CCU MEETING

Presentation By:
Guam Power Authority
September 27, 2023

ISSUES FOR DECISION

GPA Resolution No. FY2023-32

Relative to the Adoption of a Budget for Guam Power Authority for Fiscal Years 2024-2025

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

Section 8117 of Chapter 8 of Title 12 of Guam Code Annotated authorizes the Consolidated Commission on Utilities (CCU) to adopt an annual budget for the Authority. Section 6.11 of the GPA Bond Indenture Agreement requires the Authority to provide a copy of an approved budget to the Bond Trustee prior to the beginning of each fiscal year. The General Manager has reviewed the budget to ensure that all budget expenditures are consistent with the strategic goals of the Authority.

How much will it cost?

The General Manager of GPA has reviewed and proposes the revenue budgets for Fiscal Years 2024 & 2025 totaling **$505,607,000 and $576,098,000** respectively. Including Capital Improvement Projects (CIP) budget totaling $36,931,099 & $39,160,498 for Fiscal Years 2024 & 2025 respectively.

When will it be effective?

October 1, 2023 (FY'2024 budget) and October 1, 2024 (FY'2025 budget)

Proposed 2024-2025 Budget

9/14/2023

Proforma Income Statement In '000	**FY2022 Actuals**	**FY2023 Approved**	**FY2023 Projected Year-End**	**FY2024 Proposed**	**FY2025 Proposed**
REVENUES					
Existing Base Rate Revenues	$ 157,790	$ 160,800	$ 146,781	$ 157,800	$ 162,534
Fuel Revenues	$ 315,771	$ 236,432	$ 411,474	$ 391,228	$ 406,877
Miscellaneous Revenues	$ 6,215	$ 2,212	$ 6,475	$ 6,579	$ 6,687
Total Revenues	**$ 479,776**	**$ 399,444**	**$ 564,730**	**$ 555,607**	**$ 576,098**
Bad Debt Expense	$ (1,223)	$ (1,198)	$ (1,198)	$ (1,246)	$ (1,295)
Net Operating Revenues	**$ 478,553**	**$ 398,246**	**$ 563,532**	**$ 554,361**	**$ 574,803**
Production Fuel	$ 315,771	$ 236,432	$ 411,474	$ 391,228	$ 406,877
IPP	$ 9,356	$ 13,996	$ 13,996	$ 14,040	$ 14,631
O&M EXPENSES					
Yigo Diesel Units & Operating Supplies	$ 4,774	$ 6,631	$ 4,160	$ 5,040	$ 5,566
Utilities - Water & Communications	$ 2,478	$ 3,137	$ 2,804	$ 2,859	$ 3,025
Workforce - Personnel & Apprentices	$ 42,641	$ 50,554	$ 50,059	$ 54,078	$ 56,884
Contractual	$ 11,502	$ 16,418	$ 11,564	$ 15,383	$ 16,270
Administrative & General**	$ 18,323	$ 9,694	$ 11,055	$ 12,532	$ 13,014
Total O&M Expenses	**$ 79,719**	**$ 86,434**	**$ 79,642**	**$ 89,892**	**$ 94,759**
Depreciation	$ 35,213	$ 41,864	$ 37,084	$ 38,567	$ 40,110
Total Operating Expenses	$ 440,058	$ 378,726	$ 542,196	$ 533,727	$ 556,377
Earnings From Operations	$ 38,495	$ 19,520	$ 21,336	$ 20,634	$ 18,426
Interest & Other Income (Expenses)	$ (25,121)	$ (22,509)	$ (13,824)	$ (21,208)	$ (19,820)
Net Earnings(Loss) Before Capital Contribution	**$ 13,373**	**$ (2,989)**	**$ 7,512**	**$ (574)**	**$ (1,394)**

- FY2023 approved fuel budget was $236.4M, amended to increase by $249.2M under CCU Resolution 2023-05 to a new total of $485.6M.
- **FY2022 actuals for Admin & General include Pension Adjustments of $5.5M

Proposed 2024-2025 Budget - Debt Services

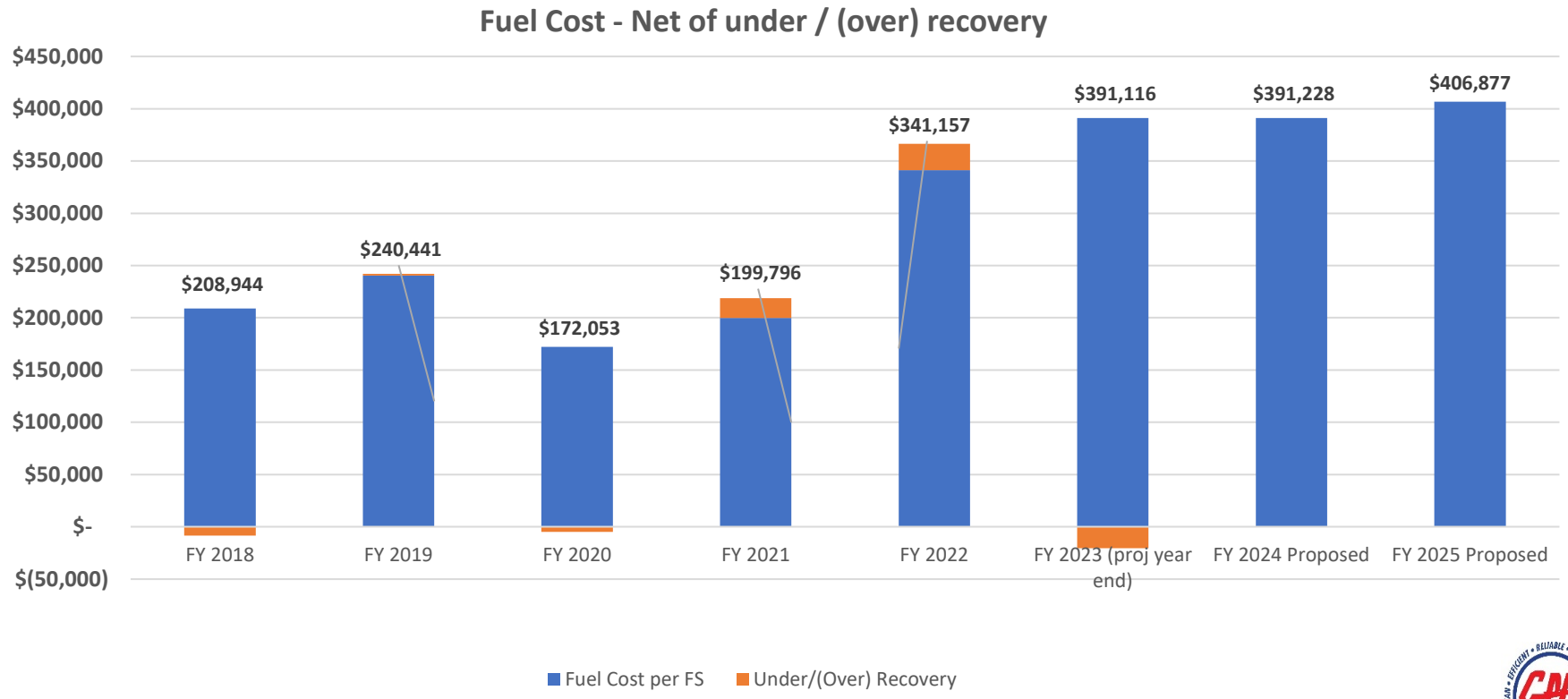
Principal & Interest (in '000)	FY2023 Projected	FY2024 Projected	FY2025 Projected
2014 Revenue Bond	$ 5,083	$ 5,085	$ 5,083
2017 Refunding Bond	$ 11,452	$ 11,445	$ 11,447
2022 Refunding Bond	$ 31,467	$ 21,413	$ 21,415
Total	**$ 48,001**	**$ 37,942**	**$ 37,944**
Debt Service Coverage (Bond Method)	**1.27**	**1.59**	**1.57**
Debt Service Coverage (S&P Method)	**1.27**	**1.59**	**1.57**

Proposed 2024-2025 Budget - Base Revenue

In '000	FY2020 Actual	FY2021 Actual	FY2022 Actual	FY2023 Projected	FY2024 Proposed	FY2025 Proposed
Base Revenue	$ 156,709	$ 158,426	$ 157,790	$ 146,781	$ 157,800	$ 162,534

Proposed 2024-2025 Budget - LEAC

Period	Projected mWh Sales	LEAC Rate	(in '000) Fuel Revenues	Period	Projected mWh Sales	LEAC Rate	(in '000) Fuel Revenues
Oct 2023 - Jan 2024	517,149	$ 0.231100	$ 119,513	Oct 2024 - Jan 2025	527,369	$0.270000	$ 142,390
Feb 2024 - Jul 2024	756,858	$ 0.270000	204,352	Feb 2025 - Jul 2025	771,816	$0.256591	$ 198,041
Aug 2024 - Sep 2024	249,493	$ 0.270000	67,363	Aug 2025 - Sep 2025	258,958	$0.256591	$ 66,446
Total	**1,523,500**		**$ 391,228**		**1,558,143**		**$ 406,877**



Operating Expenses Budget – Workforce

	FY20	FY21	FY22	FY23	FY24	FY25
APPROVED FTE	**490**	**490**	**490**	**490**	**490**	**490**
ACTUALS FTE (at year-end)	**443**	**426**	**412**	**420**		

In '000	FY2022 Actual	FY2023 Approved Budget	FY2023 Projected Year-End	FY2024 Proposed Budget	FY2025 Proposed Budget
Salaries & Wages	31,183	36,567	40,797	38,454	39,708
Employee Benefits	9,580	12,571	10,421	13,386	14,197
Retiree Benefits	4,130	4,784	4,645	5,365	5,947
Total Labor & Benefits	44,893	53,922	55,863	57,204	59,852
Less Capitalized Labor	(3,360)	(6,459)	(8,601)	(6,793)	(6,973)
Total Personnel	41,534	47,463	47,262	50,411	52,880
Apprentice Labor	1,061	1,991	1,823	2,247	2,527
Workforce Interns	46	1,100	974	1,420	1,477
Total Workforce Contracts	1,107	3,091	2,797	3,667	4,004
Total Workforce	**42,641**	**50,554**	**50,059**	**54,078**	**56,884**

Operating Expenses Budget

In '000	FY2022 Actual	FY2023 Approved Budget	FY2023 Projected Year-End	FY2024 Proposed Budget	FY2024 Proposed Budget
Fixed Management Fee	2,760	2,853	2,853	3,487	3,644
PMC Routine O&M	2,649	1,992	1,990	2,011	2,031
Software & Network Maintenance	1,520	2,234	1,702	1,906	1,978
Security Guard/Armored Car	852	1,069	868	908	940
USDA snake control	204	258	213	211	214
Environmental Protection & Compliance	633	927	810	671	701
Yigo Diesel Units	1,496	3,135	1,885	2,059	2,267
Operating Supplies	3,279	3,316	2,275	2,981	3,299
Utilities - Water/Communications	2,478	3,137	2,804	2,859	3,025
Insurance - Property, Casualty & Workmen's Comp	7,566	7,212	8,020	8,971	9,391

Proposed FY 2024-2025 CapEx

FY2024-2025 CAPITAL IMPROVEMENT PROJECTS (CIP) - REVENUE FUNDED

CIP CATEGORY (In '000)	FY2022 Actual	FY2023 Approved Budget	FY2023 Projected Year-End	Carryover	FY2024 Proposed Budget	FY2024 Proposed Budget
Overhaul	$ 1,697	$ 8,491	$ 4,507	$ 5,785	$ 13,412	$ 9,577
Network - SCADA, Advanced Meter Infrastructure, E1 Enhancement and Disaster Recovery	$ 1,160	$ 1,381	$ 1,442	$ -	$ 3,078	$ 1,906
Substation and Transmission Improvements	$ 921	$ 1,454	$ 439	$ 765	$ 2,256	$ 1,523
Water Well System Improvements	$ 86	$ 1,900	$ 275	$ -	$ 606	$ 2,300
Heavy Equipment - Bucket trucks, Diggers	$ 927	$ 1,520	$ 2,537	$ -	$ 748	$ 4,850
Other General	$ 315	$ 284	$ 210	$ 45	$ 2,034	$ 1,705
General Plant	**$ 5,106**	**$ 15,030**	**$ 9,409**	**$ 6,595**	**$ 22,134**	**$ 21,860**
Engineering Projects	**$ 715**	**$ 2,750**	**$ 6,825**	**$ 1,412**	**$ 10,796**	**$ 13,100**
Line Extensions	**$ 3,806**	**$ 4,342**	**$ 3,818**	**$ -**	**$ 4,000**	**$ 4,200**
Total - CIP (Revenue Funded)	**$ 9,627**	**$ 22,122**	**$ 20,053**	**$ 8,006**	**$ 36,930**	**$ 39,160**

*Carryovers are embedded in overall FY24 Proposed Budget

*$974.9k carryover is embedded in FY25 Proposed Budget (EV bucket trucks anticipated to come in by December 2024. Additionally, $100K of additional anticipated carryovers from FY24 to FY25 is also included on FY25 budgets.

Proposed 2024-2025 CIP Budget Details

Overhaul	FY 2024 In '000	FY 2025 In '000	Description
Cabras 1&2	$ 2,250	$ 1,780	Unit 1 Airpreheater Overhual, Unit 2 Replacement of Wall Water Tubes & Boiler Water, Unit 1 Service Water Cooler, Unit 1 Safety Valve Replacement, Ebara-Byron Jackson Boiler Feed Pump Upgrade
Gas CT	$ 8,926	$ 2,502	MCT Turbine Exchnage, YCT Main Generator Overhaul, YCT Upgrade on Generator Rotor and Excite Stator, YCT Hot Section Inspection and Exchnage, DCT 1 & 2 Combustion Inspection and Upgrade, Yigo Tank T-120 Replacement, MCT Turbine Fuel Treatment Motor Control Upgrade
Piti 7	$ 626	$ 2,300	Major Overhaul and Turbine Parts, Generator Overhaul, Starting Diesel Engine
Yigo Diesel	$ 880	$ 1,400	Yigo Diesel Units Major Overhaul, Radiator Replacements
Diesel - Tenjo, Talofofo, MDI	$ 730	$ 1,595	Diesel Units (Tenjo, Talofofo, MDI) Overhaul and Upgrades

Proposed 2024-2025 CIP Budget Details

Network	FY 2024 In '000	FY 2025 In '000	Description
Information Technology	$ 1,416	$ 894	ERP Phase II Upgrade, Oracle CC&B SW Upgrade, GPWA Physical Security, Laptops/Computers
PSCC	$ 811	$ 595	Siemen Storage Expansion Project, SCADA Switches and Power Distribution, Network Switch Communications, VHF Mobile/Portable Radio and Repeater Upgrades and Replacements, Substation Controllers
SPORD / Engineering	$ 678	$ 291	Distribution Automation, Mobile Workforce Software Additional Implementation, Replacement of ABB Software, Tier 2 Expansion Project/Equipment, Distribution Tools Set, Substation Communications Tier 1
Procurement / Warehouse / Accounting	$ 172	$ 127	E1 Enhancement, Hubble License & Training

Proposed 2024-2025 CIP Budget Details

Substation & Transmission	FY 2024 In '000	FY 2025 In '000	Description
T&D	$ 2,256	$ 973	Emergency Underground Reconstruction, SF6 Circuit Breakers, Vacuum Circuit Breakers, Omicron OMC-356, Meter Test Sets and Electronic Relays, Disconnect Switch Upgrades, Stationary Bank Sets, Pad Mounted Switch Gear Upgrades/Transformers
Safety		$ 550	Substation Hardening Phase II

Water Well	FY 2024 In '000	FY 2025 In '000	Description
Water Systems	$ 606	$ 2,300	Portable Generators on Trailers, Stationary Generator Replacements, Top End Overhaul on 1400kw Generator, Radiator

Heavy Equipment	FY 2024 In '000	FY 2025 In '000	Description
Transportation	$ 748	$ 4,850	Digger, Utility Trucks, SUV, Bucket Truck, Tree Trimming Equipment, Tractor Trucks

Proposed 2024-2025 CIP Budget Details

Engineering Projects	FY 2024 In '000	FY 2025 In '000	Description
Storage Tank 1934 & 1935 Refurbishment	$ 5,600	$ 4,900	Removal of additional/incremental volume of non-hazardous sludge, Upgrade existing defective LD system, Fire protection
EPCM Contract - Stanley	$ 2,248	$ 2,200	LNG conversion for Ukudu for rate reduction strategy
T7 Transformer Replacement	$ 500	$ 1,800	Cost for the construction and design on the installation of the new T7 transformer at Piti Substation
T501 Transformer Upgrade	$ 300	$ 1,000	Repair/upgrade is critical for the new Ukudu power plant to go online and serve full load.
Typhoon Mangkhut Permanent Repairs	$ 550	$ -	Replacement of 4 generators at $100K each plus retention fee
P-111 and P-047 Metal Cross Arm Refurbishment	$ 350	$ 350	Project plans ready for completion
Protection Relays, ICON	$ 350	$ 500	Bus protection relay, feeder protection relay, and cap bank controller
Concrete Fencing - Harmon Sub	$ 100	$ 500	For physical security - in coordination with the new ukudu power plant, need to change current chain fencing with concrete
115kV Cabras to Agana - monotube upgrade	$ 200	$ 300	Project to refurbish the Cabras-Agana 115 kV Monotube Steel Poles due to rusting

Proposed 2024-2025 CIP Budget Details

Engineering Projects	FY 2024 In '000	FY 2025 In '000	Description
Apra Heights Substation - 115/34.5 kV Transformer Upgrade - Design	$ 100	$ 200	Cost is for the design of new 115 kV transformer at Apra Substation
SCADA Ready Regulators and Switched Cap Banks	$ 70	$ 400	For voltage support due to load increases and higher impedance lengths. SCADA ready regulators will provide PSCC with voltage control during contingencies
Smartgrid Controller Conversion and T&D Line Maintenance Support/Distribution Improvement	$ -	$ 100	Conversion of controller for smart grid application. To provide troubleshotting support to T&D for research and procurement of testing equipment and automated applications; to provide maintenance support for line hardware issues
New Northern Substation near Potts Junction DESIGN	$ -	$ 500	Cost is for the design of a new Substation near Potts Junction due to low voltage and overloading issues during backfeeding

GPA RESOLUTION NO. FY2023-33

Relative to Recognizing October 1 – 7, 2023 as Public Power Week During GPA's 55-Year Operating Guam's Electric Public Power Utility

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

The Guam Power Authority (GPA) is celebrating the annual Public Power Week, a national observance coordinated by the American Public Power Association (APPA), of which GPA is a member, from October 1-7, 2023, along with more than 2,000 U.S. community-powered, not-for-profit electric utilities that collectively provide electricity to 49 million people across 49 states and five U.S. territories. The citizens of Guam place a high value on local service and therefore have chosen to operate a community-owned, not-for-profit electric utility and, as customers and owners of Guam's electric utility. GPA has provided homes, businesses, schools, social services, and local government agencies with 55 years of electricity employing sound business practices designed to ensure the best possible service at not-for-profit rates. GPA is a valuable community asset that contributes to the well-being of local citizens through energy service, customer service, environmental protection, economic development, and safety awareness.

