PJM Gas Discussion

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Pipeline Terms and Rules

- **Gas day starts at 10 a.m. ET all over the country, not time-zone specific**
  - The actual gas day designation is the day the gas day begins, so the gas day that starts on Feb 25 at 10 a.m. is considered Gas Day 25, even though it does not end until 9:59 a.m. on the 26th

- **Nomination deadlines (ET)**
  - Timely - 12:30 pm day ahead - first day ahead nomination deadline
  - Evening - 7 p.m. day ahead - second day ahead nomination deadline
  - ID1 - 11 a.m. day of - 1st intraday nom, can change final 2/3 of gas day
  - ID2 - 6 p.m. day of - 2nd intraday nom, can change final 1/2 of gas day
  - Nominations are for the entire 24-hour gas day

- **Transportation Priority**
  - Firm primary - can only be accomplished if nominating on a firm contract from primary receipt point to primary delivery point by timely nomination deadline
  - Firm secondary - FT that is nominated after the timely deadline or to/from alternative points
  - Interruptible - Only flows if capacity is available
  - “No Bump” rule - once past the ID1 cycle, FT cannot bump IT off
Power Day versus Gas Day

• Challenges with current rules:
  - Current rules require generators to go into first gas nomination cycle - “Timely cycle”
    - with your best guess for gas usage
  - Firm transportation loses its primary rights after the Timely cycle, so any changes to
    your nomination after Timely could lower your transport priority and expose the
    shipper to cuts
  - Requires generator to own and/or utilize significantly more storage capacity or take
    losses transacting in the intraday markets to balance loads
  - LDCs interruptions due to human needs
Calpine Proposals

- Move up day-ahead bidding and awards and move back Timely gas nomination deadline
  - Increases firmness of gas supply for all generators

- Change the gas day from 10 a.m. eastern to 6 a.m. eastern
  - Eliminates the issues of changing gas day in the middle of the morning peak

- Address the LDC human needs issue
  - Requires state involvement

- Not in favor of Mandatory Firm Transportation
  - Prefer market related solutions
Power Day versus Gas Day

Proposed Day Ahead Set Up

Power Day 1

- **Off-Peak**
- **On-Peak**

**Power Day 2 Offers due**

**Power Day 2 Awards announced**

Rebid Period

Gas Day 0

- **Gas Day 1**

**Day Ahead Gas Trading**

- **Gas Day 2 Timely nominations due**
- **Gas Day 2 Evening nominations due**
Summary of Key Issues

• Need Timely gas nomination deadline after the day-ahead awards
  - This will allow generators to complete gas purchasing while preserving primary priority
  - Increases value of Firm transportation to generator
  - Increases “firmness” of delivered gas supply

• While we propose moving up the deadline for day-ahead bids, we think it should only move up one hour
  - The earlier you move the deadline up, the poorer your gas price discovery is
  - Plenty of gas can be traded prior to submitting bids if deadline is 11 a.m. eastern

• Rebidding period timing is very important
  - Must be concluded by evening gas nomination deadline, but the earlier the better
  - Must be open at least 1 hour, even when day ahead is delayed
  - Late day-ahead awards are problematic
  - Re-bid and study period can be collapsed to preserve better availability of fuel supply