BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN THE MATTER OF:)	GPA Docket 18-06
)	
The Application of the Guam Power for)	PUC COUNSEL REPORT
Approval of Phase II Renewable)	
Acquisition.)	
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INTRODUCTION

- 1. This matter comes before the Guam Public Utilities Commission [PUC] upon the Petition of the Guam Power Authority ["GPA"] for Approval of the Phase II Renewable Acquisition Award to KEPCO-LG CNS Consortium.¹
- 2. GPA proposes to enter into a contract with Korean Electric Power Company ["KEPCO"]- LG CNS for the construction of two 30MW solar PV projects in Sasajyan, Mangilao. Under the contract, GPA will purchase roughly 150,000 MWH Net Annual Generation at a price of \$85.50 per MWH.²

BACKGROUND

- 3. On June 26, 2014, the PUC authorized GPA to solicit competitive bids for up to 40MW of renewable energy in its Phase II Renewable Acquisition.³
- 4. In May 2016, GPA announced its Multi-Step Bid GPA-070-16 for 60MW of Renewable Energy Capacity with Energy Storage System for ramp control.⁴
- 5. GPA had advised the PUC both informally and in writing of its intent to seek 60MW of renewable energy capacity in its Phase II Renewables program.
- 6. GPA obtained price bids in January 2017 and determined that it wished to award renewable energy resource contracts up to 120MW. GPA felt that the increase in

¹ GPA Petition for Approval of the Phase II Renewable Acquisition Award to KEPCO-LG CNS Consortium, GPA Docket 18-06, filed January 24, 2018, at p. 1.

² Guam Consolidated Commission on Utilities, Resolution No. 2018-01, Resolution Relative to Approval of the Phase II Renewable Energy Acquisition Award to KEPCO-LG CNS Mangilao Solar, LLC., for 60MW of Renewable Energy Capacity, adopted January 23, 2018, at Exhibit A.

³ PUC Order, Procurement of Phase II Renewable Acquisition, GPA Docket 14-11, dated June 26, 2014, at p. 3.

⁴ GPA Petition for Approval of the Phase II Renewable Acquisition Award to KEPCO-LG CNS Consortium, GPA Docket 18-06, filed January 24, 2018, at p. 1.

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Megawatt power for award was justified because of the favorable price of solar power in comparison to fuel oil generated power under LEAC.⁵

- 7. Two bidders, KEPCO-LG CNS and Hanwa were selected to provide two plants each, or 60 MW, totaling 120MW of solar PV capacity.⁶
- 8. Based upon prices which range from roughly \$65 to \$85 per MWH of generation, GPA has determined that it is advisable to procure 120MW of renewable solar PV energy. Each contract will have a 25-year term with an annual escalator of 1% on renewable energy price. Only the KEPCO-LG CNS contract is before the PUC for approval at the present time.
- Attached hereto as Exhibit A documents presented to the CCU, which explain details of the proposed Power Purchase Agreement between GPA and KEPCO-LG CNS.
- 10. GPA intends to pay for the energy produced by the KEPCO 60MW plant through the Levelized Energy Adjustment Clause, which means that the cost of solar power purchased by GPA under the contract will be included in the fuel cost used to determine the customer LEAC rates.
- 11. As indicated, the contract will require the installation of 32MW/32MWH ESS for Ramp Rate Control. Under the proposed Interconnection Agreement, KEPCO will be required to install various transmission lines and relays at substations.
- 12. On January 23, 2018, the CCU approved the award of two 30MW proposals, totaling 60MW for Phase II Renewable Acquisition projects, to KEPCO-LG CNS and authorized GPA to seek contract review approval for the projects with the PUC.⁷

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⁵ PUC Counsel had discussions with GPA Counsel Graham Botha and Assistant GM John Cruz in January or February of 2017 concerning the interest of GPA in procuring 120 MW of additional solar power in Phase II of the Renewables Program.

