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**BEFORE THE GUAM PUBLIC UTILITIES COMMISSION**

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| IN THE MATTER OF: | GPA Docket 24-25 |
| GUAM POWER AUTHORITY'S PHASE IV RENEWABLE ENERGY ACQUISITION AWARD | **ALJ REPORT** |

## INTRODUCTION

This matter comes before the Guam Public Utilities Commission ["PUC"] pursuant to the Petition of the Guam Power Authority ["GPA"] for PUC Approval of the Phase IV Renewable Energy Acquisition Award to KEPCO-EWP-Samsung C&T Consortium and Core Tech Solar Energy, LLC.[1]

## BACKGROUND

In December 2022, GPA announced Multi-Step Bid No. GPA-012-23 for 300 to 500 million kWh of renewable energy in its Phase IV procurement for utility scale renewables, over twenty-five years, with an option for five additional years.[2] The bids were opened in December 2023. GPA received multiple bids from five bidders for solar plants and energy storage systems.[3] The proposals received by GPA would provide over 330MW of renewable solar PV capacity to generate a minimum of 612 million kWh annually for twenty-five years.[4]

[1] GPA Petition, GPA Docket 24-25, dated September 11, 2024.
[2] Id. at p. 1.
[3] Id.; see also Guam Consolidated Commission on Utilities Resolution No. 2024-29 (attached to the Petition) at Exhibit A.
[4] GPA Petition at pgs. 1-2.

GPA ultimately intends to bring all of the bid proposals to the CCU and the PUC for approval once these proponents have met the System Impact Study requirements without a change in price.[5] GPA's present Petition only requested approval of the KEPCO and Core Tech proposals. However, GPA did not provide copies of the KEPCO and Core Tech contracts with its Petition.

On or about September 25, 2024, the ALJ requested that GPA provide copies to him of both contracts. On October 11, 2024, GPA provided the ALJ with "the near-final KEPCO contract for his review".[6] On the same day, acting GPA Counsel advised the ALJ that the Core Tech contract was still under negotiation. Therefore, "GPA is requesting to move forward with the PUC's review and approval for the award to KEPCO alone."[7]

Only the KEPCO bid award and Contract are before the PUC for review at the present time.

In December 2023, GPA determined that KEPCO was a qualified, responsive bidder. Its proposal will provide 132MW of PV Capacity and 67MW of BESS (Energy Storage System) Capacity. In Resolution No. 2024-29, the CCU approved the issuance of an award and contract to KEPCO, subject to the System Impact Study. The CCU authorized GPA to petition the PUC for approval to award a Phase IV Renewable Acquisition Bid to KEPCO.

[5] Id. at p. 5.
[6] Email from acting GPA Counsel Theresa Rojas to PUC ALJ Fred Horecky, dated October 11, 2024.
[7] Id.

The CCU has stated a number of justifications for the award and contract: (1) the Phase IV Award will help GPA meet the significant load growth which is expected to occur by the end of the decade; (2) the KEPCO proposal will provide substantial savings to GPA over the term of the contract based on current and projected LEAC rates; (3) the addition of renewable energy will serve as "an effective hedge against rising fuel oil prices"; (4) all Phase IV renewable projects will decrease oil imports by a projected total of 800,000 barrels; (5) approval of renewable energy projects will enable GPA to meet the goal under the Legislative Renewable Portfolio Standards (RPS) which mandated 50% renewables by 2035 and 100% by 2045; and (6) the System Impact Studies, as well as the costs of Interconnection, will be at the expense of the bidders.

## DISCUSSION

1. GPA's Contract Review Protocol

GPA indicates that the cost of the KEPCO contract over a 25-year period is estimated to be $1.12 billion. The GPA Contract Review Protocol requires that the PUC must review "any contract or obligation… which exceeds $1,500,000." The contract must be reviewed by the PUC "before the procurement process is begun."[8] The proposed KEPCO contract for Renewable Acquisition must be reviewed by the PUC.

