

Jester - Hayden

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	343
Project title	Jester - Hayden
Project description	This proposal includes the following system components: - Jester greenfield 765/345kV station approximately 18.5 miles south of Marysville 765kV and 12 miles west of Hayden 345kV station. This station contains a 765/345kV transformer with the following thermal ratings: 2742 / 3097 / 3097 / 3296 MVA (SN/SE/WN/WE) - Approx 12 miles of greenfield 345kV double circuit transmission line between Jester greenfield 765/345kV Station and Hayden 345kV stations. Each circuit is composed of 2 bundle, 1033 ACSR "Curlew" conductors, wired as a single-circuit 6-wire line.
Email	Company confidential and proprietary information
Project in-service date	06/2028
Tie-line impact	Yes
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	Company confidential and proprietary information

Project Components

1. Jester Greenfield Station
2. Jester - Hayden 345 kV Greenfield Line
3. Jester 765 kV Line Cut-ins

- 4. Hayden Station 345 kV Expansion
- 5. Hyatt - West Millersport 345 kV Reroute
- 6. Kenny – Roberts 138 kV Upgrade
- 7. Corridor Substation Upgrade

Greenfield Substation Component

Component title	Jester Greenfield Station
Project description	Company confidential and proprietary information
Substation name	Jester Station
Substation description	Construct a new 765/345kV greenfield station having a 3-CB 765kV ring bus that will interconnect the existing 765kV Marysville to Flatlick line, including a new 765/345kV transformer, and a 345kV line position with 1-CB that will interconnect a new double circuit 345kV Hayden line (operated as a single-circuit 6-wired line). The station will be established on approximately 100-acres of property and have a fenced area of 1,012ft x 1,140ft.
Nominal voltage	AC
Nominal voltage	765/345

Transformer Information

	Name	Capacity (MVA)		
Transformer	Transformer Bank 1	3296		
	High Side	Low Side	Tertiary	
Voltage (kV)	765	345		

Major equipment description

- 3-CB 765KV ring bus and consisting of 3-765kV, 4000A, 50kA CB's - 18-765kV, 4000A, 1-phase, motor-operated CB disc. sw. - 3-765kV, 4000A, 1-phase, motor-operated transf. disc. sw. - 6-765kV line CCVT's - 3-765kV bus CCVT's - 6-765kV, 4000A line traps - 6-line tuners - 12-765kV CB arresters - 3-765/345kV, 750MVA, 1-phase autotransformers with a 34.5kV tertiary, arresters, and oil containment - 1-345kV, 5000A, 63kA CB - 3-345kV, 5000A 1-phase, motor-operated transf. disc. - 3-345kV, 5000A, 3-phase, motor-operated CB disc. - 3-345kV CB arresters - 3-345kV bus CCVT's - 2-345kV, 3-phase, motor-operated line discharge grounding switches - 345kV-120/240V AC power system - 125VDC power system In addition to the major equipment listed above, supporting structural steel and other minor equipment will be needed such as cables, wires, foundations, etc. The station will be established on approx. 100-acres of property on agricultural land. The property will be graded for an inner fenced area of 972ft x 1,100ft, an outer fenced area of 1,012ft x 1,140ft, and includes 2-24ft gates, station stone, ground grid, and fence grounding. One (1) access road will be established. It is assumed that all necessary outages will be available.

Normal ratings

Emergency ratings

Summer (MVA)

2748.000000

3097.000000

Winter (MVA)

3097.000000

3296.000000

Environmental assessment

Land use at the proposed parcel for Jester Greenfield Substation is predominately agricultural (i.e., cultivated cropland) with shrub-scrub vegetation adjacent to a drainage channel that generally bisects the property. The preferred site is situated entirely on agricultural land. No residences are located on the site parcel. The Proposing Entity will complete the required environmental and cultural resource surveys on the property and no concerns are anticipated. A General Ohio/National Pollutant Discharge Elimination System (OH/NPDES) Permit is required for the project. The NPDES permit submission will include a SWPPP, erosion and sediment control plan, stormwater management plan, and pollution prevention plan. The stormwater management plan will include a narrative that describes the proposed stormwater management facilities, the limits of clearing and grading, and the proposed drainage patterns on the site, proposed buildings, roads, parking areas, utilities, and the total disturbed acreage for the site. The proposed stormwater management facilities and all associated impacts are typical of energy infrastructure projects and would not represent a risk to the overall project.

