

Transmission Expansion Advisory Committee – PSE&G Supplemental Projects

October 31st, 2023

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: PSEG-2023-0010

Process Stage: Needs Meeting 10/31/2023

Supplemental Project Driver:

- Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

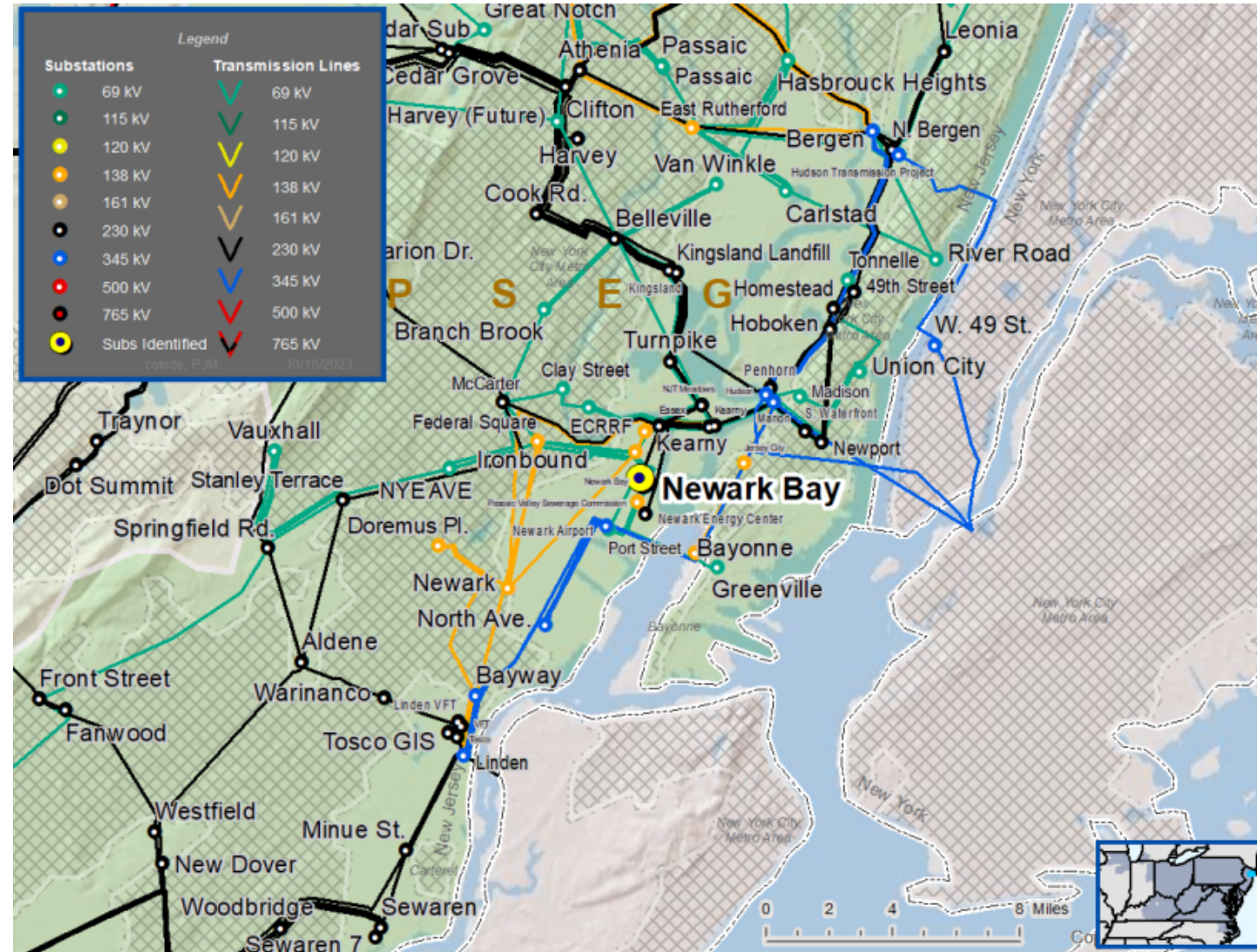
[PSE&G 2023 Annual Assumptions](#)

- Equipment Criticality, Consequence of Failure

Problem Statement:

A high pressure fluid-filled transmission circuit constructed as a dedicated feed to a cogeneration facility to allow for generation export is now subject to obsolescence due to the retirement of the cogeneration facility. The high pressure fluid-filled transmission circuit currently provides no transmission system benefit and presents potential environmental impact risks.

