Generation Resource Cold Weather Preparation

Vince Stefanowicz
Sr. Lead Engineer, Generation
Reliability Standards & Compliance Subcommittee
October 15, 2021
Summary of Activities

- Pre-Winter Reactive Capability Verification
- Cold Weather Checklist
- Seasonal Fuel Inventory and Emissions Survey
- WEEKLY Fuel Inventory and Supply Data Request
- Generator Minimum Operating Limit Survey
- Cold Weather Exercise
- RF / SERC Joint Webinar on Cold Weather Preparedness
- NERC Webinar
• 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
Cold Weather Checklist

Cold Weather Preparation Guideline and Checklist

- Provides generators with a guide to prepare units for cold weather operation
- Based on Manual 14-D, Attachment “N”
- Survey in eDART
  - Starting November 1st and ending on December 15th
- Option of using the PJM or equivalent checklist
Seasonal Fuel Inventory and Emissions Survey

- Required for reliable operations planning purposes
- Focused on fuel supply and delivery details, fuel inventory and emissions limitations
- Enhance PJM situational awareness in preparation for severe weather
- Survey open in eDART early October through mid-November
Weekly Fuel Inventory and Supply Data Request

• Required for reliable operations planning purposes and enhanced PJM situational awareness
• Focused on fuel supply and delivery details, and fuel & non-fuel consumable inventory for coal and oil resources only (including dual-fuel units)
• A new data request will be issued each Monday, starting October 11 through February 28.
• Each data request will remain open from Monday to the following Sunday.
Periodic Survey: Min. Operating Temperature

Based on joint NERC/FERC report on MISO cold weather event in January 2018 and ERCOT preliminary findings from February 2021

- Focused on specific generating units limitations, such as ambient temperatures
- Survey reopened 6/14/21 to collect additional data for renewable resources and those recently placed in service - analysis is ongoing

Report Links:
http://www.ercot.com/content/wcm/key_documents_lists/225373/2.2_REVISEDERCOT_Presentation.pdf
PJM no longer facilitating a formal exercise

Generation resources asked to self-schedule for testing

- 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
RF / SERC Winter Prep for Severe Cold Weather Webinar

• Joint effort between RF and SERC
• Held on August 24, 2021 – 0900 to 1230
• Preparation for the upcoming winter weather
• In addition to RF & SERC, presentations by many entities including:
  • NERC, MISO, TVA, NAGF, NAES, El Paso Electric

Link to posted materials:
https://www.serc1.org/outreach/events-calendar/event-details?id=4ff5b824-0bed-4fe5-bc1a-2d7883de9d23
Webinar recording:
https://serc1.webex.com/serc1/lsr.php?RCID=b7297ce99bf803591f7c14100531d6ee
NERC Winter Prep Webinar

- Preparation for the upcoming winter weather, including:
  - Generator failure modes and mechanisms
  - Winter reliability assessment
  - Natural gas and electrical operation coordination considerations

Webinar Slides:

Webinar Recording:
https://nerc.webex.com/recordingservice/sites/nerc/recording/b195f2e0ee41103997710050568c9e65/playback
Facilitator:
Monica Burkett
Monica.Burkett@pjm.com

Secretary:
Ashwini Bhat
Ashwini.Bhat@pjm.com

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

Contact

Generation Resource Cold Weather Preparation

Member Hotline
(610) 666 – 8980
(866) 400 – 8980
custsvc@pjm.com