Outreach plan

Public outreach is a critical component to the Proposing Entity's siting process, so efforts will include properly informing the public; federal, state, and local agencies; local governments; and other key stakeholders on the need for, and benefits of, this Project. The Proposing Entity's approach to public outreach is to be always candid and transparent, and to offer a variety of tools and means for directly impacted parties to engage with our staff. The Proposing Entity will provide development updates to local government officials, key stakeholders, and impacted parties as the Project progresses. Public outreach also will involve collecting information about landowner properties and communicating with directly affected landowners during the final siting process.

Land acquisition plan	The proposed Jester station will be 100-acres in size and purchased in fee.
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	\$101,206,943.00
Component cost (in-service year)	\$113,909,306.00
Greenfield Transmission Line Component	
Component title	Jester - Hayden 345 kV Greenfield Line
Project description	Company confidential and proprietary information
Point A	Jester Station
Point B	Hayden Station
Point C	

Normal ratings

Emergency ratings

Summer (MVA)	2968.000000	4142.000000
Winter (MVA)	3752.000000	4646.000000
Conductor size and type	The new single circuit line will be constructed using 6-Wired, 2-Bundled – 1033 kcmil (54/7 Strand) ACSR “Curlew” conductor.	
Nominal voltage	AC	
Nominal voltage	345	
Line construction type	Overhead	
General route description	The 345 kV line will be approximately 12 miles between the proposed Jester Substation and the existing Hayden Substation. The line crosses predominately agricultural land within Madison and Franklin counties, Ohio.	
Terrain description	The topography for the 345 kV transmission line is relatively flat across farmland and gradually sloping adjacent to and across Big Darby Creek in Franklin County, Ohio.	
Right-of-way width by segment	The proposed Jester–Hayden 345 kV greenfield route ROW will be 150 feet in width and will parallel/cross existing rights-of-way for roads and best minimizes potential impacts to the natural and human environments.	
Electrical transmission infrastructure crossings	The proposed Jester – Hayden 345 kV transmission line will cross over two existing parallel single-circuit 69 kV transmission lines in Madison County. No other existing electrical infrastructure are crossed by the 345 kV line.	
Civil infrastructure/major waterway facility crossing plan	The proposed Jester – Hayden 345 kV transmission line will not impact civil infrastructure/major waterways. The 345 kV line will aerially span Big Darby Creek, requiring less than 1 acre of riparian tree clearing.	

Environmental impacts	Land use along the Bid Route corridor consists of predominately agricultural land use. The route intersects two distinct water features (i.e., Little Darby Creek and Big Darby Creek) and their FEMA-mapped floodplains and floodways. Narrow NWI-mapped wetlands are spanned adjacent to streams. Based on existing aerial photography, the proposed route likely passes unmapped wetland or drainage features. Desktop studies and record reviews will be conducted for wetlands and streams, hazardous materials, and cultural resources. No major environmental impacts or concerns were identified based on a preliminary desktop review. A General National Pollutant Discharge Elimination System (NPDES) Permit is required for the project and will be administered by Madison and Franklin counties and the city of Columbus, who are delegated program authority by the Ohio Department of Environmental Protection. The NPDES permit submission will include a Stormwater Pollution Prevention Plan (SWP3), Notice of Intent (NOI), and associated county applications if needed. There would be no proposed stormwater management facilities associated with the linear project and therefore the work would not represent a risk to the overall project.
Tower characteristics	This 345 kV, 6-wired, single circuit line utilizes self-supporting BOLD lattice tower construction that is vertically configured. Self-supporting suspension structures will be used to the extent possible as an effort to keep electrical infrastructure compatible with agricultural use.
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	\$59,546,483.00
Component cost (in-service year)	\$67,020,093.00

