New 500kV Line - Skiffes Creek to Chickahominy

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	557
Project title	New 500kV Line - Skiffes Creek to Chickahominy
Project description	Construct a new 500kV transmission line from Skiffes Creek to Chickahominy (approximately 50 miles in length) using 6000A conductor. At Skiffes Creek, expand the station by adding an additional 500kV breaker row in a double breaker double bus arrangement to facilitate termination of the new line. At Chickahominy, install one 500kV breaker into an open breaker bay in the existing 500kV three breaker ring.
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. New 500 kV Line - Skiffes Creek to Chickahominy
2. Skiffes Creek Substation Expansion
3. Chickahominy Substation Equipment Upgrade

Greenfield Transmission Line Component

Component title	New 500 kV Line - Skiffes Creek to Chickahominy	
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.	
Point A	Skiffes Creek	
Point B	Chickahominy	
Point C		
	Normal ratings	Emergency ratings
Summer (MVA)	4357.000000	4357.000000
Winter (MVA)	5155.000000	5155.000000
Conductor size and type	3-1351.5 ACSS/TW/HS285 145°C MOT	
Nominal voltage	AC	
Nominal voltage	500	
Line construction type	Overhead	
General route description	Refer the KMZ and supporting documents for evaluation of Route.	
Terrain description	This project is approximately50 miles long through the Coastal Plains Region, traversing . The area is mostly rural with some suburban development. There are significant wetland areas including a crossing over Little Creek Reservoir. The route crosses several sets of railroad tracks and several major arterial roads. . There are elevation changes along the route, the highest being approximately 165 feet and the lowest being approximately 11 feet.	
Right-of-way width by segment	The Skiffes Creek to Chickahominy 500kV line will have 150 feet of right-of-way for 36.51 miles.	
Electrical transmission infrastructure crossings	To be determined in detailed design	
Civil infrastructure/major waterway facility crossing plan	Refer to the attached Real Estate and Permitting Summary	
Environmental impacts	Refer to the attached Real Estate and Permitting Summary	

Tower characteristics	Permanent Facilities to be Installed 1. (155) 500kV-230kV 5-2kT Suspension Towers 2. (26) 500kV-230kV 3-Pole Deadends 3. 36.51 miles of 3-1351 ACSS/TW/HS285 Conductor 4. 36.51 miles of 2 DNO-10100 OPGW Modifications: 1. Install a total of six (6) 500kV conductor strain assemblies as follows: a. Three (3) each on 557/226 and 582/44 b. See figure 1 for reference drawing 35.252 2. Install a total of four (4) OPGW strain assemblies as follows: a. Two (2) each on 557/226 and 582/44 b. See figure 2 for reference drawing 96.061
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	$283,331,290.00
Component cost (in-service year)	$303,447,812.00

Substation Upgrade Component

Component title	Skiffes Creek Substation Expansion
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Substation name	Skiffes Creek
Substation zone	345

Substation upgrade scope	Purchase & Install Substation Material: 1. Two (2), 500kV, 63kAIC, 5000A, SF6 Circuit Breakers. 2. Four (4), 500kV, 5000A Double End Break Switches. 3. Three (3), 396kV, 318kV MCOV Station Class Surge Arresters. 4. Three (3), 500kV, Coupling Capacitor Voltage Transformers. 5. Approximately 425 FT of 6 in. Sch. 80 AL tube bus. 6. Conductor, connectors, conduit, control cable, foundations, steel structures, and grounding material as necessary per engineering standards. Remove Substation Material: 1. Two (2), 500kV, 4000A Double End Break Switches. 2. Approximately 350 FT of 6 in. Sch. 40 AL tube bus. 3. Conductor, connectors, conduit, control cable, foundations, steel structures, and grounding material as necessary per engineering standards. Purchase & Install Relay Material: 1. Two (2), 4510 - SEL-2411 Equipment Annunciator 2. Two (2), 1510 – Dual SEL-351 Transmission Breaker w/ Reclosing Panel 3. Two (2), 1515 – Dual 500kV SEL-351 Transmission Breaker w/ Reclosing Panel 4. Two (2), 4535 or 4536 – 500kV Circuit Breaker Condition Monitor 5. One (1), 1340 – Dual SEL-411L DCB/Fiber, CD/Fiber Line Panel (500kV w/ 2 Fiber Cables) 6. One (1), 4506 – 3Ø CCVT Potential Makeup Box 7. Two (2), 4526_D – C.B. w/ BCM Fiber Optic Makeup Box

