Enterprise Risk Management Discussion

September 28, 2022





Topics for Discussion



2022 Risk Summary



Supply Chain Disruption Deep Dive



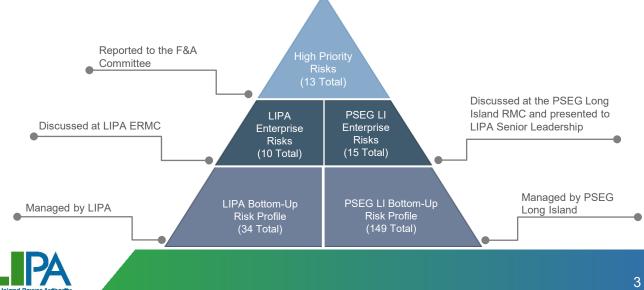
ERM Program Progress and Recommendations



2022 Summary of Risks & Criteria

High-priority risks can significantly impede both LIPA and PSEG Long Island's ability to achieve their respective goals.

- There are 13 risks that have been deemed high-priority and represent the most significant risks to the organization; these risks are reviewed and approved by senior management
- **Risk Trending** is defined as a year-over-year comparison of the state of the risk which is determined by considering new mitigation actions, changes to the environment of the risk, or event(s) that have occurred since the risk was last reviewed. Risks are rated as: Increasing, Decreasing, or Stable



2022 High-Priority Risk for Discussion-Supply Chain Disruption

Risk	Trend	Risk Mitigation	Metrics & PIPs
Supply Chain Disruptions - Increased industry demand combined with limited manufacturing capacity results in unprecedented material delivery lead times, which could lead to project delays and/or stock outs Managed by - PSEG Long Island		 Reduced reliance on single source supply for critical inventory and identified rental suppliers with limited capacity to supply critical three phase pad mount transformers as an emergency contingency Reduced turnaround time of internally reconditioned distribution pole top and three phase pad mount transformers Increased inventory on hand by outsourcing a portion of transformer repair work to third-party suppliers Authorization of alternative equipment/modification of equipment specifications has resulted in increased production flexibility and additional suppliers 	2022 Metrics: • T&D-35 Construction - Project Milestones Achieved PIPs: • IMR-18 (IM7) - Inventory Policies do not formally incorporate the Concept of Safety stock • IMR-20 (IM9) - Inventory Policies do not incorporate Storm Clauses



Supply Chain Disruptions – Current Outlook

- Labor shortages stemming from COVID-19 continue to ripple through supply chains contributing to material shortages and an inability for suppliers to meet increasing demands
- Lockdowns in China and port closings have created a logistics capacity shortage and rise in shipping costs
- The conflict in Eastern Europe has created volatility in commodity prices for metals & fuel
- Increased inflation has exacerbated price impacts related to key commodities



Supply Chain Disruptions Impacting PSEG Long Island – Distribution Transformers

Market disruptions

- Beginning in Q4 '21, lead times began increasing dramatically due to labor shortages from COVID-19 and raw material availability
 - Pole-top units typically available in 10-12 weeks increased to 52 weeks+*
 - Pad-mounts typically available in 10-12 weeks increased to 80 weeks+*

Impact

- Manufacturers moved from a commodity-based process to allocating production slots for customers with long term agreements
 - PSEGLI historically relied on a small supply base and existing contracts were expiring at the end of '21. Certain suppliers communicated an inability to fulfill existing orders, or significantly extended lead times

Mitigating actions

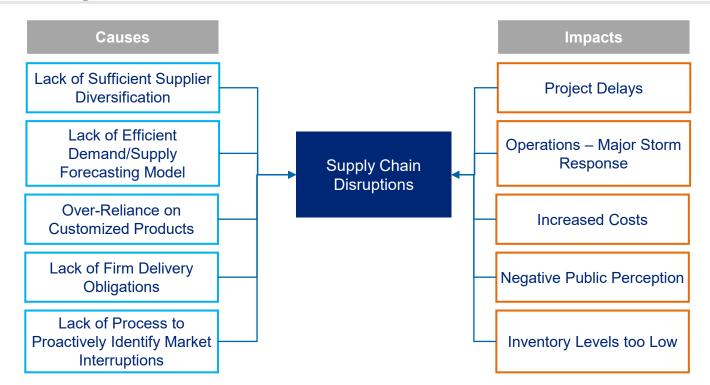
- Efforts to diversify the supply base began immediately
- · Secure contractual delivery commitments and leverage supplier relationships
- · Review and approval of alternate specifications to expedite production

Current status

• Existing storm stock and operating inventory supply position is adequate but being closely monitored and managed



