

HVDC2250

General Information

Proposing entity name	Confidential Information
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Confidential Information
Company proposal ID	Confidential Information
PJM Proposal ID	836
Project title	HVDC2250
Project description	The project adds a 2250 MW HVDC link across Lake Michigan with converter terminals at Zion and Cook, and a double-circuit overhead 345 kV line between Elwood and Joliet. Related substation and existing transmission-line upgrades are included.
Email	Confidential Information
Project in-service date	06/2031
Tie-line impact	Yes
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	Confidential Information

Project Components

1. Elderberry-Larrison Drive 345 kV Upgrade
2. Zion Substation Upgrade
3. Cook Substation Upgrade
4. Zion-Cook HVDC Line
5. Zion HVDC Terminal

6. Cook HVDC Terminal
7. Cook HVDC Terminal-Cook 765 kV Line #1
8. Cook HVDC Terminal-Cook 765 kV Line #2
9. Joliet Substation Upgrade
10. Elwood Substation Upgrade
11. East Frankfort Substation Upgrade
12. Goodings Grove Substation Upgrade
13. Elwood-Joliet Double Circuit 345 kV Line

Transmission Line Upgrade Component

Component title	Elderberry-Larrison Drive 345 kV Upgrade
Project description	Confidential Information
Impacted transmission line	Elderberry-Larrison Drive 345 kV circuit 1 (243918-289013)
Point A	Elderberry (bus 243918), 345 kV
Point B	Larrison Drive (bus 289013), 345 kV
Point C	
Terrain description	The corridor traverses open agricultural land and developed utility and industrial sites near New Carlisle, Indiana.
Existing Line Physical Characteristics	
Operating voltage	345
Conductor size and type	2-954 ACSR
Hardware plan description	Hardware modifications will be included as necessary to accommodate the anticipated rebuild and achieve the proposed ratings. Specific replacement and reuse requirements will be determined during detailed design.
Tower line characteristics	Existing structures are galvanized lattice steel.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1478.000000	2056.000000
Winter (MVA)	1867.000000	2307.000000
Conductor size and type	2-954 ACSS	
Shield wire size and type	Match existing.	
Rebuild line length	Approximately 0.6 mile, subject to confirmation during detailed design.	
Rebuild portion description	The preliminary scope anticipates rebuilding approximately 0.6 mile of the Elderberry-Larrison Drive 345 kV circuit to achieve the proposed ratings. Detailed design will confirm the work limits and equipment modifications. Proposed light-load ratings are 1595 MVA normal and 2131 MVA emergency.	
Right of way	No right-of-way expansion will be required.	
Construction responsibility	Confidential Information	
Benefits/Comments	Confidential Information	
Component Cost Details - In Current Year \$		
Engineering & design	Confidential Information	
Permitting / routing / siting	Confidential Information	
ROW / land acquisition	Confidential Information	
Materials & equipment	Confidential Information	
Construction & commissioning	Confidential Information	
Construction management	Confidential Information	

Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$3,194,406.58
Component cost (in-service year)	\$3,428,753.50
Substation Upgrade Component	
Component title	Zion Substation Upgrade
Project description	Confidential Information
Substation name	Zion
Substation zone	1274
Substation upgrade scope	Reconfigure the existing 345 kV ring bus and line connections to accommodate the Zion Red and Blue connections from the HVDC terminal. The work includes connection buswork, line terminations and associated protection, control and communications modifications.
Transformer Information	
None	
New equipment description	The upgrade includes 345 kV bus and jumper assemblies, line-termination equipment, and associated switching modifications for the two terminal connections. Protection, controls and communications will be updated to integrate the new connections with the existing station equipment.
Substation assumptions	The preliminary scope assumes reuse of the existing ring bus and breaker positions shown on the conceptual one-line, with station work accommodated within the existing footprint.
Real-estate description	
Construction responsibility	Confidential Information
Benefits/Comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information

Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$857,354.11
Component cost (in-service year)	\$928,425.23
Substation Upgrade Component	
Component title	Cook Substation Upgrade
Project description	Confidential Information
Substation name	Cook Substation
Substation zone	1252
Substation upgrade scope	Connect the two new 765 kV lines from the Cook HVDC Terminal to the existing Cook 765 kV substation. The work includes new line positions, associated switching equipment, bus connections, line terminations, and protection, control and communications modifications.
Transformer Information	
None	
New equipment description	765 kV switching and line-terminal equipment, bus and jumper assemblies, support structures, and associated protection, control and communications equipment for the two new line connections. Equipment quantities and ratings will be established in the detailed station design.
Substation assumptions	The preliminary scope includes two 765 kV line connections. The detailed switchyard configuration, new and retained breaker positions, and any required yard expansion remain to be confirmed for the 2250 MW alternative.

