SRRTEP Committee: Western
EKPC Supplemental Projects

October 14, 2022

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
Stephensburg – Vertrees 69 KV

Need Number: EKPC-2022-005

Process Stage: Needs Meeting – October 14, 2022

Supplemental Project Driver:

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

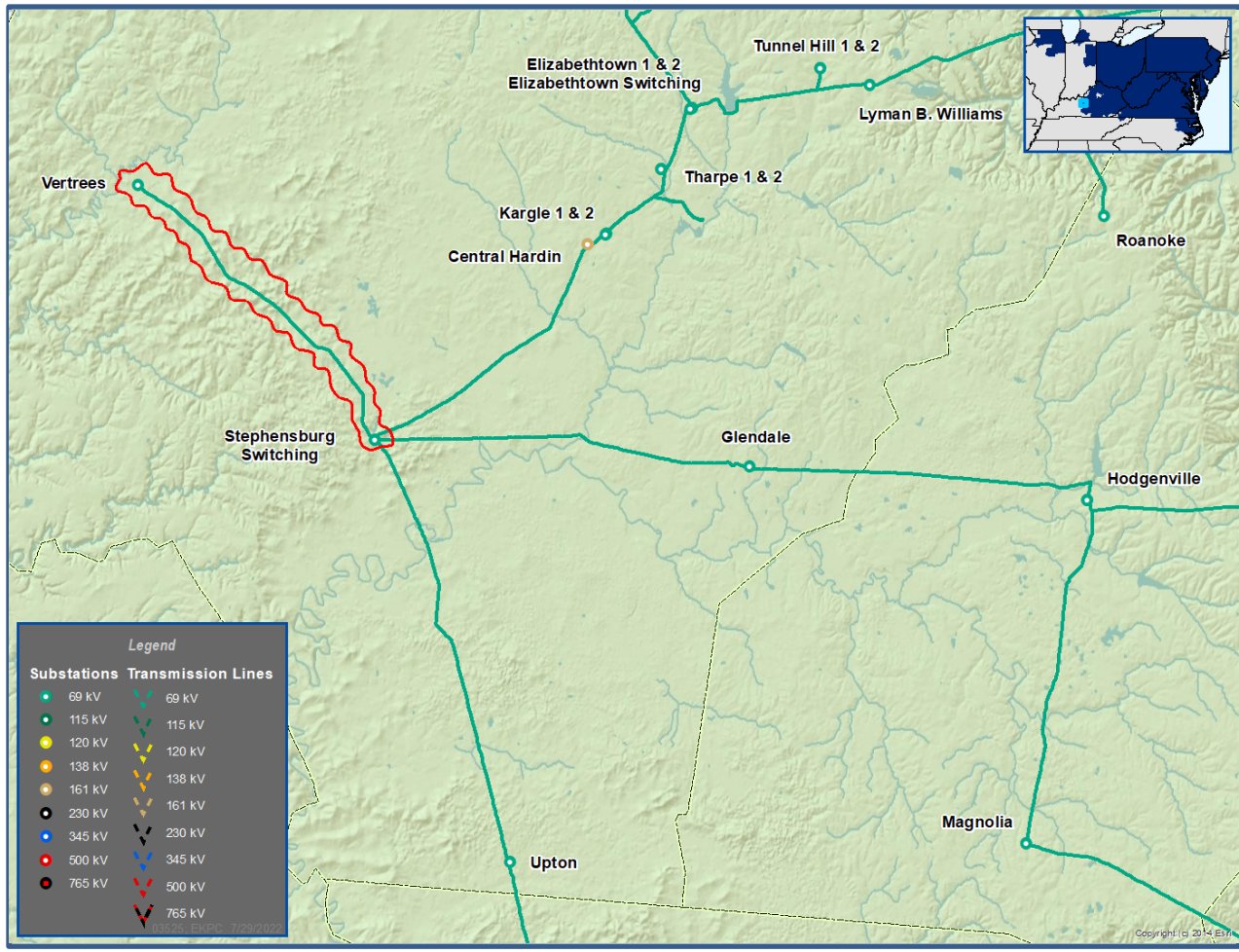
EKPC Assumptions Presentation Slides 13

Problem Statement:

The 8.7 mile, Stephensburg-Vertrees 69 KV transmission line section is 65 years old.

