

**BEFORE THE GUAM PUBLIC UTILITIES COMMISSION**

IN THE MATTER OF:	)	
	)	GPA DOCKET 17-02
	)	
The Application of the Guam Power Authority for Approving the Contract with TEMES, Inc. for Cabras 1 Overhaul.	)	PUC COUNSEL REPORT
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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 Contract with TEMES, Inc., for Cabras 1 Overhaul.<sup>1</sup>

**BACKGROUND**

2. GPA's presently has a Performance Management Contract with Taiwan Electrical and Mechanical Engineering Services, Inc. ("TEMES") for Cabras 1 & 2.<sup>2</sup>
3. The Cabras Unit 1 is scheduled for its next overhaul in July of 2017; this overhaul is expected to last 50 days. The period of the outage schedule will be from July 15, 2017 through September 3, 2017.<sup>3</sup>
4. The PMC TEMES has recommended the overhaul of Cabras Unit 1 to restore reliability and availability of plant equipment, restore plant efficiency, and support economic dispatching of the generation system.<sup>4</sup>
5. The key items designated for overhaul include the main steam turbine generator, archway tubes, burner front system and flame detectors, and air preheaters.<sup>5</sup>
6. The total overhaul cost is anticipated to be \$5,490,000. The project will be programmed under revenue funds. The Breakdown of Cost is set forth in Attachment 1 hereto.<sup>6</sup>

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<sup>1</sup> GPA Petition for Approval of the Contract with TEMES, Inc., for Cabras 1 Overhaul, GPA Docket 17-02, filed October 7, 2016.

<sup>2</sup> Id.

<sup>3</sup> Guam Consolidated Commission on Utilities Resolution No. 2016-49, Relative to Authorizing the Guam Power Authority to seek Approval from the PUC to Proceed with the Cabras Unit 1 Major Overhaul, adopted September 27, 2016, at p. 1.

<sup>4</sup> Id.

<sup>5</sup> Id.

7. For the overhaul, Cabras Unit 1 Air Preheater Baskets, Archway Tubes, and Inlet Vane Control Assembly have been identified for replacement.<sup>7</sup>
8. Lead times for product delivery and materials needed for replacement are between 20 and 36 weeks.<sup>8</sup> For that reason, GPA intends to issue a notice to proceed to TEMES for the early procurement of the materials needed for the overhaul so that they will be available in time for the July 2017 overhaul.
9. The Guam Consolidated Commission on Utilities, in Resolution 2016-49, approved GPA's request to contract for the generator overhaul of Cabras 1 through the PMC, TEMES, Inc., in the amount of \$5,490,000, using revenue funds.<sup>9</sup>

### ANALYSIS

10. In GPA Docket 13-03, the PUC approved a major overhaul for Cabras 1 on April 30, 2013. The cost of such overhaul was \$1.4M, and it was funded from bond funds.<sup>10</sup>
11. The last major overhaul of the Cabras Unit 1 was completed in December 2013. This unit has been in operation for 33 months without a major overhaul. It will have been running for 40 months before the scheduled overhaul in July 2017.<sup>11</sup>
12. GPA has submitted a Cost-Benefit Analysis for the Cabras Unit 1 Major Overhaul.<sup>12</sup>
13. In general, GPA performs overhauls every 18-24 months in order to restore plant efficiency, reliability and availability.<sup>13</sup>

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<sup>6</sup> Id.; see Attachment "1" hereto (which is also attached to CCU Resolution No. 2016-49).

<sup>7</sup> Guam Consolidated Commission on Utilities Resolution No. 2016-50, Relative to Authorizing the Management of Guam Power Authority to Issue the PMC a Notice to Proceed for Early Material Procurement for the Cabras Unit 1 Major Overhaul, adopted September 27, 2016, at p. 1.

<sup>8</sup> Id.

<sup>9</sup> Guam Consolidated Commission on Utilities Resolution No. 2016-49, Relative to Authorizing the Guam Power Authority to seek Approval from the PUC to Proceed with the Cabras Unit 1 Major Overhaul, adopted September 27, 2016, at p. 2.

