

FOR CONSIDERATION

May 19, 2021

TO: The Board of Trustees

FROM: Thomas Falcone

SUBJECT: Consideration of the Adoption of Certain Implementation Plans Relating to Asset Management

Requested Action

The Board of Trustees (the “Board”) of the Long Island Power Authority (“LIPA”) is requested to adopt a resolution attached hereto as **Exhibit “A,”** approving certain Implementation Plans to improve PSEG Long Island’s asset management policies and practices (the “Asset Management Recommendations”).

Background

PSEG Long Island operates and maintains approximately 14,000 miles of transmission and distribution (“T&D”) assets owned by LIPA. Asset management is a core utility responsibility and, 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...” Additionally, the OSA provides that PSEG Long Island is responsible for “...the accuracy of the plant records, maps and maintenance databases concerning capital assets.”

In 2020, LIPA hired the Woodhouse Partnership (“TPWL”), a firm with international expertise in asset management across many sectors, including the utility sector, to evaluate PSEG Long Island’s asset management programs and policies. This review followed findings of significant weaknesses in National Grid’s and then PSEG Long Island’s management of LIPA’s assets in 2013 and 2018 by the New York State Department of Public Service (“DPS”) as part of Management and Operations Audits, which PSEG Long Island was responsible for remedying.

TPWL evaluated PSEG Long Island’s asset management practices and processes relative to an asset management maturity model using International Standards Organization (“ISO”) 55001 requirements. On a scale of zero (innocent) to four (beyond ISO), with three being “competent,” TPWL rated PSEG Long Island’s Asset Management program between zero (innocent) and two (developing) along the 27 program components prescribed by ISO.

The systems currently supporting PSEG Long Island’s management and maintenance functions are fragmented and siloed and do not lend themselves to a comprehensive enterprise-wide understanding of system assets. Asset data is spread out between various departmental data systems with limited data quality assurance. These fragmented systems impede the effective implementation of current-

generation data-driven asset management programs. The Computerized Maintenance Management System (“CMMS”) upgrade that PSEG Long Island is planning to implement is only a partial step and we believe it is necessary to implement an integrated Enterprise Asset Management System (“EAMS”) to fully realize the potential benefits of modern asset management techniques.

Additionally, over the past several years, PSEG Long Island has implemented policies and procedures to strengthen Property, Plant and Equipment (“PP&E”) records, beginning with a project to improve record-keeping related to sub-station assets and a separate project for “outside plant” (i.e. the poles, wires and associated equipment). While PSEG Long Island has made improvements, a recent physical survey of select circuits including over 5,000 poles within five individual towns across the service territory indicates that additional work remains. For example, there is a discrepancy of 35% between records and the physical inventory of Third-Party Attachments. With regards to Asset Collection (i.e. capacitors, protective devices, fuses, riser switches, and transformers), the physical inventory in one town found 24 more transformers than the 27 shown in the mapping system. Additionally, with regards to the identification of double wood poles, the physical inventory identified 170 locations while the statewide notification system (i.e. National Joint Utilities Notification System) had 73. These discrepancies indicated the need for a comprehensive inventory of PP&E records.

Asset Management Recommendations Adopted February 24, 2021, as Amended on March 29, 2021

In response to the TPWL review, the Board adopted the following recommendations related to asset management:

1. Adopt the ISO Asset Management Framework – adopt the principles and standards prescribed by ISO 55000 and 55001 as an asset management framework and develop a three-year roadmap with milestones and steps toward a maturity goal of three by the end of 2023. The roadmap should be presented for LIPA approval by April 30, 2021.
2. Annual Reliability Assessment of Plant Asset Performance – within 90 days of each year-end, PSEG Long Island should perform and report results of an annual reliability assessment of plant asset performance. The report must include a plan and timeline to address identified deficiencies.
3. Develop Asset Management Plans – complete the development of asset management plans for transmission, distribution, and substation infrastructure (preventative maintenance, upgrade/replacement of transformer, breaker, switchgear, poles, underground cable, switches (ASU), capacitor, etc.) with annual reviews and three-year comprehensive updates. The Asset Management Plans should be presented to LIPA for approval by June 2021.
4. Capture Additional Data into the Computerized Maintenance Management System – Complete the development of the CMMS in accordance with the 2013 and 2018 Management and Operations Audit Recommendations and then expand data capture to include all T&D assets.
 - Complete CMMS upgrade by the end of 2021, including at least one-third of T&D assets.
 - Develop a plan to bring all T&D assets within CMMS within three years, including field verification. Deliver this plan to LIPA by August 2021.

