GPWA MEETING

Presentation To:
Consolidated Commission on Utilities
October 31, 2023

ISSUES FOR DECISION

GPA Resolution No. FY2024-03

Relative to Approving Amendment 2 to Phase II Renewable Energy Acquisition Power Purchase Agreement (PPA) for Hanwha Energy Corporation

GPA Resolution No. FY2024-03

Relative to Approving Amendment 2 to Phase II Renewable Energy Acquisition Power Purchase Agreement (PPA) for Hanwha Energy Corporation

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

To enable GPA to meet the USEPA consent decree requirement for 100MW of new Renewable Energy Installations.

Where is the location?

The new Hanwha Energy Corporation "HEC Guam A" 41.4 MWAC solar project is located in Dandan, Inalåhan.

How much will it cost?

The blended rate of $143.85 Per MWh in the first contract year with 1% escalation per year.

When will it be completed?

25-year contract term with December 31, 2025 COD (Solar PV System) and April 30, 2026 COD (BESS System).

What is its funding source?

Funding source is LEAC.

Exhibit C
New Project Summary

	Item	Configuration
1	Interconnection POI	Dandan Substation, with installation of new 3-phase conductors in the unused spare conduit connection Dandan to the Talofofo Substation
2	Interconnection Voltage	34.5 kV, 3 phase
3	Interconnection POI MW	30
4	PV Inverter AC MW	41.40
5	BESS MW	22
6	BESS MWh, Delivered	66
7	BESS Duration Hours	3.0
8	1st Year Minimum Production MWh (PPA Appendix A)	75,156
9	1st Year Energy Price in existing PPA, $/MWh	64.22
10	Annual Energy Price Escalation	1.0%
11	1st Year Total Microgrid Fee	$5,985,000
12	Annual Microgrid Fee Escalation	0.0%
13	Effective Blended Price $/MWh	143.85
14	Total Expected 1st Year Cost to GPA	$10,811,534
15	1st Year Guaranteed Discharge Energy MWh	22,171
16	1st Year Shift Ratio	29.5%
17	Target COD (Solar PV System)	12-31-2025
18	Target COD (BESS System)	04-30-2026

Pricing
Amendment 2

Hanwha Energy Corporation HEC Guam A

Amendment 2							
Contract Year	Annual Price ($/MWH)	Price Escalation	Guaranteed Net Annual Generation (MWH/YR)	MicroGrid Operations Fixed Annual Fee	Microgrid Cost, $/MWH (based on Guarantee)*	Blended Rate ($/MWh)	Projected Total Costs
1	$ 64.22		75,156	$ 5,985,000	$ 79.63	143.85	$ 10,811,518
2	$ 64.86	1.0%	74,780	$ 5,985,000	$ 80.03	144.90	$ 10,835,395
3	$ 65.51	1.0%	74,407	$ 5,985,000	$ 80.44	145.95	$ 10,859,674
4	$ 66.17	1.0%	74,035	$ 5,985,000	$ 80.84	147.01	$ 10,883,907
5	$ 66.83	1.0%	73,664	$ 5,985,000	$ 81.25	148.08	$ 10,908,090
6	$ 67.50	1.0%	73,296	$ 5,985,000	$ 81.66	149.15	$ 10,932,355
7	$ 68.18	1.0%	72,930	$ 5,985,000	$ 82.06	150.24	$ 10,957,003
8	$ 68.86	1.0%	72,565	$ 5,985,000	$ 82.48	151.33	$ 10,981,590
9	$ 69.54	1.0%	72,202	$ 5,985,000	$ 82.89	152.44	$ 11,006,183
10	$ 70.24	1.0%	71,841	$ 5,985,000	$ 83.31	153.55	$ 11,031,144
11	$ 70.94	1.0%	71,482	$ 5,985,000	$ 83.73	154.67	$ 11,056,105
12	$ 71.65	1.0%	71,124	$ 5,985,000	$ 84.15	155.80	$ 11,080,992
13	$ 72.37	1.0%	70,769	$ 5,985,000	$ 84.57	156.94	$ 11,106,305
14	$ 73.09	1.0%	70,415	$ 5,985,000	$ 85.00	158.08	$ 11,131,537
15	$ 73.82	1.0%	70,063	$ 5,985,000	$ 85.42	159.24	$ 11,157,114
16	$ 74.56	1.0%	69,713	$ 5,985,000	$ 85.85	160.41	$ 11,182,676
17	$ 75.31	1.0%	69,364	$ 5,985,000	$ 86.28	161.59	$ 11,208,498
18	$ 76.06	1.0%	69,017	$ 5,985,000	$ 86.72	162.78	$ 11,234,298
19	$ 76.82	1.0%	68,672	$ 5,985,000	$ 87.15	163.97	$ 11,260,077
20	$ 77.58	1.0%	68,329	$ 5,985,000	$ 87.59	165.17	$ 11,286,179
21	$ 78.36	1.0%	67,987	$ 5,985,000	$ 88.03	166.39	$ 11,312,519
22	$ 79.15	1.0%	67,647	$ 5,985,000	$ 88.47	167.62	$ 11,339,169
23	$ 79.94	1.0%	67,309	$ 5,985,000	$ 88.92	168.86	$ 11,365,782
24	$ 80.74	1.0%	66,972	$ 5,985,000	$ 89.37	170.11	$ 11,392,279
25	$ 81.55	1.0%	66,638	$ 5,985,000	$ 89.81	171.36	$ 11,419,156

Exhibit D
Projected Savings Case Summary

Case 1 - HEC Guam A (41.4 MWAC)

Contract Year	Year 1	Year 2	Year 3	Year 4	Year 5	TOTALS (Nominal $)	TOTALS (PV @ 6% $)
HEC Guam A Energy Rate ($/MWH)	$ 64.22	$ 64.86	$ 65.51	$ 66.17	$ 66.83		
Energy Guarantee (MWH)	$ 75,156.00	$ 74,975.00	$ 74,363.00	$ 73,966.00	$ 73,570.00		
Phase II Energy Costs	$ 4,826,519.00	$ 4,862,879.00	$ 4,871,521.00	$ 4,894,331.00	$ 4,916,684.00	$ 24,371,934.00	$20,522,288.65
Microgrid Operations Costs	$ 5,985,000.00	$ 5,985,000.00	$ 5,985,000.00	$ 5,985,000.00	$ 5,985,000.00	$ 29,925,000.00	$25,210,997.26
Total Phase II Project Costs	$ 10,811,519.00	$ 10,847,879.00	$ 10,856,521.00	$ 10,879,331.00	$ 10,901,684.00	$ 54,296,934.00	$45,733,285.91
Current LEAC Rate ($/MWH)	$ 223.57	$ 223.57	$ 223.57	$ 223.57	$ 223.57		
Replacement Energy Costs Based on Current LEAC	$ 16,802,627.00	$ 16,762,161.00	$ 16,625,336.00	$ 16,536,579.00	$ 16,448,045.00	$ 83,174,748.00	$70,118,206.71
Estimated Savings	$ 5,991,108.00	$ 5,914,282.00	$ 5,768,815.00	$ 5,657,248.00	$ 5,546,361.00	$ 28,877,814.00	$24,384,920.80

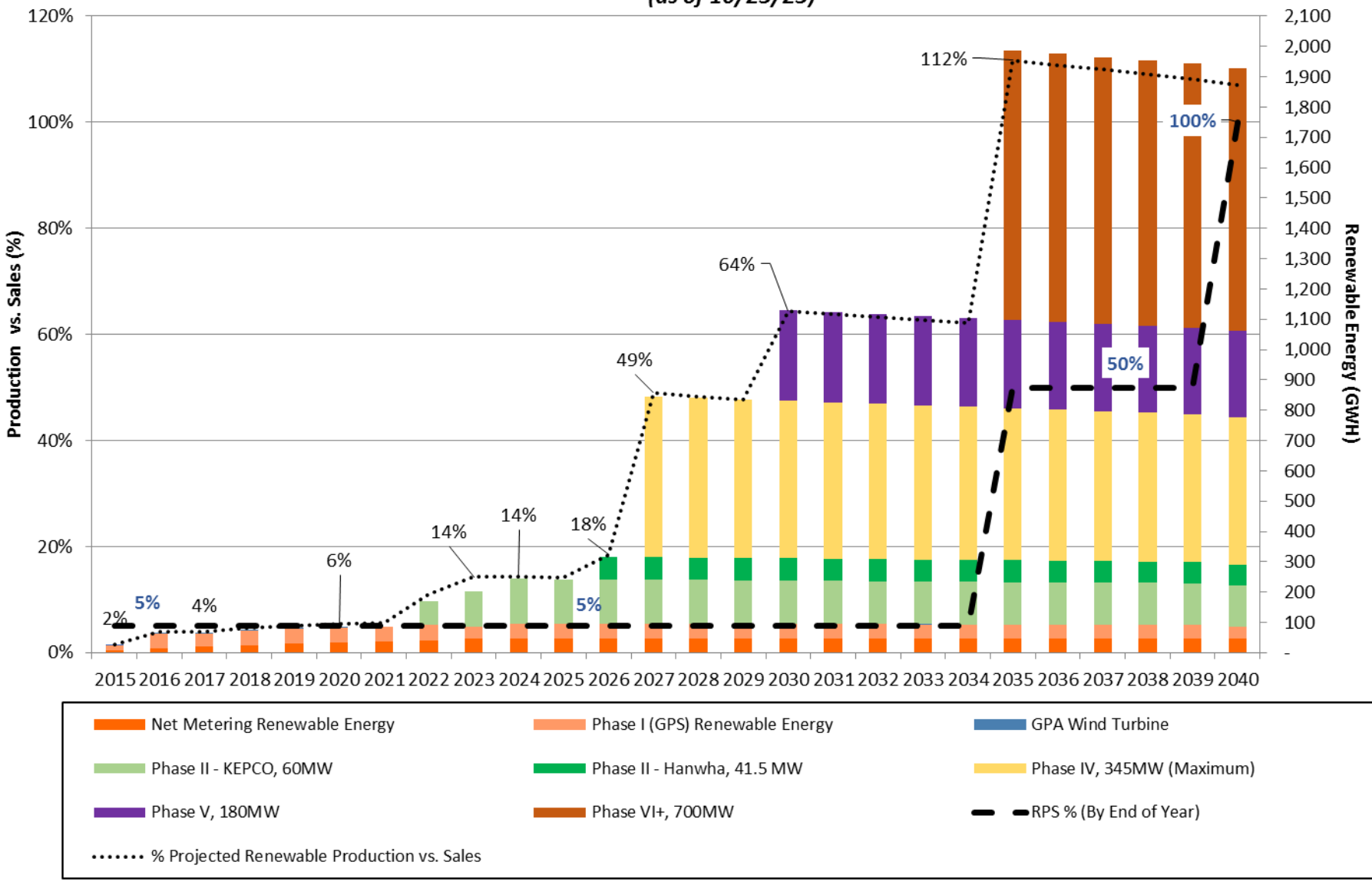
Exhibit B
Project Milestones

No.	Milestone	Date
1.	NTP for preliminary engineering studies and 60% design.	10/31/2023
2.	EPC Vendor Selection	1/15/2024 or 60 days after PUC approval
3.	Long Lead Items Vendors Selection	1/30/2024
4.	Contract Consultant to Conduct Interconnection System Impact Study	3/15/2024
5.	Long Lead Items Vendors Contracting	3/31/2024
6.	EPC Contract Signing and Notice to Proceed	6/30/2024
7.	Interconnection System Impact Study Completion	7/31/2024
8.	Commence PV Module Deliveries	3/31/2025
9.	Commence Microgrid (ESS) Equipment Deliveries	9/15/2025
10.	Mechanical Completion (PV + ESS Microgrid)	11/30/2025
11.	Substantial Completion (PV + ESS Microgrid)	12/30/2025
12.	Commercial Operation Date (PV + ESS Microgrid)	12/31/2025

