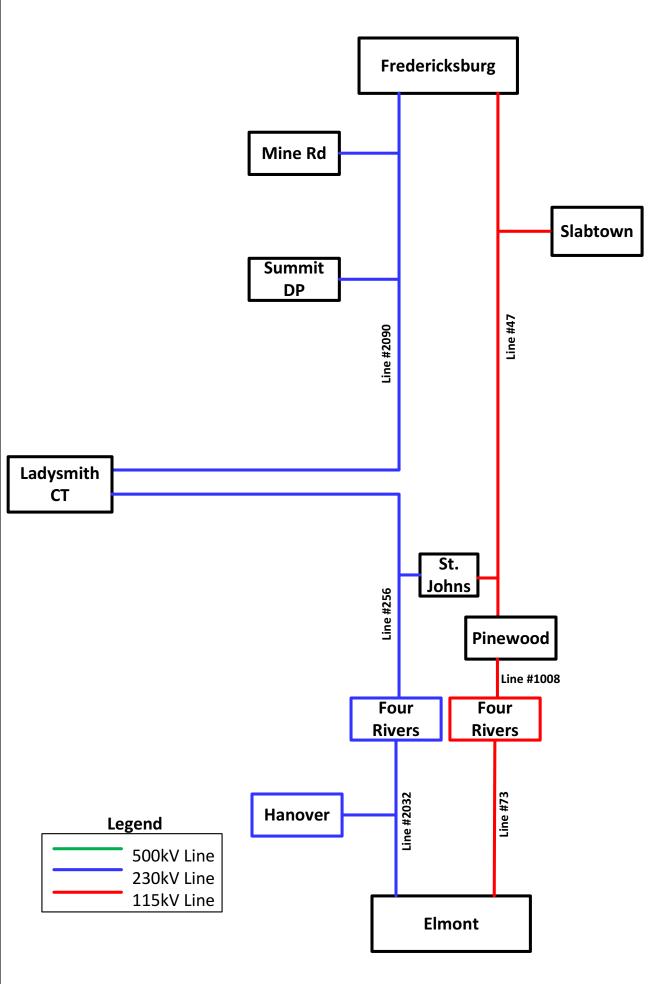


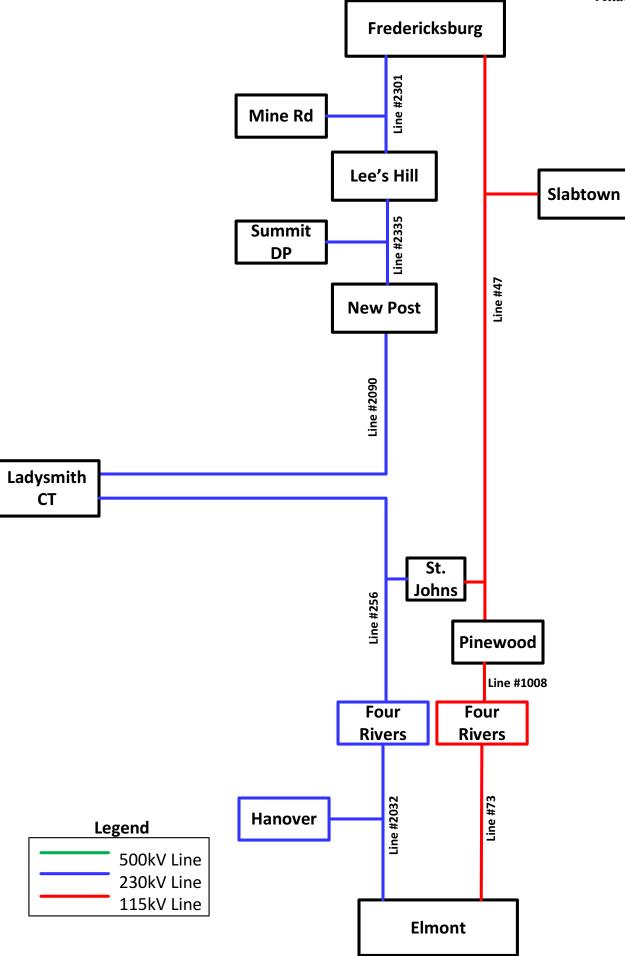
LC Riedhill SpotsyTech Campus | 1" = 200'-0" | 03/17/2023