Greenfield Transmission Line Component

Component title	Jester 765 kV Line Cut-ins	
Project description	Company confidential and proprietary information	
Point A	Marysville	
Point B	Jester	
Point C	Flatlick	
	Normal ratings	Emergency ratings
Summer (MVA)	4047.000000	4349.000000
Winter (MVA)	4484.000000	4961.000000
Conductor size and type	The new line cut-ins will be constructed using a bundled conductor to meet/exceed SN/SE WN/WE ratings stated above.	
Nominal voltage	AC	
Nominal voltage	765	
Line construction type	Overhead	
General route description	The 765 kV tie-ins will be approximately 0.25 mile between the proposed Jester Greenfield Substation and the existing Gavin – Marysville 765 kV transmission lines in Madison County, Ohio.	
Terrain description	The topography for the 765 kV tie-ins is flat and consists of cultivated cropland. Land use in the surrounding area is predominately agricultural. No state or local highways are crossed by the 765 kV tie-ins.	
Right-of-way width by segment	The 765 kV greenfield line cut-ins routes will be 200 feet each in width and minimize potential impacts to the natural and human environments.	
Electrical transmission infrastructure crossings	No electrical transmission infrastructure crossings are present with the 765kV cut-ins.	
Civil infrastructure/major waterway facility crossing plan	The cut-ins will not impact civil infrastructure/major waterways.	

Environmental impacts	The cut-ins have undergone a robust siting analysis, as well as desktop environmental and cultural resource assessments.
Tower characteristics	The condition of the existing line is assumed to be in good working order. Structure loading at adjacent structures would remain unchanged due to proposing structure locations on cL and near existing tower locations.
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	\$3,584,000.00
Component cost (in-service year)	\$4,033,824.00
Substation Upgrade Component	
Component title	Hayden Station 345 kV Expansion
Project description	Company confidential and proprietary information
Substation name	Hayden
Substation zone	AEP

Substation upgrade scope Create a new 345 kV line position to Jester Station (double circuit line operated 6-wired) by adding 1-345 kV CB to the existing ring bus, 2-345 kV take-off towers, and other associated items.

Transformer Information

None

New equipment description - 1-345kV, 5000A, 63kA CB - 2-345kV, 3000A, 3-phase, motor-operated CB disc. sw. - 6-345kV CB arresters - 3-345kV bus CCVT's - 2-345kV, 3-phase, motor-operated line discharge grounding switches - Install associated relay equipment in the existing control enclosure. - Necessary structural supports for equipment

Substation assumptions This proposal assumes that all necessary outages will be available, the existing AC, DC, & telecom systems will accommodate the new equipment, the existing control enclosure has space for the new relay equipment, ground grid resistivity test data are available, ground grid upgrades will not be needed, the existing cable trench has space for the new control cables, soil boring logs and geotechnical report are available, additional station stone will not be needed, and space will be available to install the equipment outlined in this description.

Real-estate description All necessary land rights are acquired.

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 \$4,742,204.00

Component cost (in-service year) \$5,337,393.00

Transmission Line Upgrade Component

Component title Hyatt - West Millersport 345 kV Reroute

Project description Company confidential and proprietary information

Impacted transmission line Hyatt - West Millersport

Point A Hyatt Station

Point B West Millersport Station

Point C

Terrain description Terrain is gently rolling hills.

Existing Line Physical Characteristics

Operating voltage 345

Conductor size and type 1,414 kcmil 62/19 "Falbo" ACSR/PE

Hardware plan description It is assumed no hardware could be reused.

Tower line characteristics The condition of the existing line is assumed to be in good working order. Structure loading at adjacent structures would remain unchanged.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	971.000000	1376.000000
Winter (MVA)	1234.000000	1585.000000
Conductor size and type	unknown	

Shield wire size and type	unknown
Rebuild line length	0.6 miles
Rebuild portion description	Approximately 0.5-mile adjustment to 345kV alignment, located wholly within AEP-owned property, to connect to the Corridor substation.
Right of way	It is anticipated that the Proposed Solution would not require new ROW; however, current landowners that are crossed by the existing transmission line would need to be notified of the proposed upgrades.
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	\$4,850,301.00
Component cost (in-service year)	\$5,459,055.00

Transmission Line Upgrade Component

Component title	Kenny – Roberts 138 kV Upgrade
Project description	Company confidential and proprietary information

Impacted transmission line	Kenny - Roberts
Point A	Kenny Station
Point B	Roberts Station
Point C	
Terrain description	Terrain along the Proposed Solution is flat in a residentially developed community in Upper Arlington.

