



BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

<p>GPA'S PETITION FOR APPROVAL OF SOLAR PV IFB FOR GUAM COMMUNITY COLLEGE</p> <hr/>	<p>))))))</p>	<p>GPA DOCKET NO. 14-10</p> <p>ALJ REPORT</p>
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INTRODUCTION

This matter comes before the Guam Public Utilities Commission (the "PUC") pursuant to the June 13, 2014 Petition for Approval of Solar PV IFB for Guam Community College, filed by the Guam Power Authority ("GPA"). GPA seeks PUC approval to issue a multi-step invitation for bid ("IFB") for the procurement of a solar photovoltaic system ("PV") for the Guam Community College ("GCC").

DISCUSSION

1. PAG's Contract Review Protocol

Pursuant to 12 G.C.A. § 12004, GPA may not enter into any contractual agreements or obligations which could increase rates and charges without the PUC's express approval. Additionally, pursuant to GPA's current Contract Review Protocol, "[a]ll professional service procurements in excess of \$1,500,000" "shall require prior PUC approval under 12 G.C.A. §12004, which shall be obtained before the procurement process is begun" Contract Review Protocol for Guam Power Authority, Administrative Docket, p. 1 (Feb. 15, 2008).

In addition, pursuant to a Memorandum of Understanding between the PUC and GPA, filed in GPA Docket 08-06, the PUC is tasked with reviewing and approving, prior to issuance, "all RFPs used for the purpose of procuring renewable, demand-side

management, and conventional power resources and services.” Memorandum of Understanding, GPA Docket 08-06, p. 3 (Dec. 15, 2008).

2. The GCC Solar PV Program

A. Scope of Services.

In support of its Petition, GPA submitted its draft bid documents for the PV program. The bid documents consist of three volumes, the last volume constituting GPA’s Draft Renewable Energy Purchase Agreement. Based on the bid documents, GPA submits that this particular project will serve as a pilot program, and will provide GCC with about 1-3 megawatts of electricity. The program will involve a power purchase agreement between GPA and the contractor, and will be for a term of between fifteen (15) to twenty (20) years. This program will also require a Memorandum of Understanding between GCC and GPA for the use of GCC property.

Generally, the scope of work for this contract will include the design, installation, operation and maintenance of a solar PV system. Specifically, the bid provides that the PV systems will be available for commercial operation within thirty-six (36) months from the award of the contract. IFB, vol. 1, p. 1. The PV systems will deliver energy directly to GPA’s distribution system. IFB, vol. 1, p. 1. For selected contractors, GPA will execute power purchase agreements (“PPAs”) for delivery of renewable energy to the GPA distribution system. IFB, vol. 2, p. 3.

“This program includes project financing, furnishing, delivering, testing, installing, operating, and maintaining, rooftop and ground-mounted solar photovoltaic systems on GCC’s Properties”; and with a goal of acquiring up to “3MW of rooftop and ground-mounted solar photovoltaic projects by 2015.” IFB, vol. 2, p. 3. In addition to

providing roof-top or ground-mounted PV systems, the contractor is also responsible for private financing; inspection and assessment of roof and land suitability; system designs; construction; testing; interconnection; operations and maintenance; monitoring, information exchange, and system control. IFB, vol. 2, p. 5. GPA further submits that the contractor “must undertake full project capital and O&M financing.” IFB, vol. 2, p. 5.

According to GPA, this program forms part of its Phase II Renewable Acquisition effort, and will serve as a pilot program for GPA, whereby GPA will continue additional staged bids in order to satisfy its renewable energy portfolio requirements. IFB, vol. 2, p. 3.

B. Program Objectives.

The subject program has a number of key objectives, which include the following: encouraging renewable energy market transformation; meeting Renewable Portfolio Standard goals; reducing air emissions, among others. IFB, vol. 2, p. 3. Additionally, GPA submits that this program supports the policies and directives of the Consolidated Commission on Utilities (“CCU”) and the PUC by reducing energy costs and Guam’s reliance on fossil fuels. IFB, vol. 2, p. 4.

C. Cost.

Since this is a multi-step bid process, pricing will be evaluated at Step Two, whereby GPA will evaluate Price Proposals from the bidders indicated in a Qualified Bidders List established during Step One. IFB, vol. 1, p. 1. GPA has indicated that the program will be funded by LEAC. *See* Petition, p. 1; CCU Resolution, p. 1.

3. Statutory Authority

To begin with, it is the Legislature's policy to "support" the "development of alternate energy" insofar as such energy program does not "burden" "the taxpayers, power consumers, and residents of Guam." 12 G.C.A. § 8306. Accordingly, the Legislature has expressly authorized the Governor, the Government of Guam, and GPA, to "enter into alternate energy agreements to develop alternate energy or to purchase alternate energy, so long as certain requirements are met. *Id.* For instance, Section 8306 provides the following.

