Bay Shore - Davis-Besse - Lake Ave + Lemoyne - Lake Ave 345kV

General Information

Proposing entity name	Proprietary business information.
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Proprietary business information.
Company proposal ID	Proprietary business information.
PJM Proposal ID	357
Project title	Bay Shore - Davis-Besse - Lake Ave + Lemoyne - Lake Ave 345kV
Project description	1) Install second circuit on open tower position along the existing Bayshore - Davis-Besse line. 2) Expand the existing Bay Shore substation to terminate new line. 3) Expand the existing Davis-Besse substation to terminate two new lines. 4) Construct new 345kV lines from Davis-Besse to Lake Ave and Lemoyne to Lake Ave. Will be built via a combination of brownfield and greenfield components. Greenfield portion will be on double circuit towers. 5) Expand the existing Lake Ave substation to terminate two new lines 6) Expand the existing Lemoyne substation to terminate new line.
Email	Proprietary business information.
Project in-service date	06/2030
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	Proprietary business information.

Project Components

1. 3Q-1) Bay Shore substation expansion
2. 3A-1) Bay Shore - Davis-Besse 345kV line

3. 3T-1) Davis-Besse substation expansion
4. 3S-2) Davis-Besse to Lake Ave (Brownfield portion)
5. 3O-4) Lemoyne - Lake Ave 345kV (brownfield portion)
6. 3I-1) Lemoyne substation expansion
7. 3S-4) Davis-Besse to Lake Ave and Lemoyne to Lake Ave 345kV double circuit (greenfield portion)
8. 3R-2) Lake Ave substation expansion

Substation Upgrade Component

Component title	3Q-1) Bay Shore substation expansion
Project description	Proprietary business information.
Substation name	Bay Shore
Substation zone	ATSI
Substation upgrade scope	Expand the existing 345kV ring by adding an additional breaker and line position.

Transformer Information

None

New equipment description	Add one (1) 345kV, 5000A, 63kAIC breaker to existing ring configuration.
Substation assumptions	Assumes use of open position in northeast portion of substation, as displayed in Attachments 2 and 3.
Real-estate description	Based on publicly available parcel data and imagery, upgrades are expected to fit fully within existing fenceline on incumbent owned property.
Construction responsibility	Proprietary business information.
Benefits/Comments	Proprietary business information.
Component Cost Details - In Current Year $	
Engineering & design	Proprietary business information.
Permitting / routing / siting	Proprietary business information.

ROW / land acquisition	Proprietary business information.
Materials & equipment	Proprietary business information.
Construction & commissioning	Proprietary business information.
Construction management	Proprietary business information.
Overheads & miscellaneous costs	Proprietary business information.
Contingency	Proprietary business information.
Total component cost	$1,500,000.00
Component cost (in-service year)	$1,739,540.00

Transmission Line Upgrade Component

Component title	3A-1) Bay Shore - Davis-Besse 345kV line
Project description	Proprietary business information.
Impacted transmission line	Bay Shore - Davis-Besse
Point A	Bay Shore
Point B	Davis-Besse
Point C	N/A
Terrain description	New line will be entirely contained within existing ROW. Terrain is very flat with elevations ranging from ~595ft to ~570ft and consists of mostly agricultural land.
Existing Line Physical Characteristics	
Operating voltage	345
Conductor size and type	No existing conductor. Proposing to install new circuit using spare position on existing structure.
Hardware plan description	Existing hardware not impacted by new circuit. New circuit will require new insulators and shield wire/OPGW per transmission owner requirements and design.

Tower line characteristics	Majority of existing line is a single circuit on double-circuit 345kV lattice towers. There are two short portions (2 miles in total) where the structures are single circuit h-frames.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1411.000000	1683.000000
Winter (MVA)	1723.000000	1925.000000
Conductor size and type	2 Horizontal Bundle Cardinal ACSS MA3	
Shield wire size and type	Incumbent / Transmission Owner to select preferred shield wire	
Rebuild line length	20.9	
Rebuild portion description	Utilize spare tower position to install second circuit.	
Right of way	It appears new circuit can be fully contained within existing ROW by utilizing existing towers.	
Construction responsibility	Proprietary business information.	
Benefits/Comments	Proprietary business information.	
Component Cost Details - In Current Year $		
Engineering & design	Proprietary business information.	
Permitting / routing / siting	Proprietary business information.	
ROW / land acquisition	Proprietary business information.	
Materials & equipment	Proprietary business information.	
Construction & commissioning	Proprietary business information.	
Construction management	Proprietary business information.	

