

SRRTEP Committee Southern Dominion Supplemental Projects

October 14, 2021

Need Slides

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

Need Number: DOM-2021-0059

Process Stage: Need Meeting 10/14/2021

Project Driver: Equipment Material Condition, Performance and Risk

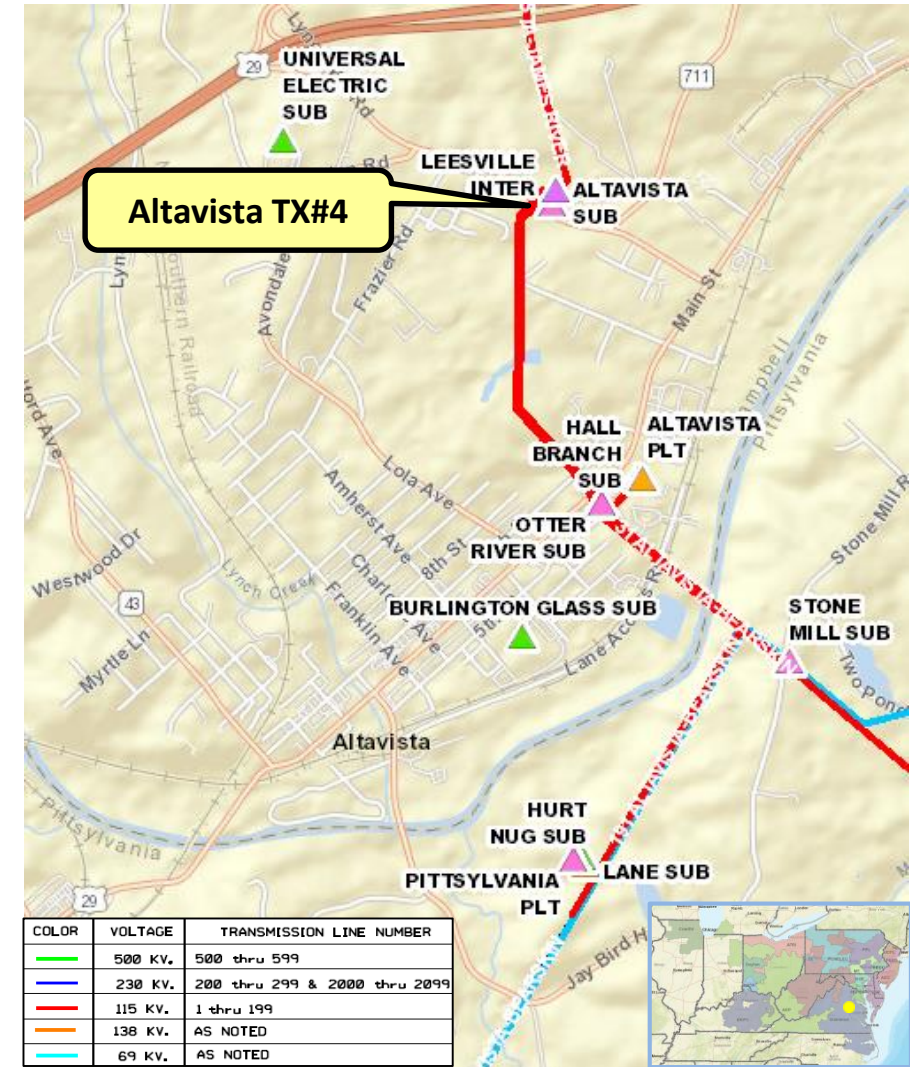
Specific Assumption References:

See details on Equipment Material Condition, Performance and Risk in Dominion's Planning Assumptions presented in December 2020.

Problem Statement:

Altavista TX#4 is a 112 MVA, 138/115/13.2 kV transformer bank that was manufactured in 1986. This transformer bank has been identified for replacement based on the results of Dominion's transformer health assessment (THA) process. Detailed drivers include:

- Age (>30 years old).
- Reduced BIL ratings (2 levels below standard).
- Tertiary winding design not meeting current MVA requirement for loading.
- Degraded porcelain type bushings.
- Oil DGA indicates high CO and CO2 levels; potential break down of dielectric paper insulation on main current carrying conductors inside the transformer.
- Transformer paint is not in good shape.
- THA score less than 80.