Renewable Portfolio Standards (RPS) Tracking Projection thru 2040

(as of 10/23/23)

Phase IV: 345 MW



Project Site Photo Dandan, Inalåhan



GPA Resolution No. FY2024-04

Relative to Approving the Award of the New Ultra Low Sulfur Diesel Supply Contract

What is the project's objective? Is it necessary and urgent?
The existing contract will expire in January 31, 2024. The new fuel supply contract is necessary to provide uninterrupted supply of fuel for the Baseload and Peaking units.

Where is the location?
Bulk Ultra Low Sulfur Diesel Fuel Oil will be supplied to the following plants:

1. Piti 7
2. Piti 8&9
3. Tenjo Vista
4. Ukudu plants

How much will it cost?
The 3-year contract is estimated to cost approximately **$846,864,000** requiring prior approval from the PUC.

When will it be completed?
The contract is for an initial period of three (3) years to commence on or about February 01, 2024 and to expire on January 31, 2027, with the option to extend for two (2) additional one-year terms.

What is its funding source?
Fuel (LEAC) revenue funds

The RFP/BID responses:
Three (3) bidders responded to the solicitation under IFB GPA-04-23. **HYUNDAI CORPORATION** was determined to the lowest responsive and responsible bidder.

GM REPORT

October 2023

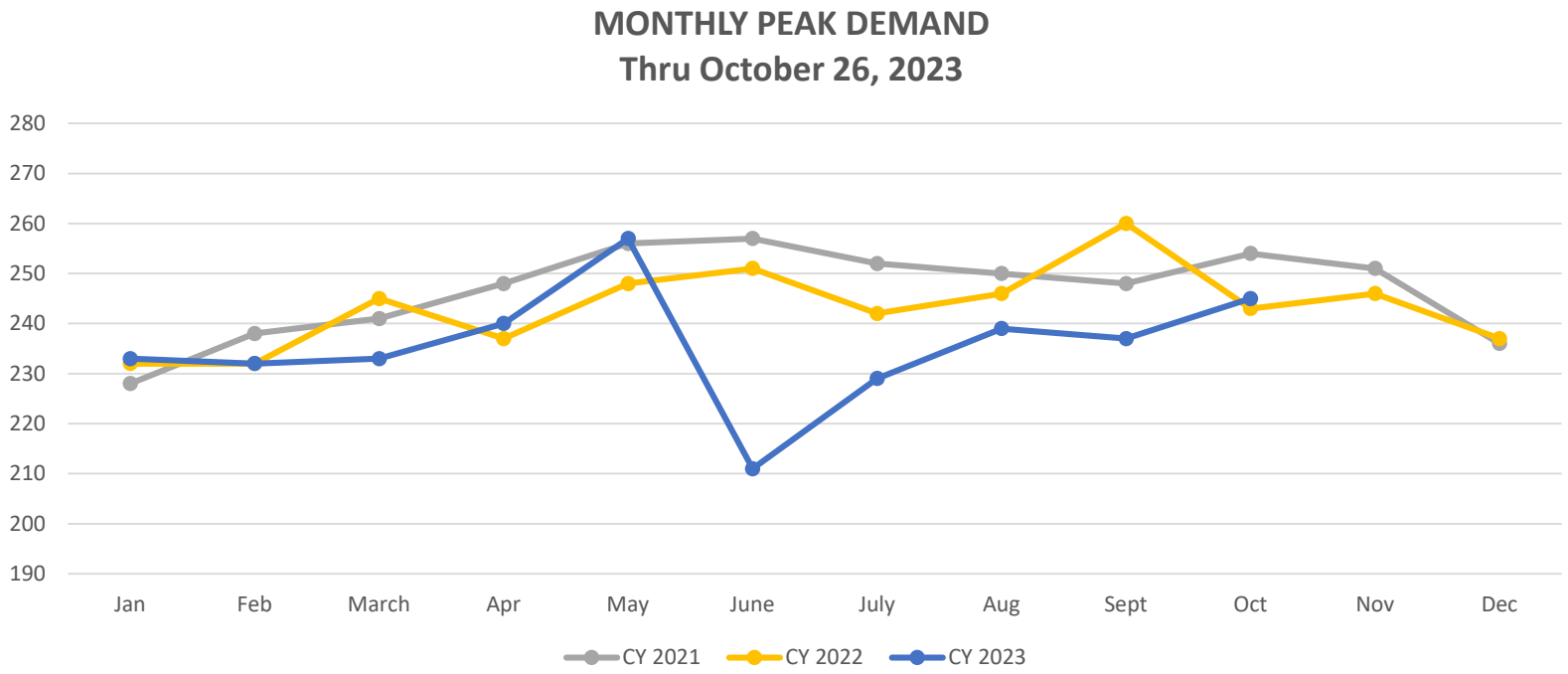
JOHN M. BENAVENTE, P.E.
General Manager
GUAM POWER AUTHORITY

Projected November Generation Status

1. **Reserve Margin Forecast for November 2023:**

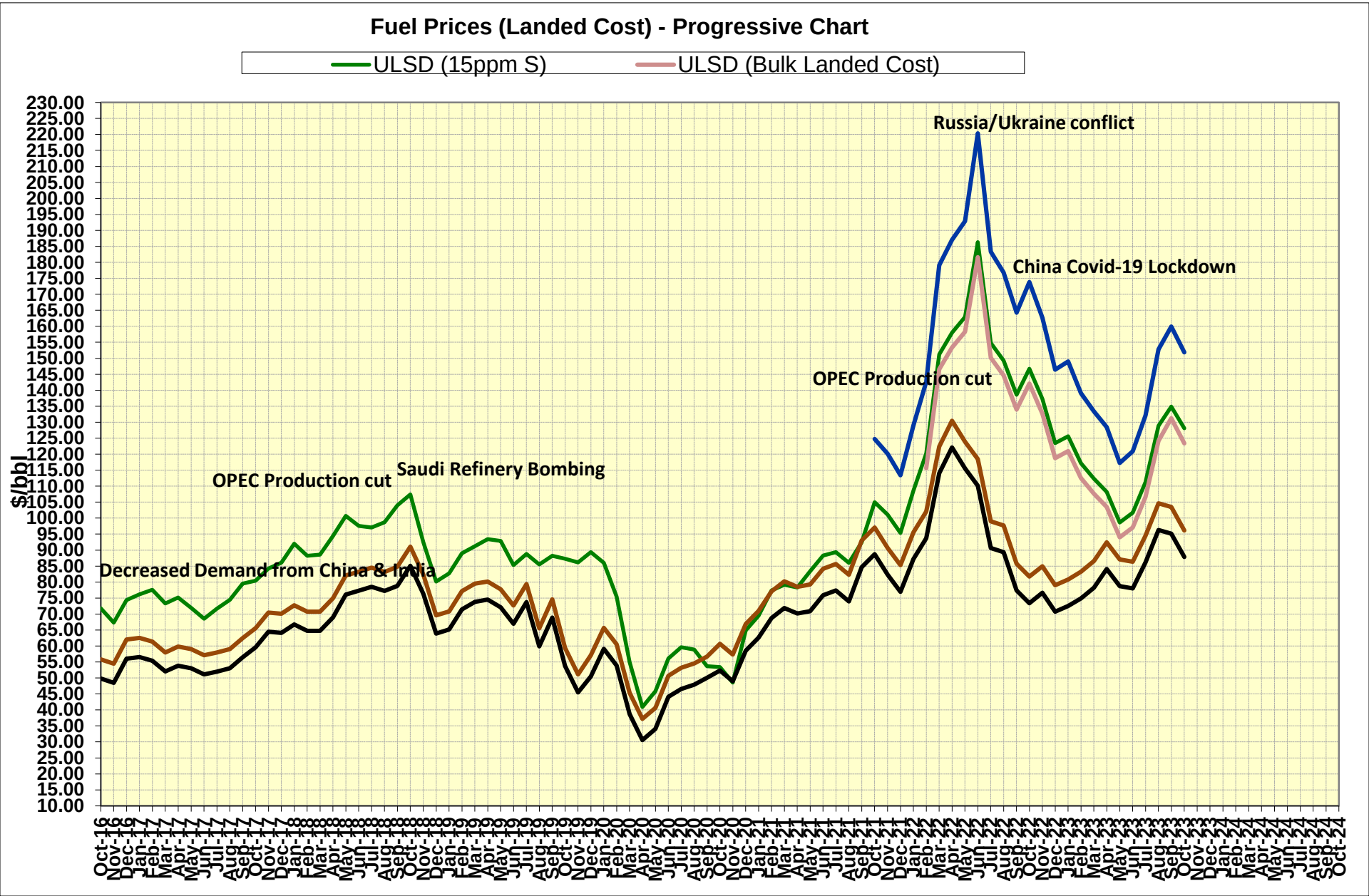
Targeted Available Capacity:	252 MW (All Baseloads Available)
Projected Demand:	246 MW
Anticipated Reserve Margin:	6 MW
Interruptible Load Availability:	16 MW
Total Reserves:	22 MW

2. **System Peak Demand:**



GPA Fuel Landed Cost (Per Barrel as October 19, 2023)

3. 0.2% ULSRFO $151.89; ULSD Bulk $128.07



4. PUC Update:

GPA Docket – **Thursday, October 26, 2023** Regular Meeting

- GPA Docket 24-01, Petition to Approve and Authorize GPA to Award Property Insurance –Meeting recessed to 2pm October 31, 2023
- GPA Docket 24-02, Petition to Approve and Authorize GPA to Award Casualty Insurance - Approved

Approved Dockets on September 26 & 28, 2023:

- GPA Docket 23-19: Petition to Extend the Performance Management Contract for Cabras 1 and 2 - Approved
- GPA Docket 23-20, Petition to Procure a Hot Section Exchange & Generation Repair for Yigo CT - Approved
- GPA Docket 23-21, Petition to Approve the Purchases of Bucket Trucks - Approved

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	$ 5,224,600	50,611	9/30/2023
TOTAL:	**$ 21,104,800**	**$ 26,209,500**		*As of 10/23/23*

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

Guam Homeowner Assistance Fund Program (HAF)

- $6,666.56 was applied to qualified ratepayer accounts from September 12, 2023, through October 6, 2023. [Batch 72]

Emergency Rental Assistance Program (ERA)

- $139,464.10 was applied to qualified ratepayer accounts from September 12, 2023 through October 6, 2023. [Batches 264-269]

6. DSM Online Report – Summary from Aug 22 to Sept 23

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	$ 134,300	7	12	$ 1,950.00	472	654	$ 132,350
Oct-22	474	690	$ 138,900	4	9	$ 1,450.00	470	681	$ 137,450
Nov-22	514	698	$ 138,550	10	14	$ 1,500.00	504	684	$ 137,050
Dec-22	480	647	$ 130,325	5	5	$ 950.00	475	642	$ 129,375
Jan-23	398	534	$ 106,575	1	1	$ 150.00	397	533	$ 106,425
Feb-23	385	568	$ 111,375	7	9	$ 1,400.00	378	559	$ 109,975
Mar-23	487	728	$ 142,100	16	32	$ 4,450.00	471	696	$ 137,650
Apr-23	379	526	$ 105,725	3	4	$ 750.00	376	522	$ 104,975
May-23	398	579	$ 120,875	4	7	$ 1,600.00	394	572	$ 119,275
Jun-23	404	546	$ 112,925	5	8	$ 1,700.00	399	538	$ 111,225
Jul-23	625	824	$ 169,725	3	3	$ 1,400.00	622	821	$ 168,325
Aug-23	612	835	$ 175,525	5	5	$ 1,100.00	607	830	$ 174,425
Sep-23	565	816	$ 165,575	4	4	$ 2,900.00	561	812	$ 162,675
TOTAL	6,417	8,972	$ 1,813,850	74	113	$ 21,300.00	6,343	8,859	$ 1,792,550

CURRENT AVERAGE REBATE PER UNIT

Month	ALL		COMMERCIAL		RESIDENTIAL	
	Applications	Equipment	Applications	Equipment	Applications	Equipment
As of Sep-23	$ 283	$ 202	$ 288	$ 188	$ 283	$ 202

* *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.*

6. DSM Online Report – September 2023

COUNTS PER APPLICATION STATUS

MONTHS	ALL	COMMERCIAL			RESIDENTIAL		
	Applications	Processing	Approved	Denied	Processing	Approved	Denied
Aug-22	217					200	17
Sep-22	479		3	4		395	77
Oct-22	474		2	2		367	103
Nov-22	514		3	7		385	119
Dec-22	480		4	1	1	352	122
Jan-23	398		1			303	94
Feb-23	385		4	3	2	294	82
Mar-23	487		7	9	2	390	79
Apr-23	379		2	1	5	309	62
May-23	398		2	2	4	317	73
Jun-23	404		3	2	12	330	57
Jul-23	625	2		1	388	155	79
Aug-23	612	5			519		88
Sep-23	565	3		1	467		94
TOTAL	6,417	10	31	33	1,400	3,797	1,146

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

6. DSM Online Report – September 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									
Sep-23	4	4	2,900	3	3	$ 450				1	1	$ 2,450			
TOTAL	74	113	21,300	71	110	16,700	1	1	1,000	1	1	2,450	1	1	1,150

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

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

6. DSM Online Report – September 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	132,350	404	575	$ 119,950				29	34	$ 3,400	39	45	$ 9,000
Oct-22	470	681	137,450	413	615	$ 126,150				19	19	$ 1,900	38	47	$ 9,400
Nov-22	504	684	137,050	432	600	$ 121,950				16	17	$ 1,700	56	67	$ 13,400
Dec-22	475	642	129,375	406	561	$ 115,475	1	1	$ 500	22	26	$ 2,600	46	54	$ 10,800
Jan-23	397	533	106,425	351	482	$ 97,525				10	13	$ 1,300	36	38	$ 7,600
Feb-23	378	559	109,975	330	498	$ 99,475	1	1	$ 500	12	20	$ 2,000	35	40	$ 8,000
Mar-23	471	696	137,650	406	608	$ 123,350				25	33	$ 3,300	40	55	$ 11,000
Apr-23	376	522	104,975	329	467	$ 95,075	1	1	$ 500	11	14	$ 1,400	35	40	$ 8,000
May-23	394	572	119,275	356	530	$ 111,775				8	9	$ 900	30	33	$ 6,600
Jun-23	399	538	111,225	337	469	$ 99,525				19	21	$ 2,100	43	48	$ 9,600
Jul-23	622	821	168,325	543	727	$ 152,525				27	30	$ 3,000	52	64	$ 12,800
Aug-23	607	830	174,425	551	769	$ 164,525				20	23	$ 2,300	36	38	$ 7,600
Sep-23	561	812	162,675	518	755	$ 154,175				20	29	$ 2,900	23	28	$ 5,600
TOTAL	6,343	8,859	1,792,550	5,568	7,943	$ 1,638,850	3	3	$ 1,500	253	304	$ 30,400	519	609	$ 121,800

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

General Manager's Report

7. New Power Plant Update: GPA Activities

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 the 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).
  - ✓ Archaeological monitoring is nearly completed for all required 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.
  - ✓ GPA is assisting DUP with work within Harmon Substation
    - ✓ GPA work includes installation of line guards, outage coordination, etc.

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.
- Foundation bolts for ULSD tanks have been removed. Installing 42 more bolts compared to original 28.

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 ground breaking 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.
- Conducted monthly cybersecurity meeting to discuss NERC compliance with GPA Oct. 6, 2023

Typhoon Bolaven:

- Site was not affected by the typhoon and equipment was well preserved.

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
  - Excavation has started on Route 8 road crossing

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
  - GPA issued response to GUP's request on Oct. 5th, 2023

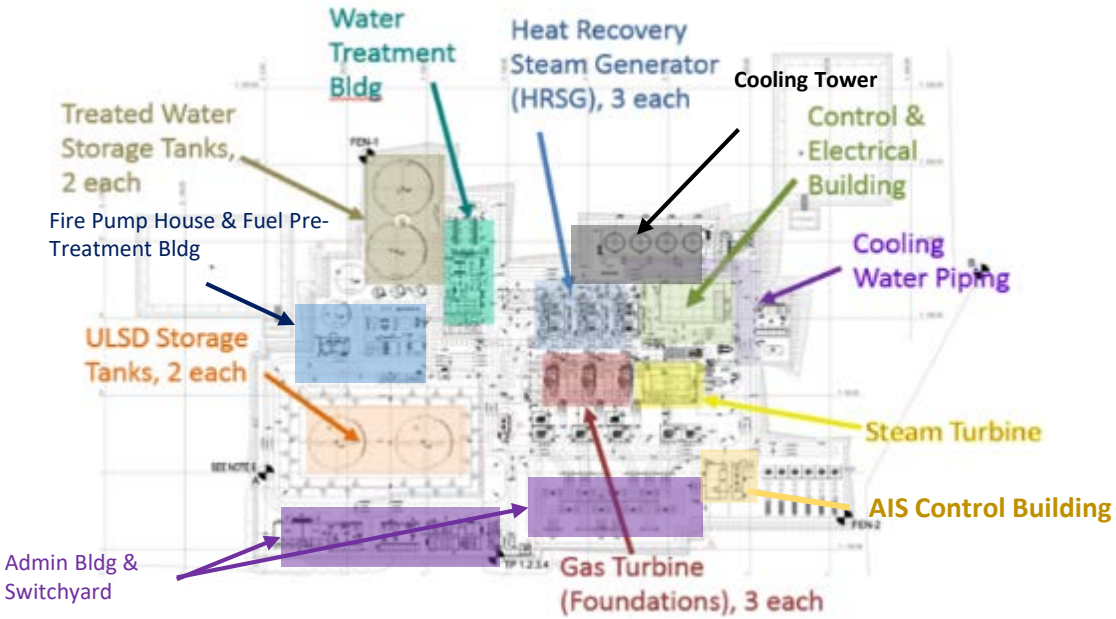
Transportation Logistics

- 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 Oct. 27 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

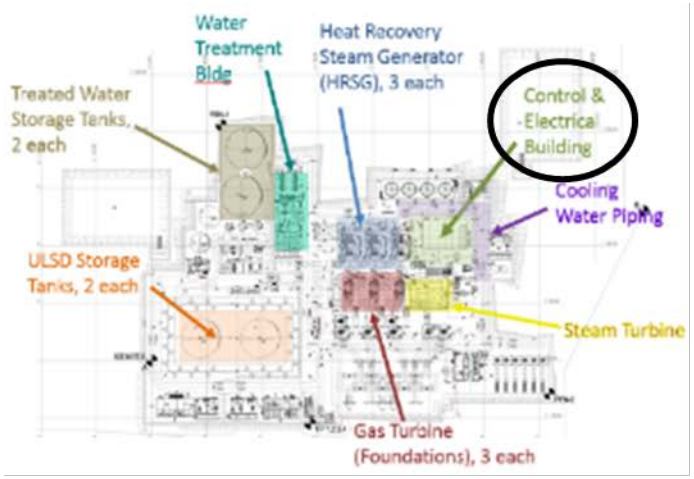
Ukudu Power Plant Construction Status

Plant construction progresses. Both ULSD tanks are demolished, while the demolition of the treated water tanks are ongoing. Major achievements include: Installation of all circuit breakers in AIS area, installation of water treatment equipment, and installation of Steam Turbine building structural steel.



