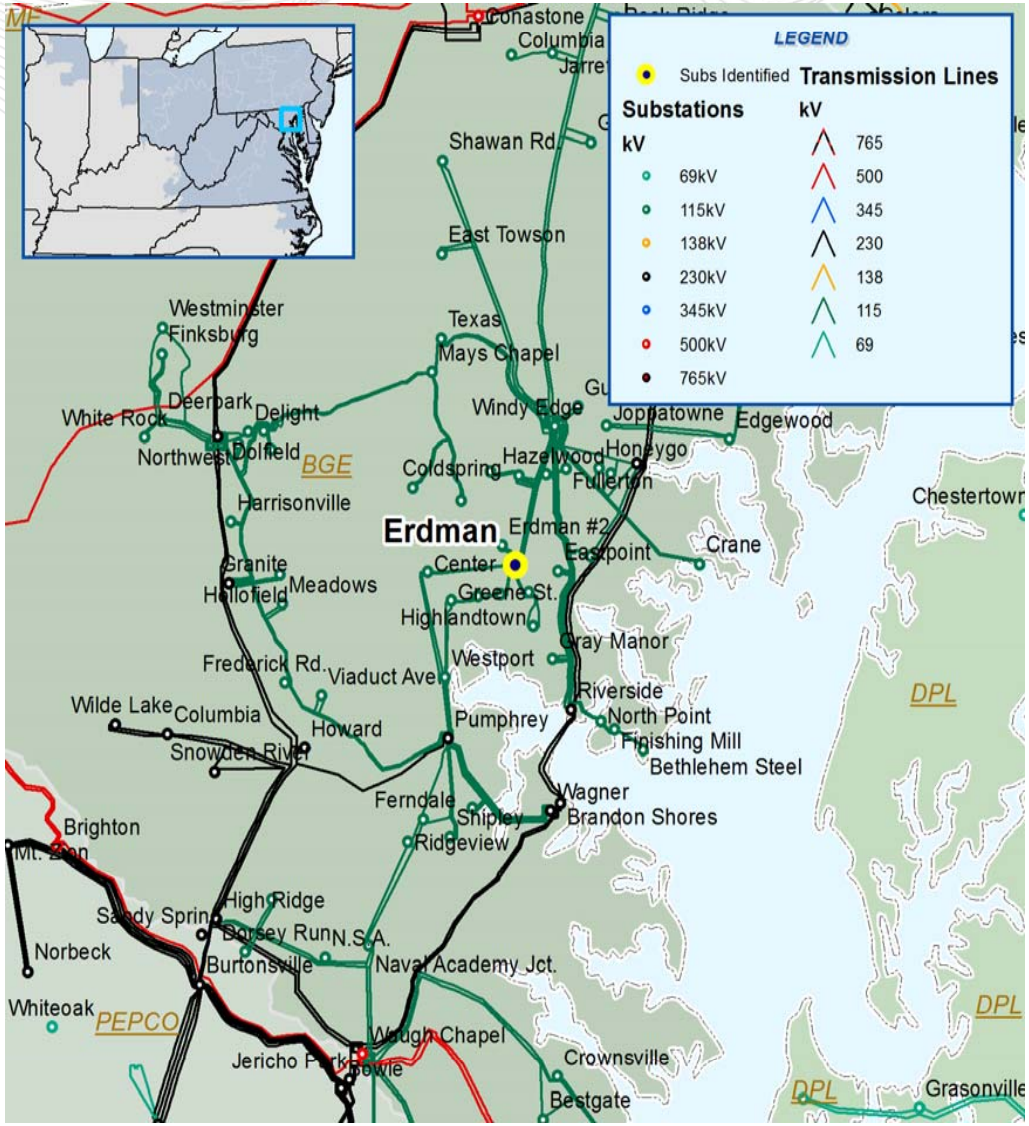
Sub Regional RTEP Committee – Mid-Atlantic

September 19, 2011

2011 RTEP Baseline Analysis Update

BGE Transmission Zone

- Baseline contingency analysis and Generation Deliverability Test:
- Overload on Center – Erdman 115 kV circuits for several single contingencies
- Proposed Solution:
  - Move the station supply connections of the Hazelwood 115/13kV station (B1606.1) .
  - Install 115kV tie breakers at Melvale (B1606.2).
  - Replace the B1267 scope with ‘Rebuild existing Erdman 115 kV substation to a GIS ring-bus to enable termination of new circuits’.
- Estimated Project Cost:
  - $ 0.15 M
  - $ 20 M
  - $ 32.4 M
- Expected IS Date:
  - 6/1/2016
  - 6/1/2016
  - 6/1/2015



