

Transmission Expansion Advisory Committee Supplemental Projects

PPL Transmission Zone

Scope Change

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: PPL-2025-0010

Meeting Date: 9/9/2025 & 5/8/2026

Process Stage: Solution

Need Presented: 5/6/2025

Supplemental Project Driver: Customer Service

Problem Statement:

- A customer has submitted a request to have their facility served from a 230kV source in Hazleton, PA. The total facility load is approximately 1000 MW (2030). The requested in-service date is 05/2027.

Initial In-Service 2027 Load	Projected 2028 Load	Projected 2030 Load
350 MW	700 MW	1000 MW

Specific Assumption References:

[PPL 2025 Annual Assumptions](#)



Need Number: PPL-2025-0010

Proposed Solution:

Tresckow 230kV Yard: Install three new 230kV line terminals for the Customer lead lines at Tresckow 230kV yard. Install a total of three 230kV breakers. Estimated Cost: \$4.5 M

Tresckow 230kV Customer Lead Lines: Install three 230kV lead lines for approximately 0.1 miles from Tomhicken 230kV switchyard to the customer facility. Estimated Cost: \$4 M

~~**Susquehanna Tomhicken #1 & #2 230kV Reconductor:** Reconductor ~10 miles the Susquehanna Tomhicken #1 & #2 230kV lines from Susquehanna 230kV switchyard to the Tomhicken 230kV switchyard. Estimated Cost: \$12 M~~

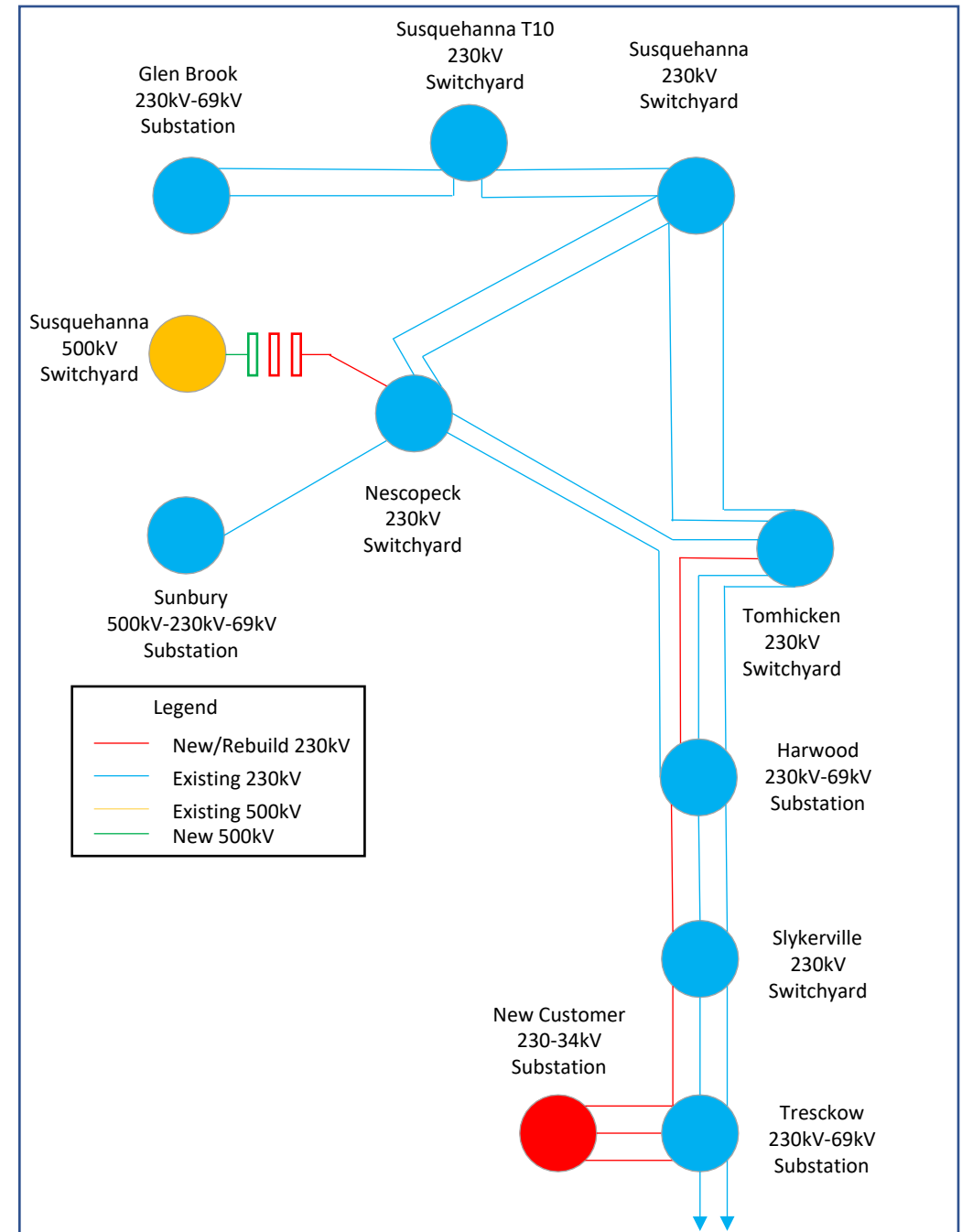
Scope now under Baseline project B4029.5

Harwood 230kV yard: Install a new DBDB (BAAH ultimate) bay at Harwood 230kV yard. Install two breakers, one dead-ends, and associated bay equipment. Estimated Cost: \$2.5 M

Slykerville 230kV Yard: Install two new DBDB (BAAH ultimate) bays at Slykerville 230kV yard. Install four breakers, two dead-ends, and associated bay equipment. Estimated Cost: \$5 M

Harwood - Slykerville #3 230kV Line: Construct a new single circuit initial, future double circuit, 230kV transmission line for ~2.5 miles from Harwood 230kV yard to the Slykerville 230kV yard. Estimated Cost: \$11.25 M

Tresckow 230kV Switchyard: Install a new DBDB (BAAH ultimate) bay at Tresckow 230kV yard. Install two breakers, a dead-end, and associated bay equipment. Estimated Cost: \$2.5 M



Need Number: PPL-2025-0010

Proposed Solution:

Slykerville - Tresckow #3 230kV Line: Construct a new single circuit initial, future double circuit, 230kV transmission line for ~1.9 miles from Slykerville 230kV yard to the Tresckow 230kV yard. Estimated Cost: \$8.75 M

Glen Brook – Susquehanna T10 #1 & #2 230kV Reconductor: Reconductor the limiting section ~0.6 mile section of the Glen Brook – Susquehanna T10 #1 & #2 230kV lines. Estimated Cost: \$1 M

Scope now under Baseline project B4029.13

Susquehanna 500kV Yard: Install a new 500-230kV Transformer off the north bus of the Susquehanna 500kV yard. Install one new 500kV breaker, 3 single phase 250MVA 500-230kV units, one 230kV breaker, and ancillary equipment. Estimated Cost: \$25 M

Nescopeck 230kV Yard: Install a new DBDB (BAAH ultimate) bay at Nescopeck 230kV yard. Install two breakers, a dead-end, and associated bay equipment. Estimated Cost: \$2.5 M

Susquehanna T22 - Nescopeck 230kV Line: Construct a new single circuit initial, future double circuit, 230kV transmission line for ~3.75 miles from the 230kV side of T22 at Susquehanna 500kV yard to the Nescopeck 230kV yard. Estimated Cost: \$16 M

Tomhicken – Harwood #3 230kV Line: Add the second circuit to the NESC-HARW pole line from Tomhicken to Harwood (2.7 miles). Install terminal equipment and one breaker at Tomhicken. Install terminal equipment and one breaker at Harwood. Estimated Cost: \$6.5 M

Alternatives Considered:

1. Install a new four bay BAAH 230kV Switchyard at the customer’s location. Break the TRES-EPAL/SIEG 230kV lines and extend three 230kV lines to customer sub. Solution would include all the upgrades listed above. Estimated cost: \$139.5 Million

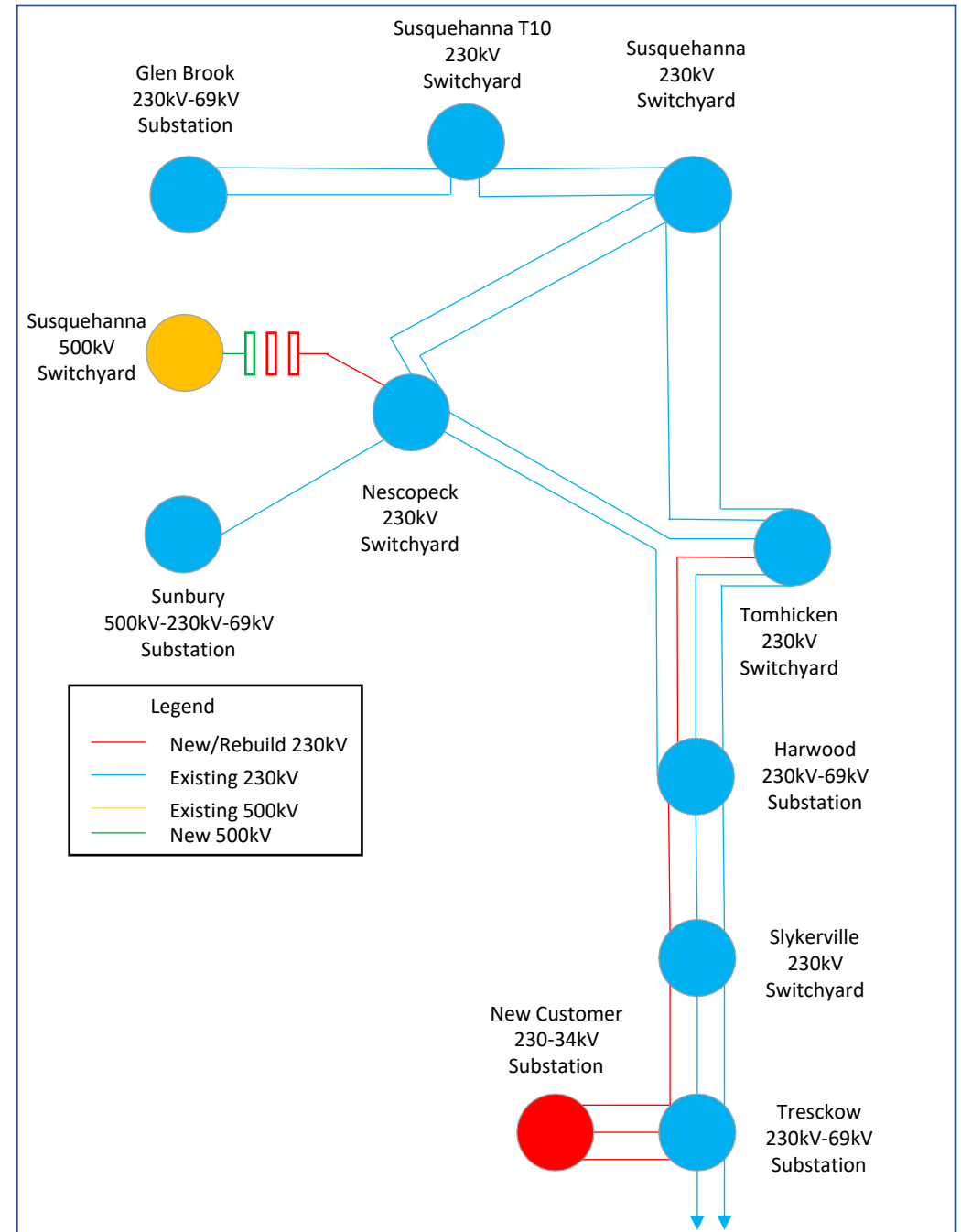
Estimated Project Cost: ~~\$95M~~ **\$88.5M**

