

Dominion Supplemental Projects

Transmission Expansion Advisory
Committee
March 04, 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

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0001

Process Stage: Need Meeting 03/04/2025

Project Driver: Customer Service

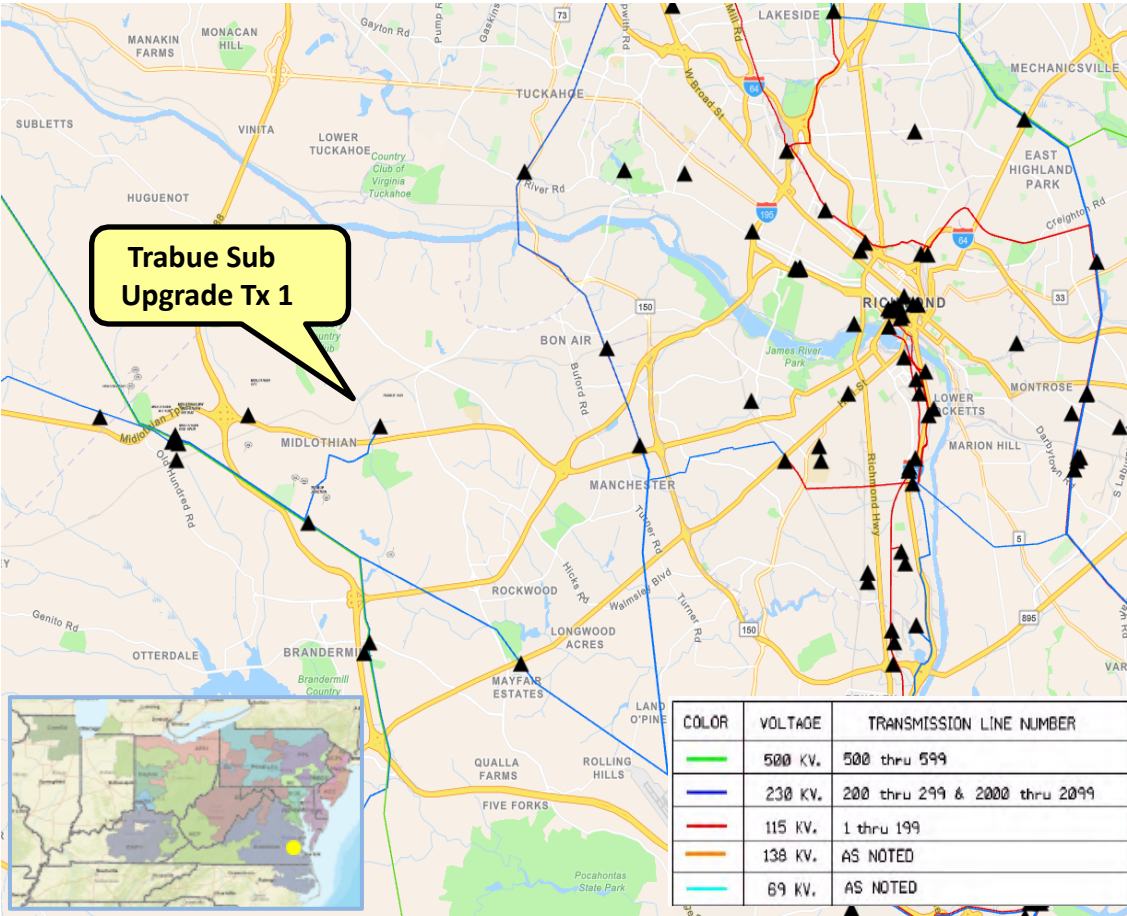
Specific Assumption References:

Customer load request will be evaluated per Dominion’s Facility Interconnection Requirements Document and Dominion’s Transmission Planning Criteria.

Problem Statement:

DEV has submitted a delivery point request to upgrade transformer 1 at Trabue Substation in Midlothian, VA. The upgrade is being driven by new customer load. The total load is in excess of 100 MW. The customer requests service by January 1, 2026.

