Transmission Expansion Advisory Committee Supplemental Projects

PPL Transmission Zone

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 M-3 Process
Moore's Hill

Need Number: PPL-2026-0058

Process Stage: Need Meeting TEAC - 12/01/2026

Project Driver:

- *Customer Service*

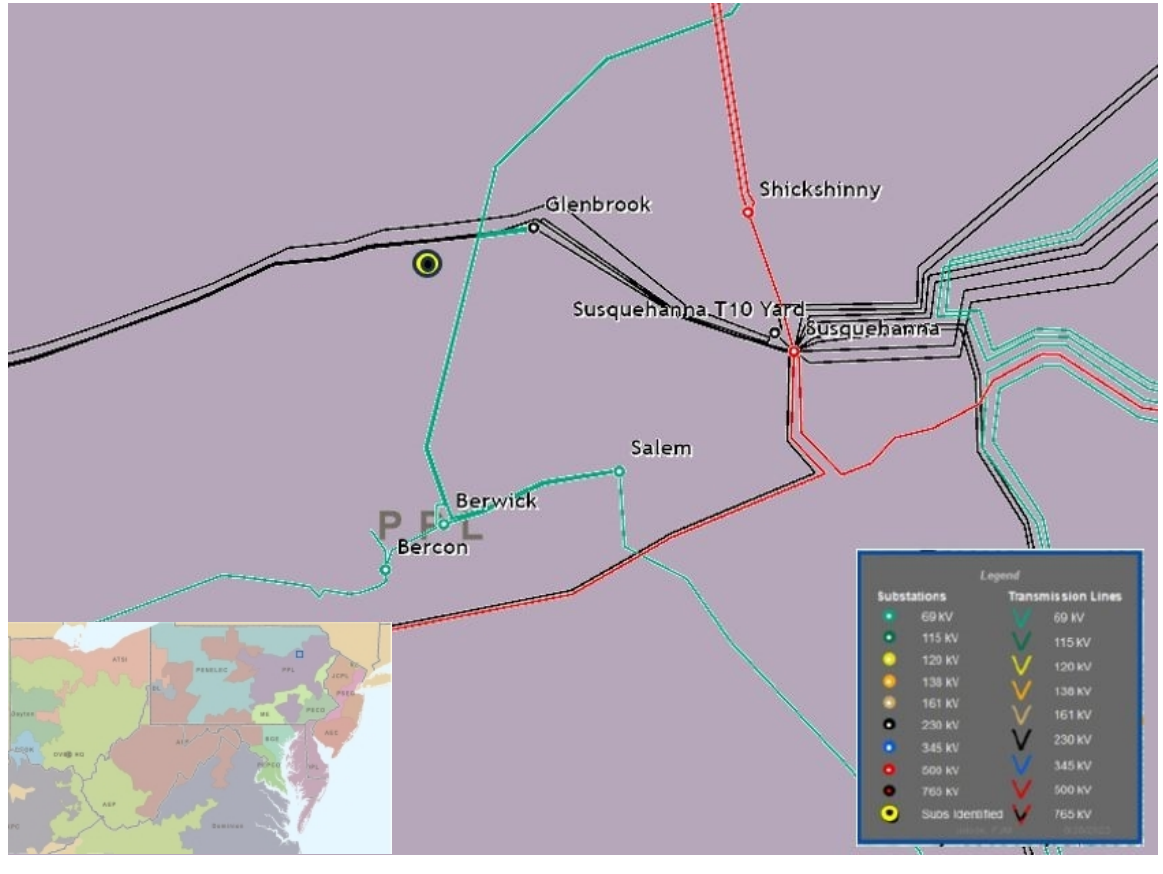
Specific Assumption References:

PPL 2026 Annual Assumptions

Problem Statement:

A customer has submitted a request to have their facility served from a 230kV source near Berwick, PA. The total facility load is approximately 600MW (2030). The requested in-service date is 9/2029.

- Initial Load: 300 MW, Expected Date: 09/2029
- Total Load: 600 MW, Expected Date: 09/2030



Solution

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 M-3 Process
Tamarack 500-230kV Substation

Need Number: PPL-2026-0056

Process Stage: Solution Meeting TEAC - 12/01/2026

Previously Presented: Need Meeting TEAC - 11/03/2026

Project Driver:

- *Customer Service*

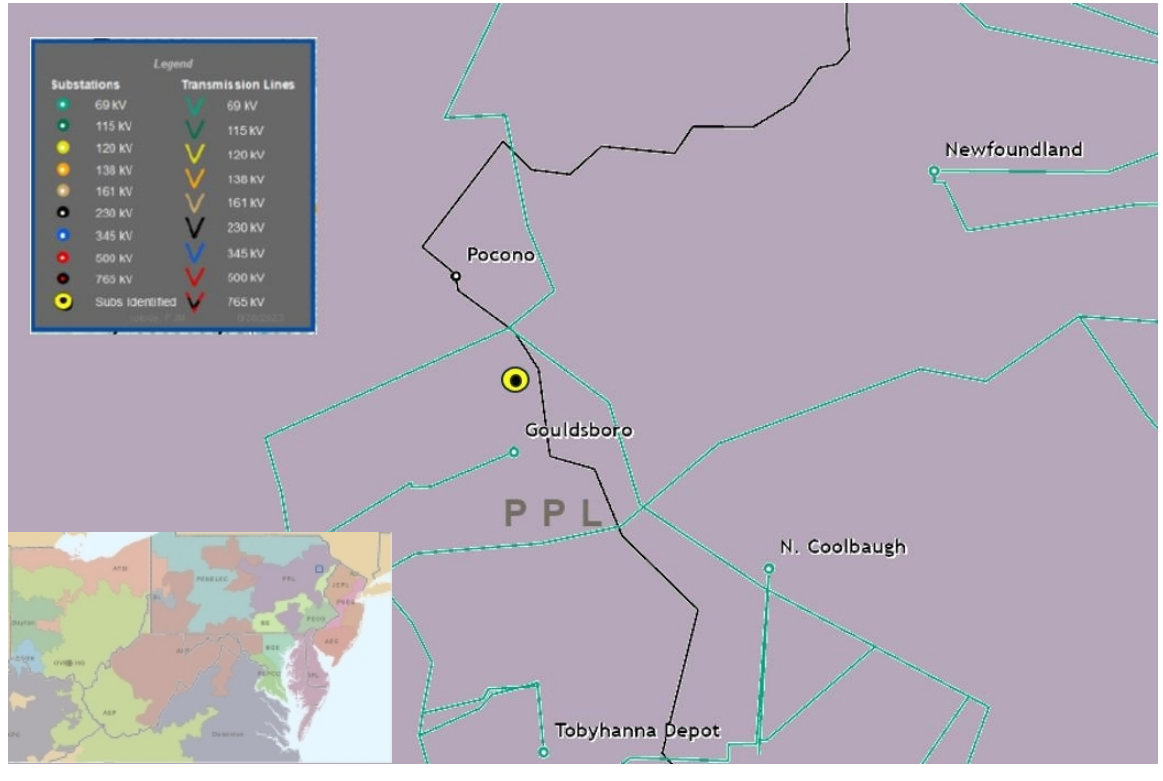
Specific Assumption References:

PPL 2026 Annual Assumptions

Problem Statement:

The Customer associated with PPL-2025-0012 requested a third 230kV delivery point with an additional 700MW of load. The requested in-service date is 05/2030.

- Initial Load: 250 MW, Expected Date: 05/2030
- Total Load: 700 MW, Expected Date: 05/2032



PPL Transmission Zone M-3 Process
Tamarack 500-230kV Substation

Need Number: PPL-2026-0056

Process Stage: Solution Meeting TEAC - 12/01/2026

Proposed Solution:

Sandy Run 500kV Switchyard

- Install a new four bay 500kV switchyard
- Estimated Cost: $40 M

Bifurcate Susquehanna – Wescosville (Orefield) 500kV line

- Bifurcate Susquehanna - Wescosville (Orefield) 500kV line into the new Sandy Run 500kV Switchyard
- Estimated Cost: $10 M

Tamarack 230kV Yard

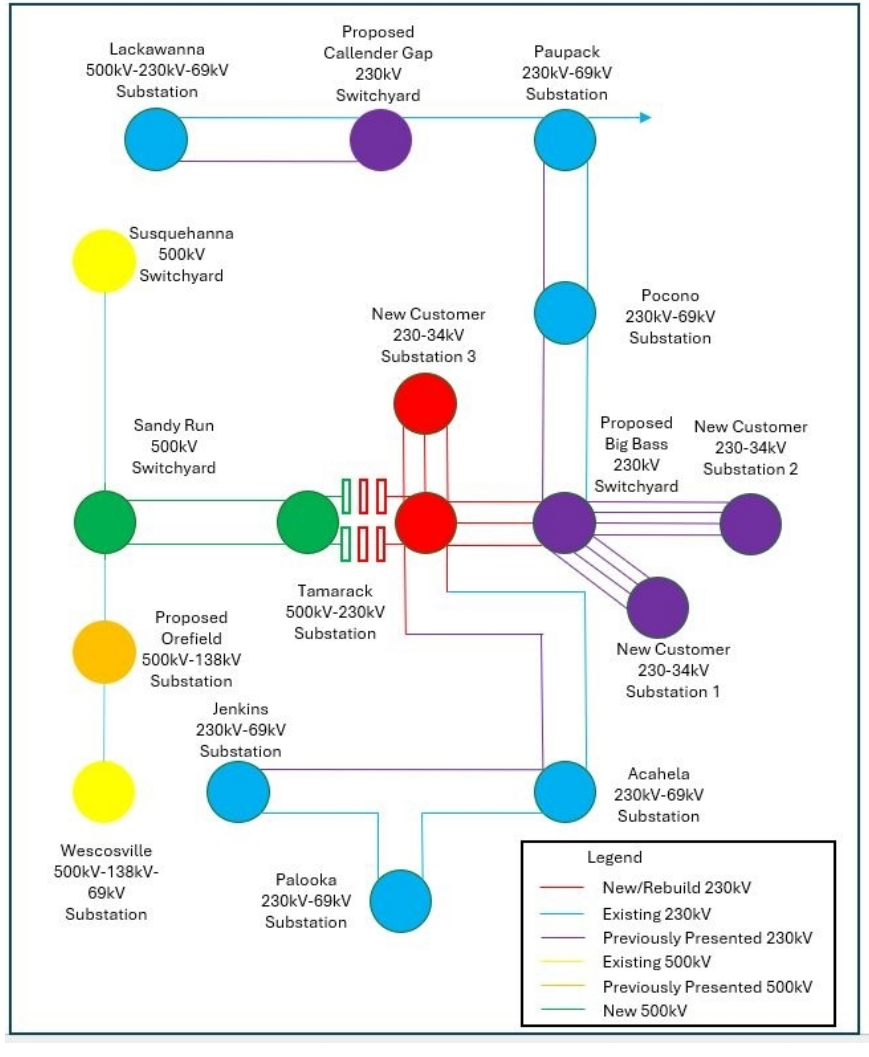
- Install seven bays of new BAAH 230kV switchyard with one 144 MVAR Capacitor bank and one 250+/-MVAR STATCOM
- Estimated Cost: $118 M