Existing Line Physical Characteristics

Operating voltage	138
Conductor size and type	Unkown
Hardware plan description	It is assumed no hardware could be reused.
Tower line characteristics	N/A

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	138.000000	138.000000
	Normal ratings	Emergency ratings
Summer (MVA)	285.000000	311.000000
Winter (MVA)	285.000000	318.000000
Conductor size and type	unknown	
Shield wire size and type	unknown	
Rebuild line length	3.5 miles	

Rebuild portion description	The incumbent portion of the Kenny – Roberts 138 kV line in western Columbus, Ohio, involves rebuilding the existing underground line predominantly within road right-of-way. The underground rebuild begins at the existing Kenny Substation, traveling south and west through North Star Road and Zollinger Road. From here, the underground rebuild travels through Griggs Reservoir Park and the Scioto River before transitioning to an overhead line just west of the river that continues to the existing Roberts Substation.
Right of way	It is anticipated that the Proposed Solution would not require new 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	\$49,860,358.00
Component cost (in-service year)	\$56,118,263.00
Substation Upgrade Component	
Component title	Corridor Substation Upgrade
Project description	Company confidential and proprietary information
Substation name	Corridor Station

Substation zone	AEP
Substation upgrade scope	Create two (2) new 345 kV line positions and cut-in the existing 345 kV Hyatt-West Millersport line by adding 3-345 kV CB's, a CB & a half string, 2-345 kV take-off towers, and other associated items.
Transformer Information	
None	
New equipment description	- 3-345kV, 5000A, 63kA CB's - 3-345kV, 3000A, 3-phase, motor-operated CB disc. sw. - 6-345kV line arresters - 6-345kV line CCVT's - 4-345kV, 3000A line traps - Install associated relay equipment in the existing control enclosure. - Necessary support structures for equipment
Substation assumptions	This proposal assumes that all necessary outages will be available, the existing AC, DC, & telecom systems will accommodate the new equipment, the existing control enclosure has space for the new relay equipment, ground grid resistivity test data are available, ground grid upgrades will not be needed, the existing cable trench has space for the new control cables, soil boring logs and geotechnical report are available, additional station stone will not be needed, and space will be available to install the equipment outlined in this description.
Real-estate description	All necessary land rights are acquired.
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 \$5,520,501.00