- Begin yearly audits of digital plant records to verify completeness and accuracy of newly installed and retired assets by the end of 2021.
5. Strategic Asset Management Plan (SAMP) – Develop a SAMP that binds the work activities, investment commitments, and decision making through an overarching framework that would be explained and communicated throughout the organization.
 - Develop and present to LIPA for approval the topical outline for the first draft of the SAMP and diagnose what information is available and what information needs to be gathered or developed to prepare a SAMP by June 30, 2021.
 6. Implement an Enterprise Asset Management System. Expand the scope and objectives of the planned CMMS upgrade to include a full-fledged EAMS with capabilities in maintenance management, a full-featured asset database that can accommodate all utility operational assets, comprehensive asset health monitoring, and predictive maintenance capabilities. This system should be the system of record for maintaining all operational asset data, including data for all plant assets and all field/network assets. This integrated enterprise system should provide the baseline for improving our capabilities in a data-driven, risk-based program for asset management decisions and move the utility towards a preventive and predictive approach for managing assets. The system development plan should align with PSEG Long Island’s SAMP. The new system should replace the limited, home-grown, custom CMMS and integrate asset life-cycle management, predictive maintenance, asset risk analysis, and other key asset management functions. Phase 1 of this system to go live no later than December 30, 2022.
 7. Conduct a System-Wide Physical Inventory of Outside Plant Assets. PSEG Long Island should engage an outside firm to perform a system-wide physical inventory of outside plant assets for completion within three years. The physical inventory should collect detailed data on all significant physical assets belonging to the network, including poles, pole attachments, transformers, switches, line characteristics, and line-attached devices. The data developed in this physical assessment should align with asset data models in the Enterprise Asset Management System (see Recommendation No. 6). PSEG Long Island should also consider collecting relevant condition data during the physical inspection to the extent feasible.

On May 11, 2021 PSEG Long Island submitted to LIPA Staff a proposed Implementation Plan addressing the Asset Management Recommendations 1 through 5. That plan indicated that Recommendation 6 will be addressed as a separate implementation plan. Recommendation 7 was not addressed, and LIPA has indicated to PSEG Long Island that it expects a separate project Implementation Plan on this recommendation.

LIPA Staff recommends the Board adopt the Implementation Plan attached hereto as **Exhibit “B”**. In accordance with PSEG Long Island’s proposed schedule, the Implementation Plan on Recommendation 6 (Implement an Enterprise Asset Management System) shall be submitted by PSEG Long Island for LIPA Staff review no later than August 31, 2021, for consideration at the Board’s September meeting. LIPA Staff also expects PSEG Long Island to submit an Implementation Plan addressing Recommendation 7 (Systemwide Physical Inventory of Outside Plant Assets) for LIPA staff review no later than May 31, 2021 for consideration at its June meeting.

These efforts are critical to ensuring accurate and comprehensive property records of LIPA-owned assets and will ensure that LIPA and PSEG Long Island are focusing efforts on the long-term management of LIPA's assets to derive the greatest performance from investments for customers.

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" Implementation Plan

RESOLUTION ADOPTING CERTAIN IMPLEMENTATION PLANS RELATING TO ASSET MANAGEMENT

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, additionally, the OSA provides that PSEG Long Island is responsible for “...the accuracy of the plant records, maps and maintenance databases concerning capital assets.”; and

WHEREAS, the Board adopted the Asset Management recommendations at the February 24, 2021 meeting, which were then amended at the March 29, 2021 meeting; and

WHEREAS, on May 11, 2021, PSEG Long Island submitted to LIPA Staff the proposed Implementation Plans relating to certain of the Asset Management Recommendations; and

WHEREAS, the asset management recommendations previously adopted by the Board are critical to ensuring accurate and comprehensive property records of LIPA owned assets and will ensure that LIPA and PSEG Long Island are focusing their efforts on the long-term management of LIPA’s assets to derive the greatest performance from investments for customers.

