

SRRTEP Committee: Western EKPC Supplemental Projects

December 13, 2024

Solution

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 Number: EKPC-2024-004

Process Stage: Solution Meeting SRRTEP-W - 12/13/2024

Previously Presented: Need Meeting 10/18/2024

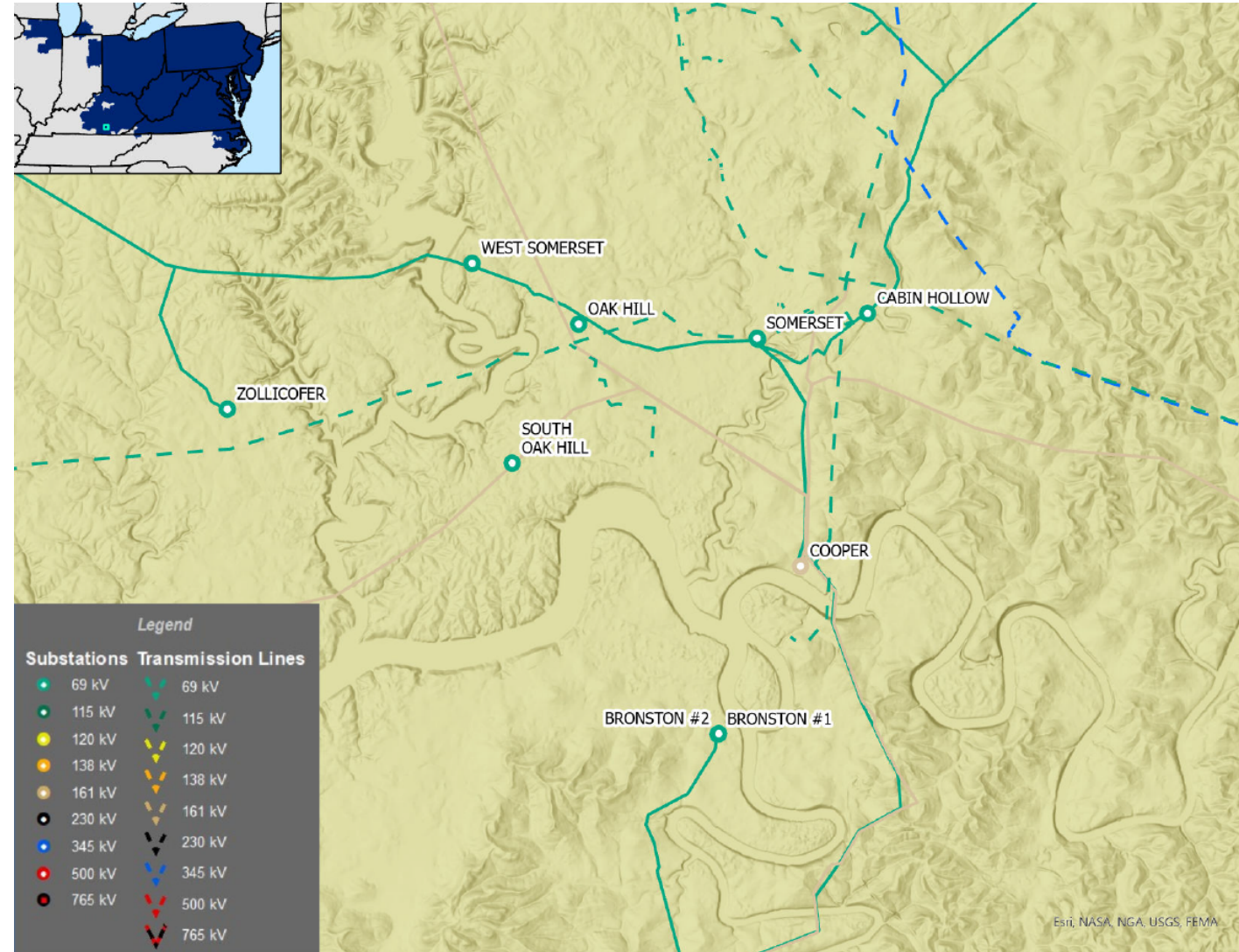
Project Driver: Operational Flexibility and Efficiency

Specific Assumption References:

EKPC Assumptions Presentation Slide 14

Problem Statement:

EKPC set back-to-back all-time winter peaks during winter storm Elliott in December 2022 and Winter Storm Gerri in January 2024. During these storms EKPC faced many real time operational challenges due to the extreme cold temperatures, high loads and unplanned outages around the southern portion of the EKPC transmission system. EKPC’s only generation in the southern portion of the system is comprised of the Cooper 1 and 2 generators with around 30 load serving substations in the immediate area. System Operation and Planning studies have shown during these conditions if the Cooper generators are unavailable, voltage constraints around the Cooper area would be certain. EKPC’s System Operations group has requested additional voltage support for this area as risk management against similar future winter weather conditions.