As part of Public Power Week 2023, GPA and its employee association, has implemented two community outreach programs to collect nonperishable foods to benefit Guam's food pantries and support Special Olympics events. GPA has also established a school outreach program to provide hands-on, in-classroom learning for Guam's schoolchildren, the next generation of island leaders, to promote energy conservation and sustainability.

In 55 years of service, with the establishment of the Guam Public Utility Agency of Guam in 1950 by the Government of Guam with electric power produced by the United States Navy to the people of Guam GPA's mission remains: to provide reliable, efficient, effective, environmentally responsible, and affordable energy solutions for the island of Guam.

In 2023, GPA has made great strides toward implementing more renewable energy solutions for a more sustainable future for Guam through the establishment of its Integrated Resource Plan (IRP) also known as the Clean Energy Master Plan (CEMP) to transform Guam's Island-Wide Power System to incorporate more renewable energy in Guam's energy future. GPA is committed to providing 50 percent of the island's electric power from renewable or non-greenhouse gas emissions sources by 2030 and 100 percent by 2040. GPA continues to develop and support programs that fiscally benefit its customers, such as the $100 utility credits for active commercial and residential customers, which has **distributed approximately $74M in energy credits in the past 14 months,** and the Guam Energy Sense Rebate Program that offers cash rebates for customers purchasing more energy-efficient home appliances, **which has paid more than $9.8M in rebates have been paid out since** 2015.

GPA has helped Guam to recover after Typhoon Mawar, a Category 4 storm that devastated the island with super typhoon winds and flooding damaging Guam's island-wide power infrastructure and electrical grid system, making this post-typhoon recovery the fastest in Guam's history. GPA continues to work on hardening Guam's power system to make it more resilient and enhance the quality of its infrastructure to allow for quicker recovery time in the event of any future natural disasters. In recognition of its 55th year, the CCU commends GPA's leadership team and more than 400 employees for performing with excellence and a spirit of service to the people of Guam these past 55 years through challenges and successes to manage, maintain, and strengthen Guam's public utility for generations to come.

It is the request of GPA Management that CCU adopts Oct. 1-7, 2023, as Public Power Week on Guam to recognize the people behind public power at Guam Power Authority, its Performance Management Contractors, Power Purchase Agreement Partners, and Mutual Aid Utility Partners for their contributions to our community and to educate customers, policymakers, employees, island residents, and schoolchildren on the benefits of public power.

GPA RESOLUTION NO. FY2023-34

Relative to Change the Signatories That May Authorize Banking Transactions on Behalf of GPA

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

Guam Power Authority (GPA) maintains a variety of bank accounts, Letter of Credit facilities and other financial instruments and accounts at institutions including but not limited to the Bank of Guam, Bank of Hawaii, First Hawaiian Bank, Coast 360 Federal Credit Union, Bank Pacific, Community First Credit Union, and US Bank.

Due to staffing changes, it is appropriate that a change be made to the authorized signatories. The modification is to add the GPA's Assistant General Manager of Operations.

The following persons are authorized to sign financial instruments including checks, Letters of Credits, bank transfers and other transaction documents and to authorize other types of payments on behalf of the Guam Power Authority:

JOHN M. BENAVENTE, P.E., General Manager
JENNIFER G. SABLAN, P.E., Assistant General Manager of Operations
JOHN J.E. KIM, Chief Financial Officer
MARIPAZ N. PEREZ, Assistant Chief Financial Officer
LENORA M. SANZ, Controller

Transactions amounts of $10,000.00 or less will require a single signatory. All other transactions will require two (2) signatories.

GPA RESOLUTION FY2023-35

Relative to the Review of 12 GCA Section 8502(c)(2)(B) Regarding Net Metering

What is the project's objective? Is it necessary and urgent?
GPA seeks PUC's review and changes to the existing Net Metering program to ensure the fair allocation of cost responsibilities among NEM customers, address intermittency, storage, and interconnection issues, and incorporate new renewable energy programs such as the Virtual Power Plant. Currently, several proposed legislation seeks to modify the current NEM program which will have negative impact on the islandwide power system and ratepayers.

Where is the location?
N/A

How much will it cost?
To be determined upon fees and charges for PUC review.

When will it be completed?
As soon as possible.

What is its funding source?
Revenue Funds

GPA RESOLUTION FY2023-37

Relative to Authorizing GPA Management to Procure 40MW of Temporary Power

What is the project's objective? Is it necessary and urgent?
The Project's objective is to obtain sufficient generation reserve capacity to avoid GPA's load shedding of customers whenever an outage of two baseload units occurs. The Project is critically urgent.

Where is the location?
The impact of this Project is island-wide. The potential siting of this project is Tenjo Vista Power Plant or the GPA Bulk Fuel Storage Facility, the previously proposed location of the KEPCO Diesel Reserve Generation Power Plant, or another suitable location.

How much will it cost?
GPA projects the annual cost at about $13M based on previous experience with Temporary Power Procurement in 2015.

When will it be completed?
As soon as possible.

What is its funding source?
Revenue Funds

Current Generation Capacity Situation [FY2023-37]

Planned Increased Capacity

GPA's aged generation capacity was being addressed by the planned commissioning of the new 198 MW Ukudu combined cycle power plant. This plant which is under construction and targeted for commissioning in 2024 was significantly damaged during Typhoon Mawar and commissioning has now moved to about January 2026. This delay has presented additional challenges for GPA to meet the demand over the next two years.

Other Generation Capacity

Typhoon Mawar damaged the Yigo 20 MW combustion turbine significantly impacting its ability to meet demand. The unit is now under repair but the return to service is not expected any earlier than December 2023. The loss of this unit has impacted GPA's limited reserve capacity and as seen load shedding has been more frequent now than in the past.

Future Clean Affordable Energy

The work towards improving reliability, providing affordable energy (commissioning Ukudu 198 MW plant) and contracting for utility scale solar plants with energy shifting capability continues and barring any other substantial delays would be achieve in 2026. GPA continues its focus on these projects to achieve its commitment to lower cost energy on a sustainable basis.

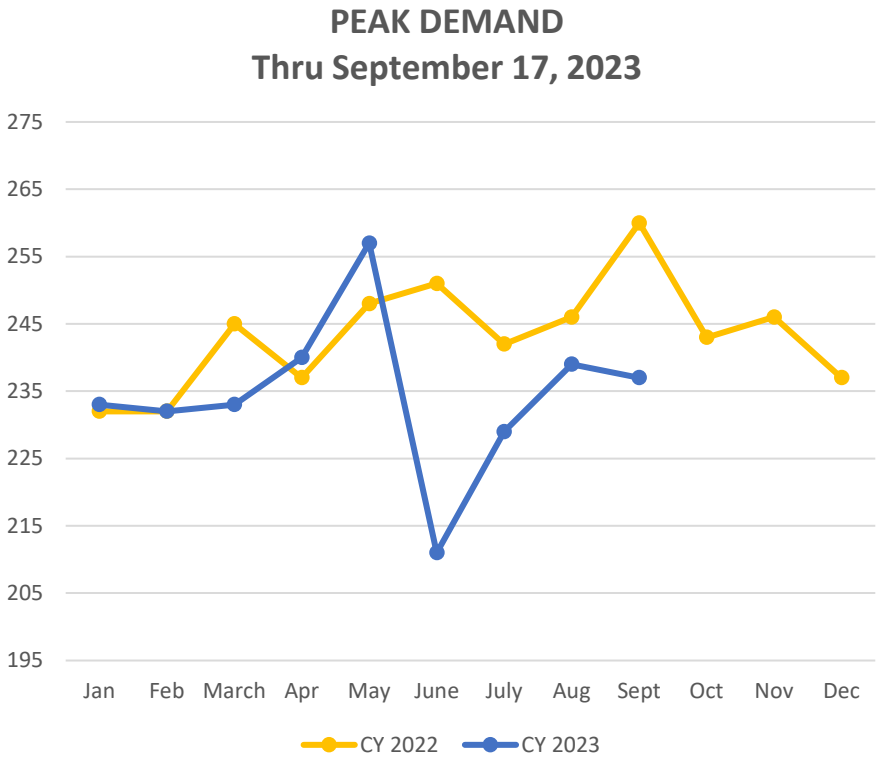
Temporary Power Needs

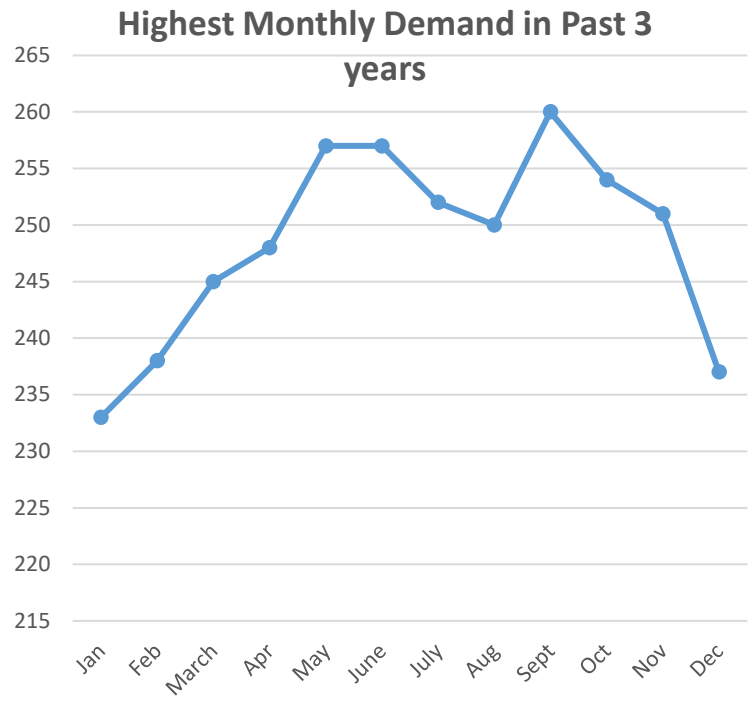
The next two years has significant challenges for GPA generation capacity and it must take action to do everything it can to restore down units and bring in reasonably cost temporary power. Constraints in accomplishing these critical work consist mainly of a procurement processes which delays implementation most especially due to mundane legal requirements and a bid protest resolution process which is burdensome and takes many months and even years to resolve. Despite GPA's expressing its concern, there has not been adequate assistance to GPA to overcome these barriers.

GPA noted last month that effort to end the current load shedding situation may take about 6 to 9 months, with incremental improvements through the period.

Generation Capacity Shortfall: Demand [FY2023-37]

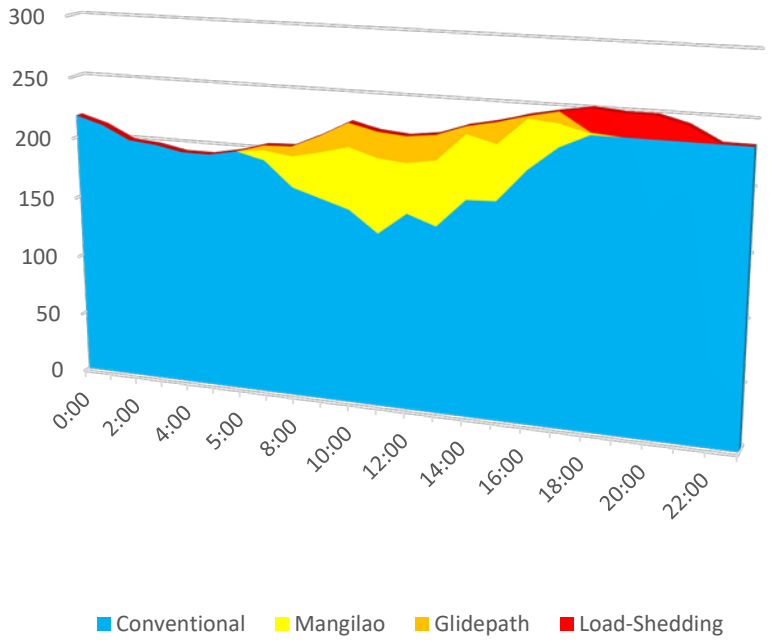
PEAK DEMAND HIGHEST IN SEPTEMBER



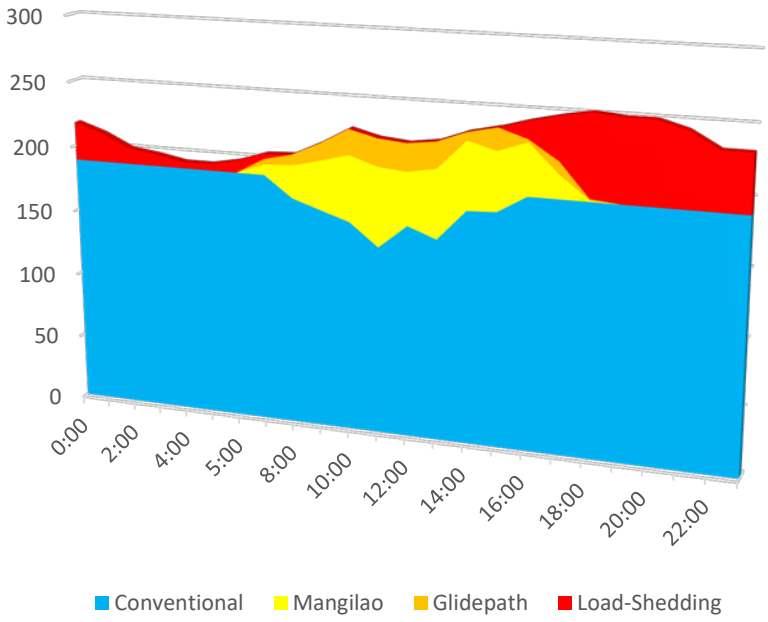


Generation Capacity Shortfall: Down Baseload Scenarios [FY2023-37]

One Baseload Down
Load Shedding 18 MW
Capacity 232 MW; Demand 250 MW



Two Baseload Down
Load Shedding 61 MW
Capacity 189 MW; Demand 250 MW



Generation Capacity Shortfall: Demand [FY2023-37]

		Actual	Actual	September Target
	Capacity Dates:	**24-Aug-23**	**20-Sep-23**	**All Baseload Repaired**
Cabras 1		41	41	41
Cabras 2		31	0	35
Piti 8		43	43	43
Piti 9		43	43	43
Piti 7		30	20	30
Dededo 1		18	18	18
Dededo 2		18	18	18
Macheche		18	16	18
Yigo CT		**Down Hard**	**Down Hard**	**Down Hard**
Yigo Diesels		**8**	**9**	**9**
Caterpillar Units		15	6	3
Manenggon #1		3	3	3
Manenggon #2		0	0	0
	Total:	**268**	**217**	**261**
Interruptible Load			16	16
	Total:		**233**	**277**
Anticipated Peak Demand		245	245	245
Reserve (Shortfall)		23	(12)	32

Temporary Power: Cost-Benefit Analysis [FY2023-37]

Temporary Power Capacity (kW) Required	40,000
Term (years)	4
Capacity Factor Hours (minor source)	2,500
Annual kWh	100,000,000
Annual MWh	100,000

ESTIMATED COST:	CY 2024	CY 2025	CY 2026	CY 2027
Capacity Charge	$ 8,500,000	$ 8,925,000	$ 9,371,250	$ 9,839,813
Fixed O&M Charge	$ 2,500,000	$ 2,625,000	$ 2,756,250	$ 2,894,063
Variable O&M ($4.62/MWh)	$ 462,000	$ 485,100	$ 509,355	$ 534,823
Annual Cost Excluding Fuel	$ 11,462,000	$ 12,035,100	$ 12,636,855	$ 13,268,698
Cost/kWh	$ 0.115	$ 0.120	$ 0.126	$ 0.133
Annual Sales	$ 1,500,000,000	$ 1,500,000,000	$ 1,500,000,000	$ 1,500,000,000
$/kW Sales	$ 0.0076	$ 0.0080	$ 0.0084	$ 0.0088
Average Residential Customer (1,000 kWh)	$ 7.64	$ 8.02	$ 8.42	$ 8.85

Potential Siting: Cabras Fuel Oil Storage Site, Tenjo Vista, Marbo Substation, or other suitable location
Subject to Air Permitting Constraints
6 to 9 months implementation period

