

S4b Wayne-Itasca, Joliet-Elwood, Byron-Charter Grove-Wayne, & 2034 Charter Grove 765kV Proposal Package

General Information

Proposing entity name	Company confidential and proprietary information.
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Company confidential and proprietary information.
Company proposal ID	Company confidential and proprietary information.
PJM Proposal ID	792
Project title	S4b Wayne-Itasca, Joliet-Elwood, Byron-Charter Grove-Wayne, & 2034 Charter Grove 765kV Proposal Package
Project description	Construct new double (2) 345kV from Wayne to Itasca substation, a new double (2) 345kV from Joliet to Elwood substations, and add a new single (1) 345kV from Byron to Charter Grove substations, and a new single (1) 345kV Charter Grove to Wayne substations. Cut in a new 765kV Charter Grove substation into the future Sugar Creek to Collins 765kV transmission facility. Additional existing ComEd transmission facility upgrades are addressed as part of this proposal.
Email	Company confidential and proprietary information.
Project in-service date	06/2034
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	Company confidential and proprietary information.

Project Components

1. Install 345/138kV TR84 at Elk Grove

2. Cut 345kV L10111 and L10112 Itasca to Des Plaines Red and Blue into 345kV Elk Grove, create new L10111 and L10112 Itasca to Elk Grove, Red and Blue, create new L18418 and L18419 Elk Grove to Des Plaines, Red and Blue
3. Cut 345kV L10111 and L10112 Itasca to Des Plaines Red and Blue into 345kV Elk Grove, create new L10111 and L10112 Itasca to Elk Grove, Red and Blue, create new L18418 and L18419 Elk Grove to Des Plaines, Red and Blue- Elk Grove Substation Component
4. Install 2-138kV Phase Shifters at Itasca
5. Install New 138kV L14613 from Sandwich to Plano
6. Install New 138kV L14613 from Sandwich to Plano- Sandwich Substation Component
7. Install New 138kV L14613 from Sandwich to Plano- Plano Substation Component
8. Install 2 New 345kV Wayne to Itasca Red and Blue Lines
9. Install 2 New 345kV Wayne to Itasca Lines- Wayne Substation Component
10. Install 2 New 345kV Wayne to Itasca Lines- Itasca Substation Component
11. 345kV L10801 Lockport Blue to Lisle Blue, replace transmission overhead conductor with ACSS
12. 345kV L10801 Lockport Blue to Lisle Blue, Lockport Substation Component
13. 345kV L10801 Lockport Blue to Lisle Blue, Lisle Substation Component
14. Install 2 New 345kV Joliet-Elwood Lines Red and Blue
15. Install 2 New 345kV Joliet-Elwood Lines- Elwood Energy Center Substation Component
16. Install 2 New 345kV Joliet-Elwood Lines- Joliet Substation Component
17. Install new 345 kV line Byron to Wayne
18. Install new 345 kV line Byron to Wayne - Byron substation
19. Install new 345 kV line Byron to Wayne - Wayne substation
20. Install 345/138kV TR84 at Cherry Valley
21. Install 2-138kV Bus Inductors at Des Plaines
22. 345kV L10111 and L10112 from Itasca to Elk Grove Red and Blue, Increase Capacity
23. Replace 345kV BT Oil Breaker 10-11 at Lockport Substation
24. Replace 345kV BT Oil Breaker 7-12 at Lockport Substation
25. L11601 East Frankfort to Gooding Grove Blue, Capacity Increase- East Frankfort Substation Component
26. L11602 East Frankfort to Gooding Grove Red, Capacity Increase- East Frankfort Substation Component
27. 345kV L10802 Lockport Red to Lisle Red, Increase Capacity with ACSS
28. 345kV L10802 Lockport Red to Lisle Red, Lockport Substation Component.

29. 345kV L10802 Lockport Red to Lisle Red, Lisle Substation Component.
30. Byron to Wayne - Charter Grove 345 kV Substation
31. 345kV L15501 Nelson-Renner Rd, replace transmission overhead conductor with ACAR
32. 345kV L0627 Byron-Lee Co, replace transmission overhead conductor with ACAR
33. 345kV L0627 Byron to Lee Co, Byron Substation Component.
34. Install 765 kV Charter Grove, Add Two (2) 765/345 kV Autos at Charter Grove

Substation Upgrade Component

Component title	Install 345/138kV TR84 at Elk Grove
Project description	Company confidential and proprietary information.
Substation name	Elk Grove
Substation zone	ComEd
Substation upgrade scope	Install 345/138kV TR84 and associated equipment at Elk Grove. Install 3-138kV BT GIS circuit breakers and 1-345kV BT GIS circuit breaker and associated equipment at Elk Grove.

Transformer Information

	Name	Capacity (MVA)
Transformer	Elk Grove TR84	420
	High Side	Low Side Tertiary
Voltage (kV)	345	138 n/a
New equipment description	Elk Grove TR84 Summer Normal/Emergency 420/480 Winter Normal/Emergency 449/491 345kV BT GIS Circuit Breaker, 4000A 63kA 138kV BT GIS Circuit Breaker, 3000A, 63kA	
Substation assumptions	The ultimate layout already provided for the autotransformer installation on existing footprint of the Elk Grove (East) expansion project. Additional acreage is not required for this project to be executed successfully.	

Real-estate description	The ultimate layout already provided for the autotransformer installation on existing footprint of the Elk Grove (East) expansion project. Additional acreage is not required for this project to be executed successfully.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$30,966,611.00
Component cost (in-service year)	\$34,058,647.00
Transmission Line Upgrade Component	
Component title	Cut 345kV L10111 and L10112 Itasca to Des Plaines Red and Blue into 345kV Elk Grove, create new L10111 and L10112 Itasca to Elk Grove, Red and Blue, create new L18418 and L18419 Elk Grove to Des Plaines, Red and Blue
Project description	Company confidential and proprietary information.
Impacted transmission line	Remove 345kV L10111 and L10112 Itasca to Des Plaines, Red and Blue, Create L10111 a L10112 Itasca to Elk Grove, Red and Blue and L18418 and L18419 Elk Grove to Des Plaines, Red and Blue
Point A	Itasca

Point B	Elk Grove	
Point C	Des Plaines	
Terrain description	Elk Grove substation is along the existing L10111 and L10112 (Previously Itasca to Desplaines, Red and Blue) right of way.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2156.0 kCMIL Bluebird ACSR (84/19)	
Hardware plan description	utilize existing hardware from existing L10111 and L10112 (Previously Itasca to Des Plaines, Red and Blue)	
Tower line characteristics	utilize existing 345kv double circuit lattice structures from existing L10111 and L10112 (Previously Itasca to Des Plaines, Red and Blue)	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1334.000000	1557.000000
Winter (MVA)	1600.000000	1760.000000
Conductor size and type	2 – 1033.5 kCMIL Curlew ACSS (22/7)	
Shield wire size and type	Utilize existing shield wire from existing L10111 and L10112 (Previously Itasca to Des Plaines Red and Blue)	
Rebuild line length	0	

Rebuild portion description	Cut-in 345kV L10111 and L10112 (Previously Itasca to Des Plaines Red and Blue) into Elk Grove, to create L10111 and L10112 Elk Grove to Itasca, Red and Blue, and L18418 and L18419 Elk Grove to Des Plaines, Red and Blue For New 345kV L18418 and L18419 Elk Grove to Des Plaines, Red and Blue Add approximately 0.25 miles of new 2156.0 Bluebird ACSR (84/19) conductor to connect L18418 and L18419 from Elk Grove to existing L10111 and L10112 infrastructure (previously Itasca to Des Plaines Red and Blue). Utilize the existing infrastructure for old L10111 and old L10112 (previously Itasca to Des Plaines Red and Blue) remainder of the right of way from Elk Grove to Des Plaines. For New 345kV L10111 and L10112 Add approximately 0.25 miles of new conductor to connect L10111 and L10112 from Elk Grove to existing L10111 and L10112 (previously Itasca to Des Plaines Red and Blue) infrastructure. Utilize the existing infrastructure for old L10111 and old L10112 (previously Itasca to Des Plaines Red and Blue) remainder of the right of way from Elk Grove to Itasca.
Right of way	For new 345kV L10111 and L10112, utilize the existing right of way for L10111 and L10112 (previously Itasca to Des Plaines Red and Blue) from Elk Grove to Itasca. For new 345kV L18418 and L18419, utilize the existing right of way for L10111 and L10112 (previously Itasca to Des Plaines Red and Blue) from Elk Grove to Des Plaines.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$16,541,086.00
Component cost (in-service year)	\$18,497,818.00

