

BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN THE MATTER OF:

The Guam Power Authority 2022  
Integrated Resource Plan (IRP)

)  
) GPA Docket 22-08  
)

)  
) **ALJ REPORT**  
)  
)  
)



On January 28, 2022, GPA filed its 2022 Integrated Resource Plan (IRP).<sup>1</sup>

GPA indicates that the focus of the IRP is upon “how to achieve additional operational savings through efficiencies and to implement projects and programs to support achieving the 50% Renewable Portfolio Standard, grid security, stability and reliability, while also achieving reduction in greenhouse gas emissions.”<sup>2</sup>

GPA’s petition states: “The primary recommendations of the 2022 IRP include no additional synchronous generation resources required in the next 10 years with the addition of the new Ukudu Power Plant (198MW) and the Cabras Reserve Facility (41MW); procurement of renewable energy contracts with an annual 300,000 MWH by 2025 and another 300,000 MWH by 2029; execute portfolio of about \$233M in projects necessary to additional renewables integration with the grid; optimization of infrastructure to improve operations and reduce costs; implement demand side management programs; and implement charging facilities for growth in electric vehicles.”<sup>3</sup>

<sup>1</sup> GPA Filing of 2022 Integrated Resource Plan (IRP), GPA Docket 22-08, dated January 28, 2022.

<sup>2</sup> Id. at p. 1.

<sup>3</sup> Id.

In Guam Consolidated Commission on Utilities (CCU) Resolution No. FY2022-08, the CCU authorized the GPA General Manager to submit the 2022 IRP to the PUC for review and its approval.<sup>4</sup>

On May 23, 2022, PUC Consultant Daymark Energy Advisors, filed its Review of the Guam Power Authority 2022 IRP.<sup>5</sup>

Daymark Energy Advisors have filed a detailed report on the IRP. This ALJ Report will briefly describe some of the major findings of the Daymark Report. Overall, Daymark concluded: “GPA has made significant improvements in its IRP planning since prior IRP’s through greater focus on comparison of alternatives and inclusion of renewables and delivery of infrastructure improvements.”<sup>6</sup>

The key element of Daymark’s scope of work is to determine whether the IRP is “prudent.” As Daymark recognizes, there are two main elements of the IRP approval process. What GPA has provided in its IRP is “a roadmap plan” demonstrating that GPA has considered appropriate alternatives before identifying technically and economically superior potential solutions for investment over its planning horizon. GPA then files project approvals with the Commission periodically throughout the IRP time frame to obtain PUC approval to invest in each project.”<sup>7</sup> Daymark indicates that GPA has satisfied a “prudence” standard:

“Daymark’s review indicates that GPA’s IRP incorporates robust engineering analyses that contribute to a broad set of alternative

---

<sup>4</sup> Guam Consolidated Commission on Utilities GPA Resolution No. FY2022-08, Approval of the 2022 Integrated Resource Plan, adopted and approved on the 25<sup>th</sup> day of January, 2022.

<sup>5</sup> Daymark Energy Advisors, Review of Guam Power Authority 2022 IRP, filed on May 23, 2022.

<sup>6</sup> Id., at p. 19.

<sup>7</sup> Id., at p. 4.

investments in the generation, transmission, and distribution areas of GPA's system. GPA has significantly improved its IRP planning approach through investigation and adoption in the recommended roadmap of a number of alternative solutions that incorporate traditional utility solutions as well as infrastructure improvements, market solutions through the issuance of RFPs for new technology adoption, customer solutions through the adoption of load modifying pilots, and renewable energy solutions."<sup>8</sup>

Daymark further concludes: "addressing whether the IRP is well conceived and comprehensive, GPAs support and adoption of renewable energy is consistent with Guam's policy goals and such a move helps to insulate the island against high fuel costs and fuel price volatility."<sup>9</sup>

A primary recommendation of the IRP is a \$233 Million Capital Improvement Plan. The programs and projects are designed to support achieving the 50% Renewable Portfolio Standard by 2030. The CIP projects include the following:

- Relay upgrades
- Adaptive underfrequency and under voltage load shedding systems
- Synchronous condenser conversions and stand-alone synchronous condenser
- Standalone BESS
- Grid controller
- Synchrophasor network
- Malojloj – Hagatna 115 KV Line
- Demand response programs including demand response with GWA
- Remote start/stop/autostart for several CT facilities and the Tenjo Vista Plant

---

<sup>8</sup> Id., at p. 7.

<sup>9</sup> Id., at p. 9.

- Umatec microgrid
- Solar irradiance sensor network.<sup>10</sup>

The PUC will have a full opportunity to review each plan proposed in GPA's \$233M Capital Improvement Plan. Each project exceeding \$1.5M will come before the PUC under the Contract Review Protocol. While Daymark is correct that GPA's current IRP does not include much specific analysis about the rate impact of the \$233M expenditure program, GPA will be required to submit more detailed rate impact information when it files for project approval with the PUC.

Daymark also indicates that GPA's renewable energy supply plan results in meeting the RPS goal five years ahead of the legislatively stated date of 2035. GPA's proposal would meet the RPS goal five years early, by 2030. The ALJ believes that there may be advantages in delaying the scheduled compliance with the RPS schedule until 2035; this will enable costs to the ratepayers from the CIP plan to be spread out over a longer period, thereby reducing ratepayer impacts. GPA should consider and develop a schedule which meets the RPS standard by 2035. A 2035 timeline is in full compliance with the RPS Legislation.

Daymark has included in its report considerable analysis of the DSM programs and the Electric Vehicle Roadmap.<sup>11</sup>

Among its recommendations, Daymark has indicated that the IRP should better document which investments are included within the proposed Roadmap investments, the timelines, and the decision criteria. Such criteria will need to be presented to the

---

<sup>10</sup> Id., at p. 10.

<sup>11</sup> Id., at pgs. 14-17.

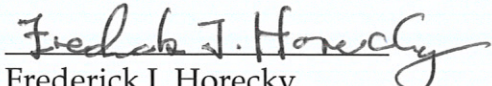
PUC at such time GPA requests approval of specific projects. At present there is a “roadmap”, but GPA may certainly, over the next few years, alter the scope and timing of the projects.

Daymark has also suggested that GPA should more explicitly address whether the new 198MW unit will meet the expectations of the Renewable Integration Study and how GPA will limit the impacts when such unit is out of service.<sup>12</sup>

Daymark has also recommended that, in addition to net present value analyses, GPA should include and prepare annual total rate impacts for the projects (including base rates and the LEAC) for consideration in their proposed capital requests. This will assist the Commission in reviewing and adequately assessing the projects. GPA should continue to evaluate rate impacts and provide updates to the PUC as its CIP plans and budget become more solidified at the project review stage.

Both Daymark Energy Advisors and the Administrative Law Judge recommend conditional approval of GPA’s Integrated Resource Plan. A proposed Order is submitted for the consideration of the Commissioners.

Dated this 23<sup>rd</sup> day of May, 2022.

  
Frederick J. Horecky  
Chief Administrative Law Judge

---

<sup>12</sup> Id., at pgs. 19-20.