Subregional RTEP Committee – Western
FirstEnergy Supplemental Projects

APS Transmission Zone

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

APS Transmission Zone M-3 Process
Yukon No. 7 500/138 kV Transformer

Need Number: APS-2025-030

Process Stage: Solution Meeting - 01/06/2026

Previously Presented: Need Meeting - 12/02/2025

Project Driver:

Operational Flexibility and Efficiency

Specific Assumption Reference:

System Performance Projects Global Factors

- • Substation/line equipment limits

Problem Statement:

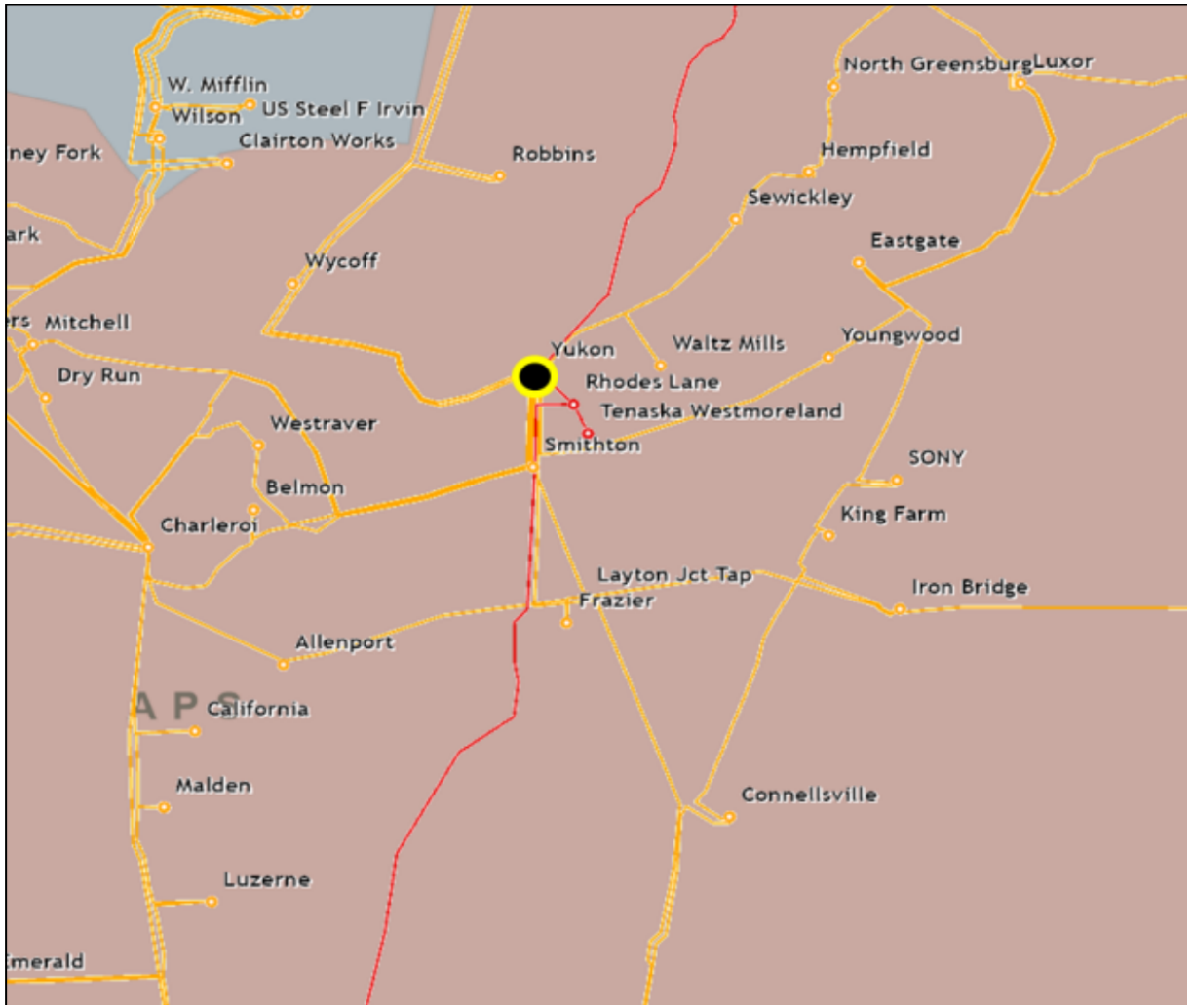
Upon field inspection, limiting substation conductor was found on the Yukon No. 7 500/138 kV Transformer. The substation conductor caused a derate on the transformer circuit.

Existing Ratings:

1096 / 1296 / 1309 / 1375 MVA (SN/SSTE/WN/WSTE)

Existing Transformer Ratings:

1415 / 1476 / 1791 / 1746 MVA (SN/SSTE/WN/WSTE)



APS Transmission Zone M-3 Process
Yukon No. 7 500/138 kV Transformer

Need Number: APS-2025-030

Process Stage: Solution Meeting - 01/06/2026

Proposed Solution:

At Yukon Substation, replace the limiting conductor on the No. 7 500/138 kV Transformer.

Transformer Ratings:

- Before Proposed Solution: 1096 / 1296 / 1309 / 1375 MVA (SN/SSTE/WN/WSTE)
- After Proposed Solution: 1096 / 1365 / 1372 / 1558 MVA (SN/SSTE/WN/WSTE)

Alternatives Considered:

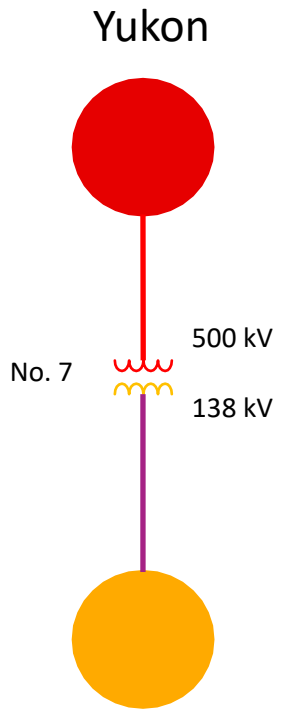
Maintain equipment in existing condition with limiting equipment rating.

Estimated Project Cost: $0.41M

Projected In-Service: 12/31/2026

Project Status: Engineering

Model: 2024 RTEP model for 2029 Summer (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

12/22/2025– V1 – Original version posted to pjm.com