

SRRTEP Committee Southern Dominion Supplemental Projects

August 18, 2022

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-2022-0050

Process Stage: Need Meeting 08/18/2022

Project Driver: Customer Service

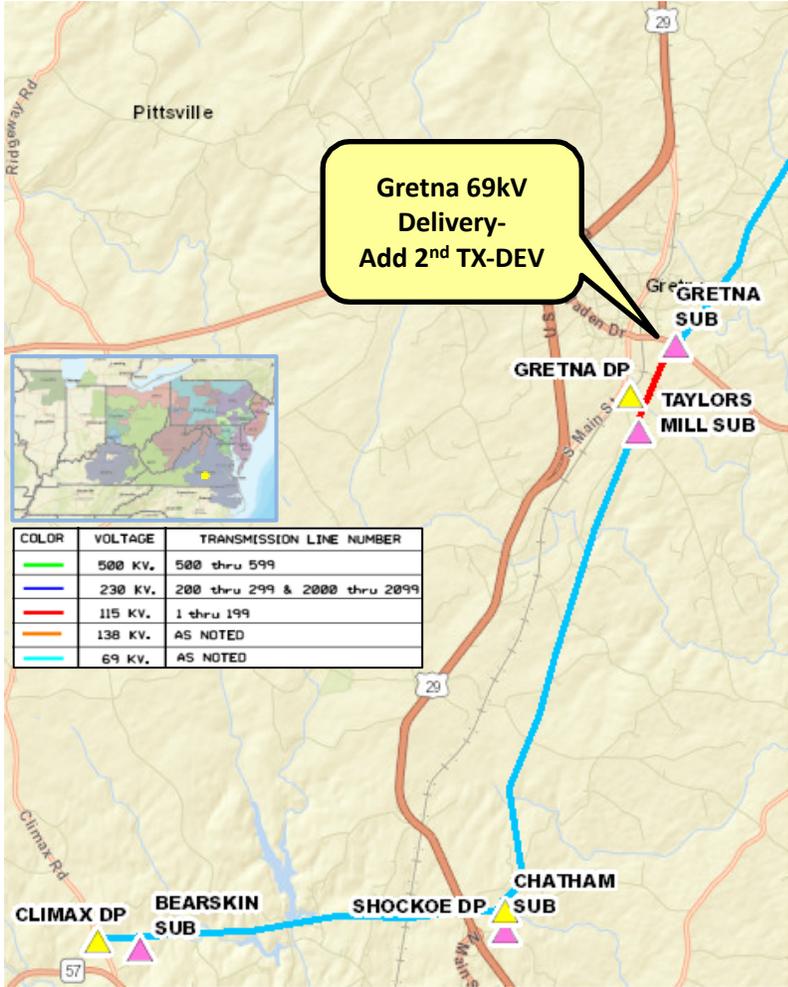
Specific Assumption References:

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 a 2nd, 3 - 2.5/3.125 MVA distribution transformer at Gretna Substation in Pittsylvania County, Virginia. The new transformer is needed for voltage island mitigation. Requested in-service date is 12/15/2024.

Initial In-Service Load	Projected 2027 Load
Winter: 7.5 MW	Summer: 8.5 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 Customer Load Request