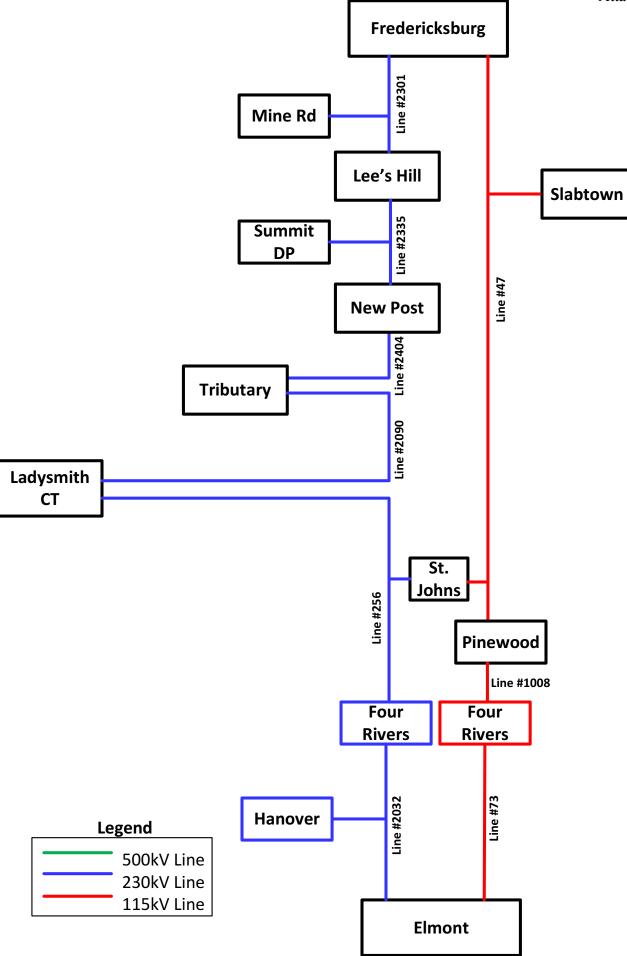
1	Total Building Load	0.45	1.95	30	e	9	0.72	28.13	28.13	28.13	28.13	28.13	28.13	28.13	28.13	28.13	295.29	•
	Q4 (MW)																0	295.29
	Q3 (MW) Q																0	
2032	Q2 (MW) Q															23.44	23,44	
	D (MM) D	-															0	
	Q4 (MW) Q																0	271.85
	og (mm) c															4.69	4.69	
2031	O2 (MW)														23.44		23.44	
	(MM) TO																0	
	Q4 (MW)																0	243.72
0	Q3 (MW)														4.69		4.69	
2030	Q2 (MW)													23.44			23,44	
	(MW) TO																0	
	Q4 (MW)																0	215.59
5702	(MM)											4	4	4.69			8 4.69	
2	Q2 (MW)											23.44	23.44				0 46.88	
	(MM)																0	02
	() Q4 (MW)											4.69	4.69				9.38	164.02
2028	(www) ED (w									23.44	23.44	4	4				46.88 9	
	w) Q2 (MW)									23	23						0 46	
_	(WM) Q1 (MW)																0	107.76
	IW) Q4 (MW)									4.69	4.69						9.38	10
2027	(WM) Q3 (MM)					4	0.48	23.44	23.44								51.36	
	AW) Q2 (MW)	_															0	
	(MM) G1 (MM)					2	0.24										2.24	47.02
	MW) Q41							4.69	4.69								9.38	
2026	(MW) Q3			25.31													25.31	
	t (MW) Q2		1.30		2												3.3	
	ia (MW) Q																0	6.79
	D (MW) EC	0.45	0.65	4.69	H												6'19	
2025	Q2 (MW) C	-																
	QI MNV) Q2 MNV) Q3 MNV) Q4 MNV) Q1 MNV) Q2 MNV) Q3 MNV) Q4 MNV)																	
	Building Use	er Pump	shouse		shouse	shouse											OTAL LOAD:	CUMULATIVE LOAD:
		Sanitary Sewer Pump Station	Manuf/Warehouse	Data Center	Manuf/Warehouse	Manuf/Warehouse	Office	Data Center	Oct-31 Data Center	QUARTERLY TOTAL LOAD:	OMMIN							
	Building Number Initial ISD	Jun-25	Jun-25	0ct-25	0ct-25	Oct-26	Oct-26	Oct-26	Oct-26	0ct-27	0ct-27	Oct-28	Oct-28	0ct-29	Oct-30	0ct-31		
	Building	N/A	01	03	02	04	05	90	07	80	60	10	11	12	13	14		

Note 1: We envision that the highlighted fram would be converted to the existing OH line on Ree 1. Note 2: We examed that, inkloty, the first data center building OH wall be connected to the existing OH line on Ree 1 and use the available brieflying power until the substation condeliner the total pow Note 2: We examed that, inkloty, the first data center building OH wall be connected to the existing OH line on Ree 1 and use the available brieflying power until the substation condeliner the total power on Ree 1.

needed for that building.







B. Detail the engineering justifications for the proposed project (for example, provide narrative to support whether the proposed project is necessary to upgrade or replace an existing facility, to significantly increase system reliability, to connect a new generating station to the Applicant's system, etc.). Describe any known future project(s), including but not limited to generation, transmission, delivery point or retail customer projects, that require the proposed project to be constructed. Verify that the planning studies used to justify the need for the proposed project considered all other generation and transmission facilities impacting the affected load area, including generation and transmission facilities that have not yet been placed into service. Provide a list of those facilities that are not yet in service.

### Response: (1) Engineering Justification for Project

See Section I.A of the Appendix.

### (2) Known Future Projects

The proposed Project is needed to provide requested connection service to REC to serve its customer, the SpotsyTech Campus, a mixed-use technology park which includes a data center, and to maintain reliable service for overall load growth in the area, consistent with NERC Reliability Standards as described in Section I.A. See <u>Attachments I.A.1.a</u> and <u>I.A.1.b</u> for existing and future electric transmission facilities in the affected load area, including the proposed Project, which will serve existing and future customers.

