

Sub-Regional RTEP Committee – Mid-Atlantic PPL Supplemental Projects

September 19th, 2024

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 Hamilton, PA

Need Number: PPL-2024-0006

Process Stage: Solution Meeting SRRTEP-MA - 09/19/2024

Previously Presented: Need Meeting SRRTEP-MA - 07/18/2024

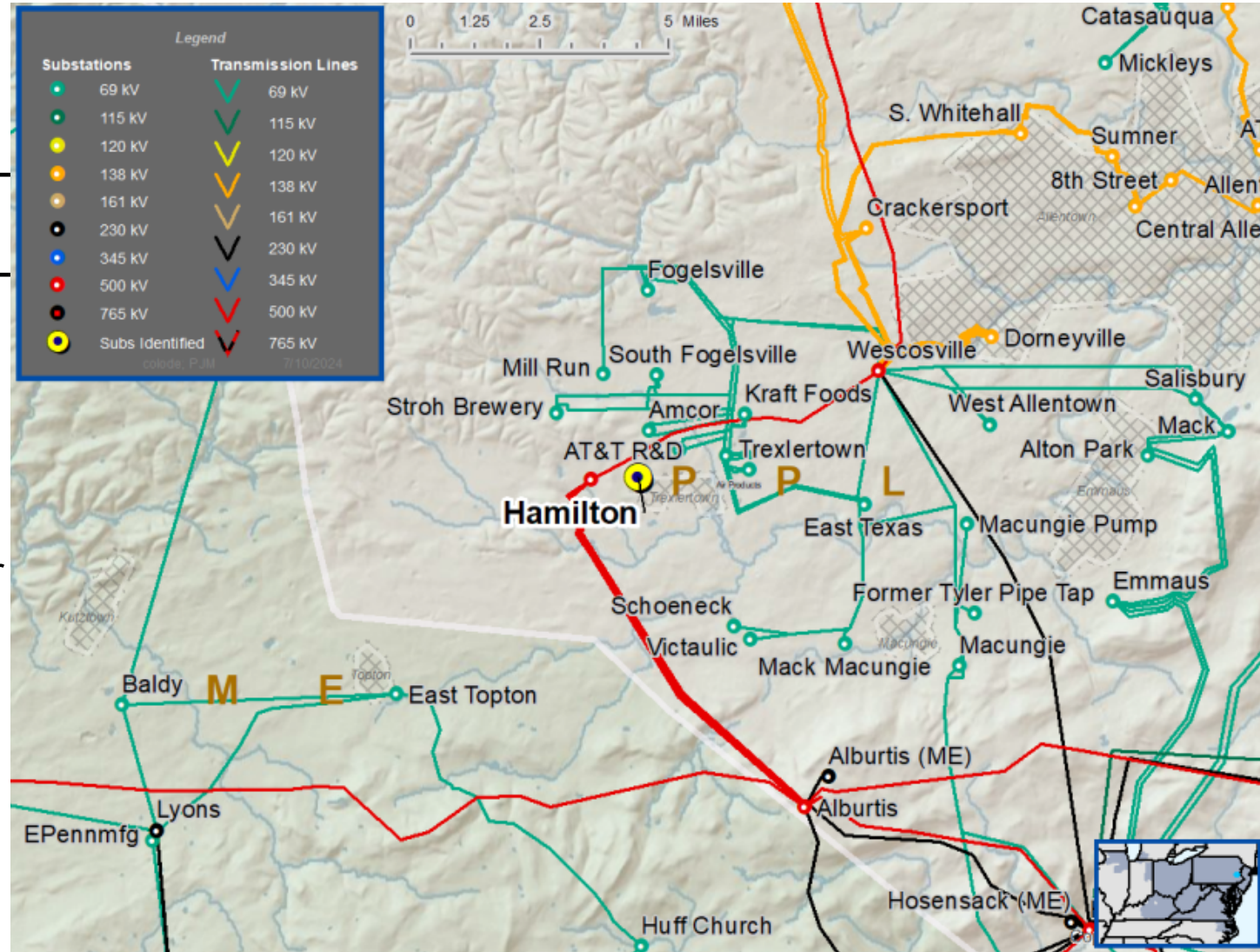
Project Driver: Customer Service

Specific Assumption References:

PPL 2024 Annual Assumptions

Problem Statement:

A customer has submitted a request to have their facility served from a double circuit 69kV transmission line in Breinigsville, PA. The requested load is approximately 100 MVA. The requested in service date is 5/14/2026.





