

Great Lakes Enhanced Gateway

General Information

Proposing entity name	Sensitive commercial or competitive information
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Sensitive commercial or competitive information
Company proposal ID	Sensitive commercial or competitive information
PJM Proposal ID	230
Project title	Great Lakes Enhanced Gateway
Project description	The Wilton Center-Zion Energy Center HVDC Project is a 3,000 MW, +/-525 kV voltage-source-converter (VSC) bipole with a dedicated metallic return linking ComEd's Wilton Center 345 kV station to the Zion Energy Center 345 kV station (TSS 974, Lake County) - approx. 111 route-miles overhead to a transition station in north-eastern McHenry County and approx. 20 route-miles underground to the Zion converter. It creates a controllable, high-capacity north-south transfer path on the western edge of the Chicago metropolitan area, moving power from the strong 765/345 kV source at Wilton Center directly into the northern Lake County load pocket without loading the suburban 345 kV and 138 kV corridors; the VSC terminals' +/-1,000 MVAR-class dynamic reactive capability relieves the thermal overloads, supports ComEd load-deliverability (CETO) margin and provides voltage support in a region facing rapid data-center growth and thermal retirements. The Great Lakes Gateway proposal pairs the HVDC link with a new single-circuit 765 kV AC line from ComEd's Wilton Center 765 kV station (TSS 112, Will County, IL) to AEP/Indiana Michigan Power's Greentown 765 kV station (Howard County, IN; AEP zone of PJM - not a tie line), approx. 145.7 route-miles on the submitted Route 10_10 alignment (approx. 30.9 mi in Illinois, approx. 114.9 mi in Indiana), terminated in an open ring position at Wilton Center (no new breaker) and a new bay breaker at Greentown. The extension adds a third 765 kV source into Wilton Center from the AEP 765 kV backbone, so the HVDC withdrawal is supplied without depending on the single existing Dumont-Wilton Center 765 kV path, and raises west-to-east import capability into the ComEd zone. The terminal configurations are drawn on the planned station arrangements that precede this project's 6/1/2033 in-service date: ComEd's TR 91 position at Wilton Center (PJM b4006.1, RISD 12/1/2030) and, at Greentown, the PJM 2025 RTEP Window 1 Greentown-Thistlewood 765 kV expansion (Grid Growth West, RISD 6/1/2030) and the Gwynneville re-termination of the Jefferson line. Components here: Wilton Center 765 kV Substation Upgrade (ComEd), Wilton Center-Greentown 765 kV OH - Illinois (proposer) and - Indiana (AEP), Greentown 765 kV Substation Upgrade (AEP). Routing: submitted Route 10_10 (10 Oct 2026), incl. 25.5 mi beside the Dumont-Wilton Center 765 kV line in Will County; Rev 0 Alt E is the ICC alternate.

Email	Sensitive commercial or competitive information
Project in-service date	06/2033
Tie-line impact	Yes
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	Sensitive commercial or competitive information

Project Components

1. Zion Energy Center Substation Upgrade
2. Zion Energy Center Converter - Zion Energy Center R 345 kV #01
3. Zion Energy Center Converter - Zion Energy Center B 345 kV #02
4. Zion Energy Center Converter Station
5. Zion Energy Center Converter - Wilton Center Converter 525 kV HVDC
6. Wilton Center Converter - Wilton Center R 345 kV #01
7. Wilton Center Converter Station - Wilton Center 345 kV #02
8. Wilton Center Converter Station
9. Wilton Center 345 kV Substation Upgrade
10. Wilton Center – Greentown 765 kV OH - Illinois
11. Wilton Center – Greentown 765 kV OH - Indiana
12. Greentown 765 kV Substation Upgrade
13. Zion - Zion Energy Center B 345 kV #01
14. Zion Energy Center B - Libertyville B 345 kV
15. Zion Energy Center B - Paris 345 kV
16. Zion - Zion Energy Center B 345 kV #02
17. Zion Energy Center R - Pleasant Prairie 345 kV #02
18. Zion - Zion Energy Center R 345 kV #02
19. Zion EC Gen - Zion Energy Center R 345 kV

20. Zion Energy Center R - Pleasant Prairie 345 kV #01

21. Wilton Center 765 kV Substation Upgrade

Substation Upgrade Component

Component title	Zion Energy Center Substation Upgrade
Project description	Sensitive commercial or competitive information
Substation name	Zion Energy Center 345 kV switchyard (ComEd TSS 974), Newport Township, Lake County, IL (approx. 42.469 N, 87.896 W)
Substation zone	ComEd
Substation upgrade scope	(1) Build a new 345 kV breaker-and-a-half yard adjacent to and incorporating the existing TSS 974 yard: 7 bays, 21 circuit breakers (including (2) tie breakers), 12 terminals as shown on the provided one-line. Blue section: Zion-Libertyville to Libertyville Blue; Zion-Libertyville to Zion Blue; Zion Converter Pole 2 Blue; Zion-Paris to Zion Blue; Zion-Paris to ATC Paris. Red section: Zion Converter Pole 1 Red; Zion E.C.-Libertyville Red (L15423); Zion-Pleasant Prairie to ATC Pleasant Prairie; Zion-Zion E.C. Red (L2223); Zion E.C. generation; Zion E.C.-Pleasant Prairie (ATC); Zion-Pleasant Prairie to Zion Red. (2) Terminate the two new converter leads, the four loop-in legs of the Zion-Libertyville and Zion-Paris Blue circuits (line components a-d) and the two legs of the Zion-Pleasant Prairie Red circuit (ComEd L2221). (3) Transfer the existing Red terminals (Zion R, Libertyville R, ATC Pleasant Prairie-Zion E.C., generation tie) to the new bays and retire or salvage the existing ring-bus breakers. (4) New protection and control for all terminals, SCADA/EMS integration, telecom, station service, batteries and control building. (5) Yard civil: site grading and drainage, foundations, grounding grid extension, fence, access road, oil containment where required. (6) Short-circuit review and replacement of any existing equipment whose duty is exceeded with the converter in service.

Transformer Information

None

New equipment description	New 345 kV equipment (preliminary ratings, ComEd standards to govern): 21 circuit breakers, 345 kV, 4,000 A, 63 kA, dead-tank (SF6 or ComEd-approved alternative gas), with independent-pole operation on converter and line bays; approx. 38 motor-operated breaker disconnects and bus disconnects and 12 line disconnects, 345 kV, 4,000 A, with ground switches on line positions; CCVTs on each line/converter terminal and both buses; free-standing CTs where required for bus and breaker-failure zones; 345 kV surge arresters at each line and converter entrance; Bus A and Bus B strain/rigid bus rated 4,000 A with associated bay bus and jumpers; bus support and take-off structures (converter-lead dead-end structures in components h and i); protective relaying (redundant line current differential/distance, bus differential, breaker failure, transfer trip), control building, 125 Vdc battery/charger, station service, SCADA RTU and fiber telecom. Converter bays are rated for the full 1,500 MW per pole plus up to ± 500 MVar reactive exchange (approx. 1,600 MVA continuous). Equipment counts will be confirmed in detailed design.
Substation assumptions	Assumptions used for scope and cost: Open land adjacent to the existing yard (east/south) is available or can be acquired for the new bays so that the Red section can be built and the existing terminals transferred before the Blue section is constructed on the reclaimed pad (phased construction with temporary ties to limit outages). Existing breakers are not reused in place; salvage as ComEd spares.
Real-estate description	The expanded breaker-and-a-half yard requires approximately 7 acres beyond the existing TSS 974 fence, on open land immediately east of the existing yard on private property held by an entity historically associated with ComEd. The proposer will acquire the required land in fee (or by easement where acceptable to ComEd) by negotiated purchase from the current owner and convey it to ComEd for the expanded station; no residential or public parcels are affected. The station expansion footprint is shown in the general arrangement and KMZ included with the proposal.
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information

Overheads & miscellaneous costs	Sensitive commercial or competitive information	
Contingency	Sensitive commercial or competitive information	
Total component cost	\$66,608,885.00	
Component cost (in-service year)	\$74,432,160.00	
Greenfield Transmission Line Component		
Component title	Zion Energy Center Converter - Zion Energy Center R 345 kV #01	
Project description	Sensitive commercial or competitive information	
Point A	Zion Energy Center Converter Station	
Point B	Zion Energy Center	
Point C		
	Normal ratings	Emergency ratings
Summer (MVA)	2075.000000	2454.000000
Winter (MVA)	2273.000000	2604.000000
Conductor size and type	2 × 954 kcmil ACSS/MA3/E3X per phase (bundled); 1 × 48-fiber OPGW + 1 × 7#8 Alumoweld shield wire (preliminary; converter pole rating 1,500 MW governs)	
Nominal voltage	AC	
Nominal voltage	345	
Line construction type	Overhead	

General route description	Short station-to-station connection, approximately 0.6 route-miles: from the Zion Energy Center Converter Station 345 kV AC yard (immediately west/south-west of the Zion Energy Center) north-east into the expanded ZEC 345 kV yard. The alignment crosses the Union Pacific Milwaukee Subdivision (single-track freight line immediately west of the ZEC yard), a ComEd 138 kV circuit, and the cut-in Zion Energy Center B - Paris 345 kV line (originally L2222 Zion-Paris) and enters the Zion Energy Center yard at the Red section (east half of the yard). Alternatives evaluated: converter sites north of the ZEC yard and ~0.75 mi WSW along the railroad; the adjacent site was selected to minimize lead length, crossings, and to minimize/eliminate overlap with wetland features. The Pole 1 (Red) and Pole 2 (Blue) leads are routed as two independent single-circuit lines on separate structures so that a single structure failure cannot remove both poles of the bipole. Final alignment is subject to the converter general arrangement, ComEd crossing standards and the ZEC yard expansion layout.
Terrain description	Flat glacial lake plain on open land between the Zion Energy Center generating site, the ComEd transmission corridor and the Union Pacific railroad. Silty clay loam over glacial till; drainage to local ditches and retention basins; one railroad crossing (Union Pacific Milwaukee Subdivision) and no river or highway crossings; no mapped FEMA floodplain on the lead alignment. Access from existing plant/station access roads and the converter site. NWI wetland and field delineation to be confirmed during siting.
Right-of-way width by segment	Single segment, approx. 0.6 mi, new right-of-way on proposer-owned land (converter parcel), the ComEd/Zion Energy Center station property, and only one other private property. Typical 150-ft ROW for single-circuit 345 kV monopole construction (75 ft each side of centerline). No use or expansion of existing ComEd line ROW except at the single 138 kV ComEd line crossing, which is made by spanning the existing circuit under a ComEd crossing agreement; the Union Pacific railroad is spanned under a UP crossing agreement (no longitudinal occupation). Classification: 100% new ROW (0% existing, 0% expansion of existing).
Electrical transmission infrastructure crossings	ComEd 138 kV circuit Lakeview-Unknown, Zion Energy Center B - Paris 345 kV line (originally L2222 Zion-Paris)
Civil infrastructure/major waterway facility crossing plan	No road, pipeline or waterway is crossed. The Union Pacific Milwaukee Subdivision (single track) is crossed by an overhead span between dead-end/angle monopoles set back per UP clearance standards under a UP crossing agreement. A stormwater pond south of the ZEC yard is spanned or avoided.

Environmental impacts	The line is on previously disturbed industrial/utility/agricultural land adjacent to an operating generating station and substation; no state or federal protected lands, no mapped NWI wetlands or FEMA floodplain on the alignment (to be verified by field delineation), no known cultural resources (SHPO/HARGIS review and a Phase I archaeological survey of any undisturbed ground will be completed), and no critical habitat (USFWS IPaC and IDNR EcoCAT consultation, with tree-clearing windows for northern long-eared/tricolored bat if any clearing is required). Permits/approvals expected: ICC certificate (covered under the project's Section 8-406.1 filing), NPDES ILR10 construction stormwater permit with SWPPP and erosion/sediment controls (silt fence, inlet protection, stabilized access), Lake County Stormwater Management Commission watershed development permit if thresholds are triggered, and local building/road-use permits. No USACE Section 404 permit is anticipated; if a wetland is identified it will be spanned/avoided.
Tower characteristics	Single-circuit 345 kV tubular steel monopoles with davit arms and polymer V-string suspension or dead-end insulators in a vertical/delta phase configuration, one OPGW and one shield-wire position; heights approx. 100-130 ft; drilled concrete pier foundations. Approximately 4-5 structures: a dead-end at the converter AC yard, dead-end/angle structures at the railroad and ComEd corridor crossings, and the line-entrance dead-end at the ZEC yard (provided by this component). Design to NESC Heavy loading and ComEd 345 kV clearance standards. Structure family consistent with the 345 kV steel monopole sample design drawings in the proposal attachments; final structure type and height per detailed design and geotechnical borings.
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information
Contingency	Sensitive commercial or competitive information

Total component cost	\$7,797,568.00
Component cost (in-service year)	\$8,713,400.00

Greenfield Transmission Line Component

Component title	Zion Energy Center Converter - Zion Energy Center B 345 kV #02
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Project description	Sensitive commercial or competitive information
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Point A	Zion Energy Center Converter Station
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Point B	Zion Energy Center
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Point C	
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	Normal ratings	Emergency ratings
Summer (MVA)	2075.000000	2454.000000
Winter (MVA)	2273.000000	2604.000000
Conductor size and type	2 × 954 kcmil ACSS/MA3/E3X per phase (bundled); 1 × 48-fiber OPGW + 1 × 7#8 Alumoweld shield wire (preliminary; converter pole rating 1,500 MW governs)	
Nominal voltage	AC	
Nominal voltage	345	
Line construction type	Overhead	
General route description	Short station-to-station connection, approximately 0.5 route-mile, parallel to and separated from the Pole 1 lead: from the Zion Energy Center Converter Station 345 kV AC yard (immediately west/south-west of the Zion Energy Center) north-east into the expanded ZEC 345 kV yard, crossing the Union Pacific Milwaukee Subdivision and a ComEd 138 kV circuit, and entering the Zion Energy Center yard at the Blue section (west half of the yard). The Pole 1 and Pole 2 leads use separate structures and a separation of at least one structure-fall distance so that a single failure cannot remove both poles. Alternatives evaluated: converter sites north of the ZEC yard and ~0.75 mi WSW along the railroad; the adjacent site minimizes lead length, crossings, and wetland impact. Final alignment subject to the converter general arrangement, ComEd crossing standards and the Zion Energy Center yard expansion layout.	

