

Apply Conductor Coating Technology to Lines 11620 & 11622 Elwood - Goodings Grove

General Information

Proposing entity name	COMED
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Yes
Company proposal ID	
PJM Proposal ID	937
Project title	Apply Conductor Coating Technology to Lines 11620 & 11622 Elwood - Goodings Grove
Project description	Apply conductor coating to lines 11620 & 11622 from Elwood to Goodings Grove. The coating increases emissivity and reduces absorptivity of the conductor, allowing for increased ratings. This technology was presented at PJM's Emerging Technology Forum on 3/17/21.
Email	Personal email redacted.
Project in-service date	06/2028
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	Introduces this new technology on the PJM system.

Project Components

1. Apply Coating to 345 kV Lines 11620 & 11622

Transmission Line Upgrade Component

Component title	Apply Coating to 345 kV Lines 11620 & 11622
Project description	Proprietary information

Impacted transmission line	11620 & 11622
Point A	Elwood
Point B	Goodings Grove
Point C	
Terrain description	The lines are on existing ComEd right-of-way over flat terrain. Approximately half of the terrain is farmland with the rest bordering industrial, residential, and wooded lands. There are two interstate highway crossings.

Existing Line Physical Characteristics

Operating voltage	345
Conductor size and type	2156 ACSR Bluebird
Hardware plan description	Existing line hardware will not be changed.
Tower line characteristics	345 kV lines 11620 and 11622 are on a total of 104 structures ranging in age from 3 to 54 years. The structures are a combination of lattice and steel monopoles. These structures were inspected within the last 5 years with approximately 40 percent of them being replaced in 2020 to accommodate additional generation at TSS 900 Elwood.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1441.000000	1830.000000
Winter (MVA)	1702.000000	2021.000000
Conductor size and type	2156 ACSR Bluebird with ceramic coating	
Shield wire size and type	The shield wire will not be replaced	
Rebuild line length	18.7 miles	

Rebuild portion description	No rebuild will be necessary.
Right of way	The existing ROW will be utilized.
Construction responsibility	ComEd
Benefits/Comments	
Component Cost Details - In Current Year \$	
Engineering & design	Detailed cost estimates broken down by category are considered proprietary information and are redacted.
Permitting / routing / siting	Detailed cost estimates broken down by category are considered proprietary information and are redacted.
ROW / land acquisition	Detailed cost estimates broken down by category are considered proprietary information and are redacted.
Materials & equipment	Detailed cost estimates broken down by category are considered proprietary information and are redacted.
Construction & commissioning	Detailed cost estimates broken down by category are considered proprietary information and are redacted.
Construction management	Detailed cost estimates broken down by category are considered proprietary information and are redacted.
Overheads & miscellaneous costs	Detailed cost estimates broken down by category are considered proprietary information and are redacted.
Contingency	Detailed cost estimates broken down by category are considered proprietary information and are redacted.
Total component cost	\$8,523,936.00
Component cost (in-service year)	\$9,881,578.00

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
2023W1-GD-S571	270736	ELWOOD ; B	270770	GOODINGS ;4B	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S1259	270737	ELWOOD ; R	270769	GOODINGS ;2R	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S5482	270737	ELWOOD ; R	270769	GOODINGS ;2R	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S1902	270737	ELWOOD ; R	270769	GOODINGS ;2R	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S5632	270736	ELWOOD ; B	270770	GOODINGS ;4B	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S5542	270737	ELWOOD ; R	270769	GOODINGS ;2R	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S1260	270736	ELWOOD ; B	270770	GOODINGS ;4B	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S5702	270736	ELWOOD ; B	270770	GOODINGS ;4B	1	345	222	Summer Gen Deliv	Included

New Flowgates

None

Financial Information

Capital spend start date 01/2027

Construction start date 01/2027

Project Duration (In Months) 17

Additional Comments

None