

# SRRTEP COMMITTEE: MID-ATLANTIC PSE&G SUPPLEMENTAL PROJECTS

March 17, 2022

# 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-2022-0002

**Process Stage:** Needs Meeting 03/17/2022

**Supplemental Project Driver:**

- Customer Service

**Specific Assumption Reference:**

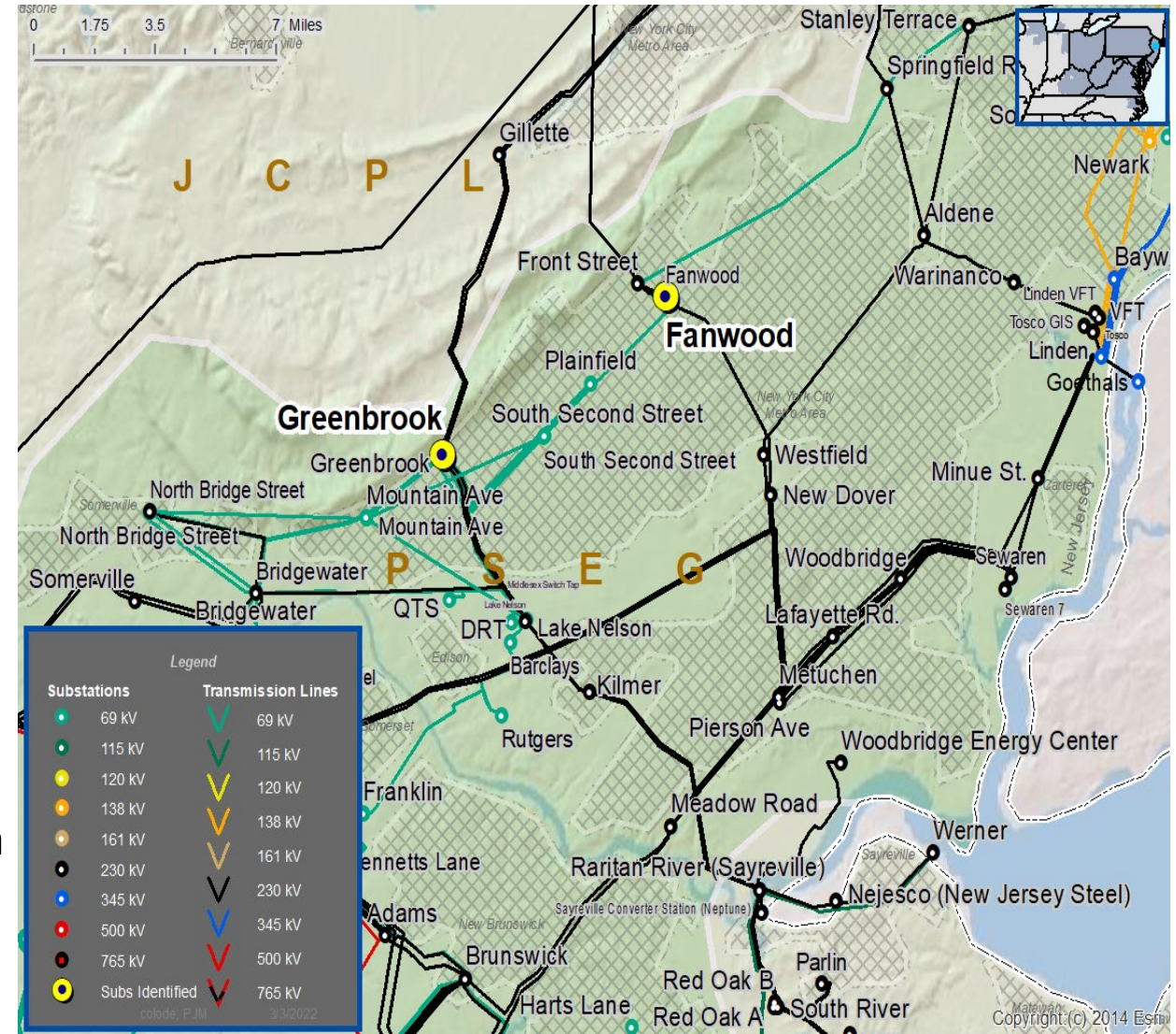
- [PSE&G 2022 Annual Assumptions](#)
- Localized Load Growth & Contingency Overloads

**Problem Statement:**

- Green Brook 1H and Fanwood 1H are substations in the South Plainfield area that are heavily loaded and operate at higher than their 60 MVA capacity for N-1 contingency overload criteria.

- Green Brook 1H serves roughly 19,000 customers with a peak load of 79.3 MVA in 2021.
- Fanwood 1H serves roughly 22,900 customers with a peak load of 85.2 MVA in 2021.