Transformer Information

None

New equipment description	1. Two (2), 500kV, 63kAIC, 5000A, SF6 Circuit Breakers. 2. Four (4), 500kV, 5000A Double End Break Switches. 3. Three (3), 396kV, 318kV MCOV Station Class Surge Arresters. 4. Three (3), 500kV, Coupling Capacitor Voltage Transformers. 5. Two (2), 4510 - SEL-2411 Equipment Annunciator 6. Two (2), 1510 – Dual SEL-351 Transmission Breaker w/ Reclosing Panel 7. Two (2), 1515 – Dual 500kV SEL-351 Transmission Breaker w/ Reclosing Panel 8. Two (2), 4535 or 4536 – 500kV Circuit Breaker Condition Monitor
Substation assumptions	1. The scope of work depicted on the drawings assumes that there is no overlap with other designs and construction activities, except if mentioned in this Project Summary. 2. 4-hole pad connections must be replaced with 6-hole pad connections to maintain 5000A ratings. 3. Relay Settings and P&C design will be revised as part of the SPE Scope of Work. 4. It was determined that the GA would not need any additional equipment relocation thus it has been omitted from the submittal.
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	$5,190,950.90
Component cost (in-service year)	$5,559,508.52

Substation Upgrade Component

Component title	Chickahominy Substation Equipment Upgrade
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Substation name	Chickahominy
Substation zone	345
Substation upgrade scope	Purchase & Install Substation Material: 1. Two (2), 500kV, 63kAIC, 5000A, SF6 Circuit Breakers. 2. Two (2), 500kV, 5000A Double End Break Switches. 3. Three (3), 396kV, 318kV MCOV Station Class Surge Arresters. 4. Five (5), 500kV, Coupling Capacitor Voltage Transformers. 5. Approximately 150 FT of 6 in. Sch. 80 AL tube bus. 6. Conductor, connectors, conduit, control cable, foundations, steel structures, and grounding material as necessary per engineering standards. Reuse Substation Material: 1. One (1), 500kV, Coupling Capacitor Voltage Transformer. 2. Approximately 150 FT of 6 in. Sch. 80 AL tube bus. Remove Substation Material: 1. Approximately 300 FT of 6 in. Sch. 80 AL tube bus. 2. Conductor, connectors, conduit, control cable, foundations, steel structures, and grounding material as necessary per engineering standards. Purchase & Install Relay Material: 1. Two (2), 4510 - SEL-2411 Equipment Annunciator 2. Two (2), 1510 – Dual SEL-351 Transmission Breaker w/ Reclosing Panel 3. Two (2), 1515 – Dual 500kV SEL-351 Transmission Breaker w/ Reclosing Panel 4. Two (2), 4535 or 4536 – 500kV Circuit Breaker Condition Monitor 5. One (1), 1340 – Dual SEL-411L DCB/Fiber, CD/Fiber Line Panel (500kV w/ 2 Fiber Cables) 6. Two (2), 4506 – 3Ø CCVT Potential Makeup Box 7. Two (2), 4526_D – C.B. w/ BCM Fiber Optic Makeup Box

Transformer Information

None

New equipment description	1. Two (2), 500kV, 63kAIC, 5000A, SF6 Circuit Breakers. 2. Two (2), 500kV, 5000A Double End Break Switches. 3. Three (3), 396kV, 318kV MCOV Station Class Surge Arresters. 4. Five (5), 500kV, Coupling Capacitor Voltage Transformers. 5. Two (2), 4510 - SEL-2411 Equipment Annunciator 6. Two (2), 1510 – Dual SEL-351 Transmission Breaker w/ Reclosing Panel 7. Two (2), 1515 – Dual 500kV SEL-351 Transmission Breaker w/ Reclosing Panel 8. Two (2), 4535 or 4536 – 500kV Circuit Breaker Condition Monitor 9. One (1), 1340 – Dual SEL-411L DCB/Fiber, CD/Fiber Line Panel (500kV w/ 2 Fiber Cables) 10. Two (2), 4506 – 3Ø CCVT Potential Makeup Box 11. Two (2), 4526_D – C.B. w/ BCM Fiber Optic Makeup Box
Substation assumptions	1. The scope of work depicted on the drawings assumes that there is no overlap with other designs and construction activities, except if mentioned in this Project Summary. 2. 4-hole pad connections must be replaced with 6-hole pad connections to maintain 5000A ratings. 3. Relay Settings and P&C design will be revised as part of the SPE Scope of Work. 4. It was determined that the GA would not need any additional equipment relocation thus it has been omitted from the submittal
Real-estate description	N/A
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	$4,371,795.50

Component cost (in-service year)	$4,371,795.00

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. New 500 kV Line - Skiffes Creek to Chickahominy - Dominion
2. Skiffes Creek Substation Expansion - Dominion
3. Chickahominy Substation 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