Component cost (in-service year) \$6,213,371.00

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
2023W2-N2-ST31	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST30	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST33	243458	05HYATT	246752	05VASSEL	1	345	205	Summer N-1-1	Included
2023W2-N2-ST32	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST24	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST23	243553	05POLARS	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST26	243513	05GENOA	243537	05MALIS	2	138	205	Summer N-1-1	Included
2023W2-N2-ST25	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST28	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST27	243526	05HYATT	243537	05MALIS	2	138	205	Summer N-1-1	Included
2023W2-N2-ST29	243513	05GENOA	243537	05MALIS	2	138	205	Summer N-1-1	Included
2023W2-N2-ST40	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST42	242939	05MARYSV	243458	05HYATT	1	345	205	Summer N-1-1	Included
2023W2-N2-ST41	243553	05POLARS	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST44	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST43	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST35	243513	05GENOA	243537	05MALIS	2	138	205	Summer N-1-1	Included
2023W2-N2-ST34	243513	05GENOA	243591	05SPRNGR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST37	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST36	243553	05POLARS	243590	05WESTAR	1	138	205	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
2023W2-N2-ST39	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST38	243458	05HYATT	246752	05VASSEL	1	345	205	Summer N-1-1	Included
2023W2-N1-WT1	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Winter Basecase	Included
2023W2-N2-ST50	243513	05GENOA	243591	05SPRNGR	1	138	205	Summer N-1-1	Included
2023W2-N1-WT3	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Winter Basecase	Included
2023W2-N1-WT2	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Winter Basecase	Included
2023W2-N1-WT5	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Winter Basecase	Included
2023W2-N1-WT4	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Winter Basecase	Included
2023W2-N2-ST46	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST45	243513	05GENOA	243591	05SPRNGR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST48	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST47	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST49	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N1-WT10	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Winter Basecase	Included
2023W2-N1-ST2	243538	05MALISX	243537	05MALIS	ZB	138/138	205/205	Summer Base Case	Included
2023W2-N1-WT12	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Winter Basecase	Included
2023W2-N1-ST1	243538	05MALISX	243537	05MALIS	ZB	138/138	205/205	Summer Base Case	Included
2023W2-N1-WT11	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Winter Basecase	Included
2023W2-N1-ST4	243538	05MALISX	243537	05MALIS	ZB	138/138	205/205	Summer Base Case	Included
2023W2-N1-WT14	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Winter Basecase	Included
2023W2-N1-ST3	243538	05MALISX	243537	05MALIS	ZB	138/138	205/205	Summer Base Case	Included
2023W2-N1-WT13	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Winter Basecase	Included
2023W2-N1-ST6	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Summer Base Case	Included
2023W2-N2-WT2	243537	05MALIS	243538	05MALISX	ZB	138	205	Winter N-1-1	Included
2023W2-N1-ST5	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Summer Base Case	Included
2023W2-N2-WT1	243513	05GENOA	243590	05WESTAR	1	138	205	Winter N-1-1	Included
2023W2-N1-WT7	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Winter Basecase	Included
2023W2-N1-WT6	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Winter Basecase	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2023W2-N1-WT9	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Winter Basecase	Included
2023W2-N1-WT8	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Winter Basecase	Included
2023W2-N1-ST11	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Summer Base Case	Included
2023W2-N2-WT7	243553	05POLARS	243590	05WESTAR	1	138	205	Winter N-1-1	Included
2023W2-N2-WT6	243537	05MALIS	243538	05MALISX	ZB	138	205	Winter N-1-1	Included
2023W2-N1-ST13	243537	05MALIS	243553	05POLARS	1	138/138	205/205	Summer Base Case	Included
2023W2-N1-ST12	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Summer Base Case	Included
2023W2-N2-WT8	243553	05POLARS	243590	05WESTAR	1	138	205	Winter N-1-1	Included
2023W2-N1-ST15	243590	05WESTAR	243513	05GENOA	1	138/138	205/205	Summer Base Case	Included
2023W2-N1-ST14	243537	05MALIS	243553	05POLARS	1	138/138	205/205	Summer Base Case	Included
2023W2-N1-ST17	243538	05MALISX	243537	05MALIS	ZB	138/138	205/205	Summer Base Case	Included
2023W2-GD-W19	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205	Winter Gen Deliv	Included
2023W2-N1-ST16	243538	05MALISX	243537	05MALIS	ZB	138/138	205/205	Summer Base Case	Included
2023W2-GD-W15	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205	Winter Gen Deliv	Included
2023W2-GD-W15	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205	Winter Gen Deliv	Included
2023W2-N1-ST8	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Summer Base Case	Included
2023W2-GD-S14	243590	05WESTAR	243513	05GENOA	1	138	205	Summer Gen Deliv	Included
2023W2-N2-WT4	243513	05GENOA	243590	05WESTAR	1	138	205	Winter N-1-1	Included
2023W2-N1-ST7	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Summer Base Case	Included
2023W2-N2-WT3	243537	05MALIS	243553	05POLARS	1	138	205	Winter N-1-1	Included
2023W2-N1-ST10	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Summer Base Case	Included
2023W2-GD-S16	243537	05MALIS	243553	05POLARS	1	138	205	Summer Gen Deliv	Included
2023W2-N1-ST9	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Summer Base Case	Included
2023W2-N2-WT5	243537	05MALIS	243553	05POLARS	1	138	205	Winter N-1-1	Included