General Manager's Report

Ukudu Power Plant Construction Status



Control & Electrical Building – Roof sealant pouring is ongoing

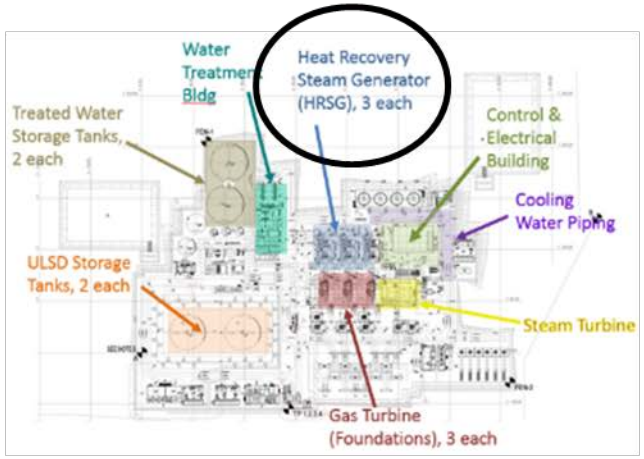




General Manager's Report

Ukudu Power Plant Construction Status

Heat Recovery Steam Generator (HRSG)





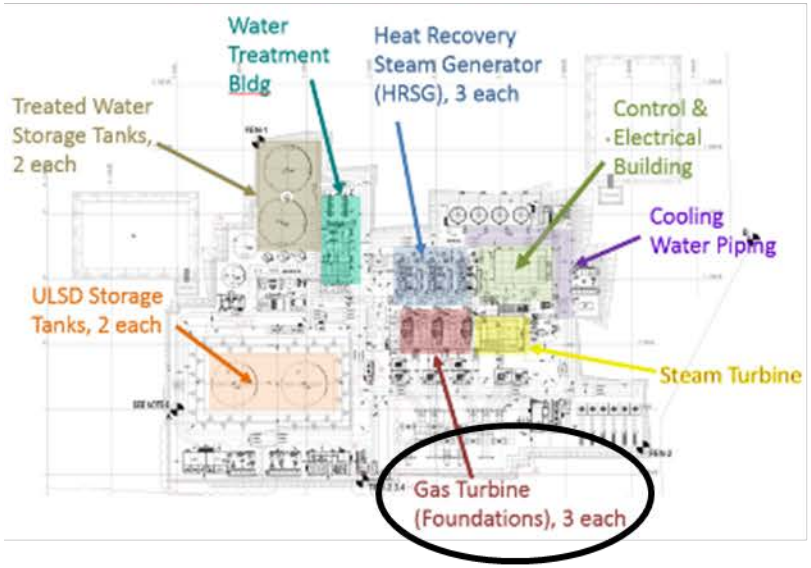
HRSG: HRGS insulation repair and replacement is ongoing



General Manager's Report

Ukudu Power Plant Construction Status

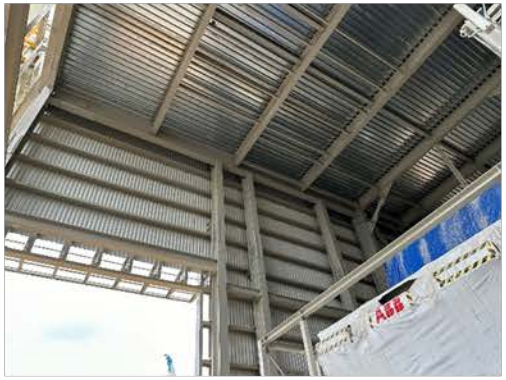
Gas Turbines & Generators



GTG Building – Exterior siding installation is ongoing



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

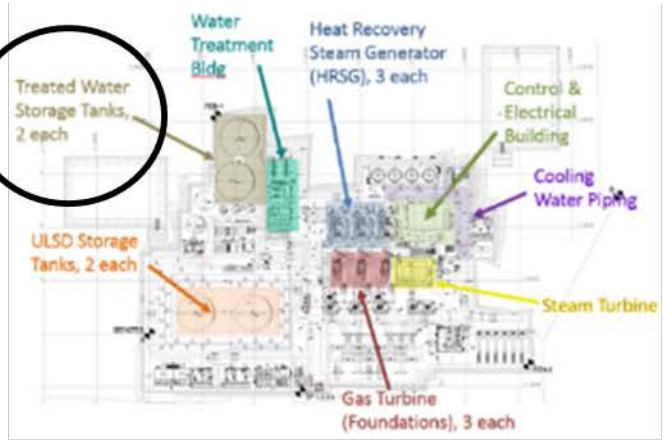






General Manager's Report

Ukudu Power Plant Construction Status



Treated Water Storage Tank 1 – Demolition is underway

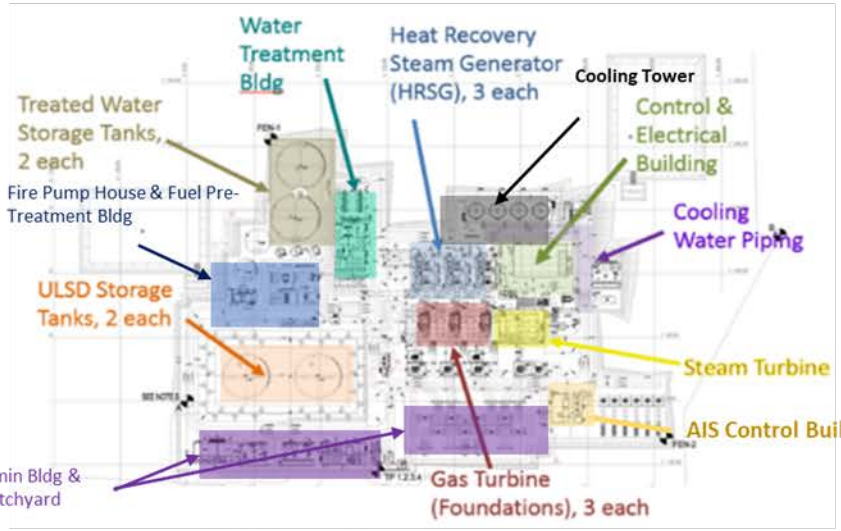


Treated Water Storage Tank 2 – Demolition is ongoing



General Manager's Report

Ukudu Power Plant Construction Status



Steam Turbine & Generator – Building structural steel is nearly completed

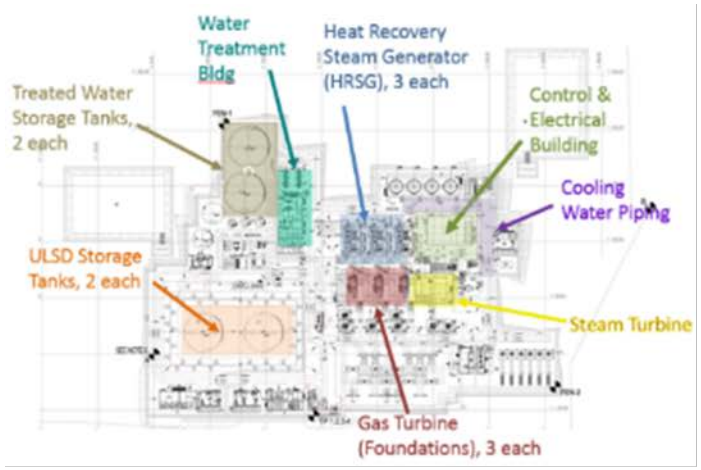


BESS – Excavation for battery is ongoing



General Manager's Report

Ukudu Power Plant Construction Status



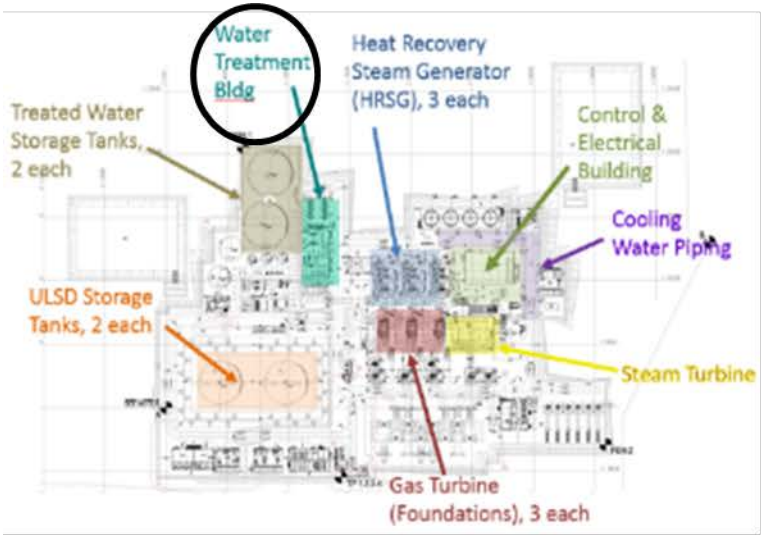
ULSD Storage Tank A &B – Demolition of both storage tanks is completed. Removing anchor bolts for replacement.





General Manager's Report

Ukudu Power Plant Construction Status



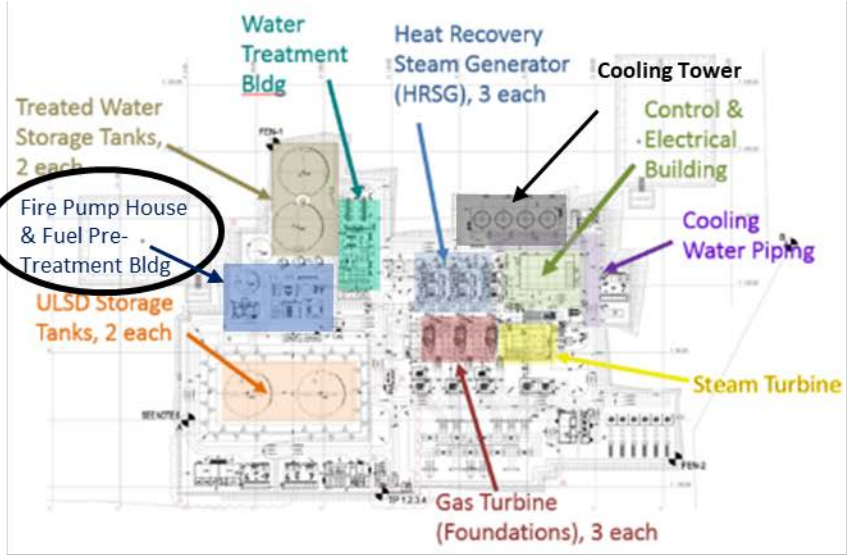
Water Treatment Building – Installation of EDI and water treatment equipment is ongoing.





