



Generation Resource Cold Weather Preparation

Eli Ramsay

Sr. Engineer, Generation - PJM

System Operations Subcommittee

October 2, 2024

- **Markets Gateway**

- Resource Limitation Reporting, Operational Restrictions, Max Run Time

- **Parameter Exceptions**

- For additional information on submitting exceptions for pipeline constraints, please refer to the [Temporary Operating Parameter Limit \(PLS\) Exceptions due to Pipeline Restrictions](#) document posted on the Energy Market page under the Parameter Limited Schedules section
- Temporary Exceptions can be submitted throughout the operating day including before and after the close of the Day-Ahead Market
- Supporting Documentation can now be uploaded directly to Markets Gateway

- **Periodic Fuel and Non-Fuel Consumables Inventory Data Requests**

- **eDART Outage and Informational Tickets**

- **Cold Weather Advisory**

- Provides early notice (3-5 days) that forecasted temperatures may call for a Cold Weather Alert
- Members are to take any necessary precautions to prepare generating facilities for cold weather operations

- **Cold Weather Alert**

- Prepare personnel and facilities for expected extreme cold weather conditions
 - Erecting temporary windbreaks or shelters, positioning heaters, verifying heat trace systems, or draining equipment prone to freezing
- Update all parameters in Markets Gateway
- Report any limitations to PJM Dispatch

- **Pre-winter generation resource site visits**
 - PJM coordinating with RF to develop plan and schedule
 - Targeted start pre-winter in 2024/2025
- **Gas-Electric Coordination**
 - During Critical Periods:
 - Dispatching gas units in real time taking the intraday gas nomination deadlines into account as necessary
 - Gas-Electric team communicating with gas generators to ascertain fuel supply availability particularly for those units being counted on for reserve requirements



PJM Training Available to Enhance Winter Readiness

- **Upcoming In-person Training:**
 - PJM Markets 201 – 11/19 to 11/21
- **LMS Courses:**
 - Generation ITP Part B - PJM Markets and Real Time Ops
 - Generation ITP Part D - Emergency Procedures (Resource Limitations actions covered here)
- **Virtual Sessions Planned for Q4 of 2024:**
 - [Generator Energy Schedules and Parameters](#) – 10/30
 - Performance Assessment Intervals – 12/12
 - Winter Emergency Procedures Drill – 11/7

Cold Weather Preparation Guideline and Checklist

- Provides generation resources with a guide to prepare units for cold weather operation
- All generation resources must be prepared for winter and respond accordingly to the data request
- Based on Manual 14-D, Attachment “N”
- Data Request in eDART
 - Open November 1st to December 15th
 - Option of using the PJM or equivalent GO developed checklist
 - GOs requested to identify any improvements or changes to preparation activities made since Winter Storm Elliott
 - GOs requested to share best practices not already documented in M-14D, Attachment “N”
- Results published at appropriate stakeholder and regulatory levels

- Changes to Cold Weather Preparation Checklist
 - In addition to Cold Weather Operating Limits, we will be adding NERC Extreme Cold Weather Temperature
 - Basis for collecting NERC Extreme Cold Weather Temperature is NERC Standard EOP-012-2, effective October 1, 2024
 - Data will be pre-populated where possible

- Data Request open in eDART October 1 through mid-November
- Focused on fuel supply and delivery details, emissions limitations and gas supply/delivery information
- Required for reliable operations planning purposes
- Enhance PJM situational awareness in preparation for severe cold weather
- Data will be pre-populated where possible

- **NERC Winter Prep for Severe Cold Weather Webinar 9/5/24**
 - Preparation for the upcoming winter weather, including:
 - Winter reliability assessment update
 - Industry specific presentations from ERCOT, SPP, EPRI, and ISO-SE

- Generation resources strongly encouraged to self-schedule for testing
 - Day-ahead preferred, real-time acceptable with proper notice to PJM dispatch
 - Informational eDART ticket with cause “Cold Weather Preparation Exercise”
 - See Manual 14-D, Section 7.5.1 for details

- Pre-Winter Review: From October 1 through October 31
- Generation Owners review their unit reactive capabilities in eDART
- Update D-curves as necessary
- Provide acknowledgement via eDART

- Data requests are issued throughout the year to collect critical operational data from Generation Owners (GOs) via eDART. When the submission time passes and the data request is closed, there may be GOs that have not provided the required data
- Reactive capability verifications and GOs who are not actively managing eDART tickets fall under the same umbrella in accordance with M-10, Section 2
- Non-respondents that **may be found in breach of PJM Operating Agreement** if they do not remedy the potential breach in a timely manner, per OA section 11.3.1



Data Request Non-Responders: Historic Response Rates

- 2023 Fuel and Emissions (Annual Survey): 92.7%
- 2023 Cold Weather Preparation Checklist: 97.8%
- 2022 Fuel and Emissions (Annual Survey): 97.0%
- 2022 Cold Weather Preparation Checklist: 96.9%
- 2021 Fuel and Emissions (Annual Survey): 97.9%
- 2021 Cold Weather Preparation Checklist: 93.4%

All percentages shown by unit count

- Roughly one week before a data request closes, a “reminder” Pardot notification will be sent out
- When an eDART data request closes, PJM will review the list of non-responders and send potential breach letters accordingly
- Impacted parties will have the opportunity to remedy the potential breach by supplying the data requested through a remediation data request
 - The data request will be re-opened for **two business days**. During this window, GO’s may submit their responses to resolve the potential breach. After 48 hours from re-opening, the data request will be closed permanently
- PJM will begin initiate the breach process for continued non-responders

Facilitator:
Kevin Hatch,

Kevin.Hatch@pjm.com

Secretary:
Matt Wharton,

Matthew.Wharton@pjm.com

SME/Presenter:

Eli Ramsay,

Eli.Ramsay@pjm.com

Generation Resource Cold Weather Preparation



Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

**PROTECT THE
POWER GRID
THINK BEFORE
YOU CLICK!**



Be alert to
malicious
phishing emails.

Report suspicious email activity to PJM.
(610) 666-2244 / it_ops_ctr_shift@pjm.com

