

SRRTEP Committee: Mid-Atlantic PSE&G Supplemental Projects

February 16, 2021

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-2020-0010

Process Stage: Solutions Meeting 02/16/2021

Previously Presented: Need Meeting 11/18/2020

Supplemental Project Driver:

- Equipment Material Condition, Performance and Risk

Specific Assumption Reference:

[PSE&G 2019 Annual Assumptions](#)

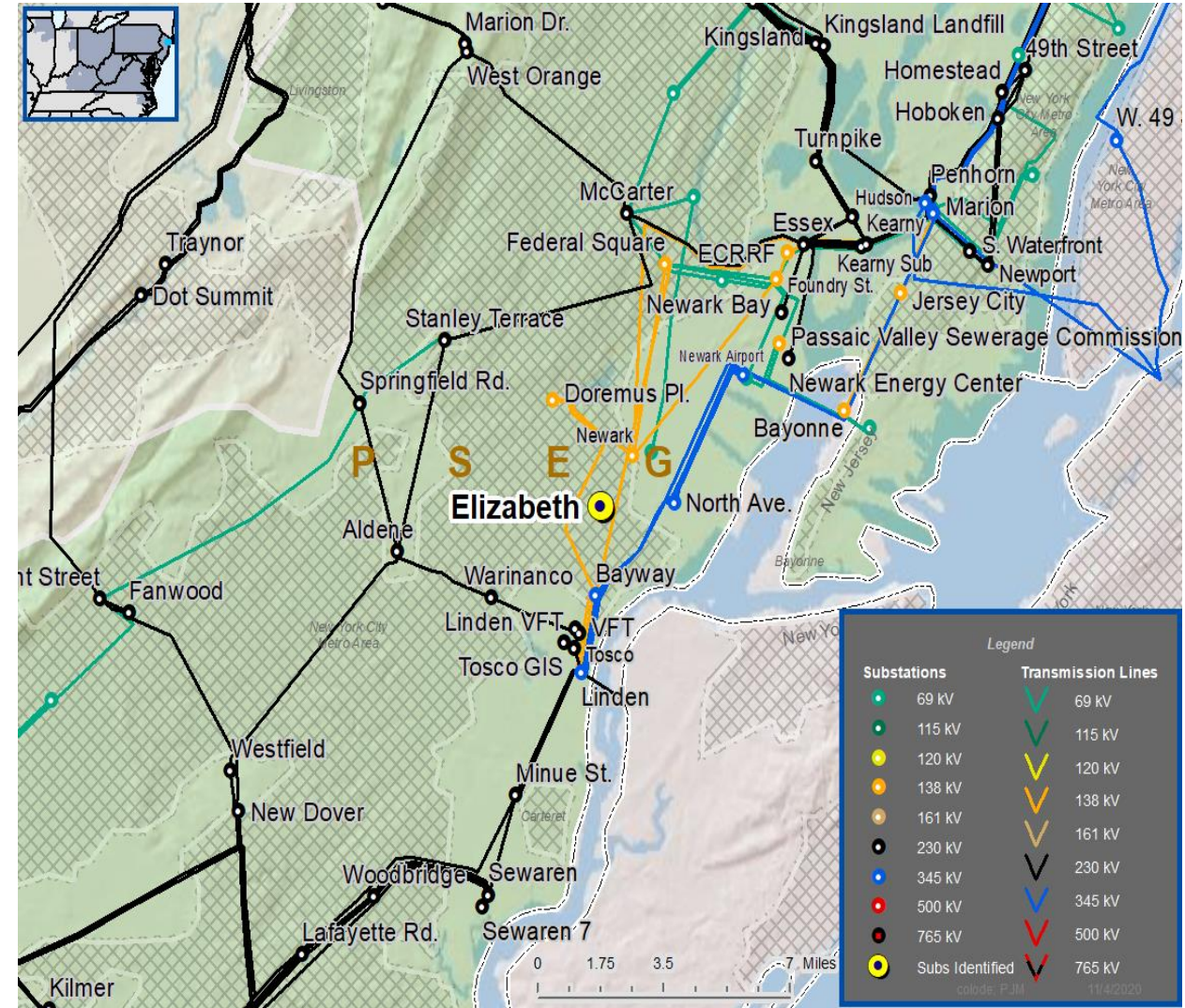
[August 2017 26kV to 69kV PSE&G Presentation](#)

- Equipment Reliability and Condition Assessment
- Asset Risk Model

Problem Statement:

- Elizabeth Substation is supplied by 26kV circuits with increasing performance problems.
 - Over the past decade, the four 26kV supply circuits have seen 11 momentary and 36 extended outages, with total duration of 1147 hours.
 - Station equipment at Elizabeth has been in service since 1914 and needs to be addressed.
 - Historical flooding has compromised some station structures.
 - Elizabeth serves roughly 7,965 customers and 27.3 MVA of load.