General Manager's Report

Ukudu Power Plant Construction Status



Fire Pump House – Concrete pouring in progress

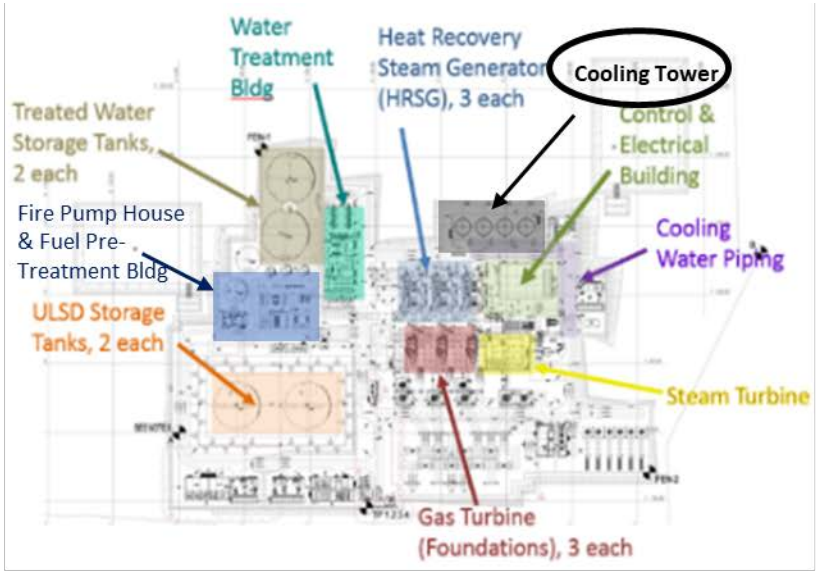


Fire Loop – Main trench pipe installation is in progress near ULSD Tank



General Manager's Report

Ukudu Power Plant Construction Status

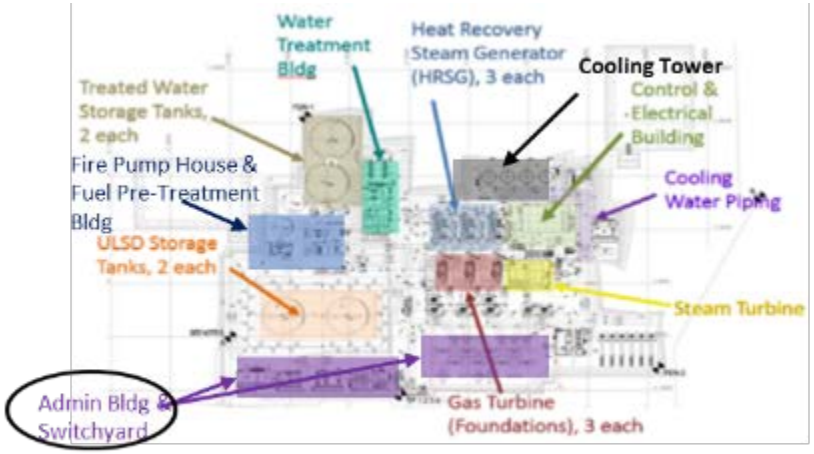


Cooling Tower & Basin – Cooling tower frame installation is nearly complete



General Manager's Report

Ukudu Power Plant Construction Status



Switchyard – Circuit breakers set in place



Admin Building – Rebar bent slightly.



General Manager's Report

Ukudu Power Plant Construction Status

Major achievements include shipping of Gas Turbine BOP equipment and STG piping supports and Hangers. Other progress is shown below:



Fuel Oil Treatment System – ULSD Treatment skid manufacturing in progress



Fuel Oil Treatment System – ULSD Treatment skid manufacturing in progress



Fuel Oil Treatment System – Switch gear production in progress



Fuel Oil Treatment System – Switch gear production in progress

General Manager's Report

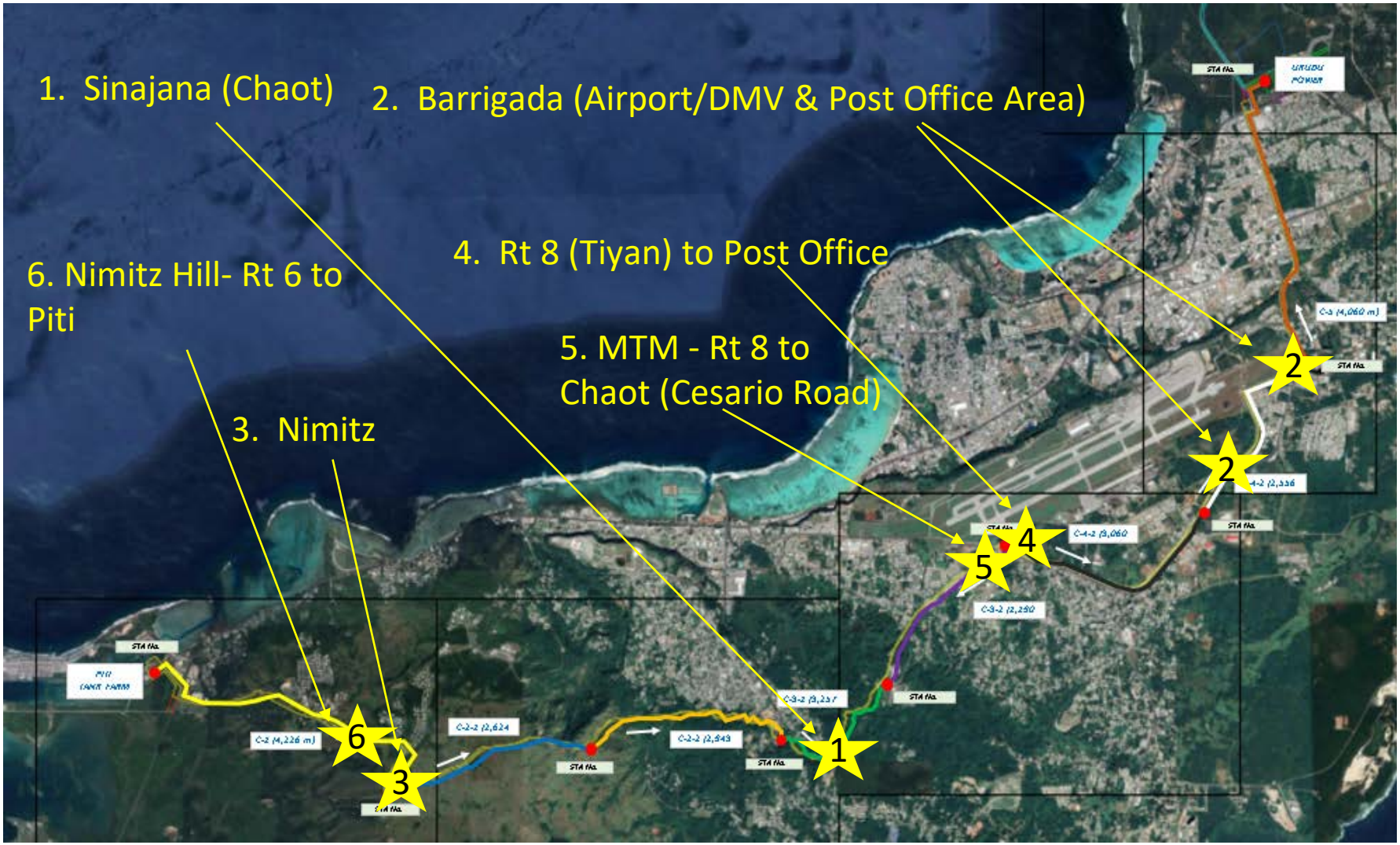
Ukudu Power Plant Construction Status (Transportation)

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

Fuel Pipeline Construction Status



General Manager's Report

Fuel Pipeline Construction Status

1. Sinajana/Chaot area

GPA reviewing pipeline drawings east of Chaot bridge. Installation on hold until design issues are addressed.





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

Fuel Pipeline Construction Status

3. Nimitz Hill

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



4. Rt 8 (Tiyan) to Post Office

Route 8 road crossing is in progress.





General Manager's Report

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.





