

Vassell 765/345 kV Transformer Addition and Maliszewski Breaker Replacement

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_A |
| PJM Proposal ID | 117 |
| Project title | Vassell 765/345 kV Transformer Addition and Maliszewski Breaker Replacement |
| Project description | Connect and energize a second 765/345 kV bank at Vassell station. The proposal will perform work to be able to energize spare 765/345 kV units at the station to be operated normally in. Breakers will be added to the 765 kV and 345 kV yards at Vassell along with a 345 kV transformer tie being constructed between the two yards. This will establish a second 765/345 kV transformer at the station. Along with the work at Vassell, 765 kV circuit breaker 'D' at Maliszewski station will be replaced. |
| 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 | Procurement of a new transformer is not needed for this proposal; AEP will endeavor to energize the new bank as soon as practical rather than waiting for the 6/1/2027 required ISD. Further, this proposal allows for the series reactor at Maliszewski to be operated as intended under certain circumstances, which may further reduce loadings on the 138 kV network out of Maliszewski. |

Project Components

1. Vassell Transformer Addition

2. Maliszewski 765 kV Breaker Replacement

Substation Upgrade Component

| | |
|--------------------------|---|
| Component title | Vassell Transformer Addition |
| Project description | Perform work at Vassell station to connect and energize a second 765/345 kV transformer at Vassell station. |
| Substation name | Vassell |
| Substation zone | 205 - AEP |
| Substation upgrade scope | Connect and energize a second 765/345 kV bank at Vassell station. Reconfigure 765 kV Bus by relocating formerly CB-D to Bus 4 "E8" position and replacing with 2 new breakers H2 & H5 with associated disconnects. Build out 345 kV bus "K" string with 2 new breakers for relocating connection to transformer T1 (moved from G string to K string). Connect transformer T2 on "J" string to avoid crossing over transformer leads. Construct 345 kV tie between 765 and 345 kV yard. Spare transformer will be onsite and ready to use; this work is what's required to energize and put the spare unit in service permanently. |

Transformer Information

| | Name | Capacity (MVA) | | |
|---------------------------|--|----------------|----------|--|
| Transformer | 2 | 2250 | | |
| | High Side | Low Side | Tertiary | |
| Voltage (kV) | 765 | 345 | | |
| New equipment description | (1) 2,250 MVA. 765/345 kV Transformer (SN-2403 MVA / SE-2772 MVA / WN-2724 MVA / WE-2897 MVA) (2) 765 kV, 4000 A, 50 kA Circuit Breakers (SN-5522 MVA / SE-5522 MVA / WN-6845 MVA / WE-6845 MVA) (2) 345 kV, 5000 A, 63 kA, Circuit Breakers (SN-3113 MVA / SE-3113 MVA / WN-3858 MVA / WE-3858 MVA) | | | |
| Substation assumptions | Assuming existing CB-D can be reused and moved to new "E8" position, also that existing switch DS1 can be reused in "E7" positions as well. Assuming bus tubing on new/reconfigured "E" string will be replaced, but bus supports will be able to be reused. Assuming insulators leftover from removed bus supports will be able to be reused. Fence will not need to be expanded. | | | |

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|-----------------------------|---|
| Real-estate description | N/A. All work to be performed on AEP owned property. No station expansion required. |
| Construction responsibility | AEP |

Benefits/Comments

Component Cost Details - In Current Year \$

| | |
|----------------------------------|------------------------|
| Engineering & design | Detailed cost estimate |
| Permitting / routing / siting | Detailed cost estimate |
| ROW / land acquisition | Detailed cost estimate |
| Materials & equipment | Detailed cost estimate |
| Construction & commissioning | Detailed cost estimate |
| Construction management | Detailed cost estimate |
| Overheads & miscellaneous costs | Detailed cost estimate |
| Contingency | Detailed cost estimate |
| Total component cost | \$30,828,810.60 |
| Component cost (in-service year) | \$30,828,810.60 |

Substation Upgrade Component

| | |
|--------------------------|---|
| Component title | Maliszewski 765 kV Breaker Replacement |
| Project description | Replace 765 kV breaker D at Maliszewski station due. |
| Substation name | Maliszewski |
| Substation zone | 205 - AEP |
| Substation upgrade scope | Replace 3000A 765 kV circuit breaker 'D' with a 5000A 50 kA breaker at Maliszewski station. Breaker disconnect switches will be reused. |