Substation Upgrade Component

Component title	Cut 345kV L10111 and L10112 Itasca to Des Plaines Red and Blue into 345kV Elk Grove, create new L10111 and L10112 Itasca to Elk Grove, Red and Blue, create new L18418 and L18419 Elk Grove to Des Plaines, Red and Blue- Elk Grove Substation Component
Project description	Company confidential and proprietary information.
Substation name	Elk Grove
Substation zone	ComEd
Substation upgrade scope	Cut In L10111 and L10112 into 345kV Elk Grove. Rename L10111 from Elk Grove Blue to Des Plaines Blue to L18418. Rename L10112 from Elk Grove Red to Des Plaines Red L10819 i. Install three (3) 345kV gas-insulated circuit breakers with associated MOD and ground switches on the 345kV Blue bus in the 345kV GIS building. ii. Install three (3) 345kV gas-insulated circuit breakers with associated MOD and ground switches on the 345kV Red bus in the 345kV GIS building. iii. Install two (2) 345kV gas-insulated motor-operated disconnects, associated ground switches and fast-acting ground switches for the L.10111 and L.18418 345kV GIS blue bus. iv. Install two (2) 345kV gas-insulated motor-operated disconnects, associated ground switches and fast-acting ground switches for the L.10112 and L.18419 345kV GIS red bus, v. Install GIS Cable Modules for the cable line connection, instrument transformers, LCCs, and associated equipment. vi. Install 345kV cable TUG lines (L.10111, L.10112, L.18418, L.18419) from the GIS to the transmission right of way, to transition to associated OH line. Consider 2 cables per phase, for each 345kV line that will require six (6) cable terminations per line. vii. Each line UG/OH transition, shall be equipped with three (3) 345kV Fiber optic CT, for the UG protection scheme.
Transformer Information	
None	
New equipment description	345kV GIS Circuit Breakers, 4000A 63kA
Substation assumptions	The ultimate layout already provided for the line cut-ins within Elk Grove GIS.
Real-estate description	Additional acreage is not required at the Substation for this project to be executed successfully.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.

Permitting / routing / siting	Company confidential and proprietary information.		
ROW / land acquisition	Company confidential and proprietary information.		
Materials & equipment	Company confidential and proprietary information.		
Construction & commissioning	Company confidential and proprietary information.		
Construction management	Company confidential and proprietary information.		
Overheads & miscellaneous costs	Company confidential and proprietary information.		
Contingency	Company confidential and proprietary information.		
Total component cost	\$25,815,406.00		
Component cost (in-service year)	\$28,077,781.00		
Substation Upgrade Component			
Component title	Install 2-138kV Phase Shifters at Itasca		
Project description	Company confidential and proprietary information.		
Substation name	Itasca		
Substation zone	ComEd		
Substation upgrade scope	Install 1-138kV, 466MVA phase shifter, and 3 motor operated disconnect switches on line L10108 from Itasca to Pine Red, at Itasca. Install 1-138kV, 466MVA phase shifter, and 3 motor operated disconnect switches on line L10109 from Itasca to Pine Blue at Itasca.		
Transformer Information			
	Name		Capacity (MVA)
Transformer	L10108 138kV PS Transformer		420
	High Side	Low Side	Tertiary
Voltage (kV)	138	138	n/a

	Name	Capacity (MVA)
Transformer	L10109 138kV PS Transformer	420
	High Side	Low Side Tertiary
Voltage (kV)	138	138 n/a
New equipment description	138kV PS Transformers, Summer Normal/Emergency 420/480 Winter Normal/Emergency 420/480	
Substation assumptions	L.10108 and L10109 to Itasca to Pine Red and Blue will be intercepted within the yard and re-installed from the bus side of the shifters to the 138kV buses. The microwave towers within the COMED yard will have to be relocated to create a location for the phase shifters. Cost of relocation to be included in this project. Grading and grounding within the 120' x 160' area for the new phase shifters needs to be installed.	
Real-estate description	Additional acreage is not required for this project to be executed successfully.	
Construction responsibility	Company confidential and proprietary information.	
Benefits/Comments	Company confidential and proprietary information.	
Component Cost Details - In Current Year \$		
Engineering & design	Company confidential and proprietary information.	
Permitting / routing / siting	Company confidential and proprietary information.	
ROW / land acquisition	Company confidential and proprietary information.	
Materials & equipment	Company confidential and proprietary information.	
Construction & commissioning	Company confidential and proprietary information.	
Construction management	Company confidential and proprietary information.	
Overheads & miscellaneous costs	Company confidential and proprietary information.	
Contingency	Company confidential and proprietary information.	
Total component cost	\$28,503,796.00	

Component cost (in-service year) \$31,231,719.00

Greenfield Transmission Line Component

Component title Install New 138kV L14613 from Sandwich to Plano

Project description Company confidential and proprietary information.

Point A Sandwich

Point B Plano

Point C

	Normal ratings	Emergency ratings
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Summer (MVA)	351.000000	449.000000
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Winter (MVA)	420.000000	500.000000
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Conductor size and type 1113 KCMIL Bluejay & 556.5 kCMIL ACSR (24/7) Parakeet/TP conductor

Nominal voltage AC

Nominal voltage 138

Line construction type Overhead

General route description ComEd is replacing wood structures on L14609 from Sandwich to Plano (3.5miles) with new 138kV double circuit steel structures. The new 138kV L14613 transmission line will utilize existing double circuit structures of 138kV L14609 from Sandwich to Miller, and utilize existing double circuit structures of 138kV L97805 from Miller to Plano.

Terrain description Open farmland; flat.

Right-of-way width by segment The existing L14609 ROW has enough easement to accommodate the 138kv double circuit L14609 and new L14613. TROW width appears to be 400' wide from Plano to Sandwich. Width and rights to be confirmed by Real Estate and project team. Typical 138kV TROW width for double circuit monopole is ~110'.

Electrical transmission infrastructure crossings n/a

Civil infrastructure/major waterway facility crossing plan	Five road crossings (Little Rock Road, Creek Road, Cook Road, E Sandwich Road, W Sandwich Road, Three potential creek crossings One potential easement crossing (based on GIS) Existing distribution along southern side of property line
Environmental impacts	ESD would need to work with ECOC to confirm any other environmental concerns (floodplains, wetlands, wetland buffers, areas of critical species etc.)
Tower characteristics	ComEd is replacing wood structures on L14609 from Sandwich to Plano with new 138kV double circuit steel structures. There are approximately 60 double circuit wood poles to replace with double circuit steel monopoles. The new 138kV L14613 transmission line will utilize existing double circuit structures of 138kV L14609 from Sandwich to Miller, and utilize existing double circuit structures of 138kV L97805 from Miller to Plano.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$22,756,937.00
Component cost (in-service year)	\$25,190,230.00
Substation Upgrade Component	
Component title	Install New 138kV L14613 from Sandwich to Plano- Sandwich Substation Component

Project description	Company confidential and proprietary information.
Substation name	Sandwich
Substation zone	ComEd
Substation upgrade scope	At TSS 146 Sandwich Install new L14613 Line disconnect and structure. Install New SF6 Circuit Breaker for new 138kV BT 1-6. This will include Motor-operated Disconnects. New Circuit breaker will include new relay scheme that will include new relay panels and possibly new battery Install new Circuit breaker, MOD, and Line disconnect foundation.
Transformer Information	
None	
New equipment description	138kV BT circuit breaker, 3000A and 63kA 138kv motor operated line disconnect switch, 3000A
Substation assumptions	Sandwich substation ultimate was designed and built to accommodate the new line.
Real-estate description	no change, Sandwich substation ultimate was designed and built to accommodate the new line.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$3,017,090.00

Component cost (in-service year)	\$3,312,981.00	
Greenfield Transmission Line Component		
Component title	Install 2 New 345kV Wayne to Itasca Red and Blue Lines	
Project description	Company confidential and proprietary information.	
Point A	Wayne	
Point B	Itasca	
Point C		
	Normal ratings	Emergency ratings
Summer (MVA)	1449.000000	1864.000000
Winter (MVA)	1741.000000	2073.000000
Conductor size and type	2-1113_KCMIL_45/7_ACSR_BLUEJAY_TWISTED	
Nominal voltage	AC	
Nominal voltage	345	
Line construction type	Overhead	
General route description	The route is approximately 14 miles in length between Wayne and Itasca. The route begins at the existing Wayne Substation and parallels existing transmission lines across densely populated areas along Highway 390 in an eastward direction. The route terminates at Itasca just west of the O'Hare Airport.	
Terrain description	Variable terrain is expected in areas outside rural farmland and commercial/industrial areas. Areas near creeks/rivers/ponds will have slightly steeper elevation changes. Elevation patterns generally increase in elevation from west to east.	
Right-of-way width by segment	The transmission line design assumes 200 feet of available right-of-way along the route within ComEd's existing corridor. No additional land acquisition is anticipated.	
Electrical transmission infrastructure crossings	L7910, L7915	

Civil infrastructure/major waterway facility crossing plan	The route between Wayne and Itasca substations will cross one 138 kV transmission line. US/State/County Permits will be requested and acquired for all necessary line crossings. When possible, road line crossings will be as close to perpendicular as possible. Extra precautions will be taken by construction teams to ensure the safety of the public when installing road crossing spans. For any Waters of the US crossings, an Army Corps of Engineers permit will be required. This permit will be requested, and all requirements will be met. FAA permits will be requested/acquired for all structures. Additional FAA requirements may be needed as the line approaches the area near the airport.
Environmental impacts	Environmental research will be acquired for the entire project area, and line will comply with all necessary environmental regulations. A Transmission Line Siting Application will be required for the state utility commissions. · Army Corps of Engineers permit approval required · USFWS permit approval required · Pennsylvania DER permit approval required · USEPA permit approval required · State and local environmental permit(s) will be required
Tower characteristics	Engineered steel monopoles will be used along the approximately 13.9-mile route between Wayne Substation and Itasca Substation. The poles are anticipated to be supported on reinforced concrete drilled-shaft foundations. Double-circuit steel monopoles will carry the two proposed 345 kV circuits along most of the route. For approximately 0.25 mile, quad-circuit steel monopoles will carry the two proposed 345 kV circuits and two existing 138 kV circuits to accommodate right-of-way constraints. Tangent, running-angle, and deadend monopoles will be used as required by the alignment and structure loading. Phase conductors will be supported from pole arms using suspension or deadend insulator assemblies, as applicable. Preliminary structure height is approximately 180'. Typical spans are estimated at 400' to 800', depending on the route section.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.

Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$110,807,188.00
Component cost (in-service year)	\$122,509,090.00
Substation Upgrade Component	
Component title	Install New 138kV L14613 from Sandwich to Plano- Plano Substation Component
Project description	Company confidential and proprietary information.
Substation name	Plano
Substation zone	ComEd
Substation upgrade scope	Install 1 new 138kV BT circuit breaker onto the existing 138kv ring bus at Sandwich, install one new motor operated line disconnect switch to interconnect L14613 into Sandwich substation.
Transformer Information	
None	
New equipment description	138kV BT circuit breaker, 3000A and 63kA 138kV motor operated line disconnect switch, 3000A
Substation assumptions	Plano substation ultimate was designed and built to accommodate the new line.
Real-estate description	no change, Plano substation ultimate was designed and built to accommodate the new line.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.

Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$3,564,025.00
Component cost (in-service year)	\$3,917,133.00
Substation Upgrade Component	
Component title	Install 2 New 345kV Wayne to Itasca Lines- Wayne Substation Component
Project description	Company confidential and proprietary information.
Substation name	Wayne
Substation zone	ComEd
Substation upgrade scope	Add three (3) 345kV 4000A circuit breaker. Replace foundation. Install 2-2156 kCMIL ACSR (84/19) Bluebird Bundled conductor between the circuit breaker and MODs on all three phases. Install six (6) 345kV 4000A ACCC D06 motor operated disconnects (MODs). Install two (2) dead-end structures for L. 14413 and L. 14414 respectively. Install 2-2156 kCMIL ACSR (84/19) Bluebird Bundled conductor for each line from dead-end structure to line side MODs on all three phases Remove 345kV BT 9-10 circuit breaker.
Transformer Information	
None	
New equipment description	345kV gas circuit breakers, 4000A, 63 \kA
Substation assumptions	The ultimate layout already provided for the line cut-ins within the substation.
Real-estate description	Additional acreage is not required for this project.
Construction responsibility	Company confidential and proprietary information.

Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$12,927,102.00
Component cost (in-service year)	\$14,269,767.00
Substation Upgrade Component	
Component title	Install 2 New 345kV Wayne to Itasca Lines- Itasca Substation Component
Project description	Company confidential and proprietary information.
Substation name	Itasca
Substation zone	ComEd

Substation upgrade scope	Install three (3) 345kV gas-insulated circuit breakers with associated MOD and ground switches on the 345kV Blue bus in the 345kV GIS building. Install three (3) 345kV gas-insulated circuit breakers with associated MOD and ground switches on the 345kV Red bus in the 345kV GIS building. Install one (1) 345kV gas-insulated motor-operated disconnects, associated ground switches and fast-acting ground switches for the L.14413 345kV GIS blue bus. Install one (1) 345kV gas-insulated motor-operated disconnects, associated ground switches and fast-acting ground switches for the L.14414 345kV GIS red bus, Install GIS Cable Modules for the cable line connection, instrument transformers, LCCs, and associated equipment. Install 345kV cable TUG lines (L.14413, L.14414,) from the GIS to the transmission right of way, to transition to associated OH line. Consider 2 cables per phase, for each 345kV line that will require six (6) cable terminations per line. Each line UG/OH transition, shall be equipped with three (3) 345kV Fiber optic CT, for the UG protection scheme.
Transformer Information	
None	
New equipment description	345KV GIS breaker, 4000A, 63kA
Substation assumptions	The ultimate layout already provided for the line cut-ins within GIS.
Real-estate description	Additional acreage is not required for this project to be executed successfully.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.

Total component cost	\$29,863,699.00	
Component cost (in-service year)	\$32,601,086.00	
Transmission Line Upgrade Component		
Component title	345kV L10801 Lockport Blue to Lisle Blue, replace transmission overhead conductor with ACSS	
Project description	Company confidential and proprietary information.	
Impacted transmission line	345kV L10801 Lockport Blue to Lisle Blue	
Point A	Lockport Blue	
Point B	Lisle Blue	
Point C		
Terrain description	The line is in existing ComEd right-of-way over flat terrain. The terrain is bordering industrial, residential, and wooded lands. There is one railroad crossing and one interstate highway crossing.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2156 KCMIL ACSR	
Hardware plan description	The lattice towers that are the extent of L10801 Lockport Blue to Lisle Blue are greater than 60 years old, Existing hardware will be replaced	
Tower line characteristics	Double circuit 345kV lattice towers with 2 shield wire positions. Line is double circuit with 10802 Lockport to Lisle Red. The existing conductor is 1-Bluebird ACSR with average span lengths of 650'. Existing structures are primarily type "A" (TL258) designed for Bluebird ACSR and 1000' weight spans	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings

Summer (MVA)	1665.000000	2049.000000
Winter (MVA)	2072.000000	2340.000000
Conductor size and type	2 x 795 kcmil 26/7 ACSS "Drake"	
Shield wire size and type	OPGW	
Rebuild line length	12.7	
Rebuild portion description	Replace existing conductor with 2 x Drake ACSS. Replace existing shield wire and transmission hardware. About 10% of structures will be replaced, and 6% will be modified to maintain the line's integrity. Tower replacement and modification quantities were estimated based on comparing the proposed conductor to the loading schedules of the existing towers. Modification percentages are based on weight-span analysis and point load differences attributed to the larger conductor diameter and ice loading impacts. Increased conductor diameter compared to existing is approximately accounted for in original design transverse OLF buffer. Typical span lengths were used to determine sag-related risks like blowout and vertical clearances. It is assumed the line will be reconducted to Exelon's cable tension criteria instead of ComEd's to be more competitive.	
Right of way	The rebuild portions will occur in the existing 345kV L10801/L10802 Lockport Blue to Lisle Red and Blue ROW.	
Construction responsibility	Company confidential and proprietary information.	
Benefits/Comments	Company confidential and proprietary information.	
Component Cost Details - In Current Year \$		
Engineering & design	Company confidential and proprietary information.	
Permitting / routing / siting	Company confidential and proprietary information.	
ROW / land acquisition	Company confidential and proprietary information.	
Materials & equipment	Company confidential and proprietary information.	
Construction & commissioning	Company confidential and proprietary information.	
Construction management	Company confidential and proprietary information.	
Overheads & miscellaneous costs	Company confidential and proprietary information.	

Contingency	Company confidential and proprietary information.
Total component cost	\$14,008,244.00
Component cost (in-service year)	\$15,517,431.00
Substation Upgrade Component	
Component title	345kV L10801 Lockport Blue to Lisle Blue, Lockport Substation Component
Project description	Company confidential and proprietary information.
Substation name	Lockport
Substation zone	ComEd
Substation upgrade scope	At Lockport substation, replace 345kV BT3-9 oil circuit breaker and associated equipment, and replace 345kV BT9-10 oil circuit breaker and associated equipment, with 2 new 345kV SF6 circuit breakers and associated equipment. This will include new relay schemes and panels at Lockport.
Transformer Information	
None	
New equipment description	345kV BT circuit breakers, 4000A, 63kA
Substation assumptions	Existing space is adequate for existing equipment to be removed and replaced.
Real-estate description	n/a- existing space is adequate for existing equipment to be removed and replaced.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.

Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$5,777,271.00
Component cost (in-service year)	\$6,358,760.00
Substation Upgrade Component	
Component title	345kV L10801 Lockport Blue to Lisle Blue, Lisle Substation Component
Project description	Company confidential and proprietary information.
Substation name	Lisle
Substation zone	ComEd
Substation upgrade scope	At Lisle substation, replace 345kV BT2-3 manual disconnect switches with new 345kV BT2-3 motor operated disconnect switches.
Transformer Information	
None	
New equipment description	345kV BT motor operated disconnect switches 4000A, 63kA
Substation assumptions	Existing space is adequate for existing equipment to be removed and replaced. Structure supports for the new motor operated disconnects are adequate.
Real-estate description	n/a- existing space is adequate for existing equipment to be removed and replaced.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.

Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$1,061,727.00
Component cost (in-service year)	\$1,166,132.00

Greenfield Transmission Line Component

Component title	Install 2 New 345kV Joliet-Elwood Lines Red and Blue
Project description	Company confidential and proprietary information.
Point A	Elwood Energy Center
Point B	Joliet
Point C	

	Normal ratings	Emergency ratings
Summer (MVA)	1680.000000	2059.000000
Winter (MVA)	2091.000000	2382.000000
Conductor size and type	2-1277.2_KCMIL_54/7_ACAR_BUNDLED	
Nominal voltage	AC	
Nominal voltage	345	

Line construction type	Overhead
General route description	Construct new transmission line utilizing existing Transmission Right-of-Way as much as possible. A preliminary route is approximately 8.2 miles in length between Elwood Energy Center and Joliet. The route begins on double-circuit 345kV poles and traverses rural farmland for the first 4.0 miles, going west from Elwood Energy Center for approximately 2.2 miles and turning north after passing Baseline Road/Houbolt Road. The route progresses north for approximately 1.8 miles. The route crosses over Houbolt Road before passing through a wooded area and over the Des Plaines River (approximately 1.3 miles). After crossing the river, it proceeds through another wooded area before entering a commercial/industrial area (approximately 1.1 miles). The route then converges upon an existing double-circuit 138kV transmission right-of-way. The approximate 1.5 miles of existing 138kV Right-of-Way will need to be rebuilt as quad-circuit structures to accommodate the new transmission lines. The 138kV and 345kV paths then diverge, with the remaining 0.3 miles of route being double-circuit 345kV.
Terrain description	Line crossing of 138kV L0903 and L0904 may require additional modifications and line outages to meet clearance requirements.
Right-of-way width by segment	New easements, where it is required, are obtainable for the construction of the new transmission lines as described below: All Double-Circuit 345kV RoW, except the River Crossing, will be NEW and approximately 120-130 feet in width. This is approximately 6.4 miles. All Quad Circuit RoW (2 new 345kV and 2 rebuilt/underbuilt 138kV), will be on existing RoW that is approximately 150 feet in width. This is approximately 1.5 miles. The Double-Circuit 345kV River Crossing will need a wider RoW. Pending detailed engineering, it is estimated that this width will be somewhere in the range of 150-200 feet in width. The river crossing is approximately 0.3 miles.
Electrical transmission infrastructure crossings	L0903, L0904
Civil infrastructure/major waterway facility crossing plan	Des Plaines River L0903/L0904 US/State/County Permits will be requested and acquired for all necessary line crossings. When possible, line crossings of roads will be as close to perpendicular as possible. Extra precautions will be taken by construction organization to ensure safety of the public when installing road crossing spans. For Des Plaines River crossing, it is anticipated that and Army Corps of Engineers permit will be required. This permit will be requested, and all requirements will be met. FAA permits will be requested/acquired for all structures, if determined necessary by the FAA Notice Criteria Tool. Northern-most portion of the line is several miles away from Joliet Regional Airport. It is expected that some height limitations may exist for this last section of line. Structure design will be modified accordingly.
Environmental impacts	Environmental research will be acquired for the entire project area, and line will comply with all necessary environmental regulations. Approximately the last 2 miles of line are in an area that will require the installation of bird diverters. The Quad-Circuit area is near a wetland, Environmental research will need to be performed to determine if special precautions need to be taken in this area.

Tower characteristics	Steel Monopole structures will be utilized for the proposed project. Structures will be engineered and have baseplates. They will sit on drilled shaft foundations, consisting of concrete, anchor bolts, and a steel reinforcing (rebar) cage. The majority of the line will be double-circuit 345kV, with four equal-length arms on each side of the structure in a vertical configuration. The top arm will support the static/shield wire, and the three arms below it each supporting a conductor/phase. Standard I-String suspension assemblies will be used for tangent structures. The River Crossing span will be similar in arrangement, but the overall dimensions will likely be larger to ensure all necessary clearances are maintained in the long span. The quad-circuit portion of line will have three equal length arms on each side, in a vertical arrangement. The 345kV circuit will have a delta-conductor configuration. The top arm will support one static/shield wire and one 345kV phase conductor with an I-String suspension assembly for the typical tangent structure. The middle arm will support the remaining two phases of the 345kV circuit, with the outer phase being supported by an I-String and the inner phase being supported by a V-String for the typical tangent structure. The 138kV circuit will be supported on the bottom arm in a horizontal arrangement, with I-String suspension assemblies for the typical tangent structure.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$48,912,507.00
Component cost (in-service year)	\$54,011,707.00

Substation Upgrade Component

Component title	Install 2 New 345kV Joliet-Elwood Lines- Elwood Energy Center Substation Component
Project description	Company confidential and proprietary information.
Substation name	Elwood Energy Center
Substation zone	ComEd
Substation upgrade scope	Install (2) 345kV 4000A circuit breaker. New foundations and structures. Install 4000A ACCC D06 motor operated disconnects (MODs) on either side of the breakers. Install dead-end structures to support 345kV L.90014 & L.90016. Install 4000A ACCC D06 motor operated disconnects (MODs) on the new dead-end structures.

Transformer Information

None	
New equipment description	345kV gas circuit breakers, 4000A, 63kA 345kV ACCC D06 motor operated disconnects, 4000A, 63kA
Substation assumptions	n/a
Real-estate description	No yard expansions required
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.

Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$8,031,220.00
Component cost (in-service year)	\$8,831,579.00
Substation Upgrade Component	
Component title	Install 2 New 345kV Joliet-Elwood Lines- Joliet Substation Component
Project description	Company confidential and proprietary information.
Substation name	Joliet
Substation zone	ComEd
Substation upgrade scope	Install (2) 345kV 4000A circuit breaker. New foundations and structures. Install 4000A ACCC D06 motor operated disconnects (MODs) on either side of the breakers. New dead-end structures to support 345kV L.90014 & L.90016. Extend 345kV bus 7 approximately 100' southwest to support new breaker. Extend 345kV bus 8 approximately 150' southwest to support new breaker. Remove equipment associated with exiting generating station including CT/PT metering, dead-ends structures, and MODs. Bus 8 extension and breaker will run southwest in its place.
Transformer Information	
None	
New equipment description	345kV gas circuit breakers, 4000A, 63kA 345kV ACCC D06 motor operated disconnects, 4000A, 63kA
Substation assumptions	n/a
Real-estate description	No yard expansions required,
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.

Permitting / routing / siting	Company confidential and proprietary information.	
ROW / land acquisition	Company confidential and proprietary information.	
Materials & equipment	Company confidential and proprietary information.	
Construction & commissioning	Company confidential and proprietary information.	
Construction management	Company confidential and proprietary information.	
Overheads & miscellaneous costs	Company confidential and proprietary information.	
Contingency	Company confidential and proprietary information.	
Total component cost	\$8,492,967.00	
Component cost (in-service year)	\$9,335,172.00	
Greenfield Transmission Line Component		
Component title	Install new 345 kV line Byron to Wayne	
Project description	Company confidential and proprietary information.	
Point A	Byron	
Point B	Charter Grove	
Point C	Wayne	
	Normal ratings	Emergency ratings
Summer (MVA)	1665.000000	2049.000000
Winter (MVA)	2072.000000	2340.000000
Conductor size and type	2 x 795 kcmil 26/7 ACSS "Drake"	
Nominal voltage	AC	
Nominal voltage	345	

Line construction type	Overhead
General route description	The route is approximately 20 miles in length between Byron and Wayne. The route begins at the existing Byron Substation and parallels existing transmission lines across rural farmland in the western half and travels mostly southeast. In the eastern half, the route traverses more areas of urban development while staying within existing ROW until the line terminates at Wayne Substation.
Terrain description	Variable terrain is expected in areas outside rural farmland and commercial/industrial areas. Areas near creeks/rivers/ponds will have slightly steeper elevation changes. The Fox River crossing will involve steeper terrain changes, but the design plans to span this area as much as possible.
Right-of-way width by segment	The proposed L0625 circuit will be installed on the existing structures carrying L0626. No additional right-of-way is required
Electrical transmission infrastructure crossings	L15627, L7910, L7915
Civil infrastructure/major waterway facility crossing plan	US/State/County Permits will be requested and acquired for all necessary line crossings. When possible, road line crossings will be as close to perpendicular as possible. Extra precautions will be taken by construction teams to ensure the safety of the public when installing road crossing spans. For any Waters of the US crossings, an Army Corps of Engineers permit will be required. This permit will be requested, and all requirements will be met. FAA permits will be requested/acquired for all structures
Environmental impacts	Environmental research will be acquired for the entire project area, and line will comply with all necessary environmental regulations. A Transmission Line Siting Application will be required for the state utility commissions. · Army Corps of Engineers permit approval required · USFWS permit approval required · Pennsylvania DER permit approval required · USEPA permit approval required · State and local environmental permit(s) will be required
Tower characteristics	The existing structures along the route are 345 kV steel monopoles supported by reinforced concrete drilled shaft foundations. They carry Circuit L0626 and include tangent, running-angle, and deadend monopoles. Tangent monopoles support the phase conductors with suspension insulator assemblies, while deadend monopoles use deadend insulator assemblies. Shield wires are supported above the phase conductors. Additional davit arms, insulators, and hardware will be installed on the structures to accommodate the proposed L0625 circuit
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.

Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$69,353,165.00
Component cost (in-service year)	\$76,968,378.00
Substation Upgrade Component	
Component title	Install new 345 kV line Byron to Wayne - Byron substation
Project description	Company confidential and proprietary information.
Substation name	Byron
Substation zone	ComEd
Substation upgrade scope	Install one 345kV MOD - 4000A. Install Dead End structure. Install 2-2156 kCMIL ACSR (84/19) Bluebird Bundled conductor for each line from dead-end structure to line side MODs on all three phases
Transformer Information	
None	
New equipment description	345kV MOD - 4000A
Substation assumptions	The ultimate layout already provided for the line cut-ins within the substation
Real-estate description	Additional acreage is not required for this project
Construction responsibility	Company confidential and proprietary information.

Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$1,934,296.00
Component cost (in-service year)	\$2,130,839.00
Substation Upgrade Component	
Component title	Install new 345 kV line Byron to Wayne - Wayne substation
Project description	Company confidential and proprietary information.
Substation name	Wayne
Substation zone	ComEd
Substation upgrade scope	Install (1) 345kV 4000A circuit breaker. New foundations and structures. Install (3) 4000A ACCC D06 motor operated disconnects (MODs). New dead-end structure to support 345kV L.0625. Extend 345kV bus connection to move L14401 from Bus 16 to Bus 15.
Transformer Information	
None	
New equipment description	345KV GIS breaker, 4000A, 63kA

Substation assumptions	The ultimate layout already provided for the line cut-ins within the substation.
Real-estate description	Additional acreage is not required for this project to be executed successfully
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$6,725,445.00
Component cost (in-service year)	\$7,406,948.00
Substation Upgrade Component	
Component title	Install 345/138kV TR84 at Cherry Valley
Project description	Company confidential and proprietary information.
Substation name	Cherry Valley
Substation zone	ComEd

Substation upgrade scope

Install one (1) 345-138kV autotransformer (TR-84). Install two (2) 345kV gas circuit breakers, one on transformer high side and the other as a bus tie. Install three (3) 345kV motor-operated disconnects (MOD). Extend 138kV Blue bus #4 for a new autotransformer bay. Install three (3) 138kV gas circuit breakers, one the low side of TR84, and one each for lines L-15624 and L-15625.

Transformer Information

	Name		Capacity (MVA)
Transformer	Cherry Valley TR84		420
	High Side	Low Side	Tertiary
Voltage (kV)	345	138	n/a
New equipment description	Cherry Valley 345/138kV TR84 Summer Normal/Emergency 420/480 Winter Normal/Emergency 449/491 345kV BT and TR Circuit Breaker, 4000A 63kA 138kV TR and Line Circuit Breaker, 3000A, 63kA		
Substation assumptions	Existing structure in substation yard to be identified and removed/relocated if on the path of new autotransformer installation. The ultimate layout already provided for the autotransformer installation on existing footprint of the Cherry Valley expansion project.		
Real-estate description	Additional acreage is not required for this project.		
Construction responsibility	Company confidential and proprietary information.		
Benefits/Comments	Company confidential and proprietary information.		
Component Cost Details - In Current Year \$			
Engineering & design	Company confidential and proprietary information.		
Permitting / routing / siting	Company confidential and proprietary information.		
ROW / land acquisition	Company confidential and proprietary information.		
Materials & equipment	Company confidential and proprietary information.		
Construction & commissioning	Company confidential and proprietary information.		
Construction management	Company confidential and proprietary information.		

Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$22,119,811.00
Component cost (in-service year)	\$24,438,749.00
Substation Upgrade Component	
Component title	Install 2-138kV Bus Inductors at Des Plaines
Project description	Company confidential and proprietary information.
Substation name	Des Plaines
Substation zone	ComEd
Substation upgrade scope	Install two (2) 138kV Air-Cooled Inductors - 2.5 ohm, Install four (4) 138kV 3000 A Gas Circuit Breakers and associated equipment Install new control and protection equipment. Use 138kV Duresca Bus outdoor GIS for connection to Bus 3 (approx. 100 ft)
Transformer Information	
None	
New equipment description	138kV Air-Cooled Inductors - 2.5 ohm, 3000A, 63kA 138kV gas circuit breakers, 138kV, 3000A, 63kA 138kV Duresca Bus outdoor GIS, 3000A, 63kA
Substation assumptions	no yard expansion required. Replace and locate L.4610 breaker and associated equipment, and replace and locate L.4611 breaker and associated equipment to allow connection to Bus 4.
Real-estate description	no yard expansion required
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.

ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$12,680,805.00
Component cost (in-service year)	\$13,868,719.00
Transmission Line Upgrade Component	
Component title	345kV L10111 and L10112 from Itasca to Elk Grove Red and Blue, Increase Capacity
Project description	Company confidential and proprietary information.
Impacted transmission line	345kV L10111 and L10112 Itasca to Elk Grove Red and Blue
Point A	Itasca
Point B	Elk Grove
Point C	
Terrain description	Existing L10111/L10112 Itasca to Elk Grove Red and Blue right of way.
Existing Line Physical Characteristics	
Operating voltage	345
Conductor size and type	2156.0 kCMIL Bluebird ACSR (84/19)
Hardware plan description	utilize new hardware due to line rebuild.

Tower line characteristics

For L10111 and L10112 from Itasca to Elk Grove Red and Blue. The lattice towers were installed in 1965 and have exceeded their expected service life, making replacement the preferred long-term solution. The replacement of all structures offers a cost-effective opportunity to mitigate loading, clearance, reliability, and asset condition issues under a single capital investment initiative.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1882.000000	1981.000000
Winter (MVA)	1882.000000	2335.000000
Conductor size and type	2 – 1033.5 kCMIL Curlew ACSS (22/7)	
Shield wire size and type	to be determined during detailed engineering	
Rebuild line length	4.27	
Rebuild portion description	For L10111 & L10112 Itasca to Elk Grove Red and Blue rebuild A total of 34 structures is included in the project and will require rebuild. These structures consist of: -10 Dead-end structures -A 30' steel pole -23 Suspension Towers	
Right of way	The proposed new sections for the existing lines L10111 & L10112 Itasca to Elk Grove Red and Blue will be approximately 4.27 miles from ELK GROVE (the cut in will begin from station) to existing L10111 and L10112 ROW structures and then to ITASCA.	
Construction responsibility	Company confidential and proprietary information.	
Benefits/Comments	Company confidential and proprietary information.	
Component Cost Details - In Current Year \$		
Engineering & design	Company confidential and proprietary information.	
Permitting / routing / siting	Company confidential and proprietary information.	
ROW / land acquisition	Company confidential and proprietary information.	

Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$36,471,787.00
Component cost (in-service year)	\$40,255,561.34
Substation Upgrade Component	
Component title	Replace 345kV BT Oil Breaker 10-11 at Lockport Substation
Project description	Company confidential and proprietary information.
Substation name	Lockport
Substation zone	ComEd
Substation upgrade scope	At Lockport substation, replace 345kV BT10-11 oil circuit breaker and associated equipment, with one new 345kV SF6 circuit breaker and associated equipment. This will include new relay schemes and panels at Lockport.
Transformer Information	
None	
New equipment description	345kV BT circuit breakers, 4000A, 63kA
Substation assumptions	Existing space is adequate for existing equipment to be removed and replaced.
Real-estate description	n/a- existing space is adequate for existing equipment to be removed and replaced.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.

Component Cost Details - In Current Year \$

Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$3,112,204.00
Component cost (in-service year)	\$3,422,927.00

Substation Upgrade Component

Component title	Replace 345kV BT Oil Breaker 7-12 at Lockport Substation
Project description	Company confidential and proprietary information.
Substation name	Lockport
Substation zone	ComEd
Substation upgrade scope	At Lockport substation, replace 345kV BT7-12 oil circuit breaker and associated equipment, a new 345kV SF6 circuit breakers and associated equipment. This will include new relay schemes and panels at Lockport.

Transformer Information

None	
New equipment description	345kV BT circuit breakers, 4000A, 63kA
Substation assumptions	Existing space is adequate for existing equipment to be removed and replaced.

Real-estate description	n/a- existing space is adequate for existing equipment to be removed and replaced.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$3,112,204.00
Component cost (in-service year)	\$3,422,927.00
Substation Upgrade Component	
Component title	L11601 East Frankfort to Gooding Grove Blue, Capacity Increase- East Frankfort Substation Component
Project description	Company confidential and proprietary information.
Substation name	East Frankfort
Substation zone	ComEd
Substation upgrade scope	Replace 1-2156KCMIL ACSR conductor with new 2-2156 ACSR bundled conductors at the L11601 East Frankfort to Gooding Grove, East Frankfort Line terminal.

