FOR CONSIDERATION

August 11, 2021

TO: The Board of Trustees

FROM: Thomas Falcone

SUBJECT: Consideration of the Adoption of Recommendations Relating to Development of a

Standardized Data Access Platform

Requested Action

The Board of Trustees (the "Board") of the Long Island Power Authority ("LIPA") is requested to adopt a resolution related to certain recommendations to improve LIPA and Department of Public Service ("DPS") access to PSEG Long Island financial and operational data through a Standardized Data Access Platform (the "Recommendations"), which resolution attached hereto as **Exhibit "A.**"

Background

Section 4.11(A), System Information and Computer Database, of the Amended and Restated Operations Services Agreement ("OSA"), stipulates that "Service Provider shall establish and maintain an information system to record, provide and, to the extent practicable, provide real time retrieval for LIPA's review and copying of T&D System operating and financial data, including all information necessary to verify calculations made pursuant to this Agreement. Such information shall include information about the T&D System (including information in physical formats such as diagrams, flow charts, and schematics related to the T&D System), reports (and all supporting data) regarding the performance of the T&D System, and information regarding management (including planning, design, engineering, operation, maintenance, and customer contact) of the T&D System (collectively, 'System Information')".

Furthermore, the term-sheet between PSEG Long Island and LIPA dated June 26, 2021 provides, among other things, that: "Prior to the separation of the IT systems, the Service Provider will provide LIPA and its representatives and consultants with the same access, including the same real-time access, where applicable, as the Service Provider and its Affiliates have to all information technology systems and processes that are utilized in whole or in part to serve LIPA, as well as to all of the financial-, customer-, and T&D system-related data, information and reports residing therein and accessible there through.

During the past several years, LIPA has had the ability to access PSEG Long Island systems on an as-requested basis. However, the usefulness of such access provisions has been limited by the complexity of the access procedures, availability of user training, and organization of system data. Modern data warehouse systems serving enterprise data are characterized by an enterprise-wide data dictionary, a central repository of enterprise data, and meaningful organization of enterprise data suitable for decision-making and performance monitoring. Additionally, data lakes facilitate access to semi-structured and unstructured data as well as raw data from structured databases for in-depth analysis.

LIPA staff believes that the development of a Standardized Data Access Platform consisting of a data warehouse and a data lake would provide effective centralized access to organization-wide data that would facilitate PSEG Long Island's management decision-making capability as well as LIPA and DPS' oversight.

Recommendations

LIPA Staff recommends that PSEG Long Island develop a Project Implementation Plan with the objective of developing a Standardized Data Access Platform consisting of an enterprise-wide data warehouse, a broader data lake, and provisioning and development of tools to support reporting and analytics. The Standardized Data Access Platform will provide PSEG Long Island management, LIPA, and the DPS seamless and effective access to PSEG Long Island financial, operational, and performance data. This data repository will contain structured data from PSEG Long Island's financial and operational systems and will be equipped with suitable tools to facilitate query, reporting, and analyses of data from the entire spectrum of data sources without the users needing to manage connections to different source systems. Phase I of the implementation should, at a minimum, incorporate data from the following source systems: SAP, Outage Management System/Pragma CAD (OMS/pCAD), Advanced Metering Infrastructure (AMI) and Customer Information and Billing System (CAS). Phase II should, as a minimum, include data from Asset Management, Energy Management System (EMS), Distribution Management System (DMS) and Supervisory Control and Data Acquisition (SCADA). The Project Implementation Plan should be delivered no later than September 10, 2021 with the objective of a production Phase I system to be delivered no later than December 31, 2022.

Recommendation

Based upon the foregoing, I recommend approval of the above requested action by adoption of a resolution in the form attached hereto.

<u>Attachments</u>

Exhibit "A" Resolution

RESOLUTION ADOPTING RECOMMENDATIONS RELATING TO THE DEVELOPMENT OF A STANDARDIZED DATA ACCESS PLATFORM

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, Section 4.11(A), System Information and Computer Database, of the OSA, stipulates that "Service Provider shall establish and maintain an information system to record, provide and, to the extent practicable, provide real time retrieval for LIPA's review and copying of T&D System operating and financial data, including all information necessary to verify calculations made pursuant to this Agreement." and

WHEREAS, the term-sheet between PSEG Long Island and LIPA dated June 26, 2021 states that "the Service Provider will provide LIPA and its representatives and consultants with the same access, including the same real-time access, where applicable, as the Service Provider and its Affiliates have to all information technology systems and processes that are utilized in whole or in part to serve LIPA, as well as to all of the financial-, customer-, and T&D system-related data, information and reports residing therein and accessible there through." and

WHEREAS, the current access methods to PSEG Long Island's systems have been limited and insufficient for efficient and effective oversight of the T&D operations; and

WHEREAS, LIPA Staff has developed recommendations for development of a Standardized Data Access Platform utilizing industry-standard data warehouse and data lake technologies, as described in the accompanying memorandum (the "Standardized Data Access Platform Recommendations"); and

WHEREAS, the Standardized Data Access Platform Recommendations require the development and preparation of a Project 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 Standardized Data Access Platform Recommendations and directs LIPA Staff, together with PSEG Long Island, to implement the Standardized Data Access Platform Recommendations, including the creation of Project Implementation Plans for the Board's consideration at its September 2021 meeting.

Dated: August 11, 2021