Real-estate description	The work is at the existing AEP-owned Cook Substation. Any required expansion limits and additional property rights remain to be confirmed.	
Construction responsibility	Confidential Information	
Benefits/Comments	Confidential Information	
Component Cost Details - In Current Year \$		
Engineering & design	Confidential Information	
Permitting / routing / siting	Confidential Information	
ROW / land acquisition	Confidential Information	
Materials & equipment	Confidential Information	
Construction & commissioning	Confidential Information	
Construction management	Confidential Information	
Overheads & miscellaneous costs	Confidential Information	
Contingency	Confidential Information	
Total component cost	\$75,589,500.00	
Component cost (in-service year)	\$81,709,272.80	
Greenfield Transmission Line Component		
Component title	Zion-Cook HVDC Line	
Project description	Confidential Information	
Point A	Zion HVDC Terminal	
Point B	Cook HVDC Terminal	
Point C		
	Normal ratings	Emergency ratings

Summer (MVA)	2250.000000	2250.000000
Winter (MVA)	2250.000000	2250.000000
Conductor size and type	Two 525 kV copper XLPE pole cables (positive/negative), nominal 5000 kcmil, plus a separate metallic return	
Nominal voltage	DC	
Nominal voltage	525	
Line construction type	Underground, Submarine	
General route description	The preliminary route extends approximately 72.1 miles from the Zion HVDC Terminal in Lake County, Illinois, to the Cook HVDC Terminal in Berrien County, Michigan. A short underground approach connects the Zion terminal to the shoreline. Submarine cables cross Lake Michigan generally east-southeast to the Cook landfall. The Michigan land portion follows the Livingston Road and Moonflower Path corridor before turning north to the Cook terminal.	
Terrain description	The route crosses Lake Michigan between developed shoreline property at Zion and a wooded shore corridor near Cook. The Michigan land portion follows existing road corridors through wooded land before reaching the terminal.	
Right-of-way width by segment	The permanent underground/submarine cable corridor will be approximately 3 feet wide.	
Electrical transmission infrastructure crossings	No mapped transmission-line crossings are identified along the preliminary cable route. The crossing inventory remains subject to confirmation during detailed design.	
Civil infrastructure/major waterway facility crossing plan	For the lake crossing, the preliminary design uses buried submarine cables with open-cut installation at both shore approaches. The land portions use a concrete duct bank. One transition vault and one intermediate splice vault are proposed on the Cook land portion. Marine and geotechnical investigations will inform final burial and protection requirements. Road, utility and marine construction interfaces will be coordinated with the affected facility owners and authorities.	

Environmental impacts	The permitting plan includes Illinois Commerce Commission review of the Illinois facilities and Michigan Public Service Commission review of the Michigan transmission facilities. For the lake crossing, the Proposer will seek U.S. Army Corps of Engineers authorization under Section 10, Michigan Department of Environment, Great Lakes, and Energy authorization under Part 325 for Michigan bottomland work, and the required bottomland rights. Illinois lakebed and landfall approvals will be coordinated with the Illinois Department of Natural Resources and Illinois Environmental Protection Agency. Section 404 authorization, Section 401 water quality certification and coastal consistency review will be addressed where required. Marine and geotechnical investigations and applicable wetland, habitat and cultural resource surveys and reports will support permitting and final design. Construction will address lakebed disturbance, turbidity, erosion and sediment control.
Tower characteristics	No transmission towers are proposed for this component. The design uses buried submarine cables across Lake Michigan and underground duct banks on land.
Construction responsibility	Confidential Information
Benefits/Comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$537,689,337.98
Component cost (in-service year)	\$578,621,816.10
Greenfield Substation Component	