⁶ GPA Petition for Approval of the Phase II Renewable Acquisition Award to KEPCO-LG CNS Consortium, GPA Docket 18-06, filed January 24, 2018, at p. 1.

⁷ Guam Consolidated Commission on Utilities, Resolution No. 2018-01, Resolution Relative to Approval of the Phase II Renewable Energy Acquisition Award to KEPCO-LG CNS Mangilao Solar, LLC., for 60MW of Renewable Energy Capacity, adopted January 23, 2018, at p. 1.

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ANALYSIS

- 13. Since 2008, PUC has understood that GPA intended to undertake a second phase associated with its renewable energy resource acquisition process. Originally, GPA's goal was to acquire a total of approximately 80MW of renewable energy resources.⁸
- 14. The Phase II renewable energy acquisition was also included in GPA's 2013 IRP.
- 15. However, GPA has considerably increased the amount of renewable energy resources that it now intends to include within the island wide power system. The driver for such increase appears to be the lower price for renewable energy as compared with traditional fossil fuel energy.
- 16. Public Law 29-62 set certain "Renewable Portfolio Standards", which required GPA to establish portfolio goals, *inter alia*, of twenty-five percent (25%) of its net electricity sales by December 31, 2035.9
- 17. With its proposed 120MW of solar energy, it appears that GPA will greatly exceed the legislative renewable portfolio standards. It is anticipated that, by 2020, 26% of GPA's sales will be through renewable energy production.¹⁰
- 18. GPA has provided various justifications for increasing the amount of solar energy. The KEPCO-LG CNS proposals would provide substantial savings to GPA over the term of the contracts based on current and projected LEAC rates.¹¹
- 19. Renewable energy is furthermore "an effective hedge against rising fuel oil prices." As the Commission has witnessed in recent LEAC proceedings, fuel prices have been increasing.
- 20. Furthermore, the energy prices under the renewable energy contracts are fixed with escalations of no more than the 1% annually.¹²

⁸ Georgetown Consulting Group, Docket 08-06, Petition for Contract Review of Renewable Energy Acquisition, dated April 18, 2009.

⁹ Public Law 29-62 enacted March 25, 2008, Section 2 (12 GCA §8311).

Guam Consolidated Commission on Utilities, Resolution No. 2018-01, Resolution Relative to Approval of the Phase II Renewable Energy Acquisition Award to KEPCO-LG CNS Mangilao Solar, LLC., for 60MW of Renewable Energy Capacity, adopted January 23, 2018, at Exhibit D.
 Id.

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21. Counsel has two general concerns that need to be addressed by the PUC: (1) the increased procurement by GPA of solar power impacts LEAC rates. The issue is whether this cost is justified by the good that results from such sustainable energy which is beneficial to the ratepayers and the island of Guam; and (2) is there any danger that GPA is over-procuring energy? With over 200MW of solar energy proposed, new generation of 180MW, and 400MW of existing fossil fuel energy

22. GPA will need to justify the total mix of energy resources that it is proposing, and that it is not procuring more generation capacity than necessary.

resources, could there be an excess of needed power production resources?

- 23. With regard to the proposed contract with KEPCO, there are new provisions which require energy storage and ramp control. It is desirable that GPA will require KEPCO to provide energy storage facilities enabling the shifting of solar energy to peak hour use.
- 24. In general, the proposed contract is based upon earlier renewable energy contracts, such as the NRG contract, and appears to be well written and provides numerous provisions that protect GPA and its ratepayer interests in the event of contractor default. These provisions provide remedies to GPA and penalties in the event that the contractor defaults in the construction of the facility or otherwise fails to deliver renewable energy in accordance with the agreement. The provisions appear to be standard and commercially reasonable.

RECOMMENDATION

- 25. Counsel recommends that the PUC approve GPA's request to award KEPCO-LG CNS for two 30MW renewable solar energy plants.
- 26. A Proposed Order is submitted herewith for the consideration of the Commissioners.

¹² Id. at p. 2.

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February 19, 2018

Dated this 19th day of February, 2018.

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