Tamarack 500kV Yard

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

Sandy Run– Tamarack 500kV Line

- Install a new ~25 miles double circuit 500kV line from Sandy Run 500kV Switchyard to the Tamarack 500-230kV Substation



PPL Transmission Zone M-3 Process
Tamarack 500-230kV Substation

Need Number: PPL-2026-0056

Proposed Solution: Continued from previous slide...

- Estimated Cost: $213 M

Tamarack 230kV Customer Lead Lines

- Install three 230kV lead lines for approximately 0.6 miles from Tamarack 230kV switchyard to the customer's third substation
- Estimated Cost: $6 M

Bifurcate Acahela – Big Bass 230kV line

- Bifurcate Acahela - Big Bass 230kV line into the new Tamarack 230kV switchyard (~0.25 miles)
- Estimated Cost: $4 M

Tamarack – Big Bass 230kV line

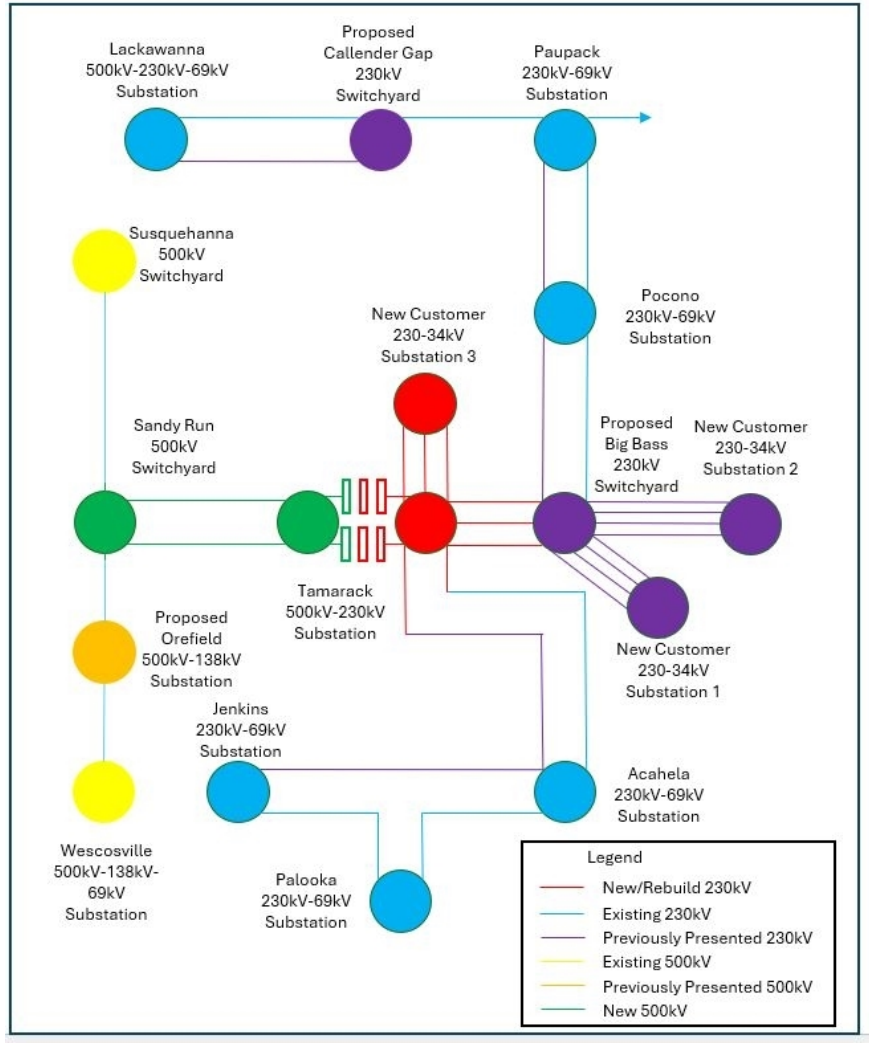
- Install three 230kV Circuits between Big Bass and Tamarack 230kV yards (~1.0 miles)
- Estimated Cost: $7 M

Ratings MVA (SN/SE/WN/WE):

Sandy Run 500kV Switchyard

- *All New 500 kV Breaker*
  - Before Proposed Solution: N/A kA
  - After Proposed Solution: 63 kA

Bifurcate Susquehanna – Wescosville (Orefield) 500kV line



PPL Transmission Zone M-3 Process
Tamarack 500-230kV Substation

Need Number: PPL-2026-0056

Ratings MVA (SN/SE/WN/WE): Continued from previous slide...

