Line 85 Uprate (Lanexa to West Point) & Northern Neck Transformer Upgrade

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	338
Project title	Line 85 Uprate (Lanexa to West Point) & Northern Neck Transformer Upgrade
Project description	This project serves to partially rebuild and partially uprate existing 115kV line 85 from Lanexa Substation to West Point Substation in New Kent and King William Counties, VA. Install cooling radiator as needed at Northern Neck Transformer #6 to match the rating of Northern Neck Transformer #4 - 195/202/219 MVA (SN/SE/SLD) at 37°C/100°F.
Email	The redacted information is proprietary to the Company; therefore, it is privileged and confidential
Project in-service date	11/2028
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	The redacted information is proprietary to the Company; therefore, it is privileged and confidential
Project Components	
1. Line 85 Rebuild/Resag (Lanexa to West Point)	
2. Lanexa 115kV Substation Terminal Equipment Upgrade	

- 3. Goalders Creek 115kV Substation Relay Reset
- 4. Norther Neck Substation Transformer 6 Radiators

Transmission Line Upgrade Component

Component title	Line 85 Rebuild/Resag (Lanexa to West Point)				
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential				
Impacted transmission line	Line 85				
Point A	Lanexa				
Point B	Owl Trap				
Point C					
Terrain description	The project is in the Coastal Plains region, specifically New Kent County and a portion of King William County. The area is mostly rural. There are several crossings of The Diascund Reservoir, a major crossing over the Pamunkey River and numerous wetland areas. There are elevation changes along the route with the highest being approximately 152 feet and the lowest being approximately 6 feet.				
Existing Line Physical Characteristics					
Operating voltage	115				
Conductor size and type	(1) 1033.5 ACSS (45/7) "Ortolan" conductor				
Hardware plan description	This upgrade will require replacing the existing bolted hardware with compression-type assemblies				
Tower line characteristics	The existing line consists mainly of weathering steel double circuit H-frame structures built in 1979 and weathering steel double circuit towers built in 1969 in the rebuild section.				
Proposed Line Characteristics					
	Designed	Operating			
Voltage (kV)	115.000000	115.000000			
	Normal ratings	Emergency ratings			
Summer (MVA)	341.000000	341.000000			
Winter (MVA)	382.000000	382.000000			

Conductor size and type Shield wire size and type Rebuild line length Rebuild portion description Right of way Construction responsibility **Benefits/Comments** Component Cost Details - In Current Year \$ Engineering & design Permitting / routing / siting ROW / land acquisition Materials & equipment Construction & commissioning Construction management Overheads & miscellaneous costs Contingency Total component cost Component cost (in-service year) Substation Upgrade Component Component title Project description

1-768.2 ACSS/TW(20/7) 250°C MOT

(2) DNO-10410 Optical Ground wire

1.04

Refer to "993539 - Line 85 Rebuild - Scope & One Lines" for complete description.

The proposed work requires no additional land and will all be completed within the existing right of way.

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Lanexa 115kV Substation Terminal Equipment Upgrade

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Substation name	Lanexa
Substation zone	345
Substation upgrade scope	Purchase & Install Substation Material: 1. One (1), 115KV Wave Trap 2. One (1) 115KV Coupling Capacitor Voltage Transformer. 3. Conductors, connectors, insulators, control cables, foundations, steel structures, and grounding connections as per engineering standards. Retire Substation Material: 1. One (1), 115kV, Single phase Coupling Capacitor Voltage Transformer due to aging. 2. One (1), 115kV, 1600A, Wave Trap. Purchase & Install Relay Material: 1. Relay reset only.
Transformer Information	
None	
New equipment description	1. One (1), 115KV Wave Trap 2. One (1) 115KV Coupling Capacitor Voltage Transformer.
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. Relay Settings and P&C design will be revised as part of the SPE Scope of Work.
Real-estate description	Substation is not being expanded.
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	\$252,776.40
Component cost (in-service year)	\$270,723.10
Substation Upgrade Component	
Component title	Goalders Creek 115kV Substation Relay Reset
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential
Substation name	Goalders Creek
Substation zone	345
Substation upgrade scope	Purchase & Install Relay Material: 1. Relay Reset Only.
Transformer Information	
None	
New equipment description	None
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. Relay Settings and P&C design will be revised as part of the SPE Scope of Work
Real-estate description	Substation is not being expanded.
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 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	\$20,108.20
Component cost (in-service year)	\$21,535.67
Substation Upgrade Component	
Component title	Norther Neck Substation - Transformer 6 Radiators
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential
Substation name	Northern Neck
Substation zone	345
Substation upgrade scope	1. Replacement of all 8 radiators on Transformer #6. 2. Evaluation and potential modification of the oil conservator tank to accommodate an additional 500 liters of oil. 3. Structural reinforcements such as additional bracing due to increased weight. 4. Potential modifications to the COPS tank or oil containment system, pending engineering review.
Transformer Information	
None	
New equipment description	1. Eight (8), Cooling Radiators 2. Approximately Five Hundred (500) Liters of Transformer Oil 3. Structural Bracing Components as Required 4. Containment Modification Material as Required
Substation assumptions	None
Real-estate description	Substation is not being expanded.
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	\$500,000.00
Component cost (in-service year)	\$535,500.00
Congestion Drivers	

None

Existing Flowgates

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
2025W1-ME2	314188	3WEST PT	314387	3LANEXA	1	115	345	Market Efficiency	Included

New Flowgates

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Financial Information

Capital spend start date	10/2025
Construction start date	11/2027
Project Duration (In Months)	37

Additional Comments

The project is in the Coastal Plains region, specifically New Kent County and a portion of King William County. There are several crossings of The Diascund Reservoir, a major crossing over the Pamunkey River and numerous wetland areas. These are the main reasons for the relatively high cost estimate.