

Hollymead - Gordonsville Line # 2135 Rebuild

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	704
Project title	Hollymead - Gordonsville Line # 2135 Rebuild
Project description	This project serves to wreck/rebuild segment one of 230kV line 2135, demarcation point between Holly Meade Junction (Str.339B) and Gordonsville using double-circuit capable 230 kV poles. The line will be rebuilt with 3-phase 2-768 ACSS Maumee Type 13 bundled conductor and two (2) DNO-11410 shield wire. Switches and line lead at HollyMeade will be upgraded to 4000A.
Email	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Project in-service date	12/2027
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. Hollymeade Equipment Rating Upgrade
2. Gordonsville Substation
3. Line # 2135 (Hollymead to Gordonsville)
4. Cash Corner DP Equipment Rating Upgrade

Substation Upgrade Component

Component title	Hollymeade Equipment Rating Upgrade
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Substation name	Hollymeade
Substation zone	363
Substation upgrade scope	Purchase and install substation material: 1. One (1) 230 kV, 4000A, 3-Phase Vertical Break Switch with vacuum interrupter attachment. 2. One (1), Motor Operator, 10-20K IN-LB 3. Conductors, connectors, conduit, control cable, and grounding materials as per engineering standards. Purchase and install relay material: 1. One (1) 4103 - Non-Earthing Switch MOAB AC/DC Distribution Box 2. One (1) 4548 – Non-Earthing Switch MOAB Control Box Remove substation material: 1. One (1), 230kV, 3000A, 3-Phase Vertical Break Switch with vacuum interrupter attachment.

Transformer Information

None	
New equipment description	One (1) 230 kV, 4000A, 3-Phase Vertical Break Switch with vacuum interrupter attachment. One (1), Motor Operator, 10-20K IN-LB.
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 connections to maintain 4000A ratings. 3. Relay Settings and protection & control 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	\$303,674.00
Component cost (in-service year)	\$325,234.85

Substation Upgrade Component

Component title	Gordonsville Substation
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Substation name	Gordonsville
Substation zone	363
Substation upgrade scope	Purchase and install substation material: 1. Line conductors and connectors, as per engineering standards. Purchase and install relay material: 1. No relay material is needed (Relay Resets Only).

Transformer Information

None	
New equipment description	No new equipment being installed.
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 connections to maintain 4000A ratings. 3. Relay Settings and protection & control design will be revised as part of the SPE scope of work.
Real-estate description	Substation will not be expanded under this project.
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	\$79,491.00
Component cost (in-service year)	\$85,134.86

Transmission Line Upgrade Component

Component title	Line # 2135 (Hollymead to Gordonsville)
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Impacted transmission line	Line #2135
Point A	Hollymead Junction
Point B	Gordonsville Substation
Point C	
Terrain description	The project area is in the central Virginia Piedmont region with elevations ranging from approximately 400 to 1000 feet. The terrain is predominately vegetated existing right-of-way consisting of moderate slopes. The line will cross Route 20 and some smaller roads, a railroad track, several small streams, and the Rivanna River.

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	2-477 ACSR (24/7) 90°C MOT [7.10 miles]
Hardware plan description	Existing segment of the line will remain as is. For the extension segment, new hardware will be used. The existing hardware were installed in 2014.
Tower line characteristics	Existing structures shall be removed, and new structures will be used for the rebuild.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1047.000000	1047.000000
Winter (MVA)	1160.000000	1160.000000
Conductor size and type	2-768.2 ACS/TW/HS (20/7) 250°C MOT [7.10 miles]	
Shield wire size and type	DNO-11410	
Rebuild line length	7.10 Miles	

