

Indiana Utility Regulatory Commission Winter Reliability Forum

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Winter Readiness/Sensitivity Analysis

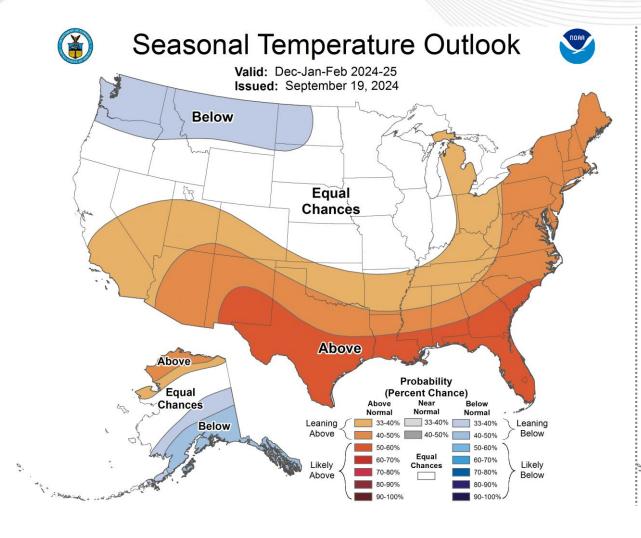
Gas-Electric Coordination

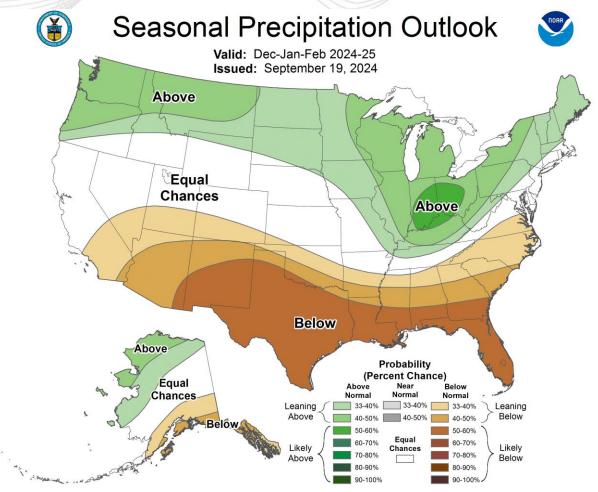
Generator Preparedness/Accreditation

Capacity Market



CPC/NOAA Winter Outlook



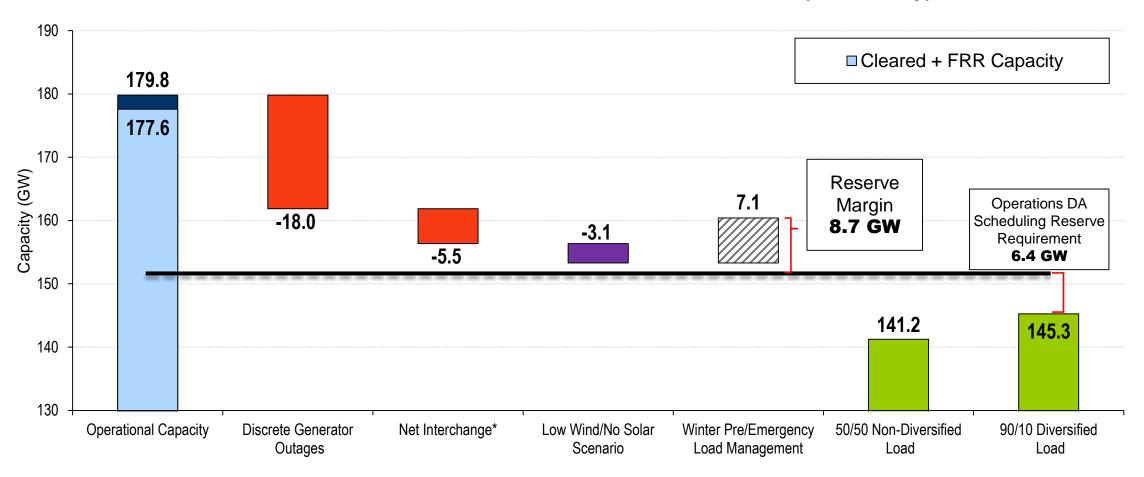




Low Wind and No Solar Scenario

(Winter 2024–25 – Preliminary)

Winter 2024–25 Low Wind and No Solar Scenario Overview (Preliminary)



^{* 3,025}MW of Net Interchange (5,500MW) is Firm Interchange, which cannot be recalled.



2024–25 Winter OATF Study

Sensitivity Studies	RESULTS
External Contingencies Impactful to PJM Reliability	No Reliability Concerns
N-1-1 Relay Trip Conditions	No Reliability Concerns
Max-Cred Contingency Analysis	No Reliability Concerns
90/10 Load Forecast Study (145,259 MW diversified peak load forecast)	No Reliability Concerns
Gas Pipeline Study	No Reliability Concerns
Solar and Wind Generation Sensitivity Study	No Reliability Concerns
Transfer Interface Analysis	No Reliability Concerns
BGE/PEPCO Import Capability	No Reliability Concerns

50/50 modeled load forecast: 141,233 MW

90/10 modeled load forecast: 145,259 MW



Gas-Electric Coordination

Weekly winter operations calls with interstate pipeline gas operations personnel (Primarily November through March)

Daily analysis of natural gas scheduled deliveries to generators (Is the gas nomination sufficient to meet electric obligation?)

