Transmission Expansion Advisory Committee – PPL Supplemental Projects

September 9th, 2025

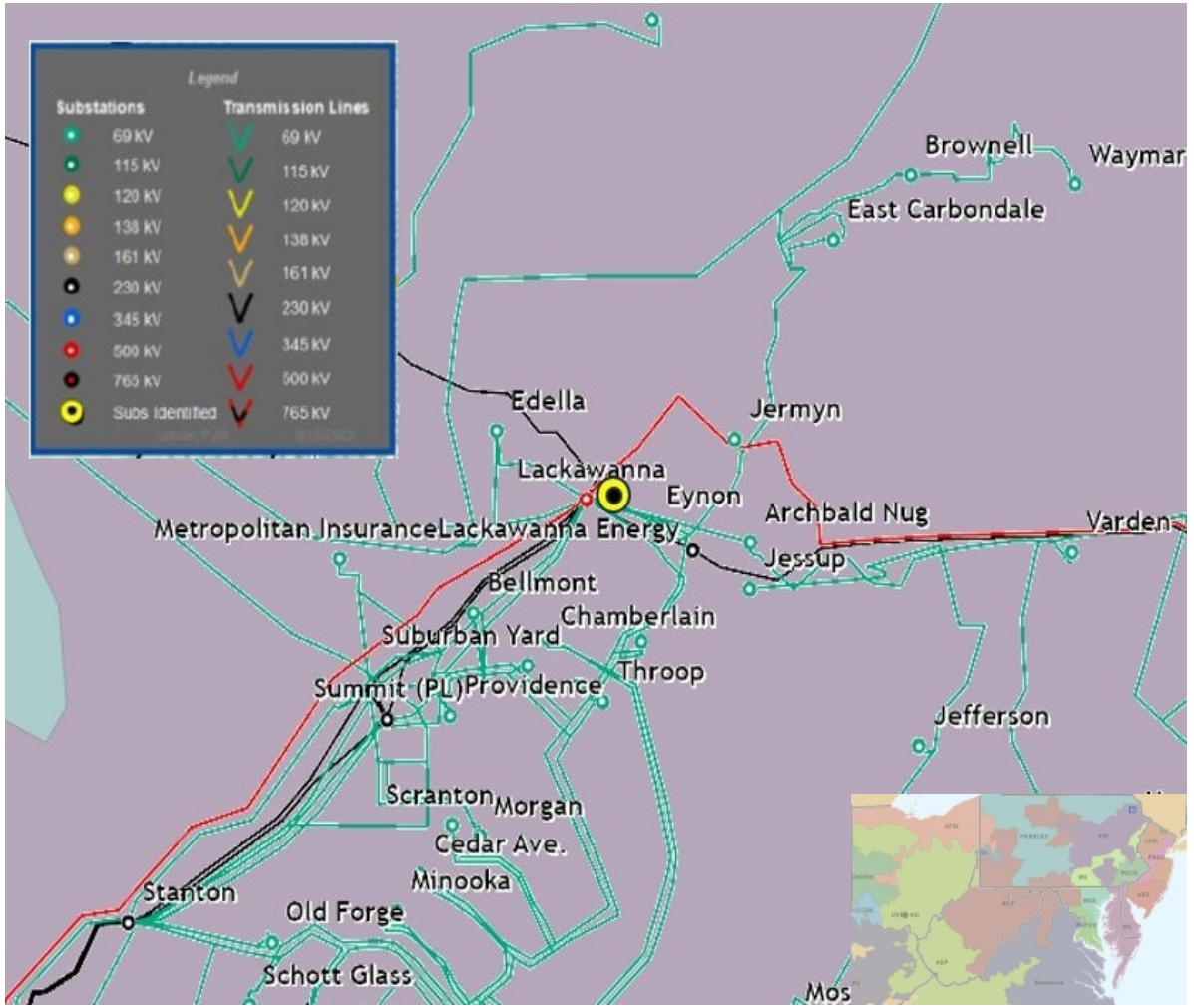
Needs

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: PPL-2025-0013
Process Stage: Need Meeting 9/09/2025
Project Driver: Customer Service
Specific Assumption References:
PPL 2025 Annual Assumptions