2023W2-GD-S18	243590	05WESTAR	243513	05GENOA	1	138	205	Summer Gen Deliv	Included
2023W2-GD-S17	242933	05RPMONE	246929	05MADDOX	1	345	205	Summer Gen Deliv	Included
2023W2-GD-W15	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205	Winter Gen Deliv	Included
2023W2-GD-W15	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205	Winter Gen Deliv	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2023W2-N1-ST22	243538	05MALISX	243537	05MALIS	ZB	138/138	205/205	Summer Base Case	Included
2023W2-N1-ST21	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Summer Base Case	Included
2023W2-N1-ST24	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Summer Base Case	Included
2023W2-N1-ST23	243538	05MALISX	243537	05MALIS	ZB	138/138	205/205	Summer Base Case	Included
2023W2-N1-ST26	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Summer Base Case	Included
2023W2-N1-ST25	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Summer Base Case	Included
2023W2-GD-S116	243538	05MALISX	243537	05MALIS	ZB	138	205	Summer Gen Deliv	Included
2023W2-GD-W21	243538	05MALISX	243537	05MALIS	ZB	138	205	Winter Gen Deliv	Included
2023W2-N1-ST27	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Summer Base Case	Included
2023W2-GD-W21	242933	05RPMONE	246929	05MADDOX	1	345	205	Winter Gen Deliv	Included
2023W2-GD-W58	242933	05RPMONE	246929	05MADDOX	1	345	205	Winter Gen Deliv	Included
2023W2-N1-ST19	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Summer Base Case	Included
2023W2-GD-W25	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205	Winter Gen Deliv	Included
2023W2-N1-ST18	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205/205	Summer Base Case	Included
2023W2-GD-W16	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205	Winter Gen Deliv	Included
2023W2-GD-W16	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205	Winter Gen Deliv	Included
2023W2-N1-ST20	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205/205	Summer Base Case	Included
2023W2-GD-W16	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205	Winter Gen Deliv	Included
2023W2-GD-W16	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205	Winter Gen Deliv	Included
2023W2-GD-S121	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205	Summer Gen Deliv	Included
2023W2-GD-S122	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205	Summer Gen Deliv	Included
2023W2-GD-S123	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205	Summer Gen Deliv	Included
2023W2-GD-S4	242926	05MALIS	290237	05MALIS 1EQ	1	765/999	205	Summer Gen Deliv	Included
2023W2-GD-S127	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205	Summer Gen Deliv	Included
2023W2-GD-S6	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205	Summer Gen Deliv	Included
2023W2-GD-S126	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205	Summer Gen Deliv	Included
2023W2-N2-ST11	243553	05POLARS	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-GD-S125	290237	05MALIS 1EQ	243538	05MALISX	1	999/138	205	Summer Gen Deliv	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2023W2-N2-ST10	243553	05POLARS	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-GD-S11	4243538	05MALISX	243537	05MALIS	ZB	138	205	Summer Gen Deliv	Included
2023W2-N2-ST9	243513	05GENOA	243591	05SPRNDR	1	138	205	Summer N-1-1	Included
2023W2-GD-S115	243538	05MALISX	243537	05MALIS	ZB	138	205	Summer Gen Deliv	Included
2023W2-N2-ST2	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-GD-W2	243538	05MALISX	243537	05MALIS	ZB	138	205	Winter Gen Deliv	Included
2023W2-GD-S3	243538	05MALISX	243537	05MALIS	ZB	138	205	Summer Gen Deliv	Included
2023W2-N2-ST1	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-GD-W2	243538	05MALISX	243537	05MALIS	ZB	138	205	Winter Gen Deliv	Included
2023W2-N2-ST4	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-GD-W59	243538	05MALISX	243537	05MALIS	ZB	138	205	Winter Gen Deliv	Included
2023W2-N2-ST3	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-GD-W2	243538	05MALISX	243537	05MALIS	ZB	138	205	Winter Gen Deliv	Included
2023W2-N2-ST6	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST5	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST8	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST7	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST20	243513	05GENOA	243537	05MALIS	2	138	205	Summer N-1-1	Included
2023W2-N2-ST22	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST21	243526	05HYATT	243537	05MALIS	2	138	205	Summer N-1-1	Included
2023W2-N2-ST13	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-GD-S135	243537	05MALIS	243553	05POLARS	1	138	205	Summer Gen Deliv	Included
2023W2-N2-ST12	243553	05POLARS	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST15	243547	05MORSE	243591	05SPRNDR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST14	243553	05POLARS	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST17	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included
2023W2-N2-ST16	243513	05GENOA	243591	05SPRNDR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST19	243547	05MORSE	243591	05SPRNDR	1	138	205	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
2023W2-N2-ST18	243537	05MALIS	243553	05POLARS	1	138	205	Summer N-1-1	Included

New Flowgates

Company confidential and proprietary information

Financial Information

Capital spend start date 10/2024

Construction start date 07/2026

Project Duration (In Months) 44

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. Jester Greenfield Station - Transource
2. Jester - Hayden 345 kV Greenfield Line - Transource

Cost elements covered by cost containment

Engineering & design Yes

Permitting / routing / siting No

ROW / land acquisition No

Materials & equipment No

Construction & commissioning No

Construction management	No
Overheads & miscellaneous costs	No
Taxes	No
AFUDC	No
Escalation	No
Additional Information	Company confidential and proprietary information
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?	Company confidential and proprietary information

Additional Comments

None