

FOR CONSIDERATION

June 28, 2023

TO: The Board of Trustees

FROM: Thomas Falcone

REQUEST: Approval of the Annual Report on the Board’s Policy on Transmission and Distribution Operations

Requested Action

The Board of Trustees (the “Board”) of the Long Island Power Authority (“LIPA”) is requested to adopt a resolution: (i) approving the annual report on the Board’s Policy on Transmission and Distribution (“T&D”) Operations (the “Policy”); and (ii) finding that LIPA has complied with the Policy, which resolution is attached hereto as **Exhibit “A.”**

Background

By Resolution No. 1371, dated July 26, 2017, the Board originally adopted the Policy. The last annual review of the Policy was completed in May 2022, and the Board last amended the Policy in November 2021. The amendments to the Policy in November 2021 changed the name of the Policy from T&D System Reliability to T&D Operations.

The Policy now provides that: “LIPA’s vision for our transmission and distribution system is to achieve industry-leading reliability, improve resiliency by minimizing outages and reducing restoration times after significant system disruptions, and leverage modern system design and technology to provide value to all customers. The Policy also provides for an annual reporting requirement that “[t]he Chief Executive Officer, or his or her designee, will report annually to the Board on the key provisions of this Policy.”

Compliance with the Policy

LIPA Staff recommends that for the reasons set forth below, the Board find that LIPA has complied with the Policy since the last annual review. Compliance with each element of the Policy is discussed in detail below.

As set forth in the Policy, “[t]o achieve our vision for reliability, LIPA will”:

“provide top decile reliability (i.e., top 10% of peer utilities) as measured by system average outage duration, excluding major events.”

- LIPA has taken steps to improve reliability (as further discussed below) with the objective of maintaining the Board’s policy objective of top 10% reliability among peer utilities as measured by system average outage duration (i.e. the average outage minutes per customer

per year, excluding major weather events).

- PSEG Long Island’s 2022 performance for system average outage duration per customer was 56.0 minutes. Top decile was 57.1 minutes, and therefore performance was within the top decile versus peer utilities.
- The 2023 PSEG Long Island performance metrics, which were the product of input from LIPA, PSEG Long Island, and the New York State Department of Public Service, set a system average outage duration target of 57.5 minutes (T&D-07), which is slightly higher than the most recently available top decile benchmark. The 2023 year-to-date performance is tracking at a similar level as 2022.

“improve circuit conditions that cause a customer to experience four or more sustained outages or six or more momentary outages in any 12-month period.”

- The 2023 performance metrics include metrics for sustained multiple customer outages (“MCO”) (T&D-10), repeat sustained multiple customer outages (T&D-12), and multiple momentary customer outages (T&D-11). In particular, the metric for repeat multiple customer outages targets reducing the number of customers with four or more sustained interruptions over a multi-year period by at least 90%. In 2022, PSEG Long Island successfully achieved all three of the metric targets in the MCO category and are meeting all three targets thus far in 2023.
- LIPA will continue to focus on improving MCO customer experience for those smaller groups of customers that have experienced outlier performance that is far worse than the overall system average. This will be addressed by focusing on improving performance for those customers that have experienced more than seven sustained outages in a year. Similarly, LIPA will continue to focus on improving performance for those customers that have experienced ten or more momentary outages in a year.
- Annual reliability programs are designed to improve circuit performance, including the Circuit Improvement Program (“CIP”), the Multiple Customer Outage Program (“MCO”), and the Multiple Device Operation Program (“MDO”).
- There were 409 miles of branch lines addressed on 77 circuits through the CIP program in 2022, and 79 capital system improvement jobs and improvement of 513 branch tap lines were completed in 2022 to address MCO and MDO programs.

“utilize modern system design and technology to anticipate and minimize outages, monitor system conditions, provide for preventative and predictive system maintenance, and facilitate the efficient and timely interconnection of renewable and distributed resources.”

- LIPA has required the development of a roadmap for an Enterprise Asset Management System (“EAMS”), including compliance with ISO 55001 asset management standards, to anticipate and minimize outages and provide the analytic tools and processes for modern preventative and predictive maintenance. This effort includes a complete inventory of Transmission and Distribution assets beginning in June 2022 that continues at present. These initiatives, which include asset inventory, governance, and system implementation, were incorporated into the 2022 and 2023 performance metrics (T&D-01 through T&D-03) as part of a multi-year implementation.
- The 2023 performance metrics also include a metric (T&D-31) to position Automated

Switching Unit Vipers (“ASUVs”) on circuits to ensure no more than 500 customers between devices and to operationalize reclosers to function as tripping devices to reduce the number of customers affected and the duration during Blue Sky and adverse weather events. This will help with system configuration options and serve to minimize the number of affected customers during outages. There were a total of 149 ASUVs added in 2022.

“safeguard people and protect facilities and functions that support operations from unauthorized access or disruption through vulnerability assessments and risk mitigation”

- LIPA engaged an independent third-party consultant to perform a security evaluation of its physical assets, with the objective of identifying vulnerabilities, determining risk and developing findings and recommendations. That assessment was completed in November 2022. The findings from the assessment were developed into actionable deliverables under a Project Implementation Plan contained in a 2023 physical security performance metric (T&D-45).
- LIPA will be undertaking a further physical security review during 2023 to continue to advance management of this risk.

