

Maliszewski-Polaris 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_G |
| PJM Proposal ID | 340 |
| Project title | Maliszewski-Polaris Rebuild |
| Project description | Project proposes to rebuild the 2.8 mile 138 kV line between Maliszewski and Polaris 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. Maliszewski-Polaris Rebuild

Transmission Line Upgrade Component

| | |
|----------------------------|---|
| Component title | Maliszewski-Polaris Rebuild |
| Project description | Rebuild the 138 kV line between Maliszewski and Polaris stations (2.8 miles). |
| Impacted transmission line | Maliszewski-Polaris 138 kV Line |

| | | |
|---|--|--------------------------|
| Point A | Maliszewski | |
| Point B | Polaris | |
| Point C | | |
| Terrain description | Flat, urban terrain | |
| Existing Line Physical Characteristics | | |
| Operating voltage | 138 | |
| Conductor size and type | 636 KCM ACSR 26/7 Grosbeak & 1590 KCM ACSR 45/7 Lapwing | |
| Hardware plan description | All existing structures/hardware will be removed as part of this rebuild scope | |
| Tower line characteristics | Existing structures are 2001 vintage double circuit steel monopoles; 1976 vintage double circuit wood monopoles; 1976 vintage double circuit steel poles; and 1979 vintage single circuit wood monopoles. | |
| Proposed Line Characteristics | | |
| | Designed | Operating |
| Voltage (kV) | 138.000000 | 138.000000 |
| | Normal ratings | Emergency ratings |
| Summer (MVA) | 329.000000 | 361.000000 |
| Winter (MVA) | 416.000000 | 416.000000 |
| Conductor size and type | 1590 ACSS (54/19) Falcon | |
| Shield wire size and type | OPGW & 159 ACSR (12/7) Guinea | |
| Rebuild line length | 2.8 miles | |
| Rebuild portion description | Rebuild 2.8 miles from Maliszewski Station to Polaris Station. Line will be rebuilt structure-for-structure, utilizing existing ROW. Install approximately 36 new steel monopoles, double circuit & single circuit. The 6 poles installed in 2001 will be reused where possible. | |

Right of way

No new ROW needed. Existing ROW rights will be used and supplemented 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

\$8,883,662.80

Component cost (in-service year)

\$8,883,662.80

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-ST22 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST24 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST25 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST17 | 243537 | 05MALIS | 243553 | 05POLARS | 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-ST18 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST13 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST32 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST40 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST47 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST43 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST44 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-WT3 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Winter N-1-1 | Included |
| 2023W2-N2-ST49 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST8 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST5 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST6 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST3 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-GD-S135 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-S165 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer Gen Deliv | Included |
| 2023W2-N2-WT5 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Winter N-1-1 | Included |
| 2023W2-N1-ST13 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-ST14 | 243537 | 05MALIS | 243553 | 05POLARS | 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