

Hudson County 69kV Projects Update

August 27, 2019

Background

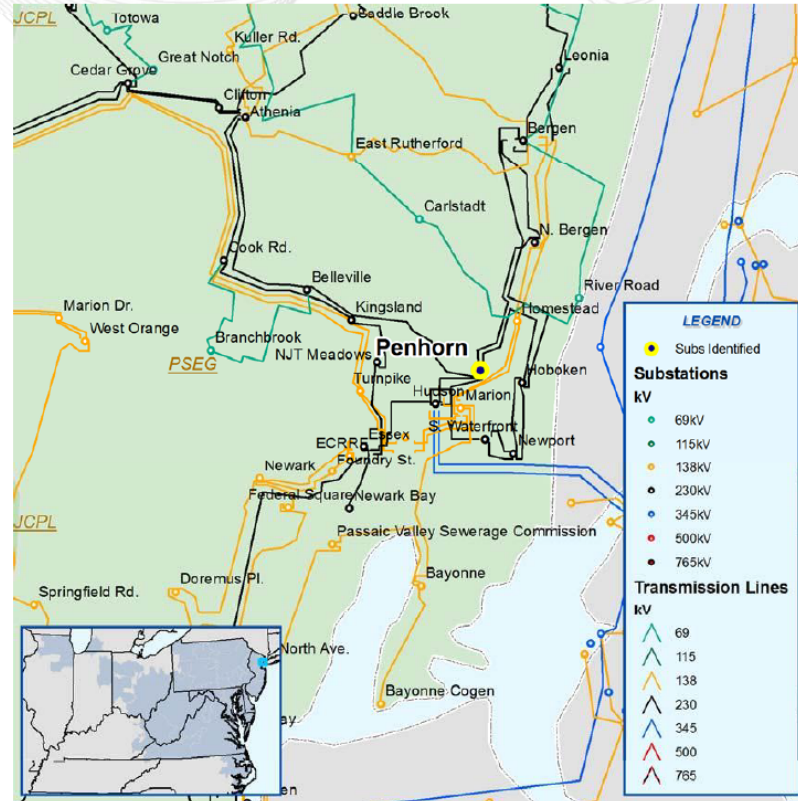
- Three projects within the same network, s0239, s0483, and s1016, were targeted at addressing load growth and area reliability
- Several scope changes were required to address property constraints
- Stations were flooded after Super Storm Sandy causing additional location considerations
- Overall concerns have been addressed in a manner that met original drivers with overall cost \$3.4M lower
- Appropriate time for stakeholder update; In-service dates revised and operating procedures leveraged to ensure no performance impacts

Reference: s0239



PSEG Transmission Zone

- PSEG Reliability:
- To improve the area load reliability
- Proposed Solution:
Build a new 69 kV buses at Marshall Street and Madison Street. Build a new 69 kV circuits from Marshall St. – Penhorn Switch, Marshall St. – Madison St., and build 69 kV double circuit from Madison St. – Penhorn Switch (S0239).
- Estimated Project Cost: \$46.9 M
- Expected IS Date: 6/1/2016