Overheads & miscellaneous costs	Proprietary business information.
Contingency	Proprietary business information.
Total component cost	$10,500,000.00
Component cost (in-service year)	$12,176,781.00

Substation Upgrade Component

Component title	3T-1) Davis-Besse substation expansion
Project description	Proprietary business information.
Substation name	Davis-Besse
Substation zone	ATSI
Substation upgrade scope	Expand the existing Davis Besse 345kV yard by adding one 345kV bay and two line positions. Expansion will require reconfiguration of existing terminals, see Attachment 2 (Single Line Diagram) and Attachment 3 (General Arrangement).

Transformer Information

None

New equipment description	Add three (3) new 345kV, 5000A, 63kAIC breakers and one (1) breaker and a half (BAAH) bay. Relocate existing 345kV breaker to adjacent bay.
Substation assumptions	Assumes use of empty bay for one termination and an expansion of the buswork to the south to accommodate second termination.
Real-estate description	The substation fenceline may require expansion but work can be contained in utility property.
Construction responsibility	Proprietary business information.
Benefits/Comments	Proprietary business information.

Component Cost Details - In Current Year $

Engineering & design	Proprietary business information.
Permitting / routing / siting	Proprietary business information.

ROW / land acquisition	Proprietary business information.
Materials & equipment	Proprietary business information.
Construction & commissioning	Proprietary business information.
Construction management	Proprietary business information.
Overheads & miscellaneous costs	Proprietary business information.
Contingency	Proprietary business information.
Total component cost	$8,000,000.00
Component cost (in-service year)	$9,277,547.00

Transmission Line Upgrade Component

Component title	3S-2) Davis-Besse to Lake Ave (Brownfield portion)
Project description	Proprietary business information.
Impacted transmission line	Davis-Besse - Lemoyne
Point A	Davis-Besse
Point B	Handoff north of Toussaint
Point C	
Terrain description	New line will be entirely contained within existing ROW. Terrain is very flat with elevations ranging from ~595ft to ~580ft and consists of mostly agricultural land.
Existing Line Physical Characteristics	
Operating voltage	345
Conductor size and type	No existing conductor. Proposing to install new circuit using spare position on existing structure.
Hardware plan description	Existing hardware not impacted by new circuit. New circuit will require new insulators and shield wire/OPGW per transmission owner requirements and design.

Tower line characteristics	Existing structures appear to be double-circuit capable lattice towers with only a single circuit installed.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1411.000000	1683.000000
Winter (MVA)	1723.000000	1925.000000
Conductor size and type	2 Horizontal Bundle Cardinal ACSS MA3	
Shield wire size and type	Incumbent / Transmission Owner to select preferred shield wire	
Rebuild line length	6	
Rebuild portion description	Utilize spare tower position to install new circuit on Davis-Besse to Lemoyne transmission structures.	
Right of way	It appears new circuit can be fully contained within existing ROW by utilizing existing towers.	
Construction responsibility	Proprietary business information.	
Benefits/Comments	Proprietary business information.	
Component Cost Details - In Current Year $		
Engineering & design	Proprietary business information.	
Permitting / routing / siting	Proprietary business information.	
ROW / land acquisition	Proprietary business information.	
Materials & equipment	Proprietary business information.	
Construction & commissioning	Proprietary business information.	

Construction management	Proprietary business information.
Overheads & miscellaneous costs	Proprietary business information.
Contingency	Proprietary business information.
Total component cost	$3,585,000.00
Component cost (in-service year)	$4,157,501.00

Transmission Line Upgrade Component

Component title	3O-4) Lemoyne - Lake Ave 345kV (brownfield portion)
Project description	Proprietary business information.
Impacted transmission line	Lemoyne-Davis Besse
Point A	Lemoyne
Point B	Handoff north of Toussaint
Point C	
Terrain description	New line will be entirely contained within existing ROW. Terrain is very flat with elevations ranging from ~640ft on the western end and sloping gradually to ~570ft in the east. Route is largely rural and consists of mostly agricultural land.
Existing Line Physical Characteristics	
Operating voltage	345
Conductor size and type	No existing conductor. Proposing to install new circuit using spare position on existing structure.
Hardware plan description	Existing hardware not impacted by new circuit. New circuit will require new insulators and shield wire/OPGW per transmission owner requirements and design.
Tower line characteristics	Existing structures appear to be double-circuit capable lattice towers with only a single circuit installed.
Proposed Line Characteristics	

