

Swap 345kV transmission line at Green Acres, rebuild University Park to Olive 345kV lines and add a reactor along Crete- St John 345kV line.

General Information

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|---|--|
| Proposing entity name | Business confidential information |
| Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project? | Yes |
| Company proposal ID | Business confidential information |
| PJM Proposal ID | 40 |
| Project title | Swap 345kV transmission line at Green Acres, rebuild University Park to Olive 345kV lines and add a reactor along Crete- St John 345kV line. |
| Project description | <p>1. Outside of the Green Acres substation, swap the NIPSCO Green Acre Tap towers from the St. John - Green Acres - Olive line to the University Park - Olive line to create a University Park - Green Acres - Olive line and St. John - Olive line. 2. Rebuild the NEET owned University (IN/IL border) - Green Acres 345 kV line with 2x1033 Curlew ACSS. 3. Reconductor NEETMA IN 6.95 miles of existing Crete to St John line. NEETMA portion goes from IL/IN State Line to St. John substation owned by NIPSCO. The line will be reconducted using 2x1033 Curlew ACSS HS. Upgrade is for reconductor only (Tower replacement will be part of supplemental project # s2509). 4. Reconductor ComEd's section of existing line from IN State Line to Crete with 2x1277 ACSR. 5. Reconductor ComED section of existing line of University - Olive with 2x1277 ACSR conductor rated 2058/2381 WN/WE. 6. Upgrade the limiting element at Stillwell or Dumont substation to increase the rating of the Stillwell -Dumont line to match conductor rating (1408/1887/1780/2143 for SN/SE/WN/WE for PJM side). 7. Upgrade the existing terminal equipment (substation conductor) at St. John on the existing Crete to St. John 345 kV line with bundled 2x1590 ACSR Lapwing rated 2239/2390 WN/WE. 8. Upgrade the existing terminal equipment (substation conductor) at Green Acres on the existing St. John to Green Acres 345 kV line with bundled 2x1590 ACSR Lapwing rated 2239/2390 WN/WE. 9. Install a new 8.34+ Ohm (0.7%, 100 MVA base) series reactor device along the Crete - St. John 345 kV line</p> |
| Email | amanda.gittens@nexteraenergy.com |
| Project in-service date | 12/2027 |
| Tie-line impact | Yes |

| | |
|--|--|
| Interregional project | Yes |
| Interregional RTO name | MISO |
| Interregional cost allocation evaluation | No |
| Evaluated in interregional analysis under PJM Tariff or Operating Agreement provisions | No |
| Specify analysis and applicable Tariff or Operating Agreement provisions | |
| Is the proposer offering a binding cap on capital costs? | No |
| Additional benefits | Project addressing reliability and market efficiency needs documented by PJM. While this project is interregional in that there are transmission components in both MISO and PJM, the need that is being addressed is only a PJM need. |

Project Components

1. Green Acres Substation transmission lines swap upgrades
2. Rebuild Uni (IN/IL border)-Green Acres 345 kV TL
3. Reconductor Crete - St. John-NEETMA 345 kV TL upgrade
4. Crete - St. John-ComEd 345 kV TL upgrade
5. Uni North - Uni-Olive IN/IL section 345kV TL Upgrade
6. Stillwell - Dumont 345 kV TL substation limiting element rating upgrade
7. St. Johns substation terminal equipment upgrade
8. Green Acres substation terminal equipment upgrade
9. 345 kV Series Reactor

Transmission Line Upgrade Component

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|----------------------------|--|
| Component title | Green Acres Substation transmission lines swap upgrades |
| Project description | Business confidential information |
| Impacted transmission line | Crete – St John – Green Acres – Olive, University Park – Olive |

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|---------------------|---|
| Point A | Green Acres |
| Point B | Olive |
| Point C | Not Applicable |
| Terrain description | The terrain along the transmission line right-of-way (ROW) is predominantly silt loam and clay loam soils with gentle slopes, and about 94% of the ROW having a ground slope of 4% or less. Elevations along the ROW range from about 670 feet to 721 feet MSL. Minor vegetation clearing is anticipated to be required for the project. The existing land use adjacent to the ROW is primarily cultivated crops. |

