

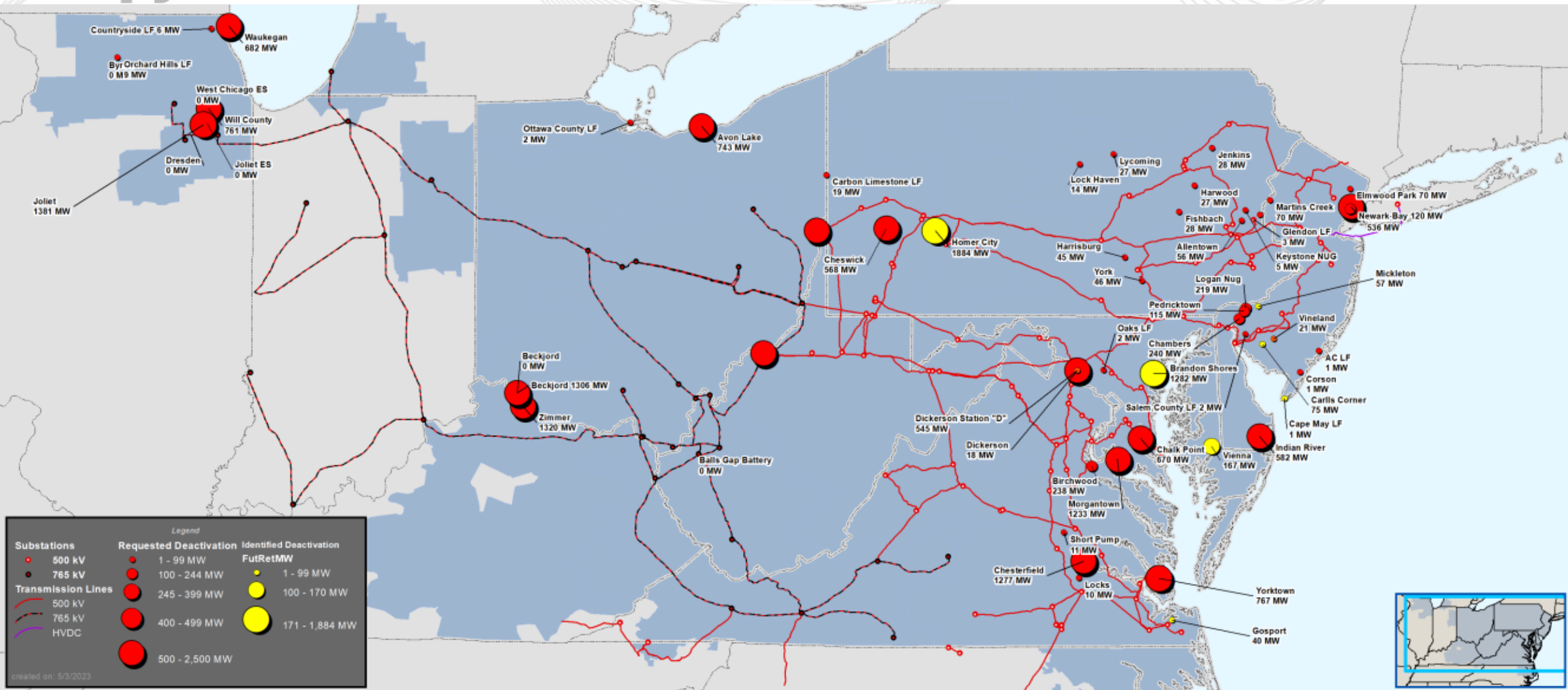


Generation Deactivation Notification Update

Transmission Expansion Advisory Committee
June 6th, 2023



Generation Deactivation Announcements 2020-2023





Deactivation Status

Unit(s)	MW	Transmission Zone	Requested Deactivation Date	PJM Reliability Status
Homer City 1,2 and 3	1,884	Penelec	7/1/2023	Reliability analysis completed , no impact identified
Cape May County Municipal Lf2	0.6	ACE	10/1/2023	Reliability analysis completed , no impact identified
Carlls Corner CT1 and CT2	74	ACE	6/1/2024	Reliability analysis completed , no impact identified
Mickleton CT1	57.2	ACE	6/1/2024	Reliability analysis completed , no impact identified
Gosport 1	40	Dominion	7/1/2024	Reliability analysis completed , no impact identified
Vienna 8 and 10	167.3	DPL	6/1/2025	Reliability analysis completed , no impact identified



