

# Gas Electric Coordination Issues

EGCSTF

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IMM



Monitoring Analytics

# Dominion 08.15.2022 Proposal

- **Dominion Option 1:**
  - **Increased PJM situational awareness**
- **IMM supports increased situational awareness of gas supply conditions**
  - **Details to be developed**
- **Dominion Option 2:**
  - **Multi day option for weekends/holidays**
- **IMM opposes the proposed multi day option as it shifts risk to customers and provides unique market options to gas fired generation**

# FERC

- **Inclusion of natural gas cost adders.**
  - **Gas costs are addressed in fuel cost policies**

# FERC / NAESB

- **Options for gas day / electric day alignment.**
  - **Should work with NEASB to align gas market with electric market.**
- **Opportunities for enhancements to NEASB nomination guidelines for generators during constrained periods.**
  - **Generators must follow pipeline nomination guidelines.**

# Natural Gas Industry / Tariff

- **Daily, Monthly and seasonal natural gas balancing rules.**
  - **Generators have to manage their supplies within the pipeline tariffs**
  - **These risks are assumed when generators make purchases and sales.**



# PJM Markets

- **Minimum natural gas volume commitment for volumes purchased in advance of day ahead awards using DA MW/LMP projections**
  - **Generators are obligated to make purchases/sales based on their own market expectations.**
  - **Guaranteed payments are not consistent with market principles.**
- **Gas pipeline / supply constraints considered in dispatch instructions**
  - **During constrained periods PJM should share pipeline conditions with dispatch.**
  - **Generators availability should be updated immediately.**
  - **Outages should be taken when gas is not available.**

# PJM Markets

- **Recovery of fuel disposal due to cancelled dispatch.**
  - **Fuel purchases are based on generators economic decisions, this risk should not be borne by the market.**
  - **Look into the possibility of developing a Gas ISO.**
- **Multi day award to match multi day gas market over weekends and holidays. Due to lack of liquidity in gas market.**
  - **Fuel purchase decisions are the generators' responsibility.**
  - **Working with regulators and gas suppliers to ensure a gas market over weekends/holidays should be a goal.**

# PJM Markets

- **The obligations of capacity resources to obtain gas supply and pipeline transportation with defined reliability characteristics should be clarified.**
  - **It is the generators' responsibility to determine what resources they need and generators should make those decisions based on their own economic assessment.**
  - **Capacity resources are expected to be available at all times.**



# PJM Operations

- **Clear definition of fuel related unavailability/outages.**
  - **Generators should take a forced outage if fuel is not available. Generators should not receive the daily capacity payment if fuel is not available for the day.**
- **Ensuring critical gas infrastructure is clearly identified within system restoration, load shedding and demand response programs.**
  - **PJM should implement their plan as soon as possible to ensure that no part of the gas supply is included in or affected by any DR resource. PJM should work with pipelines to identify critical resources including black start units.**

# PJM Operations

- **Expanded Tabletop Drills.**
  - **PJM should include IMM and state PUC's in their tabletop drills as well as generator owners.**
- **Improve understanding of on-site, alternate fuel inventory and capability.**
  - **Generators update fuel inventories in MIRA. More regular updates should be performed. PJM needs full real time situational awareness.**

# PJM Operations

- **In addition to N-1 (unit failure paradigm) contingency planning, some contingency planning around load and intermittent generation forecast error should be used in reserve calculations and associated fueling requirements.**
  - **Not relevant to gas/electric coordination issue.**
- **N-1 reliability and emergency spin reserves to consider fuel limitations and constraints**
  - **PJM reserve calculations and the ability to offer reserves should account for actual terms of gas availability including nomination periods.**

# PJM Operations

- **Opportunities for enhanced protocols for communication of advanced notice of gas limitations (either due to physical delivery or contractual) from market participants to PJM.**
  - **Any gas limitations generators identify need to be reported to PJM immediately**
- **PJM should have full information about the pipeline and gas supply arrangements and dual fuel supply arrangements of all generators.**
  - **Generators need to provide PJM and the IMM with all pertinent pipeline and supply information.**

# PJM Operations

- **Visibility of all fuel limitations and the impact on reliability and reserves.**
  - **PJM reserve calculations and the ability to offer reserves should account for actual terms of gas availability.**

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