# Elwood - Joliet 345kV Transmission Project

## General Information

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|---|---|
| Proposing entity name | CONFIDENTIAL INFORMATION |
| Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project? | CONFIDENTIAL INFORMATION |
| Company proposal ID | CONFIDENTIAL INFORMATION |
| PJM Proposal ID | 663 |
| Project title | Elwood - Joliet 345kV Transmission Project |
| Project description | The Elwood - Joliet 345kV transmission project consists of an approximately 4 mile double circuit 345kV transmission line from the Elwood Substation to the Joliet Substation. |
| Email | CONFIDENTIAL INFORMATION |
| Project in-service date | 06/2028 |
| 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. Elwood - Joliet 345kV Double Circuit Transmission Line
2. Joliet Substation Upgrade
3. Elwood Substation Upgrade

### Greenfield Transmission Line Component

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|---|---|
| Component title | Elwood - Joliet 345kV Double Circuit Transmission Line |

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|---|---|
| Project description | CONFIDENTIAL INFORMATION |
| Point A | Elwood |
| Point B | Joliet |
| Point C | |

| | **Normal ratings** | **Emergency ratings** |
|---|---|---|
| Summer (MVA) | 1792.000000 | 1792.000000 |
| Winter (MVA) | 1792.000000 | 1792.000000 |

| | |
|---|---|
| Conductor size and type | Double Bundle 954 "Cardinal" ACSS/TW MA3 |
| Nominal voltage | AC |
| Nominal voltage | 345/345 |
| Line construction type | Overhead |
| General route description | The route heads north out of the existing Elwood Substation and parallels existing roadways until the Des Plaines River. At this point the route parallels the existing Joliet - Dresden 138kV transmission line to cross the Des Plaines River and enter the Joliet Substation. |
| Terrain description | The terrain traversed by the project features a generally flat industrial area with limited clearing required. |
| Right-of-way width by segment | The project will feature a right of way width of 150 feet for the project route. |
| Electrical transmission infrastructure crossings | and over the Elwood - Elwood Generating Station 345kV transmission line., over the double circuit Tap - Joliet 138kV transmission line., The proposed transmission line crosses over the double circuit Dresden - Joliet 138kV transmission line |

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| Civil infrastructure/major waterway facility crossing plan | The proposer will secure crossing and encroachment permits, authorizations and agreements for existing linear infrastructure crossed by the project. The proposer will coordinate with easement holders including; municipal and county roads; oil and gas pipelines; transmission lines, and local distribution utilities (power, sewer, water, gas, fiber, etc.) to not interfere with existing easement rights crossed by the project. The proposer will obtain occupation agreements from municipal and county jurisdictions to place transmission facilities over municipal and county roads. The proposer plans to secure crossing agreements with existing oil and gas pipelines and transmission lines. The proposer will secure all necessary permits for major waterway crossings, specifically the Des Plaines River crossing. |
| 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, Proposer 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. Proposer 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, Proposer has identified other permits which may be required for the construction of the Project. Proposer 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 double circuit transmission line utilizes tubular steel monopole structures with braced post insulators attached via the pole shaft in a vertical configuration. The transmission line will utilize horizontally spaced double-bundle 954 kcmil "Cardinal" ACSS/TW MA3 conductor and two optical groundwires. |
| Construction responsibility | CONFIDENTIAL INFORMATION |
| Benefits/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 |

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|---|---|
| Construction management | CONFIDENTIAL INFORMATION |
| Overheads & miscellaneous costs | CONFIDENTIAL INFORMATION |
| Contingency | CONFIDENTIAL INFORMATION |
| Total component cost | $15,123,150.00 |
| Component cost (in-service year) | $18,105,715.00 |

## Substation Upgrade Component

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|---|---|
| Component title | Joliet Substation Upgrade |
| Project description | CONFIDENTIAL INFORMATION |
| Substation name | Joliet Substation |
| Substation zone | 1274 |
| Substation upgrade scope | The substation scope will involve adding four (4) new 3000A, 345kV breakers. The "red" and "blue" portions of the substation will each be expanded to a ring bus configuration by adding two (2) breakers to each side to accommodate a line position for the new Elwood - Joliet transmission line. |

## Transformer Information

None

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|---|---|
| New equipment description | 345kV Circuit Breakers (4): 3000A continuous current rating 345kV Circuit Breaker Isolation Disconnect Switches & associated jumper assemblies: 3000A continuous current rating, 1792 MVA rating, and a short circuit current rating of 63kA. |
| Substation assumptions | The substation can be expanded to the northwest to accommodate the new connections. |
| Real-estate description | ComEd owns the land northwest of the current substation that will be used for the expansion. |
| Construction responsibility | CONFIDENTIAL INFORMATION |
| Benefits/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 | $10,258,406.00 |
| Component cost (in-service year) | $12,206,558.00 |

## Substation Upgrade Component

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|---|---|
| Component title | Elwood Substation Upgrade |
| Project description | CONFIDENTIAL INFORMATION |
| Substation name | Elwood Substation |
| Substation zone | 1274 |
| Substation upgrade scope | The substation scope will involve adding two (2) new 3000A, 345kV breakers. The "red" and "blue" portions of the substation will each be expanded by adding a breaker to create a new position in the existing ring bus configuration to accommodate a line position for the new Elwood - Joliet transmission line. |

## Transformer Information

None

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|---|---|
| New equipment description | 345kV Circuit Breakers (2): 3000A continuous current rating 345kV Circuit Breaker Isolation Disconnect Switches & associated jumper assemblies: 3000A continuous current rating, 1792 MVA rating, and a short circuit current rating of 63kA. |
| Substation assumptions | New positions can be added to the substation to accommodate the new connections. |

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| Real-estate description | No new land is necessary for the expansion. |
| Construction responsibility | CONFIDENTIAL INFORMATION |
| Benefits/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 | $3,989,381.00 |
| Component cost (in-service year) | $4,746,995.00 |

## 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-S1252 | 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 |

| FG # | Fr Bus No. | From Bus Name | To Bus No. | To Bus Name | CKT | Voltage | TO Zone | Analysis type | Status |
|---|---|---|---|---|---|---|---|---|---|
| 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-S1262 | 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

CONFIDENTIAL INFORMATION

## Financial Information

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|---|---|
| Capital spend start date | 03/2024 |
| Construction start date | 06/2027 |
| Project Duration (In Months) | 51 |

## Cost Containment Commitment

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|---|---|
| Cost cap (in current year) | CONFIDENTIAL INFORMATION |
| Cost cap (in-service year) | CONFIDENTIAL INFORMATION |

### Components covered by cost containment

1. Elwood - Joliet 345kV Double Circuit Transmission Line - Proposer

### Cost elements covered by cost containment

| | |
|---|---|
| Engineering & design | Yes |
| Permitting / routing / siting | Yes |
| ROW / land acquisition | Yes |
| Materials & equipment | Yes |

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|---|---|
| Construction & commissioning | Yes |
| Construction management | Yes |
| Overheads & miscellaneous costs | Yes |
| Taxes | Yes |
| AFUDC | Yes |
| Escalation | Yes |
| Additional Information | CONFIDENTIAL INFORMATION |
| Is the proposer offering a binding cap on ROE? | Yes |
| Would this ROE cap apply to the determination of AFUDC? | Yes |
| Would the proposer seek to increase the proposed ROE if FERC finds that a higher ROE would not be unreasonable? | No |
| Is the proposer offering a Debt to Equity Ratio cap? | CONFIDENTIAL INFORMATION |
| Additional cost containment measures not covered above | CONFIDENTIAL INFORMATION |

## Additional Comments

None