Existing Line Physical Characteristics

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|----------------------------|--|
| Operating voltage | 345 |
| Conductor size and type | Single 1414 kcmil paper expanded ACSR per phase |
| Hardware plan description | Four new structures will be installed to accommodate the southern University Park – Olive line being cut into the Green Acres substation. Tubular steel structures of similar design to the approved supplemental project will be used and bundled 1033 kcmil ACSS conductor installed. 345kV hardware, with the same design as the supplemental project will be installed on the new section of line. |
| Tower line characteristics | This section of line will have recently replaced with tubular steel double circuit monopoles due to the supplemental project. |

Proposed Line Characteristics

| | Designed | Operating |
|---------------------------|--|--------------------------|
| Voltage (kV) | 345.000000 | 345.000000 |
| | Normal ratings | Emergency ratings |
| Summer (MVA) | 2050.000000 | 2495.000000 |
| Winter (MVA) | 2193.000000 | 2621.000000 |
| Conductor size and type | 1033.5 kcmil Curlew ACSS HS: 2C Bundle | |
| Shield wire size and type | Reuse OPGW from supplemental project | |

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|--|--|
| Rebuild line length | 0 mile |
| Rebuild portion description | Outside of the Green Acres substation, swap the NEETMA IN circuits. Two (2) 3-pole tubular steel structures will be used to cut the southern circuit into Green Acres, and two (2) new intermediate structures will be installed between the line and station. The proposed swap will result in the North Circuit going from Crete to St John to Olive and the South Circuit going from University Park to Green Acres to Olive. |
| Right of way | Existing ROW will be used to support the circuit swap at Green Acres. |
| Construction responsibility | Business confidential information |
| Benefits/Comments | Resolves reliability and market efficiency issues identified per PJM's. |
| Component Cost Details - In Current Year \$ | |
| Engineering & design | Detailed cost breakdown is business confidential information. |
| Permitting / routing / siting | Detailed cost breakdown is business confidential information. |
| ROW / land acquisition | Detailed cost breakdown is business confidential information. |
| Materials & equipment | Detailed cost breakdown is business confidential information. |
| Construction & commissioning | Detailed cost breakdown is business confidential information. |
| Construction management | Detailed cost breakdown is business confidential information. |
| Overheads & miscellaneous costs | Detailed cost breakdown is business confidential information. |
| Contingency | Detailed cost breakdown is business confidential information. |
| Total component cost | \$1,976,000.00 |
| Component cost (in-service year) | \$2,080,000.00 |
| Transmission Line Upgrade Component | |
| Component title | Rebuild Uni (IN/IL border)-Green Acres 345 kV TL |
| Project description | Business confidential information |
| Impacted transmission line | University Park Sub to Olive 345 kV line |

| | |
|---------------------|---|
| Point A | University Park Sub |
| Point B | Green Acres Tap |
| Point C | Not Applicable |
| Terrain description | The terrain along the transmission line right-of-way (ROW) is predominantly silt loam and clay loam soils with gentle slopes, and about 94% of the ROW having a ground slope of 4% or less. Elevations along the ROW range from about 670 feet to 721 feet MSL. Minor vegetation clearing anticipated for the project. The existing land use adjacent to the ROW is primarily cultivated crops and developed lands. |

Existing Line Physical Characteristics

| | |
|----------------------------|---|
| Operating voltage | 345 |
| Conductor size and type | Single 1414 kcmil paper expanded ACSR per phase |
| Hardware plan description | NEET MA IN has received approval for a supplemental project that involves replacing aging infrastructure between of an existing double circuit 345 kV line. This rebuild represents a portion of the supplemental project # s2509 that is necessary to address the PJM reliability issue, which only involves rebuild the Uni (IN/IL border)-to Green Acres section of the 345 kV line. |
| Tower line characteristics | NEET MA IN has received approval for a supplemental project that involves replacing aging infrastructure between of an existing double circuit 345 kV line. This rebuild represents a portion of the supplemental project # s2509 that is necessary to address the PJM reliability issue, which only involves rebuild the Uni (IN/IL border)-to Green Acres section of the 345 kV line. |