Transformer Information

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|-----------------------------|--|
| None | |
| New equipment description | (1) 765 kV, 5000 A, 63 kA Circuit Breakers (SN-6903 MVA / SE-6903 MVA / WN-8555 MVA / WE-8555 MVA) |
| Substation assumptions | Assuming no modification to existing bus or switch connections required. Assumed existing breaker pier foundations will be removed completely. |
| Real-estate description | N/A. All work to be performed inside existing station fence on AEP property. |
| Construction responsibility | AEP |
| Benefits/Comments | |

Component Cost Details - In Current Year \$

| | |
|----------------------------------|------------------------|
| Engineering & design | Detailed cost estimate |
| Permitting / routing / siting | Detailed cost estimate |
| ROW / land acquisition | Detailed cost estimate |
| Materials & equipment | Detailed cost estimate |
| Construction & commissioning | Detailed cost estimate |
| Construction management | Detailed cost estimate |
| Overheads & miscellaneous costs | Detailed cost estimate |
| Contingency | Detailed cost estimate |
| Total component cost | \$2,900,128.10 |
| Component cost (in-service year) | \$2,900,128.10 |

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-ST31 | 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-ST33 | 243458 | 05HYATT | 246752 | 05VASSEL | 1 | 345 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST32 | 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-ST23 | 243553 | 05POLARS | 243590 | 05WESTAR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST26 | 243513 | 05GENOA | 243537 | 05MALIS | 2 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST25 | 243537 | 05MALIS | 243553 | 05POLARS | 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-ST27 | 243526 | 05HYATT | 243537 | 05MALIS | 2 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST29 | 243513 | 05GENOA | 243537 | 05MALIS | 2 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST40 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST42 | 242939 | 05MARYSV | 243458 | 05HYATT | 1 | 345 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST41 | 243553 | 05POLARS | 243590 | 05WESTAR | 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-ST35 | 243513 | 05GENOA | 243537 | 05MALIS | 2 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST34 | 243513 | 05GENOA | 243591 | 05SPRNGR | 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-ST36 | 243553 | 05POLARS | 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-ST38 | 243458 | 05HYATT | 246752 | 05VASSEL | 1 | 345 | 205 | Summer N-1-1 | Included |
| 2023W2-N1-WT1 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Winter Basecase | Included |
| 2023W2-N2-ST50 | 243513 | 05GENOA | 243591 | 05SPRNGR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N1-WT3 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-WT2 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-WT5 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-WT4 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Winter Basecase | Included |
| 2023W2-N2-ST46 | 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-ST45 | 243513 | 05GENOA | 243591 | 05SPRNGR | 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-ST47 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST49 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N1-WT10 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-WT12 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-ST2 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-WT11 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-ST1 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-WT14 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-ST4 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-WT13 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-ST3 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N2-WT2 | 243537 | 05MALIS | 243538 | 05MALISX | ZB | 138 | 205 | Winter N-1-1 | Included |
| 2023W2-N1-ST6 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Summer Base Case | Included |
| 2023W2-N2-WT1 | 243513 | 05GENOA | 243590 | 05WESTAR | 1 | 138 | 205 | Winter N-1-1 | Included |
| 2023W2-N1-ST5 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-WT7 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-WT6 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-WT9 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Winter Basecase | Included |
| 2023W2-N1-WT8 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Winter Basecase | Included |
| 2023W2-N2-WT7 | 243553 | 05POLARS | 243590 | 05WESTAR | 1 | 138 | 205 | Winter N-1-1 | Included |
| 2023W2-N1-ST11 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N2-WT6 | 243537 | 05MALIS | 243538 | 05MALISX | ZB | 138 | 205 | Winter N-1-1 | Included |
| 2023W2-N1-ST13 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N2-WT8 | 243553 | 05POLARS | 243590 | 05WESTAR | 1 | 138 | 205 | Winter N-1-1 | Included |
| 2023W2-N1-ST12 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-ST15 | 243590 | 05WESTAR | 243513 | 05GENOA | 1 | 138/138 | 205/205 | Summer Base Case | Included |

