

Transmission Expansion Advisory Committee – PSE&G Supplemental Projects

December 3rd, 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

Need Number: PSEG-2023-0011

Process Stage: Solutions Meeting 12/03/2024

Previously Presented: Need Meeting 10/31/2023

Supplemental Project Driver:

- Customer Service

Specific Assumption Reference:

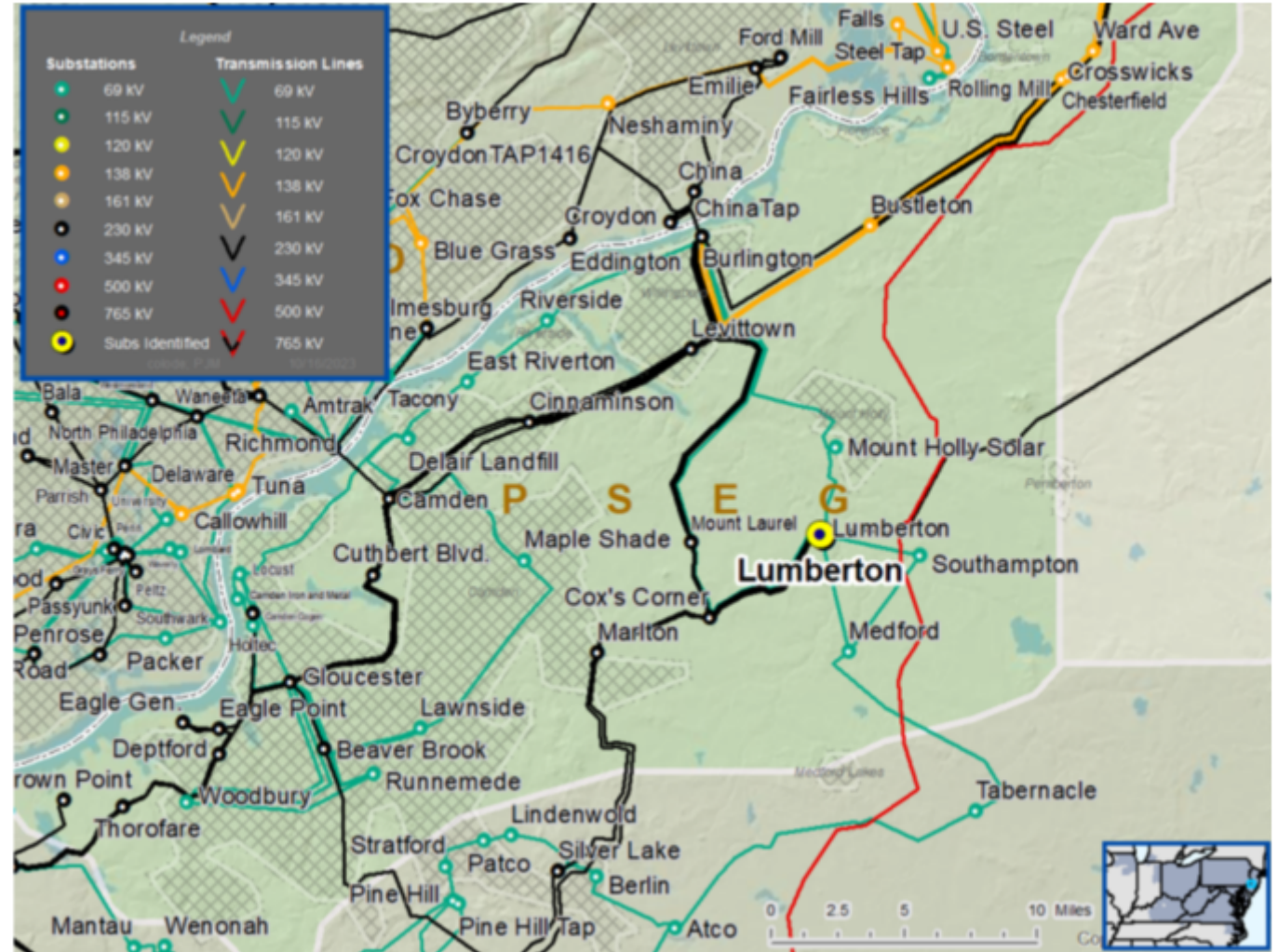
[PSE&G 2023 Annual Assumptions](#)

