



# MISO Identified Regional Issues & Planned Solution near the MISO-PJM Seam

Supplemental material for *MISO-PJM Annual  
Issues Review IPSAC Meeting*

March, 13, 2026

# Notes



- This presentation provides an overview of significant MISO MTEP transmission projects near the MISO-PJM seam which have either been approved in MTEP25 Appendix A or proposed MTEP26
- It is not a comprehensive review of all planned projects in MISO. For a complete list of projects see the following Public Documents
  - [MTEP25 Report \(notably, Appendix A\)](#)
  - [MTEP Projects Under Evaluation Status Report](#)
  - [Planning Advisory Committee \(PAC\) Materials](#)
  - [Subregional Planning \(SPM\) Materials](#)

# MTEP 25 Approved Project Highlights

MISO East and Central Subregion

# Ameren Illinois (AMIL)

## MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID | Project Name   | Project Type | Other Type        | Expected ISD | Current Cost |
|-----------------|--|--------------|-------------------|--------------|--------------|
| ▲ 22788         | Rebuild Prest-Tibbs 138 kV line (1558)                       | Other        | Local Reliability | 12/1/2025    | \$23.0M      |
| 22907           | Upgrade Tuscola West 138 kV substation                       | Other        | Age and Condition | 12/1/2026    | \$5.8M       |
| 22908           | Rebuild Joppa - Marion South 161kV line                      | Other        | Age and Condition | 12/1/2030    | \$46.5M      |
| 25018           | New Moonshine Solar Bootleg 138 kV switching station (J1382) | GIP          |                   | 12/1/2025    | \$8.0M       |
| 25269           | Replace West Frankfort East 345/138 kV transformer 1         | Other        | Age and Condition | 12/1/2026    | \$10.6M      |
| 25328           | Upgrade Charleston NE 138kV line                             | Other        | Age and Condition | 6/1/2026     | \$4.0M       |
| 50077           | New Aster 138 kV interconnection (J1777)                     | GIP          |                   | 6/1/2026     | \$0.8M       |
| 50084           | New Ramsey East 138 kV Connection (J1714)                    | GIP          |                   | 12/1/2026    | \$0.8M       |
| 50118           | Upgrade Powerton-Tazewell 345 kV line (AE1-163)              | GIP          |                   | 12/1/2025    | \$1.5M       |
| 50119           | New Moro-Cottage Hills 138 kV Line (C1908 MPFCA)             | GIP          |                   | 6/30/2028    | \$38.6M      |
| 50140           | Upgrade Fargo 138 kV Line Position for Lucky                 | Other        | Local Needs       | 12/1/2029    | \$2.0M       |
| 50175           | Upgrade Taylorville South 138 kV Substation                  | Other        | Local Reliability | 12/1/2026    | \$5.2M       |
| 50185           | Replace Marion South 161/138 kV transformer                  | Other        | Age and Condition | 12/1/2026    | \$3.6M       |
| 50189           | Rebuild Latham-Docket-1409 138 kV line (C1903 MPFCA)         | GIP          |                   | 12/1/2027    | \$4.0M       |



## MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID<br>▲ | Project Name  | Project Type | Other Type        | Expected ISD | Current Cost |
|----------------------|---|--------------|-------------------|--------------|--------------|
| 50118                | Upgrade Powerton-Tazewell 345 kV line (AE1-163)       | GIP          |                   | 12/1/2025    | \$1.5M       |
| 50119                | New Moro-Cottage Hills 138 kV Line (C1908 MPFCA)      | GIP          |                   | 6/30/2028    | \$38.6M      |
| 50140                | Upgrade Fargo 138 kV Line Position for Lucky          | Other        | Local Needs       | 12/1/2029    | \$2.0M       |
| 50175                | Upgrade Taylorville South 138 kV Substation           | Other        | Local Reliability | 12/1/2026    | \$5.2M       |
| 50185                | Replace Marion South 161/138 kV transformer           | Other        | Age and Condition | 12/1/2026    | \$3.6M       |
| 50189                | Rebuild Latham-Docket-1409 138 kV line (C1903 MPFCA)  | GIP          |                   | 12/1/2027    | \$4.0M       |
| ▲ 50190              | New Peru-Princeton 138 kV line                        | Other        | Load Growth       | 6/1/2029     | \$90.0M      |
| ▲ 50198              | New Wieland Metals 138 kV Load Addition               | Other        | Load Growth       | 12/1/2026    | \$10.7M      |
| 50230                | New Harco South-Carrier Mills 161 kV line             | Other        | Local Reliability | 12/31/2029   | \$30.0M      |
| 50257                | Reconfigure Steeleville 138 kV Substation to Ring Bus | Other        | Age and Condition | 12/1/2026    | \$6.0M       |
| 50282                | New Radbourn 345 kV and Leghorn 345 kV Shunt Reactors | Other        | Load Growth       | 12/1/2026    | \$4.8M       |
| 50288                | Replace Marblehead North 161/138 kV transformer       | Other        | Age and Condition | 12/1/2027    | \$1.5M       |
| 50299                | New Wakefield 138 kV switching station                | Other        | Load Growth       | 12/1/2027    | \$10.7M      |
| 50504                | Upgrade Dupo Ferry 138 kV breakers                    | GIP          |                   | 12/1/2026    | \$2.5M       |
| 9740                 | Reconductor Grand Tower-Campbell Hill 138 kV line     | Other        | Age and Condition | 12/1/2029    | \$34.9M      |



