



Requirements For Generating Facility Interconnection To The LIPA Transmission System

July 9, 2024

Overview

- Provide an overview of LIPA's revision on technical requirements for interconnecting an Energy Producing and Energy Storage Resource to the LIPA transmission system (23kV or higher).
- This Interconnection technical document provides the following :
 - Design practices applicable to LIPA system modifications and upgrades necessary for interconnection of Resources.
 - Specific substation and protection design practices applicable to all Resources.
 - Performance requirements applicable to synchronous generator and synchronous condenser Resources (performance requirements applicable to inverter-based resources, inclusive of doubly-fed generators, are specified separately in LIPA's Performance Requirements for Transmission Connected Resources Using Non- Synchronous Generation document).

Revisions

- Clearly specify details of technical interconnection design requirements that will protect the reliability, safety, security, system equipment integrity, power quality of the LIPA system and the property of other customers.
- Provided clarification on LIPA's system configuration practices used to accommodate resource interconnection.
- Clearly define transmission interconnection of technical design requirements for the following:
 - Storm Hardening, Environmental, Community Impact/Assessments, Substation Requirements, Bus Design, Grounding, Control Houses, Fencing, Transmission lines, etc.
- Provide clarification on submittal of drawings, test reports, and system modeling data for the Producer's facility
- Detailed protection requirements for interconnection and commissioning testing



Bulk Electric System Facility and End User Interconnection Requirements to the LIPA Transmission System

Overview

- Provides an overview of LIPA's revision on technical requirements for connecting new Non-LIPA facilities to the LIPA Bulk Electric System. Applies to new Transmission line & Load interconnections or substantial modifications of existing interconnections on the bulk electric system.
- This interconnection document provides a general overview of the functional objectives and requirements to be met in the design of facility connections.
 - Requirements are written to establish a basis for maintaining reliability, power quality, and a safe environment for the general public, power consumers, maintenance personnel and the equipment through the planning horizon.
- This document applies to only those elements designated as Bulk Electric System elements, where Bulk Electric System is defined by NERC.
- Clarifies the process that connection of non-LIPA transmission facilities to the LIPA transmission system shall follow the NYISO transmission expansion and interconnection process outlined in the NYISO Transmission and Interconnection Manual.

Revisions

- Reference Documents added to provide clarification on LIPA's system configuration practices used for substation design criteria.
- Defines the transmission load interconnection procedures
- Provide clarification for transmission line configuration, supporting structures and substation structures, foundation for facilities, Grounding, Metering, Site Access
- Document also talks about Reliability and System security
- Provides clarity on operational and maintenance expectations
- Clarify protective relay requirements for all Bulk Electric system transmission circuits. Also provides additional clarification for Supervisory Control and Data Acquisition(SCADA) requirements.

References

- PSEG-LI Interconnection Resources
 - <https://www.psegliny.com/aboutpseglongisland/legalandregulatory/>
- Requirements for Interconnection of an Energy Producing and Energy Storage Resource to the LIPA system
 - <https://www.psegliny.com/aboutpseglongisland/legalandregulatory/-/media/B85AB8C5A5404FF8A344606A0A8892E8.ashx>
- Bulk Electric System Facility and End User Interconnection Requirements to the LIPA Transmission System
 - <https://www.psegliny.com/aboutpseglongisland/legalandregulatory/-/media/A9CC3C5F2E7C4C14BCB4812C7C519444.ashx>

For any follow up questions, please see contact below:

Iram Iqbal – PSEG Long Island

DL-PSEGLI-PAMNYISORreporting@pseg.com

 **Thank**
you