Proposed Line Characteristics

| | Designed | Operating |
|-------------------------|--|--------------------------|
| Voltage (kV) | 345.000000 | 345.000000 |
| | Normal ratings | Emergency ratings |
| Summer (MVA) | 2050.000000 | 2495.000000 |
| Winter (MVA) | 2193.000000 | 2621.000000 |
| Conductor size and type | 1033.5 kcmil Curlew ACSS HS: 2C Bundle | |

| | |
|-----------------------------|--|
| Shield wire size and type | Reuse OPGW from supplemental project |
| Rebuild line length | 13.7 miles |
| Rebuild portion description | Line will be rebuilt as part of the supplemental project utilizing tubular steel monopoles in existing ROW replacing aging lattice towers. Tangent structures will be direct embedded with angles and deadend on drilled piers. New hardware and conductor will be installed as part of the rebuild. |
| Right of way | Segment 1: This approximately 7 mile segment, starting from the Illinois/Indiana state line heading East crosses mostly agricultural and developing residential area to St. John Substation. The right of way varies in width but averages 140' and crosses 14 roadways (public and community) and two railroads. Segment 2: This approximately 6.7 mile stretch to the NE crosses mostly agricultural land and 12 roadways. |
| Construction responsibility | Business confidential information |
| Benefits/Comments | Resolves reliability and market efficiency issues identified per PJM's Generation Deliverability Process. |

Component Cost Details - In Current Year \$

| | |
|----------------------------------|---|
| Engineering & design | Detailed cost breakdown is business confidential information. |
| Permitting / routing / siting | Detailed cost breakdown is business confidential information. |
| ROW / land acquisition | Detailed cost breakdown is business confidential information. |
| Materials & equipment | Detailed cost breakdown is business confidential information. |
| Construction & commissioning | Detailed cost breakdown is business confidential information. |
| Construction management | Detailed cost breakdown is business confidential information. |
| Overheads & miscellaneous costs | Detailed cost breakdown is business confidential information. |
| Contingency | Detailed cost breakdown is business confidential information. |
| Total component cost | \$40,156,737.00 |
| Component cost (in-service year) | \$42,076,737.00 |

Transmission Line Upgrade Component

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|----------------------------|---|
| Component title | Reconductor Crete - St. John-NEETMA 345 kV TL upgrade |
| Project description | Business confidential information |
| Impacted transmission line | Crete Bus to St John Bus 345 kV line |
| Point A | Crete Bus |
| Point B | St John Bus |
| Point C | Not Applicable |
| Terrain description | The terrain along the transmission line right-of-way (ROW) is predominantly silt loam and clay loam soils with gentle slopes, and about 94% of the ROW having a ground slope of 4% or less. Elevations along the ROW range from about 670 feet to 721 feet MSL. Minor vegetation clearing anticipated for the project. The existing land use adjacent to the ROW is primarily cultivated crops and developed lands. |

Existing Line Physical Characteristics

| | |
|----------------------------|---|
| Operating voltage | 345 |
| Conductor size and type | Single 1414 kcmil paper expanded ACSR per phase |
| Hardware plan description | NEET MA IN has received approval for a supplemental project that involves replacing aging infrastructure between of an existing double circuit 345 kV line. This reconductor represents a portion of the supplemental project that is necessary to address the PJM reliability issue, which only involves reconductoring the Crete-St. John section of the 345 kV line. |
| Tower line characteristics | NEET MA IN has received approval for a supplemental project that involves replacing aging infrastructure between of an existing double circuit 345 kV line. This reconductor represents a portion of the supplemental project that is necessary to address the PJM reliability issue, which only involves reconductoring the Crete-St. John section of the 345 kV line. |

Proposed Line Characteristics

| | Designed | Operating |
|--------------|-----------------------|--------------------------|
| Voltage (kV) | 345.000000 | 345.000000 |
| | Normal ratings | Emergency ratings |

