PECO 2019
Submission of Supplemental Projects for Inclusion in the Local Plan

Need Number: PE-2019-0001

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 08/08/2019

Previously Presented:

Need 01/25/2019

Solution 02/22/2019

Project Driver:

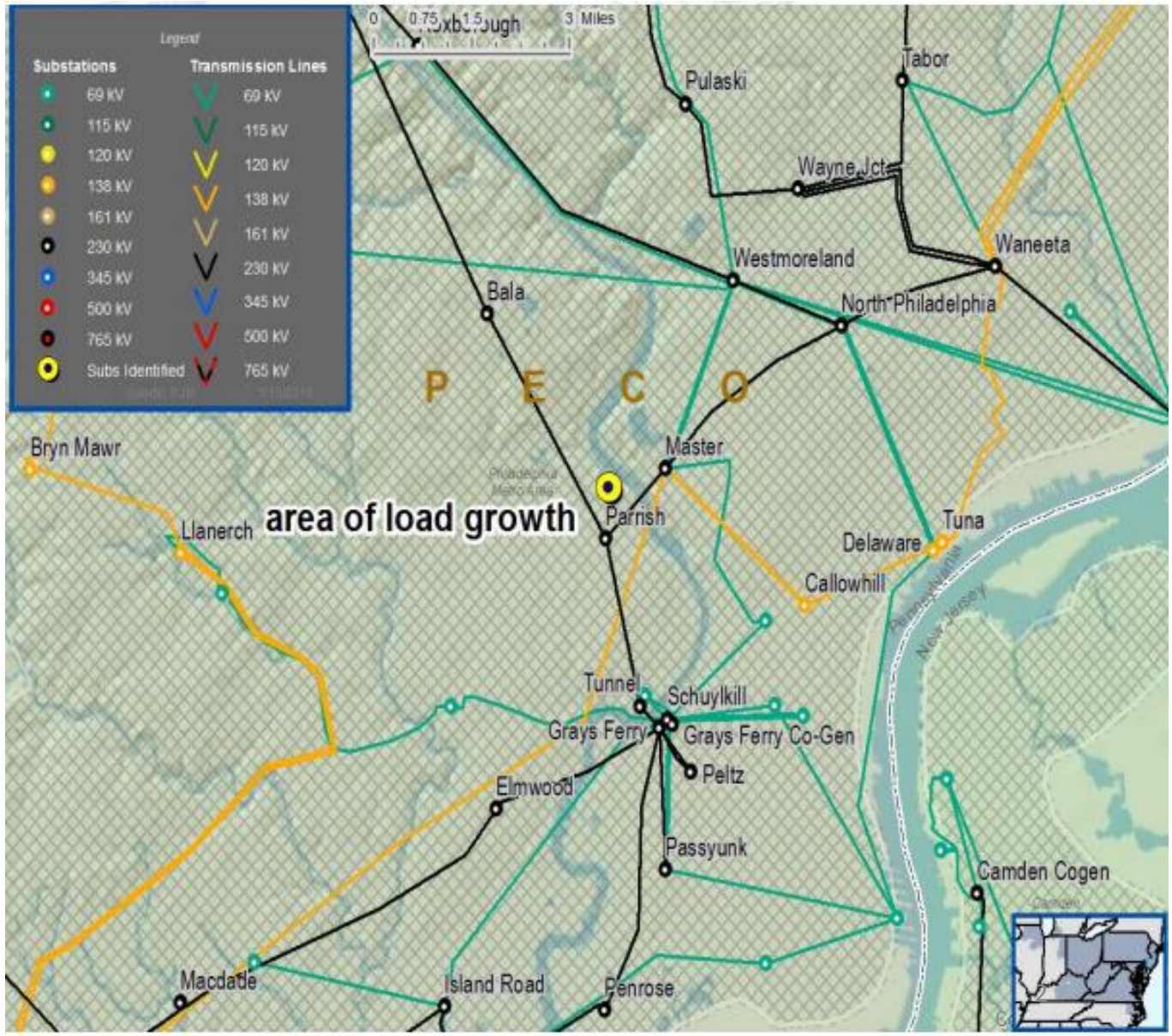
Customer Service

Specific Assumption Reference:

PECO Energy Transmission Planning Assumptions document presented to SRRTEP on December 7, 2018

Problem Statement:

Customer load growth in the Upland area of Delaware County PA.



