
Geographic Information System (GIS) Long Term Plan

RECOMMENDATIONS FOR GIS LONG TERM PLAN

- Geographic Information System (GIS) is a foundational platform for a modern utility and an integral component of utility line-of-business processes/systems, including SCADA, Enterprise Asset Management, Outage Management, Advanced Distribution Management Systems, Distributed Energy Resource Management Customer Information Systems.
- Long-term planning is essential for leveraging the potential of GIS to optimize utility operations and drive improved decision-making. PSEG Long Island's current GIS system portfolio falls short of a modern GIS platform.
- LIPA Staff believes that developing a comprehensive Long-Term GIS Plan would improve PSEG Long Island's ability to leverage GIS as a platform for application development across the enterprise in a manner that optimizes business value.
- LIPA Staff recommends that a Project Implementation Plan (PIP) be delivered by January 5, 2022, for the Board's review and approval, with the objective of a comprehensive GIS Long-Term Plan to be delivered for LIPA approval no later than July 1, 2022, and modernization/upgrade of the GIS technology stack to go-live, in accordance with the approved plan, no later than November 30, 2022.

FOR CONSIDERATION

October 29, 2021

TO: The Board of Trustees

FROM: Thomas Falcone

SUBJECT: Consideration of the Adoption of Recommendations Relating to Development of a Geographical Information System Long Term Plan

Requested Action

The Board of Trustees (the “Board”) of the Long Island Power Authority (“LIPA”) is requested to adopt a resolution related to approving certain recommendations developed by LIPA Staff to improve PSEG Long Island’s use of Geographical Information System (“GIS”) capabilities to achieve business objectives, which resolution is attached hereto as **Exhibit “A.”**

Background

Pursuant to Section 4.4(16), Rights and Responsibilities of LIPA, of the Amended and Restated Operations Services Agreement (“OSA”), LIPA, in part, has the right to “make recommendations to the Service Provider, in each case as may be reasonably necessary or appropriate to perform LIPA’s oversight responsibilities and obligations with respect to the provision of Operations Services under this Agreement and as may otherwise be necessary or appropriate to comply with LIPA’s legal, contractual and fiduciary obligations...”. Under the OSA, PSEG Long Island is responsible for both Transmission and Distribution (“T&D”) and Information Technology (“IT”) services.

Additionally, LIPA and PSEG Long Island continue to negotiate the terms of a Second Amended OSA pursuant to the Term Sheet, dated June 26, 2021 (the “Term Sheet”). Under the Term Sheet executed by LIPA and PSEG Long Island, the Second Amended OSA will divide the Operations Services into six specific scope functions. In part, the scope function relating to IT requires PSEG Long Island to be responsible for system development and implementation. Likewise, the scope function relating to T&D, requires PSEG Long Island to be responsible for general transmission and distribution utility operations. The proposed recommendations are consistent with the responsibilities under the OSA and the IT and T&D scope functions in the Term Sheet.

GIS is a foundational platform for every utility, leveraging geographic and geo-referenced data to manage and optimize the use of spatial information. As spatial data collection and analytics technologies become increasingly sophisticated, utility IT and operational technology (“OT”) systems have evolved to leverage these capabilities, with GIS becoming an integral component of modern utility line-of-business processes and systems, including SCADA, Enterprise Asset Management, Advanced Distribution Management Systems, Distributed Energy Resource Management Systems, and Customer Information Systems.

Long-term planning is essential for leveraging the potential of GIS to optimize utility operations and drive improved decision-making via geospatial-data-derived insights. A comprehensive long-term GIS plan will assess the business objectives, opportunities, and priorities; the technology platform

and marketplace; and the data, resource and process requirements; and provide a clear roadmap for delivering business applications across the enterprise cohesively and efficiently.

PSEG Long Island's current GIS plan consists of a GIS Roadmap and Product Lifecycle chart that identifies broad timelines for upgrades/enhancements of current components and applications over the next 10 years. This level of planning falls far short of a comprehensive long-term plan; and LIPA Staff finds that the lack of a long-term plan is reflected in PSEG Long Island budget proposals, which indicate that GIS project development continues to be conducted in an ad-hoc, localized manner without adequate enterprise-level prioritization against business goals or evaluation of the IT marketplace.

LIPA Staff believes that the development of a comprehensive GIS Long-Term Plan would improve PSEG Long Island's ability to leverage GIS as a platform for application development across the enterprise in a manner that optimizes business value.

Recommendations

LIPA staff recommends that PSEG Long Island develop a Project Implementation Plan with the objective of developing a comprehensive GIS Long-Term Plan that provides a clear roadmap for leveraging GIS across the enterprise in a manner that optimizes business value, and that at a minimum:

- Assesses and identifies the business objectives, opportunities, and priorities across the enterprise lines-of-business processes and systems, including SCADA, Enterprise Asset Management, Advanced Distribution Management Systems, Distributed Energy Resource Management Systems, and the Customer Information Systems.
- Evaluates the technology marketplace and develops a comprehensive ecosystem plan that considers the core platform and associated infrastructure; system resiliency; business application development toolsets and approaches; and third-party integration products and services.
- Identifies new opportunities to establish GIS-based services, applications, and capabilities to enhance utility business performance and customer experience.
- Identifies available or potential data sets and any associated data management or integration issues.
- Addresses process and resource requirements.

The Project Implementation Plan should be delivered no later than January 5, 2022 for the Board's review and approval at its January 2022 meeting, with the objective of the comprehensive GIS Long-Term Plan to be delivered for LIPA approval no later than July 1, 2022, and modernization/upgrade of the GIS technology stack and go-live, in line with the approved plan, no later than November 30, 2022.

Recommendation

Based upon the foregoing, I recommend approval of the above requested action by adoption of a resolution in the form attached hereto.

Attachments

Exhibit "A" Resolution

RESOLUTION ADOPTING RECOMMENDATIONS RELATING TO DEVELOPMENT OF A GEOGRAPHICAL INFORMATION SYSTEM LONG TERM PLAN

WHEREAS, pursuant to Section 4.4(16), Rights and Responsibilities of LIPA, of the Amended and Restated Operations Services Agreement (“OSA”), LIPA, in part, has the right to “make recommendations to the Service Provider, in each case as may be reasonably necessary or appropriate to perform LIPA’s oversight responsibilities and obligations with respect to the provision of Operations Services under this Agreement and as may otherwise be necessary or appropriate to comply with LIPA’s legal, contractual and fiduciary obligations...”; and

WHEREAS, LIPA Staff developed Geographical Information System (“GIS”) recommendations, as described in the accompanying memorandum; and

WHEREAS, the recommendations require the development and preparation of a Project Implementation Plan to ensure that the recommendations are acted on in a timely manner.

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby adopts the GIS recommendations; and

BE IT FURTHER RESOLVED, that the Board directs LIPA Staff, together with PSEG Long Island, to implement the GIS recommendations, including the creation of Project Implementation Plans for the Board’s consideration at its January 2022 meeting.

Dated: October 29, 2021