- Before Proposed Solution: 2707/3112/3207/3566
- After Proposed Solution: 2707/3112/3207/3566

Tamarack 230kV Yard

- *All New 230 kV Breaker*
  - Before Proposed Solution: N/A kA
  - After Proposed Solution: 63 kA

Tamarack 500kV Yard

- *All New 500 kV Breaker*
  - Before Proposed Solution: N/A kA
  - After Proposed Solution: 63 kA

Sandy Run– Tamarack 500kV Line

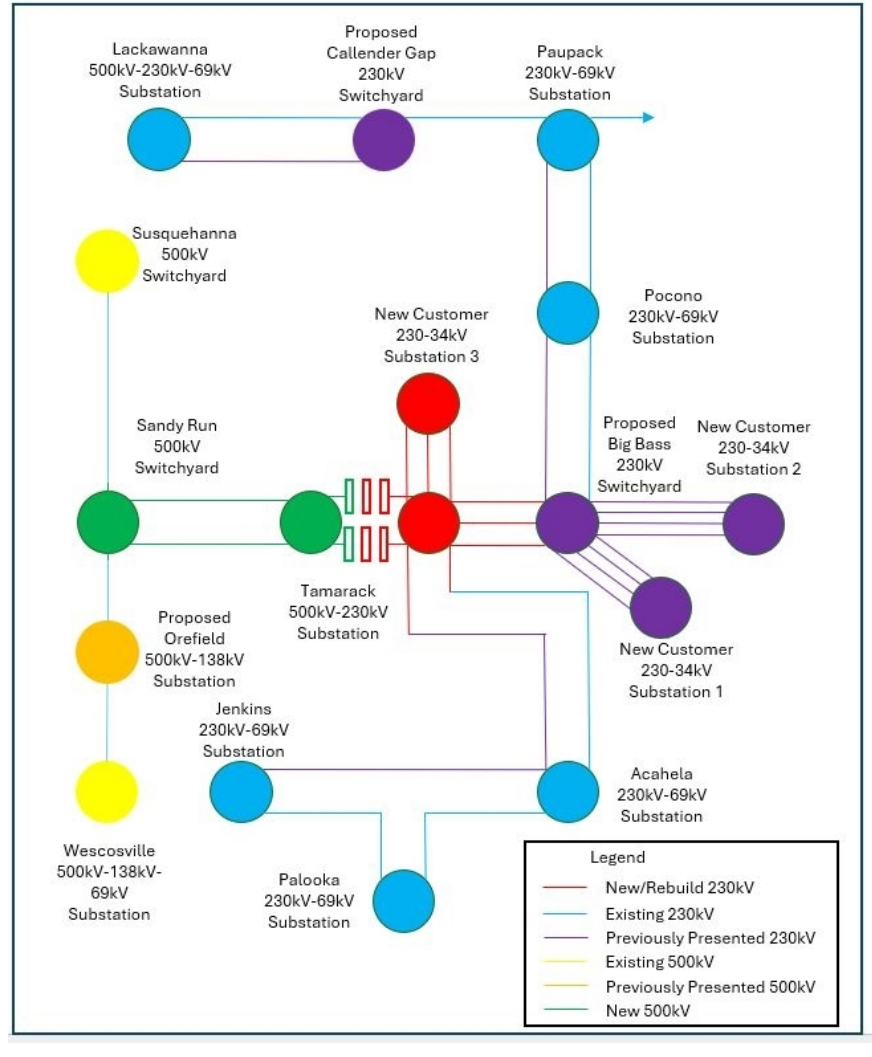
- Before Proposed Solution: N/A
- After Proposed Solution: 3609/4150/4276/4755

Tamarack 230kV Customer Lead Lines

- Before Proposed Solution: N/A
- After Proposed Solution: 933/1079/998/1143

Bifurcate Acahela – Big Bass 230kV line

- Before Proposed Solution: N/A
- After Proposed Solution: 647/801/746/903



PPL Transmission Zone M-3 Process
Tamarack 500-230kV Substation

Need Number: PPL-2026-0056

Ratings MVA (SN/SE/WN/WE): Continued from previous slide...

