pole extension for switch 13-252T283 between P-252 and P-283 for backfeed. CIP/GPI work for the Nikko Tsubaki hotel, installation of isolation switches and re-distribution of load. Upgrade of primary line. Installation of Line recloser on P-341 for remote isolation and restoration. Engineering will identify oversized transformers to be changed out. Analysis will commence after completion of the GIS integration with CIS and implementation of Milsoft's Windmill line modeling software. Meter data will be mapped and modeled to determine actual consumption from CIS data. GPI's are being identified for transformers that are potentially overloaded and have potential voltage issues. Advanced Grid Analytics will be utilized to assist with this task. 47 possible overloaded transformers identified; 10 GPI's created; 20 pending assessment. Failed pad mounted transformer replacements are coordinated with T&D to properly size replacement based on historical kW.
7	Metering assessment and correction of customer power factor		
7.1	Process Ongoing	Evaluating large demand customers to define magnitude of power factor problem.	<ul style="list-style-type: none"> On March 9, 2015, GPA "went live" with the new Customer Care & Billing (CC&B) software from Oracle (<i>March 9, 2015</i>). This new system is now capable of receiving multiple reads from a single meter and calculating the power factor to determine if a penalty or bonus will be applied on the customer's bill. This was not possible with the Utility billing system. During the period <i>December 2018 to May 2019</i>, there were no significant issues regarding power factor calculations.

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
7.2	Process Ongoing	Evaluating economics of power factor improvement	<ul style="list-style-type: none"> Evaluation of economics of power factor improvement completed. Engineering will order capacitors as part of the Distribution capital improvement project program in accordance with the Medium Range Plan. 19 of the 63 distribution feeders were estimated to need capacitor placement. However, this number will change due to recent re-configuring and transferring of load between critical feeders. Re-evaluation of feeder VAR profiles completed. Re-evaluation of reconfigured feeders completed; pending order for capacitor banks. Re-evaluation of P-270, P-245, P-340, P-221, P-223, P-204, P-252, P-294, and P-204 completed.
8	Cost effective reactive power compensation		
8.1	Process Ongoing	Procure and install distribution capacitors	<ul style="list-style-type: none"> Procurement of 4 – 900KVAR and 4 – 450KVAR fixed capacitor banks have been installed. Procurement of 2 each switched capacitor banks is completed and installed on P-046 and P-330. To date, capacitor installations for P-323 are completed; a capacitor bank on P-206 was removed due to excess VAR contribution; P-087 faulty capacitor bank was replaced, and P-311 existing capacitor bank was moved towards Barrigada Heights. Installation of switched capacitor bank on P-294 to extend backfeed capability onto P-210 and P-250. Capacitor bank moved from P-270 to P-245 to correct power factor and reduce line losses. Capacitor bank on P-252 moved closer to load to increase voltage for backfeed support. Capacitor banks ordered under PO: 21876. 7ea. 450 KVAR and 6ea. 900 KVAR fixed capacitor banks. Defective capacitor banks on P-204, P-282, and P-252 tested and removed. Installed 450KVAR capacitor bank on P-204 at new location and 900 KVAR capacitor bank on P-282 at new location to optimize VAR compensation. Installed 2ea 900KVAR capacitor banks on P-340. One normally closed and one normally open for voltage during backfeed. Installed 900KVAR capacitor bank on P-221 and 450 KVAR capacitor bank on P-223. Tested faulty capacitor banks on P-282, P-283, P-252, P-005, P-203, and P-261. Created testing procedure. Removed capacitor bank on P-252 near substation completed.
8.1	Process Ongoing	Procure and install distribution capacitors	

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
			<ul style="list-style-type: none"> Removed existing capacitor bank on P-282 and installed new 900KVAR near Agana Lockup. Removed existing capacitor bank on P-204 fronting Kings and installed new 450KVAR capacitor bank on Pas street. Tested P-294 switched capacitor bank control unit. Found dirt and moisture in unit. Replaced unit. Re-evaluation of P-261, P-340, P-341 and P-262 ongoing. P-216 and P-340 transformer and lateral balancing Re-evaluation of Dededo Feeders due to GWA pump projects. Isolation of P-088 capacitor bank Installation of P-330 capacitor bank at Santa Ana.
9	Quality Systems Design & Implementation		
9.1	Process Ongoing	Documentation including supporting documents is regularly updated & maintained	<ul style="list-style-type: none"> Documents updated and submitted semi-annually.

GUAM POWER AUTHORITY

GROSS GENERATION, SALES, LINE LOSSES

	24-Month	12-Month	Apr-19	Mar-19	Feb-19	Jan-19	Dec-18	Nov-18
Gross Generation	3,454,906,704	1,688,667,235	145,503,688	143,823,309	122,451,569	134,873,732	145,920,185	142,629,149
Station Use	126,696,268	63,729,762	5,842,982	5,747,275	4,866,399	5,393,681	5,241,350	5,619,537
Net Send Out (A-B)	3,328,210,436	1,624,937,473	139,660,706	138,076,034	117,585,170	129,480,051	140,678,836	137,009,613
Sales to Navy (@34.5Kv)	618,875,210	302,727,659	27,083,234	26,077,843	22,368,909	24,517,651	26,518,827	24,888,490
GPA-metered (C-D)	2,709,335,226	1,322,209,814	112,577,472	111,998,191	95,216,261	104,962,400	114,160,009	112,121,123
Power factor adj.	0	0						
Adjusted (E-F)	2,709,335,226	1,322,209,814	112,577,472	111,998,191	95,216,261	104,962,400	114,160,009	112,121,123
GPA KWH Accountability:								
Sales to customers								
(accrual basis)	2,529,514,204	1,229,579,792	105,312,468	103,092,475	88,790,044	98,071,914	105,671,074	104,648,912
GPA use-KWH	7,617,965	4,054,387	338,900	315,576	319,640	368,413	338,948	335,814
No of days	730	365	30	31	28	31	31	30
Unaccounted for KWH (G-H)	172,203,057	88,575,635	6,926,104	8,590,140	6,106,577	6,522,073	8,149,987	7,136,396
Ratio of Unaccounted KWH: Ratio to Gross Generation (J/A)	4.98%	5.25%	4.76%	5.97%	4.99%	4.84%	5.59%	5.00%
Ratio to Net Generation (J/C)	5.17%	5.45%	4.96%	6.22%	5.19%	5.04%	5.79%	5.21%