

Genoa-Spring Road Sag Mitigation

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_M
PJM Proposal ID	426
Project title	Genoa-Spring Road Sag Mitigation
Project description	Project will mitigate clearance issues on Genoa - Spring Rd SW 138 kV line to allow line to operate to conductor's designed rating. In addition a station riser will be replaced at Genoa station.
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. Genoa-Spring Road Sag Mitigations
2. Genoa Riser Replacement

Transmission Line Upgrade Component

Component title	Genoa-Spring Road Sag Mitigations
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Project description	Mitigate clearance issues on Genoa - Spring Rd SW 138 kV line to allow line to operate to conductor's designed rating. Scope includes 13 pole replacements, and 15 structure modifications.
Impacted transmission line	Genoa-Spring Road 138 kV
Point A	Genoa
Point B	Spring Road
Point C	
Terrain description	Flat terrain, through urban areas.

Existing Line Physical Characteristics

Operating voltage	138
Conductor size and type	636 KCM ACSR (26/7) Grosbeak
Hardware plan description	Existing hardware to be reused at any structures that are not being replaced. Hardware to be removed and new hardware installed at locations of structure replacements/modifications shown in the KMZ.
Tower line characteristics	Existing structures are mostly 1968 vintage, wood monopoles & H-frame single circuit structures. Sag study was based on an existing PLS-CADD model. The Genoa - Morse 138kV circuit would be able to operate at a full MOT of 302 degrees F, once the scoped mitigations are completed.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	138.000000	138.000000
	Normal ratings	Emergency ratings
Summer (MVA)	223.000000	310.000000
Winter (MVA)	281.000000	349.000000
Conductor size and type	636 KCM ACSR (26/7) Grosbeak	
Shield wire size and type	N/A - existing shield wire to be re-used	

Rebuild line length	N/A - line is not proposed to be rebuilt.
Rebuild portion description	N/A - line will not be rebuilt. There will be 13 tower replacements and 15 tower modifications.
Right of way	Work will be performed in existing ROW. Supplemental easements will be obtained 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	\$3,378,845.20
Component cost (in-service year)	\$3,378,845.20

Substation Upgrade Component

Component title	Genoa Riser Replacement
Project description	Replace station riser at Genoa
Substation name	Genoa
Substation zone	205 - AEP
Substation upgrade scope	Replace Genoa 636.0 KCM ACSR (26/7) Riser

Transformer Information

None	
New equipment description	1272 KCM ACSR station conductor
Substation assumptions	All necessary outages will be available, additional station equipment replacement would not be required
Real-estate description	N/A - all work to be performed inside station fence and on existing AEP property
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	\$82,500.00
Component cost (in-service year)	\$82,500.00

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
2023W2-N2-ST9	243513	05GENOA	243591	05SPRNGR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST16	243513	05GENOA	243591	05SPRNGR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST34	243513	05GENOA	243591	05SPRNGR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST45	243513	05GENOA	243591	05SPRNGR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST50	243513	05GENOA	243591	05SPRNGR	1	138	205	Summer N-1-1	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