Need Number: PE-2019-0001

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 08/08/2019

Selected Solution:

New 230/13 kV Distribution Substation

- Purchase property to accommodate construction
- Install 230 kV bus and two (2) 230/13 kV transformers
- Construct tap from existing 230kV Bala to Parrish line to feed new substation.
- Transfer load from nearby heavily loaded Llanerch, Bala, and Parrish substations to new Upland substation.

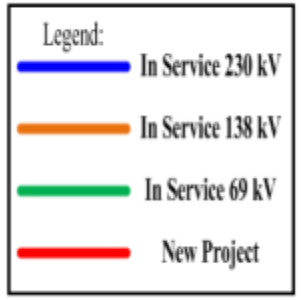
Estimated Cost: $27M

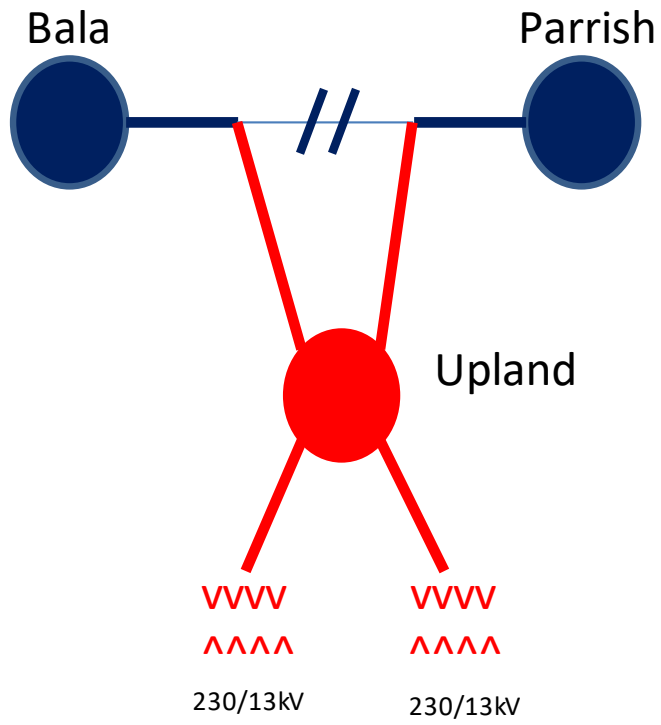
Projected In-Service: 06/01/2021

Supplemental Project ID: s1849

Project Status: Engineering

Model: 2023 RTEP





Need Number: PE-2019-0003, 0004, 0005

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 08/08/2019

Previously Presented:

Need 02/22/2019 and 03/22/2019

Solution 04/26/2019

Project Driver:

Customer Service

Specific Assumption Reference:

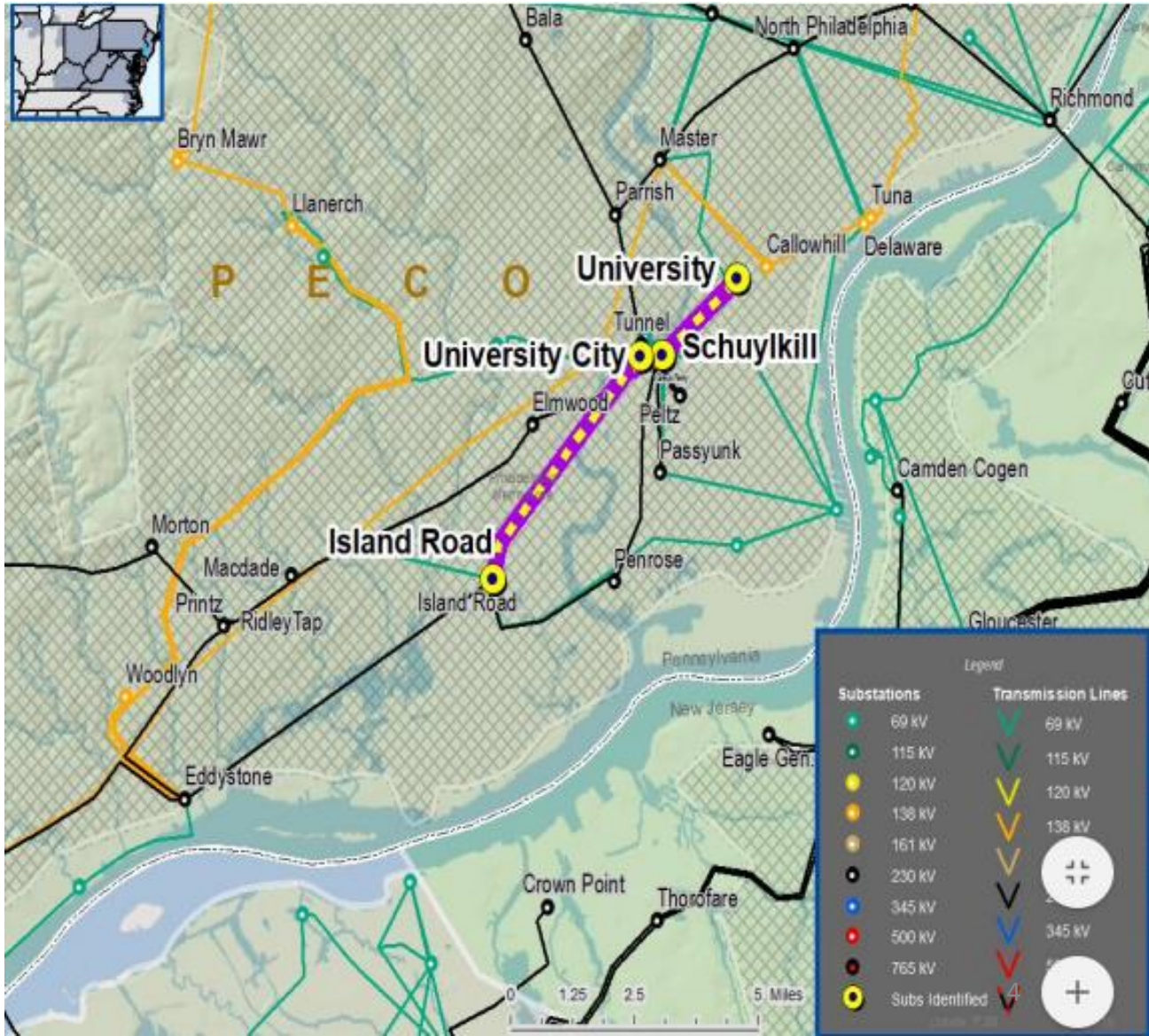
PECO Energy Transmission Planning Assumptions document presented to SRRTEP on December 7, 2018

Problem Statement:

PE-2019-0003: The portion of the Island Road to Schuylkill 69 kV transmission line that runs under the Schuylkill River is in a tunnel that is in deteriorating condition. (2/22/19)

PE-2019-0004: The portion of the University to Schuylkill 69 kV transmission line that runs under the Schuylkill River is in a tunnel that is in deteriorating condition. (2/22/19)

PE-2019_0005: PECO distribution has requested transmission supply to serve 50 MVA of load in the University City area of the city of Philadelphia..(3/22/19)



Need Number: PE-2019-0003, 0004, 0005

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 08/08/2019

Selected Solution:

New 69/13 kV Distribution Substation

- Install 69kV bus and two (2) 69/13 kV transformers
- Tap existing 69kV Schuylkill to Angora, Schuylkill to Island Road, and Schuylkill to University lines to feed new substation. Retire portions of the Schuylkill to Island Road and Schuylkill to University lines under the Schuylkill river.
- Transfer load from Peltz substation to new Civic substation and add additional new load.
- Relocate north connection point of Schuylkill North-Central bus tie to open terminal position of retired Island Road to Schuylkill line
- Rebuild 69kV Passyunk – Southwark line