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## MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID | Project Name   | Project Type | Other Type        | Expected ISD | Current Cost |
|-----------------|--|--------------|-------------------|--------------|--------------|
| 22874           | Upgrade Ashley 161 kV substation                                   | Other        | Age and Condition | 12/1/2027    | \$4.1M       |
| 22881           | Upgrade Belleau 138 kV substation                                  | Other        | Local Reliability | 6/1/2027     | \$3.0M       |
| 23046           | Upgrade Montgomery 345/161 kV Substation                           | Other        | Local Reliability | 6/1/2026     | \$17.0M      |
| 25040           | Replace Tyson 345/138 kV transformer 3                             | Other        | Age and Condition | 12/1/2027    | \$8.5M       |
| 25496           | New Blanchette 138 kV Ring Bus                                     | Other        | Local Reliability | 6/1/2027     | \$7.0M       |
| 25497           | Reconfigure Overton 161kV Substation                               | Other        | Local Reliability | 12/1/2027    | \$46.0M      |
| 50100           | Rebuild Baumgartner 138 kV Substation                              | Other        | Age and Condition | 6/1/2028     | \$6.3M       |
| 50154           | Grain Belt Express AECI Facilities Construction Agreement (GI-083) | GIP          |                   | 12/1/2027    | \$70.5M      |
| 50186           | Grain Belt Express HVDC Network Upgrades (H104-H105)               | GIP          |                   | 12/1/2030    | \$171.0M     |
| 50220           | Rebuild McCredie-Overton 345 kV Line (MPFCA)                       | GIP          |                   | 6/1/2031     | \$63.1M      |
| 50221           | Rebuild Overton-McBaine Tap 161 kV Line (MPFCA)                    | GIP          |                   | 12/1/2030    | \$9.6M       |
| 50222           | Rebuild Overton-Sedalia East 161 kV Line (MPFCA)                   | GIP          |                   | 12/1/2030    | \$9.7M       |
| 50226           | New Vulcan 138/34 kV Substation                                    | Other        | Load Growth       | 6/1/2027     | \$12.0M      |
| 50227           | Upgrade California 161 kV Terminal                                 | Other        | Local Reliability | 6/1/2028     | \$22.6M      |
| 50256           | New Tibbe 138/34.5 kV Substation                                   | Other        | Load Growth       | 12/1/2029    | \$33.0M      |
| 50259           | Rebuild Fletcher-Pilot Knob-2 161 kV line                          | Other        | Local Reliability | 6/1/2026     | \$1.4M       |



## MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID   | Project Name   | Project Type | Other Type        | Expected ISD | Current Cost |
|---|--|--------------|-------------------|--------------|--------------|
| 23477   | Reconfigure Overton 161kV Substation                               | Other        | Local Reliability | 12/1/2027    | \$48.0M      |
| 50100   | Rebuild Baumgartner 138 kV Substation                              | Other        | Age and Condition | 6/1/2028     | \$6.3M       |
| 50154   | Grain Belt Express AECI Facilities Construction Agreement (GI-083) | GIP          |                   | 12/1/2027    | \$70.5M      |
| 50186   | Grain Belt Express HVDC Network Upgrades (H104-H105)               | GIP          |                   | 12/1/2030    | \$171.0M     |
| 50220   | Rebuild McCredie-Overton 345 kV Line (MPFCA)                       | GIP          |                   | 6/1/2031     | \$63.1M      |
| 50221   | Rebuild Overton-McBaine Tap 161 kV Line (MPFCA)                    | GIP          |                   | 12/1/2030    | \$9.6M       |
| 50222   | Rebuild Overton-Sedalia East 161 kV Line (MPFCA)                   | GIP          |                   | 12/1/2030    | \$9.7M       |
| 50226   | New Vulcan 138/34 kV Substation                                    | Other        | Load Growth       | 6/1/2027     | \$12.0M      |
| 50227   | Upgrade California 161 kV Terminal                                 | Other        | Local Reliability | 6/1/2028     | \$22.6M      |
| 50256   | New Tibbe 138/34.5 kV Substation                                   | Other        | Load Growth       | 12/1/2029    | \$33.0M      |
| 50259   | Rebuild Fletcher-Pilot Knob-2 161 kV line                          | Other        | Local Reliability | 6/1/2026     | \$1.4M       |
| 50403   | Relocate Dardenne 161/138 kV Substation                            | Other        | Age and Condition | 12/1/2027    | \$3.6M       |
|  50531 | New AECI Load Addition at Ameren Fredericktown 138 kV              | Other        | Load Growth       | 12/1/2026    | \$1.2M       |
|  50615 | New Central 138 kV Substation Load Addition                        | Other        | Load Growth       | 12/1/2026    | \$1.0M       |
|  50616 | New Rootbeer 345 kV Substation Load Addition                       | Other        | Load Growth       | 12/1/2026    | \$2.0M       |
|  50617 | New 345 kV Lumberjack substation for Load Connection               | Other        | Load Growth       | 12/1/2027    | \$38.5M      |
|  50696 | New Huster-McClay 138 kV line tap for Hayford load                 | Other        | Load Growth       | 6/1/2027     | \$0.5M       |



# Ameren Transmission Company of Illinois (ATXI)

# Ameren Transmission Company of Illinois

## MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID | Project Name   | Project Type | Other Type        | Expected ISD | Current Cost |
|-----------------|--|--------------|-------------------|--------------|--------------|
| 50633           | 11360 MW Int-Entity New Transmission (MoMENT) Project (Primary)            | Other        | Local Reliability | 12/1/2030    | \$604.0M     |
| 50636           | New Diamond Core Load Addition (RECC Territory) at Mogul 345 kV substation | Other        | Load Growth       | 12/1/2027    | \$0.0M       |

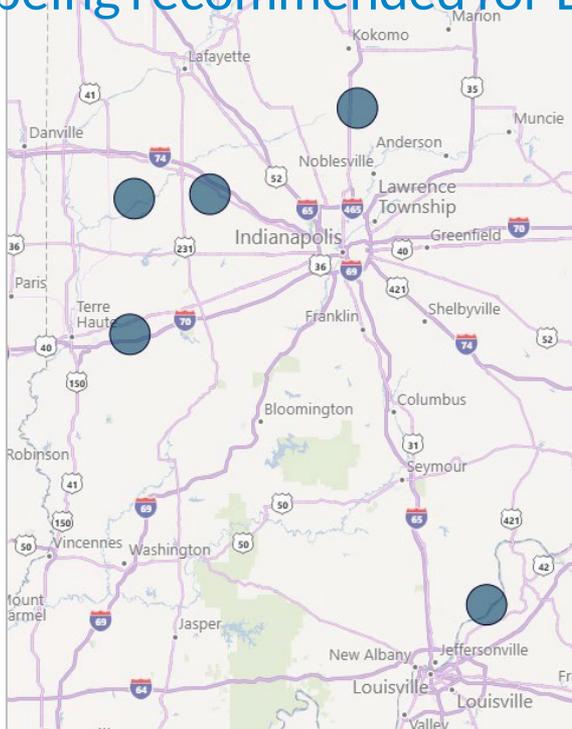


# Duke Energy Midwest (DEI)

# Duke Energy Indiana

As already presented and justified, the following BRPs are being recommended for Board Approval