Supply Chain Disruptions – Bow-tie Analysis





Supply Chain Disruptions – Mitigation

Short Term Risk Mitigation Actions – Distribution Transformers		
Need	Action	
Supplier Diversification	 Streamline supplier qualification/onboarding process (complete) Identification of alternate suppliers (in process) Approval of additional international suppliers to supplement domestic supply (in process) 	
Supplier Inability to Fulfill Orders	 Leverage future business with key suppliers to expedite production of transformers for Summer 2022 delivery (complete) 	
Ability to use Alternate/Substitute Products	 Evaluation and approval of amorphous core transformers (complete) Evaluation of laminated wood poles and use of Class 3 poles for single phase and two-phase branch line work (complete) 	
Use of Refurbishments	 Qualification of three new transformer refurbishment vendors (complete) Acceleration of refurbishment program and use of non-PSEGLI refurbed units (complete) 	
Additional Outreach – Government and Peers	 Increase collaboration with peer utilities through direct outreach to learn and apply best practices and sourcing strategies, i.e., New York Material Sharing Group (NYMSG) (complete) 	

Longer Term Strategies for Improvement

Improve predictive modeling – Identify lack of supplier diversification, strength of contract commitments, and potential or known market risks, develop a heat map to prioritize risk level and action critical categories of materials, and create comprehensive category plans to get ahead of potential disruptions, assure supply and mitigate price increases

Demand Supply Forecasting – Modernize materials management process, including enhanced forecasting, and demand modeling and dashboard reporting, including supplier delivery accuracy. Centralize the operational material planning function to manage inventory and develop new processes for multi-year material demand planning integrated with procurement strategies

Process Improvements – Develop a Procurement Playbook, Contract Modernization, Procurement Organization Transformation



ERM Board Policy Compliance

- Completed the biannual assessment of the ERM Program via the Gartner Maturity Model; the maturity level has remained the same
- Improvements to the program were noted in the risk assessment process and increasing risk management skills across the organization
- Areas of improvement have been identified and a roadmap is being developed
- 2022 PSEG LI ERM Metrics are on track, the two metrics are:
 - Improvements to the Annual Report report was provided in June and included notable improvements in the level of detail provided for mitigation actions and key insights; an update to the report will be provided in December
 - Development of Key Risk Indicators for five high-priority risks work is underway and will be complete by December



FOR CONSIDERATION

September 28, 2022

TO: The Finance and Audit Committee

FROM: Thomas Falcone

SUBJECT: Consideration of Recommendation to Approve the Annual Report on the Board's Policy on Enterprise Risk Management

Requested Action

The Finance and Audit Committee (the "Committee") of the Board of Trustees (the "Board") of the Long Island Power Authority ("LIPA") is requested to adopt a resolution recommending that the Board: (i) find that LIPA has complied with the Board Policy on Enterprise Risk Management (the "ERM Policy" or "Policy"); and (ii) approve the annual report for the Policy, which Resolution is attached hereto as **Exhibit "A."**

Background - Board Policy on Enterprise Risk Management

By Resolution No. 1351, dated March 29, 2017, the Board adopted the ERM Policy, focusing on the identification, assessment, management, and mitigation of risks. The Policy was last reviewed and amended by the Board by Resolution No. 1572, dated December 16, 2020.

The Finance and Audit Committee ("F&A Committee"), in its Charter, was delegated the responsibility for reviewing LIPA's practices relating to ERM. LIPA's Service Provider, PSEG Long Island, participates in the implementation of LIPA's ERM Program.

Specifically, the Policy provides that "the Chief Executive Officer or his or her designee will report annually to the F&A Committee of the Board on the Policy, including: a review of the significant risks to LIPA's mission; and compliance with the key provisions of the Policy."

Compliance with the Policy

Performance for 2022 has been consistent with the Policy. LIPA and PSEG Long Island have maintained an ERM program designed to evaluate significant risks and corresponding mitigation activities facing the business. This Report covers ERM activities from the Board's November 2021 review to the present. LIPA Staff recommends that, for the reasons set forth below, the Board find that LIPA has substantially complied with the objectives of the Policy for the period since the last annual report.

The Policy states: "Under the direction of LIPA's Chief Executive Officer, LIPA and its Service Provider shall maintain an Enterprise Risk Management Program with the following key provisions":

"An Enterprise Risk Management Committee consisting of at least three LIPA staff appointed by the Chief Executive Officer, two of whom must be drawn from LIPA's senior management, to oversee the processes and procedures of the Program."

