Subregional RTEP Committee – Western FirstEnergy Supplemental Projects

March 4, 2025

Solutions

Stakeholders must submit any comments within 10 days of this meeting in order to provide time necessary to consider these comments prior to the next phase of the M-3 process



Need Numbers: ATSI-2025-004

Process Stage: Solution Meeting 03/04/2025

Previously Presented: Need Meeting 02/04/2025

Project Driver:

Other

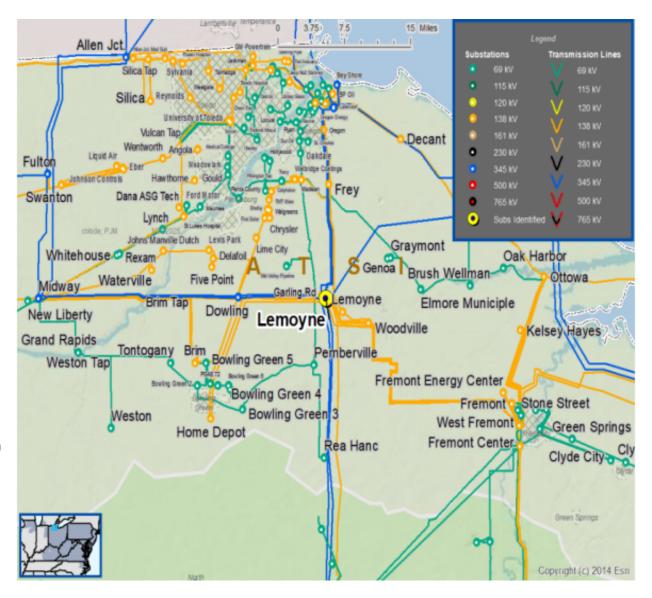
Specific Assumption Reference:

Other (External Public Utility)

Problem Statement:

- As part of its Long-Range Transmission Planning process (LRTP), MISO identified transmission overload and congestion issues through the Midwest region of the MISO transmission system that indicated a need for a MISO high voltage regional transmission backbone in the 10-year and 20-year planning horizons.
- In September 2024, MISO posted its draft 2024 MISO Transmission Expansion Plan (MTEP24) Appendix A for all facilities in the LRTP Tranche 2.1 Portfolio. The Appendix A facility-level details identified transmission facility work in PJM impacting the ATSI zone that is needed to accommodate the portfolio of MISO projects. MISO indicated assignment to PJM Transmission Owners for work in PJM associated with addressing MISO Appendix A identified transmission facility work in PJM.

Lemoyne Substation Upgrades for MISO Tranche 2.1





Lemoyne Substation Upgrades for MISO Tranche 2.1

Need Numbers: ATSI-2025-004

Process Stage: Solution Meeting 03/04/2025

Proposed Solution:

At Lemoyne Substation: Replace line relaying

 Install new 20-mile ADSS fiber line from Lemoyne Substation to Toledo Edison regional services territory boundary

Alternatives Considered: Alternatives considered as part of the MISO LRTP process: MTEP24 Chapter 2 - Regional Long Range Transmission Planning

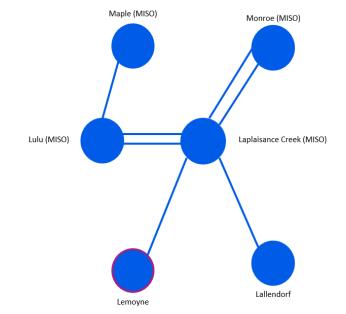
Estimated Project Cost: \$15.6 M (ATSI scope)

Total Project Cost: \$40 M (Laplaisance Creek in MTEP24 Appendix A)

Projected In-Service: 6/1/2032

Project Status: Conceptual

Model: MISO LRTP 2032 Powerflow Case



Legend	
500 kV	
345 kV	
230 kV	
138 kV	
115 kV	
69 kV	
46 kV	
34.5 kV	
23 kV	
New	



Need Numbers: ATSI-2025-005

Process Stage: Solution Meeting 03/04/2025

Previously Presented: Need Meeting 02/04/2025

Project Driver:

Other

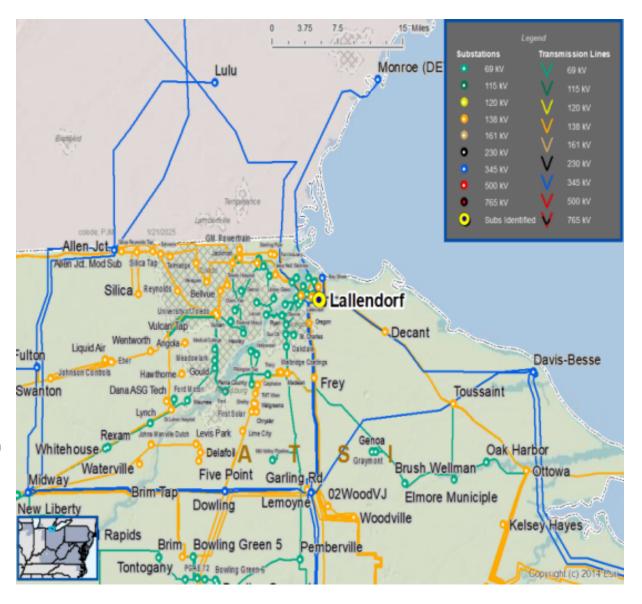
Specific Assumption Reference:

Other (External Public Utility)

Problem Statement:

- As part of it's Long-Range Transmission Planning process (LRTP), MISO identified transmission overload and congestion issues through the Midwest region of the MISO transmission system that indicated a need for a MISO high voltage regional transmission backbone in the 10-year and 20-year planning horizons.
- In September 2024, MISO posted its draft 2024 MISO Transmission Expansion Plan (MTEP24) Appendix A for all facilities in the LRTP Tranche 2.1 Portfolio. The Appendix A facility-level details identified transmission facility work in PJM impacting the ATSI zone that is needed to accommodate the portfolio of MISO projects. MISO indicated assignment to PJM Transmission Owners for work in PJM associated with addressing MISO Appendix A identified transmission facility work in PJM.

Lallendorf Substation Upgrades for MISO Tranche 2.1





Lallendorf Substation Upgrades for MISO Tranche 2.1

Need Numbers: ATSI-2025-005

Process Stage: Solution Meeting 03/04/2025

Proposed Solution:

At Lallendorf Substation: Substation: Replace line relaying

• Install new seven-mile ADSS fiber line from Lallendorf Substation to Toledo Edison regional services territory boundary

Alternatives Considered: Alternatives considered as part of the MISO LRTP process: MTEP24 Chapter 2 - Regional Long Range Transmission Planning

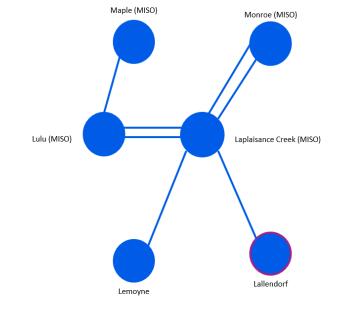
Estimated Project Cost: \$5.9 M (ATSI scope)

Total Project Cost: \$40 M (Laplaisance Creek in MTEP24 Appendix A)

Projected In-Service: 6/1/2032

Project Status: Conceptual

Model: MISO LRTP 2032 Powerflow Case



Legend		
500 kV		
345 kV		
230 kV		
138 kV		
115 kV		
69 kV		
46 kV		
34.5 kV		
23 kV		
New		

Appendix

High Level M-3 Meeting Schedule

Ass	um	pti	ons
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Activity	Timing
Posting of TO Assumptions Meeting information	20 days before Assumptions Meeting
Stakeholder comments	10 days after Assumptions Meeting

Needs

Activity	Timing
TOs and Stakeholders Post Needs Meeting slides	10 days before Needs Meeting
Stakeholder comments	10 days after Needs Meeting

Solutions

Activity	Timing
TOs and Stakeholders Post Solutions Meeting slides	10 days before Solutions Meeting
Stakeholder comments	10 days after Solutions Meeting

Submission of Supplemental Projects & Local Plan

Activity	Timing
Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
Post selected solution(s)	Following completion of DNH analysis
Stakeholder comments	10 days prior to Local Plan Submission for integration into RTEP
Local Plan submitted to PJM for integration into RTEP	Following review and consideration of comments received after posting of selected solutions

Revision History

02/20/2025 – V1 – Original version posted to pjm.com