(b) Any power produced or sold from alternate energy sources (including power generated from windmills, solar ponds and Ocean Thermal Energy Conversion (OTEC) cannot be purchased by Guam Power Authority or the government of Guam at a cost greater than the average cost of producing power found in the islandwide power system (not inclusive of backup diesel generators), specifically the two Cabras Units, the two Tanguisson Units, and the Piti Power Plant.

(c) No contract may be signed by the government of Guam or the Guam Power Authority to develop or purchase power from alternate energy sources (including power generated from windmills, solar ponds and Ocean Thermal Energy Conversion), if such contract will result in increased expenses and costs for the Guam Power Authority. No such alternate energy contract may be signed until the board of directors of the Guam Power Authority has so certified that the agreement is consistent with all bond covenants and that the price paid for electricity pursuant to the agreement does not exceed actual current avoided cost.

12 G.C.A. § 8306(b) and (c). In addition, Section 8306 additionally provides that "[a]ll interface facilities to provide usable alternate energy (including power generated from windmills, solar ponds and Ocean Thermal Energy Conversion) shall be installed and maintained at the expense of the supplier of alternate energy. Any such interconnections

shall be at existing lines owned and operated by the Islandwide Power System, and such interfaces shall be subject to the engineering standards and approval set by the Guam Power Authority.” 12 G.C.A. § 8306(f).

Therefore, completely in line with this policy, GPA is expressly authorized to “enter into long term contracts for a period up to and not exceeding thirty (30) years for renewable energy contracts, purchased power agreements, refurbish-operate-maintain contract, and build-operate-transfer contracts that cost Thirty Million Dollars (\$30,000,000) or more.” 12 G.C.A. §8104(n). In addition, GPA is mandated under statutory renewable portfolio standards, specifically 12 G.C.A. §8311, to meet 5% of renewable generation by December 2015.

4. Board Approval

Resolution No. 2014-18, issued by the CCU, authorized GPA to “pursue a Roof Top Solar pilot project with Guam Community College (GCC), or other entities, subject to final approval of the CCU as resolved in Resolution 2013-63” CCU Resolution No. 2014-18, p. 1. In particular, the CCU authorized GPA’s General Manager to “petition the Public Utilities Commission for expedited review for approval the bid documents for the Solar PV Program pilot project with Guam Community College (GCC).” CCU Resolution No. 2014-18, p. 2.

The CCU found that the GCC program will “help GPA to meet its renewable portfolio and Demand-Side Management goals” by meeting “the renewable resource portfolio standard adopted by the Guam Legislature in 2008”; and will also result “in cost savings to the customers of GPA.” CCU Resolution No. 2014-18, p. 1.

5. Lummus Report on Green Credit

A. Green Credits, Also Known as Renewable Energy Credits.

Based on the August 18, 2014 Report submitted by Lummus Consultants International, Inc. (“Lummus Report”), renewable energy credits (“RECs”) were initially used “as a mechanism to validate renewable generation to support the renewable generation market in transitioning to valuing credits.”¹ “An REC is validated with a certificate describing the renewable generation”; and “[s]ome jurisdictions have third party tracking systems that create, retire, or transfer certificates based upon rules created by that jurisdiction, which is usually an independent contractor.”²

“The purpose of a green credit today is to promote renewable energy by providing an additional incentive to the generator through the value associated with a green credit.”³ “Adoption of renewable energy is intended to drive reduced dependence on existing fossil generation and reduce the need for additional fossil fuel generation”; as well as to be used as a product that “creates an additional funding source for utility customers or utility companies to use to balance the costs of renewable energy adoption.”⁴

Lummus indicates that “[g]reen credits are an outgrowth of the development of RPS to encourage environmentally cleaner energy alternatives” since “[r]enewable energy currently has higher overnight costs according to a report by the U.S.

¹ Lummus Report, p. 5.

² Lummus Report, p. 5.

³ Lummus Report, p. 6.

⁴ Lummus Report, p. 6.