Initial In-Service Load	Projected 2029 Load
Summer: 96 MW Winter: 75 MW	Summer: 100 MW Winter: 90 MW



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0010

Process Stage: Need Meeting 03/04/2025

Project Driver: Customer Service

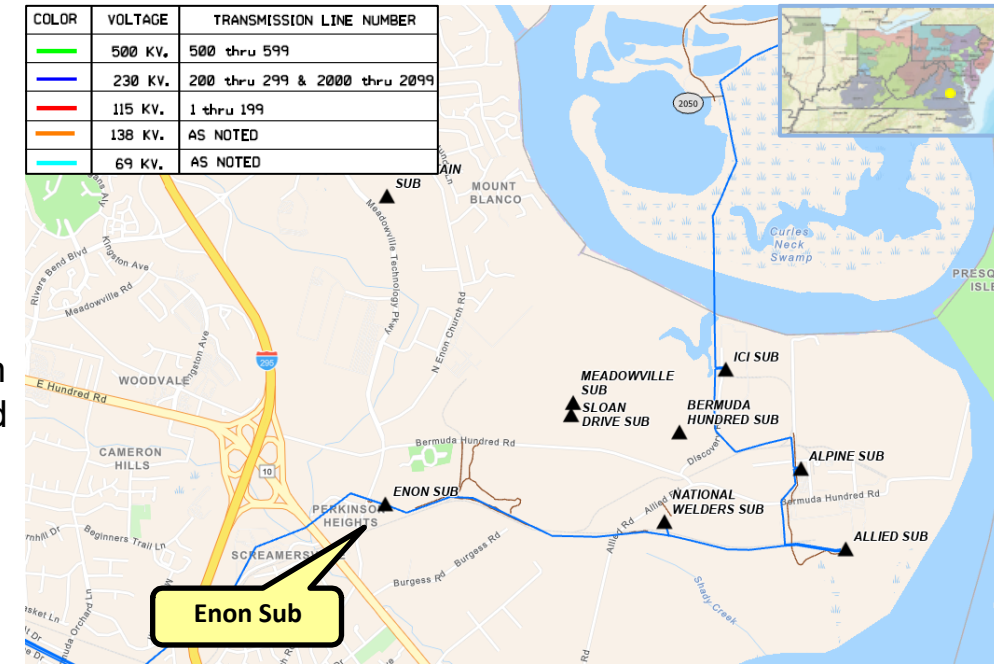
Specific Assumption References:

Customer load request will be evaluated per Dominion's Facility Interconnection Requirements Document and Dominion's Transmission Planning Criteria.

Problem Statement:

DEV Distribution has submitted a DP Request to add TX3 at existing Enon substation in Petersburg, VA. The new TX is being driven by new customer load. The total load will exceed 100MW. The requested in-service date is 03/01/2028.

Initial In-Service Load	Projected 2029 Load
Summer: 76.9 MW Winter: 64.9 MW	Summer: 88.9 MW Winter: 65.9 MW



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

Dominion Transmission Zone: Supplemental Equipment Material Condition, Performance and Risk

