#### BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN THE MATTER OF:	) ) GPA DOCKET 11-13
GUAM POWER AUTHORITY'S PETITION FOR REVIEW AND APPROVAL OF NETWORK COMMUNICATIONS CONTRACT (SMART GRID PROJECT)	) ) PUC COUNSEL REPORT ) ) )

# **INTRODUCTION**

- 1. This matter comes before the Guam Public Utilities Commission ["PUC"] upon Request of the Guam Power Authority ["GPA"] for contract review and approval of GPA's Network Communications Contract with Tropos Networks, Inc.<sup>1</sup>
- 2. According to the Request, the implementation of this contract for the "Network Backhaul Solution" is critical to the success of GPA's Smart Grid Project.<sup>2</sup>
- 3. The cost of the contract for Network Communications with Tropos Networks Inc. is the amount of \$5,243,775.23.

### **BACKGROUND**

- 4. The Smart Grid Project has been before the Commission on numerous occasions. Previously, PUCauthorized 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>3</sup>
- 5. More recently, 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 Network Communications, and authorized GPA to obligate funds up to the full amount of \$17M.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup> GPA Request for Approval of Tropos Network Contract under GPA Smart Grid Project, GPA Docket 11-13, filed April 20, 2012.

<sup>2</sup> Id

<sup>&</sup>lt;sup>3</sup> PUC Order, GPA Docket 10-01, issued July 27, 2010, at p. 2.

<sup>&</sup>lt;sup>4</sup> PUC Order GPA Docket 11-13, issued December 19, 2011, at p. 2.

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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>5</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>6</sup>

# THE NETWORK COMMUNICATIONS CONTRACT WITH TROPOS NETWORKS INC.

- 8. GPA has presented a strong justification for the approval of its proposed contract with Tropos Networks Inc. in that implementation of the contract for "the network backhaul solution" is critical to the success of GPA's Smart Grid Contract.
- 9. Tropos was selected for the contract award from a pool of seven vendors.<sup>7</sup> At all stages of the procurement and selection process, GPA was assisted by its project PMO, Black & Veatch.<sup>8</sup>
- 10. In approving the Contract with Tropos, the Consolidated Commission on Utilities recognized that GPA intends "to implement a network backhaul solution to allow for connectivity of Smart Grid applications…"<sup>9</sup>
- 11. The Smart Grid Network Communications is the system through which data will be communicated from the automated meter infrastructure to the Meter data management system. The Smart Grid Network Communications will also include the communications for the other Smart Grid Components (Substation Automation,

<sup>6</sup> Id. at p. 3.

<sup>&</sup>lt;sup>5</sup> Id. at p. 2.

<sup>&</sup>lt;sup>7</sup> Memorandum to General Manger Re: RFP No. 004 Network Communications Vendor Selection, dated February 27, 2012.

<sup>&</sup>lt;sup>8</sup> Memorandum to General Manager, RFP No. 004 Network Communications Contract Recommendation, dated April 9, 2012; see also ABSTRACT, GPA SGIG RFP No. 004 Network Communications, p. 2.

<sup>&</sup>lt;sup>9</sup> CCU Resolution No. 2012-24, authorizing Management of the Guam Power Authority to contract services for Island-Wide Network Backhaul Communications in support of Smart Grid initiatives, issued April 10, 2012.

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Distribution Automation, Distribution Management System, Outage Management System, and Load Control Management System).<sup>10</sup>

- 12. Tropos will supply all of the required software and hardware for the Network Backhaul System [NBS] as well as necessary services in order to successfully implement the NBS at GPA. The NBS will be implemented in two phases.<sup>11</sup>
- 13. The first phase is to implement the Tier 1 backhaul network from the substations to the data center. The second phase is to implement the Tier 2 backhaul network from the AMI network to the substations.<sup>12</sup>
- 14. GPA has provided a draft "Form of Contract" which indicates the agreement between GPA and Tropos. Furthermore, there is a detailed statement of Work attached to the Contract which indicates the duties and responsibilities of Tropos for implementing the network communications system as well as warranty coverage and system compliance standards.<sup>13</sup>
- 15. The system that Tropos will construct is akin to a telecommunications system involving radio communications, network/Wifi interoperability, and Ethernet transport. Tier 2 network provides wireless broadband access to the Tier 1 Network for both fixed and Mobile Access.<sup>14</sup>

# **RECOMMENDATIONS**

- 16. Counsel recommends that the PUC approve GPA's award of the Network Communications Contract to Tropos Networks, Inc.
- 17. GPA should be authorized to expend an amount up to \$5,243,775.23 for such contract.

<sup>&</sup>lt;sup>10</sup> Id. at p. 2.

<sup>&</sup>lt;sup>11</sup> ABSTRACT, GPA SGIG RFP NO. 004 NETWORK COMMUNICATIONS, p. 1.

<sup>12</sup> Id

<sup>&</sup>lt;sup>13</sup> The form of contract and Attachment h-1, Statement of Work for GPA NBS (Network Backhaul Solution) Project, submitted with GPA's request for Contract Review, filed April 20, 2012.

<sup>&</sup>lt;sup>14</sup> Attachment h-1 Statement of Work, Id.

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- 18. 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 Network & Communications Infrastructure.
- 19. The Network Communications piece of the Smart Grid Project truly is critical for its success. Without the implementation of a communications infrastructure, GPA will be unable to obtain any of the projected benefits of the Smart Grid Project.
- 20. The Network Backhaul Solution is critical to enable GPA to obtain data and information from the advanced Metering Infrastructure, Distribution Automation, Substation Automation, System Control Data Acquisition (SCADA), Power Quality Management, Outage Management, Mobile Workforce, and other applications.<sup>15</sup>
- 21. A Proposed Order is submitted herewith for the consideration of the Chairman.

Dated this 30th day of April, 2012.	
	Frederick J. Horecky
	PUC Legal Counsel

<sup>&</sup>lt;sup>15</sup> Attachment h-1 Statement of Work at p. 2.