INFORMATION TECHNOLOGY SYSTEM SEPARATION PLAN

September 28, 2022

Kings Park, NY

IT SYSTEM SEPARATION PLAN

In the reformed OSA, LIPA and PSEG Long Island agreed to separate the IT systems used by Long Island from those of PSEG corporate and affiliates

- OSA required LIPA and PSEG Long Island to form a joint cross-functional team (the **"IT Team"**) to develop the Plan for IT System Separation by July 29, 2022

- IT Team was organized in April 2022 to deliver on this mandate. The technical assessment and planning team was led by PSEG Long Island's Interim President and COO, David Lyons, with support from LIPA staff and consultants

- In developing the Plan, the IT Team considered, among other things, the **cost of IT Separation**, **ongoing maintenance**, and **impact on Operations Services, customers**, and minimizing the impact on PSEG Long Island's ability to meet its obligations under the OSA

- The cost and disruption of the Plan has been minimized in several ways, including by **categorizing the systems into bundles**, planning to separate systems in conjunction with planned **upgrades or replacements** (where possible), and selecting the **"system carve out"** method of separation of the ERP

The System Separation Program envisions an end-state where none of the systems remain intermingled by the end of two years (Q4 2024)

- IT Team identified approximately **46 IT systems** (including cybersecurity systems) that are intermingled with New Jersey to be separated within **24 months**

- The IT Team delivered the Plan to the Department of Public Service ("DPS") for their review and recommendation on July 29, 2022. The OSA set a timeline for DPS' review and recommendation to the LIPA Board within 60 days of submission. The timing facilitates the Board's consideration of the IT Plan as part of the 2023 Budget

- The plan contains the catalog of IT Systems to be separated and high-level schedule. The 24-month timeline is aggressive but permits all systems to be separated before the end of the contract

Discussion | Questions?

LIPA
Long Island Power Authority

September 28, 2022

TO: The Board of Trustees

FROM: Thomas Falcone

SUBJECT: Consideration of Adoption of the LIPA and PSEG Long Island IT System Separation Plan

Requested Action

The Board of Trustees (the "Board") of the Long Island Power Authority ("LIPA") is requested to adopt the LIPA and PSEG Long Island IT System Separation Plan ("Plan").

Background

In the Second Amended and Restated Operations Services Agreement ("OSA") between LIPA and PSEG Long Island, the parties agreed that it would be beneficial for all Information Technology ("IT") Systems serving LIPA to be separate and distinct from the systems, data, reports, and information of PSEG Long Island and its Affiliates ("IT System Separation"). This includes the Enterprise Resource Planning ("ERP") system, infrastructure, various application systems, and cybersecurity support systems.

The OSA stipulated that LIPA and PSEG Long Island form a joint "IT Team" utilizing technical and business Subject-Matter Experts in their respective organizations and develop an "IT Team Proposal" that identifies which systems should undergo separation and their schedule for doing so. In developing the IT Team Proposal, LIPA and PSEG Long Island have considered the cost of the system separation, the costs of ongoing operation and maintenance, impact on operations services and customers, and the impact on PSEG Long Island's ongoing ability to meet its obligations under the OSA.

A joint LIPA and PSEG Long Island "IT Team" was organized in April 2022 to deliver on this mandate within 120 days. The technical assessment and planning team was led by PSEG Long Island's Interim President and COO, David Lyons, with support from LIPA Staff and consultants. The IT Team delivered the Plan to the Department of Public Service ("DPS") for their review and recommendation on July 29, 2022. The OSA set a timeline for DPS' review and recommendation to the LIPA Board within 60 days of submission. The timing facilitates the Board's consideration of the IT Plan as part of the 2023 Budget.

The cost and disruption of the Plan has been minimized in several ways, including by categorizing the systems into bundles, planning to separate systems in conjunction with planned upgrades or replacements (where possible), and selecting the "system carve out" method of separation of the ERP.

Discussion

LIPA and PSEG Long Island are jointly developing a multi-year IT System Separation Program ("SSP") to implement the requirements of the OSA, which call for separating the currently operational IT, Operational Technology ("OT"), and Cybersecurity ("Cyber") systems that are intermingled with Public Service Enterprise Group ("PSEG") corporate systems. Systems used at or by PSEG Long Island but owned or controlled by PSEG or its affiliates are subject to separation. LIPA and PSEG Long Island agreed that for an IT, OT, or Cyber system to be classified as an "intermingled system," it must satisfy at least one of the following criteria:

- The system is deployed on hardware and/or infrastructure owned, operated, or controlled by PSEG
- The system software is licensed by PSEG and not by PSEG Long Island (acting as an agent of LIPA)
- The system is supported and maintained under a vendor contract with PSEG and not by PSEG Long Island (acting as an agent of LIPA)
- The services provided by the system are provisioned under a vendor contract with PSEG and not with PSEG Long Island (acting as an agent of LIPA)
- The administrative control of the system is performed by employees or agents of PSEG and not by employees or agents of PSEG Long Island.