Testing from the LineVue robot from Kinectrics Corporation deemed the condition of the line 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
Laurel Co Industrial Area 69 KV

Need Number: EKPC-2022-006

Process Stage: Needs Meeting – October 14, 2022

Supplemental Project Driver:

Customer Service

Specific Assumption Reference:

EKPC Assumptions Presentation Slides 15

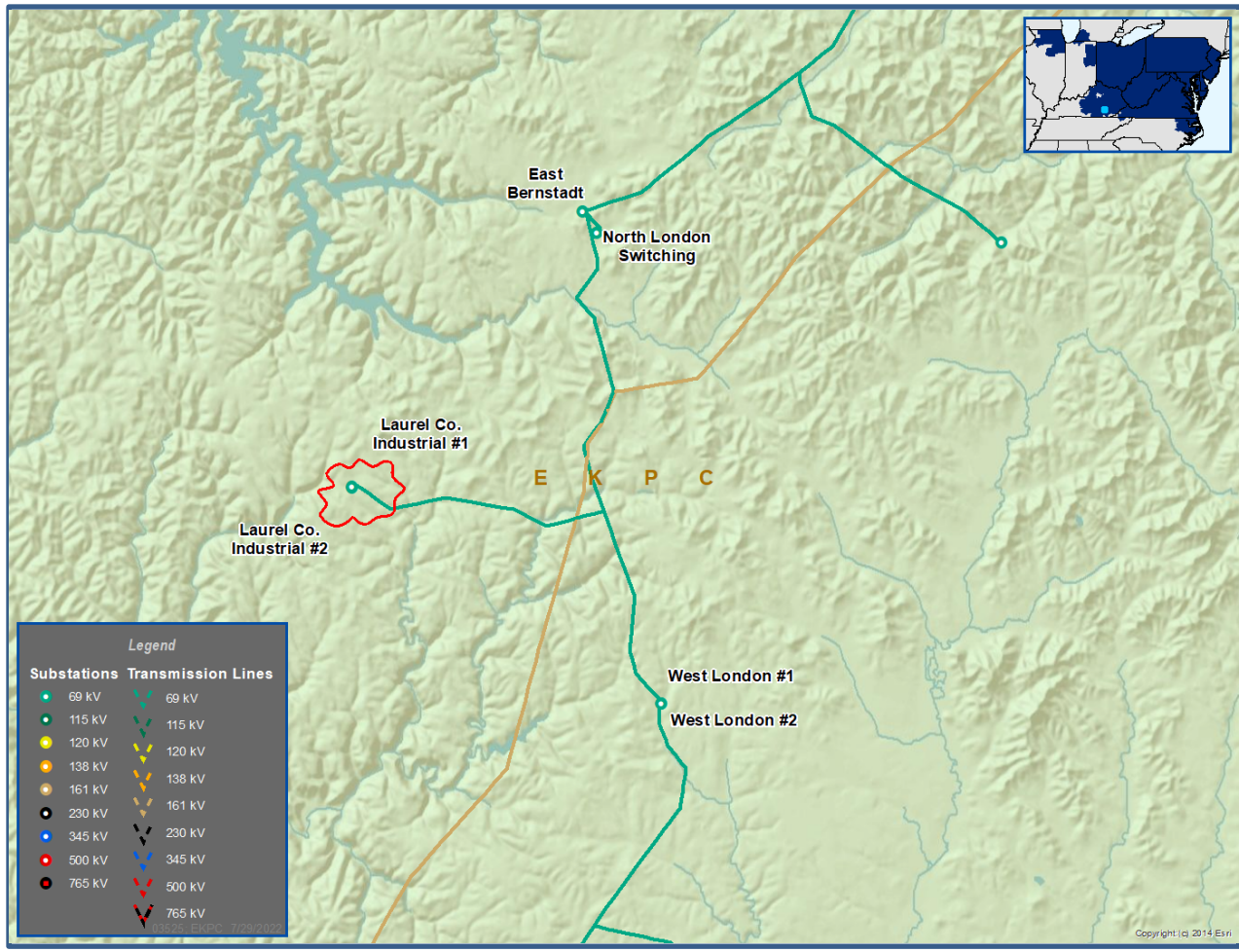
Problem Statement:

The load in the area of the Laurel County Industrial distribution substation has expanded to the maximum capacity of the Laurel County Industrial #1 11.2/14 MVA distribution transformer. Additionally, an industrial customer served from this substation is planning an expansion to add additional load, this would cause the load to exceed the maximum rating of the distribution transformer.

The 69 KV circuit that serves this area currently feeds six distribution substations with one serving a critical hospital load. Distribution outages in the area have been exacerbated due to limited distribution back feed capabilities, limited by loading of nearby distribution feeders.

A solution is needed to address these issues to improve the reliability of the distribution system in the area.

