

Subregional RTEP Committee – Western FirstEnergy Supplemental Projects APS Transmission Zone

August 14, 2026

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

Need Number: APS-2026-015
Process Stage: Need Meeting 08/14/2026
Project Driver: Customer Service

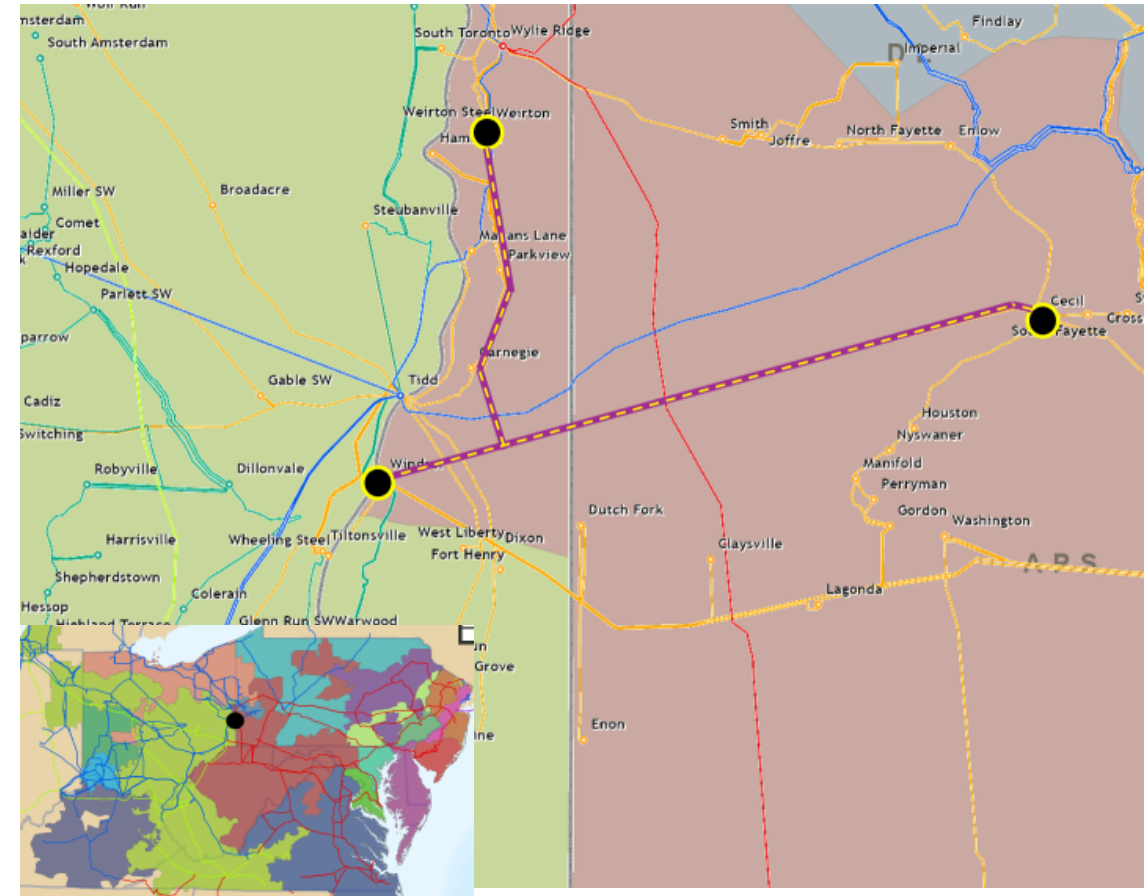
Specific Assumption References:

New customer connection requests will be evaluated per FirstEnergy's "Requirements for Transmission Connected Facilities" document and "Transmission Planning Criteria" document.

Problem Statement:

New Customer Connection - A customer requested 138 kV service for load of approximately 29 MW near the Cecil-Weirton-Windsor (Buffalo Jct) 138 kV Line. The request is approximately 4.4 miles from Cecil Substation.

Requested in-service date is February 10, 2028.



Need Number: APS-2026-010
Process Stage: Need Meeting 08/14/2026
Project Driver: Equipment Condition/Performance/Risk

Specific Assumption References:

System Performance Global Factors

- System reliability/performance
- Substation/Line equipment limits

Line Condition Rebuild/Replacement

- Age/condition of wood transmission line structures

Problem Statement:

The Belmont - Richwood Hill 138 kV Line was constructed approximately 53 years ago and is approaching end of life. It is approximately 43 miles long with 271 wood transmission line structures.

Per recent inspections, the line is exhibiting deterioration. Inspection findings include:

- 178 structures require repairs due to deterioration.
- 10 structures failed inspection due to sound, woodpecker damage, top rot, decay, cracking, and/or delamination of cross-arms.