Utilizing the above criteria, the IT Team identified 46 systems that are intermingled systems. The IT Team has done reasonable due diligence to identify these intermingled systems, but it is possible that there are one or two more systems that are intermingled but not identified as such.

The SSP envisions an end-state where none of the systems remain intermingled by the end of two years (Q4 2024), recognizing that the total separation of some of the administrative and support functions may extend into 2025. The 24-month timeline is aggressive but permits all systems to be separated before the end of the OSA.

The plan contains the catalog of IT Systems to be separated and high-level schedule. The Plan submitted to DPS is attached hereto as **Exhibit "B"** with DPS' recommendations on the Plan attached hereto as **Exhibit "C."**

Recommendation

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

Attachments

Exhibit "A"   Resolution
Exhibit "B"   IT Separation Plan, dated July 29, 2022
Exhibit "C"   DPS Recommendation

ADOPTION OF THE LIPA AND PSEG LONG ISLAND IT SYSTEM SEPARATION PLAN

WHEREAS, in the Second Amended and Restated Operations Services Agreement ("OSA") between LIPA and PSEG Long Island, the parties agreed that it would be beneficial for all IT Systems serving LIPA to be separate and distinct from the system, data, reports, and information of PSEG Long Island and its Affiliates ("IT System Separation"); and

WHEREAS, a joint LIPA and PSEG Long Island "IT Team" was organized in April 2022 to deliver on this mandate within 120 days. The technical assessment and planning team was led by PSEG Long Island's Interim President and COO, David Lyons, with support from LIPA Staff and consultants; and

WHEREAS, the System Separation Program envisions an end-state where none of the systems remain intermingled by the end of two years (Q4 2024), recognizing that the total separation of some of the administrative and support functions may extend into 2025; and

WHEREAS, the IT Separation Plan was submitted to the Department of Public Service ("DPS) on July 29, 2022, for its review and recommendation.

NOW, THEREFORE, BE IT RESOLVED, that for the reasons set forth herein and in the accompanying Memorandum, the Board hereby adopts the IT System Separation Plan in the form set forth in **Exhibit "B"** to be amended, as needed pursuant to comments provided by DPS.

Dated: September 28, 2022

July 29, 2022

Rory M. Christian
Chief Executive Officer
New York Department of Public Service
125 East Bethpage Road
Plainview, NY 11803

Dear CEO Christian,

LIPA and PSEG Long Island are submitting this IT System Separation Plan (the "Plan") to the Department of Public Service ("DPS") for your review and recommendation to the LIPA Board.

In the Second Amended and Restated Operations Services Agreement ("OSA") between LIPA and PSEG Long Island, the parties agreed that it would be beneficial for all IT Systems serving LIPA to be separate and distinct from the system, data, reports, and information of PSEG Long Island and its Affiliates ("IT System Separation").

Section 4.2(A)(1)(q) of the OSA required LIPA and PSEG Long Island to form a joint cross-functional team (the "IT Team") to develop the Plan for IT System Separation by July 29, 2022. In developing the Plan, the IT Team considered, among other things, the cost of IT Separation, ongoing operations and maintenance, impact on Operations Services and customers, minimizing the impact on PSEG Long Island's ability to meet its obligations under the OSA, schedule, and prioritization among different IT Systems.

The joint IT Team Proposal identifies the IT Systems to undergo separation and the schedule for doing so. In preparing the IT Team Proposal, the proposal minimizes the cost and disruption in several ways, including by categorizing the systems into bundles, planning to separate systems in conjunction with planned upgrades or replacements (where possible), and selecting the "system carve out" method of separation of the Enterprise Resource Planning System, as further described herein.

The OSA sets a timeline for DPS' review and recommendation to the LIPA Board within 60 days of submission, which is September 27, 2022. The Board has a meeting on September 28, 2022, where we will plan to address the Plan and the DPS recommendation. This timing also facilitates the Board considering the IT Plan as part of the 2023 Budget. As always, we appreciate the efforts of DPS on behalf of Long Island and Rockaways electric customers.

Respectfully submitted,

Thomas Falcone
Chief Executive Officer
Long Island Power Authority

David Lyons
Interim President and Chief Operating Officer
PSEG Long Island

cc: LIPA Board of Trustees
        Carrie Meek Gallagher, DPS Long Island Director
        Nick Forst, Esq., DPS Assistant Counsel

IT SYSTEM SEPARATION PLAN

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Background

The Long Island Power Authority ("LIPA"), a corporate municipal instrumentality and political subdivision of the State of New York, provides retail electric service to approximately 1.1 million customers in Nassau County, Suffolk County, and a portion of Queens County known as the Rockaways.

