# SRRTEP Committee: Mid-Atlantic PSE&G Supplemental Projects

January 14, 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

# PSE&G Transmission Zone M-3 Process
# Downtown New Brunswick

**Need Number:** PSEG-2020-0012
**Process Stage:** Solutions Meeting 01/14/2021
**Previously Presented:** Need Meeting 11/18/2020

**Supplemental Project Driver:**

- Storm Hardening
- Customer Service
- Equipment Material Condition, Performance and Risk

**Specific Assumption Reference:**

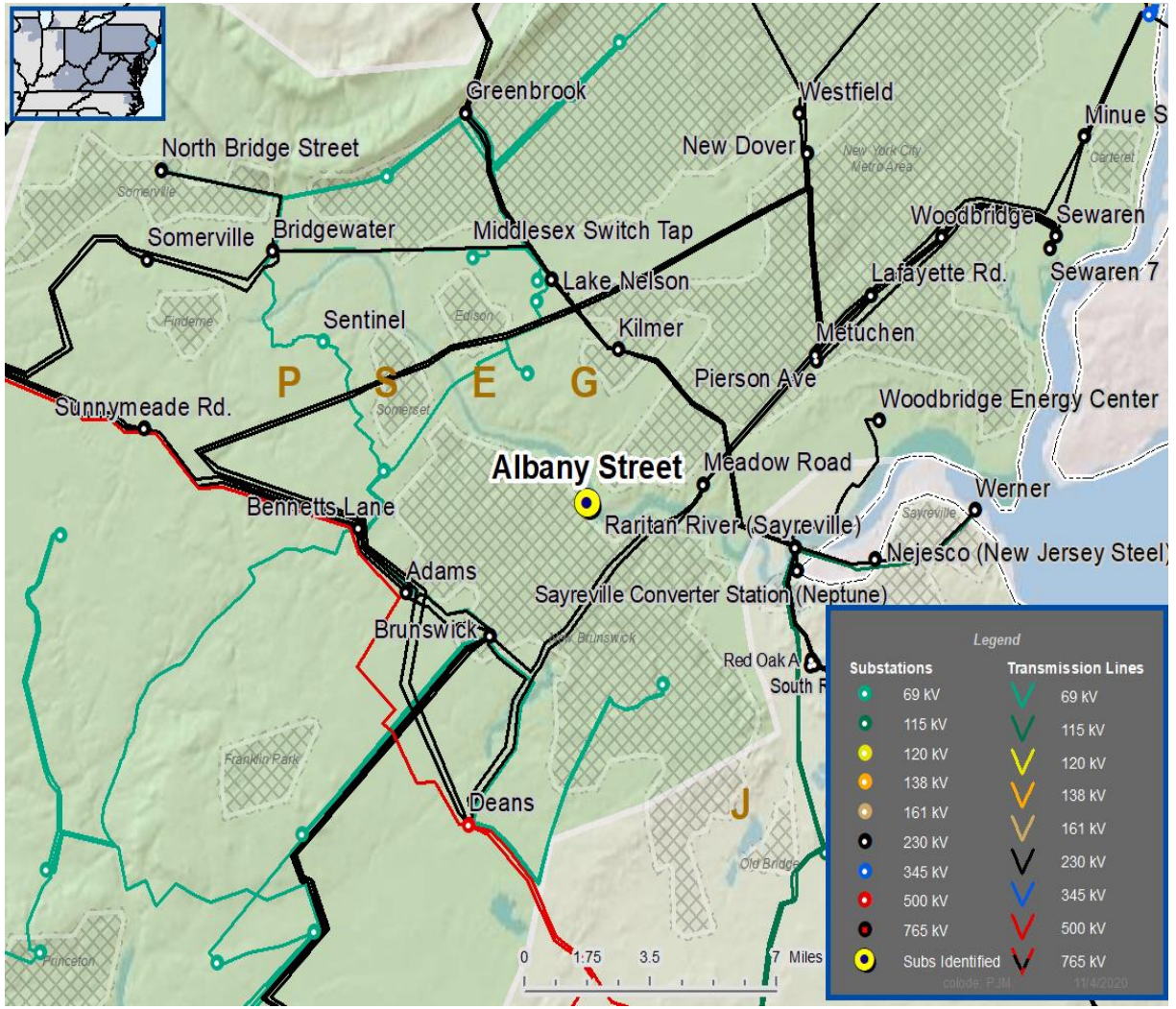
PSE&G 2019 Annual Assumptions

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

**Problem Statement:**

- Albany St is supplied by 26kV circuits with increasing performance problems.
  - Albany St. Station is at risk in a major storm event. Albany St. is surrounded by flood zone and is inaccessible for an extended period during a flooding event.