	Designed	Operating

Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1411.000000	1683.000000
Winter (MVA)	1723.000000	1925.000000
Conductor size and type	2 Horizontal Bundle Cardinal ACSS MA3	
Shield wire size and type	Incumbent / Transmission Owner to select preferred shield wire	
Rebuild line length	15.8	
Rebuild portion description	Utilize spare tower position to install new circuit on Davis-Besse to Lemoyne transmission structures.	
Right of way	It appears new circuit can be fully contained within existing ROW by utilizing existing towers.	
Construction responsibility	Proprietary business information.	
Benefits/Comments	Proprietary business information.	
Component Cost Details - In Current Year $		
Engineering & design	Proprietary business information.	
Permitting / routing / siting	Proprietary business information.	
ROW / land acquisition	Proprietary business information.	
Materials & equipment	Proprietary business information.	
Construction & commissioning	Proprietary business information.	
Construction management	Proprietary business information.	
Overheads & miscellaneous costs	Proprietary business information.	
Contingency	Proprietary business information.	
Total component cost	$8,100,000.00	

Component cost (in-service year)	$9,393,517.00

Substation Upgrade Component

Component title	3I-1) Lemoyne substation expansion
Project description	Proprietary business information.
Substation name	Lemoyne
Substation zone	ATSI
Substation upgrade scope	Install one new 345kV breaker to create position to terminate new Lemoyne-Lake Ave line. Reposition one existing breaker and bus work to enable new breaker installation.

Transformer Information

None

New equipment description	Add one (1) 345kV, 5000A, 63kAIC breaker to existing ring configuration. Relocate one (1) existing 345kV breaker to complete ring.
Substation assumptions	Assumes open position and repositioning of existing breaker per Attachments 2 and 3.
Real-estate description	Based on publicly available parcel data and imagery, upgrades are expected to fit fully within existing fenceline on incumbent owned property.
Construction responsibility	Proprietary business information.
Benefits/Comments	Proprietary business information.

Component Cost Details - In Current Year $

Engineering & design	Proprietary business information.
Permitting / routing / siting	Proprietary business information.
ROW / land acquisition	Proprietary business information.
Materials & equipment	Proprietary business information.
Construction & commissioning	Proprietary business information.

Construction management	Proprietary business information.
Overheads & miscellaneous costs	Proprietary business information.
Contingency	Proprietary business information.
Total component cost	$1,500,000.00
Component cost (in-service year)	$1,739,540.00

Greenfield Transmission Line Component

Component title	3S-4) Davis-Besse to Lake Ave and Lemoyne to Lake Ave 345kV double circuit (greenfield portion)
Project description	Proprietary business information.
Point A	Handoff north of Toussaint
Point B	Lake Ave
Point C	N/A

	Normal ratings	Emergency ratings
Summer (MVA)	1411.000000	1683.000000
Winter (MVA)	1723.000000	1925.000000

Conductor size and type	2 Horizontal Bundle Cardinal ACSS MA3
Nominal voltage	AC
Nominal voltage	345
Line construction type	Overhead
General route description	Route departs from the existing Davis-Besse - Lemoyne 345kV corridor north of the Toussaint substation. The route proceeds south until reaching the Ohio Turnpike, at which point it continues east towards Lake Ave. The route follows the Ohio Turnpike and existing transmission corridors where feasible. See Attachment 11 for further details.

