

# Transmission Expansion Advisory Committee – PPL Supplemental Projects

August 06, 2024

# 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-2024-0004

**Process Stage:** Need Meeting TEAC - 08/06/2024

**Project Driver:** Customer Service

**Specific Assumption References:**

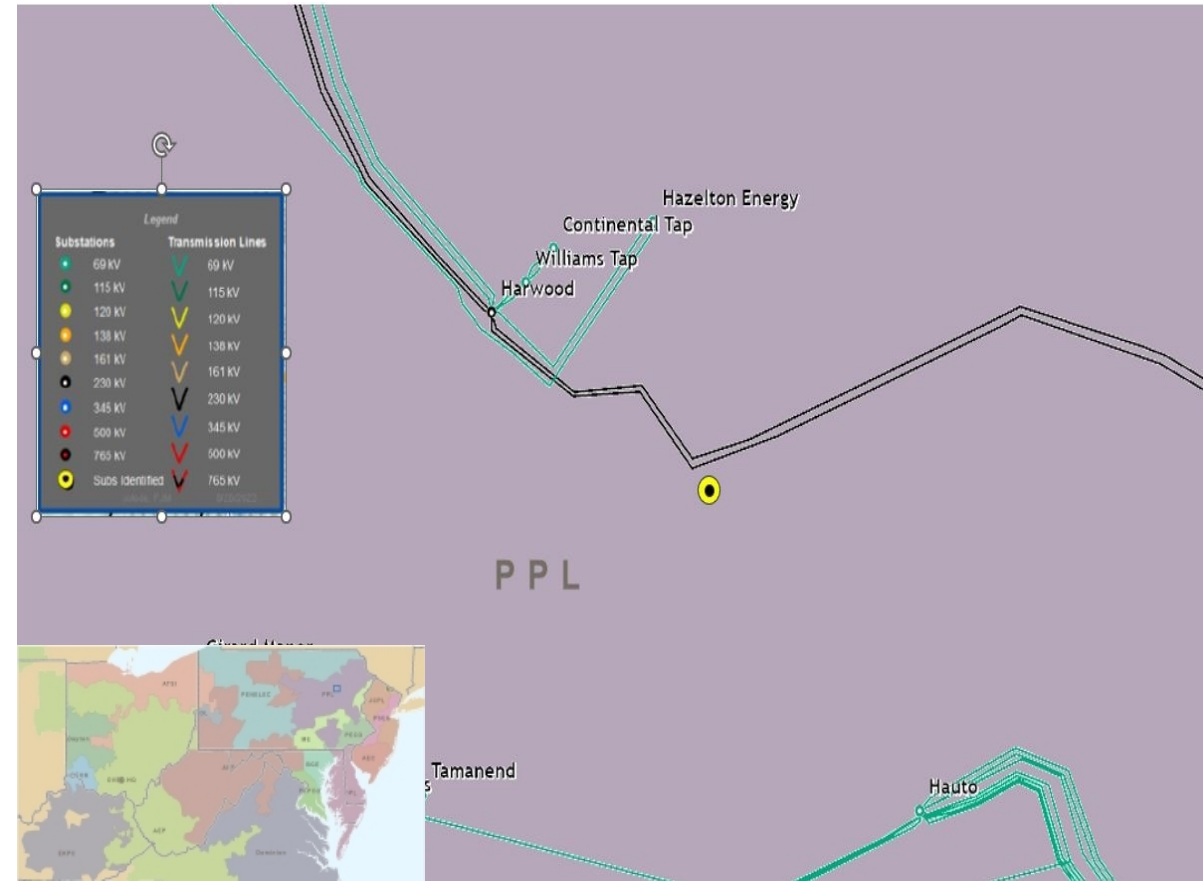
PPL 2024 Annual Assumptions

**Problem Statement:**

A customer has submitted a request to have their facility served from a 230kV source in Hazleton, PA. The total facility load is approximately 1,000 MW (2030). The requested in service date is 05/2027.

**Specific Assumption References:**

[PPL 2024 Annual Assumptions](#)



# Solution

Stakeholders must submit any comments within 10 days of this meeting in order to provide the time necessary to consider these comments prior to the next phase of the M-3 process.





# PPL Transmission Zone: Supplemental Harwood, PA

**Need number(s):** PPL-2024-0003

**Process Stage:** Solution Meeting TEAC - 08/06/2024

**Proposed Solution:**

**Tomhicken 230kV Switchyard:** Install a six bay BAAH 230kV switchyard with a 125MVAR Capacitor bank.. Estimated Cost: \$45 M

**Nescopeck 230kV Switchyard:** Install a new three bay BAAH 230kV switchyard.. Estimated Cost: \$29.5 M

**Susquehanna 230kV Switchyard:** Install a new line terminal at Susquehanna 230kV yard by installing new dead-end, 230kV breaker, and associated equipment.. Estimated Cost: \$2 M

**Susquehanna T10 230kV Switchyard:** Install a new BAAH bay at the Susquehanna T10 230kV yard. Install two dead-ends, three 230kV breakers and associated equipment.. Estimated Cost: \$6 M