| | | |
|--|--|-------------|
| Summer (MVA) | 2050.000000 | 2495.000000 |
| Winter (MVA) | 2193.000000 | 2621.000000 |
| Conductor size and type | 1033.5 kcmil Curlew ACSS HS: 2C Bundle | |
| Shield wire size and type | Reuse OPGW from supplemental project | |
| Rebuild line length | 7 miles | |
| Rebuild portion description | Line will be rebuilt as part of the supplemental project utilizing tubular steel monopoles in existing ROW replacing aging lattice towers. Tangent structures will be direct embedded with angles and deadend on drilled piers. New hardware and conductor will be installed as part of the rebuild. | |
| Right of way | Segment 1: This approximately 7 mile segment, starting from the Illinois/Indiana state line heading East crosses mostly agricultural and developing residential area to St. John Substation. The right of way varies in width between 100 and 150 feet and crosses 14 roadways (public and community) and two railroads. | |
| Construction responsibility | Business confidential information | |
| Benefits/Comments | Resolves market efficiency and reliability issues identified per PJM's Generation Deliverability Process. | |
| Component Cost Details - In Current Year \$ | | |
| Engineering & design | Detailed cost breakdown is business confidential information. | |
| Permitting / routing / siting | Detailed cost breakdown is business confidential information. | |
| ROW / land acquisition | Detailed cost breakdown is business confidential information. | |
| Materials & equipment | Detailed cost breakdown is business confidential information. | |
| Construction & commissioning | Detailed cost breakdown is business confidential information. | |
| Construction management | Detailed cost breakdown is business confidential information. | |
| Overheads & miscellaneous costs | Detailed cost breakdown is business confidential information. | |
| Contingency | Detailed cost breakdown is business confidential information. | |
| Total component cost | \$1,990,250.00 | |

Component cost (in-service year) \$2,095,000.00

Transmission Line Upgrade Component

Component title Crete - St. John-ComEd 345 kV TL upgrade

Project description Business confidential information

Impacted transmission line Crete Bus to St John Bus 345 kV line

Point A Crete Bus

Point B St John Bus

Point C Not Applicable

Terrain description The terrain along the transmission line right-of-way (ROW) is relatively flat with about 94% of the ROW having a ground slope of 4% or less. Elevations along the ROW range from about 670 feet to 725 feet MSL. Minor vegetation clearing anticipated for the project. The existing land use adjacent to the ROW is primarily cultivated crops and developed lands.

Existing Line Physical Characteristics

Operating voltage 345

Conductor size and type Single 1414 kcmil paper expanded ACSR per phase

Hardware plan description Unknown

Tower line characteristics Lattice structure towers built in 1950's

Proposed Line Characteristics

| | Designed | Operating |
|--------------|----------------|-------------------|
| Voltage (kV) | 345.000000 | 345.000000 |
| | Normal ratings | Emergency ratings |
| Summer (MVA) | 1679.000000 | 2058.000000 |
| Winter (MVA) | 2091.000000 | 2381.000000 |

| | |
|-----------------------------|---|
| Conductor size and type | 1277 kcmil ACSR: 2C Bundle |
| Shield wire size and type | Utilize existing shield wire to extent practicable |
| Rebuild line length | 4.97 miles |
| Rebuild portion description | 4.97 miles going from Crete Substation to IL/IN State line |
| Right of way | This approximately 5 mile segment from the IL/IN state line that runs west to the Crete substation crosses mostly agricultural land and crosses 7 roadways and utilizes existing ROW. |
| Construction responsibility | ComEd |
| Benefits/Comments | Resolves reliability and market efficiency issues identified per PJM's Generation Deliverability Process. |

Component Cost Details - In Current Year \$

| | |
|----------------------------------|---|
| Engineering & design | Detailed cost breakdown is business confidential information. |
| Permitting / routing / siting | Detailed cost breakdown is business confidential information. |
| ROW / land acquisition | Detailed cost breakdown is business confidential information. |
| Materials & equipment | Detailed cost breakdown is business confidential information. |
| Construction & commissioning | Detailed cost breakdown is business confidential information. |
| Construction management | Detailed cost breakdown is business confidential information. |
| Overheads & miscellaneous costs | Detailed cost breakdown is business confidential information. |
| Contingency | Detailed cost breakdown is business confidential information. |
| Total component cost | \$6,454,500.00 |
| Component cost (in-service year) | \$7,121,321.20 |

Transmission Line Upgrade Component

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|---------------------|--|
| Component title | Uni North - Uni-Olive IN/IL section 345kV TL Upgrade |
| Project description | Business confidential information |