**Model:** 2021 Series 2026 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

**Need Number:** PSEG-2022-0001

**Process Stage:** Solutions Meeting 3/17/2022

**Previously Presented:** Need Meeting 2/17/2022

**Supplemental Project Driver:**

- Equipment Material Condition, Performance and Risk

**Specific Assumption Reference:**

[PSE&G 2022 Annual Assumptions](#)

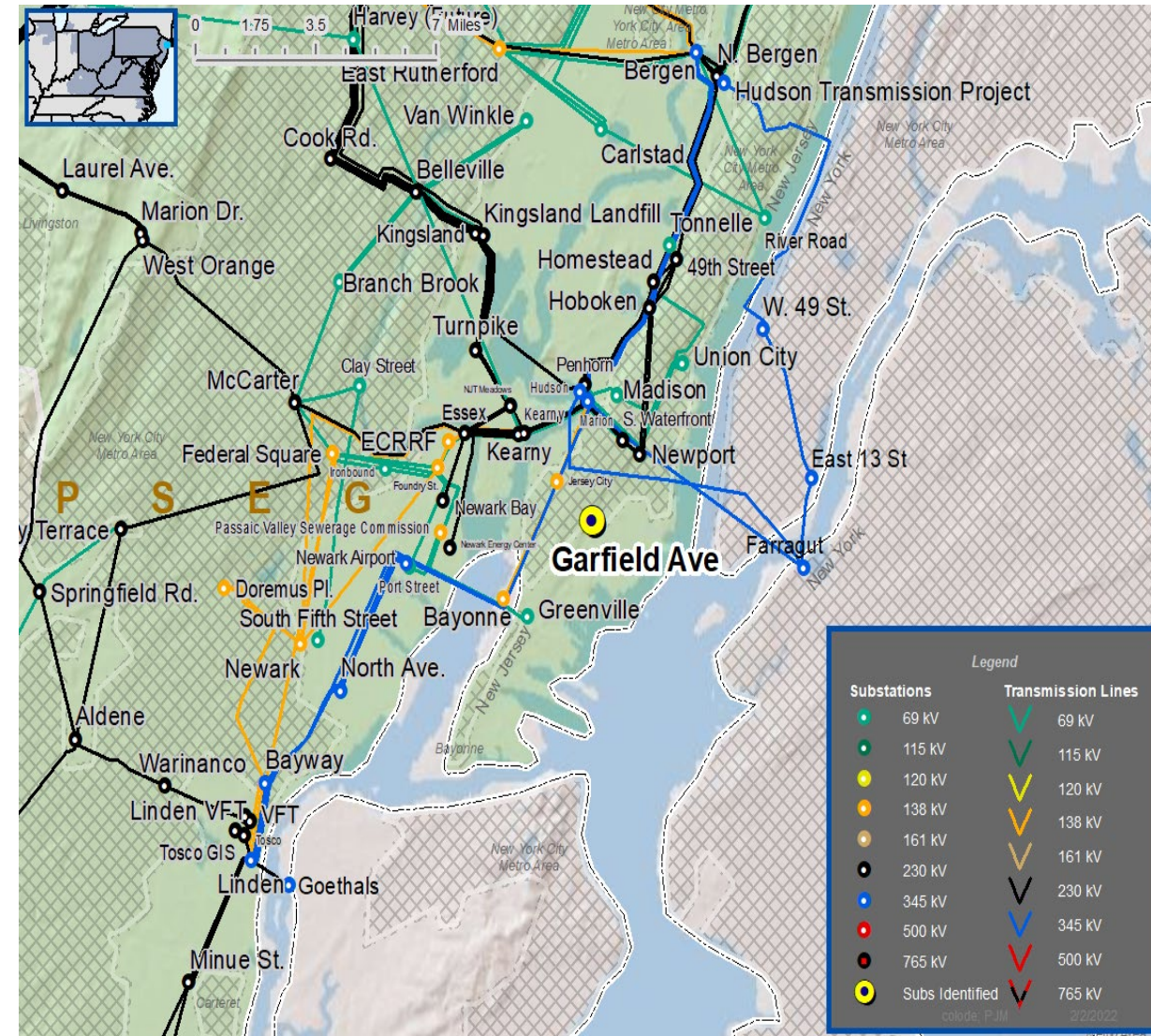
[August 2017 26kV to 69kV PSE&G Presentation](#)

- Equipment Reliability and Condition Assessment
- Asset Risk Model

**Problem Statement:**

- Garfield Avenue Substation is a station in the Jersey City area with no additional supply capacity, no additional station capacity, and station condition issues.
  - Station equipment at Garfield Avenue is in poor condition and needs to be addressed.
  - The substation building was built over 100 years ago, is in poor condition, and is not in compliance with today's NJ UCC requirements.
  - Substation has no additional supply capacity for projected load growth in the area.
  - Garfield serves over 14,600 customers.

