

FOR CONSIDERATION

September 27, 2018

TO: The Board of Trustees

FROM: Thomas Falcone

SUBJECT: Approval of the Annual Report to the Board on the Enterprise Risk Management Policy

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, 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, 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 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. 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.

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 for “Maintaining 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 a member of the senior management of the Authority, to establish processes and controls and oversee the implementation of the Enterprise Risk Management program”.

- The Authority has an active ERMC that reviews the ERM process and controls and oversees the implementation of the ERM Program.
- 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 and meets with ERM Staff on a regular basis. Over the last twelve months, the ERMC has met seven times to discuss the ERM Program.

The Policy requires that the Authority “Regularly assess the risks facing the Authority and providing updates on the status of risks and corresponding mitigation activities to the senior management of the Authority and its Service Provider as well as at least annually to the Finance and Audit Committee of the Board of Trustees”.

- In 2018, the Authority and PSEG Long Island revised the ERM Program to follow a bottom-up approach to engaging each of the business units at LIPA and PSEG Long Island. ERM staff from the Authority, PSEG Corporate and PSEG Long Island collectively facilitate working sessions with the appropriate subject matter experts in each business unit.
- The ERM process includes the identification of risks affecting LIPA’s 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 Vice President is required to review and sign off on the risks and mitigation activities within the business units of their department as risk-owner.
- A formal presentation of the significant risks and mitigation activities of each department is made to LIPA’s ERMC and the Senior Leadership Team at PSEG Long Island.
- Annually, the F&A Committee receives an ERM Program Update highlighting the significant risks facing the organization concurrent with this annual report.
- The revised ERM Program has been implemented across all the departments at LIPA and three of the four business units at PSEG Long Island, which is ahead of the schedule anticipated when the program was revised in 2018 (see Goal #75 below), with the balance of the business units to be completed by the end of Q-1 2019.

The Policy provides for “Annually reviewing the Authority’s insurance and other forms of coverage against insurable risks, including the availability and desirability of such coverage.”

- 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 Authority’s CFO provides 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 CFO’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 2018 and prudent and economic levels of coverage are in place for each type of policy, including:
 - D&O Insurance \$200M Limit/\$1M Retention
 - Excess 3rd Party General Liability \$300M Limit/\$3M Retention
 - Property Insurance (all risks, excludes wires and poles) \$500M/CAT\$300M Limit adder/\$1.5-\$7.5M Retention; includes U.S. Property Terrorism

- 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
- Nuclear Electric Replacement (NMP2) \$300M Limit/12-week deductible period
- Employee Practices Liability Insurance \$5M Limit/\$15K Retention
- LIPA premises Liability and Property Insurance \$150K-\$3M Limit/\$0 Retention

The Policy provides for “Maintaining business continuity plans for the operations of the Authority and periodically reviewing such plans of the Service Provider.”

- 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 BCP plans are reviewed annually and were reviewed during 2018.
- 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 2018.

The Policy provides for “Requiring the Authority’s Audit staff to annually undertake a review of the effectiveness and maturity of the Enterprise Risk Management program.”

- The Authority’s Internal Audit department will receive the third-party ERM Program maturity assessment and diagnostic report as further described under “Proposed Changes to the Board Policy” below.

Proposed Changes to the Board Policy

The Board Policy has been revised for three purposes:

- Simplification of language and elimination of duplication, without material change;
- A change in requirement from an annual review of the maturity of the ERM Program by Internal Audit to a program effectiveness assessment that is provided to senior management and Internal Audit for review. Staff will undertake an annual program effectiveness and diagnostic assessment by an outside independent entity (e.g. the Corporate Executive Board or Risk Management Society) making a requirement for an additional assessment by Internal Audit redundant; and
- Addition of an annual reporting requirement on the Policy to the F&A Committee, consistent with other Board policies.

2018 Work Plan and Other Goals

LIPA’s 2018 Work Plan includes the following goal to advance the Policy:

- **Goal # 75:** Initiate a department level review of significant enterprise risks with PSEG Long Island, complete risk profiles for three major business units in 2018 and two business units in 2019.