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|----------------------------|--|
| Impacted transmission line | University Park Sub to Olive Sub 345 kV line |
| Point A | University Park Sub |
| Point B | Olive Sub |
| Point C | Not Applicable |
| Terrain description | The terrain along the transmission line right-of-way (ROW) is predominantly silt loam and clay loam soils with gentle slopes, and about 94% of the ROW having a ground slope of 4% or less. Elevations along the ROW range from about 685 feet to 705 feet MSL. Minor vegetation clearing anticipated for the project. The existing land use adjacent to the ROW is primarily cultivated crops and developed land. |

Existing Line Physical Characteristics

| | |
|----------------------------|---|
| Operating voltage | 345 |
| Conductor size and type | Single 1414 kcmil paper expanded ACSR per phase |
| Hardware plan description | Unknown |
| Tower line characteristics | Lattice structure towers built in 1950's |

Proposed Line Characteristics

| | Designed | Operating |
|---------------------------|--|--------------------------|
| Voltage (kV) | 345.000000 | 345.000000 |
| | Normal ratings | Emergency ratings |
| Summer (MVA) | 1679.000000 | 2058.000000 |
| Winter (MVA) | 2091.000000 | 2381.000000 |
| Conductor size and type | 1277 kcmil ACSR: 2C Bundle | |
| Shield wire size and type | Utilize existing shield wire to extent practicable | |
| Rebuild line length | 12.21 miles | |

| | |
|--|---|
| Rebuild portion description | Reconductor ComEd section of 12.21 miles of existing University to Olive line 345 kV from Uni to Uni (IL/IL) border section |
| Right of way | Segment 1: This 1.1 mile segment starts in at the University Park substation and following a ROW that varies in width between 150 and 200 ft in width southeast to the Canadian National railroad line .25 mile beyond the existing Woodhill substation. This segment crosses 4 roadways and 1 railroad. Segment 2: This 11 mile stretch heads east from the Canadian National rail line, crossing mostly agricultural lands to the IL/IN border. This segment crosses 14 roadways and 1 railroad |
| Construction responsibility | ComEd |
| Benefits/Comments | Resolves reliability and market efficiency issues identified per PJM's Generation Deliverability Process. |
| Component Cost Details - In Current Year \$ | |
| Engineering & design | Detailed cost breakdown is business confidential information. |
| Permitting / routing / siting | Detailed cost breakdown is business confidential information. |
| ROW / land acquisition | Detailed cost breakdown is business confidential information. |
| Materials & equipment | Detailed cost breakdown is business confidential information. |
| Construction & commissioning | Detailed cost breakdown is business confidential information. |
| Construction management | Detailed cost breakdown is business confidential information. |
| Overheads & miscellaneous costs | Detailed cost breakdown is business confidential information. |
| Contingency | Detailed cost breakdown is business confidential information. |
| Total component cost | \$15,827,777.70 |
| Component cost (in-service year) | \$17,475,145.60 |
| Substation Upgrade Component | |
| Component title | Stillwell - Dumont 345 kV TL substation limiting element rating upgrade |
| Project description | Business confidential information |
| Substation name | Existing substation name where the upgrade will take place. Stillwell or Dumont 345 kV TL |

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| Substation zone | NIPS to AEP |
| Substation upgrade scope | Upgrade the limiting element at Stillwell or Dumont substation to increase the rating of the Stillwell -Dumont line to t match conductor rating (1408/1887/1780/2143 for SN/SE/WN/WE for PJM side) |
| Transformer Information | |
| None | |
| New equipment description | Upgrade the limiting element at Stillwell or Dumont substation to increase the rating of the Stillwell -Dumont line to match conductor rating (1408/1887/1780/2143 for SN/SE/WN/WE for PJM side) |
| Substation assumptions | Upgrade of limiting element possible without any substation expansion. Either AEP or NIPSCO' scope of work. In service date should occur in fall 2027 to accommodate overload in summer 2027 |
| Real-estate description | No substation expansion anticipated. |
| Construction responsibility | AEP |
| Benefits/Comments | Resolves reliability and market efficiency issues identified per PJM's process. |
| Component Cost Details - In Current Year \$ | |
| Engineering & design | Detailed cost breakdown is business confidential information. |
| Permitting / routing / siting | Detailed cost breakdown is business confidential information. |
| ROW / land acquisition | Detailed cost breakdown is business confidential information. |
| Materials & equipment | Detailed cost breakdown is business confidential information. |
| Construction & commissioning | Detailed cost breakdown is business confidential information. |
| Construction management | Detailed cost breakdown is business confidential information. |
| Overheads & miscellaneous costs | Detailed cost breakdown is business confidential information. |
| Contingency | Detailed cost breakdown is business confidential information. |
| Total component cost | \$5,000,000.00 |
| Component cost (in-service year) | \$5,520,404.02 |

