

SRRTEP Committee Southern Dominion Supplemental Projects

May 16, 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-2022-0031

Process Stage: Need Meeting 05/16/2022

Project Driver: Customer Service

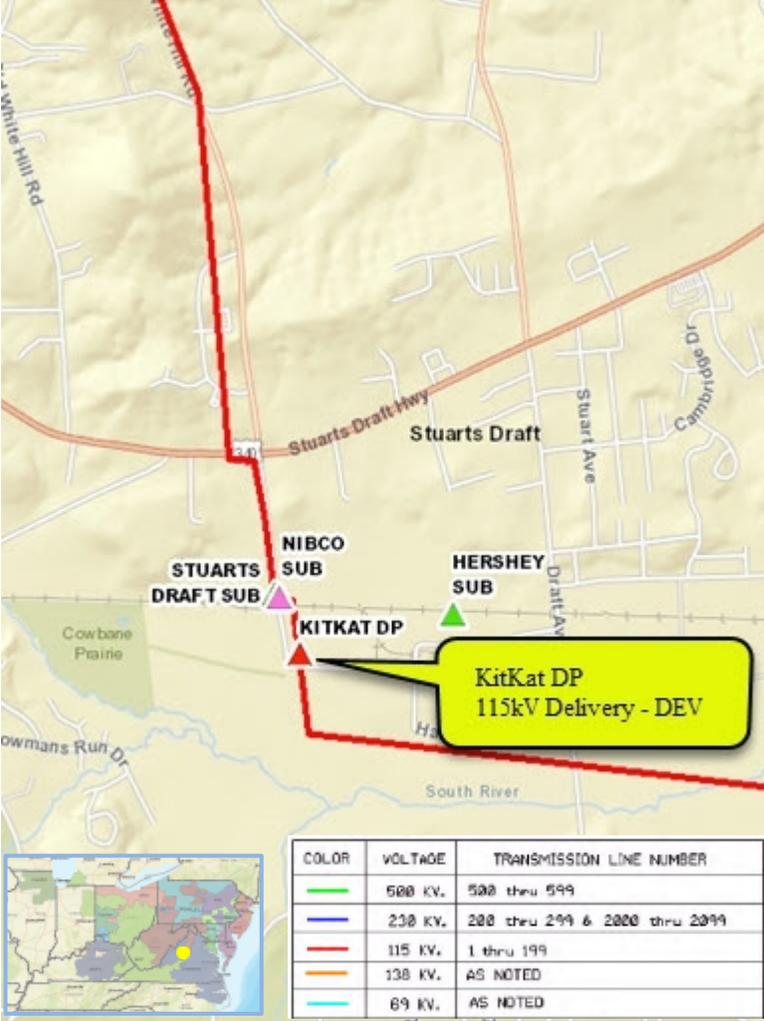
Specific Assumption References:

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 for a new 115kV delivery point (KitKat) to serve the customer from 115kV system in Augusta County with a total projected load of 20 MW. Requested in-service date is 03/30/2023.

Initial In-Service Load	Projected 2027 Load
Summer: 15.5 MW	Summer: 20 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-2021-0050