This goal will be completed during the year and the implementation of the revised Program design, with department level reviews, is ahead of schedule.

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"** Enterprise Risk Management Policy (redline)
- Exhibit "C"** Enterprise Risk Management Policy (clean)
- Exhibit "D"** Report to the Board on the ERM Policy

Exhibit A

RESOLUTION APPROVING THE REPORT TO THE BOARD OF TRUSTEES ON THE ENTERPRISE RISK MANAGEMENT POLICY

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 Board has received the annual Staff report on compliance with the Policy; and

WHEREAS, the Board has reviewed the Policy and affirms that changes to the Policy are required.

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

Dated: September 27, 2018

Board Policy: _____ **Enterprise Risk Management**

Policy Type: _____ **Operating Policies**

Monitored by: _____ **Finance and Audit**

Board Resolution: _____ **[#xxxx] #1351, approved March 29, 2017]**

_____ **[#XXXX], amended September 27, 2018**



Board Policy on Enterprise Risk Management

~~LIPA's ability to~~ It is the policy of the Board of Trustees to maintain an effective and comprehensive Enterprise Risk Management Program (the "Program") to ("ERM Program") which will identify, assess, manage, and mitigate, monitor, and report on LIPA's the organization's most significant risks to achieving its mission and delivering value to its customer-owners.

~~The ERM Program enables a risk aware culture across the Authority and its Service Provider to proactively take measures to reduce the impact and/or likelihood of financial, operational, supply, physical security, and cyber security, legal, legislative, regulatory, reputational, compliance, and other risks is integral to the Authority achieving its mission and delivering value to its customer owners. An effective risk management program, executed in conjunction with the~~

Managing risks under the ERM Program seeks to:

- ~~Provide transparency to Senior Management of the Authority, its Service Provider and to the Board of Trustees regarding the Authority's most significant risks and the actions taken by the Authority and its Service Provider, is therefore consistent with, and required by, best utility practices. to manage those risks;~~

It is the policy of the Board of Trustees for the Authority to maintain an Enterprise Risk Management Program that:

- ~~Increases~~ Increase the likelihood of successfully delivering on achieving the Authority's mission on behalf of its customer owners;
- ~~Enhances~~ Enhance the effectiveness of strategic planning and decision-making by the Authority and its Service Provider; and
- ~~Maintains~~ Maintain prudent and appropriate levels of insurance or other coverage against insurable risks, if available and reasonably economic;
- ~~Provides transparency to the senior management of the Authority and its Service Provider and to the Board of Trustees regarding the Authority's risks and the actions taken by the Authority and its Service Provider to manage those risks.~~

Under the direction of LIPA's the Authority's Chief Executive Officer, the Authority and its Service Provider shall ~~conduct~~ maintain an Enterprise Risk Management program, the Enterprise Risk Management ERM Program with the , having the following key provisions of which include:

- ~~Maintaining an Enterprise~~ Preserve a governance structure including A an Executive Risk Management Committee consisting of the Chief Financial Officer and at least

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_____ **[#XXXX], amended September 27, 2018**

two other Authority staff appointed by the Chief Executive ~~Office~~Officer, one of whom ~~iech~~ must be drawn from LIPA's ~~the~~ senior management ~~of the Authority, to to establish maintain and to oversee the~~ processes and ~~controls and oversee the implementation procedures~~ of the ~~Enterprise Risk Management program~~ERM Program;

- An evaluation of the ~~Continuously~~Periodically ~~monitor the most significant~~ risks facing the Authority and its Service Provider, ~~and provide regular updates on the status of risks~~ and corresponding mitigation activities, reported to ~~the~~ senior management of the Authority and its Service Provider for review and evaluation on an annual basis ~~regular cycle, with ongoing monitoring activity between reviews;~~
- A review of as well as to and report, at least a minimum annually, to the Finance and Audit Committee of the Board of Trustees on such risks and mitigation activities;