Daily assessment of pipeline operating conditions (OFOs, critical days, ratable take requirements, force majeure)

Daily report(s) to PJM Dispatch on gas delivery risks, which could impact generation and provide overall operational awareness

Timely assessment and communication of emergent pipeline events to PJM Ops and Markets personnel

Pre-winter meetings with interstate pipelines and local distribution companies

Monthly pipeline outage coordination calls (April through October)



Winter Generator Preparedness

- □ NERC Natural Gas Statement
- □ NERC/RF/SERC Winter Prep Activities
- Cold Weather Checklist
- Seasonal Fuel Inventory and Emissions
 Data Request
- □ Pre-Winter Reactive Capability Verification
- Maintenance Margin/Basic Values and Generation Outages

- Periodic Fuel and Non-Fuel Consumables
 Inventory Data Requests
- RTO-Wide Winter Emergency Procedures
 Drill
- SERC and NPCC Winter Operations and Capacity Projections
- □ Generator Site Visits With RF and SERC
- NYISO, MISO, TVA and CPL Seasonal Readiness Meetings

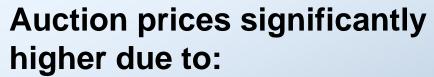
https://www.pjm.com/-/media/committees-groups/committees/oc/2024/20241010/20241010-item-11---generation-resource-cold-weather-preparation.ashx



PJM 2025/2026 Capacity Auction

System tighter since the 2024/25 BRA

As predicted in 4R Report



Generator retirements | More power demand | FERC-approved market reforms



Prices signal need for investment now.

Nov. 8: FERC grants PJM
6-month delay to pursue limited reforms for 2026/2027 auction.

Goal:

Improve market certainty, resolve key issues before next auction.



Appendix

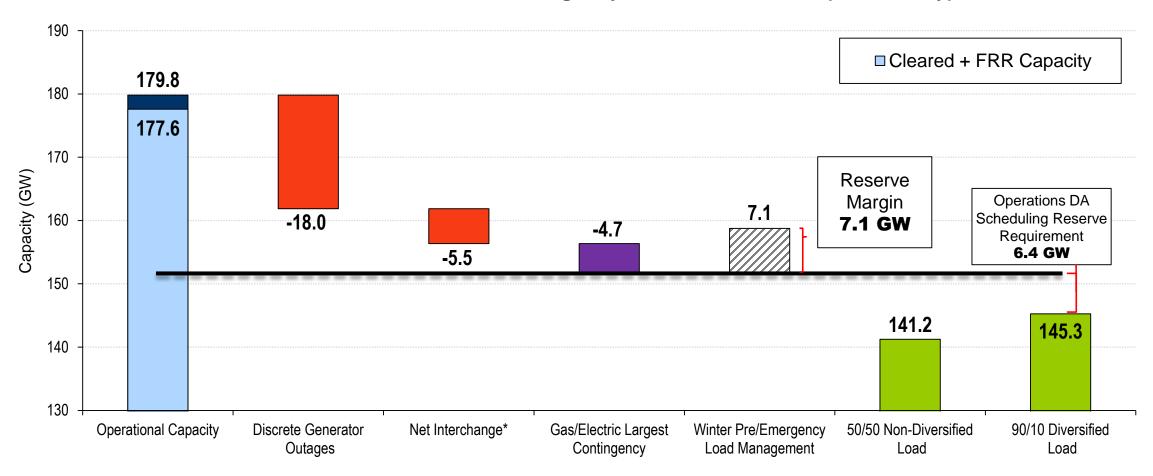
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Gas-Electric Contingency Scenario

(Winter 2024–25 – Preliminary)

Winter 2024–25 Gas Electric Contingency Scenario Overview (Preliminary)



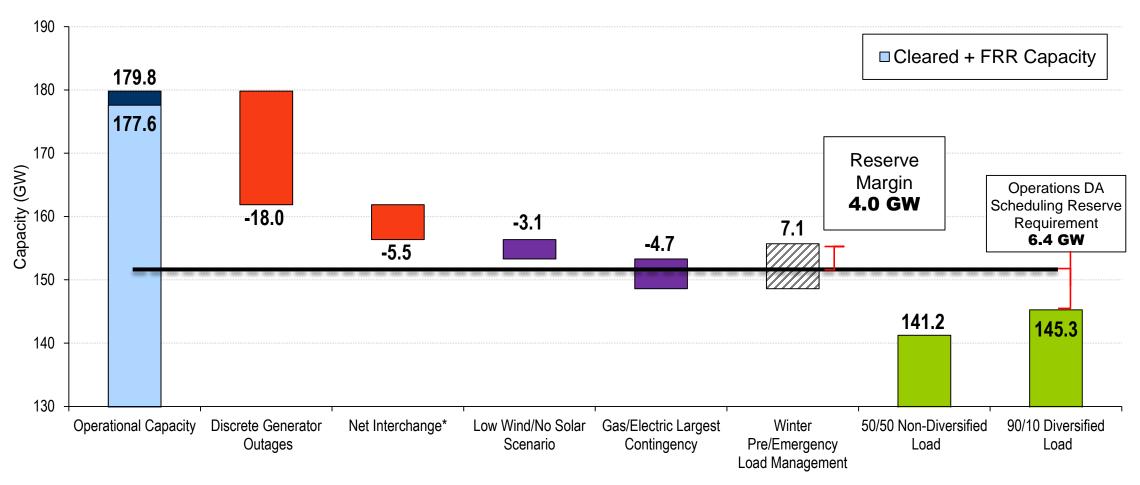
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Stressed System Scenario

(Winter 2024–25 – Preliminary)

Winter 2024–25 Stressed System Scenario Overview (Preliminary)



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