

SRRTEP - Western Committee EKPC Supplemental Projects

February 17, 2021

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 Boone-Bullittsville 69 KV

Need Number: EKPC-2021-001

Process Stage: Need Meeting – February 17, 2021

Supplemental Project Driver:

Equipment Material Condition, Performance and Risk
Other

Specific Assumption Reference:

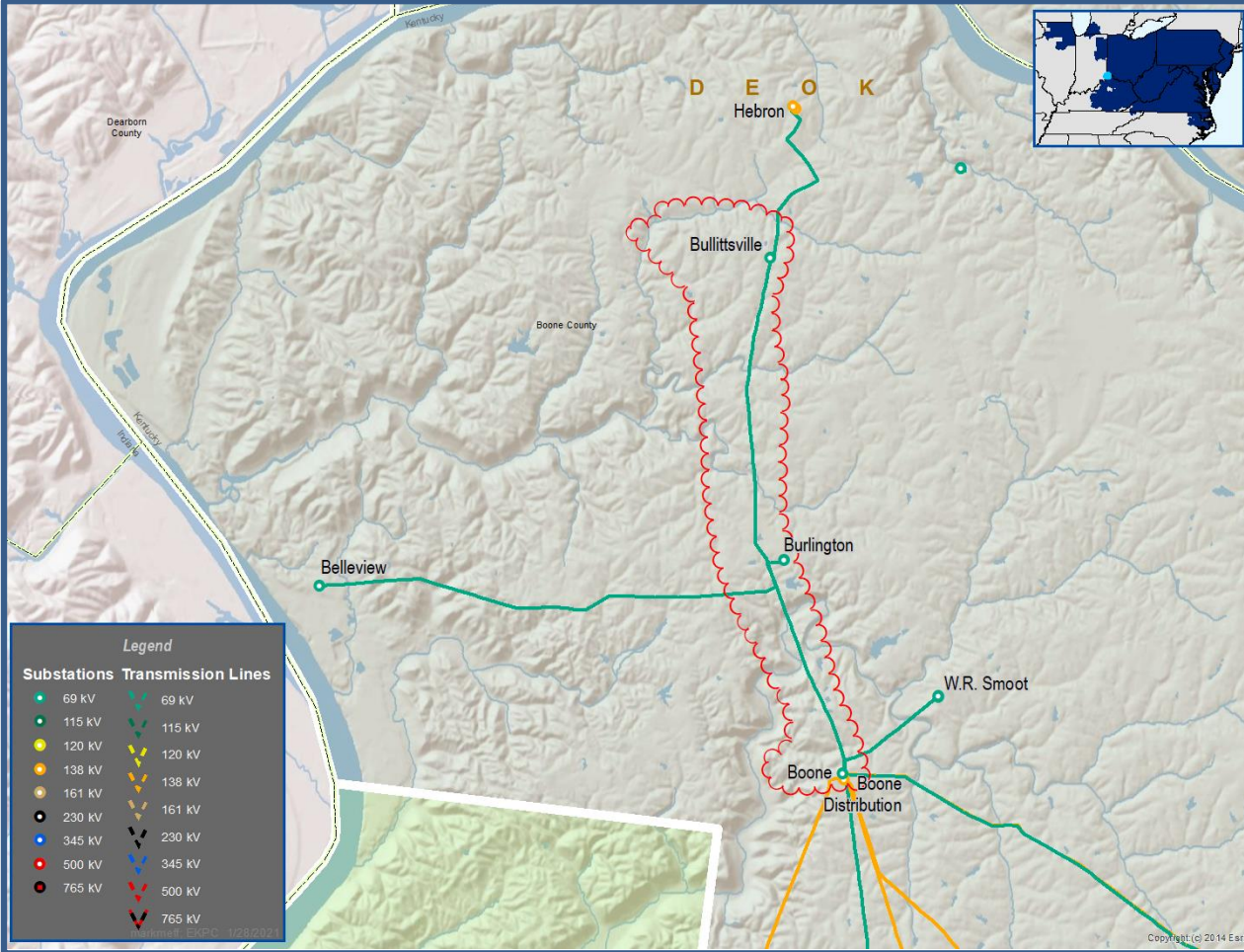
EKPC Assumptions Presentation Slide 12 & 16