Component title	Zion HVDC Terminal		
Project description	Confidential Information		
Substation name	Zion HVDC Terminal		
Substation description	The proposed Zion HVDC Terminal near the existing Zion Substation in Zion, Illinois, will connect the 525 kV DC cable system to the 345 kV system for the 2250 MW link. Two AC connections serve the Zion Blue and Red buses (270940 and 270941).		
Nominal voltage	DC		
Nominal voltage	525		
Transformer Information			
	Name	Capacity (MVA)	
Transformer	Zion converter-transformer equivalent (each; model 4733)		
	High Side	Low Side	Tertiary
Voltage (kV)			
Major equipment description	The terminal will include HVDC conversion equipment, converter-transformer equipment, 345 kV switching equipment and buswork, and 525 kV DC cable terminations. Associated facilities include cooling, auxiliary power, protection, control and communications systems. Equipment quantities, transformer nameplate ratings, and the final terminal arrangement remain to be confirmed for the 2250 MW design.		
	Normal ratings	Emergency ratings	
Summer (MVA)	2250.000000	2250.000000	
Winter (MVA)	2250.000000	2250.000000	
Environmental assessment	The permitting plan includes Illinois Commerce Commission review of the Illinois facilities, including the Zion HVDC Terminal. Wetlands, waters, habitat and cultural resources within the site and construction areas will be evaluated to guide layout and grading. Required environmental permits and construction stormwater coverage will be obtained before the corresponding work. Design and construction will address drainage, equipment noise, spill prevention, erosion and sediment control.		

Outreach plan	The Proposer will coordinate with municipal officials and affected landowners during project development. Project information and a designated contact will be available to address questions. Notices and public meetings will be provided as required by the applicable siting process.
Land acquisition plan	The Proposer will secure the property rights needed for the terminal, electrical connections, access and temporary construction areas. Title review and surveys will establish the required interests, and acquisition and easement terms will be negotiated with affected property owners.
Construction responsibility	Confidential Information
Benefits/Comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$686,423,500.00
Component cost (in-service year)	\$742,675,082.31
Greenfield Substation Component	
Component title	Cook HVDC Terminal
Project description	Confidential Information
Substation name	Cook HVDC Terminal

Substation description	The proposed Cook HVDC Terminal near Cook Substation in Berrien County, Michigan, will connect the 525 kV DC cable system to the 765 kV system for the 2250 MW link. Two new 765 kV overhead lines connect the terminal to Cook Substation.		
Nominal voltage	DC		
Nominal voltage	525		
Transformer Information			
	Name	Capacity (MVA)	
Transformer	Cook converter-transformer equivalent (each; model basis)		
	High Side	Low Side	Tertiary
Voltage (kV)			
Major equipment description	The terminal will include HVDC conversion equipment, converter-transformer equipment, 765 kV switching equipment and buswork, and 525 kV DC cable terminations. Associated facilities include cooling, auxiliary power, protection, control and communications systems. Equipment quantities, transformer nameplate ratings, and the final terminal arrangement remain to be confirmed for the 2250 MW design.		
	Normal ratings	Emergency ratings	
Summer (MVA)	2250.000000	2250.000000	
Winter (MVA)	2250.000000	2250.000000	
Environmental assessment	The permitting plan includes Michigan Public Service Commission review of the proposed transmission facilities. Wetland, habitat and cultural resource surveys and reports will support permitting and final design. Required wetland, waterway and construction stormwater authorizations will be obtained before the corresponding work. Site design and construction will address drainage, equipment noise, spill prevention, erosion and sediment control.		
Outreach plan	The Proposer will coordinate with AEP and local officials and provide public notices and meetings as required by the applicable siting process. A project contact will address stakeholder questions during development.		

Land acquisition plan	The proposed terminal site is on AEP-owned property. The Proposer will coordinate with AEP to secure the property rights needed for the terminal, electrical connections, access and temporary construction areas. Final limits and terms remain to be established.	
Construction responsibility	Confidential Information	
Benefits/Comments	Confidential Information	
Component Cost Details - In Current Year \$		
Engineering & design	Confidential Information	
Permitting / routing / siting	Confidential Information	
ROW / land acquisition	Confidential Information	
Materials & equipment	Confidential Information	
Construction & commissioning	Confidential Information	
Construction management	Confidential Information	
Overheads & miscellaneous costs	Confidential Information	
Contingency	Confidential Information	
Total component cost	\$693,458,050.00	
Component cost (in-service year)	\$750,286,105.24	
Greenfield Transmission Line Component		
Component title	Cook HVDC Terminal-Cook 765 kV Line #1	
Project description	Confidential Information	
Point A	Cook HVDC Terminal (bus 711765)	
Point B	Cook 765 kV Substation (bus 243205)	
Point C		
	Normal ratings	Emergency ratings

