

Dominion Supplemental Projects

Transmission Expansion Advisory
Committee
March 5, 2024

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 Equipment Material Condition, Performance and Risk

Need Number: DOM-2024-0014

Process Stage: Need Meeting 03/05/2024

Project Driver: Equipment Material Condition, Performance and Risk

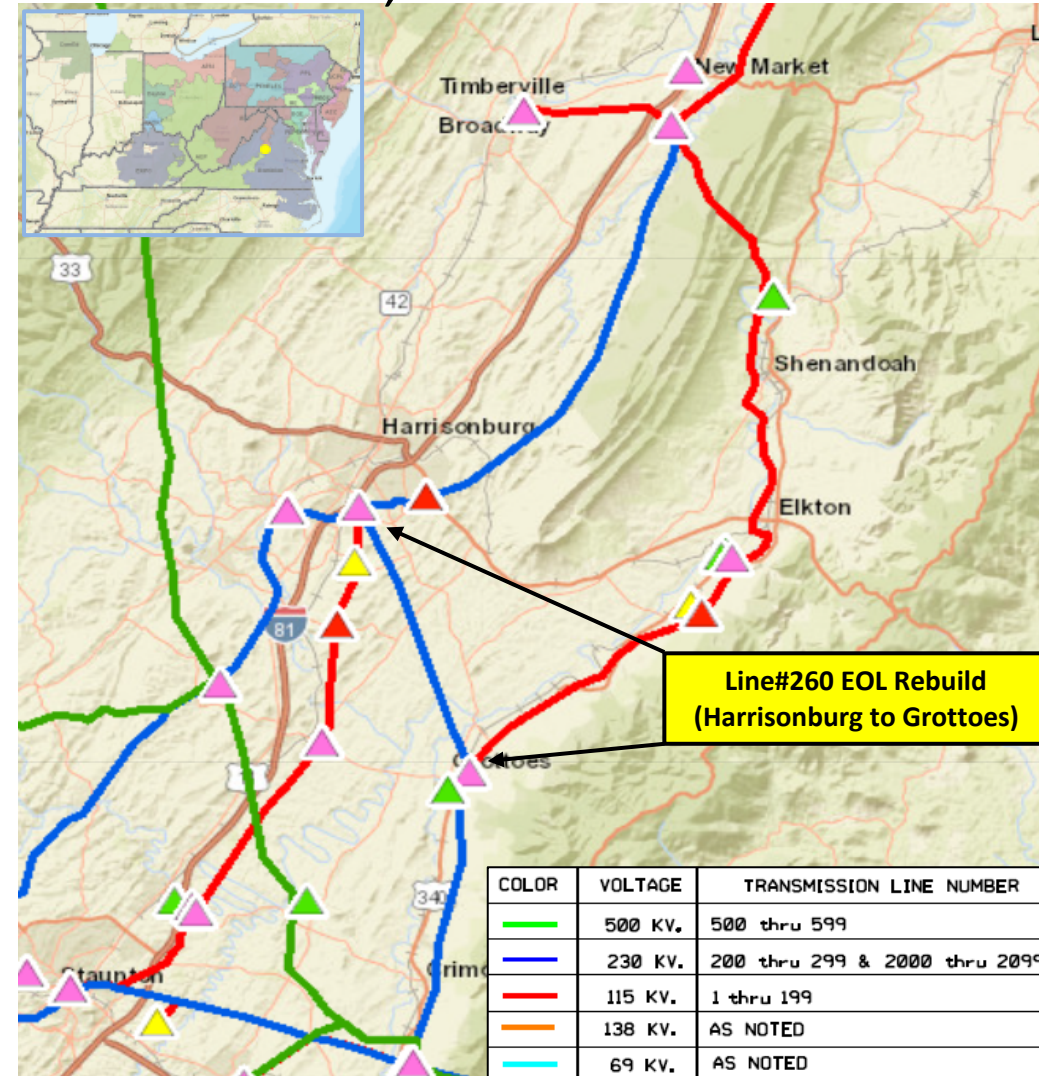
Specific Assumption References:

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 approx. 10.6 miles of 230kV Line#260 from Harrisonburg to Grottoes based on the Company’s End of Life criteria.

- Line#260 from Harrisonburg to Grottoes was constructed on mostly wood structures all dating back to 1970, ACAR conductor and 3/8” static wire.
- A number of structures have been replaced, and additional wood structure replacement is identified because of wood structure issues.
- 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.



