BOARD AGENDA SUMMARY SHEET

Committee or Board: Board	Date: September 13, 2019	Board Meeting Date: September 25, 2019	
For All Board Voting Items:			
Title of Agenda Item: App Management	proval of the Annual Report an	d Amendments on the Board's Policy on Enterprise Risk	
Consent Agenda: ⊠Yes □N	No Accompany	ing Presentation: ⊠Yes □No	
Recommendation from Con	nmittee: □N/A ⊠ F&A □ GP&	zP; □ Oversight & REV	
LIPA Presenter: Corey Horo	owitz (Presentation at F&A)	PSEG Long Island Presenter: N/A	
For Policy Reports Only:			
Type of Policy / Report: ⊠ (Operating; Governance; Co	ompliance; Mission	
Date of Last Report: Septe	ember 27, 2018	Compliance Since Last Report: ⊠Yes □No	
Proposed Changes to Policy	: ⊠ Yes □No		
Requested Action:	resolution: (i) finding the Island Lighting Compa	of the Long Island Power Authority is requested to adopt a at the Long Island Power Authority and its subsidiary Long any d/b/a LIPA has complied with the Board Policy on ment: (ii) approving the annual report for the Policy; and (iii)	

	resolution: (i) finding that the Long Island Power Authority and its subsidiary Long Island Lighting Company d/b/a LIPA has complied with the Board Policy on Enterprise Risk Management; (ii) approving the annual report for the Policy; and (iii) approving certain amendments to the Policy.		
Summary:	By Resolution No. 1351, dated March 29, 2017, the Board adopted the ERM Policy,		
(include proposed amendments	focusing on the identification, assessment, management and mitigation of risks. The		
to Board Policies, if applicable)	Policy was last reviewed and amended by the Board by Resolution No. 1428, dated September 27, 2018. The Finance & Audit Committee of the Board, in its Charter, was delegated the responsibility of reviewing the Authority's practices relating to Enterprise Risk Management. The Authority's Service Provider, PSEG Long Island, also participates in the implementation of the Authority's ERM Program.		
	Authority Staff has reviewed the Policy and recommends: (i) renaming the Executive Risk Management Committee as the Enterprise Risk Management Committee and minor modifications to the required composition of the Committee; and (ii) certain other non-material wording changes.		

FOR CONSIDERATION

September 25, 2019

TO: The Board of Trustees

FROM: Thomas Falcone

SUBJECT: Approval of the Annual Report and Amendments on the Board's Policy on Enterprise

Risk Management

Requested Action

The Board of Trustees of the Long Island Power Authority (the "Board") is requested to adopt a resolution: (i) finding that the Long Island Power Authority and its subsidiary the Long Island Lighting Company d/b/a LIPA (collectively the "Authority" or "LIPA") has complied with the Board Policy on Enterprise Risk Management (the "ERM Policy" or "Policy"); (ii) approving the annual report for the Policy; and (iii) approving certain amendments to the Policy, as detailed herein, 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. 1428, dated September 27, 2018.

The Finance & Audit Committee ("F&A Committee") of the Board, in its Charter, was delegated the responsibility of reviewing the Authority's practices relating to Enterprise Risk Management ("ERM"). The Authority's Service Provider, PSEG Long Island, also participates in the implementation of the Authority's ERM Program. There are certain ERM Program requirements, which are described below.

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: review of the significant risks to LIPA's mission; and compliance with the key provisions of the Policy."

Compliance with the Policy

Staff recommends that, for the reasons set forth below, the Board find that the Authority has complied with the objectives of the Policy for the period since the last annual report.

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

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

- The Authority has an active Executive Risk Management Committee ("ERMC") that reviews
 the ERM process and controls and oversees the implementation of the ERM Program. Over
 the last twelve months, the ERMC has met seven times to review the progress of the ERM
 Program at LIPA and PSEG Long Island. This included review of the assessment and
 mitigation efforts of all LIPA departments, as well as completed actions relating to the DPS
 Recommendation.
- Currently there are seven members on the Committee including the CEO, Interim CFO, the VP Policy, Strategy & Administration and other Staff at the Director level.
- The ERMC maintains an ERM procedures manual that was recently updated by the ERM staff and approved by the ERMC reflecting additional risk assessment factors, prioritization criteria, reporting framework and governance practices.