In addition to the proposed Project, the Company received a separate DP request in the vicinity of Ladysmith CT to Fredericksburg corridor for another new switching station, currently referred to as New Post Station. The projected loading at this site will be approximately 462 MW. However, the Company received the DP request for the first 300 MW load as of September 2024. New Post Station will be located within the same load area as the proposed Project, on the west side of the Company's 230 kV Line #2090 near Structure #2090/60, south of REC's existing Summit DP. The need for the New Post Station and tap was presented to PJM during the TEAC meeting on March 7, 2023. See <u>Attachment I.B.1</u>. The solution slide has not been presented to PJM as of September 2024.

Further, the Company received another DP request in the vicinity of the Ladysmith CT to Fredericksburg corridor for a new switching station, currently referred to as Lee's Hill Station. The projected loading at this site will be approximately 800 MW. However, the Company received the DP request for the first 300 MW of load as of September 2024. Lee's Hill Station will be located southwest of REC's existing Slabtown DP. The need for Lee's Hill Station was presented to PJM during the TEAC meeting on December 5, 2023. See <u>Attachment I.B.2</u>. This

Project was presented to PJM under a different name, "Hunters Ridge." The solution slide has not been presented to PJM as of September 2024.

The Company received another DP request near the same transmission corridor near Thornburg, Virginia. This substation is currently referred to as Matta Substation. The projected loading at this site will be approximately 803 MW. However, the Company received the DP request for the first 300 MW of load as of September 2024. This site is located near the intersection of Interstate 95 and State Highway 606. The need for Matta Substation was presented to PJM during the TEAC meeting on March 7, 2023. See <u>Attachment I.B.1</u>. This Project was presented to PJM under a different name, "Orrock." The solution slide has not been presented to PJM as of September 2024.

The Company received another DP request in the same load area for a new substation near the existing REC's St. Johns DP in Caroline County, Virginia. This substation is currently referred to as Ruther Glen Substation. The projected loading at this site will be approximately 548 MW. However, the Company received the DP request for the first 300 MW of load as of September 2024. The need for Ruther Glen Substation was presented to PJM during the TEAC meeting on February 6, 2024. See <u>Attachment I.B.3</u>. The solution slide has not been presented to PJM as of September 2024.

The Company received another DP request in the same load area for a new substation along I-95 at Exit 104, Highway 207 in Caroline County, Virginia. This substation is currently referred to as Carmel Church Substation. The projected loading at this site will be approximately 299 MW. The need for Carmel Church Substation was presented to PJM during the TEAC meeting on December 5, 2023. See <u>Attachment I.B.2</u>. The solution slide has not been presented to PJM as of September 2024.

While future Company projects are located generally within the same load area as the Project, each has its own unique load growth drivers, and as such, these future projects do not "require" the proposed Project to be constructed. These facilities include new substations that will be required to serve other load within the Project area, including parcels which may be developed as data centers. However, due to the future load growth in the area, one or more new transmission sources may be necessary in the future.

### (3) Planning Studies

Dominion Energy Virginia's Electric Transmission Planning group performs planning studies to ensure delivery of bulk power to a continuously changing customer demand under a wide variety of operating conditions. Studies are performed in coordination with the Company's RTO (*i.e.*, PJM) and in accordance with NERC Reliability Standards. In completing these studies, the Company

considered all other known generation and transmission facilities impacting the affected load area.

In order to maintain reliable service to customers and to comply with mandatory NERC Reliability Standards, specifically FAC-001,<sup>13</sup> the Company's FIR document<sup>14</sup> addresses the interconnection requirements of generation, transmission, and electricity end-user facilities. The purpose of the NERC FAC standards is to avoid adverse impacts on reliability by requiring that each TO establish facility connection and performance requirements in accordance with FAC-001, and the TO's and end-users meet and adhere to the established facility connection and performance with FAC-001.<sup>15</sup>

NERC Reliability Standards TPL-001 requirements R2, R5, and R6 require PJM, the Planning Coordinator ("PC") and the TO, to have criteria. PJM's planning criteria outlined in Attachment D of Manual 14B requires the Company, as a TO, to follow NERC and Regional Planning Standards and criteria as well as the TO Standards filed in Dominion Energy Virginia's FERC 715 filings.<sup>16</sup> The Company's FERC 715 filing contains the Dominion Energy Virginia Transmission Planning Criteria in Exhibit A of the FIR document.

The major criteria considered as part of this Project were the following:

- 1) Four breaker ring bus arrangement is required for load interconnections in excess of 100 MW (Company's FIR V21.0, Section 4.3.2);
- Amount of direct-connected load at any substation is limited to 300 MW (Company's Transmission Planning Criteria Attachment 1, Section C.2.8);
- 3) N-1-1 contingencies' load loss is limited to 300 MW (PJM Manual 14B Section 2.3.8, Attachment D, Attachment D-1, Attachment F); and
- 4) Minimum load levels within a 10-year planning horizon for the direct interconnection to existing transmission lines is 30 MW for a 230 kV delivery (Company's FAC-001 Section 4.3, Load Criteria End User).

The Project is being constructed as a double-circuit loop instead of a single circuit tap to comply with Section 4.3.2 of the Company's FIR, which requires a fourbreaker ring bus arrangement for load interconnections in excess of 100 MW.

<sup>&</sup>lt;sup>13</sup> See supra, n. 2.

<sup>&</sup>lt;sup>14</sup> See supra, n. 1.

<sup>&</sup>lt;sup>15</sup> See https://www.nerc.com/pa/Stand/Reliability%20Standards/FAC-002-2.pdf.

