



Generation Resource Cold Weather Preparation

Vince Stefanowicz

Principal Engineer, Generation - PJM
System Operations Subcommittee

September 28, 2023

- **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.
- **Real Time Values**
 - Joint Motion filed on 9/11/23 to Expedite Acceptance of PJM's Proposal on Real Time Values from September 15, 2021
- **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

- **Essential Actions to Industry Cold Weather Preparations for Extreme Weather Events - [Link](#)**
 - Requires GO to provide cold weather data to its RC, BA, and TOP
 - Refer to Essential Actions #7 and #8 in NERC Alert
 - PJM is the NERC Registered RC, BA and TOP
 - Reporting for NERC Registered Entities required by midnight Eastern on October 6, 2023
 - PJM collecting information through an eDART Data Request
 - Issued to all eDART units – only NERC Registered Entities must complete
 - GOs required to upload the responses provided to NERC
 - GOs required to answer some PJM-specific questions
 - Data Request open from August 1 through October 16

- **Pre-winter generation resource site visits**
 - PJM coordinating with IMM and RF to develop plan and schedule
 - Targeted start pre-winter in 2024/2025
- **Electric Gas Coordination Sr. Task Force**
 - Stakeholders continue to discuss short and long term solution options
 - Short term focus is on situational awareness improvements that can be implemented prior to winter of 2023/24
- **Illinois Climate and Equitable Jobs Act: PJM Reliability Guidance**
 - Guideline allows PJM to run units only for reliability reasons after emissions hours are reached
 - <https://www.pjm.com/-/media/committees-groups/committees/oc/postings/illinois-ceja-reliability-guidance.ashx>

- **Upcoming In-person Training:**
 - [Market Optimization Workshop](#) - 11/7 to 11/9
 - [Generation ITP](#) - 12/4 to 12/8
- **[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 2023:**
 - [Generator Energy Schedules and Parameters](#)
 - Performance Assessment Intervals
 - Winter Emergency Procedures Drill/Refresh (Drill date TBD)



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

- 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 Request open in eDART mid-October through mid-November
- Data will be pre-populated where possible

- **NERC Winter Prep for Severe Cold Weather Webinar 9/7/23**
 - Preparation for the upcoming winter weather, including:
 - Lessons Learned from recent severe cold weather events & effects on generation resources
 - Review of Level 3 NERC Alert on Cold Weather Preparations for Extreme Weather Events III
 - Winterization best practices for Inverter Based Resources
- **RF Winterization Program and Standards Update Webinar – [Link](#)**
 - Webinar held on July 17, 2023
- **SERC Winter Storm Elliot Recommendations and Lessons Learned**
 - Scheduled for November 2, 2023 from 2:00 – 3:30 p.m.
 - [Registration Link](#)

- Generation resources strongly encouraged to self-schedule for testing
 - PJM will notify units that should conduct test that have not run in the previous 8 weeks
 - Day-ahead preferred, real-time acceptable with proper notice to PJM dispatch
 - During month of December
 - Temperature forecast below 35 degrees
 - 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

Facilitator:
Donnie Bielak,

Donnie.Bielak@pjm.com

Secretary:
Matt Wharton,
Matthew.Wharton@pjm.com

SME/Presenter:
Vince Stefanowicz,
Vincent.Stefanowicz@pjm.com

Generation Resource Cold Weather Preparation



Member Hotline

(610) 666 – 8980

(866) 400 – 8980

custsvc@pjm.com

Appendix

- [Project 2019-06 Cold Weather](#)
 - To enhance the reliability of the BES during cold weather events by ensuring Generator Owners, Generator Operators, Reliability Coordinators, and Balancing Authorities prepare for extreme cold weather conditions.
- [Project 2021-07 Extreme Cold Weather Grid Operations, Preparedness, and Coordination – Phase II](#)
 - Address reliability related findings from the Federal Energy Regulatory Commission (FERC), NERC, and Regional Entity Joint Staff Inquiry into the February 2021 Cold Weather Grid Operations
 - Changes to EOP-011 Emergency Operations & TOP-002 Operations Planning

**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