The ERM Policy also provides that: "An evaluation of the most significant risks facing the Authority and its Service Provider, and corresponding mitigation activities, reported to senior management of the Authority and its Service Provider for review and evaluation on an annual basis, with ongoing monitoring activity between reviews"

- In 2018, the Authority and PSEG Long Island revised the ERM Program to follow a bottomup approach to engage each department or business unit at LIPA and PSEG Long Island. ERM staff from the Authority and PSEG Long Island collectively facilitated working sessions with the appropriate subject matter experts in each department or business unit.
- The ERM process includes the identification of risks affecting LIPA's and PSEG Long Islands' goals and objectives and utilizes quantitative and qualitative methods to assess the magnitude of the risk exposure. The ERM process includes a review of the mitigation of each risk. Each department or business unit Vice President is required to review and approve the department risks portfolio and mitigation activities as risk-owner.
- LIPA and PSEG Long Island have established a reporting structure whereby a formal presentation of the significant high-priority risks and associated mitigation activities of each department is brought before LIPA's and PSEG Long Island's senior management at their Management Review Board meetings.
- Annually, the F&A Committee receives an ERM Program Update highlighting the significant risks facing LIPA and PSEG Long Island and mitigation strategies concurrent with this annual report.

The ERM Policy recognizes insurance and business continuity planning as strategies to mitigate exposure to certain risks, noting:

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

"Business continuity plans for LIPA and its Service Provider that are reviewed each year."

Insurance:

• Each year the Authority and its insurance advisor oversee the placement of various policies by PSEG Long Island such as property insurance and general liability insurance and other

required coverages as deemed prudent to protect the interest of the Authority's bondholders and customer-owners.

- The AR OSA requires the Authority to provide written notification to PSEG Long Island regarding the renewal of required policies, desired changes in coverages, and any requests to investigate other types of coverages. The Authority's notification is sent each December.
- The Authority maintains several other insurance policies including directors and officers liability, premises general liability and property insurance as well as cyber insurance and employee practices liability insurance.
- The levels of coverage were reviewed during 2019 and prudent and economic levels of coverage are in place for each type of policy, including:
 - O D&O Insurance \$200M Limit/\$1M Retention
 - o Excess 3rd Party General Liability \$300M Limit/\$3M Retention
 - o Property Insurance (all risks, excludes wires and poles) \$500M/CAT\$300M Limit adder/\$1.5-\$7.5M Retention; includes U.S. Property Terrorism
 - o Cyber Insurance:
 - LIPA named insured on PSEG Long Island's Cyber Insurance \$15M Limit/\$2.5M Retention
 - LIPA Business Office Cyber Policy \$5M Limit/\$10K retention
 - o Nuclear Electric Replacement (NMP2) \$300M Limit/12-week deducible period
 - Employee Practices Liability Insurance \$5M Limit + \$1M Additional Defense Cost/\$15K Retention
 - o LIPA premises Liability and Property Insurance \$150K-\$3M Limit/\$0 Retention

Business Continuity:

- The Authority maintains departmental and corporate level business continuity plans ("BCPs"). PSEG Long Island also maintains detailed business continuity plans for each operational area within each business unit.
- LIPA and PSEG Long Island's BCPs are reviewed annually and were reviewed during 2019.
- Alternative operations within the BCPs are tested on a periodic basis to assure the most essential business functions are maintained or returned to service in appropriate time frames. Most tests have been completed, with the remaining tests and exercises to be completed by the end of 2019.

The ERM Policy also requires a maturity assessment of the ERM Program to assure the continued development of an effective ERM process, stating: "An annual review of the maturity of the Program compared to industry best practices, will be provided to senior management and the Authority's Internal Audit staff."

- The updated maturity model was provided to senior management and discussed at the ERMC's September meeting.
- The Authority's Internal Audit department received a copy of the 2019 ERM maturity

assessment and diagnostic report prepared by a third-party vendor which measures the current maturity of the Authority's ERM Program and comparison to industry benchmark.