Problem Statement:
A customer has submitted a request to have their facility served from a 230kV source in Lackawanna, PA. The total facility load is approximately 1,400 MW (2031). The requested in service date is 07/2028

Initial In-Service 2028 Load: 200 MW
Projected 2030 Load: 1,200 MW



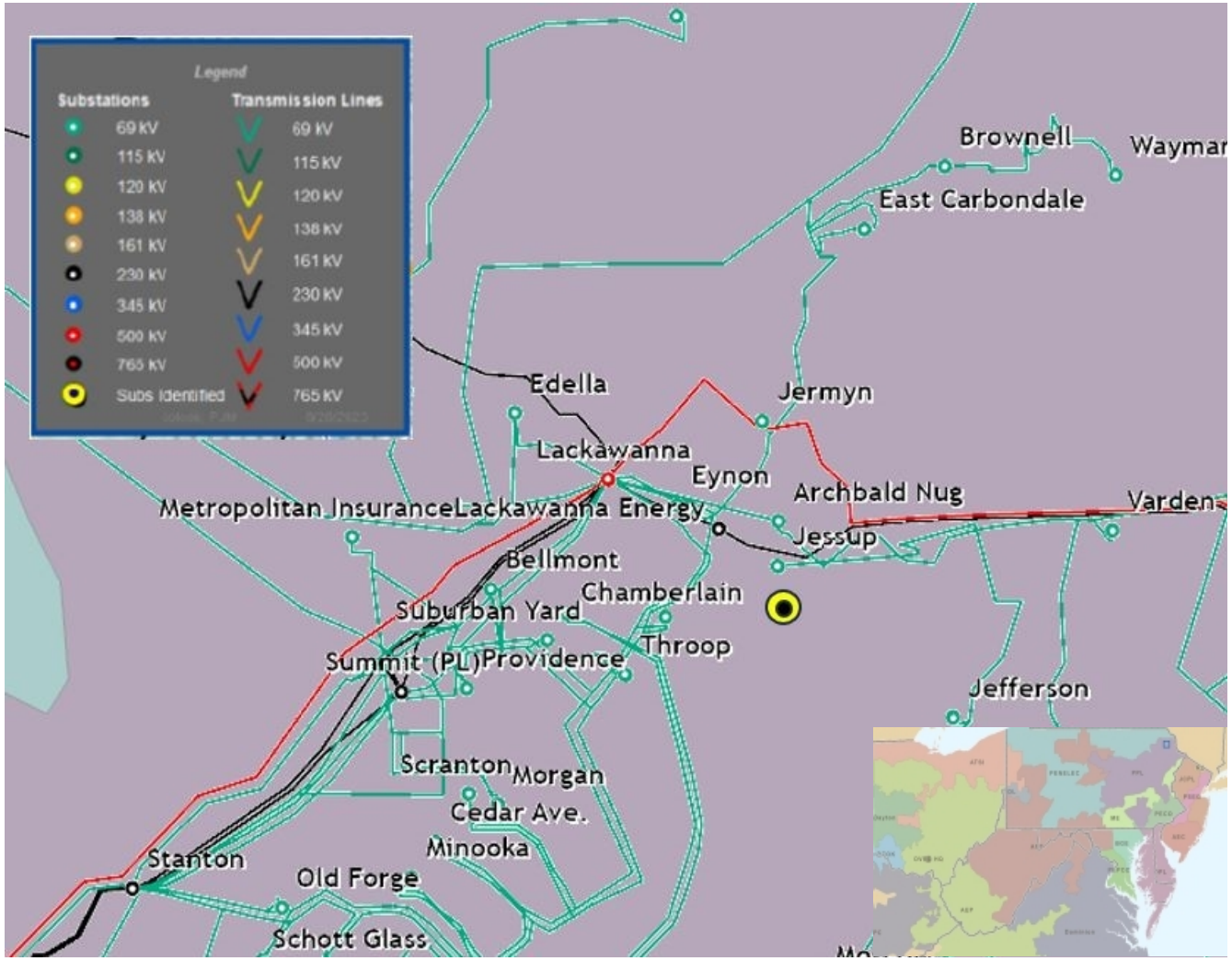
PPL Electric Utilities

PPL Transmission Zone M-3 Process
Archbald Mountain, PA

Need Number: PPL-2025-0014
Process Stage: Need Meeting 9/09/2025
Project Driver: Customer Service
Specific Assumption References:
PPL 2025 Annual Assumptions