Problem Statement:

The 6.4 mile, Boone-Bullittsville 69 KV transmission line is 60 years old. Testing from the LineVue robot from Kinectrics Corporation deemed the phase and static wire condition as unacceptable. The testing identified instances of rusting, pitting, and broken strands. Based on this testing information, the EKPC Reliability team has concluded that this line should be addressed due to the condition assessment.

Also, the current configuration of the transmission lines routed into the Boone County transmission station has created lines crossing at undesirable angles. This produces safety issues and possible longer outage times during maintenance activities.

Model: N/A



EKPC Transmission Zone M-3 Process Hodgenville - Magnolia 69kV

Need Number: EKPC-2021-002

Process Stage: Need Meeting – February 17, 2021

Supplemental Project Driver:

Equipment Material Condition, Performance and Risk

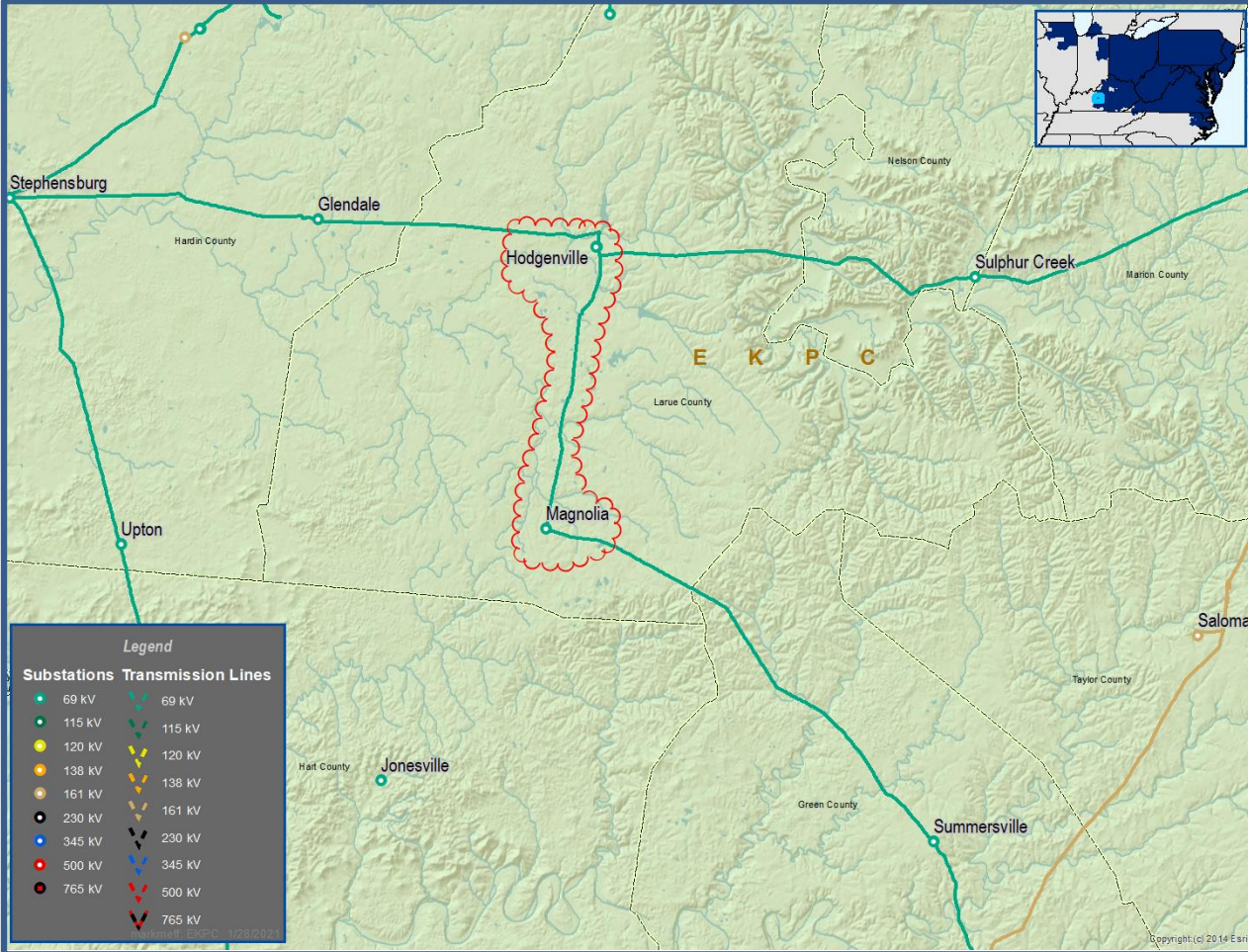
Specific Assumption Reference:

EKPC Assumptions Presentation Slide 12

Problem Statement:

The 8.49 mile, Hodgenville-Magnolia 69 KV transmission line is 64 years old. Testing from the LineVue robot from Kinectrics Corporation deemed the phase and static wire condition as unacceptable. The testing identified instances of rusting, pitting, and broken strands. Based on this testing information, the EKPC Reliability team has concluded that this line should be addressed due to the condition assessment.

Model: N/A



EKPC Transmission Zone M-3 Process Summersville - Magnolia 69kV

Need Number: EKPC-2021-003

Process Stage: Need Meeting – February 17, 2021

Supplemental Project Driver:

Equipment Material Condition, Performance and Risk

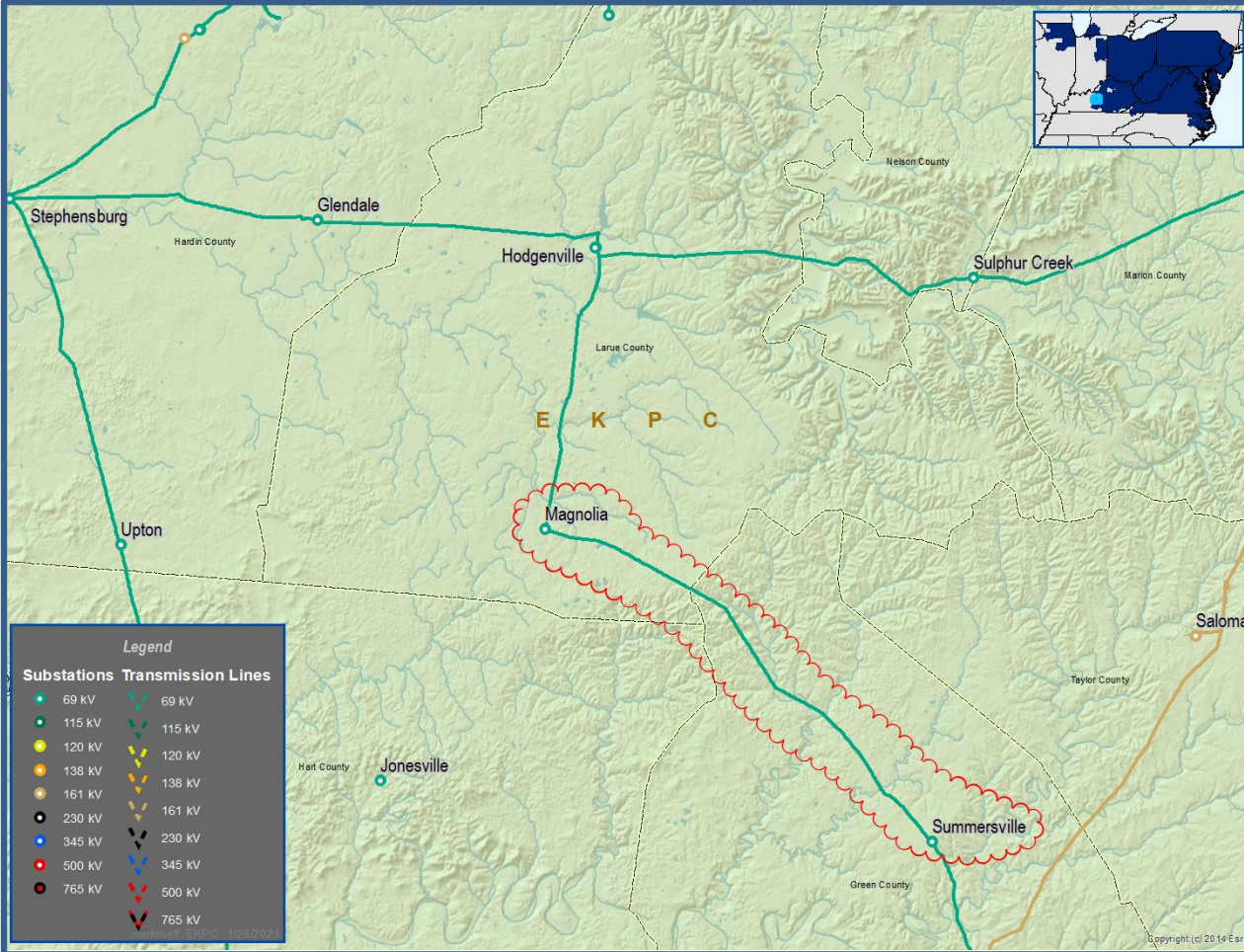
Specific Assumption Reference:

EKPC Assumptions Presentation Slide 12

Problem Statement:

The 15 mile, Summersville-Magnolia 69 KV transmission line is 59 years old. Testing from the LineVue robot from Kinectrics Corporation deemed the phase and static wire condition as unacceptable. The testing identified instances of rusting, pitting, and broken strands. Based on this testing information, the EKPC Reliability team has concluded that this line should be addressed due to the condition assessment.

Model: N/A



EKPC Transmission Zone M-3 Process Millers Creek

Need Number: EKPC-2021-004

Process Stage: Need Meeting – February 17, 2021

Supplemental Project Driver:

Equipment Material Condition, Performance and Risk
Customer Service

Specific Assumption Reference:

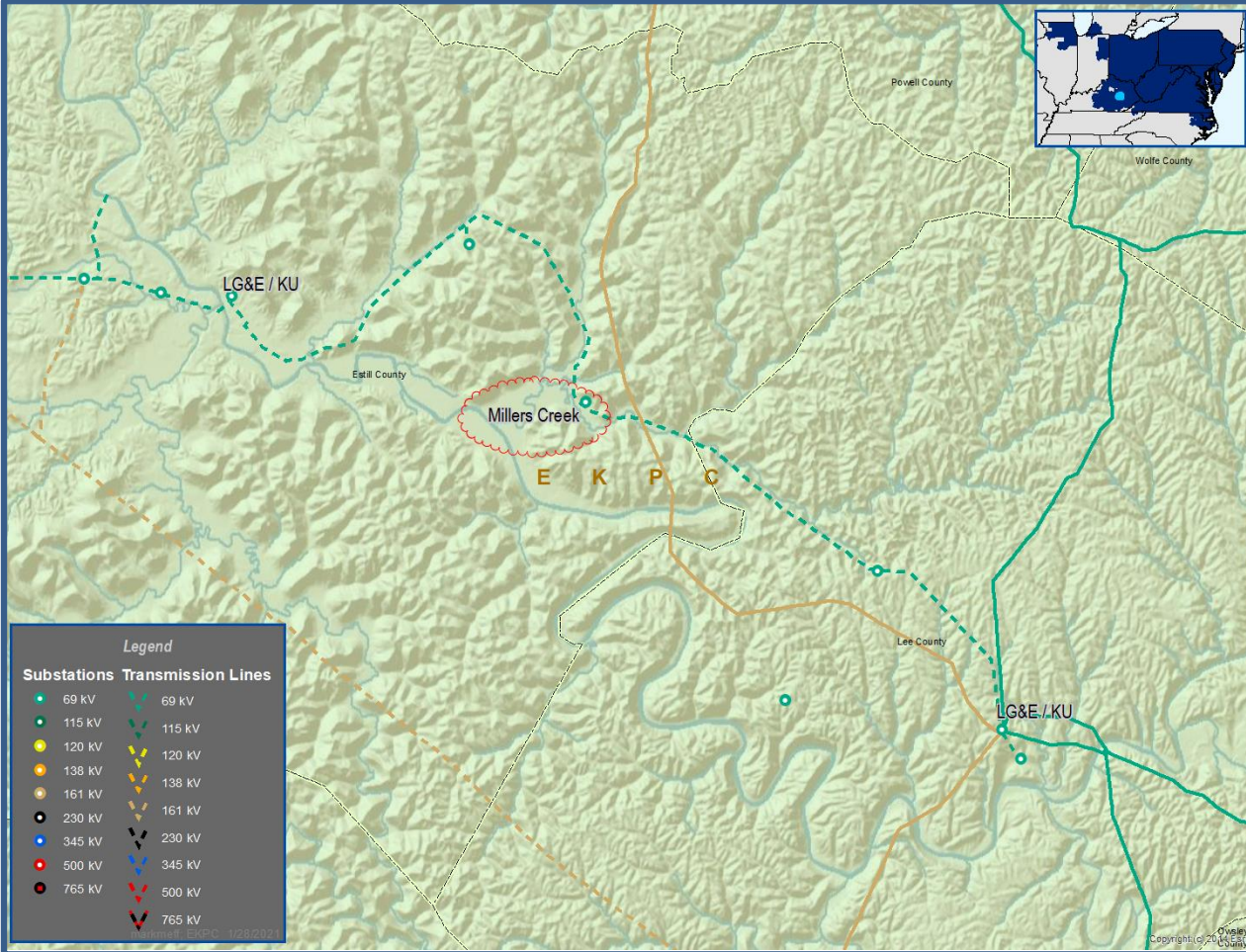
EKPC Assumptions Presentation Slide 12 & 14

Problem Statement:

The Millers Creek substation was built in 1965. It has continued to show up on EKPC’s list of Worst Performing areas for several years, and it is currently the #2 worst performing location. It is served on the LG&E/KU 69 KV transmission line between Beattyville and West Irvine. This substation had 12 transmission related outages for the 2015-2019 period.

The substation has multiple issues related to poor site access, degraded condition, safety, and obsolete design. Degradation issues include failing fence and erosion around the perimeter of the substation. There is an atypical metering structure with no bypass capability making maintenance more difficult. Regulators are under the low bay structure and are difficult to remove in the event of a failure. Regulator bypass switches and energized feeders have spacing and clearance issues and there is no bypass bus.

Model: N/A



EKPC Transmission Zone M-3 Process East Bernstadt

Need Number: EKPC-2021-005

Process Stage: Need Meeting – February 17, 2021

Supplemental Project Driver:

Equipment Material Condition, Performance and Risk

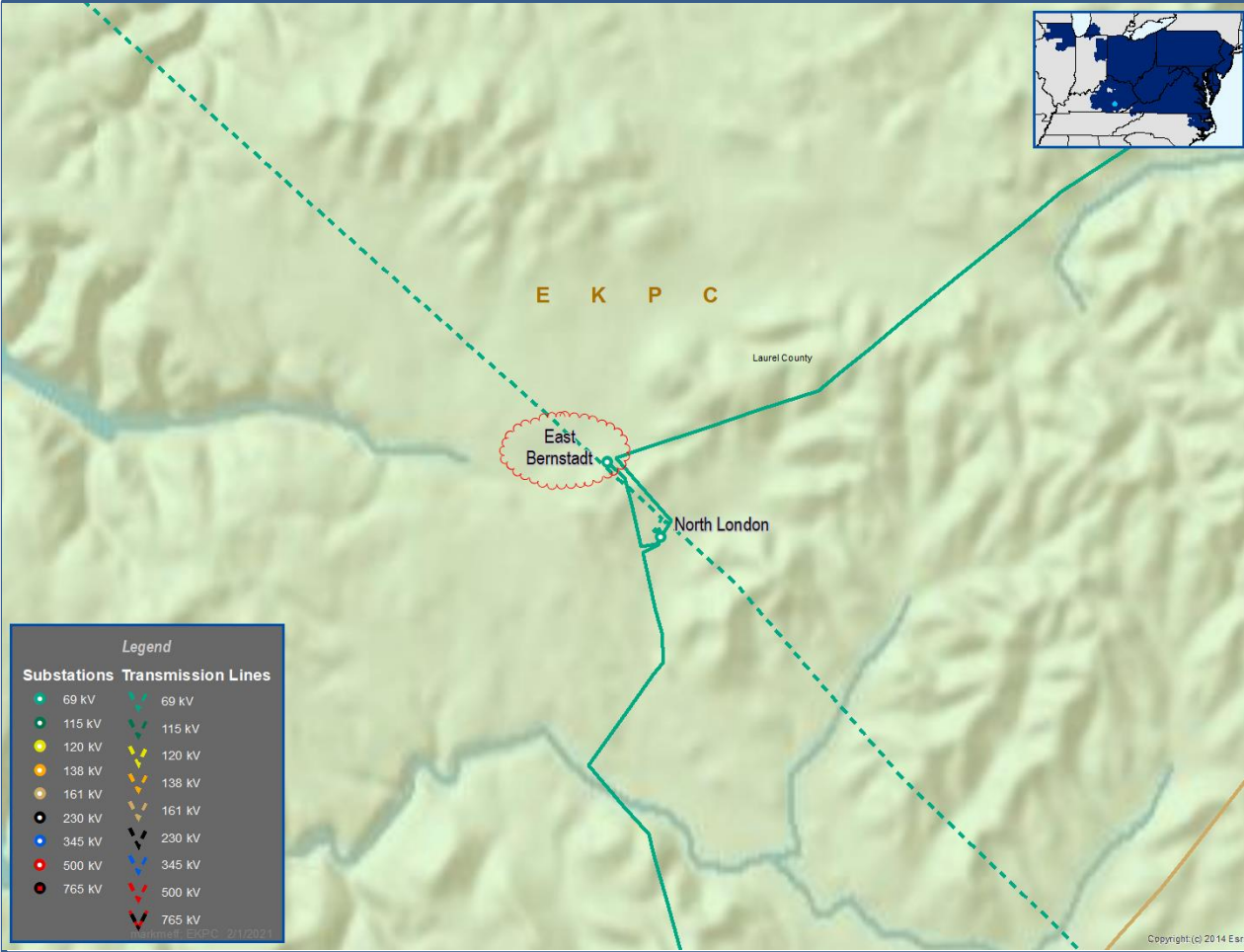
Specific Assumption Reference:

EKPC Assumptions Presentation Slide 12

Problem Statement:

Options are being evaluated to address aging condition issues of the East Bernstadt distribution substation. It has been determined that more space is needed to achieve EKPC’s standard substation design requirements. EKPC’s planning department has been asked to evaluate the ongoing need of the East Bernstadt 16.2 MVAR capacitor bank due to space limitations at the site.

