

Solutions

Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0032

Process Stage: Solutions Meeting 02/03/2026

Previously Presented: Need Meeting 10/08/2025

Project Driver: Customer Service

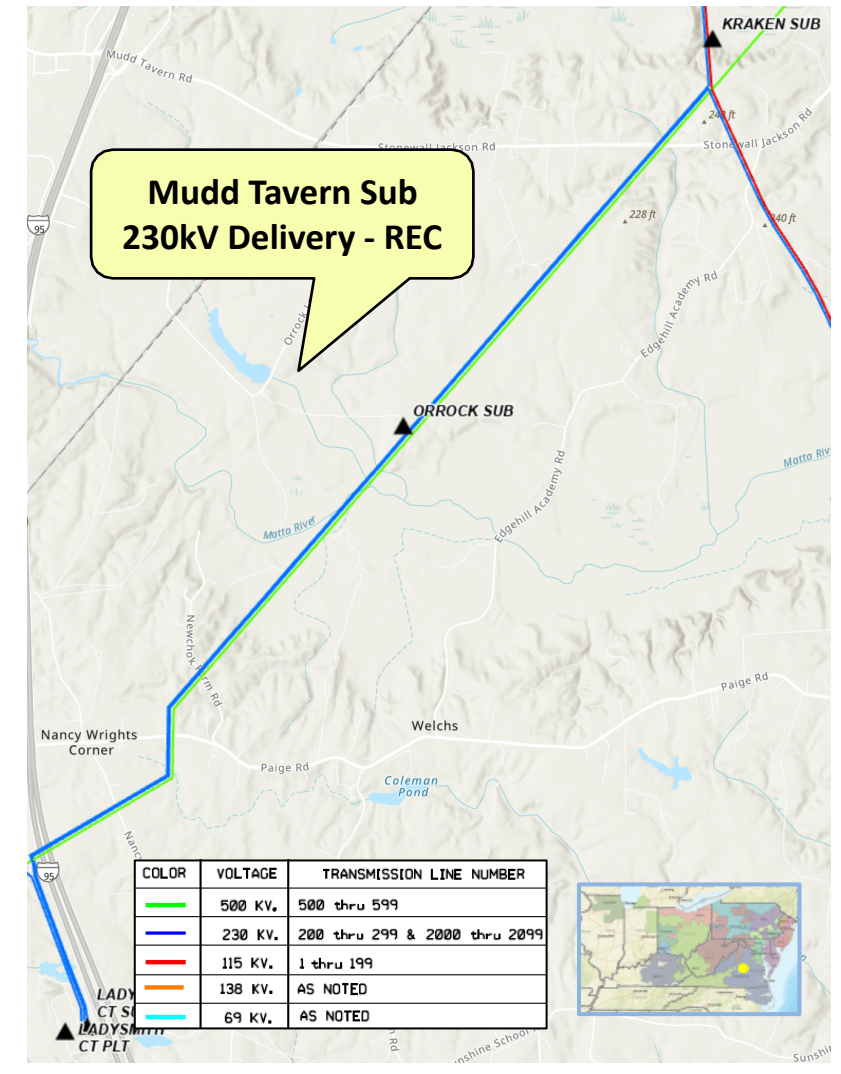
Specific Assumption References:

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

Problem Statement:

Rappahannock Electric Cooperative (REC) has submitted a DP Request for a new substation (Mudd Tavern) to serve a data center in Caroline County with a total expected capacity of 300 MW.

The requested in-service date is 08/01/2029.



Dominion Transmission Zone: Supplemental Mudd Tavern 230kV Delivery - REC

Need Number: DOM-2025-0032

Process Stage: Solutions Meeting 02/03/2026

Project Driver: Customer Service

Proposed Solution:

Extend two 230 kV lines approximately one mile from Orrock(Matta) to Mudd Tavern. Mudd Tavern Substation will be constructed with a 230 kV ring-bus, configured for an ultimate arrangement of six breakers, with four breakers installed initially.