Need Number: DOM-2022-0048

Process Stage: Solutions Meeting 08/18/2022

Previously Presented: Need Meeting 07/21/2022

Project Driver: Customer Service

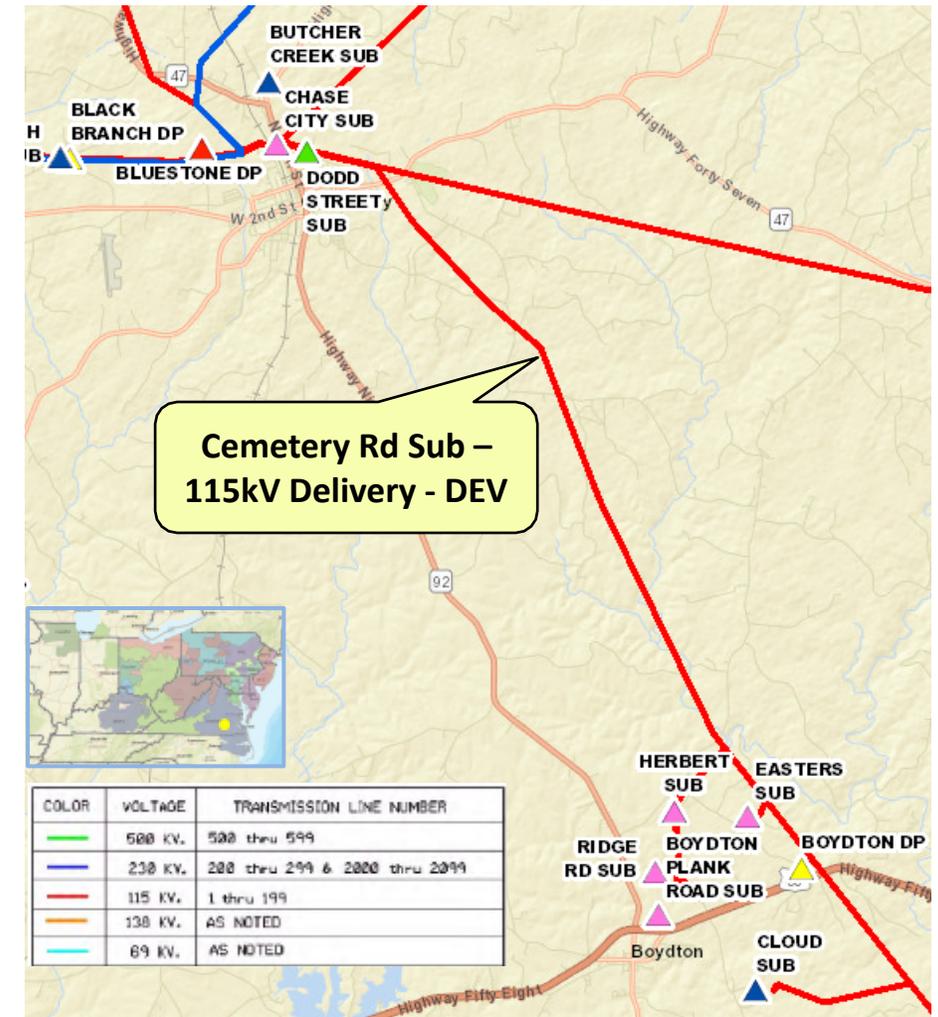
Specific Assumption References:

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 delivery point request for a new delivery point to serve a motor load customer in Chase City, VA. The total load is less than 100 MW. The customer requests service by October 15, 2024.

Initial In-Service Load	Projected 2027 Load
Winter: 24.6 MW	Summer: 49.2 MW



Dominion Transmission Zone: Supplemental Cemetery Rd 115kV Delivery - DEV

Need Number: DOM-2022-0048

Process Stage: Solutions Meeting 08/18/2022

Proposed Solution:

Tap Line #171 (Chase City – Herbert) near structure 171/51 and extend a single circuit 115kV tap to Cemetery Road sub.

Estimated Project Cost: \$5.0 M (Total)

Transmission Line	\$4M
115kV Substation	\$1M

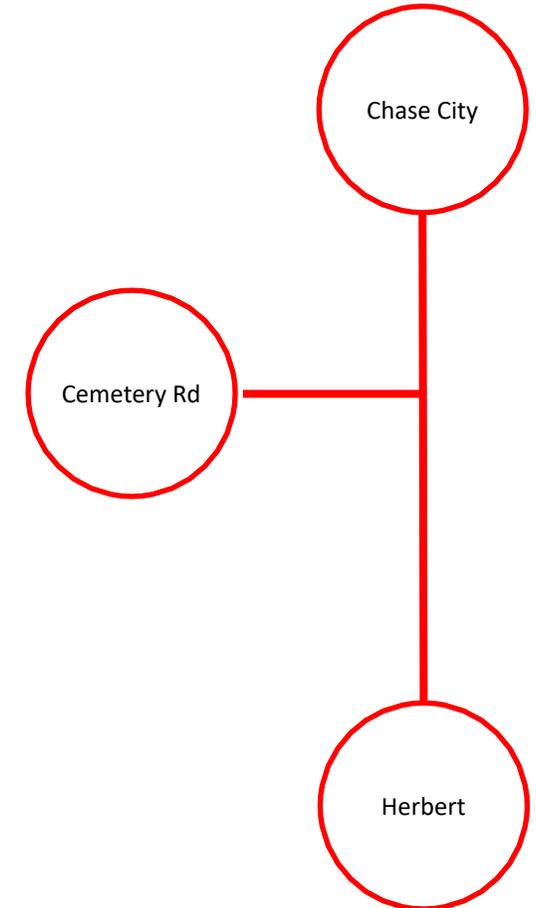
Alternatives Considered:

No feasible alternatives

Projected In-service Date: 10/15/2024

Project Status: Engineering

Model: 2025 RTEP



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

Need Number: DOM-2022-0016

Process Stage: Solution Meeting 08/18/2022

Previously Presented: Need Meeting 07/21/2022

Project Driver: Equipment Material Condition, Performance and Risk

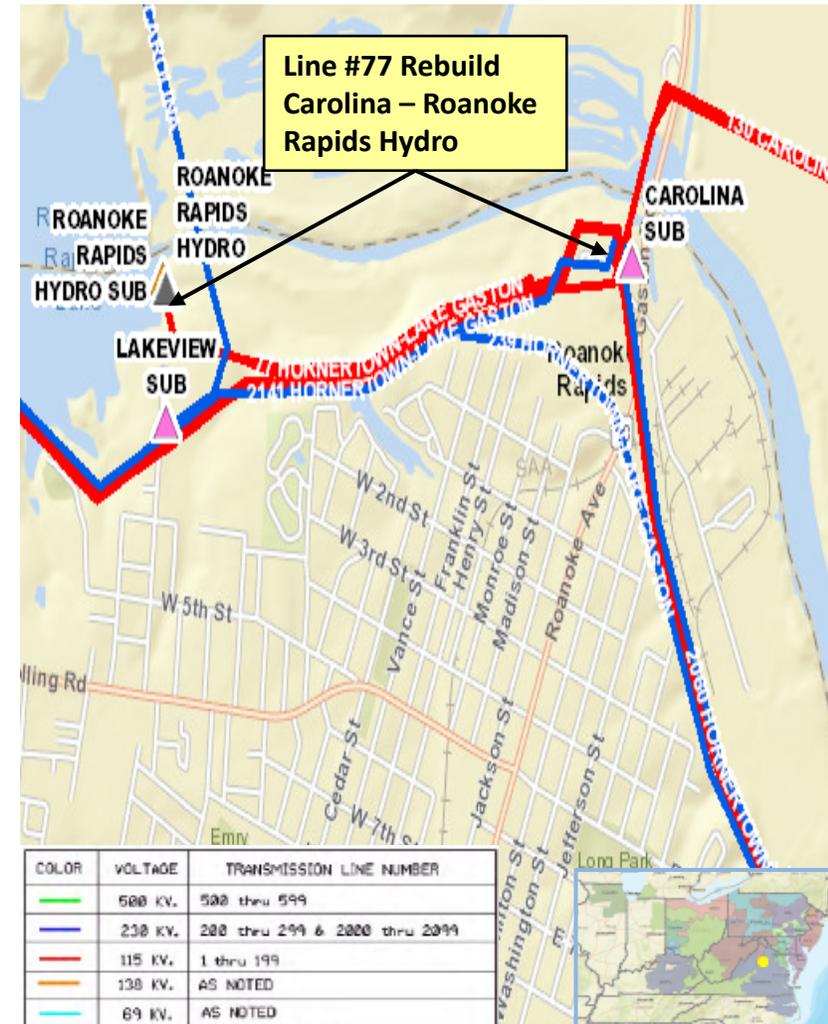
Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2021.

Problem Statement:

Dominion Energy has identified a need to rebuild approximately 1.8 miles of 115kV line #77 (Carolina – Roanoke Rapids Hydro) based on the company's End of Life criteria.

- Line #77 was constructed on 2 pole and 3 pole wood H-frame structures in 1931 from Carolina to Roanoke Rapids Hydro. This line has ACSR and CU conductor and 7/16" steel static.
- Industry guidelines indicate equipment life for wood structures is 35-55 years, conductor and connectors are 40-60 years, and porcelain insulators are 50 years.
- Line #77 is the sole transmission feed for Roanoke Rapids Hydro Generation.



Dominion Transmission Zone: Supplemental Line #77 End of Life Rebuild

Need Number: DOM-2022-0016

Process Stage: Solution Meeting 08/18/2022

Proposed Solution: Rebuild approximately 1.8 miles single circuit of line #77 from Carolina to Roanoke Rapids Hydro to current 115 kV standards, and with a conductor minimum summer normal rating of 262 MVA. The terminal ends should be upgraded as needed.

Estimated Project Cost: \$ 7.4M

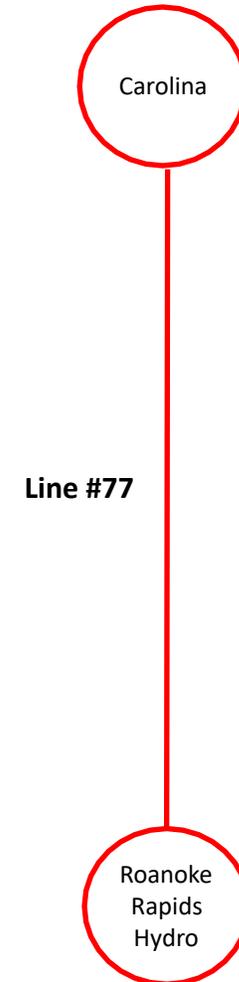
Alternatives Considered:

No feasible alternatives

Projected In-Service: 12/31/2023

Project Status: Conceptual

Model: 2025 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

08/08/2022 – V1 – Original version posted to pjm.com.