PJM Facilities Study Report

For

Network Upgrade N9269

Transition Cycle I

Revision 2: May 2025

Introduction

This Facilities Study has been prepared in accordance with the PJM Open Access Transmission Tariff and PJM Manuals. The Transmission Owner (TO) is Commonwealth Edison.

A. Project Description

The System Impact Study for PJM Interconnection Transition Cycle 1 has identified the need for PJM Network Upgrade N9269. The scope of this Network Upgrade includes the following:

- Reconductor 18.4 Miles of 345kV transmission line 11212 from TSS 112 Wilton Center to TSS 905 Essex.
- Upgrade L11212 motor-operated switch and all cable conductors at line termination structure to 2-1590 kcmil ACSR.

Upon completion of the Network Upgrade above, the expected final ratings will be:

- 1826/2011/2248/2389 MVA (SN/SLTE/SSTE/SLD)

The scope of Network Upgrade is shown in Attachment #1 and detailed in the table below.

B. Transmission Owner Facilities Study Results

1. Detailed Scope of work for Network Upgrade N9269:

The following is a detailed description of Transmission Owner Upgrades for Network Upgrade N9269. These facilities shall be designed according to the Transmission Owner's Applicable Technical Requirements and Standards. Once built, the Transmission Owner will own, operate, and maintain these facilities.

To meet the required facility rating noted above, the existing conductor will be replaced with new bundled 2-1033.5kcmil Curlew ACSS/TW with a Maximum Operating Temperature (MOT) of 289°F. Points of Interest introduced with this new conductor will be mitigated by raising existing lattice towers by 10ft using AMPJACK. New conductor insulator assemblies will be installed on all existing structures.

Two (2) New 7#8 Alumoweld static wires will be installed from structure 632D to structure 555D. The new static wires will replace the existing 3#5 Alumoweld static wires. New static wire assemblies will be installed on all existing structures.

At TSS 112 Wilton Center L11212 a motor-operated disconnect switch will need to be replaced including all cable conductors at line termination structure. Reset and update firmware on 345kV L11212 relays, as well as BT 4-5 and BT 5-6 BF relays. Retap CT's for L11212 relays to 3000:5 on BT 4-5 and BT 5-6. Retap CT's for BT 5-6 BF relaying to 3000:5.

Structure Number	Existing Structure Type	Proposed Modifications
611	LSV+0	Raise Tower 10' with AmpJack
574	LSV+15	Raise Tower 10' with AmpJack
568	LSV+0	Raise Tower 10' with AmpJack
562	LSV+0	Raise Tower 10' with AmpJack
560	LSV+5	Raise Tower 10' with AmpJack
558	LSV+5	Raise Tower 10' with AmpJack

2. MILESTONE SCHEDULE FOR COMPLETION OF COMED WORK

Facilities outlined in this report are estimated to take 60 months to construct, from the time of full execution of the Generation Interconnection Agreement and completion of a construction kickoff call. This schedule may be impacted by the timeline for procurement and installation of long lead items and the ability to obtain outages to construct and test the proposed facilities.

Description	Start month	Finish month
Detailed Design	1	12
Permitting	12	18
Construction	36	60

3. ASSUMPTIONS IN DEVELOPING SCOPE/COST/SCHEDULE

- Existing structures are assumed to be in good working condition to allow for the upgrades noted in the detailed scope of work.
- A loading comparison was performed on the existing structures against the existing loads and the design loads. Detailed structure analysis was not performed.
- Raising existing towers using AmpJack may require an evaluation of the existing foundations. Any evaluation of the suitability of the existing foundations is not included as a part of this study.

4. LAND REQUIREMENTS

- It is assumed that the Transmission Owner has the necessary property rights to access the line and install upgrades as noted in the detailed scope of work.
- Since this is a reconductor of an existing line, the existing Right-of-Way width is assumed to be adequate.
- Additional property rights are not anticipated for the scope of this upgrade.

5. ENVIRONMENTAL AND PERMITING

- It is assumed that all necessary permits will be obtained in a timely manner so as to allow engineering and construction to proceed according to the Milestone Schedule.

C. APPENDICES

Attachment #1: Single line Diagram for Network Upgrade