| FG # | Fr Bus No. | From Bus Name | To Bus No. | To Bus Name | CKT | Voltage | TO Zone | Analysis type | Status |
|----------------|------------|---------------|------------|-------------|-----|---------|---------|------------------|----------|
| 2023W2-N1-ST14 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-GD-W19 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205 | Winter Gen Deliv | Included |
| 2023W2-N1-ST17 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-ST16 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-GD-W15 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205 | Winter Gen Deliv | Included |
| 2023W2-GD-W15 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205 | Winter Gen Deliv | Included |
| 2023W2-N2-WT4 | 243513 | 05GENOA | 243590 | 05WESTAR | 1 | 138 | 205 | Winter N-1-1 | Included |
| 2023W2-N1-ST8 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Summer Base Case | Included |
| 2023W2-GD-S14 | 243590 | 05WESTAR | 243513 | 05GENOA | 1 | 138 | 205 | Summer Gen Deliv | Included |
| 2023W2-N2-WT3 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Winter N-1-1 | Included |
| 2023W2-N1-ST7 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-ST10 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Summer Base Case | Included |
| 2023W2-GD-S16 | 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-ST9 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Summer Base Case | Included |
| 2023W2-GD-S18 | 243590 | 05WESTAR | 243513 | 05GENOA | 1 | 138 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-W15 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205 | Winter Gen Deliv | Included |
| 2023W2-GD-W15 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205 | Winter Gen Deliv | Included |
| 2023W2-N1-ST22 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-ST21 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-ST24 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-ST23 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-ST26 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Summer Base Case | Included |
| 2023W2-N1-ST25 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Summer Base Case | Included |
| 2023W2-GD-S11 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-W2 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138 | 205 | Winter Gen Deliv | Included |
| 2023W2-N1-ST27 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Summer Base Case | Included |
| 2023W2-GD-W25 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205 | Winter Gen Deliv | Included |

| FG # | Fr Bus No. | From Bus Name | To Bus No. | To Bus Name | CKT | Voltage | TO Zone | Analysis type | Status |
|----------------|------------|---------------|------------|-------------|-----|---------|---------|------------------|----------|
| 2023W2-N1-ST19 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Summer Base Case | Included |
| 2023W2-GD-W16 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205 | Winter Gen Deliv | Included |
| 2023W2-N1-ST18 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205/205 | Summer Base Case | Included |
| 2023W2-GD-W16 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205 | Winter Gen Deliv | Included |
| 2023W2-GD-W16 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205 | Winter Gen Deliv | Included |
| 2023W2-N1-ST20 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205/205 | Summer Base Case | Included |
| 2023W2-GD-W16 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205 | Winter Gen Deliv | Included |
| 2023W2-GD-S12 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-S12 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-S12 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-S4 | 242926 | 05MALIS | 290237 | 05MALIS 1EQ | 1 | 765/999 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-S12 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-S6 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-S12 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205 | Summer Gen Deliv | Included |
| 2023W2-N2-ST11 | 243553 | 05POLARS | 243590 | 05WESTAR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-GD-S12 | 290237 | 05MALIS 1EQ | 243538 | 05MALISX | 1 | 999/138 | 205 | Summer Gen Deliv | Included |
| 2023W2-N2-ST10 | 243553 | 05POLARS | 243590 | 05WESTAR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-GD-S11 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138 | 205 | Summer Gen Deliv | Included |
| 2023W2-N2-ST9 | 243513 | 05GENOA | 243591 | 05SPRNGR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST2 | 243513 | 05GENOA | 243590 | 05WESTAR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-GD-S11 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-W2 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138 | 205 | Winter Gen Deliv | Included |
| 2023W2-N2-ST1 | 243513 | 05GENOA | 243590 | 05WESTAR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-GD-S3 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138 | 205 | Summer Gen Deliv | Included |
| 2023W2-GD-W2 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138 | 205 | Winter Gen Deliv | Included |
| 2023W2-N2-ST4 | 243513 | 05GENOA | 243590 | 05WESTAR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-GD-W5 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138 | 205 | Winter Gen Deliv | Included |
| 2023W2-N2-ST3 | 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-GD-W21 | 243538 | 05MALISX | 243537 | 05MALIS | ZB | 138 | 205 | Winter Gen Deliv | Included |
| 2023W2-N2-ST6 | 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-ST8 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST7 | 243513 | 05GENOA | 243590 | 05WESTAR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST20 | 243513 | 05GENOA | 243537 | 05MALIS | 2 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST22 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST21 | 243526 | 05HYATT | 243537 | 05MALIS | 2 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST13 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST12 | 243553 | 05POLARS | 243590 | 05WESTAR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-GD-S135 | 243537 | 05MALIS | 243553 | 05POLARS | 1 | 138 | 205 | Summer Gen Deliv | Included |
| 2023W2-N2-ST15 | 243547 | 05MORSE | 243591 | 05SPRNGR | 1 | 138 | 205 | Summer N-1-1 | Included |
| 2023W2-N2-ST14 | 243553 | 05POLARS | 243590 | 05WESTAR | 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-ST19 | 243547 | 05MORSE | 243591 | 05SPRNGR | 1 | 138 | 205 | Summer N-1-1 | 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