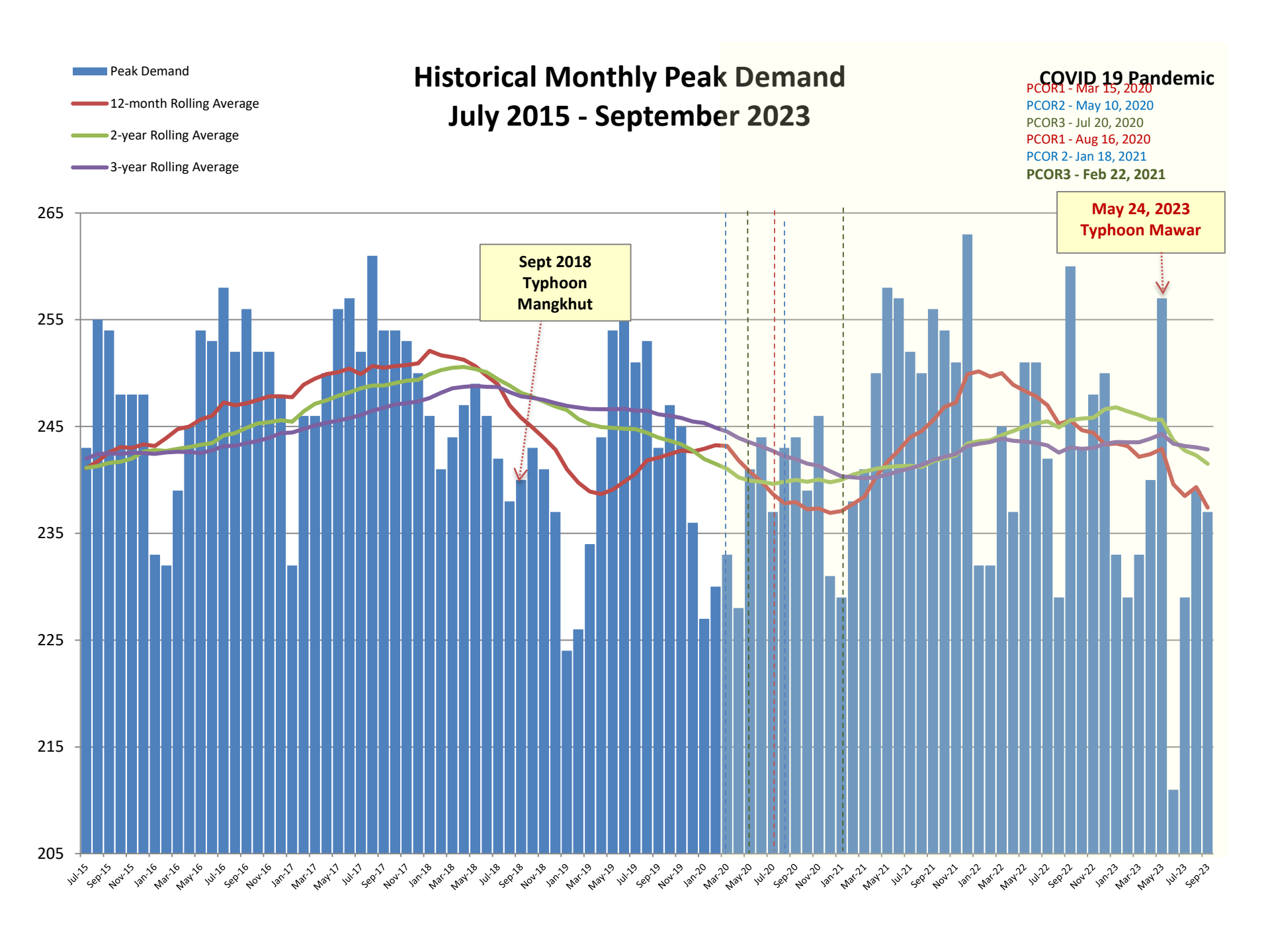
6. Nimtiz Hill- Rt 6 to Piti

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



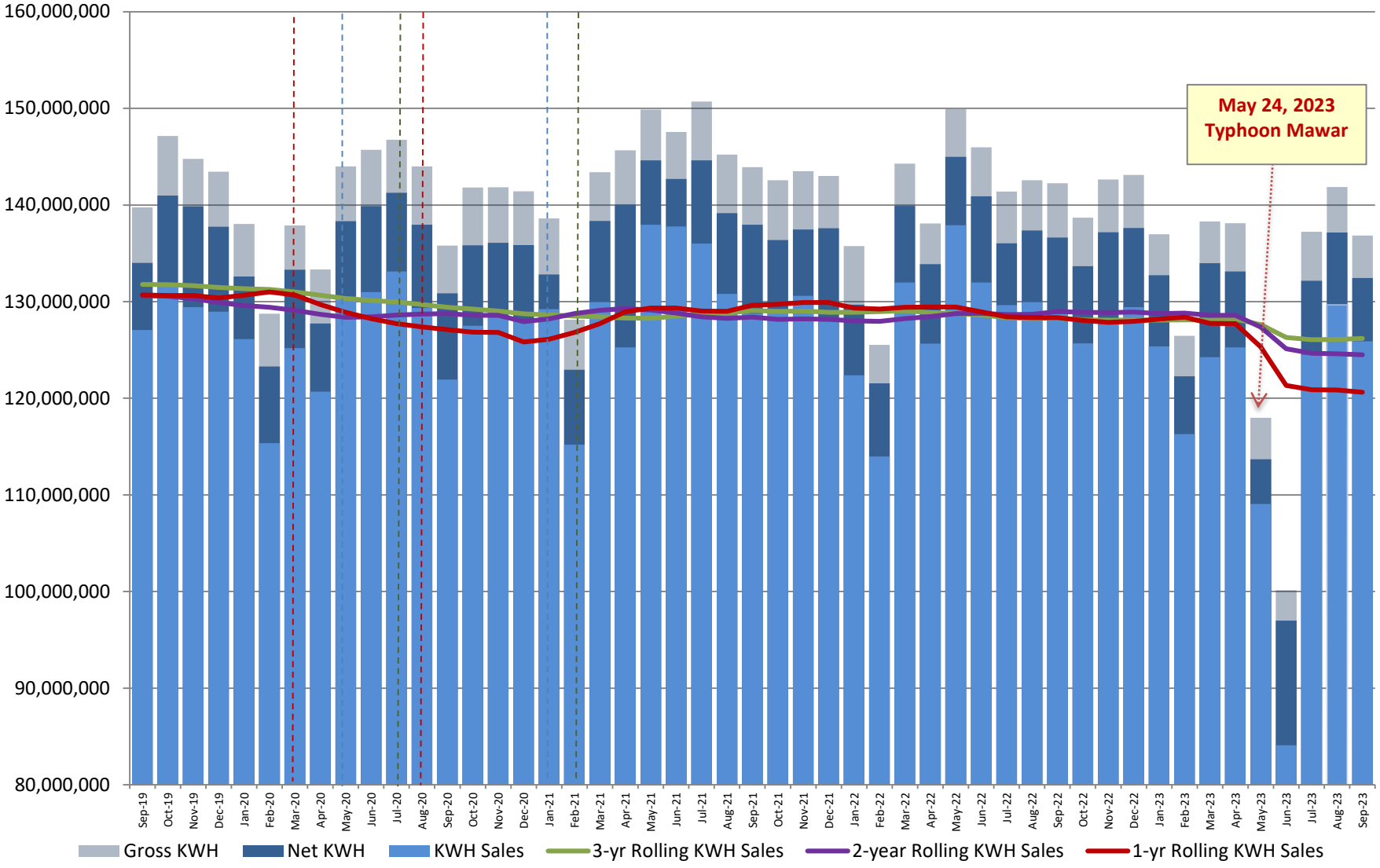


8. Generation KPIs Update September 2023

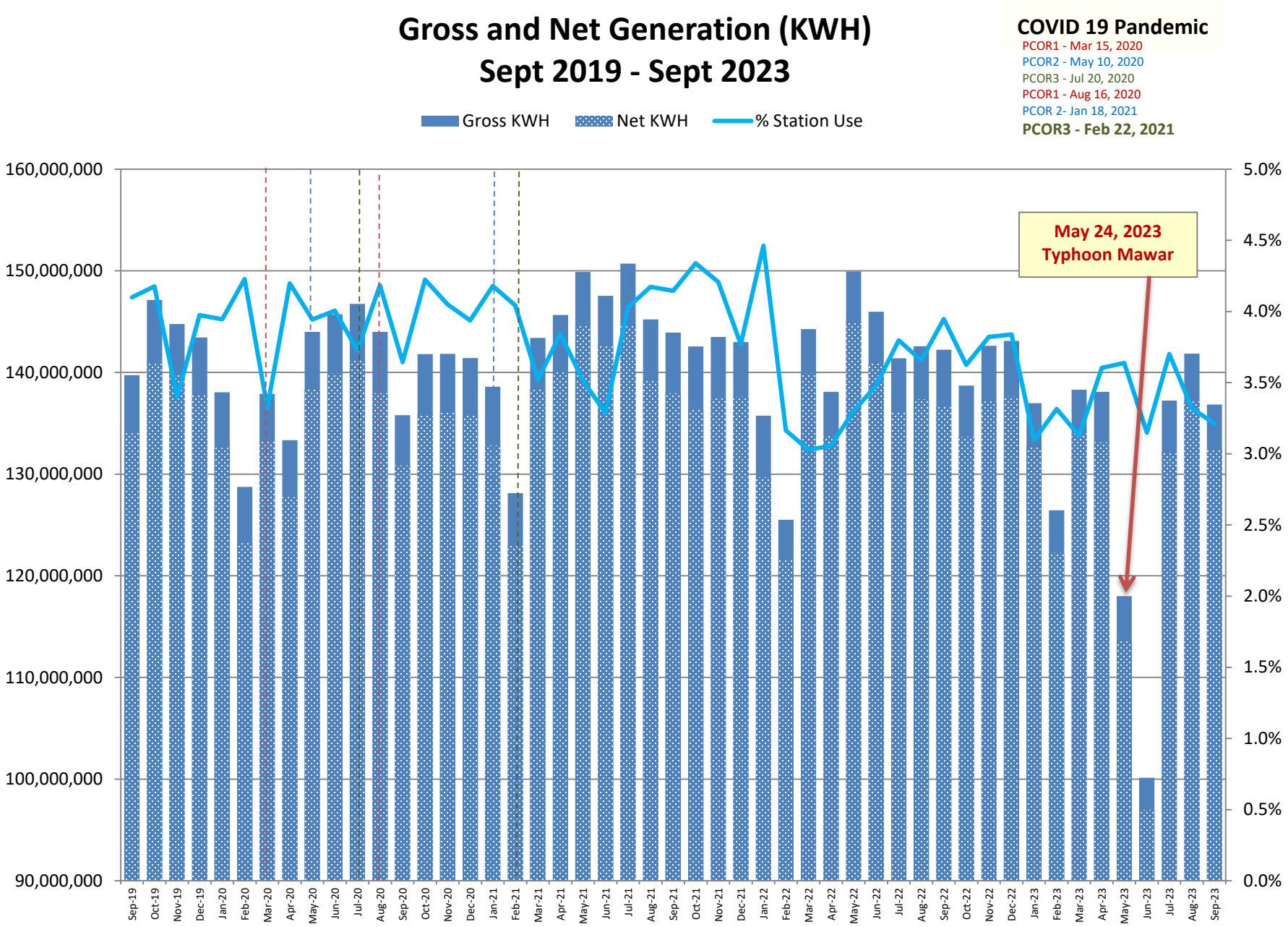

Peak Demand
12-month Rolling Average
2-year Rolling Average
3-year Rolling Average
Historical Monthly Peak Demand
July 2015 - September 2023
COVID 19 Pandemic
PCOR1 - Mar 15, 2020
PCOR2 - May 10, 2020
PCOR3 - Jul 20, 2020
PCOR1 - Aug 16, 2020
PCOR 2- Jan 18, 2021
PCOR3 - Feb 22, 2021
May 24, 2023
Typhoon Mawar
Sept 2018
Typhoon
Mangkhut
265
255
245
235
225
215
205
Jul-15
Sep-15
Nov-15
Jan-16
Mar-16
May-16
Jul-16
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Historical KWH Sales
Sept 2019 - Sept 2023

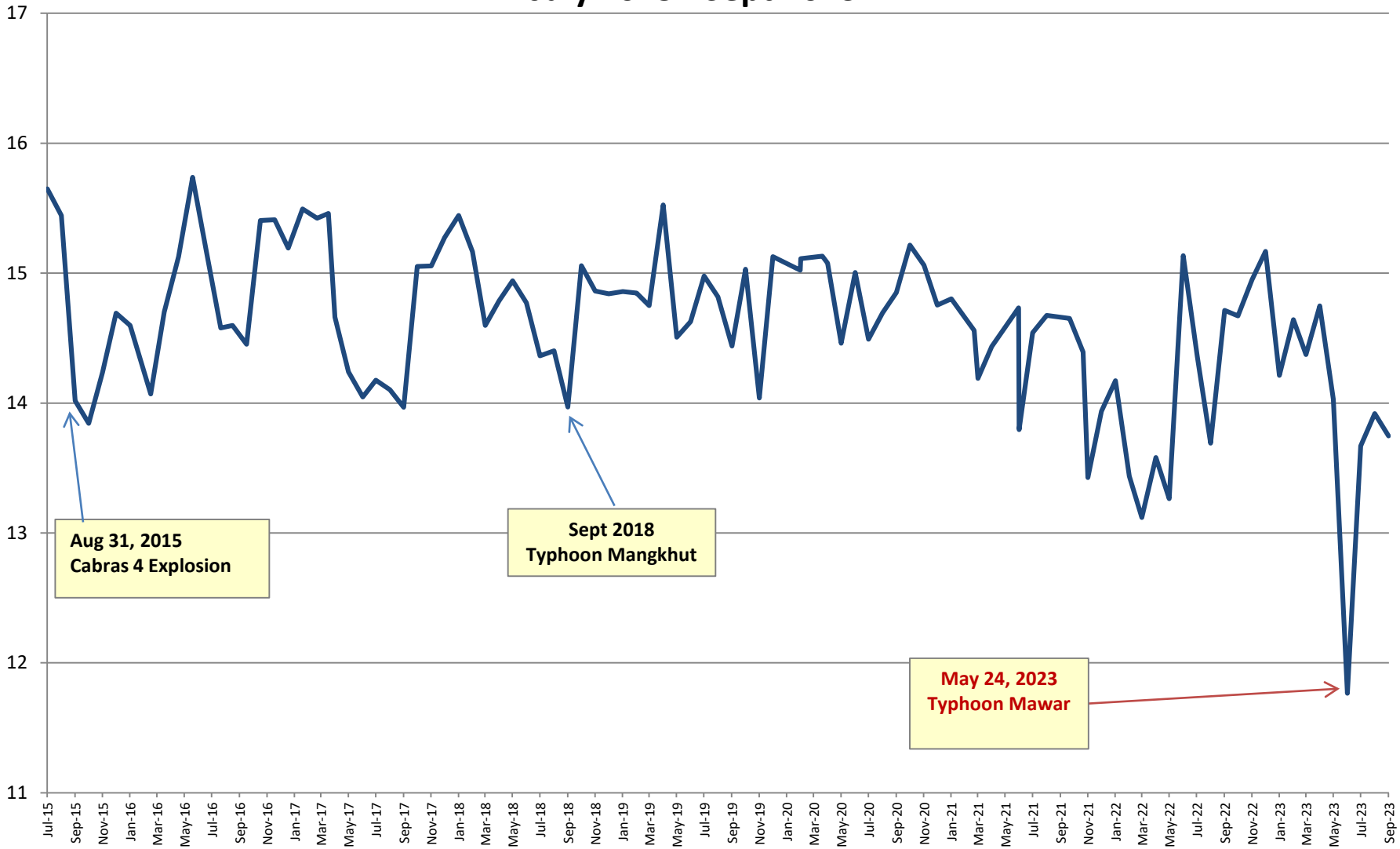
COVID 19 Pandemic
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PCOR3 - Feb 22, 2021