Terrain description	A detailed inspection of the USGS topographic map reveals relatively consistent, flat lands, with elevation within the Project ranging from a high of 854 ft above sea level to a low of 573 ft above sea level. The Project is located across 3 Level IV ecoregions including Clayey, High Lime Till Plains, Marblehead Drift/Limestone Plain, and Erie Lake Plain. In the Clayey, High Lime Till Plains ecoregion, soils are less productive and more artificially drained than adjacent ecoregions and support fewer swampy areas. The Marblehead Drift/Limestone Plain ecoregion has areas of thin glacial drift and limestone-dolomite ridges and islands. Streams often flow on carbonate bedrock; their character is different from the clayey channels of adjacent ecoregions. Scattered carbonate ridges supported distinctive mixed oak forests and prairies, marl plains had prairies, and the Lake Erie and Sandusky Bay shoreline often supported fens The Erie Lake Plain ecoregion is a nearly level coastal strip of lacustrine deposits punctuated by beach ridges and swales. Its lake-modified climate sets it apart from other nearby ecoregions and its annual growing season is often several weeks longer than inland areas. According to the NLCD, the Project area (including a 0.5-mi corridor along the proposed line) largely consists of cultivated cropland (~64.6% of the total land cover) followed by deciduous (~14.8%), developed land (open space, low, medium, and high intensity; 9.6%), and hay/pasture (4.1%). The remaining land cover (2.4%) is composed of evergreen forest, mixed forest, herbaceous, shrub/scrub, open water, and barren land.
Right-of-way width by segment	The majority of the route, approximately 93%, will have a ROW width of 150 ft. Approximately 7% of the route will have a ROW width of 100 ft in more congested areas. The proposed right of way will be an expansion of an existing transmission line corridor for approximately 38% of the route length, the remainder will be greenfield ROW.
Electrical transmission infrastructure crossings	See Attachment 4 (Google Earth .kmz file) for crossing locations.
Civil infrastructure/major waterway facility crossing plan	See Attachment 5 (Crossing Plan) and Attachment 4 (Google Earth .kmz file).

Environmental impacts	Environmental constraints were evaluated within a 0.25-mi buffer of the project and are manageable through avoidance, minimization, and mitigation strategies incorporated at the onset of the routing/siting process. The proposed corridor crosses numerous aquatic resources, including wetlands, lakes/ponds, and streams but most features could be spanned & avoided with minimal impacts. According to FEMA, multiple 100-year floodplains are crossed by the corridor. This represent total amount of features crossed by the corridor & impacts from the Project would be significantly less. Major watercourses crossed by the Project include the Sandusky, Portage, Sandusky, Huron, and Vermillion Rivers, some of which will require agency authorizations for navigable water crossings. No fatal flaws have been identified for the Project. Multiple previously recorded archaeological sites, cemeteries, & architectural resources were recorded within the corridor. However, no historic districts are crossed by the proposed corridor. Ten federally listed species (2 endangered, 5 threatened, 1 proposed, 1 candidate, and 1 Experimental population) have known ranges within the proposed corridor. No critical habitat for any federally listed species intersects the route. If suitable habitat is identified or regulations change, agency coordination & species-specific surveys will occur. The project intends to follow suggested tree removal windows & general time of year restrictions to avoid/minimize impacts to species such as federally listed bats and migratory birds, among others. Industry standard construction BMPs & avoidance and minimization measures will be used to prevent unanticipated impacts to natural resources to the maximum extent practicable. There are no environmental concerns with the proposed project that cannot be addressed through agency coordination, mitigation, & an in-depth routing/siting process. Please refer to Attachment 8 for additional information.
Tower characteristics	The proposed structures will be double circuit 345kV steel monopoles in a vertical conductor configuration. See structure drawing set included in Attachment 10.
Construction responsibility	Proprietary business information.
Benefits/Comments	Proprietary business information.
Component Cost Details - In Current Year $	
Engineering & design	Proprietary business information.
Permitting / routing / siting	Proprietary business information.
ROW / land acquisition	Proprietary business information.
Materials & equipment	Proprietary business information.
Construction & commissioning	Proprietary business information.
Construction management	Proprietary business information.

Overheads & miscellaneous costs	Proprietary business information.
Contingency	Proprietary business information.
Total component cost	$302,932,143.00
Component cost (in-service year)	$351,308,413.00

Substation Upgrade Component

Component title	3R-2) Lake Ave substation expansion
Project description	Proprietary business information.
Substation name	Lake Ave
Substation zone	ATSI
Substation upgrade scope	Expand the existing Lake Ave 345kV yard by adding two 345kV bays and four line positions.