Model:N/A



EKPC Transmission Zone M-3 Process Lees Lick

Need Number: EKPC-2021-006

Process Stage: Need Meeting – February 17, 2021

Supplemental Project Driver:

Equipment Material Condition, Performance and Risk

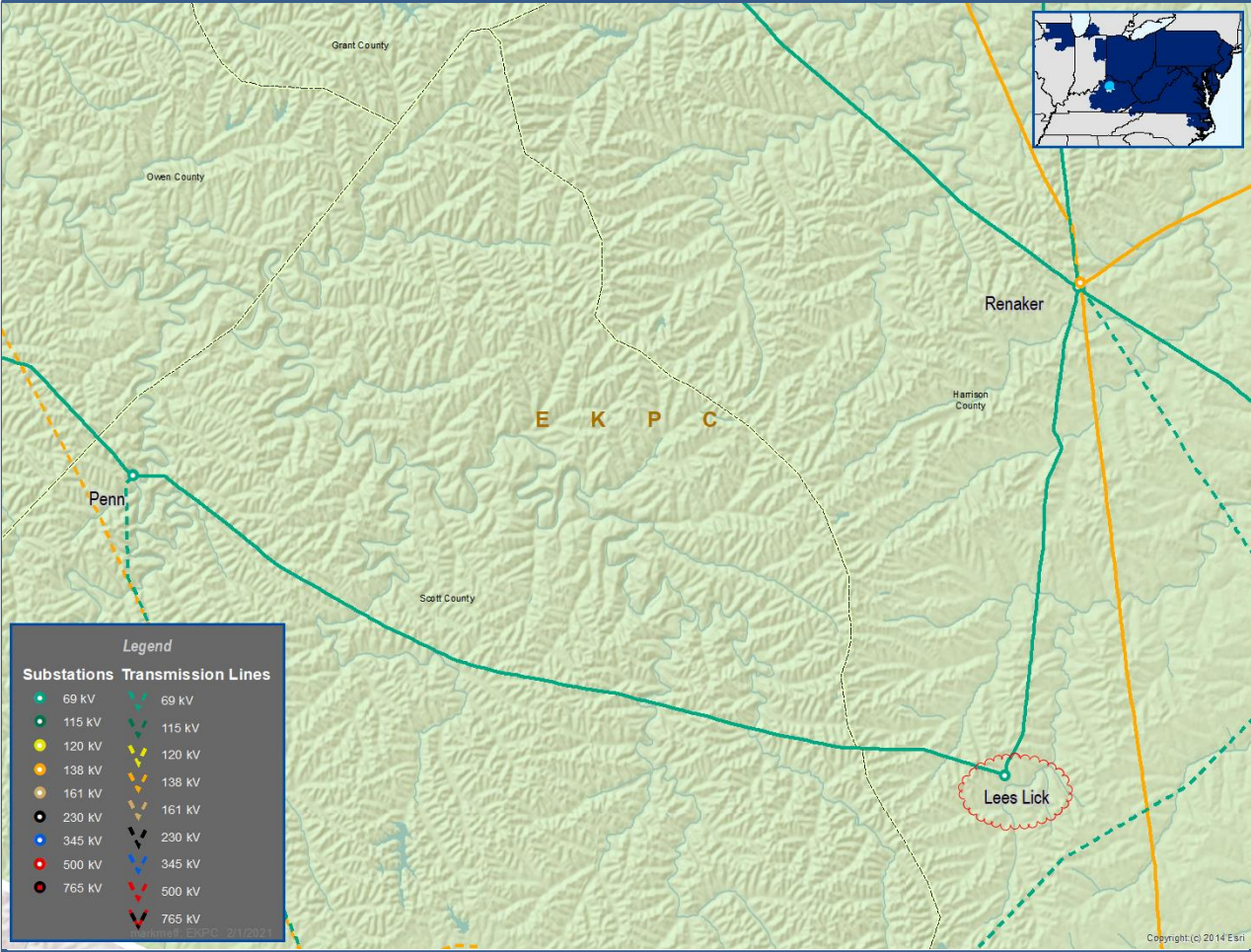
Specific Assumption Reference:

EKPC Assumptions Presentation Slide 12

Problem Statement:

Options are being evaluated to address aging condition issues of the Lees Lick distribution substation. It has been determined that more space is needed to achieve EKPC’s standard substation design requirements. EKPC’s planning department has been asked to evaluate the ongoing need of the Lees Lick 10.72 MVAR capacitor bank due to space limitations at the site.

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

2/5/2021 – V1 – Original version posted to pjm.com