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8 *Attorney for the Guam Power Authority*

9 **BEFORE THE PUBLIC UTILITIES COMMISSION**

10
11 IN THE MATTER OF) DOCKET NO.02-04
12)
13 The Guam Power Authority's LEAC) **PROGRESS STATUS REPORT FOR**
14 Loss Compliance Report) **LEAC LOSS COMPLIANCE REPORT**
15)

16 **COMES NOW**, GUAM POWER AUTHORITY (GPA), and hereby files its Progress
17 Status Report for the LEAC period from February to July 2008. GPA's Report filed January 31,
18 2008, for its first (1st) Quarter of Fiscal Year 2008 for GPA's Quality Management Plan (QMP)
19 is attached herein as Exhibit A and incorporated by reference herein. The QMP filing is
20 responsive to the PUC Order dated November 2, 2007, with the exception of paragraph 10(e).
21 GPA has issued a contract with a project completion date of May 31, 2008, which provides for
22 modeling and analysis for Dededo substation feeders. The purchase order for the \$108,970
23 contract was issued, and adequate funds are available until completion of this study.

24
25 **RESPECTFULLY SUBMITTED** this 8th day of February, 2008, by:

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29 **D. GRAHAM BOTHA, ESQ.**
30 Legal Counsel for the Guam Power Authority
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COPY

MEDIUM RANGE PLANNING STUDY OF THE GPA DISTRIBUTION SYSTEM

Scope

- Modeling and Analysis of three distribution feeders P87, P88, P89 at Dededo Substation

Software

- Advantica SynerGEE Software

Project Cost

- \$108,970

Contract Issued

- January 21, 2008

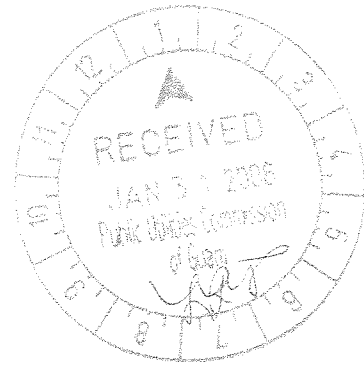
Project Completion Date

- May 31, 2008

Status

- Software training commences on March 31, 2008

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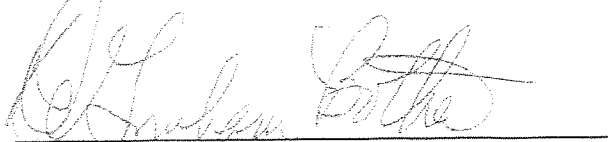
9 *Attorney for the Guam Power Authority*

10 **BEFORE THE PUBLIC UTILITIES COMMISSION**

11
12
13 IN THE MATTER OF) DOCKET NO.99-12
14)
15 The Guam Power Authority's Quality) **PROGRESS STATUS REPORT FOR**
16 Management Plan for the Cost Effective) **THE 1st QUARTER OF FY2008**
17 Reduction of Unaccounted for Energy)
18 _____)
19

20 **COMES NOW**, GUAM POWER AUTHORITY (GPA), and hereby files its Progress
21 Status Report for the first (1st) Quarter of Fiscal Year 2008 for GPA's Quality Management Plan
22 (QMP) for the Cost Effective Reduction of Unaccounted for Energy. The Report is attached
23 herein as Exhibit A and incorporated by reference herein. This filing complies with the
24 requirements set forth in the Public Utilities Commission's (PUC) Order dated October 14, 2004
25 in Docket No. 99-12, and the quarterly reporting outlined in Appendix A of Document No.
26 QMP-002-2004.

27 **RESPECTFULLY SUBMITTED** this 31st day of January, 2008, by:

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31 D. GRAHAM BOTHA, ESQ.
32 Legal Counsel for the Guam Power Authority



GUAM POWER AUTHORITY

ATLURIDÁT LEKTRESEDÁT GUAHAN
P.O. BOX 2977 • AGANA, GUAM U.S.A. 96932 2977

January 31, 2008

Mr. Harry Boertzel, Esq. ALJ
Guam Public Utilities Commission
Suite 207, GCIC Building
Hagatna, Guam 96932


RE: Quarterly Filing (1st Quarter -FY08), Progress Status (Appendix A) - QMP 002-2004

Dear Mr. Boertzel:

In compliance with PUC Docket 99-12 dated October 14, 2004, GPA hereby submits its quarterly reporting as outlined in Appendix-A of Document Number: QMP-002-2004. This provides the latest progress status as stated in its Quality Management Plan for the Cost Effective Reduction of Unaccounted for Energy.

