

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:**

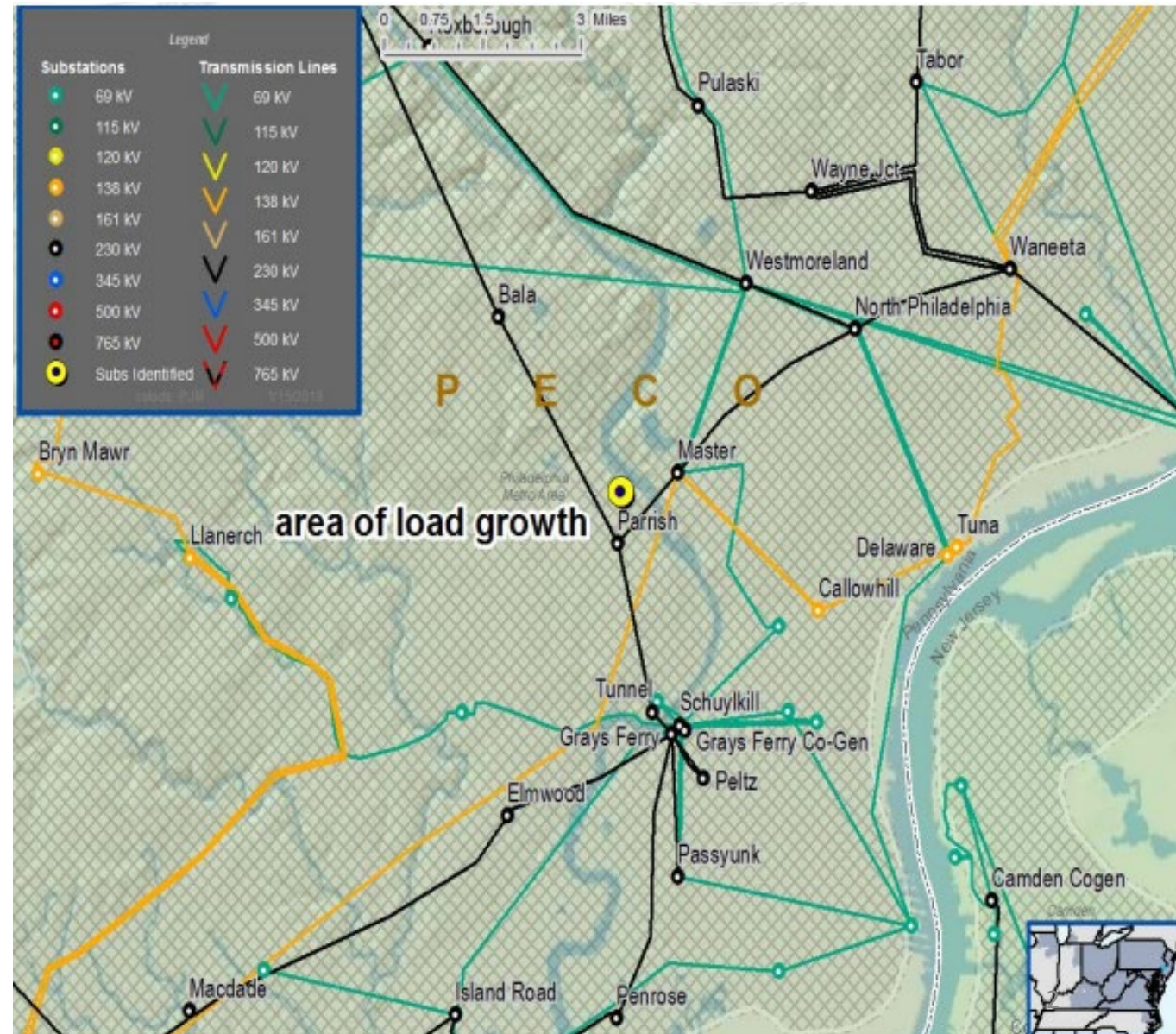
Customer Service

**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.

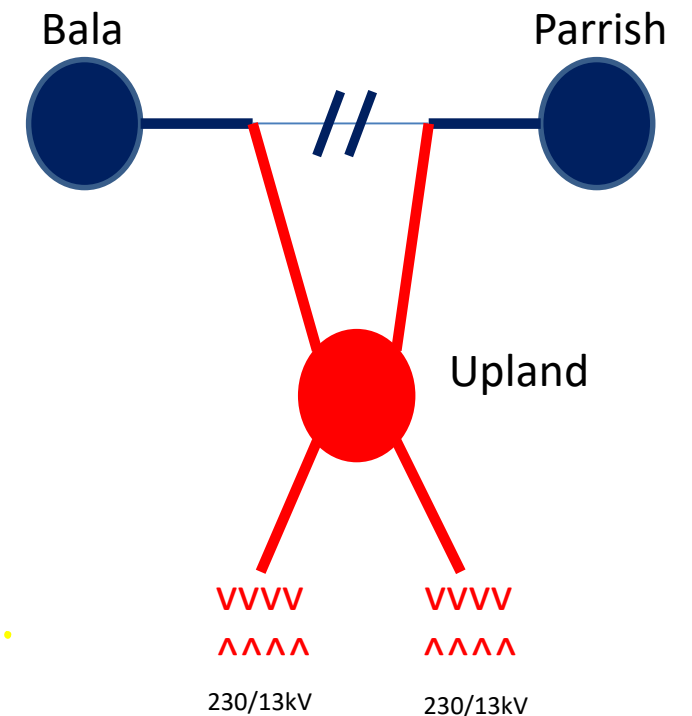
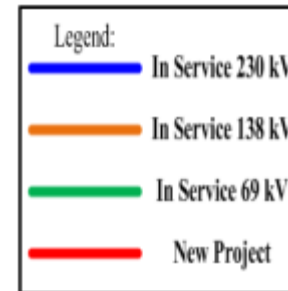
