# SRRTEP Committee: Western
# EKPC Supplemental Projects

**September 20, 2024**

# 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

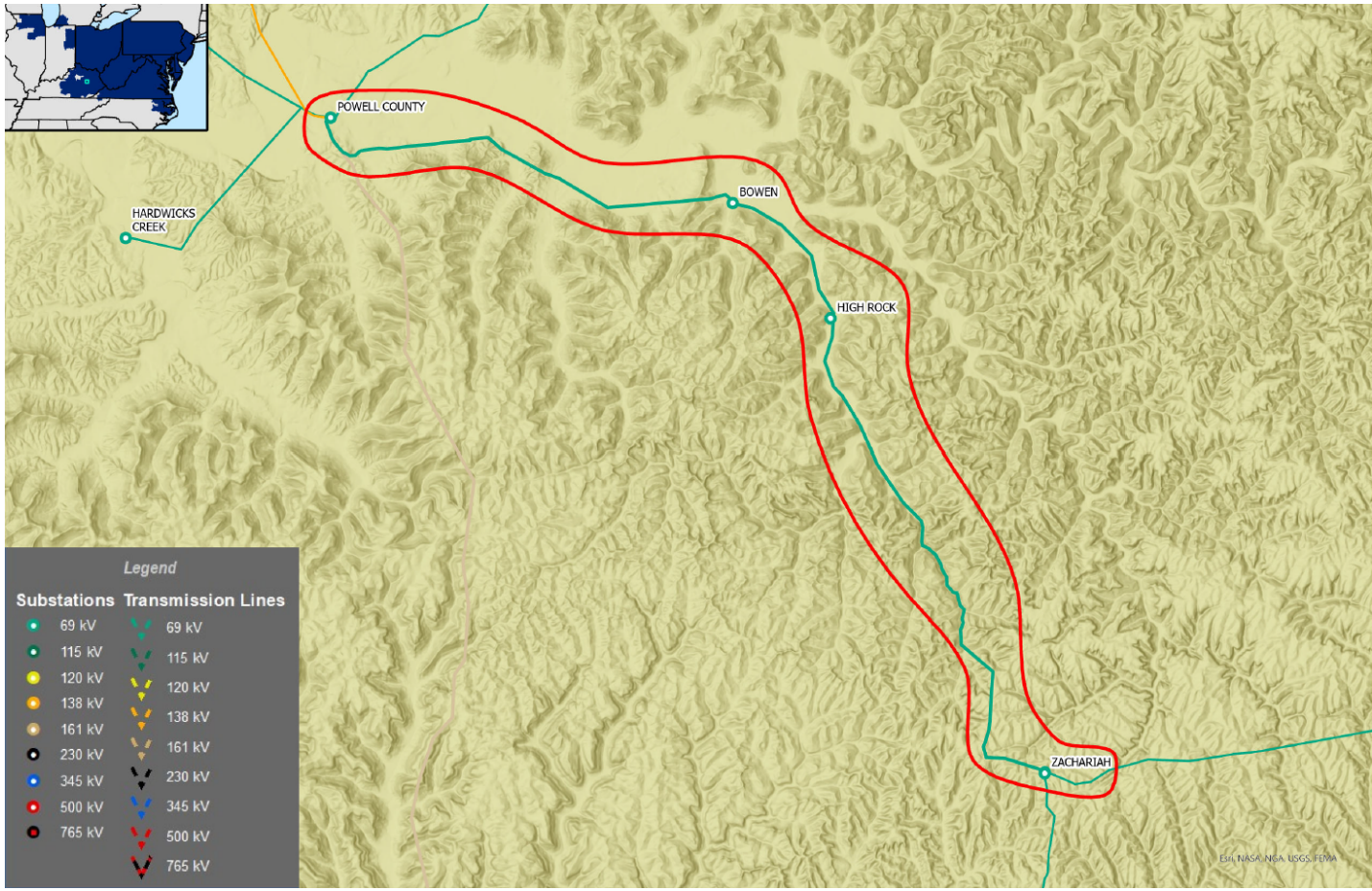
# EKPC Transmission Zone M-3 Process
# Zachariah, KY

**Need Number:** EKPC-2024-001
**Process Stage:** Need Meeting SRRTEP-W - 09/20/2024
**Project Driver:** Equipment Condition/Performance/Risk
**Specific Assumption References:**
EKPC Assumptions Presentation Slide 13
**Problem Statement:**
The EKPC reliability team has been working to identify transmission lines sections, with single wood pole structures and 556.5 ACSR wire or larger that are known to have structural design issues. Most of the structures on these lines are believed to be over 100% capacity if the structure was new, based on EKPC current design standards. Many of the lines have been re-conductored with larger wire and very little structure design was performed at the time of the re-conductor.

The 16.85 mile, Powell County-Zachariah 69 KV line sections has been identified from the above to be addressed. The line was originally built in 1954.

