



	OCKET 11-13
GUAM POWER AUTHORITY'S  PETITION FOR REVIEW AND  APPROVAL OF THE DISTRIBUTION  MANAGEMENT SYSTEMS CONTRACT  (SMART GRID PROJECT)  )	UNSEL REPORT

## INTRODUCTION

- 1. This matter comes before the Guam Public Utilities Commission ["PUC"] upon the Petition of the Guam Power Authority ["GPA"] for contract review and approval of GPA's Distribution Management Systems Contract with JMI-Edison ["JMI"].<sup>1</sup>
- 2. According to the Petition, the implementation of this Contract for Distribution Management Systems is critical to the success of GPA's Smart Grid Project, and is reasonable, prudent and necessary.<sup>2</sup>
- 3. The cost of the Contract with JMI-Edison is the amount of \$2,249,620.00.3

## **BACKGROUND**

- 4. The Smart Grid Project has been before the Commission on numerous occasions. Previously, PUC authorized GPA to issue revenue bonds, which included approximately \$17M for the Smart Grid project. PUC further approved the expenditure of funds for Smart Grid under the Contract Review Protocol and the implementation of the Smart Grid Project.<sup>4</sup>
- 5. On December 19, 2011, the PUC approved GPA's intent to proceed with six major contracts for different aspects of the Smart Grid Project, including Distribution

<sup>&</sup>lt;sup>1</sup> GPA Petition for Review and Approval of Distribution Management Systems Contract under GPA Smart Grid Project, GPA Docket 11-13, filed March 12, 2013.

<sup>&</sup>lt;sup>2</sup> Id. at p. 2.

<sup>3</sup> Id.

<sup>&</sup>lt;sup>4</sup> PUC Order, GPA Docket 10-01, issued July 27, 2010, at p. 2.

Management System ["DMS"], and authorized GPA to obligate funds up to the full amount of \$17M.5

- 6. The PUC also approved and implemented measures to assist GPA in rapidly implementing its Smart Grid Program; if expeditious action is not taken by GPA to implement Smart Grid, there is the possibility that its Grant could be terminated by the U.S. Department of Energy.<sup>6</sup>
- 7. In said Order, the PUC implemented an expedited procedure for Smart Grid projects whereby GPA would not need to obtain prior PUC approval for procurements of Smart Grid Projects, but only to obtain final review and PUC approval of Smart Grid Contracts.<sup>7</sup>
- 8. The most recent action of the PUC regarding Smart Grid was approval of GPA's Substation Automation Contract with Black Construction Corporation ["Black"] on July 30, 2012.8

## THE DISTRIBUTION MANAGEMENT SYSTEMS CONTRACT WITH JMI-EDISON

- 9. In the Distribution Management Systems Request for Proposals RFP-006, GPA's PMO (Black & Veatch) provided public announcement specifying the types of services and equipment required for the Distribution Management Systems. The RFP indicated that the Distribution Management Systems Equipment would provide real-time status information from the distribution system, enabling distribution operators to remotely monitor, coordinate and operate distribution components in real-time.<sup>9</sup>
- 10. Five vendors responded to the RFP for Distribution Management Systems, including JMI-Edison, Telvent, and Siemens. After a review by the GPA Evaluation

<sup>&</sup>lt;sup>5</sup> PUC Order GPA Docket 11-13, issued December 19, 2011, at p. 2.

<sup>6</sup> Id.

<sup>&</sup>lt;sup>7</sup> Id. at p. 3.

<sup>&</sup>lt;sup>8</sup> PUC Order, GPA Docket 11-13, issued July 30, 2012, at p. 2.

<sup>&</sup>lt;sup>9</sup> Guam Consolidated Commission on Utilities Resolution No. 2013-21, Authorizing Management of the Guam Power Authority to Contract Services and Equipment for the Distribution Management Systems in support of Smart Grid Initiatives, adopted February 26, 2013.

