West Kingsport Line Cut In

General Information

Proposing entity name **AEPSCT** Does the entity who is submitting this proposal intend to be the Yes Designated Entity for this proposed project? Company proposal ID AEP K PJM Proposal ID 19 West Kingsport Line Cut In Project title Project description Install two (2) 138 KV circuit breakers in the M and N strings in the breaker-and-a half configuration in West Kingsport station 138 KV yard to allow the Clinch River - Moreland Dr. 138 KV to cut in the West Kingsport station. The existing Clinch River-Moreland Drive line physically passes through the West Kingsport station but does not electrically connect. This project will establish the electrical connection to that line. nckoehler@aep.com **Email** 11/2025 Project in-service date Tie-line impact No Interregional project No Is the proposer offering a binding cap on capital costs? No Additional benefits

Project Components

- 1. West Kingsport Breaker Addition
- 2. Riverport Station Remote End Relaying

2021-W1-19

Substation Upgrade Component

Component title

West Kingsport Breaker Addition

Install two (2) 138 KV circuit breakers in the M and N strings in the breaker-and-a half configuration in West Kingsport station 138 KV yard to allow the Clinch River – Moreland Dr. 138 KV to cut in the West Kingsport station. Remove structures for the bypass within the station fence.

Substation name

West Kingsport

West Kingsport

Substation zone 205 - AEP

Substation upgrade scope

Install two (2) 138 KV circuit breakers in the M and N strings in the breaker-and-a half configuration in West Kingsport station 138 KV yard to allow the Clinch River – Moreland Dr. 138 KV to cut in the West Kingsport station. Remove structures for the bus-tie bypass within the station fence.

Transformer Information

None

New equipment description

(2) 138 KV 3000A 40 kA breakers, (2) 138kV 3000A switches, (3) 138kV CCVT's and 2000A line trap. Miscellaneous bus conductor and tubing rated at 3000A. 16'x12' control building expansion, (2) transmission line relay panels, (2) breaker control plates on (1) relay panel

Substation assumptions

The breaker and a half yard at West Kingsport is designed to accommodate this line cut in. Minimal work will be required. No yard expansion necessary.

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

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Construction & commissioning Detailed cost breakdown

Construction management Detailed cost breakdown

Overheads & miscellaneous costs Detailed cost breakdown

Contingency Detailed cost breakdown

Total component cost \$1,845,399.00

Component cost (in-service year) \$.00

Substation Upgrade Component

Component title Riverport Station Remote End Relaying

Project description Upgrade remote end relaying at Riverport station due to the line cut in at West Kingsport station.

Substation name Riverport

Substation zone 205 - AEP

Substation upgrade scope Retire line trap. Replace existing line relaying panel with new fiber optic based line relay panel

Transformer Information

None

New equipment description (1) line relay panel

Substation assumptions N/A. Relaying update only.

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

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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 \$251,278.00

Component cost (in-service year) \$.00

Congestion Drivers

None

Existing Flowgates

FG#	From Bus No.	From Bus Name	To Bus No.	To Bus Name	СКТ	Voltage	TO Zone	Analysis type	Status
AEP -T3	244219	05WKINGSP	244218	05WKINGSEQ	1	35/999	205	FERC 715 Thermal	Included
AEP -T4	244219	05WKINGSP	244218	05WKINGSEQ	1	35/999	205	FERC 715 Thermal	Included
AEP -T5	244219	05WKINGSP	244218	05WKINGSEQ	1	35/999	205	FERC 715 Thermal	Included
AEP -T1	244200	05LOVEDALE	244213	05SEWAGEPL	1	35	205	FERC 715 Thermal	Included
AEP -T2	244213	05SEWAGEPL	244219	05WKINGSP	1	35	205	FERC 715 Thermal	Included

New Flowgates

None

Financial Information

Capital spend start date 07/2023

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Construction start date 10/2025

Project Duration (In Months) 28

Additional Comments

None

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