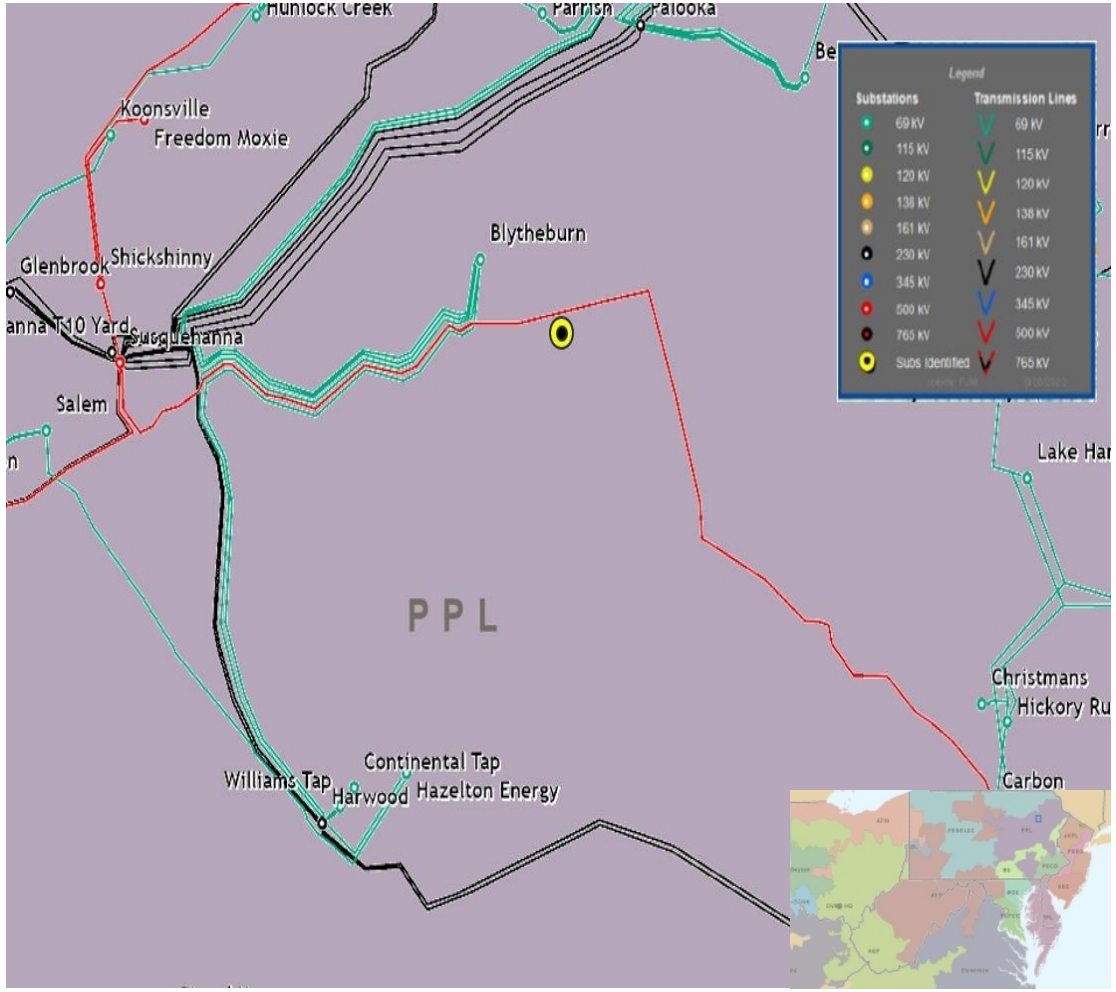
Problem Statement:
A customer has submitted a request to have their facility served from a 230kV source in Archbald, PA. The total facility load is approximately 1,000 MW (2031). The requested in service date is 05/2027.