Need Number: DOM-2024-0025

Process Stage: Solution Meeting 03/04/2025

Previously Presented: Need Meeting 04/30/2024

Project Driver: Equipment Material Condition, Performance Risk

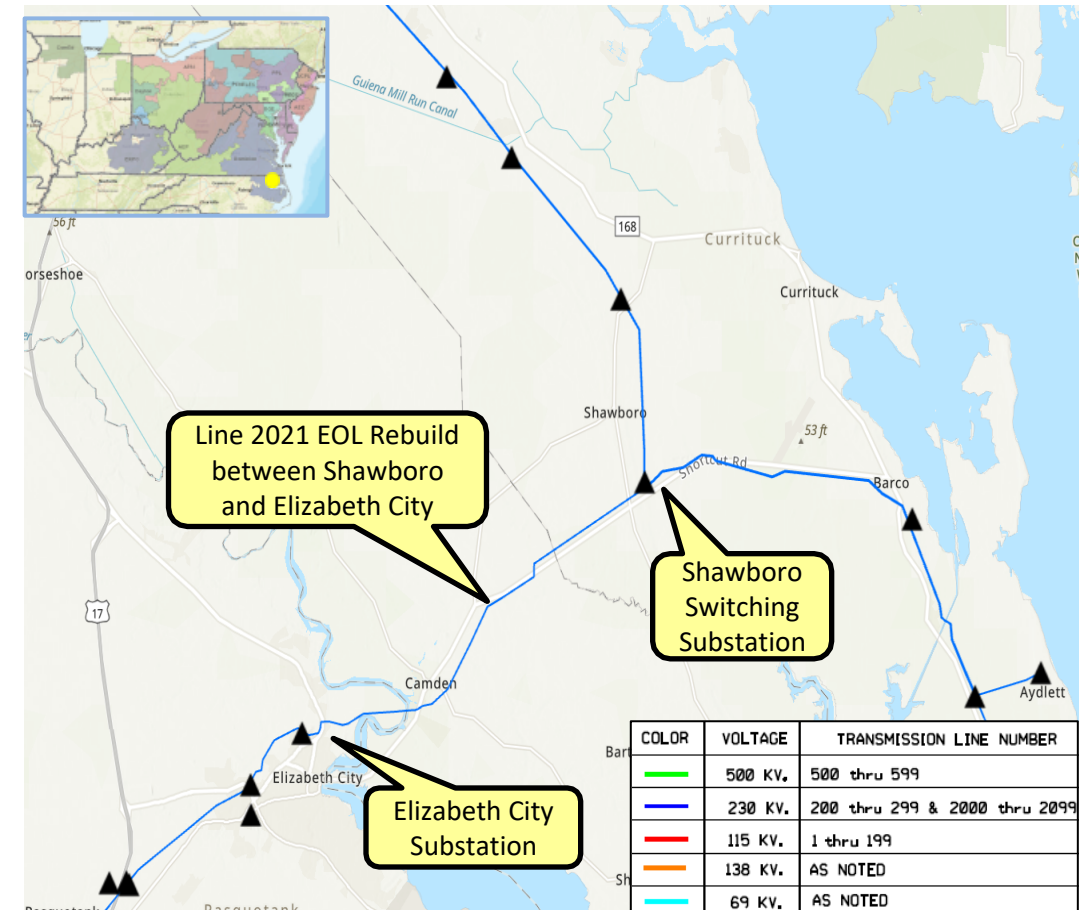
Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2023.

Problem Statement:

Dominion Energy has identified a need to replace approximately 10.3 miles of 230kV Line #2021 (Shawboro to Elizabeth City) to new 230kV standards based on the Company's End of Life criteria.

- Line #2021 was constructed on wood H-frame structures in 1975, with many in need of replacement due to deterioration.
- Industry guidelines indicate equipment life for steel structures is 40-60 years, wood structures is 35-55 years, conductor and connectors are 40-60 years, and porcelain insulators are 50 years.
- Reliability analysis with removal of Line #2021 shows these deficiencies -
 - Generation deliverability creates line thermal overloads for certain breaker failure contingencies
 - 300 MW load drop violations for N-1-1 and tower line contingencies



Dominion Transmission Zone: Supplemental 230kV Line 2021 – EOL Rebuild

Need Number: DOM-2024-0025

Process Stage: Solution Meeting 03/04/2025

Proposed Solution: Rebuild approximately 10.3 miles of Line 2021 between Shawboro and Elizabeth City to current 230kV standards. The normal rating of the line conductor will be 1573 MVA.

Estimated Project Cost: \$30.6M

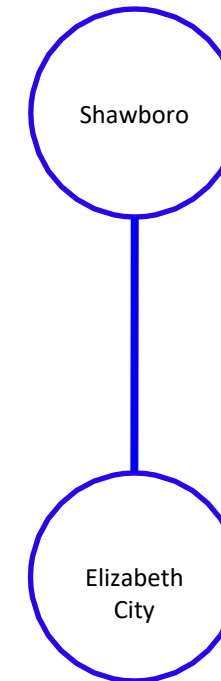
Alternatives Considered:

No feasible alternatives, End-of-Life

Project In-service Date: 08/31/2025

Project Status: Engineering

Model: 2029 RTEP



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

02/20/2025 – V1 – Original version posted to pjm.com