



1 **RESOLUTION NO. 2024 - 29**

2 **RELATIVE TO APPROVAL OF THE PHASE IV RENEWABLE ENERGY**
3 **ACQUISITION AWARD TO KEPSCO-EWP-SUMSUNG C&T CONSORTIUM AND**
4 **CORE TECH SOLAR ENERGY, LLC FOR UP TO 192 MW OF RENEWABLE**
5 **ENERGY CAPACITY**
6

7 **WHEREAS**, GPA announced GPA Multi-Step Bid No: GPA-012-23 for 300,000,000 kWh
8 to 530,000,000 kWh of renewable energy in December 2022 as its Phase IV procurement for utility
9 scale renewables over 25 years with an option for 5 additional years; and

10 **WHEREAS**, the bids were opened in December 2023 and GPA received over 330 MW of
11 renewable solar PV capacity to generate a minimum of 612,000,000 kWh annually for 25 years. The
12 summary is attached in **Exhibit A**; and

13 **WHEREAS**, the procurement process to contract Phase IV renewables is now taking close to
14 two years before a contract is approved and signed. The process requires substantial time and
15 investments by both the bidders and GPA to complete a contract for a sustained Renewable Power
16 Purchase Agreement (REPA) for 25 years; and

17 **WHEREAS**, the construction environment on the island has historically affected project
18 construction costs and is anticipated to continue driving these costs significantly higher. Projects
19 have to compete with large, ongoing military buildup projects, which are expected to persist into the
20 next decade. Additionally, inflation has been substantial, and the lead time for material supplies has
21 increased significantly; and

22 **WHEREAS**, the Phase IV awards could result in providing about 173 MW in ESS load-
23 shifting capacity. This will help GPA meet the expected significant load growth by the end of the
24 decade. The estimated military growth, which could reach 100 MW by 2033, coupled with potential
25 increases in data centers and the use of electric vehicles, will cause significant increases in demand
26 in the coming years; and

27 **WHEREAS**, GPA originally solicited for energy to be 100% shifted through an Energy
28 Storage System (ESS) to non-daylight hours. Unfortunately, ESS costs have increased to a large
29 extent which resulted in GPA having to adjust its requirement to 50% shifting through an ESS with
30 a bid price cap of \$0.179/kWh; and

31 **WHEREAS**, several large and small projects were submitted by various bidders. Their prices
32 were all within the bid price cap of \$0.179/kWh which includes about \$0.07/kWh for energy-shifting
33 batteries which provide additional value to GPA compared with its existing contracts. Battery Energy
34 Storage Systems (BESS) are similar to conventional generators which could be operated at peak
35 demand periods. Therefore, the pricing as received are reasonable in comparison to existing contracts;
36 and

37 **WHEREAS**, the Renewable Energy Purchase Agreements allow a maximum of 1% annual
38 price escalation over the 25-year contract period; and

39 **WHEREAS**, GPA evaluated the bidders' priced proposals against GPA's variable operating
40 costs primarily made up of fuel costs. Bidders provided \$/MWh priced proposals for the energy,
41 including BESS and interconnection costs; and

42 **WHEREAS**, in December 2023, GPA obtained the price bids and determined KEPCO-EWP-
43 Samsung C&T Consortium and Core Tech Solar Energy, LLC to be qualified, responsive bidders
44 with two proposals totaling 192 MW of solar PV capacity and 97 MW/ 380 MWh of BESS as shown
45 in the table below; and

	PV Capacity	BESS Capacity
KEPCO-EWP-Samsung C&T Consortium	132 MWAC	67 MW / 260 MWh
Core Tech Solar Energy, LLC	60 MWAC	30 MW / 120MWh
Aggregate Capacities	192 MWAC	97MW / 380MWh

46

47 **WHEREAS**, GPA has determined that KEPCO-EWP-Samsung C&T Consortium and Core
48 Tech Solar Energy, LLC proposals would provide substantial savings to GPA over the term of the
49 contracts based on current and projected LEAC rates. **Exhibit B** provides a summary of the energy
50 priced proposals submitted by KEPCO-EWP-Samsung C&T Consortium and by Core Tech Solar
51 Energy, LLC; and

52 **WHEREAS**, GPA issued an intent to award all bidders, subject to the System Impact Study
53 results, without a change in price, and attaining CCU and PUC approval; and

54 **WHEREAS, Exhibit C** outlines the LEAC variance between adopting and not adopting the
55 Phase IV Renewable projects at various ULSD prices per barrel; and

56 **WHEREAS,** USLD fuel oil prices continue to rise and fluctuate. ULSD prices have reached
57 over \$150 per barrel within the past two years. In 2022, ULSD was at its highest price of \$186 per
58 barrel; and

59 **WHEREAS,** GPA considers renewable energy as an effective hedge against rising fuel oil
60 prices. The renewable energy projects will decrease GPA's importation of ULSD by about 800,000
61 barrels. The cash outflow from the island will be reduced by about \$93M annually which would be
62 a significant help for the island's economy. Ratepayers will no longer see the LEAC increase to
63 \$0.31/kWh as it did recently due to global events such as the war in Ukraine. A similar situation
64 would keep LEAC below \$0.20/kWh; and

65 **WHEREAS,** not awarding these contracts will likely not result in cost savings to ratepayers
66 and may instead result in higher energy bills and increased pricing for renewable energy. GPA needs
67 to invest in renewables to hedge against global events that could drive oil prices higher, potentially
68 reaching \$200 per barrel. The current geopolitical threats from countries such as China and North
69 Korea highlight the potential for significant volatility in future oil prices; and

70 **WHEREAS,** the current import of fuel oil totals about 3M barrels per year. The new Ukudu
71 198 MW power plant will reduce imports by about 879,000 barrels yearly. The award of all Phase
72 IV renewable projects would decrease imports by an additional 800,000 barrels. Guam has an
73 opportunity to reduce its import of oil to about 1.4M barrels in 2028 substantially reducing negative
74 rate impacts on our community; and

75 **WHEREAS,** renewable energy is sustainable energy and good for the island; and

76 **WHEREAS,** Public Law 29-62 sets renewable goals under the Renewable Portfolio
77 Standards (RPS) which mandated 50% renewables by 2035 and 100% by 2045. GPA has adopted a
78 goal of 50% renewables by 2030; and

79 **WHEREAS,** the award of 192 MW is projected to increase GPA's ratio of renewable energy
80 to sales up to 39% by 2028. **Exhibit D** is a projected RPS outlook; and

81 **WHEREAS,** the System Impact Study is an iterative and complicated process that determines
82 the required infrastructure for a seamless integration of the Phase IV projects to interconnect and
83 operate on the GPA electric grid system; and

84 **WHEREAS**, the System Impact Study will not change the bidders' priced proposals as all
85 costs associated with the required infrastructure, as determined by the study, will be the responsibility
86 of the bidder; and

87 **WHEREAS**, the bid documents allow the bidders to withdraw any proposal without penalty
88 if the bidder cannot comply with the System Impact Study within the bidders' priced proposals; and

89 **WHEREAS**, GPA would like to proceed with an approval to award a potential total of
90 330MW of renewable energy capacity contracts subject to the completion of the System Impact Study
91 and finalization of the bidders' draft REPAs and Interconnection Agreements; and

92 **WHEREAS**, prices agreed upon are time sensitive which is why a partial award of the Phase
93 IV bids is being pursued at this time. These two projects are significant and could be impacted by
94 inflationary and other costs, making them important to award as expeditiously as possible; and

95 **WHEREAS**, it is GPA's intent to bring all the other bids to CCU and PUC for their approvals
96 once these bidders have met System Impact Study requirements without a change in price. GPA is
97 hopeful the other bidders could be awarded within the next 4 to 6 months; and

98 **WHEREAS**, the award of all Phase IV bids would have GPA achieve a 50% renewables
99 portfolio by 2029 ahead of its targeted 2030 goal and well ahead of the mandated 2035 date.

100 **NOW, THEREFORE, BE IT RESOLVED, by the CONSOLIDATED COMMISSION**
101 **ON UTILITIES, as FOLLOWS:**

102 1. The CCU authorizes GPA to petition the PUC for approval to award Phase IV Renewable
103 Acquisition Bid of two proposals, totaling 192 MW, to KEPCO-EWP-Samsung C&T
104 Consortium and Core Tech Solar Energy, LLC as required under the PUC Procurement
105 Protocol.

106 //

107

108 //

109

110 //

111 **RESOLVED**, that the Chairman certifies and the Board Secretary attests to the adoption of
112 this Resolution.

113 **DULY AND REGULARLY ADOPTED AND APPROVED THIS 27TH DAY OF**
114 **AUGUST 2024.**

115
116 Certified by:

Attested by:

117
118 
119 _____
120 **JOSEPH T. DUENAS**
121 Chairperson

117
118 
119 _____
120 **PEDRO ROY MARTINEZ**
121 Secretary

122
123

124 **I, Pedro Roy Martinez**, Secretary for the Consolidated Commission on Utilities (CCU), as
125 evidenced by my signature above do certify as follows:

126 The foregoing is a full, true, and accurate copy of the resolution duly adopted at a regular meeting
127 of the members of Guam Consolidated Commission on Utilities, duly and legally held at a place
128 properly noticed and advertised at which meeting a quorum was present and the members who
129 were present voted as follows:

130
131 Ayes: 4

132
133 Nays: 0

134
135 Absent: 1

136
137 Abstain: 0

138

139 ///



EXHIBIT A

Phase IV Projects - Summary

Bidder	Size MWac	ESS Size MWdc	Village	Site
Mojave Marianas LLC	60	30 MW, 120 MWh	Inarajan	Near existing Dandan Solar
PEC and LMS	4.999	2.75 MW, 16.512 MWh	Harmon	Near Harmon Sub (Lot 101185-4)
PEC and LMS	4.999	2.75 MW, 16.512 MWh	Malojloj	Lot B-3REM-14-R2
PEC and LMS	4.999	2.75 MW, 16.512 MWh	Pulantat	Near Leo Palace (LOT 177-1-4 and LOT 177-1-R6)
PEC and LMS	4.999	2.75 MW, 16.512 MWh	Barrigada	Near Radio Barrigada Sub (LOT 2442-5, LOT 2442-6, and LOT 2442-7)
Core Tech Solar Energy, LLC	60	30 MW, 120 MWh	Ukudu	Near GWA Northern Water Treatment
KEPCO, EWP, and Samsung C&T Consortium	132	67 MW, 260 MWh	Yona	Cross-Island Road- Ylig River/ Paulana River area
Power Solutions and SK Ecoplant	26.4	15 MW, 88.064 MWh	Dededo	Guam International Country Club Golf Course
Power Solutions and SK Ecoplant	26.4	15 MW, 88.064 MWh	Dededo	Guam International Country Club Golf Course
Power Solutions and SK Ecoplant	4.4	2.75 MW, 16.512 MWh	Dededo	Guam International Country Club Golf Course
Power Solutions and SK Ecoplant	4.4	2.75 MW, 16.512 MWh	Yigo	LOT 7079-1-R2 and LOT 7079-1-1R/W

EXHIBIT B

Summary of Bid Proposals from KEPCO- EWP-Samsung C& T Consortium and Core Tech Solar Energy, LLC

KEPCO- EWP-Samsung C&T Consortium		
Contract Year	Annual Price (\$/MWH)	Guaranteed Net Annual Generation (MWH/YR)
1	178.9929	233,915
2	180.7828	235,062
3	182.5907	234,447
4	184.4166	233,863
5	186.2607	233,959
6	188.1233	232,699
7	190.0046	232,120
8	191.9046	231,543
9	193.8237	231,639
10	195.7619	230,393
11	197.7195	229,768
12	199.6967	229,198
13	201.6937	229,084
14	203.7106	227,857
15	205.7477	227,291
16	207.8052	226,727
17	209.8833	226,817
18	211.9821	225,604
19	214.1019	224,913
20	216.2429	224,356
21	218.4054	192,491
22	220.5894	191,823
23	222.7953	191,640
24	225.0233	191,457
25	227.2735	191,817

Core Tech Solar Energy, LLC		
Contract Year	Annual Price (\$/MWH)	Guaranteed Net Annual Generation (MWH/YR)
1	173.62	117,675
2	175.35	117,229
3	177.11	116,781
4	178.88	116,330
5	180.67	115,877
6	182.47	115,421
7	184.30	114,963
8	186.14	114,502
9	188.00	114,038
10	189.88	113,573
11	191.78	113,104
12	193.70	112,635
13	195.64	112,165
14	197.59	111,695
15	199.57	111,224
16	201.56	110,753
17	203.58	110,281
18	205.62	109,808
19	207.67	109,335
20	209.75	108,862
21	211.85	108,389
22	213.97	107,916
23	216.10	107,443
24	218.27	106,970
25	220.45	106,497

EXHIBIT C

LEAC Variance Without and With Phase IV Renewables at Various Fuel Prices

ULSD FUEL PRICE/BARREL	2024	2026	2027	2028	2029	2030
Without Phase IV @ \$100/Bbl	\$ 0.1856	\$ 0.1237	\$ 0.1236	\$ 0.1254	\$ 0.1268	\$ 0.1277
With Phase IV @ \$100/Bbl	\$ 0.1856	\$ 0.1237	\$ 0.1236	\$ 0.1323	\$ 0.1439	\$ 0.1448
Variance				(\$0.0069)	(\$0.0171)	(\$0.0171)

ULSD FUEL PRICE/BARREL	2024	2026	2027	2028	2029	2030
Without Phase IV @ \$120/Bbl	\$ 0.2197	\$ 0.1442	\$ 0.1443	\$ 0.1466	\$ 0.1483	\$ 0.1496
With Phase IV @ \$120/Bbl	\$ 0.2197	\$ 0.1442	\$ 0.1443	\$ 0.1484	\$ 0.1547	\$ 0.1563
Variance				(\$0.0018)	(\$0.0064)	(\$0.0067)

ULSD FUEL PRICE/BARREL	2024	2026	2027	2028	2029	2030
Without Phase IV @ \$150/Bbl	\$ 0.2710	\$ 0.1750	\$ 0.1752	\$ 0.1783	\$ 0.1806	\$ 0.1824
With Phase IV @ \$150/Bbl	\$ 0.2710	\$ 0.1750	\$ 0.1752	\$ 0.1726	\$ 0.1709	\$ 0.1737
Variance				\$0.0057	\$0.0097	\$0.0087