Terrain description	Flat glacial lake plain on former industrial/utility/agricultural and open land between the Zion Energy Center generating site, the ComEd transmission corridor and the Union Pacific railroad. Silty clay loam over glacial till; drainage to local ditches and retention basins; one railroad crossing (Union Pacific Milwaukee Subdivision) and no river or highway crossings; no mapped FEMA floodplain on the lead alignment. An existing stormwater pond south of the Zion Energy Center yard is spanned or avoided. Access from existing plant/station access roads and the converter site. NWI wetland and field delineation to be confirmed during siting.
Right-of-way width by segment	Single segment, approx. 0.5 mi, new right-of-way on proposer-owned land (converter parcel), the ComEd/Zion Energy Center station property, and only one other private property. Typical 150-ft ROW for single-circuit 345 kV monopole construction (75 ft each side of centerline). No use or expansion of existing ComEd line ROW except at the single 138 kV ComEd line crossing, which is made by spanning the existing circuit under a ComEd crossing agreement; the Union Pacific railroad is spanned under a UP crossing agreement (no longitudinal occupation). Classification: 100% new ROW (0% existing, 0% expansion of existing).
Electrical transmission infrastructure crossings	ComEd 138 kV circuit
Civil infrastructure/major waterway facility crossing plan	No road, pipeline or waterway is crossed. The Union Pacific Milwaukee Subdivision (single track) is crossed by an overhead span between dead-end/angle monopoles set back per UP clearance standards under a UP crossing agreement. A Stormwater pond south of the Zion Energy Center yard is spanned or avoided.
Environmental impacts	The line is on previously disturbed industrial/utility/agricultural land adjacent to an operating generating station and substation; no state or federal protected lands, no mapped NWI wetlands or FEMA floodplain on the alignment (to be verified by field delineation), no known cultural resources (SHPO/HARGIS review and a Phase I archaeological survey of any undisturbed ground will be completed), and no critical habitat (USFWS IPaC and IDNR EcoCAT consultation, with tree-clearing windows for northern long-eared/tricolored bat if any clearing is required). Permits/approvals expected: ICC certificate (covered under the project's Section 8-406.1 filing), NPDES ILR10 construction stormwater permit with SWPPP and erosion/sediment controls (silt fence, inlet protection, stabilized access), Lake County Stormwater Management Commission watershed development permit if thresholds are triggered, and local building/road-use permits. No USACE Section 404 permit is anticipated; if a wetland is identified it will be spanned/avoided.
Tower characteristics	Single-circuit 345 kV tubular steel monopoles with davit arms and polymer V-string suspension or dead-end insulators in a vertical/delta phase configuration, one OPGW and one shield-wire position; heights approx. 100-130 ft; drilled concrete pier foundations. Approximately 4-5 structures: a dead-end at the converter AC yard, dead-end/angle structures at the railroad and ComEd corridor crossings, and the line-entrance dead-end at the ZEC yard (provided by this component). Design to NESC Heavy loading and ComEd 345 kV clearance standards. Structure family consistent with the 345 kV steel monopole sample design drawings in the proposal attachments; final structure type and height per detailed design and geotechnical borings.

Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information
Contingency	Sensitive commercial or competitive information
Total component cost	\$6,566,374.00
Component cost (in-service year)	\$7,337,600.00
Greenfield Substation Component	
Component title	Zion Energy Center Converter Station
Project description	Sensitive commercial or competitive information
Substation name	Zion Energy Center Converter Station

Substation description

Greenfield HVDC converter station and 345 kV AC switchyard on a preliminary site allowance of approximately 25 acres (fenced footprint of approx. 10-12 acres) of open/agricultural land west/south-west of the Zion Energy Center. Configuration: bipole with dedicated metallic return, ±525 kV DC, 2 × 1,500 MW, VSC-MMC half-bridge converters, dedicated metallic return. AC side: 345 kV switchyard with two line positions (Pole 1 Red lead and Pole 2 Blue lead to Zion Energy Center), one 345 kV breaker and disconnects per pole, pre-insertion/charging resistor and breaker, AC filters/PLC filters as required by the OEM, and converter transformers (three single-phase units per pole plus one spare single-phase unit). Converter: two valve halls (one per pole) with MMC valves, valve cooling, arm reactors, DC pole reactors, DC switches and surge arresters, DMR switching, DC measuring equipment, lightning protection towers. The underground ±525 kV cable section from the Wilton Center direction terminates in the DC yard (cable sealing ends and DMR cable termination), so no separate transition station is needed. Control/protection building, auxiliary power from the 345 kV yard with diesel standby, spare parts building, stormwater detention, access road and security fence.

Nominal voltage

DC

Nominal voltage

±525 kV

Transformer Information

Name	Capacity (MVA)
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Transformer

Pole 1 converter transformer bank (3 × single-phase units, approximately 550 MVA single-phase units) - OEM to confirm		
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High Side	Low Side	Tertiary
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Voltage (kV)

345	approx. 275 (valve side, OEM to confirm)	
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Name	Capacity (MVA)
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Transformer

Pole 2 converter transformer bank (3 × single-phase units, approximately 550 MVA single-phase units) - OEM to confirm		
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High Side	Low Side	Tertiary
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Voltage (kV)

345	approx. 275 (valve side, OEM to confirm)	
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Major equipment description

Major equipment: two VSC-MMC converter poles, each 1,500 MW continuous at ± 525 kV (pole current approx. 2,860 A) with approx. ± 500 MVar dynamic reactive capability at the 345 kV bus; six single-phase converter transformers (two banks of three, approx. 1,650 MVA per bank) plus one spare unit, 345 kV $\pm$ taps / valve-side voltage per OEM, ONAF/ODAF cooling; two 345 kV SF6 (or alternative-gas) dead-tank circuit breakers, 4,000 A, 63 kA, with pre-insertion resistors, plus disconnects, ground switches, CCVTs, CTs and surge arresters; AC filter/PLC filter banks as required; MMC valve halls with half-bridge submodules, valve cooling plants and arm reactors; DC pole reactors (smoothing), DC switches/disconnects, DC surge arresters, DC voltage dividers and current measuring devices for each pole and the DMR; ± 525 kV cable sealing ends and DMR cable termination; control and protection system (duplicated), station service transformers from the 345 kV yard, standby diesel generator, 125 Vdc batteries; fire protection; spare parts building. Station ratings: 3,000 MW bipole (1,500 MW per pole) continuous, independent of season subject to cooling design; no short-time overload is assumed (VSC); monopolar operation of 1,500 MW via the DMR with one pole out of service.

Normal ratings

Emergency ratings

Summer (MVA)

3400.000000

3400.000000

Winter (MVA)

3400.000000

3400.000000

Environmental assessment

The preliminary site is open/agricultural land adjacent to an operating generating station, substation, 345 kV corridor and the Union Pacific railroad, with no state or federal protected lands, nature preserves or INAI sites on the parcel; Illinois Beach State Park and the Des Plaines River greenway are more than 1 mile away. Environmental review will include: wetland delineation (NWI mapping shows scattered palustrine wetlands in the area; the site layout will avoid them or any unavoidable fill will be permitted under USACE Section 404 (NWP 57 or individual permit) with Illinois EPA 401 certification), FEMA floodplain check (no mapped SFHA on the preliminary site), USFWS IPaC / ESA Section 7 screening (rusty patched bumble bee, northern long-eared and tricolored bat - clearing windows and habitat surveys), IDNR EcoCAT consultation for state-listed species and Lake County Forest Preserve lands, SHPO/Section 106 review with a Phase I archaeological survey of undisturbed ground, Phase I ESA for the former industrial land, and FAA Part 77 review for cranes and lightning masts (no structures over 200 ft). Construction permits: ICC certificate for the HVDC project, NPDES ILR10 construction stormwater permit with SWPPP, Lake County SMC watershed development permit (stormwater detention, erosion and sediment control - silt fence, stabilized construction entrance, dewatering controls), county/township building, grading and road-use permits, IEPA air permit for the standby generator, and SPCC plan for transformer oil containment. Noise (valve cooling, transformers) will be mitigated by siting and building design to meet the Illinois Pollution Control Board numeric noise limits at the nearest receptors.

Outreach plan	Longview-Ameren will begin outreach immediately after PJM selection and before the ICC filing: (1) briefings for Lake County, Newport Township, the City of Zion, Village of Wadsworth and state legislators; (2) direct notice and meetings with the owners of the converter parcel and all adjoining landowners, the Zion Energy Center owner (Constellation) and ComEd; (3) at least one public open house in the Zion/Newport Township area in addition to the three pre-filing public meetings per county required under 220 ILCS 5/8-406.1, with project maps, visual simulations, noise and EMF information and a project website/hotline; (4) coordination with the Union Pacific railroad, Lake County SMC, Lake County Forest Preserve District and the Illinois Department of Natural Resources; (5) a published code of conduct for land agents, a single point of contact for landowners, and continuing notices before survey, construction and energization. Ameren Transmission's Illinois siting and outreach practice and its existing relationships with northern Illinois agencies will be used throughout.
Land acquisition plan	The converter site (approx. 25 acres) will be acquired in fee by the proposer through negotiated purchase from the private owner(s) at market value, supported by appraisal, title and environmental due diligence; an option agreement will be sought during the ICC process so that closing occurs after PJM designation and certificate issuance. Any land required for the expanded Zion Energy Center yard (see Zion Energy Center Upgrade) will be acquired on the same basis and conveyed to ComEd. No public (federal, state, county or municipal) land is required for the station site; crossing/encroachment agreements will be obtained from ComEd for the 138 kV line crossing and from the Union Pacific railroad for the underground cable crossing. Eminent domain authority under the ICC certificate (220 ILCS 5/8-503/8-509) would be used only if a voluntary agreement cannot be reached after good-faith negotiation.
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information

Contingency	Sensitive commercial or competitive information	
Total component cost	\$702,191,559.00	
Component cost (in-service year)	\$784,664,600.00	
Greenfield Transmission Line Component		
Component title	Zion Energy Center Converter - Wilton Center Converter 525 kV HVDC	
Project description	Sensitive commercial or competitive information	
Point A	Zion Energy Center Converter Station	
Point B	Wilton Center Converter Station	
Point C		
	Normal ratings	Emergency ratings
Summer (MVA)	3400.000000	3400.000000
Winter (MVA)	3400.000000	3400.000000
Conductor size and type	OH: 3× 2,156 kcmil ACSR per pole (bundle); DMR 2 positions × 1× 1,590 kcmil ACSR (full monopolar current); 2×48-fiber OPGW. UG: ±525 kV DC-XLPE Cu cable, 2000 mm2 (4000 kcmil class) Milliken, 70 C; 2 cables per pole + 1 DMR cable per pole (6 total).	
Nominal voltage	DC	
Nominal voltage	±525 kV	
Line construction type	Overhead, Underground	

General route description

MP 0-20.5 underground west from the Zion Converter Station across Newport and Antioch Townships (Lake Co.) under the CPKC and CN railroads, US-41, I-94, IL-173, US-45, IL-83, IL-59, the Des Plaines River and the Fox River/Chain O'Lakes narrows, into Burton and Richmond Townships (McHenry Co.) to a transition station approx. 1.5 mi east of Richmond; MP 20.5-54.4 overhead south-west and south through Richmond, Hebron, Greenwood, Hartland, Seneca, Coral and Riley Townships (McHenry Co.), west of Wonder Lake and Woodstock and between Marengo and Huntley, crossing US-12, IL-47, US-14, the Kishwaukee River, IL-176, US-20 and I-90 (MP 53.1); MP 54.4-81.8 south along the DeKalb/Kane-Kendall county line through the eastern tier of DeKalb County townships (Genoa to Squaw Grove), crossing IL-72, IL-64, IL-38 and I-88 (MP 74.2); MP 81.8-112.0 south-east across Big Rock Township (Kane Co.) and Little Rock, Fox, Kendall, Lisbon and Seward Townships (Kendall Co.), crossing US-30, the BNSF/Amtrak line, US-34, the Fox River near Millbrook (MP 92.8), the Plano-Collins 765 kV and LaSalle-Plano 345 kV lines, IL-71, IL-47 and US-52; MP 112.0-131.7 east and south-east through Troy, Channahon, Jackson and Manhattan Townships (Will Co.), crossing the Dresden-area 345/138 kV lines, I-80, the DuPage River, I-55, US-6, the Des Plaines River/I&M Canal at Channahon, the BNSF, CSXT and UP railroads, the Elwood-Goodings Grove 345 kV lines and the Alternate Route 66 historic corridor north of Elwood, then south into the Wilton Center Converter Station.