Alternatives will be developed to address these structural loading concerns.

**Model:** N/A



# EKPC Transmission Zone M-3 Process
# Munfordville, KY

**Need Number:** EKPC-2024-002

**Process Stage:** Need Meeting SRRTEP-W - 09/20/2024

**Project Driver:** Customer Service

**Specific Assumption References:**

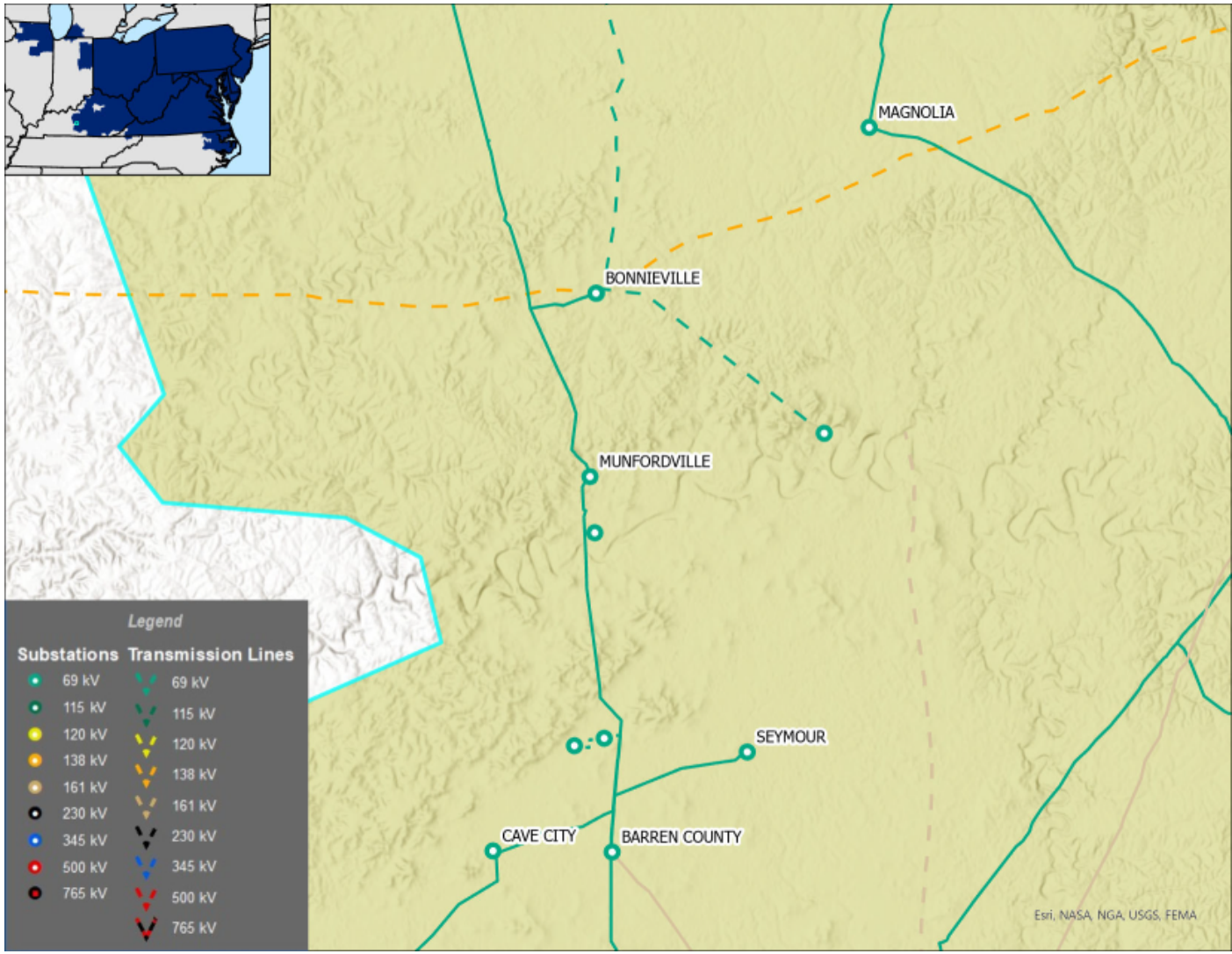
EKPC Assumptions Presentation Slide 15

**Problem Statement:**

The Munfordville substation distribution feeder currently serves ~1,800 customers and is roughly 175 miles in length. The feeder serves the area surrounding the Nolin Lake and is ~15 miles from the Munfordville substation. Approximately 50% of the feeders load is at the tail end of the circuit where load growth is expected to continue. During high loading customers near the end of the line are experiencing low voltage.

Existing distribution infrastructure is not capable of addressing the issues in this area. EKPC will develop and evaluate alternatives to address all issues listed above.