Ancillary Benefits: Operational Flexibility

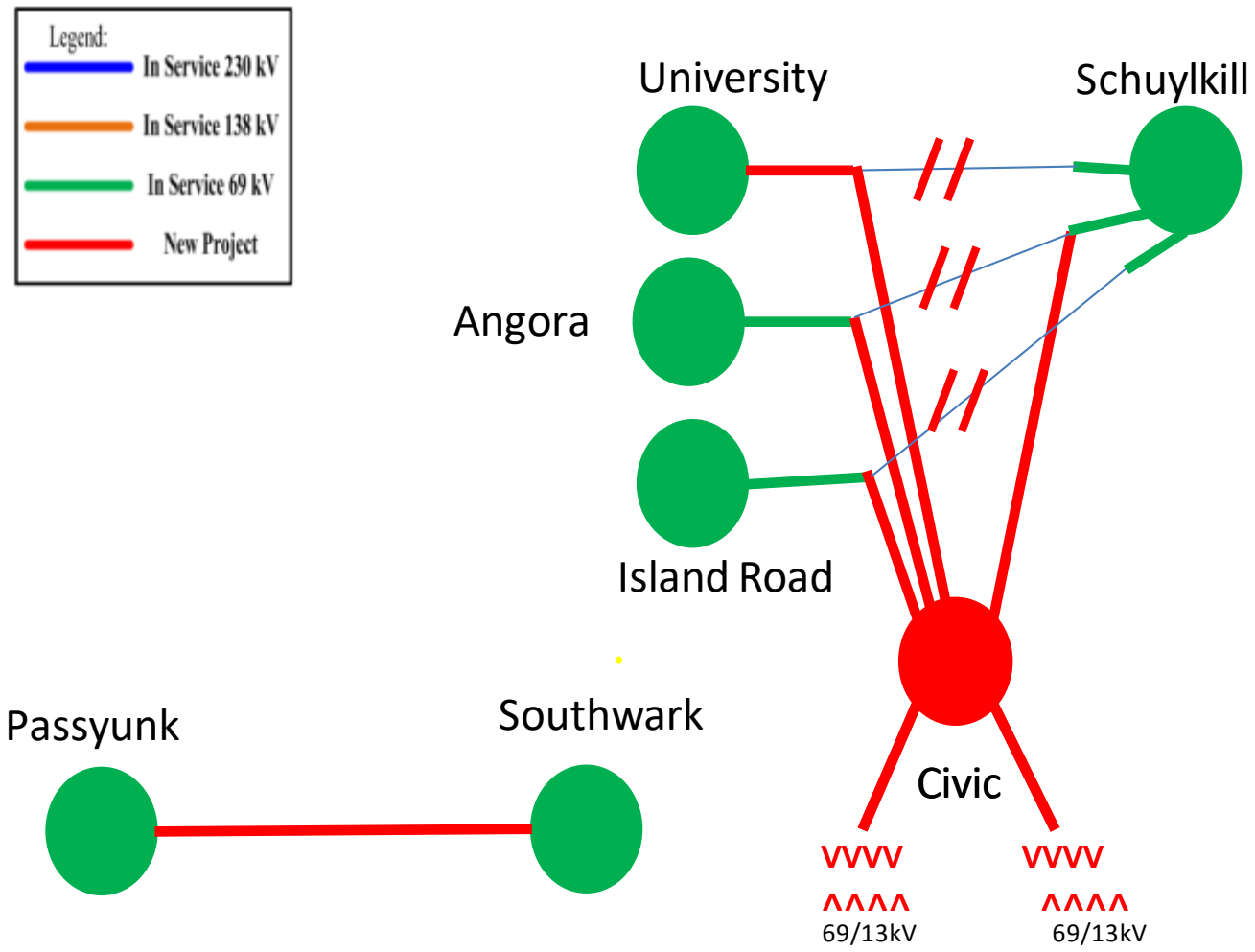
Estimated Cost: $89M

Projected In-Service: 12/31/2023

Supplemental Project ID: s1850

Project Status: Engineering

Model: 2023 RTEP



Need Number: PE-2019-0006

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 12/06/2019

Previously Presented:

Need Meeting June 28, 2019

Solution Meeting October 21, 2019

Project Driver: Customer Service

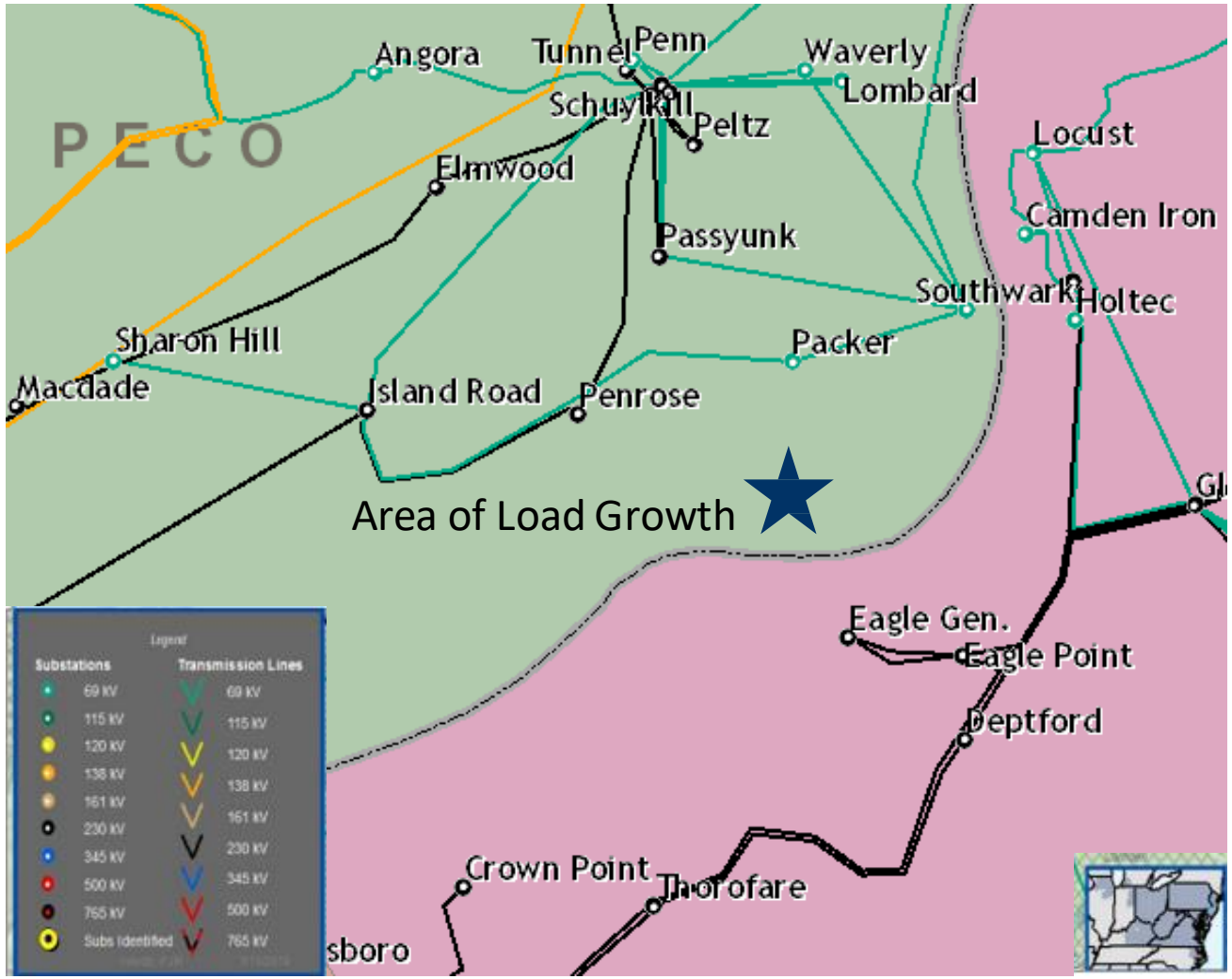
Specific Assumption Reference:

System configuration changes due to new or expansion of existing distribution substations

PECO Energy Transmission Planning Assumptions document presented to SRRTEP on December 7, 2018.

Problem Statement:

PECO Distribution Planning has been requested to support additional load growth in the South Philadelphia area of the City of Philadelphia



Initial 2023 Load	Projected 2024 Load
Summer 20MVA	Summer 65MVA

Need Number: PE-2019-0006

Process Stage: Submission of Supplemental Project for inclusion in the Local Plan 12/06/2019

Selected Solution:

Construct new 230/13kv substation.

