

SRRTEP Committee Southern Dominion Supplemental Projects

April 19, 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-2022-0012

Process Stage: Need Meeting 04/19/2022

Project Drivers: Customer Service

Specific Assumption References:

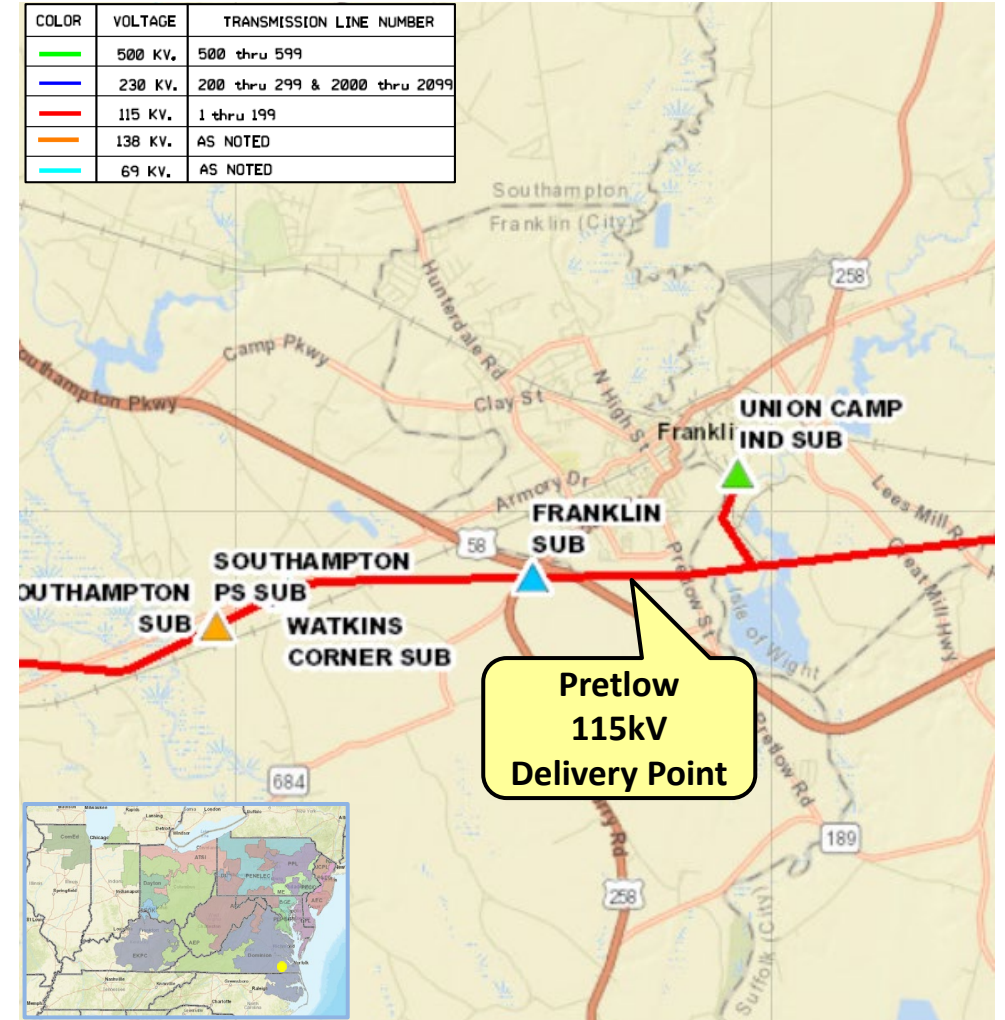
Customer load request will be evaluated per Dominion’s Facility Interconnection Requirements Document and Dominion’s Transmission Planning Criteria.

Problem Statement:

The City of Franklin, VA Power & Light has submitted a DP Request for a new 115kV substation (Pretlow DP). The new substation is needed to serve an industrial customer as well as approximately 14 MW transferred from an existing delivery point that is being retired. Requested in-service is June 1, 2024.