NOW, THEREFORE, BE IT RESOLVED, the Board hereby adopts the Implementation Plan relating to the Asset Management Recommendations 1 through 5 attached hereto as **Exhibit “B”**; and

BE IT FURTHER RESOLVED, BE IT FURTHER RESOLVED, the Board hereby directs PSEG Long Island to submit the remaining Implementation Plans for Recommendations 6 and 7 to address the comments provided by LIPA Staff consistent with the accompanying memorandum; and

BE IT FURTHER RESOLVED, that the Board directs LIPA Staff, together with PSEG Long Island, to report to the Board on the completion of the Asset Management Implementation Plans no less than a quarterly until they are completed.

Dated: May 19, 2021

PSEG Long Island

Project Implementation Plan

for

LIPA Board Resolution (02/24/2021)-

**Consideration of the Adoption of
Recommendations to Improve Asset
Management – Ver 1.1**

Recommendation No. AM-1

**Project Title: Enhancement of
PSEGLI's Asset Management Program
to Meet ISO 55000 Standards**

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1. Project Definition

This Project is required to address the LIPA Board Resolution, which requested improvements to the existing Asset Management Policies and Practices of PSEG Long Island. This project will also identify the high level IS system improvements that are required in order to comply with the data & reporting requirements of ISO 55000.

1.1. Project Purpose, Objectives, and Success Criteria

Project Purpose and Objectives: In order to enhance PSEG LI's current Asset Management practices, the following Project Objectives were specified in the LIPA Board Resolution on February 24, 2021, with an additional recommendation added by LIPA afterword;

1. Asset Management Framework – adopt an asset management framework according to principles and standards prescribed by ISO and develop a 3-Year roadmap with milestones and steps toward a maturity goal of 3.0 by the end of 2023. The roadmap should be presented for PSEG LI Leadership and LIPA approval by April 30, 2021.

2. Reliability Assessment of Plant Asset Performance – within 90 days of each year end, PSEG Long Island should perform and report results of this assessment. The report must include a plan and timeline to address any identified deficiencies.

3. Asset Management Plans – complete the development of asset management plans for transmission, distribution and substation infrastructure (preventative maintenance, upgrade/replacement of transformer, breaker, switchgear, poles, underground cable, switches (ASU), capacitor etc.) with annual reviews and three-year comprehensive updates. The Asset Management Plans should be presented to PSEG LI Leadership and LIPA for approval by June 2021.

4. Computerized Maintenance Management System (CMMS) – Upgrade CMMS in accordance with the 2013 and 2018 Management and Operations Audit Recommendations.

- Complete CMMS upgrade by the end of 2021, including at least one-third of transmission and distribution assets.
- Develop a plan to bring all transmission and distribution assets within CMMS within 3 years, including field verification. Deliver this plan to PSEG LI Leadership and LIPA by August 2021.
- Yearly audit of digital plant records to verify completeness and accuracy of newly installed and retired assets by end of 2021.

5. Strategic Asset Management Plan (SAMP) – Develop a SAMP that binds the work activities, investment commitments, and decision making through an overarching framework that would be explicated and communicated throughout the organization. • Develop and present to PSEG LI Leadership and LIPA for approval the topical outline for the first draft of the SAMP and identify what information is available and what information needs to be gathered or developed to prepare an SAMP by June 30, 2021.

6. Procure Industry Standard Technology Platform

- Replace CMMS and go live by 12/30/22. (Note: This recommendation will be addressed by PSEGLI's ongoing project to upgrade / replace the existing CMMS system with the IBM Asset Health Platform, which is an industry standard system. Our upgrade is currently expected to be completed in 2021 (one year ahead of LIPA's requested date). All work towards this recommendation is captured in our response to LIPA Recommendation #4 - Computerized Maintenance Management System (CMMS).

Project Scope: In order to address the recommendations, there are five main scope items (one for each LIPA Board AM recommendation);

In order to address the LIPA Board Recommendations, PSEGLI required the services of a consultant (UMS Group) that could provide a detailed analysis of the current gaps to achieving maturity scores of 3.0 for all ISO 55000 categories. This consultant will work in a phased approach and will provide support leveraging the knowledge of their subject matter experts, as well as their relationships and access to some of the best asset management utility organizations in the form of best practice templates for many of the key deliverables (i.e., AM Policies, AM Strategies, SAMPs, AM Plans, Lifecycle Strategies, etc.). They will also bring a strong knowledge transfer approach to the engagement, so that the PSEGLI team can develop the skills and capabilities necessary to perform key tasks on our own.