Baseline Reliability Projects



| MTEP Project ID | Project Name   | Project Type | Expected ISD | Current Cost |
|-----------------|--|--------------|--------------|--------------|
| ▲ 50718         | Rebuild Cayuga to Nucor 345 kV line                      | BRP          | 6/1/2029     | \$95.5M      |
| ▲ 50725         | Rebuild Kokomo HP to Tipton West to Cammack Rd Jct 230kV | BRP          | 6/1/2029     | \$65.5M      |
| ▲ 50719         | Rebuild Nucor to Wolf Creek 345 kV line                  | BRP          | 6/1/2029     | \$49.0M      |
| 50201           | Rebuild Slugger to LGE Trimble 34530 Ckt. 345kV Line     | BRP          | 6/1/2031     | \$43.0M      |
| 50279           | Replace Staunton 230/138kV Xfmr Bk1 and 2                | BRP          | 12/31/2026   | \$18.8M      |



## MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID | Project Name   | Project Type | Other Type        | Expected ISD | Current Cost |
|-----------------|--|--------------|-------------------|--------------|--------------|
| 50201           | Rebuild Slugger to LGE Trimble 34530 Ckt. 345kV Line           | BRP          |                   | 6/1/2031     | \$43.0M      |
| 50279           | Replace Staunton 230/138kV Xfmr Bk1 and 2                      | BRP          |                   | 12/31/2026   | \$18.8M      |
| 50280           | New Neuron - Lafayette 27MW load                               | Other        | Load Growth       | 12/31/2028   | \$25.0M      |
| 50285           | New HE Shadow Lake 138/12kV Sub                                | Other        | Load Growth       | 6/1/2026     | \$3.0M       |
| 50289           | New Wabash Industrial 69/12kV Sub                              | Other        | Load Growth       | 10/16/2026   | \$3.0M       |
| 50341           | Replace 34507 Gibson-Petersburg 345 kV Line                    | Other        | Age and Condition | 5/21/2027    | \$15.2M      |
| 50342           | Rebuild Greencastle Industrial Jct. to WVPA Vandalia 69kV Line | Other        | Local Reliability | 6/1/2026     | \$2.0M       |
| 50343           | Terre Haute Water St. 138kV Ring Bus                           | Other        | Local Reliability | 12/10/2026   | \$16.5M      |
| 50345           | New WVPA Richland 69kV ring bus                                | Other        | Local Reliability | 11/11/2026   | \$11.7M      |
| 50347           | Replace Frankfort 230/69 Bk1                                   | Other        | Age and Condition | 7/31/2026    | \$6.3M       |
| 50349           | Crane Naval Base load expansion                                | Other        | Load Growth       | 3/8/2027     | \$29.0M      |
| 50351           | Rebuild Arcadia N to Arcadia 69kV Line                         | Other        | Age and Condition | 1/19/2027    | \$5.5M       |
| 50369           | Rebuild Huntington Goblesville Jct to United Jct 69kV Line     | Other        | Age and Condition | 12/11/2026   | \$9.2M       |
| 50370           | Replace New London to Kokomo Highland Park 230kV Line          | GIP          |                   | 2/12/2027    | \$2.0M       |
| 50374           | Upgrade Dresser 345kV Line                                     | GIP          |                   | 7/1/2027     | \$11.6M      |



## MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID | Project Name   | Project Type | Other Type        | Expected ISD | Current Cost |
|-----------------|--|--------------|-------------------|--------------|--------------|
| 50289           | New Wabash Industrial 69/12kV Sub                              | Other        | Load Growth       | 10/16/2026   | \$3.0M       |
| 50341           | Replace 34507 Gibson-Petersburg 345 kV Line                    | Other        | Age and Condition | 5/21/2027    | \$15.2M      |
| 50342           | Rebuild Greencastle Industrial Jct. to WVPA Vandalia 69kV Line | Other        | Local Reliability | 6/1/2026     | \$2.0M       |
| 50343           | Terre Haute Water St. 138kV Ring Bus                           | Other        | Local Reliability | 12/10/2026   | \$16.5M      |
| 50345           | New WVPA Richland 69kV ring bus                                | Other        | Local Reliability | 11/11/2026   | \$11.7M      |
| 50347           | Replace Frankfort 230/69 Bk1                                   | Other        | Age and Condition | 7/31/2026    | \$6.3M       |
| 50349           | Crane Naval Base load expansion                                | Other        | Load Growth       | 3/8/2027     | \$29.0M      |
| 50351           | Rebuild Arcadia N to Arcadia 69kV Line                         | Other        | Age and Condition | 1/19/2027    | \$5.5M       |
| 50369           | Rebuild Huntington Goblesville Jct to United Jct 69kV Line     | Other        | Age and Condition | 12/11/2026   | \$9.2M       |
| 50370           | Replace New London to Kokomo Highland Park 230kV Line          | GIP          |                   | 2/12/2027    | \$2.0M       |
| 50374           | Upgrade Dresser 345kV Line                                     | GIP          |                   | 7/1/2027     | \$11.6M      |
| 50376           | Rebuild HE Bethany to Charlestown Jct 69kV Line                | Other        | Load Growth       | 6/1/2026     | \$3.3M       |
| ▲ 50718         | Rebuild Cayuga to Nucor 345 kV line                            | BRP          |                   | 6/1/2029     | \$95.5M      |
| ▲ 50719         | Rebuild Nucor to Wolf Creek 345 kV line                        | BRP          |                   | 6/1/2029     | \$49.0M      |
| ▲ 50725         | Rebuild Kokomo HP to Tipton West to Cammack Rd Jct 230kV       | BRP          |                   | 6/1/2029     | \$65.5M      |



# Hoosier Energy (HE)

## MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID<br>▲ | Project Name                                     | Project Type | Other Type        | Expected ISD | Current Cost |
|----------------------|--|--------------|-------------------|--------------|--------------|
| 50490                | Merom Station 345kV Expansion and New 345kV line | Other        | Load Growth       | 12/1/2030    | \$14.0M      |
| 50491                | New Ellettsville 345kV Station                   | Other        | Load Growth       | 1/1/2035     | \$20.0M      |
| 50492                | Expand Wheeler Creek 138 kV Station              | Other        | Local Reliability | 12/1/2029    | \$4.7M       |
| 50493                | Rebuild Ashland Tap - Cisne Junction 69 kV Line  | Other        | Local Reliability | 12/1/2028    | \$9.5M       |
| ▲ 50599              | New Merom 345 kV Substation Load Addition        | Other        | Load Growth       | 7/1/2026     | \$12.8M      |
| ▲ 50614              | New Marble Hill 345 kV Station and Load          | Other        | Load Growth       | 10/1/2027    | \$20.5M      |
| ▲ 50698              | New Scotland 345/69kV Substation                 | Other        | Load Growth       | 12/1/2029    | \$38.0M      |