Terrain description

Low-relief glaciated till plain throughout (Wheaton and Bloomington morainic systems in Lake/McHenry, Kane-Kendall-Will outwash and till plains); elevations approx. 600-950 ft; SSURGO slope classes $\leq 4\%$ over more than 90% of the route; no karst, landslide or mine-subsidence hazards mapped on the alignment. Underground section (MP 0-20.5): flat lake plain and the Chain O'Lakes/Fox River glacial-lake belt with shallow groundwater, organic soils and lacustrine deposits around Antioch, Channel Lake, Lake Catherine and Fox Lake Overhead section: predominantly row-crop agriculture, interspersed with woodlots, pasture, rural residential and the annexed fringes of Richmond, Maple Park, Plano/Millbrook, Yorkville, Minooka, Shorewood, Joliet and Manhattan; stream valleys of the Nippersink, Kishwaukee, Big Rock, Little Rock, Fox, Aux Sable, DuPage and Des Plaines drainages with associated floodplain. Soils are silty clay loam over glacial till, suitable for drilled-pier foundations; drain-tile protocols per an Illinois Department of Agriculture Agricultural Impact Mitigation Agreement.

Right-of-way width by segment

Segment 1 - Underground, MP 0.0-20.5, Zion Converter Station to the Richmond transition station: the two concrete-encased duct banks are installed primarily within public road right-of-way, following the IL-173 (Rosecrans Road) corridor from the converter station west through Antioch to Richmond and occupying the shoulder/parkway or pavement edge under longitudinal utility-accommodation permits from IDOT (IL-173, IL-83, US-45, US-41/I-94 crossings), the Lake and McHenry County Divisions of Transportation and the affected township road districts. Occupancy of public ROW is by permit and franchise rather than purchased easement, so no new transmission right-of-way is acquired for the in-road portion and no existing transmission ROW is used. Where the alignment leaves the road - at HDD entry/exit pits and splice-vault sites, at the local departures through Antioch and the Chain O'Lakes crossings (MP approx. 9-13.5), at bridge, culvert and congested-utility avoidance, and at the two station entries - a 40-ft permanent easement is acquired on the adjoining private (predominantly agricultural/rural) parcels, widened locally at vaults and HDD workspaces; temporary work space of approx. 150 ft is taken by temporary construction easement at trenchless crossings of I-94, the CN/Metra North Central line at Antioch, state highways and waterways. Construction in the road ROW is staged under approved traffic-control plans with lane closures and full pavement restoration to agency standards; existing buried utilities are located and offset per permit conditions. Segment 2 - Overhead, MP 20.5-131.7 (approx. 111.3 mi), Richmond transition to the Wilton Center Converter Station: 180-ft new right-of-way (90 ft each side of centerline) for the single-circuit ± 525 kV bipole on monopoles, widened to approx. 200 ft at heavy-angle and dead-end locations and at major crossings; 100% new greenfield ROW - no use or expansion of existing transmission ROW is required. The route is placed on section lines, county lines and field edges where practicable to limit parcel fragmentation.

Electrical transmission infrastructure crossings

Ameren 345 kV: GOODINGS GROVE - POWERTON STATION, ComEd 138 kV dbl ckt, ComEd 138 kV dbl ckt, ComEd 138 kV dbl ckt, ComEd 138 kV: DRESDEN GENERATING STATION - TAP138233, ComEd 138 kV: TAP138203 - TAP160101, ComEd 345 kV, ComEd 345 kV, ComEd 345 kV: EAST FRANKFORT - BRAIDWOOD, ComEd 345 kV: GOODINGS GROVE - TOP CROP, ComEd 345 kV: LOCKPORT - TAP138228, ComEd 345 kV: SILVER LAKE - TAP137908, ComEd 345 kV: WOLFS CROSSING - DRESDEN STATION, ComEd 765 kV: COLLINS - PLANO (765 KV), Unspecified 345 kV

Civil infrastructure/major waterway facility crossing plan

Civil infrastructure: 5 interstate crossings - I-94 (MP 3.7, underground bore), I-90 (MP 53.1), I-88 (MP 74.2), I-80 (MP 113.9) and I-55 (MP 115.1), overhead spans with IDOT/Illinois Tollway permits; approx. 22 US/state highway crossings (US-41, IL-173, US-45, IL-83, IL-59, US-12, IL-47 x2, US-14, IL-176, US-20, IL-72, IL-64, IL-38, US-30, US-34, IL-71, US-52, US-6) and county/township roads; approximately 17 railroad crossings per the FRA rail network (CPKC C&M/Amtrak Hiawatha and CN Waukesha Sub/Metra NCS - bored in the underground section; WSOR Fox Lake Sub, UP Harvard Sub/Metra UP-NW, UP Belvidere Sub, CPKC Chicago Sub, UP Geneva Sub/Metra UP-W at Maple Park, BNSF Mendota Sub/Amtrak, Illinois Railnet, CN at Minooka, CSXT New Rock Sub, BNSF Chillicothe Sub, UP Global IV lead and UP Joliet Sub/Amtrak - overhead spans under railroad crossing agreements; list to be verified in detailed routing); approx. 57 pipeline crossings (NGPL, ANR, Guardian, Northern Border, Alliance, Midwestern, Nicor gas; crude, refined-product and HGL lines), each with a crossing agreement, AC/DC interference and cathodic-protection study. Major waterways: Des Plaines River (MP 2.6) and Fox River/Chain O'Lakes narrows (MP 15.3) crossed by horizontal directional drilling (approx. 2,000-3,000 ft drills) in the underground section; North Branch Nippersink Creek, Kishwaukee River and South Branch, Big Rock and Little Rock Creeks, Fox River at Millbrook (MP 92.8, approx. 700-ft span, rural banks downstream of Silver Springs State Park), Aux Sable Creek, DuPage River (MP 114.2), Des Plaines River / I&M Canal / Illinois Waterway at Channahon (MP 118.4, approx. 1,400-ft engineered span adjacent to existing EHV crossings, USACE Section 10 and Section 408 review) and Cedar, Jackson and Prairie Creeks spanned overhead with structures outside the floodway where practicable (IDNR OWR floodway permits where not); 113 NHD stream crossings in total. Crossing locations are marked in the proposed-route KMZ.

Environmental impacts

Typical of a 130-mile greenfield line in agricultural northern Illinois; no fatal flaws identified in the initial permitting and constraint study. Wetlands/waters: approx. 3.8 mi of NWI wetland crossed (approx. 85 ROW-acres), approx. 15 mi of FEMA floodplain, 113 NHD stream crossings; overhead structures will be placed outside wetlands and floodways where practicable and the underground section uses trenchless methods at the Des Plaines and Fox Rivers - USACE Section 404 (NWP 57 or individual permit, Chicago and Rock Island Districts), Illinois EPA 401 certification, Section 10/408 at the Des Plaines River/I&M Canal, IDNR OWR floodway permits, and Lake/McHenry County ADID wetland requirements. Protected lands: no interior crossings of forest preserve, IDNR, nature preserve, Midewin or refuge lands. Species: USFWS IPaC and ESA Section 7 (rusty patched bumble bee high-potential zones, northern long-eared and tricolored bat, eastern prairie fringed orchid), IDNR EcoCAT/incidental-take consultation (Blanding's and ornate box turtle); tree clearing limited to October-March and surveys in season. Cultural: SHPO Section 106 with Phase I archaeology on new ROW, perpendicular crossing of the Alternate Route 66 NRHP linear district, 12 HARGIS properties within 500 ft, tribal consultation; Lincoln National Cemetery viewshed avoided by the northern Wilton approach. Aviation: FAA Part 77 filings for structures near 8 small airfields. Agricultural: Illinois Department of Agriculture AIMA (drain tile, topsoil, compaction) and prime farmland of approx. 1,700 ROW-acres. Sediment/erosion control: NPDES ILR10 permit and SWPPP, county WDO/stormwater permits in six counties, HDD frac-out contingency plans, dewatering and thermal-backfill management for the duct banks, and restoration of all agricultural land. Pipeline DC interference and cathodic-protection studies will be completed with each operator.

Tower characteristics	Overhead: single-circuit ± 525 kV bipole on self-supporting tubular steel monopoles with drilled concrete pier foundations, horizontal pole-conductor configuration - the two pole bundles at 45-ft pole-to-pole spacing on the crossarm with V-string suspension (tangent) or V-string angle assemblies, the dedicated-metallic-return conductors (two positions, each a single 1,590 kcmil ACSR bundle sized for the full 2,860 A monopolar current) on I-string arms 20-22 ft above the crossarm, and two OPGW at the pole top. Underground: Two concrete-encased duct banks, each carrying one complete pole of the bipole system (two cables for the pole, one for the DMR and a spare duct in each bank): approx. 27 in x 27 in bank section, (4) 8 in Sch 40 PVC conduits in a 2 x 2 pattern with minimum 3 in concrete to all faces, approximately 3 ft cover, fluidized thermal backfill; DTS fiber in each bank. Splice vaults every approx. 2,000-3,000 ft; trenchless crossings in bored steel casings at casing separation, or HDD with one bore per cable, at railroads, highways and rivers.
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information
Contingency	Sensitive commercial or competitive information
Total component cost	\$636,117,425.00
Component cost (in-service year)	\$710,830,000.00
Greenfield Transmission Line Component	
Component title	Wilton Center Converter - Wilton Center R 345 kV #01

Project description	Sensitive commercial or competitive information	
Point A	Wilton Center Converter Station	
Point B	Wilton Center	
Point C		
	Normal ratings	Emergency ratings
Summer (MVA)	2075.000000	2454.000000
Winter (MVA)	2273.000000	2604.000000
Conductor size and type	2 × 954 kcmil ACSS/MA3/E3X per phase (bundled); 1 × 48-fiber OPGW + 1 × 7#8 Alumoweld shield wire (preliminary; converter pole rating 1,500 MW governs)	
Nominal voltage	AC	
Nominal voltage	345	
Line construction type	Overhead	
General route description	Short station-to-station connection, approximately 0.4 route-mile, entirely on proposer-controlled land and ComEd station property: from the Wilton Center Converter Station 345 kV AC yard (immediately north of the ComEd Wilton Center substation) south into the east side of the Wilton Center 345 kV yard. The Pole 1 and Pole 2 leads are routed as two independent single-circuit lines on separate structures so that a single structure failure cannot remove both poles of the bipole. Two 345 kV ComEd transmission lines are crossed; however, no other road, railroad or waterway crossings are required; the alignment is coordinated with the existing 765 kV line entrances and the 345 kV line on the south side of the station. Alternatives evaluated: sites east and south of the substation; the northern site minimizes lead length and keeps the HVDC line approach from the north clear. Final alignment subject to the converter general arrangement and ComEd station layout.	
Terrain description	Flat till plain in row-crop agricultural land adjoining the Wilton Center substation, Manhattan Township, Will County, IL. Silty clay loam over glacial till; no mapped FEMA floodplain on the lead alignment and no streams, roads or railroads crossed. Access from the existing substation access road and the converter site. NWI wetland and field delineation to be confirmed during siting.	
Right-of-way width by segment	No new ROW is required	

Electrical transmission infrastructure crossings	L11614 Wilton Center - Tap Goodings Grove/Blue Island Red, L93601 Lincoln Energy Center - Wilton Center
Civil infrastructure/major waterway facility crossing plan	Not applicable - no civil infrastructure (roads, railroads, pipelines) or waterway is crossed by this component; the lead is contained within the converter parcel and the ComEd station property.
Environmental impacts	The lead is on agricultural land and existing station property; no protected lands, no mapped NWI wetland or FEMA floodplain on the alignment (to be verified by field delineation), no known cultural resources (SHPO/HARGIS review and Phase I archaeological survey will be completed) and no critical habitat (USFWS IPaC and IDNR EcoCAT consultation; rusty patched bumble bee survey if suitable habitat is present). Permits/approvals expected: ICC certificate (covered under the project's Section 8-406.1 filing), NPDES ILR10 construction stormwater permit with SWPPP and erosion/sediment controls, Will County stormwater permit if thresholds are triggered, township road-use agreement, and Illinois Department of Agriculture AIMA for drain tile and farmland restoration. No USACE Section 404 permit is anticipated.
Tower characteristics	Single-circuit 345 kV tubular steel monopoles with davit arms and polymer V-string suspension or dead-end insulators in a vertical/delta phase configuration, one OPGW and one shield-wire position; heights approx. 100-130 ft; drilled concrete pier foundations. Design to NESC Heavy loading and ComEd 345 kV clearance standards; structure family consistent with the 345 kV steel monopole sample design drawings in the proposal attachments; final structure type and height per detailed design and geotechnical borings.
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information