**Estimated Cost: \$27M**

**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:**

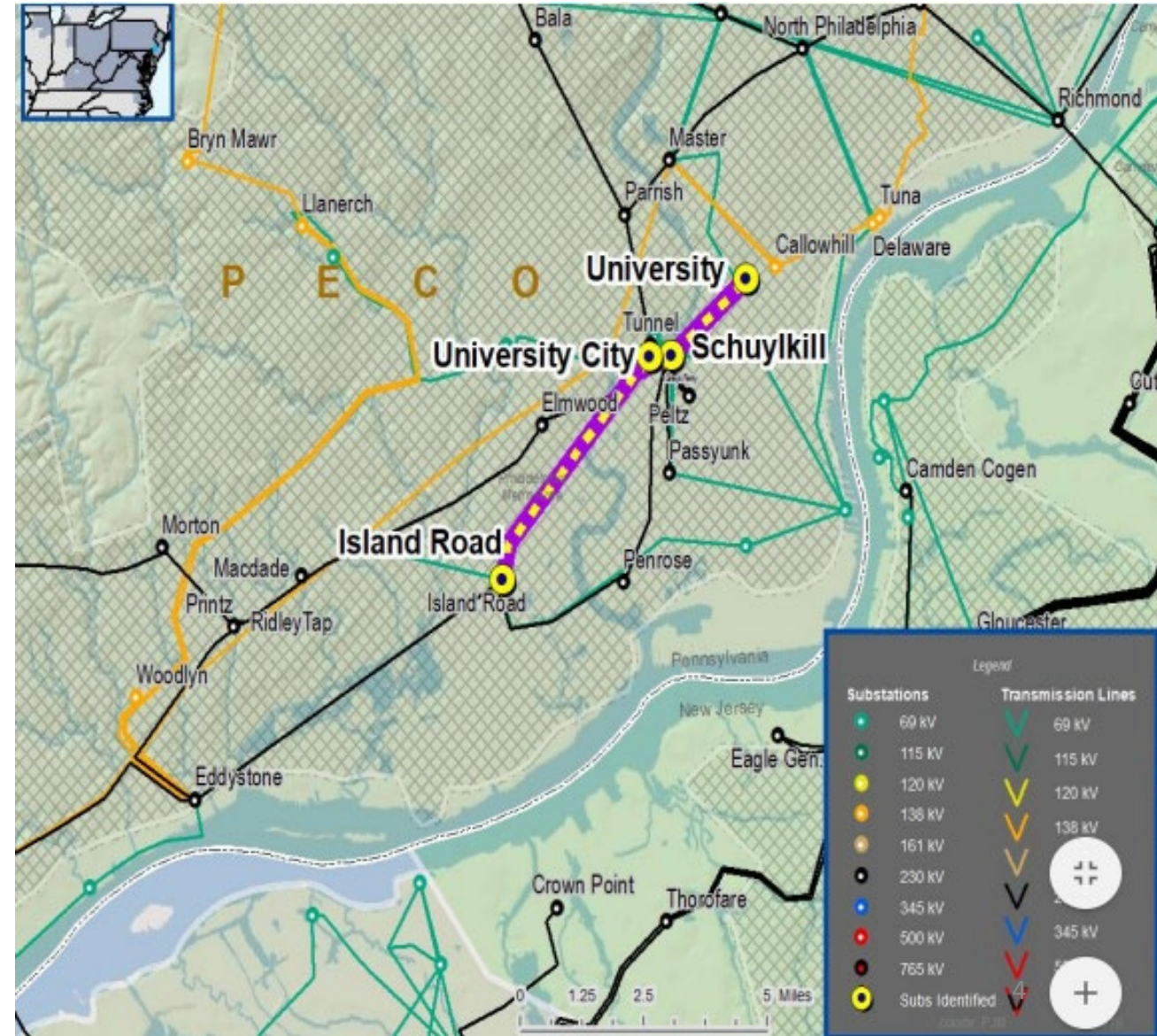
PECO Energy Transmission Planning Assumptions document presented to SRRTPEP on December 7, 2018