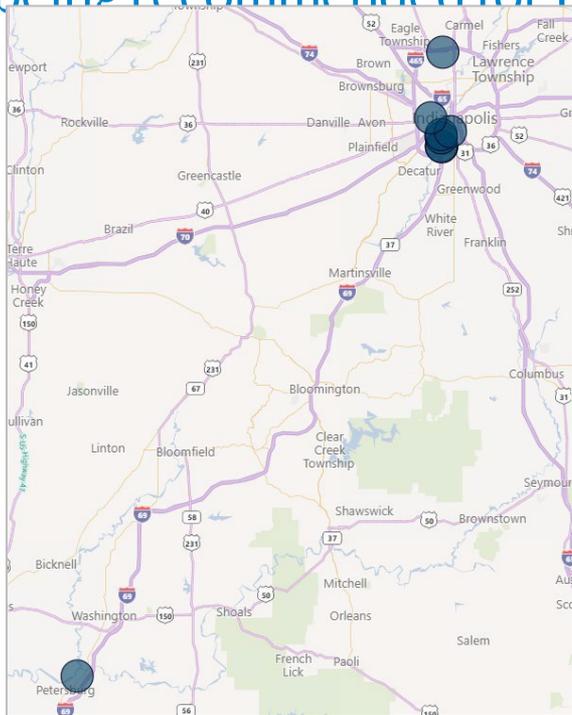


# Indianapolis Power & Light Company (IPL)

# Indianapolis Power & Light Company

As already presented and justified, the following BRPs are being recommended for F

## Baseline Reliability Projects



| MTEP Project ID | Project Name  | Project Type | Expected ISD | Current Cost |
|-----------------|---|--------------|--------------|--------------|
| ▲ 50723         | Uprate IPL Petersburg to Cato 138 kV Equipment                                | BRP          | 12/31/2028   | \$4.0M       |
| ▲ 50722         | New Pond Creek 345 : 138 kV Substation  | BRP          | 6/1/2029     | \$40.0M      |
| 50306           | Rebuild Southwest-Stout CT_132-02_138 kV Line                                 | BRP          | 12/31/2029   | \$9.3M       |
| 50307           | Rebuild Southwest-Northwest 132-04 138 kV Line                                | BRP          | 12/31/2029   | \$15.2M      |
| 50314           | Rebuild Georgetown-North 132-86 138 kV Line                                   | BRP          | 12/31/2029   | \$12.8M      |
| ▲ 50727         | Replace Thompson 345/138/13.75 MVA Autotransformer at Thompson Substation     | BRP          | 12/31/2029   | \$15.0M      |
| 50731           | IPL Adoption of Seasonal Ratings - BRP  | BRP          | 12/31/2029   | \$0.0M       |
| 50216           | Upgrade Petersburg 138 kV Breakers - 3 Breakers                               | BRP          | 12/1/2031    | \$0.7M       |
| 50217           | Upgrade Stout South Breakers - 12 Breakers 138 kV                             | BRP          | 12/1/2031    | \$3.1M       |
| 50311           | Rebuild Stout North-Sanitation Belmont-Southwest_132-01_&_132-74_138 kV Lines | BRP          | 12/1/2033    | \$15.0M      |
| 50312           | Rebuild Southwest-Lilly South 132-10 138 kV Line                              | BRP          | 12/1/2033    | \$7.1M       |
| 50313           | Rebuild Lilly South-Center 132-61 138 kV Line                                 | BRP          | 12/1/2033    | \$2.9M       |



# Indianapolis Power & Light Company

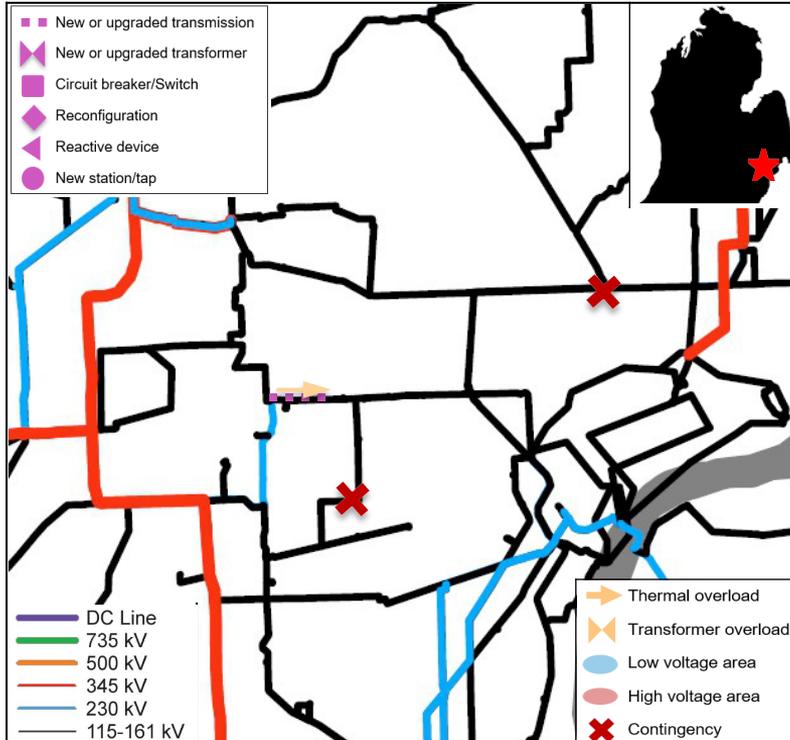
## MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID | Project Name  | Project Type | Other Type  | Expected ISD | Current Cost |
|-----------------|---|--------------|-------------|--------------|--------------|
| 50216           | Upgrade Petersburg 138 kV Breakers - 3 Breakers                               | BRP          |             | 12/1/2031    | \$0.7M       |
| 50217           | Upgrade Stout South Breakers - 12 Breakers 138 kV                             | BRP          |             | 12/1/2031    | \$3.1M       |
| 50306           | Rebuild Southwest-Stout CT_132-02_138 kV Line                                 | BRP          |             | 12/31/2029   | \$9.3M       |
| 50307           | Rebuild Southwest-Northwest 132-04 138 kV Line                                | BRP          |             | 12/31/2029   | \$15.2M      |
| 50311           | Rebuild Stout North-Sanitation Belmont-Southwest_132-01_&_132-74_138 kV Lines | BRP          |             | 12/1/2033    | \$15.0M      |
| 50312           | Rebuild Southwest-Lilly South 132-10 138 kV Line                              | BRP          |             | 12/1/2033    | \$7.1M       |
| 50313           | Rebuild Lilly South-Center 132-61 138 kV Line                                 | BRP          |             | 12/1/2033    | \$2.9M       |
| 50314           | Rebuild Georgetown-North 132-86 138 kV Line                                   | BRP          |             | 12/31/2029   | \$12.8M      |
| 50502           | New Brownsburg East 138 kV Substation   | Other        | Load Growth | 12/31/2025   | \$8.6M       |
| 50503           | New Pleasant Acres Substation Feed 2 138 kV line                              | Other        | Load Growth | 12/31/2025   | \$2.0M       |
| ▲ 50722         | New Pond Creek 345 : 138 kV Substation  | BRP          |             | 6/1/2029     | \$40.0M      |
| ▲ 50723         | Uprate IPL Petersburg to Cato 138 kV Equipment                                | BRP          |             | 12/31/2028   | \$4.0M       |
| ▲ 50727         | Replace Thompson 345/138/13.75 MVA Autotransformer at Thompson Substation     | BRP          |             | 12/31/2029   | \$15.0M      |
| 50731           | IPL Adoption of Seasonal Ratings - BRP  | BRP          |             | 12/31/2029   | \$0.0M       |