Contingency	Sensitive commercial or competitive information	
Total component cost	\$6,155,976.00	
Component cost (in-service year)	\$6,879,000.00	
Greenfield Transmission Line Component		
Component title	Wilton Center Converter Station - Wilton Center 345 kV #02	
Project description	Sensitive commercial or competitive information	
Point A	Wilton Center Converter Station	
Point B	Wilton Center	
Point C		
	Normal ratings	Emergency ratings
Summer (MVA)	2075.000000	2454.000000
Winter (MVA)	2273.000000	2604.000000
Conductor size and type	2 × 954 kcmil ACSS/MA3/E3X per phase (bundled); 1 × 48-fiber OPGW + 1 × 7#8 Alumoweld shield wire (preliminary; converter pole rating 1,500 MW governs)	
Nominal voltage	AC	
Nominal voltage	345	
Line construction type	Overhead	

General route description	Short station-to-station connection, approximately 0.4 route-mile, entirely on proposer-controlled land and ComEd station property: from the Wilton Center Converter Station 345 kV AC yard (immediately north of the ComEd Wilton Center substation) south into the west side of the Wilton Center 345 kV yard. The Pole 2 lead parallels the Pole 1 lead; the two leads are routed as two independent single-circuit lines on separate structures so that a single structure failure cannot remove both poles of the bipole. No transmission line, road, railroad or waterway crossings are required; the alignment is coordinated with the existing 765 kV line entrances and the 345 kV line on the south side of the station. Alternatives evaluated: sites east and south of the substation; the northern site minimizes lead length and keeps the HVDC line approach from the north clear. Final alignment subject to the converter general arrangement and ComEd station layout.
Terrain description	Flat till plain in row-crop agricultural land adjoining the Wilton Center substation, Manhattan Township, Will County, IL. Silty clay loam over glacial till; no mapped FEMA floodplain on the lead alignment and no streams, roads or railroads crossed. Access from the existing substation access road and the converter site. NWI wetland and field delineation to be confirmed during siting.
Right-of-way width by segment	No new ROW required
Electrical transmission infrastructure crossings	
Civil infrastructure/major waterway facility crossing plan	Not applicable - no civil infrastructure (roads, railroads, pipelines) or waterway is crossed by this component; the lead is contained within the converter parcel and the ComEd station property.
Environmental impacts	The lead is on agricultural land and existing station property; no protected lands, no mapped NWI wetland or FEMA floodplain on the alignment (to be verified by field delineation), no known cultural resources (SHPO/HARGIS review and Phase I archaeological survey will be completed) and no critical habitat (USFWS IPaC and IDNR EcoCAT consultation; rusty patched bumble bee survey if suitable habitat is present). Permits/approvals expected: ICC certificate (covered under the project's Section 8-406.1 filing), NPDES ILR10 construction stormwater permit with SWPPP and erosion/sediment controls, Will County stormwater permit if thresholds are triggered, township road-use agreement, and Illinois Department of Agriculture AIMA for drain tile and farmland restoration. No USACE Section 404 permit is anticipated.
Tower characteristics	Single-circuit 345 kV tubular steel monopoles with davit arms and polymer V-string suspension or dead-end insulators in a vertical/delta phase configuration, one OPGW and one shield-wire position; heights approx. 100-130 ft; drilled concrete pier foundations. Designed to NESC Heavy loading and ComEd 345 kV clearance standards; structure family consistent with the 345 kV steel monopole sample design drawings in the proposal attachments; final structure type and height per detailed design and geotechnical borings.
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information

Component Cost Details - In Current Year \$

Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information
Contingency	Sensitive commercial or competitive information
Total component cost	\$5,745,577.00
Component cost (in-service year)	\$6,420,400.00

Greenfield Substation Component

Component title	Wilton Center Converter Station
Project description	Sensitive commercial or competitive information
Substation name	Wilton Center Converter Station
Substation description	Greenfield HVDC converter station and 345 kV AC switchyard with a fenced footprint of approx. 10-12 acres on agricultural land (per aerial imagery) adjoining the Wilton Center substation on the north. Configuration: bipole with dedicated metallic return, ± 525 kV DC, $2 \times 1,500$ MW, VSC-MMC half-bridge converters, dedicated metallic return. AC side: 345 kV switchyard with two line positions (Pole 1 and Pole 2 leads to the Wilton Center 345 kV yard), one 345 kV breaker and disconnects per pole, pre-insertion/charging resistor and breaker, AC filters/PLC filters as required by the OEM, and converter transformers (three single-phase units per pole plus one spare single-phase unit). Converter: two valve halls (one per pole) with MMC valves, valve cooling, arm reactors, DC pole reactors, DC switches and surge arresters, DMR switching, DC measuring equipment and lightning protection towers. DC yard: overhead-line entrance structure for the +525 kV pole, -525 kV pole and DMR conductors (the approx. 111 mi overhead section terminates here; no cable at this end). Control/protection building, auxiliary power from the 345 kV yard with diesel standby, spare parts building, stormwater detention, access road and security fence.

Nominal voltage	DC		
Nominal voltage	±525 kV		
Transformer Information			
	Name		Capacity (MVA)
Transformer	Pole 1 converter transformer bank (3 × single-phase units) - OEM to confirm		approx. 1,650 (valve side, approx. 550 MVA single-phase units) - OEM to confirm
	High Side	Low Side	Tertiary
Voltage (kV)	345	approx. 275 (valve side, OEM to confirm)	
	Name		Capacity (MVA)
Transformer	Pole 2 converter transformer bank (3 × single-phase units) - OEM to confirm		approx. 1,650 (valve side, approx. 550 MVA single-phase unit for the station single-phase units) - OEM to confirm
	High Side	Low Side	Tertiary
Voltage (kV)	345	approx. 275 (valve side, OEM to confirm)	
Major equipment description	Major equipment: two VSC-MMC converter poles, each 1,500 MW continuous at ±525 kV (pole current approx. 2,860 A) with approx. ±500 MVar dynamic reactive capability at the 345 kV bus; six single-phase converter transformers (two banks of three, approx. 1,650 MVA per bank) plus one spare unit, 345 kV ± taps / valve-side voltage per OEM, ONAF/ODAF cooling; two 345 kV SF6 (or alternative-gas) dead-tank circuit breakers, 4,000 A, 63 kA, with pre-insertion resistors, plus disconnects, ground switches, CCVTs, CTs and surge arresters; AC filter/PLC filter banks as required; MMC valve halls with half-bridge submodules, valve cooling plants and arm reactors; DC pole reactors (smoothing), DC switches/disconnects, DC surge arresters, DC voltage dividers and current measuring devices for each pole and the DMR; overhead-line entrance dead-end structure and DC line arresters; control and protection system (duplicated), station service transformers from the 345 kV yard, standby diesel generator, 125 Vdc batteries; fire protection; spare parts building.		
	Normal ratings		Emergency ratings

Summer (MVA)	3400.000000	3400.000000
Winter (MVA)	3400.000000	3400.000000
Environmental assessment	The site is agricultural land (per aerial imagery) adjoining the existing Wilton Center 765/345 kV substation and its transmission corridors in rural Manhattan Township, with no protected lands, nature preserves or INAI sites on the parcel; the Midewin National Tallgrass Prairie, Abraham Lincoln National Cemetery and Alternate Route 66 historic corridor lie to the west: the station does not affect them, and the line approach from the north avoids Midewin and the cemetery. Environmental review will include: wetland delineation (NWI shows only farmed drainageways near the site; Prairie Creek and its floodplain lie east of the site and will be avoided), FEMA floodplain check, USFWS IPaC / ESA Section 7 screening (rusty patched bumble bee, northern long-eared and tricolored bat, eastern prairie fringed orchid), IDNR EcoCAT consultation, SHPO/Section 106 review with a Phase I archaeological survey, Phase I ESA, FAA Part 77 review for cranes and lightning masts, and a visual assessment from the national cemetery. Construction permits: ICC certificate for the HVDC project (220 ILCS 5/8-406.1), NPDES ILR10 construction stormwater permit with SWPPP (silt fence, stabilized construction entrance, dewatering controls, detention basin), Will County stormwater/watershed development permit and building/grading permits, township road-use agreement, Illinois Department of Agriculture AIMA for farmland conversion and drain-tile relocation, IEPA air permit for the standby generator, and an SPCC plan for transformer oil containment. Noise from valve cooling and transformers will be mitigated by siting and building design to meet Illinois Pollution Control Board limits at the nearest residences.	
Outreach plan	Longview-Ameren will begin outreach immediately after PJM selection and before the ICC filing: (1) briefings for Will County, Manhattan and Jackson Townships, the Village of Manhattan, Village of Elwood and City of Joliet, and state legislators; (2) direct notice and meetings with the owners of the converter parcel and all adjoining landowners, ComEd and the Lincoln Energy Center owner; (3) a public open house in the Manhattan/Wilton Center area in addition to the three pre-filing public meetings per county required under 220 ILCS 5/8-406.1, with project maps, visual simulations, noise and EMF information and a project website/hotline; (4) coordination with the U.S. Forest Service (Midewin), the National Cemetery Administration, the Will County Forest Preserve District, CenterPoint/railroad interests near Elwood and the Illinois Department of Agriculture (AIMA); (5) a published code of conduct for land agents, a single point of contact for landowners, and continuing notices before survey, construction and energization. Ameren Transmission's Illinois siting and outreach practice will be used throughout.	
Land acquisition plan	The converter site will be acquired in fee by the proposer through negotiated purchase from the private agricultural owner(s) at market value, supported by appraisal, title and environmental due diligence, with an option agreement during the ICC process and closing after PJM designation and certificate issuance; crop-damage and drain-tile compensation per the Illinois Department of Agriculture AIMA. Any land needed for the Wilton Center 345 kV yard conversion is within the existing ComEd station property. No public land is required for the station site. Eminent domain authority under the ICC certificate (220 ILCS 5/8-503/8-509) would be used only if a voluntary agreement cannot be reached after good-faith negotiation.	

Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information
Contingency	Sensitive commercial or competitive information
Total component cost	\$687,417,218.00
Component cost (in-service year)	\$768,155,000.00
Substation Upgrade Component	
Component title	Wilton Center 345 kV Substation Upgrade
Project description	Sensitive commercial or competitive information
Substation name	Wilton Center
Substation zone	ComEd

Substation upgrade scope

(1) Reconfigure the existing 345 kV ring bus (six breakers in two rows, terminating Goodings Grove/Blue Island tap #1 and #2, Lincoln Energy Center, Essex, and the Wilton Center 765/345 kV transformers #91, #93 & #94) into a double ring bus (red & blue) with two normally closed tie breakers: Red ring formed from the existing ring; Blue ring newly constructed along with the tie breakers; existing breakers kept in place on the red ring (Goodings Grove/Blue Island tap Red, Lincoln Energy Center, and Wilton Center 765/345 kV XFMRs #91 & #94) and the Wilton Center Converter Station Pole 1 connects to an existing open position. On the new blue ring shifting existing connections over to new positions (Wilton Center 765/345 kV XFMR #93, Wilton Center-Essex) and the new Wilton Center Converter Station Pole 2 with six new 345 kV circuit breakers. (3) Terminate the two new 345 kV converter lead lines with line disconnects, ground switches, CCVTs and arresters. (4) Replace the ring-bus protection with Bus A and Bus B differential zones, breaker failure for all twelve breakers, redundant line/transformer protection on the re-zoned terminals, transfer trip and converter-interface tripping/runback to the converter control, SCADA/EMS updates and fiber telecom to the converter station; control-house panel additions, battery and station-service upgrades as required. (5) Yard civil: bus and equipment foundations, extension of the grounding grid, grading and drainage, access, and oil-containment review. (6) Short-circuit review of the existing 345 kV breakers and bus with the converter in service and replacement of any equipment whose duty is exceeded. No 765 kV yard work and no transformer additions are included.

Transformer Information

None

New equipment description

New 345 kV equipment: six circuit breakers, 345 kV, 4,000 A, 63 kA, dead-tank (SF6 or ComEd-approved alternative gas), independent-pole operation on the converter bays; twelve motor-operated breaker disconnects and four line disconnects with ground switches, 345 kV, 4,000 A; CCVTs on the two new line terminals; free-standing CTs where required for the bus and breaker-failure zones; 345 kV surge arresters at the converter line entrances; Bus A and Bus B extensions (strain or rigid bus, 4,000 A) and bay bus/jumpers rated 4,000 A; bus support and take-off structures (line-entrance dead-end structures in components m and n); relocation of the Essex lead and cut-in of the two 765/345 kV transformer strain buses; protective relaying (bus differential A/B, breaker failure, redundant line current differential/distance with transfer trip, converter-interface schemes), control-house panels, 125 Vdc battery/charger capacity, SCADA RTU points and fiber telecom. Converter bays are rated for the full 1,500 MW per pole plus up to ± 500 MVar reactive exchange (approx. 1,600 MVA continuous).