Need number(s): EKPC-2024-004

Process Stage: Solution Meeting SRRTEP-W - 12/13/2024

Proposed Solution:

Cooper 69kV Capacitor Bank: Install a new 40.818 MVAR capacitor bank at Cooper 69kV substation.

Transmission Cost Estimate: \$0.656 M

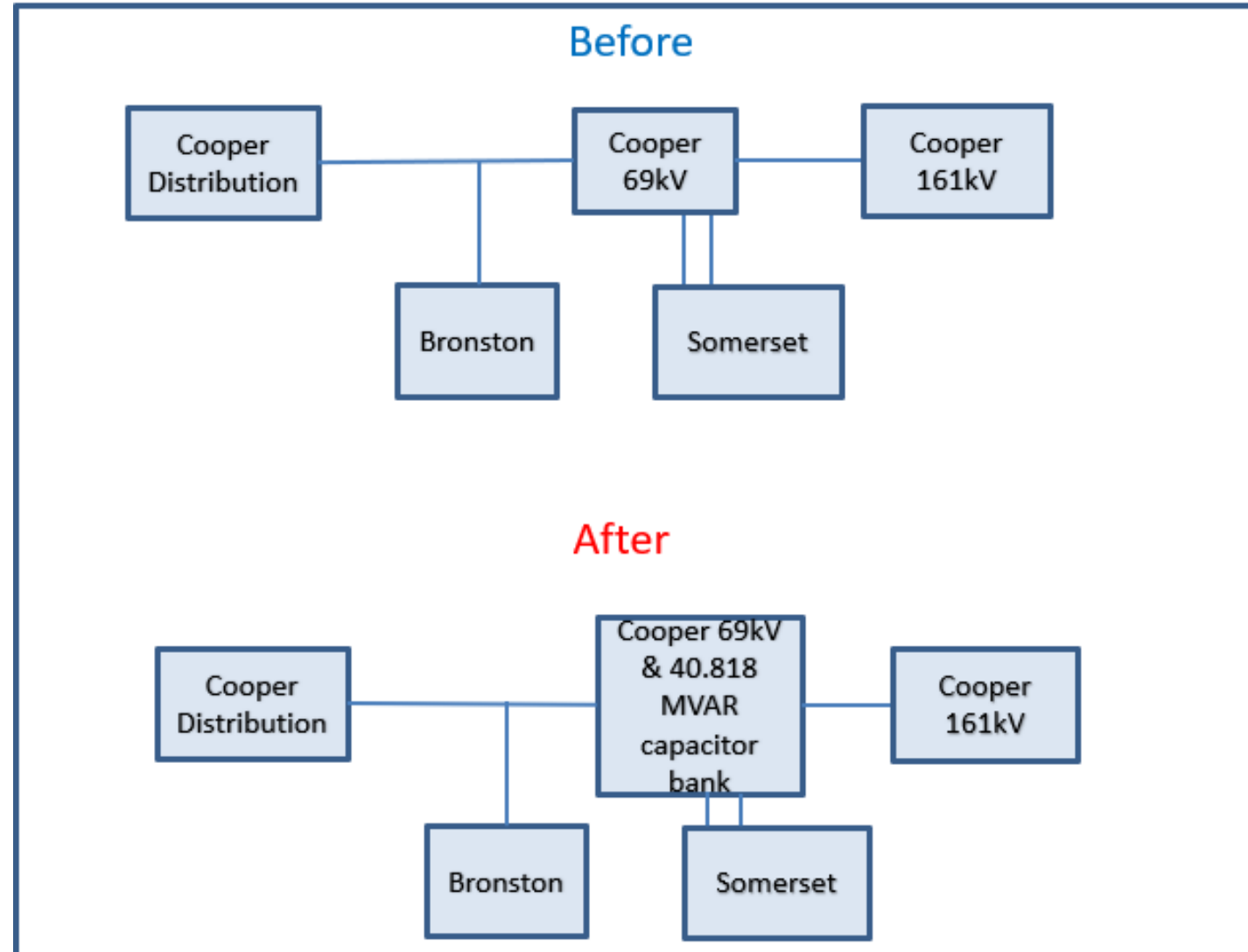
Alternatives Considered:

N/A

Projected In-Service: 06/01/2026

Project Status: Engineering

Model: N/A



Need Number: EKPC-2023-009

Process Stage: Solution Meeting SRRTEP-W - 12/13/2024

Previously Presented: Need Meeting 09/15/2023

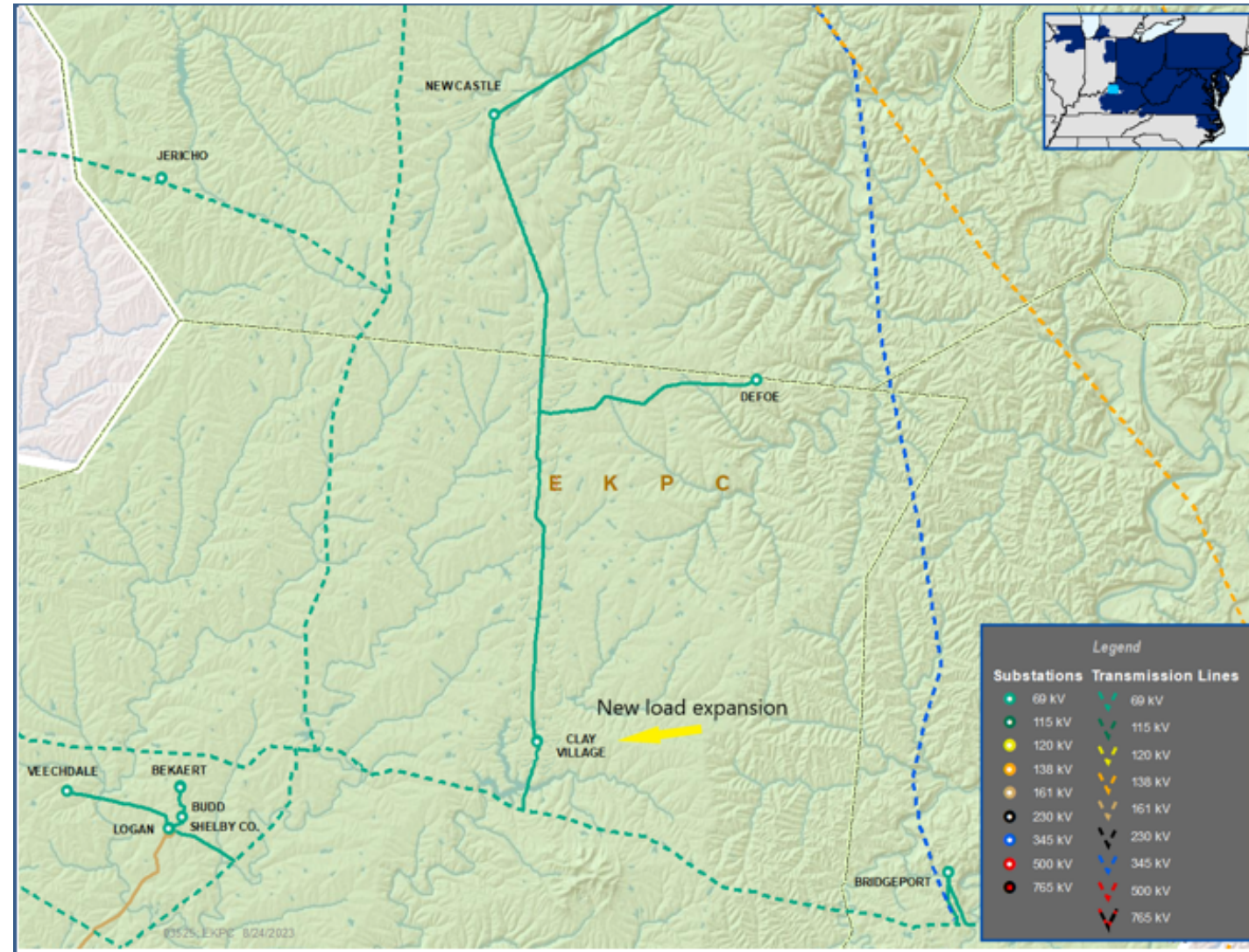
Project Driver: Customer Service

Specific Assumption References:

EKPC Assumptions Presentation Slide 15

Problem Statement:

An existing customer has announced an expansion to their facility that will increase the peak demand by 12 MW by 9/2024. This delivery point is currently served from the Clay Village distribution substation located in Shelby County, KY. The existing distribution infrastructure is not capable of serving this request.