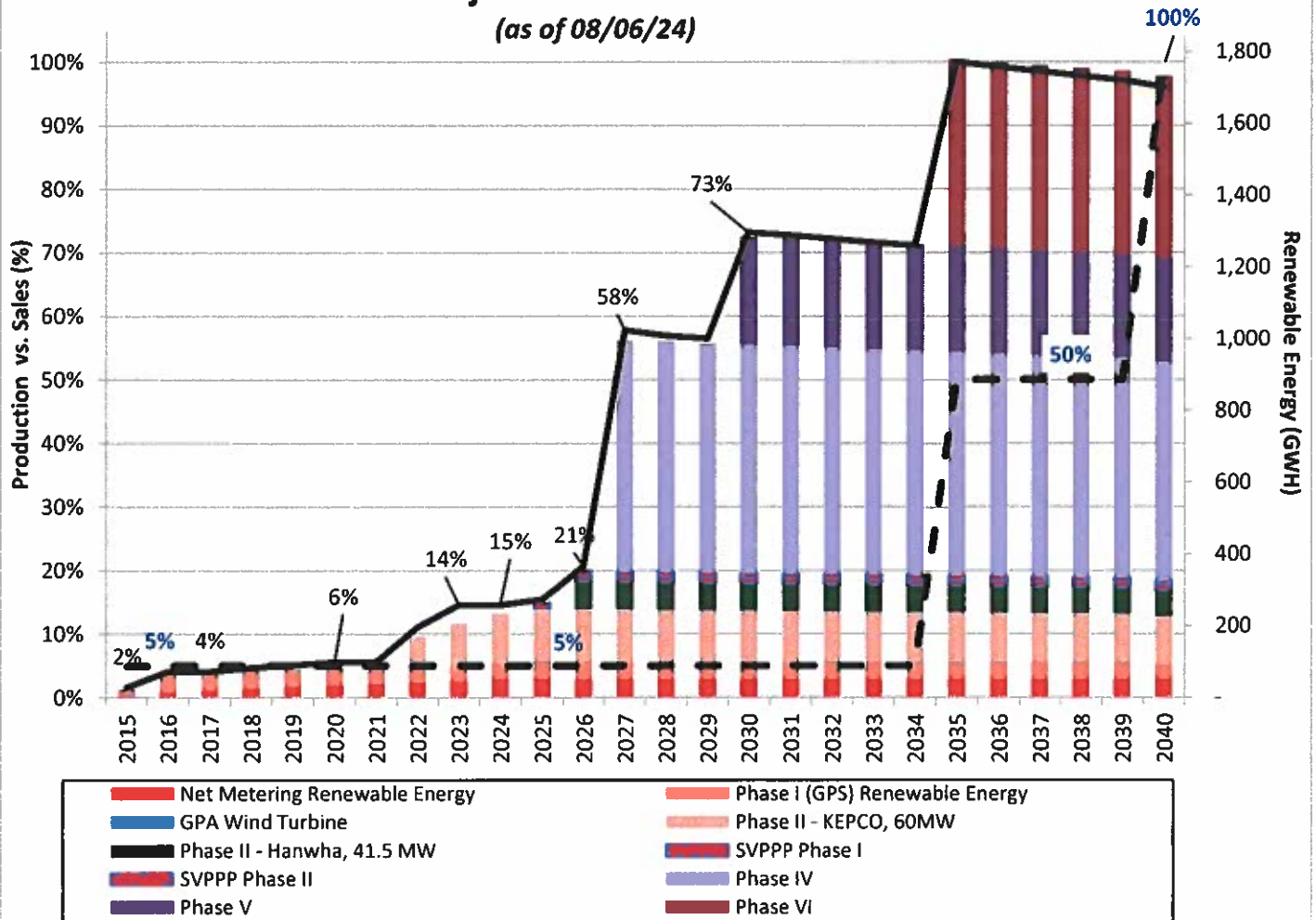
ULSD FUEL PRICE/BARREL	2024	2026	2027	2028	2029	2030
Without Phase IV @ \$175/Bbl	\$ 0.3137	\$ 0.2006	\$ 0.2010	\$ 0.2047	\$ 0.2075	\$ 0.2098
With Phase IV @ \$175/Bbl	\$ 0.3137	\$ 0.2006	\$ 0.2010	\$ 0.1928	\$ 0.1844	\$ 0.1881
Variance				\$0.0119	\$0.0231	\$0.0217

ULSD FUEL PRICE/BARREL	2024	2026	2027	2028	2029	2030
Without Phase IV @ \$200/Bbl	\$ 0.3564	\$ 0.2262	\$ 0.2268	\$ 0.2311	\$ 0.2344	\$ 0.2371
With Phase IV @ \$200/Bbl	\$ 0.3564	\$ 0.2262	\$ 0.2268	\$ 0.2130	\$ 0.1979	\$ 0.2026
Variance				\$0.0181	\$0.0365	\$0.0345

EXHIBIT D

Renewable Portfolio Standards Outlook

Renewable Portfolio Standards (RPS) Tracking Projection thru 2040 (as of 08/06/24)



GPA Resolution No. FY2024-29

Relative to Approval of the Phase IV Renewable Energy Acquisition Award to KEPCO-EWP- Samsung C&T Consortium and Core Tech Solar Energy, LLC for up to 192MW of Renewable Energy Capacity

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

GPA intends to meet its 2030 IRP goals and comply with the Renewable Portfolio Standards (RPS), as mandated by Public Law 29-62, with the Phase IV projects. In December 2023, GPA issued proposals in response to its Multi-Step Invitation For Bid (MS IFB) No: GPA-012-23; totaling over 330MW of renewable energy resource capacity with energy storage systems (ESS) for peak shifting. KEPCO-EWP-Samsung C&T Consortium and Core Tech Solar Energy, LLC are two (2) of five (5) responsive bidders that have submitted proposals that have been determined to qualify based on bid requirements and submit price proposals to be within the purchase cap of \$0.179/kWh. The signing of a contract is time sensitive to KEPCO which requires government approval for their contract. Contract includes construction of 115kV transmission line which is sensitive to price increases since the price proposal was submitted in December 2023, nearly nine months ago. GPA requests that this award be the first of a series of awards to be recommended over likely the next six months as each of the remaining bidders listed agree to installing the infrastructure delineated by the System Impact Study with no change in bid price.

GPA and KEPCO-EWP-Samsung C&T Consortium have substantially completed negotiations on commercial terms and conditions of the Renewable Energy Purchase Agreements (REPA) of which was drafted and provided within the bid. Upon finalization of the final contract, GPA seeks approval to submit KEPCO-EWP-Samsung C&T Consortium's REPA to the PUC for their approval. Copy of negotiated contract to be provided to the CCU upon completion.

GPA and Core Tech Solar Energy, LLC are in negotiations on commercial terms and conditions of the Renewable Energy Purchase Agreements (REPA) drafted and provided within the bid. Final contract must not increase price or transfer liabilities of the project to GPA. Upon completion of negotiations, GPA seeks approval to submit Core Tech Solar Energy, LLC's REPA to the PUC for their approval. Copy of the final contract to be provided to the CCU upon completion.

Where is the location?

The KEPCO-EWP-Samsung C&T Consortium solar project will be located at Cross Island Road, Santa Rita near the Ylig River/Paulana River area. The Core Tech Solar Energy, LLC solar project will be located at Ukudu area, near the GWA Northern District Water Treatment Plant.

How much will it cost?

Please see attached tables.

When will it be completed?

The agreements are both for 25-year terms.

What is its funding source?

Funding source is LEAC



GPA Resolution No. FY2024-29

Relative to Approval of the Phase IV Renewable Energy Acquisition Award to KEPCO-EWP- Samsung C&T Consortium and Core Tech Solar Energy, LLC for up to 192MW of Renewable Energy Capacity

Summary of Bid Proposals from KEPCO- EWP-Samsung C& T Consortium and Core Tech Solar Energy, LLC

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8	191.90	231,543
9	193.82	231,639
10	195.76	230,393
11	197.72	229,768
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13	201.69	229,084
14	203.71	227,857
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11	191.78	113,104
12	193.70	112,635
13	195.64	112,165
14	197.59	111,695
15	199.57	111,224
16	201.56	110,753
17	203.58	110,281
18	205.62	109,808
19	207.67	109,335
20	209.75	108,862
21	211.85	108,389
22	213.97	107,916
23	216.10	107,443
24	218.27	106,970
25	220.45	106,497





**POWERING FORWARD
CLEAN ENERGY MASTER PLAN**

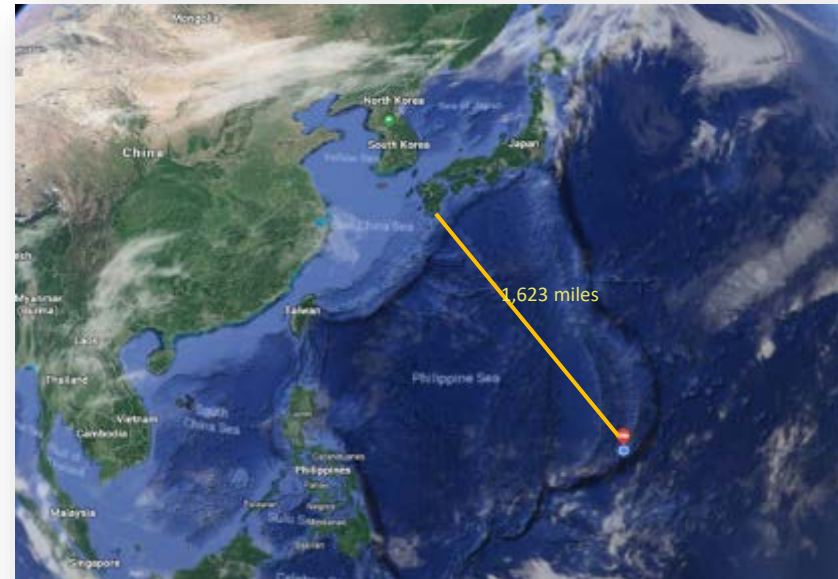
**AWARD OF
PHASE IV RENEWABLE ENERGY BID**

CONSOLIDATED COMMISSION ON UTILITIES

August 22, 2024

GPA HQ | Fadian, Mangilao

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



52,642

Total Meters¹

\$554M

in Revenues¹

257 MW

in Peak Demand¹

351.4 MW

Oil Fire
Generation

85.3 MW

Renewable
Generation

\$856M

in Assets

1.4M MWh

in Energy Sales¹

29 Substations

Conversion to indoor
type underway

1,839 Miles

Combined Transmission
& Distribution Lines

1. For fiscal year September 30, 2023



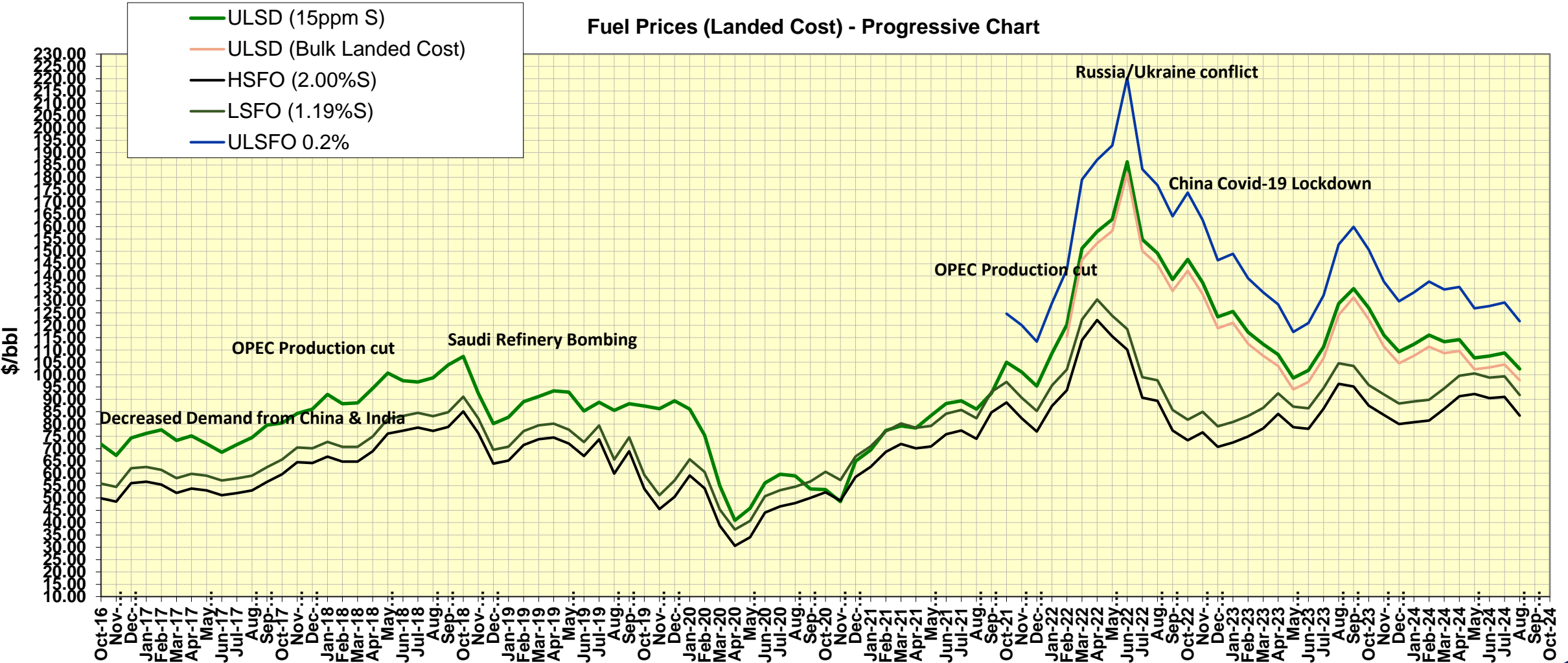
GUAM FUEL PRICES IMPACTED BY GEOGRAPHICAL & POLITICAL CONFLICTS

GPA Fuel Landed Cost (Per Barrel as of August 22, 2024)