Projected In-Service: 5/30/2027

Project Status: Conceptual

Supplemental Number: S3818

Model: 2028



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



PPL Transmission Zone: Supplemental Jerseytown, PA

Need Number: PPL-2026-0001

Process Stage: Solution Meeting TEAC - 05/08/2026

Previously Presented: Need Meeting 03/10/2026

Project Driver: Customer Service

Specific Assumption References:

PPL 2026 Annual Assumptions

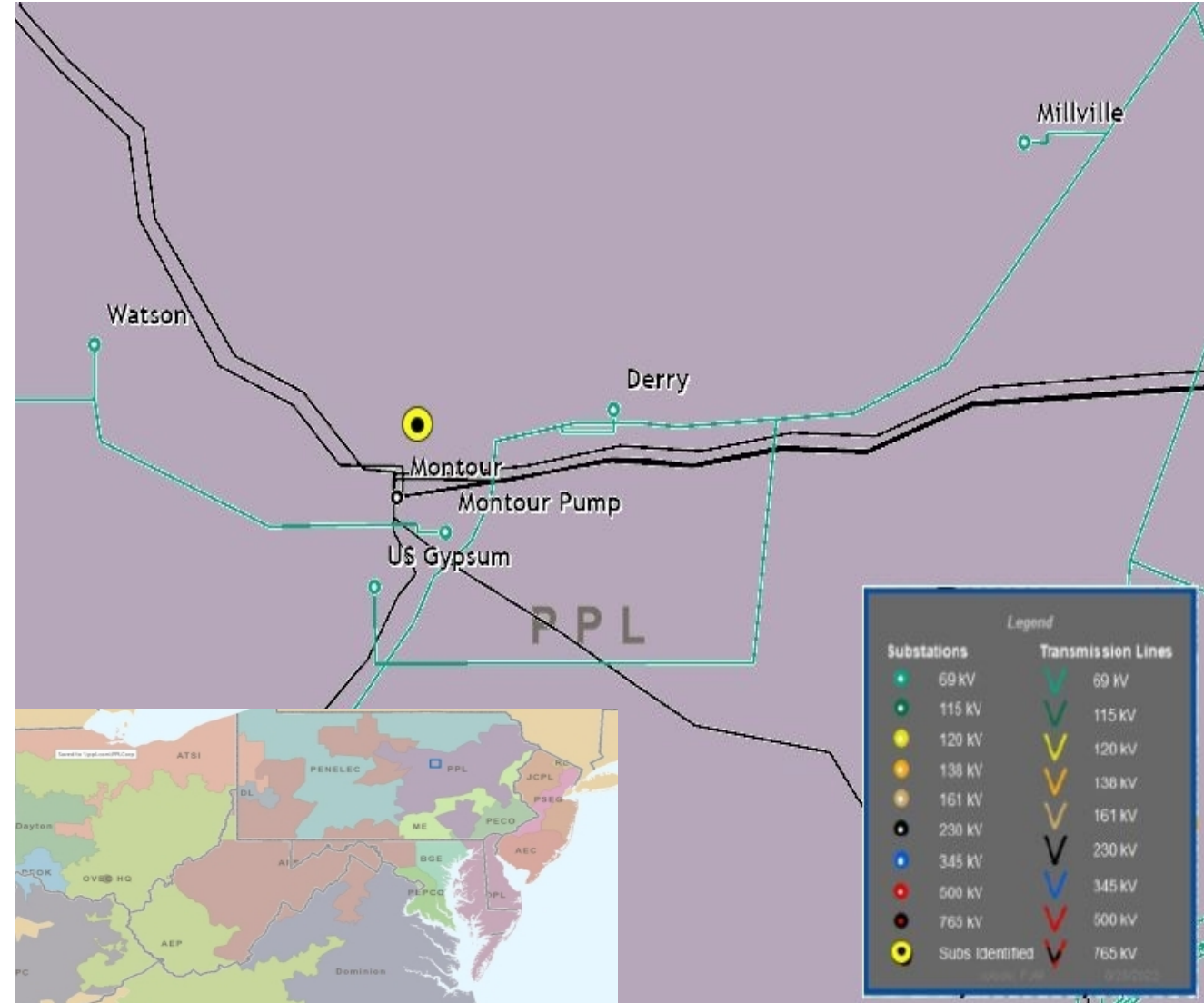
Problem Statement:

A customer has submitted a request to have their facility served from a 230kV source in Washingtonville, PA. The total facility load is approximately 1,500 MW (2032). The requested in-service date is 5/2028.

Initial In-Service 2028 Load: 200 MW

Projected 2029 Load: 550 MW

Projected 2031 Load: 1,200 MW





PPL Transmission Zone: Supplemental Jerseytown, PA

Need number(s): PPL-2026-0001

Process Stage: Solution Meeting TEAC - 05/08/2026

Proposed Solution:

Jerseytown 230kV Yard: Install nine bays of new BAAH 230kV switchyard with a 144 MVAR Capacitor bank. Estimated Cost: \$55 M

Bifurcate Montour – Saegers #1 & #2 230kV Lines: Bifurcate Montour-Saegers #1 & #2 230kV line into the new Jerseytown 230kV switchyard (~1.5 miles). Estimated Cost: \$14 M

Bifurcate Montour – Glen Brook #1 & #2 230kV Lines: Bifurcate Montour-Glen Brook #1 & #2 230kV line into the new Jerseytown 230kV switchyard (~0.5 miles). Estimated Cost: \$6 M

Jerseytown 230kV Customer Lead Lines: Install three sets of three 230kV lead lines for approximately 0.8, 1.3 and 1.7 miles, respectively, from Jerseytown 230kV switchyard to the customer substations. Estimated Cost: \$34.2 M

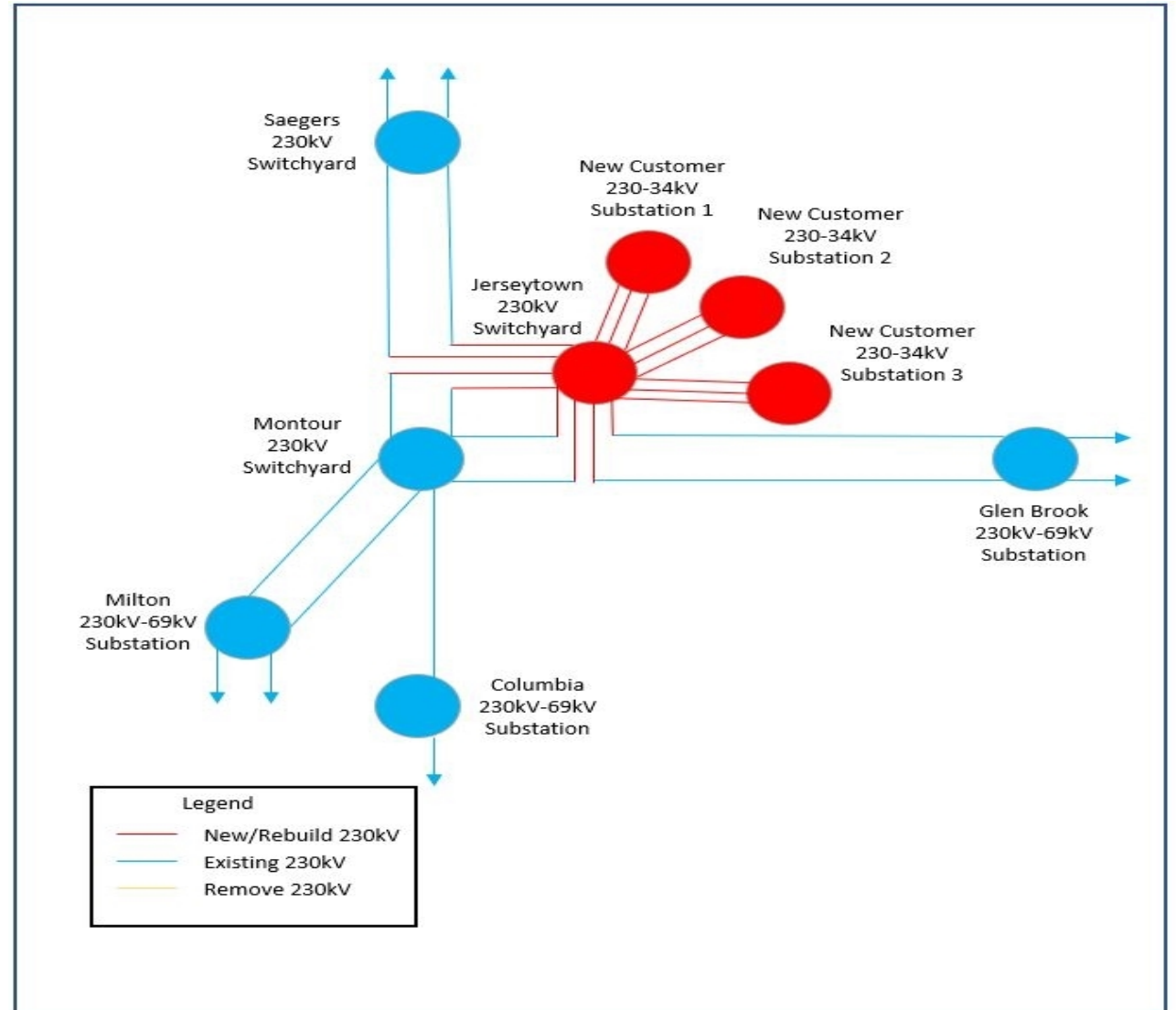
Transmission Cost Estimate: \$109.2 M

Alternatives Considered:

1. Expanding the existing Montour 230kV switchyard was infeasible due to adjacent railroad, control house and plant equipment placement.