  - Additional capacity is needed in New Brunswick for a new large customer.
  - Over the past decade, the 26kV supply circuits have seen 17 momentary and 19 extended outages, with total duration of 395 hours.
  - Albany serves roughly 18 MVA of load.

**Model:** 2020 Series 2025 Summer RTEP 50/50



# PSE&G Transmission Zone M-3 Process
# Downtown New Brunswick

**Need Number:** PSEG-2020-0012

**Process Stage:** Solutions Meeting 01/14/2021

**Proposed Solution:**

- Eliminate Albany St Station & modify North Brunswick Area Station to pick up existing loads
  - Eliminate Albany St 26kV Station.
  - Expand North Brunswick Area Station with three (3) 69/26kV transformers.
  - **Estimated Cost:** $29.2M

**Ancillary Benefits:**

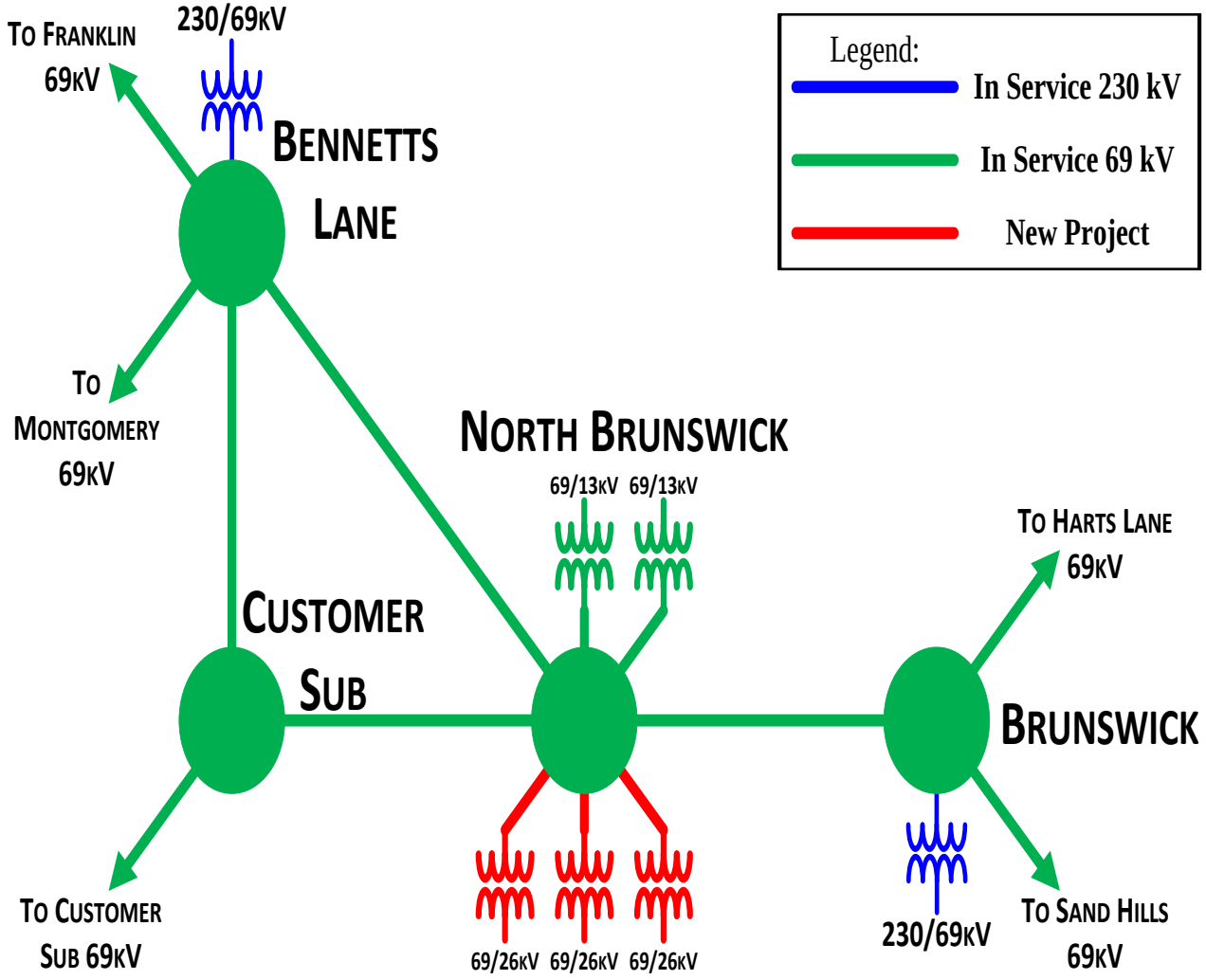
- Provides capacity increase.