Belmont - Middlebourne T 138 kV Line:

Existing Line Rating: 221 / 268 / 250 / 317 MVA (SN/SE/WN/WE)

Existing Conductor Rating: 221 / 268 / 250 / 317 MVA (SN/SE/WN/WE)

Jacksonburg T - Middlebourne T 138 kV Line:

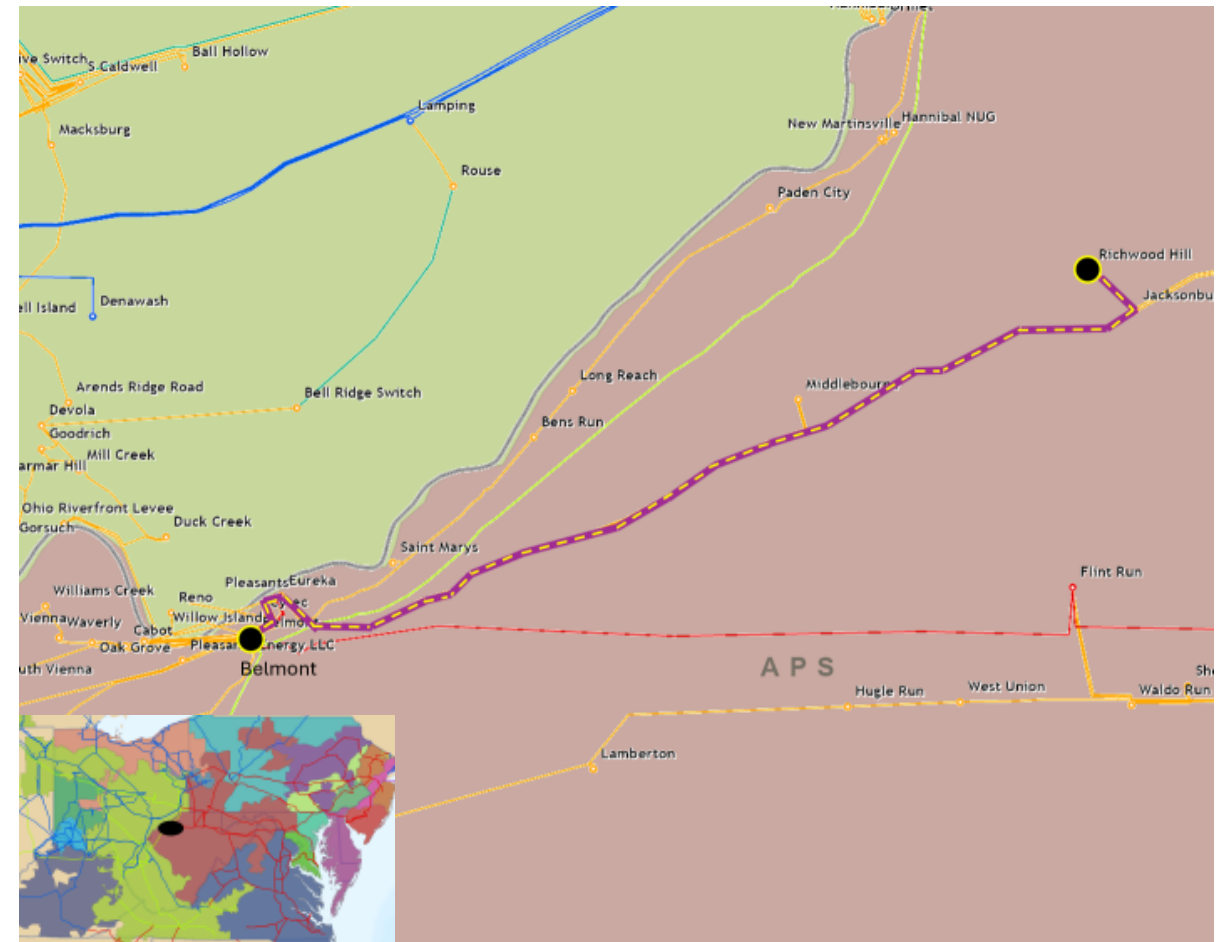
Existing Line Rating: 221 / 268 / 250 / 317 MVA (SN/SE/WN/WE)

Existing Conductor Rating: 221 / 268 / 250 / 317 MVA (SN/SE/WN/WE)

Jacksonburg T - Richwood Hill 138 kV Line:

Existing Line Rating: 221 / 268 / 250 / 317 MVA (SN/SE/WN/WE)

Existing Conductor Rating: 221 / 268 / 250 / 317 MVA (SN/SE/WN/WE)



Need Number: APS-2026-047
Process Stage: Need Meeting 08/14/2026
Project Driver: Customer Service

Specific Assumption References:

New customer connection requests will be evaluated per FirstEnergy's "Requirements for Transmission Connected Facilities" document and "Transmission Planning Criteria" document.