Annual Review of the Policy

Authority Staff has reviewed the Policy and recommends: (i) renaming the Executive Risk Management Committee as the Enterprise Risk Management Committee and minor modifications to the required composition of the Committee; and (ii) certain other non-material wording changes. The proposed changes to the Policy are more particularly set forth in **Exhibit "B"**.

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
Exhibit "B" Policy (redline)
Exhibit "C" Policy (clean)

RESOLUTION APPROVING THE ANNUAL REPORT AND AMENDMENTS 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. 1428, dated September 27, 2018; and

WHEREAS, the Finance and Audit Committee of the Board of Trustees has conducted an annual review of the Policy and has recommended that the Policy has been complied with and the changes to the Policy recommended herein are due and proper.

NOW, THEREFORE, BE IT RESOLVED, that consistent with the accompanying memorandum, the Board of Trustees hereby finds that the Authority has complied with the Policy for the period since the last annual review and approves the annual report.

BE IT FURTHER RESOLVED, that consistent with the accompanying memorandum, the changes to the Policy that are reflected in **Exhibit "B"** are hereby approved.

Dated: September 25, 2019

Board Policy: Enterprise Risk Management

Policy Type: **Operating Policies**

Monitored by: Finance and Audit

Board Resolution: #1351, approved March 29, 2017

#1428, amended September 27, 2018 [#xxx], amended September 25, 2019



Board Policy on Enterprise Risk Management

It is the policy of the Board of Trustees for the Long Island Power Authority ("LIPA") to maintain an Enterprise Risk Management Program to monitor identify, assess, mitigate, monitor, and report on LIPA's most significant risks to achieving its mission and delivering value to its customer-owners.

Under the direction of <u>LIPA's</u> the <u>Authority's</u> Chief Executive Officer, the <u>LIPA</u> Authority and its Service Provider shall maintain an Enterprise Risk Management Program with the following key provisions:

- An Enterprisexecutive Risk Management Committee consisting of the Chief
 Financial Officer and at least three LIPA two other Authority staff appointed
 by the Chief Executive Officer, two one of whom must be drawn from LIPA's
 senior management, to oversee the processes and procedures of the Program;
- An evaluation of the most significant risks facing <u>LIPA</u> the <u>Authority</u> and its Service Provider, and corresponding mitigation activities, reported to senior management of <u>LIPA</u> the <u>Authority</u> and its Service Provider for review and evaluation on an annual basis, with ongoing monitoring activity between reviews;
- A review of <u>LIPA</u> the Authority's insurance and other forms of coverage against insurable risks, including the availability and economics of such coverage, performed each year;
- Business continuity plans for LIPA and its Service Provider that are reviewed each year; and
- An annual review of the maturity of the Program compared to industry best practices, will be provided to senior management and the Authority's Internal Audit staff.

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.

Board Policy: Enterprise Risk Management

Policy Type: **Operating Policies**

Monitored by: Finance and Audit

Board Resolution: #1351, approved March 29, 2017

#1428, amended September 27, 2018 [#xxx], amended September 25, 2019



Board Policy on Enterprise Risk Management

It is the policy of the Board of Trustees for the Long Island Power Authority ("LIPA") to maintain an Enterprise Risk Management Program to monitor, mitigate and report on LIPA's most significant risks to achieving its mission and delivering value to its customer-owners.

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;
- An evaluation of the most significant risks facing 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;
- A review of LIPA's insurance and other forms of coverage against insurable risks, including the availability and economics of such coverage, performed each year;
- Business continuity plans for LIPA and its Service Provider that are reviewed each year; and
- An annual review of the maturity of the Program compared to industry best practices will be provided to senior management and the Authority's Internal Audit staff.

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.



AGENDA



ERM Process and Program Timeline



Enterprise Risk Profile



DPS Audit ERM Recommendation & Maturity Assessment



Next Steps - ERM



Insurance Update





ERM Process

A risk is defined as any issue or event that would prevent the achievement of an objective.