Process Stage: Solution Meeting 05/16/2022

Previously Presented: Need Meeting 06/15/2021

Project Driver: Equipment Material Condition, Performance and Risk

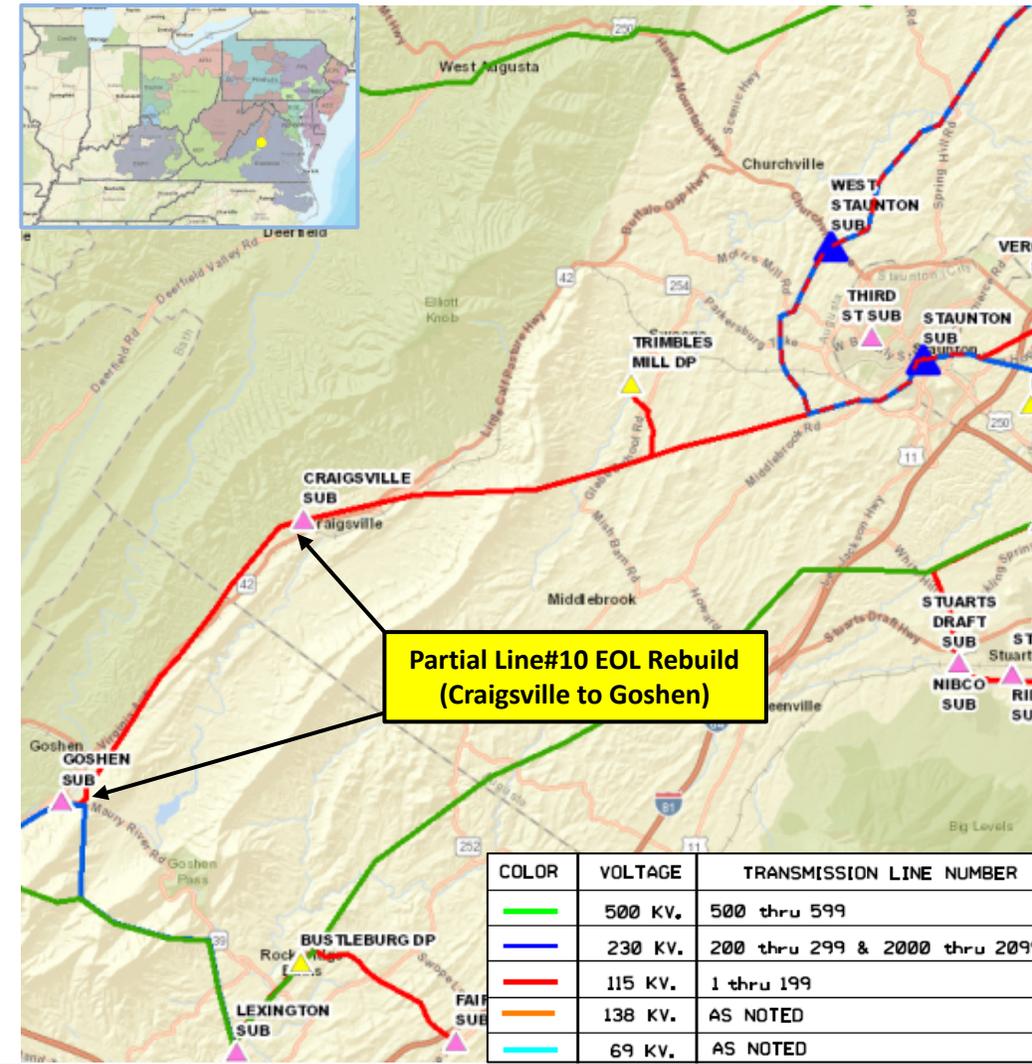
Specific Assumption References:

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

Problem Statement:

Dominion Energy has identified a need to replace approx. 11 miles of 115kV Line#10 from Craigsville to Goshen based on the Company’s End of Life criteria.

- The segment of Line#10 from Craigsville to Goshen was constructed in 1925 consisting of Blaw Knox towers, ACSR conductor and 3/8” static wire.
- Blaw Knox towers are known for ground line corrosion and potential U-Bolt connection issues.
- Field inspection indicates a number of structures have damage.
- Industry guidelines indicate equipment life for steel structures is 40-60 years, wood structures is 35-55 years, conductor and connectors is 40-60 years, and porcelain insulators is 50 years.



Dominion Transmission Zone: Supplemental 115 kV Partial Line #10 – EOL Rebuild

Need Number: DOM-2021-0050

Process Stage: Solutions Meeting 05/16/2022

Proposed Solution:

Approximately 11 miles (from Craigsville to Goshen) consisting of Blaw Knox towers will be replaced with appropriate structures. New conductor with a minimum normal summer rating of 393 MVA will be used. Terminal equipment will be upgraded as needed.

Estimated Project Cost: \$29.6 M

Alternatives Considered:

No feasible alternatives.

