

Genoa-Westar Rebuild

General Information

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| 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_N |
| PJM Proposal ID | 338 |
| Project title | Genoa-Westar Rebuild |
| Project description | Project will rebuild the approximately 2 mile long 138 kV line between Westar and Genoa stations. |
| Email | nckoebler@aep.com |
| Project in-service date | 02/2028 |
| 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

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

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| 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 Genoa 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. | |

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| 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 |
|-----------------|------------|---------------|------------|-------------|-----|---------|---------|----------------------|----------|
| 2024W1-N11-ST39 | 243513 | 05GENOA | 243590 | 05WESTAR | 1 | 138 | 205 | Summer N-1-1 Thermal | Included |
| 2024W1-N11-ST33 | 243513 | 05GENOA | 243590 | 05WESTAR | 1 | 138 | 205 | Summer N-1-1 Thermal | Included |

New Flowgates

None

Financial Information

Capital spend start date 01/2025

Construction start date 03/2027

Project Duration (In Months) 37

Additional Comments

None