

BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN THE MATTER OF:)
) GPA Docket 11-12
)
Guam Power Authority’s Petition for) **PUC COUNSEL REPORT**
Contract Review of Renewable Energy)
Acquisition Pursuant to GPA’s Integrated)
Resource Plan)
)

INTRODUCTION

1. This matter comes before the Guam Public Utilities Commission [“PUC”] upon the Filing by GPA of the “Renewable Energy Purchase Agreement with Quantum Guam Power, LLC.”¹
2. GPA’s Filing includes the following documents:
 - (1) R.W. Beck, Renewable IFB System Impact Study (IR01 & IR02 Evaluation), Final Report, dated May 2012;
 - (2) Renewable Energy Purchase Agreement between Guam Power Authority and Quantum Guam Power, LLC;
 - (3) Letter dated May 18, 2012, from Quantum Guam Power LLC to the General Manager of the Guam Power Authority [re: Renewable Energy Purchase Agreement (“PPA”) between Guam Power Authority and Quantum Guam Power LLC], wherein Quantum accepts the conclusions and conditions of the Renewable IFB System Impact Study (IR01 & IR02 Evaluation) dated May, 2012 and prepared by R.W. Beck;
 - (4) Small Generator Interconnection Agreement between GPA and Quantum.²

BACKGROUND

3. On November 19, 2011, the Chairman of the Commission issued, on behalf of the Commission, an Order in this Docket which approved the selection of Quantum Guam Power [“QGP”] and award of a contract to it of a 20MW Solar Project. The selection of Pacific Green Resources [“PGR”] and award for a 14.39MW Wind/Solar

¹ GPA Filing, GPA Docket 11-12, Renewable Energy Purchase Agreement with Quantum Guam Power, LLC, filed May 21, 2012.

² Id.

Project was also approved.³The Commission recognized that GPA was obligated by Public Law 29-62 to comply with the renewable portfolio standards set forth therein, which require that “five percent (5%) of its (i.e. GPA) net electricity sales by December 31, 2015” be provided by renewable energy sources.⁴

4. The PUC authorized GPA to enter into contracts with QGP and PGR.⁵
5. However, PUC approval for GPA to enter into contracts with QGP and PGR was subject to two conditions: (1) completion of an evaluation by GPA of the projects in the System Impact Study performed by R.W. Beck; and (2) acceptance by the project proponents of the System Impact Study terms and conditions.⁶
6. At its meeting of January 11, 2012, Guam PUC ratified the Order of the Chairman in GPA Docket 11-12.⁷

DISCUSSION

7. GPA has completed and submitted the Renewable IFB System Impact Study, prepared by R.W. Beck, as required by the December 19, 2011 Order.⁸
8. The “power flow analysis” in the Study indicates that “the Projects did not contribute to any thermal overloads, and no upgrades beyond the point of interconnection are necessary to accommodate a single IR- IR-01 or IR-02 in any of the dispatch cases. However, the combination of both IR-01 and IR-02, connected at the Talofoto 34.5 – kV substation does require upgrades.”⁹ The results of the short circuit analysis reveal that while the new generating units do marginally increase default levels in the system, the amount is not significant enough to cause any new breaker duty violations and therefore do not require any additional capital projects with the GPA system related to short circuit contributions.¹⁰
9. The results of the dynamic stability analysis indicate that the interconnection of the proposed generation projects does not introduce any new problems responding to

³ PUC Order, GPA Docket 11-12, at p. 1, issued December 19, 2011.

⁴ Id. at p. 2.

⁵ Id.

⁶ Id. at p. 4; see also letter from General Manager Joaquin Flores to ALJ Horecky dated May 31, 2012 [re: Quantum Guam Power Renewable Contract Documents Submittal], filed May 21, 2012.

⁷ Minutes of Special Meeting of January 11, 2012, at p. 1 [“Ratification”].

⁸ GPA Filing, GPA Docket 11-12, filed May 21, 2012.

⁹ __ Executive Summary at p. 1.