Transformer Information

None

New equipment description	new 2-2156 ACSR bundled conductors
Substation assumptions	Dead end structure can support the new conductors.
Real-estate description	NO impact on real-estate
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$156,105.00
Component cost (in-service year)	\$170,389.00

Substation Upgrade Component

Component title	L11602 East Frankfort to Gooding Grove Red, Capacity Increase- East Frankfort Substation Component
Project description	Company confidential and proprietary information.

Substation name	East Frankfort
Substation zone	ComEd
Substation upgrade scope	Replace 1-2156KCMIL ACSR conductor with new 2-2156 ACSR bundled conductors at the L11602 East Frankfort to Gooding Grove, East Frankfort Line terminal.
Transformer Information	
None	
New equipment description	new 2-2156 ACSR bundled conductors
Substation assumptions	Dead end structure can support the new conductors.
Real-estate description	NO impact on real-estate
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$156,105.00
Component cost (in-service year)	\$170,389.00

Transmission Line Upgrade Component

Component title	345kV L10802 Lockport Red to Lisle Red, Increase Capacity with ACSS	
Project description	Company confidential and proprietary information.	
Impacted transmission line	345kV L10802 Lockport Red to Lisle Red	
Point A	Lockport Red	
Point B	Lisle Red	
Point C		
Terrain description	The line is in existing L10801/L10802 Lockport to Lisle. ComEd right-of-way over flat terrain. The terrain is bordering industrial, residential, and wooded lands. There is one railroad crossing and one interstate highway crossing.	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2156 KCMIL ACSR	
Hardware plan description	Existing hardware will be replaced	
Tower line characteristics	Double circuit 345kV lattice towers with 2 shield wire positions. Line is double circuit with 10801. The existing conductor is 1-Bluebird ACSR with average span lengths of 650'. Existing structures are primarily type "A" (TL258) designed for Bluebird ACSR and 1000' weight spans	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1665.000000	2049.000000
Winter (MVA)	2072.000000	2340.000000

Conductor size and type	2 x 795 kcmil 26/7 ACSS "Drake"
Shield wire size and type	7#8 Alumoweld with two shield wire positions
Rebuild line length	12.64
Rebuild portion description	Replace existing conductor with 2 x Drake ACSS. Replace existing shield wire and transmission hardware. About 10% of structures will be replaced, and 6% will be modified to maintain the line's integrity. Tower replacement and modification quantities were estimated based on comparing the proposed conductor to the loading schedules of the existing towers. Modification percentages are based on weight-span analysis and point load differences attributed to the larger conductor diameter and ice loading impacts. Increased conductor diameter compared to existing is approximately accounted for in original design transverse OLF buffer. Typical span lengths were used to determine sag-related risks like blowout and vertical clearances.
Right of way	The rebuild will occur in the existing 345kV L10801/L10802 Lockport to Lisle ROW.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$14,008,244.00
Component cost (in-service year)	\$15,517,430.00

Substation Upgrade Component

Component title	345kV L10802 Lockport Red to Lisle Red, Lockport Substation Component.
Project description	Company confidential and proprietary information.
Substation name	Lockport
Substation zone	ComEd
Substation upgrade scope	At Lockport substation, replace 345kV BT3-4 oil circuit breaker and associated equipment,1 new 345kV SF6 circuit breakers and associated equipment. This will include new relay schemes and panels at Lockport.

Transformer Information

None	
New equipment description	345kV BT circuit breakers, 4000A, 63kA
Substation assumptions	Existing space is adequate for existing equipment to be removed and replaced.
Real-estate description	n/a- existing space is adequate for existing equipment to be removed and replaced.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.

Contingency	Company confidential and proprietary information.
Total component cost	\$3,230,572.00
Component cost (in-service year)	\$3,556,661.00
Substation Upgrade Component	
Component title	345kV L10802 Lockport Red to Lisle Red, Lisle Substation Component.
Project description	Company confidential and proprietary information.
Substation name	Lisle
Substation zone	ComEd
Substation upgrade scope	Replace 1-2156KCMIL ACSR conductor with new 2-2156 ACSR bundled conductors at the L10802 Lockport Red to Lisle Red, Lisle Line terminal.
Transformer Information	
None	
New equipment description	new 2-2156 ACSR bundled conductors
Substation assumptions	Dead end structure can support the new conductors.
Real-estate description	NO impact on real-estate
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.

Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$240,531.00
Component cost (in-service year)	\$264,646.00
Substation Upgrade Component	
Component title	Byron to Wayne - Charter Grove 345 kV Substation
Project description	Company confidential and proprietary information.
Substation name	Charter Grove
Substation zone	ComEd
Substation upgrade scope	Add six (6) 345kV 4000A circuit breakers. Install foundation. Install 2-2156 kCMIL ACSR (84/19) Bluebird Bundled conductor between the circuit breaker and MODs on all three phases. Install fourteen (14) 345kV 4000A ACCC D06 motor operated disconnects (MODs). Install two (2) dead-end structures for L. 0625 and L. 14428 respectively. Install 2-2156 kCMIL ACSR (84/19) Bluebird Bundled conductor for each line from dead-end structure to line side MODs on all three phases
Transformer Information	
None	
New equipment description	345kV gas circuit breakers, 4000A, 63 \kA
Substation assumptions	The ultimate layout already provided for the line cut-ins within the substation.
Real-estate description	Additional acreage is not required for this project.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.

Component Cost Details - In Current Year \$

Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$35,946,050.00
Component cost (in-service year)	\$39,575,030.00

Transmission Line Upgrade Component

Component title	345kV L15501 Nelson-Renner Rd, replace transmission overhead conductor with ACAR
Project description	Company confidential and proprietary information.
Impacted transmission line	345kV L15501 Nelson - Renner Rd
Point A	Nelson
Point B	Renner Rd
Point C	
Terrain description	The line is in existing ComEd right-of-way over flat terrain. The terrain is farmland. There are three interstate highway crossings
Existing Line Physical Characteristics	
Operating voltage	345

Conductor size and type	1-2338_KCMIL_42/19_ACAR	
Hardware plan description	The lattice towers are 56 years old, Existing hardware will be replaced	
Tower line characteristics	Double circuit 345kV lattice towers with 2 shield wire positions. Line is single circuit. The existing conductor is 1-2338_KCMIL_42/19_ACAR	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1334.000000	1528.000000
Winter (MVA)	1590.000000	1781.000000
Conductor size and type	2-1277.2 kCMIL ACAR (54/7)	
Shield wire size and type	3#6 AW	
Rebuild line length	9	
Rebuild portion description	Installation of: 25 345kV double-circuit monopoles: 21 suspension structures (approx. 135' tall) 4 dead-end structures (approx.130' tall) 28.31 miles of bundled 1277 ACAR (2 sub conductors x 3 phases x 4.29 miles x 10% extra) 19.8 miles of 7#8 static wire (2 spans x 9 miles x 10% extra) refurbishment of approx. 20 structures (STR 28-48) removal of 12.87 miles of 2338kCMIL ACAR removal of 18 miles of 3#6 AW static wire.	
Right of way	The rebuild portions will occur in the existing 345kV L15501 Nelson-Lee ROW.	
Construction responsibility	Company confidential and proprietary information.	
Benefits/Comments	Company confidential and proprietary information.	
Component Cost Details - In Current Year \$		
Engineering & design	Company confidential and proprietary information.	
Permitting / routing / siting	Company confidential and proprietary information.	

ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$23,841,680.00
Component cost (in-service year)	\$26,306,640.00
Transmission Line Upgrade Component	
Component title	345kV L0627 Byron-Lee Co, replace transmission overhead conductor with ACAR
Project description	Company confidential and proprietary information.
Impacted transmission line	345kV L0627 Byron-Lee Co
Point A	Byron
Point B	Lee Co
Point C	
Terrain description	The line is in existing ComEd right-of-way over flat terrain. The terrain is primarily farmland, along with forest and grassland. There are two railroad crossings
Existing Line Physical Characteristics	
Operating voltage	345
Conductor size and type	1-2156 ACSR Bluebird.
Hardware plan description	The lattice towers are 44 years old, Existing hardware will be replaced
Tower line characteristics	Single circuit 345kV lattice towers with 2 shield wire positions. The existing conductor is 1-2156 ACSR Bluebird.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1334.000000	1528.000000
Winter (MVA)	1590.000000	1781.000000
Conductor size and type	2-1277.2 kCMIL ACAR (54/7)	
Shield wire size and type	7#6 AW	
Rebuild line length	9	
Rebuild portion description	Reconductoring the segment of Line 0627 from STA 6 Byron to STR 113D will require the installation of approximately: . 54.78 miles of bundled 1277 kCMIL ACAR (54/7) conductor (2 subconductors × 3 phases × 8.30 miles × 10% construction contingency). . 18.26 miles of 7#6 static wire (2 shield wires × 8.30 miles × 10% construction contingency). Because this project involves reconductoring the line, 7#6 static wire is the preferred wire for ComEd. No clearance violations were identified during the PLS-CADD analysis of the proposed conductor configuration. The existing structures in the reconducted segment are Valmont steel monopoles, which provide adequate clearance for the proposed conductor.	
Right of way	The rebuild portions will occur in the existing 345kV L0627 Byron - Lee Co ROW.	
Construction responsibility	Company confidential and proprietary information.	
Benefits/Comments	Company confidential and proprietary information.	
Component Cost Details - In Current Year \$		
Engineering & design	Company confidential and proprietary information.	
Permitting / routing / siting	Company confidential and proprietary information.	
ROW / land acquisition	Company confidential and proprietary information.	
Materials & equipment	Company confidential and proprietary information.	

Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$14,178,023.00
Component cost (in-service year)	\$15,600,266.00
Substation Upgrade Component	
Component title	345kV L0627 Byron to Lee Co, Byron Substation Component.
Project description	Company confidential and proprietary information.
Substation name	Byron
Substation zone	ComEd
Substation upgrade scope	At Byron substation, BT 7-8 CB leads (2156 AAC and 2-1113 AAC) will require to be replaced with a higher rated conductor
Transformer Information	
None	
New equipment description	BT 7-8 CB leads
Substation assumptions	Existing space is adequate for existing equipment to be removed and replaced.
Real-estate description	n/a- existing space is adequate for existing equipment to be removed and replaced.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.

Permitting / routing / siting	Company confidential and proprietary information.		
ROW / land acquisition	Company confidential and proprietary information.		
Materials & equipment	Company confidential and proprietary information.		
Construction & commissioning	Company confidential and proprietary information.		
Construction management	Company confidential and proprietary information.		
Overheads & miscellaneous costs	Company confidential and proprietary information.		
Contingency	Company confidential and proprietary information.		
Total component cost	\$233,451.00		
Component cost (in-service year)	\$259,176.00		
Greenfield Substation Component			
Component title	Install 765 kV Charter Grove, Add Two (2) 765/345 kV Autos at Charter Grove		
Project description	Company confidential and proprietary information.		
Substation name	Charter Grove		
Substation description	Construct a 765 kV greenfield switching station adjacent to Charter Grove 345 kV station. Cut into future MISO Tranche 2.1 765kV line from Collins (ComEd) to Sugar Creek (ATC).		
Nominal voltage	AC		
Nominal voltage	765		
Transformer Information			
	Name		Capacity (MVA)
Transformer	TR 91		1120
	High Side	Low Side	Tertiary
Voltage (kV)	765	345	34

	Name	Capacity (MVA)	
Transformer	TR 92	1120	
	High Side	Low Side	Tertiary
Voltage (kV)	765	345	34
Major equipment description	. Install new 765KV substation TSS175 TR91, TR92, 6-765KV Breakers, new control building, Earth grading . Cut and Tie-in 765KV line to new substation, 0.5 mile x 2 lines, assumed 10 new structures . Remote Relay/SCADA upgrade at STA.23 Collins. Supporting remote ATC Sugar Creek. . Connect two yards, 765KV and 345KV. Assumed 0.5 miles x 2 Transformers lead with 10 new structures . Assumed Distribution line 1 mile to new substation for Aux Power . Install 8-new 345KV Breakers with bus expansion - assumed completion of OP300026 new 345KV TSS175 prior . Cut and Tie-in 345KV L0625 to TSS175, 0.5 mile x 2 lines, assumed 10 new structures . Remote Relay/SCADA upgrade at STA.6 Byron and TSS144 Wayne		
	Normal ratings	Emergency ratings	
Summer (MVA)	1200.000000	1379.000000	
Winter (MVA)	1200.000000	1379.000000	
Environmental assessment	Land use in the area of Charter Grove is predominantly undeveloped or agricultural and contains an existing 345kV transmission line. To ensure appropriate due diligence for environmental protection, studies will be completed for the right-of-way and proposed access routes including a wetland and stream delineation, threatened and endangered species review, and cultural resource study. Following these studies, the line route or structure locations will be adjusted to completely avoid or minimize impacts to sensitive environmental features. Examples of minimizing impacts to regulated waters or floodplains along the proposed route include installing timber mats within regulated wetlands or floodplains and temporarily bridging across streams. All areas designated for temporary impact will be restored to pre-existing condition following construction. It is anticipated unavoidable impacts to regulated wetlands or streams would be covered under a Nationwide Permit with appropriate offsetting mitigation as directed by the US Army Corps of Engineers, Illinois EPA. Construction will be covered under a general construction storm water permit from the Illinois EPA and appropriate best management practices will be installed prior to construction to manage storm water runoff. The proposed solution and all associated impacts are typical of energy infrastructure projects and would not represent a risk to the overall project schedule or cost.		
Outreach plan	ComEd will follow the Illinois Commerce Commission Certificate of Public Convenience and Necessity (CPCN) process which includes public outreach through a series of public open houses.		

Land acquisition plan	The Proposing Entity will use proven land acquisition processes and approaches that have been successfully employed on projects over the years. The Proposing Entity's initial land acquisition step is to verify current ownership by an examination of title, current property tax status, as well as document any liens, and or mortgages. The Proposing Entity will also research the status of the subsurface estate, whether or not it is severed from the surface. Once ownership is established, the Proposing Entity will negotiate with property owners based on the fair market value of the needed for the station site and access road (both fee purchases). Market data studies and appraisals, both general and for specific tracts, will be conducted to establish values and a basis for acquisition negotiations. Good Faith negotiations must be made with all landowners. Negotiations will be done in an ethical, non-confrontational and non-threatening manner with the landowners. The long-term relationship with the landowners is paramount and will be kept in mind in all negotiations, and honesty, integrity and professionalism will be displayed at all times. Negotiations will continue as long as practical to reach a voluntary agreement. If, and only if, it becomes evident that a voluntary fee purchase agreement between the company and the property owner cannot be reached, and other viable alternatives do not exist, the company may exercise the right of eminent domain to secure required property through condemnation proceedings.
Construction responsibility	Company confidential and proprietary information.
Benefits/Comments	Company confidential and proprietary information.
Component Cost Details - In Current Year \$	
Engineering & design	Company confidential and proprietary information.
Permitting / routing / siting	Company confidential and proprietary information.
ROW / land acquisition	Company confidential and proprietary information.
Materials & equipment	Company confidential and proprietary information.
Construction & commissioning	Company confidential and proprietary information.
Construction management	Company confidential and proprietary information.
Overheads & miscellaneous costs	Company confidential and proprietary information.
Contingency	Company confidential and proprietary information.
Total component cost	\$237,575,290.00
Component cost (in-service year)	\$281,734,966.00

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-N0-ST1	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345/345	222/222	Summer Baseline	Excluded
2026W1-N1-ST6	270812	LOMBARD ;3B	270724	ELK GROVE; B	1	345/345	222/222	Summer Baseline	Included
2026W1-N1-ST22	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222/222	Summer Baseline	Included
2026W1-N1-ST21	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222/222	Summer Baseline	Included
2026W1-N1-ST9	272855	YORK ;RT	271131	BUTTERFIE; R	1	138/138	222/222	Summer Baseline	Included
2026W1-N1-ST5	270812	LOMBARD ;3B	270724	ELK GROVE; B	1	345/345	222/222	Summer Baseline	Included
2026W1-N1-ST4	270812	LOMBARD ;3B	270724	ELK GROVE; B	1	345/345	222/222	Summer Baseline	Included
2026W1-N1-ST2	272855	YORK ;RT	271131	BUTTERFIE; R	1	138/138	222/222	Summer Baseline	Included
2026W1-N1-ST8	272855	YORK ;RT	271131	BUTTERFIE; R	1	138/138	222/222	Summer Baseline	Included
2026W1-N1-ST12	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222/222	Summer Baseline	Included
2026W1-N1-ST17	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345/345	222/222	Summer Baseline	Excluded
2026W1-N1-ST10	272855	YORK ;RT	271131	BUTTERFIE; R	1	138/138	222/222	Summer Baseline	Included
2026W1-GD-LL66	272803	W PLAEXCLUDED_FROM_COMPETITION	272201	W PLAEXCLUDED_FROM_COMPETITION	1	138/138	222/222	Light Load Gen Deliv	Included
2026W1-GD-LL67	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138/138	222/222	Light Load Gen Deliv	Included
2026W1-GD-LL1	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138/138	222/222	Light Load Gen Deliv	Included
2026W1-GD-LL2	272803	W PLAEXCLUDED_FROM_COMPETITION	272201	W PLAEXCLUDED_FROM_COMPETITION	1	138/138	222/222	Light Load Gen Deliv	Included
2026W1-GD-LL69	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138/138	222/222	Light Load Gen Deliv	Included
2026W1-GD-LL70	272803	W PLAEXCLUDED_FROM_COMPETITION	272201	W PLAEXCLUDED_FROM_COMPETITION	1	138/138	222/222	Light Load Gen Deliv	Included
2026W1-GD-LL68	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION	1	138/138	222/222	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	138/138	222/222	Light Load Gen Deliv	Included
2026W1-GD-LL72	272803	W PLAEXCLUDED_FROM_COMPETITION	272201	W PLAEXCLUDED_FROM_COMPETITION	1	138/138	222/222	Light Load Gen Deliv	Included
2026W1-GD-LL71	272803	W PLAEXCLUDED_FROM_COMPETITION	272201	W PLAEXCLUDED_FROM_COMPETITION	1	138/138	222/222	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-LL156	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION; R	1	138	222	Light Load Gen Deliv	Included
2026W1-GD-LL157	272803	W PLAEXCLUDED_FROM_COMPETITION; R	272054	W PLAEXCLUDED_FROM_COMPETITION; R	1	138	222	Light Load Gen Deliv	Included
2026W1-GD-LL158	272054	MILLER RD; R	272803	W PLAEXCLUDED_FROM_COMPETITION; R	1	138	222	Light Load Gen Deliv	Included
2026W1-GD-LL159	272803	W PLAEXCLUDED_FROM_COMPETITION; R	272054	W PLAEXCLUDED_FROM_COMPETITION; R	1	138	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
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-GD-S210	270814	LOMBARD ;4B	270812	LOMBARD ;3B	Z1	345	222	Summer Gen Deliv	Excluded
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-S15	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S16	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S17	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S18	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S19	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S20	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-IPD-S21	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S22	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S24	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S25	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S26	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S27	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S28	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S29	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S30	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S31	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S52	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S53	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S55	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S56	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S60	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-IPD-S63	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
2026W1-IPD-S64	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-IPD-S66	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	Summer IPD	Excluded
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