ULSRFO 0.2% \$121.65

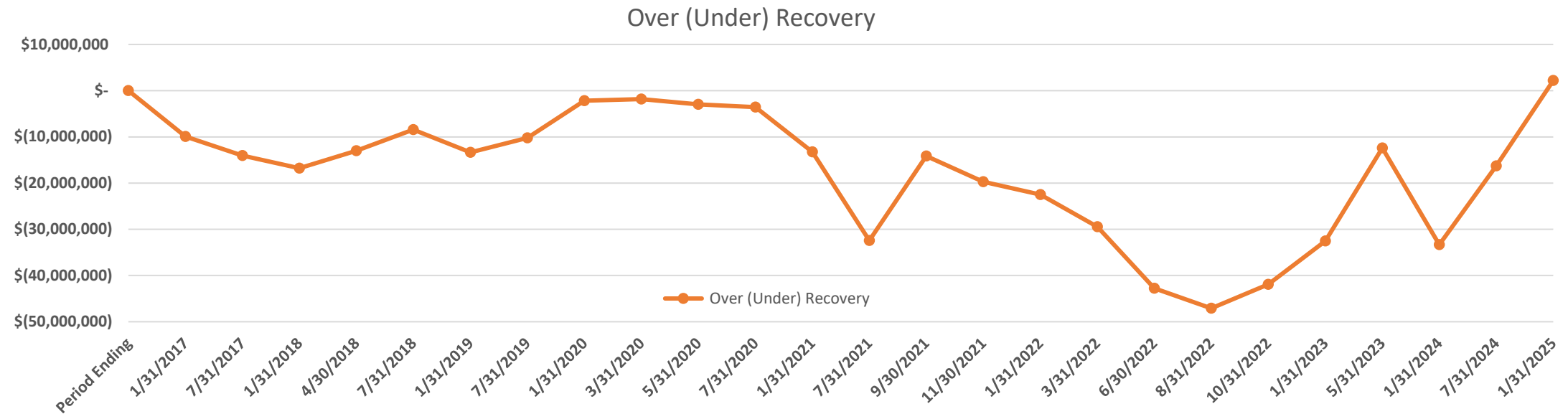
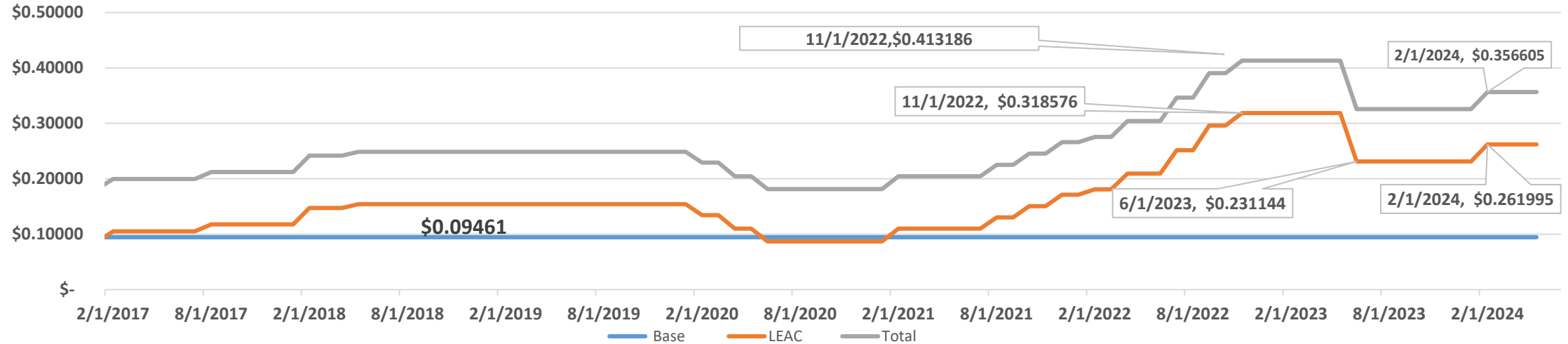
ULSD Bulk \$97.71

Fuel Prices (Landed Cost) - Progressive Chart



HISTORIC LEAC ADJUSTMENTS

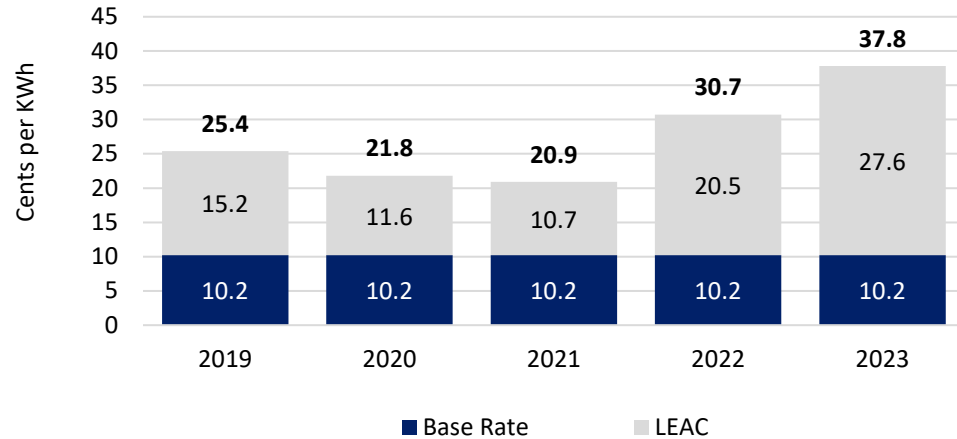
GPA recovers fuel related costs through the semi-annual Levelized Energy Adjustment Clause (LEAC) which recently has been highest in GPA history. Base rate has not changed since 2013



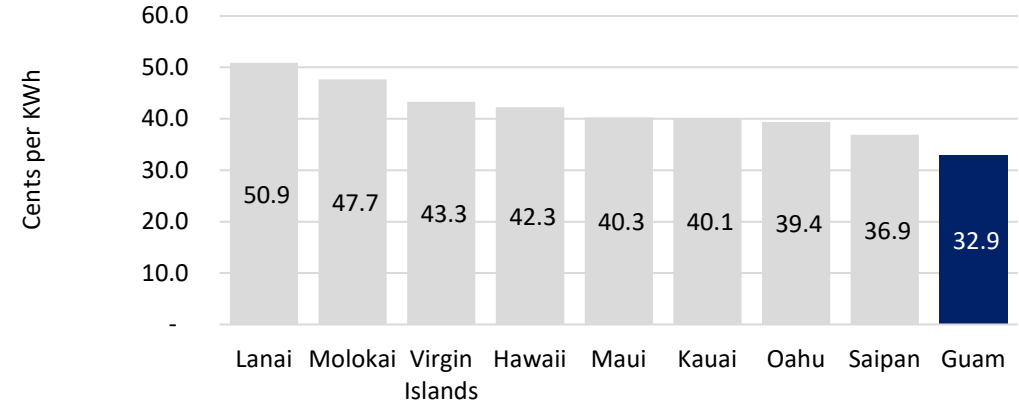
GPA RATE STRUCTURE

GPA recovers fixed costs through its Base Rate, fuel costs through the semi-annual Levelized Energy Adjustment Clause (LEAC), and any cost recovery through available surcharges

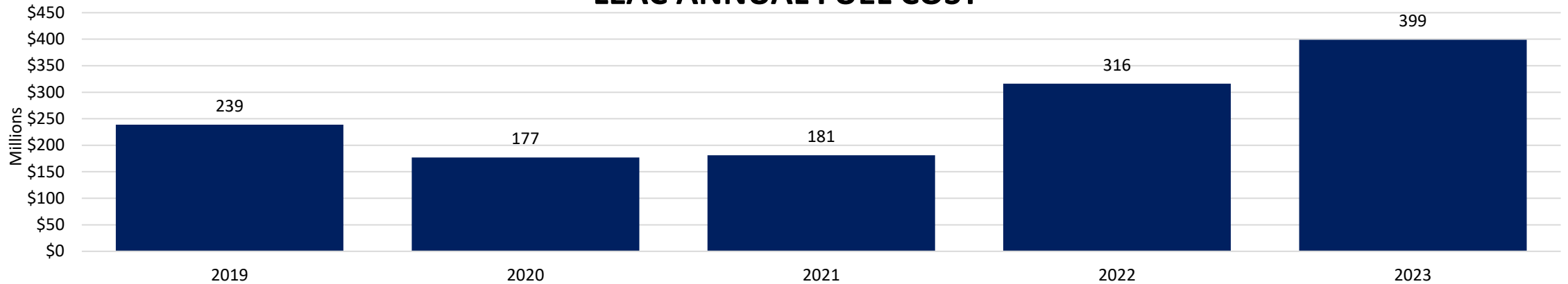
GPA System Average Rates (Fiscal Year)



Residential Rate Comparison¹



LEAC ANNUAL FUEL COST



Source: Guam Power Authority

1. Rates for Guam as of December 1, 2023; Rates for Kauai, Oahu, Molokai, Lanai, Hawaii and Maui as of December 1, 2023; Rates for Saipan as of December 1, 2023; and Rates for Virgin Islands as of March 1, 2022.





Ukudu Power Plant 198 MW Combined Cycle *Cornerstone for Renewables*



Dual Fuel (Ultra-Low Sulfur Diesel and Liquefied Natural Gas)



51% Thermal Efficiency (GPA's most efficient conventional plant)



Decreases fuel oil import by 879,000 barrels per year



Utilizes treated wastewater for boiler and condenser cooling – No thermal discharge to the ocean



