



Wagner Deactivation Update

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PJM Planning

Deactivation Enhancements Senior Task Force

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On 10/16/2023, PJM received Wagner deactivations @ 841 MW effective 6/1/2025

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Wagner 1 @ 126 MW, Wagner 3 @ 305 MW, Wagner 4 @ 397 MW and Wagner CT @ 13MW

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On 4/6/2023, PJM received Brandon Shores 1 & 2 deactivations @ 1281 MW effective 6/1/2025; PJM requested RMRs

- Tested Wagner deactivations for 2025 Summer and Winter conditions
- Assumed Brandon Shores 1 & 2 continue to operate (RMR)

- 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**

N-1-1 Voltage Analysis - Indicates wide area voltage criteria violations

- BGE, PEPCO, DOM
- PECO, PPL
- APS

N-1-1 Thermal Analysis - Indicated thermal criteria violations

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

- Tested Wagner deactivations (and Brandon Shores deactivations) 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-need 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
- 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.

PJM concludes the need for 2 Wagner RMRs and no additional upgrades

1. Wagner deactivations require the need for Wagner 3 & 4 RMRs
 - Wagner 1 and CT can deactivate
 - Wagner 3 & 4 must remain operational until reliability violations are addressed
2. Wagner deactivations will not require additional Immediate-need upgrades
3. Brandon Shores 1 & 2 and 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

APPENDIX

Unit	MW	Advanced Notice (years)	RMR Start	RMR End	RMR duration (years)
Brandon Shores 1*	639	2.2	6/1/2025	12/31/2028	3.6
Brandon Shores 2*	643	2.2	6/1/2025	12/31/2028	3.6
Wagner 3*	305	1.6	6/1/2025	12/31/2028	3.6
Wagner 4*	397	1.6	6/1/2025	12/31/2028	3.6
Indian River 4	412	0.9	6/1/2022	12/31/2026	4.6
BL England 3	149	0.3	5/1/2017	1/24/2018	0.7
BL England 2	150	0.3	5/1/2017	4/30/2019	2
Yorktown 2	165	2.2	1/6/2017	3/8/2019	2.2
Yorktown 1	159	3.1	1/6/2017	3/8/2019	2.2
Lake Shore 18	245	0.6	9/1/2012	9/15/2014	2
Eastlake 3	132	0.6	9/1/2012	9/15/2014	2
Eastlake 2	132	0.6	9/1/2012	9/15/2014	2
Eastlake 1	132	0.6	9/1/2012	9/15/2014	2
Ashtabula 5	244	0.6	9/1/2012	4/11/2015	2.6
Niles 1	109	0.3	6/1/2012	10/1/2012	0.3
Elrama 4	171	0.3	6/1/2012	10/1/2012	0.3
Cromby Diesel	3	1.0	6/1/2011	6/1/2012	1
Eddystone 2	309	1.5	6/1/2011	6/1/2012	1
Cromby 2	201	1.5	6/1/2011	6/1/2012	1
Brunot Island 4CC	244	0.2	5/16/2006	7/5/2007	1.1
Sewaren 4	124	2.6	2/25/2005	9/1/2008	3.5
Sewaren 3	106	2.6	2/25/2005	9/1/2008	3.5
Sewaren 2	118	2.6	2/25/2005	9/1/2008	3.5
Sewaren 1	103	2.6	2/25/2005	9/1/2008	3.5
Hudson 1	383	0.2	2/25/2005	12/8/2011	6.8

* PJM requested RMR, generator owner agreement pending