Model: N/A



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
Dale – Newby 69 KV

Need Number: EKPC-2022-004

Process Stage: Solution Meeting – October 14, 2022

Previously Presented:

Needs Meeting –May 19, 2022

Supplemental Project Driver:

Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

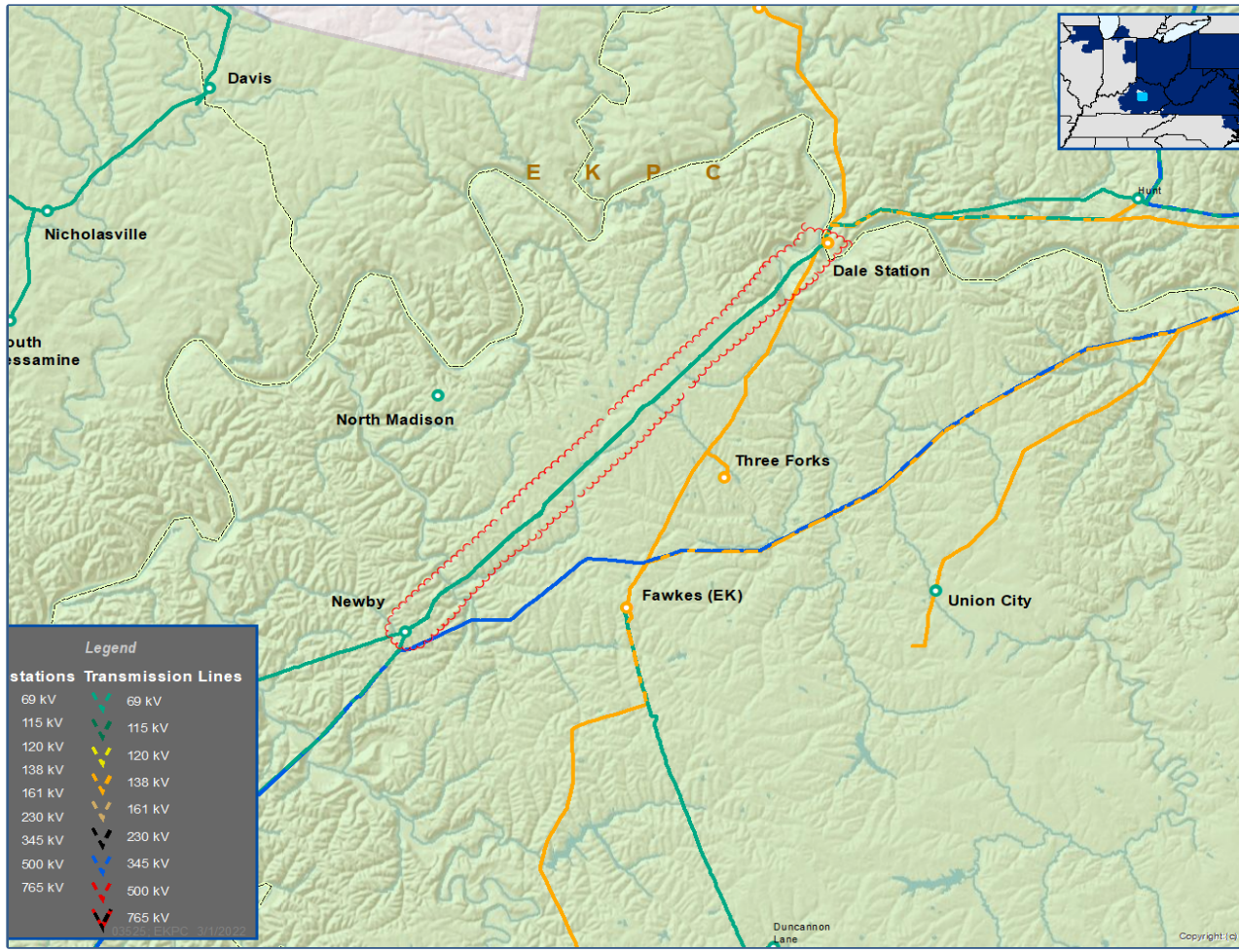
EKPC Assumptions Presentation Slides 13

Problem Statement:

The 11.1 mile, Dale - Newby double circuit 69 KV transmission line section is 70 years old.

Testing from the LineVue robot from Kinectrics Corporation deemed the condition of the line 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
Dale-Newby 69 KV

Need Number: EKPC-2022-004

Process Stage: Solutions Meeting – October 14, 2022

Proposed Solution:

Rebuild 11.1 mile Dale-Newby line section as double-circuit 69 kV using 556 ACSR Conductor.

Transmission Cost: $12.6M

Ancillary Benefits:

- None

Alternatives Considered:

Alternative 1 - Retire Dale-Newby; Construct a new 69 KV line from Fawkes-Crooksville to serve Newby.

