PJM Facilities Study Report

For

Network Upgrade N7881

Cycle TC1

Revision [0]: [July] [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 Ohio Valley Electric Corporation (OVEC).

A. Project Description

The System Impact Study for PJM Interconnection Cycle TC1 has identified the need for PJM Network Upgrade N7881. The scope of this Network Upgrade includes the following:

- Sag mitigations to bring the Dearborn – Pierce 345 kV line up to a maximum operating temperature of 311° F

B. Transmission Owner Facilities Study Results

1. Detailed Scope of work for Network Upgrade N7881:

The following is a detailed description of Transmission Owner Upgrades for Network Upgrade N7881. 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.

- Remove and replace sixteen (16) existing double circuit towers with taller double circuit custom steel poles. (Towers 11, 14, 45, 47, 52, 57, 59, 61, 63, 66, 67, 71, 77, 84, 91, and 96)
- Remove and replace two (2) existing river crossing lattice towers with taller lattice structures. (Towers 2 and 140)

2. COST ESTIMATE OF OVEC FACILITIES FOR REQUIRED UPGRADES

The following table summarizes the total estimated costs according to FERC criteria. The estimated costs are in 2025 dollars. **This cost excludes a Federal Income Tax Gross Up charges on Contributions in Aid of Construction (CIAC)**. This tax may or may not be charged based on whether this project meets the eligibility requirements of IRS Notice 88-129. If at a future date it is determined that the Federal Income Tax Gross charge is required, the Transmission Owner shall be reimbursed by the Interconnection Customer for such taxes. The estimated reimbursement amount is noted in the table below.

2.1 COST ESTIMATE FOR TRANSMISSION OWNER-BUILD OPTION

Work Description	Type of Upgrade	Direct		Indirect		Total Cost
		Labor	Material	Labor	Material	
N7881	Network Upgrade	$12,076,000	$6,774,000	$3,303,000	$1,853,000	**$24,006,000**

3. MILESTONE SCHEDULE FOR COMPLETION OF OVEC WORK

Facilities outlined in this report are estimated to take 38 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.

Activity	Dates
Project Engagement	Day 1
Engineering Start	Starts Day 5
Material Ordering	Starts Day 155
Construction (Grading & Below Grade)	Starts Day 365
Construction (Above Grade)	Day 488
Outage Requests Made By	Starts Day 256
Outage (Structure Foundations)	Starts Day 536
Outage (Cut-in & Testing)	Day 1110
Ready For Back Feed (Interconnected Transmission Owner In-Service Date)	Day 1154

4. ASSUMPTIONS IN DEVELOPING SCOPE/COST/SCHEDULE

- Scope developed from PLS-CADD model using LiDAR and Sag Study from 2022
- Replacement steel poles can be installed without the requirement of splicing or removing wire

5. LAND REQUIREMENTS

None

6. ENVIRONMENTAL AND PERMITING

- River crossing permitting will be required
- Access roads may require temporary easements not captured under existing right-of-way corridor
- Utility and road crossings will require permitting and communication with owner/County
- Federal Aviation Administration (FAA) lighting may be required