Summer (MVA)	5967.000000	5967.000000
Winter (MVA)	5967.000000	5967.000000
Conductor size and type	Six 954 kcmil Cardinal subconductors per phase with 15-inch bundle spacing.	
Nominal voltage	AC	
Nominal voltage	765	
Line construction type	Overhead	
General route description	The proposed single-circuit 765 kV overhead line will connect the Cook HVDC Terminal to Cook Substation in Berrien County, Michigan. The concept assumes approximately 0.6 mile for this connection. The final alignment and station connection positions will be confirmed for the 2250 MW alternative.	
Terrain description	The connection area includes wooded and developed portions of the Cook site. Clearing and grading requirements will depend on the final alignment.	
Right-of-way width by segment	The right-of-way will be 225 feet wide.	
Electrical transmission infrastructure crossings		
Civil infrastructure/major waterway facility crossing plan	The alignment will be coordinated with AEP/I&M to establish crossings of existing plant and transmission facilities, outage requirements and clearances. Road and other utility crossings will be coordinated with the affected facility owners.	
Environmental impacts	The permitting plan includes Michigan Public Service Commission review of the proposed transmission facilities. Applicable wetland, habitat and cultural resource surveys and reports will support permitting and final design. Required wetland, waterway and construction stormwater authorizations will be obtained before the corresponding work. Construction will address clearing, erosion and sediment control.	
Tower characteristics	The connection is proposed as a single-circuit overhead 765 kV line. Structure types and arrangements will be confirmed with the final alignment and station connections.	
Construction responsibility	Confidential Information	
Benefits/Comments	Confidential Information	
Component Cost Details - In Current Year \$		

Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$2,088,504.56
Component cost (in-service year)	\$2,247,495.36

Greenfield Transmission Line Component

Component title	Cook HVDC Terminal-Cook 765 kV Line #2
Project description	Confidential Information
Point A	Cook HVDC Terminal (bus 713765)
Point B	Cook 765 kV Substation (bus 243205)
Point C	

	Normal ratings	Emergency ratings
Summer (MVA)	5967.000000	5967.000000
Winter (MVA)	5967.000000	5967.000000
Conductor size and type	Six 954 kcmil Cardinal subconductors per phase with 15-inch bundle spacing.	
Nominal voltage	AC	

Nominal voltage	765
Line construction type	Overhead
General route description	The proposed single-circuit 765 kV overhead line will connect the Cook HVDC Terminal to Cook Substation in Berrien County, Michigan. The concept assumes approximately 0.6 mile for this connection. The final alignment and station connection positions will be confirmed for the 2250 MW alternative.
Terrain description	The connection area includes wooded and developed portions of the Cook site. Clearing and grading requirements will depend on the final alignment.
Right-of-way width by segment	The right-of-way will be 225 feet wide.
Electrical transmission infrastructure crossings	
Civil infrastructure/major waterway facility crossing plan	The alignment will be coordinated with AEP/I&M to establish crossings of existing plant and transmission facilities, outage requirements and clearances. Road and other utility crossings will be coordinated with the affected facility owners.
Environmental impacts	The permitting plan includes Michigan Public Service Commission review of the proposed transmission facilities. Applicable wetland, habitat and cultural resource surveys and reports will support permitting and final design. Required wetland, waterway and construction stormwater authorizations will be obtained before the corresponding work. Construction will address clearing, erosion and sediment control.
Tower characteristics	The connection is proposed as a single-circuit overhead 765 kV line. Structure types and arrangements will be confirmed with the final alignment and station connections.
Construction responsibility	Confidential Information
Benefits/Comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information

Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$2,506,205.44
Component cost (in-service year)	\$2,696,994.43
Substation Upgrade Component	
Component title	Joliet Substation Upgrade
Project description	Confidential Information
Substation name	Joliet Substation
Substation zone	1274
Substation upgrade scope	Add 345 kV line connections in a ring-bus arrangement for the new Elwood-Joliet Red and Blue circuits.
Transformer Information	
None	
New equipment description	New equipment will include 345 kV line-terminal switching equipment and associated connections for the new circuits.
Substation assumptions	The substation upgrade is assumed to be accommodated on existing ComEd property without additional land acquisition.
Real-estate description	
Construction responsibility	Confidential Information
Benefits/Comments	Confidential Information
Component Cost Details - In Current Year \$	

Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$18,656,087.55
Component cost (in-service year)	\$20,166,495.98
Substation Upgrade Component	
Component title	Elwood Substation Upgrade
Project description	Confidential Information
Substation name	Elwood Substation
Substation zone	1274
Substation upgrade scope	Add 345 kV line connections in a ring-bus arrangement for the new Elwood-Joliet Red and Blue circuits.
Transformer Information	
None	
New equipment description	New equipment will include 345 kV line-terminal switching equipment and associated connections for the new circuits.
Substation assumptions	The substation upgrade is assumed to be accommodated on existing ComEd property without additional land acquisition.

Real-estate description	
Construction responsibility	Confidential Information
Benefits/Comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$9,328,043.77
Component cost (in-service year)	\$10,101,300.36
Substation Upgrade Component	
Component title	East Frankfort Substation Upgrade
Project description	Confidential Information
Substation name	East Frankfort
Substation zone	1274
Substation upgrade scope	Upgrade terminal equipment serving the East Frankfort-Goodings Grove Red and Blue 345 kV circuits to support increased circuit ratings.
Transformer Information	

None	
New equipment description	Replace or uprate limiting 345 kV terminal equipment and associated connections.
Substation assumptions	The substation upgrade is assumed to be accommodated on existing ComEd property without additional land acquisition.
Real-estate description	
Construction responsibility	Confidential Information
Benefits/Comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$857,354.11
Component cost (in-service year)	\$928,425.23
Substation Upgrade Component	
Component title	Goodings Grove Substation Upgrade
Project description	Confidential Information
Substation name	Goodings Grove
Substation zone	1274

Substation upgrade scope	Upgrade terminal equipment serving the East Frankfort-Goodings Grove Red and Blue 345 kV circuits to support increased circuit ratings.
Transformer Information	
None	
New equipment description	Replace or uprate limiting 345 kV terminal equipment and associated connections.
Substation assumptions	The substation upgrade is assumed to be accommodated on existing ComEd property without additional land acquisition.
Real-estate description	
Construction responsibility	Confidential Information
Benefits/Comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$857,354.11
Component cost (in-service year)	\$928,425.23
Greenfield Transmission Line Component	
Component title	Elwood-Joliet Double Circuit 345 kV Line

Project description	Confidential Information	
Point A	Elwood	
Point B	Joliet	
Point C		
	Normal ratings	Emergency ratings
Summer (MVA)	1826.000000	2011.000000
Winter (MVA)	2091.000000	2320.000000
Conductor size and type	Two 954 kcmil Cardinal ACSS/TW MA3 conductors per phase.	
Nominal voltage	AC	
Nominal voltage	345	
Line construction type	Overhead	
General route description	The preliminary route extends approximately 4.4 miles generally north from Elwood Substation through an industrial and transportation corridor, paralleling existing roadways along portions of the alignment. Near Joliet, the route parallels the existing Dresden-Joliet 138 kV corridor to cross the Des Plaines River and enter Joliet Substation.	
Terrain description	The route traverses generally level to gently rolling industrial areas, with more pronounced slopes approaching the Des Plaines River.	
Right-of-way width by segment	Approximately 4.4 miles of new ROW, with a preliminary width of 150 feet.	
Electrical transmission infrastructure crossings	Dresden–Joliet 138 kV, Tap–Joliet 138 kV	
Civil infrastructure/major waterway facility crossing plan	The proposed route crosses the Des Plaines River, Patterson Road, Laraway Road, Millsdale Road, and BNSF Railway and Union Pacific rail corridors. Structures will be positioned to span these facilities while maintaining applicable clearances. The Proposer will coordinate with facility owners and affected utility operators to protect existing infrastructure and obtain crossing agreements, road-occupancy permits and other authorizations as applicable.	