Highly Reliable; Includes 25MW Energy Storage Battery



Independent Power Producer (IPP) 25-year Contract with GUP

NEW RENEWABLE ENERGY GENERATION

Fossil-free living with the power of solar and wind

Dandan Solar 25 MW – Ph I



2015

Wind 275 kW



2016

**KEPCO Mangilao Solar 60 MW
+ BESS 32 MW – Ph II**



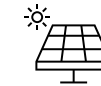
2021

2023

Phase IV

Renewable Energy Bid received 5 bids totaling approximately 333 MW

Awards may be issued in 2024



2026



**Hagåtña 24 MW
Energy Storage Batteries**



**Talofofu BESS 16 MW
Frequency Regulation**



**41 MW utility-scale
solar farm**

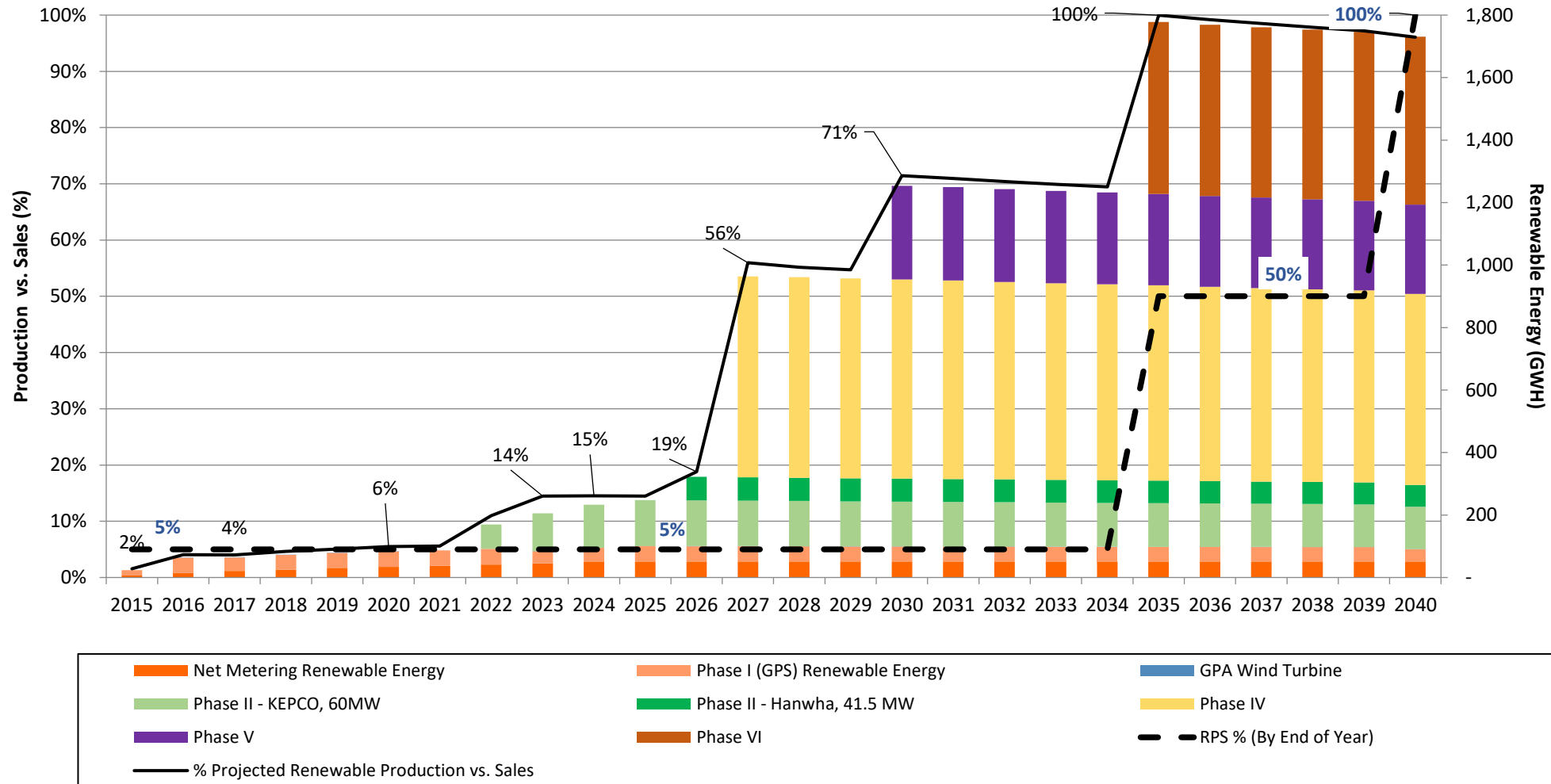
**Load shifting battery
22MW/66MWH**

Hanwha 41 MW Solar – Ph II

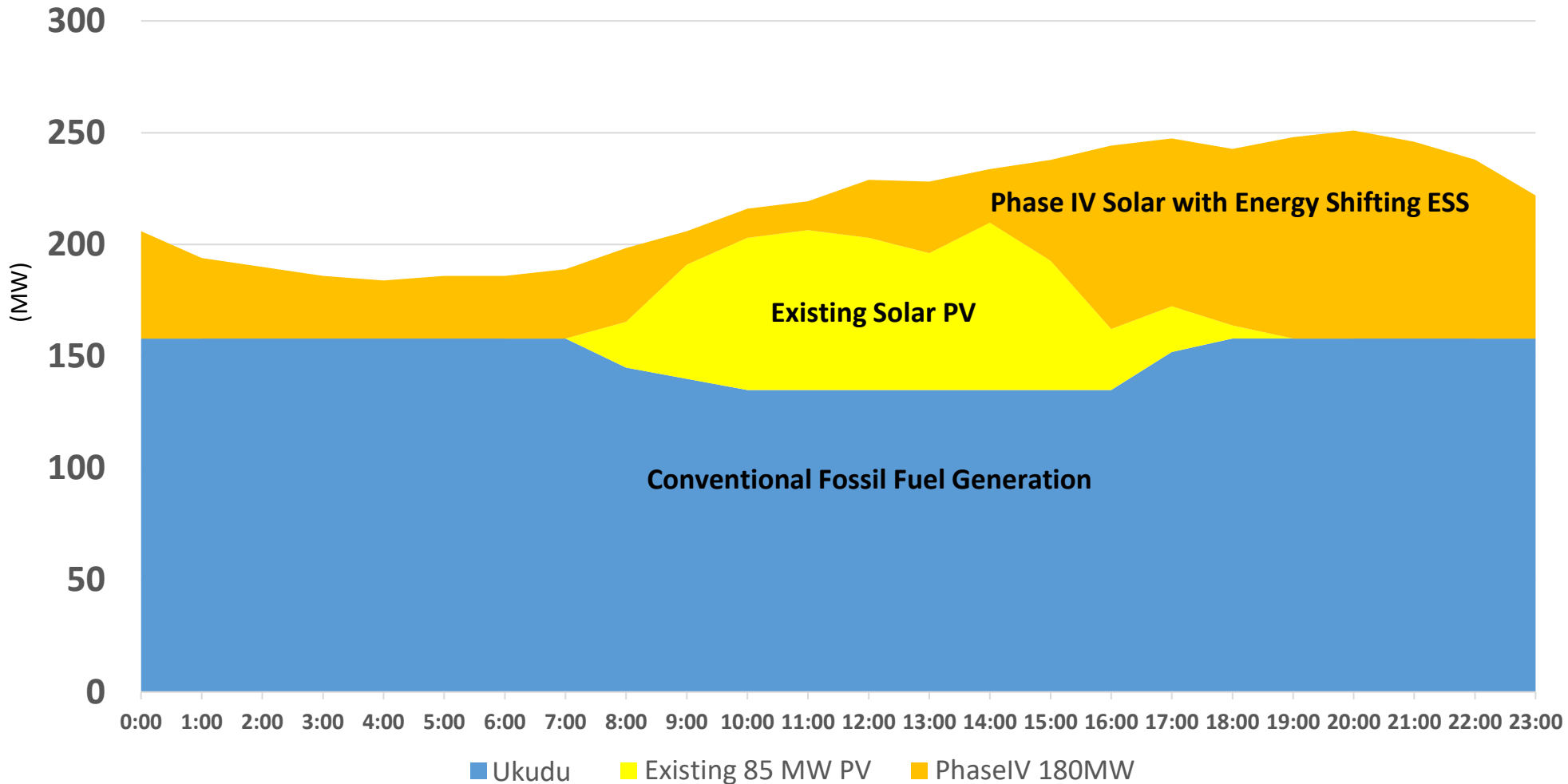
Photo Source: Guam Power Authority, pncguam.com, secc.co.kr



Renewable Portfolio Standards (RPS) Tracking Projection thru 2040 (as of 04/05/24)



Daily Energy Dispatch in 2027



ANNUAL FUEL OIL IMPORTS

CY 2023
3.0 MBbls.
approximate



CY 2028
1.3 MBbls.
projected

SIGNIFICANT PROGRESS IN ENERGY GENERATION, SHIFTING, & CAPACITY

		Contract Type	Capacity (MW)		
			July 2024	July 2026	July 2028
PRIMARY GENERATION	Cabras 1&2	Owned	84	Retired	
	Piti 8&9	Owned	86.4	86.4	86.4
	Piti 7	Owned	40	40	40
	Macheche CT	Owned	20	20	20
	Yigo CT	Owned	20	20	20
	Dededo 1&2 CT	Owned	40	40	40
	Diesel Units (4MW)	Owned	33	40	40
	Yigo Diesels (1MW)	Owned	8	Retired	
	Aggreko Temp Diesels (0.8MW)	Temporary Svc	20	-	
	Tenjo Annex Diesels (1MW)	Owned	-	20	20
	Ukudu Power Plant	IPP (25 Yrs)	-	198	198
		Total Primary Capacity	351.4	464.4	464.4
RENEWABLE GENERATION	Dandan Solar	PPA (11 Yrs)	25	25	25
	Mangilao Solar	PPA (23 Yrs)	60	60	60
	Wind Turbine	Owned	0.3	0.3	0.3
	Phase II/Hanwha Contract*	PPA (25 Yrs)	-	41	41
	Phase IV Bid – Potential Award*	PPA (25 Yrs)	-	-	330
			Total Renewable Capacity	85.3	126.3
ESS SHIFTING	Dandan ESS Shifting		4	4	4
	Phase II/Hanwha ESS Shifting*	PPA (25 Yrs)	-	22	22
	Phase IV Bid – ESS Shifting*	PPA (25 Yrs)	-	-	150
			Total ESS Shifting Capacity	4	26
		TOTAL PRIMARY & ESS SHIFTING CAPACITY	355.4	490.4	640.4
		Projected Peak Demand	260	270	289
		% Reserves	36.7%	81.6%	127.9%
		Est. Capacity Available for Growth	(11.6)	66.4	205.4

*Phase II Hanwha contract & Phase IV bid proposals include solar PV with ESS shifting capabilities. For illustrative purposes, the solar PV and ESS shifting capacity are shown separately here.



Bid Announcement	December 1, 2022
Question/Answer Period	December 1, 2022 - August 14, 2023
Submittal of Technical Proposal and Price*	November 6, 2023
Technical Proposal Review and Notification of Qualified Bidders	November 8 - December 5, 2023
Opening of Price Proposal of Qualified Bidders	December 20, 2023
Price Evaluation and Notification of Successful Bidders	December 20 - 29, 2023
System Integration Study Agreed to and Paid by Successful Bidders	February 8 - August 22, 2024 (continuing)
Contract Finalization	In Progress. Acceptable draft contract provided by GPA.
CCU Approval for Initial Proponents accepting SIS infrastructure requirement without change in price <i>CCU Resolution FY2024-29</i>	August 27, 2024 (target)
PUC Approval of CCU Resolution FY2024-29	September 30, 2024 (target)
CCU Approval of Additional Proponents	TBD (Rolling process as SIS and contract finalization are completed)
PUC Approval of Additional Proponents	One Month after CCU Approval

**Price proposals remained sealed until determination of bidder qualifications*

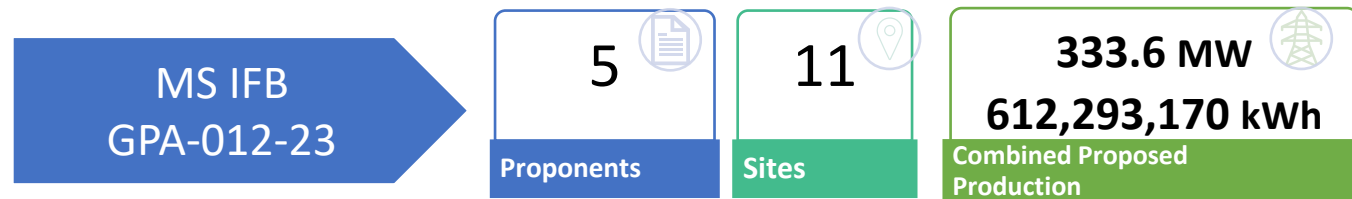
NOTE: PROCUREMENT PROCESS HAS TAKEN 21 MONTHS TO DATE; PRICING NOW AT 8 MONTHS VALIDITY AND TIME SENSITIVE



MS IFB GPA-012-23 - PHASE IV RENEWABLES BID SUMMARY

	PROPONENT	1st. Year Price	ANNUAL kWh	AMOUNT	MW Capacity	ESS MW	ESS MWh	LOCATION
①	Mojave	\$ 0.150000	113,641,000	\$ 17,046,150	60.0	30.00	120.0	Dandan
②	Core Tech Solar	\$ 0.173618	114,545,000	\$ 19,887,061	60.0	30.00	120.0	Harmon
③	KEPCO/EWP/Samsung	\$ 0.178990	216,055,000	\$ 38,671,684	132.0	67.00	260.0	Cross Island Rd.
④	Power Solutions/SK	\$ 0.179000	58,105,000	\$ 10,400,795	26.4	15.00	88.1	Dededo
	Power Solutions/SK	\$ 0.179000	58,093,000	\$ 10,398,647	26.4	15.00	88.1	Dededo
	Power Solutions/SK	\$ 0.179000	9,655,000	\$ 1,728,245	4.4	2.75	16.5	Dededo
	Power Solutions/SK	\$ 0.179000	9,367,000	\$ 1,676,693	4.4	2.75	16.5	Yigo
⑤	PEC/LMS	\$ 0.179000	8,342,210	\$ 1,493,256	5.0	2.75	16.5	Harmon
	PEC/LMS	\$ 0.179000	8,411,420	\$ 1,505,644	5.0	2.75	16.5	Malojloj
	PEC/LMS	\$ 0.179000	7,658,520	\$ 1,370,875	5.0	2.75	16.5	Pulantat
	PEC/LMS	\$ 0.179000	8,420,020	\$ 1,507,184	5.0	2.75	16.5	Barrigada

Phase IV Totals: \$ 0.172607 612,293,170 \$105,686,234 333.6 173.5 775.2



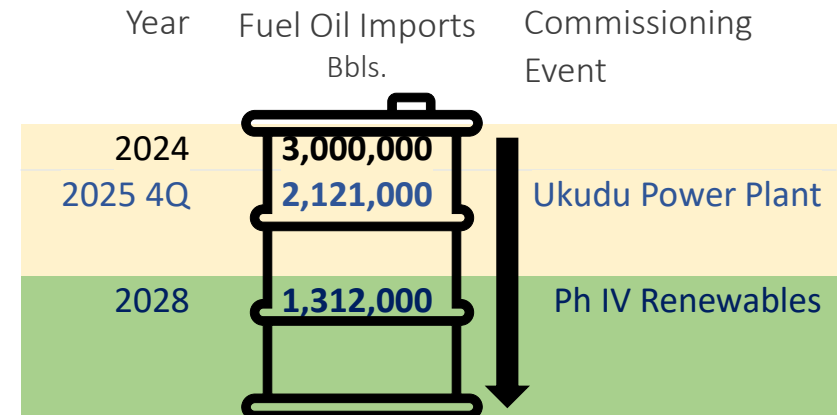
PROPOSALS SUBMITTED IN RESPONSE TO THE PHASE IV RENEWABLE ENERGY BID TOTALS 333.6MW

ACHIEVING THE RENEWABLE PORTFOLIO STANDARD MANDATE

- **GPA IS MANDATED TO ACHIEVE 50% RENEWABLES BY 2035.** If all proponents are awarded, GPA will achieve the RPS mandate by 2028.
- **The award of the proposals provide clear benefits for GPA and its ratepayers.** The government procurement process is burdensome and time-consuming. The current bid is nearing two years since announcement. Delaying awards will negatively impact ratepayer costs.

REDUCING GUAM'S ENERGY COSTS & CARBON FOOTPRINT

- **ULSD fuel oil prices will continue to rise and fluctuate** because it is a global commodity significantly impacted by global events. Every historic global and/or political event resulted in the slope of fuel prices maintaining an upward price trend.
- The price of ULSD prices has reached \$150+ per barrel within the past two years, soaring to \$186/Bbl. in 2022.
- **While GPA cannot control global fuel prices, efforts to reduce its fuel consumption significantly benefits ratepayers.**
 - The commissioning of the Ukudu Power Plant and Phase IV Renewables will reduce GPA fuel imports by ~56%.
 - The impact of global events, the perennial nemesis of GPA ratepayers, will have been reduced more than half.
 - **This paradigm shift in Guam energy generation and fuel sources will continue further as GPA continues to pursue renewables beyond 50%**



ACHIEVING OVERALL VALUE & AFFORDABILITY

- **The award of the Phase IV proposals will provide an excellent hedge against high ULSD fuel prices.**
 - GPA has used fuel oil hedging in past years to no success despite the assistance of hedging consultants.
 - GPA sets the annual escalator at no more than 1%, making these renewable energy contracts an excellent hedge. This condition protects ratepayers from having to see LEAC reach the high 20¢/kWh and into the 30¢/kWh range as it recently did.
- **GPA power purchase agreements add value to large tracts of land which are otherwise difficult to develop.**
 - As GPA enters more renewable energy contracts, the prices of large land tracts will likely increase because of their added value for energy production. However, large tracts with varying terrain and topography requiring substantial grading to install solar components will drive land and contract prices higher.
 - The award of the Phase IV proposals are time sensitive as proponents have limited land option contracts. Failure to issue timely awards jeopardize the feasibility and costs of these projects if the proponent's land options expire.
- **T&D infrastructure upgrades, although initially costly, improves the grid and prepares it for expansion.**
 - Limitations of existing transmission infrastructure are constraining low-cost utility-scale project sites.
 - Upgrades to 115 kV lines are becoming the norm and could cost upwards of \$0.02/kWh to install. As more higher voltage transmission lines are added into the grid, more and more renewables at lessor price could be added without additional expenses.
- **Energy Storage Systems (ESS) are required to shift daytime solar energy to non-daylight hours.**
 - ESS capable of 50% shifting increases renewable energy project pricing by about \$0.07/kWh, while a 100% shifting requirement raise the energy pricing over \$0.20/kWh.
 - The Phase IV bid required 50% energy shifting and a price cap of \$0.179/kWh.

IMPROVING ENERGY RELIABILITY, RESILIENCY, & READINESS

- **Energy Storage Systems provide reserve capacity to meet peak loads and future load growth.**
 - ESS provides reserve capacity, allowing GPA to reduce conventional reserve units and reduce cost.
 - DoD has noted their potential growth will raise their power requirements to 100+MW, compared to about 42MW in 2024.
 - Capacity to serve other growth areas, such as data centers, electric vehicles, island housing, etc., could be met by the ESS capabilities delivered by Phase IV projects.
- **Responding to the INDOPACOM threats and conflicts requires GPA ramp up its resiliency and reliability capacities.**
 - Having 50% of all the island's energy serve by renewables by 2028 is significant progress towards achieving resiliency.
 - The reduction of energy from conventional plants increases our inventory capacity from 90 days to several months to sustain energy sustainability.

