

Opossum Creek and New London Reactors

General Information

Proposing entity name	AEPSCT
Does the entity who is submitting this proposal intend to be the Designated Entity for this proposed project?	Yes
Company proposal ID	AEP_F
PJM Proposal ID	524
Project title	Opossum Creek and New London Reactors
Project description	Install a 5% reactor at Opossum Creek on the Opossum Creek-Redeye 138 kV line and a 5% reactor at New London on the New London-Altavista 138 kV line.
Email	nckoehler@aep.com
Project in-service date	06/2027
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	

Project Components

1. New London Reactor Install
2. Opossum Creek Reactor Install

Substation Upgrade Component

Component title	New London Reactor Install
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Project description	Install a 5% series reactor at New London station and update remote end relay settings due to new line impedances.
Substation name	New London
Substation zone	205 - AEP
Substation upgrade scope	Expand New London station, Install new 138kV box bay, 2-138kV circuit breakers and re-terminate Reusens and Brush Tavern 138kV lines. Install series reactors on the Altavista 138kV line. Update relay settings at Brush Tavern, Reusens, and Altavista stations.

Transformer Information

None	
New equipment description	2-138kV CIRCUIT BREAKERS (SN-3126A/ SE-3126A/ WN-3874A/ WE-3874A), 4-138kV Disconnect Switches (SN-3440A/ SE-3774A/ WN-4466A/ WE-4741A), 2x1272AAC Bus (SN-2450A/ SE-2856A/ WN-3098A/ WE-3398A) 3-19 Ohm, 50.4mH Series Reactors (SN-2000A/ SE-2400A/ WN-2000A/ WE-2400A)
Substation assumptions	Assume property (farmland) adjacent to station is available for purchase.
Real-estate description	
Construction responsibility	AEP
Benefits/Comments	

Component Cost Details - In Current Year \$

Engineering & design	Detailed cost breakdown
Permitting / routing / siting	Detailed cost breakdown
ROW / land acquisition	Detailed cost breakdown
Materials & equipment	Detailed cost breakdown
Construction & commissioning	Detailed cost breakdown
Construction management	Detailed cost breakdown
Overheads & miscellaneous costs	Detailed cost breakdown

Contingency	Detailed cost breakdown
Total component cost	\$6,547,040.47
Component cost (in-service year)	\$.00

Substation Upgrade Component

Component title	Opossum Creek Reactor Install
Project description	Install a 5% reactor at Opossum Creek station. Update associated relay settings.
Substation name	Opossum Creek
Substation zone	205 - AEP
Substation upgrade scope	At Opossum Creek station, relocate Cap Bank BB and install a 5% series reactors on the Redeye 138kV line. Update relay settings at Redeye station due to the reactor install.

Transformer Information

None	
New equipment description	2x1272AAC Bus (SN-2450A/ SE-2856A/ WN-3098A/ WE-3398A) 3-19 Ohm, 50.4mH Series Reactors (SN-2000A/ SE-2400A/ WN-2000A/ WE-2400A)
Substation assumptions	New equipment will be constructed on AEP property in the existing station footprint. No station expansion required.
Real-estate description	N/A
Construction responsibility	AEP
Benefits/Comments	

Component Cost Details - In Current Year \$

Engineering & design	Detailed cost breakdown
Permitting / routing / siting	Detailed cost breakdown
ROW / land acquisition	Detailed cost breakdown

Materials & equipment	Detailed cost breakdown
Construction & commissioning	Detailed cost breakdown
Construction management	Detailed cost breakdown
Overheads & miscellaneous costs	Detailed cost breakdown
Contingency	Detailed cost breakdown
Total component cost	\$2,315,784.77
Component cost (in-service year)	\$.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
2022W3-GD-W99	242701	05LEESVI	314667	4ALTVSTA	1	138	205/345	Winter Gen Deliv	Included
2022W3-GD-W99	242701	05LEESVI	314667	4ALTVSTA	1	138	205/345	Winter Gen Deliv	Included

New Flowgates

None

Financial Information

Capital spend start date	01/2024
Construction start date	01/2026
Project Duration (In Months)	41

Additional Comments

None