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-2024-0003

Process Stage: Solutions Meeting 03/05/2024

Previously Presented: Need Meeting 02/06/2024

Project Driver: Equipment Material Condition, Performance and Risk

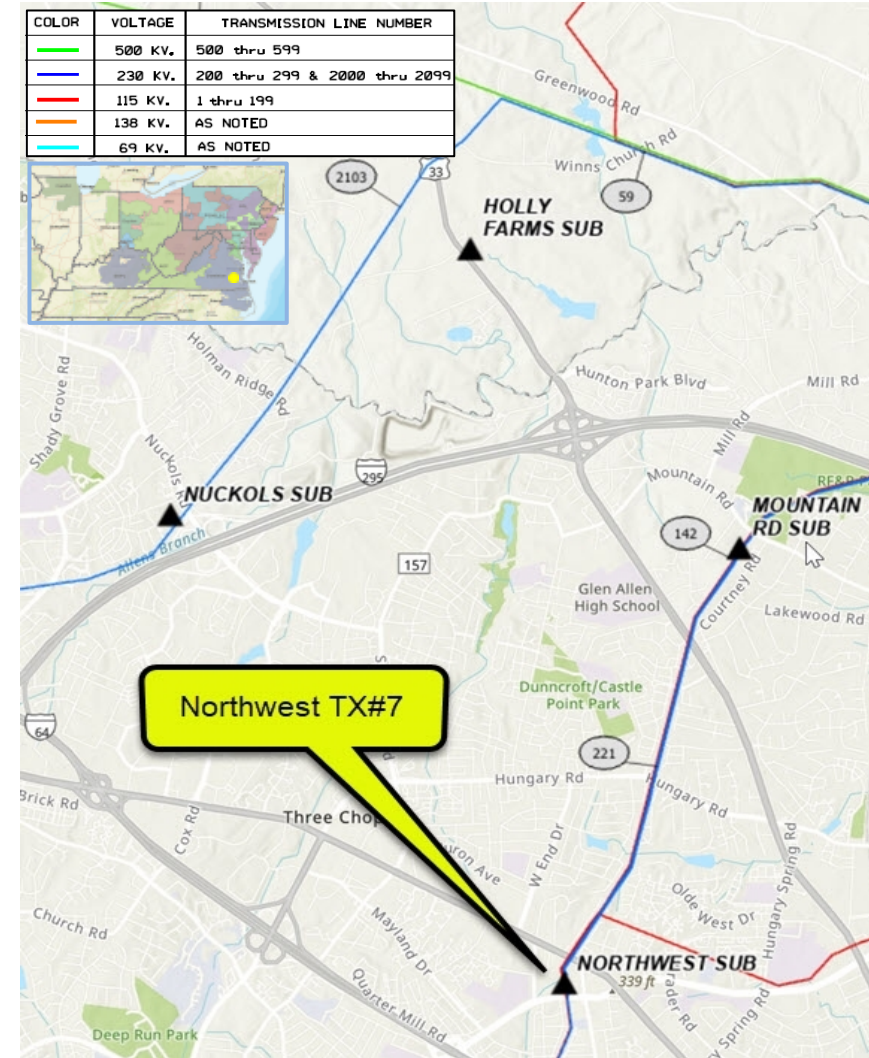
Specific Assumption References:

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

Problem Statement:

Northwest TX#7 is a 168 MVA, 230/115/13.2 kV three-phase transformer that was manufactured in 1977. This transformer bank has been identified for replacement based on the results of Dominion's transformer health assessment (THA) process. Detailed drivers include:

- Age (>40 years old).
- Reduced BIL ratings (3 levels below standard).
- Degraded porcelain type bushings.
- LTC (Load Tap Changer) has not been manufactured for 30 years; parts for maintenance and refurbishment becoming difficult to procure
- THA score less than 80.



Dominion Transmission Zone: Supplemental Replace Northwest TX#7 - DEV

Need Number: DOM-2024-0003

Process Stage: Solution Meeting 03/05/2024

Proposed Solution:

Replace Northwest TX#7 with a new three-phase, 230/115/13.2 kV, 168 MVA unit.
Include other ancillary equipment (arresters, switches, relays, etc.) as needed.

Estimated Project Cost: \$5.0 M

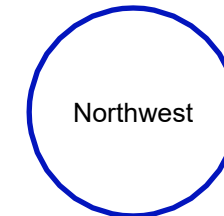
Alternatives Considered:

None

Projected In-service Date: 04/04/2024

Project Status: Engineering

Model: 2028 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

02/23/2024– V1 – Original version posted to pjm.com