

Generation Deactivation Notification Update

Transmission Expansion Advisory Committee

Jan 9th, 2024



Deactivation Status

Unit(s)derway	MW	Transmission Zone	Requested Deactivation Date	PJM Reliability Status
Eddystone Unit 3 & 4	760	PECO	05/31/2025	Reliability analysis underway
Virginia Beach 1 LF	11	DVP	04/01/2024	Reliability analysis underway
Morgantown CT 3, 4, 5, 6	216	PEPCO	06/01/2024	Reliability analysis underway
Sayreville Unit 1,2,3,4	217	JCPL	06/01/2024	Reliability analysis underway

* 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.



Deactivation Status

Unit(s)	MW	Transmission Zone	Requested Deactivation Date	PJM Reliability Status
H.A Wagner	844	BGE	06/01/2025	Reliability analysis completed. Reliability impacts identified. Existing baselines b3780.1 – b3780.13, b3781& b3782 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.

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Wagner Deactivation Immediate Needs Analysis

- Tested Wagner deactivations for 2025 Summer and Winter conditions
 - -All Wagner out
 - -Only Wagner 3 remains online
 - -Only Wagner 4 remains online
 - -Only Wagner 1+4 remain online
 - -Only Wagner 3+4 remain online
- Assumed Brandon Shores 1 & 2 continues to operate in above scenarios

• Findings

- Wagner 1 and CT1 could be deactivated
- Reliability criteria violations associated with Wagner 3 & 4 deactivations
- Wagner 3 & 4 RMRs are needed until reliability violations are addressed

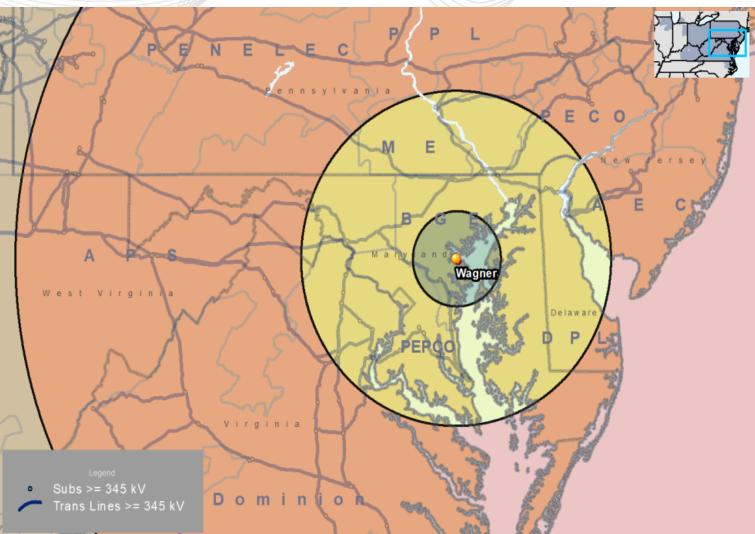
pim Voltage Violations – Multiple Transmission Owner Areas

Problem Statement: N-1-1 Voltage Violations – Wagner Deactivations, 844 MW

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

Reliability tests indicate wide spread voltage deviation violations upon Wagner ' deactivations, majority of them are associated with losing Brandon Shore's Generator(s)

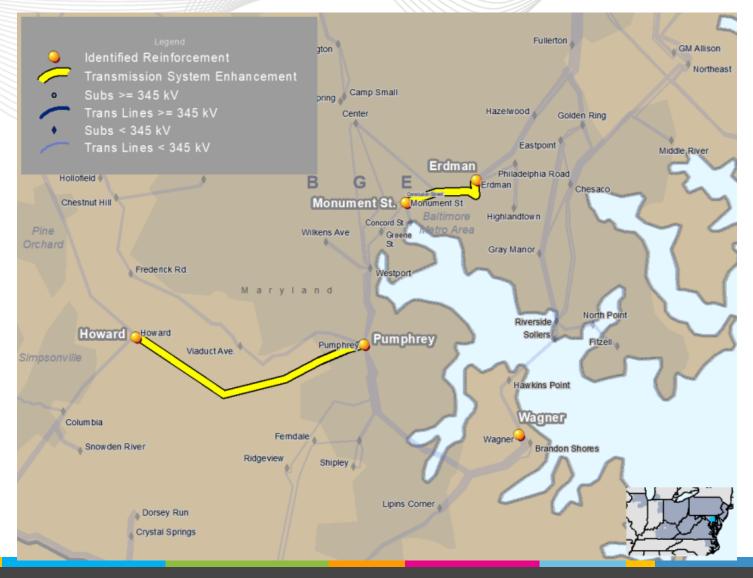
- Impacted areas :
 - BGE
 - PEPCO
 - Dominion
 - PECO
 - APS
 - PPL



Thermal Violations - BGE, APS and PEPCO Transmission Owner Areas

Problem Statement: N-1-1 Violations – Wagner Deactivations, 844 MW

- BGE
 - Wagner 230/115kV Transformer 1
 - Wagner 230/115kV Transformer 2
 - Howard Pumphrey 230kV
 - Monument St to Erdman 115kV





- Tested Wagner deactivations (and Brandon Shores deactivation) with 2022 RTEP W3 solution components in place by 2028 including Brandon Shores' immediate needs solution
- Tested Wagner deactivations (and Brandon Shores deactivation) with full 2022 RTEP W3 solution
- Findings
 - 2025 Wagner Immediate Need violations are addressed in 2028. No immediate needs solution required
 - New N-1-1 Thermal : North East 230/115kV Transformers in the summer
 - New N-1-1 Voltage Drop : Otter Creek 500kV and North-East portion of BGE 230kV systems in the winter
 - Wagner Immediate Need violations and all new N-1-1 violations are addressed in with full W3 solution
 - Future RTEP cycle will continue to analyze evolving system conditions and develop necessary solution to maintain reliability.



1. Wagner deactivations require the need for Wagner 3 & 4 RMRs

- Wagner 1 and CT can deactivate. Wagner 3 & 4 cause reliability violations
- Wagner 3 & 4 must remain operational until reliability violations are addressed

2. Wagner deactivations will not require additional immediate need upgrades

3. Wagner 3 & 4 are expected to remain RMRs at least till 2028

Continue to analyze the RMR needs as system conditions evolve and upgrades come into service





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V1 - 01/03/2024 - Original slides posted.