Transformer Information

None

New equipment description	Add six (6) new 345kV, 5000A, 63kAIC breakers and two (2) breaker and a half (BAAH) bays.
Substation assumptions	Assumes expansion of buswork to the south, fully accommodated within utility property as displayed in Attachments 2 and 3.
Real-estate description	The substation fenceline requires expansion but work can be contained in utility property.
Construction responsibility	Proprietary business information.
Benefits/Comments	Proprietary business information.

Component Cost Details - In Current Year $

Engineering & design	Proprietary business information.
Permitting / routing / siting	Proprietary business information.
ROW / land acquisition	Proprietary business information.

Materials & equipment	Proprietary business information.
Construction & commissioning	Proprietary business information.
Construction management	Proprietary business information.
Overheads & miscellaneous costs	Proprietary business information.
Contingency	Proprietary business information.
Total component cost	$8,000,000.00
Component cost (in-service year)	$9,277,547.00

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
2024W1-N1-ST62	314991	8VALLEY SC	314926	8VALLEY	1	500/500	345/345	Summer Thermal	Included
2024W1-N1-ST60	314901	8BATH CO	314991	8VALLEY SC	1	500/500	345/345	Summer Thermal	Included
2024W1-32GD-S19	238569	02BEAVER	239725	02LAKEAVE	2	345	202	2032 Summer Gen Deliv	Included
2024W1-N1-ST100	238549	02AVERY	239108	02SHNROK	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-S864	238768	02GRNFLD	238974	02N DEPT	1	138	202	Summer Gen Deliv	Included
2024W1-GD-S81	243560	05ROBERT	243529	05KENNY	1	138	205	Summer Gen Deliv	Excluded
2024W1-GD-S851	238981	02NASA	238570	02BEAVER	1	138	202	Summer Gen Deliv	Included
2024W1-GD-S366	235479	01JUNCTN	235467	01FRNCHM	1	138	201	Summer Gen Deliv	Included
2024W1-GD-S852	238981	02NASA	238570	02BEAVER	1	138	202	Summer Gen Deliv	Included
2024W1-GD-S42	235490	01MORGAN	235453	01CHERYR	1	138	201	Summer Gen Deliv	Included
2024W1-32GD-S23	238654	02DAV-BE	241877	AC2-103 TAP	1	345	202	2032 Summer Gen Deliv	Included
2024W1-N1-ST93	314929	8FRONT ROYAL	314916	8MORRSVL	1	500/500	345/345	Summer Thermal	Included
2024W1-GD-S43	235490	01MORGAN	235453	01CHERYR	1	138	201	Summer Gen Deliv	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2024W1-GD-S477	243347	05TIDD 3-4	235311	01CARNEG	1	138	201/205	Summer Gen Deliv	Excluded
2024W1-32GD-S22	238654	02DAV-BE	241877	AC2-103 TAP	1	345	202	2032 Summer Gen Deliv	Included
2024W1-GD-S353	238569	02BEAVER	239725	02LAKEAVE	2	345	202	Summer Gen Deliv	Included
2024W1-GD-S461	290623	05KAMMER_RG	242925	05KAMMER	Z1	765	205	Summer Gen Deliv	Excluded
2024W1-32GD-S21	238654	02DAV-BE	241877	AC2-103 TAP	1	345	202	2032 Summer Gen Deliv	Included
2024W1-32GD-S20	238654	02DAV-BE	239289	02HAYES	1	345	202	2032 Summer Gen Deliv	Included
2024W1-GD-S850	238874	02LAKVEW	238768	02GRNFLD	1	138	202	Summer Gen Deliv	Included
2024W1-32GD-S26	239289	02HAYES	238569	02BEAVER	1	345	202	2032 Summer Gen Deliv	Included
2024W1-GD-S848	238768	02GRNFLD	238981	02NASA	1	138	202	Summer Gen Deliv	Included
2024W1-GD-S463	290623	05KAMMER_RG	242925	05KAMMER	Z1	765	205	Summer Gen Deliv	Excluded
2024W1-32GD-S25	238654	02DAV-BE	241877	AC2-103 TAP	1	345	202	2032 Summer Gen Deliv	Included
2024W1-GD-S849	238768	02GRNFLD	238981	02NASA	1	138	202	Summer Gen Deliv	Included
2024W1-32GD-S24	238654	02DAV-BE	241877	AC2-103 TAP	1	345	202	2032 Summer Gen Deliv	Included
2024W1-N1-ST73	238768	02GRNFLD	238974	02N DEPT	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-S464	290623	05KAMMER_RG	242925	05KAMMER	Z1	765	205	Summer Gen Deliv	Excluded