LIPA's service provider, PSEG Long Island ("Service Provider" or "PSEG Long Island"), is contracted to provide electric transmission and distribution operations services to LIPA through its wholly-owned subsidiary known as ServCo.

In the Second Amended and Restated Operations Services Agreement ("OSA") between LIPA and PSEG Long Island, the parties agreed that it would be beneficial for all IT Systems serving LIPA to be separate and distinct from the system, data, reports, and information of PSEG Long Island and its Affiliates ("IT System Separation"). This includes the Enterprise Resource Planning ("ERP") system, infrastructure, various application systems, and cyber-security support systems.

The OSA stipulates that LIPA and PSEG Long Island will form a joint "IT Team" utilizing technical and business Subject Matter Experts ("SMEs") in our respective organizations and develop an "IT Team Proposal" that identifies which systems should undergo separation and the schedule for doing so. In developing the IT Team Proposal, LIPA and PSEG Long Island have considered the cost of the system separation, the costs of ongoing operation and maintenance, impact on Operations Services and customers, and the impact on PSEG Long Island's ongoing ability to meet its obligations under the OSA.

A joint LIPA and PSEG Long Island "IT Team" was organized in April 2022 to deliver on this mandate. The technical assessment and planning team was led by PSEG Long Island's Interim President and COO, David Lyons, with support from LIPA staff and consultants.

Objectives of the IT System Separation Plan

LIPA and PSEG Long Island are jointly developing a multi-year IT System Separation Program ("SSP") to implement the requirements of the OSA, which call for separating the currently operational Information Technology ("IT"), Operational Technology ("OT"), and Cybersecurity ("Cyber") systems that are intermingled with Public Service Enterprise Group ("PSEG") corporate systems. Systems used at or by PSEG Long Island but owned or controlled by PSEG or its Affiliates are subject to separation.

LIPA and PSEG Long Island agree that for an IT, OT, or Cyber system to be classified as an "intermingled system" it must satisfy at least one of the following criteria:

- The system is deployed on hardware and/or infrastructure owned, operated, or controlled by PSEG,
- The system software is licensed by PSEG and not by PSEG Long Island (acting as agent of LIPA),
- The system is supported and maintained under a vendor contract with PSEG and not by PSEG Long Island (acting as agent of LIPA),
- The services provided by the system are provisioned under a vendor contract with PSEG and not with PSEG Long Island (acting as agent of LIPA), or
- The administrative control of the system is performed by employees or agents of PSEG and not by employees or agents of PSEG Long Island.

Utilizing the above criteria, **the IT Team has identified 45 systems that are "intermingled systems."** The IT Team has done reasonable due diligence to identify these intermingled systems, but it is possible that there are one or two more systems that are intermingled but not identified as such.

The System Separation Program envisions an end-state where none of the systems remain intermingled by the end of two years (Q4 2024), recognizing that the total separation of some of the administrative and support functions may extend into 2025.

This IT System Separation Plan (the "Plan") is the first step toward the implementation of the SSP. The goals of the Plan are to:

- Identify and catalog systems to be separated,
- Develop a high-level schedule for effecting the separation, and
- Propose that the LIPA Board (subject to DPS review) adopt the recommendations in the Plan.

The IT Team
The following persons were represented in the IT Team: David Lyons (Interim President and COO, PSEG Long Island), Greg Filipkowski (Chief Information Officer, PSEG Long Island), Mujib Lodhi (Chief Information Officer, LIPA), and Osman Ahmad (Adviser to LIPA & Consultant). The Team conducted many workshops and interviews to collect and/or validate the data. The IT

Team also greatly benefited from the cooperation of many PSEG Long Island technical leads and SMEs. LIPA consultants and SMEs also supported the project.

Methodology

The analysis underlying the recommendations in this Plan consisted of seven parts:

1) Confirming the key objectives, constraints, assumptions, and overall technical approach of the project.
2) Understanding the current management, control, and operational landscape for IT, OT, and Cyber systems used by PSEG Long Island.
3) Identifying and cataloging which systems are intermingled between PSEG Long Island as agent for LIPA and PSEG corporate and/or its affiliates and therefore subject to further analysis.
4) Characterizing the subject systems on the following dimensions:
   a) Software title and version
   b) Function and business purpose
   c) Key users and other stakeholders
   d) Deployed modules (if applicable)
   e) Firm upgrade plans (if any)
   f) Hosting model (on-premise, third-party cloud)
   g) Delivery model (license only, SAAS, full service)
   h) Licensing model (e.g. perpetual license with maintenance fees, annual subscription, per-user, usage volume based, all-inclusive with hosting, etc.)
   i) Support type and support levels
   j) Integration with other PSEG Long Island hosted systems
   k) Integration with other third-party systems
   l) Requirements for post-separation integration (if any)
   m) Management model (e.g. PSEG Long Island owned and managed, PSEG owned and managed)
   n) Data model and segregation elements
   o) Data footprint (pre and post separation)

   We should note that our due-diligence model did not necessarily consider every dimension for every application reviewed but instead served as guidance for developing information on the technical approach to separation, time-to-deliver, improvement opportunities, and execution risk.