PPL Transmission Zone: Supplemental Hamilton, PA

Need number(s): PPL-2024-0006

Process Stage: Solution Meeting SRRTEP-MA - 09/19/2024

Proposed Solution:

Tek Park 69/138kV taps: Extend a new double circuit 69/138kV tap from the existing Breinigsville - ATTR 69/138kV line to interconnect the new Tek Park 69-13.8kV substation. Build 0.4 miles of new 69/138kV double circuit line using 795 ACSR conductor.. Estimated Cost: \$1.5 M

Breinigsville - Tek Park 69/138kV Lines: Extend a new double circuit 69/138kV tap from the existing Breinigsville 500-138-69kV Substation to the new Tek Park 69/138kV tap. Build 0.75 miles of new 69/138kV double circuit line using 795 ACSR conductor.. Estimated Cost: \$4 M

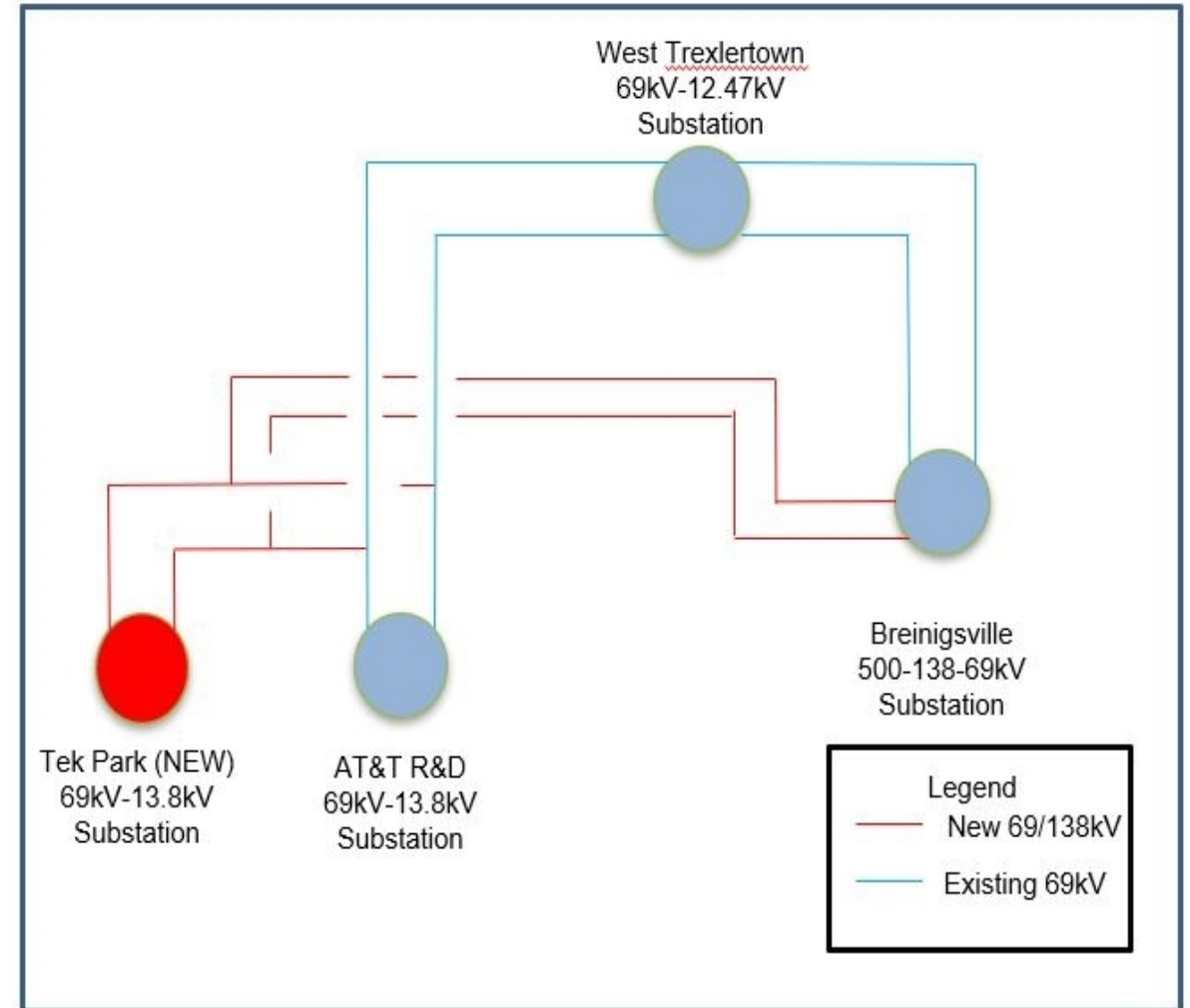
Breinigsville 69/138kV Line Terminals: Install two new line terminals in the Breinigsville 69/138kV Yard. Install two bays in initial DBDB future BAAH Arrangement.

