

Lime Kiln Substation - Replace 230 kV breakers

General Information

Proposing entity name	POTOED
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Yes
Company proposal ID	2026-W1-745
PJM Proposal ID	745
Project title	Lime Kiln Substation - Replace 230 kV breakers
Project description	As part of the 2026 RTEP short circuit analysis it was identified the short circuit current exceeds the interrupting rating of the following 230 kV breakers at Lime Kiln Substation. MTGMRY_2 MNCACY_2 MCCAIN_2 B231 DOUBS207 The required breaker interrupting rating shall be 63 kA. Replace limiting substation conductor on the 230 kV line terminals at Lime Kiln Substation.
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?	No
Additional benefits	Confidential Information

Project Components

1. Lime Kiln Substation - 230 kV Breaker Replacement

Substation Upgrade Component

Component title	Lime Kiln Substation - 230 kV Breaker Replacement
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Project description	Confidential Information and CEI
Substation name	Lime Kiln Substation
Substation zone	APS - Potomac Edison
Substation upgrade scope	Lime Kiln Substation - Replace breakers MTGMRY_2, MNCACY_2, MCCAIN_2, B231 and DOUBS207 with new 230 kV breakers with 63 kA interrupting capability - Upgrade 1272 KCMIL 45/7 ACSR breaker leads on Montgomery, Monocacy, and McCain line exits with 1590 KCMIL 45/7 ACSR conductor. - Perform ground grid, bus work, foundation, and structure adequacy studies to confirm 63 kA fault current capability.
Transformer Information	
None	
New equipment description	Upgrade the Lime Kiln Substation by replacing five existing 230 kV line terminal breakers with 63 kAIC, 4,000A breakers. The project also includes replacing limiting conductors and completing the required SCADA and relay connections.
Substation assumptions	All work will be performed within the existing substation footprint, with no transmission line construction, substation expansion, or additional land acquisition.
Real-estate description	All work will be performed within the existing substation footprint, with no transmission line construction, substation expansion, or additional land acquisition.
Construction responsibility	PROPOSER
Benefits/Comments	Proprietary and Confidential Information
Component Cost Details - In Current Year \$	
Engineering & design	Proprietary and Confidential Information
Permitting / routing / siting	Proprietary and Confidential Information
ROW / land acquisition	Proprietary and Confidential Information
Materials & equipment	Proprietary and Confidential Information
Construction & commissioning	Proprietary and Confidential Information
Construction management	Proprietary and Confidential Information

Overheads & miscellaneous costs	Proprietary and Confidential Information
Contingency	Proprietary and Confidential Information
Total component cost	\$5,731,854.00
Component cost (in-service year)	\$6,452,964.00

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-SC-28	235481	LIME KLN 230.kV	235481	LIME KLN 230.kV	N/A	N/A	201	Short Circuit	Included
2026W1-SC-29	235481	LIME KLN 230.kV	235481	LIME KLN 230.kV	N/A	N/A	201	Short Circuit	Included
2026W1-SC-30	235481	LIME KLN 230.kV	235481	LIME KLN 230.kV	N/A	N/A	201	Short Circuit	Included
2026W1-SC-31	235481	LIME KLN 230.kV	235481	LIME KLN 230.kV	N/A	N/A	201	Short Circuit	Included
2026W1-SC-32	235481	LIME KLN 230.kV	235481	LIME KLN 230.kV	N/A	N/A	201	Short Circuit	Included

New Flowgates

None

Financial Information

Capital spend start date	04/2027
Construction start date	09/2030
Project Duration (In Months)	50

Additional Comments

Please contact Larre Hozempa (lhozemp@firstenergycorp.com) or Andrew Horne (ahorne@firstenergycorp.com) with any questions.