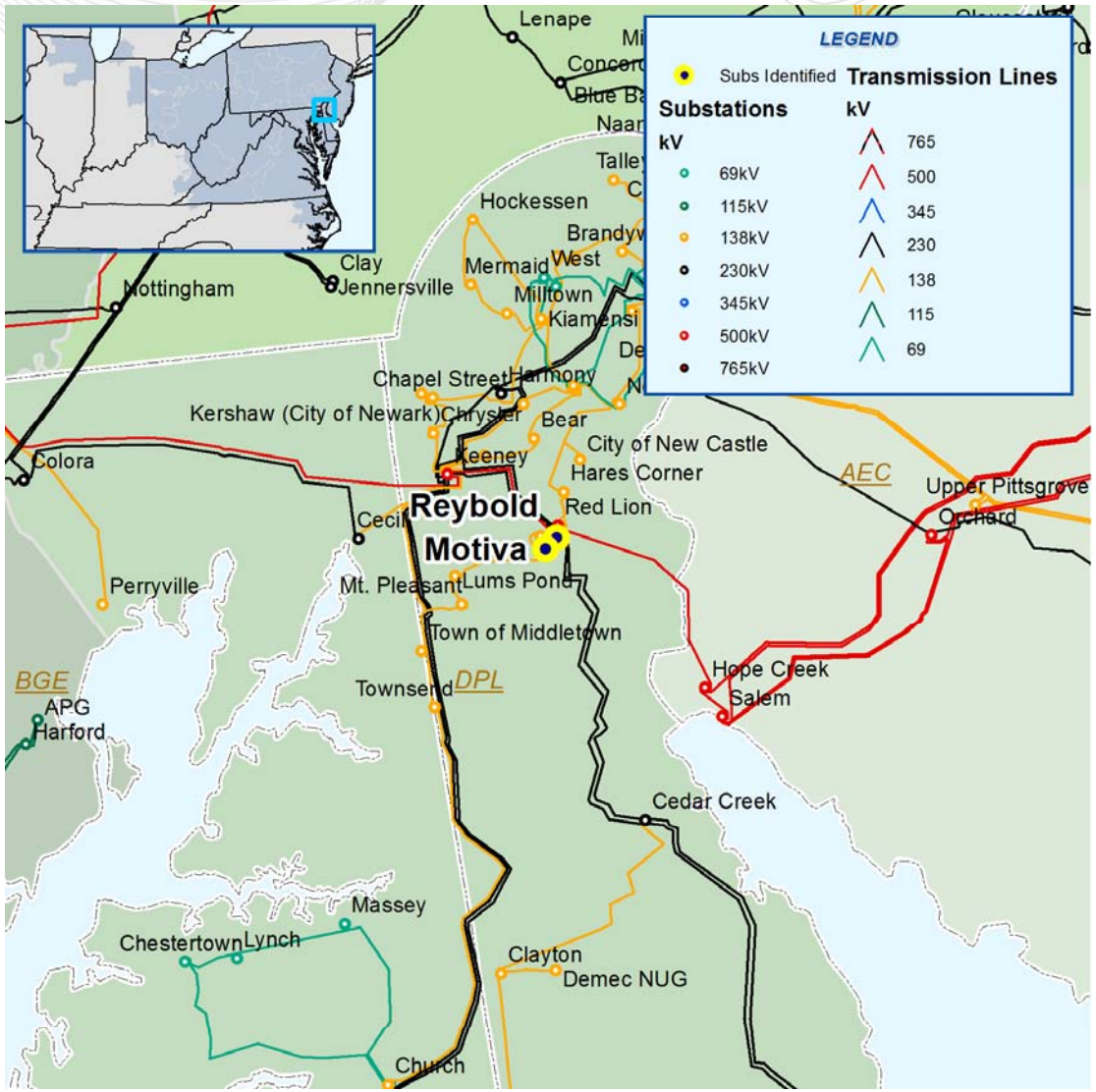
DPL Transmission Zone

- Baseline analysis and Generation Deliverability Test:
- Overload on the Reybold – Motiva 138 kV circuit for the normal system and for the single loss of the Reybold 138/69 transformer.
- Proposed Solution:

  Replace CT at Reybold 138 kV substation (B1604).
- Estimated Project Cost:

  $ 0.08 M
- Expected IS Date:

  6/1/2016



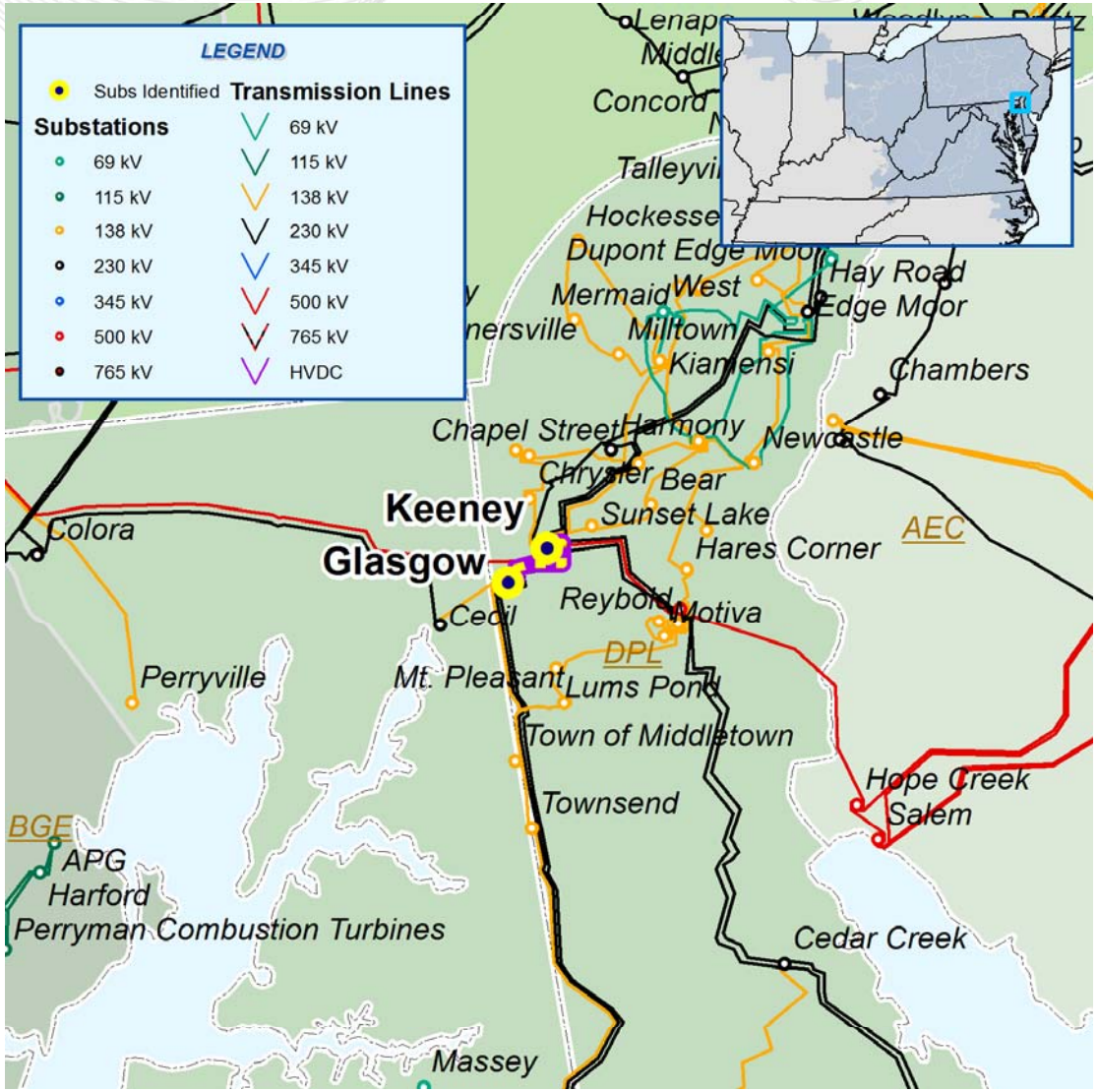
DPL Transmission Zone

- N-1-1 Violation:
- Overload on Keeney – Glasgow 138 kV circuit for several N-1-1 contingencies including loss of the Colora – Cecil 230kV and Raybold – Lums 138 kV circuits.
- Proposed Solution:

  Replace strand bus and disconnect switch at Glasgow 138 kV substation (B1723).
- Estimated Project Cost:

  $ 0.075 M
- Expected IS Date:

  6/1/2016



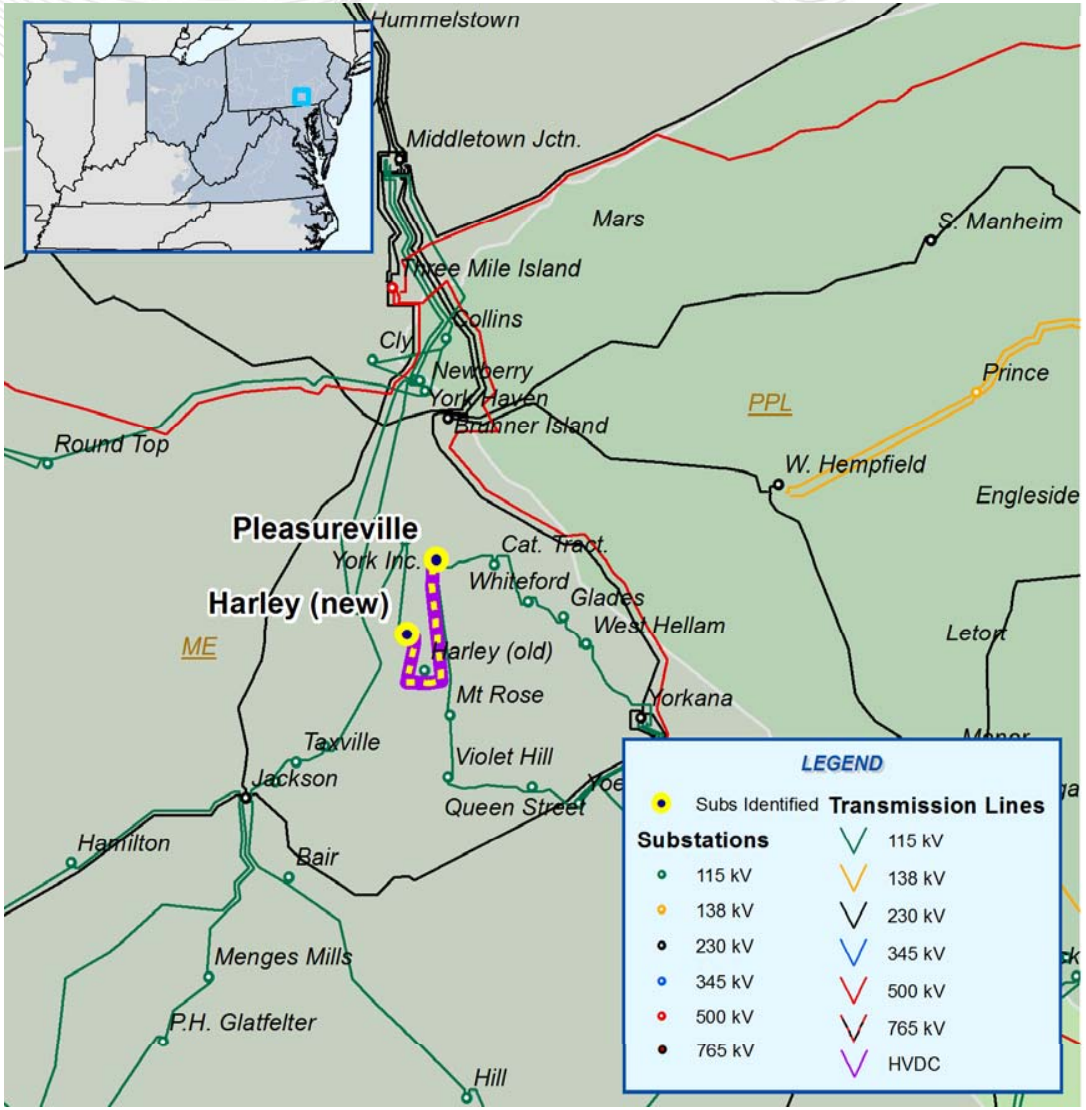
Meted Transmission Zone

- N-1-1 Thermal Violation
- Thermal overload of the Harley Davidson – Pleasureville 115 kV line for the loss of the Yorkana 230/115 kV Transformer #3; also, for the loss of the Yorkana - Brunner Island 230 kV line and the Yorkana 230/115 kV Transformer #1
- Proposed Solution:

  Reconductor 2.4 miles of existing 556 and 795 ACSR from Harley Davidson to Pleasureville 115 kV with 795 ACSS to raise the ratings (B1727).
- Estimated Project Cost:

  $2.056 M
- Expected IS Date:

  6/1/2016



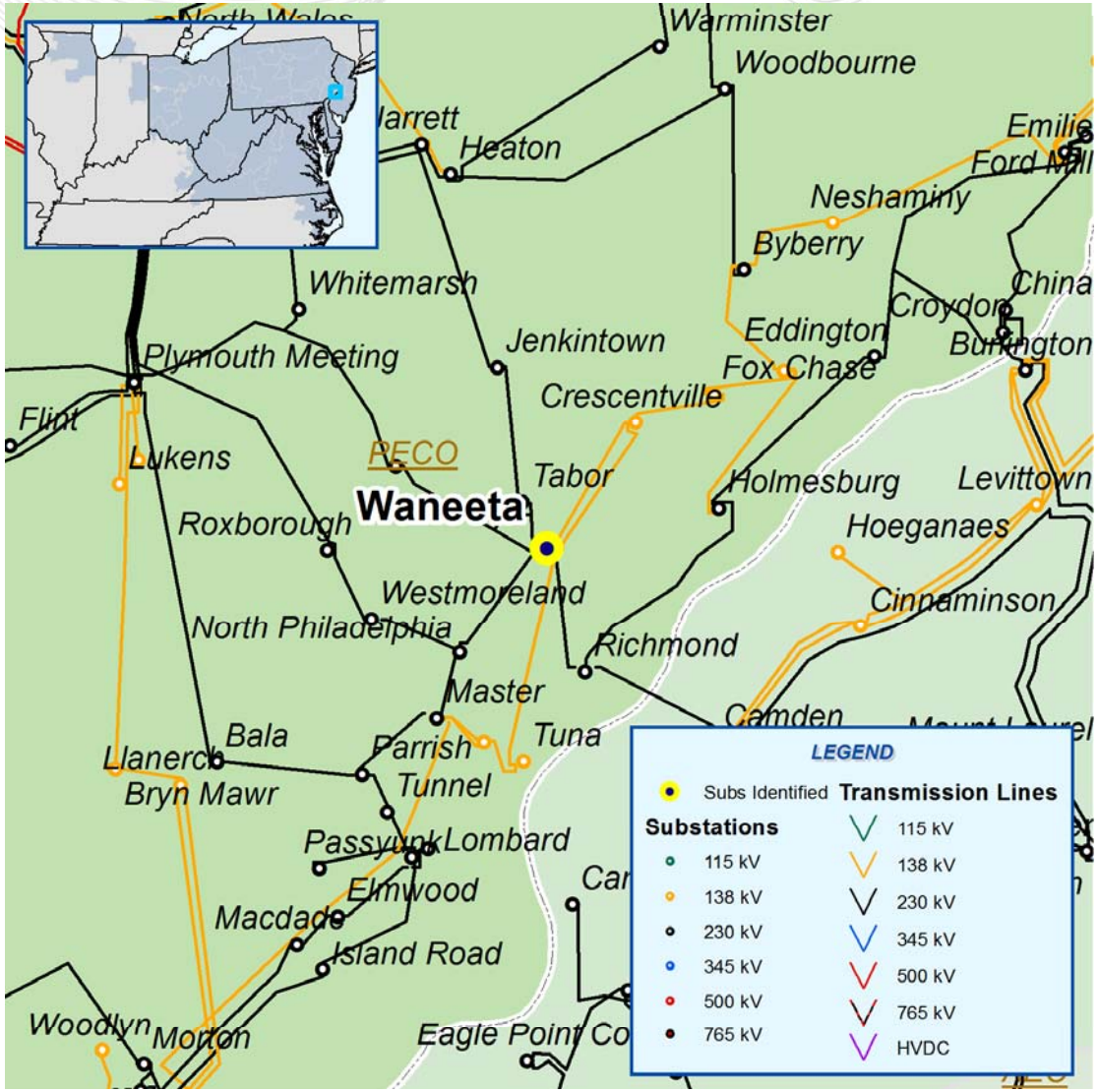
PECO Transmission Zone

- N-1-1 Thermal Violation
- The Waneeta 230/138 kV transformer is overloaded for several N-1-1 contingencies including the loss of the Holmesburg 230/138 kV transformer #8 and the Emilie – Neshaminy 138 kV circuit.
- Proposed Solution:

  Install a second Waneeta 230/138 kV transformer on a separate bus section (B1717).
- Estimated Project Cost:

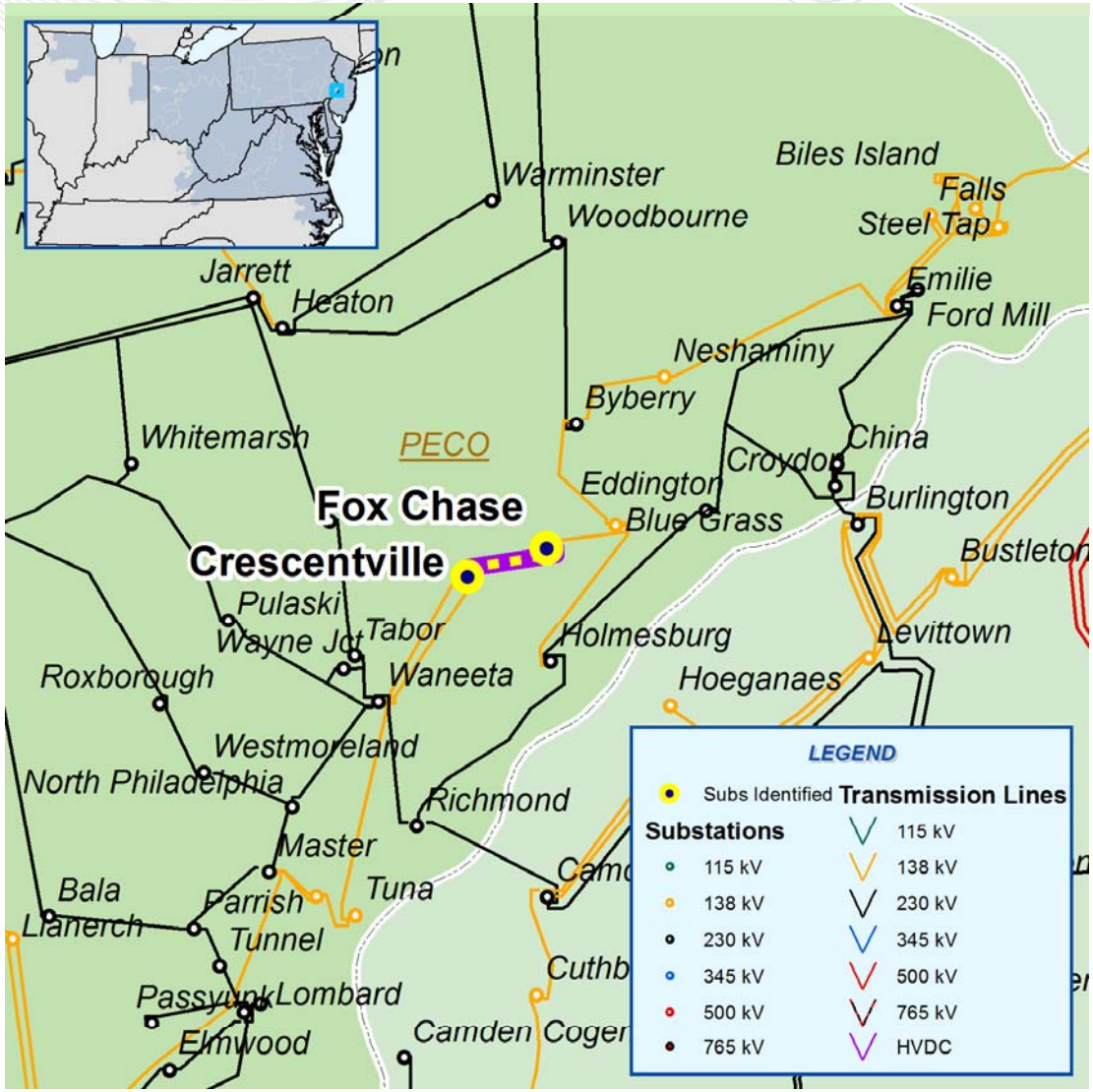
  $6.5 M
- Expected IS Date:

  6/1/2016



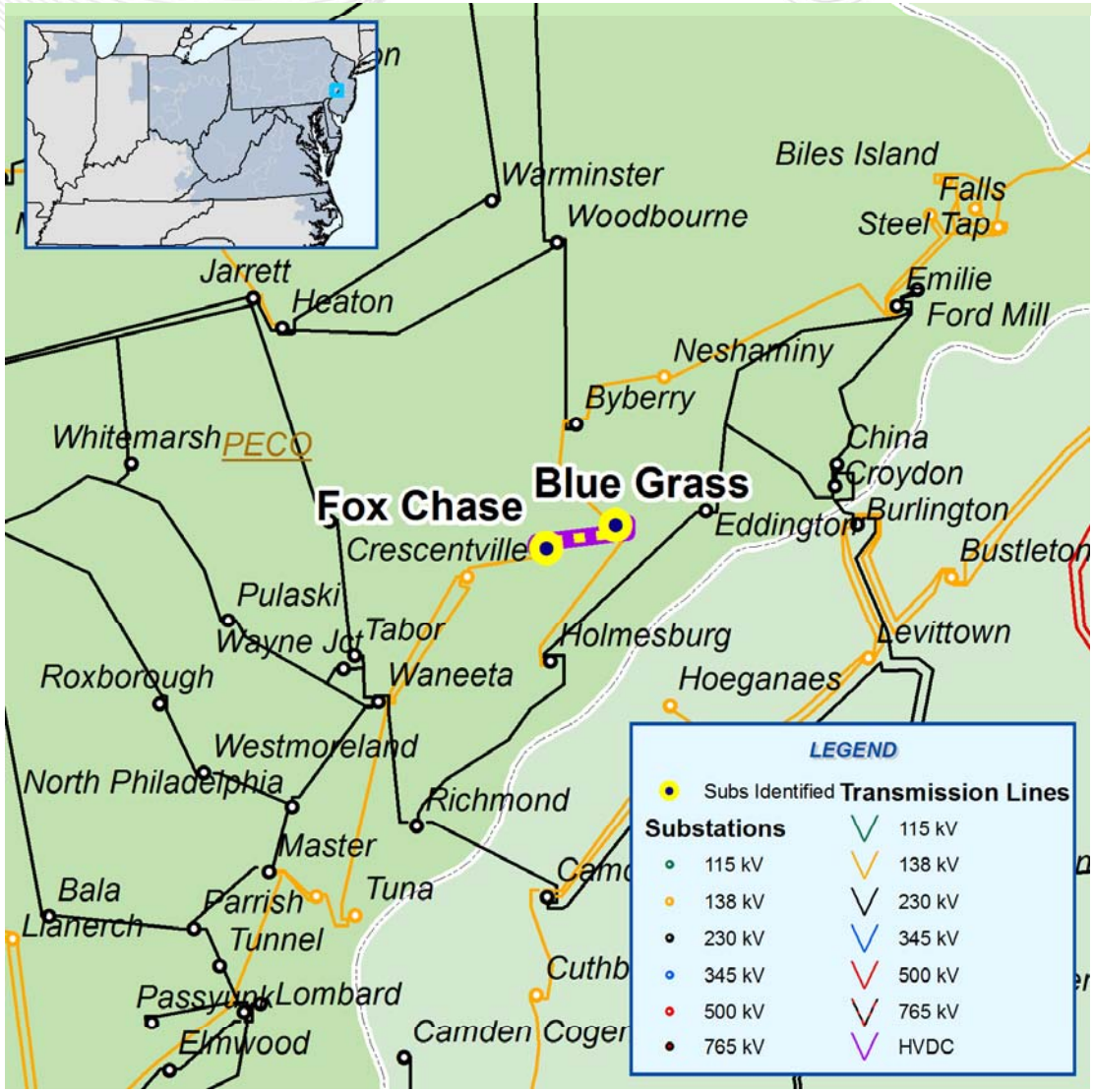
PECO Transmission Zone

- N-1-1 Thermal Violation
- The Crescentville – Foxchase 138 kV line is overloaded for several N-1-1 contingencies including the loss of the Holmesburg 230/138 kV transformer #8 and Emilie – Neshaminy 138 kV circuit.
- Proposed Solution:
  Reconductor the Crescentville – Foxchase 138 kV circuit (b1718).
- Estimated Project Cost:
  $3.0 M
- Expected IS Date:
  6/1/2016



