

Sleepy Hollow - Stony Point 230kV Transmission Project

General Information

Proposing entity name	Confidential Information
Company proposal ID	Confidential Information
PJM Proposal ID	692
Project title	Sleepy Hollow - Stony Point 230kV Transmission Project
Project description	The Sleepy Hollow - Stony Point 230kV Transmission Project will include a new 3-position ring bus interconnecting the Mount Eagle - Charlottesville 230kV transmission line and a new 3-position ring bus interconnecting the Hollymead - Cash's Corner 230kV transmission line. The proposed project will connect the new substations with a new 230kV transmission line as well as a 5% series reactor.
Project in-service date	06/2025
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	Confidential Information

Project Components

1. Sleepy Hollow Substation
2. Stony Point Substation
3. Sleepy Hollow - Stony Point 230kV Transmission Line
4. Sleepy Hollow 230kV Transmission Interconneciton
5. Stony Point 230kV Transmission Interconnection

Greenfield Substation Component

Component title	Sleepy Hollow Substation
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Substation name	Sleepy Hollow Substation
Substation description	The proposed new Sleepy Hollow 230kV substation will be a three-position ring bus that will interconnect the existing Mount Eagle to Charlottesville 230kV transmission line. The third position will connect to the new Sleepy Hollow - Stony Point 230kV transmission line and will include a 2% series reactor.
Nominal voltage	AC
Nominal voltage	230

Transformer Information

None

Major equipment description 230kV Circuit Breakers (3): 4000A continuous current rating 230kV Circuit Breaker Isolation Disconnect Switches & associated jumper assemblies: 4000A continuous current rating, 1593 MVA rating, and a short circuit current rating of 63kA. The substation will also include a 2% series reactor.

	Normal ratings	Emergency ratings
Summer (MVA)	1593.000000	1593.000000
Winter (MVA)	1593.000000	1593.000000

Environmental assessment The proposed Project was sited to avoid and minimize impacts to wetlands or other areas of environmental concern based on GIS data. It is possible that the Project cannot avoid impacts to a limited number of wetlands and waterways. If so, Central Transmission expects the Project will be subject to regulation under certain permitting programs, namely Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and Section 401 of the Clean Water Act. Central Transmission will engage a qualified consultant to conduct a wetlands delineation of the selected site/route in order to establish the extent of proposed impacts and the need for specific permits from the state or U.S. Army Corps of Engineers. In addition to the permits described above, Central Transmission has identified other permits which may be required for the construction of the Project. Central Transmission considers these permits to be minor due to the more limited effort to prepare applications and the less intensive permitting processes which follow. These include permits related to airspace clearance, stormwater/erosion and sedimentation control, road crossings, and utility and railroad crossings.

Outreach plan	Central Transmission will identify and engage stakeholders, such as community officials and landowners within the Project area, early in the process and maintain an active dialogue throughout. Public meetings may be held to offer a venue for landowners and other interested community members to learn about the Project and for Central Transmission to learn more about specific landowner and community preferences. Central Transmission plans to make information available on its website and provide notification of public meetings to landowners within the Project area as required in the siting approval process.
Land acquisition plan	The Project will be located primarily on new right-of-way to be purchased by Central Transmission. In addition, Central Transmission will procure any necessary easements required to access the site. Central Transmission will assign a Right-of-Way Manager to oversee all real estate related activities for the Project including appraisals, title work, surveying, land acquisition and restoration. A right-of-way agent will contact the property owner(s) in person to explain the Project and, as necessary, secure permission to conduct surveys, archaeological studies, etc. The right-of-way agent will be the primary point of contact to negotiate with the property owner to acquire the substation site and any required easements on a mutually agreeable basis. To the extent that negotiations reach an impasse, Central Transmission will be able to pursue eminent domain. The right-of-way agents will continue to act as a liaison with the property owners during construction and through the restoration process.
Construction responsibility	Confidential Information
Additional comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$8,037,726.00

Component cost (in-service year) \$8,785,903.00

Greenfield Substation Component

Component title Stony Point Substation

Substation name Stony Point Substation

Substation description The proposed new Stony Point 230kV substation will be a three-position ring bus that will interconnect the existing Hollymead to Cash's Corner 230kV transmission line. The third position will connect to the new Sleepy Hollow - Stony Point 230kV transmission line.

Nominal voltage AC

Nominal voltage 230

Transformer Information

None

Major equipment description 230kV Circuit Breakers (3): 4000A continuous current rating 230kV Circuit Breaker Isolation Disconnect Switches & associated jumper assemblies: 4000A continuous current rating, 1593 MVA rating, and a short circuit current rating of 63kA.

