



Expedited Project Review Results and Recommendation

**Expedited Project Review Technical
Study Task Force (EPR-TSTF)**

November 04, 2025

Purpose and Key Takeaways



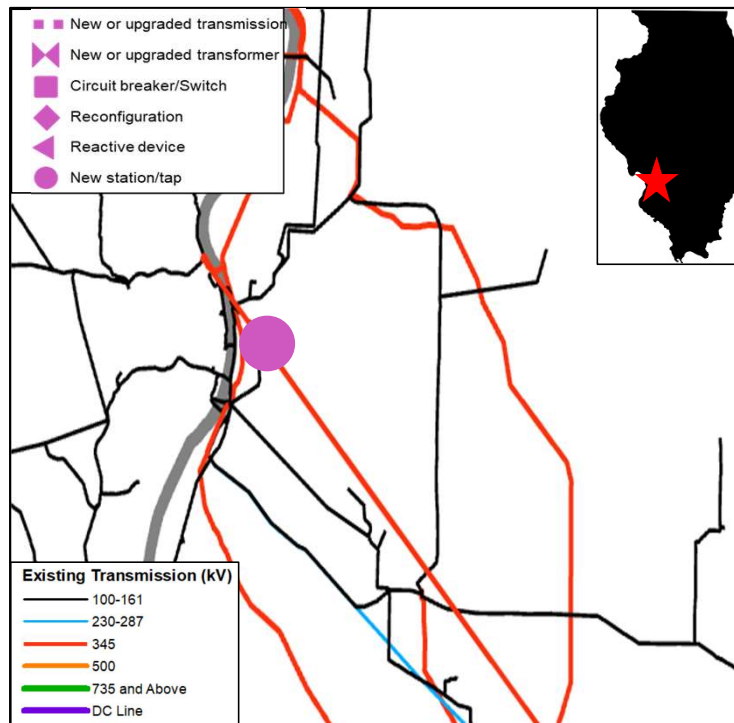
Purpose: Review results and provide MISO's recommendation for EPRs which have completed mitigation discussions

Key Takeaways:

- Twelve (12) EPRs have completed analysis and mitigation representing 3110 MW of new spot load and other reliability concerns
 - Central region representing 10 projects for review
 - South region representing 2 Projects for review
- MISO recommends the projects move to MTEP26/Appendix A after the PAC comment period.

[AMIL] New Load Addition at New Renew 138 kV substation

AMIL: Load Addition at New Renew 138 kV substation



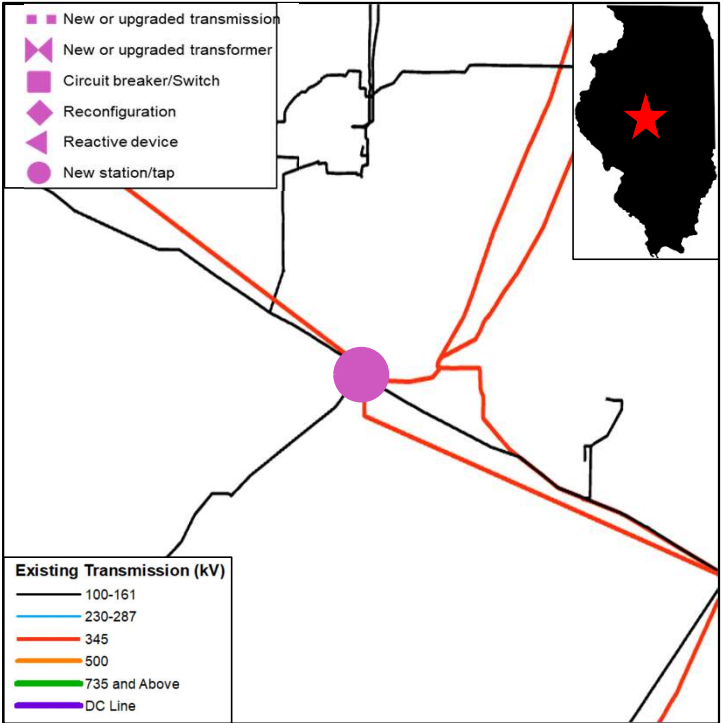
Project #	50733
Project Name	New 150 MW load at New Renew 138 kV substation on Venice-Ridge 138 kV line
Project Type	Other, Load Growth
Project Description	Construct a new 138 kV 4 position ring bus for the connection of 150 MW customer load. The substation will be splitting the Venice-Ridge-1567 138 kV line and routed into and out of the new substation. Rebuild the Venice-Ridge-1567, Cahokia-Ridge-1441, and Cahokia-Ridge-1529 138 kV lines to 2000A.
System Need	To support serving the load in this area, expected ISD requires 2 years for Engineering, Procurement, and Legislature approval prior to normal MTEP26 timeline.
Current Cost	\$56.5 M
Expected ISD	12/1/2028
Target Appendix	A in MTEP26