2024W1-GD-LL8	238768	02GRNFLD	238981	02NASA	1	138	202	Light Load Gen Deliv	Included
2024W1-GD-S895	243347	05TIDD 3-4	235311	01CARNEG	1	138	201/205	Summer Gen Deliv	Excluded
2024W1-N1-ST33	238768	02GRNFLD	238981	02NASA	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-S472	288724	05CHENOWETH	243453	05BEATTY	1	345	205	Summer Gen Deliv	Excluded
2024W1-GD-LL12	238590	02BRWELL	238728	02FORD	1	138	202	Light Load Gen Deliv	Included
2024W1-N1-ST34	238768	02GRNFLD	238981	02NASA	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-LL9	238981	02NASA	238570	02BEAVER	1	138	202	Light Load Gen Deliv	Included
2024W1-GD-LL10	238974	02N DEPT	238590	02BRWELL	1	138	202	Light Load Gen Deliv	Included
2024W1-N1-ST76	238768	02GRNFLD	238974	02N DEPT	1	138/138	202/202	Summer Thermal	Included
2024W1-N1-ST103	239290	02HAYES	238549	02AVERY	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-S400	241877	AC2-103 TAP	238569	02BEAVER	1	345	202	Summer Gen Deliv	Excluded
2024W1-GD-S497	314435	6SAPONY	314282	6CARSON	1	230	345	Summer Gen Deliv	Included
2024W1-GD-LL5	238768	02GRNFLD	238981	02NASA	1	138	202	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
2024W1-N1-ST104	239290	02HAYES	238549	02AVERY	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-S856	238974	02N DEPT	238590	02BRWELL	1	138	202	Summer Gen Deliv	Included
2024W1-N1-ST101	238549	02AVERY	239108	02SHNROK	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-S853	238974	02N DEPT	238590	02BRWELL	1	138	202	Summer Gen Deliv	Included
2024W1-GD-S495	314901	8BATH CO	314991	8VALLEY SC	1	500	345	Summer Gen Deliv	Included
2024W1-N1-ST25	243560	05ROBERT	243529	05KENNY	1	138/138	205/205	Summer Thermal	Excluded
2024W1-GD-S496	314435	6SAPONY	314282	6CARSON	1	230	345	Summer Gen Deliv	Included
2024W1-GD-S793	243560	05ROBERT	243529	05KENNY	1	138	205	Summer Gen Deliv	Excluded
2024W1-GD-S858	238590	02BRWELL	238728	02FORD	1	138	202	Summer Gen Deliv	Included
2024W1-N1-ST38	238874	02LAKVEW	238768	02GRNFLD	1	138/138	202/202	Summer Thermal	Included
2024W1-N1-ST39	238981	02NASA	238570	02BEAVER	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-S885	238570	02BEAVER	238845	02JONSON	1	138	202	Summer Gen Deliv	Included
2024W1-32GD-S41	290608	05MARYSVL_RS	242928	05MARYSV	Z1	765	205	N/A	Excluded
2024W1-N1-ST120	314901	8BATH CO	314991	8VALLEY SC	1	500/500	345/345	Summer Thermal	Included
2024W1-GD-S866	238549	02AVERY	239108	02SHNROK	1	138	202	Summer Gen Deliv	Included
2024W1-GD-S494	235334	01GLENFL	235306	01BRIDGP	1	138	201	Summer Gen Deliv	Included
2024W1-GD-S794	235334	01GLENFL	235306	01BRIDGP	1	138	201	Summer Gen Deliv	Included
2024W1-GD-S489	243131	05TILTON	235428	01WINDSR	1	138	201/205	Summer Gen Deliv	Excluded
2024W1-GD-S503	290608	05MARYSVL_RS	242928	05MARYSV	Z1	765	205	Summer Gen Deliv	Excluded
2024W1-N1-ST37	238981	02NASA	238570	02BEAVER	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-S370	235467	01FRNCHM	235592	01HAMPS45	1	138	201	Summer Gen Deliv	Included
2024W1-GD-W17	242563	05BOXWD	242603	05CLIFFR	1	138	205	Winter Gen Deliv	Included
2024W1-GD-S865	238549	02AVERY	239108	02SHNROK	1	138	202	Summer Gen Deliv	Included
2024W1-GD-S498	314901	8BATH CO	314991	8VALLEY SC	1	500	345	Summer Gen Deliv	Included
2024W1-32GD-S44	242516	05MOUNTN	242920	05BELMON	1	765	205	2032 Summer Gen Deliv	Included
2024W1-GD-W123	242563	05BOXWD	242603	05CLIFFR	1	138	205	Winter Gen Deliv	Included
2024W1-GD-S369	235599	01HAMPS64	235471	01GORE	1	138	201	Summer Gen Deliv	Included
2024W1-32GD-S42	290608	05MARYSVL_RS	242928	05MARYSV	Z1	765	205	N/A	Excluded