Substation assumptions

Assumptions used for scope and cost: The existing six breakers are reused in place (none relocated) and are adequate for the post-project short-circuit duty; a short-circuit study is included in the project analysis. The new bays fit within the existing ComEd property, so no real estate is required. The two 765/345 kV transformer leads can be cut into the new bays where their strain buses cross the pad without 765 kV yard work. No modification to the 765 kV yard.

Real-estate description	No additional real estate is anticipated: the new ring bus and tie bus extensions are laid out on the graded, unused western portion of the existing Wilton Center 345 kV property. The new 345 kV converter lead lines enter the station from the adjoining proposer-owned converter parcel.	
Construction responsibility	Sensitive commercial or competitive information	
Benefits/Comments	Sensitive commercial or competitive information	
Component Cost Details - In Current Year \$		
Engineering & design	Sensitive commercial or competitive information	
Permitting / routing / siting	Sensitive commercial or competitive information	
ROW / land acquisition	Sensitive commercial or competitive information	
Materials & equipment	Sensitive commercial or competitive information	
Construction & commissioning	Sensitive commercial or competitive information	
Construction management	Sensitive commercial or competitive information	
Overheads & miscellaneous costs	Sensitive commercial or competitive information	
Contingency	Sensitive commercial or competitive information	
Total component cost	\$18,190,782.00	
Component cost (in-service year)	\$20,327,305.00	
Greenfield Transmission Line Component		
Component title	Wilton Center – Greentown 765 kV OH - Illinois	
Project description	Sensitive commercial or competitive information	
Point A	Illinois-Indiana state line	
Point B	Wilton Center 765 kV	
Point C		
	Normal ratings	Emergency ratings

Summer (MVA)	6625.000000	6625.000000
Winter (MVA)	7473.000000	8268.000000
Conductor size and type	6-Bundle 795 kcmil Drake ACSR, GA2	
Nominal voltage	AC	
Nominal voltage	765	
Line construction type	Overhead	
General route description	The proposed 765 kV line runs approximately 146 miles from AEP's Greentown substation in Howard County, Indiana to ComEd's Wilton Center substation in Will County, Illinois, with about 115 miles in Indiana and 31 miles in Illinois. The alignment was developed from a detailed routing study, which compared six corridor alternatives across a wide study area using more than a hundred mapped constraint datasets. The selected route draws on the two strongest of those alternatives: it follows the existing Greentown-Reynolds 765 kV corridor out of Greentown. The Illinois portion begins at the state line south of Lowell, Indiana, and runs north for a little over two miles through Yellowhead Township in Kankakee County into Washington Township, Will County. There it meets the existing Dumont-Wilton Center 765 kV line and parallels it westward for about 25 miles on a separate right-of-way through Washington, Will, Peotone and Wilton Townships, crossing IL-1, the Union Pacific railroad, IL-50 and the Canadian National railroad, I-57, US-45/52 and US-52, and Forked Creek along the way. Keeping to this existing corridor means the new line crosses farmland that already hosts a 765 kV line and a 345 kV line rather than opening a new path through undeveloped countryside, and it passes the edge of Peotone without entering the village. About two miles short of the substation the route leaves the corridor and turns north through Manhattan Township, passing through the western edge of the Village of Manhattan, to enter Wilton Center from the south.	
Terrain description	Flat to gently rolling glacial landscape with less than 0.6% of the route steeper than 8%; terrain is not a constructability driver. Land cover is more than 90% row-crop agriculture with scattered farmsteads, the Peotone and Manhattan fringes, drainage ditches and tile systems.	
Right-of-way width by segment	Nominal right-of-way 200 ft, acquired as perpetual transmission easement; all segments are NEW right-of-way (no existing transmission easement is reused - where the route parallels the existing Dumont-Wilton Center 765 kV line the new centerline is offset so the new 200-ft easement lies wholly outside the existing easement).	
Electrical transmission infrastructure crossings	ComEd 345 kV, ComEd 765 kV Wilton - Dumont (twice)	

The Illinois portion of the line crosses the kinds of infrastructure typical of rural Will County, and none of the crossings is unusual for a 765 kV line. The one interstate crossing is I-57 in Peotone Township, which will use a pair of taller crossing structures and be coordinated with IDOT for permits and brief lane closures. The route also crosses four state or federal highways (IL-1, IL-50, US-45/52 and US-52 near Wilton Center Road) and the usual pattern of county and township roads on the one-mile section grid. Two railroads are crossed, the Union Pacific line near Beecher and the Canadian National line near Peotone; each requires a crossing agreement with the railroad, which typically takes three to nine months, and construction over the tracks is done in short flagged windows. Because the route follows the existing 765 kV corridor across southern Will County, it shares that corridor band with several petroleum and natural gas pipelines and crosses mapped pipelines nineteen times in Illinois, including lines operated by Enterprise Products, Buckeye, Marathon, Explorer and Enbridge. Structures will be kept well clear of each pipe, heavy equipment will cross pipeline easements on mats, and the long parallel sections will be reviewed with the pipeline operators for induced-current effects, which is standard practice where high-voltage lines and pipelines share a corridor. No major river is crossed in Illinois. The route spans a series of creeks, including Pike Creek, Trim Creek, Exline Slough, Rock Creek and Forked Creek, with structures placed on the banks outside the mapped floodway so that no work takes place in the streams themselves. About three miles of the Illinois route lie within mapped floodplain along these creeks, all of it on the Will County section; where a structure cannot avoid the regulatory floodway, an Illinois DNR floodway permit will be obtained. Any crossing that meets a road, railroad or pipeline at a shallow angle will be straightened during detailed route design.

Environmental impacts	The Illinois portion of the route crosses open farmland for nearly its entire length, and Longview's desktop screening (field surveys will follow award) found a light environmental footprint. The route does not cross any protected land: the Will County forest preserves along Forked Creek and the Midewin National Tallgrass Prairie west of Wilton Center are both avoided. Wetland contact is limited to about half a mile of farmed wetlands and small ponds that can be spanned without placing structures in them, and no major river is crossed. Roughly three miles of the Illinois route lie within mapped floodplain along Pike, Trim, Rock and Forked Creeks, with a short stretch of regulatory floodway at Rock Creek and Forked Creek where structure placement will be handled through Illinois DNR permits. Because more than 90 percent of the route is cropland, tree clearing is minimal and confined to the creek corridors, where it will be scheduled outside the April-through-September season to protect listed bat species. The southern Will County area falls within the USFWS high-potential zone for the rusty patched bumble bee, so summer habitat surveys will be completed before construction, along with screening for remnant prairie plants. Consultation with the Illinois DNR and the U.S. Fish and Wildlife Service will confirm these measures. No National Register district or listed property lies within half a mile of the route. Creek terraces along the alignment have moderate archaeological potential, and the State Historic Preservation Office will review the project, with field survey of the sensitive ground before construction. The route does not cross tribal land, and the rural areas it passes through are not identified as disadvantaged communities. The project will require the usual set of approvals for a transmission line in Illinois: an Illinois Commerce Commission certificate covering both the primary and alternate routes, with public meetings in Will and Kankakee Counties before filing; Army Corps of Engineers and Illinois EPA permits for the limited wetland work; a construction stormwater permit and county stormwater approvals; an agricultural impact mitigation agreement with the Illinois Department of Agriculture covering topsoil, drainage tile and crop damage.
Tower characteristics	The proposed line will be comprised of primarily tubular steel H-Frames for tangents and angles as well as lattice towers for dead-ends. All structures will be on drilled pier foundations. Phase spacing will be 45' to 48' pending final studies. Insulator assemblies will be primarily toughened glass strings in V-String, I-String, or Strain configurations. The conductor configuration for all structures will be horizontal with (2) OPGWs in the shield position. Refer to the attached structure drawing for details of the typical tangent structure.
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information

Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information
Contingency	Sensitive commercial or competitive information
Total component cost	\$138,708,553.00
Component cost (in-service year)	\$155,000,000.00

Greenfield Transmission Line Component

Component title	Wilton Center – Greentown 765 kV OH - Indiana
Project description	Sensitive commercial or competitive information
Point A	Greentown 765 kV
Point B	Illinois-Indiana state line
Point C	

	Normal ratings	Emergency ratings
Summer (MVA)	6625.000000	6625.000000
Winter (MVA)	7473.000000	8268.000000
Conductor size and type	AEP Standard 765 kV Conductor size and type, assumed 6 bundle minimum 795 kcmil and minimum ratings listed above for 5,000 A	
Nominal voltage	AC	
Nominal voltage	765	
Line construction type	Overhead	

General route description	The proposed 765 kV line runs approximately 146 miles from AEP's Greentown substation in Howard County, Indiana to ComEd's Wilton Center substation in Will County, Illinois, with about 115 of those miles in Indiana. Leaving Greentown, the line heads south out of the new substation position, then turns west and north to run alongside AEP's existing Greentown-Reynolds 765 kV line for about four miles through Howard County. It continues north-west across Miami County, crossing the Wabash River near Peru, then through Cass County, where it crosses the Eel River and the Norfolk Southern railroad, and across Fulton County into Pulaski County, the longest county segment at about 28 miles, where it crosses the Tippecanoe River and passes near Winamac. From there it clips the corner of Starke County and enters the Kankakee River basin. The final Indiana stretch runs across Lake County, crossing I-65, US-41 and the CSX and Norfolk Southern railroads south of Lowell, to reach the state line. The alignment stays in unincorporated farmland for its entire length in Indiana and does not pass through any town.
Terrain description	Flat to gently rolling glacial landscape with less than 0.6% of the route steeper than 8%; terrain is not a constructability driver. Land cover is more than 90% row-crop agriculture with scattered farmsteads, drainage ditches and tile systems. The Indiana segment crosses the Wisconsin till plain, the Wabash/Eel and Tippecanoe outwash, organic soils in Pulaski, Jasper and Lake Counties and the Kankakee basin sands.
Right-of-way width by segment	Nominal right-of-way 200 ft, acquired as perpetual transmission easement; all segments are NEW right-of-way (no existing transmission easement is reused - where the route parallels the existing Dumont-Wilton Center 765 kV line the new centerline is offset so the new 200-ft easement lies wholly outside the existing easement).
Electrical transmission infrastructure crossings	138 kV line (unnamed), 138 kV: Duke TAP - GREENTOWN, 230 kV: Duke GREENTOWN - PERU (twice), 230 kV: Duke WALTON - PERU, 345 kV: Duke DEEDSVILLE 345KV - WALTON, 345 kV: NORTHERN INDIANA PUB SERV CO BURR OAK - SCHAHFER STATION, 345 kV: NORTHERN INDIANA PUB SERV CO LAKE GEORGE - SCHAHFER STATION, 345 kV: OLIVE - REYNOLDS, 765 kV: WILTON - DUMONT, Greentown Sub AEP to Jefferson Sub AEP 765KV, Greentown Sub AEP to Reynolds Sub AEP 765KV, NORTHERN INDIANA PUB SERV CO 138 kV, Schahfer - Green Acres & Schahfer - Lake George 345 kV, Schahfer - St. John 345 kV, Schahfer - Tower Road 345 & 138 kV

Civil infrastructure/major waterway facility crossing plan	Over its 115 miles in Indiana the line crosses the roads, railroads, pipelines and rivers that one would expect across rural northern Indiana, and none of the crossings is unusual for a 765 kV line. The single interstate crossing is I-65 in Lake County, which will use a pair of taller crossing structures and be coordinated with INDOT for permits and brief lane closures. The route also crosses about twenty U.S. and state highways along the way, among them US-31 and US-24 near Peru, US-35 near Winamac, US-421, US-231 and US-41 near Lowell, together with the county roads that follow the one-mile section grid. Four railroads are crossed: a short line near Greentown, the Norfolk Southern line near Logansport, and the CSX and Norfolk Southern lines in Lake County. Each railroad crossing requires an agreement with the railroad. Eight mapped pipelines are crossed, operated by Countrymark, Buckeye, BP and Enterprise among others. Structures will be kept well clear of each pipe, heavy equipment will cross pipeline easements on mats, and any stretch where the line runs alongside a pipeline for more than roughly a thousand feet will be reviewed with the operator for induced-current effects. The route crosses four significant rivers, the Wabash near Peru, the Eel in Cass County, the Tippecanoe in Pulaski County and the Kankakee, along with a number of creeks and drainage ditches. The rivers will be spanned in single long spans, with the crossing structures set back from the banks and outside the floodway, so no work takes place in the water. Where a structure cannot avoid a mapped floodway, an Indiana DNR floodway permit will be obtained.
Environmental impacts	The Indiana portion of the route crosses farmland for nearly its entire 115 miles. No protected land is crossed. No National Register property lies within half a mile of the route. The route does not cross tribal land. Approvals will include Army Corps of Engineers and Indiana DEM permits for the limited wetland work, Indiana DNR floodway permits where needed, a construction stormwater permit, county drainage board approvals where the line crosses regulated drains, local land-use approvals in each of the nine counties, and either Indiana Utility Regulatory Commission approval or construction by AEP under its existing authority.
Tower characteristics	AEP Standard 765 kV Structure designs will be implemented pending final studies.
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information

Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information
Contingency	Sensitive commercial or competitive information
Total component cost	\$531,716,122.00
Component cost (in-service year)	\$594,166,667.00
Substation Upgrade Component	
Component title	Greentown 765 kV Substation Upgrade
Project description	Sensitive commercial or competitive information
Substation name	Greentown 765 kV
Substation zone	AEP
Substation upgrade scope	Complete the breaker-and-a-half bay shared with the Greentown-Reynolds terminal with three new 765 kV single phase circuit breakers and breaker disconnect switches; three new single phase 100 MVAR reactors with dedicated single phase circuit breakers and disconnect switches connected on the line, new line position for Wilton Center-Greentown 765 kV with line disconnect switch, 765 kV CCVTs, line surge arresters, wave trap/line tuner (if used by AEP), dead-end structure and bus/jumper work; protection and control, SCADA/EMS, revenue metering, station service/battery check and relay coordination on the Reynolds terminal (shared bay) and the remote Wilton Center terminal. Pre-requisite work by others (not in this component): the Grid Growth West Greentown station expansion and Gwynneville work. If AEP cannot make the drawn position available, the fallback is a yard extension with a new breaker-and-a-half bay (2 breakers).
Transformer Information	
None	
New equipment description	765 kV Reactors: Single Phase 100 MVAR Oil-Filled shunt reactors to the AEP 765 kV standard; 765 kV circuit breakers: dead-tank SF6 breakers to the AEP 765 kV standard, 4,000 A continuous, 50 kA interrupting (Estimated - AEP 765 kV breaker ratings to be confirmed), independent-pole operated with controlled switching for line/reactor energization. Disconnect switches 4,000 A, 765 kV. Structures and clearances will be per AEP 765 kV substation standards.