Note: On December 29, 2023, GPA issued to all proponents Notices of Intent to Award subject to their agreement and compliance with the system impact study infrastructure requirements (to be conducted for their technical proposals) with no change in bid price and further subject to CCU and PUC approvals.

GPA recommends an initial award (Phase IV-A) of MS IFB GPA-012-23 totaling 192 MW of solar PV renewable energy to the following two proponents:

1. Core Tech Solar Energy, LLC
2. KEPCO-EWP-Samsung C&T Consortium

- ✓ Proponents have agreed to implement the recommendation of the system impact study with no change in bid price.
- ✓ It has been indicated that an award is time sensitive due to escalating project cost which could make a contract not economically feasible.

PROPONENT	1st. Year Price	ANNUAL kWh	AMOUNT	MW Capacity	ESS MW	ESS MWh	LOCATION
Core Tech Solar	\$ 0.173618	114,545,000	\$ 19,887,061	60	30	120	Harmon
KEPCO/EWP/Samsung	\$ 0.178990	216,055,000	\$ 38,671,684	132	67	260	Cross Island Rd.
Ph IV Awards (Pt 1) Totals:	\$ 0.177129	330,600,000	\$ 58,558,745	192	97	380	

- *GPA requests that this award be the first of a series of awards to be recommended over likely the next six months as each of the remaining bidders listed agree to installing the infrastructure delineated by the System Impact Study with no change in bid price.*
- *As noted earlier, GPA recommends awarding a contract to all the proponents qualified in the Phase IV bid.*



PROJECTED LEAC WITHOUT PHASE IV AWARD

0.2% S LSRFO \$/BBL	\$150											
ULSD \$/BBL	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120
LNG (\$/BBL Equivalent)												\$84

CALENDAR YEAR **2024** **2026** **2027** **2028** **2029** **2030**

Fuel Type	LSRFO/ULSD/Solar PV		ULSD/Solar PV Ukudu 198MW Commissioned Hanwha Ph II Commissioned		ULSD/Solar PV		ULSD/Solar PV		ULSD/Solar PV		ULSD/Solar PV/LNG Ukudu Steam Turbine O/H LNG Alternative	
	Net Production	Annual Cost	Net Production	Annual Cost	Net Production	Annual Cost	Net Production	Annual Cost	Net Production	Annual Cost	Net Production	Annual Cost
GPA Conventional												
Ukudu New 198MW			1,285,678,568	\$183,668,367	1,364,723,154	\$194,960,451	1,364,723,154	\$194,960,451	1,364,723,154	\$194,960,451	1,364,723,154	\$194,960,451
Cabras 1&2 0.2% LSRFO	512,000,000	\$140,659,341	-	-	-	-	-	-	-	-	-	-
Piti 8&9 ULSD	602,000,000	\$110,967,742	113,000,000	\$20,829,493	113,000,000	\$20,829,493	177,044,586	\$32,634,947	256,089,172	\$47,205,377	335,133,758	\$61,755,808
Total Baseload	1,114,000,000	\$251,627,083	1,398,678,568	\$204,497,860	1,477,723,154	\$215,789,944	1,541,767,740	\$227,595,397	1,620,812,326	\$242,165,828	1,699,856,912	\$256,736,259
Total Non-Baseload Units	307,391,609	\$79,841,976	10,000,000	\$2,597,403	10,000,000	\$2,484,472	25,000,000	\$5,952,381	25,000,000	\$5,952,381	25,000,000	\$5,952,381
GPA Renewables												
GlidePath PV I \$0.215/kWh	54,000,000	\$11,610,000	54,000,000	\$11,842,200	54,000,000	\$11,961,000	54,000,000	\$12,079,800	54,000,000	\$12,204,000	54,000,000	\$11,610,000
KEPCO PV II \$0.0867/kWh	141,912,000	\$12,303,770	141,912,000	\$12,559,212	141,912,000	\$12,672,742	141,912,000	\$12,800,462	141,912,000	\$12,928,183	141,912,000	\$13,055,904
Hanwha PV II \$0.143/kWh			79,000,000	\$11,297,000	79,000,000	\$11,407,600	79,000,000	\$11,526,100	79,000,000	\$11,636,700	79,000,000	\$11,755,200
Ph IV-A 192MW \$0.177/kWh												
Ph IV-B 141MW \$0.167/kWh												
Ph V VPP & Other \$0.17/kWh												
Total GPA Renewables	195,912,000	\$23,913,770	274,912,000	\$35,698,412	274,912,000	\$36,041,342	274,912,000	\$36,406,362	274,912,000	\$36,768,883	274,912,000	\$36,421,104
Total Conventional	1,421,391,609	\$331,469,059	1,408,678,568	\$207,095,263	1,487,723,154	\$218,274,416	1,566,767,740	\$233,547,778	1,645,812,326	\$248,118,209	1,724,856,912	\$262,688,639
Net Metering kWh	54,312,000		55,398,240		56,506,205		57,636,329		58,789,055		59,964,837	
Conventional \$/kWh		\$0.2332		\$0.1470		\$0.1467		\$0.1491		\$0.1508		\$0.1523
Renewables \$/kWh		\$0.1221		\$0.1299		\$0.1311		\$0.1324		\$0.1337		\$0.1325
System Production Cost		\$355,382,829		\$242,793,675		\$254,315,757		\$269,954,141		\$284,887,092		\$299,109,743
System \$/kWh		\$0.2197		\$0.1442		\$0.1443		\$0.1466		\$0.1483		\$0.1496
% Renewable Energy		15.0%		19.0%		18.2%		17.5%		16.9%		16.3%

Updated August 2024



PROJECTED LEAC WITH PHASE IV AWARD

0.2% S LSRFO \$/BBL	\$150											
ULSD \$/BBL	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120	\$120
LNG (\$/BBL Equivalent)												\$84

CALENDAR YEAR	2024		2026		2027		2028		2029		2030	
Fuel Type	LSRFO/ULSD/Solar PV		ULSD/Solar PV Ukudu 198MW Commissioned Hanwha Ph II Commissioned		ULSD/Solar PV		ULSD/Solar PV Ph IVA 192MW Commissioned		ULSD/Solar PV Ph IVB 141 Commissioned		ULSD/Solar PV/LNG Ukudu Steam Turbine O/H LNG Alternative	
	Net Production	Annual Cost	Net Production	Annual Cost	Net Production	Annual Cost	Net Production	Annual Cost	Net Production	Annual Cost	Net Production	Annual Cost
GPA Conventional												
Ukudu New 198MW			1,285,678,568	\$183,668,367	1,364,723,154	\$194,960,451	1,206,167,740	\$172,309,677	828,319,156	\$118,331,308	852,363,742	\$121,766,249
Cabras 1&2 0.2% LSRFO	512,000,000	\$140,659,341			-	-	-	-	-	-	-	-
Piti 8&9 ULSD	602,000,000	\$110,967,742	113,000,000	\$20,829,493	113,000,000	\$20,829,493	20,000,000	\$3,686,636	20,000,000	\$3,686,636	60,000,000	\$11,059,908
Total Baseload	1,114,000,000	\$251,627,083	1,398,678,568	\$204,497,860	1,477,723,154	\$215,789,944	1,226,167,740	\$175,996,313	848,319,156	\$122,017,944	912,363,742	\$132,826,157
Total Non-Baseload Units	307,391,609	\$79,841,976	10,000,000	\$2,597,403	10,000,000	\$2,484,472	10,000,000	\$2,380,952	10,000,000	\$2,380,952	25,000,000	\$5,952,381
GPA Renewables												
GlidePath PV I \$0.215/kWh	54,000,000	\$11,610,000	54,000,000	\$11,842,200	54,000,000	\$11,961,000	54,000,000	\$12,079,800	54,000,000	\$12,204,000	54,000,000	\$11,610,000
KEPCO PV II \$0.0867/kWh	141,912,000	\$12,303,770	141,912,000	\$12,559,212	141,912,000	\$12,672,742	141,912,000	\$12,800,462	141,912,000	\$12,928,183	141,912,000	\$13,055,904
Hanwha PV II \$0.143/kWh			79,000,000	\$11,297,000	79,000,000	\$11,407,600	79,000,000	\$11,526,100	79,000,000	\$11,636,700	79,000,000	\$11,755,200
Ph IV-A 192MW \$0.177/kWh							330,600,000	\$58,549,260	330,600,000	\$59,134,753	330,600,000	\$59,739,420
Ph IV-B 141MW \$0.167/kWh									281,693,170	\$47,127,267	281,693,170	\$47,606,146
Ph V VPP & Other \$0.17/kWh									175,200,000	\$29,784,000	175,200,000	\$30,081,840
Total GPA Renewables	195,912,000	\$23,913,770	274,912,000	\$35,698,412	274,912,000	\$36,041,342	605,512,000	\$94,955,622	1,062,405,170	\$172,814,903	1,062,405,170	\$173,848,510
Total Conventional Net Metering kWh	1,421,391,609	\$331,469,059	1,408,678,568	\$207,095,263	1,487,723,154	\$218,274,416	1,236,167,740	\$178,377,266	858,319,156	\$124,398,896	937,363,742	\$138,778,538
Conventional \$/kWh		\$0.2332		\$0.1470		\$0.1467		\$0.1443		\$0.1449		\$0.1481
Renewables \$/kWh		\$0.1221		\$0.1299		\$0.1311		\$0.1568		\$0.1627		\$0.1636
System Production Cost		\$355,382,829		\$242,793,675		\$254,315,757		\$273,332,888		\$297,213,800		\$312,627,047
System \$/kWh		\$0.2197		\$0.1442		\$0.1443		\$0.1484		\$0.1547		\$0.1563
% Renewable Energy		15.0%		19.0%		18.2%		34.9%		56.6%		54.5%



PROJECTED LEAC RATE WITHOUT PHASE IV RENEWABLES AWARD							Liquefied Natural Gas (LNG)
<u>ULSD FUEL PRICE/BARREL</u>	<u>2024</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2030</u>
\$100	\$ 0.1856	\$ 0.1237	\$ 0.1236	\$ 0.1254	\$ 0.1268	\$ 0.1277	\$ 0.1033
\$120	\$ 0.2197	\$ 0.1442	\$ 0.1443	\$ 0.1466	\$ 0.1483	\$ 0.1496	\$ 0.1203
\$150	\$ 0.2710	\$ 0.1750	\$ 0.1752	\$ 0.1783	\$ 0.1806	\$ 0.1824	\$ 0.1459
\$175	\$ 0.3137	\$ 0.2006	\$ 0.2010	\$ 0.2047	\$ 0.2075	\$ 0.2098	\$ 0.1671
\$200	\$ 0.3564	\$ 0.2262	\$ 0.2268	\$ 0.2311	\$ 0.2344	\$ 0.2371	\$ 0.1884
PROJECTED LEAC RATE WITH PHASE IV RENEWABLES AWARD							Liquefied Natural Gas (LNG)
<u>ULSD FUEL PRICE/BARREL</u>	<u>2024</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>	<u>2030</u>
\$100	\$ 0.1856	\$ 0.1237	\$ 0.1236	\$ 0.1323	\$ 0.1439	\$ 0.1448	\$ 0.1295
\$120	\$ 0.2197	\$ 0.1442	\$ 0.1443	\$ 0.1484	\$ 0.1547	\$ 0.1563	\$ 0.1381
\$150	\$ 0.2710	\$ 0.1750	\$ 0.1752	\$ 0.1726	\$ 0.1709	\$ 0.1737	\$ 0.1508
\$175	\$ 0.3137	\$ 0.2006	\$ 0.2010	\$ 0.1928	\$ 0.1844	\$ 0.1881	\$ 0.1615
\$200	\$ 0.3564	\$ 0.2262	\$ 0.2268	\$ 0.2130	\$ 0.1979	\$ 0.2026	\$ 0.1722



LEAC VARIANCE WITHOUT & WITH PH IV RENEWABLES @ VARIOUS FUEL PRICES 52

ULSD FUEL PRICE/BARREL	2024	2026	2027	2028	2029	2030
Without Phase IV @ \$100/Bbl	\$ 0.1856	\$ 0.1237	\$ 0.1236	\$ 0.1254	\$ 0.1268	\$ 0.1277
With Phase IV @ \$100/Bbl	\$ 0.1856	\$ 0.1237	\$ 0.1236	\$ 0.1323	\$ 0.1439	\$ 0.1448
Variance				(\$0.0069)	(\$0.0171)	(\$0.0171)
ULSD FUEL PRICE/BARREL	2024	2026	2027	2028	2029	2030
Without Phase IV @ \$120/Bbl	\$ 0.2197	\$ 0.1442	\$ 0.1443	\$ 0.1466	\$ 0.1483	\$ 0.1496
With Phase IV @ \$120/Bbl	\$ 0.2197	\$ 0.1442	\$ 0.1443	\$ 0.1484	\$ 0.1547	\$ 0.1563
Variance				(\$0.0018)	(\$0.0064)	(\$0.0067)
ULSD FUEL PRICE/BARREL	2024	2026	2027	2028	2029	2030
Without Phase IV @ \$150/Bbl	\$ 0.2710	\$ 0.1750	\$ 0.1752	\$ 0.1783	\$ 0.1806	\$ 0.1824
With Phase IV @ \$150/Bbl	\$ 0.2710	\$ 0.1750	\$ 0.1752	\$ 0.1726	\$ 0.1709	\$ 0.1737
Variance				\$0.0057	\$0.0097	\$0.0087
ULSD FUEL PRICE/BARREL	2024	2026	2027	2028	2029	2030
Without Phase IV @ \$175/Bbl	\$ 0.3137	\$ 0.2006	\$ 0.2010	\$ 0.2047	\$ 0.2075	\$ 0.2098
With Phase IV @ \$175/Bbl	\$ 0.3137	\$ 0.2006	\$ 0.2010	\$ 0.1928	\$ 0.1844	\$ 0.1881
Variance				\$0.0119	\$0.0231	\$0.0217
ULSD FUEL PRICE/BARREL	2024	2026	2027	2028	2029	2030
Without Phase IV @ \$200/Bbl	\$ 0.3564	\$ 0.2262	\$ 0.2268	\$ 0.2311	\$ 0.2344	\$ 0.2371
With Phase IV @ \$200/Bbl	\$ 0.3564	\$ 0.2262	\$ 0.2268	\$ 0.2130	\$ 0.1979	\$ 0.2026
Variance				\$0.0181	\$0.0365	\$0.0345

	WITHOUT PHASE IV	WITH PHASE IV
Ukudu Power Plant	198	198
Piti 8&9	86	86
Piti 7	31	31
Macheche CT	20	20
Yigo CT	20	20
Dededo CTs	40	40
Tenjo Diesels	20	20
Manenggon Diesels	8	8
Talofofo Diesels	8	8
Yigo Diesels Replacement (online 2026)	20	20
Total Conventional Capacity:	451	451
Renewables + Shifting ESS	22	195
TOTAL CAPACITY:	473	646
Reserve Requirement	146	146
Load Capacity	327	500
Projected Demand 2028 – 2% Growth	289	289
Capacity for Growth in 2028:	38	211
Additional Military Demand by 2033	44	44
Additional Demand 2033 – 2% Growth	30	30
Projected 2033 Total Growth – 2% Growth	74	74
Capacity for Growth in 2028	38	211
BALANCE FOR GROWTH/UNIT RETIREMENTS:	(36)	137

Phase IV Projects with ESS capacity provides capacity to meet growth and customer demands for greater energy reliability and resiliency.

