

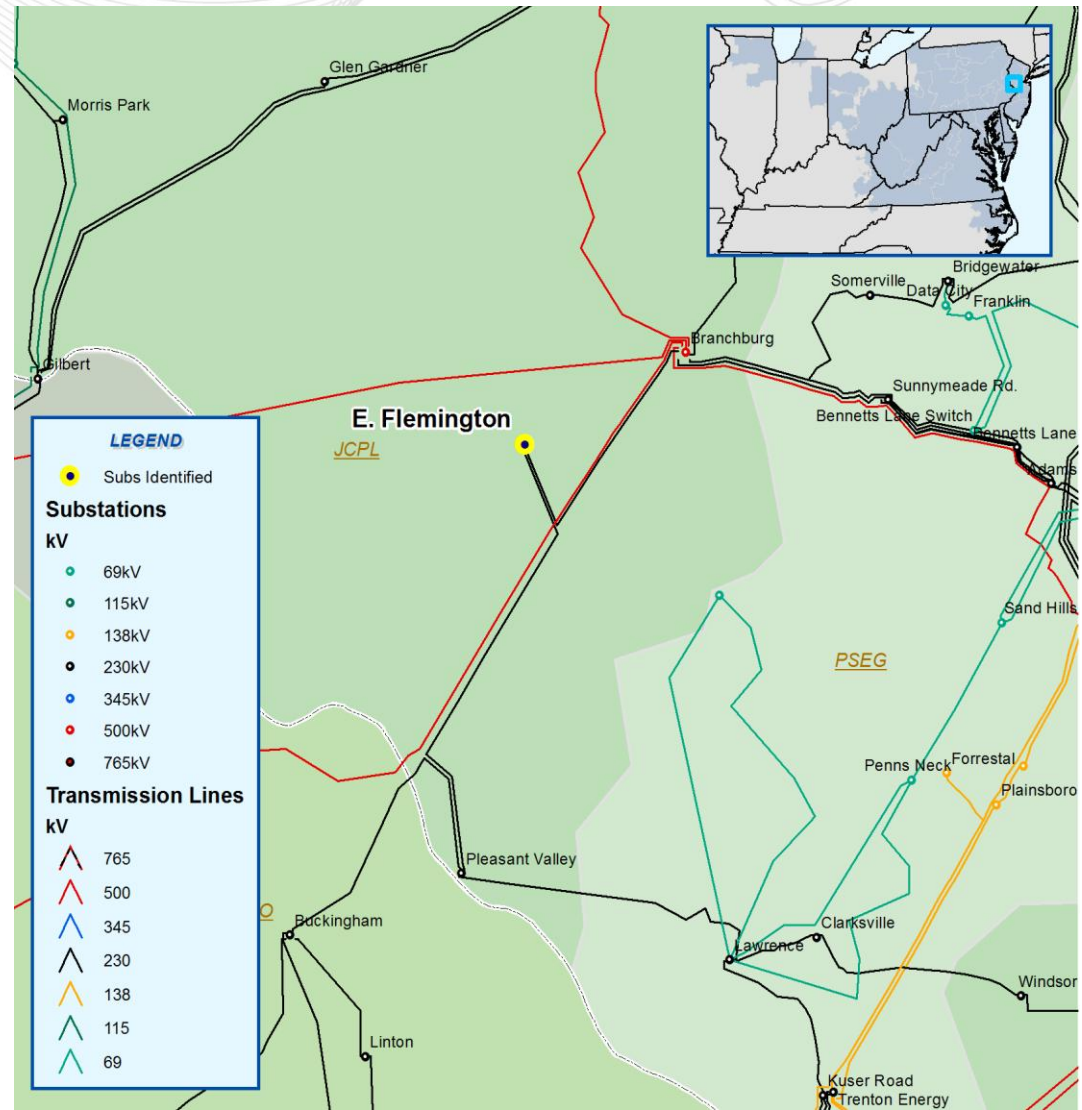
Sub Regional RTEP Committee – Mid-Atlantic