Transmission Cost Estimate: \$9 M

Alternatives Considered: Rebuilding the existing lines was considered but would leave over 125 MWs on radial feed with no transfer capability.

Projected In-Service: 06/01/2027

Project Status: Conceptual



PPL Transmission Zone: Supplemental Stanton 69, PA/Summit 69 (PL), PA

Need Number: PPL-2024-0007

Process Stage: Solution Meeting SRRTEP-MA - 09/19/2024

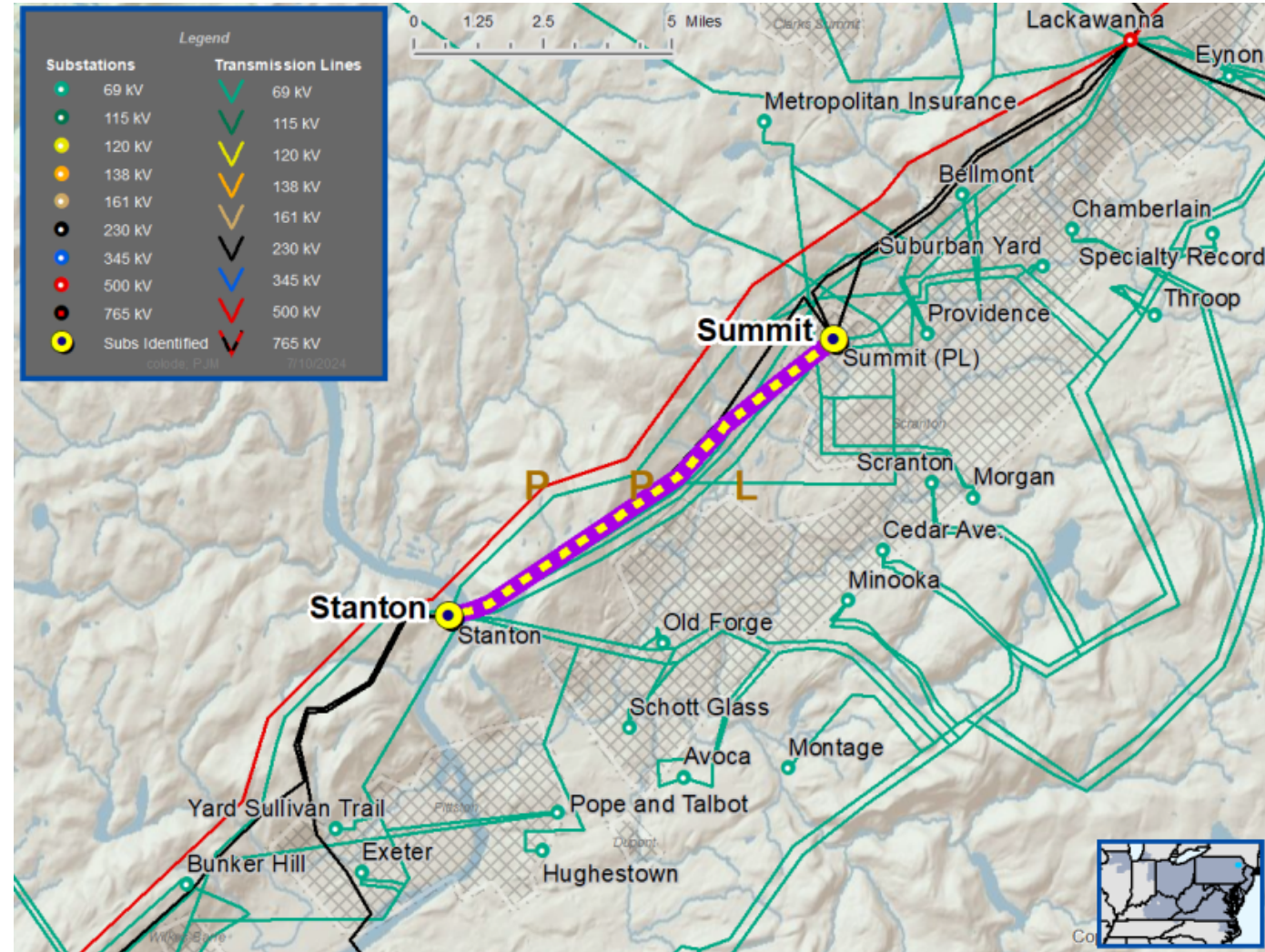
Previously Presented: Need Meeting SRRTEP-MA - 07/18/2024

