

East Fayette - Melbourne 138 kV Line

General Information

Proposing entity name	ATSI
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Yes
Company proposal ID	2026-W1-594
PJM Proposal ID	594
Project title	East Fayette - Melbourne 138 kV Line
Project description	Construct a new East Fayette-Melbourne 138 kV Line. Rebuild a section of the Allen Jct-East Fayette 138 kV Line to accommodate the new East Fayette - Melbourne 138 kV Line and construct the remaining part of the East Fayette - Melbourne 138 kV Line on double circuit steel poles with 795 ACSS. Install conductor for current and future circuit.
Email	Confidential information
Project in-service date	06/2031
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	Yes
Additional benefits	Confidential and proprietary information

Project Components

1. East Fayette Substation - New Line Terminal
2. Melbourne Substation - New Line Terminal
3. Stryker Substation - Revise Relay Settings
4. Allen Junction Substation - Revise Relay Settings

5. Rebuild Allen Junction - East Fayette 138 kV Line
6. Construct East Fayette-Melbourne 138 kV Line
7. CIAC for Distribution Work

Substation Upgrade Component

Component title	East Fayette Substation - New Line Terminal
Project description	Confidential and proprietary information
Substation name	East Fayette Substation
Substation zone	ATSI
Substation upgrade scope	Install three 138 kV circuit breakers to provide for new line terminal.
Transformer Information	
None	
New equipment description	Three 138 kV breakers rated for 3000 A, five new 138 kV switches, additional bus work and substation conductor to provide for new line terminal.
Substation assumptions	All work will be completed within the existing substation perimeter.
Real-estate description	No additional land will need to be purchased.
Construction responsibility	Confidential and proprietary information
Benefits/Comments	Confidential and proprietary information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential and proprietary information
Permitting / routing / siting	Confidential and proprietary information
ROW / land acquisition	Confidential and proprietary information
Materials & equipment	Confidential and proprietary information
Construction & commissioning	Confidential and proprietary information

Construction management	Confidential and proprietary information
Overheads & miscellaneous costs	Confidential and proprietary information
Contingency	Confidential and proprietary information
Total component cost	\$6,660,733.00
Component cost (in-service year)	\$7,381,387.00
Substation Upgrade Component	
Component title	Melbourne Substation - New Line Terminal
Project description	Confidential and proprietary information
Substation name	Melbourne Substation
Substation zone	ATSI
Substation upgrade scope	Install one 138 kV circuit breaker.
Transformer Information	
None	
New equipment description	Install one 138 kV 3000 A circuit breaker, three 138 kV switches, associated bus work and substation conductor to provide for new line terminal.
Substation assumptions	All work will be completed within the existing substation perimeter.
Real-estate description	No additional land will need to be purchased.
Construction responsibility	Confidential and proprietary information
Benefits/Comments	Confidential and proprietary information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential and proprietary information
Permitting / routing / siting	Confidential and proprietary information

ROW / land acquisition	Confidential and proprietary information
Materials & equipment	Confidential and proprietary information
Construction & commissioning	Confidential and proprietary information
Construction management	Confidential and proprietary information
Overheads & miscellaneous costs	Confidential and proprietary information
Contingency	Confidential and proprietary information
Total component cost	\$2,581,581.00
Component cost (in-service year)	\$2,855,090.00
Substation Upgrade Component	
Component title	Stryker Substation - Revise Relay Settings
Project description	Confidential and proprietary information
Substation name	Stryker Substation
Substation zone	ATSI
Substation upgrade scope	Revise relay settings.
Transformer Information	
None	
New equipment description	N/A
Substation assumptions	All work will be completed within the existing substation perimeter.
Real-estate description	No additional property will be required.
Construction responsibility	Confidential and proprietary information
Benefits/Comments	Confidential and proprietary information

Component Cost Details - In Current Year \$

Engineering & design	Confidential and proprietary information
Permitting / routing / siting	Confidential and proprietary information
ROW / land acquisition	Confidential and proprietary information
Materials & equipment	Confidential and proprietary information
Construction & commissioning	Confidential and proprietary information
Construction management	Confidential and proprietary information
Overheads & miscellaneous costs	Confidential and proprietary information
Contingency	Confidential and proprietary information
Total component cost	\$102,618.00
Component cost (in-service year)	\$113,194.00

Substation Upgrade Component

Component title	Allen Junction Substation - Revise Relay Settings
Project description	Confidential and proprietary information
Substation name	Allen Junction Substation
Substation zone	ATSI
Substation upgrade scope	Revise relay settings.