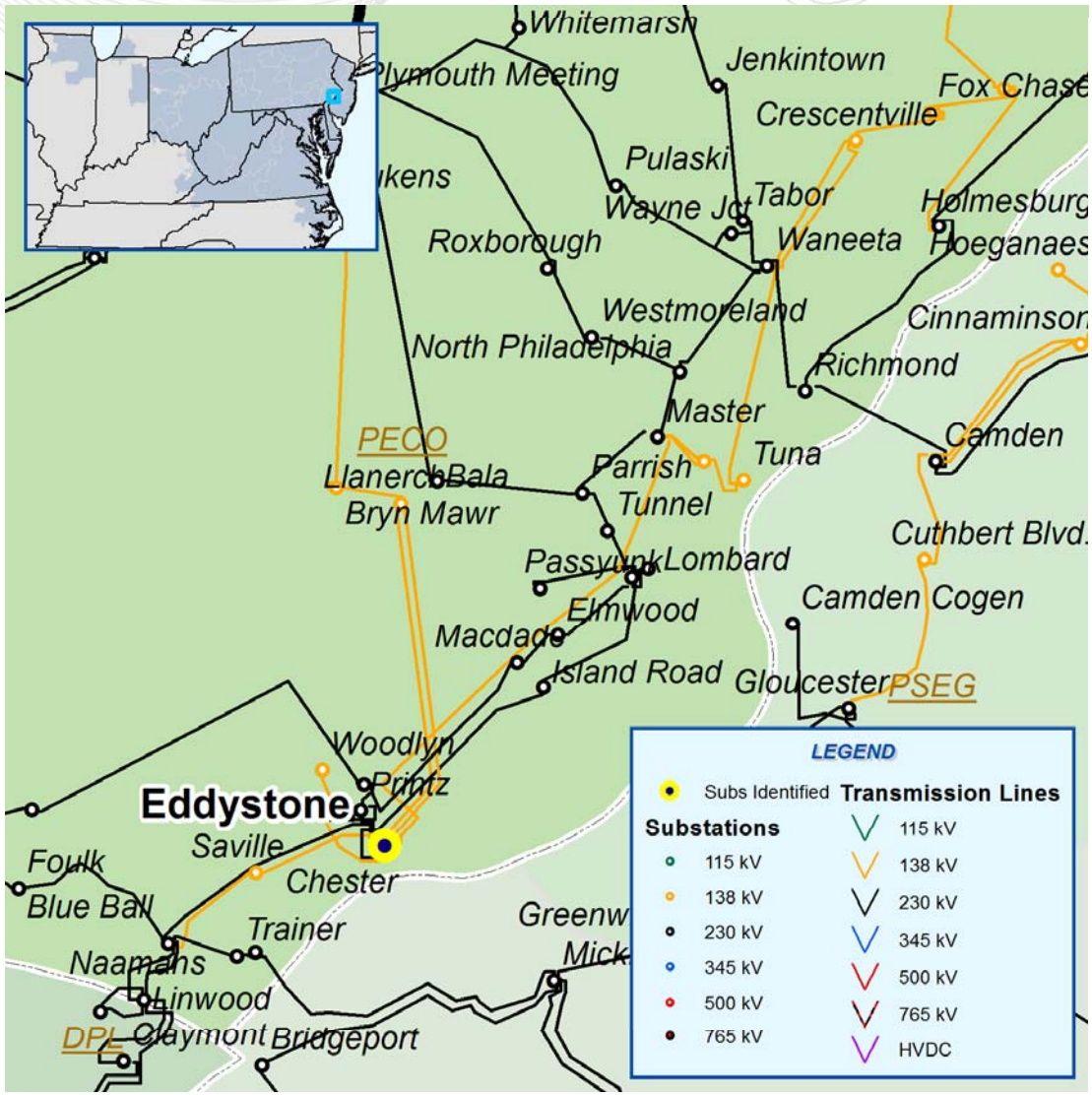
PECO Transmission Zone

- N-1-1 Thermal Violation
- The Foxchase – Bluegrass 138 kV line is overloaded for several N-1-1 contingencies including the loss of the Holmesburg 230/138 kV transformer #8 and Emilie – Neshaminy 138 kV circuit.
- Proposed Solution:
  Reconductor the Foxchase - Bluegrass 138 kV circuit (B1719).
- Estimated Project Cost:
  $1.0 M
- Expected IS Date:
  6/1/2016



PECO Transmission Zone

- N-1-1 Thermal Violation
- The Eddystone 230/138 kV transformer is unable to return to its normal rating following the loss of the Chichester 230/138 kV transformer.
- Proposed Solution:
  Increase the effective rating of the Eddystone 230/138 kV transformer by replacing a circuit breaker at Eddystone (B1720).
- Estimated Project Cost:
  $0.3 M
- Expected IS Date:
  6/1/2016