Tamarack – Big Bass 230kV line

- Before Proposed Solution: 647/801/746/903
- After Proposed Solution: 1660/1909/1967/2187

Alternatives Considered:

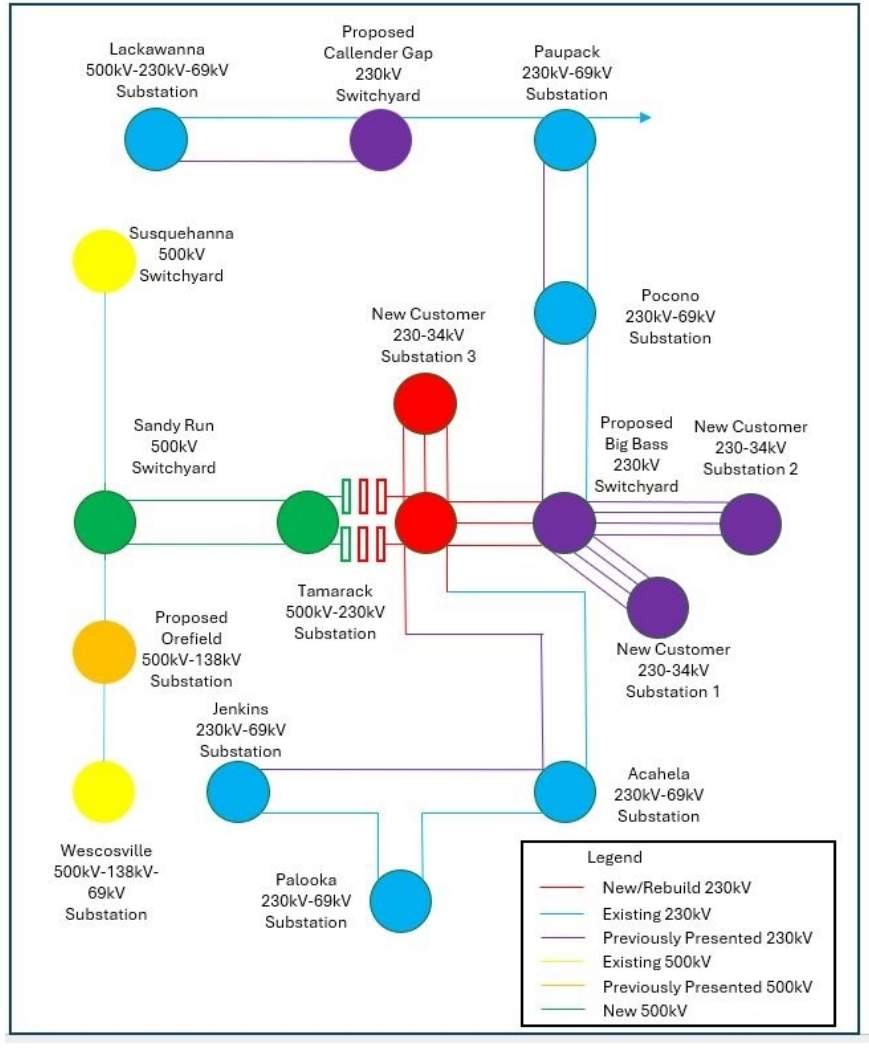
No Feasible Alternative.

Transmission Cost Estimate: $486 M

Projected In-Service: 05/30/2031

Project Status: Project Development

Model: 2030



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

PPL Transmission Zone M-3 Process
Elimsport 230kV Lines

Need Number: PPL-2026-0031

Process Stage: Solution Meeting TEAC - 10/06/2026

Previously Presented: Need Meeting TEAC - 04/07/2026

Project Driver:

- *Customer Service*

Specific Assumption References:

PPL 2026 Annual Assumptions

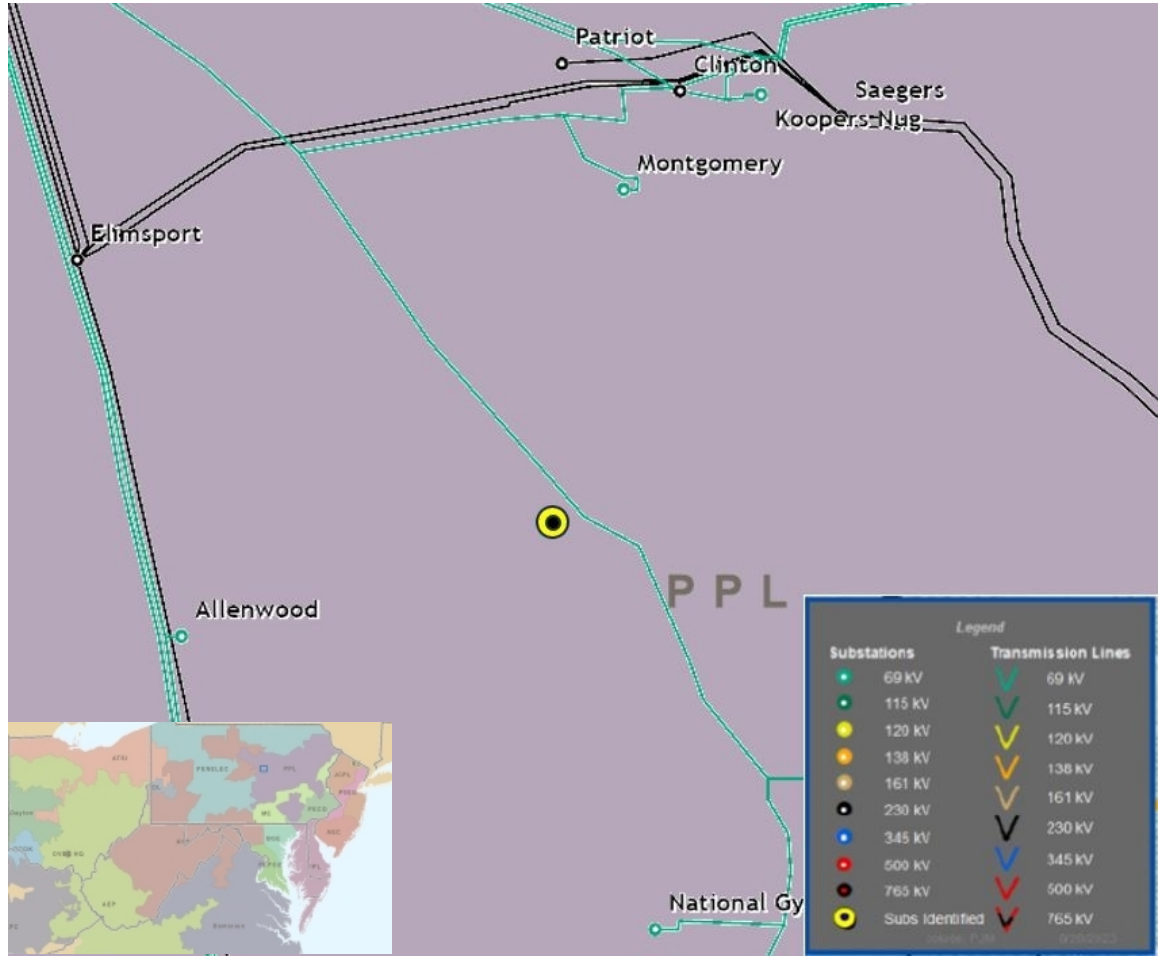
Problem Statement:

A customer has submitted a request to have their facility served from a 230kV source in Allenwood, PA. The total facility load is approximately 300 MW (2030). This request is associated with SR-RTEP need PPL-2026-0016, as the initial 60MW will be served by 69kV and then transitioned to this submittal. The requested in-service date is 06/2028.

Initial In-Service 2028 Load: 100MW

Projected 2029 Load: 200 MW

Projected 2031 Load: 300 MW



PPL Transmission Zone M-3 Process
Elimsport 230kV Lines

Need Number: PPL-2026-0031

Process Stage: Solution Meeting TEAC - 10/06/2026

Proposed Solution:

Elimsport 230kV Switchyard

- Install one new BAAH 230kV bay and add terminal to existing bay.
- Estimated Cost: $7 M

Customer 230kV Lead Lines

- Install two 230kV lead lines for approximately 7 miles from Elimsport 230kV switchyard to the customer substation.
- Estimated Cost: $31.5 M

Sunbury 230kV Yard

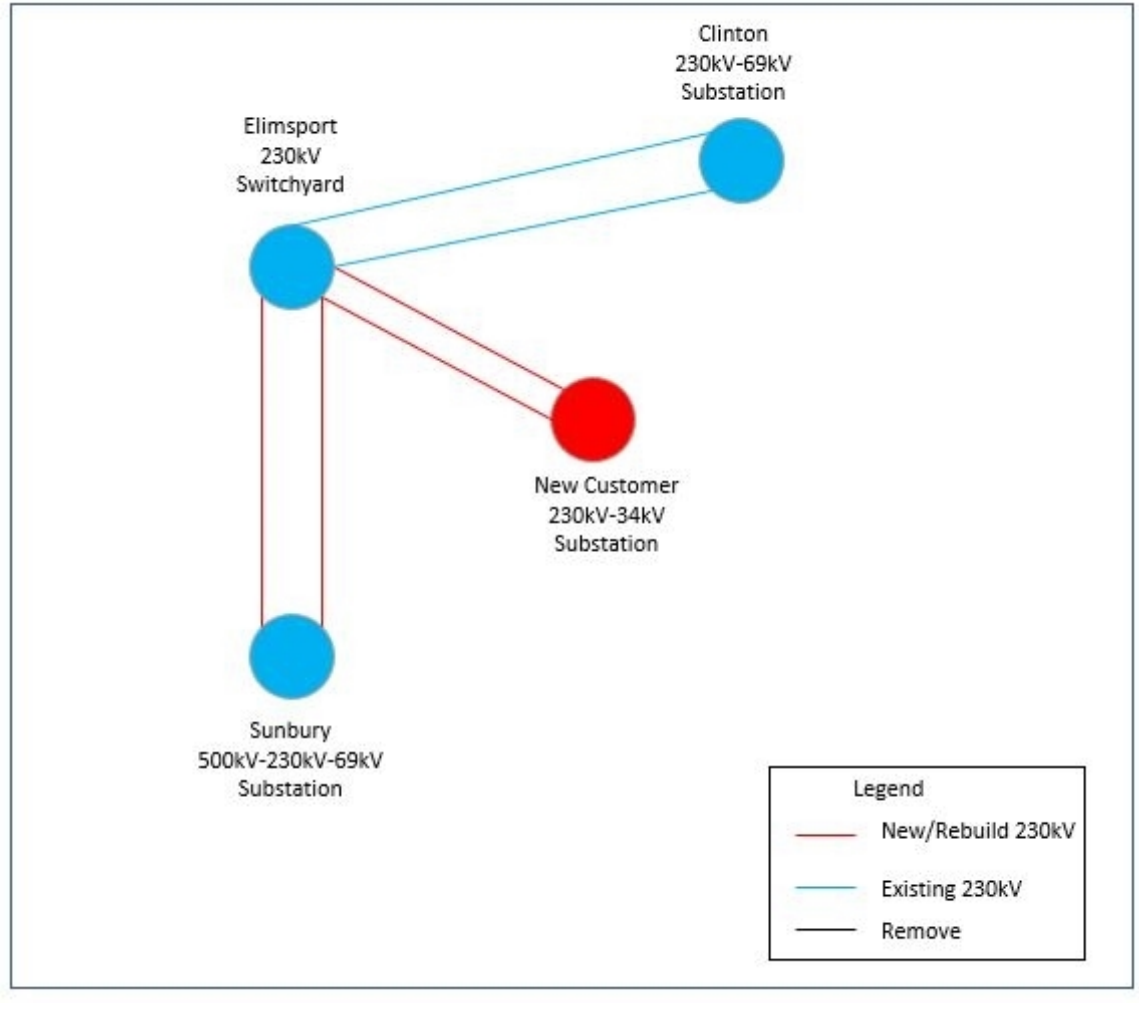
- Add terminal for a new 230kV line in the Sunbury 230kV GIS.
- Estimated Cost: $5 M