Initial In-Service 2027 Load: 166 MW
Projected 2028 Load: 500 MW
Projected 2030 Load: 900 MW



Need Number: PPL-2025-0015
Process Stage: Need Meeting 9/09/2025
Project Driver: Customer Service
Specific Assumption References:
PPL 2025 Annual Assumptions

Problem Statement:
A customer has submitted a request to have their facility served from a 138kV source in Dorrance, PA. The total facility load is approximately 600 MW (2030). The requested in service date is 05/2028.
Initial In-Service 2028 Load: 200 MW
Projected 2030 Load: 600 MW



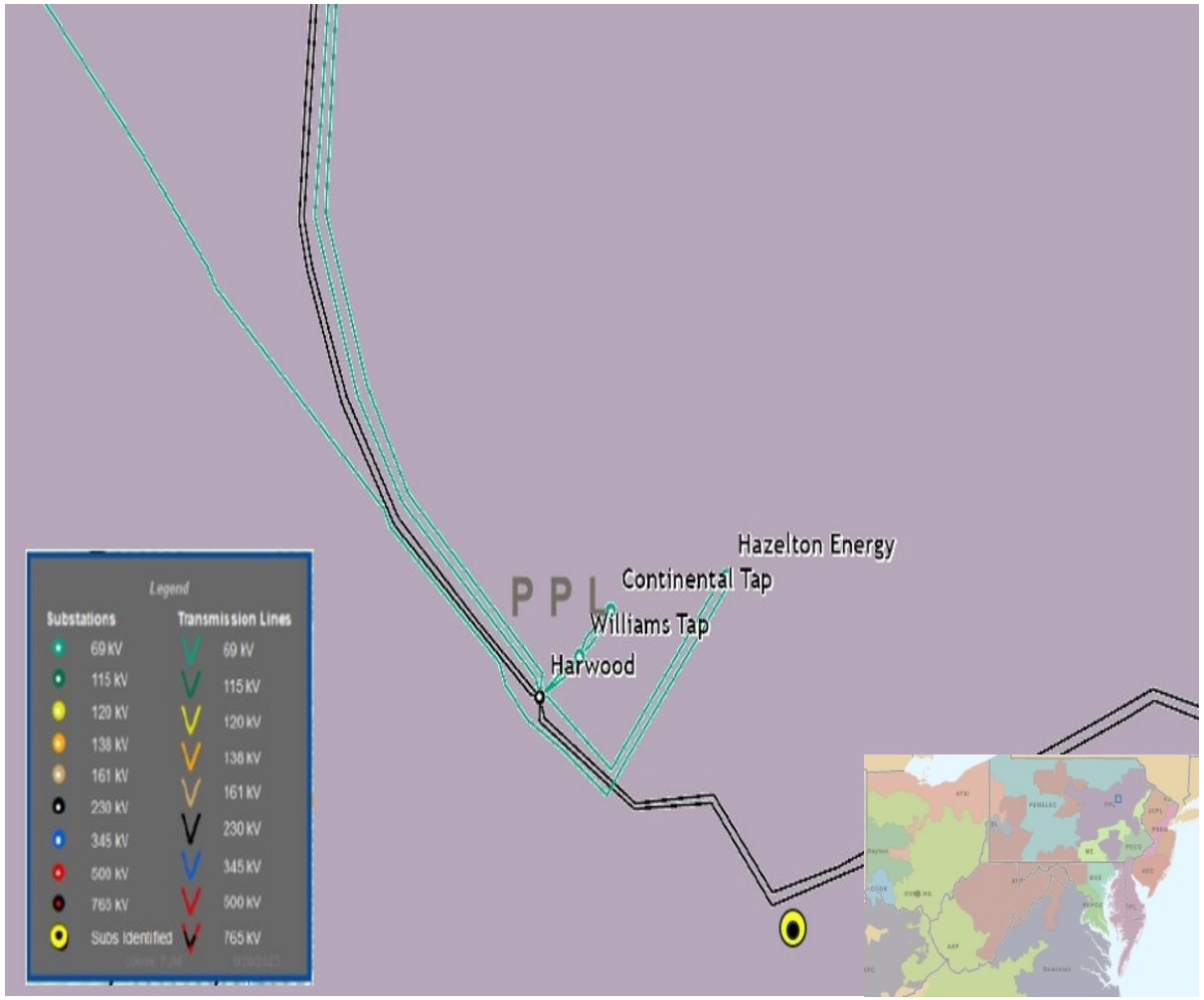
Solutions

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

Need Number: PPL-2025-0010
Process Stage: Solution Meeting TEAC - 09/09/2025
Previously Presented: Need Meeting 05/06/2025
Project Driver: Customer Service
Specific Assumption References:
PPL 2025 Annual Assumptions