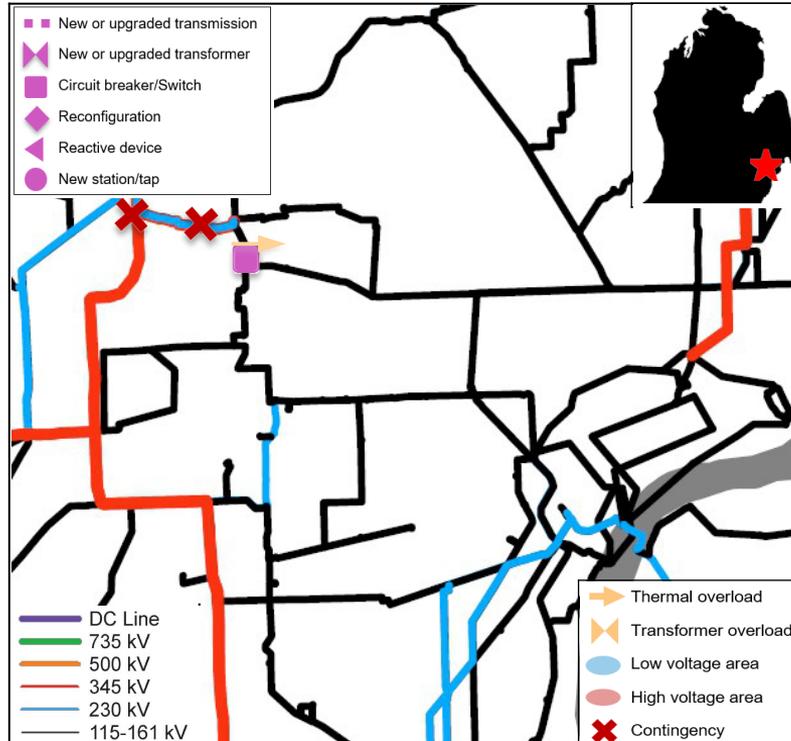
# ITCT

# ITCT: Rebuild Hines – Levan 120 kV Line



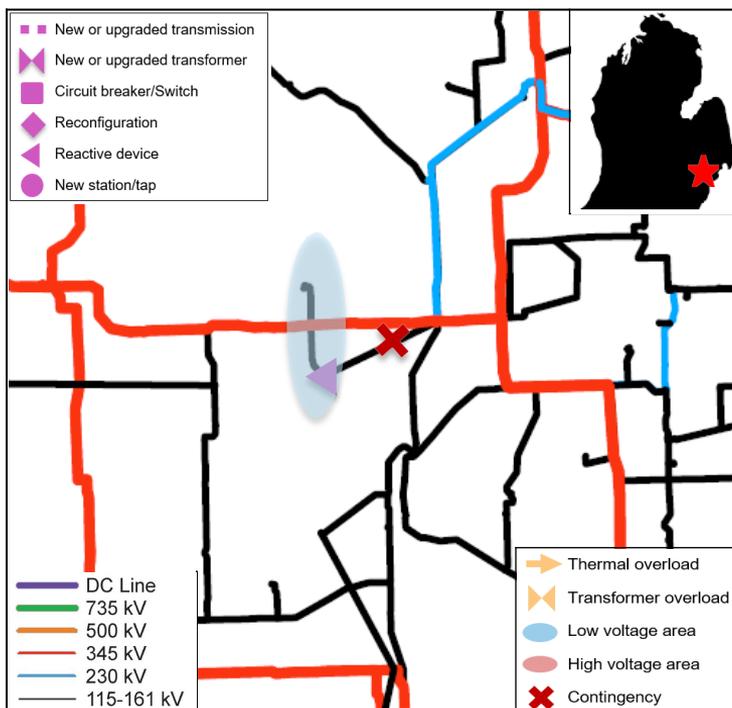
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|---------------------|--|
| Submitting TO       | ITC  |
| Project #           | 18192  |
| Project Name        | Rebuild Hines - Levan 120 kV Line  |
| Project Type        | BRP  |
| Project Description | Rebuild the 954 ACSR sections (~0.5 mile) from structure #5680A to Levan and from structure #5686 to Hines with 1431 ACSR using 120 kV, double-circuit construction. Install OPGW on the rebuilt sections. Also, upgrade the 954 ACSR bus (line drop) at Levan "HD" to at least 375 MVA for summer emergency rating. Terminate fiber at both ends. |
| System Need         | The Hines – Levan circuit is projected to become overloaded in MISO's MTEP24 study.  |
| Current Cost        | \$2M   |
| Expected ISD        | 6/1/2031   |
| Target Appendix     | A  |