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

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

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
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
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-ST120	272457	ELK GROVE; R	998470	ELK GROVE 81	1	138	222	Summer N-1-1	Excluded
2026W1-N11-ST121	270725	ELK GROVE; R	998470	ELK GROVE 81	1	345/138	222	Summer N-1-1	Excluded
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-ST133	270981	ALPINE ;RT	271083	BELVIDERE; R	1	138	222	Summer N-1-1	Excluded

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
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-ST136	272486	S ELGIN ;BT	272740	WAYNE ; B	1	138	222	Summer N-1-1	Excluded
2026W1-N11-ST137	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST138	271064	BARTLETT ;BT	272546	SPAULDING;1B	1	138	222	Summer N-1-1	Excluded
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-ST145	272486	S ELGIN ;BT	272740	WAYNE ; B	1	138	222	Summer N-1-1	Excluded
2026W1-N11-ST146	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST147	272486	S ELGIN ;BT	272740	WAYNE ; B	1	138	222	Summer N-1-1	Excluded
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
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

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N11-ST170	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST171	271052	BEDFORD P;4B	271216	CLEARING ;BT	1	138	222	Summer N-1-1	Excluded
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
2026W1-N11-ST196	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST198	271668	VETERANS ;BT	272782	WILL CNTY; B	1	138	222	Summer N-1-1	Excluded
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-ST201	271668	VETERANS ;BT	272782	WILL CNTY; B	1	138	222	Summer N-1-1	Excluded
2026W1-N11-ST202	271555	GLENDALE ;RT	272109	EXCLUDED_FROM_COMPETITION	1	138	222	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

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
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; R	1	138	222	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
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-ComEd-T1	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	FERC 715	Excluded
2026W1-ComEd-T2	270812	LOMBARD ;3B	270814	LOMBARD ;4B	Z1	345	222	FERC 715	Excluded
2026W1-GD-LL65	272054	MILLER RD; R	272803	W PLAXEXCLUDED_FROM_COMPETITION; R	1	138	222	Light Load Gen Deliv	Included
2026W1-GD-LL144	272803	W PLAXEXCLUDED_FROM_COMPETITION; R	272803	W PLAXEXCLUDED_FROM_COMPETITION; 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

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
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-S211	270814	LOMBARD ;4B	270812	LOMBARD ;3B	Z1	345	222	Summer Gen Deliv	Excluded
2026W1-GD-S532	270814	LOMBARD ;4B	270812	LOMBARD ;3B	Z1	345	222	Summer Gen Deliv	Excluded
2026W1-GD-S213	270814	LOMBARD ;4B	270812	LOMBARD ;3B	Z1	345	222	Summer Gen Deliv	Excluded
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-GD-S44	270814	LOMBARD ;4B	270812	LOMBARD ;3B	Z1	345	222	Summer Gen Deliv	Excluded
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

Company confidential and proprietary information.

Financial Information

Capital spend start date 01/2027

Construction start date 03/2029

Project Duration (In Months) 89

Cost Containment Commitment

Cost cap (in current year) Company confidential and proprietary information.

Cost cap (in-service year) Company confidential and proprietary information.

Components covered by cost containment

1. Install 345/138kV TR84 at Elk Grove - PROPOSER
2. Cut 345kV L10111 and L10112 Itasca to Des Plaines Red and Blue into 345kV Elk Grove, create new L10111 and L10112 Itasca to Elk Grove, Red and Blue, create new L18418 and L18419 Elk Grove to Des Plaines, Red and Blue - PROPOSER
3. Cut 345kV L10111 and L10112 Itasca to Des Plaines Red and Blue into 345kV Elk Grove, create new L10111 and L10112 Itasca to Elk Grove, Red and Blue, create new L18418 and L18419 Elk Grove to Des Plaines, Red and Blue- Elk Grove Substation Component - PROPOSER
4. Install 2-138kV Phase Shifters at Itasca - PROPOSER
5. Install New 138kV L14613 from Sandwich to Plano - PROPOSER
6. Install New 138kV L14613 from Sandwich to Plano- Sandwich Substation Component - PROPOSER
7. Install New 138kV L14613 from Sandwich to Plano- Plano Substation Component - PROPOSER
8. Install 2 New 345kV Wayne to Itasca Red and Blue Lines - PROPOSER
9. Install 2 New 345kV Wayne to Itasca Lines- Wayne Substation Component - PROPOSER
10. Install 2 New 345kV Wayne to Itasca Lines- Itasca Substation Component - PROPOSER
11. 345kV L10801 Lockport Blue to Lisle Blue, replace transmission overhead conductor with ACSS - PROPOSER
12. 345kV L10801 Lockport Blue to Lisle Blue, Lockport Substation Component - PROPOSER
13. 345kV L10801 Lockport Blue to Lisle Blue, Lisle Substation Component - PROPOSER
14. Install 2 New 345kV Joliet-Elwood Lines Red and Blue - PROPOSER
15. Install 2 New 345kV Joliet-Elwood Lines- Elwood Energy Center Substation Component - PROPOSER
16. Install 2 New 345kV Joliet-Elwood Lines- Joliet Substation Component - PROPOSER
17. Install new 345 kV line Byron to Wayne - PROPOSER
18. Install new 345 kV line Byron to Wayne - Byron substation - PROPOSER
19. Install new 345 kV line Byron to Wayne - Wayne substation - PROPOSER
20. Install 345/138kV TR84 at Cherry Valley - PROPOSER
21. Install 2-138kV Bus Inductors at Des Plaines - PROPOSER
22. 345kV L10111 and L10112 from Itasca to Elk Grove Red and Blue, Increase Capacity - PROPOSER
23. Replace 345kV BT Oil Breaker 10-11 at Lockport Substation - PROPOSER
24. Replace 345kV BT Oil Breaker 7-12 at Lockport Substation - PROPOSER
25. L11601 East Frankfort to Gooding Grove Blue, Capacity Increase- East Frankfort Substation Component - PROPOSER

26. L11602 East Frankfort to Gooding Grove Red, Capacity Increase- East Frankfort Substation Component - PROPOSER
27. 345kV L10802 Lockport Red to Lisle Red, Increase Capacity with ACSS - PROPOSER
28. 345kV L10802 Lockport Red to Lisle Red, Lockport Substation Component. - PROPOSER
29. 345kV L10802 Lockport Red to Lisle Red, Lisle Substation Component. - PROPOSER
30. Byron to Wayne - Charter Grove 345 kV Substation - PROPOSER
31. 345kV L15501 Nelson-Renner Rd, replace transmission overhead conductor with ACAR - PROPOSER
32. 345kV L0627 Byron-Lee Co, replace transmission overhead conductor with ACAR - PROPOSER
33. 345kV L0627 Byron to Lee Co, Byron Substation Component. - PROPOSER
34. Install 765 kV Charter Grove, Add Two (2) 765/345 kV Autos at Charter Grove - PROPOSER

Cost elements covered by cost containment

Engineering & design	Yes
Permitting / routing / siting	Yes
ROW / land acquisition	Yes
Materials & equipment	Yes
Construction & commissioning	Yes
Construction management	Yes
Overheads & miscellaneous costs	Yes
Taxes	No
AFUDC	No
Escalation	No
Additional Information	Company confidential and proprietary information.
Is the proposer offering a binding cap on ROE?	No
Is the proposer offering a Debt to Equity Ratio cap?	Company confidential and proprietary information.
Additional cost containment measures not covered above	Company confidential and proprietary information.

Additional Comments

Resubmit