GM REPORT

September 2023

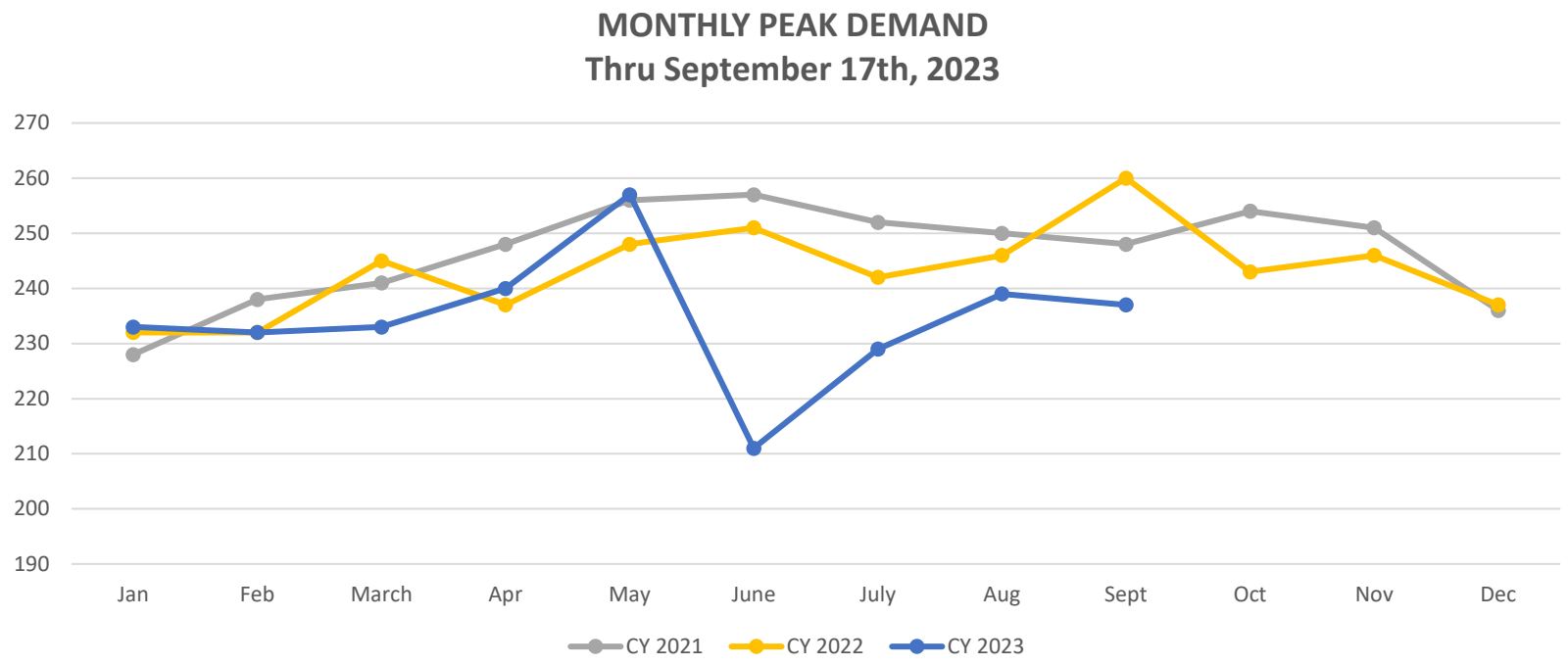
JOHN M. BENAVENTE, P.E.
General Manager
GUAM POWER AUTHORITY

Projected May Generation Status

1. Reserve Margin Forecast for October 2023:

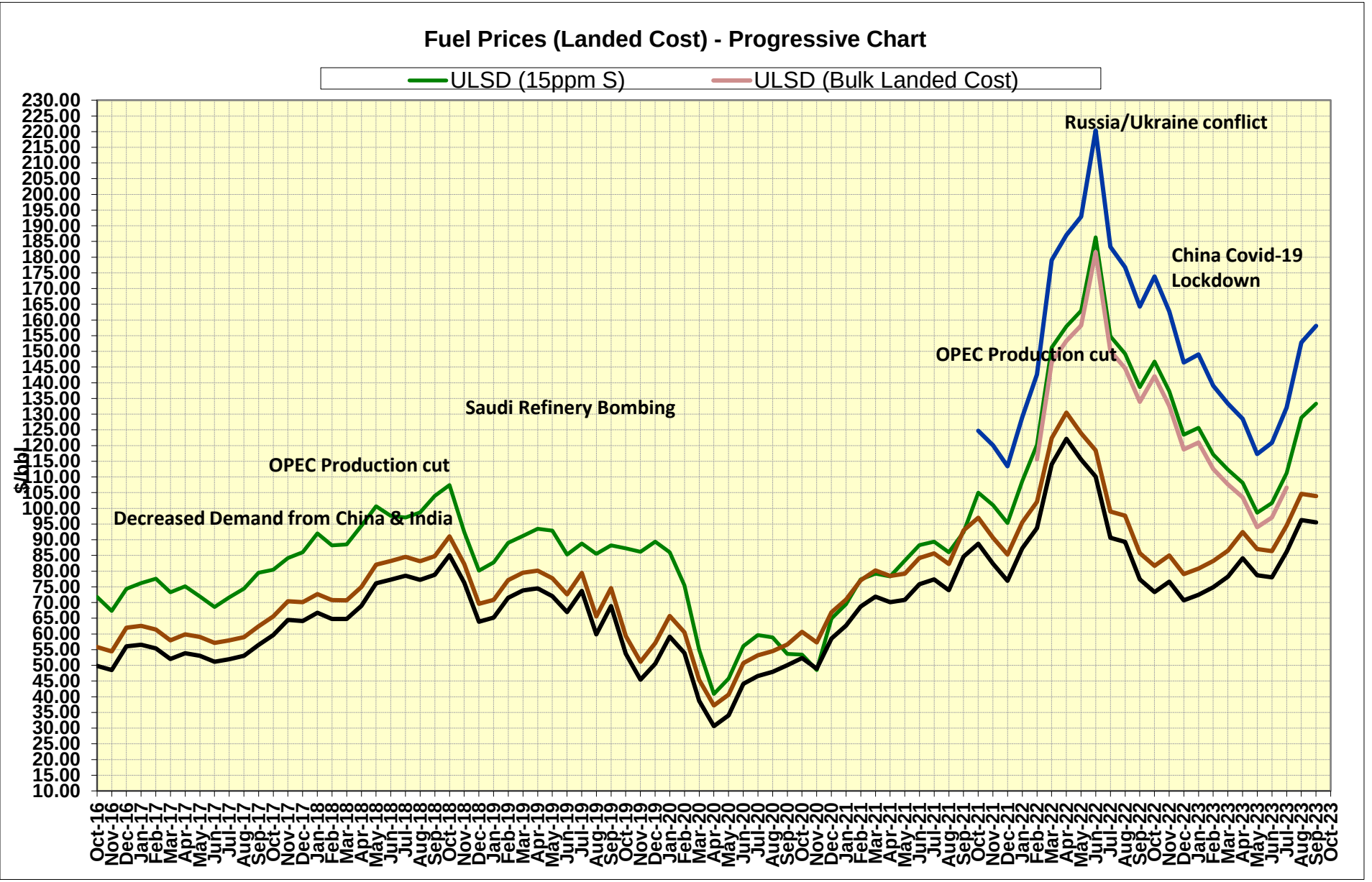
Targeted Available Capacity:	270 MW (All Baseloads Available)
Projected Demand:	243 MW
Anticipated Reserve Margin:	27 MW
Interruptible Load Availability	15 MW
Total Reserves	42 MW

2. System Peak Demand:



GPA Fuel Landed Cost (Per Barrel Thurs.,September, 14, 2023)

3. 0.2% ULSRFO 158.12; ULSD Bulk 120.38



General Manager's Report

4. **PUC Update:**

GPA Docket – **Tuesday, September 26, 2023** Special Meeting

- GPA Docket 23-19: Petition to Extend the Performance Management Contract for Cabras 1 and 2

GPA Docket – **Thursday, September 28, 2023** Regular Meeting

- GPA Docket 23-20, Petition to Procure a Hot Section Exchange & Generation Repair for Yigo CT
- GPA Docket 23-21, Petition to Approve the Purchases of Bucket Trucks

Approved Dockets on August 31, 2023:

GPA Docket 23-09, Petition Requesting Approval to Adjust the Power Pole Attachment Rate
GPA Docket 23-15, Petition for Approval to Increase the Amount of Award for GPA's Physical Security Proof of Concept

General Manager's Report

5. Customer Assistance :

Prugråman Ayuda Para I Taotao-ta Energy Credit Extension (Public Law 37-16)

Month	Amt Rec'd	GPA Credits Issued	Accounts	Date Uploaded
May-23	$ 5,276,200	$ 5,237,500	50,740	6/8/2023
Jun-23	$ 5,276,200	$ 5,275,700	51,122	6/24/2023
Jul-23	$ 5,276,200	$ 5,226,500	50,630	7/27/2023
Aug-23	$ 5,276,200	$ 5,216,600	50,531	8/26/2023
Sep-23	$ 5,276,200			
TOTAL:	**$ 21,104,800**	**$ 20,956,300**		*As of 8/26/23*

Unused credits will be returned to DOA at the conclusion of the Program

Guam Homeowner Assistance Fund Program (HAF)

- $15,392.19 was applied to qualified ratepayer accounts from August 22, 2023, through September 11, 2023. [Batches 70-71]

Emergency Rental Assistance Program (ERA)

- $146,943.94 was applied to qualified ratepayer accounts from August 22, 2023, through September 11, 2023. [Batches 258-263]

DEMAND SIDE MANAGEMENT (DSM)

6. DSM Online Report – August 2023

OVERALL COUNTS

Month	ALL			COMMERCIAL			RESIDENTIAL		
	Applications	Equipment	Rebates	Applications	Equipment	Rebates	Applications	Equipment	Rebates
Aug-22	217	315	$ 61,375				217	315	$ 61,375
Sep-22	479	666	$ 134,700	7	12	$ 1,950	472	654	$ 132,750
Oct-22	474	690	$ 139,825	4	9	$ 1,450	470	681	$ 138,375
Nov-22	514	698	$ 140,150	10	14	$ 1,500	504	684	$ 138,650
Dec-22	480	647	$ 132,175	5	5	$ 950	475	642	$ 131,225
Jan-23	398	534	$ 106,175	1	1	$ 150	397	533	$ 106,025
Feb-23	385	568	$ 110,525	7	9	$ 1,400	378	559	$ 109,125
Mar-23	487	728	$ 140,500	16	32	$ 4,450	471	696	$ 136,050
Apr-23	379	526	$ 106,150	3	4	$ 750	376	522	$ 105,400
May-23	398	579	$ 121,100	4	7	$ 1,600	394	572	$ 119,500
Jun-23	404	546	$ 111,350	5	8	$ 1,700	399	538	$ 109,650
Jul-23	625	825	$ 170,525	3	3	$ 1,400	622	822	$ 169,125
Aug-23	612	835	$ 173,925	5	5	$ 1,100	607	830	$ 172,825
TOTAL	5,852	8,157	$ 1,648,475	70	109	$ 18,400	5,782	8,048	$ 1,630,075

CURRENT AVERAGE REBATE PER UNIT

Month	ALL		COMMERCIAL		RESIDENTIAL	
	Applications	Equipment	Applications	Equipment	Applications	Equipment
As of Jul-23	$ 282	$ 202	$ 263	$ 169	$ 282	$ 203

** DSM Online went live on 8/17/22. Figures for August 2022 are from 8/17 to 8/31 only.*

** Large Commercial, Government, Prepaid, and Inactive accounts are still tracked and processed manually.*

** Paper applications are NOT INCLUDED with these counts.*

DEMAND SIDE MANAGEMENT (DSM) – (Cont'd)

6. DSM Online Report – August 2023

COUNTS PER PROGRAM - RESIDENTIAL

MONTHS	ALL			RESIDENTIAL											
				Split A/C			Central A/C			Window A/C			Washer/Dryer		
	Applications	Equipment	Rebates	Applications	Equipment	Rebates	Applications	Equipment	Rebates	Applications	Equipment	Rebates	Applications	Equipment	Rebates
Aug-22	217	315	$ 61,375	192	287	$ 57,375				15	16	$ 1,600	10	12	$ 2,400
Sep-22	472	654	$ 132,750	404	575	$ 120,350				29	34	$ 3,400	39	45	$ 9,000
Oct-22	470	681	$ 138,375	413	615	$ 127,075				19	19	$ 1,900	38	47	$ 9,400
Nov-22	504	684	$ 138,650	432	600	$ 123,450				16	17	$ 1,800	56	67	$ 13,400
Dec-22	475	642	$ 131,225	407	561	$ 117,325	1	1	$ 500	21	26	$ 2,600	46	54	$ 10,800
Jan-23	397	533	$ 106,025	351	482	$ 96,625				10	13	$ 1,200	36	38	$ 8,200
Feb-23	378	559	$ 109,125	330	498	$ 98,625	1	1	$ 500	12	20	$ 2,000	35	40	$ 8,000
Mar-23	471	696	$ 136,050	406	608	$ 122,250				25	33	$ 3,200	40	55	$ 10,600
Apr-23	376	522	$ 105,400	329	467	$ 95,500	1	1	$ 500	11	14	$ 1,400	35	40	$ 8,000
May-23	394	572	$ 119,500	356	530	$ 112,000				8	9	$ 900	30	33	$ 6,600
Jun-23	399	538	$ 109,650	337	469	$ 98,150				19	21	$ 2,100	43	48	$ 9,400
Jul-23	622	822	$ 169,125	543	728	$ 153,325				27	30	$ 3,000	52	64	$ 12,800
Aug-23	607	830	$ 172,825	551	769	$ 162,925				20	23	$ 2,300	36	38	$ 7,600
TOTAL	5,782	8,048	$ 1,630,075	5,051	7,189	$ 1,484,975	3	3	$ 1,500	232	275	$ 27,400	496	581	$ 116,200

** DSM Online went live on 8/17/22. August 2022 figures are from 8/17 – 8/31 only.*

** Large Commercial, Government, Prepaid, and Inactive accounts are still tracked and processed manually.*

** Paper applications are NOT INCLUDED with these counts.*

DEMAND SIDE MANAGEMENT (DSM) – (Cont'd)

6. DSM Online Report – August 2023

COUNTS PER PROGRAM - COMMERCIAL

MONTHS	ALL			COMMERCIAL											
				Split A/C			Central A/C			VRF A/C			Rooftop A/C		
	Applications	Equipment	Rebates	Applications	Equipment	Rebates	Applications	Equipment	Rebates	Applications	Equipment	Rebates	Applications	Equipment	Rebates
Aug-22	-	-	$ -												
Sep-22	7	12	$ 1,950	7	12	$ 1,950									
Oct-22	4	9	$ 1,450	4	9	$ 1,450									
Nov-22	10	14	$ 1,500	10	14	$ 1,500									
Dec-22	5	5	$ 950	5	5	$ 950									
Jan-23	1	1	$ 150	1	1	$ 150									
Feb-23	7	9	$ 1,400	7	9	$ 1,400									
Mar-23	16	32	$ 4,450	16	32	$ 4,450									
Apr-23	3	4	$ 750	3	4	$ 750									
May-23	4	7	$ 1,600	4	7	$ 1,600									
Jun-23	5	8	$ 1,700	4	7	$ 700	1	1	$ 1,000						
Jul-23	3	3	$ 1,400	2	2	$ 250							1	1	$ 1,150
Aug-23	5	5	$ 1,100	5	5	$ 1,100									
TOTAL	70	109	$ 18,400	68	107	$ 16,250	1	1	$ 1,000	-	-	$ -	1	1	$ 1,150

** DSM Online went live on 8/17/22. August 2022 figures are from 8/17 – 8/31 only.*

** Large Commercial, Government, Prepaid, and Inactive accounts are still tracked and processed manually.*

** Paper applications are NOT INCLUDED with these counts.*

General Manager's Report

7. New Power Plant Update: GPA Activities

Critical Path & Risk Items

Delays on Permit Approvals
- Construction Permits
- NPDES Permit

Construction Mitigation
- For any wetland, biological, cultural or other findings during construction (unknowns)

Completed:

- ECA Amendment: Signed on March 17, 2021.
- Resolution on Section 106 process between Navy/SHPO/GPA (cultural process)
- Archaeological Inventory Survey of Ukudu Site
- Cultural Survey for boring scope fuel/water/power project areas (outside of plant)
- Baseline noise study for Piti 41 MW diesel generator plant site.
- Water Supply and Discharge Agreement signed.
- Approval of research design for boring of proposed site in Piti for diesel generator relocation
- Approval of Archaeological Monitoring & Discovery Plan for pipeline construction
- Public Law 36-91 was signed on 4/11/22 for exemption of construction of Reserve Facility in Piti.
- GHPO Concurrence of Section 106 of the bull cart trails
- Land Lease Agreement was signed by Governor, Lt. Governor and Attorney General on July 6, 2022
- Geotechnical boring test report at the Piti site completed.
- GPA approves remaining Phase 5 & 6 construction permits.
- GPA obtains MEC specialist for construction support at Nimitz allowing excavation to resume on Nov. 1, 2022
- GPA obtains easement to avoid Chaot river area near Route 4 in Sinajana for pipeline construction.
- GPA provides notice to Navy of work starting on the bullcart trails along the pipeline route after Navy NEPA process.
- GPA obtains signage requirements for bullcart trails from Navy.
- CCU officially approves cancellation of Reserve Facility.
- Governor visits plant site on Feb. 2, 2023
- GPA obtains GEPA approval for Land Use Control Work Plan.
- GPA met with Mayor Paco and Mayor Sarvares to coordinate bullcart excavation in Harmon and Mongmong-Toto-Maite.
- PUC officially approves cancellation of Reserve Facility.
- GPA reviewed GUP's proposed pipeline construction plan for the Nimitz Hill Steep Section and provided comments to contractor.
- GPA received overview of commissioning plan from GUP commissioning team on Apr. 12, 2023.
- GPA obtains CCU approval for LNG Phase I pending PUC approval
- GPA met with GUP/DUP on Jun 7th, 2023 to discuss the impact of Typhoon Mawar and the actions required to mitigate damage.
- GPA restored power to Ukudu Power Plant on Jun. 8, 2023.
- GPA submitted response to GUP's Request for Compensation and Scheduling Accommodation on Jul. 31, 2023
- GPA received GUP's updated project schedule with the 14.5-month delay on Sep. 13, 2023.

