

Allen-RP Mone Reconductor

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_I
PJM Proposal ID	169
Project title	Allen-RP Mone Reconductor
Project description	Project will reconductor approximately 18.6 miles of 345 kV line between Allen and RP Mone stations.
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 will address ~18.6 miles of Paper Expanded (PE) conductor originally installed in 1955 and 1968 that has become an asset renewal concern for AEP across our footprint. AEP has concerns of increased core corrosion on PE conductors based upon review of conductor samples following recovery events. AEP shared additional details on the PE conductor concerns with stakeholders during the May 9th 2023 TEAC meeting.

Project Components

1. Allen-RP Mone Reconductor

Transmission Line Upgrade Component

Component title	Allen-RP Mone Reconductor	
Project description	Reconductor Allen - RP Mone 345 kV line (18.6 miles).	
Impacted transmission line	Allen-RP Mone	
Point A	Allen	
Point B	RP Mone	
Point C		
Terrain description	flat terrain, with a mix of urban and rural	
Existing Line Physical Characteristics		
Operating voltage	345	
Conductor size and type	2303.5 ACAR 54/37, 1275 ACSR/PE 54/19, 1414 ACSR/PE 62/19	
Hardware plan description	Existing conductor hardware to be removed and replaced. Existing towers will remain.	
Tower line characteristics	This circuit is made up of two different line assets. About ~12.2 miles of the circuit is on 1955 constructed double circuit lattice towers with porcelain suspension insulators. The remaining ~6.4 miles of the circuit is on a 1968 double circuit lattice tower. The line has 224 open hardware conditions relating to worn insulator assembly hardware, worn shield wire hardware, broken insulator-suspension hardware and broken insulators.	
Proposed Line Characteristics		
	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1677.000000	1790.000000
Winter (MVA)	1790.000000	1790.000000
Conductor size and type	2-1272 54/19 Pheasant ACSS	

Shield wire size and type	N/A - existing shield wire to be re-used
Rebuild line length	18.6 miles
Rebuild portion description	Approximately ~18.6 miles of single circuit 345kV will be reconduored, 5 dead end structures will be replaced on the line, majority of the structures will be reinforced. This project will reconductor the entire circuit from Allen 345kV - RP Mone 345kV.
Right of way	All existing ROW will be used. Supplemental easements may be required in some places and will be acquired if/as needed.
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	\$32,486,233.62
Component cost (in-service year)	\$32,486,233.62

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
2023W2-GD-W12	243211	05ALLEN	242933	05RPMONE	1	345	205	Winter Gen Deliv	Included

New Flowgates

None

Financial Information

Capital spend start date 06/2024

Construction start date 08/2026

Project Duration (In Months) 36

Additional Comments

None