5) Conducting due-diligence discussions with the relevant software vendors and other system integrators to further characterize the intermingled systems and develop a high-level approach to system separation, risk profile of separation approach, and estimated time-to-delivery.

6) Conducting due-diligence discussions with the PSEG Long Island system owners and system users. This was used to understand the various user roles engaged on Long Island and the operational support requirements from a user perspective.

7) Working from the above information, we classified the intermingled systems on the following dimensions:
   a) the nature of the intermingling,
   b) the criticality of the system to PSEG Long Island operations,
   c) the estimated lead-time required for separation operations,
   d) the risk of the adopted separation methodology,
   e) the mutual dependencies of the systems for operational viability (linked systems)

The IT Team also noted that many of the systems are due for near-term system upgrades and/or replacements. This provided an opportunity to integrate the System Separation Plan into the upgrade plan without invoking a stand-alone separation project, thereby reducing cost and simplifying execution.

IT Systems Inventory

The IT Team noted that a large number (approximately 300) of the existing IT systems in PSEG Long Island are already operating on a stand-alone basis or have been partially separated. PSEG Long Island operates a dedicated data center and several of the core systems are deployed there with a backup co-location facility in Virginia (under contract with PSEG Long Island). Key systems that already operate on Long Island on a stand-alone basis are:

1) Outage Management System (CGI OMS/PCAD v 6.7)
2) Distribution SCADA (OSII)
3) EMS (GE)
4) Customer Accounting System (CAS)
5) Enterprise Rate Platform (GridX)
6) PSEG Long Island customer contact center and voice/telephone service (Cisco)
7) Identity and Access Management for LIPA electric customers (Okta)
8) PSEG Long Island Advanced Meter Infrastructure (AMI) system (Landys and Gyr)
9) PSEG Long Island SCADA (PI) historians (OSII)

10) Data Analysis systems (SAS)

11) LAN, server farms, and PSEG-LI SharePoint (Microsoft, Intel, Linux)

12) PSEG Long Island core network infrastructure (Cisco)

However, the IT Team also identified 45 systems that are intermingled with PSEG operations, infrastructure, or licensing that would be subject to system separation. Appendix 1 lists these systems with a brief discussion of their function.

Categorization of Separation Targets into Implementation Bundles

As the IT Team analyzed the intermingled systems that would be subject to separation it became evident that it made sense to separate the system separation plan into discrete implementation bundles. These bundles were grouped together because of one or several of the following drivers: (a) the mutual interdependencies between the systems required that the systems be implemented in a coordinated fashion, (b) there exists certain synergies in managing the separation as one sub-portfolio because of deployment similarities, (c) the project risk profiles suggest that the systems be implemented as a group, or (d) budgeting or capacity constraints combined with expected ease of execution merits delay in execution.

Implementation Bundle 1 – ERP and Ancillary Systems

These systems jointly provide functionality to support PSEG Long Island's ERP requirements. As a portfolio of systems, they provide functionality to support PSEG Long Island's general ledger, financial reporting, accounts payables, non-product billings and receivables, asset and work management (inside plant only), procurement and contracting, human resources and payroll, fixed assets, and employee expense accounting. These services are provided to PSEG Long Island by the following (8) intermingled systems:

- SAP ECC 6.0 (GL, AR, AP, AR, WM)
- SAP SuccessFactors (HR and Payroll)
- SAP Ariba (Procurement)
- SAP Concur (Employee Expense)
- PowerPlan (Fixed Assets and Property Taxes)
- Catalyst (Non-PO Vouchers)
- OrgChartsPlus (Org Charts)
- Microsoft Identity Manager (Authentication Service)

The SAP ECC ERP System (SAP-ERP) has been in place in PSEG Long Island since 2015, after PSEG Long Island assumed operating control of LIPA's T&D operations from National Grid. The

current SAP ECC 6.0 system is an on-premise installation and the hardware is collocated and maintained by a third-party data center owned by DXC Technologies. DXC also maintains a second constellation of SAP-ERP for PSEG at a secondary disaster recovery site.

SAP ECC 6.0 identified above (which provides PSEG Long Island the core accounting services) is the most challenging to separate for a number of reasons: (1) it is the most complex of all the systems in the portfolio containing numerous customizations and external interfaces, (2) it provides a critical functionality to PSEG Long Island, and (3) it is likely to take the longest to deploy the separation.