General Manager's Report

7. New Power Plant Update: GPA Activities *(continued)*

Ongoing / Pending:

- Archaeological & Cultural Requirements:
  - ✓ Archaeological monitoring for pipeline construction work (Chaot & Nimitz areas).
- Water & Wastewater Requirements:
  - ✓ Change of Law issues due to update GWA NPDES permit affecting discharge of wastewater from cooling system. Follow-up with GWA on the NPDES permit modification.
- Construction Permit & Drawing Reviews:
  - ✓ Interconnection and pipeline design documents are being reviewed for approval.
- Reserve Facility:
  - ✓ Reviewing draft ECA amendment provided by GUP
- Other:
  - ✓ Monthly project reviews including Project Schedule.
  - ✓ Weekly meetings on contract items and ongoing construction activities and pending issues
  - ✓ Coordination with Navy on excavation activities for pipeline construction
  - ✓ Coordination with GUP/DUP on construction activities within Harmon Substation
  - ✓ GPA preparing response to GUP force majeure claim.
  - ✓ GPA is reviewing GUP's 14.5-month commercial operation date extension request
  - ✓ GPA is reviewing GUP's proposal to accelerate schedule from a 14.5-month delay to 11-month delay.
  - ✓ GPA is reviewing GUP's proposal to change fuel pump configuration.

General Manager's Report

7. New Power Plant Update: GUP Activities (Contractor)

Typhoon Mawar Restoration:

- DUP structural engineer arrived on island Jun. 7th, 2023 to perform damage assessment.
- Switchgear and HRSG technical advisors arrived on island on Jun. 8th, 2023 to assess extent of the damage.
- GUP is requesting for a 14.5-month extension to the required Commercial Operation Date.
- GUP reviewing treated water tank demolition plan.
- Completed demolition of fire-water tank.
- Completed demolition of both ULSD tanks.
- GUP finalizing decision for MV switchgear repair/replacement.
- Demolition is ongoing for both treated water tanks.

Completed:

- EPC Contract – Doosan
- Height Variance for Ukudu Site
- Financing Contracts Signed – Equity Bridge Loan in place. Senior loan requires air permit and land lease legislation for funds drawdown.
- Down payment to Siemens to secure Turbine Order (long lead item)
- Survey Maps for land lease recorded at Dept. of Land Management
- Phase I for Ukudu Plant construction permit approved. Foundation work is ongoing.
- GUP issues Notice to Proceed to EPC on May 31, 2022.
- Land Lease Agreement was signed by Governor, Lt. Governor and Attorney General on July 6, 2022
- GEPA approves and issues Ukudu Air Permit on 7/20/22 during construction groundbreaking ceremony.
- KEPCO/GUP achieves financial close on September 30, 2022.
- Obtained DPW heavy haul permit on Feb. 3, 2023
- Delivered letter to GPA for review requesting additional compensation for increased costs and delays.
- Completed all heavy haul transports on Apr. 24th, 2023.
- Obtained permit approval for reuse water pipeline installation from DPW and GEPA.
- Concrete work completed for median restoration.

General Manager's Report

7. New Power Plant Update: GUP Activities (Contractor) *continued*

Ongoing / Pending: *(continued)*

Construction

- Power Plant: All 6 phases of plant building construction permits were issued by Oct. 2022.
- Pipeline:
  - Construction of above-ground pipeline pedestals is ongoing.
  - Excavation and pipeline installation ongoing at Route 4 and Sgt. Roy T. Damian St road crossings.

Transmission Line

- Design and material specifications under review.
- Anticipating construction early 2023 pending permit approval.
- Cleared area between Harmon Substation and Ukudu Plant for new transmission lines.
- Pole foundation work is ongoing within Harmon Substation.

Existing Pipeline Cleaning & Demolition

- GPA continues to work with GEPA on a Land Use Control document regarding Route 16 (Airport) to Route 34 abandonment plan.

Reserve Facility

- Provided draft ECA amendment to GPA

Schedule Update

- GUP submitted updated schedule on Sep. 13, 2023, with a Jan 2026 Commercial Operation Date.
- GUP submitted "accelerated" schedule on Sep. 13, 2023, with a Sep 2025 Commercial Operation Date.
  - GPA is reviewing GUP's $12 million dollar request to accelerate schedule.

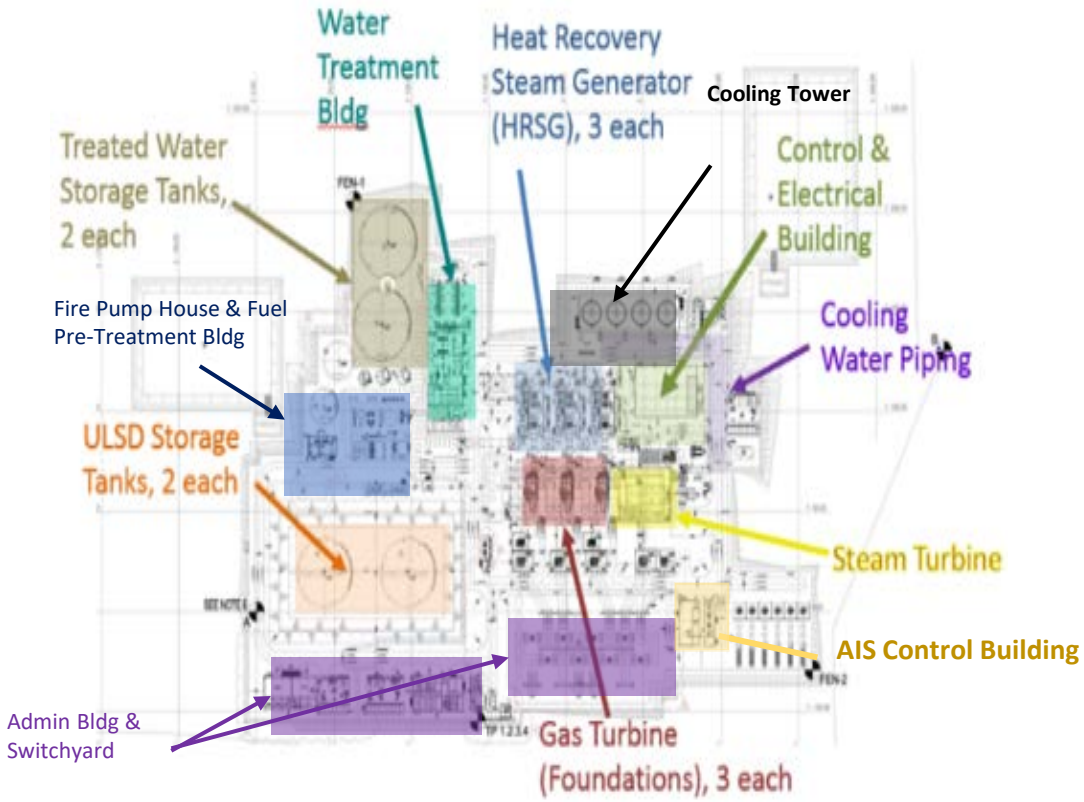
Transportation Logistics

- EPC continues to work with DPW on transport plan from Port to Ukudu site.
- Bridge analysis dictating required transport equipment.
- Temporary bridge delivered as required by DPW as backup for any bridge damage due to limited alternate routes in some areas.
- Transportation will take several hours over several days to move HRSG modules and will affect traffic during movement.
- Weekly meetings being held to discuss plans and requirements.
- 25 heavy cargo movements expected thru April 2023
- Demonstration of the Self-Propelled Modular Transporter (SPMT) was provided to DPW, GUP, DUP and GPA representatives on October 27, 2022 at the Port.
- First heavy cargo shipment arrived on Guam on Nov. 2 which contains the 12 HRSG modules. It is being stored at the Port.
- Doosan team has hired media group to provide public outreach.
- Heavy haul transportation ongoing. First transport began Feb 4th.
- Painting of newly constructed medians is ongoing.

General Manager's Report

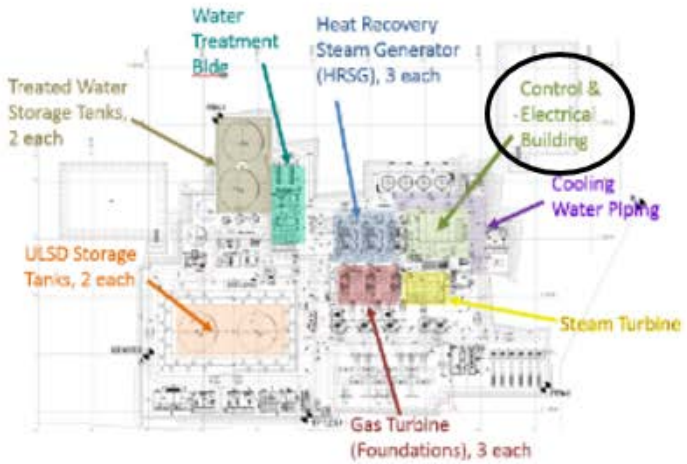
7. Ukudu Power Plant Construction Status

- Post-Typhoon Mawar, plant construction progresses steadily.
- Both ULSD tanks are demolished, while the demolition of the treated water tanks are ongoing.
- Major achievements include:
  - CTG building now has all 3 bypass stacks installed, and ring bus structures are being constructed within the AIS.
- The total number of employees for this project is roughly 700.



General Manager's Report

7. Ukudu Power Plant Construction Status



Control & Electrical Building – Exterior side nearly complete



GUP awaiting recommendation from technical advisors for medium voltage protective relay repair/replacement

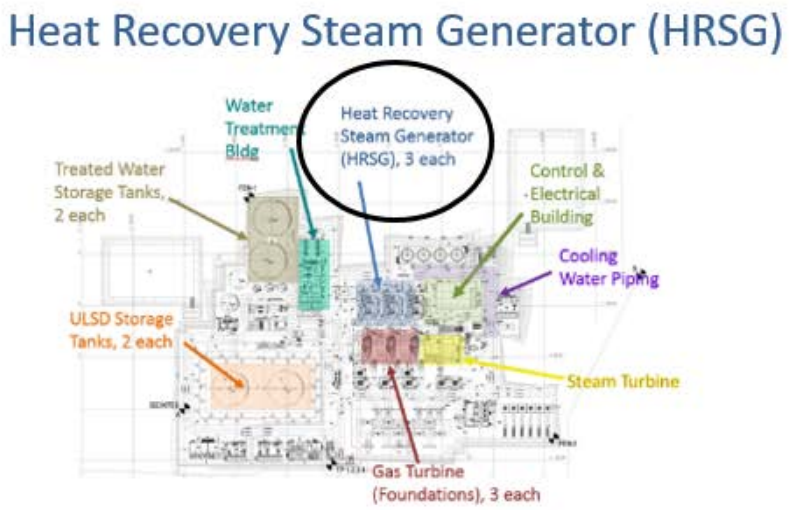


2nd floor- Switchgear installation ongoing



General Manager's Report

7. Ukudu Power Plant Construction Status





HRSG 1-3: Platform installation and internal welding ongoing



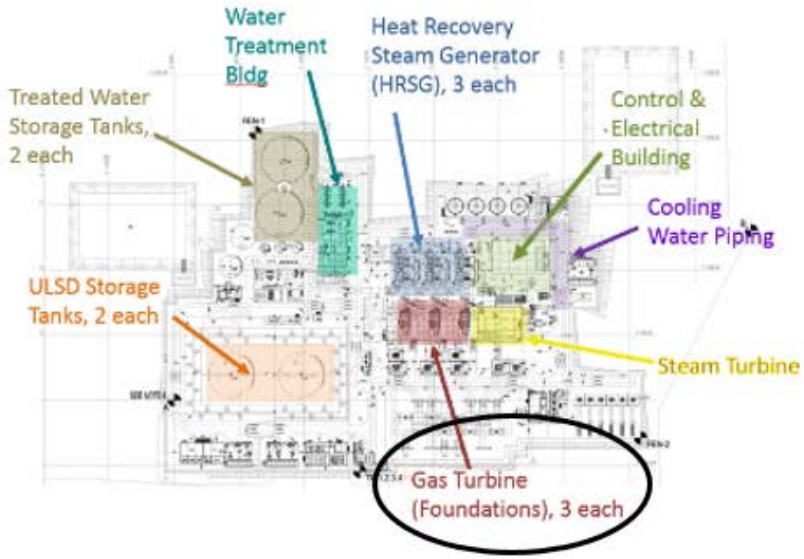




General Manager's Report

7. Ukudu Power Plant Construction Status

Gas Turbines & Generators



GTG Building – Exterior siding and staircase installation ongoing



GTG 1-3: Installation of GTG 1-3 ongoing.

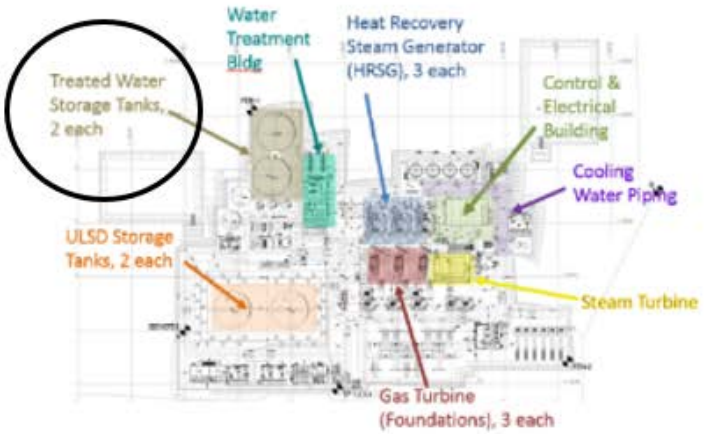






General Manager's Report

7. Ukudu Power Plant Construction Status



Treated Water Storage Tank 1 – Demolition is underway

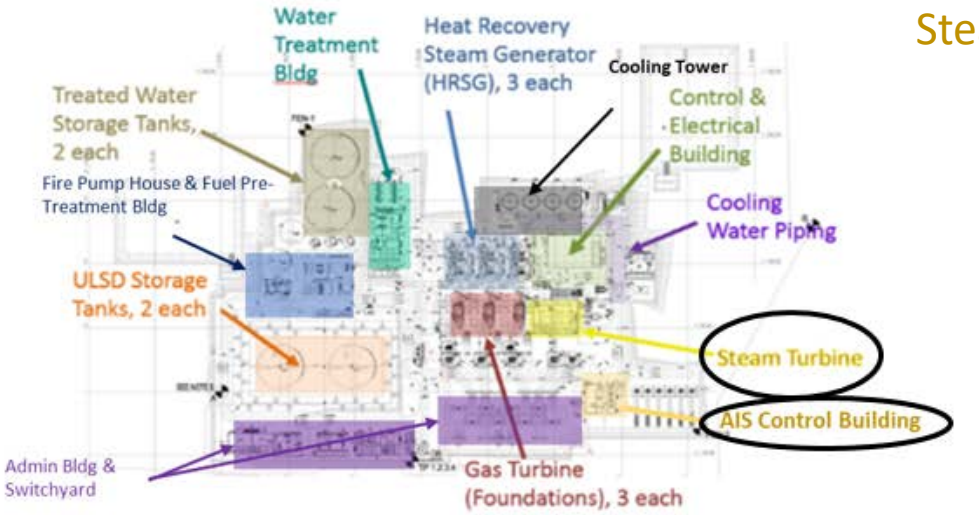


Treated Water Storage Tank 2 – Demolition is ongoing



General Manager's Report

7. Ukudu Power Plant Construction Status



Steam Turbine Generator – Construction of STG building is ongoing

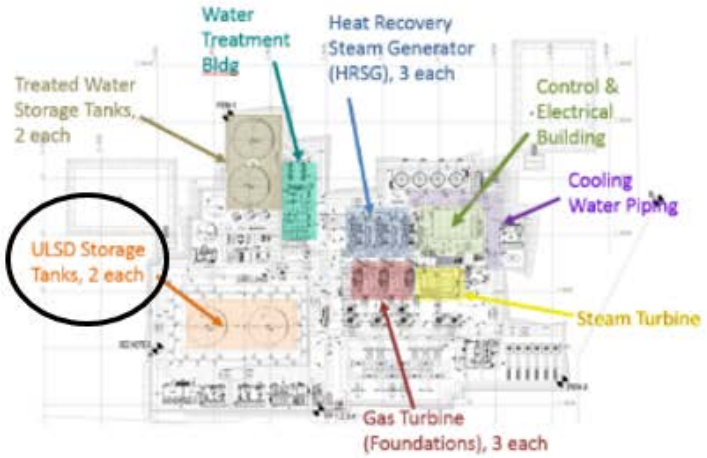


AIS Control Building – Cable pulling ongoing



General Manager's Report

7. Ukudu Power Plant Construction Status

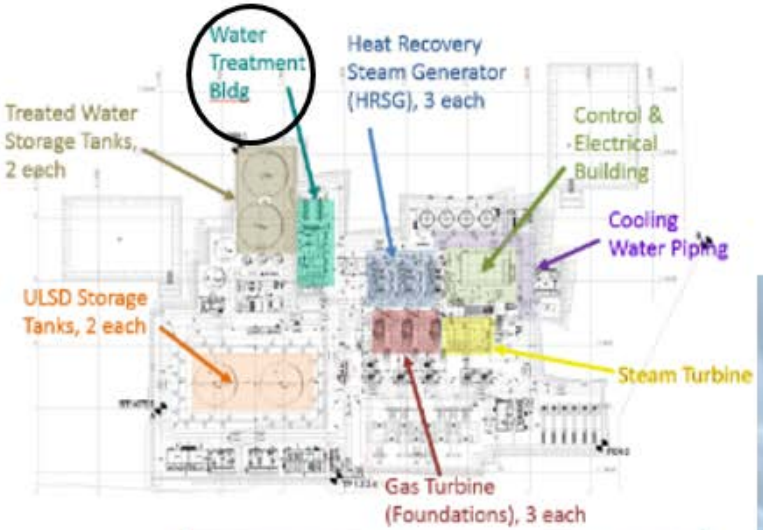


ULSD Storage Tank A &B – Demolition of both storage tanks is completed. Awaiting arrival of new material.