Models, Reliability Analysis, and Neighbor Coordination

- The EPR was applied to all applicable MTEP models based on the in-service date. Models were posted for review prior to analysis.
- MISO performed TPL-001-5.1 no-harm analysis utilizing n-1 and n-1-1 contingencies centered around the point of interconnection of the EPR
 - Results were posted for impacted entity feedback
 - Zero (0) new TPL violations or worsened reliability issues were identified
- No neighboring entities were impacted based on the analysis results.

[AMIL] Load Addition at Austin 345 kV Substation

AMIL: Load Addition at Austin 345 kV Substation



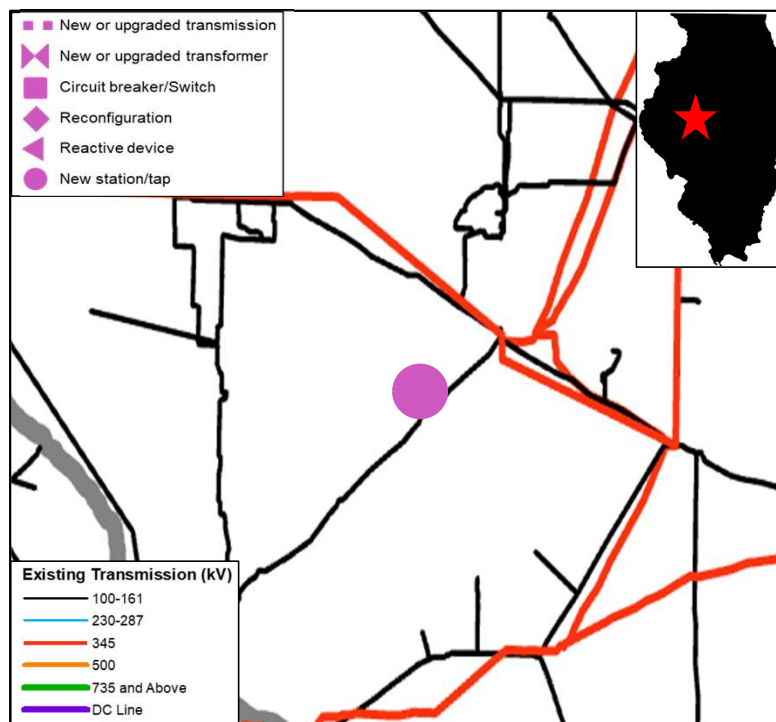
Project #	50736
Project Name	New Load Addition at Austin 345 kV substation
Project Type	Other, Load Growth
Project Description	Add 2 positions at Austin 345 kV substation to accommodate 1000 MW customer load addition
System Need	To support serving the load in this area, expected ISD requires 2 years for Engineering, Procurement, and Legislature approval prior to normal MTEP26 timeline.
Current Cost	\$12 M
Expected ISD	12/1/2028
Target Appendix	A in MTEP26

Models, Reliability Analysis, and Neighbor Coordination

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 - Zero (0) new TPL violations or worsened reliability issues were identified
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[AMIL] New RECC Load Addition at Mogul 345 kV Substation