We also note that PSEG Long Island and LIPA have already launched an Enterprise Asset Management System ("EAMS") implementation initiative. This project is considering three potential candidate systems for deployment: Oracle, IBM Maximo, and SAP Asset and Work Management. The RFP has been issued and will be implemented in PSEG Long Island only. It is expected that this new system will absorb the following scope/functionality from the existing SAP ECC 6.0 system: Asset Management, Maintenance Management, Work Management, Inventory and Warehousing, Procurement, and parts of Capital Planning. An analysis of organizational improvement opportunities conducted by LIPA suggests that improvements in these scope areas have the potential to deliver the greatest business value relative to other ERP scope areas (e.g. GL, AP, AR, FA, etc.).

The IT Team considered several approaches to implement the SAP separation but the following two approaches were the ones deemed the most feasible:

Approach 1: System Carve Out
This approach is common and considered to be low-risk because it keeps the original system design and system configuration intact but instead slices out the Long Island data and stands up a separate infrastructure and separate instance of the original SAP system. Existing integrations and customizations are reused and no other changes are implemented. This approach has been popularized by corporate divestitures and is considered a "tried and true" approach for separating SAP ECC systems based on distinct organizational identity. This approach is also referred to as "lift and shift."

This approach has the advantage of being the least cost (estimated at $10 million) and involves the least implementation risk. Because we are continuing on an older version of the SAP software, we believe this approach has a remaining life of 8 years (SAP will sunset SAP ECC support no earlier than 2030). However, the system has been functioning and there are not many strategic opportunities to gain business value by upgrading this system. The IT Team

believes that the real business value will be gained by implementing the new EAMS which, as described above, is a separate undertaking. It should be noted that while this approach has low implementation risk, there could be support challenges as the SAP ESS software is currently not under SAP maintenance and is supported by a third party.

Estimated implementation time: 10 to 15 months

Approach 2: Upgrade SAP ECC 6.0 to S4Hana and Separate the Systems Concurrently
Under this approach, SAP ECC would be upgraded to SAP's latest S4/Hana platform. This would involve SAP license upgrades and possibly moving the system to SAP's proprietary cloud platform. The systems would be separated but would involve significant process changes and system reengineering.

This approach has the advantage of putting LIPA's system on a new platform but would take significant implementation effort, require greater PSEG Long Island staff engagement, and entails higher implementation risk. It also has the highest implementation cost (estimated at $75 million), higher operating cost, and a lengthier estimated implementation period, and given the limited expected business improvement benefit from the upgrade, the business case for this upgrade cannot be justified at this point.

Estimated implementation time: 20 to 25 months

Given the above considerations, **the IT Team agrees that Approach 1 is the recommended plan for separation of the ERP systems.** However, additional due diligence must be done, and we are aware of other risk factors that may affect this decision.

Implementation Bundle 2 – E-mail and Communications Infrastructure
These systems jointly provide the functionality to support PSEG Long Island's email, communications, identity, and authentication requirements. These services are provided to PSEG Long Island by the following (10) intermingled systems:

- Microsoft Exchange 16
- Active Directory
- Cyberark
- Neustar UltraDNS
- Proofpoint
- Area 1 Security
- Digicert
- Okta

- Airwatch
- Venafi

The core systems in this cluster are Microsoft Exchange and Active Directory. The current plan calls for provisioning hardware in PSEG Long Island's Garden City data center and the Herndon Backup data center and migrating the PSEG Long Island-specific accounts to these servers. This will involve some system reconfigurations and Long Island email users will be using new psegliny.com domain addresses. This technical approach is also "battle tested" and entails low implementation risk with strong project management practices.

Estimated implementation time: 12 to 24 months

Implementation Bundle 3 – Hosted (Cloud) Systems

This bundle consists of vendor-provided hosted systems where PSEG Long Island is receiving a service for a subscription cost. The hosting provider will be responsible for separating the data in the currently intermingled system and standing up a separate "tenancy" in their hosting infrastructure.   There will be some software reconfiguration effort but all the systems in this bundle will follow the same pattern. PSEG Long Island is in discussions with the respective vendors and in the process of obtaining specific system separation implementation proposals for each of the following (27) systems:

- ServiceNow
- Barista
- Legal Tracker
- Caseworks
- Cybergrant
- Sitecore
- Burp Suite
- Carbon Black
- CRISP
- Encase
- FireEye Helix
- Lookout
- RSA
- iManage

- The Link
- Guidance Link
- Relativity One
- SIMS
- Hitachi Password Manager
- Lotus Notes
- Loadrunner
- Roxi
- Project Tracking System
- Mobichord
- AWS
- Zoom
- Atlassian Confluence

Estimated implementation time: 12 to 24 months

Summary of IT Team Recommendations

The IT Team recommends that the DPS and LIPA Board of Trustees approve this high-level Plan to move forward with the requirement to separate PSEG Long Island systems. The IT Team recognizes that the planning process was conducted at a high level and further refinement will be necessary as more technical and logistic details become available and budgetary plans are developed. The IT Team will act as the Steering Committee for this effort and will continue to provide DPS and the LIPA Board quarterly updates on progress in this initiative. The costs will be budgeted in LIPA's annual budget process. The cost and disruption of the Plan has been minimized in several ways, including by categorizing the systems into bundles, planning to separate systems in conjunction with planned upgrades or replacements (where possible), and selecting the "system carve out" method of separation of the ERP.