	Normal ratings	Emergency ratings
Summer (MVA)	1593.000000	1593.000000
Winter (MVA)	1593.000000	1593.000000

Environmental assessment	<p>The proposed Project was sited to avoid and minimize impacts to wetlands or other areas of environmental concern based on GIS data. It is possible that the Project cannot avoid impacts to a limited number of wetlands and waterways. If so, Central Transmission expects the Project will be subject to regulation under certain permitting programs, namely Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and Section 401 of the Clean Water Act. Central Transmission will engage a qualified consultant to conduct a wetlands delineation of the selected site/route in order to establish the extent of proposed impacts and the need for specific permits from the state or U.S. Army Corps of Engineers. In addition to the permits described above, Central Transmission has identified other permits which may be required for the construction of the Project. Central Transmission considers these permits to be minor due to the more limited effort to prepare applications and the less intensive permitting processes which follow. These include permits related to airspace clearance, stormwater/erosion and sedimentation control, road crossings, and utility and railroad crossings.</p>
Outreach plan	<p>Central Transmission will identify and engage stakeholders, such as community officials and landowners within the Project area, early in the process and maintain an active dialogue throughout. Public meetings may be held to offer a venue for landowners and other interested community members to learn about the Project and for Central Transmission to learn more about specific landowner and community preferences. Central Transmission plans to make information available on its website and provide notification of public meetings to landowners within the Project area as required in the siting approval process.</p>
Land acquisition plan	<p>The Project will be located primarily on new right-of-way to be purchased by Central Transmission. In addition, Central Transmission will procure any necessary easements required to access the site. Central Transmission will assign a Right-of-Way Manager to oversee all real estate related activities for the Project including appraisals, title work, surveying, land acquisition and restoration. A right-of-way agent will contact the property owner(s) in person to explain the Project and, as necessary, secure permission to conduct surveys, archaeological studies, etc. The right-of-way agent will be the primary point of contact to negotiate with the property owner to acquire the substation site and any required easements on a mutually agreeable basis. To the extent that negotiations reach an impasse, Central Transmission will be able to pursue eminent domain. The right-of-way agents will continue to act as a liaison with the property owners during construction and through the restoration process.</p>
Construction responsibility	Confidential Information
Additional comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information

ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$6,342,682.00
Component cost (in-service year)	\$6,933,080.00

Greenfield Transmission Line Component

Component title	Sleepy Hollow - Stony Point 230kV Transmission Line
Point A	Sleepy Hollow
Point B	Stony Point
Point C	

	Normal ratings	Emergency ratings
Summer (MVA)	1047.000000	1047.000000
Winter (MVA)	1160.000000	1160.000000
Conductor size and type	Double Bundle 795 "Drake" ACSS	
Nominal voltage	AC	
Nominal voltage	230	
Line construction type	Overhead	

General route description	See Routing Map attachment for information on the general project route. Most high-voltage transmission projects will require a state siting approval. To begin the siting approval process, Central Transmission plans to hold pre-application meetings with the regulatory agency to introduce Central Transmission and the Project, as well as confirm its understanding of the process. Shortly thereafter, Central Transmission will simultaneously begin collecting siting data and start its outreach efforts so that public siting input is incorporated at the earliest stages of the Project. Once Central Transmission identifies a preferred site/route and at least one viable alternative site/route, Central Transmission will carry out the environmental and detailed engineering work in order to establish a highly detailed Project plan to support the siting applications.
Terrain description	The terrain traversed by the project features hilly farmland with some forested areas.
Right-of-way width by segment	The project proposes to utilize a right-of-way width of 125 feet.
Electrical transmission infrastructure crossings	Electrical infrastructure crossings may be required depending on final line route. This will be coordinated during the detailed design process with the interconnection PTO.
Civil infrastructure/major waterway facility crossing plan	No civil infrastructure or major waterway crossings.
Environmental impacts	The proposed Project was sited to avoid and minimize impacts to wetlands or other areas of environmental concern based on GIS data. It is possible that the Project cannot avoid impacts to a limited number of wetlands and waterways. If so, Central Transmission expects the Project will be subject to regulation under certain permitting programs, namely Section 404 of the Clean Water Act, Section 10 of the Rivers and Harbors Act, and Section 401 of the Clean Water Act. Central Transmission will engage a qualified consultant to conduct a wetlands delineation of the selected site/route in order to establish the extent of proposed impacts and the need for specific permits from the state or U.S. Army Corps of Engineers. In addition to the permits described above, Central Transmission has identified other permits which may be required for the construction of the Project. Central Transmission considers these permits to be minor due to the more limited effort to prepare applications and the less intensive permitting processes which follow. These include permits related to airspace clearance, stormwater/erosion and sedimentation control, road crossings, and utility and railroad crossings.
Tower characteristics	The preliminary design for the transmission line utilizes tubular steel monopole structures with single circuit, double bundle 795 "Drake" ACSS in a delta configuration and a single optical groundwire.
Construction responsibility	Confidential Information
Additional comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information

Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$17,240,619.00
Component cost (in-service year)	\$18,845,433.00

Transmission Line Upgrade Component

Component title	Sleepy Hollow 230kV Transmission Interconneciton
Impacted transmission line	Mount Eagle - Charlottesville
Point A	Mount Eagle
Point B	Charlottesville
Point C	
Terrain description	The terrain description is mostly farmland with some forested areas.

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	N/A
Hardware plan description	N/A
Tower line characteristics	N/A

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	891.000000	891.000000
Winter (MVA)	891.000000	891.000000
Conductor size and type	N/A	
Shield wire size and type	N/A	
Rebuild line length	<0.25 miles	
Rebuild portion description	The existing line will be broken and new deadend towers installed to facilitate looping into the new Sleepy Hollow 230kV Substation.	
Right of way	The existing right-of-way will be reused to facilitate the transmission interconnection facilities necessary to loop the lines into the new substation.	
Construction responsibility	Confidential Information	
Additional comments	Confidential Information	
Component Cost Details - In Current Year \$		
Engineering & design	Confidential Information	
Permitting / routing / siting	Confidential Information	
ROW / land acquisition	Confidential Information	
Materials & equipment	Confidential Information	
Construction & commissioning	Confidential Information	
Construction management	Confidential Information	

Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$690,000.00
Component cost (in-service year)	\$754,228.00

Transmission Line Upgrade Component

Component title	Stony Point 230kV Transmission Interconnection
Impacted transmission line	Hollymead - Cash's Corner
Point A	Hollymead
Point B	Cash's Corner
Point C	
Terrain description	The terrain description is mostly farmland with some forested areas.

Existing Line Physical Characteristics

Operating voltage	230
Conductor size and type	N/A
Hardware plan description	N/A
Tower line characteristics	N/A

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	230.000000	230.000000
	Normal ratings	Emergency ratings
Summer (MVA)	741.000000	741.000000

Winter (MVA)	741.000000	741.000000
Conductor size and type	N/A	
Shield wire size and type	N/A	
Rebuild line length	<0.25 miles	
Rebuild portion description	The existing line will be broken and new deadend towers installed to facilitate looping into the new Stony Point 230kV Substation.	
Right of way	The existing right-of-way will be reused to facilitate the transmission interconnection facilities necessary to loop the lines into the new substation.	
Construction responsibility	Confidential Information	
Additional comments	Confidential Information	
Component Cost Details - In Current Year \$		
Engineering & design	Confidential Information	
Permitting / routing / siting	Confidential Information	
ROW / land acquisition	Confidential Information	
Materials & equipment	Confidential Information	
Construction & commissioning	Confidential Information	
Construction management	Confidential Information	
Overheads & miscellaneous costs	Confidential Information	
Contingency	Confidential Information	
Total component cost	\$690,000.00	
Component cost (in-service year)	\$754,228.00	

Congestion Drivers

CD #	From Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type
ME-5	314749	6CHARLVL	314772	6PROFFIT	1	230	345	Market Efficiency

Existing Flowgates

None

New Flowgates

Confidential Information

Financial Information

Capital spend start date 01/2022

Construction start date 01/2024

Project Duration (In Months) 41

Cost Containment Commitment

Cost cap (in current year) Confidential Information

Cost cap (in-service year) Confidential Information

Components covered by cost containment

1. Sleepy Hollow Substation - Proposer
2. Stony Point Substation - Proposer
3. Sleepy Hollow - Stony Point 230kV Transmission Line - Proposer

Cost elements covered by cost containment

Engineering & design Yes

Permitting / routing / siting Yes

ROW / land acquisition	Yes
Materials & equipment	Yes
Construction & commissioning	Yes
Construction management	Yes
Overheads & miscellaneous costs	Yes
Taxes	Yes
AFUDC	Yes
Escalation	No
Additional Information	Confidential Information

Is the proposer offering a binding cap on ROE?	No
Is the proposer offering a Debt to Equity Ratio cap?	Confidential Information

Additional comments

None