Transmission Expansion Advisory Committee – PSE&G Supplemental Projects

October 6, 2020

Solution

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 Belleville Area

Need Number: PSEG-2020-0006

Process Stage: Solution Meeting 10/06/2020

Previously Presented: Need Meeting 09/01/2020

Supplemental Project Driver:

Customer Service

Specific Assumption Reference:

PSE&G 2019 Annual Assumptions

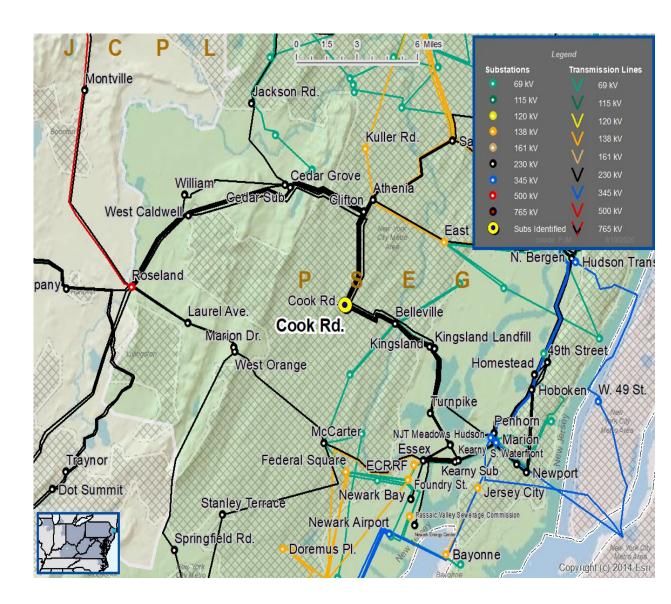
Localized Load Growth & Contingency Overloads

Problem Statement:

Cook Rd is a station in the Belleville area at capacity of 120 MVA.

 Cook Rd serves roughly 49,000 customers with a peak load of 145 MVA in 2019.

Model: 2020 Series 2025 Summer RTEP 50/50





Need Number: PSEG-2020-0006

Process Stage: Solutions Meeting 10/06/2020

Proposed Solution:

New 230-13kV Station along the existing ROW at Washington Ave

o Install a 230kV bus station with two (2) 230/13kV transformers.

O Cut and loop the Cook Rd-Kingsland 230kV line into the 230kV bus.

Transfer load from heavily loaded Cook Rd to the new station.

o Estimated Cost: \$31.2M

Ancillary Benefits:

 Does not require any additional construction of new 230kV due to close proximity to the 230kV Right of Way.

 Decreases the amount of exposure and increases the reliability of the 230kV circuit.

Alternatives Considered:

New 69-13kV Station at Washington Ave

o Purchase property to accommodate new construction

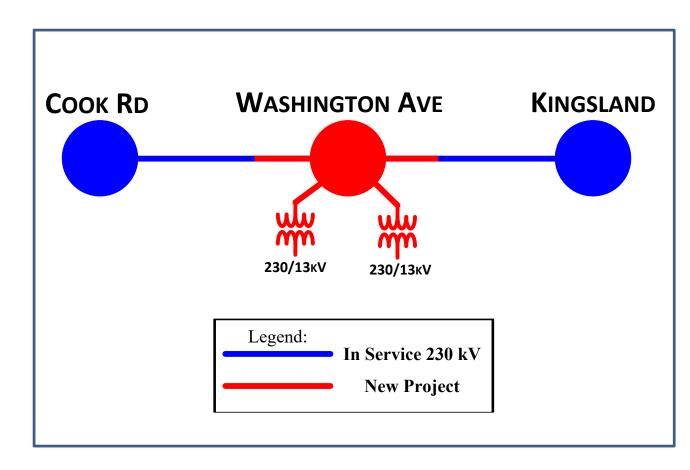
o Install a 69kV station with two (2) 69/13kV transformers.

 Construct a 69kV network between Belleville, Branch Brook, Harvey and Washington Ave.

o Transfer load from heavily loaded Cook Rd to the new station.