Environmental impacts	The Proposer will obtain a Certificate of Public Convenience and Necessity from the Illinois Commerce Commission for the project. Environmental and cultural resources, including wetlands and waters, will be evaluated to guide route refinement, structure locations and construction access. The Proposer will coordinate with the U.S. Army Corps of Engineers, Illinois Department of Natural Resources, Illinois Environmental Protection Agency and applicable local agencies to obtain necessary authorizations, including for the Des Plaines River crossing. Construction plans will address stormwater, erosion and sediment control.
Tower characteristics	The preliminary design uses tubular steel monopoles supporting two 345 kV circuits in a vertical configuration, with braced-post insulators and two optical groundwires.
Construction responsibility	Confidential Information
Benefits/Comments	Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential Information
Permitting / routing / siting	Confidential Information
ROW / land acquisition	Confidential Information
Materials & equipment	Confidential Information
Construction & commissioning	Confidential Information
Construction management	Confidential Information
Overheads & miscellaneous costs	Confidential Information
Contingency	Confidential Information
Total component cost	\$19,961,068.81
Component cost (in-service year)	\$21,480,637.75
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-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-ST15	243469	05BEATTY	247896	05BOLTON	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST14	243469	05BEATTY	243586	05WHITER	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST3	243469	05BEATTY	247896	05BOLTON	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST20	243469	05BEATTY	247896	05BOLTON	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST8	272855	YORK ;RT	271131	BUTTERFIE; R	1	138/138	222/222	Summer Baseline	Included
2026W1-N1-ST7	243469	05BEATTY	247896	05BOLTON	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST13	243469	05BEATTY	246716	05PHILLIPI	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST19	243469	05BEATTY	246716	05PHILLIPI	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST18	243469	05BEATTY	247896	05BOLTON	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST12	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222/222	Summer Baseline	Included
2026W1-N1-ST10	272855	YORK ;RT	271131	BUTTERFIE; R	1	138/138	222/222	Summer Baseline	Included
2026W1-N1-ST11	243469	05BEATTY	246716	05PHILLIPI	1	138/138	205/205	Summer Baseline	Included
2026W1-N1-ST16	247896	05BOLTON	243519	05HALLRD	1	138/138	205/205	Summer Baseline	Included
2026W1-GD-S263	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S53	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer Gen Deliv	Included
2026W1-GD-S287	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-IPD-S4	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222	Summer IPD	Included
2026W1-IPD-S5	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222	Summer IPD	Included
2026W1-IPD-S8	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer IPD	Included
2026W1-IPD-S11	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-IPD-S13	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S23	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S34	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S36	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S37	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S39	243519	05HALLRD	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S41	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S42	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S43	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S45	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S47	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S48	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S50	243519	05HALLRD	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S54	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S59	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer IPD	Included
2026W1-IPD-S60	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-IPD-S61	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S62	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S64	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-IPD-S67	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer IPD	Included
2026W1-IPD-S71	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-IPD-S72	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer IPD	Included
2026W1-IPD-S73	243469	05BEATTY	246716	05PHILLIPI	1	138	205	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-ST2	213869	PCHBTMTTP	214087	COOPER2	1	230	230	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