**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 Schuykill to Angora, Schuykill to Island Road, and Schuykill to University lines to feed new substation. Retire portions of the Schuykill to Island Road and Schuykill to University lines under the Schuykill river.
- Transfer load from Peltz substation to new Civic substation and add additional new load.
- Relocate north connection point of Schuykill North-Central bus tie to open terminal position of retired Island Road to Schuykill line
- Rebuild 69kV Passyunk – Southwark line

**Ancillary Benefits:** Operational Flexibility

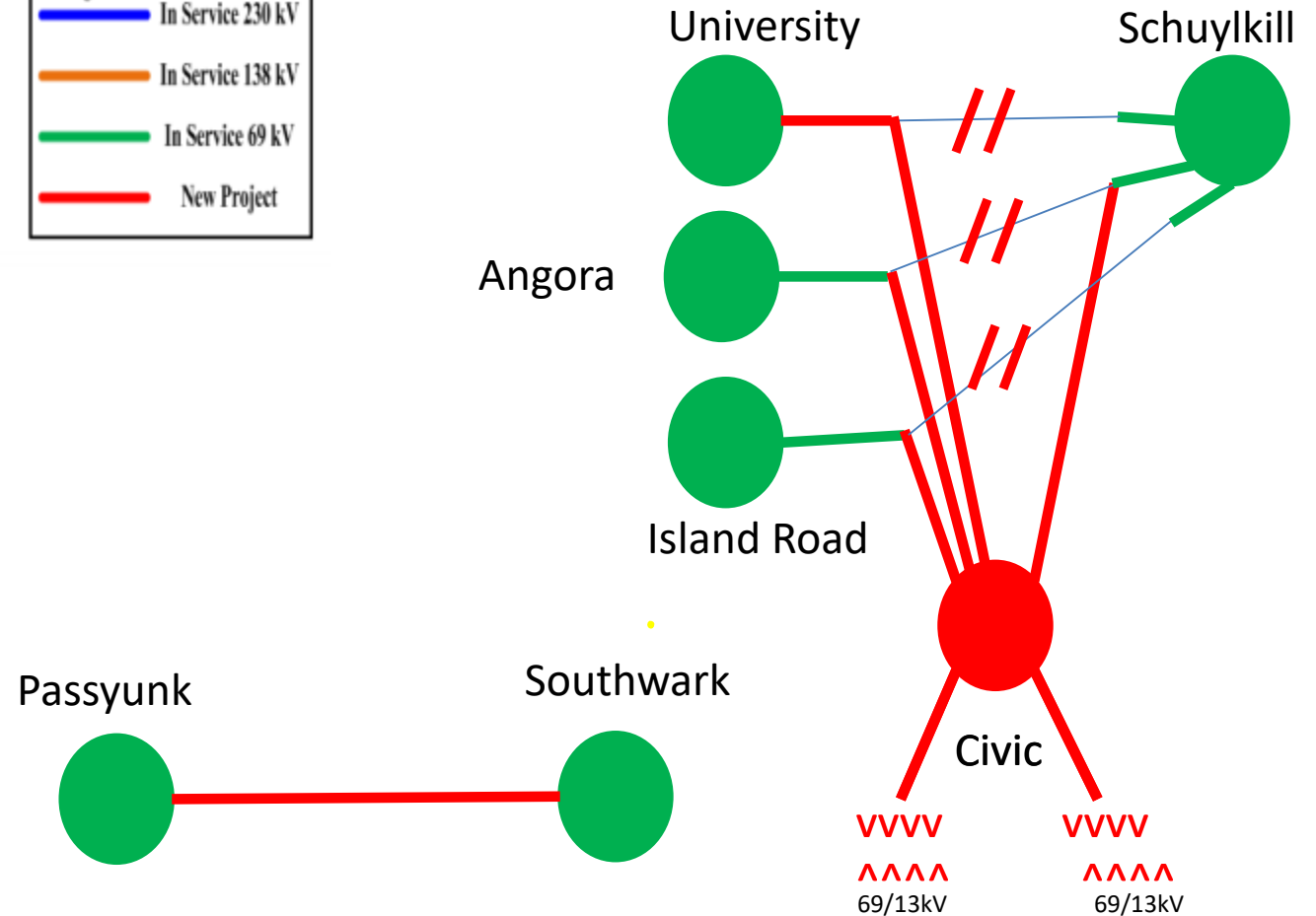
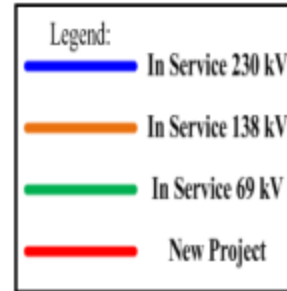
**Estimated Cost: \$89M**