Appendix 1 lists the system separation candidates and provides projected start dates for each system separation activity.

Next Steps

1. PSEG Long Island and LIPA will develop detailed plans (with outside consulting support where necessary) for each of the systems according to the deployment schedule shown in Appendix 1. They will generally address the following:
   a. Detailed project plan for the application and/or portfolio element,
   b. A target future-state architecture, if applicable,
   c. Documentation related to potential user and/or business impact,
   d. Tactical plans to deliver the identified future state,
   e. Documentation to support budgeting the transition and operating costs,
   f. Opportunities to optimize and streamline support activities, and
   g. Develop user workshops to minimize change impact.
2. Develop an implementation sequence roadmap that includes all the in-scope application and develop an overall program management plan.
3. Develop an agile acquisition strategy that leverages application and vendor information already developed.
4. Formulate a progress and reporting strategy for PSEG Long Island management, LIPA, and the DPS.
5. Develop preliminary operating and capital budget estimates for inclusion in the 2023 and future budgets.

Appendix 1 – List of System Separation Candidates and Tentative Start Date of System Separation Activity

ID	System	Business Area	System Function	Platform and Delivery Model	Implementation Bundle	Separation Start Year
1	Catalyst	Accounts Payable	Catalyst system is used to process non-Ariba POs and Non PO invoices	SaaS	1	2023Q1
2	PowerPlan	Finance	Fixed assets system.	On-Premise	1	2023Q1
3	Legal Tracker	Legal	Legal matter management and billing system (for outside counsel)	SaaS	3	2024
4	Cybergrant	External Affairs	Used for managing charitable donations by PSEG-LI and PSEG-LI employees.	SaaS	3	2024
5	Caseworks	Legal	Case management system used for regulatory filings	SaaS	3	2022Q4
6	Roxi	Claims	Custom Claims Management System	On-Premise	3	2024
7	iManage	Legal	SaaS based Document Management solution used by Legal Dept in NJ and LI	SaaS	3	2024
8	Success Factors	HR/Payroll	SaaS based Recruitment, Performance, Learning, Onboarding, Compensation, Succession Planning platform	SaaS	1	2023Q1
9	The Link	Corp Comm.	SaaS based Communication Platform used to communicate Company information	SaaS	3	2024
10	Guidance Link	Corp Secretary	FileNet based Repository for all Corporate Practices	On-Premise	3	2024

11	Relativity One	Legal	E-Discovery Solution	SaaS	3	2024
12	SIMS	T&D	Safety Information Management System	SaaS	3	2024
13	Hitachi Password Manager	IT	Hitachi Password Reset Manager - Support of call reduction, automation and Self-Service	Hosted	3	2024
14	SAP-Concur	Accounts Payable	Travel and Expense Management System	SaaS	1	2023Q1
15	Lotus Notes	HR	Labor Relations Reporting Application (custom)	On-Premise	3	2024
16	SAP-ECC	Finance	Corporate ERP – GL, AR, AP, CO, PO, WM, etc.	Hosted/SaaS	1	2023Q1
17	Microsoft Exchange	IT	Email and collaboration services	On-Premise	2	2023Q4
18	ServiceNow	IT	IT Service Management (e.g. Help Desk, etc.)	SaaS	3	2024
19	Active Directory	IT	Separated, there is a trust between the two forests.	On-premise	2	2023Q3
20	SiteCore - Online Self-Service	Customer	Customer self-service portals (PSEG Long Island has its own instance; Azure SQL Servers are shared	SaaS	3	2024
21	MobiChord (Tango, also a NJ solution)	IT	Cloud based solution and service for Telecom Bill Payments (TEM) Telephony Expense Management System	SaaS	3	2024
22	Microsoft Identity Manager (MIM)	IT	Microsoft Identity Manager - Syncs AD with SAP for users in Enterprise and LI	On-Premise	1	2023Q1
23	Airwatch	IT	Application for mobile phones (LI owns their own licenses)	SaaS	2	2024
24	Project Tracking System	IT PMO	Mclaren document repository running on FileNet Platform	On-Premise	3	2024
25	Sharepoint	IT	Shared documents in PSEG-CORP repository	On-Premise		2024