Substation Upgrade Component

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|--------------------------|---|
| Component title | St. Johns substation terminal equipment upgrade |
| Project description | Business confidential information |
| Substation name | St Johns 345 kV |
| Substation zone | NIPSCO |
| Substation upgrade scope | Upgrade the existing terminal equipment (substation conductor) at St. John on the existing Crete to St. John 345 kV line with bundled 2x1590 ACSR Lapwing rated 2239/2390 WN/WE |

Transformer Information

| | |
|-----------------------------|---|
| None | |
| New equipment description | Upgrade the existing terminal equipment (substation conductor) at St. John on the existing Crete to St. John 345 kV line with bundled 2x1590 ACSR Lapwing rated 2239/2390 WN/WE |
| Substation assumptions | Upgrade has been evaluated to be feasible per supplemental project supplemental project # s2509. |
| Real-estate description | No substation expansion anticipated |
| Construction responsibility | NIPSCO |
| Benefits/Comments | Resolves reliability and market efficiency issues identified per PJM's process. |

Component Cost Details - In Current Year \$

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|---------------------------------|---|
| Engineering & design | Detailed cost breakdown is business confidential information. |
| Permitting / routing / siting | Detailed cost breakdown is business confidential information. |
| ROW / land acquisition | Detailed cost breakdown is business confidential information. |
| Materials & equipment | Detailed cost breakdown is business confidential information. |
| Construction & commissioning | Detailed cost breakdown is business confidential information. |
| Construction management | Detailed cost breakdown is business confidential information. |
| Overheads & miscellaneous costs | Detailed cost breakdown is business confidential information. |

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| Contingency | Detailed cost breakdown is business confidential information. |
| Total component cost | \$2,000,000.00 |
| Component cost (in-service year) | \$2,208,161.61 |

Substation Upgrade Component

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|--------------------------|--|
| Component title | Green Acres substation terminal equipment upgrade |
| Project description | Business confidential information |
| Substation name | Existing substation name where the upgrade will take place. Green Acres |
| Substation zone | NIPSCO |
| Substation upgrade scope | Upgrade the existing terminal equipment (substation conductor) at Green Acres on the existing St. John to Green Acres 345 kV line with bundled 2x1590 ACSR Lapwing rated 2239/2390 WN/WE |

Transformer Information

| | |
|-----------------------------|--|
| None | |
| New equipment description | Upgrade the existing terminal equipment (substation conductor) at Green Acres on the existing St. John to Green Acres 345 kV line with bundled 2x1590 ACSR Lapwing rated 2239/2390 WN/WE |
| Substation assumptions | Upgrade has been evaluated to be feasible per supplemental project supplemental project # s2509. |
| Real-estate description | No substation expansion anticipated |
| Construction responsibility | NIPSCO |
| Benefits/Comments | Resolves reliability and market efficiency issues identified per PJM's process. |

Component Cost Details - In Current Year \$

| | |
|-------------------------------|---|
| Engineering & design | Detailed cost breakdown is business confidential information. |
| Permitting / routing / siting | Detailed cost breakdown is business confidential information. |
| ROW / land acquisition | Detailed cost breakdown is business confidential information. |
| Materials & equipment | Detailed cost breakdown is business confidential information. |

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|----------------------------------|---|
| Construction & commissioning | Detailed cost breakdown is business confidential information. |
| Construction management | Detailed cost breakdown is business confidential information. |
| Overheads & miscellaneous costs | Detailed cost breakdown is business confidential information. |
| Contingency | Detailed cost breakdown is business confidential information. |
| Total component cost | \$2,000,000.00 |
| Component cost (in-service year) | \$2,208,161.61 |