General Manager's Report

7. Ukudu Power Plant Construction Status



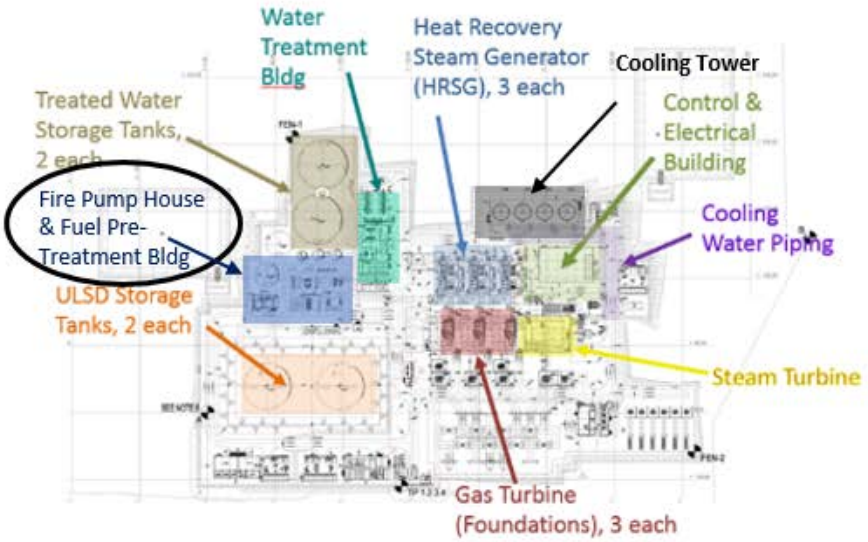


Water Treatment Building – Installation of EDI and water filtration units is ongoing.



General Manager's Report

7. Ukudu Power Plant Construction Status



Fire Pump House – Concrete pouring in progress



Fire-Water Tank – Demolition completed. Awaiting arrival of new materials

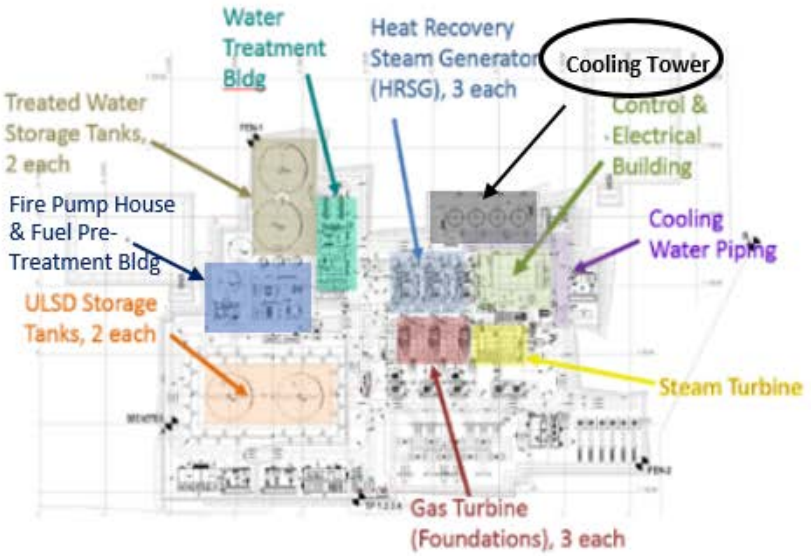


Demineralized Water Tanks – Welding ongoing



General Manager's Report

7. Ukudu Power Plant Construction Status

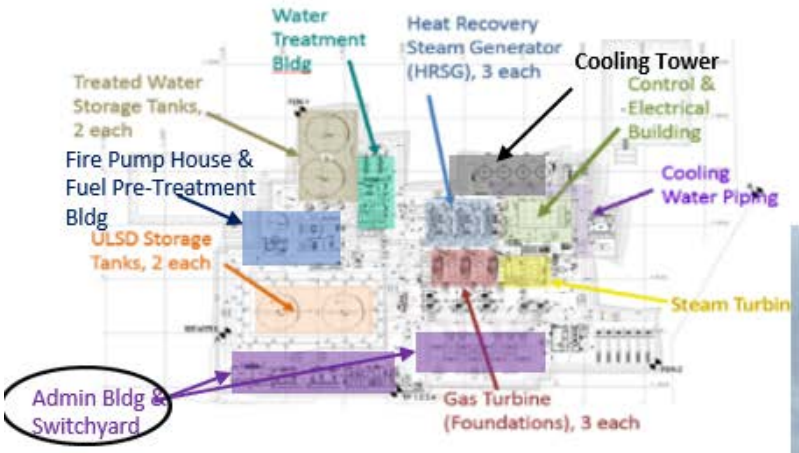


Cooling Tower & Basin – Assembly of inner structure supports ongoing



General Manager's Report

7. Ukudu Power Plant Construction Status



Switchyard – Ring bus assembly ongoing



Admin Building – Rebar bent slightly.



General Manager's Report

7. Ukudu Power Plant Construction Status

Major achievements include shipment of Gas Turbine generator equipment and STG piping material. Other progress is shown below:



Waste Water Treatment System – Thickener packing



Waste Water Treatment System – Pipe support packing



Waste Water Treatment System – Thickener packing



Waste Water Treatment System – Chemical dosing skid packing

General Manager's Report

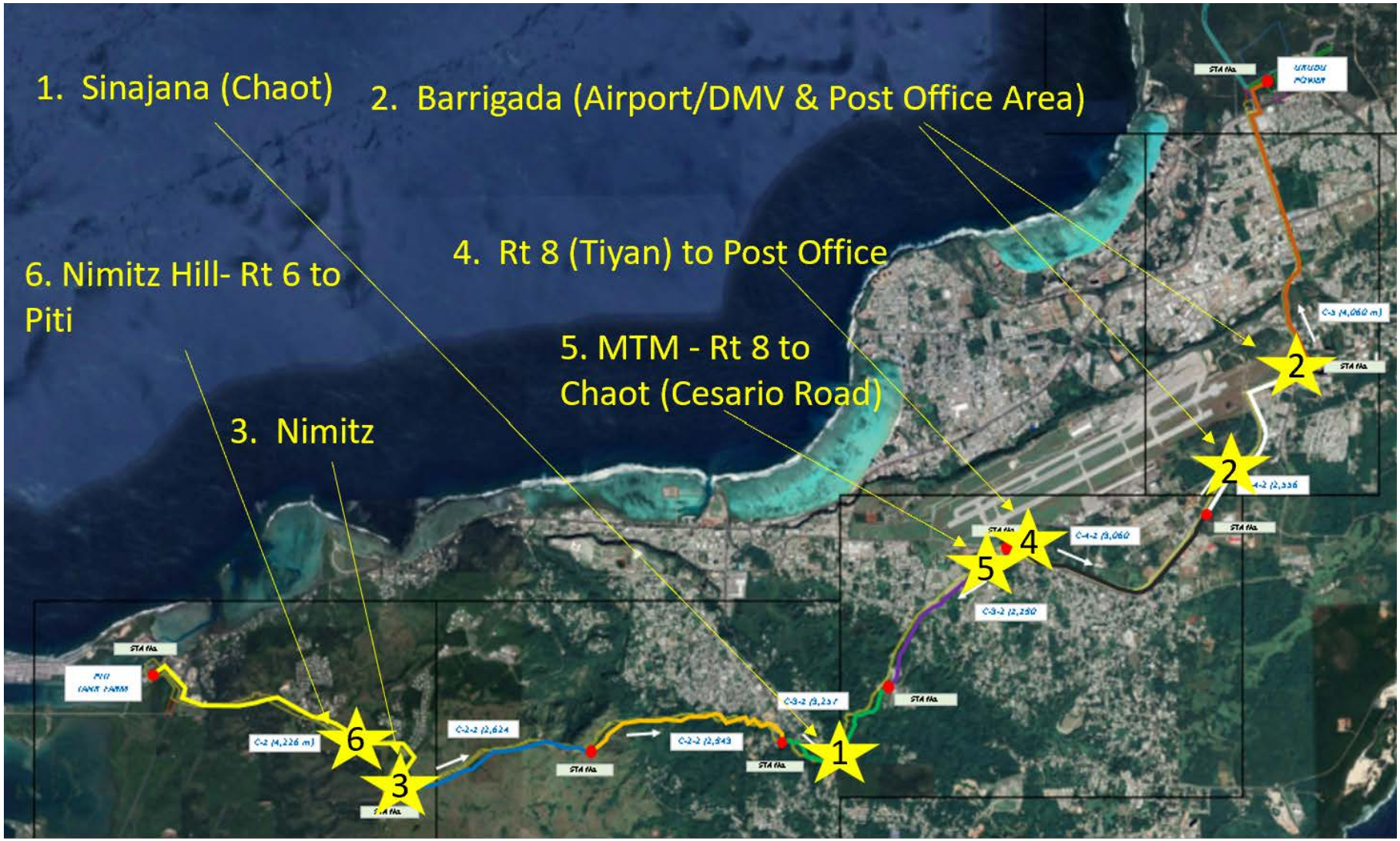
7. Ukudu Power Plant Construction Status - Transportation

- **Transportation of all heavy equipment has been completed.**
- **Concrete pouring for median restoration is completed.**
- **DUP is currently painting the newly formed medians.**



General Manager's Report

7. Ukudu Power Plant Construction Status - Pipeline



General Manager's Report

7. Fuel Pipeline Construction Status

1. Sinajana/Chaot area

Pipeline installation ongoing east of Chaot bridge. Route 4 road crossing nearly complete





2. Barrigada

Backfilling completed. Will begin road crossing near post office after Route 4 and Sgt. Roy T. Damian work is completed.



General Manager's Report

7. Ukudu Power Plant Construction Status - Pipeline

3. Nimitz Hill

Above ground pedestal installation and fiber optic trench excavation is in progress.



4. Rt 8 (Tiyan) to Post Office

Backfilling work completed. Final site restoration work is ongoing.



General Manager's Report

7. Fuel Pipeline Construction Status

5. MTM - Rt 8 to Chaot (Cesario St.)

Pipeline and fiber optic installation is ongoing at Sgt. Roy T. Damian road crossing.





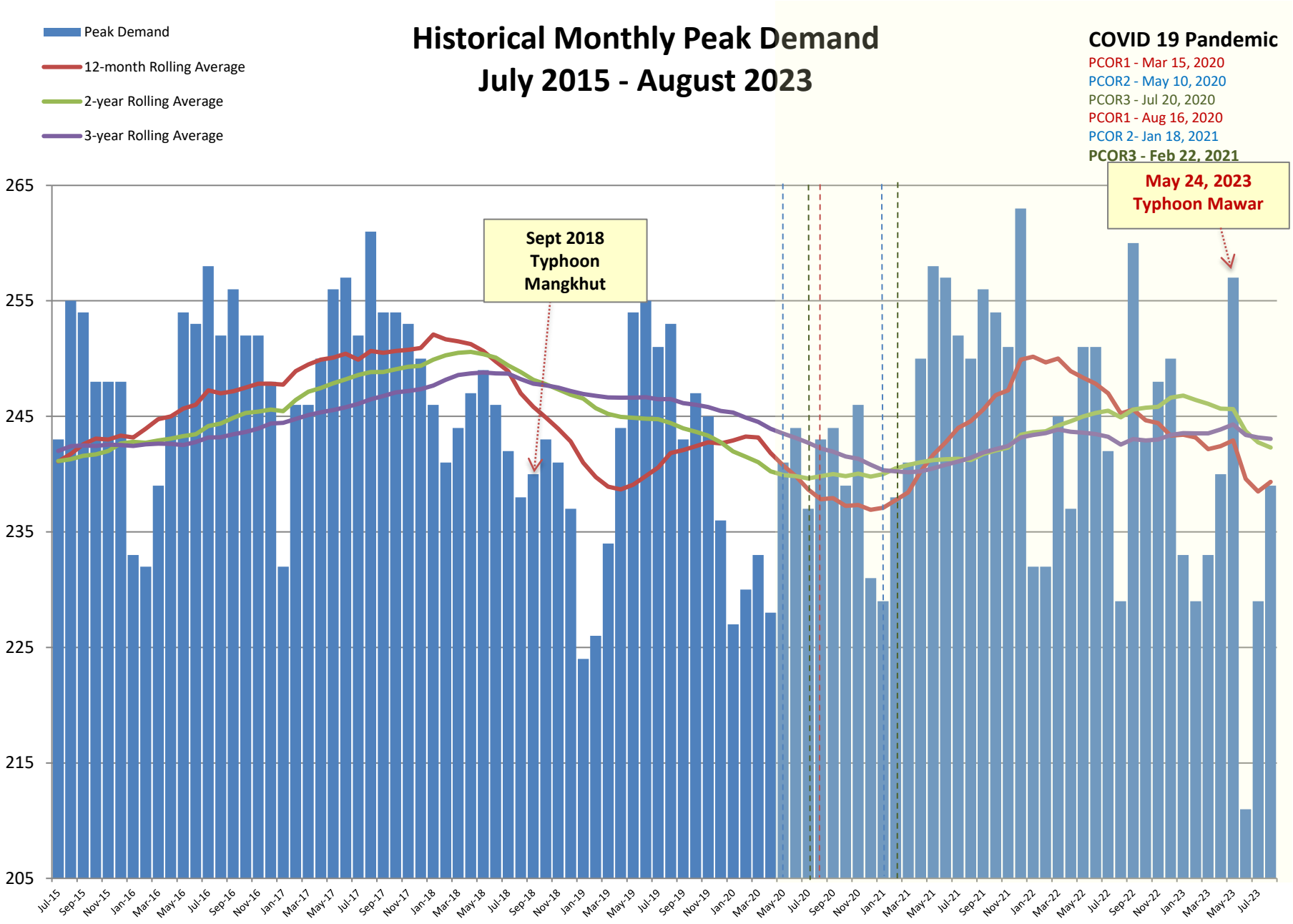
6. Nimtiz Hill- Rt 6 to Piti

Flowable fill pouring and bedding sand compaction in progress along Route 6. Backfilling completed at Turner and Larson road.