26	LoadRunner	IT	Performance Testing Tool.	Hosted	3	2024
27	Atlassian Confluence	IT	Knowledge Management	On-Premise		2024
28	Zoom	IT	Application is used for conducting video and audio meetings/webinars	SaaS	3	2024
29	AWS related DevOps	IT	Management of the AWS infrastructure (Ops) environment - re-license server deployments	Hosted	3	2024
30	Cyberark	Cyber	CyberArk Privileged Account Management , Password Vault Web Access. Privileged Session manager, Central Policy Manager	On-premise	2	2024
31	RSA appliances	IT	Authentication tool	Hosted	3	2024
32	Digicert	Cyber	Certificates	SaaS	2	2024
33	Okta	IT	Authentication and Identity (for SSO)	SaaS	2	2023Q4
34	SAP Ariba	Procure-ment	Procurement and supply chain management application	SaaS	1	2023Q1
35	Carbon Black	Cyber	VMARE Application Control	SaaS	3	2024
36	Barista	IT	Front-end to ServiceNow for ticket creation and status	SaaS	3	2024
37	Neustar ULtraDNS ULtraDDos	Cyber	DNS and DDOS Protection	SaaS	2	2024
38	FireEye Helix	Cyber	Cybersecurity defense and analysis services	SaaS	3	2024
39	ProofPoint	Cyber	Email Protection; Email Security - SPAM detection	SaaS	2	2023Q4
40	Area-1 Security	Cyber	Email protection	SaaS	2	2023Q4

41	CRISP	Cyber	Cybersecurity Risk Information Sharing Program	SaaS	3	2024
42	Encase	Cyber	Forensics and Discovery	SaaS	3	2024
43	Lookout	Cyber	Mobile Device Management	SaaS	3	2024
44	OrgChartsPlus	HR	Tool for Managing Organization Charts	SaaS	1	2023
45	Venafi	Cyber	Cruptographic management	SaaS	2	2024
46	Burp Suite	Cyber	Application Security Code Scanner	On-Premise	3	2024

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125 East Bethpage Road, Plainview, NY 11803
www.dps.ny.gov/longisland

September 27, 2022

Via E-mail and U.S. Mail
Honorable Mark Fischl, Vice Chairman
Board of Trustees
Long Island Power Authority
333 Earle Ovington Blvd.
Uniondale, New York 11553
boardoftrustees@lipower.org

Re: Matter 22-01870– Recommendations Regarding Long Island Power
       Authority and PSEG Long Island's Information Technology System
       Separation Plan

Dear Vice-Chairman Fischl:

I am pleased to provide the recommendations of the New York State Department of Public Service (DPS or the Department) regarding the Long Island Power Authority's (LIPA or the Authority) and its Service Provider PSEG Long Island LLC's (PSEG LI) proposed Information Technology and System Separation Plan (the IT Plan). The LIPA Reform Act (LRA) authorizes the Department to make recommendations regarding the operations and terms and conditions of service provided by the Authority and its Service Provider. In addition, under the terms of the Second Amended and Restated Operations Services Agreement (the New OSA) and consistent with the Department's recommendations in furtherance thereof the Department must provide its recommendations concerning the IT Plan.[1] The Department recommends the adoption of the Authority and PSEG LI's IT Plan in accordance with the discussion set forth herein.

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[1]   Second Amended and Restated Operations Services Agreement between Long Island Lighting Company d/b/a LIPA and PSEG Long Island LLC (effective April 1, 2022), §4.2(A)(1)(q), https://www.lipower.org/wp-content/uploads/2022/04/2nd-AR-OSA-in-effect-on-4-1-2022-1.pdf and DPS Recommendations re: Reformed Operations Services Agreement between LIPA and PSEG LI, dated November 23, 2021, pp. 6-7.

Introduction

On July 29, 2022, in compliance with the requirements of the New OSA, LIPA and PSEG LI provided an initial joint submission of their IT Plan for the Department's review. Under the terms of the New OSA, LIPA and PSEG LI agreed that all IT Systems serving LIPA be separate and distinct from the system, data, reports, and information of PSEG Long Island and its Affiliates. These systems include the Enterprise Resource Planning ("ERP") system, infrastructure, various application systems, and cyber-security support systems.

LIPA and PSEG Long Island agree that for a system to be classified as an "intermingled system," thus requiring that it be separated it must satisfy at least one of the following criteria:

- The system is deployed on hardware and/or infrastructure owned, operated, or controlled by PSEG;
- The system software is licensed by PSEG (PSEG LI's New Jersey based Affiliate) and not by PSEG Long Island (acting as agent of LIPA);
- The system is supported and maintained under a vendor contract with PSEG and not by PSEG Long Island (acting as agent of LIPA);
- The services provided by the system are provisioned under a vendor contract with PSEG and not with PSEG Long Island (acting as agent of LIPA); and/or
- The administrative control of the system is performed by employees or agents of PSEG and not by employees or agents of PSEG Long Island.

LIPA and PSEG LI identified 46 systems as intermingled systems. LIPA and PSEG LI envision completion of total system separation by Q4 2024, while also recognizing that the total separation of some of the administrative and support functions may extend into 2025.

