

SRRTEP - Western Committee EKPC Supplemental Projects

Sept. 18, 2026

Needs

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

EKPC Transmission Zone M-3 Process Casey County - Marion County 161 kV Circuit

Need Number: EKPC-2026-002

Process Stage: Need Meeting 09/18/2026

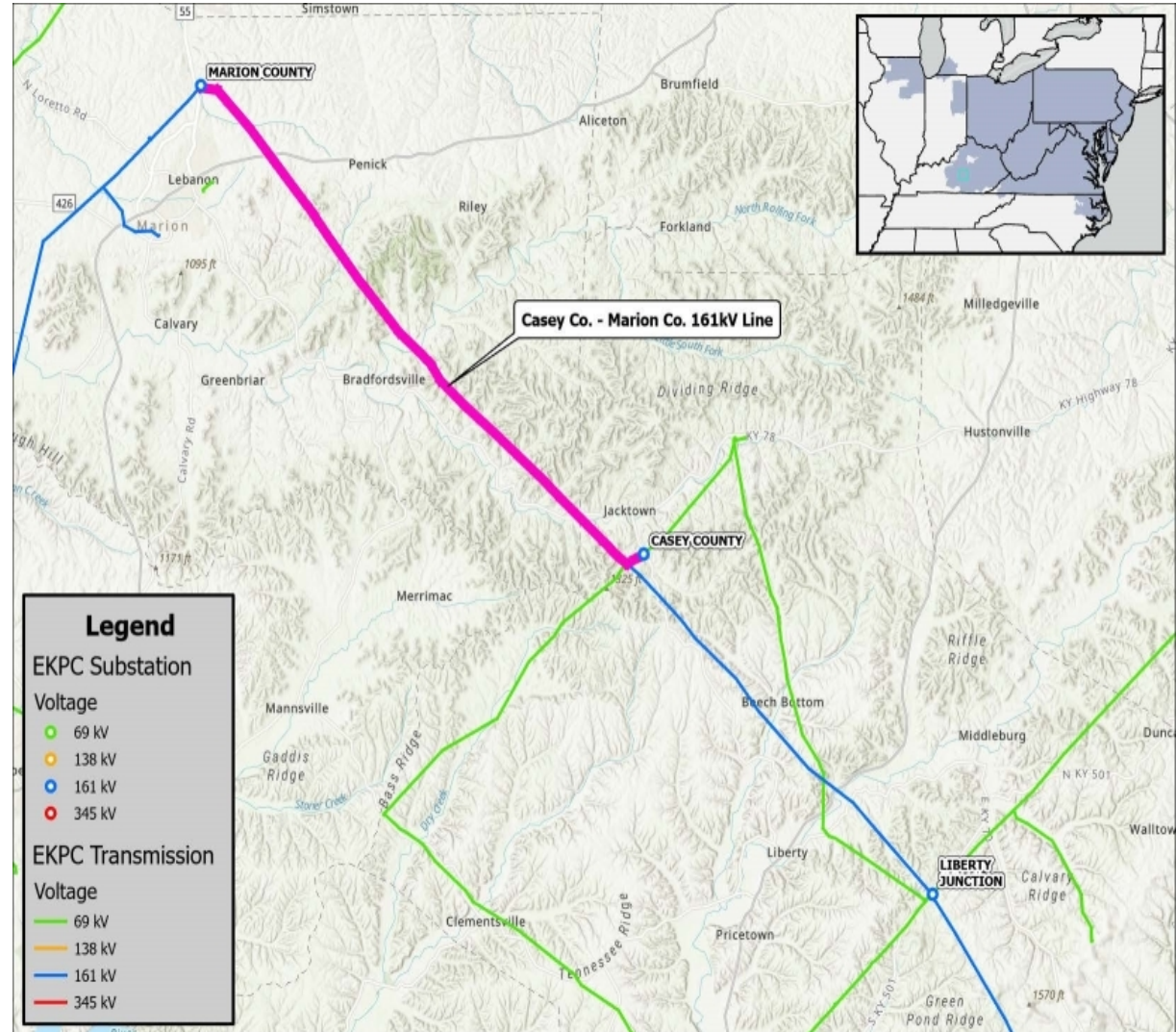
Project Driver: Other

Specific Assumption References:

EKPC Planning Assumptions Slide 17

Problem Statement:

EKPC's capital work plan includes two new generation additions AH1-721 (Cooper CCGT) in TC2 and C01-1228 (Liberty RICE) in Cycle 1. EKPC is bringing this supplemental need forward due to the Liberty RICE generation facility's expected COD of December 2028. In order to provide adequate transmission capacity for this facility, EKPC has performed its own transmission studies and identified specific transmission needs driven by the added generation output in that timeframe. EKPC's internal analysis associated with these generation additions indicate future thermal loading concerns on the 17.77-mile Casey County - Marion County 161 kV line associated with the generation additions. EKPC will develop and evaluate alternatives to address these loading concerns.



EKPC Transmission Zone M-3 Process

Liberty Jct - Casey County 161 kV

Need Number: EKPC-2026-003

Process Stage: Need Meeting 09/18/2026

Project Driver: Other

Specific Assumption References:

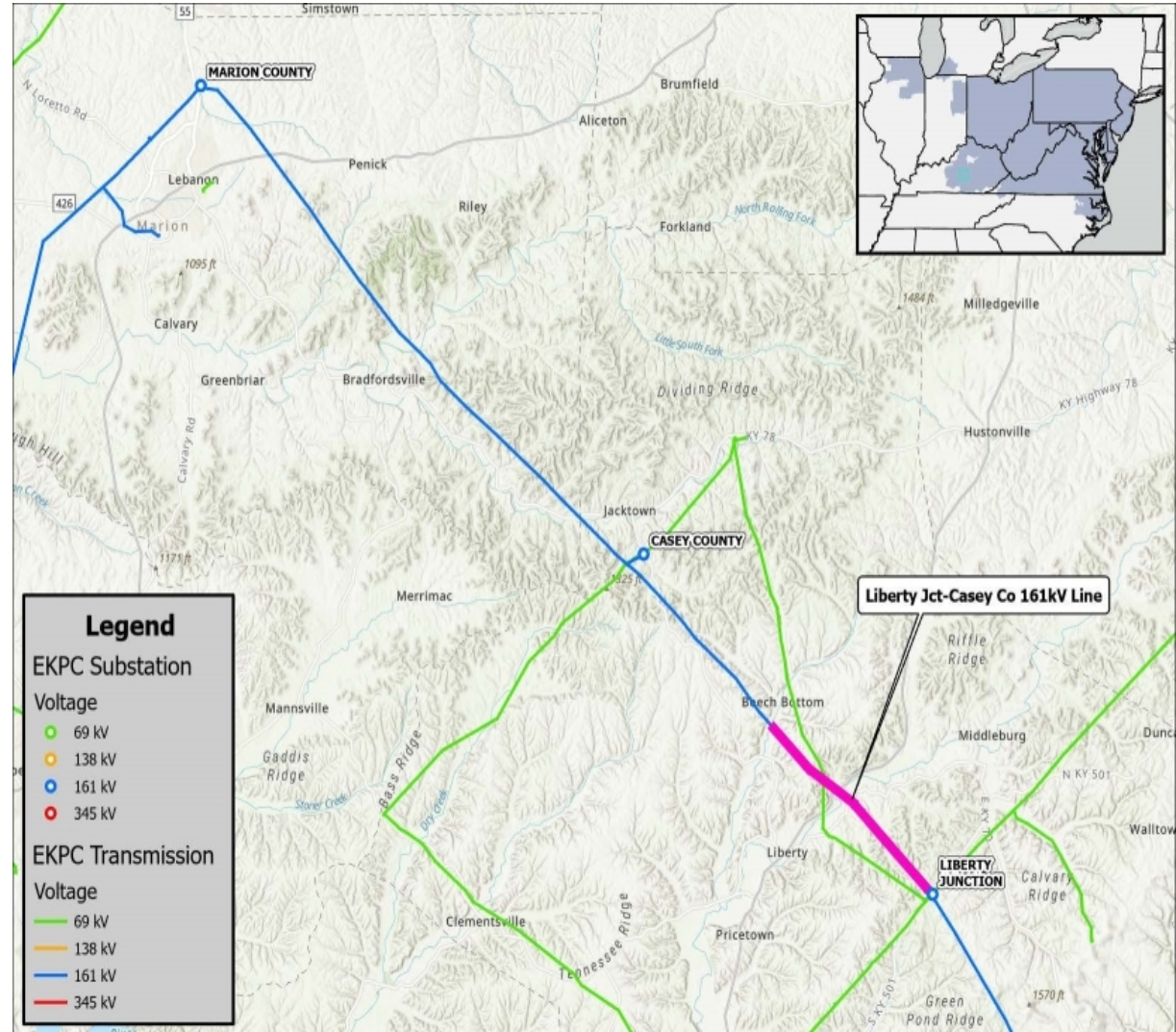
EKPC Planning Assumptions Slide 17

Problem Statement:

EKPC's capital work plan includes two new generation additions AH1-721 (Cooper CCGT) in TC2 and C01-1228 (Liberty RICE) in Cycle 1. EKPC is bringing this supplemental need forward due to the Liberty RICE generation facility's expected COD of December 2028. In order to provide adequate transmission capacity for this facility, EKPC has performed its own transmission studies and identified specific transmission needs driven by the added generation output in that timeframe.

EKPC's internal analysis associated with these generation additions indicate future thermal loading concerns 7.4 of the 13.95-mile Liberty Jct -

Casey County 161 kV line associated with the generation additions. Liberty RICE generation will be located 7.4 mile from Liberty Jct where a new switching station will be constructed. EKPC will develop and evaluate alternatives to address these loading concerns.



