Multi-TO Project Outage Coordination (MTOPOC)

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Operating Committee
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Executive Summary

MTOPOC Overview

RTEP Upgrades Completed or In-Progress

Upcoming Outages Related to RTEP Upgrades

- 2 Year Lookahead

Generator Outage Coordination

MTOPOC Overview

- A new process that stemmed from PJM Open Window – 2022 RTEP Window 3
  - Added ~7500MW of Data Center and >10,000 MW announced deactivation
  - $5.1 Billion worth transmission upgrades
- Goal is to align major EHV transmission outages within 2 year window to
  - Minimize risk to system reliability
  - Ensure efficient coordination amongst all impacted TOs/GOs
  - Maximize the construction that can be completed to meet the RTEP required in-service dates
  - “Major” is considered 230kV and above work that is 20 days or longer in duration
- $16 Billion+ additional transmission upgrades added in 2024/2025 RTEP Windows

RTEP Upgrades Completed or In-Progress

- Conastone-Northwest2 230KV BGE Reconductor (b3771)
  - Accelerated the 2322 230kV circuit upgrade from December 2026 to May 2026
    - **55% Rating Increase**
  - Accelerated the 2310 230kV circuit upgrade from Spring 2027 to Fall 2026
    - **37% Rating Increase**
  - Avoids conflicts with b3780/b3800 upgrades scheduled in Winter 26/27 and Spring 27
  - Extensive coordination with BGE and Reliability Engineering/Dispatch
- Conastone-Otter Creek 230kV PPL Rebuild (b3800.3)
  - One of a few precursory upgrades for the Doubs-Chanceford 500kV Greenfield Upgrade
  - Expected to be complete by Summer 2026

RTEP Upgrades Completed or In-Progress

- Dominion (Late Spring/Summer 2026)
  - Mars/Wishing Star (b3718)
    - **Additional feed into Data Center Alley**
  - LockRidge-Roundtable 2223 and Roundtable-Greenway 2031 (b3718.5)
    - **Line rating increased by 45%**
  - Elmont 500kV reconfiguration (non-RTEP)
    - **Line rating increased by 45%**
  - Remington-Marshrun 230kV 299 rebuild (non-RTEP)
    - **Line rating increased by 65%**

Upcoming Outages Related to RTEP Upgrades

New 500kV Capacitor Installations Fall 2026 - Spring 2027

Expected to Constrain North to South flows into BC/PEP

- Lexington (b3693)
  - Lexington TX 1 (9/14/26-10/1/26)
- Conastone (b3780.10 – Brandon Shores Upgrade)
  - **Conastone 500 Bus (2/3/27-4/16-27)**
- Brighton (b3780.1 – Brandon Shores Upgrade)
  - Brighton 500-1 Bus (8/3/26-10/5/26)
  - Brighton 500-2 Bus (10/12/26-12/18/26)
  - **Brighton-Doubs 5055 500kV (11/30/26-3/12/27)**
- Burches Hill (b3780.12 – Brandon Shores Upgrade)
  - Burhces Hill-Possumpoint 560 500kV (9/16/26-11/17/26)

Upcoming Outages Related to RTEP Upgrades

Dominion – Fall 2026

Expected to Constrain West to East and South to North flows into Northern DOM

- Aspen 500KV Substation Construction (b3800.200, 202, 213-214, 225-227)
  - **Goosecreek-Brambleton 558 500kV (10/5/26-11/26/26)**
- New Possum Point 500/230kV Transformer (b2443.6)
  - **Possumpoint TX2 (9/16/26-11/18/26)**
  - **Possumpoint TX1 (9/25/26-10/25/26)**
- 2172 and 2183 230kV Line Reconductor Uprates (b3300, b3869.2)
  - **Brambleton TX2 (9/21/26-10/2/26)**

Upcoming Outages Related to RTEP Upgrades

Dominion - 2027

- Bristers/Morrisville/Anderson Branch – 500kV Rebuild/Expansion (b3800.311,336,346, b4000.337)
  - **Bristers-Morrisville 545 500kV (9/16/27-1/31/27)**
- Goose Creek TX 1 Replacement (b4000.340)
  - **Goose Creek TX 1 (2/13/27-4/16/27)**

Expected to Constrain West to East and South to North flows into Northern DOM

Upcoming Outages Related to RTEP Upgrades

PECO/FE/Transource – Fall 2026 through 2027

- Doubs-Chanceford 500kV Greenfield Prep work (FE) (b3800.1-2, 5)
  - Peachbottom-TMI 5007 500kV(9/8/26-10/9/26)
  - Peachbottom-TMI 5007 500kV(3/1/27-3/31/27)

Significant coordination between TOs and Peach Bottom Nuclear

- Peach Bottom Reconfiguration for Bramah 500KV Station and 5012 Line Rebuild (b3780.1-2, b3800.42)
  - Peachbottom Bus Tie #2 500kV (10/12/26-11/11/26)
  - Nottingham-Peach Tap 220-08 230kV (10/26/26-10/31/26)
  - Peachbottom TX1 (9/7/27-10/15/27)
  - Peachbottom Bus Tie #1 500kV (10/25/27-11/11/27)
  - Peachbottom Bus Tie #1 500kV (11/11/27-1/8/27)

Generator Outage Coordination

- Maintaining adequate capacity during shoulder seasons is increasingly challenging:
  - Load growth and generation retirements are outpacing new generation
  - High numbers/volume of transmission outages and high impact transmission outages can create deliverability issues and generator dependencies
- GOs are strongly encouraged to submit outages in early with as much detail as possible
  - Generation outage evaluation complexity has increased significantly, requiring additional resources to review granular details and mitigate conflicts
    - PJM has worked with GOs to adapt to the current operating environment and gather feedback
- Flexibility on outage schedules and durations is critical going forward
  - Increase in approved outage adjustments and recalls due to emergent system conditions

Key Takeaways

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• Several major RTEP outages are nearing completion or have been completed	• Many more are currently being managed by the MTOPOC process	• Generation outage submission and flexibility will be critical to maintaining system reliability

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