

# Salt Fork-Leatherwood Rebuild

## 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_D
PJM Proposal ID	115
Project title	Salt Fork-Leatherwood Rebuild
Project description	AEP is proposing to rebuild ~4.2 miles of overloaded sections of the 69 kV line between Salt Fork Switch and Leatherwood Switch with 556 ACSR. Update relay settings at Broom Road station. Final ratings after proposed upgrades: 245489-245493: 73/73/91/91 SN/SE/WN/WE MVA 245478-245489: 73/90/91/106 SN/SE/WN/WE MVA
Email	nckoehler@aep.com
Project in-service date	08/2025
Tie-line impact	No
Interregional project	No
Is the proposer offering a binding cap on capital costs?	No
Additional benefits	Associated with b3274: Sections of this line were approved in the 2020 PJM Window 1 to be rebuilt. That project is currently in the detailed design phase. Associated with AEP-2021-OH006: The remaining sections (non-baseline) of this line were submitted to PJM as a need in 2/17/2021. This proposal addresses an additional 4.2 miles of the supplemental need.

## Project Components

1. Salt Fork-Leatherwood Line Rebuild
2. Broom Road Relay Settings Update

## Transmission Line Upgrade Component

Component title	Salt Fork-Leatherwood Line Rebuild
Project description	Rebuild approximately 4.2 miles of line between Salt Fork Switch and Leatherwood Switch.
Impacted transmission line	Salt Fork-Leatherwood 69 kV line
Point A	Salt Fork Switch
Point B	Leatherwood Switch
Point C	Broom Road
Terrain description	Wooded and hilly terrain.

### Existing Line Physical Characteristics

Operating voltage	69
Conductor size and type	3/0 CU (7 strand) and 336 ACSR 18/1
Hardware plan description	No hardware will be reused on the rebuilt portions.
Tower line characteristics	<ul style="list-style-type: none"> <li>• Steel lattice (1920s vintage) and wood pole (1960s vintage)</li> <li>• Number of open conditions: Newcomerstown-Cambridge-88, Leatherwood-North Cambridge-13</li> <li>• Additional Info: Ground lead wire missing, stolen or broken, structure related conditions affecting the cross arm or pole including rot, split or woodpecker holes, contaminated or broken insulator hardware See also the need presented on 2/17/2021 under AEP-2021-OH006</li> </ul>

### Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	69.000000	69.000000
	Normal ratings	Emergency ratings
Summer (MVA)	102.000000	142.000000
Winter (MVA)	129.000000	160.000000

Conductor size and type	556.5 KCM ACSR (26/7) "Dove"
Shield wire size and type	7#10 Alumoweld
Rebuild line length	4.2 miles
Rebuild portion description	Rebuild approximately of 4.2 miles of line between Salt Fork Switch and Leatherwood Switch with steel monopoles and 556 ACSR conductor.
Right of way	The Project will rebuild AEP's existing Salt Fork Switch-Leatherwood Switch 69kV Line for 60' (30'/30') wide ROW for 4.2 miles. The Project begins at AEP's existing Salt Fork Switch and runs in a general southerly direction to AEP's existing Leatherwood Switch that are both in Guernsey County, Ohio. The tabletop analysis found there were no public lands required for this Project. The private land use is predominantly agricultural & residential that were verified through the Guernsey County Clerk's Office classifications/assessments. The private land requirements include rebuilding the AEP's existing Salt Fork Switch-Leatherwood Switch 69kV Line. The rebuild line will require supplementing the existing lands rights in Guernsey County, Ohio where the land use is predominantly agricultural & residential with flat/rolling terrain.
Construction responsibility	AEP
Benefits/Comments	Business confidential practices.
<b>Component Cost Details - In Current Year \$</b>	
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	\$9,061,603.00

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

### **Substation Upgrade Component**

Component title Broom Road Relay Settings Update

Project description Update relay settings at Broom Road to coordinate with remote ends due to impedance change caused by the line rebuild

Substation name Broom Road

Substation zone 205 - AEP

Substation upgrade scope Update relay settings on breaker G at Broom Road 69 kV station.

### **Transformer Information**

None

New equipment description N/A. Settings update only.

Substation assumptions N/A. Settings update only.

Real-estate description N/A. Settings update only.

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	\$38,828.00
Component cost (in-service year)	\$.00

## Congestion Drivers

None

## Existing Flowgates

FG #	From Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
AEP -T39	245478	05LEATHERW	245489	05BROOMRD	1	69	205	FERC 715 Thermal	Included
AEP -T40	245478	05LEATHERW	245489	05BROOMRD	1	69	205	FERC 715 Thermal	Included
AEP -T41	245489	05BROOMRD	245493	05SALTFRKZ	1	69	205	FERC 715 Thermal	Included
AEP -T42	245489	05BROOMRD	245493	05SALTFRKZ	1	69	205	FERC 715 Thermal	Included

## New Flowgates

None

## Financial Information

Capital spend start date	09/2022
Construction start date	09/2024
Project Duration (In Months)	35

## Additional Comments

None