EKPC Transmission Zone M-3 Process Marion County - KU Lebanon 138kV Line

Need Number: EKPC-2026-004

Process Stage: Need Meeting 09/18/2026

Project Driver: Other

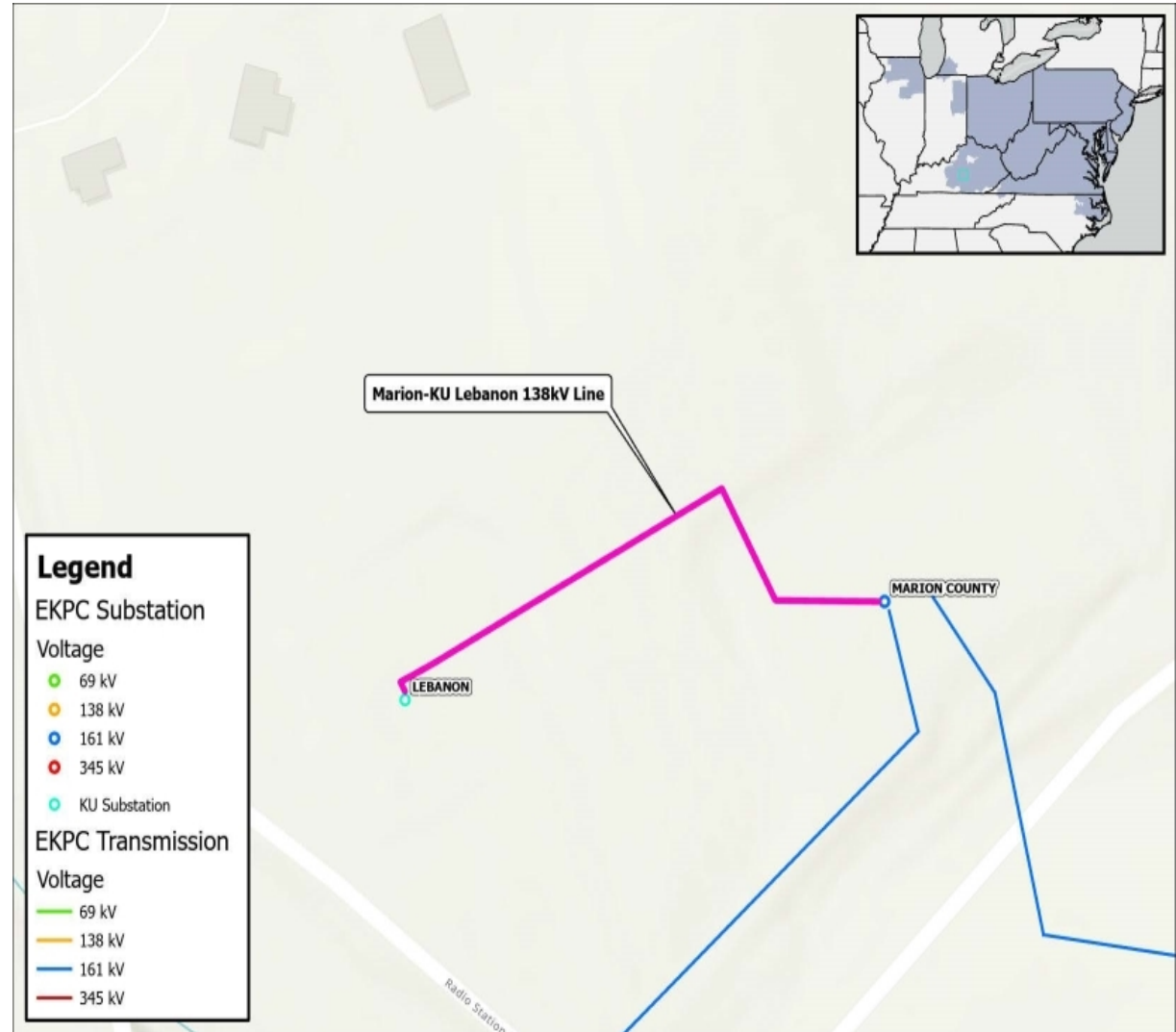
Specific Assumption References:

EKPC Planning Assumptions Slide 17

Problem Statement:

EKPC's capital work plan includes two new generation additions AH1-721 (Cooper CCGT) in TC2 and C01-1228 (Liberty RICE) in Cycle 1. EKPC is bringing this supplemental need forward due to the Liberty RICE generation facility's expected COD of December 2028. In order to provide adequate transmission capacity for this facility, EKPC has performed its own transmission studies and identified specific transmission needs driven by the added generation output in that timeframe.

EKPC's internal analysis associated with these generation additions indicate future thermal loading concerns on the 650-foot substation tie line between EKPC's Marion County 138kV station and LG&E/KU's Lebanon 138kV station. EKPC will develop and evaluate alternatives to address these loading concerns.



