

Transmission Expansion Advisory Committee

FirstEnergy Supplemental Projects

APS Transmission Zone

Re-Present

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

Doubs - Lime Kiln 230 kV Line

Need Number: APS-2025-021
Process Stage: Solution Meeting – ~~11/04/2025~~ 02/03/2026
Previously Presented: Need Meeting – 09/09/2025

Supplemental Project Driver(s):

Customer Services

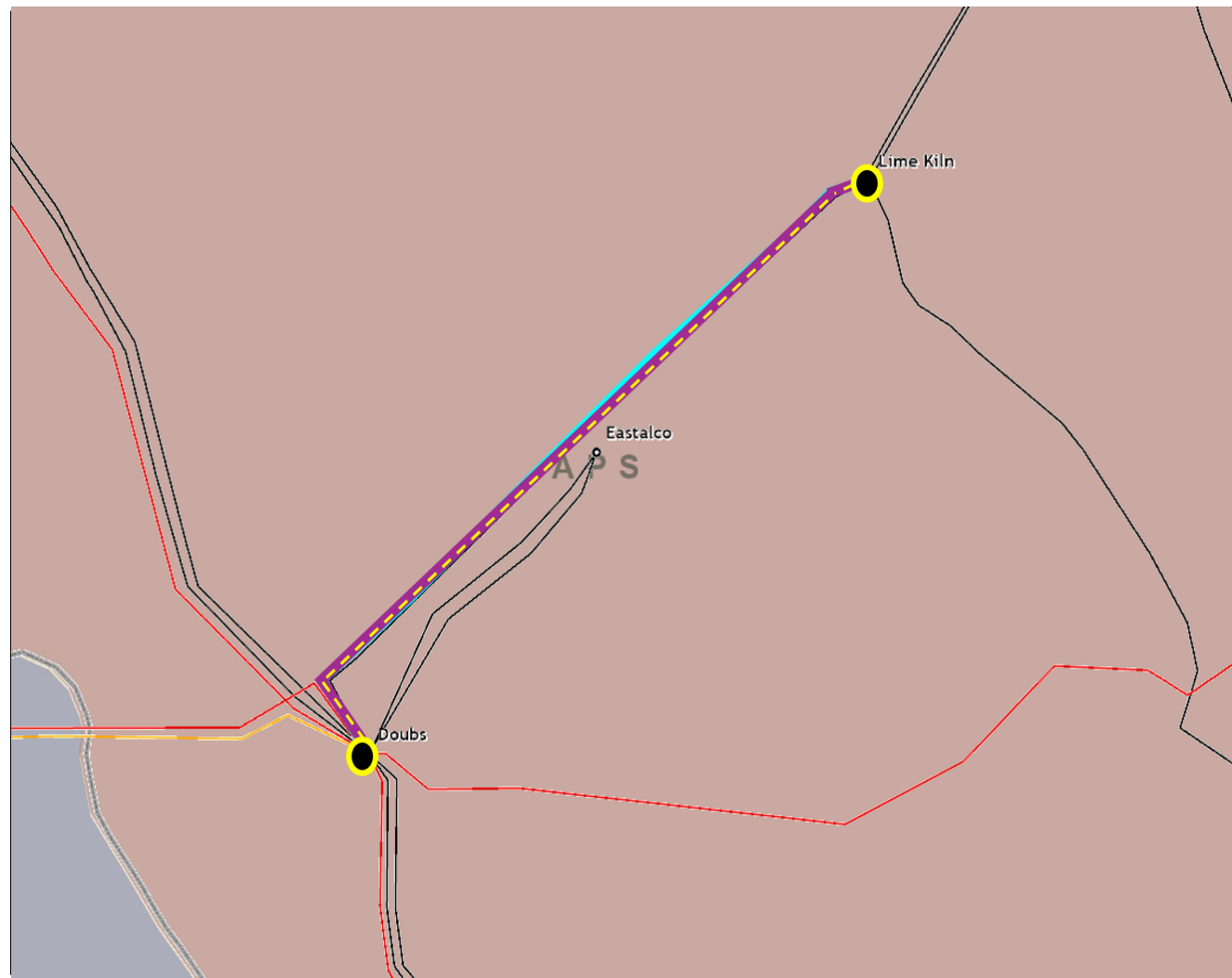
Specific Assumption Reference(s):

New customer connection request will be evaluated based on FirstEnergy's "Requirements for Transmission Connected Facilities" document and FirstEnergy's "Transmission Planning Criteria" document

Problem Statement

New Wholesale Connection – A customer requested a new 230 kV delivery point near the Doubs – Sage #205 and Doubs – Sage #207 230 kV Lines. The initial anticipated load of the new customer connection is 232 MVA. Future project total load at site is anticipated at 600 MVA. The request is approximately 3.5 miles from Doubs Substation.