**Harwood 230kV Substation:** Install new line terminal in the Harwood 230kV switchyard, install one dead-end, two breakers, and associated equipment. New bay to be DBDB initial and future BAAH.. Estimated Cost: \$4 M

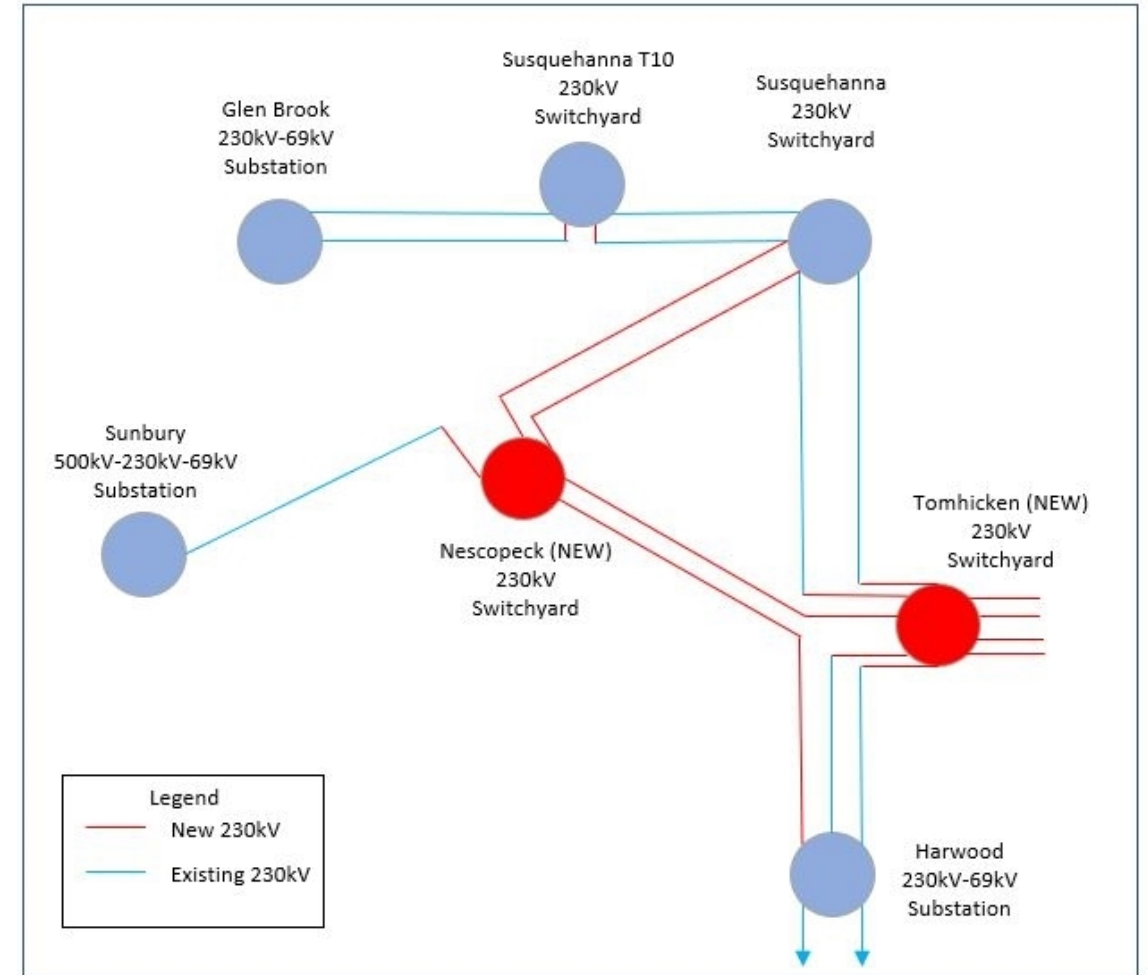
**SUSQ-HARW #1 & #2 230kV Lines:** Bifurcate the Susquehanna – Harwood #1 & #2 230kV and terminate at the new Tomhicken 230kV switchyard. Extend lines approximately 0.25 into the new Tomhicken 230kV switchyard.. Estimated Cost: \$3.7 M

**Sunbury - Susquehanna # 1 230kV Line:** Bifurcate the Sunbury – Susquehanna #1 230kV into the new Nescopeck 230kV switchyard. Extend lines approximately 0.2 into the new Nescopeck 230kV switchyard.. Estimated Cost: \$1.85 M

**Sunbury - Susquehanna # 1 230kV Line Partial Rebuild:** Rebuild the Sunbury - Susquehanna # 1 230kV Line to double circuit 230kV for 3.9 miles from the Susquehanna 230kV yard to the new Nescopeck 230kV switchyard.. Estimated Cost: \$17.2 M

**Glen Brook - Susquehanna 230kV Line:** Bifurcate the Glen Brook – Susquehanna 230kV line into the Susquehanna T10 yard. Extend lines approximately 0.25 into the existing Susquehanna T10 230kV switchyard.. Estimated Cost: \$3 M