**Alternatives Considered:**

1. New 69/26kV Switching Station at new location
   - Eliminate Albany St 26kV Station.
   - Construct a 69kV network between Brunswick, North Brunswick, and a customer Substation.
   - Property constraints - a viable property has not been located.
   - **Estimated Cost:** $73.0M
2. Eliminate Albany St Station & Construct new 26kV Station at a new location
   - Property constraints - a viable property has not been located.
   - Rebuilding of the 26kV breaker station does not address customer service driver.

**Projected In-Service:** 05/2024

**Project Status:** Conceptual



**Need Number:** PSEG-2020-0013
**Process Stage:** Solutions Meeting 01/14/2021
**Previously Presented:** Need Meeting 11/18/2020

**Supplemental Project Driver:**

- Customer Service

**Specific Assumption Reference:**

PSE&G 2019 Annual Assumptions

- Localized Load Growth & Contingency Overloads

**Problem Statement:**

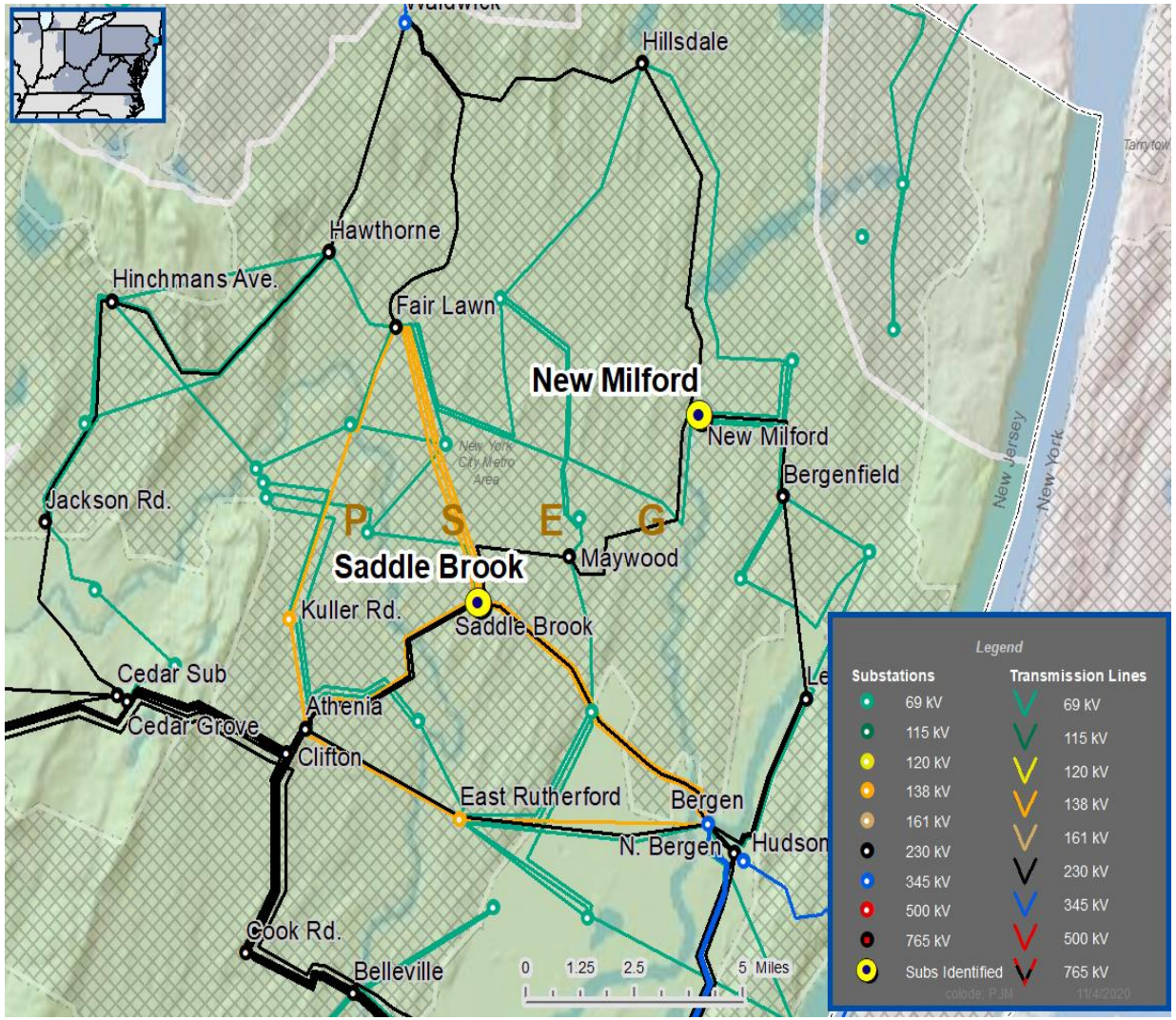
Saddle Brook 2H is a station in the Paramus area at capacity of 60 MVA.

