

Transmission Expansion Advisory Committee – PPL Supplemental Projects

May 10, 2022

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

PPL Transmission Zone: Supplemental

Need Number: PPL-2021-0006

Meeting Date: 5/10/2022

Process Stage: Solution

Need Slide Presented: 12/20/2021

Supplemental Project Driver: Equipment Material Condition, Performance and Risk; Operational Flexibility and Efficiency

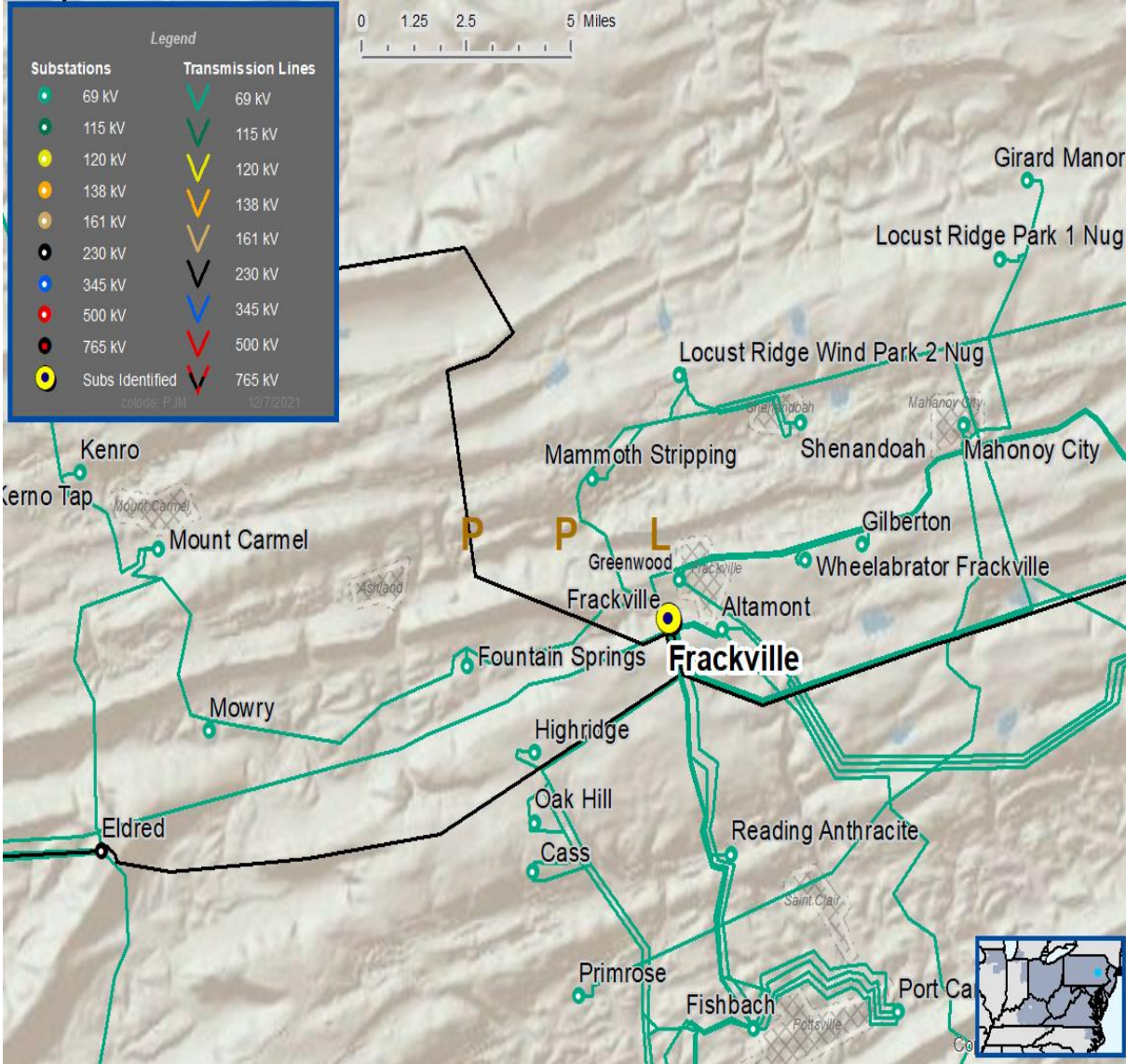
Problem Statement:

The equipment at Frackville 230/69kV Substation is reaching end of life. The current configuration of the Frackville Substation limits the ability to maintain, operate, and replace equipment. Following are the risks under certain operating conditions:

- Approximately 500 MW load/110,000 customers are at power outage risk
- 14,000 stranded customers
- Thermal overload (128% of emergency rating) on a 230-69 kV transformer

Specific Assumption References:

[PPL 2021 Annual Assumptions](#)



Need Number: PPL-2021-0006

Process Stage: Solution 05/10/2022

Proposed Solution: Build a new breaker and half 230/69kV substation next to the existing Frackville substation to address aging infrastructure and lack of operational flexibility.