Specific Assumption References:

PPL 2024 Annual Assumptions

Problem Statement:

The Stanton-Summit 69kV 1&2 lines area reliability risk due to poor asset health. The line is in poor condition with the original assets installed in 1926. The line consists of 86 vintage lattice poles, two vintage wood poles, and 12 poles replaced after 2000. The 4/0 stranded CU conductor is original. The line has experienced 4 operations (3 momentary and 1 permanent) since 2016.



PPL Transmission Zone: Supplemental Stanton 69, PA/Summit 69 (PL), PA

Need number(s): PPL-2024-0007

Process Stage: Solution Meeting SRRTEP-MA - 09/19/2024

Proposed Solution:

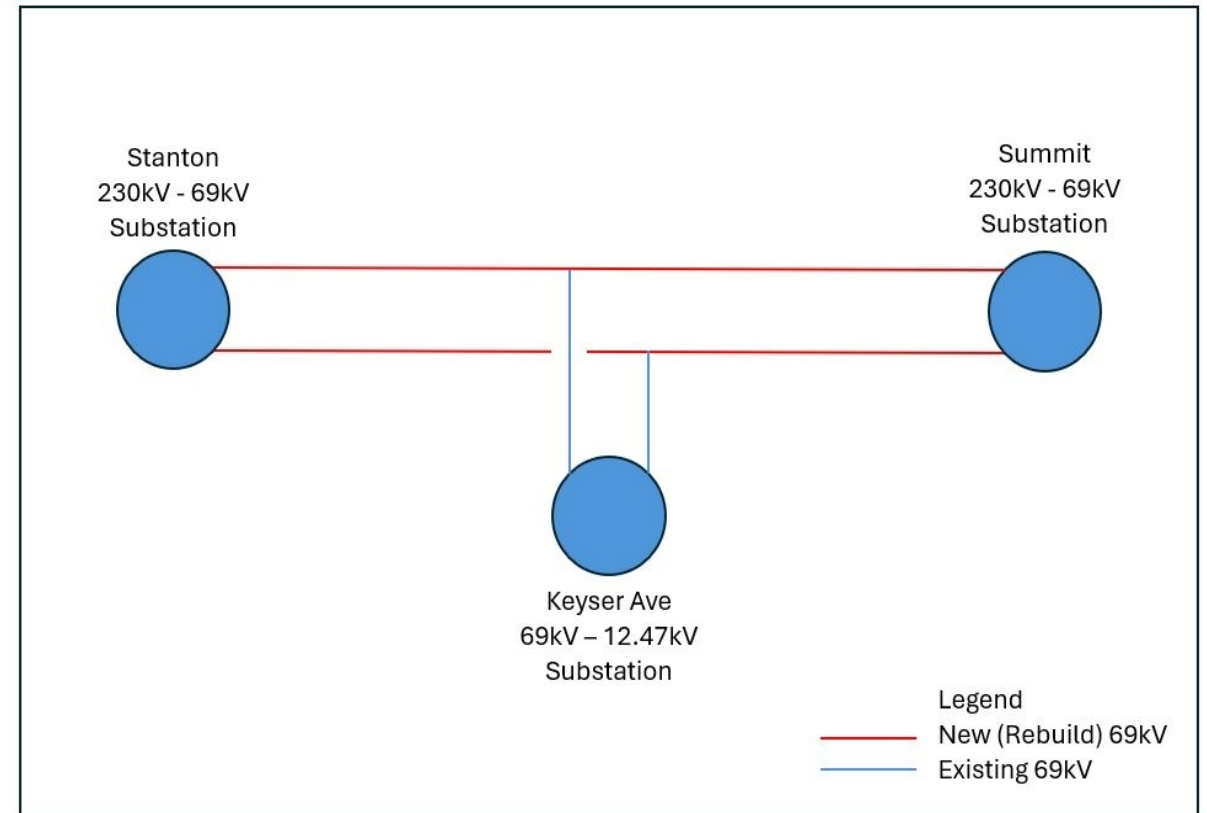
Rebuild the Stanton - Summit #1 & #2 69kV lines.: Rebuild ~7 miles of the double circuit Stanton - Summit #1 & #2 69kV lines to double circuit 69kV with 556 ACSR conductor.