AMIL: RECC Load Addition at Mogul 345 kV Substation

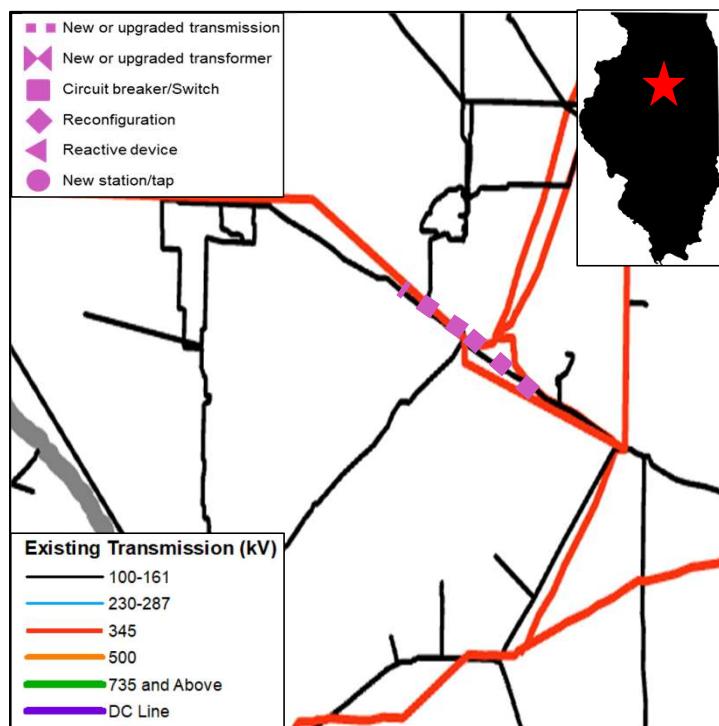


Project #	50735
Project Name	New RECC Load Addition at Mogul 345 kV substation (Phase 2)
Project Type	Other, Load Growth
Project Description	Add position at Mogul 345 kV for 300 MW load addition
System Need	To support serving the load in this area, expected ISD requires 2 years for Engineering, Procurement, and Legislature approval prior to normal MTEP26 timeline.
Current Cost	\$13.2 M
Expected ISD	12/1/2028
Target Appendix	A in MTEP26

Models, Reliability Analysis, and Neighbor Coordination

- The EPR was applied to all applicable MTEP models based on the In-Service Date. Models were posted for review prior to analysis.
- MISO performed TPL-001-5.1 no-harm analysis utilizing n-1 and n-1-1 contingencies centered around the point of interconnection of the EPR
 - Results were posted for impacted entity feedback
 - An additional BRP was required
- MISO coordinated with impacted neighboring entities based on the analysis results
 - We appreciate the active coordination of the impacted parties as a part of this process

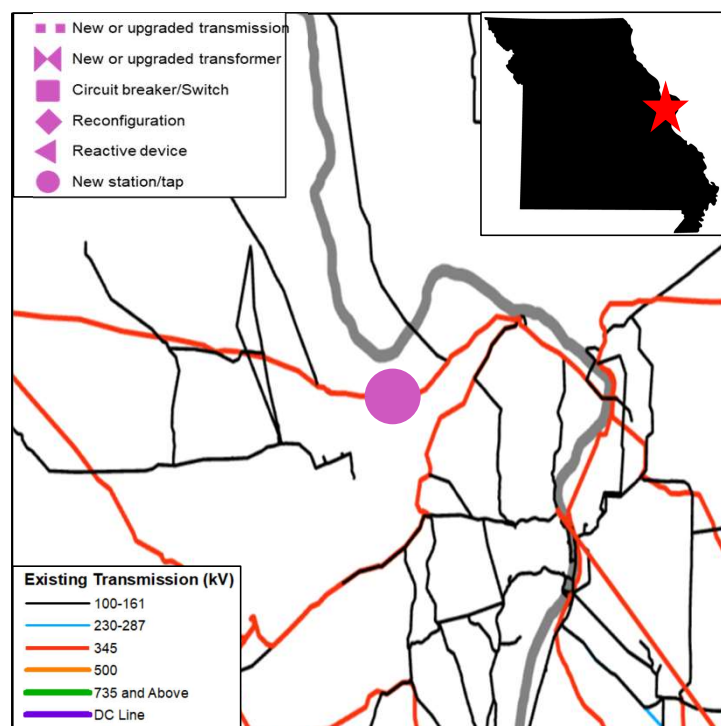
New MTEP26 BRP project (50735)



Project #	50633
Project Name	Rebuilds on 138 kV from Diamond Core Load Addition (RECC Territory)
Project Type	BRP
Project Description	Rebuild Towerline-San Jose Rail-1625, Austin-Yvonne-1545, and Yvonne-Taylorville South-1601 138 kV lines, 2000 Amps minimum continuous capability.
System Need	Load Growth
Current Cost	\$50.3 M
Expected ISD	12/1/2027
Target Appendix	A in MTEP26