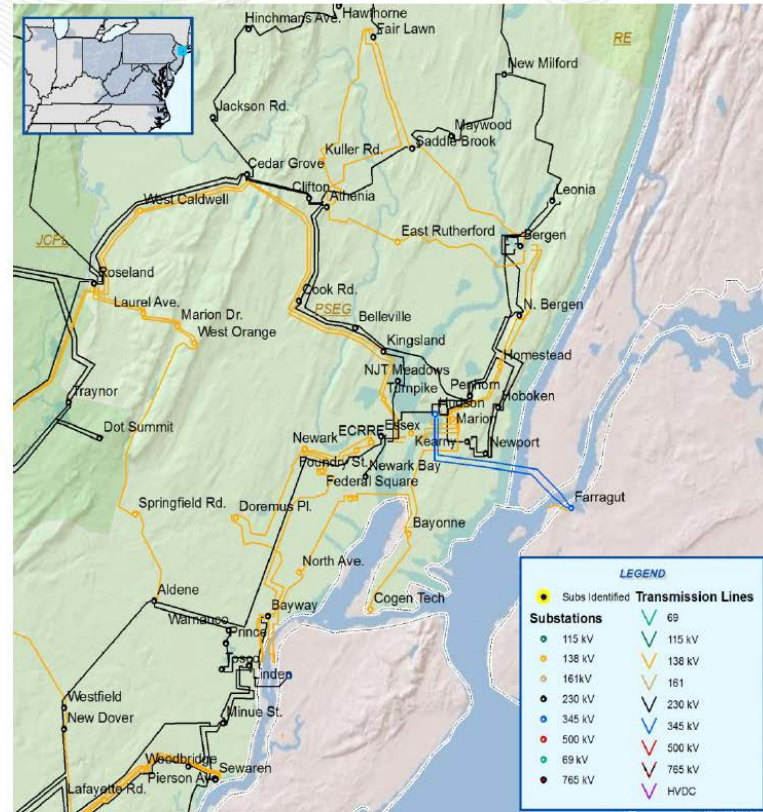


Reference: s0483



PSE&G Transmission Zone

- PSE&G Reliability Criteria :
- Improves reliability at Clay St and Harrison Substation due to age and condition of the equipments.
- Proposed Solution:
 - Construct a new Newport, Kearny, Harrison and Clay Street 69 kV substations and build 69 kV circuit from Newport – Kearny - Harrison - Clay Street (S0483).
- Estimated Project Cost: \$ 127.5 M
- Expected IS Date: 12/12/2017

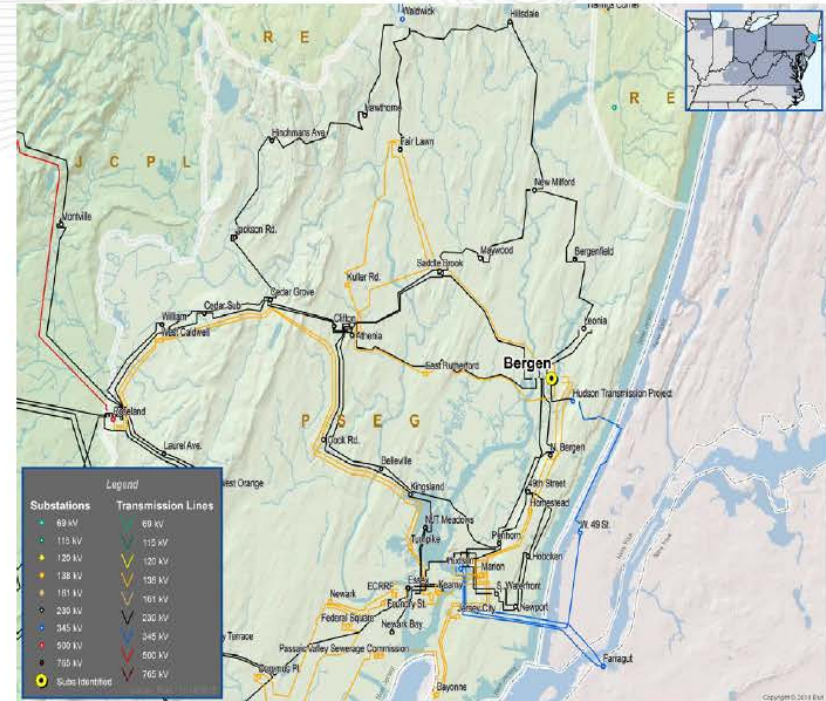


Reference: s1016



- Supplemental Upgrade :
- This project will provide capacity for future load growth in the area and to retire Marshall Street 26/4kV Substation.
- Proposed Solution:
 - Build a new Madison 230 kV substation with 3 breaker ring bus configuration by looping the R-2270 230 kV circuit
 - Build a new Madison 69 kV substation with 8 breaker ring bus configuration and install one 230/69 kV auto-transformer.
 - Install four 69/4 kV transformers at the new Madison station. (S1016)
- Estimated Project Cost:
\$ 124.627 M
- Projected IS Date:
12/31/2018

PSEG Transmission Zone



Scope Changes to s0239, s0483, and s1016

s0239: Penhorn to Madison only requires a single circuit due to interconnection with other area projects.

s0483: Project terminates at Penhorn 69kV rather than Newport.

s1016: De-scope 230kV ring at Madison. Madison 230/69kV transformer is moved to Penhorn.

Original overall cost estimate: \$299.0M

Revised overall cost estimate: \$295.6M

In-service Date: June 2020 (s0239); October 2020 (s0483 and s1016)

Revision History

8/15/2019 – V1 – Original post to pjm.com