2. In previous Dockets, the PUC has comprehensively approved the Phase IV Renewable Acquisition Program.

The Phase IV Renewable Program has previously been before the PUC on a number of occasions. In GPA Docket 22-08, the PUC considered the Guam Power Authority 2022

[8] Contract Review Protocol for Guam Power Authority, Administrative Docket, dated February 15, 2007, at par. 1.

Integrated Resource Plan (IRP). On January 28, 2022, GPA filed its 2022 IRP with the PUC.[9] The plan focused on "programs to support achieving the 50% Renewable Portfolio Standard, among other goals."[10] One of the "primary recommendations" of the 2022 IRP was "procurement of renewable energy contracts with an annual 300,000 MWH by 2025 and another 300,000 MWH by 2029.[11] The plan specifically approved 188MW Capacity by December 31, 2029 for a low load forecast scenario or 220MW Capacity by December 31, 2029 for a High load forecast scenario.[12]

The plan indicated that increased energy generation was needed based upon forecasted load requirements (MW), Renewable Portfolio Standard (RPS), and the estimated availability of current generating units. GWA was required to commit to the acquisition of energy from renewable resources to meet the RPS, and to provide renewable energy and energy-shifting BESS or firm power renewable technologies.[13]

In its Order in GPA Docket 22-08, the PUC conditionally approved GPA's 2022 Integrated Resource Plan, subject to compliance with various conditions and requirements. Those included the filing of specific projects under the Contract Review Protocol, as the Commission's approval of the IRP "is a road map does not approve any actual spending." GPA was also required "to include annual rate impacts for base rates and LEAC in all project capital requests so that the Commission can adequately assess the cost impact of each project."[14]

[9] GPA Filing of 2022 Integrated Resource Plan (IRP), GPA Docket 22-08, dated January 28, 2022.
[10] Id. at p. 1.
[11] Id.
[12] See 2021 Integrated Resource Plan, attached to the GPA Petition in GPA Docket 22-08.
[13] Id.
[14] PUC Order, GPA Docket 22-08, in the Matter of GPA integrated Resource Plan, at pgs. 2-4.

Given PUC's past approval of the 2022 Integrated Resource Plan and the general approval of the Phase IV Renewable Acquisition Program, the PUC should approve the KEPCO Contract unless its contract review demonstrates that contract is not justified, is too expensive, creates an inordinate rate impact upon customers, or is otherwise unsupportable under general contract review principles.

3. Project Description and the Proposed Contract

The KEPCO proposed 132MW solar plant is proposed to be built on a site on the Cross-Island Road-Ylig River/Paulana River Area.[15] In addition to the 132MW PV Capacity, the plant will produce 67MW of BESS (Energy Storage System) Capacity. A main purpose of the ESS is for energy to be shifted through an Energy Storage System to non-daylight hours. GPA originally solicited for energy to be 100% shifted through an ESS to non-daylight hours. However, because of ESS costs, GPA had to adjust its requirement to 50% shifting.[16]

The draft Renewable Energy Purchase Agreement between GPA and KEPCO-EWP-SCT Yona Solar, LLC, provides the following description of the plant[17]:

"The Generating Facility will be equipped with high efficiency solar panels generating direct current that will be converted to alternating current (AC) using approximately thirty (30) for thousand for hundreds (4,400) kW inverters manufactured by SMA. Inverter will generate 550V AC power that will be transformed by twenty-four (30) 550V to 34.5kV transformers located in close proximity to the inverter. And also, these 132MW solar generators are connected with Renewable Integrated ESS which is located

