

SRRTTEP Committee: Mid-Atlantic PSE&G Supplemental Projects

April 18th, 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-2024-0001

Process Stage: Solution Meeting 04/18/2024

Previously Presented: Need Meeting 02/15/2024

Supplemental Project Driver:

- Station Condition/Likelihood of Failure
- Equipment Material Condition, Performance and Risk
- Customer Service

Specific Assumption Reference:

[PSE&G 2024 Annual Assumptions](#)

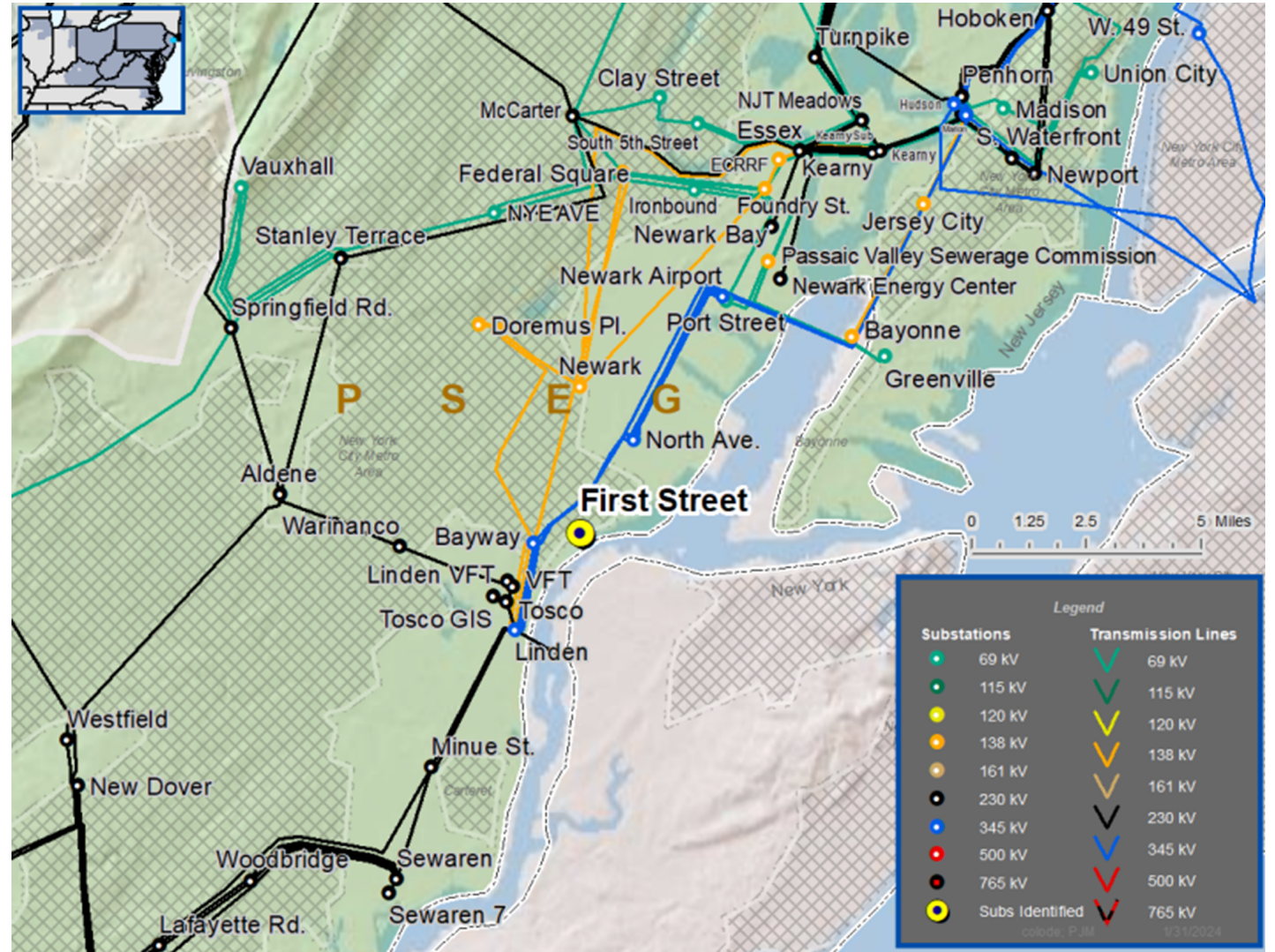
[August 2017 26kV to 69kV PSE&G Presentation](#)

- Equipment Reliability and Condition Assessment
- Asset Risk Model
- Localized Load Growth & Contingency Overloads

Problem Statement:

- First Street substation is a station in the Port Elizabeth Area with equipment and building condition issues.
 - Station equipment at First Street is in poor condition and needs to be addressed.
 - The First Street Substation building is over 90 years old, is in poor condition, and is not in compliance with today's NJ UCC requirements.
 - First Street serves roughly 6,600 customers and 18.5 MVA of load.
- PSE&G has received 9 service requests with a projected load of 8.0MW for the Port of Newark/Elizabeth area. Additional capacity is needed. Existing substations in the area cannot meet current and anticipated demand.