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

EKPC Transmission Zone M-3 Process Casey County 161 kV Three-Terminal Concerns

Need Number: EKPC-2026-001

Process Stage: Solution Meeting 09/18/2026

Previously Presented: Need Meeting 08/14/2026

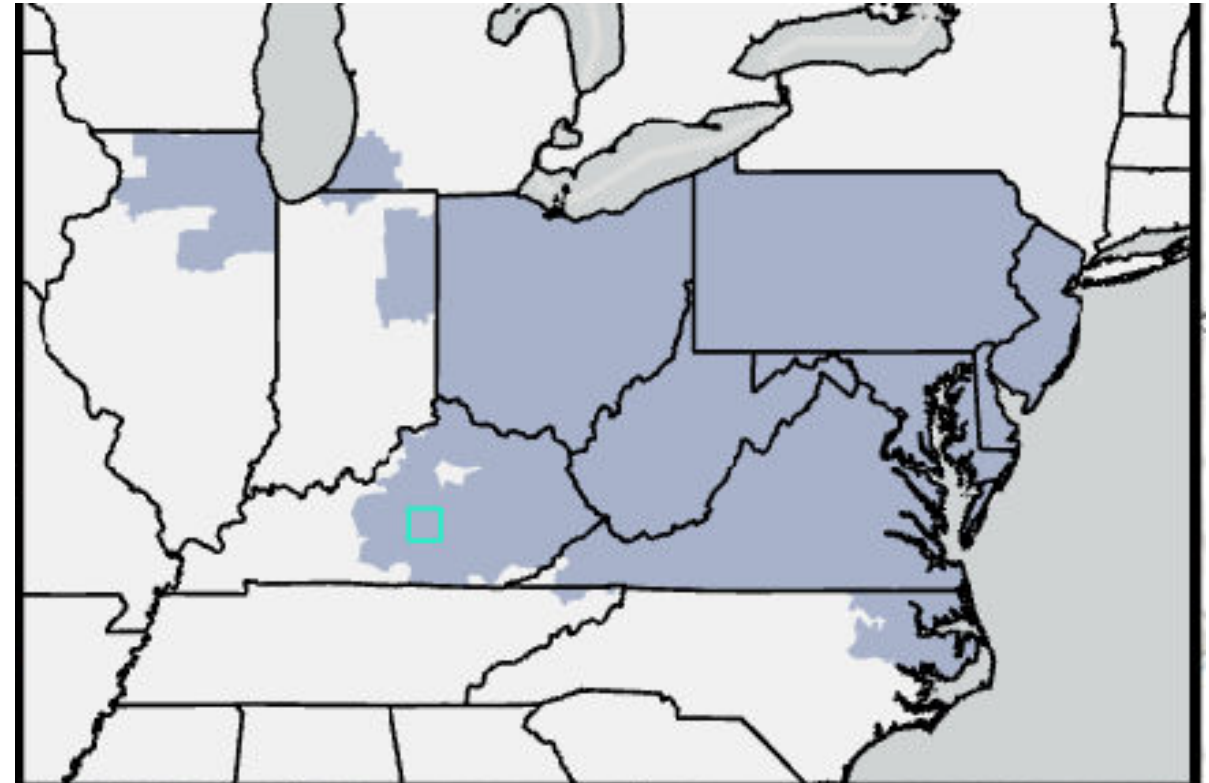
Project Driver: Infrastructure Resilience, Operational Flexibility and Efficiency

Specific Assumption References:

EKPC planning assumptions slide 14 and 16

Problem Statement:

There are currently two 161 kV lines that terminate at Casey Co. Neither of these lines have dedicated breakers so the current configuration is a three-terminal line section that would trip at remote ends and the 161/69 kV transformer at Casey Co. There is ~32 miles of 161 kV transmission exposed under this current configuration. Operational flexibility is poor when trying to take outages on this line section due to the current configuration. Alternatives will be evaluated to address the system protection and operational concerns.



EKPC Transmission Zone M-3 Process Casey County 161 kV Three-Terminal Concerns

Need number(s): EKPC-2026-001

Process Stage: Solution Meeting 09/18/2026

Proposed Solution:

161 kV breaker additions at Casey Co

- Adding 2 161 kV line breakers to the 161 kV bus at Casey Co
- Estimated Cost: \$0.998 M

Ratings MVA (SN/SE/WN/WE):

161 kV breaker additions at Casey Co

Alternatives Considered:

No alternatives considered

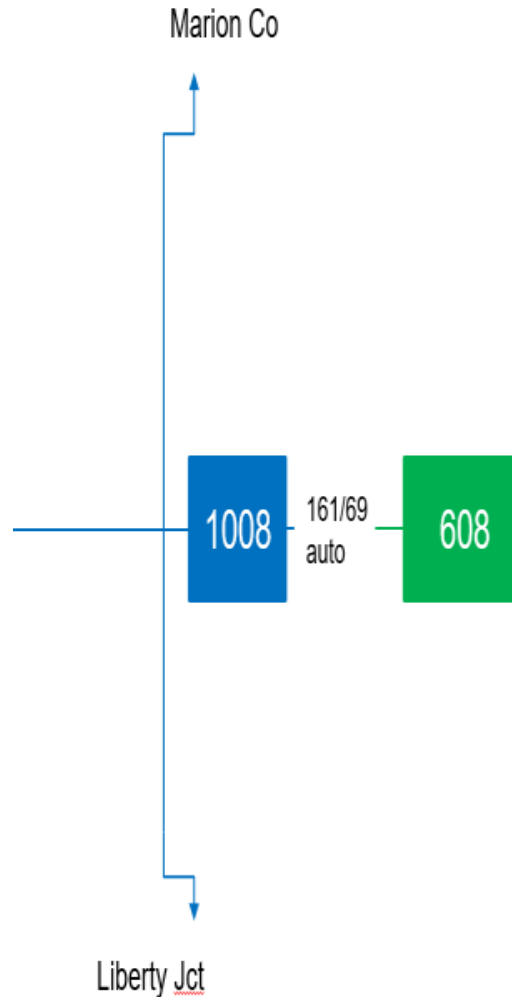
Transmission Cost Estimate: \$0.998 M

Projected In-Service: 12/31/2026

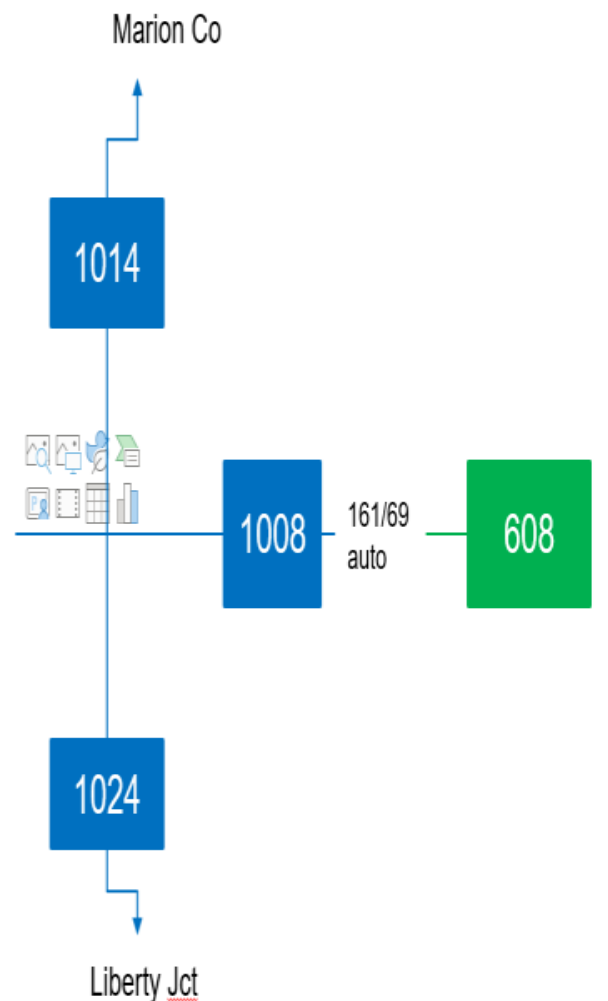
Project Status: Engineering

Model: N/A

Casey Co 161 kV before



Casey Co 161 kV after



Appendix

High Level M-3 Meeting Schedule

Assumptions

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

9/8/2026 – V1 – Original version posted to pjm.com