- LIPA has an active Enterprise Risk Management Committee ("ERMC") that reviews the progress and findings of the ERM Program, including discussions of the most significant risks facing LIPA and its Service Provider. Over the last eight months, the ERMC has met five times to discuss the various components of the Program, including the review of LIPA and the Service Provider's risk assessments and associated mitigation activities. In addition, it also reviewed the Service Provider's Annual Report and deep-dive analysis provided on select high-priority risks.
- Currently, there are nine members on the Committee, including the CEO/CFO, CIO, General Counsel, and other LIPA Staff at the Senior Vice President, Vice President, and Director levels.
- The ERMC maintains an ERM Procedures Manual, which includes the integration of risk information into decision-making within Strategic Planning, Internal Audit, and other areas of the business. The ERM Procedures Manual also calls for maintaining a list of emerging risks and recognizes the Service Provider's Risk Management Committee ("RMC"), which is responsible for managing their identified risks.

"An evaluation of the most significant risks facing the LIPA and its Service Provider, and corresponding mitigation activities, reported to senior management of LIPA and its Service Provider for review and evaluation on an annual basis, with ongoing monitoring activity between reviews."

- Since the last Board report, the ERM teams have worked with Subject-Matter Experts ("SMEs") to develop deep-dive analyses on selected significant risks of LIPA and PSEG Long Island to understand root causes, mitigations in place, and actions that could be taken to further mitigate these risks. The risk analyses were presented to LIPA's ERMC or other special-focus committees and covered the following risks: transmission system vulnerabilities, major storm, and multiple tie-line failures. Over the remainder of 2022, risk analyses will be presented on the following risks: supply chain disruptions, safety, time-of-day rate implementation, and cyber-security.
- The F&A Committee receives an annual update on the ERM Program highlighting the significant risks and mitigation actions facing LIPA and its Service Provider concurrent with this annual report. Over the course of the year, there are additional presentations to the Board that discuss significant risks, which include: major storm, cyber security, safety, physical security, rates, and staffing.

"A review of the LIPA's insurance and other forms of coverage against insurable risks, including the availability and economics of such coverage, performed each year."

Insurance:

- The Second Amended & Restated Operations Services Agreement ("OSA") requires LIPA to provide written notification to its Service Provider regarding the renewal of required policies, desired changes in coverages, and any requests to investigate other types of coverages. The LIPA notification is sent each December.
- During 2022, LIPA risk management and LIPA's Insurance Advisor provided oversight of the coverages placed by PSEG Long Island as required by the OSA to assure prudent and

economic coverage placed to protect the interest of LIPA's bondholders and customer-owners. The policies included:

- Excess 3rd Party General Liability
- Property Insurance (all risks, excludes wires and poles) includes U.S. Property Terrorism
- Cyber Insurance LIPA named insured on PSEG Long Island's Cyber Insurance
- Nuclear Electric Replacement for Nine Mile Point, Unit 2
- LIPA maintains its own insurance policies, including Director and Officer liability, premises general liability, and property insurance, as well as cyber event insurance and employee practices liability insurance.

"LIPA will conduct a biennial review of the maturity of the Program compared to industry best practices, which will be provided to the Board of Trustees, senior management, and LIPA's Internal Audit staff."

• The most recent ERM maturity assessment was conducted in August 2022 in alignment with the Board approved biennial review cadence. The ERM Program improved in many areas, including the risk assessment process, and enhancing enterprise-wide risk management skills. The ERM Team is in the process of developing a roadmap that will focus on making improvements in areas such as integrating risk analysis into business practices, improving risk awareness and accountability, and over the long term, incorporating risk analysis into strategic planning. LIPA's Internal Audit department will receive a copy of the 2022 ERM maturity assessment and diagnostic report prepared by a third-party vendor, which measures the current maturity of the LIPA ERM Program and comparison to an industry benchmark.

Annual Review of the Policy

LIPA Staff has completed its annual review of the Policy and has no suggested amendments 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 RECOMMENDING APPROVAL THE ANNUAL REPORT ON THE BOARD POLICY ON ENTERPRISE RISK MANAGEMENT

WHEREAS, the Enterprise Risk Management Policy (the "Policy") was originally approved by the Board of Trustees by Resolution No. 1351, dated March 29, 2017; and

WHEREAS, the Policy was last reviewed and amended by Resolution No. 1572, dated December 16, 2020; and

WHEREAS, the Finance and Audit Committee (the "Committee") of the Board of Trustees of the Long Island Power Authority ("LIPA") has conducted an annual review of the Policy and recommends that the Board find that the Policy has been complied with.

NOW, THEREFORE, BE IT RESOLVED, that consistent with the accompanying memorandum, the Committee hereby recommends that the Board find that LIPA has complied with the Policy for the period since the last annual review and approves the annual report on the Policy.

Dated: September 28, 2022