[AMMO] Increment Hayford 345 kV Load Addition

AMMO: Increment Hayford 345 kV Load Addition



Project #	50697
Project Name	Increment Hayford 345 kV Load Addition
Project Type	Other, Load Growth
Project Description	Hayford connection to Belleau-Graus 345 kV line for customer load addition. Additional 510 MW of load incremented on the Hayford Substation
System Need	To support serving the load in this area, expected ISD requires 2 years for Engineering, Procurement, and Legislature approval prior to normal MTEP26 timeline.
Current Cost	\$8 M
Expected ISD	12/1/2030
Target Appendix	A in MTEP26

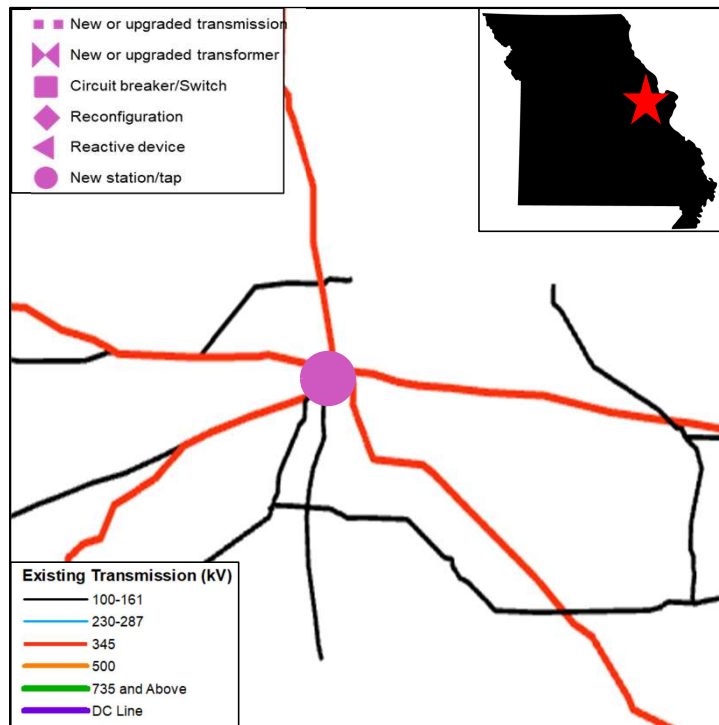
Models, Reliability Analysis, and Neighbor Coordination

- The EPR was applied to all applicable MTEP models based on the in-service date. Models were posted for review prior to analysis.
- MISO performed TPL-001-5.1 no-harm analysis utilizing n-1 and n-1-1 contingencies centered around the point of interconnection of the EPR
 - Results were posted for impacted entity feedback
 - Zero (0) new TPL violations or worsened reliability issues were identified
- No neighboring entities were impacted based on the analysis results.

[AMMO] Temporary Tap at Montgomery 345 kV Substation

AMMO: Temporary Tap at Montgomery 345 kV Substation

August 2025 Cycle



Project #	50741
Project Name	New Montgomery 345 kV Temporary Tap (Elkhorn Phase 1)
Project Type	Other, Load Growth
Project Description	Construct temporary taps on Montgomery-Lumberjack 345 kV lines to serve 250 MW of customer load. This is temporary until the new Project Elkhorn 345 kV BAAH substation can be built.
System Need	To support serving the load in this area, expected ISD requires 1 years for Engineering, Procurement, and Legislature approval prior to normal MTEP26 timeline.
Current Cost	\$0.25 M
Expected ISD	12/1/2027
Target Appendix	A in MTEP26

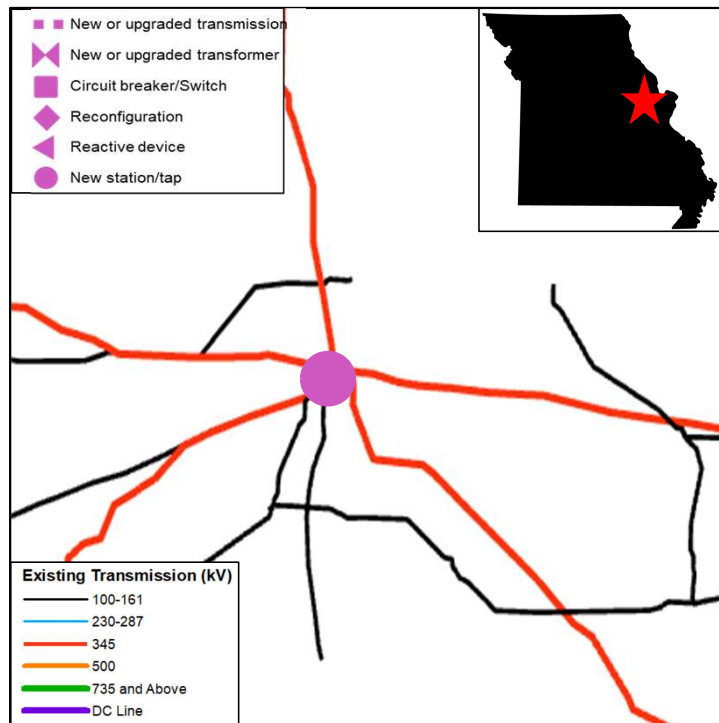
Models, Reliability Analysis, and Neighbor Coordination