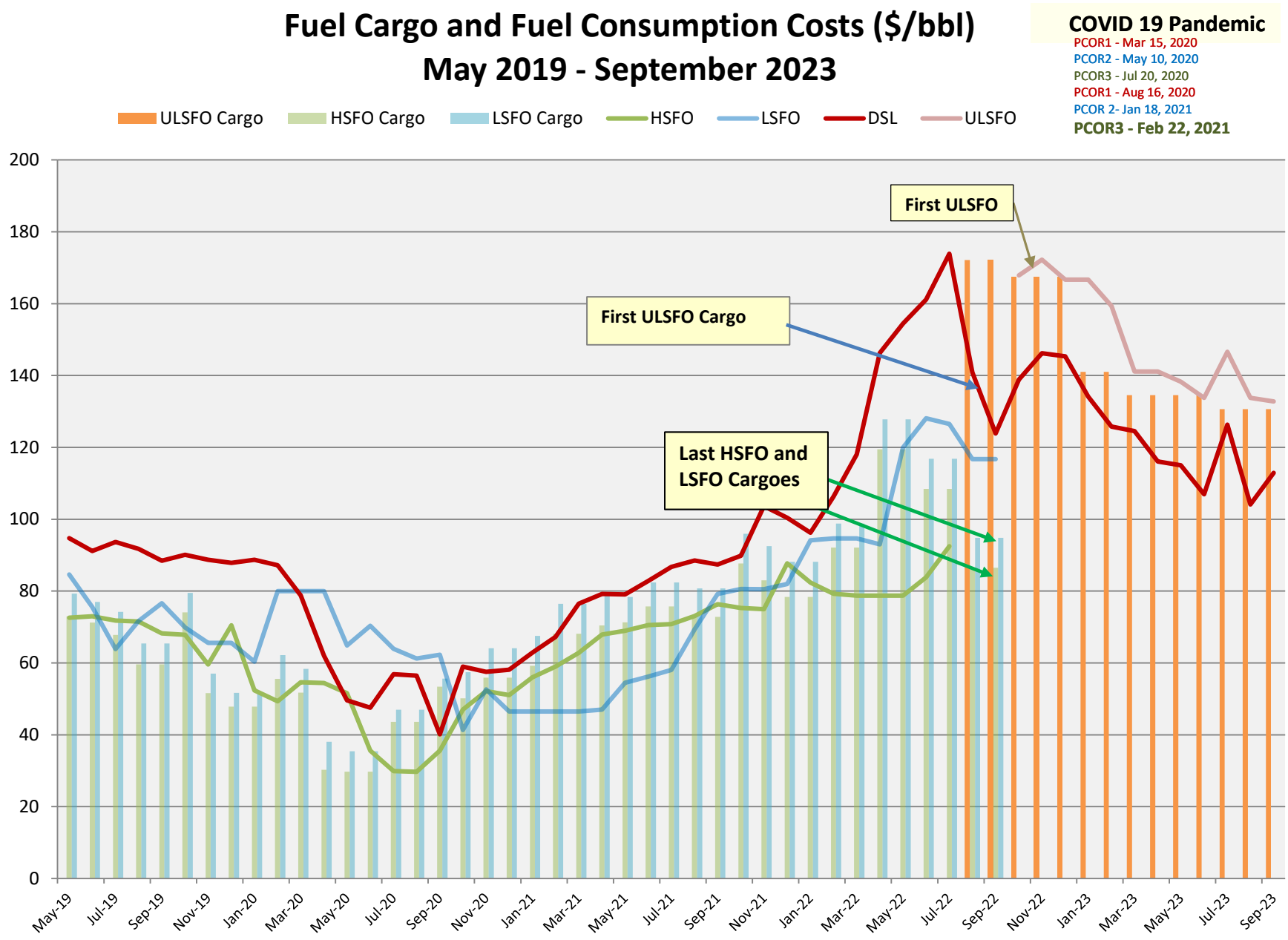
Gross and Net Generation (KWH)
Sept 2019 - Sept 2023



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



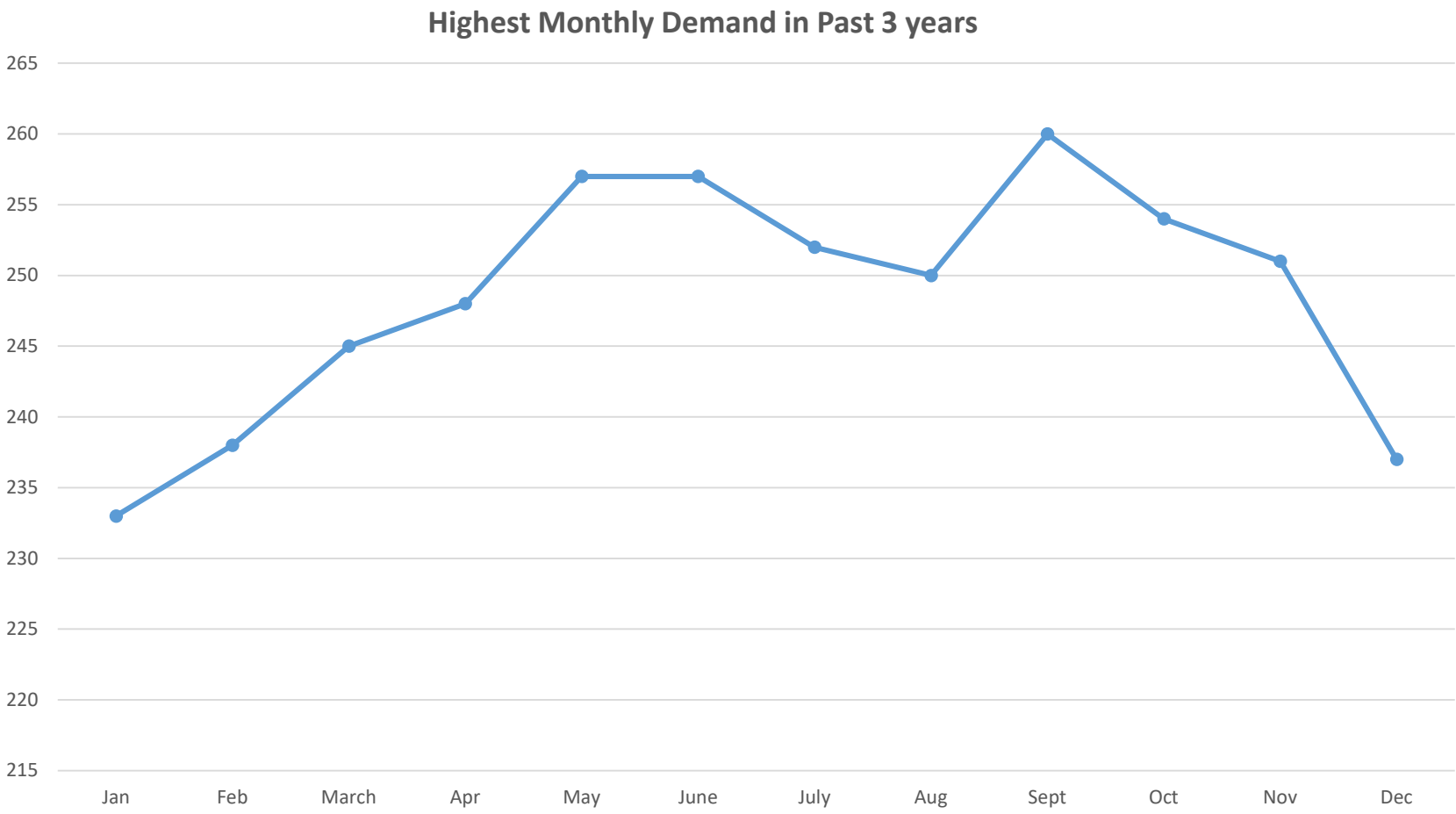
Fuel Cargo and Fuel Consumption Costs ($/bbl)
May 2019 - September 2023



