



BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN THE MATTER OF:

) GPA Docket 15-18
)
The Request of the Guam Power)
Authority to Award the Temporary Power) **PUC COUNSEL REPORT**
Services Contract to Aggreko International)
Projects Limited ("Aggreko").)
)

INTRODUCTION

1. This matter comes before the Guam Public Utilities Commission ["PUC"] upon the Request of the Guam Power Authority ["GPA"] to Award the Temporary Power Services Contract to Aggreko International Projects Limited ("Aggreko").¹

BACKGROUND

2. In its Order, September 24, 2015, the PUC authorized GPA to issue a procurement for temporary generation services.²
3. Due to the loss of 78MW of baseload capacity (as a result of the Cabras No. 3&4 Power Plant explosion and fire on August 31, 2015), GPA presently has insufficient generation reserves.³
4. GPA received four (4) proposals as the result of its Temporary Power Services Procurement. It has selected Aggreko as the lowest responsible bidder.⁴
5. The specifics of the Contract and Award to Aggreko are set forth in GM Benavente's Presentation in the Sections denominated TEMPORARY POWER

¹ Guam Consolidated Commission on Utilities Resolution No. 2015-56, Authorizing Management of the Guam Power Authority to Award the Temporary Power Services, adopted October 27, 2015. The CCU Resolution serves as the "Request" in this matter due to the expedited nature of these proceedings. Herein, the CCU authorized GPA to petition the PUC to approve the contract with Aggreko International Projects Limited.

² PUC Order, GPA Docket 15-18, dated September 24, 2015 at p. 3.

³ Id. at pgs. 2-3.

⁴ Presentation of GPA GM John Benavente, Guam Power Authority Generation Capacity Alternatives, to the Commissioners of the Guam Consolidated Commission on Utilities on October 27, 2015, attached hereto as "Exhibit 1".

RECOMMENDATION and SERVICE LEASE OF THE 40MW OF TEMPORARY POWER.⁵

6. According to GM Benavente, Aggreko will supply 40 1MW units, which will run on Ultra Low Sulphur Diesel (ULSD), and be located at the Yigo Substation.⁶
7. Costs for the leased power services are estimated to be between \$12.15 and \$12.5M per year.⁷ Cost will depend upon the length of time that Cabras No. 3 is out of service.⁸
8. The leased generation services contract would be in effect for at least one year, with two one year extension options.⁹ Total monthly payments from GPA to Aggreko will be over \$1M.¹⁰ GPA anticipates that the Aggreko plants, which will be manned by six Aggreko personnel, will be operational within sixty (60) days (around January 1, 2016).
9. GPA believes that it will receive \$15M Extra Expense Insurance that will cover the cost of temporary power. It will need to use funds from the Self-Insurance Fund to cover the cost of the temporary power services until it is reimbursed by insurance coverage.¹¹

ANALYSIS

10. GPA has justified its need to procure temporary generation services and to award a contract to Aggreko. The complete loss of the 78.6MW in baseload capacity, as a result of the Cabras explosion, has placed GPA in a situation where it cannot meet system demand upon a baseload or large emergency unit outage.¹² Mr. Benavente has speculated that Cabras 3, in the best case, could only be returned to service, at the very earliest, by August 2016.¹³

⁵ Id at pgs 35-39.

⁶ Presentation of GM Benavente to CCU on October 27, 2015.

⁷ See Guam Power Authority Generation Capacity Alternatives, *Supra*, at p. 40.

⁸ Id.

⁹ Id at p.37.

¹⁰ Id at p.40.

¹¹ Email from GPA Legal Counsel Graham Botha to PUC Counsel Frederick J. Horecky Re: The Temporary Power Proposal, dated October 23, 2015.

¹² Guam Consolidated Commission on Utilities Resolution No. 2015-56, at p.1, adopted October 27, 2015.

¹³ Guam Power Authority Generation Capacity Alternatives, *Supra*, at p. 38.

11. When there is an outage of one of the Cabras steam units or more than one unit, GPA will be short approximately 40MW.¹⁴
12. There have been numerous occurrences of load shedding and power outages since the Cabras plant explosion. GPA GM Benavente has estimated that a total of 42 hours of load shedding has occurred since August 31, 2015.¹⁵
13. It is appropriate to allow GPA to utilize the Self-Insurance Fund for the funding of the temporary generation services. The Self-Insurance Program was established for the purpose of providing GPA a mechanism to recover anticipated extraordinary expenses associated with insurable events, including accidents, explosions, and fires.¹⁶
14. However, GPA should be required to reimburse the Self-Insurance Fund when it receives funding for the temporary generation services from its Extra Expense Insurance or other insurance coverage arising from the Cabras explosion.
15. To date, GPA has failed to file the detailed analysis of the cost and feasibility of reactivating the Tanguissan Plants, as it was ordered to do in the PUC Order dated September 24, 2015. It was ordered to do so by October 26, 2015,
16. It has also failed to file the Time of Use Plan for Peak Hour rates by October 26, 2015, in accordance with the PUC Order dated September 24, 2015. The PUC cannot assess the propriety of its temporary power services contract until GPA's filings are made.

