Dominion Supplemental Projects

Transmission Expansion Advisory Committee January 07, 2025



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



Need Number: DOM-2024-0018

Process Stage: Solution Meeting 01/07/2025

Previously Presented: Need Meeting 07/09/2024

Project Driver: Customer Service

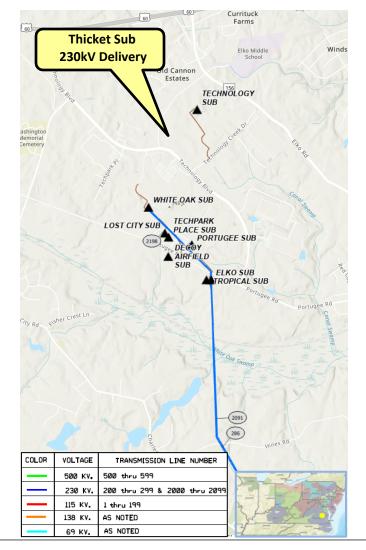
Specific Assumption References:

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 substation (Thicket) to serve a data center in Henrico County with a total load in excess of 100 MW. The requested inservice date is Q1 2028.

Initial In-Service Load	Projected 2029 Load
Summer: 123.0 MW	Summer: 255.0 MW
Winter: 0.0 MW	Winter: 195.0 MW





Dominion Transmission Zone: Supplemental Thicket 230kV Delivery - DEV

Need Number: DOM-2024-0018

Process Stage: Solution Meeting 01/07/2025

Project Driver: Customer Service

Proposed Solution:

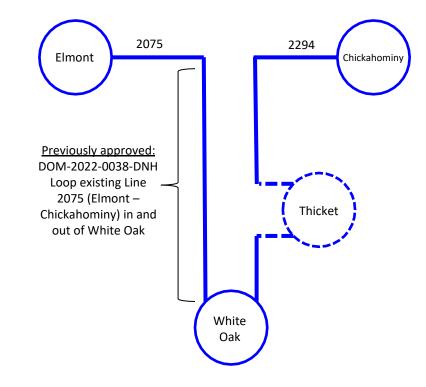
Cut and loop future 230kV Line 2294 (Chickahominy to White Oak) in and out of proposed Thicket substation. Line 2294 to terminate in a 230kV six-breaker ring arrangement.

Estimated Project Cost: \$20M Substation, \$5M Transmission Line

Alternatives Considered: None, new station is adjacent to existing transmission line and on customer property

Projected In-service Date: Q4 2027

Project Status: Engineering



Need Number: DOM-2024-0020

Process Stage: Solution Meeting 01/07/2025

Previously Presented: Need Meeting 07/09/2024

Project Driver: Customer Service

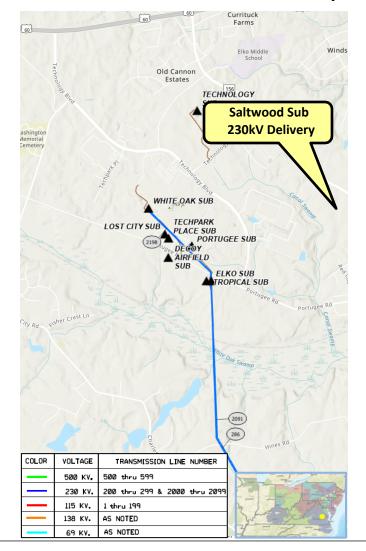
Specific Assumption References:

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 substation (Saltwood) to serve a data center in Henrico County with a total load in excess of 100 MW. The requested in-service date is 7/01/2027.

Initial In-Service Load	Projected 2029 Load
Summer: 150.0 MW	Summer: 300.0 MW
Winter: 0.0 MW	Winter: 300.0 MW





Dominion Transmission Zone: Supplemental Saltwood 230kV Delivery - DEV

Need Number: DOM-2024-0020

Process Stage: Solution Meeting 01/07/2025

Project Driver: Customer Service

Proposed Solution:

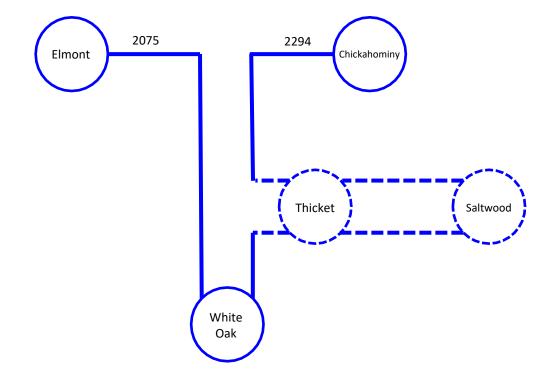
Extend two 230kV lines from proposed Thicket substation to proposed Saltwood substation. Lines to terminate in a 230kV six-breaker ring arrangement.