[15] CCU Resolution No. 2024-29, Relative to Approval Phase IV Renewable Energy Acquisition Award to KEPCO-EWP-Samsung C&T Consortium, Exhibit A.
[16] Id. at p. 1.
[17] Email dated October 11, 2024, from Acting GPA Counsel Theresa Rojas to PUC ALJ Fred Horecky, with the GPA-KEPCO Draft Renewable Energy Purchase Agreement attached, at p. 103. In the above quote, there appear to be errors in the numbers of inverters and other matters. The number of inverters appears to be thirty four thousand four hundred (34,400).

in ESS area. The ESS consist of sixteen (26) 4,400kW PCS and 260MWh Batteries. The PCS will generate 440V AC power that will be transformed by 440V to 24.5kV transformers located in close proximity to the PCS. The onsite underground constructed 34.5kV collection grid will bring the 1% ramp rate controlled 132MW solar generated electricity to the substation to be located on the site of the Generating Facility, where GPA will accept the metered power under the Power Purchase Agreements."

GPA has indicated that all costs of the KEPCO contract will be passed on to bidders through the LEAC, as well as the costs for contracts of the other four bidders under Phase IV once the other contracts are approved.

According to the Purchase Agreement, the contract term is a period of 25 years with a 5-year possible extension.[18] KEPCO is required to provide GPA with a "Development Security" of $20,934,562.[19] Any remaining development security after the Commercial Operation Date is achieved is refundable to KEPCO. The parties have not yet set a "Commercial Operation Date."[20] As part of the "Commercial Operation Date", KEPCO must certify that it and GPA have entered into the Interconnection Agreement.[21] The Commercial Operation Date maybe extended if KEPCO pays GPA the amount of fifty percent (50%) of the daily Shortfall Damages (based on ninety percent (90%) of the Minimum Production of the first Contract Year) per day for each day until the project achieves Commercial Operation.[22]

KEPCO must secure a third-party financing sufficient for the successful completion of the project and procure a binding credit agreement not later than one (1) year after the Effective Date (the date upon which the contract is signed).[23] KEPCO can terminate the

[18] Id. at Article Two.
[19] Id.
[20] Id. at Article Four, Section 4.2.
[21] Id. at Article Four, Section 4.1.
[22] Id. at Article Four, Section 4.1(a).
[23] Id. at Article Four, Section 4.3.

Agreement at any time prior to the Commercial Operation Date. GPA is entitled to termination damages payable from the Development Security or Bid Security in certain agreed amounts.[24]

KEPCO is required to sell and deliver, and GPA is required to purchase all Renewable energy generated by the Facility.[25] KEPCO guarantees a minimum delivery of MWhs of Renewable Energy and is required to deliver at least ninety percent (90%) of the minimum production.[26] GPA is entitled to damages for any Deficiency Amount.[27] KEPCO is also required to use ESS for the purpose of delivering produced energy, which shall be dispatchable at the point of interconnection, between the hours of 6:00 pm to 6:00 am. GPA can also dispatch such stored energy outside of these hours if deemed necessary.[28] There are contract provisions addressing a failure by KEPCO to deliver any quantity of renewable energy to which GPA is entitled.[29]

GPA has an option to purchase the facility if KEPCO desires to sell it during the Delivery Period (25-year term). Appendix A to the Draft Agreement, Contract Price, Minimum Production and Guaranty Output, is attached hereto as Exhibit "A".[30]

4. The Form of the Draft KEPCO Contract appears to be Commercially Reasonable.

The Draft KEPCO Contract submitted by GPA is based upon the draft Phase IV Contract which GPA submitted to the PUC in support of approval of the procurement

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[24] Id. at Article Four, Section 4.4.
[25] Id. at Article Four, Section 4.5.
[26] Id. at Article Four, Section 4.8.
[27] Id.
[28] Id. at Article Four, Section 4.18.
[29] Id. at Article Five, Section 5.1.
[30] Id., at Appendix A, p. 46.

in GPA Docket 23-01. The ALJ previously reviewed the draft Phase IV Contract form when GPA requested approval of the procurement. He concluded that "the provisions of the Contract appeared to be standard and commercially reasonable, and adequately protect the interest of GPA and its ratepayers."[31] The ALJ does not have any issues with the form or terms of the Draft KEPCO Contract.