RECOMMENDATIONS

17. Counsel recommends that PUC authorize GPA to award the temporary generation services contract to Aggreko International Projects Limited in an amount not to exceed \$11,781,392 per year, plus an energy conversion charge of \$4.40/MWh, pending submission of its required filings.
18. GPA should not be authorized to award such contract until: (1) it files both the feasibility analysis re: Tanguissan and the Time of Use Plan for Peak Hour Rates; (2) PUC Counsel certifies that: GPA has complied with the PUC Order dated

¹⁴ Id.

¹⁵ The interview with John Benavente, Guam Post, October 15, 2015.

¹⁶ The Self-Insurance Program Protocol, Protocol 1, Scope.

September 24, 2015 and that neither filing by GPA demonstrates that the temporary generation services sought by GPA are unnecessary.

19. Once it complies with the filing requirements, GPA should be authorized to withdraw funds from the Self-Insurance Fund to pay the monthly payments due to Aggreko. However, the Self-Insurance Fund should be reimbursed by GPA when it receives extra expense or other insurance from the coverage related to the Cabras No. 3&4 explosion.
20. A Proposed Order is submitted herewith for the consideration of the Commissioners.

Dated this 28th day of October, 2015.

Frederick J. Horecky
PUC Legal Counsel



Guam Power Authority Generation Capacity Alternatives

October 27, 2015

EXHIBIT 1

Recommendations:

Items for Decision October 27th Meeting:

- Repair Cabras 3 & 4 Units. (Resolution 2015-55 for Roof Removal)
- Lease 40-60MW of Temporary Capacity. (Resolution 2015-56 for Award)

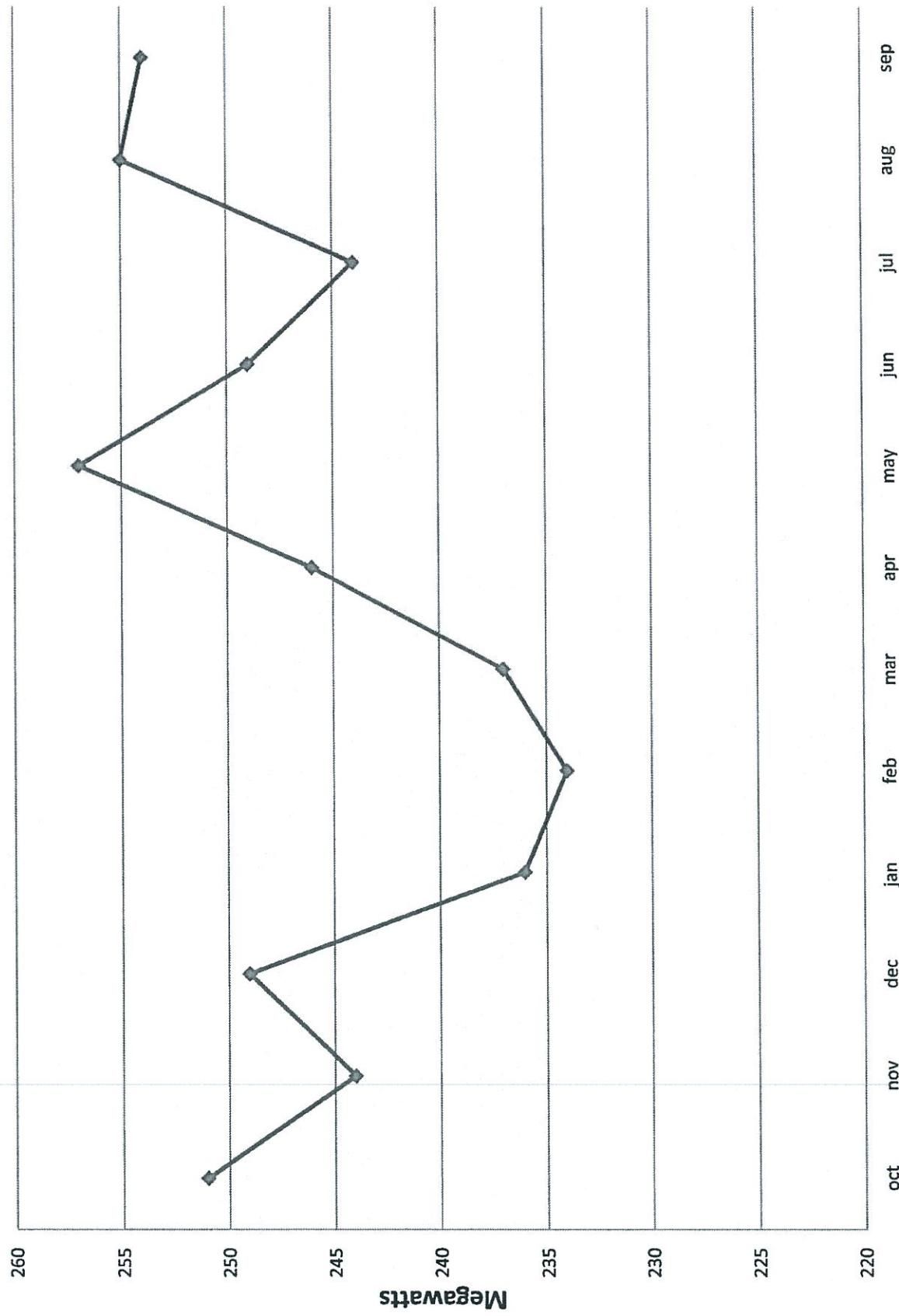
Updates:

- Implement Interruptible Load Program. (12MW Contracted)
- Activate Orote 18MW Diesel Plant. (NavFac Reviewing Proposal)
- Activate Dededo 40MW CT Plant. (PMC Bid Issued; Nov Opening)
- Replace Cabras # 1 Main Transformer. (Expected Completion in May)
- Encourage Conservation. (Ongoing)
- Issue Advanced Load Shedding Schedule. (Done as Necessary)
- Implement Demand Side Management Program (DSM). (Nov 2015)
- Evaluate Time-of-Use (TOU) Rates to reduce Peak. (In Progress)
- New Combined Cycle Plant Decision. (Pending)

Temporary Power Recommendation

- Forecasted FY 2016 Peak Demand
- Estimated Capacity for 2016 Major Overhauls
- Demand Curve for Jan thru March 2016
- Recommendation to Award:
 - Resolution 2015-56
 - Award Aggreko 40 MW Temporary Power Lease
 - One year; option of two 1 year extensions

Projected 12-Month Peak Demand

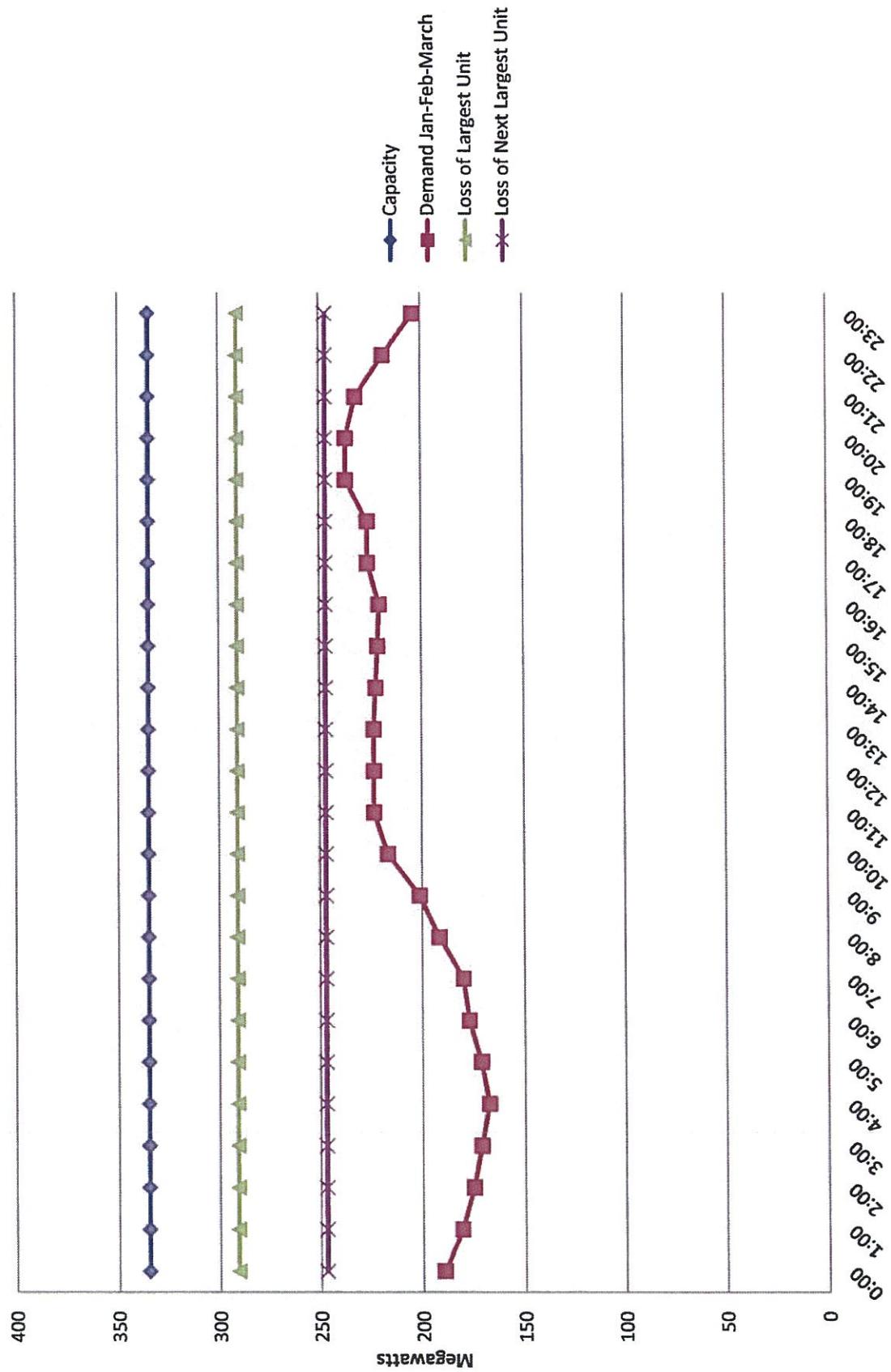


Service Lease of 40 MW to 60MW of Temporary Power

- Lack of reserves prevent GPA and its IPP partner from doing the regular preventive maintenance and overhauls typically done throughout the year. Lack of maintenance will compound our outages.
- GEPA and USEPA permits to be expedited.
- Request for Proposal (RFP) opened October 8th.
- Four (4) Proposals received. Aggreko ranked 1st.
- Completed negotiations with Aggreko on Wednesday last week.
- 40 MW of temporary power capacity for 1 year; two one year options.
- Commissioned within 60 Days of Notice to Proceed.
- No GEPA and USEPA permits needed for 1st year.
- 1st year contract \$11,781,392 and Variable cost of \$4.40 per Mwh.
- Operating Fuel Savings will offset over \$6M of Annual Fixed Cost.
- CCU approved resolution is to be immediately filed with the PUC which has included Temporary Power in this Thursday's PUC agenda.