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2024W1-GD-S488	235334	01GLENFL	235306	01BRIDGP	1	138	201	Summer Gen Deliv	Included
2024W1-N1-ST117	314331	6POE	314263	6TYLER1	1	230/230	345/345	Summer Thermal	Included
2024W1-GD-S897	239030	02OTTAWA	238874	02LAKVEW	1	138	202	Summer Gen Deliv	Included
2024W1-GD-LL29	238768	02GRNFLD	238974	02N DEPT	1	138	202	Light Load Gen Deliv	Included
2024W1-GD-LL30	238590	02BRWELL	238728	02FORD	1	138	202	Light Load Gen Deliv	Included
2024W1-GD-LL27	238974	02N DEPT	238590	02BRWELL	1	138	202	Light Load Gen Deliv	Included
2024W1-N1-ST49	238974	02N DEPT	238590	02BRWELL	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-LL33	239030	02OTTAWA	238874	02LAKVEW	1	138	202	Light Load Gen Deliv	Included
2024W1-N1-ST55	238590	02BRWELL	238728	02FORD	1	138/138	202/202	Summer Thermal	Included
2024W1-32GD-S52	314902	8CARSON	314914	8MDLTHAN	1	500	345	2032 Summer Gen Deliv	Included
2024W1-N1-ST56	238590	02BRWELL	238728	02FORD	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-S861	238768	02GRNFLD	238974	02N DEPT	1	138	202	Summer Gen Deliv	Included
2024W1-GD-S347	235490	01MORGAN	235453	01CHERYR	1	138	201	Summer Gen Deliv	Included
2024W1-32GD-S128	241877	AC2-103 TAP	238569	02BEAVER	1	345	202	N/A	Excluded
2024W1-GD-LL31	238874	02LAKVEW	238768	02GRNFLD	1	138	202	Light Load Gen Deliv	Included
2024W1-GD-LL32	238768	02GRNFLD	238974	02N DEPT	1	138	202	Light Load Gen Deliv	Included
2024W1-N1-ST48	238974	02N DEPT	238590	02BRWELL	1	138/138	202/202	Summer Thermal	Included
2024W1-GD-S872	239290	02HAYES	238549	02AVERY	1	138	202	Summer Gen Deliv	Included
2024W1-GD-S447	242516	05MOUNTN	242920	05BELMON	1	765	205	Summer Gen Deliv	Excluded
2024W1-GD-S868	239290	02HAYES	238549	02AVERY	1	138	202	Summer Gen Deliv	Included
2024W1-GD-S485	243070	05OHIOCT	243094	05SCOSHC	1	138	205	Summer Gen Deliv	Excluded

New Flowgates

Proprietary business information.

Financial Information

Capital spend start date	01/2025

Construction start date	03/2029
Project Duration (In Months)	65

Cost Containment Commitment

Cost cap (in current year)	Proprietary business information.
Cost cap (in-service year)	Proprietary business information.

Components covered by cost containment

1. 3S-4) Davis-Besse to Lake Ave and Lemoyne to Lake Ave 345kV double circuit (greenfield portion) - 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	Yes
AFUDC	No
Escalation	No
Additional Information	Proprietary business information.
Is the proposer offering a binding cap on ROE?	Yes
Would this ROE cap apply to the determination of AFUDC?	No

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?	Proprietary business information.
Additional cost containment measures not covered above	Proprietary business information.

Additional Comments

None