Substation assumptions	The scope assumes (a) the PJM-selected Greentown station expansion for the Greentown-Thistlewood 765 kV line and the Gwynneville re-termination are in service before this work; (b) the open middle-breaker position in the Reynolds bay is available for the Wilton Center line and the existing control house can accommodate the added relay panels.
Real-estate description	Work within the existing AEP Greentown substation property if the open bay position is used; the fallback yard extension would occupy open agricultural land on the north/west side of the station to be acquired by AEP in fee (Estimated, approx. 5-10 acres).
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information
Contingency	Sensitive commercial or competitive information
Total component cost	\$40,861,036.00
Component cost (in-service year)	\$45,660,201.00
Transmission Line Upgrade Component	
Component title	Zion - Zion Energy Center B 345 kV #01
Project description	Sensitive commercial or competitive information
Impacted transmission line	L 2224 Zion - Libertyville B

Point A	Zion	
Point B	Zion Energy Center B	
Point C		
Terrain description	Terrain is flat glacial lake plain, with open agricultural and industrial/utility land use adjacent to the Zion Energy Center generating site and the I-94/US-41 corridor. No river, railroad or interstate crossings are required; the new entry span lies within the existing corridor and the ZEC station property. No mapped FEMA floodplain or NWI wetland is crossed by the entry span but will be confirmed with a field delineation. Soils are silty clay loam over glacial till. Access is from existing station access roads.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2338 kcmil ACAR Assumed	
Hardware plan description	Existing line 2224 conductor, insulators and hardware are retained and reused on all spans not affected by the cut-in. New hardware is limited to the cut point and the new entry span: new dead-end assemblies on the cut-point structure (or a new dead-end structure if the existing tower cannot accept the longitudinal load), new dead-end assemblies at the ZEC line-entrance structure, jumpers, and new 2338 kcmil ACAR conductor on the entry span. Age and condition of the existing hardware have not been assessed; ComEd inspection records are required.	
Tower line characteristics	Age and condition of the existing structures have not been assessed; ComEd inspection records are required.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1201.000000	1201.000000
Winter (MVA)	1497.000000	1497.000000
Conductor size and type	2338 kcmil ACAR (or current ComEd Standard)	

Shield wire size and type	Existing shield wire retained
Rebuild line length	Less than 0.1 mi (new entry span), plus removal of bypassed conductor
Rebuild portion description	No rebuild of the existing line. Cut line 2224 at one structure adjacent to ZEC, install dead-end hardware (or a new steel dead-end pole), and construct a new single-circuit entry span of 2338 kcmil ACAR. Remove the short section of conductor bypassed between the inbound and outbound cut points.
Right of way	No new line right-of-way. The entry span is within the existing ComEd 345 kV easement and the Zion Energy Center station parcel. Station expansion land is addressed under the ZEC substation component.
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information
Contingency	Sensitive commercial or competitive information
Total component cost	\$538,564.00
Component cost (in-service year)	\$601,818.00
Transmission Line Upgrade Component	
Component title	Zion Energy Center B - Libertyville B 345 kV

Project description	Sensitive commercial or competitive information	
Impacted transmission line	L2224 Zion – Libertyville	
Point A	Zion Energy Center B	
Point B	Libertyville B	
Point C		
Terrain description	Terrain is flat glacial lake plain, with open agricultural and industrial/utility land use adjacent to the Zion Energy Center generating site and the I-94/US-41 corridor. No river, railroad or interstate crossings are required; the new entry span lies within the existing corridor and the ZEC station property. No mapped FEMA floodplain or NWI wetland is crossed by the entry span but will be confirmed with a field delineation. Soils are silty clay loam over glacial till. Access is from existing station access roads.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2338 kcmil ACAR	
Hardware plan description	All conductor, insulators, hardware and shield wire on the retained ZEC-Libertyville section are unchanged; no reconductoring. New hardware is confined to the cut point and ZEC entry: dead-end assemblies on the cut-point structure (or a new steel dead-end pole if the existing tower cannot take the unbalanced load), dead-end assemblies and jumpers at the ZEC line entrance. Age and condition of existing hardware are not known to Longview-Ameren; ComEd inspection records required.	
Tower line characteristics	Age and condition of the existing structures have not been assessed; ComEd inspection records are required.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1201.000000	1201.000000

Winter (MVA)	1497.000000	1497.000000
Conductor size and type	2338 kcmil ACAR (or current ComEd Standard)	
Shield wire size and type	Existing shield wire retained	
Rebuild line length	Less than 0.1 mi (new entry span), plus removal of bypassed conductor	
Rebuild portion description	No rebuild of the existing line. Cut line 2224 on the shared-tower line, dead-end the Libertyville side on the cut-point structure, and construct a new single-circuit entry span of 2338 kcmil ACAR (or current ComEd Standard). Remove bypassed conductor.	
Right of way	No new line right-of-way. The entry span is within the existing ComEd 345 kV easement and the Zion Energy Center station parcel. Station expansion land is addressed under the ZEC substation component.	
Construction responsibility	Sensitive commercial or competitive information	
Benefits/Comments	Sensitive commercial or competitive information	
Component Cost Details - In Current Year \$		
Engineering & design	Sensitive commercial or competitive information	
Permitting / routing / siting	Sensitive commercial or competitive information	
ROW / land acquisition	Sensitive commercial or competitive information	
Materials & equipment	Sensitive commercial or competitive information	
Construction & commissioning	Sensitive commercial or competitive information	
Construction management	Sensitive commercial or competitive information	
Overheads & miscellaneous costs	Sensitive commercial or competitive information	
Contingency	Sensitive commercial or competitive information	
Total component cost	\$574,468.00	
Component cost (in-service year)	\$641,940.00	

Transmission Line Upgrade Component

Component title	Zion Energy Center B - Paris 345 kV	
Project description	Sensitive commercial or competitive information	
Impacted transmission line	L2222 Zion – Paris (ATC) 345 kV	
Point A	Zion Energy Center B	
Point B	Paris	
Point C		
Terrain description	Terrain is flat glacial lake plain, with open agricultural and industrial/utility land use adjacent to the Zion Energy Center generating site and the I-94/US-41 corridor. No river, railroad or interstate crossings are required; the new entry span lies within the existing corridor and the ZEC station property. No mapped FEMA floodplain or NWI wetland is crossed by the entry span but will be confirmed with a field delineation. Soils are silty clay loam over glacial till. Access is from existing station access roads.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2338 kcmil ACAR Assumed	
Hardware plan description	All conductor, insulators, hardware and shield wire on the retained line are unchanged; no reconductoring. New hardware is limited to the cut point, new structures, and new spans: dead-end assemblies on the new structures and jumpers at the ZEC line entrance. Age and condition of existing hardware unknown to Longview-Ameren; ComEd inspection records required.	
Tower line characteristics	Age and condition of the existing structures have not been assessed; ComEd inspection records are required.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings

Summer (MVA)	973.000000	1069.000000
Winter (MVA)	1053.000000	1143.000000
Conductor size and type	2338 kcmil ACAR (or current ComEd Standard)	
Shield wire size and type	Existing retained	
Rebuild line length	Less than 0.25 mi (two new spans), plus removal of bypassed conductor	
Rebuild portion description	No rebuild of the existing line. Cut the Zion-Paris circuit on the shared-tower line, dead-end the Paris side, and construct new spans and structures. Remove bypassed conductor between the two cut points.	
Right of way	New line right-of-way required from point of cut/transfer to the expanded Zion Energy Center station parcel along the modified alignment (<0.25 mi of line length). Station expansion land is addressed under the ZEC substation component.	
Construction responsibility	Sensitive commercial or competitive information	
Benefits/Comments	Sensitive commercial or competitive information	
Component Cost Details - In Current Year \$		
Engineering & design	Sensitive commercial or competitive information	
Permitting / routing / siting	Sensitive commercial or competitive information	
ROW / land acquisition	Sensitive commercial or competitive information	
Materials & equipment	Sensitive commercial or competitive information	
Construction & commissioning	Sensitive commercial or competitive information	
Construction management	Sensitive commercial or competitive information	
Overheads & miscellaneous costs	Sensitive commercial or competitive information	
Contingency	Sensitive commercial or competitive information	
Total component cost	\$1,436,170.00	
Component cost (in-service year)	\$1,604,849.00	

Transmission Line Upgrade Component

Component title	Zion - Zion Energy Center B 345 kV #02	
Project description	Sensitive commercial or competitive information	
Impacted transmission line	L2222 Zion – Paris (ATC) 345 kV	
Point A	Zion Energy Center B	
Point B	Zion	
Point C		
Terrain description	Terrain is flat glacial lake plain, with open agricultural and industrial/utility land use adjacent to the Zion Energy Center generating site and the I-94/US-41 corridor. No river, railroad or interstate crossings are required; the new entry span lies within the existing corridor and the ZEC station property. No mapped FEMA floodplain or NWI wetland is crossed by the entry span but will be confirmed with a field delineation. Soils are silty clay loam over glacial till. Access is from existing station access roads.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2338 kcmil ACAR	
Hardware plan description	All conductor, insulators, hardware and shield wire on the retained ZEC-Paris line are unchanged; no reconductoring. New hardware is limited to the cut point and entry span: dead-end assemblies on the new cut-point structure and dead-end assemblies and jumpers at the ZEC line entrance. Age and condition of existing hardware unknown to Longview-Ameren; ComEd inspection records required.	
Tower line characteristics	Age and condition of the existing structures have not been assessed; ComEd inspection records are required.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000

	Normal ratings	Emergency ratings
Summer (MVA)	973.000000	1069.000000
Winter (MVA)	1053.000000	1143.000000
Conductor size and type	2338 kcmil ACAR	
Shield wire size and type	Existing retained	
Rebuild line length	Less than 0.1 mi (new entry span), plus removal of bypassed conductor	
Rebuild portion description	No rebuild of the existing line. Cut the Zion-Paris circuit on the shared-tower line, dead-end and construct a single-circuit entry span of 2338 kcmil ACAR. Remove bypassed conductor between the two cut points.	
Right of way	No new line right-of-way. The entry span is within the existing ComEd 345 kV easement and the Zion Energy Center station parcel. Station expansion land is addressed under the ZEC substation component.	
Construction responsibility	Sensitive commercial or competitive information	
Benefits/Comments	Sensitive commercial or competitive information	
Component Cost Details - In Current Year \$		
Engineering & design	Sensitive commercial or competitive information	
Permitting / routing / siting	Sensitive commercial or competitive information	
ROW / land acquisition	Sensitive commercial or competitive information	
Materials & equipment	Sensitive commercial or competitive information	
Construction & commissioning	Sensitive commercial or competitive information	
Construction management	Sensitive commercial or competitive information	
Overheads & miscellaneous costs	Sensitive commercial or competitive information	
Contingency	Sensitive commercial or competitive information	
Total component cost	\$502,659.00	