Rebuild portion description	<p>FACILITIES TO BE REMOVED: 1. Remove two (2) existing double circuit concrete 2-pole deadend backbone structures as follows: a. Structures 2135/280, 2135/303 2. Remove two (2) existing single circuit steel 3-pole Double Deadends as follows: a. Structure 2135/281,323 3. Remove one (1) existing single circuit steel 3-pole Running Angle as follows: a. Structure 2135/312 4. Remove forty-three (43) existing single circuit wood 2-pole H-Frame Suspension as follows: a. Structure 2135/282-295, 301-302, 304-308, 311, 313-319, 321-322, 324-327, 330-334, 336, 337, & 339 5. Remove eight (8) existing single circuit steel 2-pole H-Frame Suspension as follows: a. Structure 2135/296-299, 309-310, 329, 335 6. Remove three (3) existing single circuit wood 3-pole Double Deadend as follows: a. Structure 2135/300,328,338 7. Remove two (2) existing steel static poles as follows: a. Structure 2135/339A,339C 8. Remove one (1) existing steel column as follows: a. Structure 2135/339B 9. Remove one (1) existing single circuit wood 3-pole running angle as follows: a. Structure 2135/320 10. Remove approximately 7.1 miles of 3-phase 2-477 ACSR (24/7) conductor from structures 2135/280 to Holly Meade Junction (Str. 2135/339B). 11. Remove approximately 7.1 miles of one (1) 3#6 Alumoweld shield wire from structures 2135/280-339B. 12. Remove approximately 7.1 miles of one (1) 49/49MM 2 48-fiber OPGW from structures 2135/280-339B. 13. Remove two (2) switches supported on existing backbone structure 2135/303.</p> <p>FACILITIES TO BE MODIFIED: 1. Transfer existing 3-phase 2-636 ACSR conductor from existing structure 2135/339B to new structure 2135/339B. 2. Transfer existing 2 OPGW from existing structure 2135/339B to new structure 2135/339B. PERMANENT FACILITIES TO BE INSTALLED: 1. Install fifty-nine (59) 230kV steel monopole double circuit tangents (12.612) on foundations. 2. Install three (3) 230kV self-supporting steel monopole double deadend structures (12.614) on foundations. 3. Install five (5) 230kV self-supporting steel 2-pole double deadend heavy angle structures (12.235) on foundations. 4. Install two (2) 230kV substation backbone structures (12.905). 5. Install approximately 7.1 miles of 1-set 3-phase 2-768.2 ACSS Maumee Type 13 conductor. 6. Install approximately 7.1 miles of two (2) DNO-11410 shield wire. a. Assumes 5 splices per OPGW throughout the line. 7. Install two (2) 4000A switches (213576 and 213579) to be supported by proposed backbone structure 2135/303.</p>
Right of way	Existing Right-of-Way will be Reused for the rebuild. No new Right-of-Way is required for this proposal.
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	\$35,995,750.00
Component cost (in-service year)	\$38,551,448.25

Substation Upgrade Component

Component title	Cash Corner DP Equipment Rating Upgrade
Project description	The redacted information is proprietary to the Company; therefore, it is privileged and confidential.
Substation name	Cash Corner DP
Substation zone	363
Substation upgrade scope	Purchase and install substation material: 1. Two (2) 230 kV, 4000A, 3-Phase Vertical Break Switches with vacuum interrupter attachment. 2. Two (2), Motor Operators, 10-20K IN-LB 3. Conductors, connectors, conduit, control cable, and grounding materials as per engineering standards. Purchase and install relay material: 1. Two (2) 4103 - Non-Earthing Switch MOAB AC/DC Distribution Box 2. Two (2) 4548 – Non-Earthing Switch MOAB Control Box Remove substation material: 1. Two (2), 230kV, 3000A, 3-Phase Vertical Break Switch with vacuum interrupter attachment.

Transformer Information

None	
New equipment description	Two (2) 230 kV, 4000A, 3-Phase Vertical Break Switch with vacuum interrupter attachment. Two (2), Motor Operator, 10-20K IN-LB.
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 connections to maintain 4000A ratings. 3. Relay Settings and protection & control 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

\$506,801.00

Component cost (in-service year)

\$542,783.87

Congestion Drivers

None

Existing Flowgates

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2022W3-GD-S1773	14759	6HOLLYMD	314734	6CASHSCORNER	1	230	345	Summer Gen Deliv	Included
2022W3-GD-S1783	14734	6CASHSCORNER	314758	6GORDNVL	1	230	345	Summer Gen Deliv	Included

New Flowgates

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

Financial Information

Capital spend start date	06/2025
Construction start date	06/2025
Project Duration (In Months)	30

Additional Comments

Please contact Chibu Ofoegbu at 267-221-1207 or chibuzor.i.ofoegbu@dominionenergy.com for any questions.