Solution Slides

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2021-0057

Process Stage: Solutions Meeting 10/14/2021

Previously Presented: Need Meeting 08/13/2021

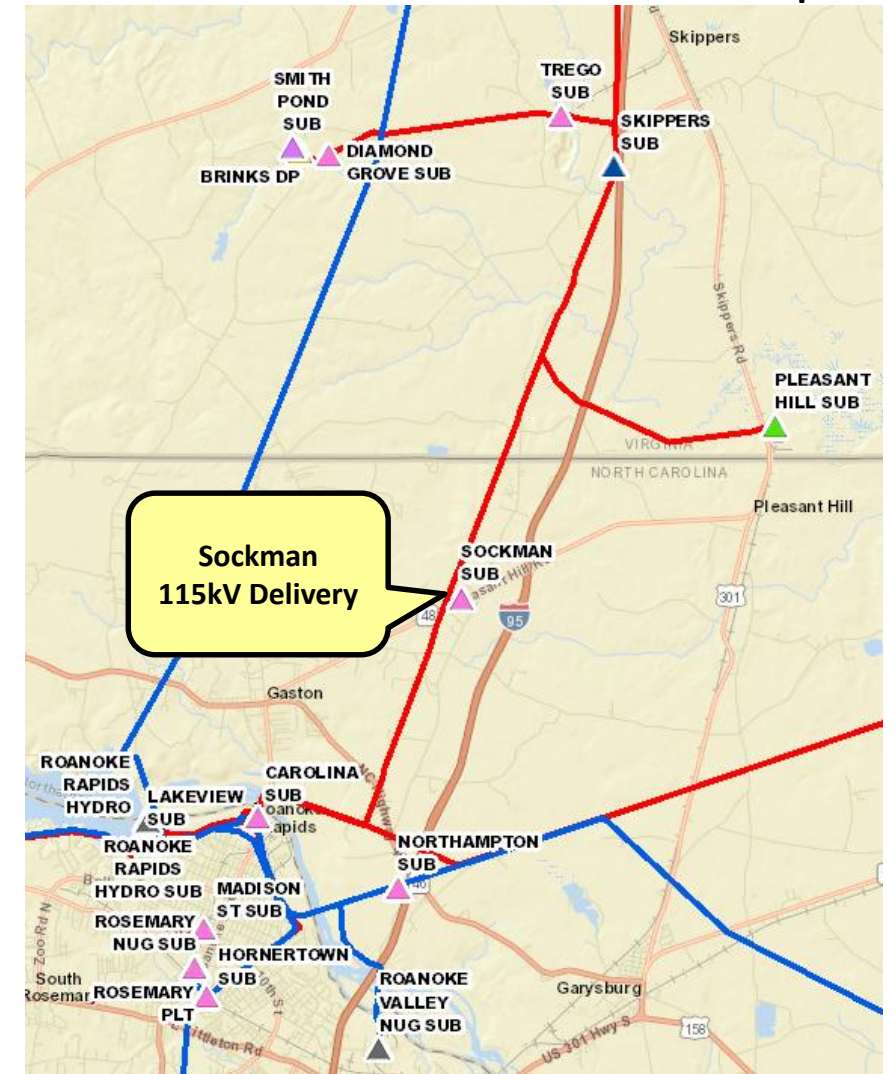
Project Driver: Customer Service

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 for a new 115kV substation (Sockman) to install 115/34.5 kV Transformer and connect 20 MW of Distributed Generation (DG) to Line #130 near structure 154 in Northampton County. The DG cannot be accommodated on existing distribution circuit. This request is for a State Queue Project NC16089. Requested in-service date is 03/31/2022.



Dominion Transmission Zone: Supplemental Sockman 115kV Delivery - DEV

Need Number: DOM-2020-0057

Process Stage: Solutions Meeting 10/14/2021

Proposed Solution:

Tap Line #130 (Skippers - Carolina) near structure 154 and install three (3) line switches and other associated transmission equipment to connect to the proposed new substation. The new section of line will have a minimum rating of 261 MVA. The developer will bear the full cost of the project.

Estimated Project Cost: \$3.6 M

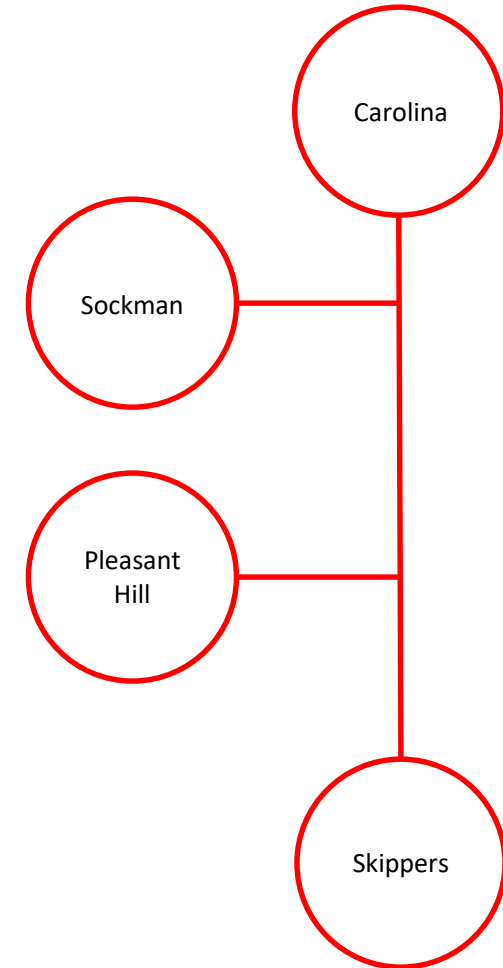
Alternatives Considered:

No feasible alternatives

Projected In-service Date: 03/31/2022

Project Status: Engineering

Model: 2026 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

10/04/2021 – V1 – Original version posted to pjm.com.