- Saddle Brook serves roughly 20,124 customers with peak load of 67.6 MVA in 2019.

New Milford 1H and 2H is a station in the Paramus area at capacity of 120 MVA.

- New Milford serves roughly 33,472 customers with peak load of 131 MVA in 2019.

**Model:** 2020 Series 2025 Summer RTEP 50/50



# PSE&G Transmission Zone M-3 Process
# Paramus Area

**Need Number:** PSEG-2020-0013

**Process Stage:** Solutions Meeting 01/14/2021

**Proposed Solution:**

- Convert existing Spring Valley Rd 69/4kV substation to a 69/13kV substation
  - Replace three (3) 69/4kV transformers with two (2) 69/13kV transformers at Spring Valley Rd.
  - **Estimated Cost:** $13.2M

**Ancillary Benefits:**

- Provides capacity increase and 13kV self healing loops.
- Facilitates future asset condition based retirements.

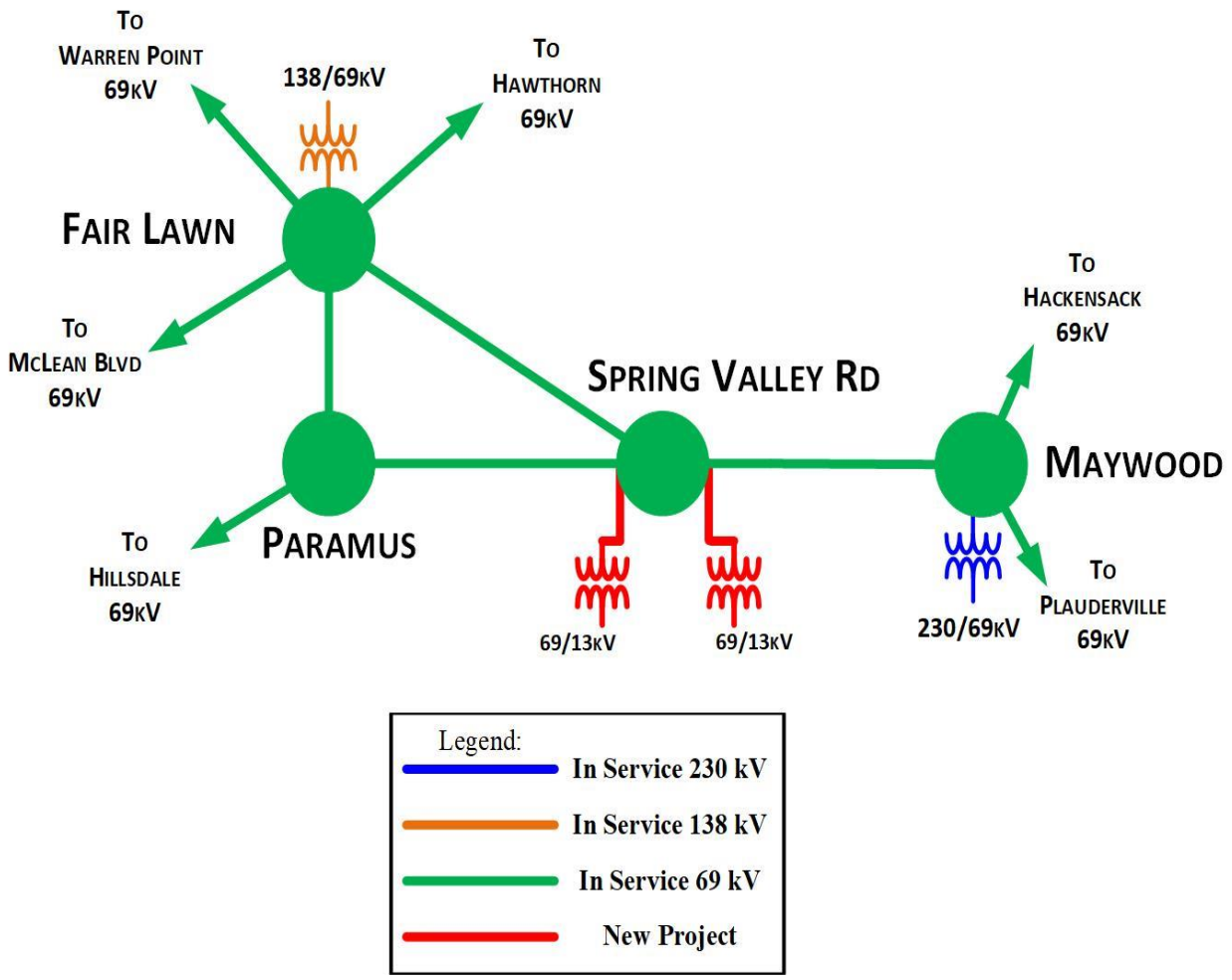
**Alternatives Considered:**

1. Construct a new 69/13kV substation in Paramus
   - Purchase property to accommodate new construction.
   - Install 69kV substation with two (2) 69/13kV transformers.
   - Station space requirements may not have enough buffer to be feasible.
   - **Estimated Cost:** $55.7M

2. Construct a new 69/13kV substation at another location in Paramus
   - Purchase property to accommodate new construction.
   - Install 69kV substation with two (2) 69/13kV transformers.
   - Station space requirements may not have enough buffer to be feasible.
   - **Estimated Cost:** $71.4M