<sup>&</sup>lt;sup>16</sup> For additional information related to FERC Form 715, *see <u>https://www.pjm.com/library/request-access/ferc-form-715</u>.* 

### (4) Facilities List

See <u>Attachments I.A.1.a</u> and <u>I.A.1.b</u> for existing and future transmission facilities, which include transmission lines and substations, in the affected area of Spotsylvania, Virginia. See <u>Attachment I.A.4</u> for a one-line diagram of facilities that will be in-service once the Project is completed.

See <u>Attachment I.G.1</u> for existing transmission lines and for existing and proposed facilities. See <u>Attachment II.A.1</u> for a map depicting the Project, including the Proposed Route of the new Line #2404.

Dominion Supplemental Projects

Transmission Expansion Advisory Committee March 7, 2023

TEAC - Dominion Supplemental 03/07/2023



Ч



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



TEAC - Dominion Supplemental 03/07/2023

2

Attachment I.B.1

## Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2023-0016 Process Stage: Need Meeting 03/07/2023 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:

substation (New Post) to serve a data center in Spotsylvania County with a total load in Rappahannock Electric Cooperative (REC) has submitted a DP Request for a new excess of 100 MW. The requested in-service date is 05/01/2025.

Projected 2028 Load	Summer: 248.0 MW
Initial In-Service Load	Summer: 33.0 MW

# TEAC - Dominion Supplemental 03/07/2023



Dominion Energy

16

## Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2023-0023 Process Stage: Need Meeting 03/07/2023 Project Driver: Customer Service

# **Specific Assumption References:**

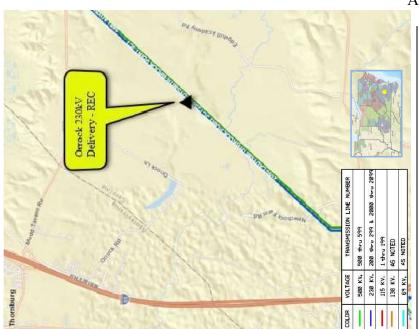
Customer load request will be evaluated per Dominion's Facility Interconnection Requirements Document and Dominion's Transmission Planning Criteria.

## Problem Statement:

Rappahannock Electric Cooperative (REC) has submitted a DP Request for a new substation (Orrock) to serve a data center in Caroline County with a total load in excess of 100 MW. The requested in-service date is 01/01/2026.

Projected 2028 Load	Summer: 116.0 MW
Initial In-Service Load	Summer: 33.0 MW

TEAC - Dominion Supplemental 03/07/2023



Dominion Energy

19

Dominion Supplemental Projects

Transmission Expansion Advisory Committee December 5, 2023

TEAC - Dominion Supplemental 12/05/2023



Ч

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



2

TEAC - Dominion Supplemental 12/05/2023

Dominion Transmission Zone: Supplemental

Need Number: DOM-2023-0053 Hunters Ridge Process Stage: Need Meeting 12/05/2023 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.

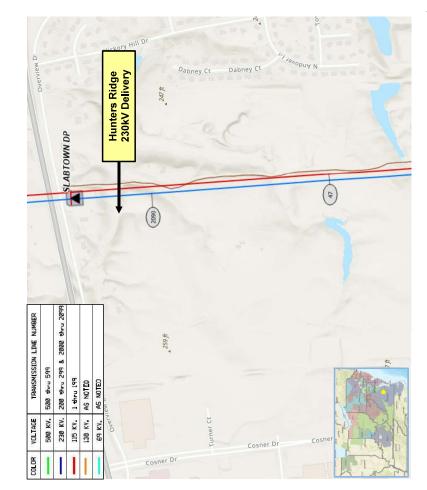
## Problem Statement:

ODEC has submitted a DP request for a new 230 kV delivery point (Hunters Ridge Sub) to serve a data center customer in Spotsylvania County with a total load in excess of 100 MVV. Requested in-service date is 10/01/2025.

Projected 2028 Load	Summer: 300 MW Winter: 300 MW
Initial In-Service Load	Summer: 0 MW Winter: 55 MW

TEAC - Dominion Supplemental 12/05/2023

m



Dominion Energy

Need Number: DOM-2023-0055 Carmel Church Process Stage: Need Meeting 12/05/2023 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.

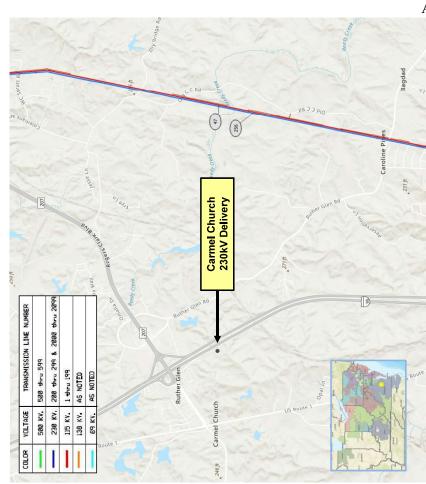
## Problem Statement:

ODEC has submitted a DP request for a new 230 kV delivery point (Carmel Church Sub) to serve a data center customer in Caroline County with a total load in excess of 100 MVV. Requested in-service date is 12/31/2026.