# ITCT: Upgrade Sunset 120 kV Switch



|                     |   |
|---------------------|---|
| Submitting TO       | ITC   |
| Project #           | 50590   |
| Project Name        | Upgrade Sunset 120 kV Switch  |
| Project Type        | BRP   |
| Project Description | Upgrade the 1200A switch "HI" at Sunset 120 kV station.                                 |
| System Need         | MISO identified the overload on Sunset2-Sunset3 120kV bus-tie (HH) in the MTEP24 study. |
| Current Cost        | \$0.4M  |
| Expected ISD        | 6/1/2030  |
| Target Appendix     | A   |

# ITCT: Install Phoenix 120 kV Capacitor



|                     |  |
|---------------------|--|
| Submitting TO       | ITC  |
| Project #           | 50591  |
| Project Name        | Install Phoenix 120 kV Capacitor   |
| Project Type        | BRP  |
| Project Description | Install a 50 Mvar capacitor with 40 kA synchronous breaker and associate switch at Phoenix 120 kV bus 103. |
| System Need         | MISO identified voltage issues at Phoenix 120 kV bus in the MTEP24 study.                                  |
| Current Cost        | \$2M   |
| Expected ISD        | 6/1/2030   |
| Target Appendix     | A  |

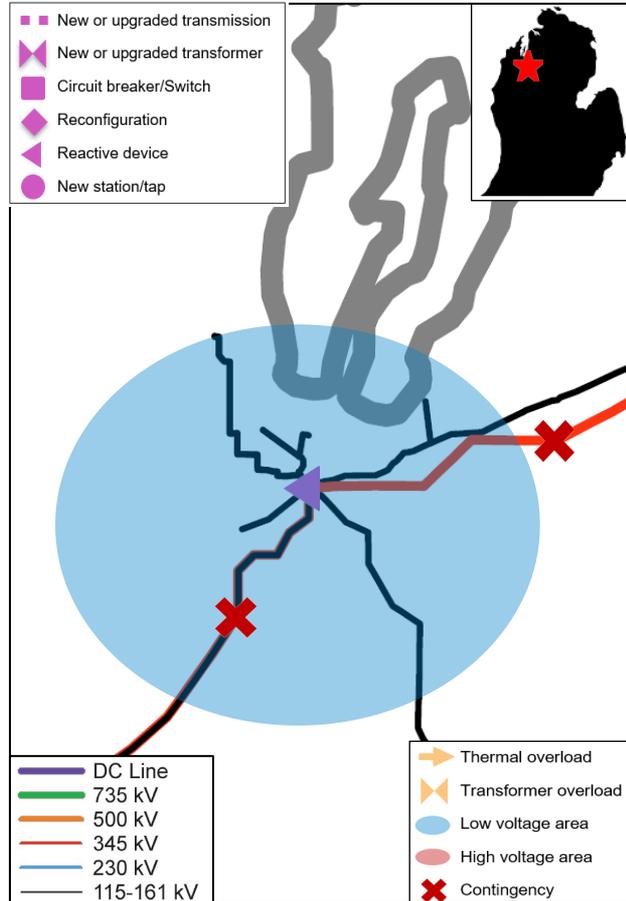
## MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID<br>▲ | Project Name                          | Project Type | Other Type        | Expected ISD | Current Cost |
|----------------------|---------------------------------------|--------------|-------------------|--------------|--------------|
| 18192                | Rebuild Hines - Levan 120 kV Line     | BRP          |                   | 6/1/2031     | \$1.9M       |
| ▲ 50212              | Avery - New DTE Interconnection       | Other        | Load Growth       | 9/30/2027    | \$15.8M      |
| 50246                | Replace Caniff #303AB PST Transformer | Other        | Age and Condition | 12/31/2028   | \$30.0M      |
| 50253                | Oliver - New DTE Interconnection      | Other        | Local Reliability | 12/1/2027    | \$5.6M       |
| 50468                | ITCT Customer Interconnections - 2028 | Other        | Load Growth       | 12/31/2028   | \$2.5M       |
| 50476                | ITCT Line Relocation - 2026           | Other        | Local Needs       | 12/31/2026   | \$2.5M       |
| 50477                | ITCT Line Relocation - 2027           | Other        | Local Needs       | 12/31/2027   | \$2.5M       |
| 50479                | ITCT Asset Replacement Program - 2027 | Other        | Age and Condition | 12/31/2027   | \$59.8M      |
| 50590                | Upgrade Sunset 120 kV Switch          | BRP          |                   | 6/1/2030     | \$0.2M       |
| 50591                | Install Phoenix 120 kV Capacitor      | BRP          |                   | 6/1/2030     | \$1.5M       |
| 50597                | DTE New Hudson Interconnection        | Other        | Load Growth       | 3/31/2028    | \$12.2M      |