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N11-ST5	213869	PCHBTMTP	214087	COOPER2	1	230	230	Summer N-1-1	Included
2026W1-N11-ST6	213844	EXCLUDED_FROM_COMPETITION	213844	EXCLUDED_FROM_COMPETITION	1	230	230	Summer N-1-1	Included
2026W1-N11-ST7	213846	EXCLUDED_FROM_COMPETITION	213846	EXCLUDED_FROM_COMPETITION	1	230	230	Summer N-1-1	Included
2026W1-N11-ST8	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST9	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST10	270781	ITASCA ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST11	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST12	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST13	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST14	270809	LISLE ; R	270813	LOMBARD ;2R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST15	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST16	213844	EXCLUDED_FROM_COMPETITION	213844	EXCLUDED_FROM_COMPETITION	1	230	230	Summer N-1-1	Included
2026W1-N11-ST17	213846	EXCLUDED_FROM_COMPETITION	213846	EXCLUDED_FROM_COMPETITION	1	230	230	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-ST24	243469	05BEATTY	247896	05BOLTON	1	138	205	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-ST27	243469	05BEATTY	247896	05BOLTON	1	138	205	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-ST31	213869	PCHBTMTP	214087	COOPER2	1	230	230	Summer N-1-1	Included
2026W1-N11-ST32	213869	PCHBTMTP	214087	COOPER2	1	230	230	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-ST33	213869	PCHBTMTP	214087	COOPER2	1	230	230	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-ST46	213869	PCHBTMTP	214087	COOPER2	1	230	230	Summer N-1-1	Included
2026W1-N11-ST47	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST48	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST49	213844	EXCLUDED_FROM_COMPETITION	213846	EXCLUDED_FROM_COMPETITION	1	230	230	Summer N-1-1	Included
2026W1-N11-ST50	213846	EXCLUDED_FROM_COMPETITION	213846	PCHBTMTP	1	230	230	Summer N-1-1	Included
2026W1-N11-ST51	213844	EXCLUDED_FROM_COMPETITION	213846	EXCLUDED_FROM_COMPETITION	1	230	230	Summer N-1-1	Included
2026W1-N11-ST52	213846	EXCLUDED_FROM_COMPETITION	213846	PCHBTMTP	1	230	230	Summer N-1-1	Included
2026W1-N11-ST53	213844	EXCLUDED_FROM_COMPETITION	213846	EXCLUDED_FROM_COMPETITION	1	230	230	Summer N-1-1	Included
2026W1-N11-ST54	213846	EXCLUDED_FROM_COMPETITION	213846	PCHBTMTP	1	230	230	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-ST59	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer N-1-1	Included
2026W1-N11-ST60	270769	GOODINGS ; 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-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-ST66	213846	EXCLUDED_FROM_COMPETITION	213846	EXCLUDED_FROM_COMPETITION	1	230	230	Summer N-1-1	Included
2026W1-N11-ST67	213844	EXCLUDED_FROM_COMPETITION	213844	EXCLUDED_FROM_COMPETITION	1	230	230	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-ST74	243469	05BEATTY	243586	05WHITER	1	138	205	Summer N-1-1	Included
2026W1-N11-ST75	243469	05BEATTY	243586	05WHITER	1	138	205	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-ST79	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer N-1-1	Included
2026W1-N11-ST80	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST82	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer N-1-1	Included
2026W1-N11-ST84	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer N-1-1	Included
2026W1-N11-ST85	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST86	243469	05BEATTY	247896	05BOLTON	1	138	205	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

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N11-ST91	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST92	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST93	270724	ELK GROVE; B	270812	LOMBARD ;3B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST94	243469	05BEATTY	247896	05BOLTON	1	138	205	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-ST102	213869	PCHBTMTTP	214087	COOPER2	1	230	230	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-ST104	213869	PCHBTMTTP	214087	COOPER2	1	230	230	Summer N-1-1	Included
2026W1-N11-ST105	213869	PCHBTMTTP	214087	COOPER2	1	230	230	Summer N-1-1	Included
2026W1-N11-ST106	213869	PCHBTMTTP	214087	COOPER2	1	230	230	Summer N-1-1	Included
2026W1-N11-ST107	213869	PCHBTMTTP	214087	COOPER2	1	230	230	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-ST111	213869	PCHBTMTTP	214087	COOPER2	1	230	230	Summer N-1-1	Included
2026W1-N11-ST112	213869	PCHBTMTTP	214087	COOPER2	1	230	230	Summer N-1-1	Included
2026W1-N11-ST113	270732	ELECT JCT;1B	270814	LOMBARD ;4B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST114	270769	GOODINGS ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST119	272457	ELK GROVE; R	998470	ELK GROVE 81	1	138	222	Summer N-1-1	Included
2026W1-N11-ST122	270725	ELK GROVE; R	998470	ELK GROVE 81	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST123	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST124	270998	ANTIOCH ;BT	272386	ROUND LK ; B	1	138	222	Summer N-1-1	Included