Transformer Information

None	
New equipment description	N/A
Substation assumptions	All work will be completed within the existing substation perimeter.
Real-estate description	No additional land will need to be purchased.

Construction responsibility	Confidential and proprietary information
Benefits/Comments	Confidential and proprietary information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential and proprietary information
Permitting / routing / siting	Confidential and proprietary information
ROW / land acquisition	Confidential and proprietary information
Materials & equipment	Confidential and proprietary information
Construction & commissioning	Confidential and proprietary information
Construction management	Confidential and proprietary information
Overheads & miscellaneous costs	Confidential and proprietary information
Contingency	Confidential and proprietary information
Total component cost	\$106,882.00
Component cost (in-service year)	\$118,067.00
Transmission Line Upgrade Component	
Component title	Rebuild Allen Junction - East Fayette 138 kV Line
Project description	Confidential and proprietary information
Impacted transmission line	Allen Junction - East Fayette 138 kV Line
Point A	East Fayette Substation
Point B	Allen Junction Substation
Point C	Lyons Substation
Terrain description	Flat, road ROW

Existing Line Physical Characteristics

Operating voltage	138 kV
Conductor size and type	477 ACSS
Hardware plan description	Line section will be rebuilt in its entirety.
Tower line characteristics	Both single circuit and double circuit monopole direct embed tangents, and angle and dead end structures on foundations

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	138.000000	138.000000
	Normal ratings	Emergency ratings
Summer (MVA)	448.000000	516.000000
Winter (MVA)	448.000000	543.000000
Conductor size and type	795 ACSS	
Shield wire size and type	SFSJ-J-6641 OPGW	
Rebuild line length	13 miles	
Rebuild portion description	Rebuild the existing Allen Junction - East Fayette 138kV Line as a double circuit (13.0 miles) with the new East Fayette - Melbourne 138 kV Line	
Right of way	100'	
Construction responsibility	Confidential and proprietary information	
Benefits/Comments	Confidential and proprietary information	
Component Cost Details - In Current Year \$		
Engineering & design	Confidential and proprietary information	
Permitting / routing / siting	Confidential and proprietary information	

ROW / land acquisition	Confidential and proprietary information
Materials & equipment	Confidential and proprietary information
Construction & commissioning	Confidential and proprietary information
Construction management	Confidential and proprietary information
Overheads & miscellaneous costs	Confidential and proprietary information
Contingency	Confidential and proprietary information
Total component cost	\$42,584,561.00
Component cost (in-service year)	\$47,617,253.00

Greenfield Transmission Line Component

Component title	Construct East Fayette-Melbourne 138 kV Line
Project description	Confidential and proprietary information
Point A	East Fayette Substation
Point B	Melbourne Substation

Point C		
	Normal ratings	Emergency ratings
Summer (MVA)	448.000000	516.000000
Winter (MVA)	448.000000	543.000000
Conductor size and type	795 ACSS	
Nominal voltage	AC	
Nominal voltage	138	
Line construction type	Overhead	