Projected 2028 Load	Summer: 125 MW Winter: 125 MW
Initial In-Service Load	Summer: 0 MW Winter: 18 MW

TEAC - Dominion Supplemental 12/05/2023

# **Dominion Transmission Zone: Supplemental**



Dominion Energy

4

Dominion Supplemental Projects

Transmission Expansion Advisory Committee February 6, 2024

TEAC - Dominion Supplemental 02/06/2024





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



Attachment I.B.3

7

TEAC - Dominion Supplemental 02/06/2024

Need Number: DOM-2024-0012 Process Stage: Need Meeting 02/06/2024 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.

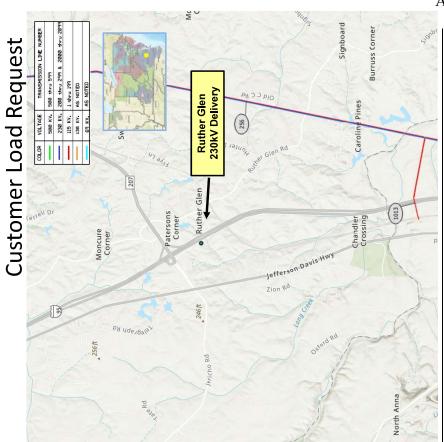
## Problem Statement:

ODEC has submitted a DP request for a new 230 kV delivery point (Ruther Glen) to serve a data center customer in Caroline County VA with a total load in excess of 100 MW. Requested in-service date is 3/02/2026.

Projected 2028 Load	Summer: 300 MW Winter: 300 MW
Initial In-Service Load	Summer: 170 MW Winter: 170 MW

TEAC - Dominion Supplemental 02/06/2024

# Dominion Transmission Zone: Supplemental



Dominion Energy

- C. Describe the present system and detail how the proposed project will effectively satisfy present and projected future electrical load demand requirements. Provide pertinent load growth data (at least five years of historical summer and winter peak demands and ten years of projected summer and winter peak loads where applicable). Provide all assumptions inherent within the projected data and describe why the existing system cannot adequately serve the needs of the Applicant (if that is the case). Indicate the date by which the existing system is projected to be inadequate.
- Response: As presented in <u>Attachment I.G.1</u>, Dominion Energy Virginia's existing utility system in the vicinity of the proposed Project area includes one 230 kV line and one 115 kV line feeding various substations and delivery points from Fredericksburg Substation to Ladysmith CT Station, and from Fredericksburg Substation to Pinewood Substation. This load area is also referred to as Fredericksburg-Ladysmith-Pinewood. <u>Attachment I.G.1</u> shows the portion of Company's transmission facilities in the load area. The area served by substations in Fredericksburg-Ladysmith-Pinewood load area is defined generally as east of Spotsylvania County and west of Caroline County parallelling Interstate 95, which includes the area south of Rappahannock River and north of Bullfield Road. See also <u>Attachment I.A.3</u> for a one-line diagram of the existing area transmission system.

As described previously, there are two existing transmission lines in the corridor in Fredericksburg-Ladysmith-Pinewood load area. The 230 kV Line #2090 runs between Fredericksburg Substation and Ladysmith CT Station for approximately 17.3 miles and the 115 kV Line #47 runs between Fredericksburg Substation and Pinewood Station for approximately 30.8 miles.

Fredericksburg Substation contains one 230-36.5 kV transformer, one 115-36.5 kV transformer, and two 115-13.2 kV transformers to feed a total of approximately 145 MW summer peak load.

Starting from Fredericksburg to the south on the 230 kV line, Mine Road Substation serves the Company's retail customers via two 230-36.5 kV transformers. These transformers feed a total of approximately 79 MW summer peak load. Approximately 2.7 miles further south of the Mine Road Substation, Company is serving REC's DP at Summit DP. Total 2024 summer peak loading at this DP is approximately 35 MW.

There are three major DPs connected to the 115 kV Line #47. Approximately 5.7 miles south of Fredericksburg, the Company serves REC's DP, Slabtown DP in Spotsylvania County. Total 2024 summer peak loading at this DP is approximately 39 MW.

Approximately 9.3 miles south of Slabtown DP, the Company serves another REC DP, Woodpecker DP in Caroline County. Total summer peak loading at this DP is less than 1 MW. About 4.3 miles further south of Woodpecker DP, the Company is serving St. Johns Substation with a 2024 summer peak loading of approximately 6 MW.

Attachment I.A.3 shows the stations and DPs described above.

<u>Attachment I.C.1</u> shows the five-year summer and winter historical loads for the existing stations and DPs in the Fredericksburg-Ladysmith-Pinewood load area. <u>Attachments I.C.2</u> shows the summer and winter projected loads at the same stations and DPs.