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: 350 MW
Projected 2028 Load: 700 MW
Projected 2030 Load: 1,000 MW

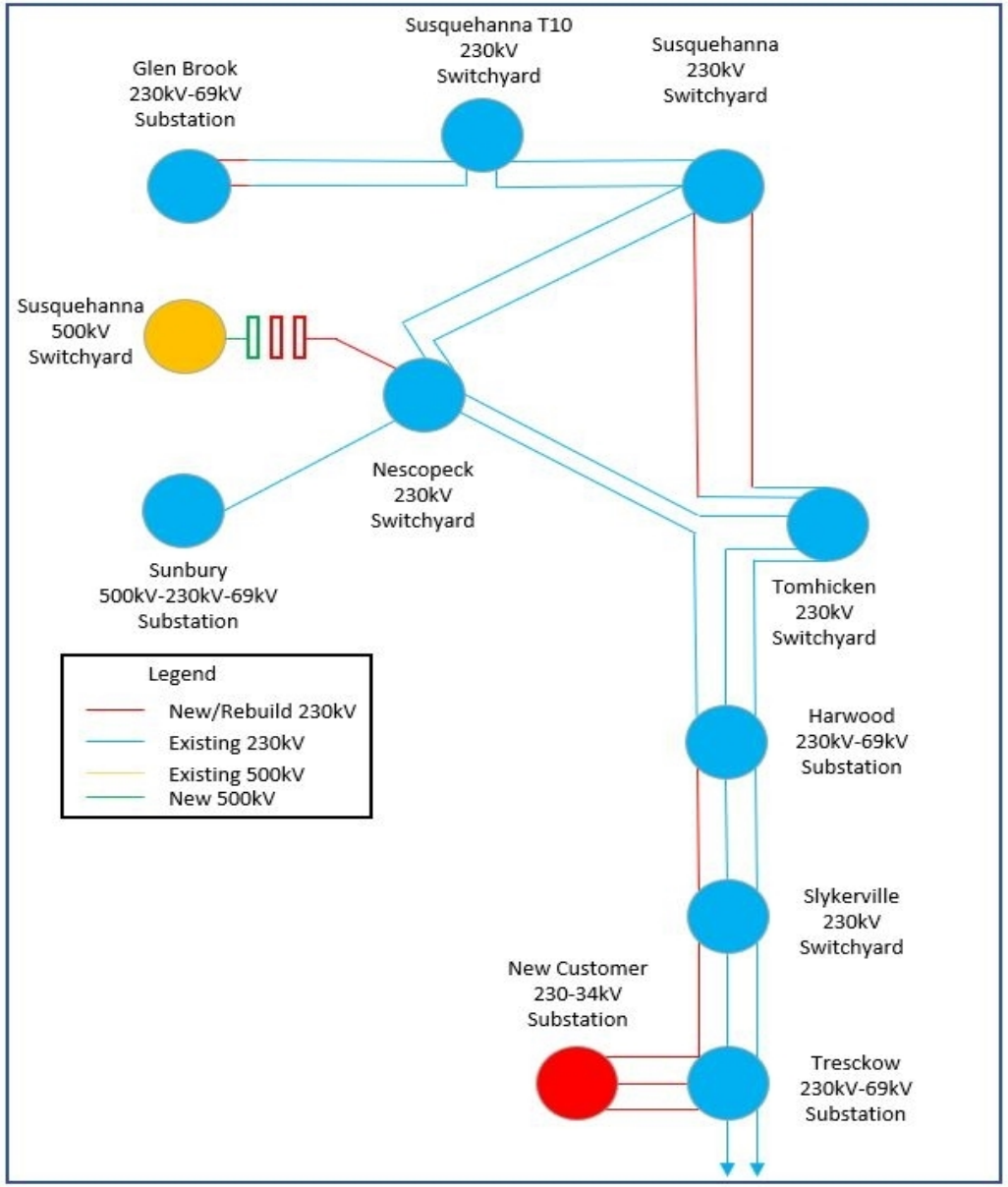


PPL Transmission Zone M-3 Process
Tresckow, PA

Need number(s): PPL-2025-0010
Process Stage: Solution Meeting TEAC - 09/09/2025
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 Tresckow 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
Harwood 230kV yard: Install a new DBDB (BAAH ultimate) bay at Harwood 230kV yard. Install two breakers, one dead-end, 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
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
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