Deactivation Status

Unit(s)	MW	Transmission Zone	Requested Deactivation Date*	PJM Reliability Status
Brandon Shores 1,2	1,282	BGE	6/1/2025	Reliability analysis complete. Reliability impacts identified. New baselines b3780.1 – b3780.13, b3781 resolve identified reliability impacts. provided they are completed by the requested deactivation date. Operating measures are not available in the interim. PJM Planning, Operations and Transmission Owner are continuing to investigate mitigation and timing.

* PJM does not approve deactivations, but rather identifies whether the requested deactivation date could lead to reliability concerns on the system. When PJM determines a proposed deactivation would adversely affect the reliability of the Transmission System due to upgrade completion timeline and absent operational measures, PJM desires and requests the Generation Owner extend operations of the deactivating unit(s). The Generation Owner may elect to support system reliability by operating until necessary network upgrades are completed by either filing its proposed Cost of Service Recovery Rate (CSRR) at FERC or accepting the Deactivation Avoidable Cost Credit (DACC) provided in the Tariff. PJM will announce at subsequent TEAC(s) after the Generation Owner submits a CSRR to the FERC and after the FERC accepts the CSRR filing or after the Generation Owner agrees to the DACC.

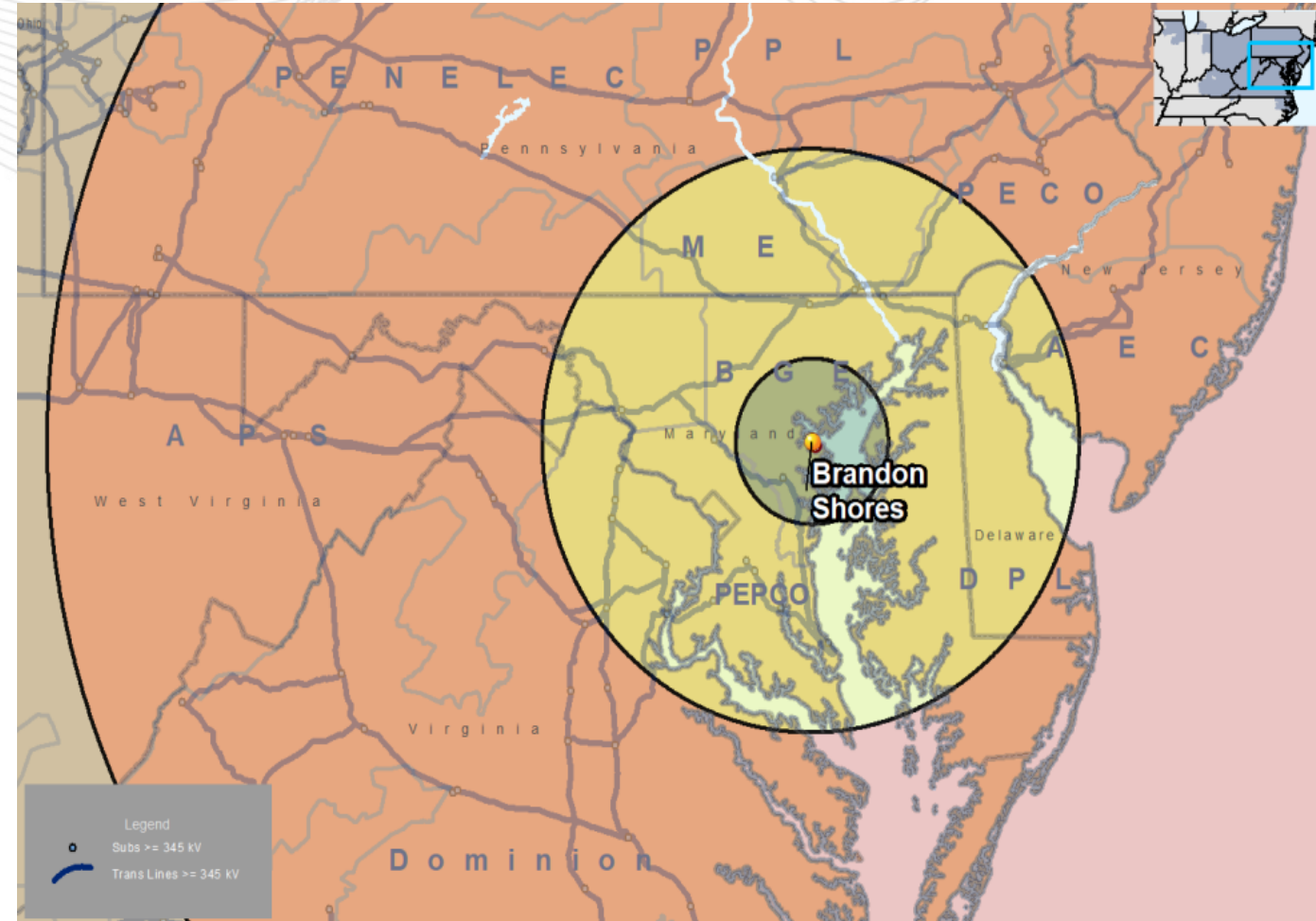
Voltage Violations – Multiple Transmission Owner Areas