Estimated Project Cost: \$20M Substation, \$20M Transmission Line

Alternatives Considered: None, new station is adjacent to existing transmission line

Projected In-service Date: Q3 2027

Project Status: Engineering





Need Number: DOM-2024-0040

Process Stage: Solution Meeting 01/07/2025

Previously Presented: Need Meeting 08/06/2024

Project Driver: Customer Service

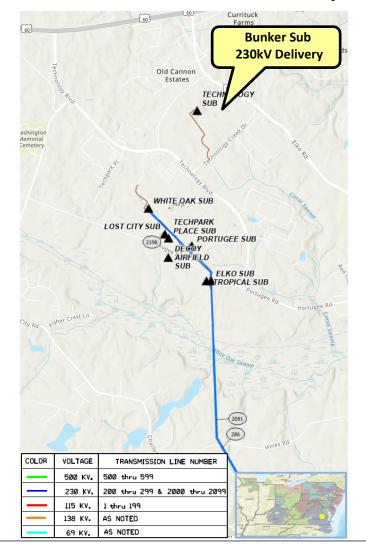
Specific Assumption References:

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 substation (Bunker) to serve a data center in Henrico County with a total load in excess of 100 MW. The requested inservice date is 12/31/2027.

Initial In-Service Load	Projected 2029 Load
Summer: 28.0 MW	Summer: 104.0 MW
Winter: 8.0 MW	Winter: 60.0 MW





Dominion Transmission Zone: Supplemental Bunker 230kV Delivery - DEV

Need Number: DOM-2024-0040

Process Stage: Solution Meeting 01/07/2025

Project Driver: Customer Service

Proposed Solution:

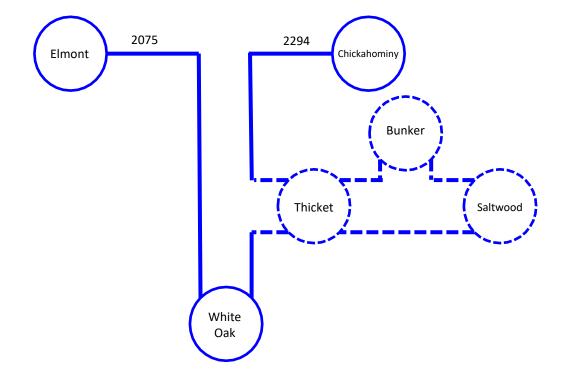
Cut and loop future 230kV line between proposed Thicket substation and proposed Saltwood substation in and out of proposed Bunker substation. Lines to terminate in a 230kV four-breaker ring arrangement.

Estimated Project Cost: \$15M Substation, \$6M Transmission Line

Alternatives Considered: None, new station is on customer owned land and adjacent to existing transmission source.

Projected In-service Date: Q4 2027

Project Status: Engineering





Need Number: DOM-2024-0019

Process Stage: Solution Meeting 01/07/2025

Previously Presented: Need Meeting 07/09/2024

Project Driver: Customer Service

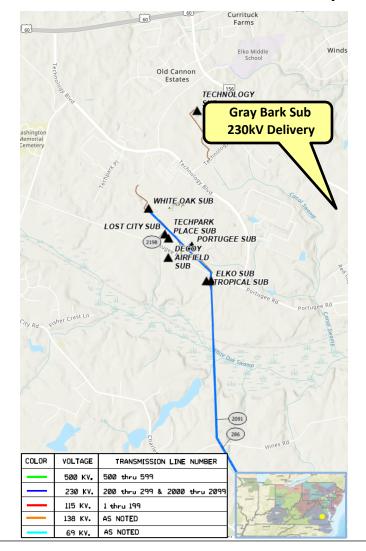
Specific Assumption References:

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 substation (Gray Bark) to serve a data center in Henrico County with a total load in excess of 100 MW. The requested in-service date is 7/01/2027.

Initial In-Service Load	Projected 2029 Load
Summer: 127.0 MW	Summer: 300.0 MW
Winter: 0.0 MW	Winter: 300.0 MW





Dominion Transmission Zone: Supplemental Gray Bark 230kV Delivery - DEV

Need Number: DOM-2024-0019

Process Stage: Solution Meeting 01/07/2025

Project Driver: Customer Service

Proposed Solution:

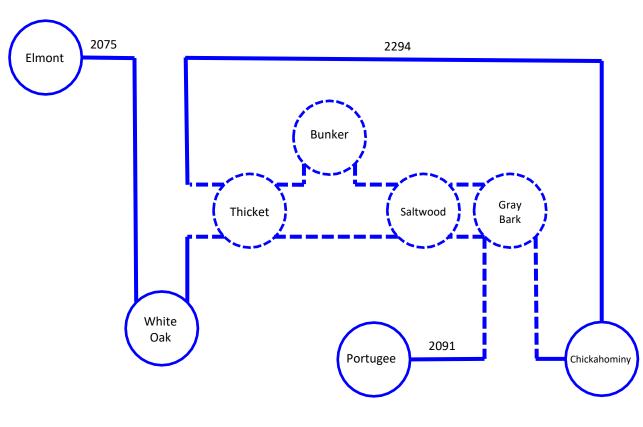
Extend two 230kV lines from proposed Saltwood substation to proposed Gray Bark substation. Cut and loop existing 230kV Line 2091 (Chickahominy to Portugee) into Gray Bark substation. Lines to terminate in a 230kV six-breaker ring arrangement.

Estimated Project Cost: \$20M Substation, \$20M Transmission Lines

Alternatives Considered: None, new station is adjacent to existing transmission line

Projected In-service Date: Q3 2027

Project Status: Engineering





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	Activity	Timing
Supplemental	Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
Projects & Local	Post selected solution(s)	Following completion of DNH analysis
Plan	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

12/27/2024 – V1 – Original version posted to pjm.com

01/06/2025 – V2 – Changed the order of the slides per Dominions request