Initial In-Service Load	Projected 2027 Load
Summer: 33.0 MW	Summer: 34.3 MW

COLOR	VOLTAGE	TRANSMISSION LINE NUMBER
Green	500 KV.	500 thru 599
Blue	230 KV.	200 thru 299 & 2000 thru 2099
Red	115 KV.	1 thru 199
Orange	138 KV.	AS NOTED
Cyan	69 KV.	AS NOTED



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2022-0018

Process Stage: Need Meeting 04/19/2022

Project Driver: Customer Service

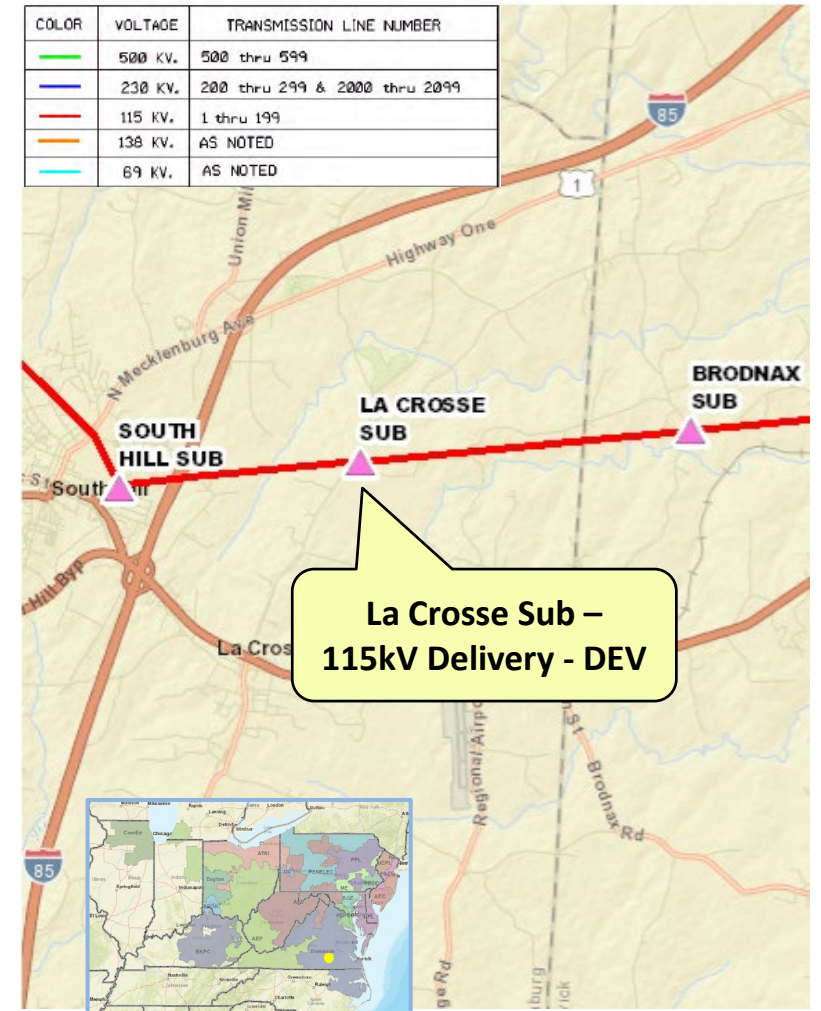
Specific Assumption References:

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

Problem Statement:

DEV has submitted a request for a new delivery point (La Crosse) at La Crosse, VA, to support as a bridging power source for new datacenter campuses. The total load is 100 MW. The customer requests service by December 1, 2022. The substation will remain as the primary source to the campuses, until 230kV sources in the area are energized. At that time, DEV Distribution Planning will evaluate the status and need for La Crosse Substation. If it is deemed that the station is not needed, customer will be responsible for the removal cost of the station.

Initial In-Service Load	Projected 2027 Load
Winter: 9.0 MW	Summer: 100.0 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 Operational Flexibility and Efficiency