Greenfield Substation Component

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|------------------------|--|
| Component title | 345 kV Series Reactor |
| Project description | Business confidential information |
| Substation name | State Line Reactor Substation |
| Substation description | 8.34+ Ohm reactor equipped with bypass switches. |
| Nominal voltage | AC |
| Nominal voltage | 345 |

Transformer Information

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|-----------------------------|---|
| None | |
| Major equipment description | New 8.34+ Ohm (0.7%, 100 MVA base) series reactor device. |

| | Normal ratings | Emergency ratings |
|--------------|-----------------------|--------------------------|
| Summer (MVA) | 2002.000000 | 2091.000000 |
| Winter (MVA) | 2091.000000 | 2196.000000 |

Environmental assessment

Fatal flaws have not been identified for the NEET MA proposed State Line substation. Environmental constraints identified are manageable through implementation of NEET MA's environmental avoidance, minimization and mitigation strategy incorporated at the beginning of the routing/siting process. While there is a small NWI wetland mapped adjacent to the proposed station. Any temporary impacts in the area will be included in the Nationwide Permit application. No streams or associated floodplains are within the proposed substation location. Permanent impacts to wetlands will be avoided and minimized to the extent possible through site specific design, engineering, and structure placement. While there do not appear to be any trees at the proposed substation, the project intends to adhere to tree removal seasonal restriction windows to avoid and minimize impacts to protected birds and bats, such as the Indiana Bat, Northern Long-eared Bat, Bald Eagle, and other common raptors. Erosion control best management practices and setbacks will be engineered and utilized to prevent sedimentation from leaving the site for the protection of aquatic species and to avoid water quality impacts. A Cultural Resource Assessment Survey will be conducted to determine the presence of archeological or culturally sensitive areas and implementation of NEET MA's avoidance strategy. There are no unique or sensitive environmental concerns or impacts with the NEET MA proposed Illinois substation.

Outreach plan

NEETMA IN is committed to working with all interested stakeholders through a robust outreach and education (O&E) program to address/respond to community concerns and inform the public about the project to the greatest extent practicable. NEETMA IN believes a well-designed O&E program can have numerous benefits, including fostering a cooperative relationship with landowners and other stakeholders, expediting the regulatory permitting process, and assisting with project development. In general, the purpose of the community outreach plan is to gain community support for the project, in particular the affected community, to enable NEETMA IN to expeditiously comply with all relevant regulatory requirements that would permit timely construction and operation of the proposed project. Elements of the community outreach plan will include the following: 1) Identify potential issues at an early stage by engagement with key community stakeholders at the outset; 2) Broaden the community engagement process to identify potential and relevant community benefits that can facilitate community support for the proposed project; 3) Develop a broad base of community support for the proposed project before the regulatory agencies; and 4) Develop a comprehensive administrative record documenting the community outreach process that can be presented to the regulatory agency or, in the event of a legal challenge, to the appropriate court. The plan proposes to dedicate considerable time and resources in engaging the community, and specifically the affected community during the planning process to identify highly sensitive areas that have the least amount of cultural, environmental, and social impacts on the community. The plans will reflect avoidance of impacts rather than mitigation. However, in some cases, if avoidance is not possible, then NEETMA IN will involve the community in providing appropriate and practical mitigation measures.

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| Land acquisition plan | Key elements in NEETMA IN's approach to the landowner negotiation process for this project, and other projects in PJM, include: 1) Proactively conducting a market analysis of land values in the project area; 2) Producing a fair and comprehensive land acquisition plan and schedule for securing necessary land rights and site control; 3) Utilizing local land acquisition teams knowledgeable of the project area; and 4) Taking a transparent approach in discussing the project and NEETMA IN development interests in the subject property. NEETMA IN will negotiate agreements with the landowners of the proposed project area. NEETMA IN's philosophy for landowner relations is to work with residents during all phases of a project to address issues as they arise, before and after acquisition of land rights. NEETMA IN is committed to serving as the point of contact for residents, whether directly or indirectly affected by the project, for the duration of the project. NEETMA IN uses a collaborative and consultative approach to working with landowners, focusing on regular communication, to understand and address issues on an ongoing basis. NEETMA IN is also committed to using design and construction techniques that minimize impacts on private lands, and to restoring the construction sites of the projects to be both good stewards of the environment and good neighbors in the communities in which NEETMA IN live and work. |
| Construction responsibility | Business confidential information |
| Benefits/Comments | Business confidential information |
| Component Cost Details - In Current Year \$ | |
| Engineering & design | Detailed cost breakdown is business confidential information. |
| Permitting / routing / siting | Detailed cost breakdown is business confidential information. |
| ROW / land acquisition | Detailed cost breakdown is business confidential information. |
| Materials & equipment | Detailed cost breakdown is business confidential information. |
| Construction & commissioning | Detailed cost breakdown is business confidential information. |
| Construction management | Detailed cost breakdown is business confidential information. |
| Overheads & miscellaneous costs | Detailed cost breakdown is business confidential information. |
| Contingency | Detailed cost breakdown is business confidential information. |
| Total component cost | \$8,037,000.00 |
| Component cost (in-service year) | \$8,460,000.00 |

