PJM System Operations
Gas Coordination Discussion

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Discussion Topics

- Last 15 years
  - Historic operational highlights
- Procedures
- Tools
- Projecting into the future
• Historic operational highlights
  – 1994: January 19, 1994 was last instance of PJM shedding firm load (1,000 MW total) in response to a capacity deficiency.
    • Actual temperatures less than 5 degrees.
    • Natural Gas fired units represent a lower percentage of total available resources
  – 2005: single digit temperatures across the RTO.
    • No emergency actions needed other than a Cold Weather Alert.
    • Natural gas represents a high percentage of total available resources.
• Historic operational highlights continued:
  – 2008:
    • Winter gas curtailments occurred again between January 18th – February 9th.
    • Temperatures between 5 – 12 degrees across the RTO.
    • No significant emergency procedures needed.
  – 2013: January 22 – 24
    • Inauguration week (all time winter peak) with large volume of gas curtailments
    • Cold Weather Alerts issued
    • Temperatures approaching 10 degrees
    • Natural Gas represents a larger share of available resources

• Severe event driven (vs. peak load)
• Manual 13 Procedures
  – Alerts, Warnings, and Actions for potential/actual capacity deficiencies.

• SSR Part G: Fuel Limited Resources
  – Used to identify those units with fuel limitations

• General fuel limitations
  – General classification: 72 hours of run time at max output.
  – Unit specific limitations for Fuel Limited Resources:
    • Oil, Kero, & Diesel: less than or equal to 16 hours
    • Gas CTs: less than or equal to 8 hours
    • Steam: less than or equal to 32 hours
• eDart
• Gas Pipeline
  - https://gaspipeline.pjm.com/gaspipeline/pages/dashboard.jsp
Gas Pipeline eSuite application

Critical Notifications

Critical notifications from the following pipelines are currently unavailable:

Dominion Gas Transmission - last update 06/07/2013 19:30

[Table of critical notifications]

Kinder Morgan Gas Transmission Pipeline System

This pipeline serves the following generators:

- Aurora
- Elgin
- Lee
Projecting into the future

• Conditions:
  – 1994 / 2005 conditions with a 2015 fleet
  – Gas pipeline demand
  – Severe event planning

• Potential improvements
  – Some level of firm fuel / dual fuel requirement?
  – Better information sharing?