Energy Information Administration (EIA)⁵ than traditional fossil generation (solar installed costs are currently around \$3,394/kW whereas a Combined Cycle's installed cost is approximately \$924/kW).⁶ "Some of the overnight cost differences are offset over time by the lower fuel and maintenance costs associated with renewable energy."⁷ Lummus explains that "[g]reen credits, along with tax incentives and long term contracts, make renewable energy a more competitive investment when compared with fossil alternatives."⁸ Lummus has found that "[t]he value of green credits varies from jurisdiction to jurisdiction, ranging from under \$1 to as high as \$500 for solar RECs."⁹

B. Compensation for Green Credits.

Lummus submits that a "green credit's monetary value is created within each jurisdiction's [Renewable Portfolio Standards ("RPS")] and associated market." Lummus, therefore, maintains that the compensation for green credits rely "on the balance of supply and demand within each market or jurisdiction."¹⁰ In particular, Lummus explains that "[t]he market, or jurisdiction, sets the rules for RPS, establishes pricing structures which set minimum and maximum prices for green credits that may differ by type (example: solar versus hydro for instance), and creates renewable portfolio

⁵ http://www.eia.gov/forecasts/aeo/assumptions/pdf/table8_2_2014er.pdf

⁶ Lummus Report, p. 6.

⁷ Lummus Report, p. 6.

⁸ Lummus Report, p. 6.

⁹ Lummus Report, p. 6.

¹⁰ Lummus Report, p. 7.

standards.”¹¹ Green credits are useful inasmuch as “[i]f the utility has a surplus or deficit when compared to the requirement, they can trade RECs within the associated market or directly with another utility in order to achieve their RPS requirement”; and “[e]ach electric distribution utility is responsible for owning enough RECs to cover their obligation in each of their jurisdictions.”¹²

C. Findings.

Lummus found that currently, “there is a very limited market of individual customers, such as GCC or the military for example, that can promote renewable energy and who could purchase or sell green credits to each other or to GPA.”¹³ Thus, Lummus cautions that “[t]he adoption of green credits may add costs to already high generation costs for GPA customers whether the utility or individual customer receives the credit.”¹⁴ However, Lummus recognizes that “[i]f the Commission moves toward adoption of a green incentive to encourage the solar or wind markets to be competitive and financially feasible, then such additional costs could be justified.”¹⁵

Lummus ultimately recommended that the Commission require GPA to report to the PUC the results of GPA’s investigation on the potential for a green credit market, and that such a report include the potential costs and benefits of incorporating a

¹¹ Lummus Report, p. 7.

¹² Lummus Report, p. 7.

¹³ Lummus Report, p. 7.

¹⁴ Lummus Report, p. 7.

¹⁵ Lummus Report, p. 7.

green credit market within GPA's IRP.¹⁶ Lummus notes that in order to establish a green credit market, certain rules would need to be established, such as the following: Qualifications for green credits; Ownership of the credit; Renewable resources that qualify for the credit; Tracking of the green credits; Expiration of the credits; Reporting of the credits; among others.¹⁷

CONCLUSION AND RECOMMENDATION

The ALJ recommends that the PUC approve GPA's request to issue a multi-step IFB for the procurement of solar PV system on behalf of GCC in similar form to the bid documents submitted to, and reviewed by, the PUC. The subject program is consistent with the Legislature's intent of developing renewable energy in Guam, and will help GPA meet its obligations under the statutory renewable portfolio standards. GPA shall of course be required to present any final contract resulting from the subject bid to the PUC for regulatory review. A proposed Order is submitted herewith for the Commissioners' consideration.

With respect to establishing a "green credit," Lummus has submitted for the PUC's consideration a proposed Order related to its findings as detailed in the Lummus Report.

In this proposed Order, Lummus recommends that GPA submit a Green Credit evaluation report that outlines the benefits and costs of implementation, approach to such a market on Guam, and outlines the risks and opportunities associate with adoption,

¹⁶ Lummus Report, p. 7.

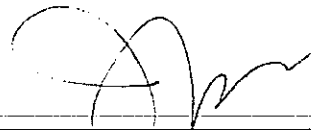
¹⁷ Lummus Report, pp. 7-8.

sixty (60) days after the date of this Order. In addition, Lummus further recommends that GPA shall submit a Green Credit Implementation Plan to the PUC that includes projected costs, proposed rules, relationship to RPS, validation process and suggested tracking mechanism that are required for a green credits program to be implemented with a timeline, no later than one hundred and twenty (120) days after the date of this Order. Further, Lummus recommends that after the PUC approves the Green Credit Implementation Plan, GPA shall submit a detailed Green Credit Report to the PUC that includes the following:

- a. Number of credits by type, date credit created, retirements and ownership;
- b. Any off island activity;
- c. Proposed costs associated with green credits;
- d. Other pertinent information.

Lummus suggests that such report should be due to the PUC annually and that the development of the initial Green Credit Implementation Plan, reporting, and efforts through actual implementation shall be an ongoing collaborative effort between GPA and Lummus regarding suggestions, recommendations and exchange of ideas. In order to facilitate the development of that report, it was recommended that an initial meeting shall be held within fourteen (14) days of this Order.

Respectfully submitted this 26th day of August, 2014.



JOEPHET R. ALCANTARA
Administrative Law Judge