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

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-N11-ST167	272387	ROUND LK ; R	272791	WILSON RD; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST168	275213	SILVER LK;2M	272464	SILVER LK; B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST169	272457	ELK GROVE; R	998470	ELK GROVE 81	1	138	222	Summer N-1-1	Included
2026W1-N11-ST170	270999	ANTIOCH ;RT	272393	ROUND LK ;5R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST172	271554	GLENDALE ;BT	271924	LOMBARD ;6B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST173	270725	ELK GROVE; R	998470	ELK GROVE 81	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST174	270781	ITASCA ; R	271735	ITASCA ;3R	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST175	270781	ITASCA ; R	271735	ITASCA ;3R	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST176	271554	GLENDALE ;BT	271924	LOMBARD ;6B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST177	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST178	270883	SILVER LK; R	275213	SILVER LK;2M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST179	272465	SILVER LK; R	272791	WILSON RD; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST180	271554	GLENDALE ;BT	271924	LOMBARD ;6B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST185	270999	ANTIOCH ;RT	272389	RL BEACH ; R	1	138	222	Summer N-1-1	Included
2026W1-N11-ST186	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST188	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST189	270998	ANTIOCH ;BT	272388	RL BEACH ; B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST190	270998	ANTIOCH ;BT	272386	ROUND LK ; B	1	138	222	Summer N-1-1	Included
2026W1-N11-ST191	272457	ELK GROVE; R	998470	ELK GROVE 81	1	138	222	Summer N-1-1	Included
2026W1-N11-ST194	270809	LISLE ; R	270811	LOCKPORT ; R	1	345	222	Summer N-1-1	Included
2026W1-N11-ST195	270725	ELK GROVE; R	998470	ELK GROVE 81	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST196	271131	BUTTERFIE; R	272855	YORK ;RT	1	138	222	Summer N-1-1	Included
2026W1-N11-ST199	270808	LISLE ; B	270810	LOCKPORT ; B	1	345	222	Summer N-1-1	Included
2026W1-N11-ST200	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer N-1-1	Included
2026W1-N11-ST202	271555	GLENDALE ;RT	272109	EXCLUDED_FROM_COMPETITION	1	138	222	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	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-GD-S634	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S637	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S638	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S639	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S534	270814	LOMBARD ;4B	275199	LOMBARD ;4M	1	345/138	222	Summer Gen Deliv	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026W1-GD-S231	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S642	243469	05BEATTY	243586	05WHITER	1	138	205	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-S645	247896	05BOLTON	243519	05HALLRD	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S262	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S648	243469	05BEATTY	247896	05BOLTON	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S654	247896	05BOLTON	243519	05HALLRD	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S661	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S296	243469	05BEATTY	246716	05PHILLIPI	1	138	205	Summer Gen Deliv	Included
2026W1-GD-S302	213559	DELCOTAP	228401	MCKLTON	1	230	230/234	Summer Gen Deliv	Included
2026W1-GD-S560	213559	DELCOTAP	228401	MCKLTON	1	230	230/234	Summer Gen Deliv	Included
2026W1-GD-S304	213559	DELCOTAP	228401	MCKLTON	1	230	230/234	Summer Gen Deliv	Included
2026W1-GD-S303	213559	DELCOTAP	228401	MCKLTON	1	230	230/234	Summer Gen Deliv	Included
2026W1-GD-S305	213559	DELCOTAP	228401	MCKLTON	1	230	230/234	Summer Gen Deliv	Included
2026W1-GD-S174	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222	Summer Gen Deliv	Included
2026W1-GD-S175	270724	ELK GROVE; B	271442	ELK GRV E; B	1	345/138	222	Summer Gen Deliv	Included

New Flowgates

Confidential Information

Financial Information

Capital spend start date 01/2027

Construction start date 10/2029

Project Duration (In Months) 53

Cost Containment Commitment

Cost cap (in current year)	Confidential Information
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Cost cap (in-service year)	Confidential Information
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Components covered by cost containment

1. Zion-Cook HVDC Line - Proposer
2. Zion HVDC Terminal - Proposer
3. Cook HVDC Terminal - Proposer
4. Cook HVDC Terminal-Cook 765 kV Line #1 - Proposer
5. Cook HVDC Terminal-Cook 765 kV Line #2 - Proposer
6. Elwood-Joliet Double Circuit 345 kV Line - Proposer

Cost elements covered by cost containment

Engineering & design	Yes
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Permitting / routing / siting	Yes
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ROW / land acquisition	Yes
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Materials & equipment	Yes
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Construction & commissioning	Yes
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Construction management	Yes
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Overheads & miscellaneous costs	Yes
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Taxes	Yes
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AFUDC	No
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Escalation	Yes
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Additional Information	Confidential Information
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Is the proposer offering a binding cap on ROE?	Yes
Would this ROE cap apply to the determination of AFUDC?	Yes
Would the proposer seek to increase the proposed ROE if FERC finds that a higher ROE would not be unreasonable?	No
Is the proposer offering a Debt to Equity Ratio cap?	Confidential Information
Additional cost containment measures not covered above	Confidential Information

Additional Comments

None