Need number(s): EKPC-2023-009

Process Stage: Solution Meeting SRRTEP-W - 12/13/2024

Proposed Solution:

Clay Village #2: Due to new delivery point of Clay Village #2, a new 69 kV box structure and associated bus/switches will be added to reconfigure existing distribution and protection scheme. New 69-13.2 12/16/20 Clay Village #2 distribution station will be built.

Transmission Cost Estimate: \$1.265 M

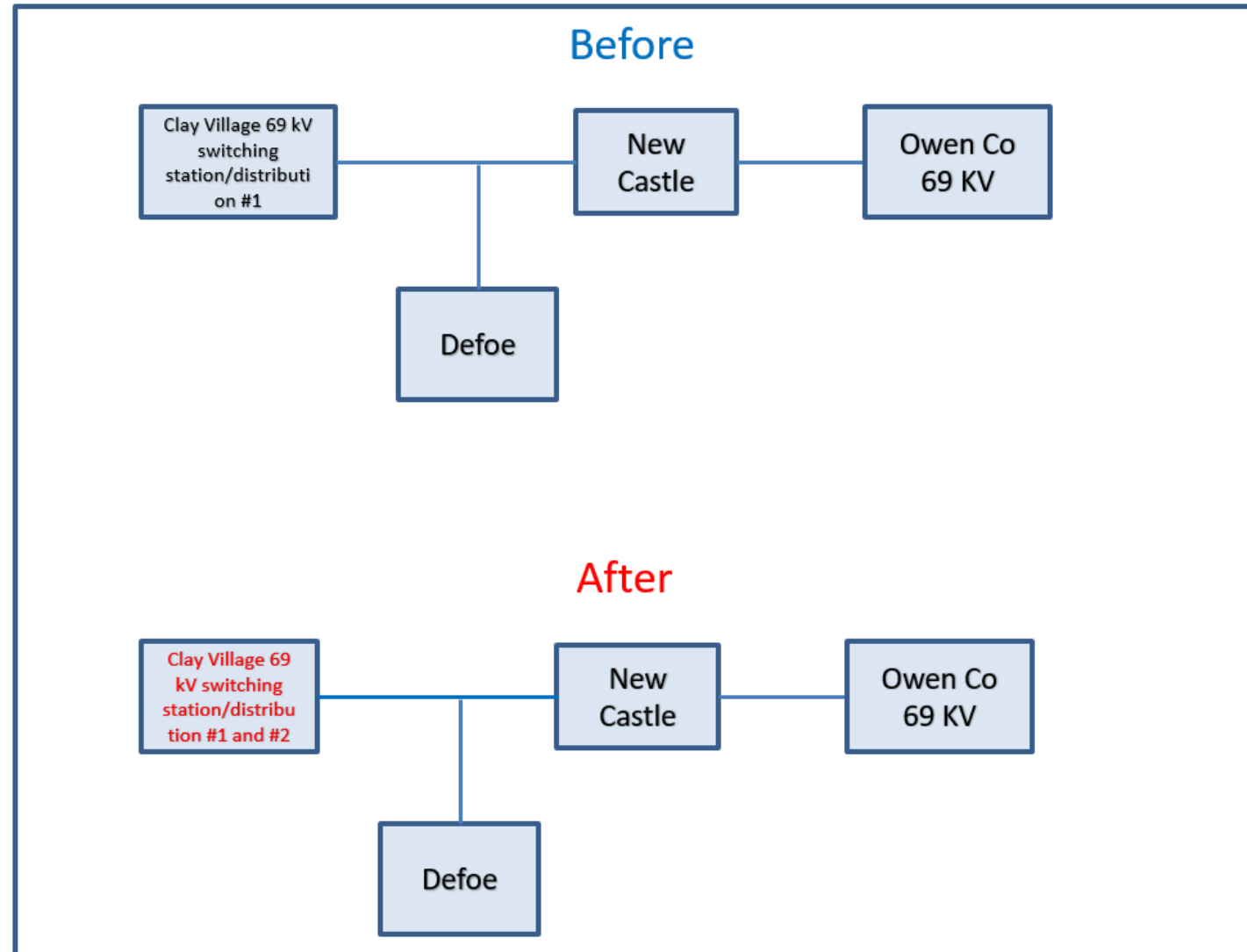
Alternatives Considered:

N/A

Projected In-Service: 06/01/2026

Project Status: Engineering

Model: N/A



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

12/3/2024 – V1 – Original version posted to pjm.com