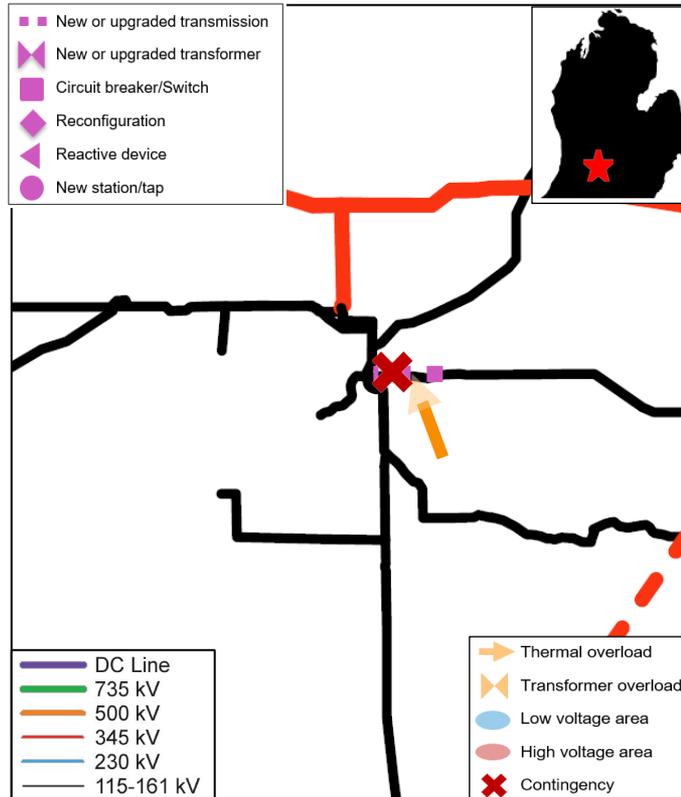
# METC

# METC: New [METC] Keystone 138 kV STATCOM



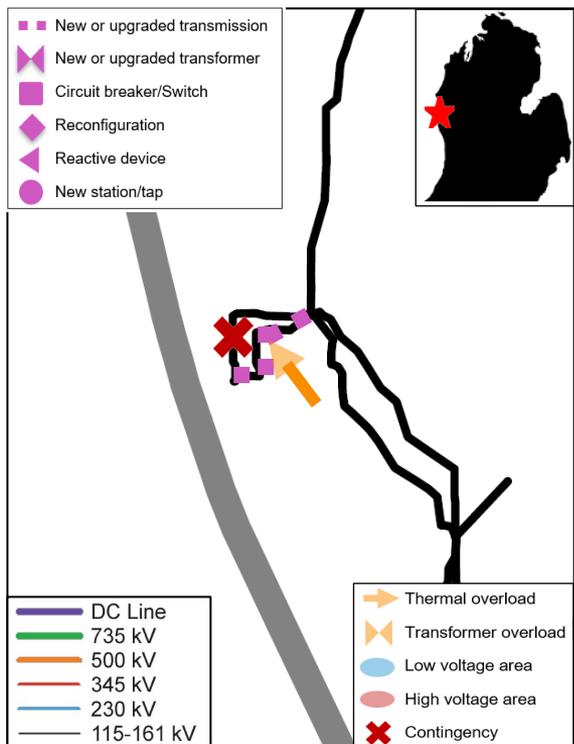
|                     |  |
|---------------------|--|
| Submitting TO       | METC   |
| Project #           | 15993  |
| Project Name        | New [METC] Keystone 138 kV STATCOM   |
| Project Type        | BRP  |
| Project Description | The proposed solution is to add +100/0 Mvar STATCOM and 4*25 Mvar MSC (Mechanical Switch Capacitor) at [METC] Keystone 138 kV<br>1. to provide the needed slow/fast reactive power supports to the bus voltages in [METC] Keystone 138 kV region<br>2. To reduce the lower flows on the [METC] Keystone 345/138 kV transformers. |
| System Need         | MISO identified the need for fast reactive supporting device at [METC] Keystone in the MTEP24 dynamics (D5) study.   |
| Current Cost        | \$62M  |
| Expected ISD        | 6/1/2031   |
| Target Appendix     | A  |

# METC: Upgrade Mud Lake – Verona #1 138 kV line



|                     |   |
|---------------------|---|
| Submitting TO       | METC  |
| Project #           | 50366   |
| Project Name        | Upgrade Mud Lake - Verona #1 138 kV line  |
| Project Type        | BRP   |
| Project Description | Upgrade ~0.67 mile of 954 ACSR to 1431 ACSR on the Mud Lake – Verona 138 kV line No. 1. Also, upgrade the 2-4/0 Cu stranded bus at position “588” and switch 585 to at least 450 MVA for summer emergency rating. |
| System Need         | MISO’s MTEP24 generator deliverability study shows the Mud Lake - Verona 138 kV line No. 1 overloaded for an N-1 contingency.   |
| Current Cost        | \$2M  |
| Expected ISD        | 6/1/2030  |
| Target Appendix     | A   |

# METC: Upgrade Dupont – White Lake 138 kV Line



|                     |   |
|---------------------|---|
| Submitting TO       | METC  |
| Project #           | 50372   |
| Project Name        | Upgrade Dupont-White Lake 138 kV line   |
| Project Type        | BRP   |
| Project Description | Upgrade line from Dupont to White Lake (~5.094 miles) from 336 ACSR to 954 ACSR. Also, upgrade buses at Dupont positions "199" and "177" to at least 332 MVA for summer emergency rating. |
| System Need         | The overloads identified were found in MISO's MTEP24 Annual Deliverability Study.   |
| Current Cost        | \$8M  |
| Expected ISD        | 6/1/2030  |
| Target Appendix     | A   |

# Michigan Electric Transmission Co.

## MTEP25 Appendix A Projects being recommended for Board Approval

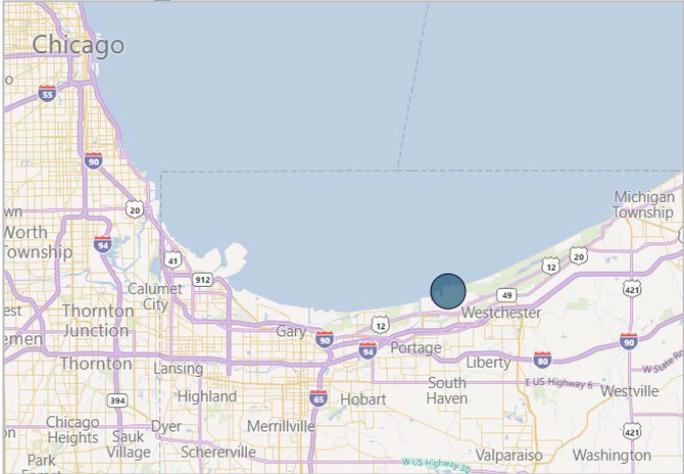
| MTEP Project ID | Project Name                                    | Project Type | Other Type        | Expected ISD | Current Cost |
|-----------------|---|--------------|-------------------|--------------|--------------|
| 19976           | New [METC] Keystone 138 kV STATCOM              | BRP          |                   | 6/1/2031     | \$62.2M      |
| 20020           | Rebuild Gaylord - Mio Dam 138kV line            | Other        | Age and Condition | 12/31/2029   | \$87.3M      |
| 50203           | Rebuild and Relocate Alma 138 kV substation     | Other        | Local Needs       | 12/31/2029   | \$15.2M      |
| 50229           | New Oneida - Tallman 138 kV circuit             | Other        | Local Needs       | 12/31/2029   | \$29.6M      |
| 50251           | Rebuild Batavia - Dorrance #1 & #2 138 kV lines | Other        | Age and Condition | 12/31/2029   | \$10.6M      |
| 50317           | New Hagensville Junction Interconnection (METC) | Other        | Load Growth       | 12/31/2028   | \$5.0M       |
| 50366           | Upgrade Mud Lake - Verona #1 138 kV line        | BRP          |                   | 6/1/2030     | \$1.6M       |
| 50372           | Upgrade Dupont-White Lake 138 kV line           | BRP          |                   | 6/1/2030     | \$8.3M       |
| 50377           | Rebuild Blackstone 138 kV Station               | Other        | Age and Condition | 6/1/2030     | \$17.0M      |
| 50447           | New [CONS] Baker Interconnection                | Other        | Local Needs       | 6/1/2030     | \$108.8M     |
| 50463           | Rebuild [CONS] Blackstone 46 kV Station         | Other        | Local Needs       | 10/1/2028    | \$3.3M       |
| 50466           | METC Customer Interconnections - 2028           | Other        | Load Growth       | 12/31/2028   | \$2.5M       |
| 50474           | METC Line Relocation - 2026                     | Other        | Local Needs       | 12/31/2026   | \$2.5M       |
| 50475           | METC Line Relocation - 2027                     | Other        | Local Needs       | 12/31/2027   | \$2.5M       |
| 50478           | METC Asset Replacement Program - 2027           | Other        | Age and Condition | 12/31/2027   | \$53.9M      |