- The EPR was applied to all applicable MTEP models based on the in-service date. Models were posted for review prior to analysis.
- MISO performed TPL-001-5.1 no-harm analysis utilizing n-1 and n-1-1 contingencies centered around the point of interconnection of the EPR
 - Results were posted for impacted entity feedback
 - Zero (0) new TPL violations or worsened reliability issues were identified
- No neighboring entities were impacted based on the analysis results.

[AMMO] Load Addition at New Elkhorn 345 kV Substation

AMMO: Load Addition at New Elkhorn 345 kV Substation

August 2025 Cycle



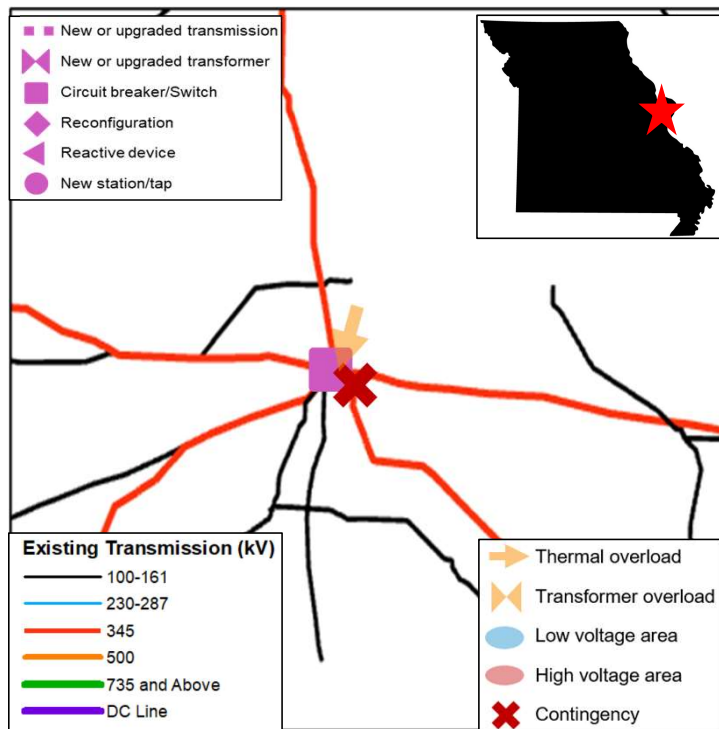
Project #	50737
Project Name	New Load Addition at New Elkhorn 345 kV substation (Elkhorn Phase 2)
Project Type	Other, Load Growth
Project Description	Construct a new 345 kV substation, 12 position ultimate BAAH bus arrangement for the connection of 1000 MW load addition. Construct 3.25 miles 345 kV double circuit line from Lumberjack to split Odyssey-Montgomery 345 kV line.
System Need	To support serving the load in this area, expected ISD requires 3 years for Engineering, Procurement, and Legislature approval prior to normal MTEP26 timeline.
Current Cost	\$40 M
Expected ISD	12/1/2028
Target Appendix	A in MTEP26

Models, Reliability Analysis, and Neighbor Coordination

- The EPR was applied to all applicable MTEP models based on the In-Service Date. Models were posted for review prior to analysis.
- MISO performed TPL-001-5.1 no-harm analysis utilizing n-1 and n-1-1 contingencies centered around the point of interconnection of the EPR
 - Results were posted for impacted entity feedback
 - Two (2) additional CAPs were required to mitigate observed issues
- MISO coordinated with impacted neighboring entities based on the analysis results
 - We appreciate the active coordination of the impacted parties as a part of this process

