

Subregional RTEP Committee – Western FirstEnergy Supplemental Projects

May 19, 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

Need Number: APS-2022-002

Process Stage: Need Meeting 05/19/2022

Project Driver:

Equipment Material Condition, Performance and Risk

Operational Flexibility and Efficiency

Specific Assumption Reference:

System reliability and performance.

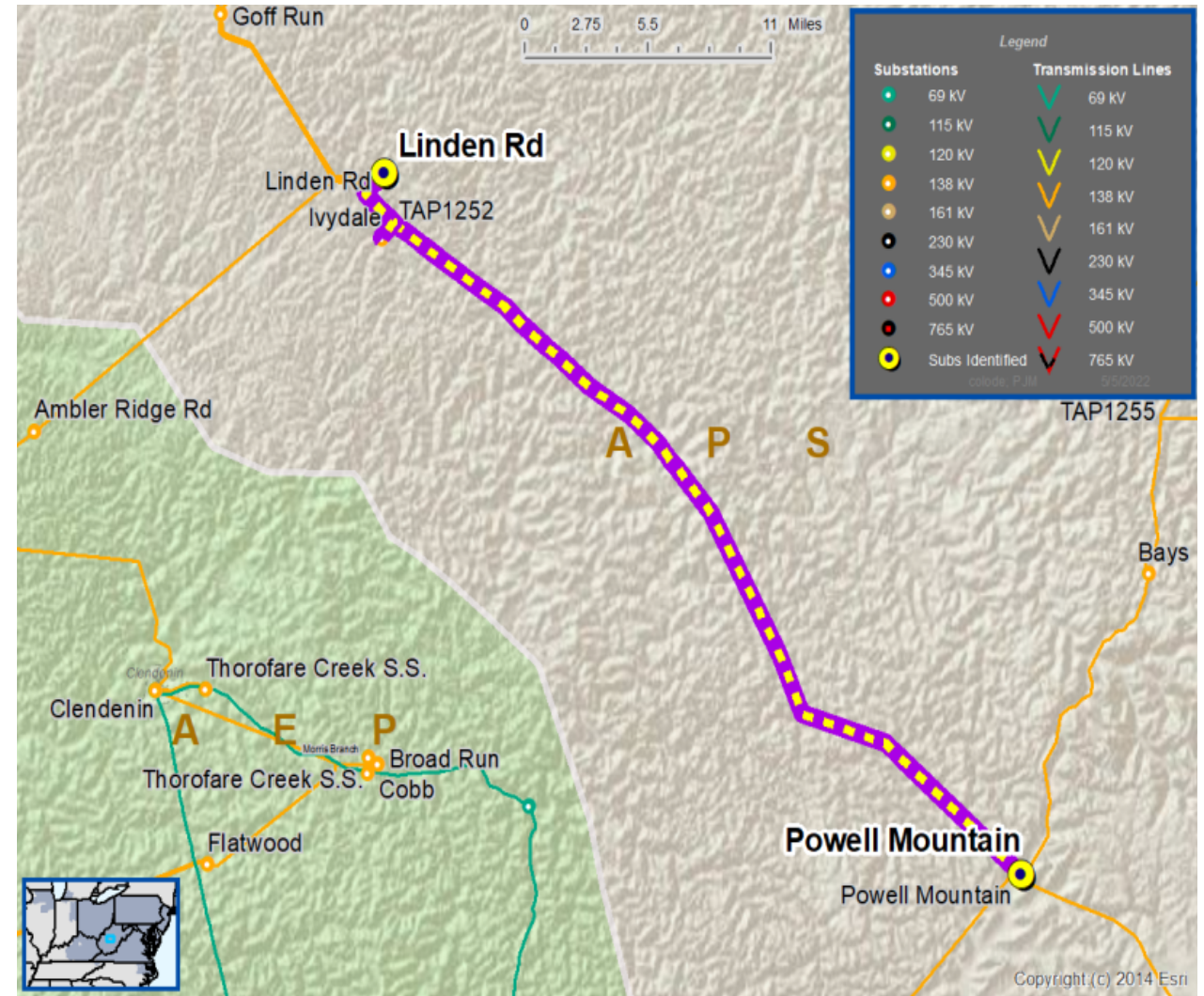
System Condition Projects

- Line Condition Rebuild/Replacement
 - Transmission Line Switches

Problem Statement:

The Powell Mountain – Linden Road 138 kV line has two in-line switches that are in degraded condition and have limited availability of spare parts. The existing switches have operational limitations. The motor control units are no longer supported by the manufacturer. Inability to sectionalize this line results in loss of approximately 6 MW of load and 2,400 customers.