Model: 2023 Series 2028 Summer RTEP 50/50



Need Number: PSEG-2023-0011

Process Stage: Need Meeting 10/31/2023

Supplemental Project Driver:

- Customer Service

Specific Assumption Reference:

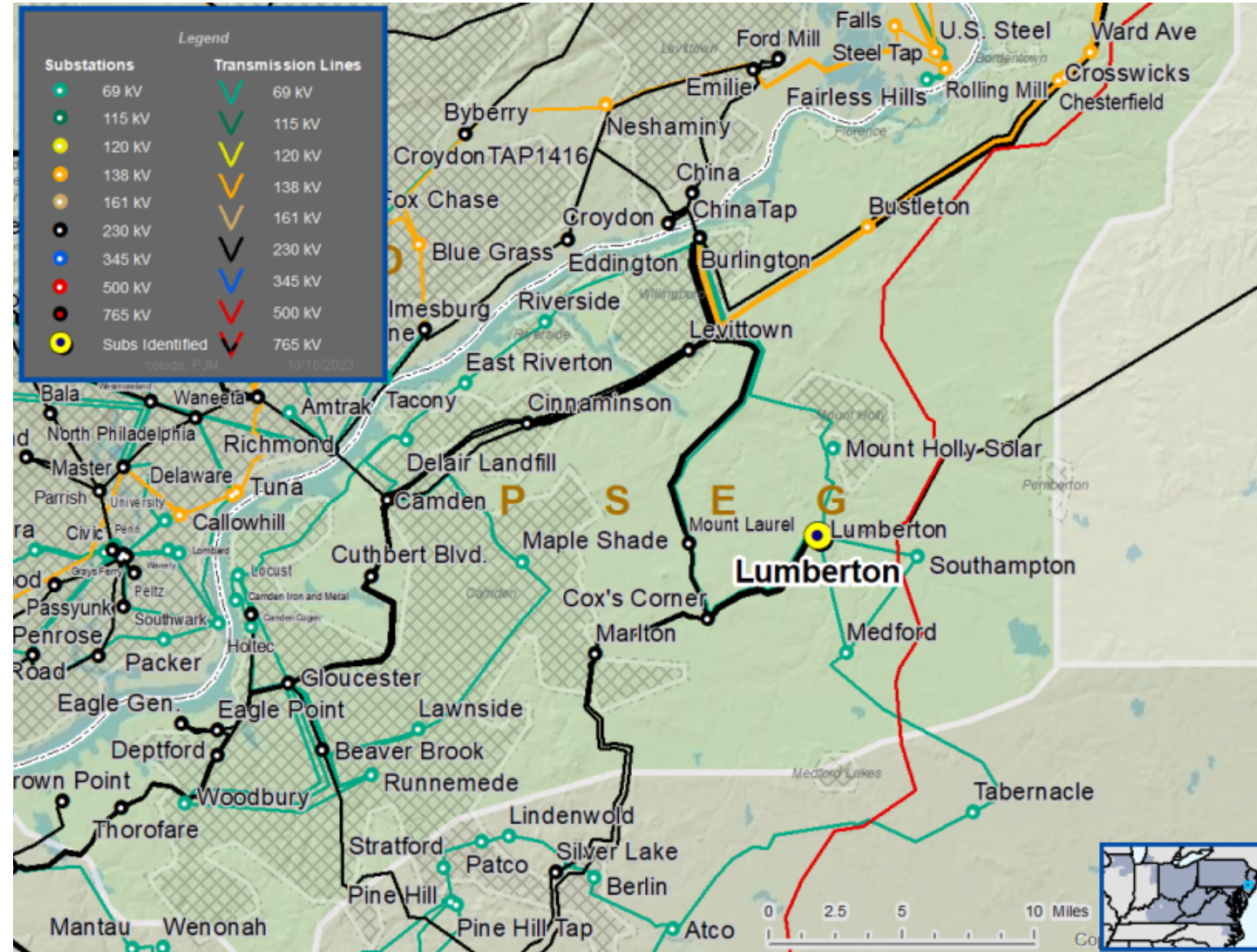
[PSE&G 2023 Annual Assumptions](#)

- 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 123%.

Model: 2022 Series 2027 Summer RTEP 50/50



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



PSE&G Transmission Zone M-3 Process Harlingen Area

Need Number: PSEG-2023-0009

Process Stage: Solutions Meeting 10/31/2023

Previously Presented: Need Meeting 9/05/2023

Supplemental Project Driver:

- Customer Service

Specific Assumption Reference:

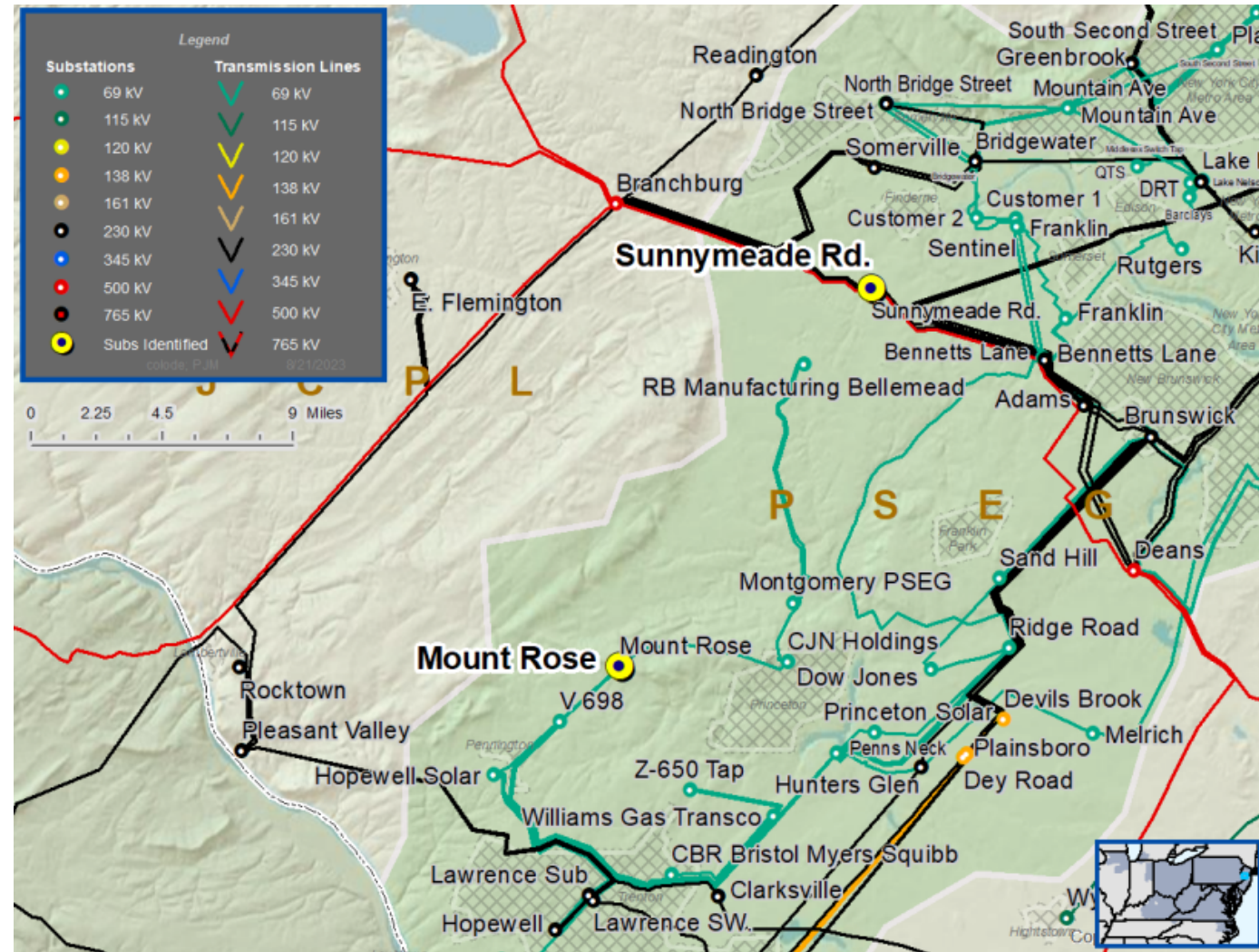
[PSE&G 2023 Annual Assumptions](#)

- Localized Load Growth & Contingency Overloads

Problem Statement:

- Sunnymeade Substation is a station in the Hillsborough area with no additional station capacity.
 - Sunnymeade serves over 21,400 customers with a peak load of over 63.4 MVA in 2021.
 - The actual station capacity is 61.43MVA. Contingency overload is 103.2%.
- Mount Rose Substation is a station in the Mount Rose area with no additional station capacity.
 - Mount Rose serves over 11,800 customers with a peak load of over 65.0 MVA in 2021.
 - The actual station capacity is 61.47MVA. Contingency overload is 105.7%.

Model: 2022 Series 2027 Summer RTEP 50/50





PSEG Transmission Zone M-3 Process Harlingen Area

Need Number: PSEG-2023-0009

Process Stage: Solutions Meeting 10/31/2023

Proposed Solution:

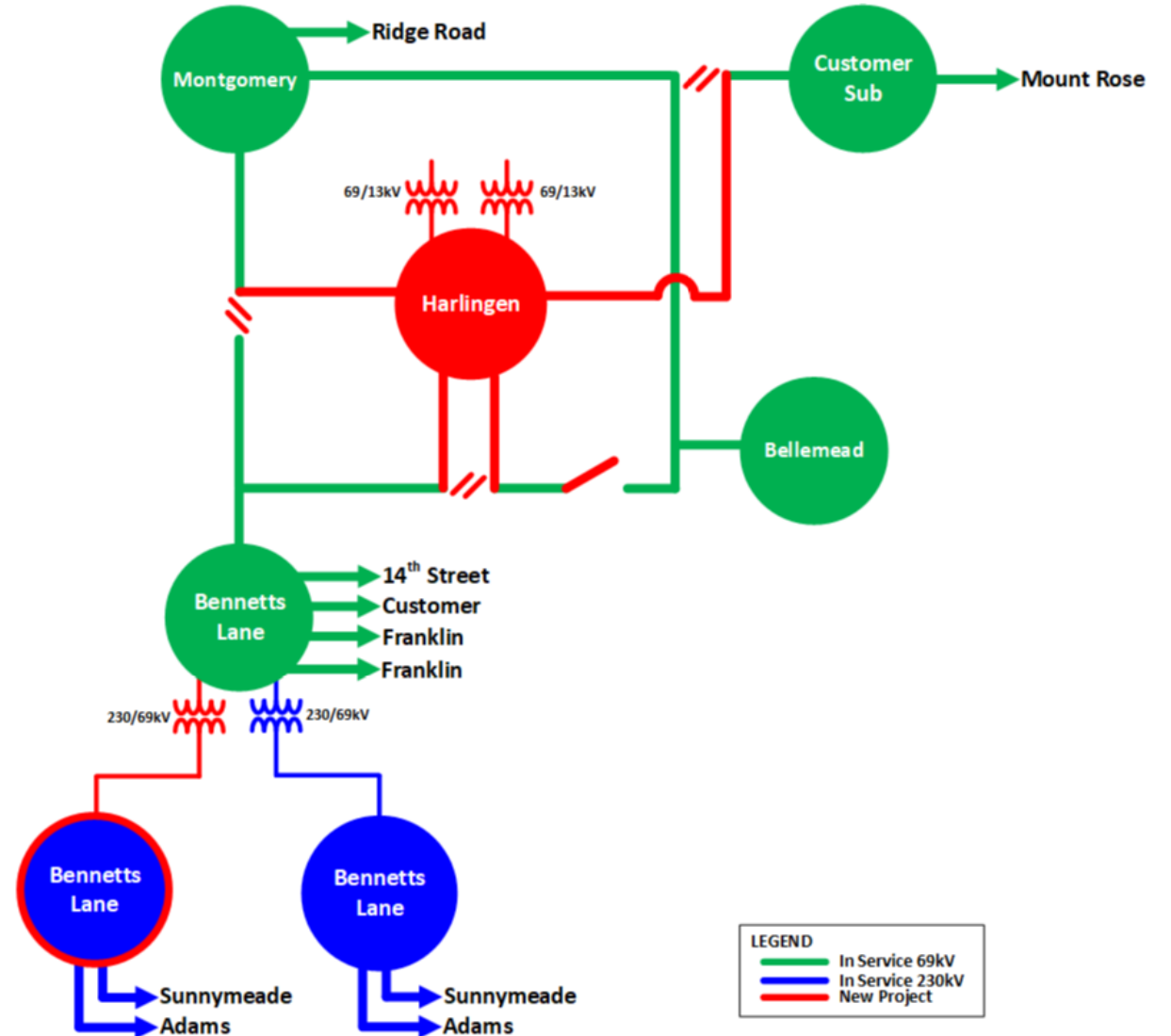
- Construct a new 69-13kV substation in the Harlingen area
 - Construct new 69-13kV station on new property
 - Install two (2) 69-13kV transformers
 - Cut and loop the Bennetts Lane-Montgomery 69kV line into the new substation
 - Cut and loop the Montgomery-Customer Sub 69kV line into the new substation
 - Resolves contingency overload at Sunnymead and Mount Rose substation
- Construct a second 230-69 transformer at the Bennetts Lane substation
 - Install one (1) 230-69 transformer
 - Modify 230kV bus at Bennetts Lane
 - Modify 69kV bus at Bennetts Lane
- **Estimated Cost:** \$105.1M

Alternative Considered:

- Construct a new 69-13kV substation in the Harlingen area and construct a new 69kV line from Montgomery
 - Construct new 69-13kV station on new property
 - Install two (2) 69-13kV transformers
 - Cut and loop the Bennetts Lane-Montgomery 69kV line into the new substation
 - Construct one (1) new 69kV line from Montgomery to the new substation
 - Modify 69kV bus at Montgomery for an additional circuit.
- Construct a second 230-69 transformer at the Bennetts Lane substation
 - Install one (1) 230-69 transformer
 - Modify 230kV bus at Bennetts Lane
 - Modify 69kV bus at Bennetts Lane
- **Estimated Cost:** \$152.1M

Projected In-Service: 12/2029

Project Status: Conceptual



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

10/20/2023 - V1 – Original version posted to pjm.com