50737 Corrective Action Plan (CAP)

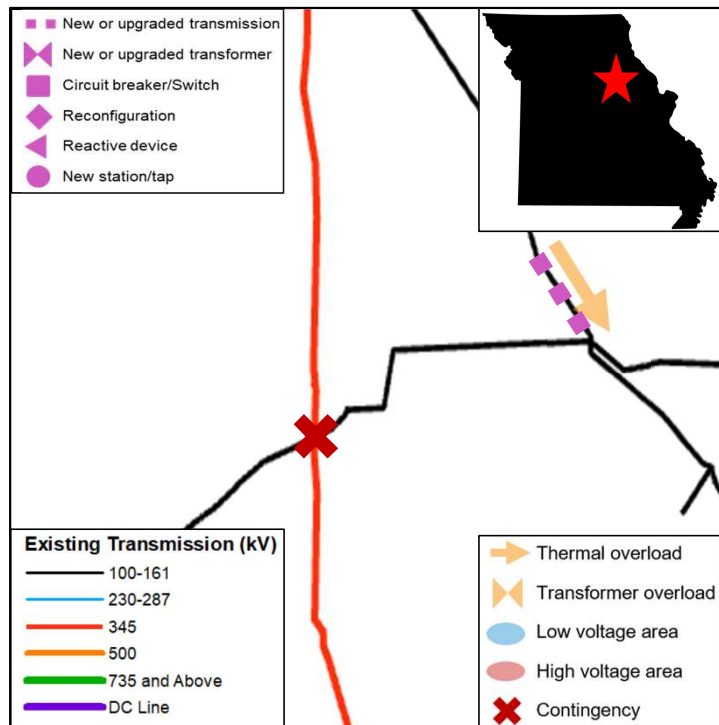
New MTEP26 BRP project



Project #	51113
Project Name	Upgrade Montgomery 345 kV Terminal Equipment
Project Type	BRP
Project Description	Upgrade Montgomery bus/terminal equipment to 4000 A
System Need	P12 and P6 Thermal observations
Current Cost	\$5 M
Expected ISD	12/1/2029
Target Appendix	A in MTEP26

50737 Corrective Action Plan (CAP)

New MTEP26 BRP project

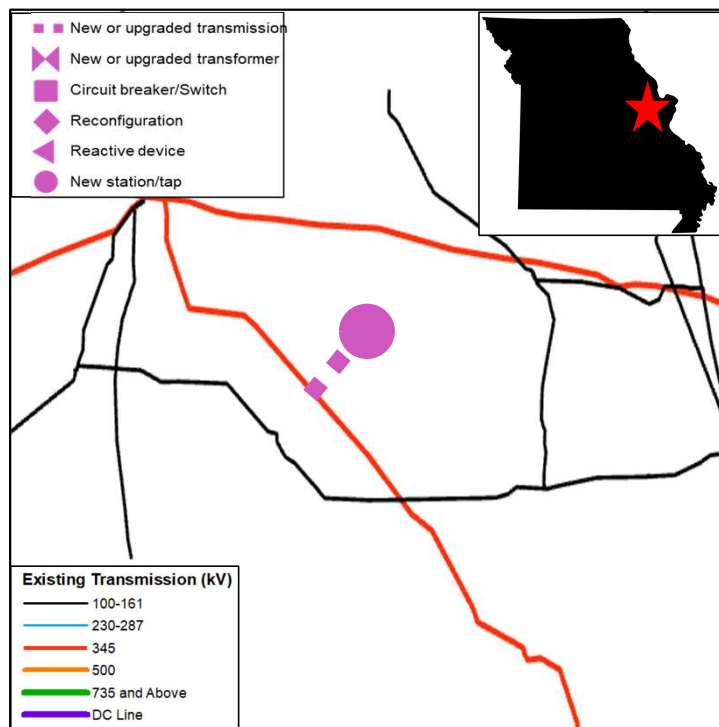


Project #	51114
Project Name	Pike – Peno Creek 161 kV E3X Application
Project Type	BRP
Project Description	Add E3X coating to Pike – Peno Creek 161 kV to increase ampacity
System Need	P12 and P23 thermal observations
Current Cost	\$0.8 M
Expected ISD	12/1/2029
Target Appendix	A in MTEP26