¹⁰ Id.

transmission system events, provided that IR-01 inverters are procured with the Extended Ride Through Option.¹¹

10. The results of the analysis for voltage and reactive impacts indicate that IR01 and IR02, both individually and together, do not significantly contribute to any steady state bus voltage degradation in any of the scenarios or POIs analyzed.¹²
11. Furthermore, the transient stability test results indicated no degradation of performance or criteria violations caused by the new interconnection.¹³
12. The solution recommended by Beck is that the QGP and PGR projects will both connect at the Talofoto Substation, and will do so by building a 34.5 kV underground connection with two circuits from Dandan to Talofoto (1 connection for each project).¹⁴
13. Beck further recommends a cost allocation for the interconnection requests, with 57% of cost allocated to QGP and 43% of the cost allocated to PGR.¹⁵ The total required Network Upgrade Costs are estimated to be \$17,337,482. From that amount, there will be a cost assignment to QGP of \$9,907,133 and to PGR of \$7,430,350.¹⁶
14. By letter dated May 18, 2012, Quantum Guam Power LLC accepted the conclusions and conditions of the Renewable System Impact Study (IR01 & IR02 Evaluation) dated May, 2012, prepared by R.W. Beck. Furthermore, there is the Small Generator Interconnection Agreement that Quantum Guam Power LLC will enter into, which specifically sets forth the agreements and understandings regarding interconnection and the payment of costs by Quantum for such arrangements.¹⁷
15. In addition, GPA and Quantum Guam Power LLC (QGP) have agreed to the form of their Renewable Energy Purchase Agreement, which is attached to GPA's filing. The form of the agreement is comprehensive and fully sets forth the details of the relationship between the parties and the terms and conditions thereof.

¹¹ Id. at p. 2.

¹² Id. at p. 2-3.

¹³ Id., Section 4 [Dynamic Stability Results].

¹⁴ Id. at Section 5.

¹⁵ Id. at Section 5 at p. 5-2.

¹⁶ Id. at p. 5-3.

¹⁷ Letter from Quantum Guam Power to Guam Power Authority dated May 18, 2012; Small Generator Interconnection Agreement between Guam Power Authority and Quantum Guam Power LLC.

16. A considerable amount of work and negotiation has clearly gone into the agreement. Seller will construct a solar facility capable of producing 20 megawatts during the first contract year, and a minimum production of megawatts for a term of 25 years.¹⁸ At present, the “Commercial Operation” date is twenty four months from the effective date of the agreement.¹⁹
17. Seller will bear the cost for construction of the solar facility. The facility will remain the property of Seller unless a sale is agreed to by the parties in accordance with the contract. The contract provides for strict performance guarantees and penalties in the event that Seller does not meet the minimum energy production requirements. GPA purchases the power from Seller at a fixed price. The Contract price per megawatt hour varies from \$196.00 in year 1 to \$220.90 in year 25.²⁰
18. The Agreement negotiated between the parties appears to be a well thought out, and detailed statement and description of the relationship between the parties. GPA has the authority to enter into contracts under its governing statute; assuming that a contract is prudent and reasonable (which this contract appears to be).
19. As previously indicated, GPA has been mandated by the Guam Legislature to meet and comply with certain renewable portfolio standards. The solar projects herein are a good faith effort by GPA to comply with the statutory mandate.

RECOMMENDATION

20. Counsel recommends that the PUC find that the System Impact Study prepared by R.W. Beck Inc. has been completed in accordance with the PUC Order dated December 19, 2011. The Study sets forth the impact of the two proposed projects upon the GPA system and the cost of interconnection upgrades.
21. PUC should find that Quantum Guam Power has accepted all terms and conditions of the System Impact Study, as well as its cost responsibility for the interconnection upgrades required to implement its project.
22. Counsel further recommends that the PUC determine that the requirements for contract approval set forth in the PUC December 19, 2011 Order have been satisfied.

¹⁸ Renewable Energy Purchase Agreement, pgs. 11 & 44.

¹⁹ Id. At p. 14.

²⁰ Id., Appendix A.

23. The PUC should approve the Renewable Energy Purchase Agreement between Quantum Guam Power LLC and the Guam Power Authority.
24. A proposed Order is submitted herewith for the consideration of the Commissioners.

Dated this 29th day of May, 2012.

Frederick J. Horecky
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