Phase 1 of their study will entail an intensive review of the existing organizational structure, and all AM policies & practices in place. They will then use the info gained from this phase to assist PSEGLI in producing the following LIPA deliverables; Asset Management framework roadmap, ISO 55000 compliant Asset Class Plans, and a Topical outline for the proposed Strategic Asset Management plan (SAMP).

Phase 2 of the consultants review will include a more thorough analysis of PSEGLI's Asset Management practices and data systems, which will enable them to refine all plans required to achieve and sustain LIPA's requested scores of 3.0 for all ISO 55000 maturity categories.

The specific scopes for each of the LIPA recommendations are listed below;

1. **Asset Management Framework** – PSEGLI has reviewed all of the components of ISO 55000 framework and has drafted an Asset Management Policy which closely aligns with the requirements of this standard. This policy document will be reviewed by our consultant to ensure that it adheres to ISO 55000 requirements (Note: PSEGLI's consultant (UMS Group) is expected to begin work on their review once all procurement efforts & cyber security reviews have been finalized in the mid-April timeframe). Additionally, our consultant will provide a thorough review of PSEG LI's AM Framework, including: Asset Management policies, strategies, plans and practices. Based on that review, define the key gaps and actions to achieve a level 3 competence level in each dimension of the ISO 55000 Asset Management framework. The primary work product from this task will be a detailed Implementation Plan/Roadmap to manage PSEG LI's multi-year ISO 55000 asset management initiative. This plan will include identification and sequencing of specific changes required, as well as identification / quantification of resource requirements. At this time, PSEGLI's consultant cannot be

on-boarded with sufficient time to prepare a detailed plan/roadmap by the original requested date of 4/30/21. This has been reviewed with LIPA staff and a listing of our updated timeline can be seen in the Deliverables section below. The benefit of adopting this recommendation is the increased consistency in business practices that it provides.

Deliverables;

1. PSEGLI initiated consultant outreach efforts to identify an ISO 55000 consultant to assist with PSEGLI's response to LIPA Board recommendations – 3/17/21 (**complete**)
 2. Complete Procurement activities and issue PO to consultant (UMS Group) – 4/16/21
 3. Consultant to perform ISO 55000 compliance study and help PSEGLI to produce LIPA requested plan/roadmap to achieving maturity scores of 3.0 by end of 2023 – 6/30/21
-
2. **Reliability Assessment of Plant Asset Performance** – PSEGLI will prepare year end reports on the overall performance of key asset classes. This report will include details on number of failures, customers impacted, and cost for required repairs. Additionally, the report will contain all required recommendations to address any known deficiencies. The first draft of this report (for YE 2020), which meets LIPA's stated requirements, will be presented to PSEG LI Leadership and LIPA by 6/30/21. The benefit of adopting this recommendation is ensuring continuous improvement by measuring against 'the right' KPIs, which provides the foundation for improvements to be made year on year.

Deliverables;

1. Provide PSEG LI Leadership and LIPA with a 2020 Year End Reliability Assessment Report – 6/30/21
-
3. **Asset Management Plans** – Asset specific plans currently exist for the majority of T&D equipment. PSEGLI's consultant will review existing plans and provide guidance on producing a complete set of ISO 55000 compliant asset management plans for transmission, distribution and substation infrastructure (preventative maintenance, upgrade/replacement of transformer, breaker, switchgear, poles, underground cable, switches (ASU), capacitor etc.) with annual reviews and three-year comprehensive updates. A set of these plans will be delivered to PSEG LI Leadership and LIPA by 6/30/21. The benefit of adopting this recommendation is in ensuring a holistic approach to managing assets, which can lower the cost of ownership over the asset lifecycle.

Deliverables;

1. Deliver a set of specific Asset Class plans to PSEG LI Leadership and LIPA for review – 6/30/21
-
4. **Computerized Maintenance Management System (CMMS)** – PSEGLI's current plans call for the start of the implementation of the new CMMS (IBM Asset Health Platform) during 2021, with full functionality expected by 12/31/21. This new system is intended to help address several of the Asset Management milestones that were identified as part of the Northstar audit.