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 |
|---------------|------------|---------------|------------|--------------|-----|---------|---------|-------------------|----------|
| MDW1-GD-S1620 | 255113 | 17STILLWELL | 243219 | 05DUMONT | 1 | 345 | 205/217 | Summer Gen Deliv | Included |
| MDW1-ME-01 | 255113 | 17STILLWELL | 243219 | 05DUMONT | 1 | 345 | 205/217 | Market Efficiency | Included |
| MDW1-ME-02 | 274804 | UNIV PK N;RP | 243229 | 05OLIVE | 1 | 345 | 205/222 | Market Efficiency | Included |
| MDW1-GD-W392 | 274804 | UNIV PK N;RP | 243229 | 05OLIVE | 1 | 345 | 205/222 | Winter Gen Deliv | Included |
| MDW1-GD-W393 | 274804 | UNIV PK N;RP | 243229 | 05OLIVE | 1 | 345 | 205/222 | Winter Gen Deliv | Included |
| MDW1-GD-W309 | 274750 | CRETE EC ;BP | 255112 | 17STJOHN | 1 | 345 | 217/222 | Winter Gen Deliv | Included |
| MDW1-GD-W404 | 274750 | CRETE EC ;BP | 255112 | 17STJOHN | 1 | 345 | 217/222 | Winter Gen Deliv | Included |
| MDW1-GD-W419 | 274750 | CRETE EC ;BP | 255112 | 17STJOHN | 1 | 345 | 217/222 | Winter Gen Deliv | Included |
| MDW1-ME-04 | 274750 | CRETE EC ;BP | 255112 | 17STJOHN | 1 | 345 | 217/222 | Market Efficiency | Included |
| MDW1-GD-W172 | 274750 | CRETE EC ;BP | 255112 | 17STJOHN | 1 | 345 | 217/222 | Winter Gen Deliv | Included |
| MDW1-GD-W171 | 274750 | CRETE EC ;BP | 255112 | 17STJOHN | 1 | 345 | 217/222 | Winter Gen Deliv | Included |
| MDW1-GD-W188 | 274750 | CRETE EC ;BP | 255112 | 17STJOHN | 1 | 345 | 217/222 | Winter Gen Deliv | Included |
| MDW1-GD-W190 | 274750 | CRETE EC ;BP | 255112 | 17STJOHN | 1 | 345 | 217/222 | Winter Gen Deliv | Included |
| MDW1-GD-W185 | 274750 | CRETE EC ;BP | 255112 | 17STJOHN | 1 | 345 | 217/222 | Winter Gen Deliv | Included |
| MDW1-GD-W332 | 270728 | E FRANKFO; B | 274750 | CRETE EC ;BP | 1 | 345 | 222 | Winter Gen Deliv | Included |
| MDW1-GD-W331 | 270728 | E FRANKFO; B | 274750 | CRETE EC ;BP | 1 | 345 | 222 | Winter Gen Deliv | Included |
| MDW1-ME-03 | 270728 | E FRANKFO; B | 274750 | CRETE EC ;BP | 1 | 345 | 222 | Winter Gen Deliv | Included |

New Flowgates

None

Financial Information

| | |
|------------------------------|---------|
| Capital spend start date | 01/2023 |
| Construction start date | 12/2025 |
| Project Duration (In Months) | 59 |

Additional Comments

None