**Model:** 2021 Series 2026 Summer RTEP 50/50



**Need Number:** PSEG-2022-0001

**Process Stage:** Solutions Meeting 03/17/2022

**Proposed Solution:**

- Construct new 69-13-4kV station on existing property.
  - Construct a new seven (7) breaker 69kV ring bus.
  - Install three (3) 3 winding 69-13-4kV transformers.
  - Reconfigure the 69kV network by cutting and looping existing 69kV lines in the Jersey City Area into Garfield Ave.
  - **Estimated Cost:** \$85.6M

**Ancillary Benefits:**

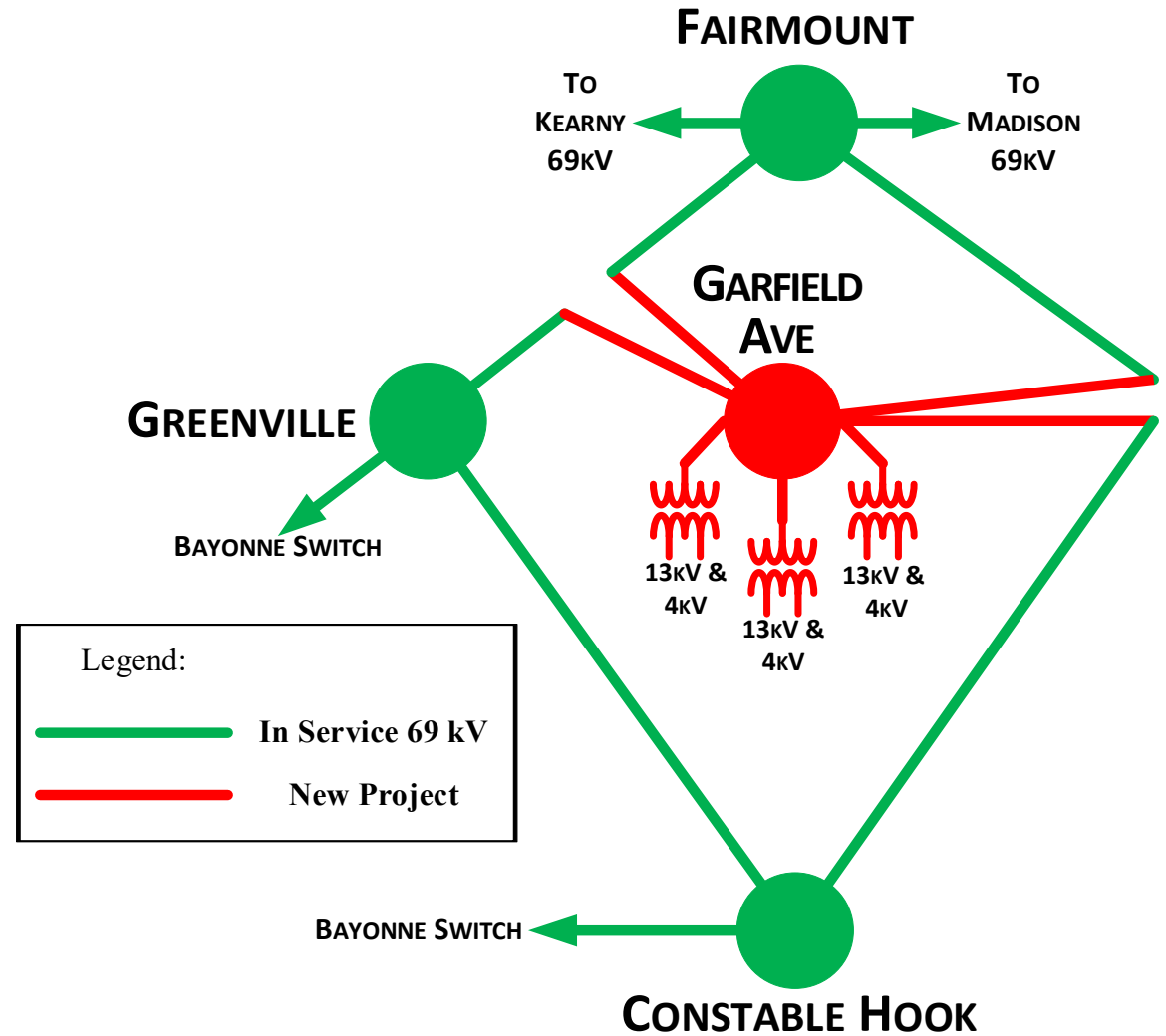
- Provides the ability to leverage an additional 20 MVA of capacity for future growth in densely populated, property-constrained urban setting over alternatives considered with simplified design.
- Third transformer provides additional reliability benefits as it will be used as an operating spare for the station.
- This option minimizes overall construction complexity.

**Alternative Considered:**

- Construct New 69/13kV Station at Garfield Ave with two (2) 69/13kV transformers.
  - Reconfigure the 69kV network by cutting and looping existing 69kV lines in the Jersey City Area into Garfield Ave.
  - More complex construction sequencing and execution.
  - **Estimated Cost:** \$84.2M

**Projected In-Service:** 05/2027

**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

3/7/2022 – V1 – Original version posted to pjm.com