Component cost (in-service year)	\$561,697.00	
Transmission Line Upgrade Component		
Component title	Zion Energy Center R - Pleasant Prairie 345 kV #02	
Project description	Sensitive commercial or competitive information	
Impacted transmission line	L2221 Zion - Pleasant Prairie 345 kV	
Point A	Zion Energy Center	
Point B	Pleasant Prairie	
Point C		
Terrain description	Terrain is flat glacial lake plain, with open agricultural and industrial/utility land use adjacent to the Zion Energy Center generating site and the I-94/US-41 corridor. No river, railroad or interstate crossings are required; the new entry span lies within the existing corridor and the ZEC station property. No mapped FEMA floodplain or NWI wetland is crossed by the entry span but will be confirmed with a field delineation. Soils are silty clay loam over glacial till. Access is from existing station access roads.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2156 ACSR Assumed	
Hardware plan description	All conductor, insulators, hardware and shield wire on the retained Pleasant Prairie - ZEC line are unchanged; no reconductoring. New hardware is limited to the cut point and entry span: dead-end assemblies on the new cut-point structure and dead-end assemblies and jumpers at the ZEC line entrance. Age and condition of existing hardware unknown to Longview-Ameren; ComEd inspection records required.	
Tower line characteristics	Age and condition of the existing structures have not been assessed; ComEd inspection records are required.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000

	Normal ratings	Emergency ratings
Summer (MVA)	1146.000000	1441.000000
Winter (MVA)	1356.000000	1636.000000
Conductor size and type	2156 ACSR (or current ComEd Standard)	
Shield wire size and type	Existing retained	
Rebuild line length	Less than 0.25 mi (2 new spans), plus removal of bypassed conductor	
Rebuild portion description	No rebuild of the existing line. Cut the Zion-Pleasant Prairie circuit on the shared-tower line, dead-end the Pleasant Prairie side, and construct new spans and structures. Remove bypassed conductor between the two cut points.	
Right of way	New line right-of-way required from point of cut/transfer to the expanded Zion Energy Center station parcel along the modified alignment (<0.25 mi of line length). Station expansion land is addressed under the ZEC substation component.	
Construction responsibility	Sensitive commercial or competitive information	
Benefits/Comments	Sensitive commercial or competitive information	
Component Cost Details - In Current Year \$		
Engineering & design	Sensitive commercial or competitive information	
Permitting / routing / siting	Sensitive commercial or competitive information	
ROW / land acquisition	Sensitive commercial or competitive information	
Materials & equipment	Sensitive commercial or competitive information	
Construction & commissioning	Sensitive commercial or competitive information	
Construction management	Sensitive commercial or competitive information	
Overheads & miscellaneous costs	Sensitive commercial or competitive information	
Contingency	Sensitive commercial or competitive information	
Total component cost	\$1,256,648.00	

Component cost (in-service year)	\$1,404,243.00	
Transmission Line Upgrade Component		
Component title	Zion - Zion Energy Center R 345 kV #02	
Project description	Sensitive commercial or competitive information	
Impacted transmission line	L2223 Zion - Zion Energy Center 345 kV	
Point A	Zion	
Point B	Zion Energy Center R	
Point C		
Terrain description	Terrain is flat glacial lake plain, with open agricultural and industrial/utility land use adjacent to the Zion Energy Center generating site and the I-94/US-41 corridor. No river, railroad or interstate crossings are required; the new entry span lies within the existing corridor and the ZEC station property. No mapped FEMA floodplain or NWI wetland is crossed by the entry span but will be confirmed with a field delineation. Soils are silty clay loam over glacial till. Access is from existing station access roads.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2338 kcmil ACAR Assumed	
Hardware plan description	All conductor, insulators, hardware and shield wire on the retained Zion - Zion Energy Center 345 kV line are unchanged; no reconductoring. New hardware is limited to the cut point and entry span: dead-end assemblies on the new cut-point structure and dead-end assemblies and jumpers at the ZEC line entrance. Age and condition of existing hardware unknown to Longview-Ameren; ComEd inspection records required.	
Tower line characteristics	Age and condition of the existing hardware have not been assessed; ComEd inspection records are required.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000

	Normal ratings	Emergency ratings
Summer (MVA)	1201.000000	1201.000000
Winter (MVA)	1476.000000	1497.000000
Conductor size and type	2338 kcmil ACAR (or current ComEd standard)	
Shield wire size and type	Existing retained	
Rebuild line length	Less than 0.1 mi (new entry span), plus removal of bypassed conductor	
Rebuild portion description	No rebuild of the existing line. Cut the Zion - Zion Energy Center 345 kV circuit on the shared-tower line, dead-end and construct a single-circuit entry span of 2338 kcmil ACAR (or current ComEd standard). Remove bypassed conductor between the two cut points.	
Right of way	No new line right-of-way. The entry span is within the existing ComEd 345 kV easement and the Zion Energy Center station parcel. Station expansion land is addressed under the ZEC substation component.	
Construction responsibility	Sensitive commercial or competitive information	
Benefits/Comments	Sensitive commercial or competitive information	
Component Cost Details - In Current Year \$		
Engineering & design	Sensitive commercial or competitive information	
Permitting / routing / siting	Sensitive commercial or competitive information	
ROW / land acquisition	Sensitive commercial or competitive information	
Materials & equipment	Sensitive commercial or competitive information	
Construction & commissioning	Sensitive commercial or competitive information	
Construction management	Sensitive commercial or competitive information	
Overheads & miscellaneous costs	Sensitive commercial or competitive information	
Contingency	Sensitive commercial or competitive information	
Total component cost	\$592,419.00	

Component cost (in-service year)	\$662,000.00	
Transmission Line Upgrade Component		
Component title	Zion EC Gen - Zion Energy Center R 345 kV	
Project description	Sensitive commercial or competitive information	
Impacted transmission line	L97401 Zion EC Gen - Zion Energy Center 345 kV	
Point A	Zion EC Gen	
Point B	Zion Energy Center R	
Point C		
Terrain description	Terrain is flat glacial lake plain, with open agricultural and industrial/utility land use adjacent to the Zion Energy Center generating site and the I-94/US-41 corridor. No river, railroad or interstate crossings are required; the new entry span lies within the existing corridor and the ZEC station property. No mapped FEMA floodplain or NWI wetland is crossed by the entry span but will be confirmed with a field delineation. Soils are silty clay loam over glacial till. Access is from existing station access roads.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2156 ACSR assumed	
Hardware plan description	All conductor, insulators, hardware and shield wire on the retained Zion EC Gen - ZEC line are unchanged; no reconductoring. New hardware is limited to the cut point and entry span: dead-end assemblies on the new cut-point structure and dead-end assemblies and jumpers at the ZEC line entrance. Age and condition of existing hardware unknown to Longview-Ameren; ComEd inspection records required.	
Tower line characteristics	Age and condition of the existing structures have not been assessed; ComEd inspection records are required.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000

	Normal ratings	Emergency ratings
Summer (MVA)	1202.000000	1526.000000
Winter (MVA)	1421.000000	1677.000000
Conductor size and type	2156 ACSR (or current ComEd Standard)	
Shield wire size and type	Existing retained	
Rebuild line length	Less than 0.20 mi (2 new spans), plus removal of bypassed conductor	
Rebuild portion description	No rebuild of the existing line. Cut the Zion - Pleasant Prairie 345 kV circuit with a new dead-end tower, install a new dead-end structure to north of the new bay position and construct a single-circuit entry span(s) (<0.20 mi) of 2156 kcmil ACSR (or current ComEd standard). Remove bypassed conductor between the two cut points.	
Right of way	New line right-of-way required from point of cut/transfer to the expanded Zion Energy Center station parcel along the modified alignment (<0.20 mi of line length). Station expansion land is addressed under the ZEC substation component.	
Construction responsibility	Sensitive commercial or competitive information	
Benefits/Comments	Sensitive commercial or competitive information	
Component Cost Details - In Current Year \$		
Engineering & design	Sensitive commercial or competitive information	
Permitting / routing / siting	Sensitive commercial or competitive information	
ROW / land acquisition	Sensitive commercial or competitive information	
Materials & equipment	Sensitive commercial or competitive information	
Construction & commissioning	Sensitive commercial or competitive information	
Construction management	Sensitive commercial or competitive information	
Overheads & miscellaneous costs	Sensitive commercial or competitive information	
Contingency	Sensitive commercial or competitive information	

Total component cost	\$682,181.00
Component cost (in-service year)	\$762,303.00
Transmission Line Upgrade Component	
Component title	Zion Energy Center R - Pleasant Prairie 345 kV #01
Project description	Sensitive commercial or competitive information
Impacted transmission line	Zion Energy Center - Pleasant Prairie 345 kV
Point A	Zion Energy Center
Point B	Pleasant Prairie
Point C	
Terrain description	Terrain is flat glacial lake plain, with open agricultural and industrial/utility land use adjacent to the Zion Energy Center generating site and the I-94/US-41 corridor. No river, railroad or interstate crossings are required; the new entry span lies within the existing corridor and the ZEC station property. No mapped FEMA floodplain or NWI wetland is crossed by the entry span but will be confirmed with a field delineation. Soils are silty clay loam over glacial till. Access is from existing station access roads.
Existing Line Physical Characteristics	
Operating voltage	345
Conductor size and type	2156 ACSR assumed
Hardware plan description	All conductor, insulators, hardware and shield wire on the retained Pleasant Prairie - ZEC line are unchanged; no reconductoring. New hardware is limited to the cut point and entry span: dead-end assemblies on the new cut-point structure and dead-end assemblies and jumpers at the ZEC line entrance. Age and condition of existing hardware unknown to Longview-Ameren; ComEd inspection records required.
Tower line characteristics	Age and condition of the existing structures have not been assessed; ComEd inspection records are required.
Proposed Line Characteristics	
	Designed
	Operating

Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1202.000000	1526.000000
Winter (MVA)	1421.000000	1677.000000
Conductor size and type	2156 ACSR (or current ComEd Standard)	
Shield wire size and type	Existing retained	
Rebuild line length	Less than 0.25 mi (2 new spans), plus removal of bypassed conductor	
Rebuild portion description	No rebuild of the existing line. Cut/Transfer the Zion - Pleasant Prairie 345 kV circuit on the existing dead-end tower and change the line angle (if structurally capable), install a new dead-end structure to north of the new bay position and construct a single-circuit entry span(s) (<0.25 mi) of 2156 kcmil ACSR (or current ComEd standard). Remove bypassed conductor between the two cut points.	
Right of way	New line right-of-way required from point of cut/transfer to the expanded Zion Energy Center station parcel along the modified alignment (<0.25 mi of line length). Station expansion land is addressed under the ZEC substation component.	
Construction responsibility	Sensitive commercial or competitive information	
Benefits/Comments	Sensitive commercial or competitive information	
Component Cost Details - In Current Year \$		
Engineering & design	Sensitive commercial or competitive information	
Permitting / routing / siting	Sensitive commercial or competitive information	
ROW / land acquisition	Sensitive commercial or competitive information	
Materials & equipment	Sensitive commercial or competitive information	
Construction & commissioning	Sensitive commercial or competitive information	
Construction management	Sensitive commercial or competitive information	
Overheads & miscellaneous costs	Sensitive commercial or competitive information	

Contingency	Sensitive commercial or competitive information
Total component cost	\$789,894.00
Component cost (in-service year)	\$882,667.00
Substation Upgrade Component	
Component title	Wilton Center 765 kV Substation Upgrade
Project description	Sensitive commercial or competitive information
Substation name	Wilton Center 765 kV
Substation zone	ComEd
Substation upgrade scope	On the ring as expanded by ComEd for TR 91 (b4006.1): terminate the Wilton Center-Greentown 765 kV line in the open ring position left after that expansion. No new 765 kV circuit breaker on the ring (the position is bounded by existing ring breakers). Scope: line disconnect switch, 765 kV CCVTs, line surge arresters, wave trap/line tuner for carrier (if used by ComEd), dead-end structure, bus and jumper work from the ring to the take-off; shunt reactors, circuit breaker and disconnect switch, protection and control, SCADA/EMS points, revenue metering, station service and battery capacity check, and relay re-coordination of the adjacent ring positions and of the remote AEP Greentown terminal.
Transformer Information	
None	
New equipment description	(3) new 765 kV single phase circuit breakers for the reactors and no new transformers. New equipment at the line position: 765 kV line disconnect switch, 4,000 A (Estimated, to match the ComEd 765 kV yard standard used in the 2025 yard expansion; confirm with ComEd); 765 kV CCVTs (one per phase) and station-class surge arresters; wave trap/line tuner if ComEd retains power-line carrier; dead-end structure, bus conductor and jumpers sized above the ring-breaker rating; relaying with OPGW-based communications to Greentown, breaker-failure initiation to the adjacent existing breakers, and remote-end transfer trip; SCADA/EMS and revenue metering. (3) 100 MVAR single phase reactors.