Problem Statement:

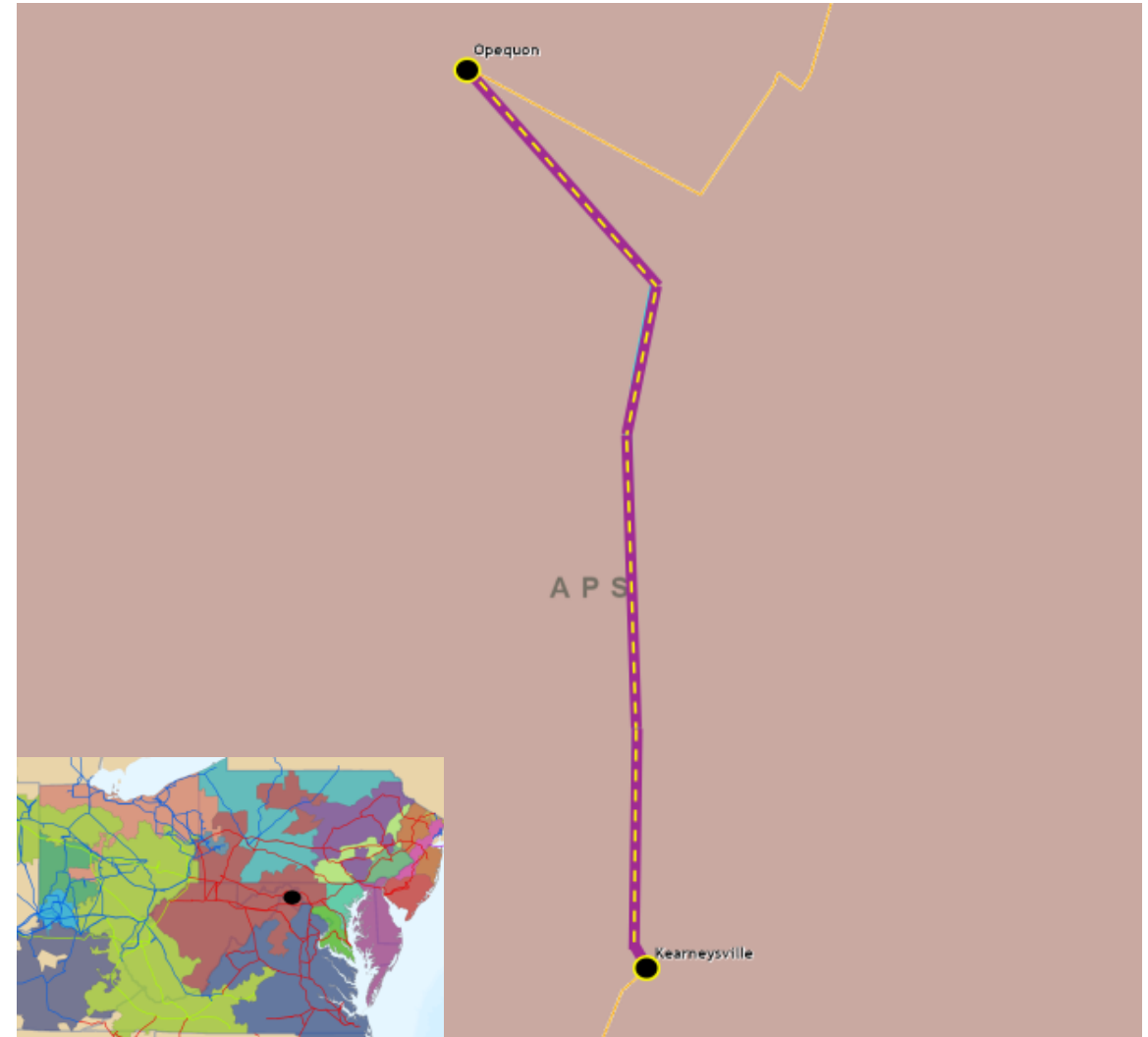
New Customer Connection - A customer requested 138 kV service for load of approximately 250 MW near the Kearneysville - Opequon 138 kV Line. The request is approximately 0.8 miles from Kearneyville Substation.

Initial Load (2028): 50 MVA

Expected Load (2031): 250 MVA

Ultimate Load (2031): 250 MVA

Requested in-service date is 12/31/2027.