Transmission Cost Estimate: $95 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

Projected In-Service: 05/30/2028



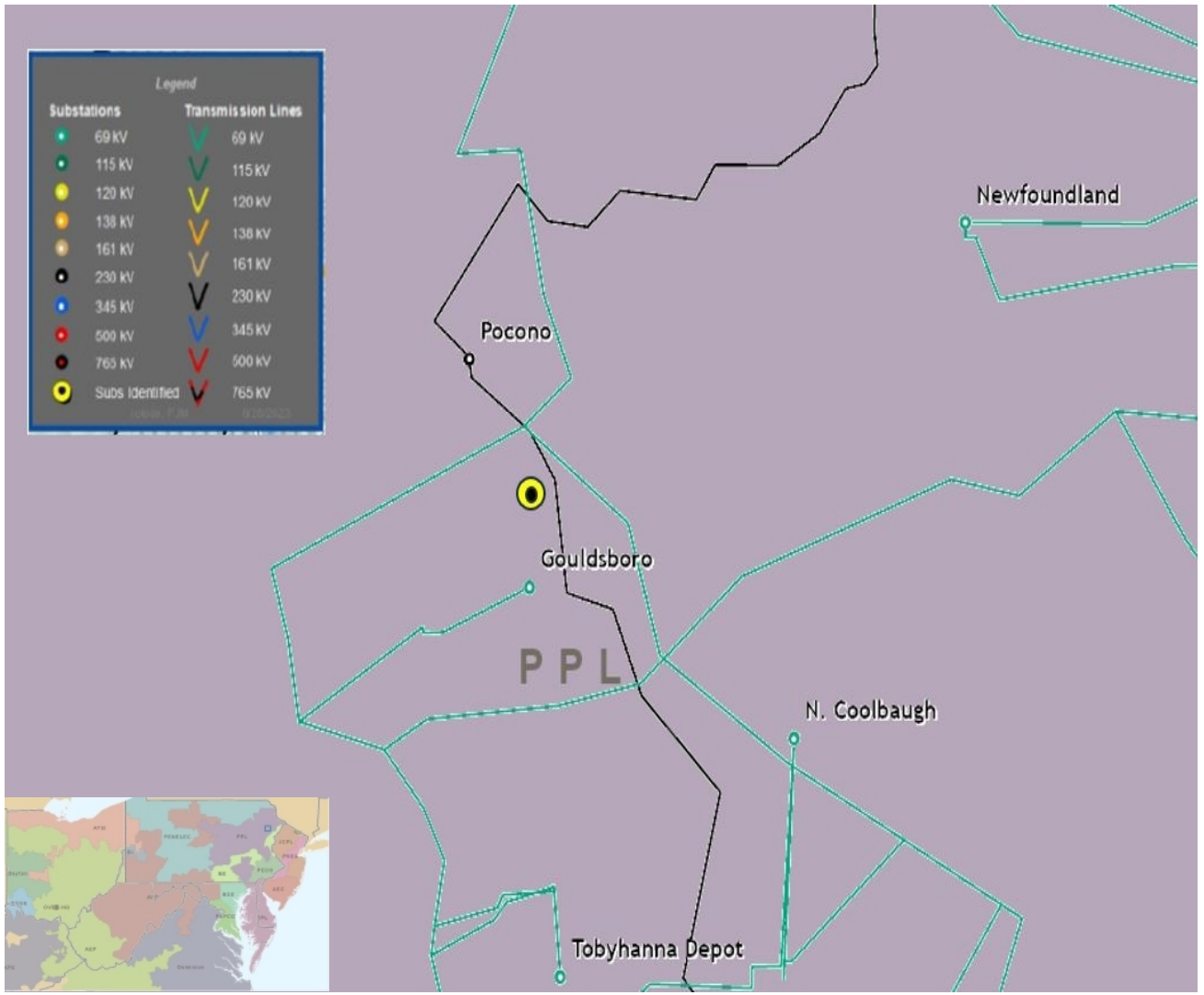
PPL Electric Utilities

PPL Transmission Zone M-3 Process
Big Bass, PA

Need Number: PPL-2025-0012
Process Stage: Solution Meeting TEAC - 09/09/2025
Previously Presented: Need Meeting 07/08/2025
Project Driver: Customer Service
Specific Assumption References:
PPL 2025 Annual Assumptions

Problem Statement:
A customer has submitted a request to have their facility served from a 230kV source in Gouldsboro, PA. The total facility load is approximately 1,500 MW (2030). The requested in-service date is 05/2027.