- Switches A-1225 and A-1226
 - Transmission line rating is 164/206 MVA (SN/SE)



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Need Number: APS-2022-004

Process Stage: Need Meeting 05/19/2022

Project Driver:

Equipment Material Condition, Performance and Risk

Operational Flexibility and Efficiency

Specific Assumption Reference:

Line Condition Rebuild/Replacement

- Age/condition of wood pole transmission line structures
- Age/condition of steel tower or steel pole transmission line structures

Substation Performance Projects Global Factors

- Substation/line equipment limits

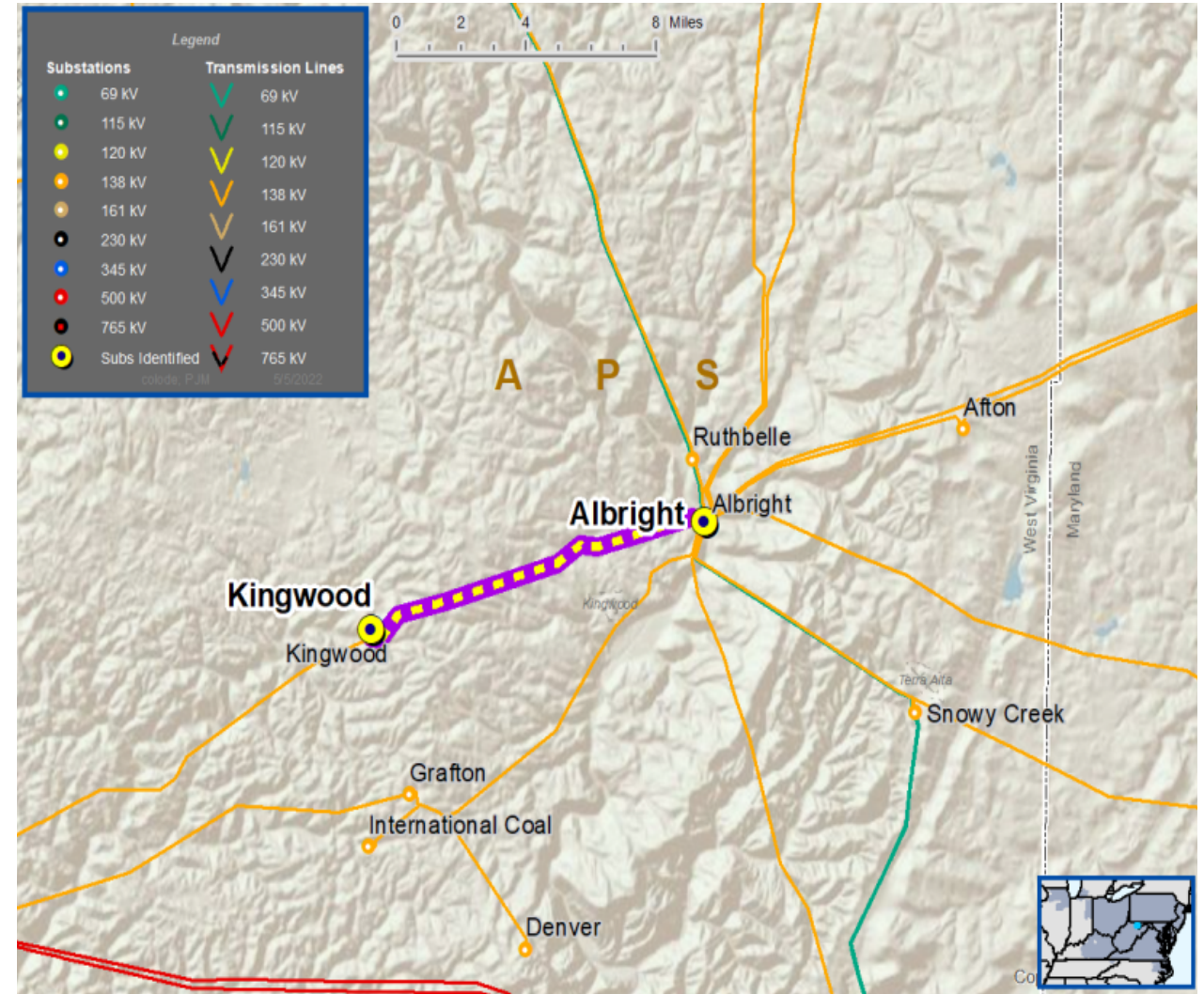
Problem Statement:

Albright – Kingwood 138 kV line is exhibiting deterioration.

- The transmission line was constructed in 1953.
- Total line distance is approximately 4.0 miles.
- 25 out of 30 structures failed inspection (83% failure rate)
- Failure reasons include woodpecker damage, cracking, and decay

Transmission line ratings are limited by terminal equipment (Substation Conductor , Wave trap).

- Existing line rating: 176/209 MVA (SN/SE)
- Existing conductor rating: 221/268 MVA (SN/SE)



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

5/5/2022 – V1 – Original version posted to pjm.com