OTHER DISCUSSION

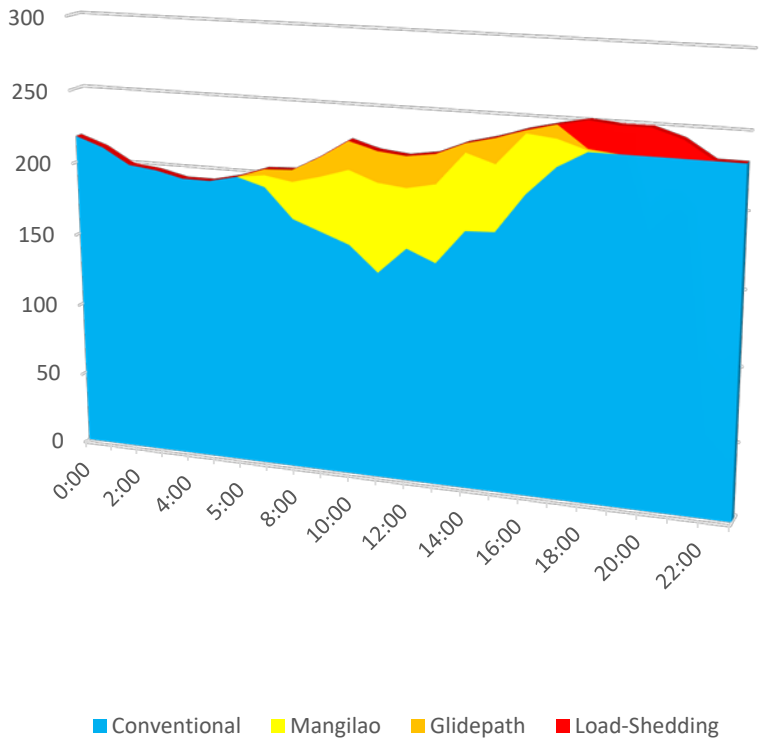
Generation Capacity Update

PEAK DEMAND HIGHEST IN SEPTEMBER

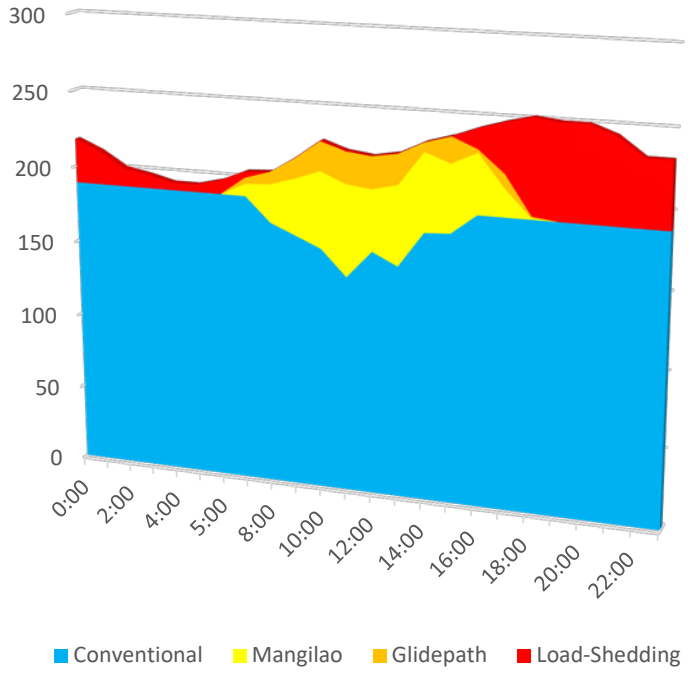


Generation Capacity Shortfall: Down Baseload Scenarios

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	Oct 20, 2023 Schedule
Capacity Dates:	**18-Oct-23**	**One Baseload Under Maintenance**
Cabras 1	41	41
Cabras 2	31	31
Piti 8	43	43
Piti 9	43	0
Piti 7	22	22
Dededo 1	18	18
Dededo 2	18	18
Macheche	16	16
Yigo CT	**Down Hard**	**Down Hard**
Yigo Diesels	**9**	**9**
Caterpillar Units	6	6
Manenggon #1	3	3
Manenggon #2	0	0
Total:	**250**	**207**
Interruptible Load	16	16
Total:	**266**	**223**
Anticipated Peak Demand	250	235
Reserve (Shortfall)	**16**	-8

EMERGENCY GENERATION CAPACITY WORK IN PROGRESS UPDATE

24-Oct-23			
Action Plan: (In-House Units):	**Status**	**Comments**	**MW Capacity Increase Target**
Return to Service Cabras 1	Done: Operating @ 41 MW	Capacity to be increase in December 2023	9
Return to Service Cabras 2	Done: Operating @ 31 MW	Repair work to increase capacity and reliability by February 2024	14
Piti 8 Preventive Maintenance (PM)	Done; Full Capacity of 43 MW	Catch up on delayed maintenance	
Piti 9 Preventive Maintenance (PM)	Scheduled for Oct 27, 2023; @ 43 MW Cap.	Catch up on delayed maintenance	
Piti 7 Maintenance	Repair & PM to be schedule for Nov. 2023	Increase current capacity of 22 MW to 31 MW	9
Yigo 20 MW CT Return to Service	Combustion Turbine and Generator repair	Rotor in Texas for complete rewinding; earlest completion update February 2024	20
Yigo Diesel PMC bid	Administrative work in Progress	Attempt to lift procurement stay continues; most likely requires legislation	25
Wartsila Control Upgrade	Administrative work in Progress	Control system repair or replacement	6
Caterpillar Units Repair	Administrative work in Progress	Various Repairs including turbocharges and modification of plant air system	20
MW Capacity Increase Targeted			**103**
Action Plan: (Outside Contracts):			
Interruptible Load Program	Administrative work in Progress	Program participants and Navy assistance totals about 16 MW	
Temporary Power Solicitation	Specifications nearly complete	Petion to be filed with PUC this Month Oct. 2023	40
Talofofo Energy Storage System (ESS)	Administrative work in Progress	Allow shifting of 16 MWH from daytime to Peak Time @ 4MW for 4 Hours	4
KMS ESS	Administrative work in Progress	Allow shifting of 24 MWH from daytime to Peak Time @ 6MW for 4 Hours	6
MW Capacity Increase Targeted			**50**
Total Capacity Under Pursuit			**153**

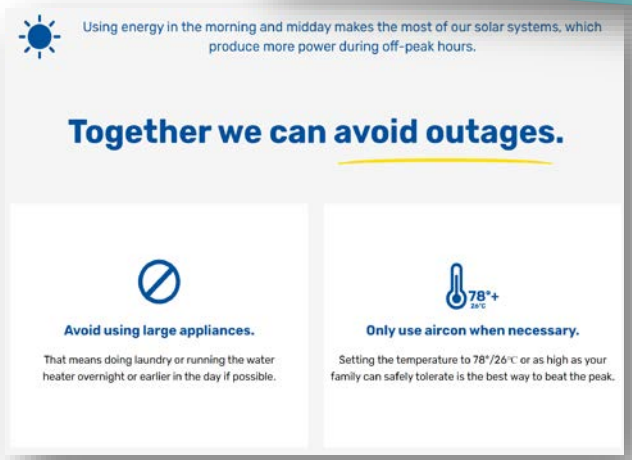
GPA has noted effort to end load shedding may take 6 to 9 months incremental improvements through the period.

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



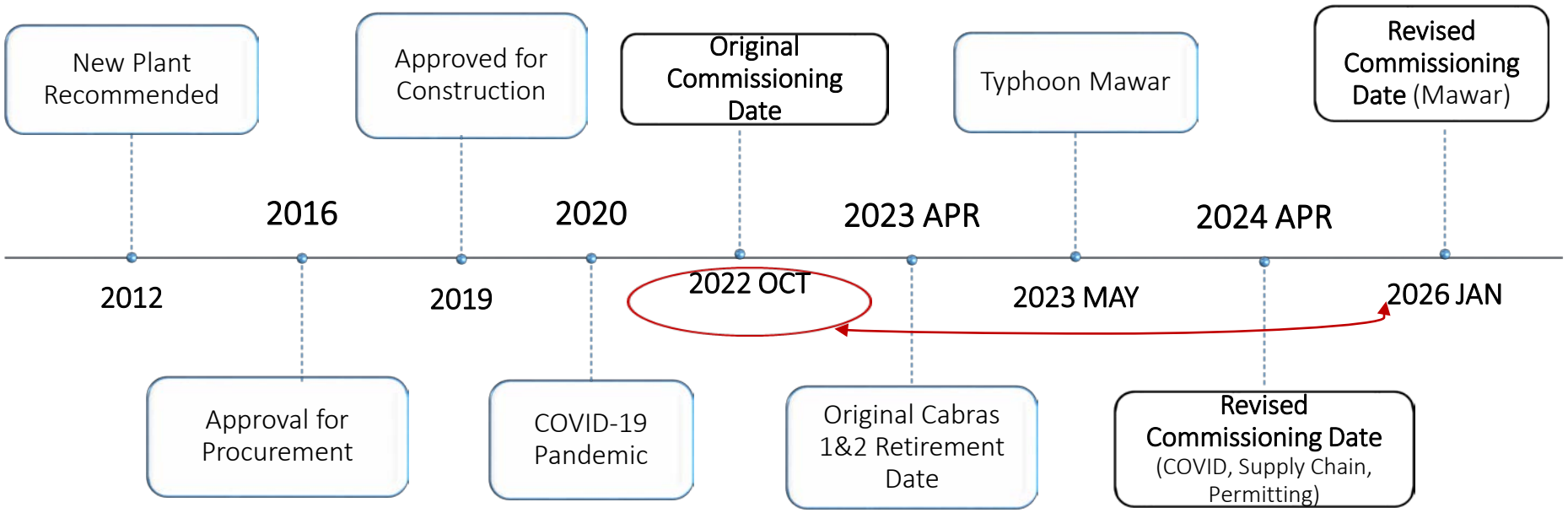
- Issue a Load Shedding Schedule for a month (Issued in October):
  - Explain when one or several 1-hour outages could occur
  - Issue capacity alert scenario as early as possible which triggers extend of outage



LONG-TERM GENERATION CAPACITY IN PROGRESS

NEW 198 MW UKUDU COMBINED CYCLE POWER PLANT

- This plant, which is under construction and scheduled for commissioning in 2024, has now been delayed to January 2026 due to damages sustained from Typhoon Mawar. This delay presents additional challenges for GPA to meet the demand over the next two years.
- The new plant will provide improved generation reliability and substantially reduce fuel operating costs once commissioned.
- The plant is a critical part of the USEPA-GPA Consent Decree which also requires the retirement of Cabras units 1&2 within 5 months of the Ukudu plant's commissioning.



LONG-TERM GENERATION SUPPLY

PHASE IV RENEWABLES BID

- Bids from proponents are due on November 6, 2023.
- This bid requests 180MW+ of renewable energy with energy shifting systems which would shift at least 50% energy production from daytime supply to nighttime supply to meet peak and reduce conventional unit production.
- Commissioning may take about 3 years from CCU & PUC approvals.
- The energy storage systems will help increase GPA generation capacity substantially.

HANWHA 60 MW SOLAR PV PLANT

- GPA had noted completion of this contract which was awarded in 2018 was tenuous due to huge escalation in transmission cost and have been working with contractor to agree on an acceptable solution in order to meet USEPA consent decree requirements.
- Resolution to amend this contract is before the CCU for consideration and subject to PUC approval.

VIRTUAL POWER PLANT BID

- Engineering technical analysis and work on bid specifications are ongoing. Team is analyzing best way to integrate smaller-sized renewable capacity into the grid.
- This bid is considering 20 MW capacity as the initial pilot bid.