While there were no previous plans to bring all T&D asset data into CMMS, this recommendation will be reviewed by PSEGLI and our consultant(s) in order to determine

the exact scope of system upgrades/integrations (OMS, EGIS, Powerplan, SAP, Work management systems, etc.) that are required in order to meet this recommendation. Additionally, we will work closely with LIPA staff in an effort to identify and prioritize all the T&D asset data which is required to be brought into the new CMMS (IBM Asset Health Platform).

In order to address the recommended field verification of T&D assets, we will be utilizing the data collected from the separate pole attachment review program, which will be field verifying overhead T&D assets beginning Q4 of 2021 and ending Q4 of 2024. LIPA's Inside Plant assets were fully inspected a few years ago by a consultant (working for Fixed Assets group). The SAP asset registry was updated as part of this review and is continuously being updated based on new installations/removals and verified via routine inspections of equipment by Operations personnel. All underground T&D asset information should be accurate, as these assets can only be installed/removed under a specific switching procedure, which is then sent to mapping for real time updates to EGIS. Additional field verification of Underground Assets is also provided by inspections carried out under the existing Stray Voltage program (currently projected to be a 10 year program). A complete audit of all electronic asset records cannot be completed until all field inspections have been completed (end of 2024) and the data reviewed. The benefits of adopting this recommendation are the automated asset health reviews and improvement in asset planning (especially capital expenditures) that it provides.

Deliverables;

1. Implementation of CMMS upgrade to IBM Asset Health Platform – 12/31/21
 2. IS System Schematic which shows all associated IS systems which contain LIPA Asset data and the existing communication paths between each system – 4/30/21
 3. Develop a high-level plan which addresses all ISO 55000 asset data requirements which can be used as basis for any required system upgrades/integrations – 8/31/21
 4. Identify all ISO 55000 audit requirements which can be utilized in order to comply with recommended annual audit of digital plant records – 8/31/21
 5. Develop a plan to bring all required transmission and distribution assets (as agreed to with LIPA, following the consultant's analysis) into CMMS within 3 years, including field verification. Deliver this plan to PSEG LI Leadership and LIPA by 8/31/21.
5. **Strategic Asset Management Plan (SAMP)** – PSEGLI's consultant will assist in the development of a Topical Outline for the Strategic Asset Management Plan (SAMP) that will bind the work activities, investment commitments, and decision making through an overarching framework that would be explicated and communicated throughout the organization. This topical outline will be provided to PSEG LI Leadership and LIPA by the due date of June 30, 2021. The benefit that adopting this recommendation provides is the company wide understanding of the importance of proper asset strategy, as well as providing a financial commitment towards the maintenance of all T&D assets.

Deliverables;

1. Topical outline for PSEGLI's Strategic Asset Management Plan (SAMP) – 6/30/21

Project End State and Success Criteria:

At the conclusion of the project, it is anticipated that PSEGLI’s Asset Management Policy and Asset Plans have been updated (including a Strategic Asset Management Plan) and meet LIPA’s final Asset Management recommendations. Additionally, a detailed roadmap towards achieving ISO 55000 maturity scores of 3.0 or greater will be produced which identifies all required initiatives and resources required to accomplish this alignment with ISO 55000 by the LIPA requested date of 12/31/23.

As part of this project, a second Project Implementation Plan (PIP) will be drafted (if necessary), which specifically outlines all of the IS system upgrades/integrations that are required for a fully functional CMMS, and which support all ISO 55000 work scheduling, project risk review, and reporting requirements.