[AMMO] New Load Addition at New Yoshi 345 kV substation

AMMO: Load Addition at New Yoshi 345 kV substation

August 2025 Cycle



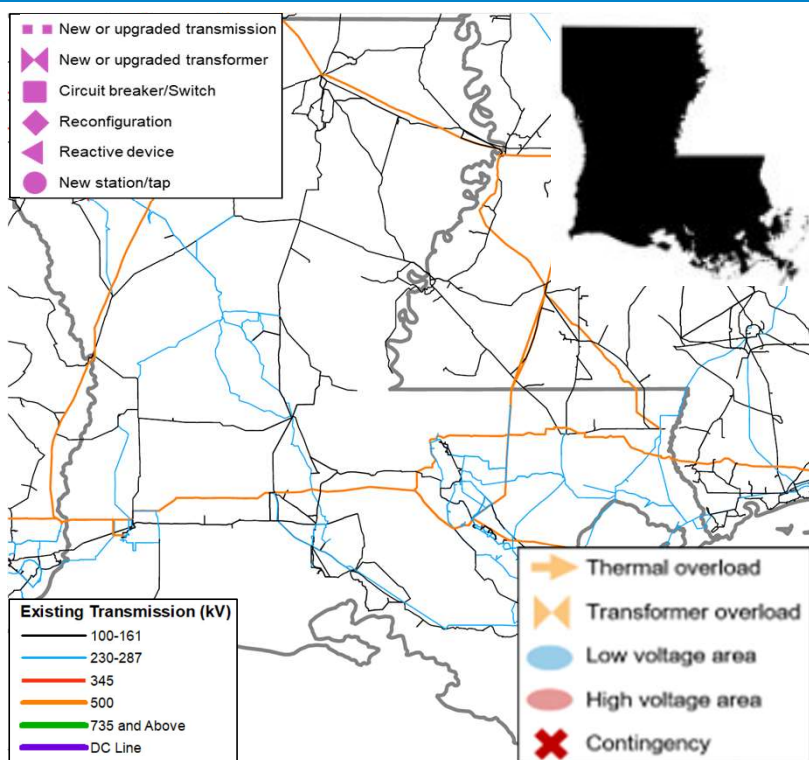
Project #	50738
Project Name	New Load Addition at New Yoshi 345 kV substation
Project Type	Other, Load Growth
Project Description	Construct a new 345 kV substation, 12 position ultimate BAAH bus arrangement for the connection of 400 MW load addition. Construct 20 miles 345 kV double circuit line between Lumberjack/Elkhorn substations and Project Yoshi. Construct 10 miles 345 kV line between Scarlet and Project Yoshi.
System Need	To support serving the load in this area, expected ISD requires 1 years for Engineering, Procurement, and Legislature approval prior to normal MTEP26 timeline.
Current Cost	\$109 M
Expected ISD	12/31/2027
Target Appendix	A in MTEP26

Models, Reliability Analysis, and Neighbor Coordination

- The EPR was applied to all applicable MTEP models based on the in-service date. Models were posted for review prior to analysis.
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 - Results were posted for impacted entity feedback
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- No neighboring entities were impacted based on the analysis results.

[1803] 1803 – Age and Condition Programs

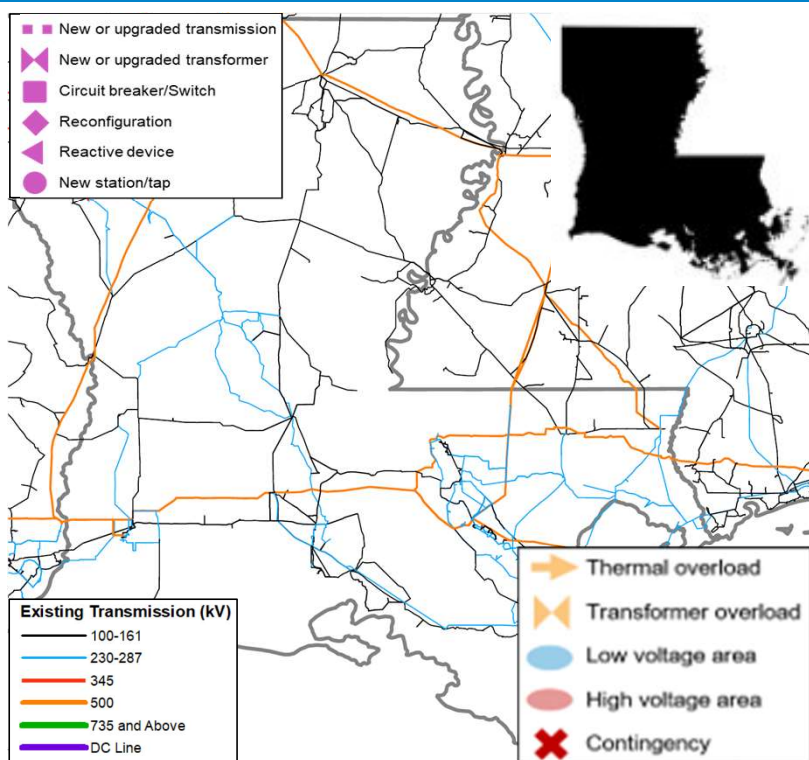
1803 Inc. : 2026 Age and Condition Program



