

Transmission Expansion Advisory Committee FirstEnergy Supplemental Projects

April 1, 2025

Needs

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process

ATSI Transmission Zone M-3 Process Mayfield - Northfield Q1 & Q3 & Eastlake - Lloyd Q12 & Q13 138 kV lines

Need Number: ATSI-2025-006

Process Stage: Need Meeting 04/01/2025

Project Driver: Operational Flexibility and Efficiency

Specific Assumption References:

System reliability and performance

Load at risk in planning and operational scenarios

Problem Statement:

There are significant load loss concerns in the northeast Ohio region alongside interstate I-271. The following are the transmission lines associated with this corridor:

1. Mayfield - Northfield Q1 & Q3 138 kV lines
2. Eastlake - Lloyd Q12 & Q13 138 kV lines

Mayfield-Northfield Q1 & Q3 common tower contingency causes a load loss of approximately 130 MW affecting approximately 17,000 customers. Eastlake-Lloyd Q12 & Q13 common tower contingency causes a load loss of approximately 160 MW affecting approximately 22,000 customers. Significant operational flexibility challenges in the area due to the number and amount of load served from the transmission lines.

A total load of approximately 290 MW is served from over 24 miles of line in the corridor.



Appendix

High Level M-3 Meeting Schedule

Assumptions

Activity	Timing
Posting of TO Assumptions Meeting information	20 days before Assumptions Meeting
Stakeholder comments	10 days after Assumptions Meeting

Needs

Activity	Timing
TOs and Stakeholders Post Needs Meeting slides	10 days before Needs Meeting
Stakeholder comments	10 days after Needs Meeting

Solutions

Activity	Timing
TOs and Stakeholders Post Solutions Meeting slides	10 days before Solutions Meeting
Stakeholder comments	10 days after Solutions Meeting

Submission of Supplemental Projects & Local Plan

Activity	Timing
Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
Post selected solution(s)	Following completion of DNH analysis
Stakeholder comments	10 days prior to Local Plan Submission for integration into RTEP
Local Plan submitted to PJM for integration into RTEP	Following review and consideration of comments received after posting of selected solutions

Revision History

03/21/2025– V1 – Original version posted to pjm.com

03/28/2025-V2- Updated Map for ATSI-2025-006