

Genoa-Westar 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_E
PJM Proposal ID	729
Project title	Genoa-Westar Rebuild
Project description	Project will rebuild the approximately 2 mile 138 kV line between Westar and Genoa 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	The existing line between Genoa and Westar stations is comprised entirely of wood poles. A third of the structures date back to the 1960's and 1970's. The vast majority of the conductor on the line was originally installed in the 1970's. Rebuilding the line would replace these aging assets.

Project Components

1. Genoa-Westar 138 kV Rebuild

Transmission Line Upgrade Component

Component title	Genoa-Westar 138 kV Rebuild
Project description	Rebuild the 138 kV line between Westar and Genoa stations (approximately 2 miles).

Impacted transmission line	Genoa-Westar 138 kV
Point A	Genoa
Point B	Westar
Point C	
Terrain description	Flat terrain, through urban areas.
Existing Line Physical Characteristics	
Operating voltage	138
Conductor size and type	636 ACSR Grosbeak
Hardware plan description	All existing structures/hardware will be removed as part of this rebuild scope
Tower line characteristics	Structures are majority 1968, 1979, and 1999 vintage wood monopoles, single and double circuit sections.

Proposed Line Characteristics

	Designed	Operating
Voltage (kV)	138.000000	138.000000
	Normal ratings	Emergency ratings
Summer (MVA)	287.000000	337.000000
Winter (MVA)	363.000000	400.000000
Conductor size and type	1590 ACSS (54/19) Falcon	
Shield wire size and type	159 ACSR (54/19) Guinea	
Rebuild line length	2 miles	
Rebuild portion description	Rebuild about 2 miles from Westar Station to Polaris Station. Line scope to be rebuilt on a structure-for-structure basis utilizing the existing ROW. Install approximately 41 steel monopoles, single and double circuit capable, where applicable.	

Right of way No new ROW needed. Existing ROW rights will be used and supplemented if and 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 \$8,788,984.60

Component cost (in-service year) \$8,788,984.60

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-WT4	243513	05GENOA	243590	05WESTAR	1	138	205	Winter N-1-1	Included
2023W2-N2-ST1	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST2	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST4	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included

FG #	Fr Bus No.	From Bus Name	To Bus No.	To Bus Name	CKT	Voltage	TO Zone	Analysis type	Status
2023W2-N2-ST7	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST28	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST30	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST31	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST37	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST39	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST46	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-ST48	243513	05GENOA	243590	05WESTAR	1	138	205	Summer N-1-1	Included
2023W2-N2-WT1	243513	05GENOA	243590	05WESTAR	1	138	205	Winter N-1-1	Included
2023W2-GD-S186	243590	05WESTAR	243513	05GENOA	1	138	205	Summer Gen Deliv	Included
2023W2-GD-S141	243590	05WESTAR	243513	05GENOA	1	138	205	Summer Gen Deliv	Included
2023W2-N1-ST15	243590	05WESTAR	243513	05GENOA	1	138/138	205/205	Summer Base Case	Included

New Flowgates

None

Financial Information

Capital spend start date 06/2024

Construction start date 06/2026

Project Duration (In Months) 36

Additional Comments

None