

RP Mone-Maddox Creek 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_C
PJM Proposal ID	561
Project title	RP Mone-Maddox Creek Reconductor
Project description	Project will reconductor the 9.4 mile 345 kV line between RP Mone and Maddox Creek stations.
Email	nckoebler@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. RP Mone-Maddox Creek 345 kV Reconductor

Transmission Line Upgrade Component

Component title	RP Mone-Maddox Creek 345 kV Reconductor
Project description	Reconductor 345 kV line between RP Mone and Maddox Creek stations (9.4 miles).
Impacted transmission line	RP Mone-Maddox Creek 345 kV

Point A	RP Mone
Point B	Maddox Creek
Point C	
Terrain description	Flat and rural terrain.
Existing Line Physical Characteristics	
Operating voltage	345
Conductor size and type	1275 ACSR/PE
Hardware plan description	All existing structures and shield wire will be reused. All other hardware will be replaced.
Tower line characteristics	Existing structures are type SJ1 lattice tower, vintage 1955, single circuit, alternating phases on opposite sides of the towers.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	345.000000	345.000000
	Normal ratings	Emergency ratings
Summer (MVA)	1676.000000	1868.000000
Winter (MVA)	2022.000000	2219.000000
Conductor size and type	2-ACSS PHEASANT 1272 (54/19)	
Shield wire size and type	N/A	
Rebuild line length	9.4 miles	
Rebuild portion description	All 9.4 miles of the line will be reconducted, not rebuilt. Existing towers have been determined adequate to handle larger conductor.	
Right of way	N/A - existing ROW easements are sufficient. Any supplemental ROW will be obtained if/as needed on existing route.	

Construction responsibility

AEP

Benefits/Comments

Project will address 9+ miles of Paper Expanded (PE) conductor that have 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 storm recovery events. AEP shared additional details on the PE conductor concerns with stakeholders during the May 9th 2023 TEAC meeting.

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

\$16,718,576.40

Component cost (in-service year)

\$16,718,576.40

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-W58	242933	05RPMONE	246929	05MADDOX	1	345	205	Winter Gen Deliv	Included
2023W2-GD-W21	242933	05RPMONE	246929	05MADDOX	1	345	205	Winter Gen Deliv	Included
2023W2-GD-S170	242933	05RPMONE	246929	05MADDOX	1	345	205	Summer Gen Deliv	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2023W2-GD-S14	2242933	05RPMONE	246929	05MADDOX	1	345	205	Summer 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