۲ د	1;;
Attachment	

		Historical St	Historical Summer Load		
	2019	2020	2021	2022	2023
Fredericksburg	137.4	148	137	138.7	141.3
Mine Road	85.2	93.5	74.9	84.5	86.1
Summit	0	0	18.3	3.8	13.8
Slabtown	36	41	32.7	31	27.5
Woodpecker	0	0	8.3	0.5	0.6
St. Johns	5.7	4.8	0	5.9	6

		Historical Winter Load	/inter Load		
	2019	2020	2021	2022	2023
Fredericksburg	118.2	103.7	100.3	110.4	116.9
Mine Road	85.7	68.8	99	74.5	84
Summit	0	0	0	3.8	11.4
Slabtown	30	26.1	26.3	24.0	23.0
Woodpecker	0	0.4	0.3	0.1	0
St. Johns	10	6.4	6.1	10.3	10.1

				<b>Projected Summer Load</b>	ummer Load					
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Fredericksburg	145.8	148.6	148.6	148.6	152.5	157.1	162.1	162.1	162.1	162.1
Mine Road	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1	86.1
Summit	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2	20.2
Slabtown	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Woodpecker	0.6	9.0	0.6	0.6	9.0	0.6	0.6	0.6	0.6	0.6
St. Johns	9	9	9	9	9	9	9	9	9	9
New Post	0	0	99	99	198	330	462	462	462	462
Lee's Hill	0	0	88	220	450	650	800	800	800	800
Matta	0	0	0	0	93.5	225.5	363	495	627	764.5
Ruther Glen	0	0	0	0	338	338	548	548	548	548
<b>Carmel Church</b>	0	0	0	0	32.6	94.6	149.6	211.6	298.6	298.6

Attachment I.C.2

				Projected V	Projected Winter Load	~				
2024	24	2025	2026	2027	2028	2029	2030	2031	2032	2033
12	120.5	123.5	123.5	127.2	127.2	131.7	131.7	131.7	131.7	131.7
ω	84	84	84	84	84	84	84	84	84	84
1(	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4
	19	19	19	19	19	19	19	19	19	19
	0	0	0	0	0	0	0	0	0	0
1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1	10.1
	0	0	16.5	99	132	264	396	462	462	462
	0	0	17	134	350	550	750	800	800	800
	0	0	0	0	22	159.5	291.5	429	561	693
	0	0	0	0	170	338	338	548	548	548
	0	0	0	0.6	17.6	79.6	124.6	186.6	298.6	298.6

D. If power flow modeling indicates that the existing system is, or will at some future time be, inadequate under certain contingency situations, provide a list of all these contingencies and the associated violations. Describe the critical contingencies including the affected elements and the year and season when the violation(s) is first noted in the planning studies. Provide the applicable computer screenshots of single-line diagrams from power flow simulations depicting the circuits and substations experiencing thermal overloads and voltage violations during the critical contingencies described above.

### E. Describe the feasible project alternatives, if any, considered for meeting the identified need including any associated studies conducted by the Applicant or analysis provided to the RTO. Explain why each alternative was rejected.

Response: The Company evaluated the following transmission electrical alternative to the Project. No Dominion Energy Virginia distribution alternatives to the proposed Project were considered because the Project is needed to respond to a DP request from REC within the cooperative's service territory.

### **Transmission Electrical Alternative**

As explained in Section I.A, there is one 230 kV Line #2090 (Fredericksburg – Ladysmith CT) and one 115 kV Line #47 (Fredericksburg – Pinewood) in the closest transmission corridor to the Tributary Station. The 115 kV Line #47 is not capable of supporting the data center load growth in the area. To support the load growth in the area, the existing 115kV Line #47 will likely be converted to a 230kV transmission line in the future.

### **Analysis of Demand-Side Resources:**

Pursuant to the Commission's November 26, 2013, Order entered in Case No. PUE-2012-00029, and its November 1, 2018, Final Order entered in Case No. PUR-2018-00075 ("2018 Final Order"), the Company is required to provide analysis of demand-side resources ("DSM") incorporated into the Company's planning studies. DSM is the broad term that includes both energy efficiency ("EE") and demand response ("DR"). In this case, PJM and the Company have identified a need for the proposed Project in order to provide requested service to a customer of REC and comply with mandatory NERC Reliability Standards, while maintaining the overall long-term reliability of its transmission system.<sup>17</sup> Notwithstanding, when performing an analysis based on PJM's 50/50 load forecast, there is no adjustment in load for DR programs because PJM only dispatches DR when the system is under stress (*i.e.*, a system emergency). Accordingly, while existing DSM is considered to the extent the load forecast accounts for it, DR that has been bid previously into PJM's capacity market is not a factor in this particular application because of the identified need for the Project. Based on these considerations, the evaluation of the Project demonstrated that despite accounting for DSM consistent with PJM's methods, the Project is necessary.

Incremental DSM also will not resolve the need for the Project. As discussed in Sections I.A and I.C, the need for the proposed Project is based on the Company's