Transmission Cost Estimate: \$17.5 M

Alternatives Considered: Removing the line is infeasible due to resulting reduction in operational flexibility and that the lines serve a distribution substation.

Projected In-Service: 12/01/2027

Project Status: Conceptual



PPL Transmission Zone: Supplemental Old Forge, PA/Avoca, PA

Need Number: PPL-2024-0008

Process Stage: Solution Meeting SRRTEP-MA - 09/19/2024

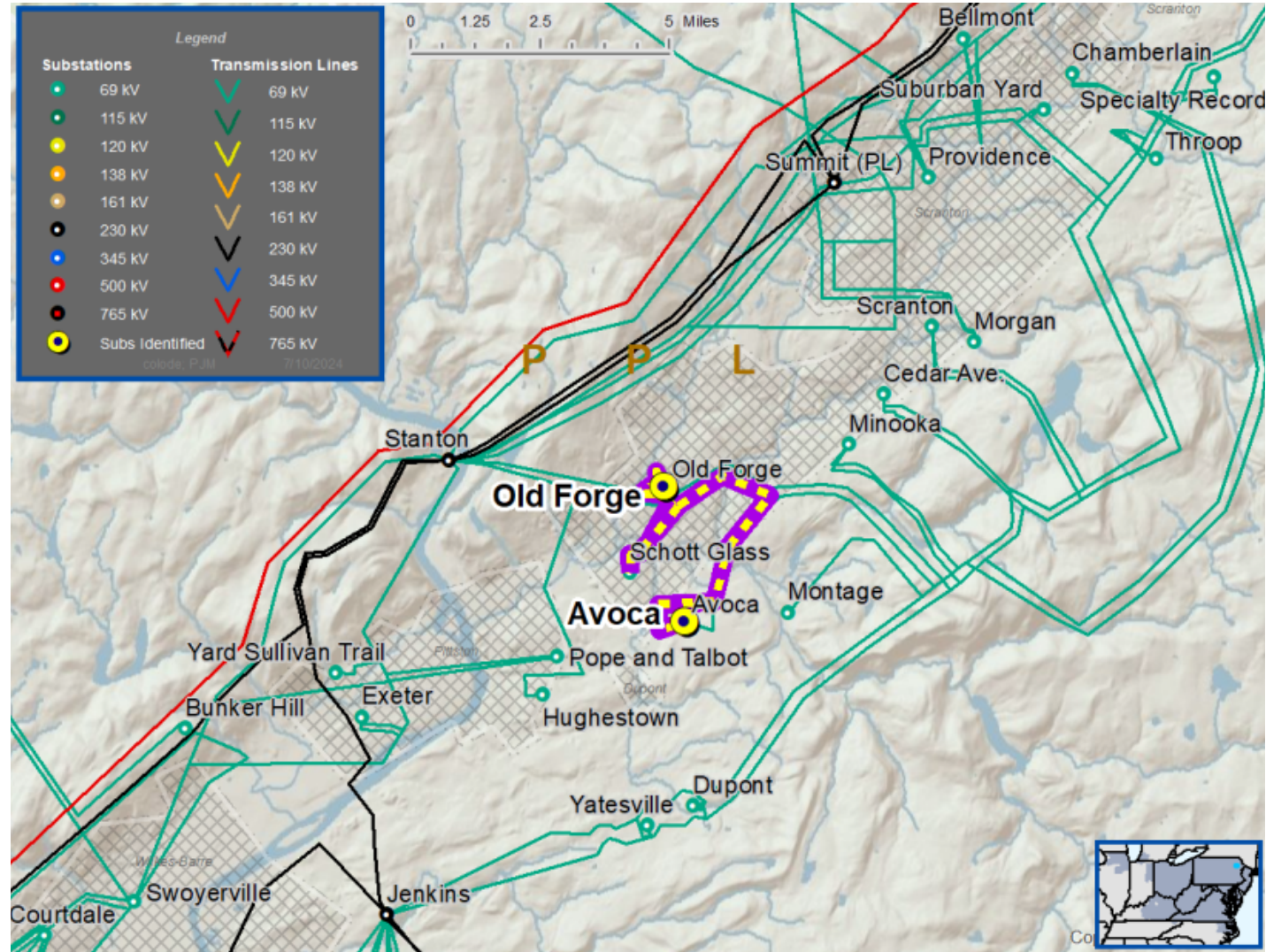
Previously Presented: Need Meeting SRRTEP-MA - 07/18/2024

Project Driver: Equipment Condition/Performance/Risk

Specific Assumption References:
PPL 2024 Annual Assumptions

Problem Statement:

The Old Forge-Avoca 69kV Tie line is a reliability risk due to poor asset health. The line is in poor condition with the original assets installed in the 1925. The line consists of 38 vintage poles and 18 poles replaced since 2000. The 4/0 CU conductor is original. The line has experienced 1 permanent outage since 2013.