- Construct new (Navy Yard) 230 kV breaker and half configuration bus by tapping the existing Penrose - Island Rd 230 kV circuit and Install two 230/13 kV transformers
  Cost $71M

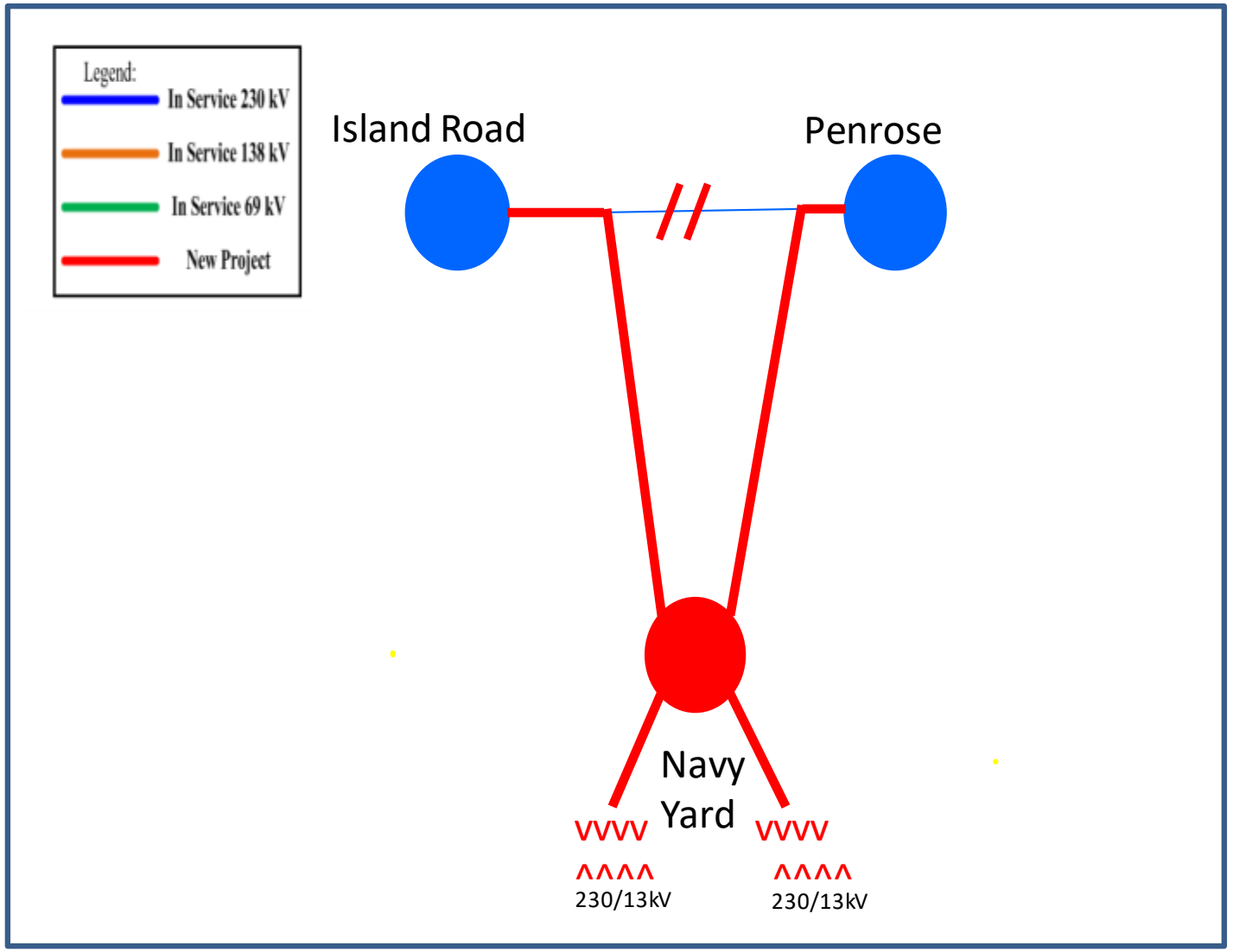
Ancillary Benefits: Provide additional 230kV transmission infrastructure closer to areas of load growth.

Projected In-Service: Summer 2023

Supplemental Project ID: s2076

Project Status: Conceptual

Model: 2023 PJM RTEP



Revision History

12/6/2019 – V4 – Added local plan for S2076

08/27/2019 – V3 – Slides 4 & 5: Added Need Numbers PECO-2019-0003 and PECO-2019-0004 to the slide header.

08/23/2019 – V2 – Revised supplemental IDs to s1849 & s1850 (from s1826 & s1827)

08/08/2019 – V1 – Posted supplemental projects s1826 & s1827