

PJM Facilities Study Report
For
Network Upgrade N9166
Cycle TC1 Phase 3

Revision 0: June 2025

Introduction

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

A. Project Description

The System Impact Study for PJM Interconnection Transition Cycle 1 Phase 3 has identified the need for PJM Network Upgrade N9166. The scope of this Network Upgrade includes the following:

- Reconductor 0.2 miles of 138kV transmission line 16914 from TSS 169 McGirr Road to Structure 216.
- Substation conductor and equipment confirmed to meet or exceed minimum capability required below.

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

- 2232/2888/3074/3488 A (533/690/735/834 MVA) SN/SLTE/SSTE/SLD.

The scope of Network Upgrade is shown in the Attachments and detailed below.

B. Transmission Owner Facilities Study Results

1. Detailed Scope of work for Network Upgrade N9166:

The following is a detailed description of Transmission Owner Upgrades for Network Upgrade N9166. 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, L16914 will be reconducted with T2-1113 kcmil ACSR (45/7) Bluejay with a Maximum Operating Temperature (MOT) of 275°F. The existing shield wire for L16914 will remain. New conductor hardware assemblies will be installed on all existing structures noted in the scope.

2. MILESTONE SCHEDULE FOR COMPLETION OF COMED WORK

Facilities outlined in this report are estimated to take **24 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	16
Permitting/Procurement	16	20
Construction	20	24

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.

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.
- Additional property rights are not anticipated for the scope of this upgrade.
- The Right-Of-Way is assumed to be adequate for the proposed scope.

5. ENVIRONMENTAL AND PERMITTING

- 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