CONSIDERATIONS:

- Without adequate load capacity,
 - Retirement of older units not recommended
 - Load-shedding is possible
- Current reserve units will be 35 years old by 2028
- Military demand may ramp up quickly to address regional threats. The Phase IV projects provide capacity to GPA to meet concurrent customer needs.



GPA RECOMMENDS THE AWARD TO ALL PHASE IV RENEWABLE BIDDERS (MS IFB-012-23) WHO COMPLY WITH SYSTEM IMPACT STUDY INFRASTRUCTURE REQUIREMENT WITHOUT A CHANGE IN BID PRICE

PH IV-A

Initial Awards

- Two of the five qualified proponents have substantially completed the System Impact Studies and contract negotiations with GPA. The parties are prepared to proceed to the award phase of the procurement process.
- The 2 proposals total 192MW solar PV with 97MW/380MWh ESS capacity.
- The lengthy procurement process stresses proponents' ability to maintain price validity, increasing the time sensitivity to award.
- GPA requests the CCU's approval to proceed with an initial award to proponents KEPCO/EWP/Samsung and Core Tech Solar. Together, 192MW solar PV Plant with 97MW/380MWh ESS capacity will be awarded.

PH IV-B

Remaining Awards

- GPA will recommend the CCU and PUC approve the award to the remaining proponents upon completion of the SIS and contract negotiations.

PHASE IV renewable projects provide a ***significant hedge against perennially rising fuel prices*** resulting in recent \$0.31/kWh LEAC. Ukudu and Ph IV projects will keep LEAC below \$0.20/kWh despite rising fuel prices.

The combination of efficient conventional energy and energy shifting renewable energy capacity provides ***reliability and resiliency for Guam ratepayers.***

The added capacity from Ph IV is allows GPA to ***meet future demand growth, retire units as needed, and achieve the 50% renewable portfolio mandate*** ahead of schedule.

GPA Resolution No. FY2024-29

Phase IV Renewable Energy Bid (PH IV-A)
SUPPLEMENTAL INFORMATION
August 27, 2024



PROJECTED LEAC - SAMPLE RESIDENTIAL BILLS *Schedule R*

@ \$120/Bbl.	RATE SCHEDULE R													
	Existing Rate		After Ukudu				No Phase IV				With Phase IV			
	2024		2026		Change		2029		Change		2029		Change	
	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
kWh		1,000		1,000				1,000				1,000		
Monthly Charge	\$ 15.00	\$ 15.00	\$ 18.00	\$ 18.00	\$ 3.00	\$ 3.00	\$ 18.00	\$ 18.00			\$ 18.00	\$ 18.00		
Non-Fuel Energy Charge														
First 500 kWh	0.069550	34.78	0.083460	41.73	0.013910	\$ 6.95	0.083460	41.73	-		0.083460	41.73	-	
Over 500 kWh	0.086870	43.44	0.104244	52.12	0.017374	8.68	0.104244	52.12	-		0.104244	52.12	-	
Emergency Water-Well Charge	0.002790	1.40	0.002790	1.40			0.002790	1.40			0.002790	-		
Self-Insurance Charge	0.002900	2.90	0.002900	2.90			0.002900	2.90			0.002900	-		
Working Capital Fund Surcharge	0.000000	-	0.000000	-			0.000000	-			0.000000	-		
Total Electric Charge before LEAC		97.52		116.15		18.63		116.15				111.85		
Fuel Recovery Charge	0.261995	262.00	0.144200	144.20	(0.117795)	(117.80)	0.148300	148.30	0.004100	\$ 4.10	0.154700	154.70	0.006400	\$ 6.40
Total Electric Charge		<u>\$ 359.52</u>		<u>\$ 260.35</u>		<u>\$ (99.16)</u>		<u>\$ 264.45</u>		<u>\$ 4.10</u>		<u>\$ 266.55</u>		<u>\$ 6.40</u>
Increase/(Decrease) in Total Bill				<u>\$ (99.17)</u>				<u>\$ 4.11</u>				<u>\$ 2.10</u>		
% Increase/(Decrease) in Total Bill				-27.58%				1.58%				0.79%		
% Increase/(Decrease) in LEAC rate				-44.96%				2.84%				4.32%		

@ \$150/Bbl.	RATE SCHEDULE R													
	Existing Rate		After Ukudu				No Phase IV				With Phase IV			
	2024		2026		Change		2029		Change		2029		Change	
	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
kWh		1,000		1,000				1,000				1,000		
Monthly Charge	\$ 15.00	\$ 15.00	\$ 18.00	\$ 18.00	\$ 3.00	\$ 3.00	\$ 18.00	\$ 18.00			\$ 18.00	\$ 18.00		
Non-Fuel Energy Charge														
First 500 kWh	0.069550	34.78	0.083460	41.73	0.013910	\$ 6.95	0.083460	41.73	-		0.083460	41.73	-	
Over 500 kWh	0.086870	43.44	0.104244	52.12	0.017374	8.68	0.104244	52.12	-		0.104244	52.12	-	
Emergency Water-well charge	0.002790	1.40	0.002790	1.40			0.002790	1.40			0.002790	-		
Self-Insurance Charge	0.002900	2.90	0.002900	2.90			0.002900	2.90			0.002900	-		
Working Capital Fund Surcharge	0.000000	-	0.000000	-			0.000000	-			0.000000	-		
Total Electric Charge before LEAC		97.52		116.15		18.63		116.15				111.85		
Fuel Recovery Charge	0.261995	262.00	0.175000	175.00	(0.086995)	(87.00)	0.180600	180.60	0.005600	\$ 5.60	0.170900	170.90	(0.009700)	\$ (9.70)
Total Electric Charge		<u>\$ 359.52</u>		<u>\$ 291.15</u>		<u>\$ (68.36)</u>		<u>\$ 296.75</u>		<u>\$ 5.60</u>		<u>\$ 282.75</u>		<u>\$ (9.70)</u>
Increase/(Decrease) in Total Bill				<u>\$ (68.37)</u>				<u>\$ 5.61</u>				<u>\$ (14.00)</u>		
% Increase/(Decrease) in Total Bill				-19.02%				1.93%				-4.72%		
% Increase/(Decrease) in LEAC rate				-33.20%				3.20%				-5.37%		



PROJECTED LEAC - SAMPLE COMMERCIAL BILLS *Schedule G (1P)*

@ \$120/Bbl.		kW/kWh Billed	RATE SCHEDULE G (Single Phase)													
			Existing Rate		After Ukudu				No Phase IV				With Phase IV			
			2024		2026		Change		2029		Change		2029		Change	
SINGLE PHASE		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	
kWh			5,000		5,000				5,000				5,000			
Monthly Charge		14.16	\$ 14.16	16.99	\$ 16.99	\$ 2.83	\$ 2.83	16.99	\$ 16.99	\$ -	\$ -	16.99	\$ 16.99	\$ -	\$ -	
Non-Fuel Energy Charge																
First 350 kWh per month		350	0.200860 \$ 70.30	0.241032 \$ 84.36	0.040172 \$ 14.06	0.241032 \$ 84.36						0.241032 \$ 84.36				
Over 350 kWh per month		4,650	0.108610 \$ 505.04	0.130332 \$ 606.04	0.021722 \$ 101.01	0.130332 \$ 606.04	- \$ -					0.130332 \$ 606.04	- \$ -			
Emergency Water-Well Charge		5,000	0.002790 \$ 13.95	0.002790 \$ 13.95	- \$ -	0.002790 \$ 13.95	- \$ -					0.002790 \$ 13.95	- \$ -			
Self-Insurance Charge		5,000	0.002900 \$ 14.50	0.002900 \$ 14.50	- \$ -	0.002900 \$ 14.50	- \$ -					0.002900 \$ 14.50	- \$ -			
WCF Surcharge		5,000	- \$ -	- \$ -	- \$ -	- \$ -	- \$ -					- \$ -	- \$ -			
Total Electric Charge before LEAC			\$ 617.95	\$ 735.85	\$ 117.90	\$ 735.85	\$ -					\$ 735.85	\$ -			
Fuel Recovery Charge			0.261995 \$ 1,309.98	0.144200 \$ 721.00	\$ (588.98)	0.148300 \$ 741.50	\$ 20.50					0.154700 \$ 773.50	\$ 32.00			
Total Electric Charge			\$ 1,927.92	\$ 1,456.85	\$ (471.08)	\$ 1,477.35	\$ 20.50					\$ 1,509.35	\$ 32.00			
Increase/(Decrease) in Total Bill				\$ (471.08)	\$ 20.50							\$ 32.00				
% Increase/(Decrease) in Total Bill				-24.43%	1.74%							2.17%				
% Increase/(Decrease) in LEAC rate				-44.96%	2.84%							4.32%				

@ \$150/Bbl.		kW/kWh Billed	RATE SCHEDULE G (Single Phase)													
			Existing Rate		After Ukudu				No Phase IV				With Phase IV			
			2024		2026		Change		2029		Change		2029		Change	
SINGLE PHASE		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	
kWh			5,000		5,000				5,000				5,000			
Monthly Charge		14.16	\$ 14.16	16.99	\$ 16.99	\$ 2.83	\$ 2.83	16.99	\$ 16.99	\$ -	\$ -	16.99	\$ 16.99	\$ -	\$ -	
Non-Fuel Energy Charge																
First 350 KWH per month		350	0.200860 \$ 70.30	0.241032 \$ 84.36	0.040172 \$ 14.06	0.241032 \$ 84.36						0.241032 \$ 84.36				
Over 350 KWH per month		4,650	0.108610 \$ 505.04	0.130332 \$ 606.04	0.021722 \$ 101.01	0.130332 \$ 606.04	- \$ -					0.130332 \$ 606.04	- \$ -			
Emergency Water-well charge		5,000	0.002790 \$ 13.95	0.002790 \$ 13.95	- \$ -	0.002790 \$ 13.95	- \$ -					0.002790 \$ 13.95	- \$ -			
Self-Insurance Charge		5,000	0.002900 \$ 14.50	0.002900 \$ 14.50	- \$ -	0.002900 \$ 14.50	- \$ -					0.002900 \$ 14.50	- \$ -			
WCF Surcharge		5,000	- \$ -	- \$ -	- \$ -	- \$ -	- \$ -					- \$ -	- \$ -			
Total Electric Charge before LEAC			\$ 617.95	\$ 735.85	\$ 117.90	\$ 735.85	\$ -					\$ 735.85	\$ -			
Fuel Recovery Charge			0.261995 \$ 1,309.98	0.175000 \$ 875.00	\$ (434.98)	0.180600 \$ 903.00	\$ 28.00					0.170900 \$ 854.50	\$ (48.50)			
Total Electric Charge			\$ 1,927.92	\$ 1,610.85	\$ (317.08)	\$ 1,638.85	\$ 28.00					\$ 1,590.35	\$ (48.50)			
Increase/(Decrease) in Total Bill				\$ (317.08)	\$ 28.00							\$ (48.50)				
% Increase/(Decrease) in Total Bill				-16.45%	1.74%							-2.96%				
% Increase/(Decrease) in LEAC rate				-33.20%	3.20%							-5.37%				



PROJECTED LEAC - SAMPLE COMMERCIAL BILLS *Schedule G (3P)*

@ \$120/Bbl.		RATE SCHEDULE G (Three Phase)													
		Existing Rate		After Ukudu				No Phase IV				With Phase IV			
		2024		2026		Change		2029		Change		2029		Change	
kW/kWh Billed		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
THREE PHASE kWh			5,000		5,000				5,000				5,000		
Monthly Charge		\$ 14.16	\$ 14.16	16.99	\$ 16.99	\$ 2.83	\$ 2.83	16.99	\$ 16.99	\$ -	\$ -	16.99	\$ 16.99	\$ -	\$ -
Non-Fuel Energy Charge															
First 500 kWh per month		500	0.197850 \$ 98.93	0.237420	\$ 118.71	0.039570	\$ 19.79	0.237420	\$ 118.71			0.237420	\$ 118.71		
Over 500 kWh per month		4,500	0.106080 \$ 477.36	0.127296	\$ 572.83	0.021216	\$ 95.47	0.127296	\$ 572.83	-	\$ -	0.127296	\$ 572.83	-	\$ -
Emergency Water-Well Charge		5,000	0.002790 \$ 13.95	0.002790	\$ 13.95	-	\$ -	0.002790	\$ 13.95	-	\$ -	0.002790	\$ 13.95	-	\$ -
Self-Insurance Charge		5,000	0.002900 \$ 14.50	0.002900	\$ 14.50	-	\$ -	0.002900	\$ 14.50	-	\$ -	0.002900	\$ 14.50	-	\$ -
WCF Surcharge		5,000	- \$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total Electric Charge before LEAC			\$ 618.90		\$ 736.98		\$ 118.09		\$ 736.98		\$ -		\$ 736.98		\$ -
Fuel Recovery Charge			0.261995 \$ 1,309.98	0.144200	\$ 721.00		\$ (588.98)	0.148300	\$ 741.50		\$ 20.50	0.154700	\$ 773.50		\$ 32.00
Total Electric Charge			\$ 1,928.87		\$ 1,457.98		\$ (470.89)		\$ 1,478.48				\$ 1,510.48		
Increase/(Decrease) in Total Bill					\$ (470.89)				\$ 20.50				\$ 32.00		
% Increase/(Decrease) in Total Bill					-24.41%				1.41%				2.16%		
% Increase/(Decrease) in LEAC rate					-44.96%				2.84%				4.32%		