Problem Statement: N-1-1 and Load Deliverability Voltage Violations – Brandon Shores Deactivations, 1282 MW

- Voltage violations: Multiple Transmission owner areas
- Contingency: N-1-1, N-1

Reliability tests indicate wide spread voltage deviation violations upon Brandon Shores' deactivations

- Impacted areas :
 - BGE
 - PEPCO
 - Dominion
 - PECO
 - APS
 - ME
 - PPL

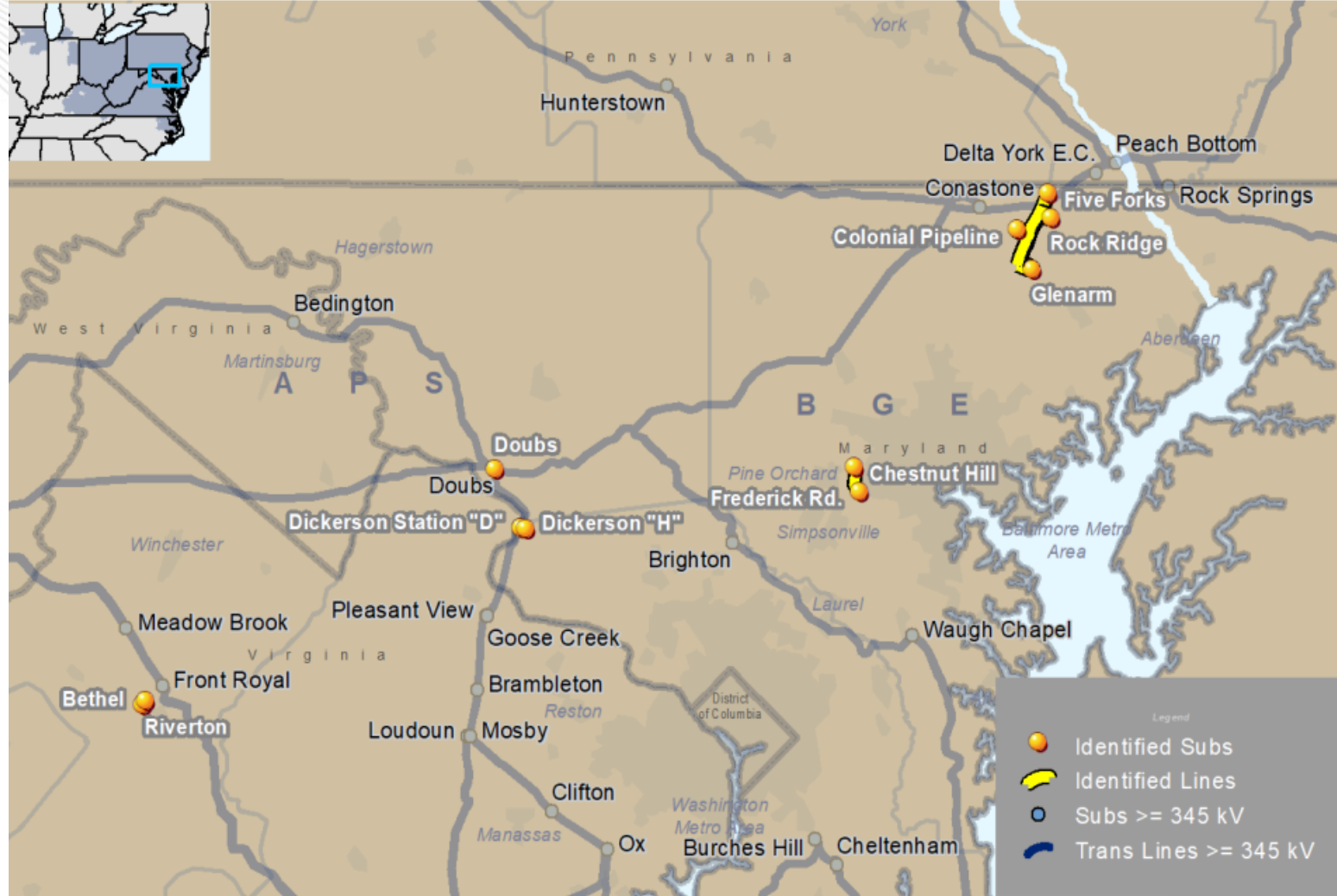




Thermal Violations - BGE, APS and PEPSCO Transmission Owner Areas

Problem Statement: Generation Deliverability, N-1-1 Violations – Brandon Shores 1 and 2, 1282 MW

- Contingency: N-1-1, N-1
- BGE
 - Five Rock – Rock Ridge 1 115kV
 - Five Rock – Rock Ridge 2 115kV
 - Rock Ridge – Colonial Pipeline 1 115kV
 - Rock Ridge – Colonial Pipeline 2 115kV
 - Colonial Pipeline – Glenarm 1 115kV
 - Colonial Pipeline – Glenarm 2 115kV
 - Chestnut Hill 7 – Frederick Road 7 115kV
 - Chestnut Hill 8 – Frederick Road 8 115kV
- APS
 - Doubs Transformer 3 500/230 kV
 - Bethel – Riverton 138kV
- PEPSCO
 - Dickerson – Dickerson H 230kV



500kV Recommended Reinforcements

- PECO - B3780.1: Peach Bottom North Upgrades – substation work
- PECO - B3780.2: Peach Bottom to Graceton – New 500kV Transmission line
- PECO - B3780.3: West Cooper Substation expansion
- BGE - B3780.4 : Peach Bottom to Graceton (BGE) – New 500kV Transmission line
- PECO - B3780.8: Graceton 500kV expansion
- PECO - B3780.10: Install New Conastone Capacitor
- PEPCO - B3780.11 : Brighton Statcom and Capacitor
- PEPCO - B3780.12 : Burchess Hill Cap

• **Projected ISD:** 12/31/2028

• **Required ISD:** 6/1/2025

• **Estimated Cost:** \$333 Million

* Operating measures are not available in interim.