Estimated Project Cost: \$ 26M (Total)

Transmission Line – \$6M

230kV Substation – \$20M

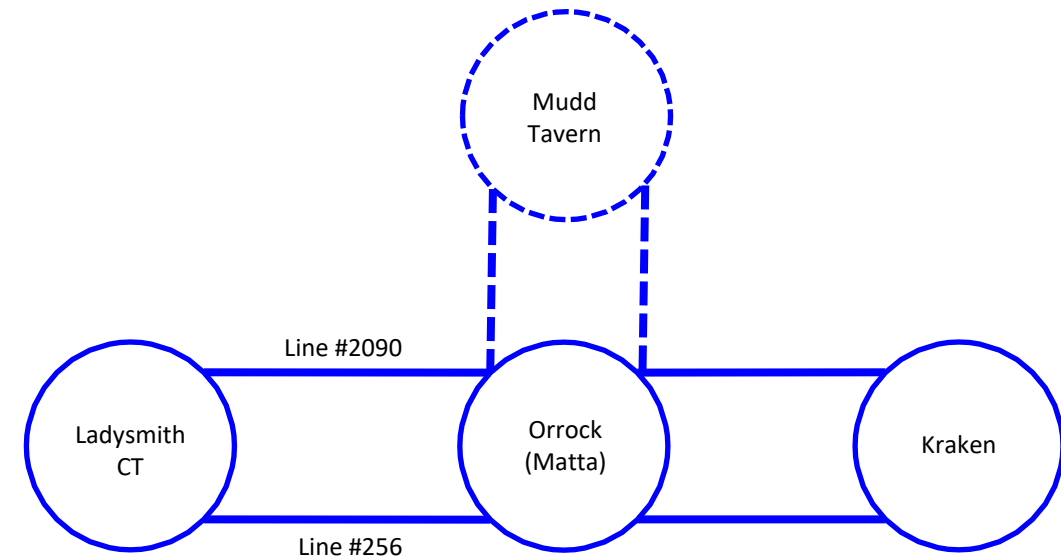
Alternatives Considered:

No feasible alternatives.

Projected In-service Date: 03/01/2029

Project Status: Conceptual

Model: 2029 RTEP



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2024-0036

Process Stage: Solution Meeting 02/03/2026

Previously Presented: Need Meeting 06/04/2024

Project Driver: Customer Service

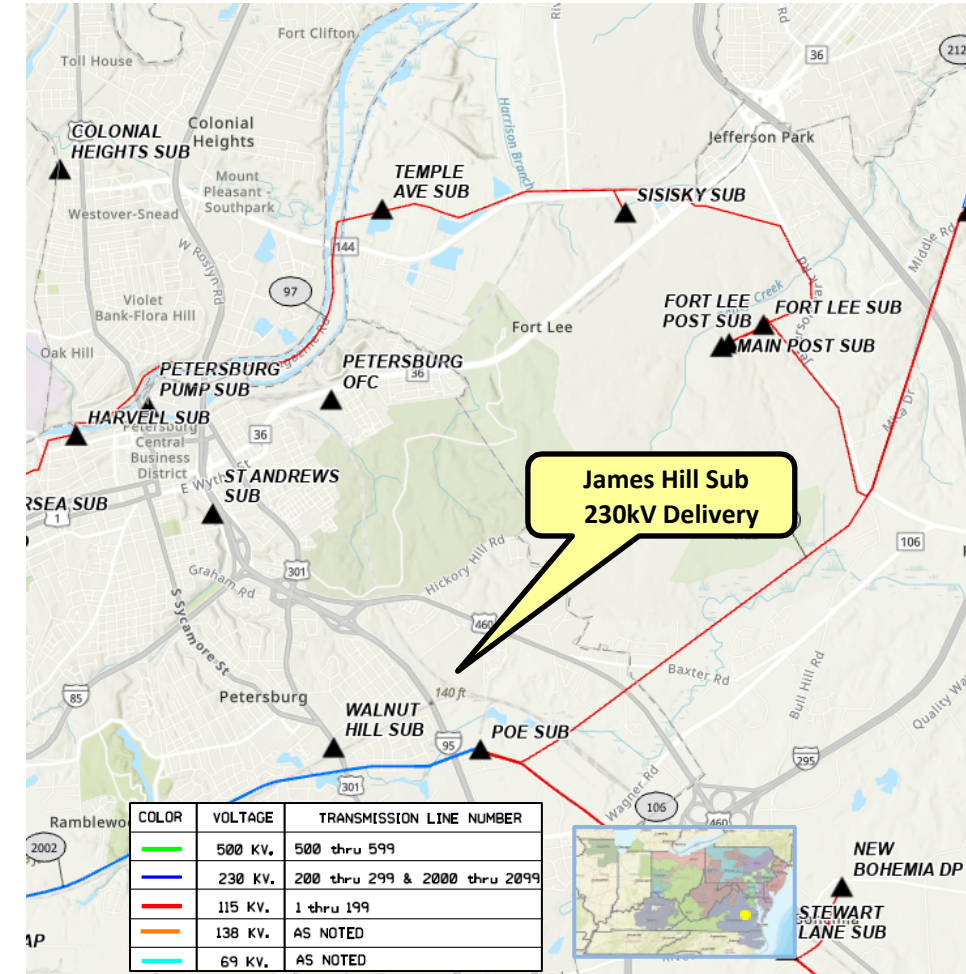
Specific Assumption References:

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 (**James Hill Jamestown Drive**) to serve a data center in Petersburg, VA with a total load in excess of 100 MW.

The requested in-service date is 12/31/2028.



Dominion Transmission Zone: Supplemental James Hill 230kV Delivery - DEV

Need Number: DOM-2024-0036

Process Stage: Solution Meeting 02/03/2026

Project Driver: Customer Service

Proposed Solution:

Construct James Hill substation with a 230 kV four-breaker ring arrangement. Cut and extend 230 kV Line #2003 (Chesterfield – Poe) approximately 1.0 miles in and out of James Hill substation on double-circuit structures.

Estimated Project Cost: \$26M (Total)

Transmission Line – \$6M

230kV Substation – \$20M

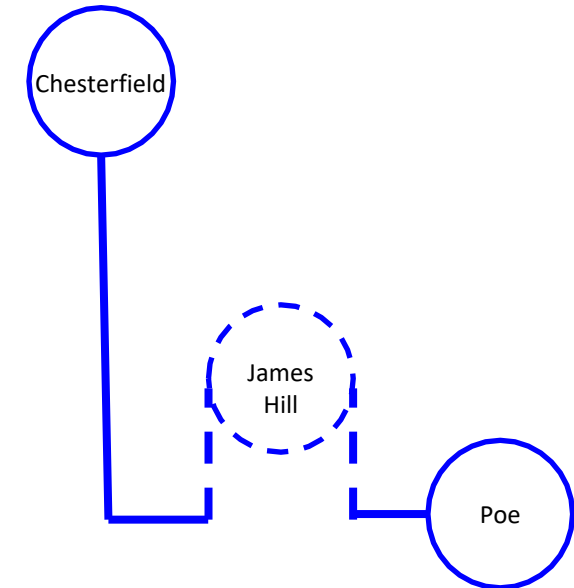
Alternatives Considered:

Constructing two new lines from Poe Substation to James Hill Substation was considered, however, there is currently a project to install a six-breaker 230kV ring bus at Poe (b4000.334-.336) and there is no room for further expansion to accommodate additional line terminals. Even if this alternative was feasible, the expected cost would be higher.