August 19, 2011

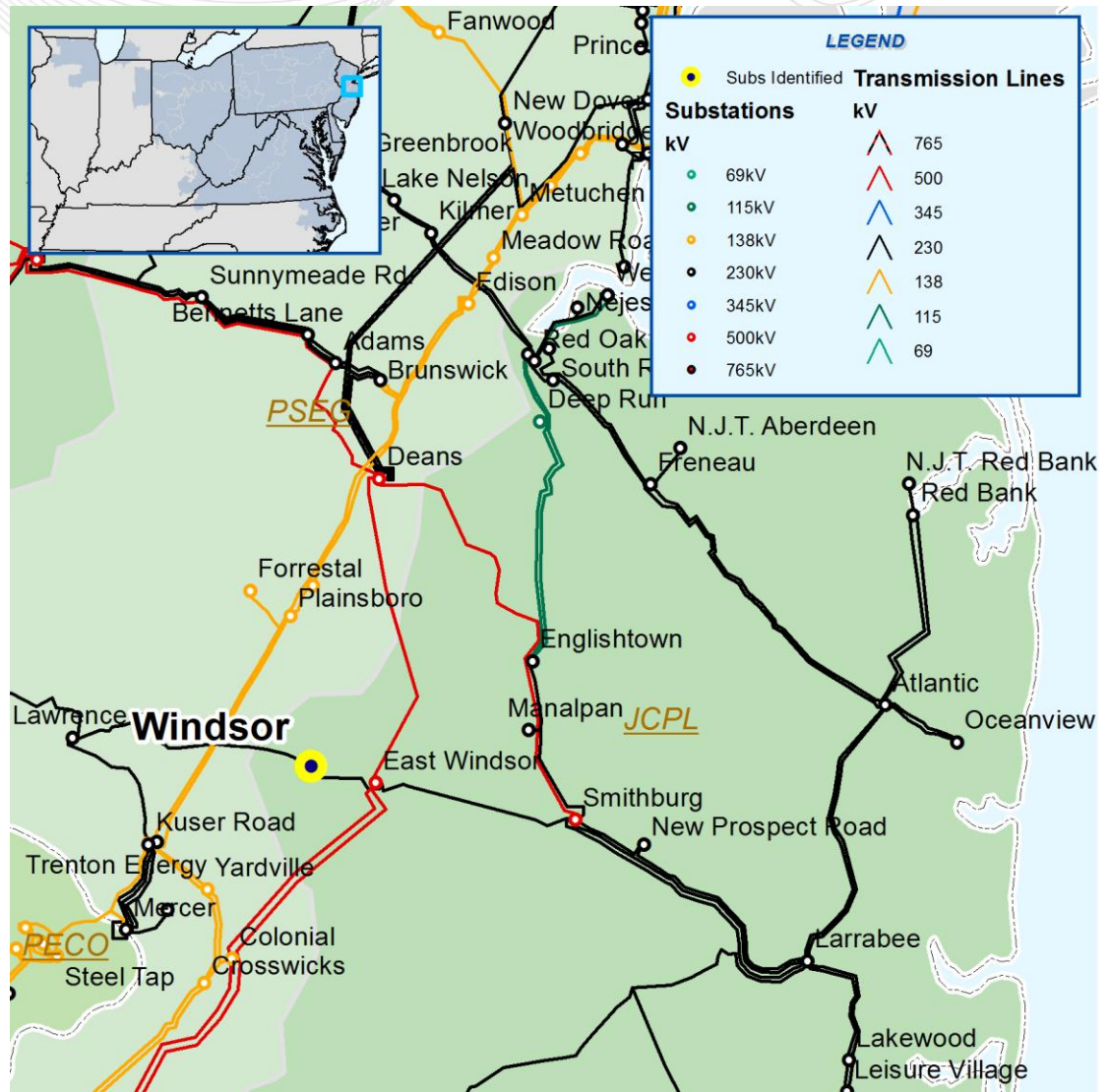


2011 RTEP Baseline Analysis Update

- FE Planning Criteria
- Local voltage collapse on 34.5 kV for the loss of the East Flemington – US Bronze 34.5 kV (Y727) line.
- Proposed Solution:
Install a 230/34.5 kV transformer at Rocktown by looping the Pleasant Valley - E Flemington 230 kV Q-2243 line (0.4 miles) through the Rocktown 34.5 kV substation (B1673).
- Estimated Project Cost:
\$7.836 M
- Expected IS Date:
6/1/2013