PPL Transmission Zone: Supplemental Old Forge, PA/Avoca, PA

Need number(s): PPL-2024-0008

Process Stage: Solution Meeting SRRTEP-MA - 09/19/2024

Proposed Solution:

Old Forge - Avoca 69kV Tie Line Rebuild:

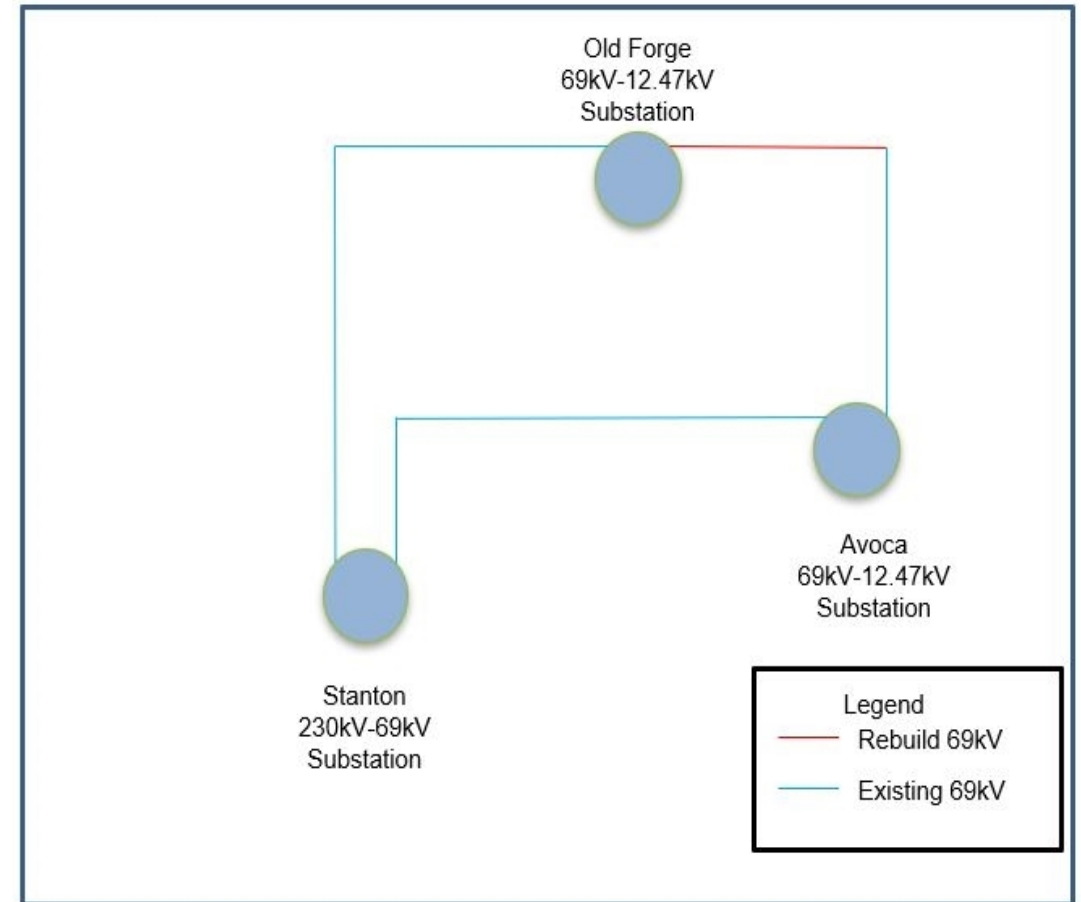
Rebuild 2 miles of the existing single circuit Old Forge – Avoca 69kV tie line as single circuit 69kV with 556ACSR conductor.. Estimated Cost: \$5.5 M

Transmission Cost Estimate: \$5.5 M

Alternatives Considered: Removing the line is infeasible due to resulting reduction in operational flexibility.