Projected In-service Date: 12/30/2031

Project Status: Conceptual

Model: 2030 RTEP



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0051

Process Stage: Solution Meeting 02/03/2026

Previously Presented: Need Meeting 11/04/2025

Project Driver: Customer Service

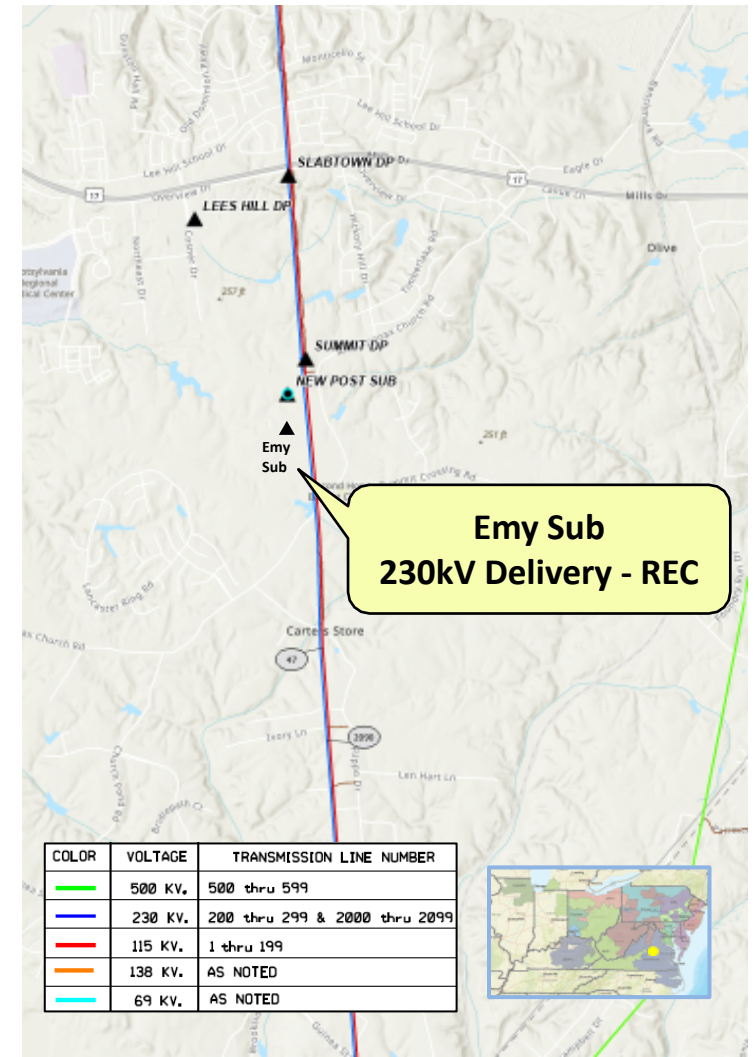
Specific Assumption References:

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

Problem Statement:

Rappahannock Electric Cooperative (REC) has submitted a DP Request for a new substation (Emy) to serve a data center in Spotsylvania County, VA with a total expected capacity of 212 MW.

The requested in-service date is 07/05/2027.



Dominion Transmission Zone: Supplemental Emy 230kV Delivery - REC

Need Number: DOM-2025-0051

Process Stage: Solution Meeting 02/03/2026

Project Driver: Customer Service

Proposed Solution:

Extend two new 230 kV lines from New Post to Emy. Add two new 230 kV breakers at New Post substation to accommodate the new lines. Cut two 230 kV lines into Emy from the South. The lines cut will be future Lines #2404 (Tributary – New Post) and #2372 (Kraken – New Post).

Estimated Project Cost: \$26M (Total)

Transmission Line – \$6M

230kV Substation – \$20M

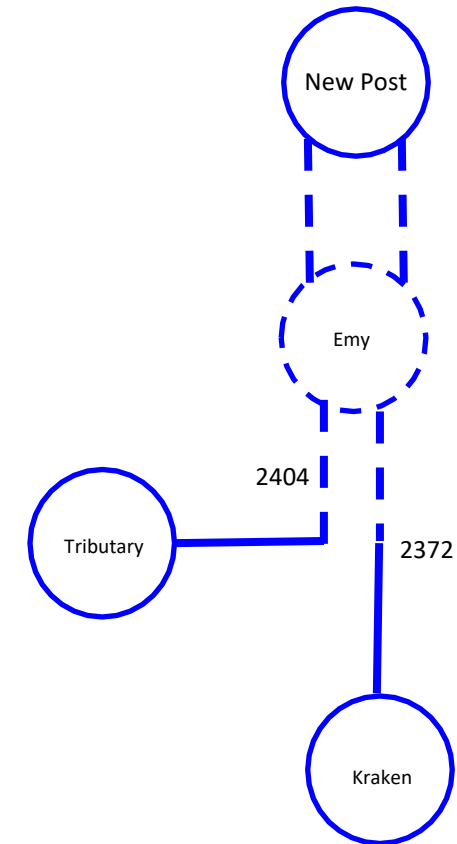
Alternatives Considered:

None. The new station is on customer owned land and adjacent to existing transmission lines.