The enterprise risk management process includes actions the organization takes to identify, assess, monitor, respond and mitigate, and report on risks:

Risk Reporting

Communication of risk information that enables management to make risk-informed decisions

Risk Monitoring

Process for monitoring changes in the probability and/or impact of a risk



Risk Identification

Process to identify risks affecting the organization

Risk Assessment

Quantitative and qualitative methods utilized to assess the magnitude of risk exposures

Risk Response & Mitigation

Process and documentation of identifying and implementing actions to minimize the probability and/or impact of a risk



LIPA ERM PROGRAM PROGRESS

Initiated LIPA Department Risk Assessments

2017

2018

- Completed LIPA Risk Portfolio
- Initiated PSEG Long Island Risk Assessments

- Completed PSEG Long Island Risk Portfolio
- Updated LIPA Risk Portfolio
- Performed deep dive analysis on high-priority enterprise risks

2020

2019

- Increase risk monitoring and measurement of mitigation effectiveness
- Continue integration of ERM into Strategy

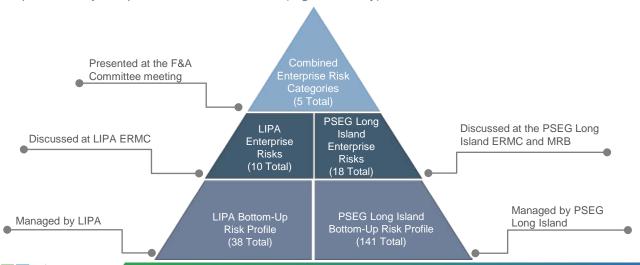


COMBINED ENTERPRISE RISK CRITERIA

Combined enterprise risks can significantly impede **both** LIPA and PSEG Long Island's ability to achieve their respective goals.

To qualify as a combined enterprise risk, it must be considered high-priority and meet one or more of the following criteria:

- Collaborative effort between LIPA and PSEG Long Island (e.g., regulation)
- Vested interest between LIPA and PSEG Long Island (e.g., cyber)
- Requires a major capital or O&M investment (e.g., reliability)



IDENTIFYING & MITIGATING PRIORITY RISKS

Risk Category	Risk Description	Mitigation Activities
Reputation (Board Policy on Customer Service)	Reputation is impacted by a customer/stakeholder's perception of financial and/or operating performance and results in negative media coverage.	 Employ clear and timely communication through all channels with customers, stakeholders and public officials on issues to ensure information is disseminated early and accurately Increase customer awareness, through the facilitation of public presentations, stakeholder meetings, quarterly advisory meetings, board meetings and hearings. Additionally, informational outreach materials are provided
Reliability (Board Policy on Reliability)	Catastrophic event (e.g., major storm) and/or operational issues result in long-duration outages, and negative public perception.	 Prioritize capital and O&M expenditures to maintain the T&D system Facilitate annual drills, exercises and training, including after action and best practice reviews with annual plan refinement and update Monitor performance through the use of metrics, which are measured against goals and identify areas for improvement, when necessary
Cyber & Physical Security (Proposed Board Policy on Cyber and Physical Security)	Cyber or physical security breach to a critical operating system results in the inability to operate the system safely and effectively.	 Implement and maintain intrusion detection system and/or data loss protection, utilizing industry best practices Conduct security vulnerability inspections, physical security inspections, and physical penetration tests at critical sites All employees and contractors are trained on the importance of protecting PII and data is only shared on an "as needed" basis; additionally, PSEG Long Island is working with a third party to mask all PII
Regulatory Risk	Regulations are modified and result in potential changes to the business model, operational changes, and/or an increased cost of service.	 Translate existing subject matter expertise into synchronized and persuasive policy positions Identify opportunities to impact policy that align with customer needs
Rates (Board Policies on Affordability and Debt)	Insufficient rates/untimely rate relief leads to inadequate system investments which compromises LIPA's ability to achieve strategic priorities.	 Balance system requirements with financial obligations and customer impacts Analyze costs, and identify ways to offset expenses to minimize rate impacts to our customers Maintain strong relationships with, and actively educate stakeholders



