Transmission Expansion Advisory Committee: AEP Supplemental Projects

July 8, 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

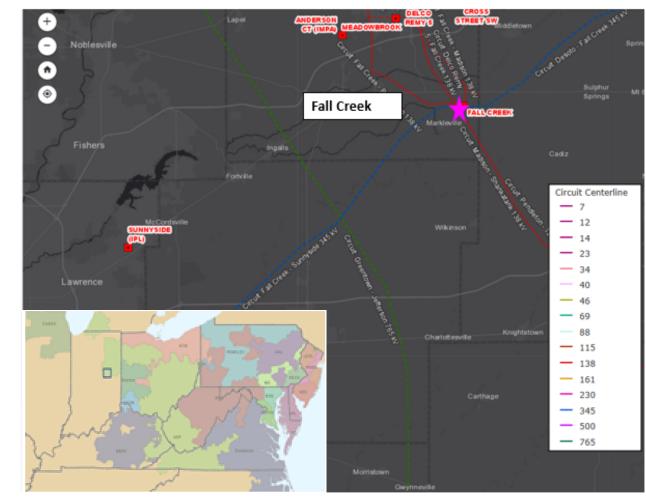


AEP Transmission Zone M-3 Process Fall Creek, IN

Need Number: AEP-2024-IM013 Process Stage: Solution Meeting TEAC - 07/08/2025 Previously Presented: Need Meeting 12/03/2024 Project Driver: Operational Flexibility and Efficiency Specific Assumption Reference: AEP Guidelines for Transmission Owner Identified Needs (AEP Assumptions slide 14)

Problem Statement:

AES-Indiana (a MISO member) will be removing and retiring their Fall Creek 345 kV circuit breakers "L" and "K2" which have reached their end of life. These are the only AES-Indiana owned assets at AEP's Fall Creek 345 kV station. This removal will affect the operational reliability of the system by creating a three-terminal line, an operating configuration that presents protection challenges and could result in mis-operations or over-tripping of the remaining AEP breakers in the station.





AEP Transmission Zone M-3 Process Desoto, IN/Aladdin, IN/Fall Creek, IN

Need number(s): AEP-2024-IM013 Process Stage: Solution Meeting TEAC - 07/08/2025

Proposed Solution:

Desoto relay upgrades: 345 kV relay upgrades due to the Fall Creek station circuit breaker install.. Estimated Cost: \$1.175 M

Aladdin Telecom install: Install Telecom at Aladdin station for the area.. Estimated Cost: \$0.197 M

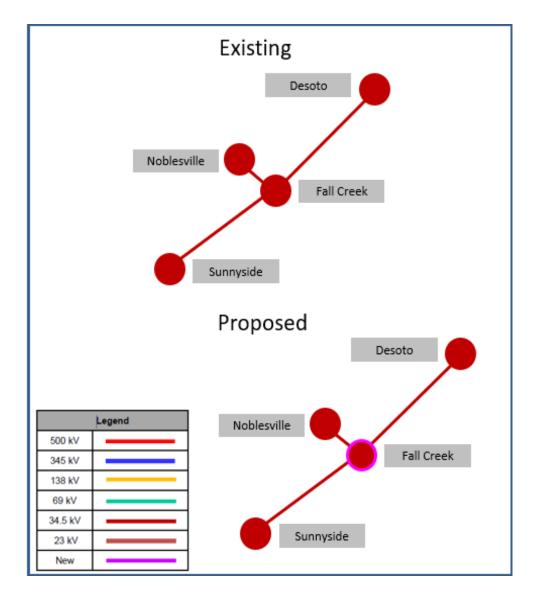
Fall Creek install: Install three 345 kV 63 kA breakers in the current "K" string. Extend 345 kV bus. 345 kV switch removal.. Estimated Cost: \$7.954 M

Transmission Cost Estimate: \$9.326 M

Alternatives Considered:

Considering the availability of space in the station, no other transmission alternates were viable. Retiring and not replacing the breakers would result in a three-terminal line at the station and would result in protection challenges with the remaining equipment.

Projected In-Service: 05/27/2026 Project Status: Scoping



Appendix

High Level M-3 Meeting Schedule

Activity	Timing
Posting of TO Assumptions Meeting information	20 days before Assumptions Meeting
Stakeholder comments	10 days after Assumptions Meeting

Needs

Solutions

Submission of Supplemental Projects & Local Plan

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

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

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

6/27/2025 – V1 – Original version posted to pjm.com