**Projected In-Service:** 12/2024

**Project Status:** Conceptual



# Project Update

**Previously Presented:** SRRTEP Mid Atlantic 08/24/2018

**Process Stage:** Project Update 01/14/2021

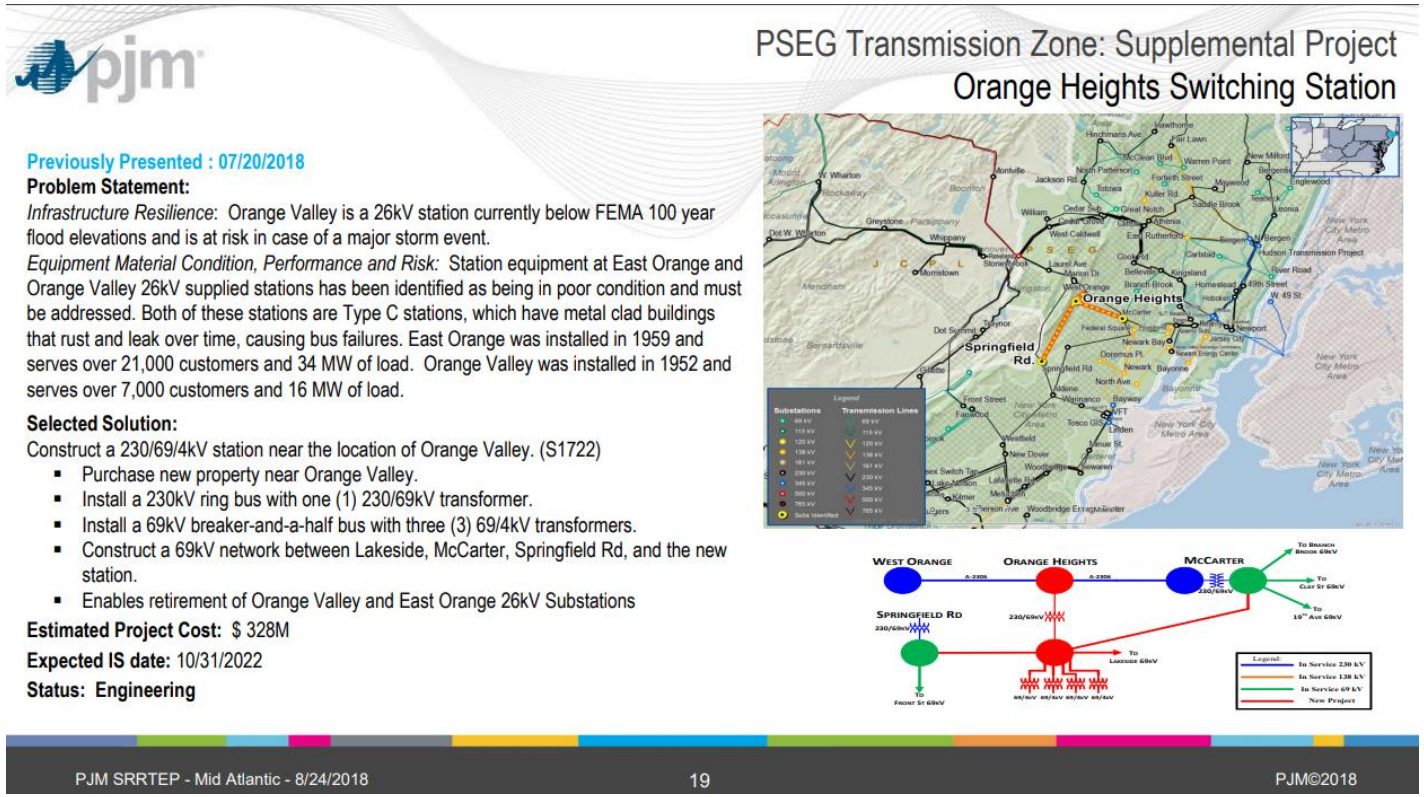
**Project Scope Changes:**

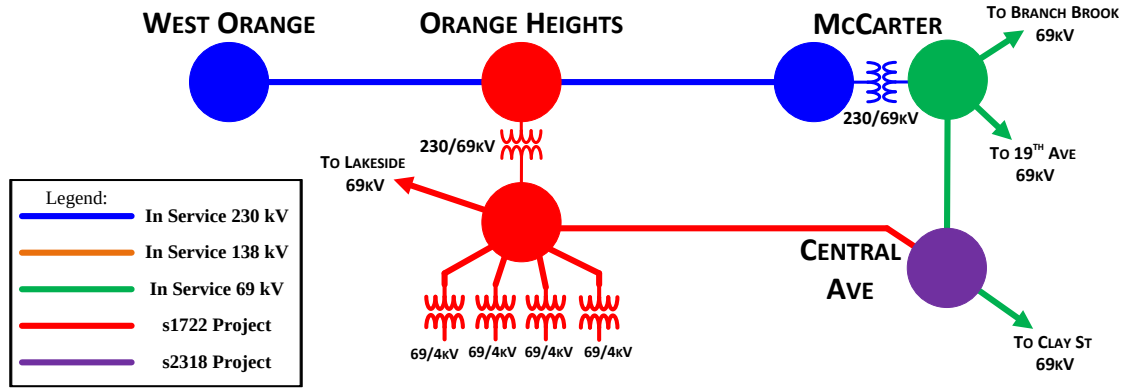
- A new property has been selected for the project.
- Circuit to Springfield Road de-scoped.
- Circuit to McCarter will now terminate at Central Ave.
    - Allows for the de-scoping of an additional GIS buildout at McCarter.

**Revised Estimated Cost:** $167M

**Projected In-Service:** 12/2023

**Project Status:** Engineering



# 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

1/11/2020 – V1 – Original version posted to pjm.com