Alternatives Considered:

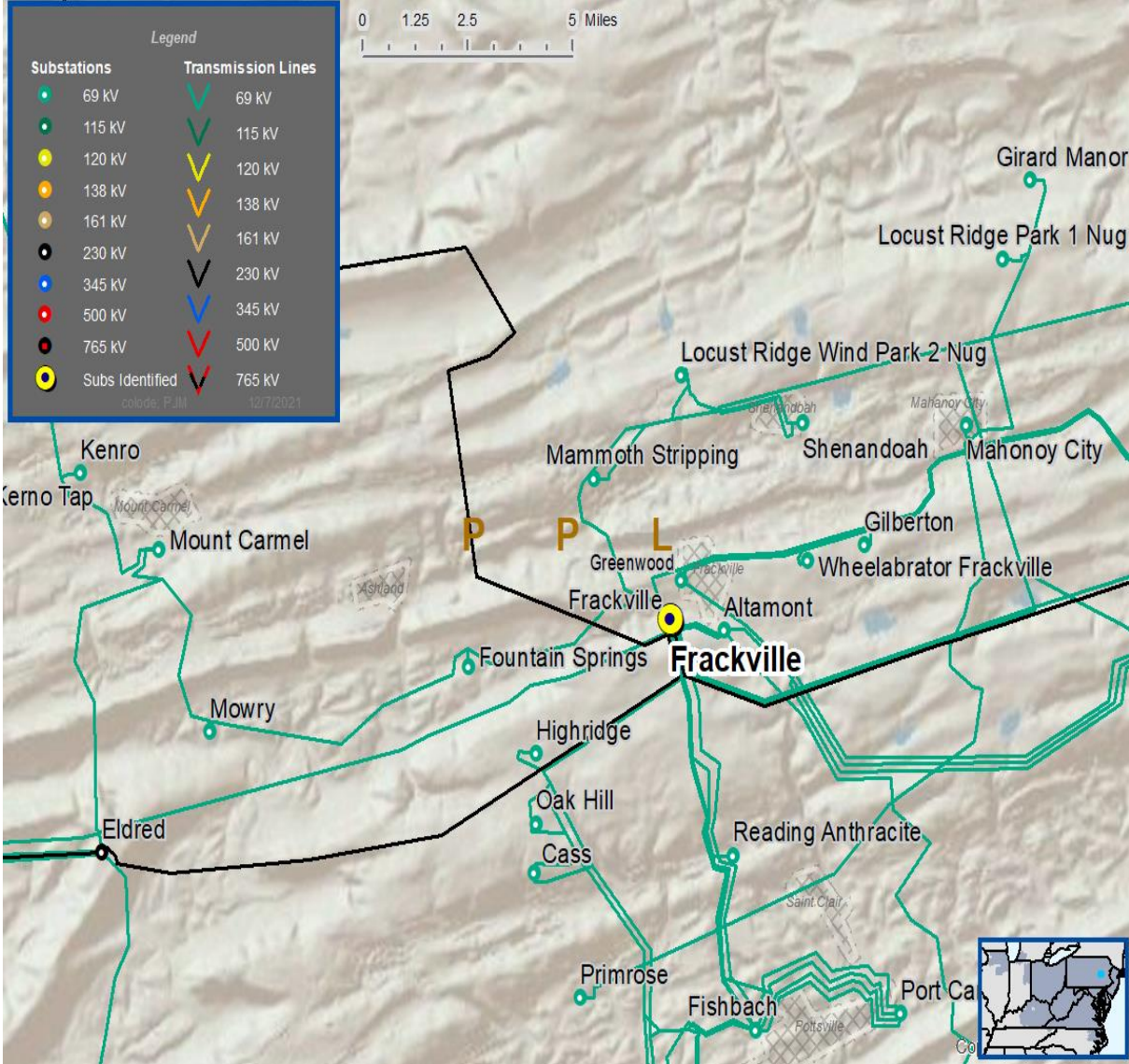
- Replace equipment in place at existing substation: Infeasible due to operational limitations for taking outages at Frackville. This alternative does not address the operational issues due to the non-standard configuration.

Estimated Project Cost: \$60M

Project IS Date: 12/31/2025

Project Status: Conceptual

Model: 2026



Questions?



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

4/28/2022 – V1 – Original version posted to pjm.com