Transmission Cost: $5.8M

Alternative 2 - Retire Dale-Newby; Construct a new 138 KV line from Fawkes-West Berea. Rebuild Newby as 138/12.5 KV to serve Newby from new line.

Transmission Cost: $8.5M

Alternative 3 - Rebuild Dale-Newby as single-circuit 69 kV and serve Newby from this line. Construct 69 KV line from Lancaster to Toddville.

Transmission Cost: $18.1M

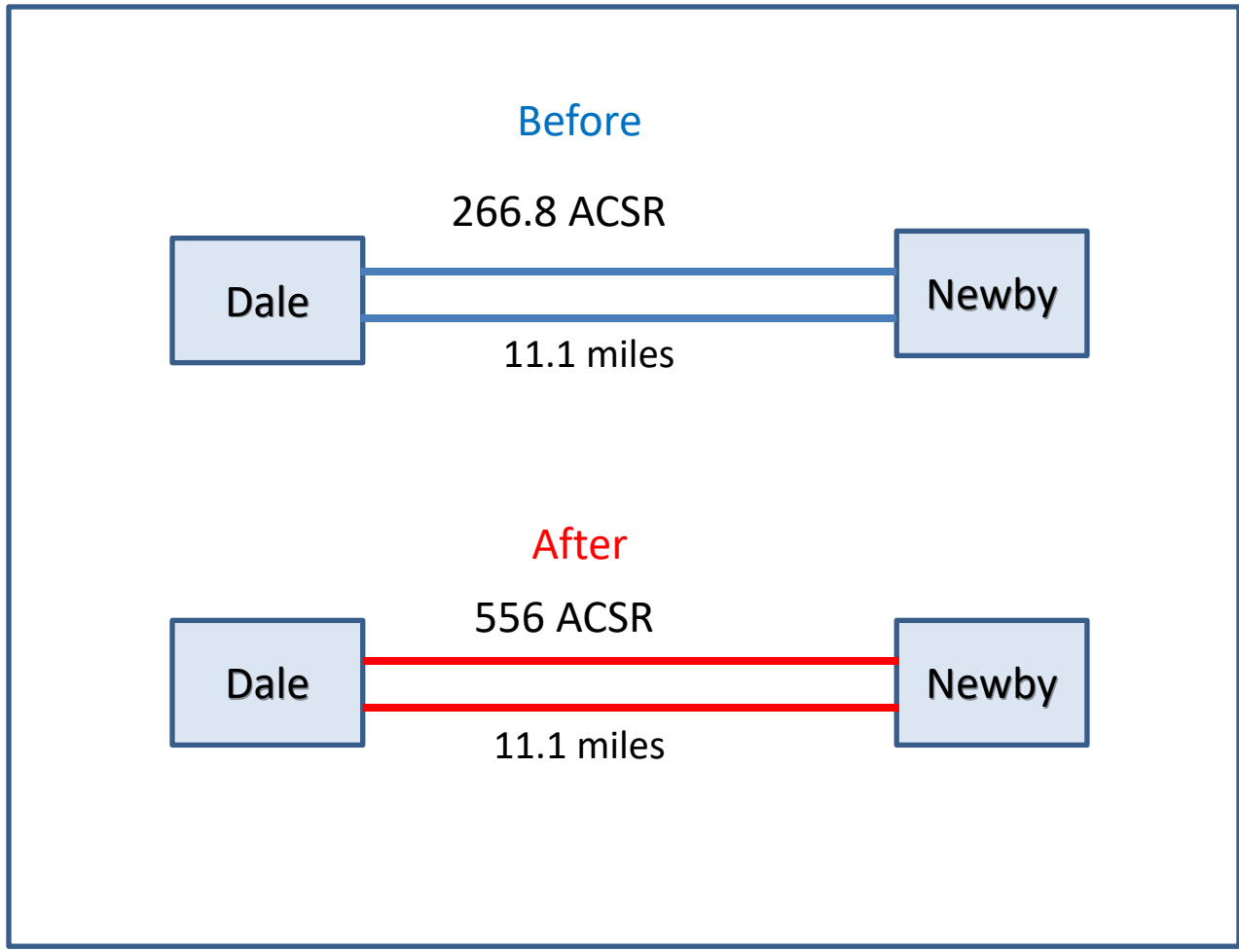
Alternative 4 - Retire Dale-Newby; Construct EK Fawkes-Newby 138 kV and rebuild Newby as 138/12.5 KV to serve from new line.

Transmission Cost: $14.2M

Projected In-Service: 12/31/2028

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

10/4/2022 – V1 – Original version posted to pjm.com