**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

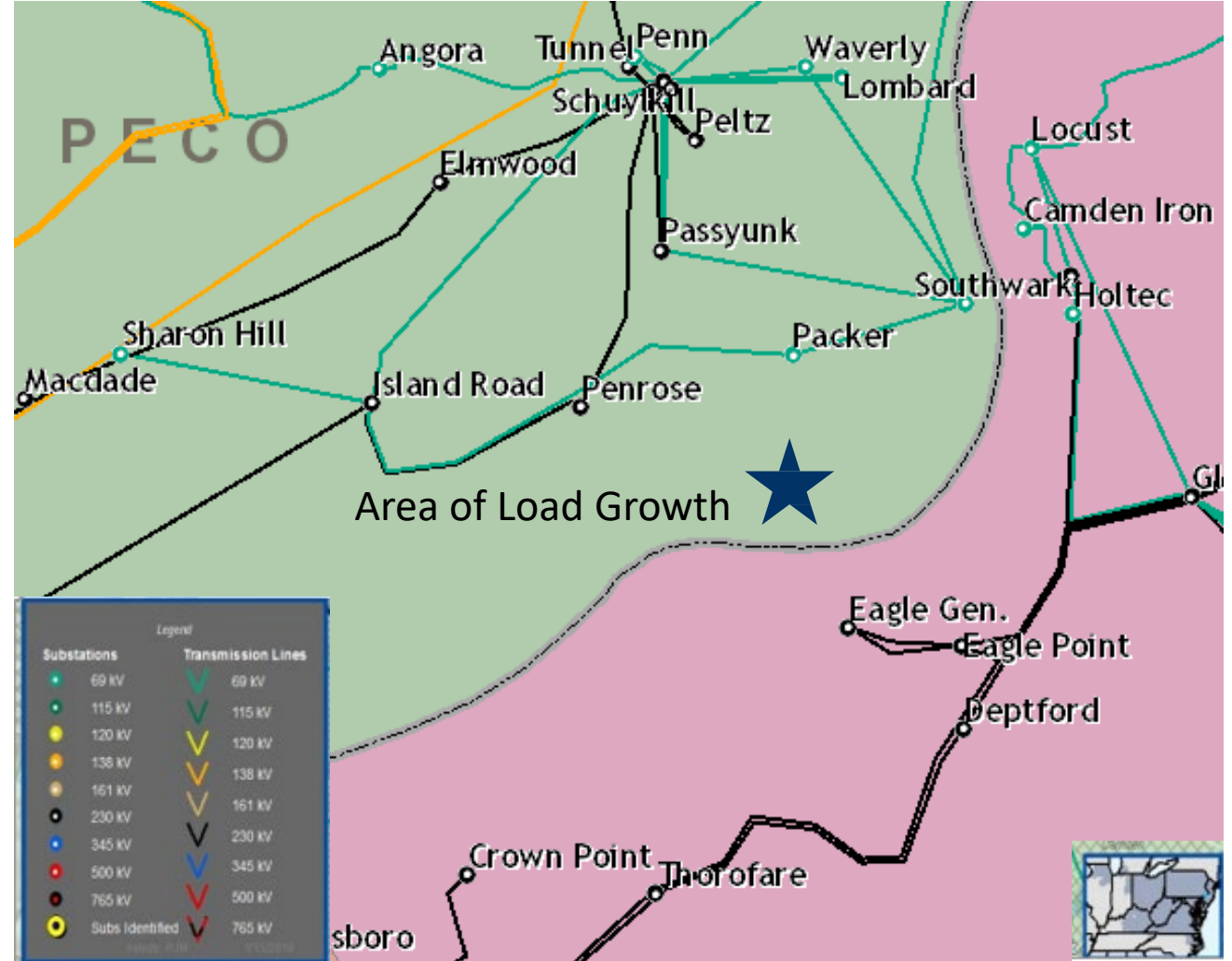
**Specific Assumption Reference:**

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



<b>Initial 2023 Load</b>	<b>Projected 2024 Load</b>
<b>Summer 20MVA</b>	<b>Summer 65MVA</b>

