

BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN THE MATTER OF:) GPA Docket 16-11
)
The Petition of the Guam Power Authority)
for Approval of Macheche CT Repairs) **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 Macheche CT Repairs.¹

BACKGROUND

2. The Macheche Combustion Turbine (CT) power plant was installed in 1993; it is rated for 22MW and is used to support peak loads and base load unit outages for the island wide power system (IWPS).²
3. On July 1, 2016, the unit was shut down after a turbine blade borescope inspection revealed corrosion on the turbine blades. The unit has been in operation for more than 20 years utilizing the original turbine engine.³
4. GPA’s Performance Management Contractor (PMC) for the Combustion Turbines, TEMES, has recommended that the Macheche turbine engine be replaced at a cost not to exceed \$2.7M⁴
5. The time frame for completion of the project is estimated at about three months.⁵

¹ GPA Petition for Approval of the Repairs for the Macheche CT, GPA Docket 16-11, filed July 27, 2016; see also Letter from GPA General Manager John Benavente to Frederick J. Horecky, PUC Legal Counsel, dated July 22, 2016; this letter request is treated as a Petition.

² The Guam Consolidated Commission on Utilities Resolution No. 2016-41, Authorizing Management of the Guam Power Authority to Implement and Complete the Repairs Required to Place Macheche Combustion Turbine Plant in service, approved July 26, 2016.

³ Id.

⁴ Id.

⁵ GPA Petition for Approval of the Repairs for the Macheche CT, GPA Docket 16-11, filed July 27, 2016, at p.1.

6. GPA management has requested that the PUC expedite this request. The loss of the Macheche CT, GPA is experiencing difficulty in meeting sufficient energy reserves and needs to restore the unit within 45 days to meet the annual peak demand period.⁶
7. General Electric has prepared a Borescope Inspection Report dated July 22, 2016. The Report indicates that the unit is not available for continued operation and is not serviceable at the present time ⁷

ANALYSIS

8. GM Benavente indicates that at present there is 303MW of generation capacity in the IWPS, with a peak demand of 255MW. This only leaves a reserve of 48MW. The loss of the 20MW produced by the Macheche unit leaves a deficiency in reserve capacity. The additional capacity of the Macheche unit is needed to meet the upcoming annual peak demand period.⁸
9. GPA proposes to fund the Macheche CT repairs from Revenue CIP (Capital Improvement Project) funds.⁹
10. Every year GPA submits a Capital Improvement Project Ceiling Cap. This cap includes General Plant Engineering projects. Over the past five fiscal years, the CIP Project Ceiling Cap has ranged from \$5M to \$16,390,707.¹⁰
11. The FY2016 CIP Cap is \$12,067,780.¹¹
12. GPA has sufficient funds in its CIP fund to pay for this project. It is reasonable, necessary and prudent for the PUC to approve the repair of the Macheche CT to provide additional system generation capacity as soon as possible.

⁶ Letter from GPA General Manager John Benavente to Frederick J. Horecky, PUC Legal Counsel, dated July 22, 2016; this letter request is treated as a Petition.

⁷ GE Boroscope Inspection Report dated July 22, 2016.

⁸ Letter from GPA General Manager John Benavente to Frederick J. Horecky, PUC Legal Counsel, dated July 22, 2016; this letter request is treated as a Petition.

⁹ Issues for Decision, submitted to the CCU, July 26, 2016.

¹⁰ PUC Order, GPA Docket 15-19, dated September 24, 2015 at p.1.

¹¹ Id. at p. 3.

RECOMMENDATION

13. Counsel recommends that the PUC approve the Macheche CT repairs as requested in GPA's Petition.
14. GPA should be authorized to expend the amount of \$2.7M from the Revenue CIP Fund to pay the replacement of the engine.
15. A Proposed Order is submitted herewith for the consideration of the Commissioners.

Dated this 27th day of July, 2016.

Frederick J. Horecky
PUC Legal Counsel