Should you have any questions regarding this matter, please do not hesitate to call me at 648-3225.

Sincerely,


Joaquin C. Flores, P.E.
General Manager
Guam Power Authority

APPENDIX A

Progress Reporting for 1st Quarter – FY'08

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
1	Accurate metering and billing of the U.S. Navy		
1.1	CONTINUOUS	Navy account set in Utiligy for electronic meters (Q220 and 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. Manual billing issued until Utiligy set-up is finalized. Consumption, reads and billings from March thru July 2007 have been completed in Utiligy.
1.2	CONTINUOUS	Defining metering performance standards (generation, substation and Navy)	<ul style="list-style-type: none"> Engineering initiated review of appropriate meter performance standards and is finalizing standards. Target completion: March 2008
1.3	COMPLETED	Perform Engineering study to determine economic impact and performance of the latest metering systems. Identify the most economical and reliable meter replacements.	
1.4	CONTINUOUS	SOP for Navy Metering	<ul style="list-style-type: none"> No progress; still pending finalization and approval.
1.5	CONTINUOUS	Exploring the feasibility of aggregate reading	<ul style="list-style-type: none"> Currently unavailable; working with software developer; will not be available until the next release
2	Accurate metering and billing of civilian loads		
2.1	CONTINUOUS	Meter Task Force (MTFC) continues to oversee, assess, and issue recommendations for QA/QC of metering and billing accuracy	<p><u>System Losses Report Data</u></p> <ul style="list-style-type: none"> October – December 2007 <ul style="list-style-type: none"> Three-phase meter accounts (MTF) corrected: 6 <ul style="list-style-type: none"> Accounts investigated w/o meter discrepancies found and corrected: 6 Accounts investigated w/o meter discrepancy: 13 Ongoing Single & Three Phase Meter Field Investigations (MFI) <ul style="list-style-type: none"> Accounts w/ meter discrepancies found and corrected: 40 Accounts w/o meter discrepancy: -0- <p><u>Hard to read or inaccessible meters (unsafe conditions, gate lock, vicious dog, etc.)</u></p> <ul style="list-style-type: none"> Oct 2007: 506 accounts Nov 2007: 371 accounts Dec 2007: 351 accounts GPA coordinating with Customers for actual readings on a monthly basis after billings estimated at twice the average consumption. Adjustments are made based on actual/verified readings and consumptions. Cat codes will be utilized to track service addresses with these attributes.
2.2	CONTINUOUS	Customer service continuing to resolve issues for hard to read or inaccessible meters	

KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
2.3	Identify all zero consumption billings and perform required field investigations	<ul style="list-style-type: none"> • As of December 31, 2007 identified 427 accounts with zero consumption billings/minimum charges; 157 accounts have been investigated and processed for corrective action. • For 1st quarter 34 accounts were processed for meter investigation <ul style="list-style-type: none"> ▪ 14 accounts revealed vacant units (no load) ▪ 3 accounts pending backbilling ▪ 1 account pending repairs (stolen conductors) ▪ 7 accounts have pending field investigation ▪ 6 accounts deemed inaccessible ▪ 2 accounts revealed meter removed ▪ 1 account revealed obstruction of meter • A report will be created to identify age of the meters servicing these addresses for possible testing whether they are defective, etc., and also to monitor previous consumption history. • Report on rejected reads is available on the system and can be viewed to determine the reason for rejects.
2.4	Enhancement of meter download/upload procedures to reduce the number of rejected reads.	COMPLETED
3	Systematic analysis of billing accounts for possible outliers	
3.1	Documentation for systematic billing analysis	<ul style="list-style-type: none"> • Continuous <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. ○ Both the reading exception and billing exception reports are being reviewed and scrutinized for each billing cycle monthly. These reports indicate all the possible reading and billing exception that warrants review and attention. • Continuous - reading exception reports are verified for accuracy and statistics of reading exception errors are tracked by Accounting. Any item requiring service order or investigations are being routinely communicated to Customer Service. • Continuous – reports are generated monthly to assist in billing analysis
3.2	Monitoring of reading exception reports in Utility system	CONTINUOUS
3.3	Additional reports generated monthly in Utility system to assist in billing analysis	CONTINUOUS
4	Accurate Monitoring, Measurement and Reporting of System Losses	
4.1	Civilian load recovery reported by the MTFC monthly on a system losses report	<ul style="list-style-type: none"> • October 2007 <ul style="list-style-type: none"> ○ Single & Three phase Meter Field Investigations (MFI) <ul style="list-style-type: none"> ▪ 56 accounts w/adjustments for backbilling ▪ Revenue recover: \$56,380.70 ▪ kWh recovery: 302,679

KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
		<ul style="list-style-type: none"> • November 2007 <ul style="list-style-type: none"> ○ None reported • December 2007 <ul style="list-style-type: none"> ○ Single & Three phase Meter Field Investigations (MFI) <ul style="list-style-type: none"> ▪ 32 accounts w/adjustments for backbilling ▪ Revenue recovery: \$123,037.92 ▪ kWh recovery: 622,166
4.2	Identify present metering discrepancies	<ul style="list-style-type: none"> • 5 metering discrepancies resolved this quarter.
4.3	Procure equipment & systems	<ul style="list-style-type: none"> • New meter installation pending at South Finegayan Housing (P44).
4.4	Install, test, debug & operate metering and reporting systems	<ul style="list-style-type: none"> • Installed and tested the MV90xi software. • 13 new Quantum meters installed last quarter.
4.5	Metering points set up in the Utiligy system for all generating plants, substations and feeders currently in test environment stage in Utiligy system.	<ul style="list-style-type: none"> • Identifying location of 180 meters to determine appropriate GPA non-billed consumption. • Target completion: January 2008
4.6	Set up service address in Utiligy system and in the meter master record for GPA generating plants, station use, Navy and GPA substation; attachment of meters to applicable addresses, input of meter reads, billing of accts., and creation of reports to monitor the usage and determination of losses.	<ul style="list-style-type: none"> • T&D will provide location of all GPA meters for generating plants, station use, Navy and GPA substation. • 100% completed, attachment of meters to applicable addresses is pending verification of location by T&D and report from Engineering. • Billing cycle for Rt. 26 (Navy) has been set up in Utiligy system but still needs to complete the connections for each meter to the applicable service address. Engineering is reviewing the list provided by T & D; the generating plants one-line diagram will be completed by the end of this month.
5	Identification of unlisted electric energy consumers	
5.1	Process in place to identify and minimize occurrences in Unlisted consuming meters.	<ul style="list-style-type: none"> • Various reports are generated monthly to identify unlisted energy consumers (i.e., exception, minimum charge reports, etc.). • Investigations are conducted daily on disconnected/terminated accounts, active accounts and unauthorized removal of meters reported based on work orders or meter read discrepancies.
5.2	Tampering and illegal connections investigated and documented through GPA Revenue Protection Section, Internal Audit Section.	<ul style="list-style-type: none"> • October – December 2007 Meter Tampering/Investigations Conducted <ul style="list-style-type: none"> ○ Disconnected/Terminated Accts (i.e, illegal hook-up, damaged meter, Unlisted meter): 28 ○ Unauthorized Removal of Meter: 2 ○ Active Accounts (i.e., defective metering, Seal/strap cut or missing, misc/others): 34 • Confirmed Meter Tampering/Theft of Services: 23 cases

KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
6	Power system design and procurement guides considering optimization of system costs and losses	
6.1	Prepare transformer sizing guidelines	COMPLETED
6.2	Prepare conductor economics selection and evaluation guidelines	Conductor sizing guidelines based on voltage drop prepared for single-phase and three-phase loads. Analysis using computer model simulations of distribution feeders will determine existing conductor economics.
6.3	Stock appropriate transformers	<ul style="list-style-type: none"> • Engineering will identify transformers to be changed out and prepare maintenance plan for T&D to execute. • Action plan will be based on analysis of distribution feeders. • Target: 3 feeders in FY 2008
7	Metering assessment and correction of customer power factor	
7.1	Evaluating large demand customers to define magnitude of power factor problem.	<ul style="list-style-type: none"> • There are approximately 30 large accounts that have not calculated power adjustments. Awaiting software developer (AMX) to complete the fixes on power factor calculations for digital meters with KVAH and KVAH reads. The remaining large accounts (P & L) are with Q-meters and with power factor calculations which are reviewed and verified by Accounting during billing process.
7.2	Evaluating economics of power factor improvement	<ul style="list-style-type: none"> • Loss factor calculations conducted to determine optimum capacitor installations recommended system wide to improve system power factor.
7.3	File new rate – cost of service study	<ul style="list-style-type: none"> • Contractor is Economist.com • Project is over 2 years • Aggregate cost: \$550K
8	Cost effective reactive power compensation	
8.1	Perform long range transmission planning study	<ul style="list-style-type: none"> • Transmission study kickoff: October 16, 2007 • Contractor is R. W. Beck • Cost of the study is \$150K including contingencies • Working on a forecast
8.2	Capacitor bank savings and loss factor calculations to determine optimum capacitor installations recommended system wide	
8.3	Procure and Install substation capacitors	
8.4	Connectivity model of distribution circuit and building load model.	<ul style="list-style-type: none"> • Consultant, Power Engineers will conduct training on Synergy software • As-builts of 3 Dededo circuits (P87, P88, P89) completed. • Yigo circuits (P330, P331, P332) currently being assessed.
8.5	Perform medium range distribution planning study	<ul style="list-style-type: none"> • Consultant, Power Engineers will start process of study. • Once initial training is completed (May 2008) and first feeders P87, P88, P89 are modeled and analyzed, a complete project schedule for the distribution system will be developed.

	KEY MANAGEMENT OBJECTIVE	TASK DESCRIPTION	STATUS
8.6		Procure and install distribution capacitors	<ul style="list-style-type: none"> • Optimal location of distribution capacitors dependent on modeling and analysis of distribution system.
9	Quality Systems Design & Implementation		
9.1	CONTINUOUS	Documentation including supporting documents is regularly updated and maintained.	<ul style="list-style-type: none"> • Documents updated and submitted quarterly

**GUAM POWER AUTHORITY
GROSS GENERATION, SALES, LINE LOSSES**

FY 2007 & 2008

	<u>24-Month</u>	<u>12-Month</u>	<u>Dec-07</u>	<u>Nov-07</u>	<u>Oct-07</u>	<u>Sep-07</u>	<u>Aug-07</u>	<u>Jul-07</u>
A Gross Generation	3,770,583,315	1,879,393,364	162,566,914	155,161,136	158,546,336	152,111,031	158,428,452	164,399,619
B Station Use	207,240,585	105,434,361	9,172,913	8,429,571	8,940,809	8,422,781	9,492,770	9,821,760
C Net Send Out (A-B)	3,563,342,731	1,773,959,003	153,394,001	146,731,565	149,605,527	143,688,250	148,935,682	154,577,859
D Sales to Navy (@34.5Kv)	672,201,782	332,635,327	29,091,977	27,521,749	28,815,693	26,074,601	29,109,366	29,922,192
E GPA-metered (C-D)	2,891,140,949	1,441,323,676	124,302,024	119,209,816	120,789,834	117,613,649	119,826,316	124,655,667
F Power factor adj.	0	0	0	0	0	0	0	0
G Adjusted (E-F)	2,891,140,949	1,441,323,676	124,302,024	119,209,816	120,789,834	117,613,649	119,826,316	124,655,667
H GPA KWH Accountability: Sales to customers								
(accrual basis)								
I GPA use-KWH	2,611,487,207	1,301,662,451	111,571,272	107,460,615	106,110,375	105,980,724	106,754,053	118,643,402
No of days	6,163,785	3,026,675	238,573	264,934	244,868	252,202	259,250	263,811
J Unaccounted for KWH (G-H)	730	365	31	30	31	30	31	31
Ratio of Unaccounted KWH:								
K Ratio to Gross Generation (J/A)	7.42%	7.43%	7.83%	7.57%	9.26%	7.65%	8.25%	3.66%
L Ratio to Net Generation (J/C)	7.85%	7.87%	8.30%	8.01%	9.81%	8.10%	8.78%	3.89%
	<u>279,653,742</u>	<u>139,661,225</u>	<u>12,730,752</u>	<u>11,749,201</u>	<u>14,679,459</u>	<u>11,632,925</u>	<u>13,072,263</u>	<u>6,012,265</u>

*Sept -07 Sales to Navy adjusted to reflect actual billing.