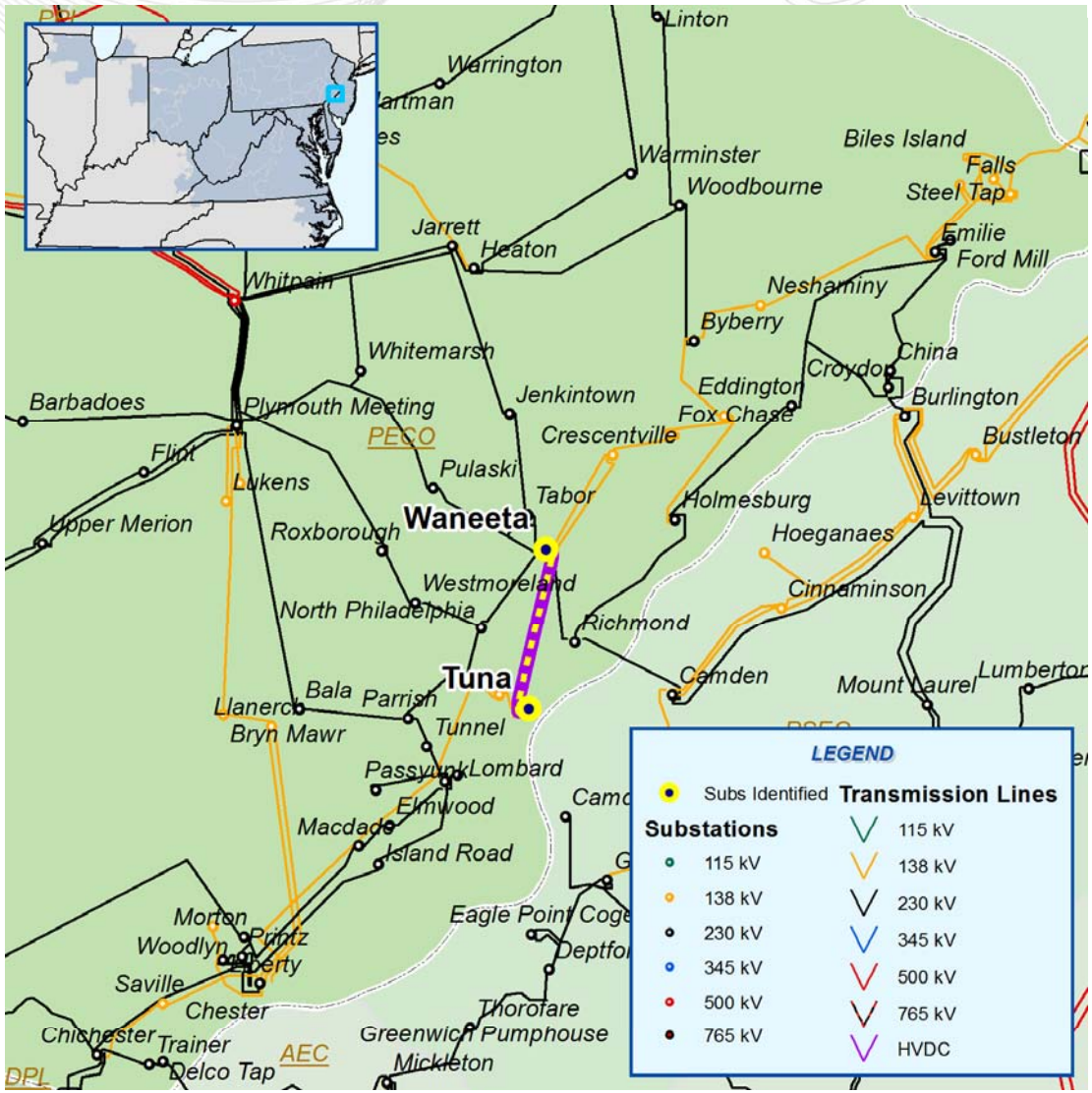
PECO Transmission Zone

- N-1-1 Thermal Violation
- The Waneeta – Tuna 138 kV circuit is overloaded for the loss of the Master – Callowhill 138 kV circuits 130-04 and 130-06.
- Proposed Solution:

  Increase the rating of the Waneeta – Tuna 138 kV circuit by replacing two 138 kV CTs at Waneeta (B1721).
- Estimated Project Cost:

  $0.024 M
- Expected IS Date:

  6/1/2016



PECO Transmission Zone

- PECO Criteria
- The Cedarbrook – Whitemarsh 69 kV circuit is normally overloaded for the loss of the Cedarbrook – Westmoreland 69 kV circuit.
- Proposed Solution:

  Increase the normal rating of the Cedarbrook – Whitemarsh 69 kV circuit by changing the CT ratio and replacing station cable at Whitemarsh 69 kV (B1722).
- Estimated Project Cost:

  $0.055 M
- Expected IS Date:

  6/1/2016