

Cedar Run - Cline 345kV Transmission Project

General Information

Proposing entity name	Confidential
Company proposal ID	
PJM Proposal ID	148
Project title	Cedar Run - Cline 345kV Transmission Project
Project description	The Cedar Run - Cline 345kV Transmission Project will include two new 3-position substations interconnecting the Bloom - Davis and St. John - RM Schafer 345kV transmission lines. The proposed project will connect each of the new substations with a new single-circuit 345kV transmission line. The proposed project will require new right-of-way.
Project in-service date	06/2024
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	

Project Components

1. Cedar Run 345kV Substation
2. Cline 345kV Substation
3. Cedar Run - Cline 345kV Transmission Line
4. Cedar Run 345kV Transmission Interconnection
5. Cline 345kV Transmission Interconnection

Greenfield Substation Component

Component title	Cedar Run 345kV Substation
-----------------	----------------------------

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. 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 Proposer

Additional comments

Component Cost Details - In Current Year \$

Engineering & design	Confidential
Permitting / routing / siting	Confidential
ROW / land acquisition	Confidential
Materials & equipment	Confidential
Construction & commissioning	Confidential
Construction management	Confidential
Overheads & miscellaneous costs	Confidential
Contingency	Confidential
Total component cost	\$6,836,635.00

Component cost (in-service year) \$7,473,011.60

Greenfield Substation Component

Component title Cline 345kV Substation

Substation name Cline 345kV Substation

Substation description The proposed new Cline 345kV substation will be a three-position ring bus that will interconnect the existing St. John to RM Schafer 345kV transmission line. The third position will connect to the new Cedar Run - Cline 345kV transmission line.

Nominal voltage AC

Nominal voltage 345

Transformer Information

None

Major equipment description 345kV Circuit Breakers (3): 4000A continuous current rating and 63kA short circuit rating 345kV Circuit Breaker Isolation Disconnect Switches & associated jumper assemblies: 4000A continuous current rating

	Normal ratings	Emergency ratings
Summer (MVA)	2387.000000	2387.000000
Winter (MVA)	2387.000000	2387.000000

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

Proposer

Additional comments

Component Cost Details - In Current Year \$

Engineering & design

Confidential

Permitting / routing / siting

Confidential

ROW / land acquisition	Confidential
Materials & equipment	Confidential
Construction & commissioning	Confidential
Construction management	Confidential
Overheads & miscellaneous costs	Confidential
Contingency	Confidential
Total component cost	\$6,836,632.00
Component cost (in-service year)	\$7,473,011.00

Greenfield Transmission Line Component

Component title	Cedar Run - Cline 345kV Transmission Line
Point A	Cedar Run
Point B	Cline
Point C	

	Normal ratings	Emergency ratings
Summer (MVA)	1379.000000	1781.000000
Winter (MVA)	1379.000000	1781.000000
Conductor size and type	Double bundle 1033 ACSS	
Nominal voltage	AC	
Nominal voltage	345	
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 described in the Site Selection/Routing Analysis section above in order to establish a highly- detailed Project plan to support the siting applications.
Terrain description	The terrain traversed by the project features generally flat agricultural fields and short segments of forested areas.
Right-of-way width by segment	The project will feature new rights of way for the entire project route.
Electrical transmission infrastructure crossings	N/A
Civil infrastructure/major waterway facility crossing plan	No major 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 1033.5 kcmil ACSS conductor in a vertical configuration and a single optical groundwire.
Construction responsibility	Proposer
Additional comments	

Component Cost Details - In Current Year \$

Engineering & design	Confidential
Permitting / routing / siting	Confidential
ROW / land acquisition	Confidential
Materials & equipment	Confidential
Construction & commissioning	Confidential
Construction management	Confidential
Overheads & miscellaneous costs	Confidential
Contingency	Confidential
Total component cost	\$13,955,991.00
Component cost (in-service year)	\$15,255,062.00

Transmission Line Upgrade Component

Component title	Cedar Run 345kV Transmission Interconnection
Impacted transmission line	Bloom - Davis 345kV Transmission Line
Point A	Bloom 345kV Substation
Point B	Davis 345kV Substation
Point C	
Terrain description	Flat/cleared agricultural field.

Existing Line Physical Characteristics

Operating voltage	345
Conductor size and type	N/A
Hardware plan description	N/A
Tower line characteristics	N/A

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1334.000000	1528.000000
Winter (MVA)	1334.000000	1528.000000
Conductor size and type	N/A	
Shield wire size and type	N/A	
Rebuild line length	<.25 miles	
Rebuild portion description	The existing line will be broken and new deadend towers installed to facilitate looping into the new Cedar Run 345kV 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	ComEd	
Additional comments		
Component Cost Details - In Current Year \$		
Engineering & design	Confidential	
Permitting / routing / siting	Confidential	
ROW / land acquisition	Confidential	
Materials & equipment	Confidential	
Construction & commissioning	Confidential	
Construction management	Confidential	

Overheads & miscellaneous costs	Confidential
Contingency	Confidential
Total component cost	\$999,997.00
Component cost (in-service year)	\$1,093,083.00

Transmission Line Upgrade Component

Component title	Cline 345kV Transmission Interconnection
Impacted transmission line	St. John - RM Schafer 345kV Transmission Line
Point A	St. John 345kV Substation
Point B	RM Schafer 345kV Substation
Point C	
Terrain description	Generally flat agricultural fields.

Existing Line Physical Characteristics

Operating voltage	345kV
Conductor size and type	N/A
Hardware plan description	N/A
Tower line characteristics	N/A

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1314.000000	1392.000000

Winter (MVA)	1314.000000	1392.000000
Conductor size and type	N/A	
Shield wire size and type	N/A	
Rebuild line length	<.25 miles	
Rebuild portion description	The project will break the existing St. John - RM Schafer 345kV transmission line and new deadend towers will be installed to facilitate looping into the new Cline 345kV 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	ComEd	
Additional comments		
Component Cost Details - In Current Year \$		
Engineering & design	Confidential	
Permitting / routing / siting	Confidential	
ROW / land acquisition	Confidential	
Materials & equipment	Confidential	
Construction & commissioning	Confidential	
Construction management	Confidential	
Overheads & miscellaneous costs	Confidential	
Contingency	Confidential	
Total component cost	\$999,997.00	
Component cost (in-service year)	\$1,093,083.00	

Congestion Drivers

None

Existing Flowgates

FG #	From Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type
GD-W3	274750	CRETE EC ;BP	255112	17STJOHN	1	345	217/222	Gen Deliv (winter)
GD-W4	274750	CRETE EC ;BP	255112	17STJOHN	1	345	217/222	Gen Deliv (winter)

New Flowgates

None

Financial Information

Capital spend start date 01/2021

Construction start date 06/2024

Project Duration (In Months) 41

Cost Containment Commitment

Cost cap (in current year) Confidential

Cost cap (in-service year) Confidential

Components covered by cost containment

1. Cedar Run 345kV Substation - Proposer
2. Cline 345kV Substation - Proposer
3. Cedar Run - Cline 345kV 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	Yes
Additional Information	Confidential
Is the proposer offering a binding cap on ROE?	No
Is the proposer offering a Debt to Equity Ratio cap?	Confidential

Additional comments

None