However, although GPA indicates that the draft KEPCO contract is "near-final", there seem to be many aspects of the contract that have not been finalized. The "Effective Date" has not yet been indicated. The name of the Seller (KEPCO) has not been indicated at the beginning of the Draft. The Commercial Operation date has not been specified. There are costs to be allocated to the parties in the Contract which have not been specified, or for which amounts have not been indicated. "Milestones" for the contract and completion dates, have not been set out yet in the Milestone Attachment. Various calculation procedures have not been completed.

In addition, the awards for which GPA seeks approval, including KEPCO, are "subject to the completion of the System Impact Study (see Part F., below) and finalization of the vendors' draft REPAs and Interconnection Agreements."[32] While the system impact study will not change the bidders' price proposals, as all costs associated with the required infrastructure will be the responsibility of the bidder, the bid documents allow the bidder such as KEPCO to withdraw any proposal without penalty if the bidder cannot comply with the System Impact Study within the bidders' price proposals.[33]

[31] ALJ Report, GPA Docket 23-01, dated October 18, 2022.
[32] GPA Petition, GPA Docket 24-05, dated September 11, 2024, at p. 2.
[33] Id. at p. 5.

There are a number of significant revisions that still need to be made before the contract can be finalized. Both the GPA-PUC Contract Review Protocol, as well as the applicable statute, require that GPA submit a "contract" for appropriate review. Guam law defines "contract" as "an **agreement** to do or not do a certain thing." 18 GCA §85101. (emphasis added). However, a "draft" contract, to which the parties GPA and KEPCO have not evidenced "agreement", does not satisfy the requirement for a "contract." The contract review protocol indicates that GPA "contracts" require prior PUC approval. This requirement extends to "any contract or obligation" which exceeds $1.5M.[34]

12 GCA §12105(e)(1) indicates that utilities, such as GPA, shall not … enter into any **contractual agreements or obligations** which could increase rates and charges prior to the written approval of the Commission." The statute indicates that GPA should submit an agreed upon contract. Here GPA has submitted a draft contract without any indication that KEPCO has agreed to such draft. Nothing suggests that a final agreement or contract has been formed between GPA and KEPCO. Since this is a $1.12 Billion Dollar contract, the PUC should have a final version of the contract before it grants approval.

Contracts submitted to PUC by GPA under the Contract Review Protocol should be just that—final contracts to which the parties have agreed. GPA should not be submitting draft agreements to the PUC for review and approval when there is no final agreement by the parties. Here the PUC cannot discern what the final agreement of the parties may be, or the extent to which terms and conditions in the "draft" will be changed. GPA submits that there are various reasons why it seeks an expedited approval of the

[34] Contract Review Protocol for Guam Power Authority, Administrative Docket, dated February 15, 2007, at par. 1.

KEPCO contract. However, its desire for expedited PUC approval does not justify submission of unfinalized drafts.

5. GPA has provided Valid Justifications for Approval of a Contract with KEPCO for the provision of 132MW of PV Capacity.

The PUC previously approved the Phase IV Renewable Energy Program in the IRP and in its Order approving the procurement in GPA Docket 23-01. As GPA points out, Public Law 29-62 sets renewable goals under the Renewable Portfolio Standards (RPS), which mandate 50% renewables by 2035 and 100% by 2045.[35] Approval of the KEPCO award will substantially further the ability of GPA to meet the renewable goal of 50% by 2035. GPA has adopted a goal of 50% by 2030.[36] Previously PUC Consultant Daymark raised an issue as to why GPA has pushed the renewable goal of 50% five years earlier than the Legislature established.[37]