Team (guided by PMO Black & Veatch Personnel), GPA concluded that JMI-Edison was the most responsible bidder and selected JMI for award of the contract.<sup>10</sup>

- 11. GPA has also presented its proposed contract with JMI-Edison. JMI-Edison will perform its contract in conjunction with its technology partner, General Electric ["GE"]. The contract commences upon its effective date and continues in effect until the distribution Management System and Hardware Installation Services are completed (unless extended by mutual agreement of both parties or terminated by either party). Attached to the Contract as Attachment "A" is a detailed Statement of Work. It sets out the duties and responsibilities of the parties in considerable detail.
- 12. It is anticipated that the implementation of the Distribution Management System will be completed on or about May 30, 2014.<sup>13</sup> As part of the price quotation, JMI-Edison provides GPA a Warranty, Maintenance & Support Services for Systems and Equipment to be supplied.<sup>14</sup>
- 13. The DMS has applications that help distribution operators monitor and control the distribution system under normal conditions and improve restoration during abnormal operation. DMS receives real-time status information from the distribution system, enabling distribution operators to remotely monitor, coordinate and operate distribution components in real-time. Operators send control commands to substation and remote distribution devices such as breakers, switches and reclosers, switched capacitor banks, voltage regulators, and load tap changers in the field. The DMS provides advanced decision support and automated control of the distribution system.<sup>15</sup>
- 14. Under the contract, JMI is required to provide GPA with project management, technical support (system administration and version control), change management services, software installation, gap assessment, software configuration, conversion,

<sup>10</sup> Id.

<sup>&</sup>lt;sup>11</sup> Form or contract between GPA and JMI-Edison, attached to the GPA Petition herein.

<sup>&</sup>lt;sup>12</sup> Attachment "A", Statement of Work, to the Contract between GPA and JMI-Edison [attached to the GPA Petition for Contract Review herein].

<sup>&</sup>lt;sup>13</sup> Attachment "A", Statement of Work (last 2 pages).

<sup>&</sup>lt;sup>14</sup> Attachment "B" to the Contract between GPA and JMI-Edison [letter dated February 7, 2013, Re: Revised Price Proposal from JMI-Edison to Vincent J. Sablan, Engineer Supervisor, GPA].

<sup>&</sup>lt;sup>15</sup> ABSTRACT, GPA SGIG RFP No. 006, Distribution Management System [attached to GPA Petition for Contract Review].

interface development, report writing, training, testing support, and post-live support services to insure the successful implementation for GPA and its customers. <sup>16</sup>

- 15. Among other benefits, DMS can improve the distribution system's efficiency and reliability. Fault detection, isolation, and restoration functions can be integrated to information as provided from distribution automation, substation automation, and other smart grid applications. An integrated Volt-Var Control engine can use Load Flow DSE results to determine and produce a set of control recommendations/actions to reduce overall load to be within dispatcher-defined limits, and maintain power factors within pre-defined limits by switching capacitors on and off.<sup>17</sup>
- 16. In CCU Resolution No. 2013-21, the GPA General Manager was authorized to enter into a contract with JMI-Edison in the amount of \$2,249,620.00 for the Distribution Management Systems, subject to PUC approval.<sup>18</sup>

## **RECOMMENDATION**

- 17. Counsel recommends that the PUC approve GPA's award for the Distribution Management Systems to JMI-Edison.
- 18. GPA should be authorized to expend an amount up to \$2,249,620.00 for such contract.
- 19. The PUC has previously given broad support for the Smart Grid Project, approved funding for the project, and specifically authorized GPA to proceed with the Distribution Management Systems.
- 20. The Distribution Management System is critical for the success of the Smart Grid Project. Without its implementation, GPA will be unable to obtain the projected benefits of the Smart Grid Project (SG).

<sup>16</sup> Id.

<sup>&</sup>lt;sup>17</sup> Attachment "A" Statement of Work, at p. 4.

<sup>&</sup>lt;sup>18</sup> Consolidated Commission on Utilities Resolution No. 2013-21, at p. 3.

21. A Proposed Order is submitted herewith for the consideration of the Commission.

Dated this 19th day of March, 2013

Frederick J. Horecky

PUC Legal Counsel