The Policy further provides that “[t]o achieve our vision for resiliency, LIPA will”

“mitigate the effects of climate change through multi-year programs that reduce the number and duration of outages after significant system disruptions”

- The 2023 performance metrics include five metrics (T&D-27 through T&D-31) related to storm hardening. The storm hardening metrics require the development and execution of robust storm overhead and underground hardening plans designed to improve the mainline and branch line performance during increasingly more severe storm patterns. More than 80.4 distribution miles were assessed and improved in 2022.
- Three performance metrics (T&D-24 through T&D-26) target improved vegetation management, including improved cycle trim, utilizing an improved trimming technique of “circuit trim to sky” and preemptive hazardous tree identification and removal of hazard trees. PSEG Long Island did not achieve the 2022 performance target for hazard tree removal but did achieve the other work-related targets for vegetation management.
- LIPA filed six applications for additional federal grants for storm hardening in 2021 and 2022, of which one was awarded in the 2nd quarter of 2023 (\$3.5 million for transmission crossings). The others, totaling \$450 million, are presently under review. This would allow LIPA to accelerate several hundred million dollars of storm hardening investment at low cost to customers and is a benefit of LIPA’s public power status.
- In 2023, LIPA submitted a grant application under the United States Department of Energy’s Grid Resilience and Innovation Partnerships Program (GRIP) to increase the penetration of renewable Distributed Energy Resources (DER) on LIPA’s distribution system. This grant would enable over 700 MW of hosting capacity on targeted circuits, enhancing system resiliency. The total cost of the project is estimated at \$549 million. Awards are expected to be announced during the 4th quarter of 2023.

“assure timely and accurate communication to customers about outages and restoration times”

- LIPA is enhancing the Estimated Time of Restoration (“ETR”) process to provide more accuracy, allowing for customers to better plan for the outage duration. The 2023 ETR metric (T&D-42) has an objective of operationalizing a minimum of two factors, such as time of day, day of week, seasonality, outage location and device type to improve the ETR accuracy and improve customer experience.

“independently verify that emergency restoration plans are complete and tested.”

- LIPA independently verified and validated PSEG Long Island’s remediation of its outage management system implementation (see June 2023 report to the Board).
- Between December 2022 and May 2023, LIPA observed and made over 330 recommendations to enhance PSEG Long Island’s functional exercises related to emergency response in the event of a critical system failure. LIPA has requested PSEG Long Island provide a schedule for implementing the recommendations prior to the next exercise series in 2023.
- 2022 Performance Metric IT-3 related to System Resiliency required PSEG Long Island to update and successfully exercise its disaster recovery and business continuity plans for all critical systems and processes. PSEG Long Island did not achieve this metric in 2022, and LIPA remains concerned about PSEG Long Island’s ability to meet the 2023 performance metric, as further described in the 2022 Performance Report dated May 15, 2023 ([link](#)) and the 2023 Quarterly Performance Report dated June 2023, respectively.

Enterprise Risk Management Discussion

The Board has adopted a policy on Enterprise Risk Management (“ERM”). Enterprise risks are brought to the Board’s attention throughout the year. There are three risks related to this Policy:

- a major event such as a severe storm damages the infrastructure and results in widespread, long duration outages, and negative public perception;
- protection of critical assets such as substations and the control centers are compromised and could result in outages, equipment damages and safety issues; and
- asset management risks including the lack of accurate, historical data resulting in less than optimal decision making to support lifecycle optimization and replacement schedules of aging substation equipment and a lack of a substantive cathodic program for underground transmission cables and fluid tanks.

The major event risk is the highest rated risk in the PSEG Long Island portfolio. To mitigate this risk, LIPA and PSEG Long Island have implemented numerous reliability, vegetation management, and storm hardening initiatives, as further described above. LIPA has concerns about PSEG Long Island’s failure to meet certain 2022 metrics in this area, including System Resiliency (IT-3) and the vegetation management (T&D-24 through T&D-26)¹ metrics. This remains a risk that is not mitigated to the standards set in the performance metrics.

¹ PSEG Long Island did not achieve the three vegetation management metrics (T&D 24-26) in 2022. For one of the three metrics, PSEG Long Island did not accomplish the level of work required by the metric (hazard tree removal). For the other two, PSEG Long Island missed the cost management aspect of the metric.

The protection of critical assets risk is also a highly rated risk. To mitigate this risk, there are several substation security upgrade projects which are funded and underway, including measures outlined in performance metric 2023 T&D-45 Physical Security, which is further described above. LIPA will be undertaking a further physical security review during 2023 to continue to advance management of this risk.

The asset management risk has a medium rating and is being mitigated through the development of the Enterprise Asset Management System, as discussed above. As discussed in the Quarterly Board report on performance metrics, LIPA has concerns about the ability to meet the EAMs metrics. PSEG Long Island did not meet the 2022 EAMS metric T&D-1 and 2023 EAMS metric T&D-3 is behind schedule. This remains a risk that is not mitigated to the standards set in the performance metrics.

Annual Review of the Policy

The Policy was last updated in November 2021, to reflect the Board's strategic direction in this area. LIPA Staff has reviewed the Policy and proposes no changes at this time.

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 APPROVING THE REPORT TO THE BOARD OF TRUSTEES ON THE BOARD POLICY ON TRANSMISSION & DISTRIBUTION OPERATIONS

WHEREAS, the Board Policy on Transmission and Distribution (“T&D”) System Reliability was originally approved by the Board of Trustees by Resolution No. 1371, dated July 26, 2017; and

WHEREAS, the last annual review of the Policy was completed in May 2022 and the Board last amended the Policy in November 2021; and

WHEREAS, the amendments to the Policy in November 2021 changed the name of the Policy from T&D System Reliability to T&D Operations; and

WHEREAS, the Board has conducted an annual review of the Policy and affirms that the Policy has been complied with.

NOW, THEREFORE, BE IT RESOLVED, that consistent with the accompanying memorandum, the Board hereby finds that the LIPA has complied with the T&D Operations Policy for the period since the last annual review and approves the annual report to the Board.

Dated: June 28, 2023