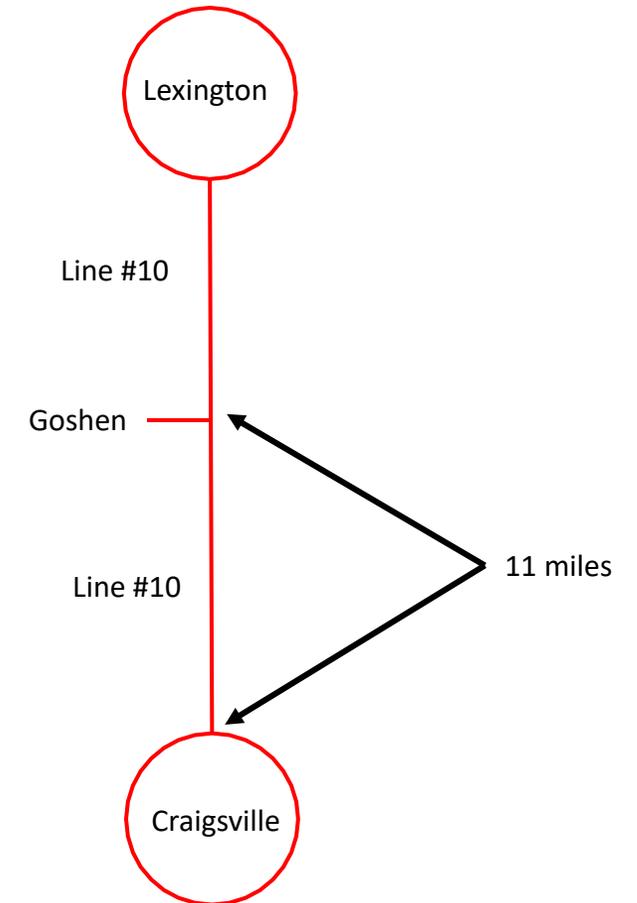
Line #10 provides service to Goshen DP (BARC) with 8 MW connected load.

Line #10 also serves as a back-up source for Trimbles Mill DP if the Staunton source is lost.

Projected In-service Date: 12/31/2024

Project Status: Conceptual

Model: 2025 RTEP



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2022-0012

Process Stage: Solution Meeting 05/16/2022

Project Driver: Customer Service

Previously Presented: Need Meeting 04/19/2022

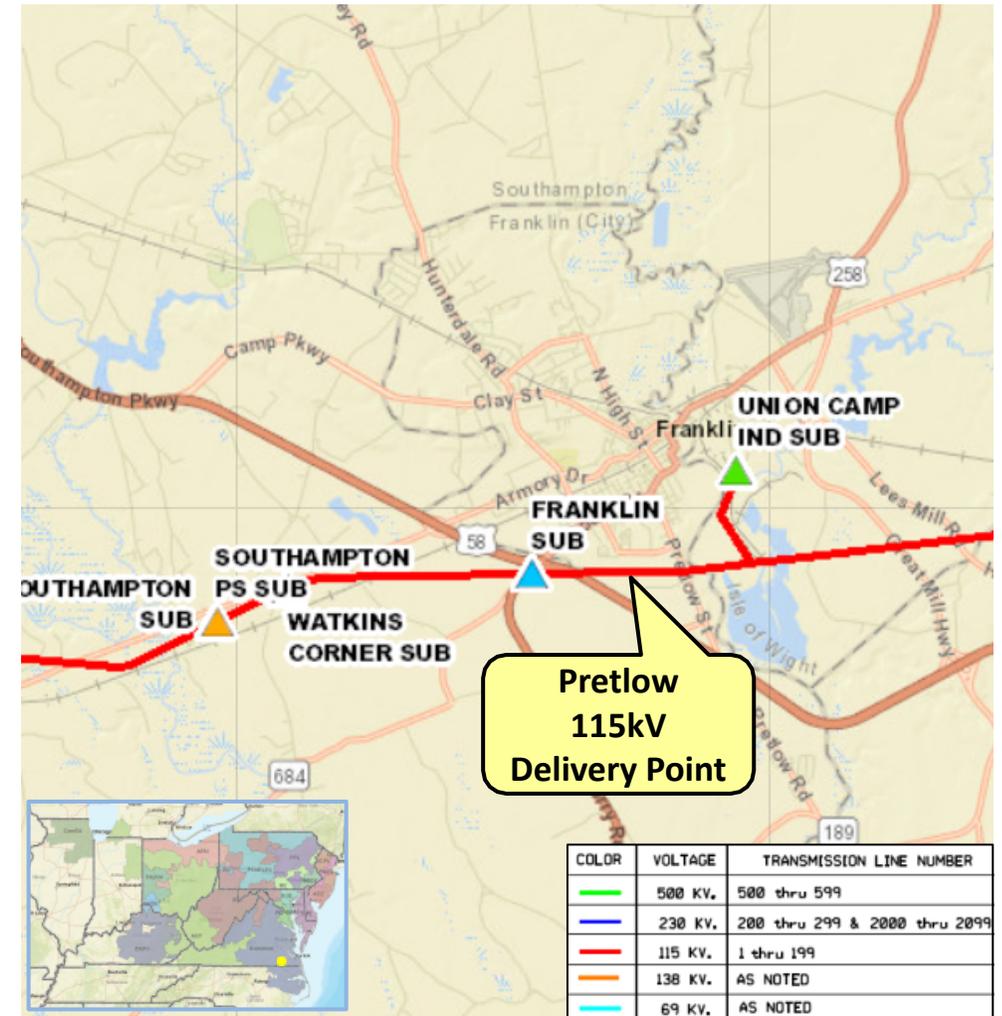
Specific Assumption References:

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: 21.7 MW	Summer: 23.0 MW



Dominion Transmission Zone: Supplemental Pretlow 115kV Delivery – City of Franklin

Need Number: DOM-2022-0012

Process Stage: Solution Meeting 05/16/2022

Project Driver: Customer Service

Previously Presented: Need Meeting 04/19/2022

Proposed Solution:

Build a single circuit 115kV tap line for approximately 200 feet, connecting the City of Franklin P&L's proposed Pretlow DP to Line #93 (Southampton – Union Camp). Install required switch structures and switches in accordance with Dominion Facilities Interconnection Requirements.

Estimated Project Cost: \$1.3M

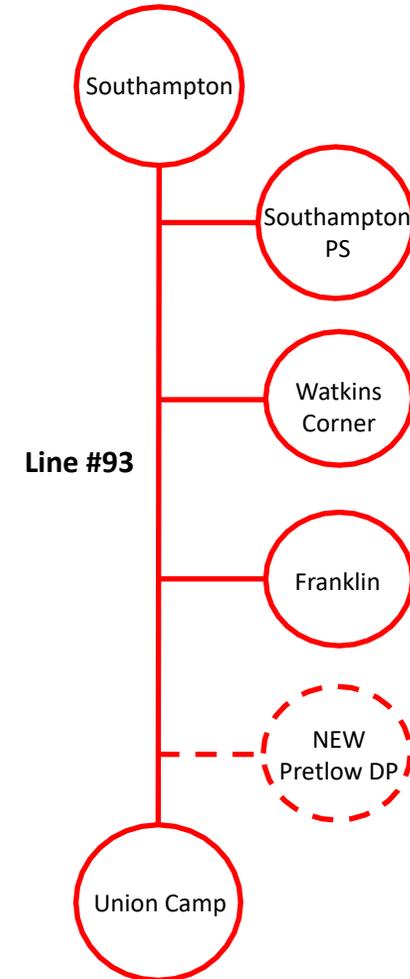
Alternatives Considered:

No feasible alternatives

Project In-Service: 06/01/2024

Project Status: Conceptual

Model: 2025 RTEP



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2022-0018

Process Stage: Solutions Meeting 05/16/2022

Previously Presented: Need Meeting 04/19/2022

Project Driver: Customer Service

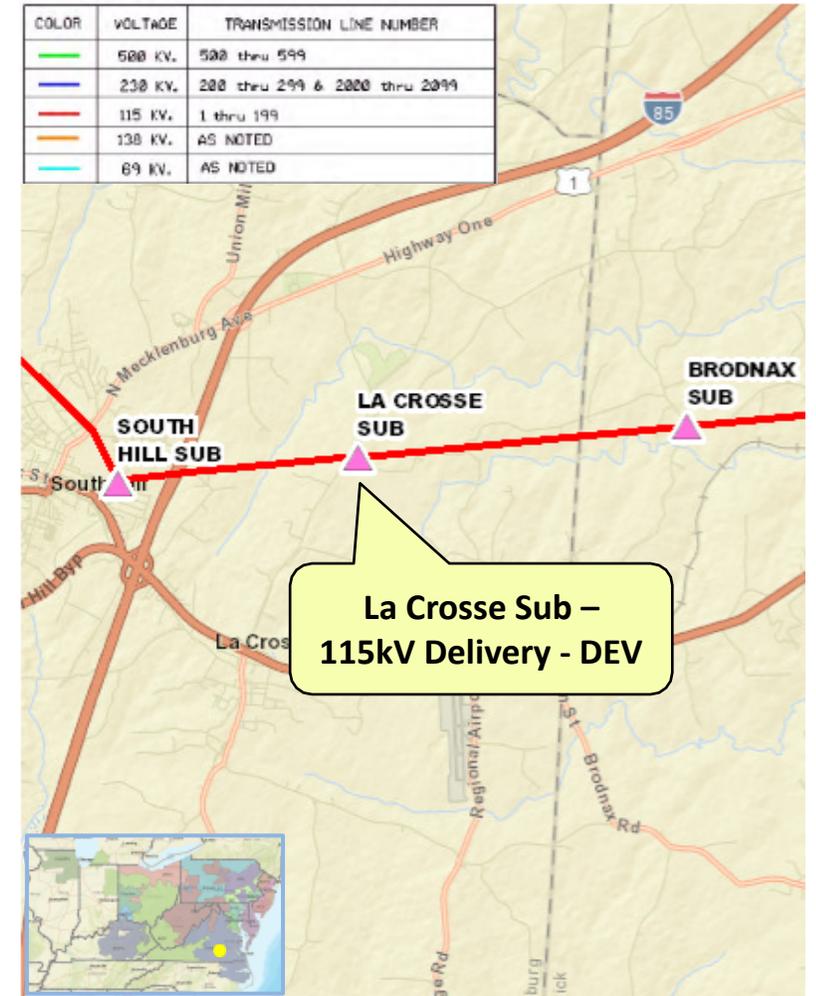
Specific Assumption References:

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 data center 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 “labor cost” for the removal of the station.

Initial In-Service Load	Projected 2027 Load
Winter: 9.0 MW	Summer: 100.0 MW



Dominion Transmission Zone: Supplemental La Crosse 115kV Delivery - DEV

Need Number: DOM-2022-0018

Process Stage: Solutions Meeting 05/16/2022

Proposed Solution:

Interconnect the new substation by cutting and extending Line #40 (Chase City – Broadnax) to the proposed La Crosse 115kV Substation. Add 33 MVAR 115kV cap bank at La Crosse Sub for voltage support. The data center customer will bear the full cost of the project.

Estimated Project Cost: \$9.0 M (Total)

Transmission Line	\$3M
115kV Substation	\$6M

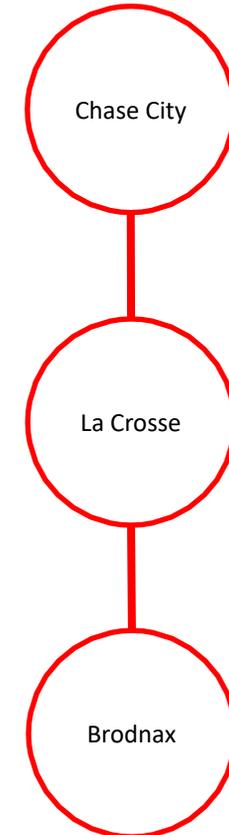
Alternatives Considered:

No feasible alternatives

Projected In-service Date: 12/01/2022

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

05/06/2022 – V1 – Original version posted to pjm.com.