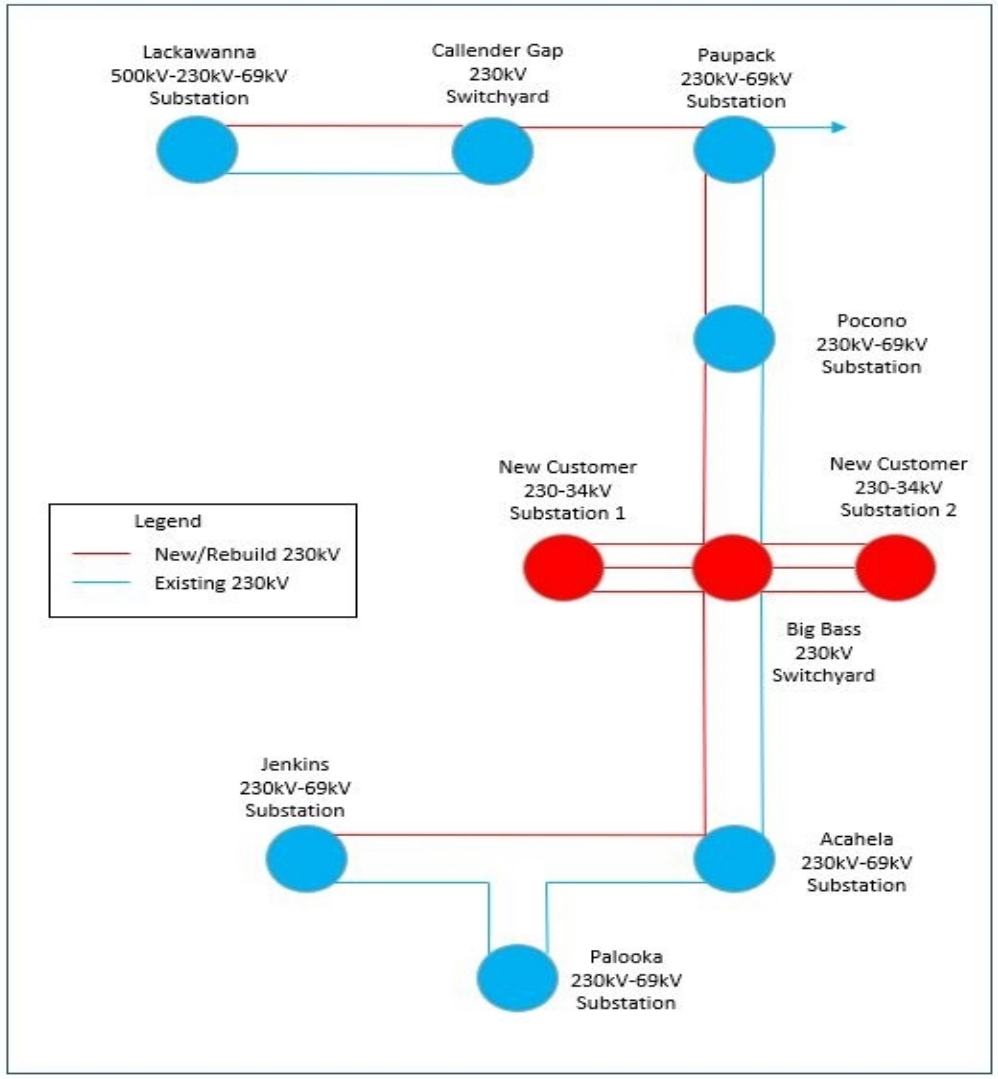
Initial In-service 2027 Load: 300MW
Projected 2028 Load: 700MW
Projected 2030 Load: 1,500MW