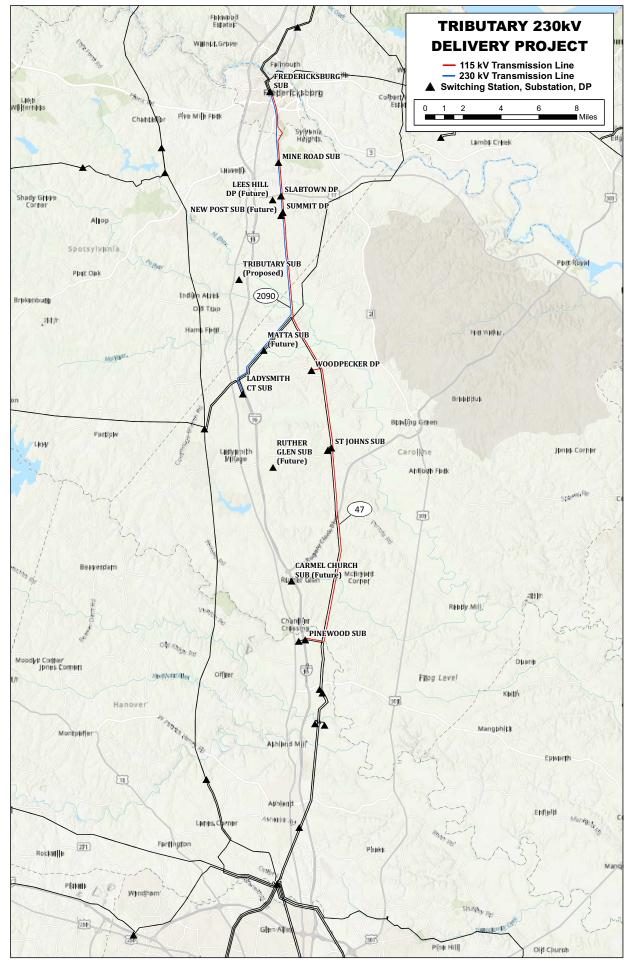
<sup>&</sup>lt;sup>17</sup> While the PJM load forecast does not directly incorporate DR, its load forecast incorporates variables derived from Itron that reflect EE by modeling the stock of end-use equipment and its usages. Further, because P JM's load forecast considers the historical non-coincident peak ("NCP") for each load serving entity ("LSE") within PJM, it reflects the actual load reductions achieved by DSM programs to the extent an LSE has used DSM to reduce its NCPs.

obligation to interconnect REC's customer, SpotsyTech Campus, consistent with the Company's FIR and mandatory NERC Reliability Standards. As reflected in Section I.A, REC's ultimate projected load will be approximately 295 MW. By way of comparison, statewide, the Company achieved demand savings of 276.5 MW (net) / 350.0 MW (gross) from its DSM programs in 2023. More importantly, the Company's DSM programs will not impact the load of REC's customers. Accordingly, because the Project is necessary to provide service to a REC customer, the Company's DSM programs will not obviate the need for the Project.

F. Describe any lines or facilities that will be removed, replaced, or taken out of service upon completion of the proposed project, including the number of circuits and normal and emergency ratings of the facilities.

G. Provide a system map, in color and of suitable scale, showing the location and voltage of the Applicant's transmission lines, substations, generating facilities, etc., that would affect or be affected by the new transmission line and are relevant to the necessity for the proposed line. Clearly label on this map all points referenced in the necessity statement.

Response: See <u>Attachment I.G.1</u>.



### H. Provide the desired in-service date of the proposed project and the estimated construction time.

The desired in-service target date for the Project is April 1, 2027. The Company Response: estimates it will take approximately 21 months after a final order from the Commission for detailed engineering, materials procurement, permitting, real estate, and construction of the Project. Accordingly, to support this estimated construction timeline and construction plan, the Company respectfully requests a final order by July 1, 2025. Should the Commission issue a final order by July 1, 2025, the Company estimates that construction should begin in Spring of 2026, with the Project to be completed by the in-service target date of April 1, 2027. This schedule is contingent upon obtaining the necessary permits and careful coordination of outages, the latter of which may be particularly challenging due to the amount of new load growth, rebuilds, and new builds scheduled to occur in this load area. Dates may need to be adjusted based on permitting delays or design modifications to comply with additional agency requirements identified during the permitting application process, as well as the ability to schedule outages, and unpredictable delays due labor shortages or materials/supply issues. Based on the Project's complexity, there may be delays with procurement of materials.

Any adjustments to the Project schedule resulting from these or similar challenges could necessitate a minimum of a six- to twelve-month delay in the targeted inservice date. Accordingly, for purposes of judicial economy, the Company requests that the Commission issue a final order approving both a desired inservice target date (*i.e.*, April 1, 2027) and an authorization sunset date (*i.e.*, April 1, 2028) for energization of the Project.

In addition, the Company is actively monitoring regulatory changes and requirements associated with the Northern Long Eared Bat ("NLEB") and how it could potentially impact construction timing associated with time of year restrictions ("TOYRs"). The U.S. Fish and Wildlife Service ("USFWS") previously indicated that it planned to issue final NLEB guidance to replace the interim guidance by April 1, 2024; however, the interim guidance has been extended by USFWS until late summer 2024. In the meantime, the USFWS issued several draft guidance documents for public review and comment. The Company actively is tracking updates from the USFWS with respect to the final guidance. Once issued, the Company plans to review and follow the final guidance to the extent it applies to the Company's projects. Until the final guidance is issued, the Company will continue following the interim guidance. For projects that may require additional coordination, the Company will coordinate with the USFWS.

The Company is also continuing to track potential regulatory changes associated with the potential up-listing of the Tricolored bat ("TCB"). On September 14, 2022, the USFWS published the proposed rule to the Federal Register to list the TCB as endangered under the Endangered Species Act ("ESA"). On April 1, 2024,

the USFWS issued draft guidance for the NLEB and TCB for public review and comment. The USFWS also recently extended its Final Rule issuance target from September 2023 to September 2024. The Company is actively tracking this ruling and evaluating the effects of potential outcomes on Company projects' permitting, construction, and in-service dates, including electric transmission projects.

- I. Provide the estimated total cost of the project as well as total transmissionrelated costs and total substation-related costs. Provide the total estimated cost for each feasible alternative considered. Identify and describe the cost classification (e.g., "conceptual cost," "detailed cost," etc.) for each cost provided.
- Response: The estimated conceptual cost of the proposed Project along the Proposed Route is approximately \$20.6 million for the transmission-related work and \$11.7 million in station-related costs (2024 dollars).