The contract award to KEPCO would result in providing an additional 132MW in PV Capacity and 67MW in BESS Capacity. There is an expected significant load growth by the end of this decade: "The estimated military growth, which could reach 100MW by 2033, coupled with potential increases in data centers and the use of electric vehicles, will cause significant increases in demand in the coming years."[38] In GPA Docket 24-21, concerning the Piti Overhaul, GPA presented evidence establishing anticipated load growth based upon discussions with the military and private sector. Potential load

[35] GPA Petition, GPA Docket 24-25, September 11, 2024, at p. 4.
[36] Id.
[37] PUC Order, GPA Docket 22-08, in the Matter of GPA integrated Resource Plan, at p. 4; Daymark suggested that GPA should develop alternative plans delaying the 50% goal until 2035: "Completion by 2035 would be in full compliance with the time frame established by the Legislature. Spreading out the potential costs of the CIP program over a longer period could potentially reduce the impact of the cost burden upon ratepayers."
[38] GPA Petition, GPA Docket 24-25, September 11, 2024, at p. 2.

requirements for the military over the span of the next ten years could increase load by 50MW. GPA estimates that private and government projects will increase load by 36MW.[39]

GPA estimates that the renewable energy projects, including KEPCO, will decrease GPA's importation of USLD by about 800,000 barrels. This projection is based upon approval of all Phase IV renewable projects. This will potentially reduce cash outflow from Guam which is presently paid for fossil fuel.

GPA claims that the proposal submitted by KEPCO will "provide substantial savings to GPA over the term of the contracts based on the current and projected LEAC rates."[40] This issue will be addressed in more detail in the next section on "Costs."

6. Costs Impact of the KEPCO Renewable Contract.

On October 3, 2024, the ALJ requested that Marianas Consulting Group (MCG) prepare a Report on the financial impact on the Phase IV Contract with KEPCO upon ratepayers. Such Report was filed on October 28, 2024 and is incorporated herein.[41]

GPA has estimated the impact on LEAC of Phase IV at Various levels of Fuel Prices (from $100 per Bbl. to $200 per Bbl. For ULSD).[42] Said LEAC Variance is attached hereto as Exhibit "B". The LEAC Variance Exhibit indicates if ULSD Fuel Prices/Barrel are $120 or less, the estimated LEAC prices for years 2028, 2029, and 2030 are higher with the implementation of Phase IV than without Phase IV. However, if the fuel prices for

[39] PUC Order, GPA Docket 24-21, dated August 29, 2024, at p. 6.
[40] Id. at p.3.
[41] MCG Report on Phase IV Renewable Acquisition Award, GPA Docket 24-25, dated October 28, 2024.
[42] GPA Petition, Exhibit C to Resolution No. 2024-29.

those years per barrel of ULSD are $150 or more, LEAC prices are lower with the implementation of Phase IV than without Phase IV.

Interestingly, MCG's LEAC calculations are somewhat different than GPA's calculations. MCG finds that LEAC prices "With Phase IV" are less expensive than "Without Phase IV", regardless of whether ULSD is priced at $100, $120, $150, $175, or $200 per barrel.[43]

MCG's Report concludes as follows: "Under both the GPA and MCG analyses, the Phase IV-A Renewables do not significantly impact the projected LEAC rates to be charged to GPA rate payers and, as fuel costs rise, acquisition of the Phase IV-A Renewables may actually result in a lower LEAC rate to GPA's customers. The Phase IV-A Renewables also act as a partial hedge against higher fuel costs and rates as fuel prices rise. Also, the Phase IV-A Renewables will help GPA meet its renewable goals and the renewable goals set forth in Guam Public Law 29-62…
**Nothing has come to our attention from a rate standpoint not to approve the draft contract with Kepco.**"[44] (emphasis added).

Due to decisions made by the PUC over the years concerning LEAC, it has been resolved that the costs for all solar plants contracted by GPA are paid for by ratepayers. The accepted theory has been that solar energy reduces fuel costs and that such costs should appropriately be included in the calculation of LEAC. It is established that the costs of all Phase IV solar projects will be paid by ratepayers through the LEAC.