Model: 2020 Series 2025 Summer RTEP 50/50





PSE&G Transmission Zone M-3 Process Elizabeth Area

Need Number: PSEG-2020-0010

Process Stage: Solutions Meeting 02/16/2021

Proposed Solution:

- Convert existing Elizabeth 26/4kV substation to a 69/4kV substation
 - Purchase property to accommodate new construction.
 - Install 69kV substation with three (3) 69/4kV transformers.
 - Cut and loop Linden-Vauxhall 69kV circuit into new location.
 - Construct a circuit to Nye Ave 69kV
 - **Estimated Cost:** \$85.8M

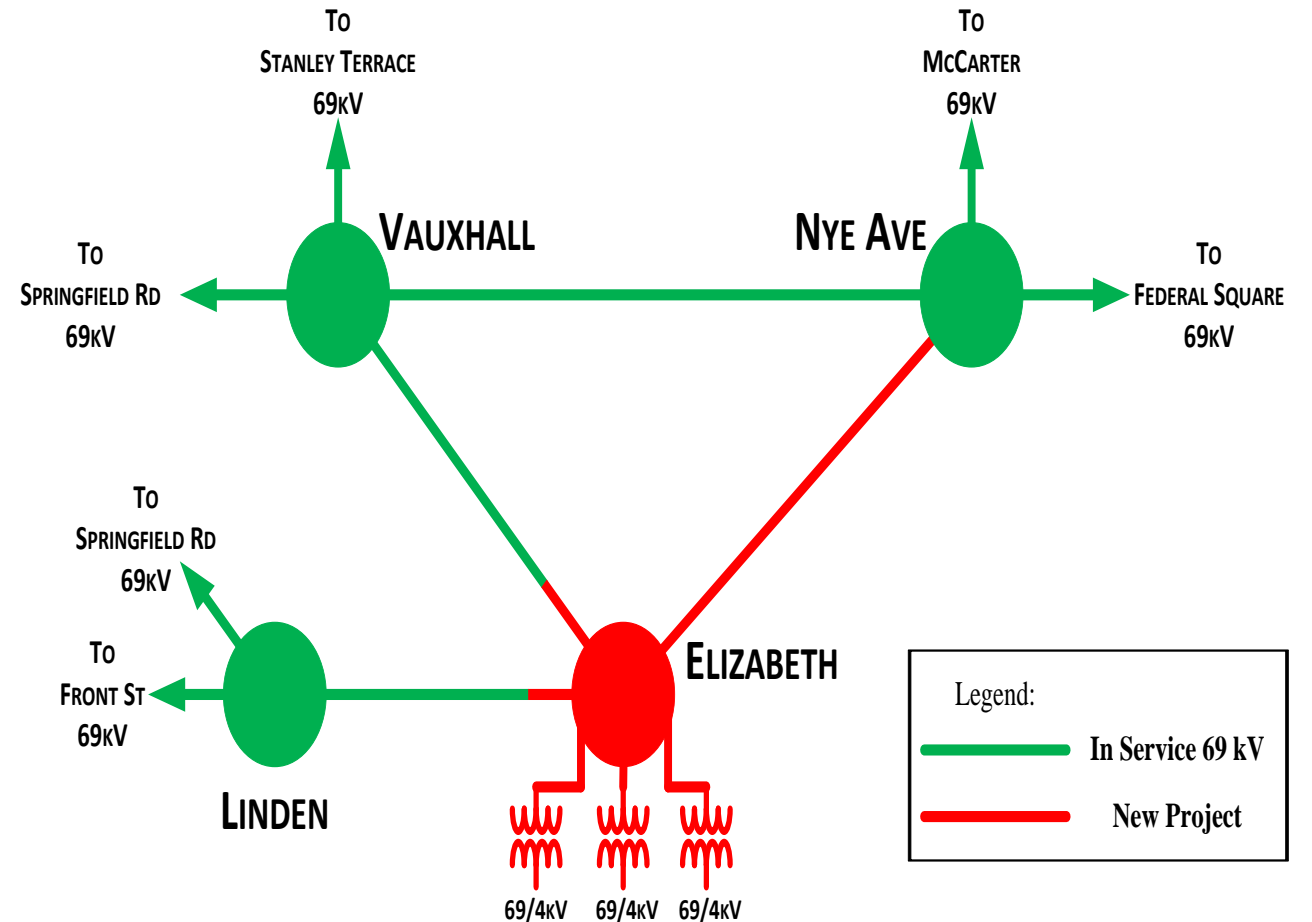
Alternatives Considered:

- Convert existing Elizabeth 26/4kV substation to a 69/4kV substation
 - Purchase property to accommodate new construction.
 - Install 69kV substation with three (3) 69/4kV transformers.
 - Cut and loop Linden-Vauxhall 69kV circuit into new location.
 - Construct a circuit to Stanley Terrace 69kV.
 - **Estimated Cost:** \$102.3M

- Convert existing Elizabeth 26/4kV substation to a 69/4kV substation
 - Purchase property to accommodate new construction.
 - Install 69kV substation with three (3) 69/4kV transformers.
 - Construct a circuit to Nye Ave 69kV.
 - Construct a circuit to Stanley Terrace 69kV.
 - Construct a circuit to Vauxhall 69kV.
 - **Estimated Cost:** \$116.2M

Projected In-Service: 5/31/2025

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

2/5/2021 – V1 – Original version posted to pjm.com