In response to LIPA and PSEG LI's IT Plan, the Department's review is "to ensure it is appropriate and to protect customers from unjust or unreasonable costs."[2] Upon submission of the IT Plan, the Department conducted technical meetings with LIPA and PSEG LI whereupon, LIPA and PSEG LI, on August 29, 2022, filed an Updated IT Plan with certain revisions which clarified aspects of the plan (Updated IT Plan).

Discussion

DPS Staff reviewed the methodology and objectives of the IT Plan as clarified by the Updated IT Plan. While the Department generally supports the Updated IT Plan and LIPA and PSEG LI's recognition of cost and risk mitigation, DPS Staff identified

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[2]   DPS Recommendations re: Reformed Operations Services Agreement between LIPA and PSEG LI, dated November 23, 2021, pp. 6-7.

additional enhancements for inclusion as LIPA and PSEG LI move forward toward full IT system separation.

The Updated IT Plan states:

The IT Team also noted that many of the systems are due for near-term system upgrades and / or replacements. This provided an opportunity to integrate the System Separation Plan into the upgrade plan without invoking a stand-alone separation project, thereby reducing cost and simplifying execution.[3]

DPS Staff recommends, that LIPA and PSEG LI identify each of the 46 systems with this characteristic and identify potential efficiencies or cost savings in the individual projects plans to simultaneously upgrade and separate these systems. While the primary goal of the Updated IT Plan is to derive benefits from system separation, the risk of incurring additional cost by layering on upgrades to systems should not pass on unjust costs to customers. If LIPA and PSEG LI can derive additional efficiencies by upgrading systems while also separating those systems, then those efficiencies should be identified, tracked, and reconciled in each project plan. DPS Staff recommends that LIPA and PSEG LI report on their ability to actualize such savings as each project is completed.

In addition, the Updated IT Plan states that LIPA and PSEG LI will "[d]evelop preliminary operating and capital budget estimates for inclusion in the 2023 budget proposal and future budgets."[4] DPS Staff recommends that LIPA and PSEG LI work collaboratively with the Department to refine their budgeting methodology as budgets for each of the separation projects are developed. Since each project may present unique challenges, the costs associated will also be unique. Understanding how cost estimates are developed e.g., whether vendor estimates were obtained, for what portions of work, and whether quotes are based on prior work is important to insulate customers from unjust or unreasonable costs.

The Updated IT Plan also states that LIPA and PSEG LI will develop detailed system separation and migration plans addressing a variety of items for each system.[5] DPS Staff recommends that a Risk Management & Mitigation Plan for each system be added to this bulleted list of items. Additionally, LIPA and PSEG LI will "[f]ormulate a progress and reporting strategy for PSEG Long Island management, LIPA, and the DPS."[6] During the initial technical meeting with DPS Staff, Staff noted the importance of regular reporting as part of a larger Communication Strategy Plan for the entire undertaking. DPS Staff recommends that LIPA and PSEG LI file with the Department quarterly updates, at a minimum, containing a summary of the status of each project with the associated information outlined in the Updated IT Plan, in addition to the

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[3]   Matter 22-01870, LIPA and PSEG LI IT Separation Planning, Information Technology and System Separation Plan (filed Aug 28, 2022), p. 8.

[4]   Id., p. 14.

[5]   Id.

[6]   Id.

information Staff recommends LIPA and PSEG LI include herein. These updates may coincide with the reporting provided to the LIPA Board of Trustees.

Finally, DPS Staff recommends that LIPA and PSEG LI perform an analysis to determine the degree of change system(s) users and/or impacted stakeholders will encounter in the systems interface, operations, functionality, (i.e., look and feel, flow, etc.) because of system separation or migration. Staff believes that this degree of "change sizing" step to accurately gauge the degree of change that users and/or stakeholders will encounter should be leveraged in the planning of and implementing the right types, (i.e., intensity, amount, and timing) of user and stakeholder trainings included in each of the 46 system separation project plans. Accordingly, inclusion of "change sizing" should ensure a smooth operational transition once the IT component of the system separation or migration has been implemented.

Conclusion

The Department reviewed LIPA and PSEG LI's IT Plan and its Updated IT Plan, and the Department recommends that in accordance with the foregoing discussion and recommended changes, the IT Plan be adopted by the LIPA Board of Trustees.

Respectfully submitted,

Rory M. Christian
Chief Executive Officer

CC: Thomas Falcone, LIPA Chief Executive Officer
        Bobbi O'Connor, LIPA General Counsel & Secretary to the Board of Trustees
        Mujib Lodhi, LIPA CIO and Senior VP of Customer Experience
        David C. Lyons, PSEG LI Interim President and Chief Operating Officer
        Greg Filipkowski, PSEG LI Chief Information Officer
        Carrie Meek Gallagher, DPS LI Director
        Nicholas Forst, DPS LI Counsel
        Peter Hilerio, DPS LI Counsel