Estimated Cost: \$93.6MProjected In-Service: 05/2024

Project Status: Conceptual





PSE&G Transmission Zone M-3 Process Northern Camden County Area

Need Number: PSEG-2020-0007

Process Stage: Solution Meeting 10/06/2020

Previously Presented: Need Meeting 09/01/2020

Supplemental Project Driver:

Customer Service

Specific Assumption Reference:

PSE&G 2019 Annual Assumptions

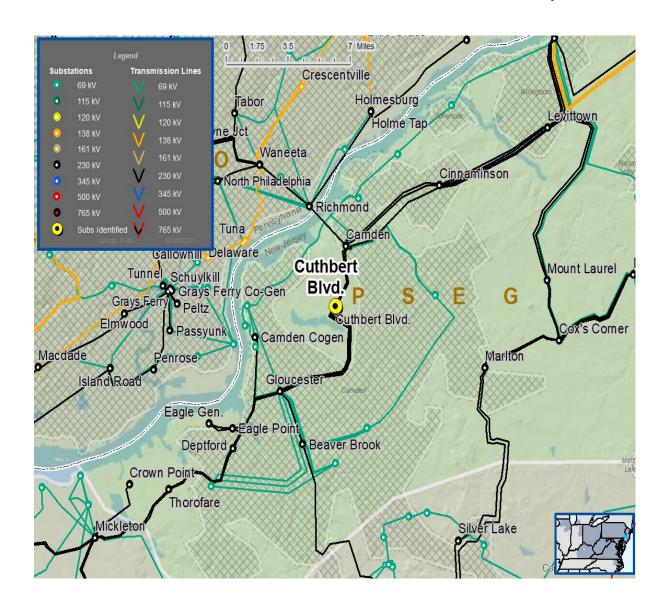
Localized Load Growth & Contingency Overloads

Problem Statement:

Cuthbert Blvd is a station in the Northern Camden area at capacity of 120MVA.

 Cuthbert Blvd serves roughly 33,000 customers with a peak load of 143MVA in 2019.

Model: 2020 Series 2025 Summer RTEP 50/50





Need Number: PSEG-2020-0007

Process Stage: Solutions Meeting 10/06/2020

Proposed Solution:

• New 230-13kV Station along the existing ROW in Pennsauken

o Install a 230kV station with two (2) 230/13kV transformers.

o Cut and loop the Camden-Cinnaminson 230kV line into the 230kV bus.

o Transfer load from heavily loaded Cuthbert Blvd to the new station.

o Estimated Cost: \$48.6M

Ancillary Benefits:

 Does not require any additional construction of new transmission circuits due to close proximity to the 230kV Right of Way.

o Decreases the amount of exposure and increases the reliability of the 230kV circuit.

Alternatives Considered:

New 69-13kV Station in Pennsauken

o Install a 69kV station with two (2) 69/13kV transformers.

o Construct a 69kV network between Camden, Mapleshade, Riverside and Pennsauken.

o Transfer load from heavily loaded Cuthbert Blvd to the new station.

o **Estimated Cost:** \$54.2M

New 230-69-13kV Station along the existing ROW in Pennsauken

o Install a 230kV station with one (1) 230/69kV transformer.

o Cut and loop the Camden-Cinnaminson 230kV line into the 230kV bus.

o Install a 69kV station with two (2) 69/13kV transformers.

o Construct a 69kV network between Camden, Mapleshade and Pennsauken.

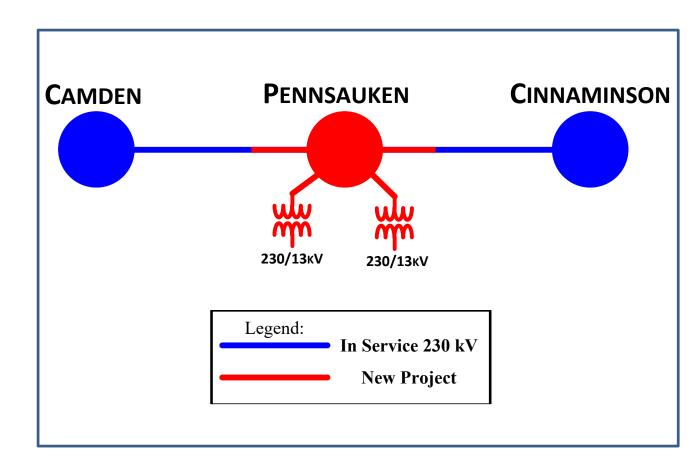
o Transfer load from heavily loaded Cuthbert Blvd to the new station.

Estimated Cost: \$97.6M

Projected In-Service: 05/2024

Project Status: Conceptual

PSE&G Transmission Zone M-3 Process Northern Camden County Area



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	Activity	Timing
Supplemental	Do No Harm (DNH) analysis for selected solution	Prior to posting selected solution
Projects & Local	Post selected solution(s)	Following completion of DNH analysis
Plan	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

9/25/2020 – V1 – Original version posted to pjm.com