

FOR CONSIDERATION

February 24, 2021

TO: The Board of Trustees

FROM: Thomas Falcone

SUBJECT: Consideration of the Adoption of Recommendations to Improve Asset Management

Requested Action

The Board of Trustees (the “Board”) of the Long Island Power Authority (“LIPA”) is requested to adopt a resolution approving certain recommendations developed by LIPA to improve the asset management policies and practices of PSEG Long Island (the “Asset Management Recommendations”), which resolution is attached hereto as **Exhibit “A.”**

Background

PSEG Long Island operates and maintains approximately 14,000 miles of transmission and distribution (“T&D”) assets owned by LIPA.

Asset management is a core utility responsibility. A strong asset management framework should:

- Aim to comply with an international or nationally accepted standard (such as ISO 55000).
- Provide clear direction, aligned goals, and strategies for a consistent approach to decision-making and performance management.
- Align planning processes to meet established delivery levels using consistent processes, data, and documentation.
- Enhance transparency and accountability in the life-cycle management of LIPA’s assets through the development, approval, and implementation of asset management plans and reporting on asset performance against predetermined service levels.
- Maximize value for money invested in LIPA infrastructure assets.
- Reinforce a commitment to continuous improvement and provision of resources to deliver asset management objectives.

In 2020, LIPA hired the Woodhouse Partnership (“TPWL”), a firm with international expertise in asset management across many sectors, including the utility sector, to evaluate PSEG Long Island’s asset management programs and policies. This review followed findings of significant weaknesses in National Grid and then PSEG Long Island’s management of LIPA’s assets in 2013 and 2018 by the New York State Department of Public Service (“DPS”) as part of Management and Operations Audits, which PSEG Long Island was responsible for remedying. TPWL had the following principal findings:

- PSEG Long Island has only recently developed an Asset Management Policy. The policy needs to be vetted by LIPA and socialized throughout the organization and all Subject Matter Experts.
- Asset management needs more integrated process documentation to support a coherent and integrated Asset Management System. These documents should include identifying roles and

responsibilities throughout the organization, training and communication across the organization, as well as increased awareness of emerging practices.

- The lack of a Strategic Asset Management Plan (“SAMP”) inhibits PSEG Long Island’s long-term planning and allows undifferentiated spending. The SAMP is the foundational document established by International Standards Organization (“ISO”) 55000 that aligns the organization’s strategic plan with the actions necessary to accomplish that plan’s objectives.
- PSEG Long Island is attempting to structure information to enable better asset management decisions. However, in the interviews conducted as part of the TPWL evaluation, there was a general lack of understanding of the capabilities and direction PSEG Long Island is taking regarding establishing a quantitative base for making and controlling asset management decisions. Further, a published plan for asset information development would give clarity to the current state of asset information and plans for the integration of the various systems used to collect and manage asset information.
- Maintenance asset management decisions are not based on functional reliability analysis consistent with a risk analysis and using inputs from assessment of criticality.
- There is a lack of “project management” and focus in developing and operationalizing asset plans for operations and maintenance and capital plans.
- There is lack of a performance measures that represent the effectiveness of the asset management program.
- Communications and awareness within PSEG Long Island are siloed. This is in-part due to the lack of asset management system tools, such as processes and procedures and a comprehensive work and spending schedule established with performance metrics.

TPWL evaluated PSEG Long Island’s asset management practices and processes relative to a asset management maturity model using ISO 55001 requirements. On a scale of 0 (innocent) to 4 (beyond ISO), with 3 being “competent,” TPWL rated PSEG Long Island’s Asset Management program between 0 (innocent) and 2 (developing) along the 27 program components prescribed by ISO.

Recommendations

PSEG Long Island has undertaken various initiatives in response to prior DPS Management and Operations Audits, such as creating an Asset Management group, development of asset management policies and procedures, re-invigorating the asset information data system, providing greater support to project scheduling and estimating, and the introduction of risk evaluation for capital work; however, the pace of completion of these initiatives is not satisfactory, nor is there a clearly communicated SAMP that aligns the discrete initiatives.

LIPA staff recommends the Board adopt the following Asset Management Recommendations:

1. Asset Management Framework – adopt an asset management framework according to principles and standards prescribed by ISO and develop a 3-Year roadmap with milestones and steps toward a maturity goal of 3.0 by the end of 2023. The roadmap should be presented for LIPA approval by April 30, 2021.
2. Reliability Assessment of Plant Asset Performance – within 90 days of each year end, PSEG Long Island should perform and report results of this assessment. The report must include a plan and

timeline to address any identified deficiencies.

3. Asset Management Plans – complete the development of asset management plans for transmission, distribution and substation infrastructure (preventative maintenance, upgrade/replacement of transformer, breaker, switchgear, poles, underground cable, switches (ASU), capacitor etc.) with annual reviews and three-year comprehensive updates. The Asset Management Plans should be presented to LIPA for approval by June 2021.
4. Computerized Maintenance Management System (CMMS) – Upgrade CMMS in accordance with the 2013 and 2018 Management and Operations Audit Recommendations.
 - Complete CMMS upgrade by the end of 2021, including at least one-third of transmission and distribution assets.
 - Develop a plan to bring all transmission and distribution assets within CMMS within 3 years, including field verification. Deliver this plan to LIPA by August 2021.
 - Yearly audit of digital plant records to verify completeness and accuracy of newly installed and retired assets by end of 2021.
5. Strategic Asset Management Plan (SAMP) – Develop a SAMP that binds the work activities, investment commitments, and decision making through an overarching framework that would be explicated and communicated throughout the organization.
 - Develop and present to LIPA for approval the topical outline for the first draft of the SAMP and identify what information is available and what information needs to be gathered or developed to prepare an SAMP by June 30, 2021.

PSEG Long Island should prepare Implementation Plans for each Asset Management Recommendation no later than April 9, 2021. The Implementation Plans will be presented to the Board for its consideration at its May 2021 meeting.

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 THE ASSET MANAGEMENT RECOMMENDATIONS

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, Department of Public Service Management and Operations Audits in 2013 and 2018 found weaknesses in asset management that PSEG Long Island was to remedy; and

WHEREAS, LIPA hired The Woodhouse Partnership, a firm with international expertise in asset management across many sectors, including the utility sector, to evaluate PSEG Long Island’s asset management programs and practices and found significant weaknesses in PSEG Long Island’s management of LIPA’s assets; and

WHEREAS, LIPA Staff has developed Asset Management Recommendations, as described in the accompanying memorandum; and

WHEREAS, each of the Asset Management Recommendations require the development and preparation of an Implementation Plan to ensure that the recommendations are acted on in a timely manner; and

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby adopts the Asset Management Recommendations; and

BE IT FURTHER RESOLVED, that the Board directs LIPA Staff, together with PSEG Long Island, to implement the Asset Management Recommendations, including the creation of Implementation Plans for the Board’s consideration at its May 2021 meeting; and

BE IT FURTHER RESOLVED, that the Board directs LIPA Staff, together with PSEG Long Island, to report to the Board on the completion of the Implementation Plans on no less than a quarterly basis until they are completed.

Dated: February 24, 2021