Projected In-Service: 12/01/2027

Project Status: Conceptual



PPL Transmission Zone: Supplemental Exeter, PA/Stanton 69, PA

Need Number: PPL-2024-0009

Process Stage: Solution Meeting SRRTEP-MA – 09/19/2024

Previously Presented: Need Meeting SRRTEP-MA - 07/18/2024

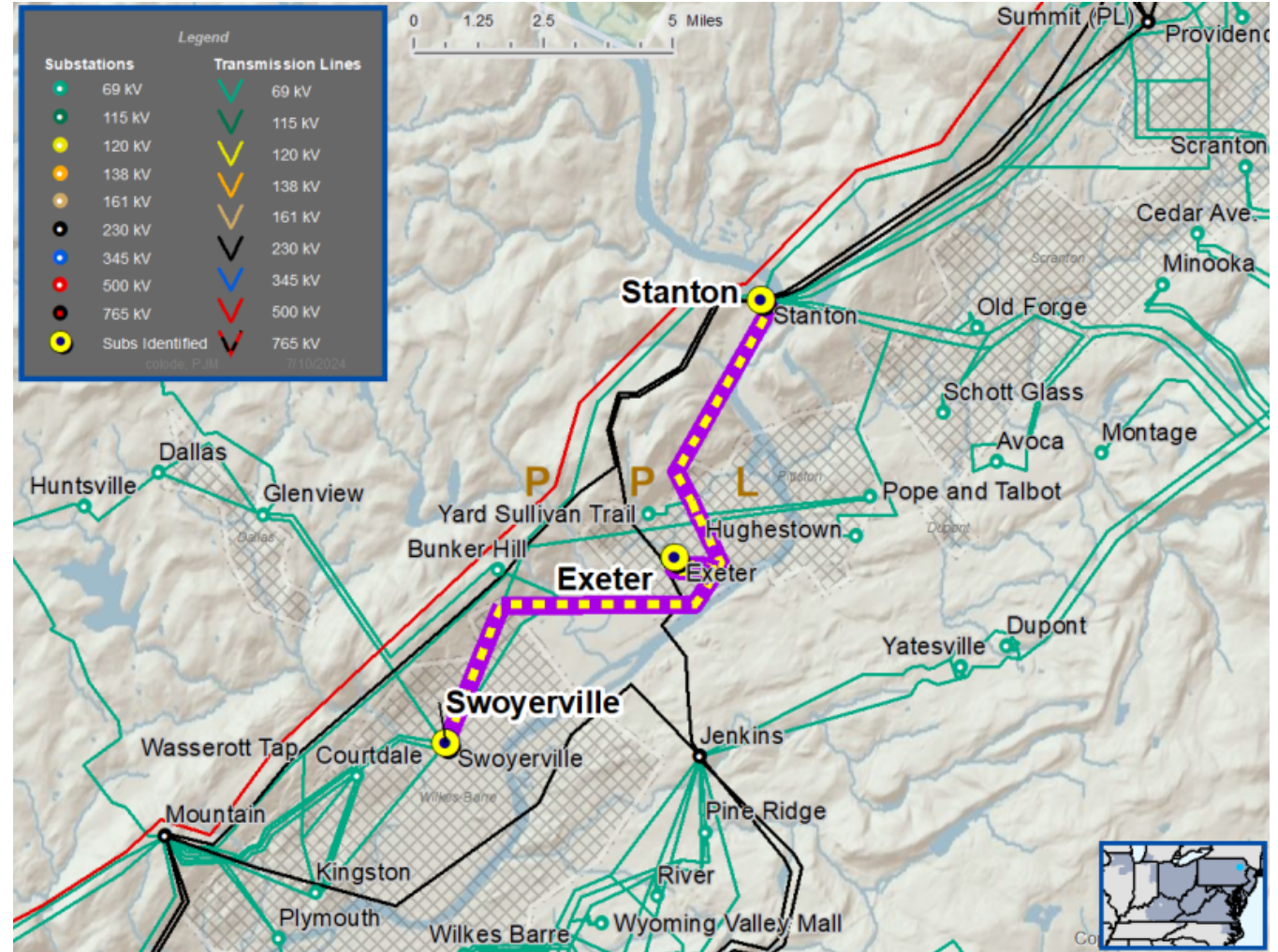
Project Driver: Equipment Condition/Performance/Risk

Specific Assumption References:

PPL 2024 Annual Assumptions

Problem Statement:

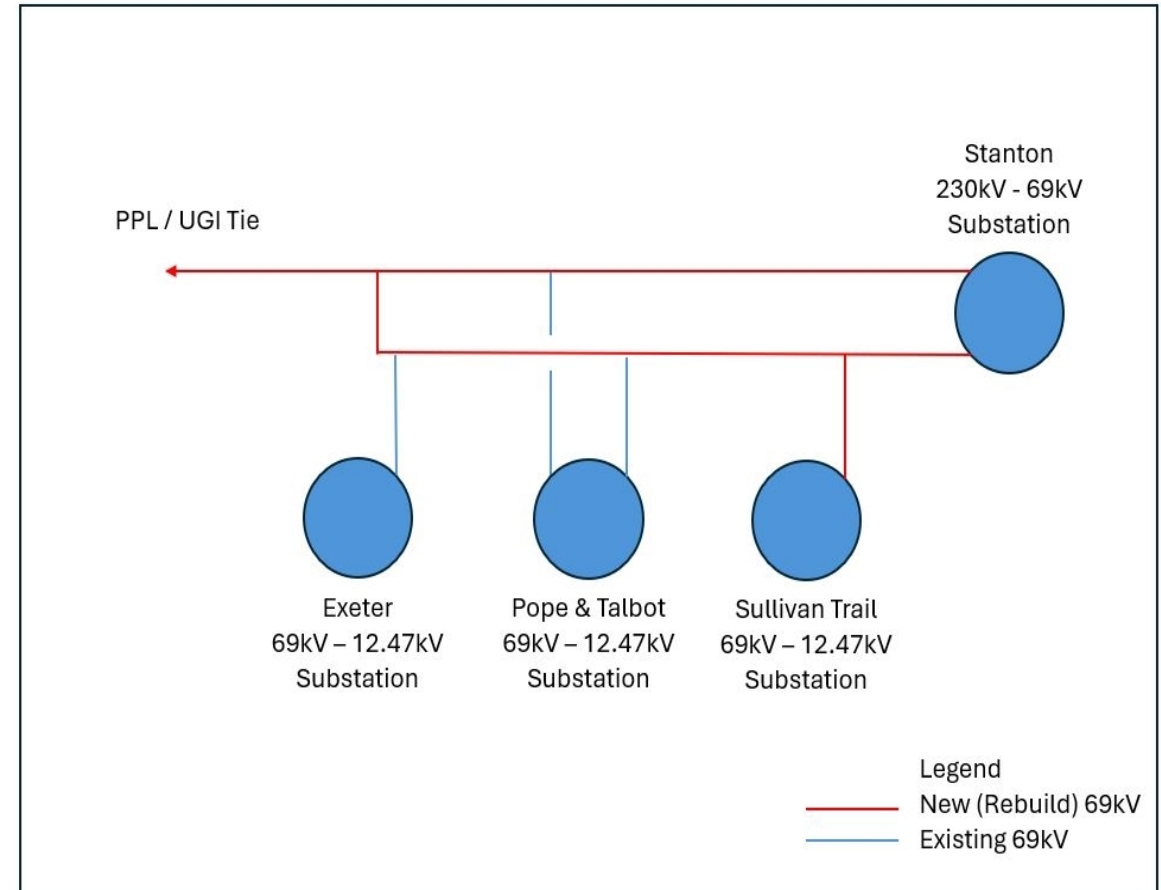
The Stanton-Swoyerville/Exeter 69kV tap is a reliability risk due to poor asset health. The line is in poor condition with the original assets installed in 1943. The line consists of 98 vintage wood poles, 2 vintage lattice towers, 5 vintage steel embedded poles, and 85 new poles replaced after 2000. The 4/0 CU conductor is original. The line has experienced 3 permanent operations since 2018.





PPL Transmission Zone: Supplemental Exeter, PA/Stanton 69, PA

Need number(s): PPL-2024-0009
Process Stage: Solution Meeting SRRTEP-MA - 09/19/2024
Proposed Solution:
Stanton-Swoyersville/Exeter 69kV Rebuild: Rebuild ~6 miles of the double circuit Stanton-Swoyersville/Exeter 69kV lines to double circuit 69kV. Rebuild ~1 mile of single circuit 69kV taps. All rebuilt sections to be 556 ACSR conductor.
Transmission Cost Estimate: \$17.5 M
Alternatives Considered: Removal of the lines is infeasible due to distribution substations being connected to the lines.
Projected In-Service: 12/01/2027
Project Status: Conceptual



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

09/09/2024 – V1 – Original version posted to pjm.com