<sup>10</sup> PUC Order, GPA Docket 13-03, GPA's request to Finance Maintenance Work at Cabras 1 and to Use 1999 Bond Funds for Capital Projects, dated April 30, 2013.

<sup>11</sup> Guam Consolidated Commission on Utilities Resolution No. 2016-49, *supra*, adopted September 27, 2016, at p. 1.

<sup>12</sup> Cabras Unit 1 Major Overhaul, Cost-Benefit Analysis, attached to GPA's Petition.

<sup>13</sup> Id.

14. The overhaul of Cabras Unit #1 was scheduled for late 2015; however, it was postponed due to the unexpected explosion of Cabras Units 3 & 4. Since it is been nearly three years since the last major overhaul, GPA can expect an increase in occurrences of boiler tube leaks, derating of the unit, and mechanical equipment failure.<sup>14</sup>
15. GPA finds that the benefits of the overhaul outweigh the cost. The justification is that: “Completion of the Cabras 1 major overhaul will ensure availability, restore efficiency, and improve reliability of the unit... this overhaul is necessary to minimize boiler tube leaks and derating of the unit in the near future.”<sup>15</sup>
16. The Cabras 1 unit is essential to the island wide power system, and the contract is reasonable, prudent and necessary.<sup>16</sup>
17. In its Life Extension Feasibility Study, GPA Consultant Leidos also recognized that GPA has planned a major overhaul for the Cabras Unit 1 plant “for significant repairs, renewals and replacements...”<sup>17</sup>
18. The PUC has been aware that GPA planned to undertake a major overhaul of the Cabras 1 plant. In GPA’s FY2017 Capital Improvement Ceiling Cap, GPA included \$5,190,000 for the Cabras 1 overhaul, and indicated that GPA would be presenting a petition to the PUC for approval.<sup>18</sup> A substantial portion of the Cabras 1 overhaul cost is included in the FY2017 Revenue Budget.
19. The contract of the PMC TEMES technically ends on December 31, 2016; however, GPA is currently working with TEMES on a contract extension for the remaining four years of the contract extension period until 2020. The contract extension will be presented to the CCU at the October 25, 2016, meeting for review and approval.<sup>19</sup>

### **RECOMMENDATION**

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<sup>14</sup> Id.

<sup>15</sup> Cabras Unit 1 Major Overhaul, Cost-Benefit Analysis, attached to GPA’s Petition

<sup>16</sup> GPA Petition for Approval of the Contract with TEMES, Inc., for Cabras 1 Overhaul, GPA Docket, 17-02, filed October 7, 2016, at p. 2.

<sup>17</sup> Leidos, Final Report: Life Extension Feasibility Study, dated June 30, 2016.

<sup>18</sup> PUC Order, GPA Docket 16-13, GPA Request to Approve FY2017 CIP Ceiling Cap, dated September 29, 2016, at p. 2.

<sup>19</sup> Email from GPA Counsel Graham Botha to PUC Counsel Frederick Horecky dated October 10, 2016.

20. Counsel recommends that the Cabras 1 overhaul be approved, as requested in GPA's Petition.
21. The funding source proposed by GPA for the Cabras #1 overhaul, revenue funds, should be approved in the amount of \$5,490,000.
22. The PUC should approve GPA's petition and authorize it to proceed with the Cabras 1 planned overhaul work as set forth in the Cabras Unit 1 Major Overhaul Cost-Benefit Analysis and Attachment 1.
23. GPA should also be authorized to issue a notice to proceed to TEMES for the early procurement of Cabras Unit 1 Air Preheater Baskets Archway Tubes, Inlet Vane Control Assembly, and Burner Front System materials.
24. A Proposed Order is submitted herewith for the consideration of the Commissioners.

Dated this 22nd day of October, 2016.

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Frederick J. Horecky  
PUC Legal Counsel