Projected In-Service: 05/30/2028

Project Status: Project Development





PPL Transmission Zone: Supplemental Callender Gap, PA

Need Number: PPL-2026-0002

Process Stage: Solution Meeting TEAC - 05/08/2026

Previously Presented: Need Meeting 03/10/2026

Project Driver: Customer Service

Specific Assumption References:

PPL 2026 Annual Assumptions

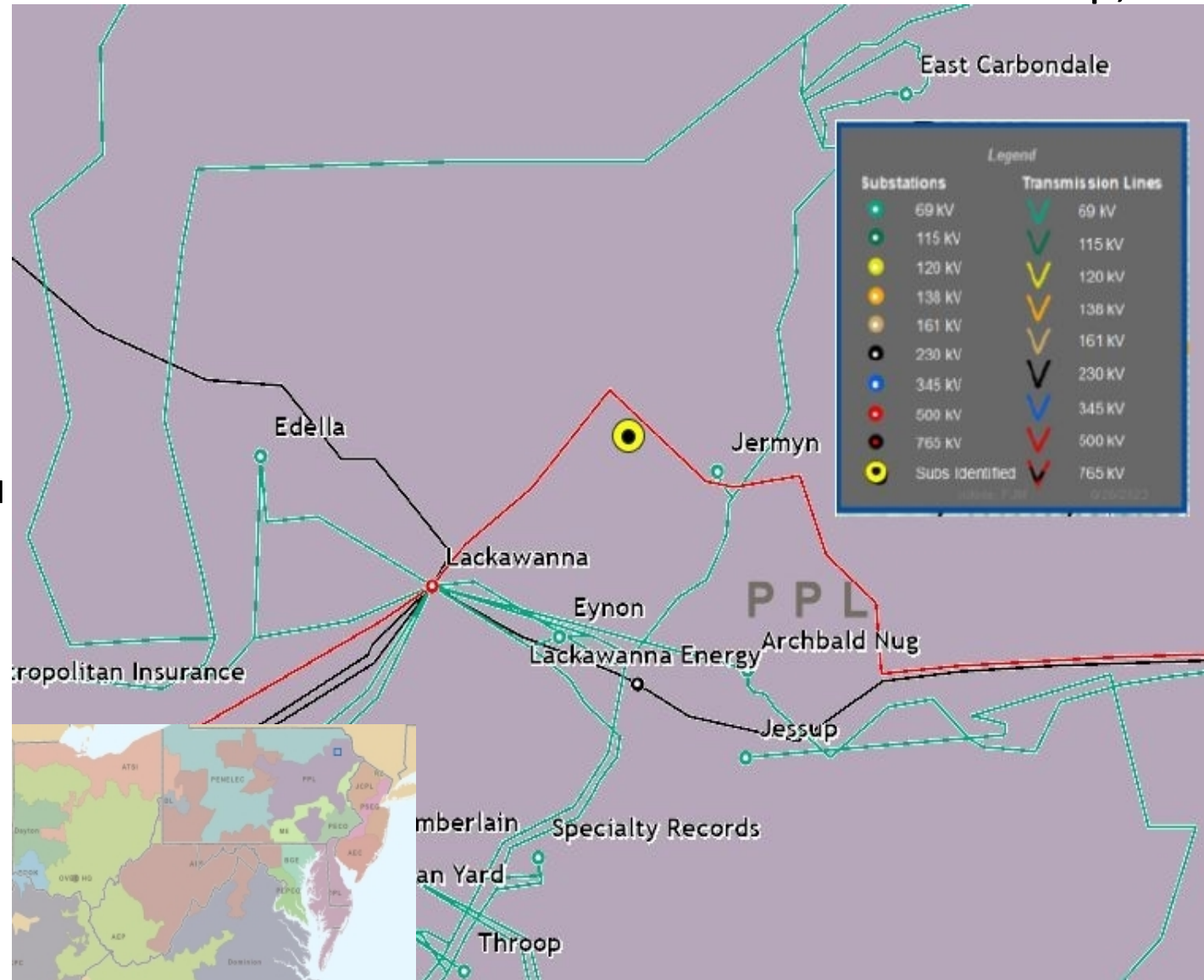
Problem Statement:

A customer has submitted a request to have their facility served from a 230kV source in Archbald, PA. The total facility load is approximately 1,200 MW (2033). The requested in-service date is 5/2028.

Initial In-Service 2028 Load: 100 MW

Projected 2029 Load: 380 MW

Projected 2031 Load: 900 MW





PPL Transmission Zone: Supplemental Callender Gap, PA

Need number(s): PPL-2026-0002

Process Stage: Solution Meeting TEAC - 05/08/2026

Proposed Solution:

Callender Gap 230kV Yard: Install four new 230kV line terminals for the Customer lead lines at Callender Gap 230kV yard. Install a total of four 230kV breakers. Install second 144MVAR Capacitor bank. Estimated Cost: \$11 M

Callender Gap 230kV Customer Lead Lines: Install four new 230kV circuits from Callender Gap to the Customer Substation (0.25 miles). Estimated Cost: \$5.5 M

Lackawanna 230kV Yard: Install a +/-200MVAR STATCOM at Lackawanna 230kV yard. Estimated Cost: \$60 M

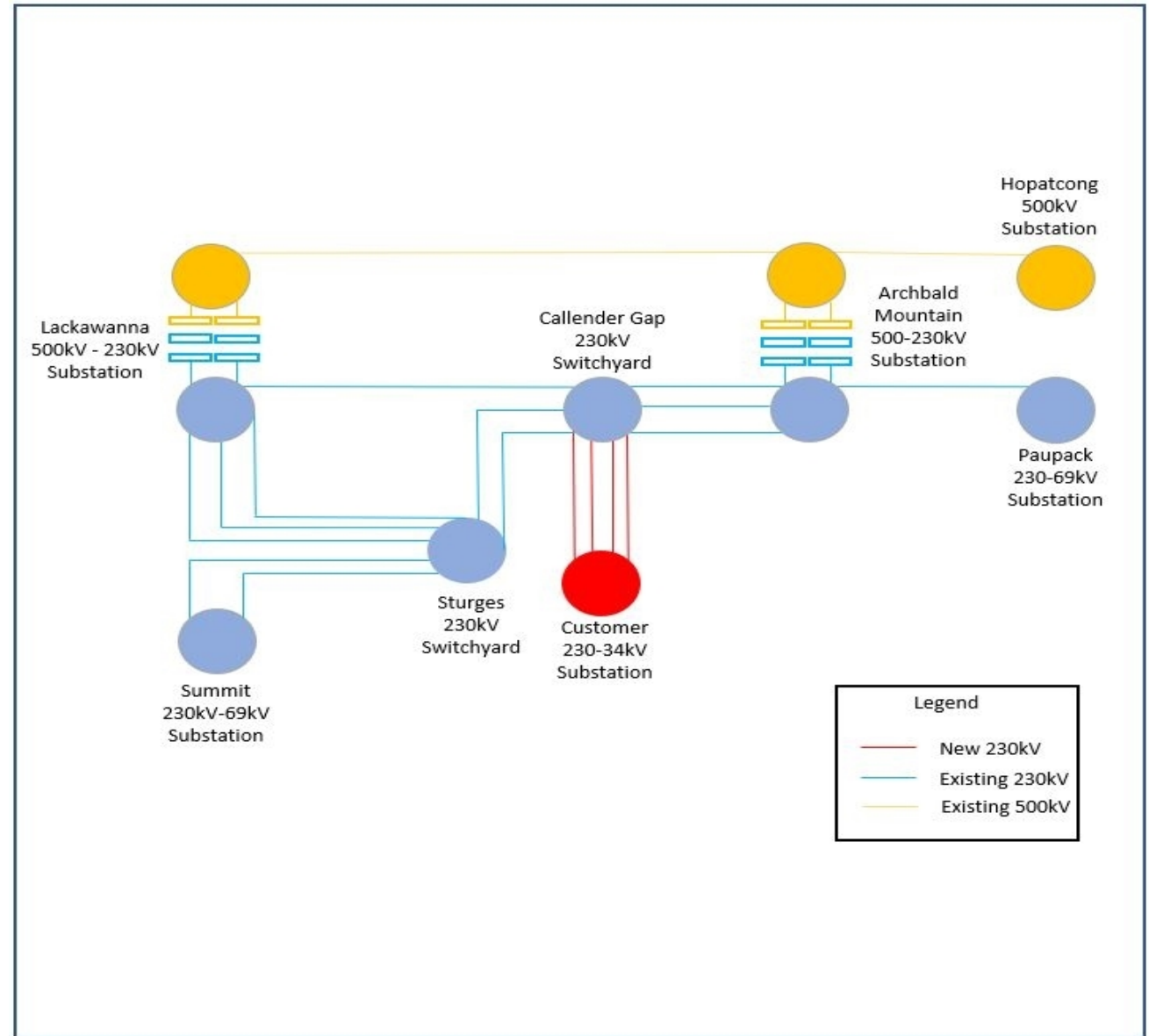
Transmission Cost Estimate: \$76.5 M

Alternatives Considered:

1.No feasible alternative as customer site is adjacent to the Callender Gap 230kV Switchyard

Projected In-Service: 05/30/2029

Project Status: Project Development





PPL Transmission Zone: Supplemental Beach Haven, PA

Need Number: PPL-2026-0003

Process Stage: Solution Meeting TEAC - 05/08/2026

Previously Presented: Need Meeting 03/10/2026

Project Driver: Customer Service

Specific Assumption References:

PPL 2026 Annual Assumptions

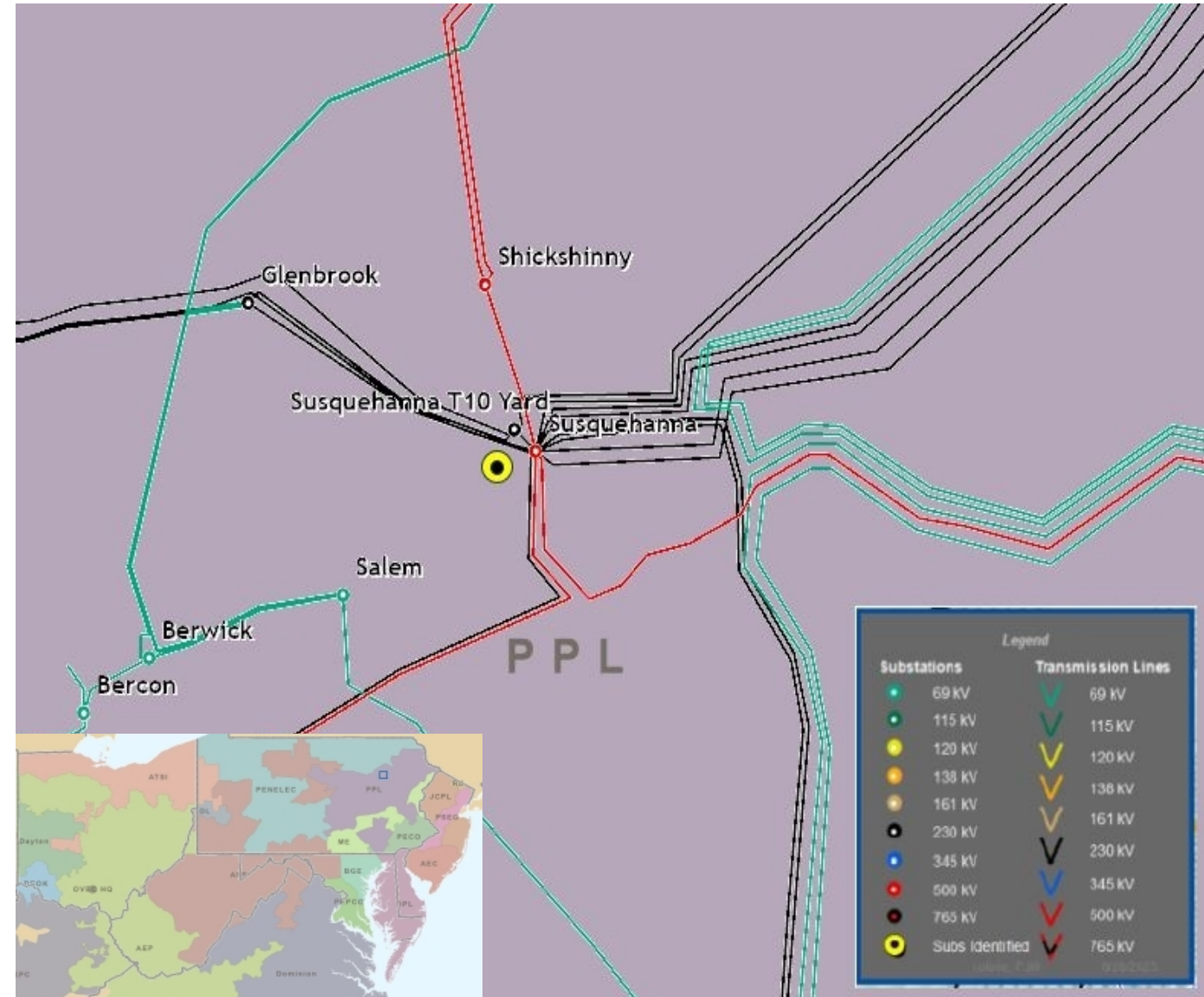
Problem Statement:

A customer has submitted a request to have their facility served from a 230kV source in Berwick, PA. The total facility load is approximately 1,500 MW (2033). The requested in-service date is 5/2028.

Initial In-Service 2028 Load: 75 MW

Projected 2029 Load: 300 MW

Projected 2031 Load: 750 MW





PPL Transmission Zone: Supplemental Beach Haven, PA

Need number(s): PPL-2026-0003

Process Stage: Solution Meeting TEAC - 05/08/2026

Proposed Solution:

Beach Haven 230kV Yard: Install nine bays of new BAAH 230kV switchyard with a 144 MVAR Capacitor bank. . Estimated Cost: \$53 M

Bifurcate Glen Brook – Susquehanna T10 #1 & #2 230kV Lines: Bifurcate Glen Brook - Susquehanna T10 #1 & #2 230kV line into the new Beach Haven 230kV switchyard (~0.2 miles). Estimated Cost: \$4.5 M

Terminate Susquehanna 500-230kV T22 at Beach Haven: Terminate the 230kV T22 lead line into the new Beach Haven 230kV switchyard (~0.8 miles) (Originally went to Nescopeck under PPL-2025-0010). Estimated Cost: \$5 M

Beach Haven 230kV Customer Lead Lines: Install two sets of three 230kV lead lines for approximately 0.8 and 1 miles respectively, from Beach Haven 230kV switchyard to the customer substations. Install two sets of double circuit 230kV lead lines for approximately 0.25 and 0.3 miles respectively, from Beach Haven 230kV switchyard to the customer substations. . Estimated Cost: \$18.7 M

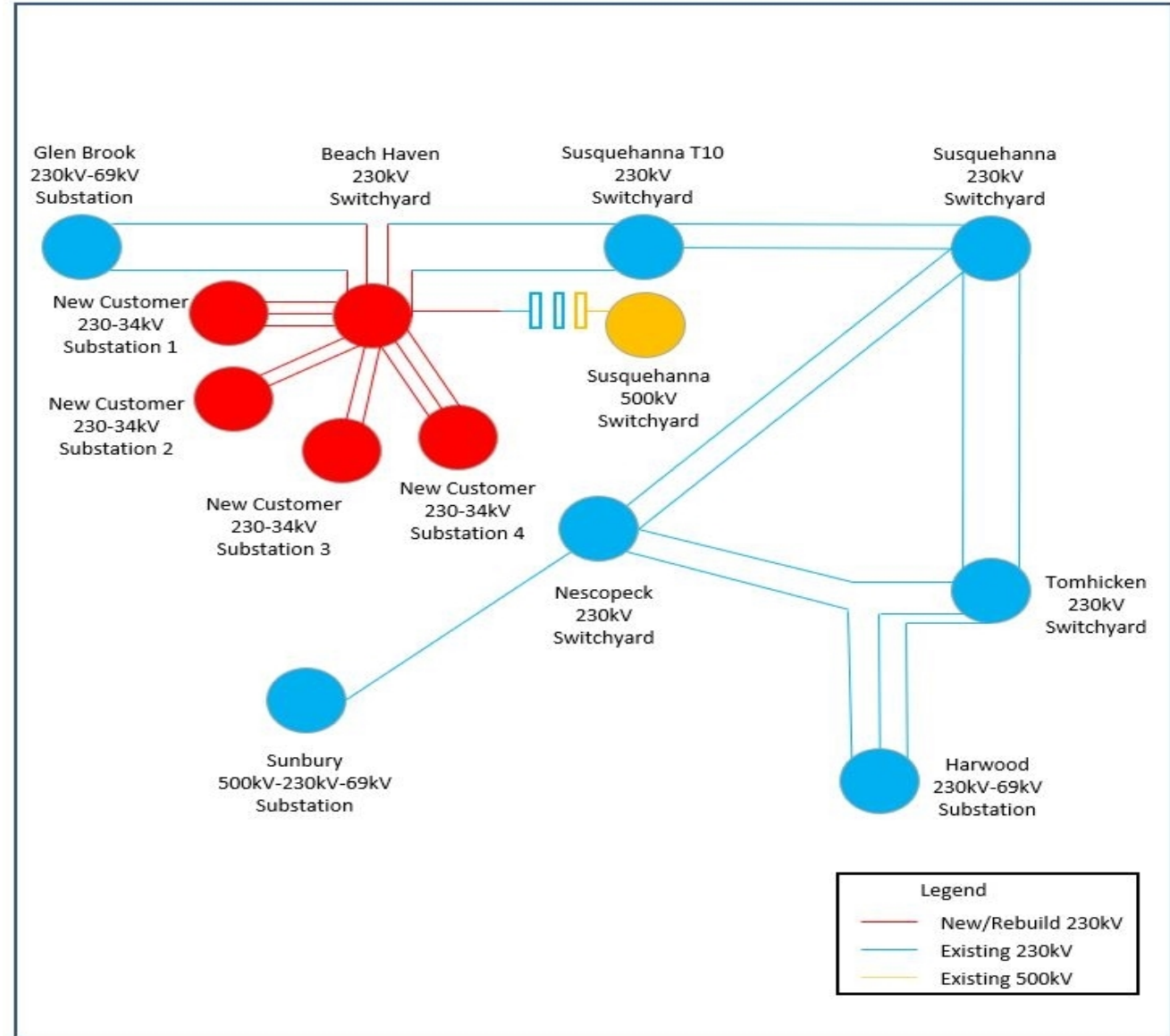
Transmission Cost Estimate: \$81.2 M

Alternatives Considered:

1.No feasible alternative as Glen Brook and Susquehanna T10 230kV yards cannot be sufficiently expanded to serve the customer load

Projected In-Service: 05/30/2028

Project Status: Project Development





PPL Transmission Zone: Supplemental Nescopeck, PA

Need Number: PPL-2026-0004

Process Stage: Solution Meeting TEAC - 05/08/2026

Previously Presented: Need Meeting 03/10/2026

Project Driver: Customer Service

Specific Assumption References:

PPL 2026 Annual Assumptions

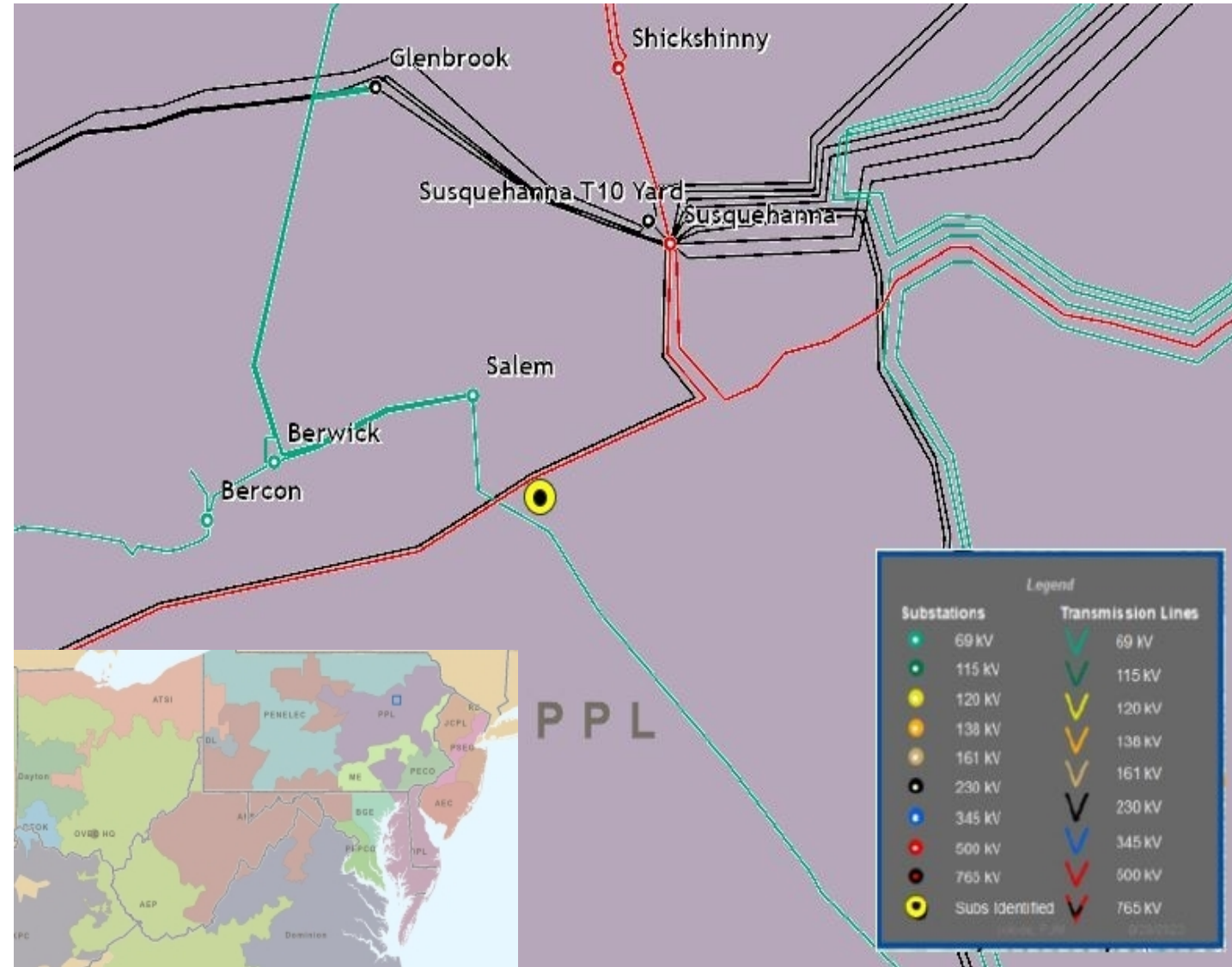
Problem Statement:

A customer has submitted a request to have their facility served from a 230kV source in Nescopeck, PA. The total facility load is approximately 1,350 MW (2032). The requested in-service date is 10/2028.

Initial In-Service 2028 Load: 60 MW

Projected 2029 Load: 450 MW

Projected 2031 Load: 1,050 MW





PPL Transmission Zone: Supplemental Nescopeck, PA

Need number(s): PPL-2026-0004

Process Stage: Solution Meeting TEAC - 05/08/2026

Proposed Solution:

Nescopeck 230kV Yard: Install six new 230kV line terminals for the Customer lead lines at Nescopeck 230kV yard. Install a 144 MVAR Capacitor bank. Estimated Cost: \$16 M

Nescopeck 230kV Customer Lead Lines: Install two sets of three 230kV lead lines for approximately 0.6 and 0.75 miles, respectively, from Nescopeck 230kV switchyard to the customer substation. Estimated Cost: \$12.1 M

Nescopeck 500kV Yard: Install four bays of a 500kV GIS yard at Nescopeck with two 500-230kV (750MVA) Transformers. Estimated Cost: \$88 M

Bifurcate Sunbury – Susquehanna 500kV Line: Bifurcate Sunbury - Susquehanna 500kV line into the new Nescopeck 500kV yard (~0.25 miles). Estimated Cost: \$10 M

Nescopeck 230kV Yard XFMR Leads: Install two new 230kV line terminals for the for the 500-230kV Transformers at Nescopeck 230kV yard. Estimated Cost: \$4.5 M

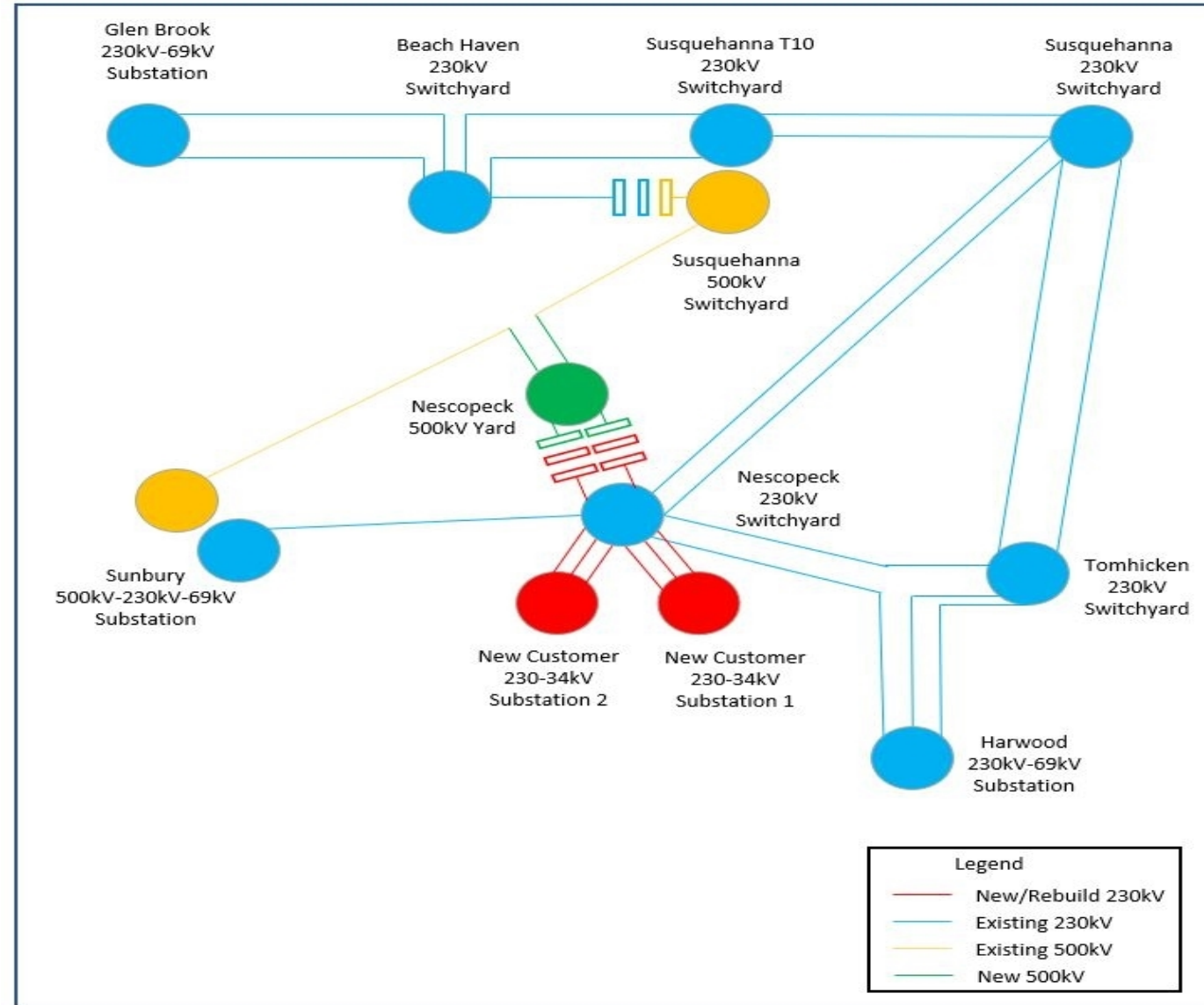
Transmission Cost Estimate: \$130.6 M

Alternatives Considered:

No feasible alternative as customer site is adjacent to the Nescopeck230kV Switchyard

Projected In-Service: 05/30/2029

Project Status: Project Development





PPL Transmission Zone: Supplemental Hummelstown, PA

Need Number: PPL-2026-0022

Process Stage: Solution Meeting TEAC - 05/08/2026

Previously Presented: Need Meeting 04/07/2026

Project Driver: Equipment Condition/Performance/Risk

Specific Assumption References:

PPL 2026 Annual Assumptions

Problem Statement:

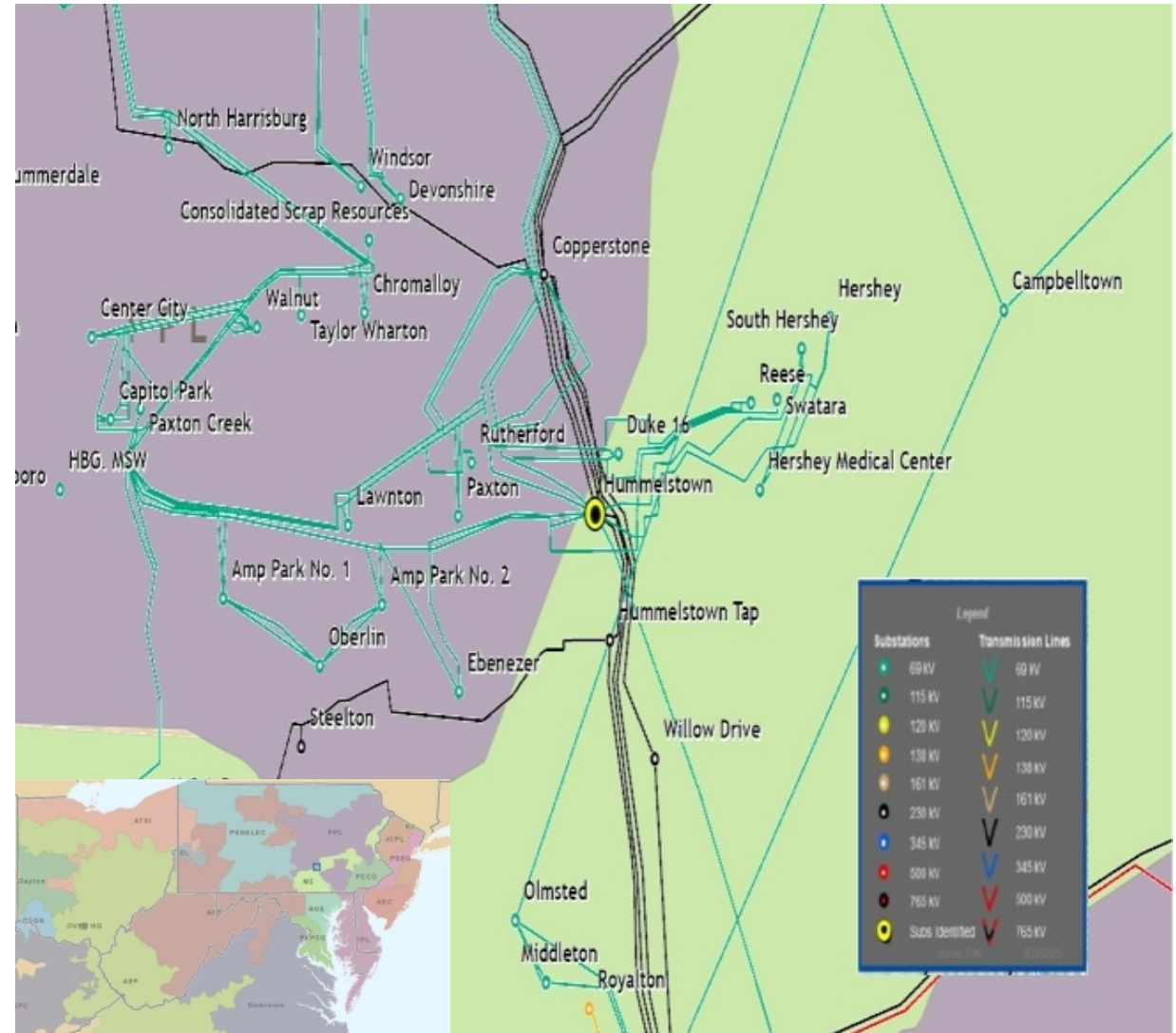
The Hummelstown substation 230-69kV Transformer 1 is approximately 34 years old and has experienced 28 unplanned maintenance events. 12 of the 28 have occurred since 2023, indicating an increasing rate of failure. These maintenance events include:

Replacing melted CT terminal blocks in the cabinet

Replacing a failed AC unit

Repairing a leak near the pressure relief device

Replacing a failed lockout relay





Need number(s): PPL-2026-0022

Process Stage: Solution Meeting TEAC -
05/08/2026

Proposed Solution:

Hummelstown 230-69kV Transformer 1 Replacement: Install a new 170MVA, 230-69kV transformer as an in-kind replacement of the existing 230-69kV Hummelstown Transformer 1. Estimated Cost: \$7.1 M

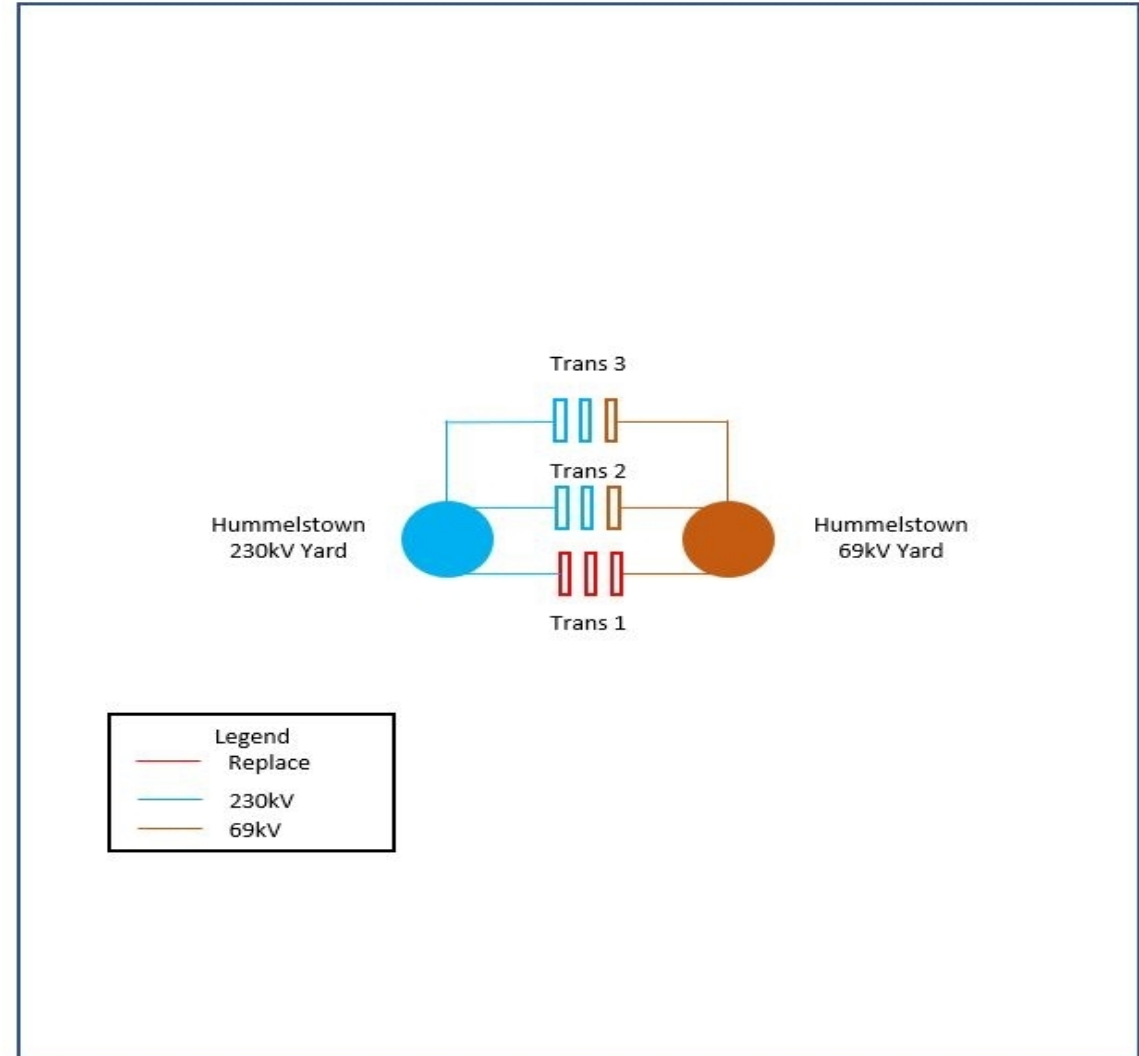
Transmission Cost Estimate: \$7.1 M

Alternatives Considered:

No Feasible Alternative

Projected In-Service: 12/31/2029

Project Status: Conceptual





PPL Transmission Zone: Supplemental Jenkins, PA

Need Number: PPL-2026-0023

Process Stage: Solution Meeting TEAC - 05/08/2026

Previously Presented: Need Meeting 04/07/2026

Project Driver: Equipment Condition/Performance/Risk

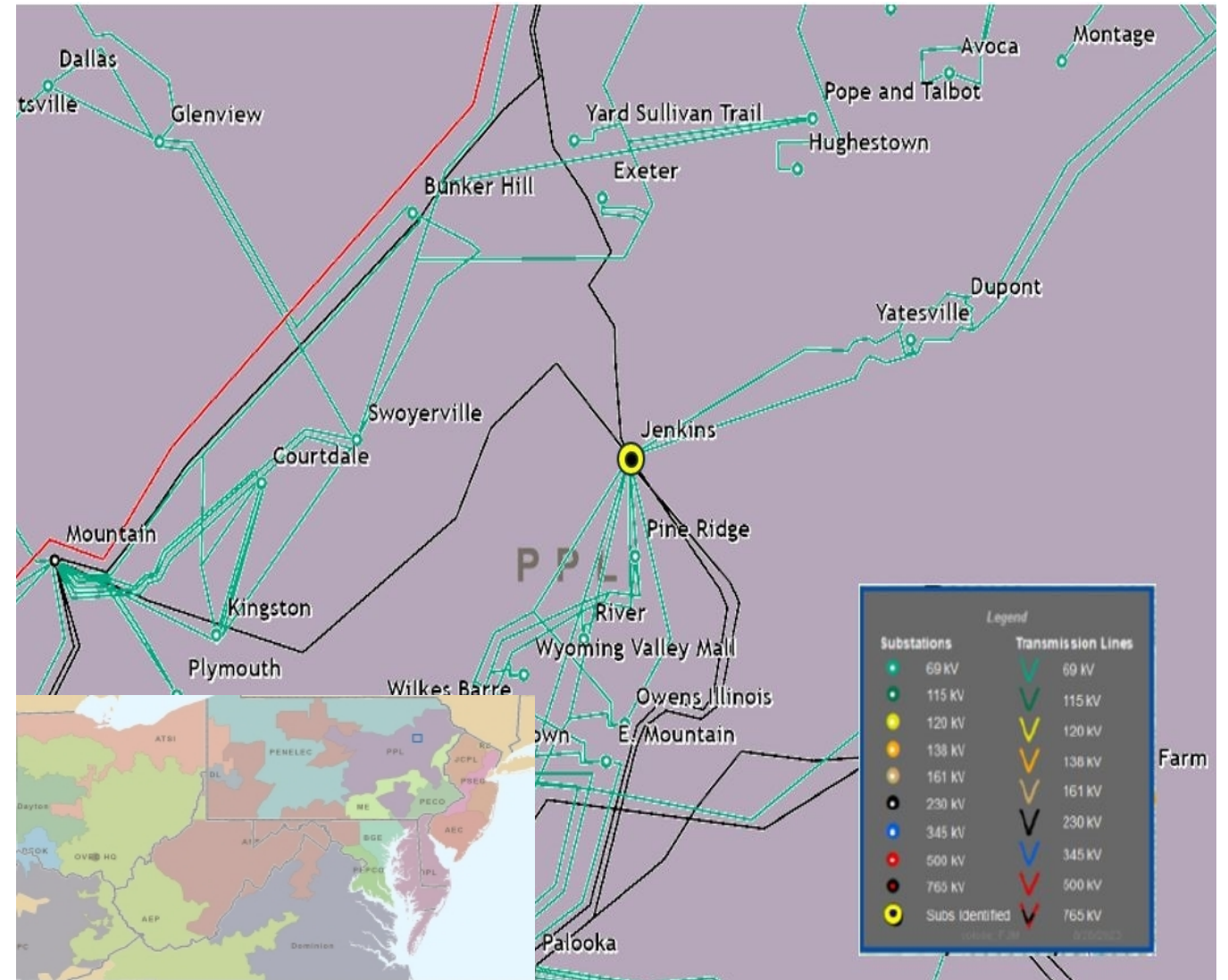
Specific Assumption References:

PPL 2026 Annual Assumptions

Problem Statement:

The Jenkins substation 230-69kV Transformer 4 is approximately 44 years old and has experienced 8 different maintenance events. Some of these events include remediation for multiple individual failures, including:

- Replacing K5 timing relay
- Replacing failed cooling fans
- Replacing a failed Buchholz pressure relay
- Replacing diverter switches





Need number(s): PPL-2026-0023

Process Stage: Solution Meeting TEAC -
05/08/2026

Proposed Solution:

Jenkins 230-69kV Transformer 4

Replacement: Install a new 170MVA, 230-69kV transformer as an in-kind replacement of the existing 230-69kV Jenkins Transformer 4. Estimated Cost: \$7.1 M

