

Line #2213 Reconductor - Cabin Run to Yardley Ridge - Full Reconductor

General Information

Proposing entity name	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	134
Project title	Line #2213 Reconductor - Cabin Run to Yardley Ridge - Full Reconductor
Project description	Proposal C-2 increases the ampacity of Line 2213 between Cabin Run to Yardley Ridge to a summer rating of 1574 MVA by fully reconductoring the line and upgrading the line leads at Yardley Ridge.
Project in-service date	06/2025
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. Uprate line segment from Cabin Run to Yardley Ridge - Full reconductor
2. Yardley Ridge Terminal Equipment
3. Cabin Run Substation relay resets

Transmission Line Upgrade Component

Component title	Uprate line segment from Cabin Run to Yardley Ridge - Full reconductor
Impacted transmission line	Line #2213 - Cabin Run to Yardley Ridge
Point A	Cabin Run

Point B	Yardley Ridge	
Point C		
Terrain description	The project area is in the northern Virginia Piedmont region with elevations ranging from approximately 250 to 300 feet. The line will cross two primary roads. The terrain is predominately forested/vegetated existing right-of-way consisting of moderate slopes.	
Existing Line Physical Characteristics		
Operating voltage	230 kV	
Conductor size and type	2-636 ACSR (24/7) 150 Deg C and 2-795 ACSR (26/7) 150 Dec C and 2-768.2 ACSS/TW 250 deg C	
Hardware plan description	Existing line hardware will not be reused.	
Tower line characteristics	Existing structures for this transmission line are ten years old or less and do not need to be replaced as part of the reconductor project.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1574.000000	1574.000000
Winter (MVA)	1650.000000	1650.000000
Conductor size and type	2-768.2 ACSS/TW 250 deg C MOT	
Shield wire size and type	Shield wire unchanged	
Rebuild line length	1.36 miles (Reconductor)	

Rebuild portion description	Reconductor scope includes: 1. Remove approximately 0.52 miles of single circuit 3-phase 2-795 ACSR conductor between Yardley Ridge and structure number 2213/87. 2. Remove approximately 0.84 miles of single circuit 3-phase 2-636 ACSR conductor between structure number 2213/87 & 78. 3. Replace three conductor deadend insulator assemblies on the backbone at Yardley Ridge. 4. Replace three conductor suspension insulator assemblies on two double circuit steel poles between Yardley Ridge and structure number 2213/78. 5. Replace three conductor braced post insulator assemblies on four double circuit steel poles between Yardley Ridge and structure number 2213/78. 6. Replace six conductor deadend insulator assemblies on eight double circuit steel poles between Yardley Ridge and structure number 2213/78. 7. Replace six conductor deadend insulator assemblies on two single circuit steel 3-pole structures between Yardley Ridge and structure number 2213/78. 8. Replace three conductor deadend insulator assemblies on double circuit steel pole structure number 2213/78. 9. Install approximately 1.36 miles of single circuit 3-phase 2-768.2 ACSS/TW conductor between Yardley Ridge and structure number 2213/78. This shall include the installation of dampers, spacers, and tee connectors for the substation installed risers.
Right of way	No new or additional right of way is required to complete this project.
Construction responsibility	The redacted information is proprietary to the Company, therefore it is privileged and confidential.
Additional 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	\$1,540,718.00
Component cost (in-service year)	\$1,650,108.00

Substation Upgrade Component

Component title	Yardley Ridge Terminal Equipment
Substation name	Yardley Ridge
Substation zone	352
Substation upgrade scope	Replacement of the line lead conductors and Current Transformers (CT's) on the two circuit breakers (XT2213 & WT2213). Replacing the CT's with Thermal Rating Factor (TRF) of 4.0 will upgrade the breakers to the required ampacity, removing them from concerns of being the current limiting factor. System Protection Engineering Coordination Study and System Protection Technician relay resets.

Transformer Information

None	
New equipment description	Purchase and install Substation Material: 1.) Line 2213 line lead conductors and connector to support 1574 MVA summer line rating. 2.) All Current Transformers in the two (2) 230 kV, Circuit Breakers (XT2213, WT2213)- total of thirty six (36), 2000: 5 CT's, TRF 4
Substation assumptions	No additional relay material will be needed.
Real-estate description	The substation will not be expanded for this project.
Construction responsibility	The redacted information is proprietary to the Company, therefore it is privileged and confidential.
Additional 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	\$196,461.00
Component cost (in-service year)	\$210,410.00

Substation Upgrade Component

Component title	Cabin Run Substation relay resets
Substation name	Cabin Run
Substation zone	352
Substation upgrade scope	System Protection Engineering Coordination Study and System Protection Technician relay resets.

Transformer Information

None	
New equipment description	No new equipment required for this proposal.
Substation assumptions	No additional relay material will be needed for this proposal.
Real-estate description	The substation will not be expanded for this proposal.
Construction responsibility	The redacted information is proprietary to the Company, therefore it is privileged and confidential.
Additional 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	\$9,978.00
Component cost (in-service year)	\$10,686.00

Congestion Drivers

None

Existing Flowgates

FG #	From Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type
N2-ST12	313863	6YARDLEY	313730	6CABIN_RUN	1	230/230	345/345	N-1-1 Thermal (summer)

New Flowgates

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

Financial Information

Capital spend start date	03/2024
Construction start date	03/2025
Project Duration (In Months)	15

Additional comments

None