PPL Transmission Zone M-3 Process
Tresckow, PA

Need number(s): PPL-2025-0012
Process Stage: Solution Meeting TEAC - 09/09/2025
Proposed Solution:
Big Bass 230kV Switchyard: Install a six bay BAAH 230kV switchyard with two 125MVAR Capacitor banks. Estimated Cost: $50 M
Big Bass 230kV Customer Lead Lines: Install three 230kV lead lines for approximately 0.2 miles from Big Bass 230kV switchyard to each of the customer's two substations (six lines total). Estimated Cost: $8 M
Jenkins 230kV Substation: Build out bay #2 at Jenkins 230kV yard and install one new 230kV breaker, two MODs, and ancillary equipment. Estimated Cost: $1.25 M
Re-terminate Jenkins - Palooka 230kV line: Re-terminate the JENK-PALO 230kV line from bay 3 to bay 2 at Jenkins 230kV yard. Estimated Cost: $1 M
New Jenkins - Acahela 230kV Line: Install the second circuit on the existing single circuit, future double circuit, sections of Jenkins - Palooka and Palooka - Acahela 230kV lines between Jenkins and Acahela (15 miles). Estimated Cost: $18.75 M
Acahela 230kV Substation: Install a new DBDB (BAAH ultimate) bay at Acahela 230kV yard. Install two breakers, one dead-end, and ancillary equipment. Build out bay #3 and install one new 230kV breaker, two MODs, and ancillary equipment. Estimated Cost: $3.75 M
Bifurcate Acahela - Pocono 230kV line: Bifurcate Acahela - Pocono 230kV line into the new Big Bass 230kV switchyard (~0.25 miles). Estimated Cost: $3 M
New Acahela - Big Bass #2 230kV Line: Install the second circuit on the existing single circuit, future double circuit, Acahela - Big Bass 230kV line between Acahela and Big Bass (12.9 miles). Estimated Cost: $16.125 M
New Big Bass - Pocono #2 230kV Line: Install the second circuit on the existing single circuit, future double circuit, Big Bass - Pocono 230kV line between Big Bass and Pocono (7.25 miles). Estimated Cost: $9.1 M
Pocono 230kV Substation: Install a new DBDB (BAAH ultimate) bay at Pocono 230kV yard. Install two breakers, one dead-end, and ancillary equipment. Build out bay #3 and install one new 230kV breaker, two MODs, and ancillary equipment. Estimated Cost: $3.75 M
New Paupack - Pocono #2 230kV Line: Install the second circuit on the existing single circuit, future double circuit, Paupack - Pocono 230kV line between Paupack and Pocono (21.75 miles). Estimated Cost: $27.5 M
Paupack 230kV Substation: Build out bay #2 at Paupack 230kV yard and install one new 230kV breaker, one dead-end, and ancillary equipment. Replace four MODs in Bay 3 at Paupack 230kV. Estimated Cost: $2.9 M
Upgrade Lackawanna - Callender Gap 230kV Line: Add two subconductors to each phase in the 500kV designed section of the Lackawanna - Callender Gap 230kV line for ~ 3 miles. Rebuild the existing ~0.5 mile 230kV designed section of Lackawanna - Callender Gap 230kV line. Estimated Cost: $7.75 M
Lackawanna 230kV Substation: Replace two 230kV breakers and four MODs in Bay #3 at Lackawanna 230kV. Estimated Cost: $2.9 M
Upgrade Callender Gap - Paupack 230kV Line: Add two subconductors to each phase in the 500kV designed section of the Callender Gap - Paupack 230kV Line for ~ 17.1 miles. Reconductor the existing ~0.9 mile 230kV designed section of Callender Gap - Paupack 230kV line. Estimated Cost: $31.1 M

Transmission Cost Estimate: $186.875 M
Alternatives Considered:
1.Bifurcate the ACAH-POCO 230kV line and install new 230kV switchyard. Rebuild Blooming Grove 230kV yard to BAAH and install new 500-230kV yard with two transformers. Extend ~21 miles of greenfield double circuit 230kV to new switchyard. Estimated cost ~$255 Million.
Projected In-Service: 05/30/2028



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

8/29/2025 – V1 – Original version posted to pjm.com