Requested In-Service Date: 09/2030





Need Number: APS-2025-021
Process Stage: Solution Meeting – ~~11/04/2025~~ 02/03/2026

Proposed Solution:

Construct new Quantum 300 Substation

- Build a new 10-breaker 230 kV breaker-and-a-half station
- Loop the Doubs – Sage #205 and Doubs – Sage #207 230 kV lines in and out of new breaker-and-a-half station
- **Rebuild and** reconductor 2.9 miles of the Doubs – Sage #205 and #207 230 kV lines between Doubs Substation and the new breaker-and-a-half station.
- **Rebuild and reconductor 0.6 miles of the Doubs – Sage #205 and #207 230 kV lines between the new breaker-and-a-half substation and Sage Substation.**

Transmission Line Ratings:

Doubs – Sage #205 230 kV Line:

- Before Proposed Solution:
 - 617 / 754 / 699 / 894 MVA (SN/SE/WN/WE)
- After Proposed Solution:
 - Doubs – **Manor Woods** #205 230 kV Line: 1156 / 1334 / 1158 / 1403 MVA (SN/SE/WN/WE)
 - **Manor Woods - Sage #205 230 kV Line: 1156 / 1334 / 1158 / 1403 MVA (SN/SE/WN/WE)**

Doubs – Sage #207 230 kV Line:

- Before Proposed Solution:
 - 617 / 754 / 699 / 894 MVA (SN/SE/WN/WE)
- After Proposed Solution:
 - Doubs – **Manor Woods** #207 230 kV Line: 1156 / 1334 / 1158 / 1403 MVA (SN/SE/WN/WE)
 - **Manor Woods - Sage #207 230 kV Line: 1156 / 1334 / 1158 / 1403 MVA (SN/SE/WN/WE)**

Alternatives Considered:

No alternatives were considered due to the proximity of the Doubs – Lime Kiln #207 **and Doubs – Sage #205 230 kV lines**

Estimated Project Costs: \$63.16 M

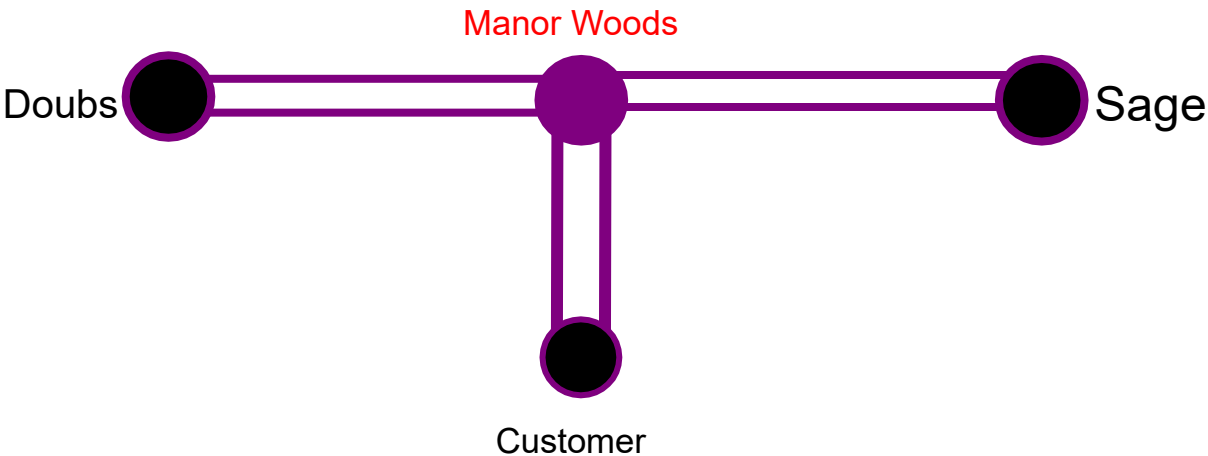
Project In-Service Date: 09/23/2032

Status: Conceptual

Model: 2023 RTEP – 2028 Summer 50/50 Case

APS Transmission Zone M-3 Process

Doubs - Lime Kiln 230 kV Line



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
69 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

01/23/2026– V1 – Original version posted to pjm.com