- FE Planning Criteria
- Overload on the Windsor 230/34.5 kV # 1 transformer for the loss of the Windsor 230/34.5 kV # 3 transformer.
- Proposed Solution:
Build a new Englishtown - Wyckoff Street (15 miles) 115 kV line and install a 115/34.5 kV transformer at Wyckoff Street (B1674).
- Estimated Project Cost: \$18.4303 M
- Expected IS Date: 6/1/2014

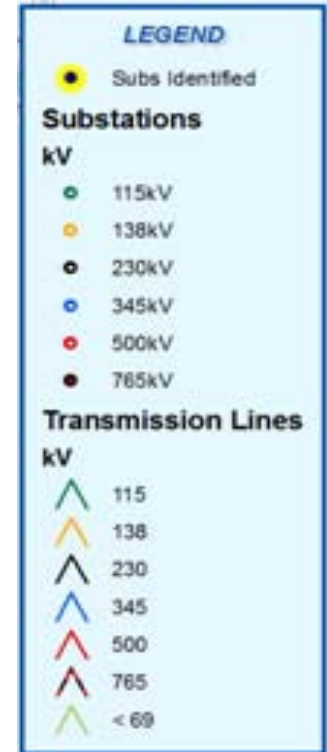


- ODEC criteria violation:
 - Radial load exceeds 50 MW on 69 kV circuit south of Tasley, VA.
 - Tapped transformer without its own protection. Kellam Transformer #1 limits the line to Bayview to less than 20 MVA for certain operating conditions.
 - Additionally, the existing 336 ACSR is over 50 years old
- Proposed Solution:

Replace existing line with a new double circuit line and add a breaker to complete the ring bus at Kellam (B1675).
- Estimated Project Cost:

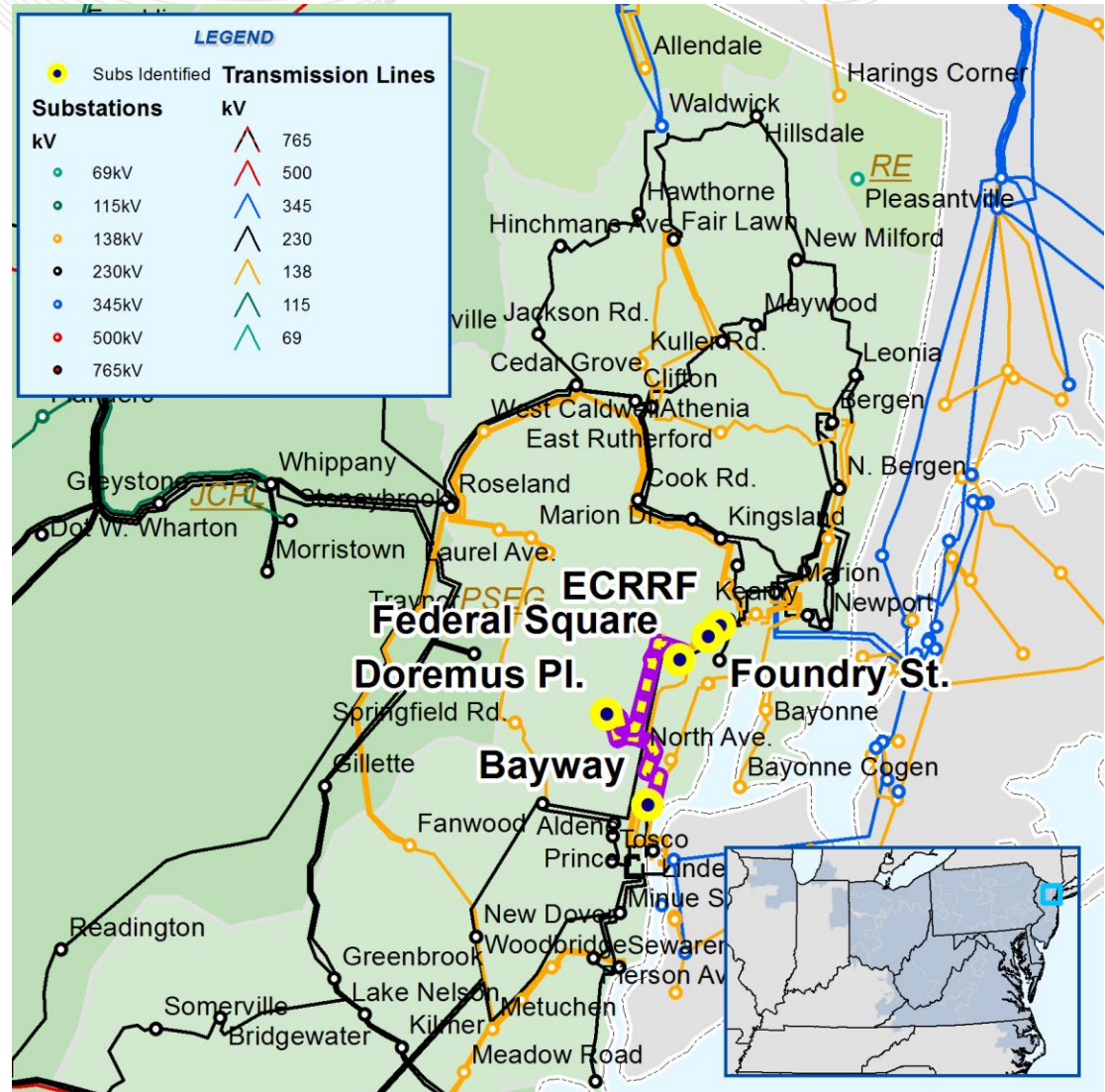
\$12 M
- Required IS Date:

6/1/2016

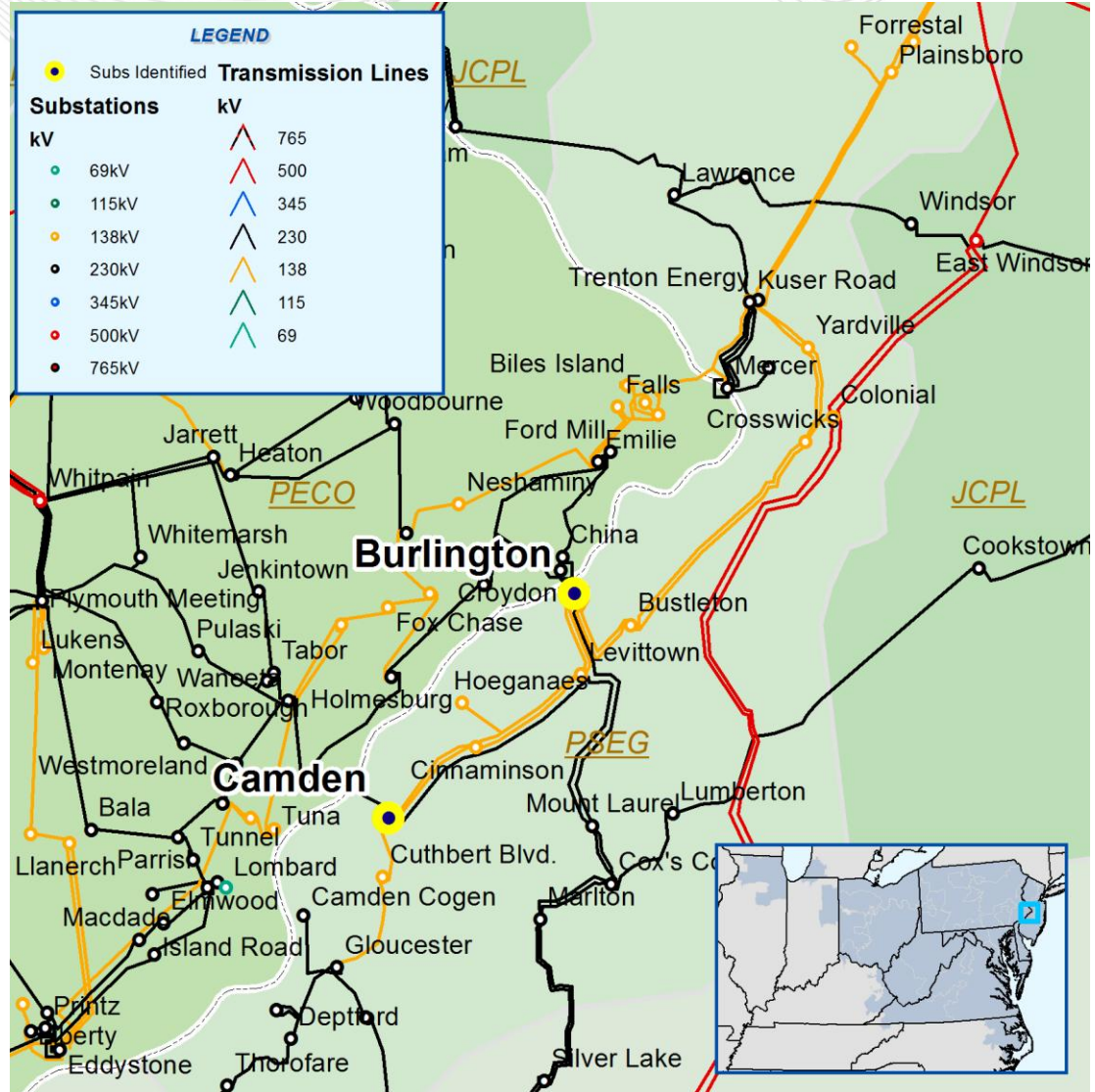


Supplemental Projects

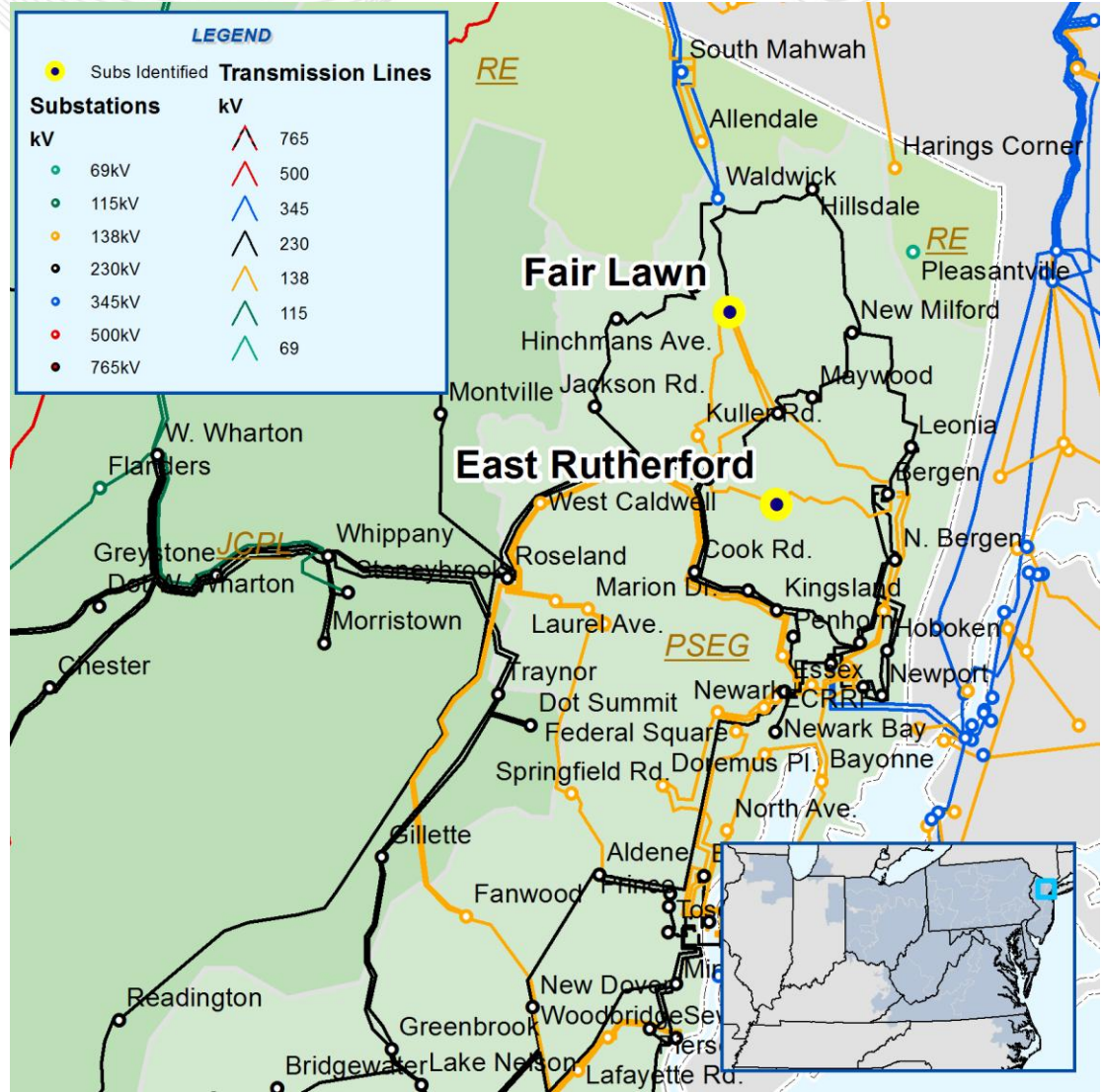
- **General Reliability Concern:**
- Reliability issue as a result of existing 138 kV cable movement due to elevation and track movement.
- **Proposed Solution:**
 Reconductor the K-1311 (Bayway – Federal Square) 138 kV cable (S0309).
 Reconductor the Q-1369 (Bayway – Doremus Place) 138 kV cable (S0310).
 Reconductor the B1328 (Foundry St. - ECRRF) 138 kV cable (S0311).
- **Estimated Project Cost:**
 \$46.1 M
 \$31.0 M
 \$9.0 M
- **Expected IS Date:**
 12/31/2013



- PSE&G Distribution Reliability:
- To improve reliability at Riverside, East Riverton and Delair 26 kV substations by minimizing circuit exposure, and to provide additional capacity to the area.
- Proposed Solution:
 - Convert the Riverside, East Riverton and Delair substations from 26 kV to 69 kV (S0313).
 - Construct a new network between Burlington and Camden (Burlington – Riverside – East Riverton – Delair – Camden 69 kV)
- Estimated Project Cost: \$90.0 M
- Expected IS Date: 6/1/2016



- PSE&G Distribution Reliability:
- To improve reliability at Paramus 69 kV, Spring Valley and Hasbrouck Heights 26 kV substations. To improve operational performance at Fairlawn and East Rutherford switching stations.
- Proposed Solution:
 - Convert the Spring Valley Rd. and Hasbrouck Heights substations from 26 kV to 69 kV (S0314).
 - Build a new 69 kV circuit between Paramus and Spring Valley Rd.
 - Construct a new network between Fairlawn and East Rutherford (Fairlawn – Paramus – Spring Valley Rd. – Hasbrouck Heights – East Rutherford 69 kV)
- Estimated Project Cost: \$107 M
- Expected IS Date: 6/1/2016



- PSE&G Reliability:
- Edison 138kV operated as a split bus limiting operator flexibility.
- Proposed Solution:
 - Reconfigure Edison for Breaker and Half. Build for 230kV, operate at 138kV with 63kA breakers (S0317).
- Estimated Project Cost: \$60 M
- Expected IS Date: 6/1/2016