@ \$150/Bbl.		RATE SCHEDULE G (Three Phase)													
		Existing Rate		After Ukudu				No Phase IV				With Phase IV			
		2024		2026		Change		2029		Change		2029		Change	
kW/kWh Billed		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
THREE PHASE kWh			5,000		5,000				5,000				5,000		
Monthly Charge		\$ 14.16	\$ 14.16	16.99	\$ 16.99	\$ 2.83	\$ 2.83	16.99	\$ 16.99	\$ -	\$ -	16.99	\$ 16.99	\$ -	\$ -
Non-Fuel Energy Charge															
First 500 KWH per month		500	0.197850 \$ 98.93	0.237420	\$ 118.71	0.039570	\$ 19.79	0.237420	\$ 118.71			0.237420	\$ 118.71		
Over 500 KWH per month		4,500	0.106080 \$ 477.36	0.127296	\$ 572.83	0.021216	\$ 95.47	0.127296	\$ 572.83	-	\$ -	0.127296	\$ 572.83	-	\$ -
Emergency Water-well charge		5,000	0.002790 \$ 13.95	0.002790	\$ 13.95	-	\$ -	0.002790	\$ 13.95	-	\$ -	0.002790	\$ 13.95	-	\$ -
Self-Insurance Charge		5,000	0.002900 \$ 14.50	0.002900	\$ 14.50	-	\$ -	0.002900	\$ 14.50	-	\$ -	0.002900	\$ 14.50	-	\$ -
WCF Surcharge		5,000	- \$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total Electric Charge before LEAC			\$ 618.90		\$ 736.98		\$ 118.09		\$ 736.98		\$ -		\$ 736.98		\$ -
Fuel Recovery Charge			0.261995 \$ 1,309.98	0.175000	\$ 875.00		\$ (434.98)	0.180600	\$ 903.00		\$ 28.00	0.170900	\$ 854.50		\$ (48.50)
Total Electric Charge			\$ 1,928.87		\$ 1,611.98		\$ (316.89)		\$ 1,639.98				\$ 1,591.48		
Increase/(Decrease) in Total Bill					\$ (316.89)				\$ 28.00				\$ (48.50)		
% Increase/(Decrease) in Total Bill					-16.43%				1.74%				-2.96%		
% Increase/(Decrease) in LEAC rate					-33.20%				3.20%				-5.37%		



PROJECTED LEAC - SAMPLE COMMERCIAL BILLS *Schedule J (1P)*

@ \$120/Bbl.		RATE SCHEDULE J (Single Phase)													
		Existing Rate		After Ukudu				No Phase IV				With Phase IV			
		2024		2026		Change		2029		Change		2029		Change	
		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
SINGLE PHASE															
kWh			25,000		25,000				25,000				25,000		
DEMAND (kW Billed)	35														
Monthly Charge		\$ 38.33	\$ 38.33	\$ 46.00	\$ 46.00	\$ 7.67	\$ 7.67	\$ 46.00	\$ 46.00	\$ -	\$ -	\$ 46.00	\$ 46.00	\$ -	\$ -
Demand Charge (\$/kW-month)	35	\$ 6.16	\$ 215.60	\$ 7.39	\$ 258.72	\$ 1.23	\$ 43.12	\$ 7.39	\$ 258.72	\$ -	\$ -	\$ 7.39	\$ 258.72	\$ -	\$ -
Energy Charge															
First Block - First 2,000 kWh per month (\$/kWh)	2,000	0.196760	\$ 393.52	0.236112	\$ 472.22	0.039352	\$ 78.70	0.236112	\$ 472.22	-	\$ -	0.236112	\$ 472.22	-	\$ -
Second Block - > 2,000 kWh per month (\$/kWh)	23,000	0.065540	\$ 1,507.42	0.078648	\$ 1,808.90	0.013108	\$ 301.48	0.078648	\$ 1,808.90	-	\$ -	0.078648	\$ 1,808.90	-	\$ -
Emergency Water-Well Charge	25,000	0.002790	\$ 69.75	0.002790	\$ 69.75	-	-	0.002790	\$ 69.75	-	\$ -	0.002790	\$ 69.75	-	\$ -
Self-Insurance Charge	25,000	0.002900	\$ 72.50	0.002900	\$ 72.50	-	-	0.002900	\$ 72.50	-	\$ -	0.002900	\$ 72.50	-	\$ -
WCF Surcharge	25,000	-	\$ -	-	\$ -	-	-	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total Electric Charge before LEAC			\$ 2,297.12		\$ 2,728.09		\$ 430.97		\$ 2,728.09		\$ -		\$ 2,728.09		\$ -
Fuel Recovery Charge		0.261995	\$ 6,549.88	0.144200	\$ 3,605.00		\$ (2,944.88)	0.148300	\$ 3,707.50		\$ 102.50	0.154700	\$ 3,867.50		\$ 160.00
Total Electric Charge			\$ 8,847.00		\$ 6,333.09		\$ (2,513.90)		\$ 6,435.59		\$ 102.50		\$ 6,595.59		\$ 160.00
Increase/(Decrease) in Total Bill					\$ (2,513.90)				\$ 102.50				\$ 160.00		
% Increase/(Decrease) in Total Bill					-28.42%				1.62%				2.49%		
% Increase/(Decrease) in LEAC rate					-44.96%				2.84%				4.32%		

@ \$150/Bbl.		RATE SCHEDULE J (Single Phase)													
		Existing Rate		After Ukudu				No Phase IV				With Phase IV			
		2024		2026		Change		2029		Change		2029		Change	
		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
SINGLE PHASE															
kWh			25,000		25,000				25,000				25,000		
DEMAND (kW Billed)	35														
Monthly Charge		\$ 38.33	\$ 38.33	\$ 46.00	\$ 46.00	\$ 7.67	\$ 7.67	\$ 46.00	\$ 46.00	\$ -	\$ -	\$ 46.00	\$ 46.00	\$ -	\$ -
Demand Charge (\$/kW-month)	35	\$ 6.16	\$ 215.60	\$ 7.39	\$ 258.72	\$ 1.23	\$ 43.12	\$ 7.39	\$ 258.72	\$ -	\$ -	\$ 7.39	\$ 258.72	\$ -	\$ -
Energy Charge															
First Block - First 2,000 kWh per month (\$/kWh)	2,000	0.196760	\$ 393.52	0.236112	\$ 472.22	0.039352	\$ 78.70	0.236112	\$ 472.22	-	\$ -	0.236112	\$ 472.22	-	\$ -
Second Block - > 2,000 kWh per month (\$/kWh)	23,000	0.065540	\$ 1,507.42	0.078648	\$ 1,808.90	0.013108	\$ 301.48	0.078648	\$ 1,808.90	-	\$ -	0.078648	\$ 1,808.90	-	\$ -
Emergency Water-well charge	25,000	0.002790	\$ 69.75	0.002790	\$ 69.75	-	-	0.002790	\$ 69.75	-	\$ -	0.002790	\$ 69.75	-	\$ -
Self-Insurance Charge	25,000	0.002900	\$ 72.50	0.002900	\$ 72.50	-	-	0.002900	\$ 72.50	-	\$ -	0.002900	\$ 72.50	-	\$ -
WCF Surcharge	25,000	-	\$ -	-	\$ -	-	-	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total Electric Charge before LEAC			\$ 2,297.12		\$ 2,728.09		\$ 430.97		\$ 2,728.09		\$ -		\$ 2,728.09		\$ -
Fuel Recovery Charge		0.261995	\$ 6,549.88	0.175000	\$ 4,375.00		\$ (2,174.88)	0.180600	\$ 4,515.00		\$ 140.00	0.170900	\$ 4,272.50		\$ (242.50)
Total Electric Charge			\$ 8,847.00		\$ 7,103.09		\$ (1,743.90)		\$ 7,243.09		\$ 140.00		\$ 7,000.59		\$ (242.50)
Increase/(Decrease) in Total Bill					\$ (1,743.90)				\$ 140.00				\$ (242.50)		
% Increase/(Decrease) in Total Bill					-19.71%				1.97%				-3.35%		
% Increase/(Decrease) in LEAC rate					-33.20%				3.20%				-5.37%		



PROJECTED LEAC - SAMPLE COMMERCIAL BILLS *Schedule J (3P)*

@ \$120/Bbl.		RATE SCHEDULE J (Three Phase)													
		Existing Rate		After Ukudu				No Phase IV				With Phase IV			
		2024		2026		Change		2029		Change		2029		Change	
		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
THREE PHASE															
kWh			117,200		117,200				117,200				117,200		
DEMAND (kW Billed)	163														
Monthly Charge		\$ 38.33	\$ 38.33	\$ 46.00	\$ 46.00	\$ 7.67	\$ 7.67	\$ 46.00	\$ 46.00	\$ -	\$ -	\$ 46.00	\$ 46.00	\$ -	\$ -
Demand Charge (\$/kW-month)	163	\$ 5.80	\$ 945.40	\$ 6.96	1,134.48	\$ 1.16	\$ 189.08	\$ 6.96	1,134.48	\$ -	\$ -	\$ 6.96	1,134.48	\$ -	\$ -
Energy Charge															
First Block - First 5,000 kWh per month (\$/kWh)	5,000	0.194370	971.85	0.233244	1,166.22	0.038874	\$ 194.37	0.233244	1,166.22	-	\$ -	0.233244	1,166.22	-	\$ -
Second Block - > 5,000 kWh per month (\$/kWh)	112,200	0.064840	7,275.05	0.077808	8,730.06	0.012968	\$ 1,455.01	0.077808	8,730.06	-	\$ -	0.077808	8,730.06	-	\$ -
Emergency Water-Well Charge	117,200	0.002790	326.99	0.002790	326.99	-	-	0.002790	326.99	-	\$ -	0.002790	326.99	-	\$ -
Self-Insurance Charge	117,200	0.002900	339.88	0.002900	339.88	-	-	0.002900	339.88	-	\$ -	0.002900	339.88	-	\$ -
WCF Surcharge	117,200	-	-	-	-	-	-	-	-	-	\$ -	-	-	-	\$ -
Total Electric Charge before LEAC			9,897.50		11,743.62		\$ 1,846.13		11,743.62		\$ -		11,743.62		\$ -
Fuel Recovery Charge		0.261995	30,705.81	0.144200	16,900.24		\$ (13,805.57)	0.148300	17,380.76		\$ 480.52	0.154700	18,130.84		\$ 750.08
Total Electric Charge			<u>\$40,603.31</u>		<u>28,643.86</u>		<u>\$ (11,959.45)</u>		<u>29,124.38</u>		<u>\$ 480.52</u>		<u>29,874.46</u>		<u>\$ 750.08</u>
Increase/(Decrease) in Total Bill					<u>(11,959.45)</u>				<u>480.52</u>				<u>750.08</u>		
% Increase/(Decrease) in Total Bill					<u>-29.45%</u>				<u>1.68%</u>				<u>2.58%</u>		
% Increase/(Decrease) in LEAC rate					<u>-44.96%</u>				<u>2.84%</u>				<u>4.32%</u>		

@ \$150/Bbl.		RATE SCHEDULE J (Three Phase)													
		Existing Rate		After Ukudu				No Phase IV				With Phase IV			
		2024		2026		Change		2029		Change		2029		Change	
		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
THREE PHASE															
kWh			117,200		117,200				117,200				117,200		
DEMAND (kW Billed)	163														
Monthly Charge		\$ 38.33	\$ 38.33	\$ 46.00	\$ 46.00	\$ 7.67	\$ 7.67	\$ 46.00	\$ 46.00	\$ -	\$ -	\$ 46.00	\$ 46.00	\$ -	\$ -
Demand Charge (\$/kW-month)	163	\$ 5.80	\$ 945.40	\$ 6.96	1,134.48	\$ 1.16	\$ 189.08	\$ 6.96	1,134.48	\$ -	\$ -	\$ 6.96	1,134.48	\$ -	\$ -
Energy Charge															
First Block - First 5,000 kWh per month (\$/kWh)	5,000	0.194370	971.85	0.233244	1,166.22	0.038874	\$ 194.37	0.233244	1,166.22	-	\$ -	0.233244	1,166.22	-	\$ -
Second Block - > 5,000 kWh per month (\$/kWh)	112,200	0.064840	7,275.05	0.077808	8,730.06	0.012968	\$ 1,455.01	0.077808	8,730.06	-	\$ -	0.077808	8,730.06	-	\$ -
Emergency Water-well charge	117,200	0.002790	326.99	0.002790	326.99	-	-	0.002790	326.99	-	\$ -	0.002790	326.99	-	\$ -
Self-Insurance Charge	117,200	0.002900	339.88	0.002900	339.88	-	-	0.002900	339.88	-	\$ -	0.002900	339.88	-	\$ -
WCF Surcharge	117,200	-	-	-	-	-	-	-	-	-	\$ -	-	-	-	\$ -
Total Electric Charge before LEAC			9,897.50		11,743.62		\$ 1,846.13		11,743.62		\$ -		11,743.62		\$ -
Fuel Recovery Charge		0.261995	30,705.81	0.175000	20,510.00		\$ (10,195.81)	0.180600	21,166.32		\$ 656.32	0.170900	20,029.48		\$ (1,136.84)
Total Electric Charge			<u>\$40,603.31</u>		<u>32,253.62</u>		<u>\$ (8,349.69)</u>		<u>32,909.94</u>		<u>\$ 656.32</u>		<u>31,773.10</u>		<u>\$ (1,136.84)</u>
Increase/(Decrease) in Total Bill					<u>(8,349.69)</u>				<u>656.32</u>				<u>(1,136.84)</u>		
% Increase/(Decrease) in Total Bill					<u>-20.56%</u>				<u>2.03%</u>				<u>-3.45%</u>		
% Increase/(Decrease) in LEAC rate					<u>-33.20%</u>				<u>3.20%</u>				<u>-5.37%</u>		