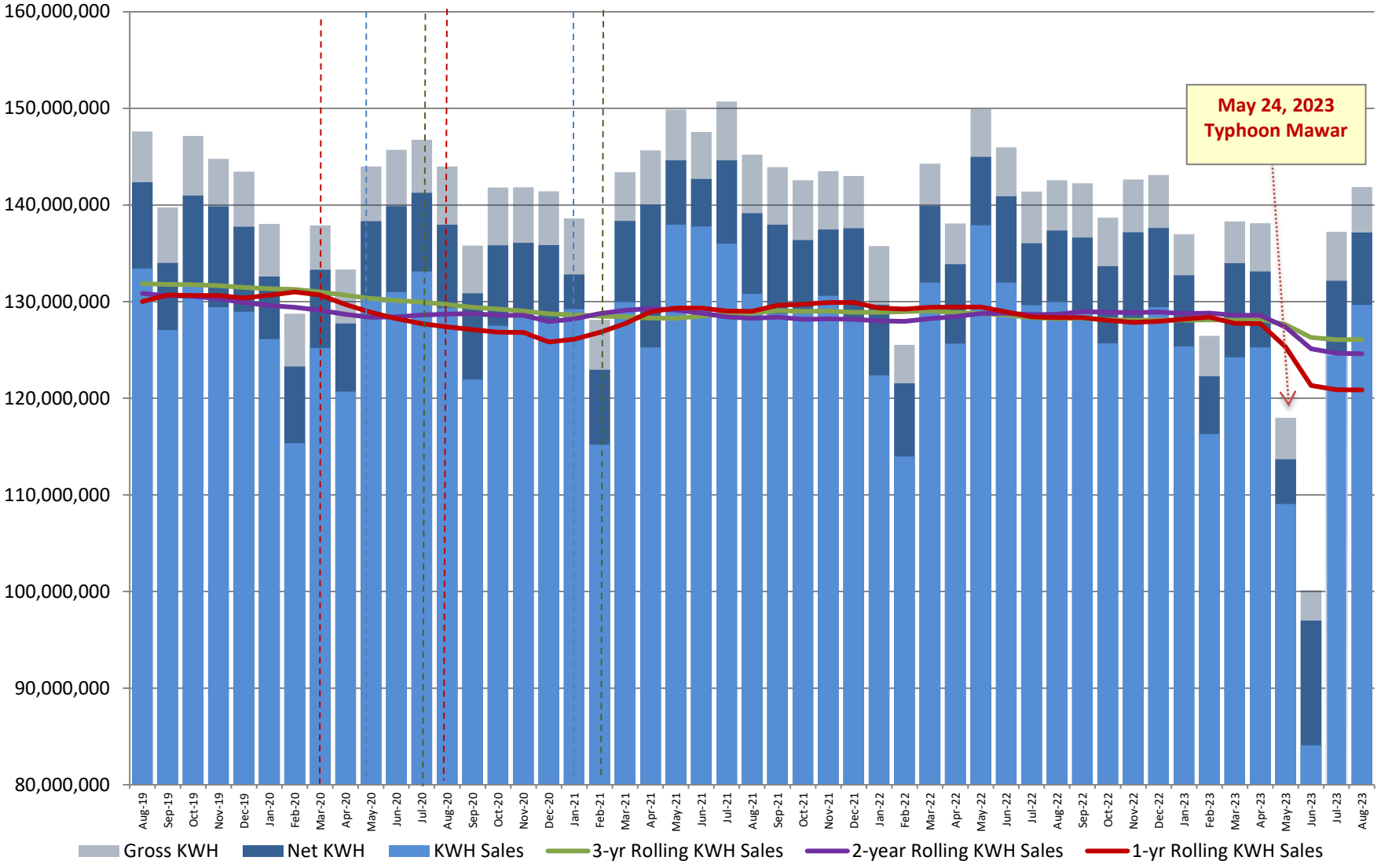
8. Generation KPIs Update
August 2023

Historical Monthly Peak Demand
July 2015 - August 2023

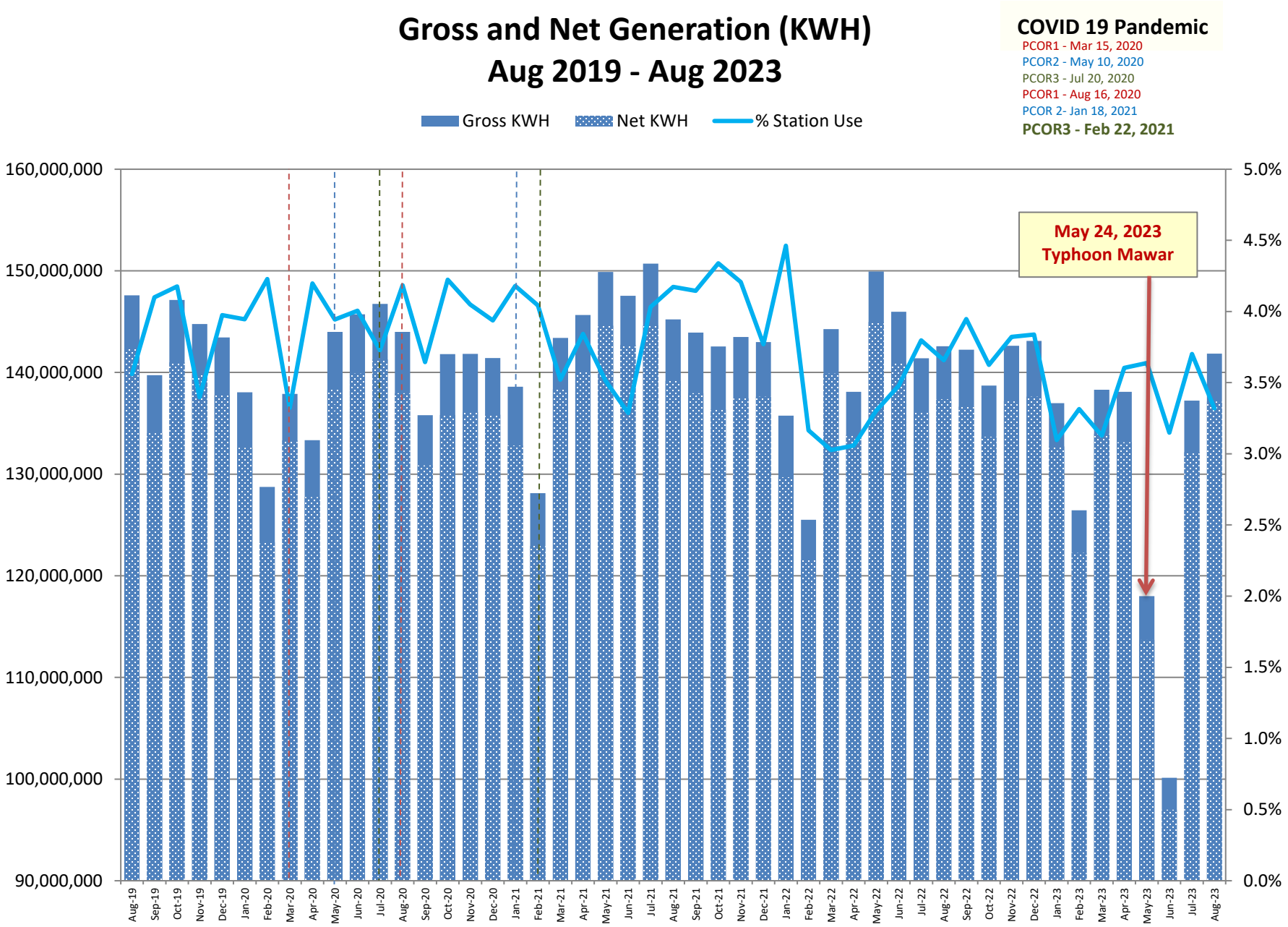


Historical KWH Sales
Aug 2019 - Aug 2023

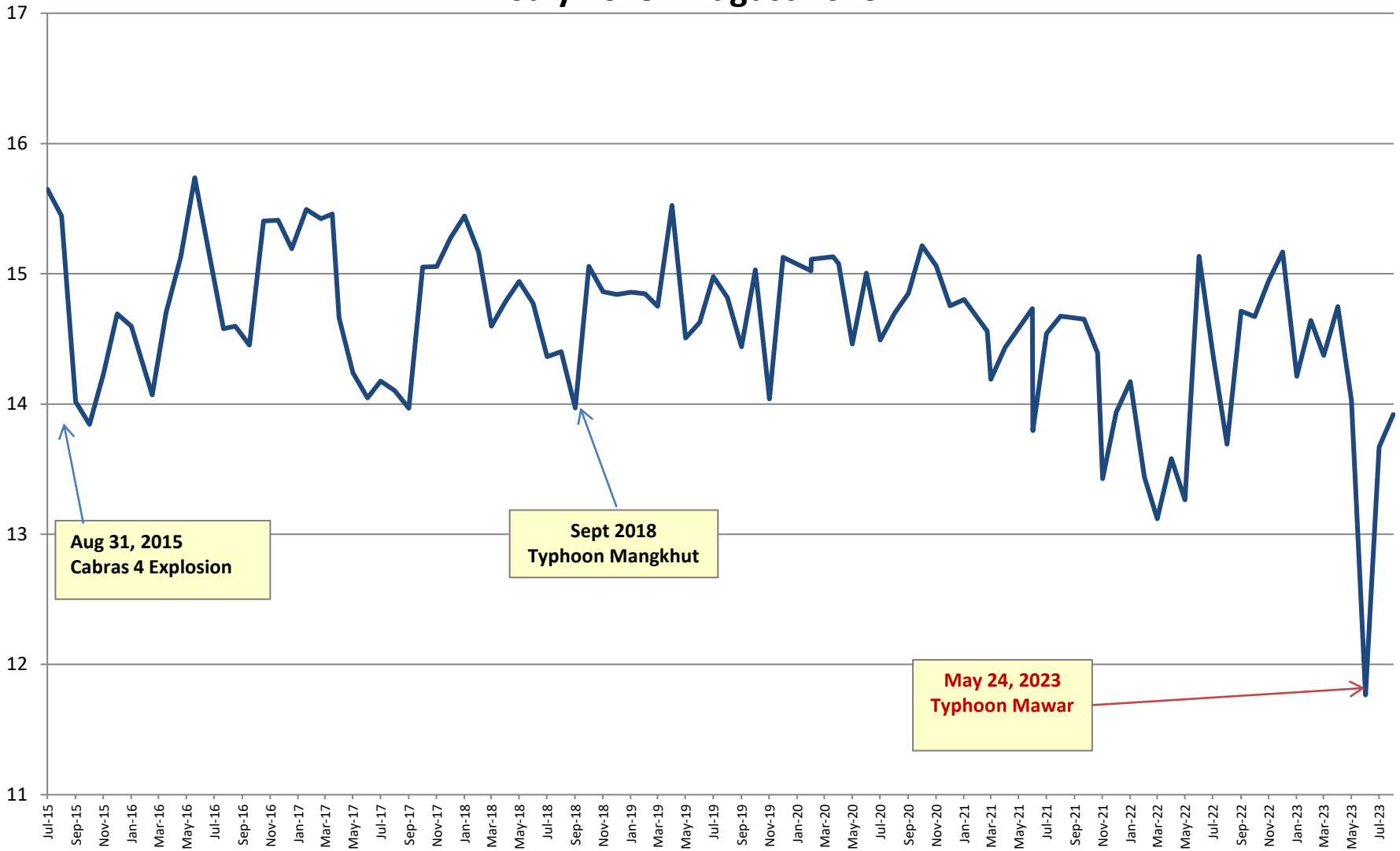
COVID 19 Pandemic
PCOR1 - Mar 15, 2020
PCOR2 - May 10, 2020
PCOR3 - Jul 20, 2020
PCOR1 - Aug 16, 2020
PCOR 2- Jan 18, 2021
PCOR3 - Feb 22, 2021



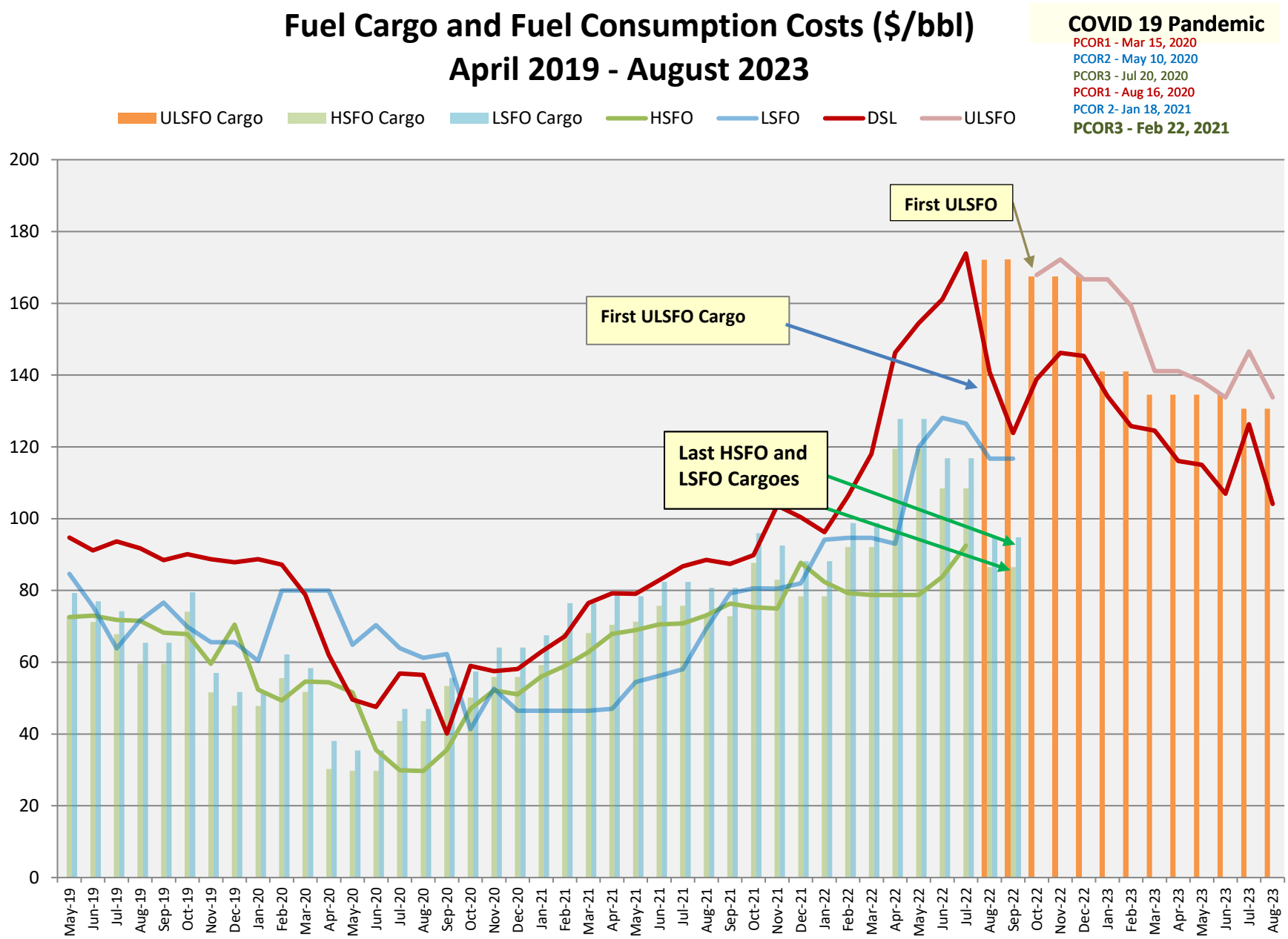
Gross and Net Generation (KWH)
Aug 2019 - Aug 2023



SYSTEM GROSS HEAT RATE
(KWH/Gal)
July 2015 - August 2023

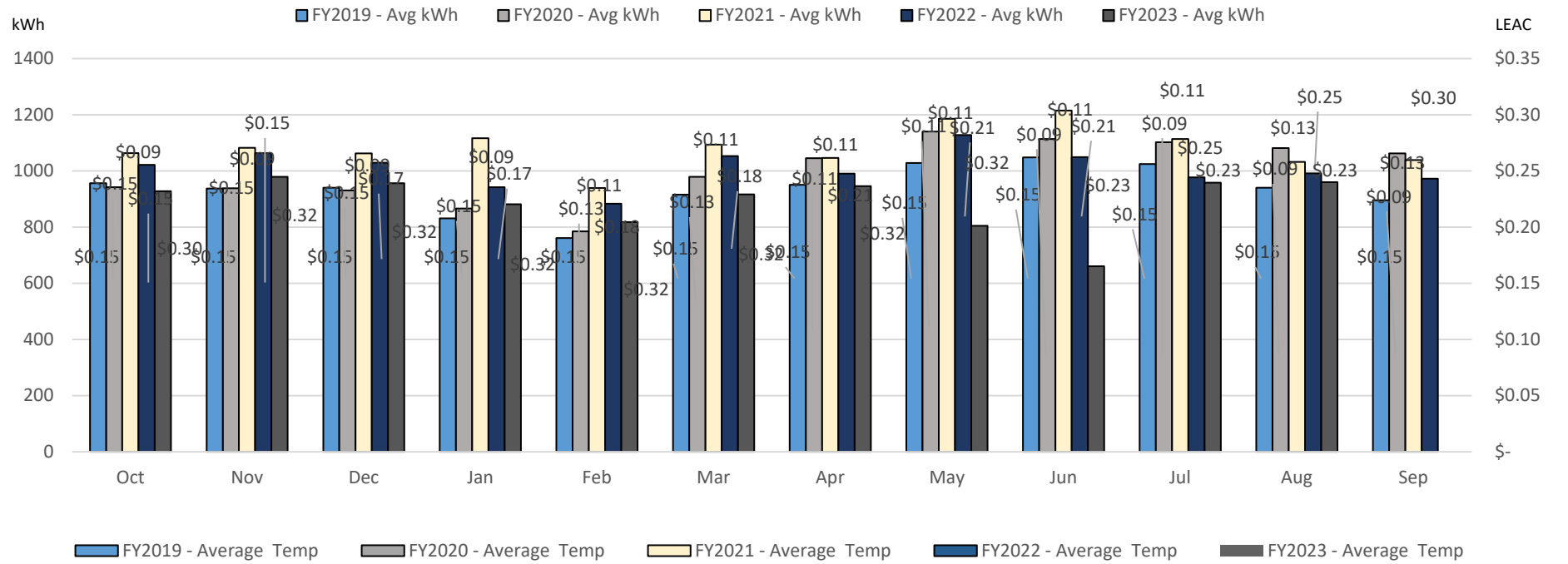


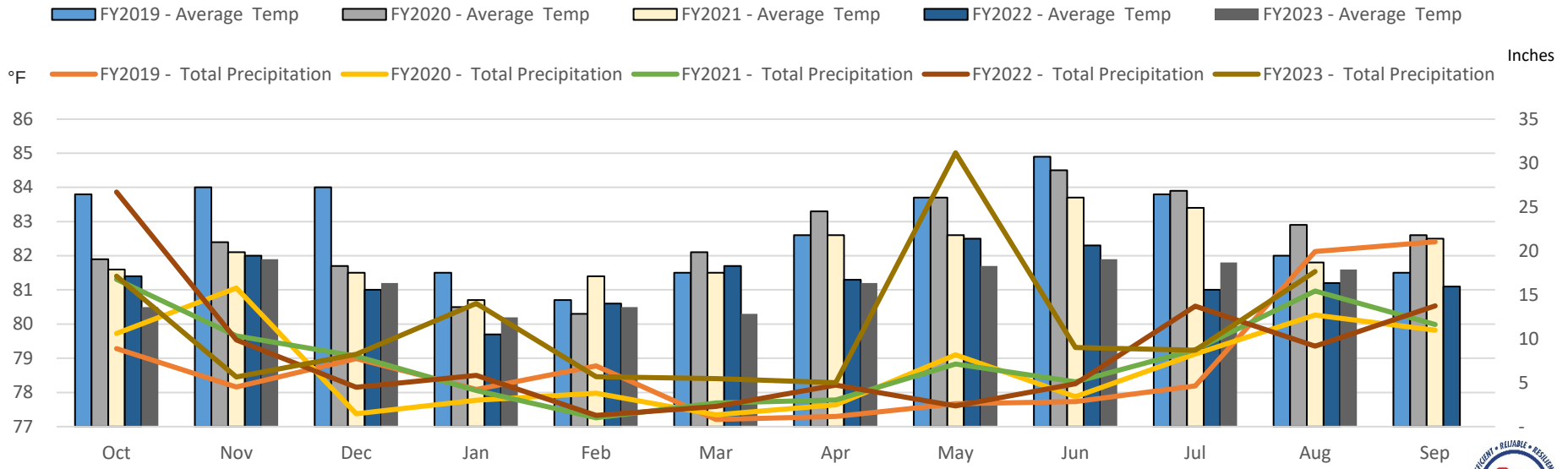
Fuel Cargo and Fuel Consumption Costs ($/bbl)
April 2019 - August 2023