RISKS ALIGN WITH OTHER UTILITIES

Edison Electric Institute

2019 Rank	2018 Rank	2017 Rank	2016 Rank	2015 Rank	Risk
1	1	1	1	1	Cybersecurity
2	3	8	2	6	Safety – Employee and Public
3	4	3	3	WI	Pressure on Rates and Returns
4	2	4	4	5	Regulation/Legislation
5	5	2	5	3	Strategy and Execution (incl. Business Model)
6	10	9	WI	WI	Customer Expectations
7	6	6	7	2	Operational Performance (reliability)
8	7	10	6	4	Catastrophic Event Response (including storms)
9	9	7	8	13	Data Privacy / Sensitive Personal Info Release
10	12	5	13	12	Aging Infrastructure

WI - included as a write-in risk



DPS RECOMMENDATION PROGRESS

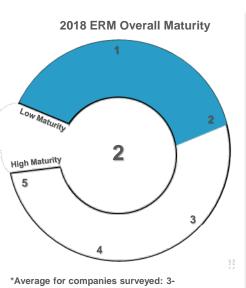
DPS Audit Recommendation – LIPA and PSEG Long Island should continue to develop an effective and comprehensive ERM process.

Goal	Status for Completion
Develop risk reporting framework for department, organization, and board reporting cadence and depth	Complete
Review each departments risk profile and obtain VP consensus	Complete
Develop prioritized portfolio of enterprise and utility risks	Complete
Establish a framework for emerging risks	Complete
Update/review ERM Procedures Manual	Complete
Perform second annual ERM Maturity Assessment	Complete
Introduce velocity as an additional component in assessing risk	Complete
Integrate updated and revised risk data into the business planning cycle to help prioritize O&M, capital and resource allocations	Ongoing



YEAR OVER YEAR ERM PROGRAM MATURITY

- ERM chose the Gartner Maturity Model to measure year over year progress and to benchmark our program against best practices
- Improvements were made to the maturity model in 2019 that increased baseline maturity standards to be more rigorous, making a year over year comparison difficult



2019 ERM Overall Maturity

1

Low Maturity

2

High Maturity

3

*Average not yet available due to changes from 2018 to 2019 maturity model

Year Over Year Improvements:

- Alignment of Risk with Strategy
- Management of the ERM Process
- · Enhancement of Risk Culture
- Comprehensive identification and assessment of risks across the Authority

2020 Program Focus Areas:

- · Improve risk monitoring
- Enhance risk reporting
- Continue integration of ERM into business processes
- Foster Risk Awareness



Next Steps



Continue integration of ERM into business practices



Perform deep dive analysis on significant enterprise risks



Increase risk monitoring and mitigation effectiveness



Continue industry benchmarking for the ERM Program







KILOWA

Overview of LIPA's Insurance Program

Support the overall mission and key objectives of supplying clean, reliable, and affordable energy

 Mitigate a portion of LIPA's financial risk on behalf of its customer-owners and bondholders

 Comply with LIPA's Board Policy on Enterprise Risk Management

"Maintain prudent and appropriate levels of insurance or other coverages against insurable risks, if available and reasonably economic."

- ERM Board Policy



PSEG Long Island Placed Insurance

PSEG Corporate insurance department manages the placement of the following policies on behalf of LIPA:



Excess General Liability



Property



U.S. Property Terrorism





Railroad Protective



Nuclear Electric (replacement power)

^{*} LIPA has received FEMA grants for storm restoration in the past



PROTECTING FINANCIAL INTERESTS OF OUR CUSTOMERS AND EMPLOYEES

Insurance procured via LIPA's insurance broker Arthur J. Gallagher (AJG)

- LIPA and UDSA Directors & Officers Liability Insurance
- Employment Practices Liability Insurance

Insurance placed through NYS Office of General Services - BRIM

- Office 3rd Party Liability Insurance
- Office Property Liability Insurance

Insurance via APPA endorsed broker Marsh - Wortham

LIPA Office Cyber Insurance



KEY TAKEAWAYS

- LIPA & PSEG Long Island ERM program making significant progress year over year
 - **0 2** Established first enterprise risk portfolio in company history
 - ERM process identified top LIPA and PSEG Long Island risks and appropriate mitigation strategies
 - Continue to mitigate financial risks through the purchase of insurance