Sunbury – Elimsport 230kV Line

- Rebuild the 25.6-mile-long Sunbury - Elimsport 230kV line to double circuit 230kV.
- Estimated Cost: $115 M

Sunbury 69kV Yard

- Install 69kV series reactors on each of the three 230-69kV Transformers.



PPL Transmission Zone M-3 Process
Elimsport 230kV Lines

Need Number: PPL-2026-0031

Proposed Solution: Continued from previous slide...

- Estimated Cost: $11 M

Ratings MVA (SN/SE/WN/WE):

Elimsport 230kV Switchyard

- *New 230 kV Breaker*
  - Before Proposed Solution: N/A kA
  - After Proposed Solution: 63 kA

Customer 230kV Lead Lines

- Before Proposed Solution: N/A
- After Proposed Solution: 933/1079/998/1143

Sunbury 230kV Yard

- *CB-2T 230 kV Breaker*
  - Before Proposed Solution: N/A kA
  - After Proposed Solution: 63 kA

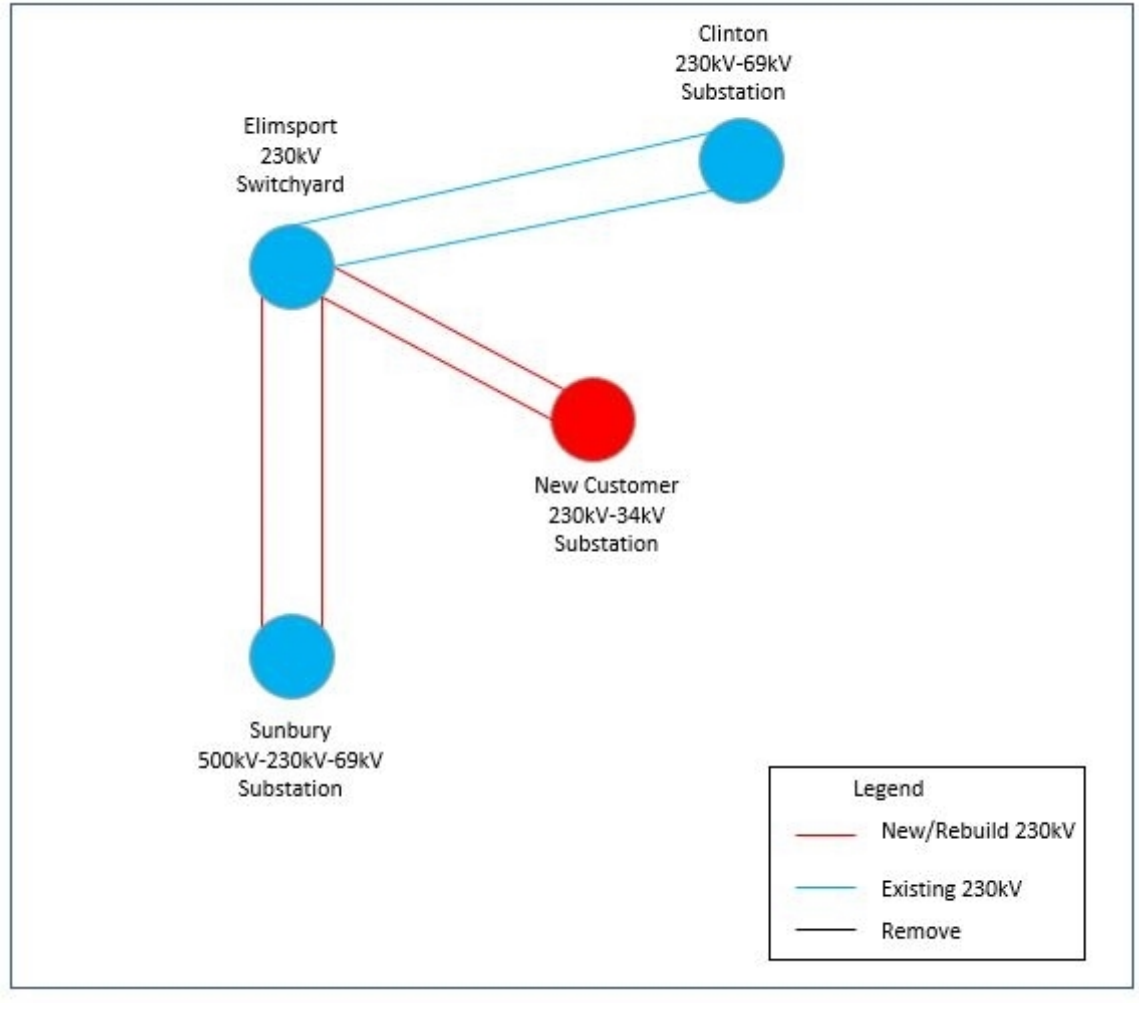
Sunbury – Elimsport 230kV Line

- Before Proposed Solution: 421/537/486/605
- After Proposed Solution: 1195/1431/1195/1640

Sunbury 69kV Yard

Alternatives Considered:

No functional alternatives as the customer site is nearest to the Elimsport 230kV Substation.



PPL Transmission Zone M-3 Process
Elimsport 230kV Lines

Need Number: PPL-2026-0031

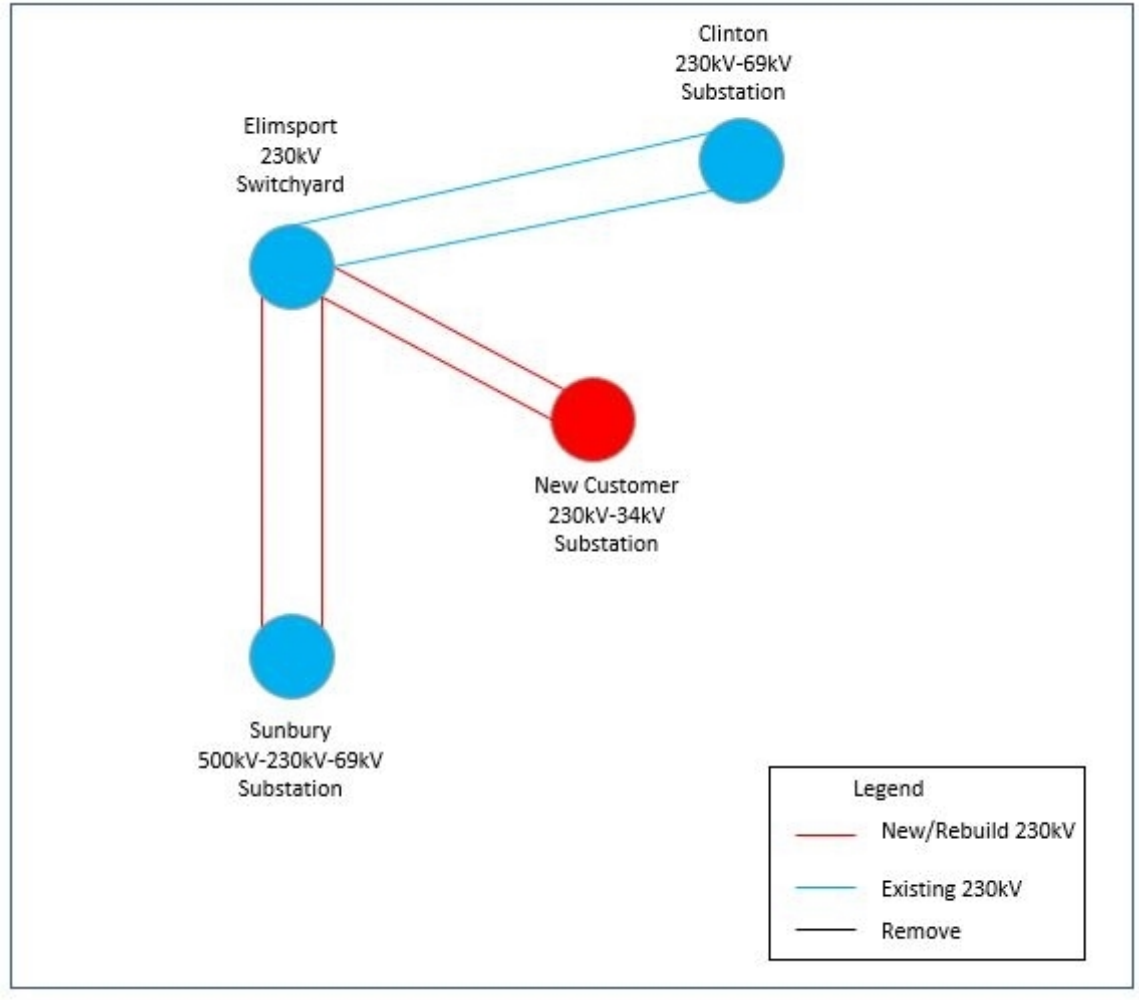
Continued from previous slide...

Transmission Cost Estimate: ~~$158.5M~~ $169.5 M

Projected In-Service: 05/30/2029

Project Status: Conceptual

Model: 2030



Revision History

11/20/2026 – V1 – Posted to pjm.com