Substation assumptions	The scope assumes (a) ComEd's b4006.1 TR 91 expansion is in service before this work and leaves one open 765 kV ring position, so the Greentown line is terminated without a ring extension or new breaker; (b) the ComEd 765 kV yard has physical room for the line take-off and dead-end at that position and the existing control enclosure can accommodate the added relay panels; the allocation of the expanded yard's spare positions between generation interconnections, TR 91 and this line is Unknown and must be confirmed with ComEd and PJM.
Real-estate description	All work is within the existing/future existing ComEd Wilton Center property; no new real estate is anticipated.
Construction responsibility	Sensitive commercial or competitive information
Benefits/Comments	Sensitive commercial or competitive information
Component Cost Details - In Current Year \$	
Engineering & design	Sensitive commercial or competitive information
Permitting / routing / siting	Sensitive commercial or competitive information
ROW / land acquisition	Sensitive commercial or competitive information
Materials & equipment	Sensitive commercial or competitive information
Construction & commissioning	Sensitive commercial or competitive information
Construction management	Sensitive commercial or competitive information
Overheads & miscellaneous costs	Sensitive commercial or competitive information
Contingency	Sensitive commercial or competitive information
Total component cost	\$25,487,323.00
Component cost (in-service year)	\$28,480,832.00
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
2026W1-GD-LL66	272803	W PLAEXCLUDED_FROM_COMPETITION	272054	W PLAEXCLUDED_FROM_COMPETITION	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL67	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138	222 ; R	Light Load Gen Deliv	Included
2026W1-GD-LL1	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138	222 ; R	Light Load Gen Deliv	Included
2026W1-GD-LL2	272803	W PLAEXCLUDED_FROM_COMPETITION	272054	W PLAEXCLUDED_FROM_COMPETITION	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL69	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138	222 ; R	Light Load Gen Deliv	Included
2026W1-GD-LL70	272803	W PLAEXCLUDED_FROM_COMPETITION	272054	W PLAEXCLUDED_FROM_COMPETITION	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL68	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138	222 ; R	Light Load Gen Deliv	Included
2026W1-GD-LL73	270694	CHERRY VA; B	270908	PRAIRIE ; B	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL143	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138	222 ; R	Light Load Gen Deliv	Included
2026W1-GD-LL72	272803	W PLAEXCLUDED_FROM_COMPETITION	272054	W PLAEXCLUDED_FROM_COMPETITION	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL71	272803	W PLAEXCLUDED_FROM_COMPETITION	272054	W PLAEXCLUDED_FROM_COMPETITION	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL156	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138	222 ; R	Light Load Gen Deliv	Included
2026W1-GD-LL157	272803	W PLAEXCLUDED_FROM_COMPETITION	272054	W PLAEXCLUDED_FROM_COMPETITION	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL158	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138	222 ; R	Light Load Gen Deliv	Included
2026W1-GD-LL159	272803	W PLAEXCLUDED_FROM_COMPETITION	272054	W PLAEXCLUDED_FROM_COMPETITION	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL74	270908	PRAIRIE ; B	270883	SILVER LK; R	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL75	270694	CHERRY VA; B	270908	PRAIRIE ; B	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL76	270908	PRAIRIE ; B	270883	SILVER LK; R	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL77	270694	CHERRY VA; B	270908	PRAIRIE ; B	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL78	270694	CHERRY VA; B	270908	PRAIRIE ; B	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL79	270694	CHERRY VA; B	270908	PRAIRIE ; B	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL80	270908	PRAIRIE ; B	270883	SILVER LK; R	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL81	270908	PRAIRIE ; B	270883	SILVER LK; R	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL82	270908	PRAIRIE ; B	270883	SILVER LK; R	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL8	270694	CHERRY VA; B	270908	PRAIRIE ; B	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL15	272444	SANDWICH ; B	272054	MILLER RD; R	1	138	222	Light Load Gen Deliv	Included
2026W1-GD-LL89	272444	SANDWICH ; B	272054	MILLER RD; R	1	138	222	Light Load Gen Deliv	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-GD-LL90	272444	SANDWICH ; B	272054	MILLER RD; R	1	138	222	Light Load Gen Deliv	Included
2026W1-GD-S53	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer Gen Deliv	Included
2026W1-IPD-S4	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222	Summer IPD	Included
2026W1-IPD-S5	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222	Summer IPD	Included
2026W1-IPD-S8	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer IPD	Included
2026W1-IPD-S60	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-IPD-S64	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-IPD-S71	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-IPD-S72	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-IPD-S75	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-N11-ST1	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST3	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST4	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST8	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST9	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST10	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST11	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST12	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST13	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST14	270809	LISLE ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST15	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST18	270809	LISLE ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST19	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST20	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST21	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST22	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST23	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST25	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N11-ST26	270716	DRESDEN ; B	274702	KENDALL ;BU	1	345	222	Summer N-1-1	Included
2026W1-N11-ST28	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST29	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST30	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST34	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST35	270809	LISLE ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST36	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST37	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST38	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST39	270809	LISLE ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST40	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST41	270809	LISLE ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST42	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST43	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST44	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST45	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST47	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST48	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST55	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST56	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST57	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST58	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST60	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST61	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST62	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST63	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST64	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST65	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N11-ST68	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST69	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST70	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST71	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST72	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST73	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST76	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST77	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST78	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST80	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST85	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST87	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST88	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST89	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST90	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST91	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST92	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST93	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST95	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST96	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST97	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST98	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST99	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST100	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST101	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST103	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST108	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST109	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N11-ST110	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST113	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST114	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST119	272457	ELK GROVE; R	998470	ELK GROVE 81	1	138	222	Summer N-1-1	Included
2026W1-N11-ST122	270725	ELK GROVE; R	998470	ELK GROVE 81	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST123	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST124	270998	ANTIOCH ;BT	272386	ROUND LK ; B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST125	272465	SILVER LK; R	272791	WILSON RD; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST126	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST127	272456	ELK GROVE; B	998471	ELK GROVE 82	1	138	222	Summer N-1-1	Included
2026W1-N11-ST128	270724	ELK GROVE; B	998471	ELK GROVE 82	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST130	272465	SILVER LK; R	272791	WILSON RD; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST131	272456	ELK GROVE; B	998471	ELK GROVE 82	1	138	222	Summer N-1-1	Included
2026W1-N11-ST132	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST134	270724	ELK GROVE; B	998471	ELK GROVE 82	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST135	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST137	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST139	271555	GLENDALE ;RT	271923	LOMBARD ; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST140	270998	ANTIOCH ;BT	272386	ROUND LK ; B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST141	271555	GLENDALE ;RT	271923	LOMBARD ; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST144	271064	BARTLETT ;BT	272546	SPAULDING;1B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST146	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST148	271554	GLENDALE ;BT	271924	LOMBARD ;6B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST151	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST153	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST154	271554	GLENDALE ;BT	271924	LOMBARD ;6B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST155	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST156	272465	SILVER LK; R	272791	WILSON RD; R	1	138	222	Summer N-1-1	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N11-ST157	271554	GLENDALE ;BT	271924	LOMBARD ;6B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST158	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST162	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST163	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST164	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST165	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST166	271554	GLENDALE ;BT	271924	LOMBARD ;6B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST167	272387	ROUND LK ; R	272791	WILSON RD; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST168	275213	SILVER LK;2M	272464	SILVER LK; B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST169	272457	ELK GROVE; R	998470	ELK GROVE 81	1	138	222	Summer N-1-1	Included
2026W1-N11-ST170	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST172	271554	GLENDALE ;BT	271924	LOMBARD ;6B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST173	270725	ELK GROVE; R	998470	ELK GROVE 81	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST174	270781	ITASCA ; R	271735	ITASCA ;3R	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST175	270781	ITASCA ; R	271735	ITASCA ;3R	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST176	271554	GLENDALE ;BT	271924	LOMBARD ;6B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST177	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST178	270883	SILVER LK; R	275213	SILVER LK;2M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST179	272465	SILVER LK; R	272791	WILSON RD; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST180	271554	GLENDALE ;BT	271924	LOMBARD ;6B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST185	270999	ANTIOCH ;RT	272389	RL BEACH ; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST186	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST188	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST189	270998	ANTIOCH ;BT	272388	RL BEACH ; B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST190	270998	ANTIOCH ;BT	272386	ROUND LK ; B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST191	272457	ELK GROVE; R	998470	ELK GROVE 81	1	138	222	Summer N-1-1	Included
2026W1-N11-ST194	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST195	270725	ELK GROVE; R	998470	ELK GROVE 81	1	345/138	222	Summer N-1-1	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N11-ST196	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST199	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST200	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST202	271555	GLENDALE ;RT	272109	EXCLUDED_FROM_COMPETITION	1	138	222, R	Summer N-1-1	Included
2026W1-N11-ST207	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST208	271052	BEDFORD P;4B	271216	CLEARING ;BT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST209	270781	ITASCA ; R	998462	ITASCA 84	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST210	272457	ELK GROVE; R	998470	ELK GROVE 81	1	138	222	Summer N-1-1	Included
2026W1-N11-ST211	270781	ITASCA ; R	998462	ITASCA 84	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST212	270999	ANTIOCH ;RT	272389	RL BEACH ; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST214	271739	ITASCA ;4R	998462	ITASCA 84	1	138	222	Summer N-1-1	Included
2026W1-N11-ST215	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST216	271739	ITASCA ;4R	998462	ITASCA 84	1	138	222	Summer N-1-1	Included
2026W1-N11-ST218	271555	GLENDALE ;RT	272109	EXCLUDED_FROM_COMPETITION	1	138	222, R	Summer N-1-1	Included
2026W1-N11-ST220	271343	DIERKING ; R	272147	GREENLEAF; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST221	271343	DIERKING ; R	272147	GREENLEAF; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST222	271342	DIERKING ; B	272146	GREENLEAF; B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST224	270883	SILVER LK; R	270917	WAYNE ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST225	270883	SILVER LK; R	270917	WAYNE ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST227	271342	DIERKING ; B	272146	GREENLEAF; B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST228	271343	DIERKING ; R	272147	GREENLEAF; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST229	271343	DIERKING ; R	272147	GREENLEAF; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST230	271343	DIERKING ; R	272147	GREENLEAF; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST231	271343	DIERKING ; R	272147	GREENLEAF; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST232	271343	DIERKING ; R	272147	GREENLEAF; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST233	271437	PINE ; R	271737	ITASCA ;6R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST234	271437	PINE ; R	271737	ITASCA ;6R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST235	271342	DIERKING ; B	272146	GREENLEAF; B	1	138	222	Summer N-1-1	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N11-ST238	271436	PINE ; B	271736	ITASCA ;12	1	138	222	Summer N-1-1	Included
2026W1-N11-ST239	271437	PINE ; R	271737	ITASCA ;6R	1	138	222	Summer N-1-1	Included
2026W1-GD-LL65	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138	222	Light Load Gen Deliv	Included
2026W1-GD-LL144	272803	W PLAEXCLUDED_FROM_COMPETITION	272054	MILLER RD; R	1	138	222	Light Load Gen Deliv	Included
2026W1-GD-LL9	270694	CHERRY VA; B	270908	PRAIRIE ; B	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL11	270908	PRAIRIE ; B	270883	SILVER LK; R	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL10	270908	PRAIRIE ; B	270883	SILVER LK; R	1	345	222	Light Load Gen Deliv	Included
2026W1-GD-LL146	272444	SANDWICH ; B	272054	MILLER RD; R	1	138	222	Light Load Gen Deliv	Included
2026W1-GD-LL88	272444	SANDWICH ; B	272054	MILLER RD; R	1	138	222	Light Load Gen Deliv	Included
2026W1-GD-S534	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer Gen Deliv	Included
2026W1-GD-S233	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer Gen Deliv	Included
2026W1-GD-S537	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer Gen Deliv	Included
2026W1-GD-S232	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer Gen Deliv	Included
2026W1-N11-WNC1	N/A	N/A	N/A	N/A	N/A	N/A	222	Winter N-1-1	Included
2026W1-GD-S174	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222	Summer Gen Deliv	Included
2026W1-GD-S175	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222	Summer Gen Deliv	Included

New Flowgates

Sensitive commercial or competitive information

Financial Information

Capital spend start date 04/2027

Construction start date 10/2030

Project Duration (In Months) 74

Cost Containment Commitment

Cost cap (in current year) Sensitive commercial or competitive information

Cost cap (in-service year)

Sensitive commercial or competitive information

Components covered by cost containment

1. Zion Energy Center Converter - Zion Energy Center R 345 kV #01 - PROPOSER
2. Zion Energy Center Converter - Zion Energy Center B 345 kV #02 - PROPOSER
3. Zion Energy Center Converter Station - PROPOSER
4. Zion Energy Center Converter - Wilton Center Converter 525 kV HVDC - PROPOSER
5. Wilton Center Converter - Wilton Center R 345 kV #01 - PROPOSER
6. Wilton Center Converter Station - Wilton Center 345 kV #02 - PROPOSER
7. Wilton Center Converter Station - PROPOSER
8. Wilton Center – Greentown 765 kV OH - Illinois - PROPOSER

Cost elements covered by cost containment

Engineering & design	No
Permitting / routing / siting	No
ROW / land acquisition	No
Materials & equipment	No
Construction & commissioning	No
Construction management	Yes
Overheads & miscellaneous costs	No
Taxes	No
AFUDC	No
Escalation	No
Additional Information	Sensitive commercial or competitive information
Is the proposer offering a binding cap on ROE?	No

Is the proposer offering a Debt to Equity Ratio cap?

Sensitive commercial or competitive information

Additional cost containment measures not covered above

Sensitive commercial or competitive information

Additional Comments

None