# Northern Indiana Public Service Company (NIPSCO)

# Northern Indiana Public Service Company

As already presented and justified, the following BRPs are being recommended for E



## Baseline Reliability Projects

| MTEP Project ID | Project Name                            | Project Type | Expected ISD | Current Cost |
|-----------------|---|--------------|--------------|--------------|
| 50390           | New Dune Acres 138 kV Breaker additions | BRP          | 5/31/2029    | \$3.0M       |

 [SPMg..., BRP ...](#)



# Northern Indiana Public Service Company

MTED25 Appendix A Projects being recommended for Board Approval

| MTED Project ID | Project Name   | Project Type | Other Type        | Expected ISD | Current Cost |
|-----------------|--|--------------|-------------------|--------------|--------------|
| 50104           | Upgrade PJM project b3775.8 St. John to Crete 345 kV           | Other        | Local Reliability | 6/1/2026     | \$1.2M       |
| 50105           | Reconfigure PJM project b3775.9. Green Acres 345kV substation  | Other        | Local Reliability | 6/1/2026     | \$2.2M       |
| 50163           | New J1358 IC Facilities Interconnection 138 kV                 | GIP          |                   | 5/31/2028    | \$23.4M      |
| 50170           | New J1355 IC Facilities Interconnection 138 kV                 | GIP          |                   | 6/1/2028     | \$4.2M       |
| 50171           | Schahfer 345kV substation Redundancy                           | GIP          |                   | 7/30/2026    | \$0.5M       |
| 50389           | New Leesburg 345/138kV Transformer addition                    | Other        | Local Reliability | 12/31/2027   | \$8.0M       |
| 50390           | New Dune Acres 138 kV Breaker additions                        | BRP          |                   | 5/31/2029    | \$3.0M       |
| 50488           | Upgrade Dumont to Stillwell 138 kV line (PJM Project B3775.11) | Other        | Local Reliability | 12/1/2026    | \$0.6M       |
| 50538           | J1386 IC Facilities  | GIP          |                   | 5/31/2028    | \$8.1M       |



# Southern Indiana Gas & Electric (SIGE)

# Southern Indiana Gas & Electric

MTED25 Appendix A Projects being recommended for Board Approval

| MTED Project ID | Project Name                                     | Project Type | Other Type        | Expected ISD | Current Cost |
|-----------------|--|--------------|-------------------|--------------|--------------|
| 50244           | Replace Bordenville T1 69 kV                     | Other        | Age and Condition | 12/31/2027   | \$2.4M       |
| 50245           | Replace Culley 138kV CCVT Boxes                  | Other        | Age and Condition | 12/31/2027   | \$1.6M       |
| 50247           | Rebuild Elliott Transformer and Substation 69 kV | Other        | Local Reliability | 12/31/2027   | \$15.7M      |
| 50248           | Replace Newburgh Circuit Switcher 69 kV          | Other        | Age and Condition | 12/31/2027   | \$1.6M       |
| 50249           | Rebuild Dubois T2 138/69 kV Transformer          | Other        | Local Reliability | 12/31/2027   | \$7.9M       |
| 50316           | Rebuild Z84 Duff to Petersburg 138 kV            | Other        | Age and Condition | 12/31/2028   | \$38.0M      |
| 50326           | Rebuild Z95 Northwest to AB Brown 138kV          | Other        | Age and Condition | 12/31/2027   | \$8.7M       |



# Wolverine Power Supply Cooperative (WPSC)

## Wolverine Power Supply Cooperative

MTEP25 Appendix A Projects being recommended for Board Approval

| MTEP Project ID | Project Name   | Project Type | Other Type        | Expected ISD | Current Cost |
|-----------------|--|--------------|-------------------|--------------|--------------|
| 50337           | Rebuild Tower - Black Lake 69 kV line to 138 kV capability             | Other        | Age and Condition | 12/31/2029   | \$4.5M       |
| 50338           | Rebuild Lincoln Junction - Lincoln 69 kV line to 138 kV capability     | Other        | Age and Condition | 12/31/2029   | \$5.0M       |
| 50339           | Rebuild Bass Lake - Wolf Lake 69 kV line to 138 kV capability          | Other        | Age and Condition | 12/31/2029   | \$11.0M      |
| 50401           | Rebuild East Jordan Junction - Barnard 69 kV line to 138 kV capability | Other        | Age and Condition | 12/31/2029   | \$26.0M      |



# MTEP 25 Projects and Issues Under Review

MISO East and Central Subregion

# Preliminary projects and issues are detailed in 1<sup>st</sup> Subregional planning meeting (SPM) materials

- East Subregional SPM 1: February 8, 2023
  - [East Subregional Planning Meeting \(ESPM\) - February 12, 2025](#)
- Central Subregional SPM 1: February 10, 2025
  - [Central Subregional Planning Meeting \(CSPM\) - February 10, 2025](#)
- MTEP25 powerflow models expected March 2025. Please see MISO modeling page for updates.
  - [Planning Modeling \(misoenergy.org\)](#)