Projected In-service Date: 05/01/2030

Project Status: Conceptual

Model: 2030 RTEP



Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2025-0083

Process Stage: Solution Meeting 02/03/2026

Previously Presented: Need Meeting 12/08/2025

Project Driver: Customer Service

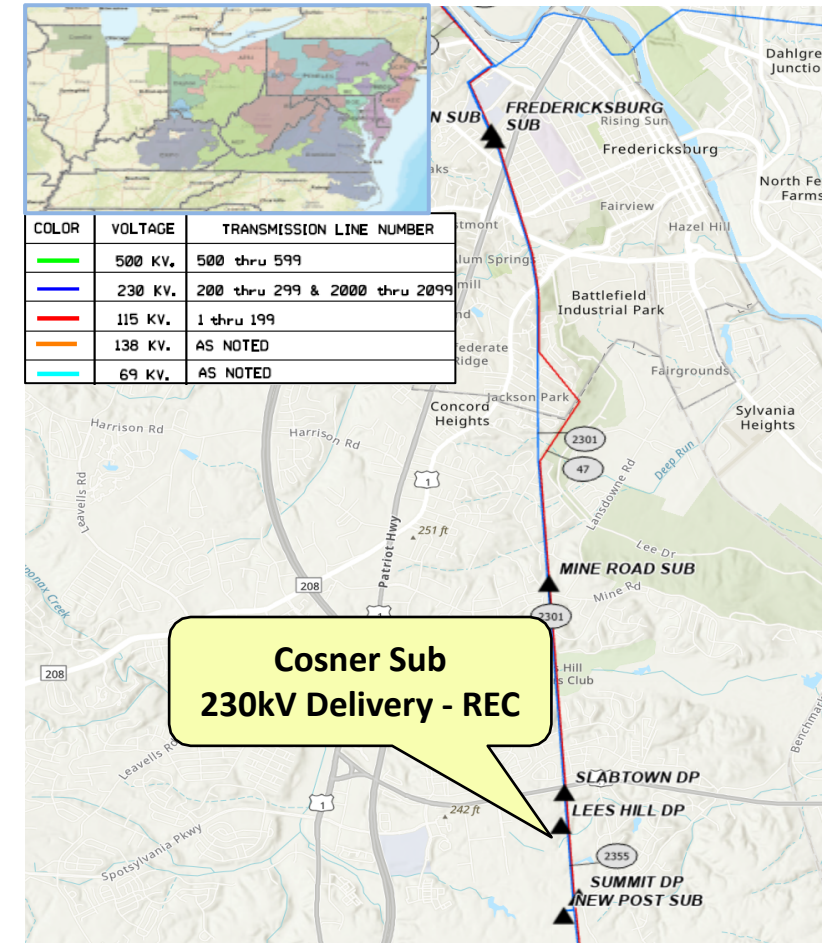
Specific Assumption References:

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

Problem Statement:

Rappahannock Electric Cooperative (REC) has submitted a DP Request for a new substation (Cosner) to serve a data center in Spotsylvania County, VA with a total expected capacity of 300 MW.

The requested in-service date is 12/01/2027.



Dominion Transmission Zone: Supplemental Cosner 230kV Delivery - REC

Need Number: DOM-2025-0083

Process Stage: Solution Meeting 02/03/2026

Project Driver: Customer Service

Proposed Solution:

Cut double-circuit New Post to Lee's Hill lines south of Cosner and Lee's Hill and terminate at Cosner, removing the existing line terminations at Lee's Hill. Extend two new 230 kV lines from Lee's Hill to Cosner.

Estimated Project Cost: \$28M (Total)

Transmission Line – \$6M

230kV Substation – \$20M

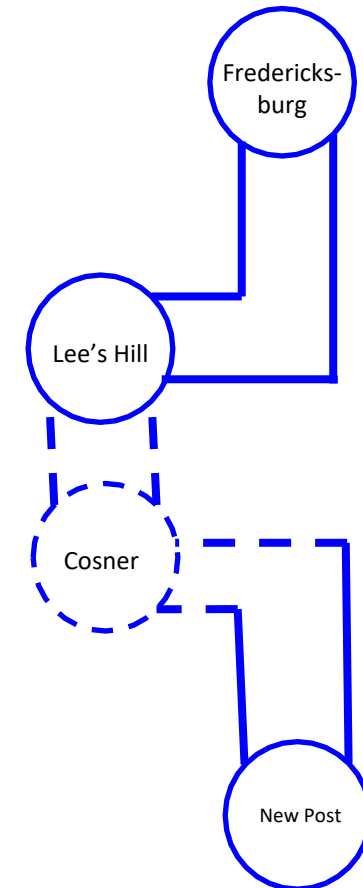
Alternatives Considered:

None. The new station is on customer owned land and adjacent to existing transmission lines.

Projected In-service Date: 09/30/2030

Project Status: Conceptual

Model: 2030 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

01/23/2026 – V1 – Original version posted to pjm.com