General route description	Transmission line route traverses north from the Melbourne Substation until intersecting the East Fayette-Allen Junction line near Lyons Substation. Rebuild East-Fayette-Allen Junction as double circuit for 13.0 miles west to East Fayette Substation
Terrain description	Flat; road ROW, and agricultural fields
Right-of-way width by segment	100 ft throughout
Electrical transmission infrastructure crossings	None
Civil infrastructure/major waterway facility crossing plan	Crosses Rt 22, RT 21, RT 20, Bean Creek, RT 19, RT 18, Township Rd 16-3, RT 16, County Rd 14-2, RT 14, RT 13, RT 12, Township Rd 11-2, County Rd 10-3, RT 10 (10 times), RT J, RT HJ, I-90, RT H, US Hwy 20A
Environmental impacts	Road Bonds are required. Environmental Filming Documentation of Existing roads are required Environmental Access and Road Crossing Permit Fees is required. Environmental Development of Permit Binder is required. Environmental Cultural Resource Consultation is required. Environmental Construction walk down is required. Wetland delineations and WDR are required ETR consultations letters are included Internal environmental engineering and external project management costs are included.
Tower characteristics	Double circuit monopole tangent, angle, and deadend structures
Construction responsibility	Confidential and proprietary information
Benefits/Comments	Confidential and proprietary information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential and proprietary information
Permitting / routing / siting	Confidential and proprietary information
ROW / land acquisition	Confidential and proprietary information
Materials & equipment	Confidential and proprietary information
Construction & commissioning	Confidential and proprietary information
Construction management	Confidential and proprietary information
Overheads & miscellaneous costs	Confidential and proprietary information

Contingency	Confidential and proprietary information
Total component cost	\$45,818,226.00
Component cost (in-service year)	\$51,111,012.00

Greenfield Transmission Line Component

Component title	CIAC for Distribution Work
Project description	Confidential and proprietary information
Point A	East Fayette
Point B	Melbourne
Point C	

	Normal ratings	Emergency ratings
Summer (MVA)	0.000000	0.000000
Winter (MVA)	0.000000	0.000000
Conductor size and type	N/A	
Nominal voltage	AC	
Nominal voltage	12.5	
Line construction type	Overhead	
General route description	Flat	
Terrain description	Flat	
Right-of-way width by segment	100'	
Electrical transmission infrastructure crossings	N/A	
Civil infrastructure/major waterway facility crossing plan	N/A	

Environmental impacts	N/A
Tower characteristics	N/A
Construction responsibility	Confidential and proprietary information
Benefits/Comments	Confidential and proprietary information
Component Cost Details - In Current Year \$	
Engineering & design	Confidential and proprietary information
Permitting / routing / siting	Confidential and proprietary information
ROW / land acquisition	Confidential and proprietary information
Materials & equipment	Confidential and proprietary information
Construction & commissioning	Confidential and proprietary information
Construction management	Confidential and proprietary information
Overheads & miscellaneous costs	Confidential and proprietary information
Contingency	Confidential and proprietary information
Total component cost	\$6,067,992.00
Component cost (in-service year)	\$6,798,251.00

Congestion Drivers

None

Existing Flowgates

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026w1-AMPT-T15	239295	02EFAYTE	241199	02EFAYE_KEX+	1	69	202	FERC 715	Included
2026w1-AMPT-T16	241199	02EFAYE_KEX+	298905	KEXON	1	69	202	FERC 715	Included
2026w1-AMPT-T17	241199	02EFAYE_KEX+	298905	KEXON	1	69	202	FERC 715	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2026w1-AMPT-T18	239295	02EFAYTE	241199	02EFAYE_KEX+	1	69	202	FERC 715	Included

New Flowgates

None

Financial Information

Capital spend start date 04/2027

Construction start date 06/2028

Project Duration (In Months) 50

Cost Containment Commitment

Cost cap (in current year) Confidential and proprietary information.

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

Components covered by cost containment

1. East Fayette Substation - New Line Terminal - PROPOSER
2. Melbourne Substation - New Line Terminal - PROPOSER
3. Stryker Substation - Revise Relay Settings - PROPOSER
4. Allen Junction Substation - Revise Relay Settings - PROPOSER
5. Rebuild Allen Junction - East Fayette 138 kV Line - PROPOSER
6. Construct East Fayette-Melbourne 138 kV Line - PROPOSER

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	Confidential and proprietary information.
Is the proposer offering a binding cap on ROE?	No
Is the proposer offering a Debt to Equity Ratio cap?	Confidential and proprietary information.
Additional cost containment measures not covered above	Confidential and proprietary information.

Additional Comments

Please contact Larre Hozempa (lhozemp@firstenergycorp.com) or Joe Cassata (jcassata@firstenergycorp.com) with any questions.