**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

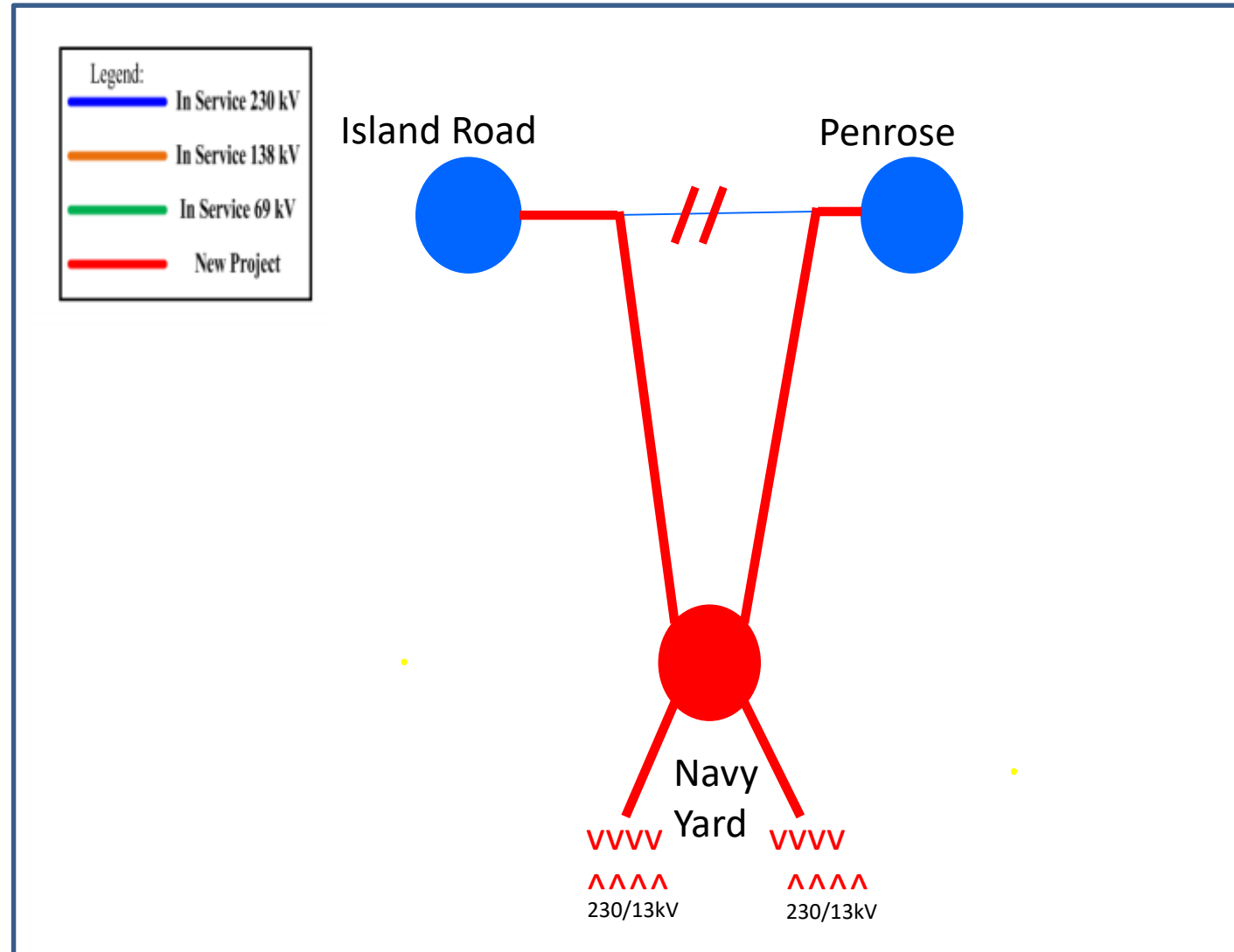
**Ancillary Benefits:** Provide additional 230kV transmission infrastructure closer to areas of load growth.

**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