9. CFO Financial Highlights
August 2023

Residential average kWh & Weather Chart





Residential average kWh & LEAC Rate

Avg kWh	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY 2019	957	938	940	831	761	915	951	1,028	1,048	1,025	940	896
FY2020	942	938	931	867	785	979	1,046	1,140	1,114	1,103	1,081	1,062
FY2021	1,064	1,083	1,062	1,117	939	1,094	1,046	1,186	1,215	1,114	1,032	1,038
FY2022	1,021	1,063	1,030	942	883	1,053	991	1,128	1,050	977	992	972
FY2023	928	979	956	882	818	917	946	805	661	958	960	

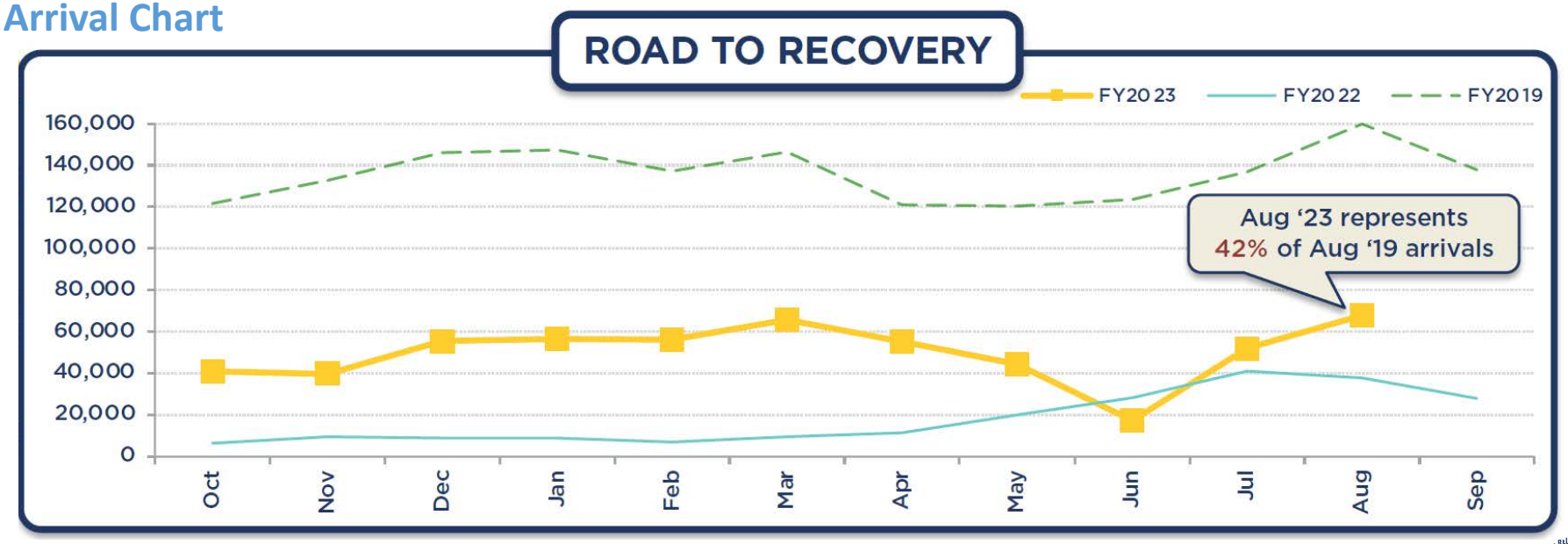
LEAC Rate	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY 2019	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1542
FY2020	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1542	$ 0.1345	$ 0.1345	$ 0.1100	$ 0.1100	$ 0.0868	$ 0.0868	$ 0.0868	$ 0.0868
FY2021	$ 0.0868	$ 0.0868	$ 0.0868	$ 0.0868	$ 0.1100	$ 0.1100	$ 0.1100	$ 0.1100	$ 0.1100	$ 0.1100	$ 0.1304	$ 0.1304
FY2022	$ 0.1508	$ 0.1508	$ 0.1715	$ 0.1715	$ 0.1808	$ 0.1808	$ 0.2095	$ 0.2095	$ 0.2095	$ 0.2516	$ 0.2516	$ 0.2960
FY2023	$ 0.2960	$ 0.3186	$ 0.3186	$ 0.3186	$ 0.3186	$ 0.3186	$ 0.3186	$ 0.3186	$ 0.2311	$ 0.2311	$ 0.2311	

Hotel kWh & Occupancy Rate

mWh Hotels	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY2019	10,826	10,628	10,494	10,175	8,965	9,443	10,565	10,741	10,066	11,494	10,170	10,397
FY2020	10,316	9,801	10,508	9,848	9,627	8,319	7,044	6,826	7,309	7,645	7,520	7,063
FY2021	7,045	7,379	7,596	6,973	6,270	6,863	7,326	7,152	7,521	7,841	7,906	7,560
FY2022	6,973	7,346	7,041	6,921	6,419	6,964	6,850	7,451	7,683	7,959	8,071	7,821
FY2023	7,802	7,921	8,251	8,031	7,542	7,950	7,859	7,176	6,101	8,538	8,467	

Occupancy Rat	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY2019	85.9	85.9	85.9	91.4	91.4	91.4	84.8	84.8	84.8	92.0	92.0	92.0
FY2020	89.9	89.9	89.9	73.7	73.7	73.7	34.7	34.7	34.7	27.1	27.1	27.1
FY2021	38.7	38.7	38.7	51.4	51.4	51.4	41.3	41.3	41.3	52.4	52.4	52.4
FY2022	45.9	45.9	45.9	56.0	56.0	56.0	54.0	54.0	54.0	66.8	66.8	66.8
FY2023	59.7	59.7	59.7	67.4	67.4	67.4	60.0	60.0	60.0			

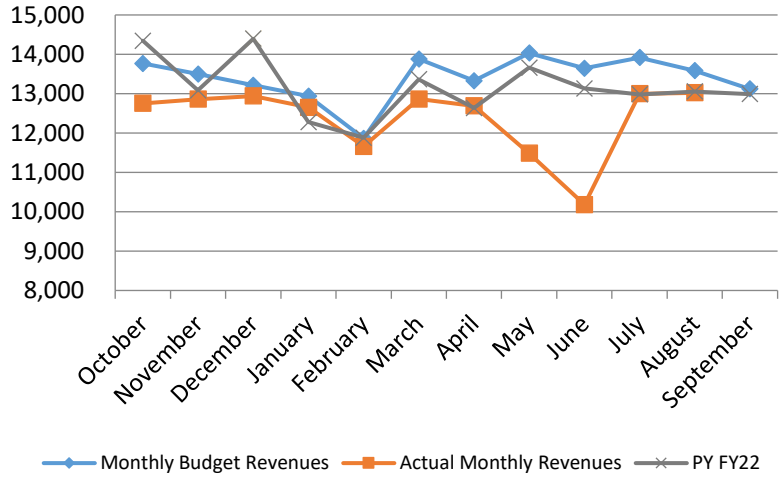
Arrival Chart



Note: Data from 22 hotels in schedule P. 1 hotel closed its doors on Oct. 2021. Occupancy rate and Road to Recovery is from GVB Visitor Arrival Statistic.

August 2023 Monthly Financial Highlights

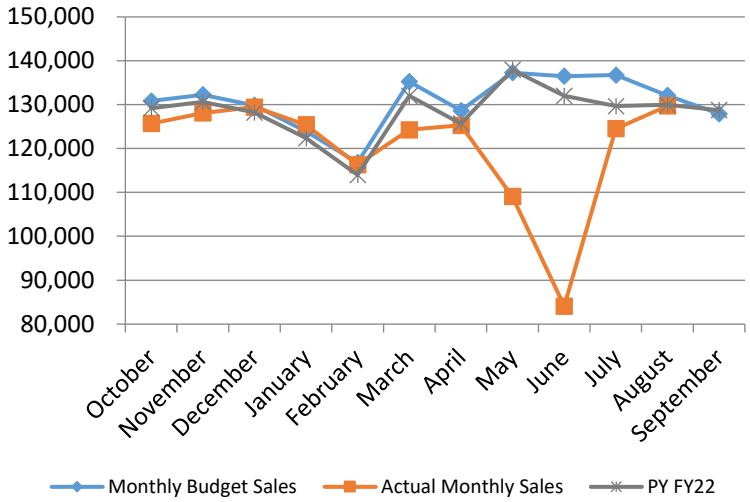
Base Rate Revenue (in '000)



Through August 31, 2023

$000	Monthly Budget Revenues	Actual Monthly Revenues	Variance		PY FY22	CY vs PY Variance	
October	13,769	$ 12,757	$ (1,013)	↓	$ 14,345	$ (1,589)	↓
November	13,500	12,861	$ (638)	↓	13,085	$ (223)	↓
December	13,214	12,940	$ (274)	↓	14,396	$ (1,456)	↓
January	12,939	12,651	$ (288)	↓	12,278	$ 374	↑
February	11,866	11,660	$ (206)	↓	11,879	$ (219)	↓
March	13,880	12,865	$ (1,014)	↓	13,364	$ (498)	↓
April	13,329	12,691	$ (638)	↓	12,636	$ 55	↑
May	14,033	11,484	$ (2,549)	↓	13,661	$ (2,177)	↓
June	13,646	10,178	$ (3,468)	↓	13,134	$ (2,956)	↓
July	13,916	12,997	$ (919)	↓	12,983	$ 15	↑
August	13,585	13,023	$ (562)	↓	13,056	$ (33)	↓
September	13,122				12,992		
Total	**$ 160,800**	**$ 136,108**	**$ (11,569)**		**$ 157,808**	**$ (8,709)**	

MWH Sales (in 'mWh)

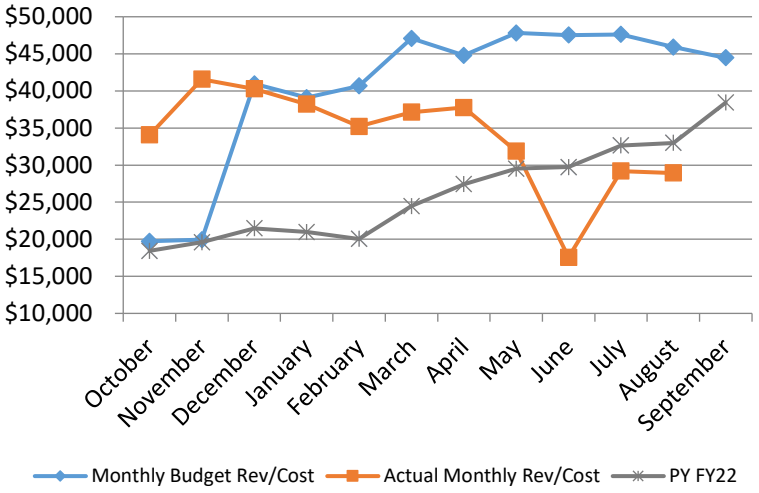


Through August 31, 2023

mwh	Monthly Budget Sales	Actual Monthly Sales	Variance		PY FY22	CY vs PY Variance	
October	130,810	125,672	(5,138)	↓	129,175	(3,502)	↓
November	132,251	128,077	(4,174)	↓	130,597	(2,520)	↓
December	129,828	129,439	(389)	↓	128,204	1,235	↑
January	123,917	125,368	1,451	↑	122,367	3,001	↑
February	116,767	116,289	(477)	↓	113,980	2,310	↑
March	135,211	124,254	(10,957)	↓	131,984	(7,730)	↓
April	128,610	125,257	(3,353)	↓	125,661	(404)	↓
May	137,272	109,061	(28,211)	↓	137,915	(28,854)	↓
June	136,470	84,097	(52,372)	↓	131,980	(47,882)	↓
July	136,715	124,518	(12,197)	↓	129,637	(5,119)	↓
August	132,084	129,673	(2,411)	↓	129,938	(265)	↓
September	127,916				128,721		
Total	**1,567,850**	**1,321,707**	**(118,228)**		**1,540,160**	**(89,731)**	

August 2023 Monthly Financial Highlights (Continued)

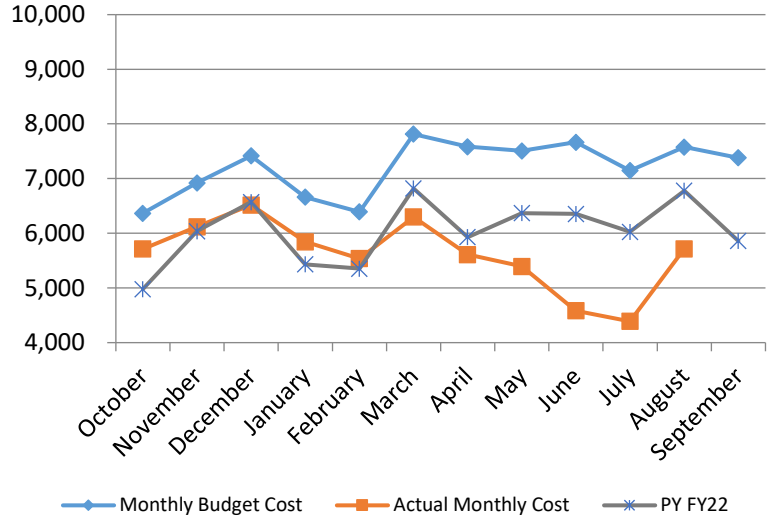
Fuel Revenues (in '000)



Through August 31, 2023

$000	Monthly Budget Rev/Cost	Actual Monthly Rev/Cost	Variance		PY FY22	CY vs PY Variance	
October	$ 19,726	$ 34,062	14,336	↑	$ 18,431	15,631	↑
November	19,943	41,593	21,650	↑	19,600	21,993	↑
December	40,967	40,281	(686)	↓	21,475	18,806	↑
January	39,102	38,205	(897)	↓	20,978	17,227	↑
February	40,669	35,217	(5,453)	↓	20,043	15,173	↑
March	47,094	37,143	(9,950)	↓	24,465	12,678	↑
April	44,794	37,773	(7,021)	↓	27,433	10,340	↑
May	47,811	31,867	(15,945)	↓	29,517	2,350	↑
June	47,532	17,560	(29,972)	↓	29,731	(12,171)	↓
July	47,617	29,194	(18,423)	↓	32,646	(3,452)	↓
August	45,916	28,940	(16,976)	↓	32,999	(4,059)	↓
September	44,467				38,433		
Total	**$ 485,639**	**$ 371,836**	**$ (69,336)**		**$ 315,753**	**$ 94,516**	

O&M Costs (in '000)



Through August 31, 2023

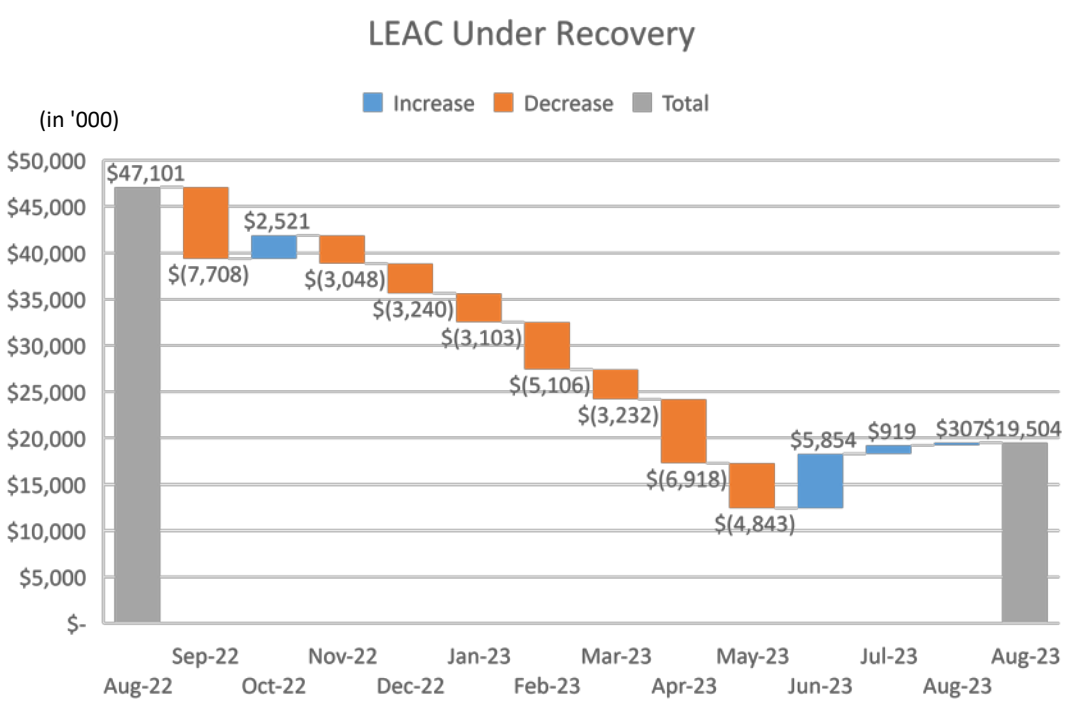
$000	Monthly Budget Cost	Actual Monthly Cost	Variance		PY FY22	CY vs PY Variance	
October	6,367	5,712	655	↑	4,979	(733)	↓
November	6,923	6,120	802	↑	6,039	(82)	↓
December	7,415	6,518	898	↑	6,569	52	↑
January	6,663	5,846	817	↑	5,434	(412)	↓
February	6,392	5,537	855	↑	5,353	(184)	↓
March	7,814	6,298	1,517	↑	6,818	521	↑
April	7,582	5,610	1,972	↑	5,931	321	↑
May	7,508	5,395	2,113	↑	6,369	975	↑
June	7,665	4,585	3,080	↑	6,353	1,768	↑
July	7,148	4,390	2,759	↑	6,028	1,638	↑
August	7,578	5,718	1,861	↑	6,779	1,061	↑
September	7,380				5,859		
Total	**$ 86,435**	**$ 61,728**	**$ 17,327**		**$ 72,512**	**$ 4,925**	

August 2023 Monthly Financial Highlights (Continued)