**Model:** N/A



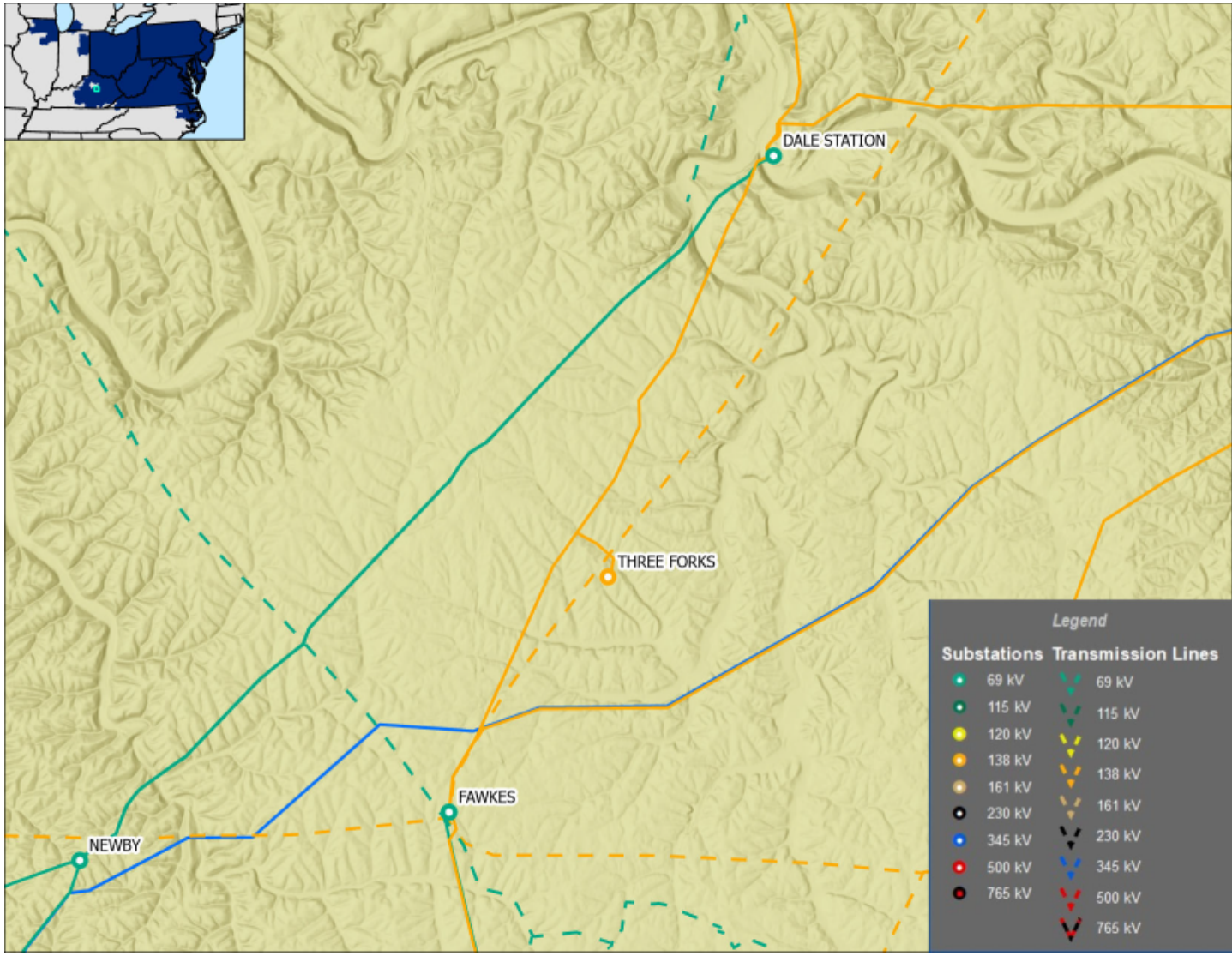
# EKPC Transmission Zone M-3 Process
# Dale, KY

**Need Number:** EKPC-2024-003
**Process Stage:** Need Meeting SRRTEP-W - 09/20/2024
**Project Driver:** Equipment Condition/Performance/Risk
**Specific Assumption References:**
EKPC Assumptions Presentation Slide 13
**Problem Statement:**
The Dale Station 69 & 138 kV substation was constructed in 1954 and is experiencing numerous of issues associated with aging condition and safety.

- Breakers antiquated and less reliable compared to newer breaker designs.
- Switches severely limit access to the end bays for performing switch maintenance and can be susceptible to operational and maintenance issues.
- Arrestors are reaching end of useful life due to an older porcelain design that is prone to catastrophic failure.
- Bus potential transformers require a bus outage in order to properly service and maintain minimum approach distance.
- The main and transfer buses are cable design with outdated insulators (evidence of corona).

Based on this information, the EKPC Reliability team has concluded that this substation is at or near end of life and should be addressed due to the condition.

**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

9/10/2024 – V1 – Original version posted to pjm.com