PROJECTED LEAC - SAMPLE COMMERCIAL BILLS *Schedule P*

@ \$120/Bbl.		RATE SCHEDULE P													
		Existing Rate		After Ukudu				No Phase IV				With Phase IV			
		2024		2026		Change		2029		Change		2029		Change	
kW/kWh Billed		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
THREE PHASE															
kWh			101,400		101,400				101,400				101,400		
MINIMUM DEMAND	210														
Monthly Charge		59.25	\$ 59.25	71.10	\$ 71.10	\$ 11.85	\$ 11.85	71.10	\$ 71.10	\$ -	\$ -	71.10	\$ 71.10	\$ -	\$ -
Demand Charge (\$/kW-month)	210	10.73	\$ 2,252.88	12.87	\$ 2,703.46	\$ 2.15	\$ 450.58	12.87	\$ 2,703.46	\$ -	\$ -	12.87	\$ 2,703.46	\$ -	\$ -
Energy Charge (\$/kWh-month)															
First Block - First 55,000 kWh per month (\$/kWh)	55,000	0.141700	\$ 7,793.50	0.170040	\$ 9,352.20	0.028340	\$ 1,558.70	0.170040	\$ 9,352.20	-	\$ -	0.170040	\$ 9,352.20	-	\$ -
Second Block - > 55,000 kWh per month (\$/kWh)	46,400	0.064440	\$ 2,990.02	0.077328	\$ 3,588.02	0.012888	\$ 598.00	0.077328	\$ 3,588.02	-	\$ -	0.077328	\$ 3,588.02	-	\$ -
Emergency Water-Well Charge	101,400	0.002790	\$ 282.91	0.002790	\$ 282.91	-	-	0.002790	\$ 282.91	-	\$ -	0.002790	\$ 282.91	-	\$ -
Self-Insurance Charge	101,400	0.002900	\$ 294.06	0.002900	\$ 294.06	-	-	0.002900	\$ 294.06	-	\$ -	0.002900	\$ 294.06	-	\$ -
WCF Surcharge	101,400	-	\$ -	-	\$ -	-	-	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total Electric Charge before LEAC			\$ 13,672.61		\$ 16,291.74		\$ 2,619.13		\$ 16,291.74		\$ -		\$ 16,291.74		\$ -
Fuel Recovery Charge	101,400	0.261995	\$ 26,566.29	0.144200	\$ 14,621.88		\$ (11,944.41)	0.148300	\$ 15,037.62		\$ 415.74	0.154700	\$ 15,686.58		\$ 648.96
Total Electric Charge			\$ 40,238.91		\$ 30,913.62		\$ (9,325.28)		\$ 31,329.36		\$ 415.74		\$ 31,978.32		\$ 648.96
Increase/(Decrease) in Total Bill					\$ (9,325.28)				\$ 415.74				\$ 648.96		
% Increase/(Decrease) in Total Bill					-23.17%				1.34%				2.07%		
% Increase/(Decrease) in LEAC rate					-44.96%				2.84%				4.32%		

@ \$150/Bbl.		RATE SCHEDULE P													
		Existing Rate		After Ukudu				No Phase IV				With Phase IV			
		2024		2026		Change		2029		Change		2029		Change	
kW/kWh Billed		Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
THREE PHASE															
kWh			101,400		101,400				101,400				101,400		
MINIMUM DEMAND	210														
Monthly Charge		59.25	\$ 59.25	71.10	\$ 71.10	\$ 11.85	\$ 11.85	71.10	\$ 71.10	\$ -	\$ -	71.10	\$ 71.10	\$ -	\$ -
Demand Charge (\$/kW-month)	210	10.73	\$ 2,252.88	12.87	\$ 2,703.46	\$ 2.15	\$ 450.58	12.87	\$ 2,703.46	\$ -	\$ -	12.87	\$ 2,703.46	\$ -	\$ -
Energy Charge (\$/kWh-month)															
First Block - First 55,000 kWh per month (\$/kWh)	55,000	0.141700	\$ 7,793.50	0.170040	\$ 9,352.20	0.028340	\$ 1,558.70	0.170040	\$ 9,352.20	-	\$ -	0.170040	\$ 9,352.20	-	\$ -
Second Block - > 55,000 kWh per month (\$/kWh)	46,400	0.064440	\$ 2,990.02	0.077328	\$ 3,588.02	0.012888	\$ 598.00	0.077328	\$ 3,588.02	-	\$ -	0.077328	\$ 3,588.02	-	\$ -
Emergency Water-well charge	101,400	0.002790	\$ 282.91	0.002790	\$ 282.91	-	-	0.002790	\$ 282.91	-	\$ -	0.002790	\$ 282.91	-	\$ -
Self-Insurance Charge	101,400	0.002900	\$ 294.06	0.002900	\$ 294.06	-	-	0.002900	\$ 294.06	-	\$ -	0.002900	\$ 294.06	-	\$ -
WCF Surcharge	101,400	-	\$ -	-	\$ -	-	-	-	\$ -	-	\$ -	-	\$ -	-	\$ -
Total Electric Charge before LEAC			\$ 13,672.61		\$ 16,291.74		\$ 2,619.13		\$ 16,291.74		\$ -		\$ 16,291.74		\$ -
Fuel Recovery Charge	101,400	0.261995	\$ 26,566.29	0.175000	\$ 17,745.00		\$ (8,821.29)	0.180600	\$ 18,312.84		\$ 567.84	0.170900	\$ 17,329.26		\$ (983.58)
Total Electric Charge			\$ 40,238.91		\$ 34,036.74		\$ (6,202.16)		\$ 34,604.58		\$ 567.84		\$ 33,621.00		\$ (983.58)
Increase/(Decrease) in Total Bill					\$ (6,202.16)				\$ 567.84				\$ (983.58)		
% Increase/(Decrease) in Total Bill					-15.41%				1.67%				-2.84%		
% Increase/(Decrease) in LEAC rate					-33.20%				3.20%				-5.37%		



PROJECTED LEAC - SAMPLE GOVERNMENT BILLS *Schedule L*

@ \$120/Bbl.		RATE SCHEDULE L															
		kW/kWh Billed		Existing Rate		After Ukudu				No Phase IV				With Phase IV			
				2024		2026		Change		2029		Change		2029		Change	
				Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
THREE PHASE																	
kWh			634,200		634,200				634,200				634,200				
MINIMUM DEMAND	200	1,158															
Monthly Charge			\$ 59.25	59.25	\$ 71.10	71.10	\$ 11.85	11.85	71.10	\$ 71.10	\$ -	\$ -	71.10	\$ 71.10	\$ -	\$ -	
Demand Charge (\$/kW-month)		1,158	\$ 8.94	10,352.52	10.73	12,423.02	\$ 1.79	2,070.50	10.73	\$ 12,423.02	\$ -	\$ -	10.73	\$ 12,423.02	\$ -	\$ -	
Energy Charge (\$/kWh-month)																	
First Block - First 38,000 kWh per month (\$/kWh)	38,000		0.164950	6,268.10	0.197940	7,521.72	0.032990	\$ 1,253.62	0.197940	\$ 7,521.72	-	\$ -	0.197940	\$ 7,521.72	-	\$ -	
Second Block - > 38,000 kWh per month (\$/kWh)	596,200		0.080900	48,232.58	0.097080	57,879.10	0.016180	\$ 9,646.52	0.097080	\$ 57,879.10	-	\$ -	0.097080	\$ 57,879.10	-	\$ -	
Emergency Water-Well Charge	634,200		0.002790	1,769.42	0.002790	1,769.42	-	-	0.002790	\$ 1,769.42	-	\$ -	0.002790	\$ 1,769.42	-	\$ -	
Self-Insurance Charge	634,200		0.002900	1,839.18	0.002900	1,839.18	-	-	0.002900	\$ 1,839.18	-	\$ -	0.002900	\$ 1,839.18	-	\$ -	
WCF Surcharge	634,200		-	-	-	-	-	-	-	\$ -	-	\$ -	-	\$ -	-	\$ -	
Total Electric Charge before LEAC				68,521.05		81,503.54		\$ 12,982.49		\$ 81,503.54		\$ -		\$ 81,503.54		\$ -	
Fuel Recovery Charge	634,200		0.261995	166,157.23	0.144200	91,451.64		\$ (74,705.59)	0.148300	\$ 94,051.86		\$ 2,600.22	0.154700	\$ 98,110.74		\$ 4,058.88	
Total Electric Charge				<u>\$234,678.28</u>		<u>172,955.18</u>		<u>\$ (61,723.10)</u>		<u>\$ 175,555.40</u>		<u>\$ 2,600.22</u>		<u>\$ 179,614.28</u>		<u>\$ 4,058.88</u>	
Increase/(Decrease) in Total Bill						<u>(\$61,723.10)</u>				<u>\$ 2,600.22</u>				<u>\$ 4,058.88</u>			
% Increase/(Decrease) in Total Bill						-26.30%				1.50%				2.31%			
% Increase/(Decrease) in LEAC rate						-44.96%				2.84%				4.32%			

@ \$150/Bbl.		RATE SCHEDULE L															
		kW/kWh Billed		Existing Rate		After Ukudu				No Phase IV				With Phase IV			
				2024		2026		Change		2029		Change		2029		Change	
				Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount	Rate	Amount
THREE PHASE																	
kWh			634,200		634,200				634,200				634,200				
MINIMUM DEMAND	200	1,158															
Monthly Charge			\$ 59.25	59.25	\$ 71.10	71.10	\$ 11.85	11.85	71.10	\$ 71.10	\$ -	\$ -	71.10	\$ 71.10	\$ -	\$ -	
Demand Charge (\$/kW-month)		1,158	\$ 8.94	10,352.52	10.73	12,423.02	\$ 1.79	2,070.50	10.73	\$ 12,423.02	\$ -	\$ -	10.73	\$ 12,423.02	\$ -	\$ -	
Energy Charge (\$/kWh-month)																	
First Block - First 38,000 kWh per month (\$/kWh)	38,000		0.164950	6,268.10	0.197940	7,521.72	0.032990	\$ 1,253.62	0.197940	\$ 7,521.72	-	\$ -	0.197940	\$ 7,521.72	-	\$ -	
Second Block - > 38,000 kWh per month (\$/kWh)	596,200		0.080900	48,232.58	0.097080	57,879.10	0.016180	\$ 9,646.52	0.097080	\$ 57,879.10	-	\$ -	0.097080	\$ 57,879.10	-	\$ -	
Emergency Water-Well Charge	634,200		0.002790	1,769.42	0.002790	1,769.42	-	-	0.002790	\$ 1,769.42	-	\$ -	0.002790	\$ 1,769.42	-	\$ -	
Self-Insurance Charge	634,200		0.002900	1,839.18	0.002900	1,839.18	-	-	0.002900	\$ 1,839.18	-	\$ -	0.002900	\$ 1,839.18	-	\$ -	
WCF Surcharge	634,200		-	-	-	-	-	-	-	\$ -	-	\$ -	-	\$ -	-	\$ -	
Total Electric Charge before LEAC				68,521.05		81,503.54		\$ 12,982.49		\$ 81,503.54		\$ -		\$ 81,503.54		\$ -	
Fuel Recovery Charge	634,200		0.261995	166,157.23	0.175000	110,985.00		\$ (55,172.23)	0.180600	\$ 114,536.52		\$ 3,551.52	0.170900	\$ 108,384.78		\$ (6,151.74)	
Total Electric Charge				<u>\$234,678.28</u>		<u>\$192,488.54</u>		<u>\$ (42,189.74)</u>		<u>\$ 196,040.06</u>		<u>\$ 3,551.52</u>		<u>\$ 189,888.32</u>		<u>\$ (6,151.74)</u>	
Increase/(Decrease) in Total Bill						<u>(\$42,189.74)</u>				<u>\$ 3,551.52</u>				<u>\$ (6,151.74)</u>			
% Increase/(Decrease) in Total Bill						-17.98%				1.85%				-3.14%			
% Increase/(Decrease) in LEAC rate						-33.20%				3.20%				-5.37%			



PROJECTED TOTAL BILLS FOR ALL RATE CLASSES WITH & WITHOUT PH IV

ULSD \$120 / BARREL	CURRENT BILL	BILL WITH UKUDU	NO PHASE IV	WITH PHASE IV RENEWABLES	VARIANCE
	2024	2026	2029	2029	2029
SCHEDULE R (AVERAGE 1,000KWH)	\$ 359.52	\$ 260.35	\$ 264.45	\$ 266.55	\$ 2.10
SCHEDULE G (Single Phase)	\$ 1,927.92	\$ 1,456.85	\$ 1,477.35	\$ 1,509.35	\$ 32.00
SCHEDULE G (Three Phase)	\$ 1,928.87	\$ 1,457.98	\$ 1,478.48	\$ 1,510.48	\$ 32.00
SCHEDULE J (Single Phase)	\$ 8,847.00	\$ 6,333.09	\$ 6,435.59	\$ 6,595.59	\$ 160.00
SCHEDULE J (Three Phase)	\$ 40,603.31	\$ 28,643.86	\$ 29,124.38	\$ 29,874.46	\$ 750.08
SCHEDULE P	\$ 40,238.91	\$ 30,913.62	\$ 31,329.36	\$ 31,978.32	\$ 648.96
SCHEDULE L	\$ 234,678.28	\$ 172,955.18	\$ 175,555.40	\$ 179,614.28	\$ 4,058.88

ULSD \$150 / BARREL	CURRENT BILL	BILL WITH UKUDU	NO PHASE IV	WITH PHASE IV RENEWABLES	VARIANCE
	2024	2026	2029	2029	2029
SCHEDULE R (AVERAGE 1,000KWH)	\$ 359.52	\$ 291.15	\$ 296.75	\$ 282.75	\$ (14.00)
SCHEDULE G (Single Phase)	1927.72	1610.85	1638.85	1590.35	\$ (48.50)
SCHEDULE G (Three Phase)	\$ 1,928.87	\$ 1,611.98	\$ 1,639.98	1591.48	\$ (48.50)
SCHEDULE J (Single Phase)	\$ 8,847.00	\$ 7,103.09	\$ 7,243.09	\$ 7,000.59	\$ (242.50)
SCHEDULE J (Three Phase)	\$ 40,603.31	\$ 32,253.62	\$ 32,909.94	\$ 31,773.10	\$ (1,136.84)
SCHEDULE P	\$ 40,238.91	\$ 34,036.74	\$ 34,604.58	\$ 33,621.00	\$ (983.58)
SCHEDULE L	\$ 234,678.28	\$ 192,488.54	\$ 196,040.06	\$ 189,888.32	\$ (6,151.74)



PROJECTED COSTS & SAVINGS WITH PH IV RENEWABLES AWARDS

New Generation

Increase Decrease Total