Project #	51058
Project Name	1803 - 2026 Age and Condition Program
Project Type	Other, Age & Condition
Project Description	The 1803 Age and Condition Program prioritizes replacing aged and/or degraded transmission substation assets prioritized on equipment condition assessments. This project covers the execution of this program in 2026 to replace aging equipment such as: arrestors, breakers, switches, motor operated switches, current transformers, potential transformers, communication equipment, protective relays, battery banks, or battery chargers.
System Need	1803 Electric Cooperative, Inc was approved as a MISO TO on June 12, 2025. This EPR request is for the evaluation of a 2025 MTEP "Other/Age and Condition" project for work to be performed during calendar year 2026. Due to expected lead times of BES equipment 1803 requests approval of this project ahead of the MTEP26 cycle.
Current Cost	\$6.1 M
Expected ISD	12/31/2026
Target Appendix	A in MTEP26

This is a like for like replacement with no topological change.

1803 Inc. : 2027 Age and Condition Program



Project #	51059
Project Name	1803 - 2027 Age and Condition Program
Project Type	Other, Age & Condition
Project Description	The 1803 Age and Condition Program prioritizes replacing aged and/or degraded transmission substation assets prioritized on equipment condition assessments. This project covers the execution of this program in 2027 to replace aging equipment such as: arrestors, breakers, switches, motor operated switches, current transformers, potential transformers, communication equipment, protective relays, battery banks, or battery chargers.
System Need	1803 Electric Cooperative, Inc was approved as a MISO TO on June 12, 2025. This EPR request is for the evaluation of a 2025 MTEP "Other - Age and Condition" project for work to be performed during calendar year 2027. Due to expected lead times of BES equipment 1803 requests approval of this project ahead of the MTEP26 cycle.
Current Cost	\$9.8 M
Expected ISD	12/31/2027
Target Appendix	A in MTEP26

This is a like for like replacement with no topological change.

Contact Information

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Questions

MTEP26 reliability analysis scope is consistent with previous cycle to ensure compliance with NERC standards

Steady State Analysis	Transient Stability Analysis	Voltage Stability Analysis	Transfer Capability Assessment	Nuclear Plant Assessment	Generator Deliverability Analysis
Contingency analysis for both planning and extreme events	Disturbance analysis for both planning and extreme events	Identify voltage stability limits under a set of transfer scenarios	Evaluate transfer capability of the system under various transfer scenarios	Monitor and identify potential NPIR violations	Determine deliverability of existing network resources
Near and Long term horizons (year 2, 5, 10)	Near and Long term horizons (year 5, 10*)	Near term horizon (year 5)	Near term horizon (year 5)	Near and Long term horizons (year 2, 5, 10)	Near and Long term horizons (year 5, 10)
TPL-001-5.1 FAC-014 PRC-023	TPL-001-4 FAC-014 PRC-023	FAC-014 PRC-023	FAC-013 FAC-014 PRC-023	NUC-001 PRC-023	

NERC TPL-001-5.1 establishes contingencies and acceptable mitigation requirements

TPL Category	Description	Acceptable Mitigation		
		BES Level	Physical Upgrade Required?	Load Shed or Redispatch Allowed?
P0	System intact	EHV, HV	Yes	No
P1	Single contingency (Fault of a shunt device- fixed, switched or SVC/STATCOM is new)	EHV, HV	Yes	No
P2	Single event which may result in multiple element outage. Open line w/o fault, bus section fault, internal breaker fault	EHV HV	Yes No	No Yes
P3	Loss of generator unit followed by system adjustments + P1. No load shed is allowed	EHV, HV	Yes	Yes
P4	Fault + stuck breaker events	EHV HV	Yes No	No Yes
P5	Fault + relay failure to operate (new)	EHV HV	Yes No	No Yes
P6	Two overlapping singles (not generator)	EHV, HV	No	Yes
P7	Common tower outages; loss of bipolar DC	EHV, HV	No	Yes