2. Project Deliverables:

Describe applicable Project Deliverables:

Deliverable	Delivery Date	Comments
Draft plan/roadmap which includes a plan to achieve ISO 55000 compliance by the end of 2023	6/30/21	
2020 Year End Reliability Assessment Report	6/30/21	
A set of specific Asset Class plans to PSEG LI Leadership and LIPA for review	6/30/21	
Implement new CMMS (IBM Asset Health Platform)	12/31/21	
IS System Schematic for all systems with LIPA Asset information	4/30/21	
A high-level plan which addresses all ISO 55000 asset data requirements which can be used as basis for any required system upgrades/integrations.	8/31/21	
Report which identifies all ISO 55000 audit requirements which can be utilized in order to comply with recommended annual audit of digital plant records.	8/31/21	
Plan which details work required to bring transmission and distribution assets into CMMS within 3 years, including field verification.	8/31/21	
Topical outline for PSEGLI’s Strategic Asset Management Plan (SAMP)	6/30/21	

2.1. Assumptions, Dependencies, and Constraints

For the vast majority of the deliverable’s PSEGLI requires the assistance of a consultant (UMS Group) that is familiar with all of the requirements of ISO 55000. The deliverable dates shown above, assume that we can complete all required procurement processes and onboard the consultant in early April for their initial review. The consultant has stated that a full week of engagement by their review team is required to assist in the initial deliverables above.

Deliverable dates for CMMS upgrade assume all prior planned funding for the 2021 CMMS integration project remains unchanged and no additional technical issues delay the progress of this effort. Any delays with full implementation of CMMS could also impact deliverables associated with Asset Management Framework, Asset Management Plans, and the Strategic Asset Management Plan (SAMP). Additionally, project assumes all required funding for identified Asset Management initiatives will be prioritized and made available by PSEGLI T&D.

3. Project Structure

3.1. Internal Project Organization

PSEG Long Island

Executive Sponsor:	Dan Eichhorn
Project Oversight:	John O’Connell / Ray Alvarez
Project Manager (Asset Strategy):	John McCumiskey
Project Manager (IS):	Diane Blankenhorn
SMEs:	Tom Welsh (IS), all LI Asset Strategy Personnel
Consultant (ISO 55000):	UMS Group

3.2. Other Stakeholders

Other Stakeholders include the following PSEGLI T&D Departments; IDA, Engineering, Operations (East & West), as well as PSEGLI’s IS group.

4. Project Plan

4.1. Project Work Plan

Asset Strategy group will work with all stakeholder groups and our consultant (UMS) to provide the work plan required in order to support all identified deliverables. PSEGLI’s Technology Group (Diane Blankenhorn – Mgr) will provide the required IS system schematic and assist consultant with review of planned CMMS implementation, as well as other existing data systems which house LIPA asset data.

4.2. Risk Management Plan

Due to PSEGLI’s inability to definitively determine ISO 55000 maturity scores for all categories, the assistance of an outside consultant was required. In order to fully address these LIPA recommendations PSEGLI has taken steps to secure this consultant (UMS).

4.3. Issue Resolution Plan

All potential issues which impact deliverables will be reviewed and addressed by the Project Team and all affected PSEGLI departments. Any required resolution plans to address these issues will be drafted.

4.4. LIPA Reporting Plan

Asset Strategy will provide quarterly updates to PSEG LI Leadership and LIPA detailing the progress achieved for all the deliverables listed in Section 2.

5. Technical Execution Plan

5.1. Technical Approach

N/A. This Project Implementation Plan does not cover the technical requirements associated with ISO 55000 data standards and potential systems upgrades/integrations. After a review by our consultant, a separate PIP (if necessary), will be issued to cover these.

5.2. Quality Assurance Plan

Quality assurance is a major component of ISO 55000. As such, all deliverables must align to these ISO 55000 requirements, which account for both Quality Assurance and Continuous Improvement.

5.3. Documentation Plan

The main document deliverables of this Project Execution Plan are listed below;

Document	Created By	Reviewed By	Target Date	Distribution
Draft Report/Roadmap with plan to achieve ISO 55000 compliance by 12/31/23			6/30/21	
2020 Year End Reliability Assessment Report			6/30/21	
Set of T&D Asset Specific Plans			6/30/21	
IS System Schematic which shows all associated IS systems which contain LIPA Asset data			4/30/21	
Plan to bring all required transmission and distribution assets into CMMS within 3 years, including field verification.			8/31/21	
Topical outline for PSEGLI’s Strategic Asset Management Plan (SAMP)			6/30/21	

Revision History

Name	Date	Reason for Changes	Version
John McCumiskey	04/05/21	Initial Draft	1.0
John McCumiskey	04/06/21	Revised Based on Review Comments Received	1.1