BASELOAD UNITS:		Cabras 2 Out.		MEC8 Out.		Cabras 1 OH		Cabras 3 On-line		Net Temp. Pwr.	
Unit	Available (MW)	Jan/Feb	March	Available (MW)	May	Available (MW)	August	Available (MW)	CR2017	Available (MW)	
Cabras #1	42.0	42.0	42.0	0.0	0.0	66.0	66.0	66.0	66.0	66.0	
Cabras #2	50.0	0.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	66.0	
Cabras #3	0.0	0.0	0.0	0.0	0.0	39.0	39.0	39.0	39.0	39.0	
Cabras #4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MEC #8	40.0	44.0	44.0	0.0	44.0	44.0	44.0	44.0	44.0	44.0	
MEC #9	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	
Total Baseload Availability	176.0	130.0	152.0	154.0	259.0	259.0	259.0	259.0	259.0	259.0	
STANDBY / PEAKING / EMERGENCY UNITS:											
Temporary Power	0	40	40	40	40	40	40	40	0	0	
TEMES 7 CT	32	40	40	40	40	40	40	40	40	40	
Macheche C.T.	18	18	18	18	18	18	18	18	18	18	
Yigo C.T.	19	19	19	19	19	19	19	19	19	19	
Tenjo #1	4	4	4	4	4	4	4	4	4	4	
Tenjo #2	0	4	4	4	4	4	4	4	4	4	
Tenjo #3	4	4	4	4	4	4	4	4	4	4	
Tenjo #4	4	4	4	4	4	4	4	4	4	4	
Tenjo #5	4	4	4	4	4	4	4	4	4	4	
Tenjo #6	4	4	4	4	4	4	4	4	4	4	
Manenggon #1 (MDI)	4	4	4	4	4	4	4	4	4	4	
Manenggon #2 (MDI)	0	4	4	4	4	4	4	4	4	4	
Talifoflo #1	4	4	4	4	4	4	4	4	4	4	
Talifoflo #2	0	4	4	4	4	4	4	4	4	4	
Orote	0	12	18	18	18	18	18	18	18	18	
Dededo CT Plant	0	0	0	20	20	20	20	20	40	40	
Total Standby/Peaking	97	169	175	195	195	195	195	195	175	175	
System Totals:	273	289	327	349	454	434					
System Peak Demand	245	237	237	260	260	260	260	260	260	260	
Reserve	28	62	90	89	194	174					
Less Largest Unit	50	44	66	66	66	66	66	66	66	66	
Reserve	-22	18	24	23	128	108					
Interruptible Load Triggered:	36	36	36	36	0	0	0	0	0	0	
Reserve	14	54	60	59	128	108					
Less Next Largest Unit	44	44	44	44	66	66	66	66	66	66	
Reserve Balance	-30	10	16	15	62	42					