~~Incorporating ERM risk information into the Authority's Strategic Planning and business planning processes;~~

- Annually reviewing 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 ~~Maintaining business continuity plans for~~Annually evaluate the operations maturity of ~~the the Authority~~ERM Program compared to ~~an~~ and industry best practices, ~~which~~ will be provided to senior management and the Authority's Internal Audit staff ~~each year.~~

~~periodically reviewing such plans~~implementation of continuous improvements consistent with industry best practices. The results of the Service Provider; and

- Requiring ~~maturity assessment will be shared with the Authority's Internal Audit staff to annually undertake a review of the effectiveness and maturity of the Enterprise Risk Management program.~~

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. ~~the progress of the ERM Program within LIPA and at its Service Provider in providing transparency into various risk and efforts of raising risk awareness~~ ~~based on current ERM Program results, highlight the most significant risks facing the Authority and its Service~~

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Provider; • measures taken to reduce the impact and/or likelihood of a significant risk; • and other elements of compliance with this Policy.

Board Policy: **Enterprise Risk Management**

Policy Type: **Operating Policies**

Monitored by: **Finance and Audit**

Board Resolution: **#1351, approved March 29, 2017**

[#XXXX], amended September 27, 2018



Board Policy on Enterprise Risk Management

It is the policy of the Board of Trustees to maintain an Enterprise Risk Management Program to 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 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;
- 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;
- 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;
- 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.



Enterprise Risk Management Update for the Finance & Audit Committee

September 27, 2018

Agenda



Resource Update



ERM Process Status



LIPA Risk Profile



PSEG Long Island Status



DPS Audit ERM Recommendation



Next Steps



ERM Resource Update

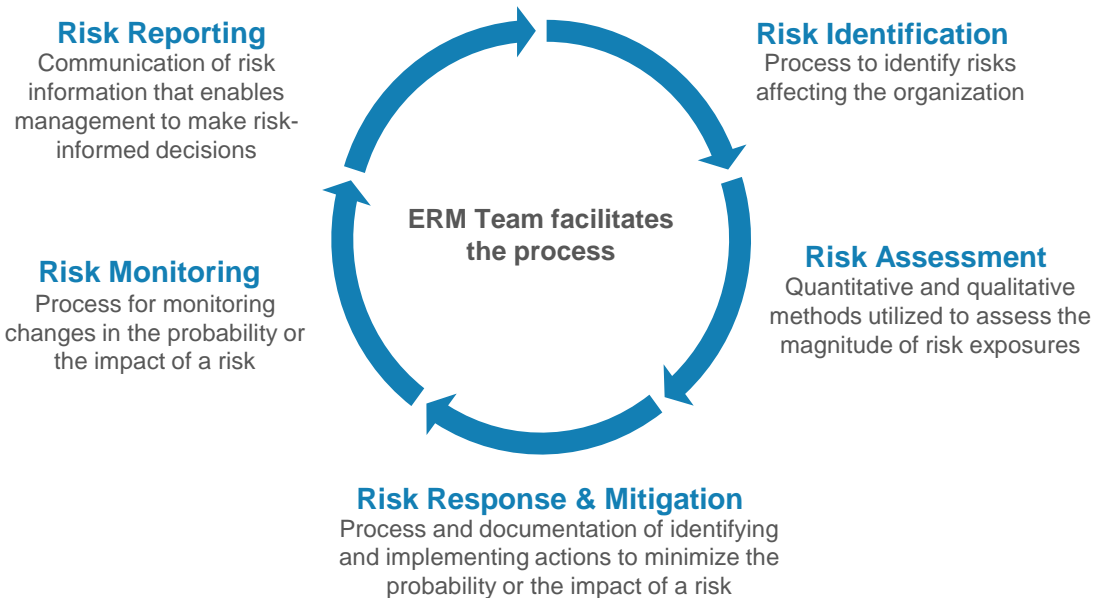
Since last update to Finance and Audit Committee:

- LIPA hired an ERM Manager
- PSEG Long Island hired a dedicated ERM Program Manager
- LIPA and PSEG Long Island are utilizing a collaborative program to increase efficiencies and prevent redundancies
- Benchmark leading practices with LPPC, EEI, St. John's University, and NY area ERM practitioners

ERM Process Status

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:



ERM Timeline



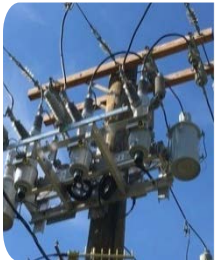
Initiated LIPA
Department Risk
Assessments

● 2017

- Completed LIPA Risk Portfolio
- 50 risks identified and assessed
- Regular risk reporting to Executive Risk Management Committee and Senior Leadership Team



2018 ●



- Complete PSEG Long Island Risk Portfolio by Q1
- Portfolio View of LIPA and PSEG Long Island Risks

● 2019

Top LIPA Risks



REPUTATION is impacted by customer/stakeholder's perception related to operating under-performance and can result in negative media coverage.



OVERSIGHT challenges regarding PSEG Long Island's management activities under the contract could result in operational performance that is not aligned with LIPA's mission and policies.



WORKFORCE challenges due to the limited ability to promote internal candidates or identify and attract external candidates could result in inadequate expertise to fulfill LIPA's mission and policies.



CATASTROPHIC EVENT could result in damages to infrastructure and substantial legal/ regulatory consequences and negative public perception (e.g., storm, cyber event).



REGULATION/LEGISLATION requirements could be modified and result in potential changes to the business model, loss of tax exemption, and/or an increased cost of service.



RATE PRESSURE could lead to inadequate system investments which compromises LIPA's ability to achieve strategic priorities.

PSEG Long Island Risk Update



CUSTOMER OPERATIONS

- Facilitated 21 working sessions
- Identified and assessed 27 risks
- Reviewed with VP and President



ELECTRIC OPERATIONS

- Facilitated 18 working sessions
- Identified and assessed 42 risks
- Reviewed with VP



POWER MARKETS

- Facilitated 10 working sessions, to date
- Identified and assessed 13 risks
- Reviewed with VP

DPS Audit ERM Recommendation

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

ERM plan to address DPS recommendation:

- Utilized an external assessment model to measure the current maturity of the ERM Program
 - Current maturity of the Program is a ‘2’ compared to the industry benchmark of a ‘3’ - (on a five point scale)
 - Identified areas of opportunity and implementing via the ERM roadmap over the next 48 months (i.e., incorporate risk management into strategy, risk reporting, embed risk management into business processes, etc.)
- Evaluate maturity on an annual basis

Next Steps



Develop a LIPA top risk report with documentation of responsible officers, mitigation strategies, and tracking mechanisms (Key Risk Indicators)



Complete PSEG Long Island department risk profiles and integrate into the Utility Risk Portfolio



Continue with enhancements to further develop a consistent and systematic ERM Program



Provide next update to the F&A Committee March 2019

LIPA Insurance Program Update for the Finance & Audit Committee

Agenda



Overview of LIPA's insurance program and participants



PSEG Long Island managed insurance



LIPA managed insurance through LIPA's broker and NYS Office of General Services (OGS)





Overview of LIPA's Insurance Program

- **An important component of mitigating a portion of LIPA's financial risk on behalf of its customer-owners and bondholders**
- **Supports the overall mission and key objectives of supplying clean, reliable, and affordable energy**
- **In compliance 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"

Insurance Program Participants

- Arthur J. Gallagher (“AJG”), LIPA’s Advisor - M. Hogue
- Arthur J. Gallagher, LIPA’s Insurance Broker - T.J. Bradley
- PSEG Corporate Insurance Department manages PSEG Long Island insurance requirements - R. Green
- LIPA administers coverages through NYS Office of General Services

The background of the slide is a blue-tinted image of a car's instrument cluster. It features several analog gauges, including a speedometer on the left and a tachometer on the right. Below the gauges is a digital display showing the number '0359'. The overall aesthetic is clean and professional, with a focus on automotive technology.