Solutions

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

Need Number: APS-2026-003
Process Stage: Solution Meeting 08/14/2026
Previously Presented: Need Meeting 01/16/2026
Project Driver: Customer Service

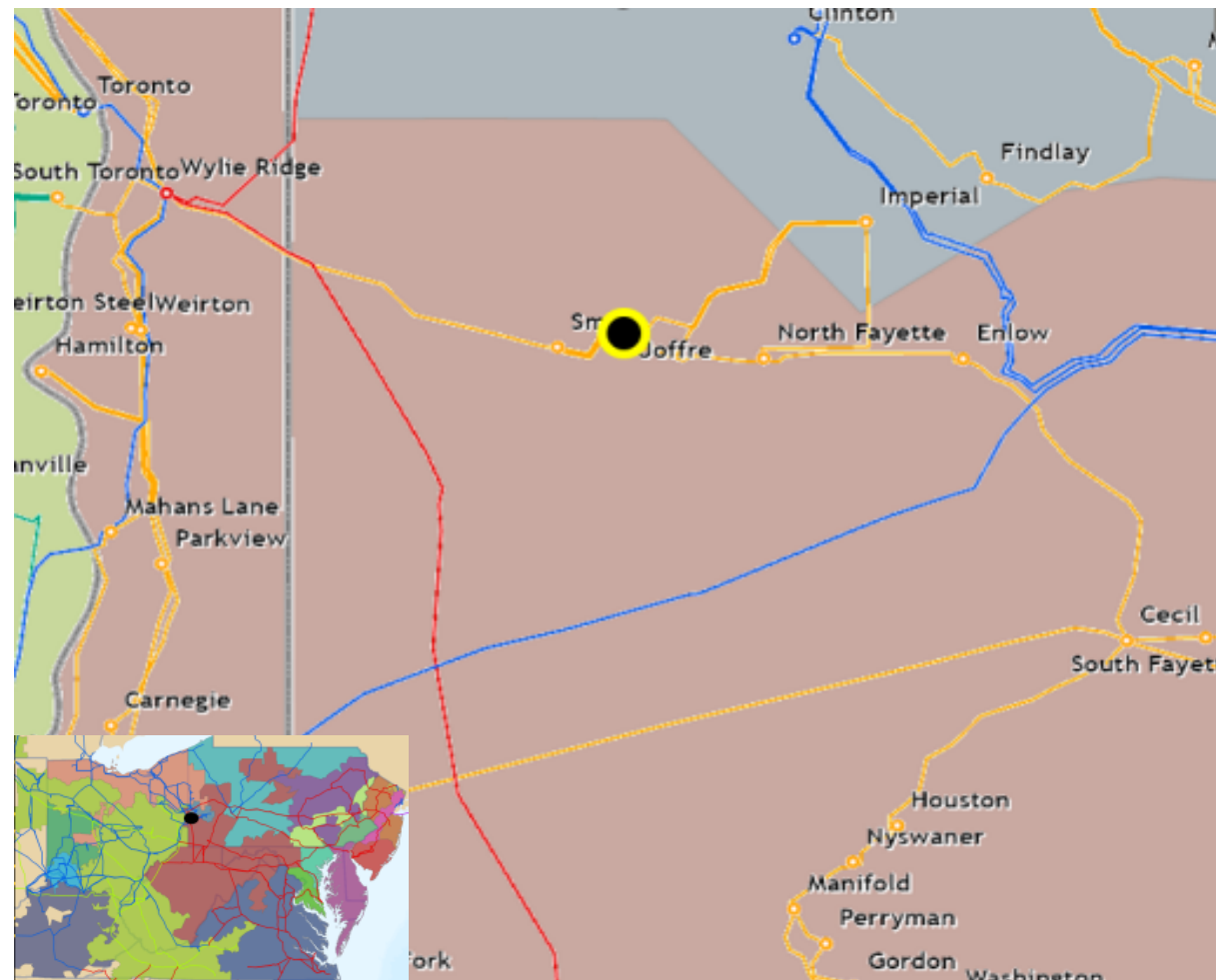
Specific Assumption Reference:

New or existing customer connection requests will be evaluated per FirstEnergy's "Requirements for Transmission Connected Facilities" document and "Transmission Planning Criteria" document.

Problem Statement:

Existing Customer Connection - A customer located near the existing Joffre Substation requested an increase of load at the existing 138 kV delivery point. The anticipated load increase is 79 MVA for a total load of 99 MVA.

The requested in-service date is 05/27/2027.



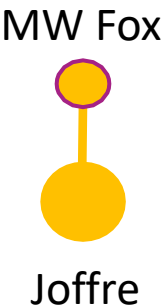
Need Number: APS-2026-003
Process Stage: Solution Meeting 08/14/2026

Proposed Solution:
 Joffre 138 kV Substation:

Upgrade the 138 kV metering equipment at the existing MPLX Harmon Creek Cryogenic Plant (MW FOX), served from the Joffre Substation.

Alternatives Considered:
 No reasonable alternatives due to the customer's proximity to the Joffre Substation.

Estimated Project Cost: \$0.05 M
Projected In-Service: 12/10/2027
Project Status: Conceptual
Model: 2024 RTEP model for 2029 Summer & Winter (50/50)



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	

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

08/xx/2026– V1 – Original version posted to pjm.com