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[43] MCG Report on Phase IV Renewable Acquisition Award, at pgs. 2-3.
[44] Id. at p. 4.

The ALJ is not certain whether GPA has added the cost of all the Phase IV LEAC projects into the estimated LEAC for 2028, 2029, and 2030. The addition of the costs for the KEPCO and Core Tech contracts alone will result in an increase to ratepayers through LEAC over the 25-year period of $1.669 billion. The contracts with the other three bidders will also increase the LEAC for ratepayers substantially.

In response to questions raised by the ALJ with GPA, GPA Legal Counsel Marianne Woloschuk stated: "The KEPCO Consortium's generation accounts for 19% of the LEAC Rate. If all five bidders are approved, they will account for about 30% of the LEAC."[45] GPA has also not indicated that the costs for all five bidders have been included in the LEAC calculations.

## RECOMMENDATION

The ALJ concludes that GPA has justified the need for Phase IV solar projects. The PUC should grant conditional approval to GPA to proceed with the finalization of the KEPCO contract. However, approval shall not be granted until GPA submits a final contract to the PUC that both GPA and KEPCO have agreed to. When GPA submits the final contract, the ALJ shall review the same and determine whether the final contract contains any material changes that were not in the draft. Upon the ALJ's certification there are no material changes in the contract, approval would be final.

A Proposed Order is submitted herewith for the Commissioners' consideration.

[45] Email from GPA Counsel Marianne Woloschuk to PUC ALJ Fred Horecky dated October 22, 2024.

Dated this 29th day of October, 2024.

Frederick J. Horecky
Chief Administrative Law Judge

# APPENDIX A

## CONTRACT PRICE, MINIMUM PRODUCTION AND GUARANTEED OUTPUT

| Contract Year | Annual Contract Price ($/MWh) | Estimated Annual Production (MWh) (= Minimum Production or Guaranteed Output) | 90% of Minimum Production (MWh) |
|---|---|---|---|
| 1 | 178.9929 | 233,915.00 | 210,523.50 |
| 2 | 180.7828 | 235,062.00 | 211,555.80 |
| 3 | 182.5907 | 234,447.00 | 211,002.30 |
| 4 | 184.4166 | 233,863.00 | 210,476.70 |
| 5 | 186.2607 | 233,959.00 | 210,563.10 |
| 6 | 188.1233 | 232,699.00 | 209,429.10 |
| 7 | 190.0046 | 232,120.00 | 208,908.00 |
| 8 | 191.9046 | 231,543.00 | 208,388.70 |
| 9 | 193.8237 | 231,639.00 | 208,475.10 |
| 10 | 195.7619 | 230,393.00 | 207,353.70 |
| 11 | 197.7195 | 229,768.00 | 206,791.20 |
| 12 | 199.6967 | 229,198.00 | 206,278.20 |
| 13 | 201.6937 | 229,084.00 | 206,175.60 |
| 14 | 203.7106 | 227,857.00 | 205,071.30 |
| 15 | 205.7477 | 227,291.00 | 204,561.90 |
| 16 | 207.8052 | 226,727.00 | 204,054.30 |
| 17 | 209.8833 | 226,817.00 | 204,135.30 |
| 18 | 211.9821 | 225,604.00 | 203,043.60 |
| 19 | 214.1019 | 224,913.00 | 202,421.70 |
| 20 | 216.2429 | 224,356.00 | 201,920.40 |
| 21 | 218.4054 | 192,491.00 | 173,241.90 |
| 22 | 220.5894 | 191,823.00 | 172,640.70 |

| | | | |
|---|---|---|---|
| 23 | 222.7953 | 191,640.00 | 172,476.00 |
| 24 | 225.0233 | 191,457.00 | 172,311.30 |
| 25 | 227.2735 | 191,817.00 | 172,635.30 |

# 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 |