PJM Facilities Study Report For Network Upgrade N7757 Cycle TC1

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) is AEP Indiana Michigan Transmission Company, Inc. (IMTCo).

A. Project Description

The System Impact Study for PJM Interconnection Cycle TC1 has identified the need for PJM Network Upgrade N7757. The scope of this Network Upgrade includes the following:

Replace Bus 1 at the Desoto 138 kV Station

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

Summer Normal	Summer Emergency	Winter Normal	Winter Emergency	
> 2912 A	> 3126 A	> 3684 A	> 3874 A	

B. Transmission Owner Facilities Study Results

1. Detailed Scope of work for Network Upgrade N7757:

The following is a detailed description of Transmission Owner Upgrades for Network Upgrade N7757. 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 existing 3" bus #1 and replace with 5" SCH 40 IPS

2. COST ESTIMATE OF IMTCo 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

	Type of	Direct		Indirect		Total	Tax
Work Description	Upgrade	Labor	Material	Labor	Material	Cost	
	Network						
N7757	Upgrade	\$65,000	\$27,000	\$66,000	\$28,000	\$186,000	

3. MILESTONE SCHEDULE FOR COMPLETION OF IMTCo WORK

Facilities outlined in this report are estimated to take 17 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	Day 5			
Material Ordering	Day 106			
Construction (Grading & Below Grade)	N/A			
Construction (Above Grade)	Day 483			
Outage Requests Made By	Day 119			
Outage (Structure Foundations)	Day 483			
Outage (Cut-in & Testing)	N/A			
Ready For Back Feed (Interconnected Transmission Owner In-Service Date)	Day 511			

4. ASSUMPTIONS IN DEVELOPING SCOPE/COST/SCHEDULE

• Structures, foundations, insulators, and jumpers are in good working condition and can be re-used.

5. LAND REQUIREMENTS

None

6. ENVIRONMENTAL AND PERMITING

None