Cabras 2/MEC Overhaul Scenario With Temporary Power and Interruptible Load



Description:	40Mw Plant	Monthly	Annual	Average Monthly Kwh	
Capacity fee	\$17,31	\$692,400		Aggreko Heat rate	13.65
Fixed O&M	\$204,000	\$185,630		Aggreko Gallons consumed	903,260
Variable O&M	\$4.41/MWH	\$54,250		GPA CT Heat Rate	10.2
		\$104,456		GPA CT Gallons Consumed	1,208,775
Total Monthly		\$1,036,736	\$12,440,830	Gal Saved	305,514
				\$/Gal ULSD	\$1.72
				Monthly Savings	\$525,485
				Net Monthly Cost:	\$511,251
				Net Annual Cost	\$6,135,011.63

Description:	40Mw Plant	Monthly	Annual	Average Monthly Kwh	
Capacity fee	\$17,31	\$692,400		Aggreko Heat rate	13.65
Fixed O&M	\$204,000	\$185,630		Aggreko Gallons consumed	1,299,054
Variable O&M	\$4.41/MWH	\$78,021		GPA CT Heat Rate	10.2
		\$104,456		GPA CT Gallons Consumed	1,738,440
Total Monthly		\$1,060,507	\$12,151,800	Gal Saved	439,386
				\$/Gal ULSD	\$1.72
				Monthly Savings	\$755,744
				Net Monthly Cost:	\$304,764
				Net Annual Cost	\$3,657,162.86

Estimated Combustion Turbines Kwh production with Cabras # 3 out of Service:

Period Cabras #3 out of Service	Kwh Generated	Monthly Average
January to August 2016	147,954,000	12,329,500
January to December 2016	212,785,000	17,732,083

36 MW of Interruptible Load

- **The following 13 large customers (14 MW of Load) are in the program.**
 - Hyatt
 - Hilton
 - Nikko Hotel
 - Pacific Islands Club
 - Sheraton
 - Guam International Airport Authority
 - Pacific Star Hotel
 - Guam Premium Outlets
 - Agana Shopping Center
 - Guam Regional Medical Center
 - Westin
 - Guam Plaza Hotel & Waterpark
 - Lotte Hotel
- **Additional Interruptible Load Support.**
 - Department of the Navy (10 MW)
 - Guam Waterworks Authority (12MW)

The following estimates the impact on energy served for period August 31st to October 25th.				55
Number of Days in Period	Dates	Interruptible Load (kWh)	Load Shedding (kWh)	
	6-Sep		38,914	38,914
	7-Sep		6,137	6,137
	14-Sep		57,151	57,151
	23-Sep		5,639	5,639
	26-Sep	47,120		47,120
	27-Sep	67,166	133,227	200,393
	28-Sep	17,332	98,138	115,470
	29-Sep	57,627	4,455	62,082
	7-Oct	7,097		7,097
	9-Oct	185,970		185,970
	10-Oct	93,347		93,347
	11-Oct	111,646	15,858	127,504
	12-Oct	104,311		104,311
	14-Oct	12,078		12,078
	23-Oct	288,609	31,869	320,479
	24-Oct	274,469	170,514	444,984
	25-Oct	51,370		51,370
Total		1,318,142	561,904	1,880,046
Total kWh Sales Loss				1,880,046
Estimated Gross kWh				2,112,411
kWh Production for Period:				262,446,619
Percent Loss in Production				0.72%
Days of Load Shedding				10
Days of Interruptible Loading				14
Hours of Load Shedding				46
Hours in Period				1,320
Percent Hours Load Shedding				3.48%
Estimated Revenue Loss				\$216,205