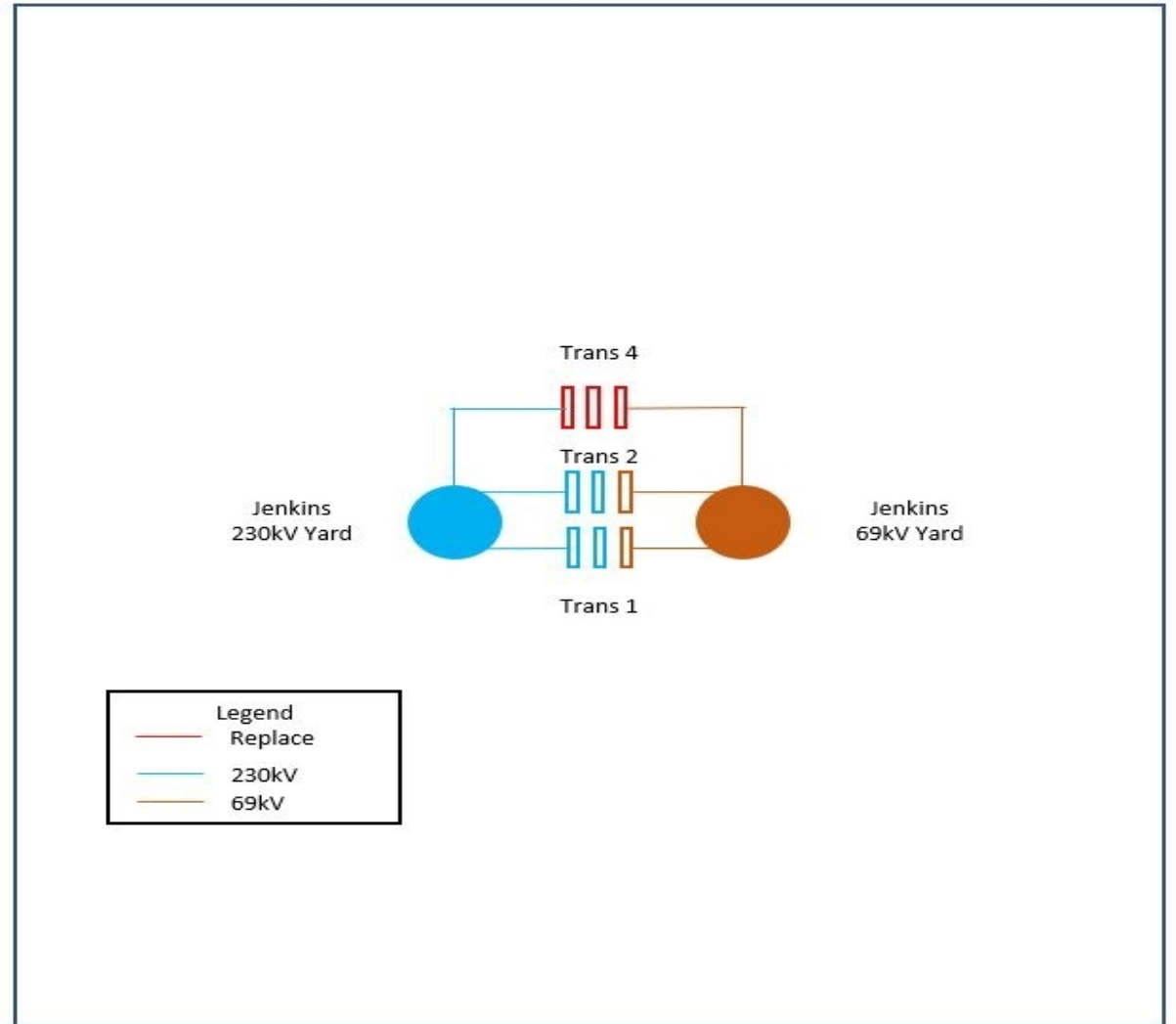
Transmission Cost Estimate: \$7.1 M

Alternatives Considered:

No Feasible Alternative

Projected In-Service: 05/31/2029

Project Status: Conceptual





Need Number: PPL-2026-0027

Process Stage: Solution Meeting TEAC - 05/08/2026

Previously Presented: Need Meeting 04/07/2026

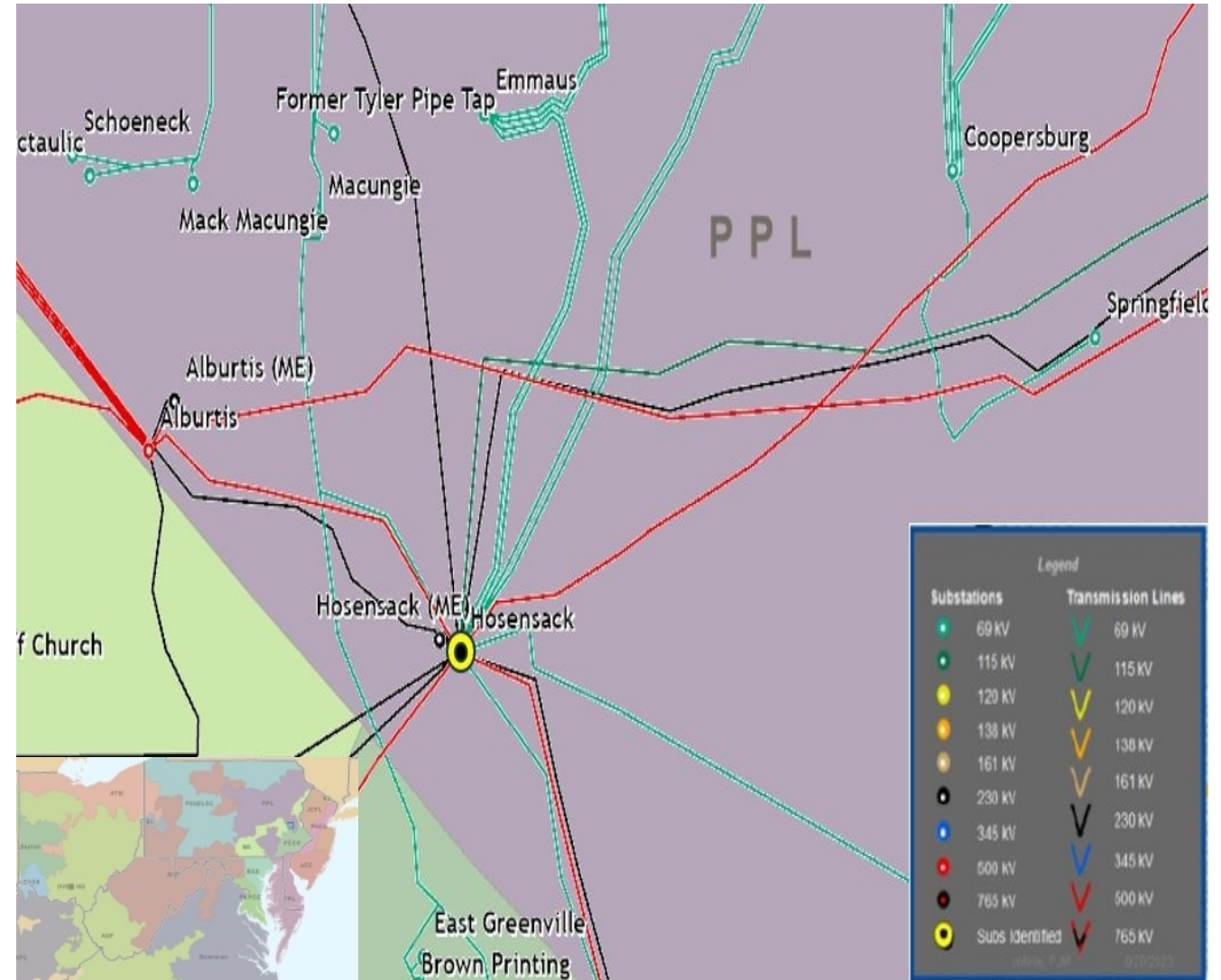
Project Driver: Infrastructure Resilience, Operational Flexibility and Efficiency

Specific Assumption References:

PPL 2026 Annual Assumptions

Problem Statement:

The current arrangement at Hosensack 500kV is built for BAAH but operated as a ring bus. Multiple lines terminating in the Hosensack 500kV Switchyard are susceptible to outages due to P4 Stuck Breaker contingency events.





Need number(s): PPL-2026-0027

Process Stage: Solution Meeting TEAC -
05/08/2026

Proposed Solution:

Hosensack 500kV Switchyard: Upgrade the Hosensack 500kV Switchyard to a BAAH configuration. Install three 3000A circuit breakers and five 3000A MODs. Estimated Cost: \$4.9 M

