Transmission Expansion Advisory Committee – PSE&G Supplemental Projects

June 2, 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

TEAC – PSE&G Supplemental 06/02/2020



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

Need Number: PSEG-2020-0001

Process Stage: Solutions Meeting 6/02/2020

Previously Presented: Need Meeting 4/14/2020

Supplemental Project Driver:

Customer Service

Specific Assumption Reference:

PSE&G 2019 Annual Assumptions

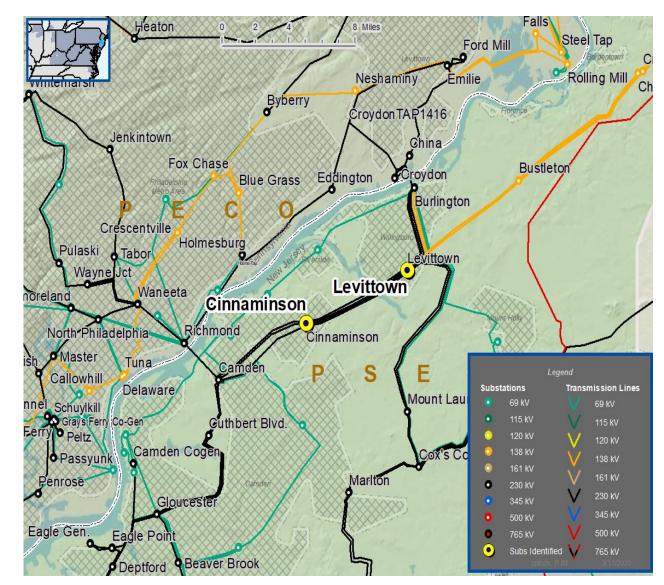
Localized Load Growth & Contingency Overloads

Problem Statement:

Cinnaminson and Levittown are stations in the Northern Camden/ Southern Burlington area respectively at capacity of 120 MVA each. The stations are currently at capacity.

- Cinnaminson serves roughly 20,500 customers with peak load of 121 MVA in 2019.
- Levittown serves roughly 34,000 customers with peak load of 126 MVA in 2019.

Model: 2019 Series 2024 Summer RTEP 50/50





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

Need Number: PSEG-2020-0001

Process Stage: Solutions Meeting 6/02/2020

Proposed Solution:

New 230kV Station in Rancocas

o Install a 230kV station on existing Right of Way with two (2) 230/13kV transformers.

o Cut and loop the Camden-Burlington 230kV line in to the 230kV bus.

o Transfer load from heavily loaded Cinnaminson and Levittown to the new station.

o Estimated Cost: \$39M

Ancillary Benefits:

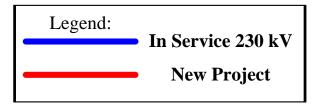
Decreases the amount of exposure and increases the reliability of the 230kV circuit.
 Line exposure to a fault is halved by the cut and loop in to the new station.

Alternatives Considered:

- New 69kV Substation in Rancocas
 - o Install a 69kV station with two (2) 69/13kV transformers.
 - Would require construction of a 69kV network between Delair, East Riverton, Burlington and the new station.
 - o Transfer load from heavily loaded Cinnaminson and Levittown to the new station.
 - Estimated Cost: \$79M
- New 230-69kV Substation in Rancocas
 - o Install a 230-69kV station with one (1) 230/69kV transformers in Rancocas.
 - o Install two (2) 69/13kV transformers at Riverside.
 - Cut and loop the Camden-Burlington 230kV line in to the 230kV bus.
 - Would require construction of a 69kV network between Delair, East Riverton, Rancocas and Riverside
 - o Transfer load from heavily loaded Cinnaminson and Levittown to the new station.
 - Estimated Cost: \$85M

Projected In-Service: 05/2024
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	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

5/21/2020 – V1 – Original version posted to pjm.com