

Reconductor 345 kV lines 11620 & 11622 Elwood to 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	For internal use only
PJM Proposal ID	35
Project title	Reconductor 345 kV lines 11620 & 11622 Elwood to Goodings Grove
Project description	Reconductor 18.7 miles of 345 kV lines 11620 & 11622 from Elwood to Goodings Grove with two conductor bundled 1033.5 ACSS conductor. Modify and replace towers as necessary to accommodate the higher mechanical loads of the bundled conductor.
Email	Removed personal information from public posting
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	

Project Components

1. Reconductor 345 kV lines 11620 & 11622 from Elwood to Goodings Grove
2. Upgrade Goodings Grove Circuit Breakers, Disconnects, and Associated Equipment
3. Upgrade Station Conductor at Elwood

Transmission Line Upgrade Component

Component title	Reconductor 345 kV lines 11620 & 11622 from Elwood to Goodings Grove
Project description	Reconductor 345 kV lines 11620 & 11622 from Elwood to Goodings Grove with two conductor bundled 1033.5 kcmil ACSS conductor. Make necessary tower replacements and reinforcements to support the heavier mechanical loads.
Impacted transmission line	11620 & 11622 Elwood to Goodings Grove
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
Hardware plan description	Existing hardware will be replaced.
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. Based on these inspections, it was determined that 12 of the remaining structures will need to be replaced and 42 will require modifications to accommodate the larger conductor.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1961.000000	2112.000000

Winter (MVA)	2324.000000	2457.000000
Conductor size and type	Two conductor bundle of 1033.5 kcmil ACSS	
Shield wire size and type	The shield wire will not be replaced.	
Rebuild line length	18.7	
Rebuild portion description	All 18.7 miles of double circuit line will be reconducted on existing towers except as noted above.	
Right of way	The existing right-of-way 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	\$56,177,088.00	

Component cost (in-service year) \$65,124,642.00

Substation Upgrade Component

Component title Upgrade Goodings Grove Circuit Breakers, Disconnects, and Associated Equipment

Project description Replace existing Goodings Grove line 11620 and 11622 circuit breakers with 3000A 345 kV 63 kA circuit breakers. Replace line disconnects with 3000A 345 kV Motor Operated Disconnects (MODs).

Substation name Goodings Grove

Substation zone ComEd

Substation upgrade scope Replace existing Goodings Grove line 11620 and 11622 circuit breakers with 3000A 345 kV 63 kA circuit breakers. Replace line disconnects with 3000A 345 kV Motor Operated Disconnects (MODs).

Transformer Information

None

New equipment description 3000A or larger circuit breakers and MODs will be used. Circuit breaker ratings are expected to be 1961/2112 MVA summer normal/summer LTE and 2324/2457 MVA winter normal/winter LTE. 3000A MOD ratings are expected to be 2739/3105 MVA summer normal/summer LTE and 3191/3510 MVA winter normal/winter LTE.

Substation assumptions Existing line circuit breakers replaced in place.

Real-estate description

Construction responsibility ComEd

Benefits/Comments Confidential information

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	\$5,163,654.00
Component cost (in-service year)	\$5,986,090.00

Substation Upgrade Component

Component title	Upgrade Station Conductor at Elwood
Project description	Upgrade 2156 ACSR and 2-1113 jumpers and leads at Elwood
Substation name	Elwood
Substation zone	ComEd
Substation upgrade scope	Upgrade 2156 ACSR and 2-1113 jumpers and leads at Elwood that are included in the line ratings for 345 kV lines 11620 and 11622.

Transformer Information

None	
New equipment description	New jumpers will be 2-1590 ACSR and rated higher than other line components.
Substation assumptions	All work will be in the existing substation.
Real-estate description	
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	\$500,000.00
Component cost (in-service year)	\$579,637.00

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-S57	1270736	ELWOOD ; B	270770	GOODINGS ;4B	1	345	222	Summer Gen Deliv	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2023W1-GD-S1259	270737	ELWOOD ; R	270769	GOODINGS ;2R	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S548	270737	ELWOOD ; R	270769	GOODINGS ;2R	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S190	270737	ELWOOD ; R	270769	GOODINGS ;2R	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S563	270736	ELWOOD ; B	270770	GOODINGS ;4B	1	345	222	Summer Gen Deliv	Included
2023W1-GD-S554	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-S570	270736	ELWOOD ; B	270770	GOODINGS ;4B	1	345	222	Summer Gen Deliv	Included

New Flowgates

None

Financial Information

Capital spend start date 01/2024

Construction start date 01/2026

Project Duration (In Months) 53

Additional Comments

None