The estimated conceptual costs for the transmission-related work associated with the Alternative Routes 3 and 4 are provided in Section II.A.9.

- J. If the proposed project has been approved by the RTO, provide the line number, regional transmission expansion plan number, cost responsibility assignments, and cost allocation methodology. State whether the proposed project is considered to be a baseline or supplemental project.
- Response: The Project is classified as a supplemental project initiated by the TO to interconnect REC's customer, the SpotsyTech Campus. PJM does not approve supplemental projects. The Project's "Need" slide was presented to PJM on February 6, 2024, see <u>Attachments I.J.1</u>. This Project was presented with the name "Riverview" during the TEAC meeting. The Company plans to present the "Solution" slide to PJM by November 2024.

The Project is presently 100% cost allocated to DOM Zone.

Dominion Supplemental Projects

Transmission Expansion Advisory Committee February 6, 2024

TEAC - Dominion Supplemental 02/06/2024

Ч

Dominion Energy 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



# TEAC - Dominion Supplemental 02/06/2024

Attachment I.J.1

7

## Dominion Transmission Zone: Supplemental Customer Load Request

Need Number: DOM-2024-0009 Process Stage: Need Meeting 02/06/2024 Project Driver: Customer Service

# Specific Assumption References:

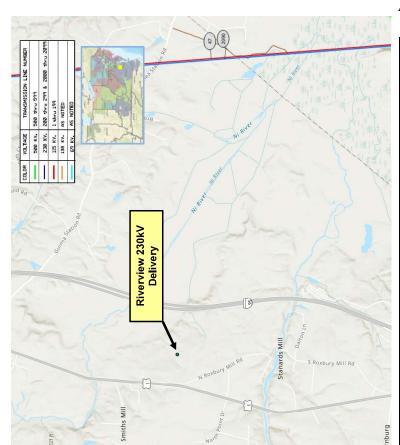
Customer load request will be evaluated per Dominion's Facility Interconnection Requirements Document and Dominion's Transmission Planning Criteria.

## Problem Statement:

ODEC has submitted a DP request for a new 230 kV delivery point (Riverview) to serve a data center customer in Spotsylvania VA with a total load in excess of 100 MW. Requested in-service date is 5/31/2025.

Projected 2028 Load	Summer: 108 MW Winter: 108 MW
Initial In-Service Load	Summer: 7 MW Winter: 0 MW

TEAC - Dominion Supplemental 02/06/2024



Dominion Energy

K. If the need for the proposed project is due in part to reliability issues and the proposed project is a rebuild of an existing transmission line(s), provide five years of outage history for the line(s), including for each outage the cause, duration and number of customers affected. Include a summary of the average annual number and duration of outages. Provide the average annual number and duration of outages on all Applicant circuits of the same voltage, as well as the total number of such circuits. In addition to outage history, provide five years of maintenance history on the line(s) to be rebuilt including a description of the work performed as well as the cost to complete the maintenance. Describe any system work already undertaken to address this outage history.

L. If the need for the proposed project is due in part to deterioration of structures and associated equipment, provide representative photographs and inspection records detailing their condition.

- M. In addition to the other information required by these guidelines, applications for approval to construct facilities and transmission lines interconnecting a Non-Utility Generator ("NUG") and a utility shall include the following information:
  - 1. The full name of the NUG as it appears in its contract with the utility and the dates of initial contract and any amendments;
  - 2. A description of the arrangements for financing the facilities, including information on the allocation of costs between the utility and the NUG;
  - 3. a. For Qualifying Facilities ("QFs") certificated by Federal Energy Regulatory Commission ("FERC") order, provide the QF or docket number, the dates of all certification or recertification orders, and the citation to FERC Reports, if available;
    - b. For self-certificated QFs, provide a copy of the notice filed with FERC;
  - 4. Provide the project number and project name used by FERC in licensing hydroelectric projects; also provide the dates of all orders and citations to FERC Reports, if available; and
  - 5. If the name provided in 1 above differs from the name provided in 3 above, give a full explanation.

- N. Describe the proposed and existing generating sources, distribution circuits or load centers planned to be served by all new substations, switching stations and other ground facilities associated with the proposed project.
- Response: As part of the Project, the Tributary Station will provide interconnection to REC's customer, the SpotsyTech Campus, a mixed-use technology park as described in Section I.C. See <u>Attachments I.A.1.a</u> and <u>I.A.1.b</u>. The Tributary Station may also be used to support future load growth in the area.

### II. DESCRIPTION OF THE PROPOSED PROJECT

### A. Right-of-way ("ROW")

### 1. Provide the length of the proposed corridor and viable alternatives.

Response: The approximate lengths of the Project's Proposed and Alternative Routes<sup>18</sup> are as follows:

Proposed Route: 2.4 miles

Alternative Route 3: 2.8 miles

Alternative Route 4: 3.0 miles

See Section II.A.9 for an explanation of the Company's route selection process, as well as the Routing Study referenced therein. Also, see <u>Attachment II.A.1</u> for an overview of Proposed and Alternative Routes.

<sup>&</sup>lt;sup>18</sup> To minimize confusion, the Alternative Routes are numbered as presented to the public and other stakeholders during the outreach process described in Section III.