Reinforcements – BGE and APS Transmission Areas

230 kV & 115kV Recommended Reinforcements

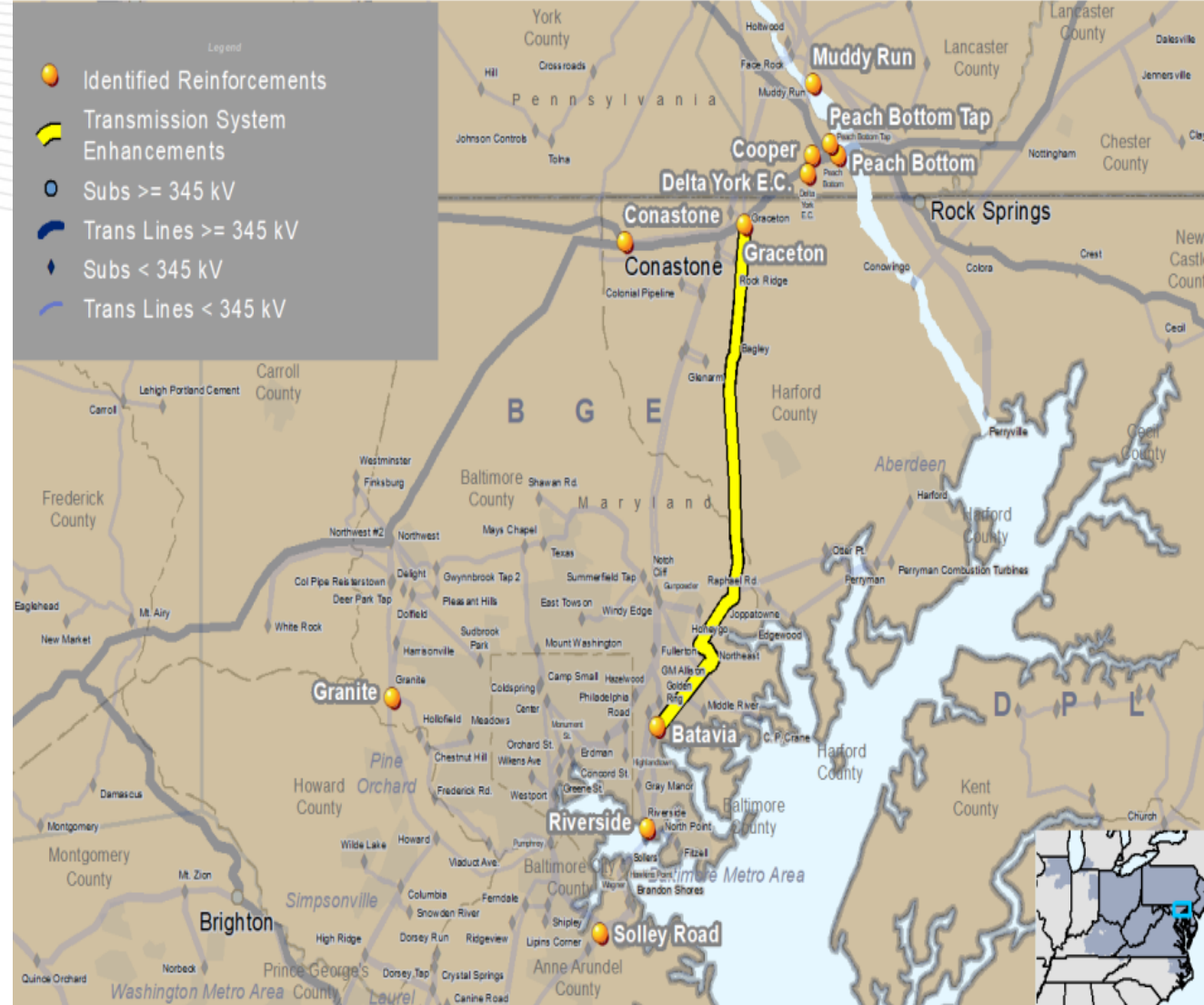
- BGE - B3780.5: Build Solley Road Substation + Statcom
- BGE - B3780.6: Build Granite Substation + Statcom
- BGE - B3780.7 : Build Batavia Road Substation
- BGE - B3780.9: Graceton to Batavia Road 230 kV Double Circuit Pole Line
- BGE – B3780.13: Batavia Road to Riverside 230kV reconductor

- **Projected ISD:** 12/31/2028
- **Required ISD:** 6/1/2025
- **Estimated Cost:** \$ 452 Million

*Operating measures are not available in interim.

- APS - B3781: Replace line drops to Doubs Transformer 3

- **Projected ISD:** 12/31/2025
- **Required ISD:** 6/1/2025
- **Estimated Cost:** \$ 0.8 Million



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Generation Deactivation Notification



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Revision History

V1 - 06/01/23 - Original slides posted.