PSEG Long Island Managed Insurance

PSEG Long Island Insurance

- In line with **A&R OSA Sec. 4.9A - Appendix 11(A)** PSEG Corp. insurance dept. manages the placement of several policies on LIPA's behalf through its broker Marsh USA



Excess General Liability (incl. auto and employee liability)

Limit: \$300M

Deductible: \$3M

Layered program

Claims first made

Comparable to industry peer group (Rev. \$1B-\$10B)



Property* (all risks; excludes lines, wires and poles)

Limit: \$500M (CAT limit increase \$300M)

Full replacement cost coverage; temp. rental equip. \$25M limit; electronic data media \$25M limit

Deductible: \$1.5M; Named storm / flood min. \$1.5M-7.5M each occ.



U.S. Property Terrorism

Limit: Follows Property Program

Deductible: Follows Property Program



Railroad Protective

Limit: \$2M / \$6M

Deductible: \$0

Period: 2 year program



Nuclear Electric (replacement power)

Limit: \$300M Indemnity

Paid: \$650K/week

Deductible: 12 week waiting period

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

PSEG Long Island Insurance

PSEG Long Island is required to maintain insurance as specified in the A&R OSA

- **Worker's Compensation:** Limit: in compliance with jurisdiction where the work is performed; Deductible: \$500K maximum self-insured
- **Fiduciary Liability:** Limit: \$60M aggregate; Deductible: not to exceed \$1M maximum
- **Business Travel Accident Travel Accident:** Limit: 6X salary, and cap of \$4M; Deductible: \$0

Other Coverages*

- **Cyber Insurance** – \$15M Limit; coverage for PSEG Long Island systems, employees, and LIPA and LILCO d/b/a LIPA are additional named insured
- **Crime Insurance** – Coverage for PSEG Long Island employees

**T&D insurance – Limited coverage for lines, poles and wires available but is cost prohibitive*



LIPA Managed Insurance

LIPA Managed Insurance

AJG manages the marketing, negotiating, coverage, and claims processing with carriers

LIPA Employment Practices Liability Coverage

- \$5M Limit to cover employment related claims
- \$15K Self Insured Retention (*reduced from \$25K*)
- Premium declined 20% with expanded marketing effort
- New endorsements: \$1M defense cost outside of the Limit and \$50K wage and hour defense cost sublimit

LIPA and UDSA Directors & Officers Liability Insurance

- Coverage aligns with benchmarking data for a utility of its size and geography
- Premiums have been relatively flat year-over-year

LIPA

- \$200M Limit of coverage
- \$1M Self Insured Retention

UDSA

- \$30M Limit of coverage
- \$250K Self Insured Retention

LIPA Managed Insurance *(cont'd)*

LIPA insurance policies placed through N.Y.S. Office of General Services - Bureau of Risk and Insurance Management under the State's master policy

General Liability coverage (to 3rd party damage of property or injury)

- Limit per occurrence: \$1M
- Damage to premises: \$300K
- Medical Expense: \$10K
- Aggregate limit of \$2M *(except for Earle Ovington Blvd. Office which has excess liability of \$2M total \$4M)*
- \$0 Deductible

Office Property coverage

- Limits ranges from \$150K - \$3M depending on value of each location
- \$0 Deductible

LIPA Managed Insurance

(cont'd)

LIPA Cyber Insurance Coverage

Policy placed through APPA endorsed brokerage firm

- \$5M Limit
- Deductible: \$10K/claim; *\$0 deductible when using Underwriter approved support vendors*
- Highlights of Coverage resulting from a cyber attack and breach of **LIPA's corporate I.T. system and website:**
 - Security & Privacy
 - Network Extortion
 - Technology Services
 - Reputational Damage
 - Event Support Expenses
 - Social Engineering Fraud
 - Multimedia / Intellectual Property
 - Network Interruption and Recovery
 - Miscellaneous Professional Services
 - Privacy Regulatory Defense & Penalty
 - Electronic Theft, Computer Fraud, & Telecommunications Fraud



Questions?