Need Number: DOM-2022-0011

Process Stage: Solution Meeting 04/19/2022

Project Driver: Operational Flexibility and Efficiency

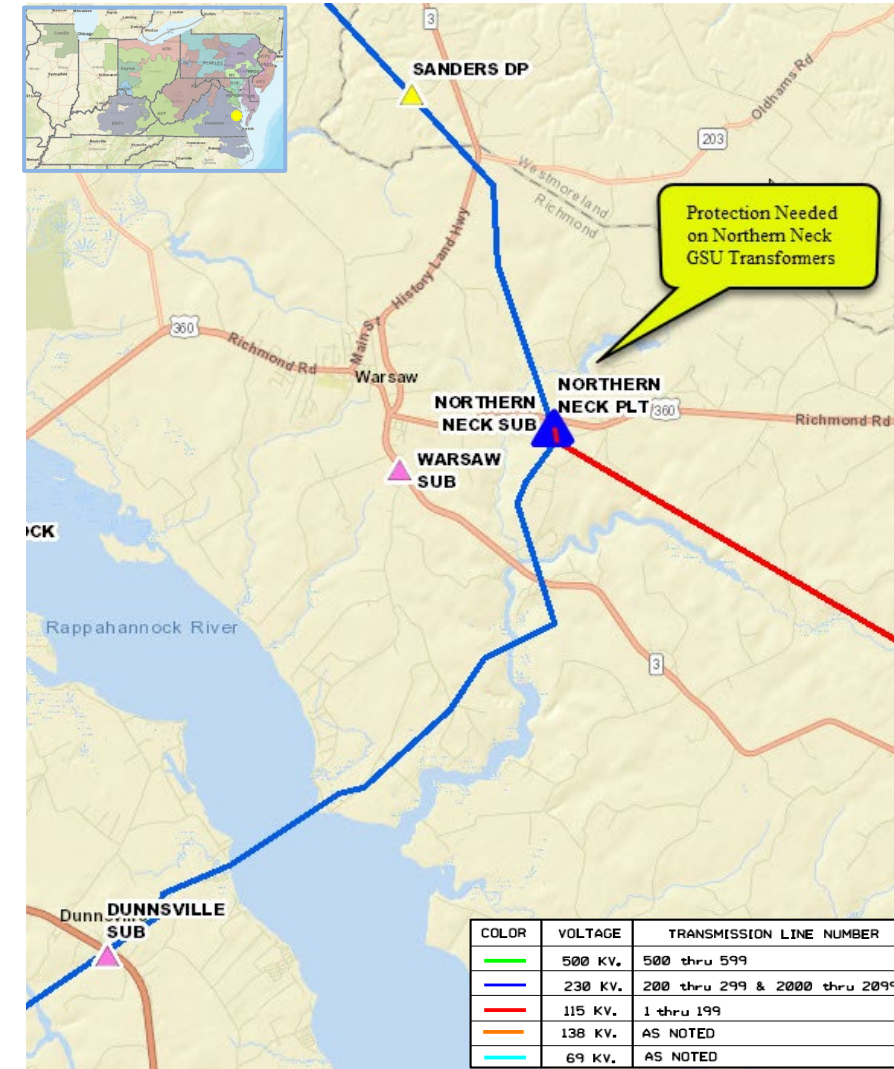
Previously Presented: 2/17/2022

Specific Assumption References:

See details on Operational Flexibility and Efficiency in Dominion’s Planning Assumptions presented in December 2021.

Problem Statement:

Line #224 (Lanexa-Northern Neck) is being wrecked and rebuilt for approximately 41 miles on baseline upgrade project #b3089 and a 2nd 230kV circuit is being added in the corridor on baseline upgrade project #b3223. To support the load in the area and maintain adequate voltage during the extended construction in the Lanexa-Northern Neck corridor, a mobile statcom was installed at Northern Neck Substation and the adjacent Northern Neck generators have been called into operation. Due to the age of the Northern Neck generator installation, the transmission interconnection does not include appropriate protection on the high-side of the generator step-up transformers, resulting in the loss of the mobile statcom and all generation on multiple occasions. As a result, Dominion Energy has identified the need to install appropriate protection to provide better segmentation on the high-side of the generator step-up transformers.



Dominion Transmission Zone: Supplemental Install Circuit Switchers on Northern Neck GSU TX#2 and GSU TX#3

Need Number: DOM-2022-0011

Process Stage: Solutions Meeting 04/19/2022

Proposed Solution:

Install two 230kV, 1200 Amp, 40kA circuit switchers on the high-side of Northern Neck GSU TX#2 and GSU TX#3, including any associated equipment (bus, relaying, etc.) determined necessary by the project team.

Estimated Project cost:

\$0.45M

Alternative Considered:

No feasible alternatives

Projected In-service Date:

09/30/2022

Project Status:

Engineering

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

04/06/2022 – V1 – Original version posted to pjm.com.

04/07/2022 – V2 – The solution for Dominion Need DOM-2022-0011 has been added to the slide deck on slides 6 & 7.