- Localized Load Growth & Contingency Overloads

Problem Statement:

- Lumberton Substation is a station in the Lumberton area with no additional station capacity.
 - Lumberton serves over 17,000 customers with a peak load of over 73.2 MVA in 2022.
 - The actual station capacity is 59.41 MVA. Contingency overload is 115%.

Model: 2022 Series 2027 Summer RTEP 50/50





PSE&G Transmission Zone M-3 Process Lumberton Area

Need Number: PSEG-2023-0011

Process Stage: Solutions Meeting 12/03/2024

Proposed Solution:

At Pemberton:

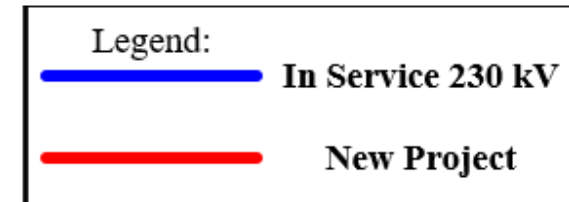
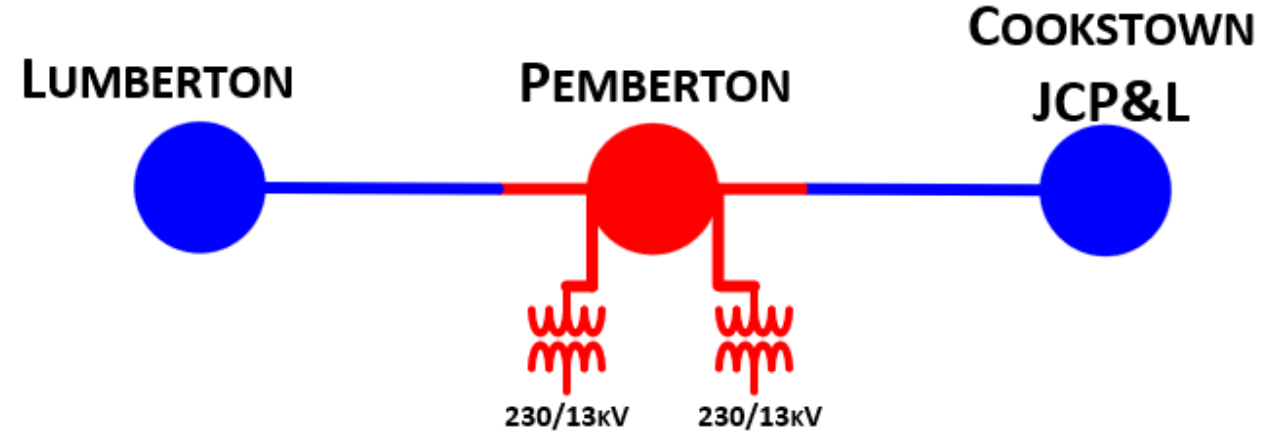
- Construct a 230-13kV Substation at PSEG owned property in the Pemberton Area.
 - Construct a 230kV substation.
 - Cut and loop Lumberton-Cookstown 230kV circuit into new substation.
 - Install two (2) 230-13kV transformers.
 - **Estimated Cost: \$62.7M**
- First Energy (JCP&L) to install a Fiber Connection on JCP&L owned portion from Pemberton to Cookstown.
 - **First Energy (JCP&L) Estimated Cost: \$1.8M**

Total Project Cost : \$64.5M

Alternative Considered:

- Expand Lumberton Substation.
 - Lumberton substation has insufficient space for required facilities and full capacity of the station will not be accessible for future load growth.
- **Projected In-Service: 12/2029**

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

11/22/2024 – V1 – Original version posted to pjm.com