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# PPL Transmission Zone: Supplemental Harwood, PA

**Need number(s):** PPL-2024-0003

**Process Stage:** Solution Meeting TEAC - 08/06/2024

## Proposed Solution (Continued):

**Nescopeck - Tomhicken 230kV Line:** Extend a double circuit 230kV (built for 500kV) for ~9 miles from Nescopeck to Tomhicken on existing PPL ROW. Extend single circuit 230kV (built for 500kV DlbCir) for 2.7 miles from Tomhicken to Harwood and terminate at Harwood. This will create the Nescopeck - Tomhicken 230kV and Nescopeck - Harwood 230kV lines.. Estimated Cost: \$80.5 M

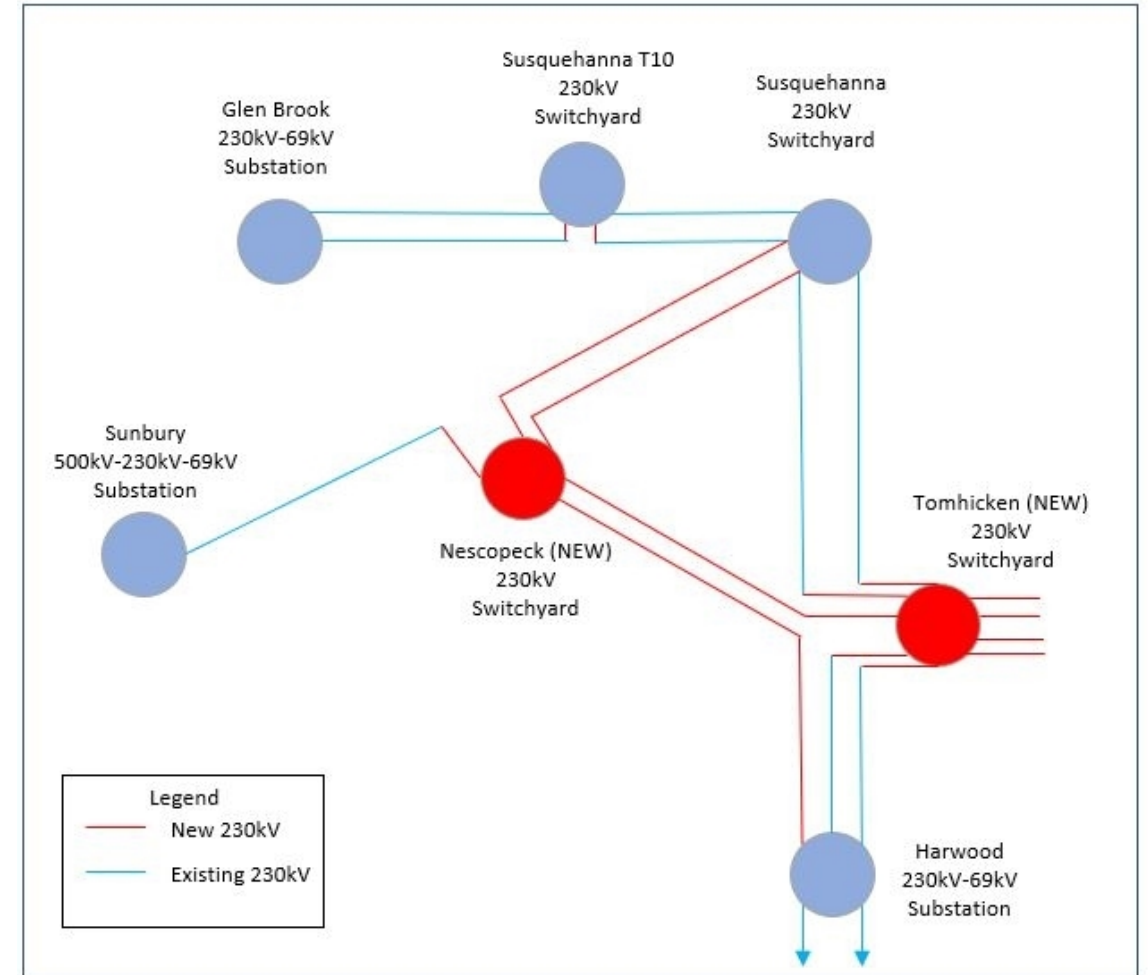
**Tomhicken Customer Taps 230kV lines:** Install four 230kV lead lines for approximately 0.1 miles from Tomhicken 230kV switchyard to the customer facility.. Estimated Cost: \$3.8 M

**Transmission Cost Estimate:** \$196.55 M

**Alternatives Considered:** Rebuild the Susquehanna – Harwood #1 & #2, install a third line 230kV circuit from Susquehanna to Harwood, and break GLBR-SUSQ into SU10 yard. Rebuild of the Susquehanna – Harwood #1 & #2 infeasible due to outage conflicts with HARW-SIEG/EPAL 230kV rebuild under S2374 as well as the lack of operational flexibility. Estimated cost \$199 million.

**Projected In-Service:** 06/01/2027

**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

07/26/2024 - V1 – Original version posted to pjm.com