Model: 2022 Series 2027 Summer RTEP 50/50





PSEG Transmission Zone M-3 Process Port Elizabeth Area

Need Number: PSEG-2024-0001

Process Stage: Solutions Meeting 04/18/2024

Proposed Solution:

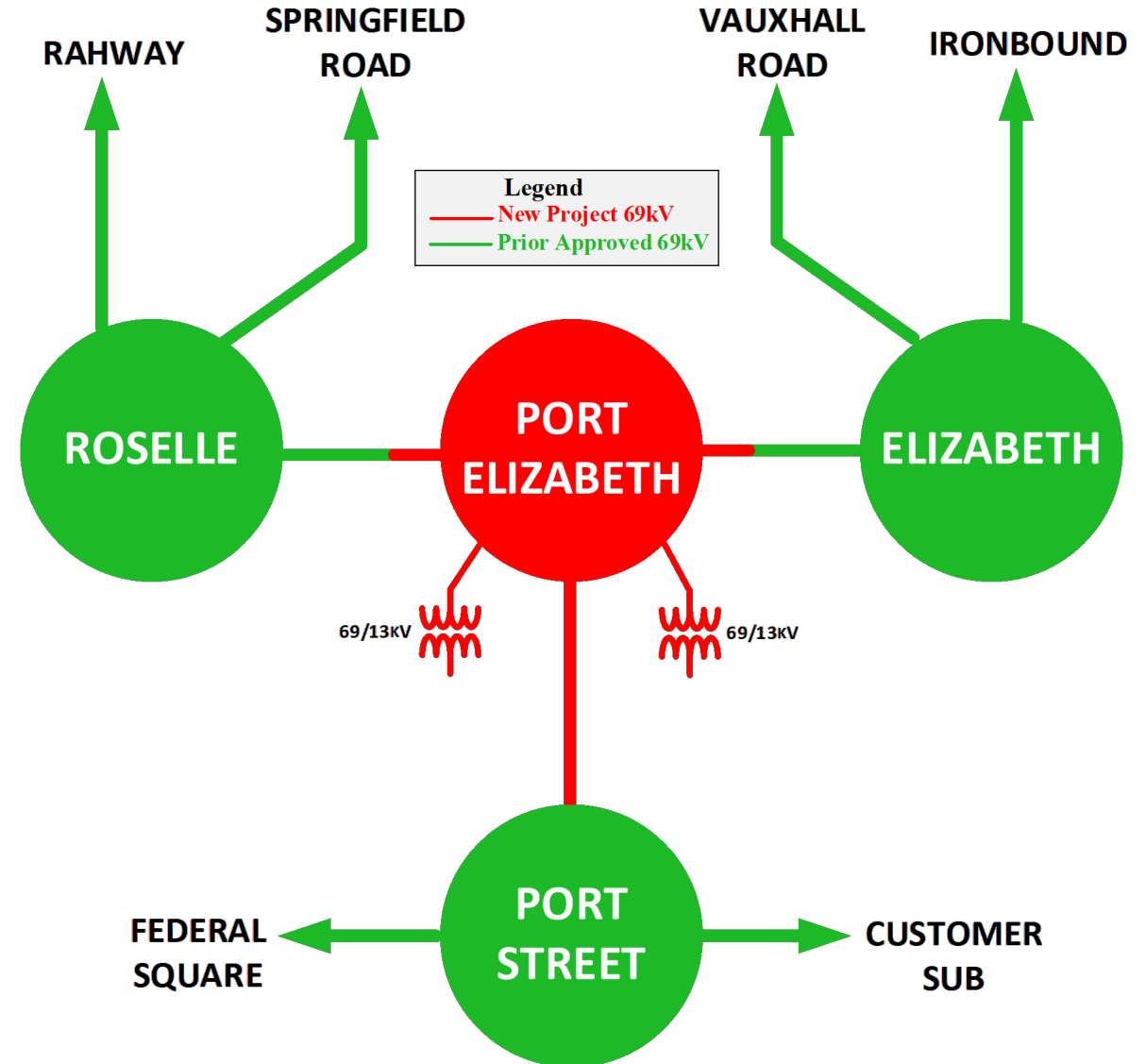
- Construct new 69-13kV substation at PSEG owned property in Elizabeth NJ.
 - Install two (2) 69/13kV transformers.
 - Cut and loop Roselle – Elizabeth 69kV line into the new 69kV bus.
 - Build new 69kV circuit to Port Street.
 - **Estimated Cost:** \$222.7M

Alternatives Considered:

- **Alternative 1:** Construct new 69-13-4kV substation at PSEG owned property in Elizabeth NJ.
 - Install three (3) 69/13&4kV transformers.
 - Cut and loop Roselle – Elizabeth 69kV line into the new 69kV bus.
 - Build new 69kV circuit to Port Street.
 - **Estimated Cost:** \$237.7M
- **Alternative 2:** Purchase property and construct new 345-69-13kV substation.
 - Purchase suitable property alongside 345kV Right-of-Way.
 - Construct new 345-69kV switch and 69-13kV substation.
 - **Estimated Cost:** N/A. This option was deemed infeasible due to inability to locate and purchase a suitable property.

Projected In-Service: 06/2029

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

4/08/2024 – V1 – Original version posted to pjm.com