Through July 31, 2023													
	4Q2020	1Q2021	2Q2021	3Q2021	4Q2021	1Q2022	2Q2022	3Q2022	4Q2022	1Q2023	2Q2023	3Q2023	4Q2023
Residential	44,191	44,503	44,575	45,247	45,229	45,224	45,283	45,261	45,315	45,370	45,417	45,453	44,981
Commercial	5,366	5,301	5,307	5,330	5,336	5,349	5,367	5,368	5,373	5,425	5,473	5,436	5,418
Government	1,081	1,063	1,060	1,049	1,056	1,069	1,077	1,079	1,087	1,088	1,108	1,112	1,107
Streetlights	1,132	1,133	1,132	1,132	1,131	1,160	1,158	1,156	1,163	1,167	1,167	1,165	1,157
Navy	1	1	1	1	1	1	1	1	1	1	1	1	1
Total	**51,771**	**52,001**	**52,075**	**52,759**	**52,753**	**52,803**	**52,886**	**52,865**	**52,939**	**53,051**	**53,166**	**53,167**	**52,664**

Debt service coverage (DSC) calculation-indenture	2018	2019	2020	2021	2022	2023
Senior lien coverage	2.53	1.78	1.42	1.54	1.87	1.65
Debt service coverage (DSC) calculation-IPP as O&M						
Senior lien coverage	1.65	1.46	1.23	1.49	1.87	1.65

August 2023 Monthly Financial Highlights (Continued)



Through August 31, 2023				
$000	LEAC Revenue	Fuel Cost	(Over)/Under Recover	Under Recovery Balance
October	$ 34,062	$ 36,583	2,521	$ 41,914
November	41,593	$ 38,545	(3,048)	$ 38,866
December	40,281	$ 37,041	(3,240)	$ 35,626
January	38,205	$ 35,102	(3,103)	$ 32,523
February	35,217	$ 30,111	(5,106)	$ 27,417
March	37,143	$ 33,911	(3,232)	$ 24,185
April	37,773	$ 30,855	(6,918)	$ 17,267
May	31,867	$ 27,024	(4,843)	$ 12,424
June	17,560	$ 23,414	5,854	$ 18,278
July	29,194	$ 30,113	919	$ 19,197
August	28,940	$ 29,247	307	$ 19,504
September				
Total	**$ 371,836**	**$ 351,946**	**$ (19,889)**	

OTHER DISCUSSION

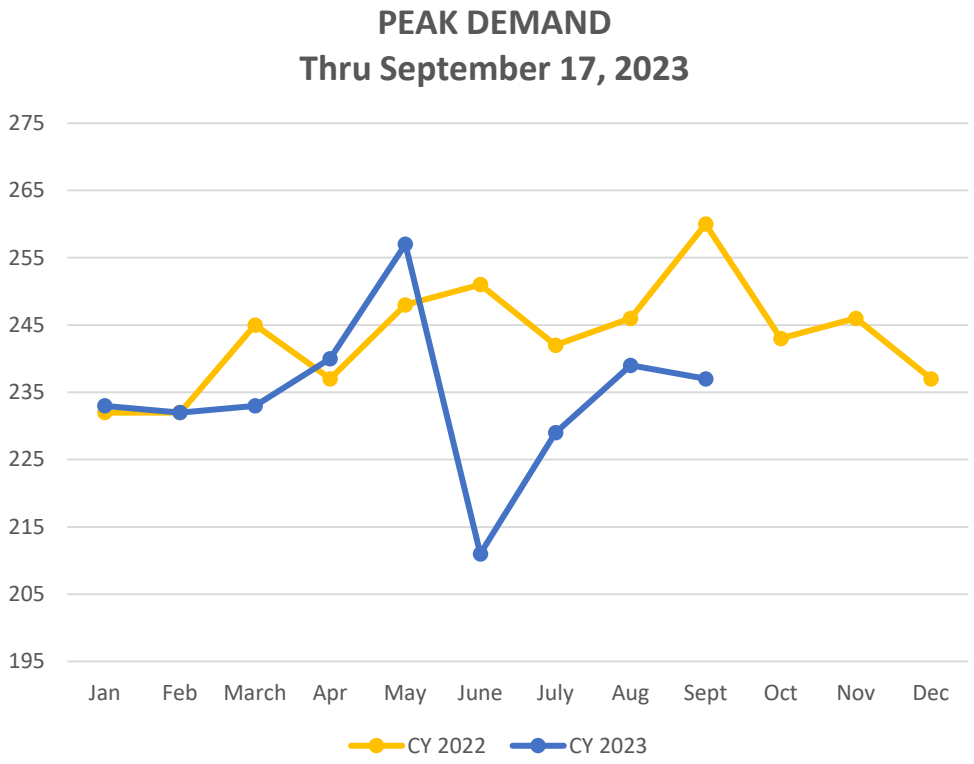
Capacity Shortfall (Load-Shedding)

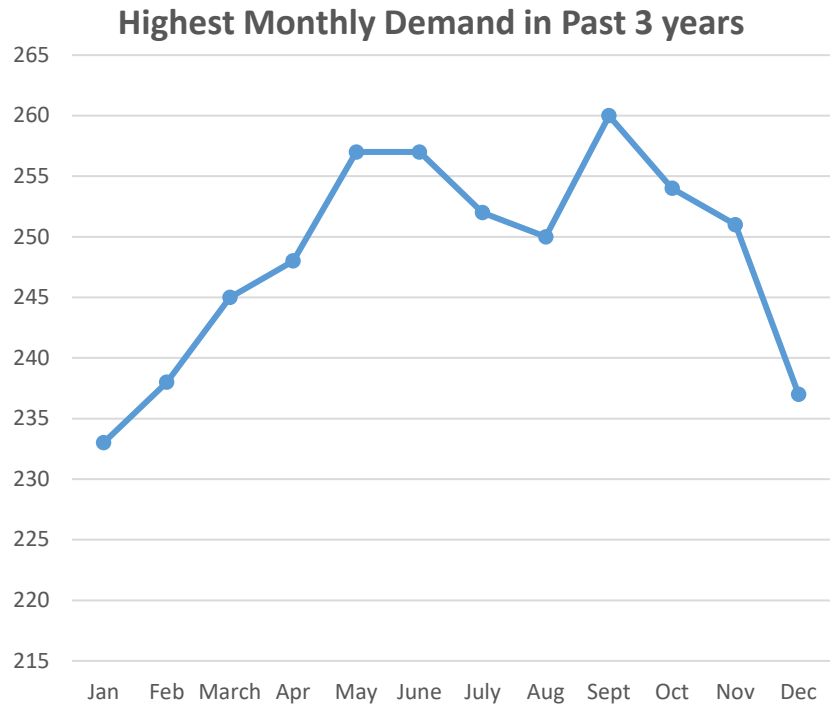
Generation Capacity Shortfall
September 20, 2023

JOHN M. BENAVENTE, P.E.
General Manager
GUAM POWER AUTHORITY

Generation Capacity Shortfall: Demand

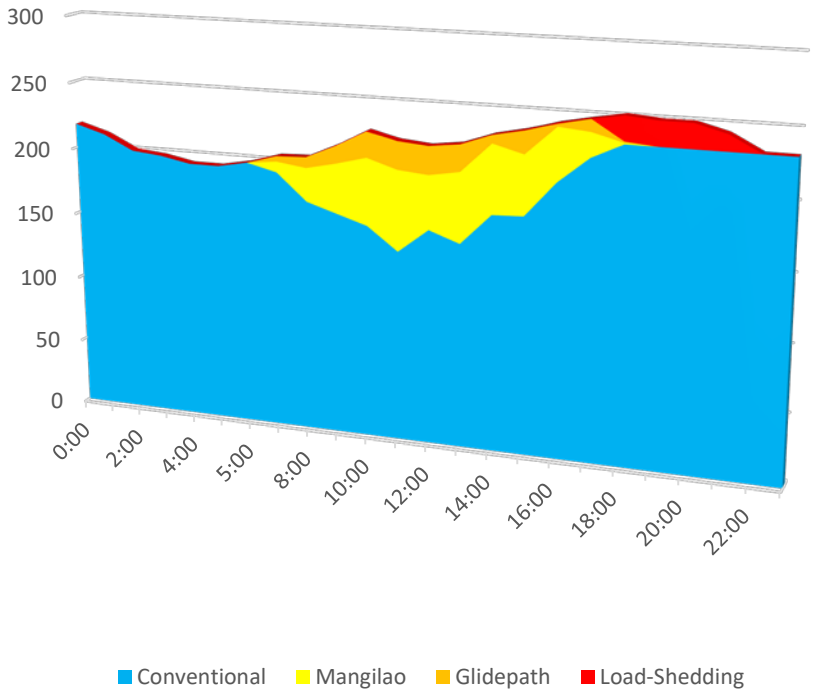
PEAK DEMAND HIGHEST IN SEPTEMBER



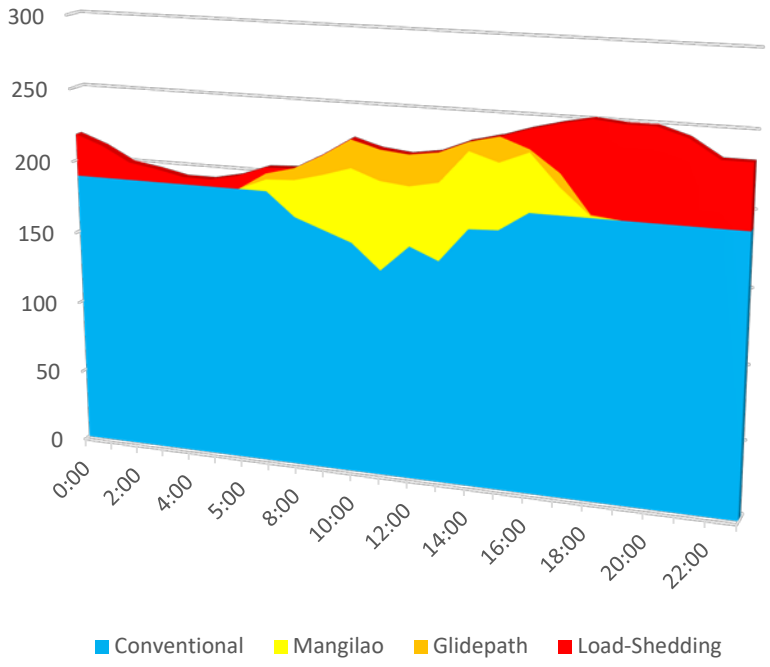


Generation Capacity Shortfall: Down Baseload Scenarios

One Baseload Down; Load Shedding 18 MW
Capacity 232MW; Demand 250MW



Two Baseload Down; Load Shedding 61 MW
Capacity 189 MW; Demand 250MW



Generation Capacity Shortfall: Demand

		Actual	Actual	September Target
	Capacity Dates:	**24-Aug-23**	**20-Sep-23**	**All Base Load Repaired**
Cabras 1		41	41	41
Cabras 2		31	0	35
Piti 8		43	43	43
Piti 9		43	43	43
Piti 7		30	20	30
Dededo 1		18	18	18
Dededo 2		18	18	18
Macheche		18	16	18
Yigo CT		**Down Hard**	**Down Hard**	**Down Hard**
Yigo Diesels		**8**	**9**	**9**
Caterpillar Units		15	6	3
Manenggon #1		3	3	3
Manenggon #2		0	0	0
	Total:	**268**	**217**	**261**
Interruptible Load			16	16
	Total:		**233**	**277**
Anticipated Peak Demand		245	245	245
Reserve (Shortfall)		23	(12)	32

CURRENT GENERATION CAPACITY SITUATION

GPA's aged capacity was being addressed by the planned commissioning of the new 198 MW Ukudu combined cycle power plant. This plant which is under construction and targeted for commissioning in 2024 was significantly damaged during Typhoon Mawar and commissioning has now moved to about January 2026. This delay has presented additional challenges for GPA to meet the demand over the next two years.

Typhoon Mawar damaged the Yigo 20 MW combustion turbine significantly impacting its ability to meet demand. The unit is now under repair but the return to service is not expected any earlier than December 2023. The loss of this unit has impacted GPA's limited reserve capacity and as seen load shedding has been more frequent now than in the past.

The work towards improving reliability, providing affordable energy (commissioning Ukudu 198 MW plant) and contracting for utility scale solar plants with energy shifting capability continues and barring any other substantial delays would be achieve in 2026. GPA continues its focus on these projects to achieve its commitment to lower cost energy on a sustainable basis.

The next two years has significant challenges for GPA generation capacity and it must take action to do everything it can to restore down units and bring in reasonably cost temporary power. Constraints in accomplishing these critical work consist mainly of a procurement processes which delays implementation most especially due to mundane legal requirements and a bid protest resolution process which is burdensome and takes many months and even years to resolve. Despite GPA's expressing its concern, there has not been adequate assistance to GPA to overcome these barriers.

GPA noted last month that effort to end the current load shedding situation may take about 6 to 9 months, with incremental improvements through the period. The following summarizes GPA's current action plan.

Plan of Action for Capacity Recovery

- Continue Cabras Unit 2 repair work to restore unit capacity to 40 MW. Order boiler tube material and plan to replace problematic screen tube bank area no later than January 2024
- Once Cabras 2 is operating and stable, shutdown Piti 7 for repair of plenum and increase capacity from 20 MW to 31 MW (5-day outage)
- Return to service Caterpillar units requiring significant repairs or rehabilitation and increase plant capacity by 10 MW
- Replace Manenggon Wartsila units control system and increase plant capacity by 5 MW
- Upgrade emergency standby units for water and wastewater facilities. The majority of generators are over 30 years-old



Plant personnel assessing for safe entry into boiler to make necessary repairs to 48-year-old Cabras Unit 2 baseload plant.

Plan of Action for Capacity Recovery

- Establish as soon as possible Interruptible Rate Customers to assist in meeting peak demand during loss or scheduled maintenance of base load units. Current participants include GIAA, PAG, GRMC, PIC, Hilton, Micronesian Mall, KTWR and IT&E. Additionally, Navy and their DOD customers are supporting GPA with 5 MW of interrupted load or generator capacity. Some large customers are unable to participate due to down generators. Follow up calls are being made to other customers invited to participate.

- Expedite repair of Yigo 20 MW combustion Turbine Unit. Generator rotor was shipped to Texas and is close to arriving there for repair. The return to service targeted is for no later than December 31, 2023

- Performance Management Contractor for Yigo Diesels:
  - GPA resolved the original protest and was about to open the price proposal of three bidders when unfortunately, another protest was filed by the fourth and disqualified bidder. Work continues towards a solution.
  - Once an award on this bid can be made, GPA will need CCU and PUC Approvals
  - This plan could take six to nine months to accomplish if we could resolve protest issue.

Plan of Action for Capacity Recovery

- Pursue converting the Talofofo Energy Storage System (ESS) to dual service which could allow the shifting of 16 MWH of solar PV to shave evening peak

- Pursue approval to bid for 40 MW of emergency temporary power for a three-year basic contract with two one-year renewal options

- Pursue approval to bid for an Energy Storage Battery 45 MW / 225 MWh to shave peak demand and which could be charged by daytime solar PV or available conventional units. This is part of Integrated Resource Plan recommendation.

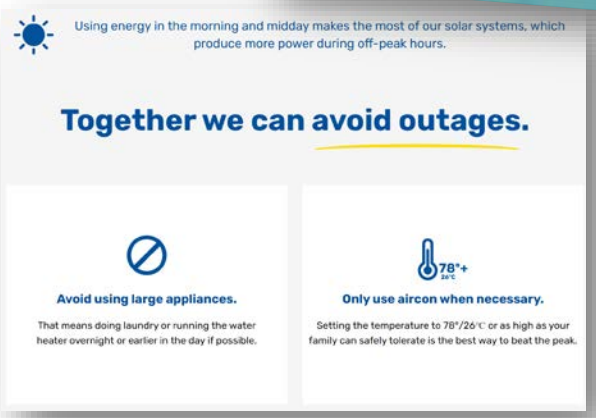
- Consider an amendment to the Hanwha contract to include a 22 MW-66 MWh shifting Energy Storage System to be used to shave peak time load (allows GPA to meet USEPA consent decree requirement)

Plan of Action for Capacity Recovery

- Media campaign “BEAT THE PEAK” has been launched asking customers to help reduce load shedding while lowering their energy bill:
  - Shut off water heaters during peak times; lower their water heater temperature setting
  - Shut one or more air conditioners off during emergency load shedding periods
  - Government employees, schools and businesses to place their air conditioning thermostats at 75 degrees or higher after work; shut down air conditioners if possible



- Issue a Load Shedding Schedule for a month (Issue in October):
  - Explain when one or several 1-hour outages could occur
  - Issue capacity alert scenario as early as possible which triggers extend of outage



Temporary Power: Cost-Benefit Analysis

Temporary Power Capacity (KW) required	**40,000**
Period (years)	4
Capacity Factor (Minor Source) Hours	2,500
Annual KWH	100,000,000
Annual MWH	100,000

ESTIMATED COST:	**CY 2024**	**CY 2025**	**CY 2026**	**CY 2027**
Capacity Charge:	$ 8,500,000	$ 8,925,000	$ 9,371,250	$ 9,839,813
Fixed O&M Charge:	$ 2,500,000	$ 2,625,000	$ 2,756,250	$ 2,894,063
Variable O&M ($4.62/MWh):	$ 462,000	$ 485,100	$ 509,355	$ 534,823
Annual Cost Excluding Fuel:	$ 11,462,000	$ 12,035,100	$ 12,636,855	$ 13,268,698
Cost/kWh:	$ 0.115	$ 0.120	$ 0.126	$ 0.133
Annual Sales:	$ 1,500,000,000	$ 1,500,000,000	$ 1,500,000,000	$ 1,500,000,000
$/KW Sales:	$ 0.0076	$ 0.0080	$ 0.0084	$ 0.0088
Average Residential Customer (1,000 KWH):	$ 7.64	$ 8.02	$ 8.42	$ 8.85

Potential Siting: Cabras Fuel Oil Storage Site, Tenjo Vista or Marbo Substation
Subject to Air Permitting Constraints
6 to 9 months Implementation period