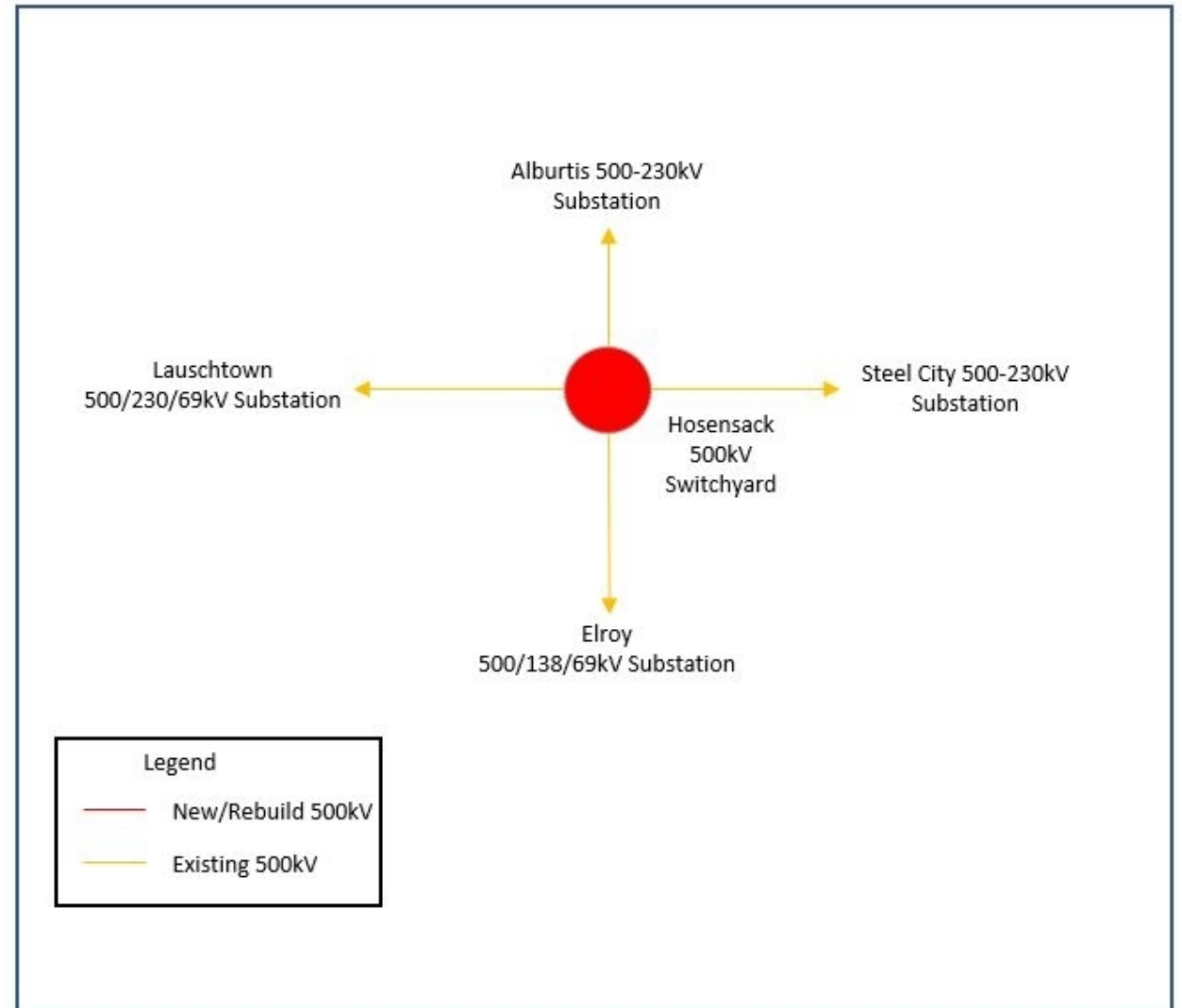
Transmission Cost Estimate: \$4.9 M

Alternatives Considered:

No functional alternatives

Projected In-Service: 11/30/2029

Project Status: Conceptual





Need Number: PPL-2026-0028

Process Stage: Solution Meeting TEAC - 05/08/2026

Previously Presented: Need Meeting 04/07/2026

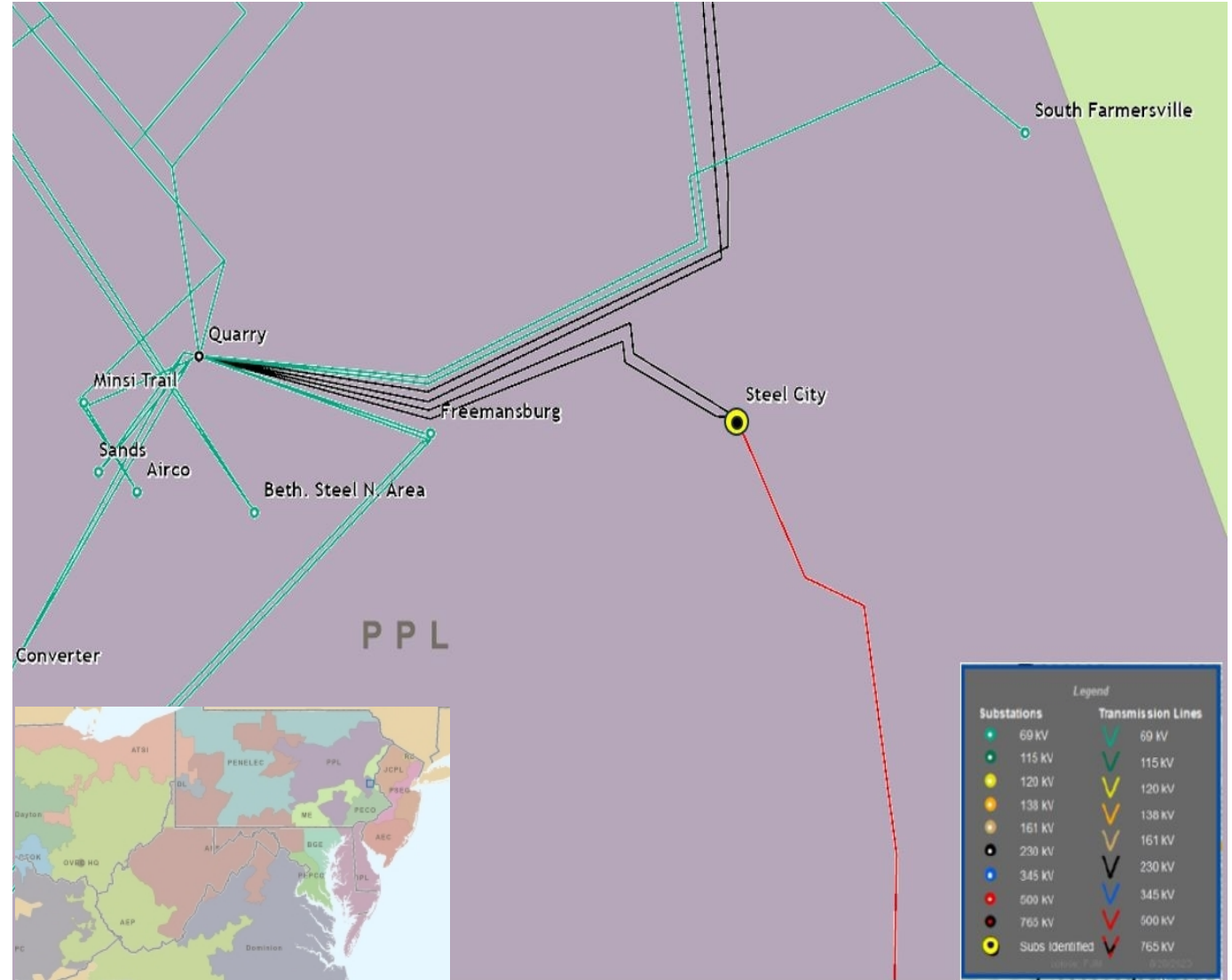
Project Driver: Operational Flexibility and Efficiency

Specific Assumption References:

PPL 2026 Annual Assumptions

Problem Statement:

The current arrangement at Steel City 500kV is built for BAAH but operated as a ring bus. Multiple elements terminating in the Steel City 500kV Switchyard are susceptible to outages due to P4 Stuck Breaker contingency events.





Need number(s): PPL-2026-0028

Process Stage: Solution Meeting TEAC -
05/08/2026

Proposed Solution:

Steel City 500kV Switchyard: Upgrade the Steel City 500kV Switchyard to a BAAH configuration. Install two 3000A circuit breakers. Estimated Cost: \$3 M

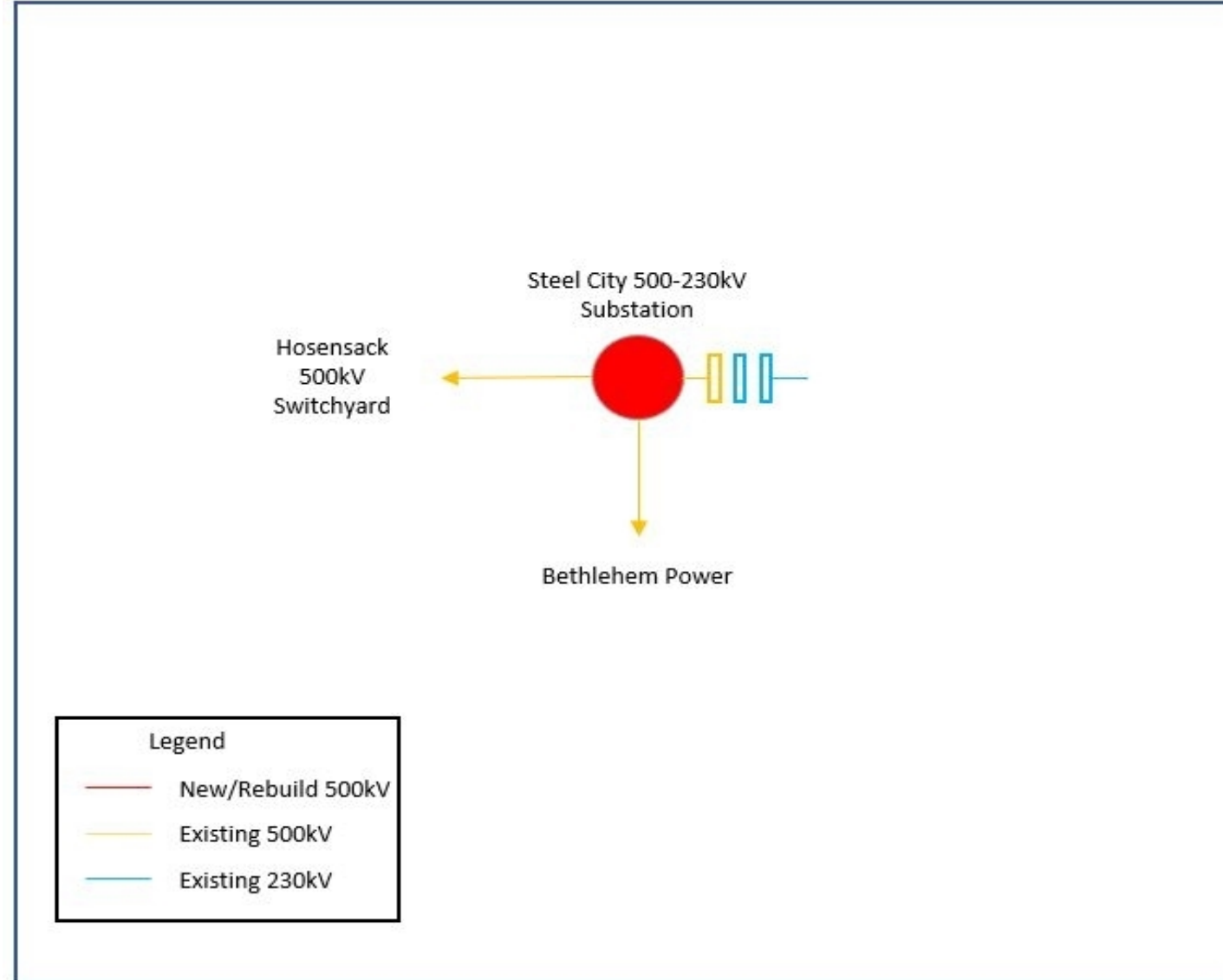
Transmission Cost Estimate: \$3 M

Alternatives Considered:

No functional alternatives

Projected In-Service: 11/30/2029

Project Status: Conceptual



Revision History

04/28/2026 – V1 – Posted to pjm.com