Line 576 Partial Rebuild - North Anna to Vontay

General Information

Proposing entity name	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Company proposal ID	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
PJM Proposal ID	339
Project title	Line 576 Partial Rebuild - North Anna to Vontay
Project description	Rebuild 500 kV line 576 from North Anna Substation to Vontay Substation using 6,000A, 500 kV conductor. Line 576 will cut-in to the new Vontay substation in a different proposal. Upgrade/install 6000A equipment at substations to support the new conductor termination.
Email	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Project in-service date	06/2032
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.

Project Components

1. Line 576 Rebuild - North Anna to Vontay
2. North Anna Equipment Upgrade

Transmission Line Upgrade Component

Component title	Line 576 Rebuild - North Anna to Vontay

Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Impacted transmission line	Line 576
Point A	North Anna
Point B	Vontay
Point C	
Terrain description	The project area is in the central Virginia Piedmont region with elevations ranging from approximately 130 to 260 feet. The terrain is predominately vegetated existing right-of-way with several areas of dense residential development consisting of minimal slopes. The line will include rebuilt crossings of Interstate 64, Jefferson Highway (Route 33), Midlothian Turnpike (Route 60), CSX railroads, Lake Anna, the James River, and the Little River. The line starts in Louisa County and runs through Hanover County, Goochland County, and Powhatan County, and terminates in Chesterfield County.
Existing Line Physical Characteristics	
Operating voltage	500
Conductor size and type	2-2500 ACAR (84/7) 90°C MOT
Hardware plan description	New hardware will be used for line rebuild.
Tower line characteristics	Existing Structures will be removed and new structures will be used for this rebuild.
Proposed Line Characteristics	

	Designed	Operating
Voltage (kV)	500.000000	500.000000
	Normal ratings	Emergency ratings
Summer (MVA)	5109.000000	5268.000000
Winter (MVA)	5691.000000	5867.000000
Conductor size and type	3-1351 ACSS/TW/HS285 145° C MOT	

Shield wire size and type	(2) DNO-10110 OPGW wire
Rebuild line length	20 Miles
Rebuild portion description	EXISTING FACILITIES TO BE REMOVED: 1. Remove two (2) existing single circuit 5DE tower structures. 2. Remove existing single circuit 5HA tower structures. 3. Remove existing single circuit 5HT tower structures. 4. Remove existing single circuit 5LA tower structures. 5. Remove existing single circuit 5LT tower structures. 6. Remove existing single circuit 5MA tower structures. 7. Remove existing single circuit 5MT tower structures. 8. Remove one (1) existing single circuit 2-pole H-frame structures. 9. Remove approximately 20 miles of 2-2500 ACAR (84/7) conductor. 10. Remove approximately 20 miles of two (2) fiber optic GW 45/45 MM2 614. PERMANENT FACILITIES TO BE INSTALLED: 1. Install 500kV 5-2 KT Tower on foundations. 2. Install 500kV 5-2 MA Tower on foundations. 3. Install 500/230kV 3 Pole Steel DC DDE Heavy Angle on foundations. 4. Install 500/230kV 3 Pole Steel DC DDE Small/Medium Angle on foundations. 5. Install approximately 20 miles of two (2) DNO-10100 OPGW wire. 6. Install approximately 20 miles of three 3-phase 3-1351 ACSS conductor.
Right of way	Existing Right-of-Way shall be used.
Construction responsibility	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Benefits/Comments	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Component Cost Details - In Current Year $	
Engineering & design	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Permitting / routing / siting	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
ROW / land acquisition	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Materials & equipment	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Construction & commissioning	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Construction management	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Overheads & miscellaneous costs	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Contingency	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Total component cost	$102,700,058.00

Component cost (in-service year)	$109,991,762.00

Substation Upgrade Component

Component title	North Anna Equipment Upgrade
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Substation name	North Anna
Substation zone	345
Substation upgrade scope	Replace four (4) 500kV, 3000 A Double End Break switches with 6000A switches. Replace/install associated equipment including CCVTs, wave traps and relay equipment.

Transformer Information

None

New equipment description	Replace four (4) 500kV, 6000 A Double End Break switches
Substation assumptions	1. The scope of work assumes that there is no overlap with other designs and construction activities, except if mentioned in this Project Summary. 2. Pad connections must be replaced to maintain 6000A ratings. 3. Relay Settings and P&C design will be revised as part of the SPE Scope of Work.
Real-estate description	No additional real estate needed
Construction responsibility	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Benefits/Comments	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.

Component Cost Details - In Current Year $

Engineering & design	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Permitting / routing / siting	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
ROW / land acquisition	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Materials & equipment	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Construction & commissioning	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.

Construction management	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Overheads & miscellaneous costs	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Contingency	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Total component cost	$2,158,171.20
Component cost (in-service year)	$2,311,401.00

Congestion Drivers

None

Existing Flowgates

None

New Flowgates

The redacted information is proprietary to the Company; therefore, it is privileged and confidential.

Financial Information

Capital spend start date	01/2026
Construction start date	06/2029
Project Duration (In Months)	77

Cost Containment Commitment

Cost cap (in current year)	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Cost cap (in-service year)	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.

Components covered by cost containment

1. Line 576 Rebuild - North Anna to Vontay - Dominion
2. North Anna Equipment Upgrade - Dominion

Cost elements covered by cost containment

Engineering & design	Yes
Permitting / routing / siting	No
ROW / land acquisition	No
Materials & equipment	No
Construction & commissioning	No
Construction management	No
Overheads & miscellaneous costs	No
Taxes	No
AFUDC	No
Escalation	No
Additional Information	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Is the proposer offering a binding cap on ROE?	Yes
Would this ROE cap apply to the determination of AFUDC?	Yes
Would the proposer seek to increase the proposed ROE if FERC finds that a higher ROE would not be unreasonable?	No
Is the proposer offering a Debt to Equity Ratio cap?	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.

Additional Comments

None