



North American Energy Standards Board

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GECTF Preliminary Discussion Points List - Expanded

Purpose: The purpose of this list is to identify the areas for discussion in an effort to understand and frame the issues.

Flexibility/Planning:

- 1.1. Identify the impact of weather and other uncontrollable factors on generation and gas load swings.
 - Issues may include pricing, unknown generation needs, and gas units being turned on or off with short notice.
 - While there may not be available services to mitigate, there could be market-based tools available.
 - There is a lack of historical statistics with respect to extreme weather on generation unit availability.
- 1.2. Discuss ways to accommodate the natural gas requirements of new generation as it comes online in various regions.
 - a. The impact on the gas infrastructure of new gas-fired generation facilities.
 - Gas input supply, transportation capacity availability, and capacity contract rights (types of available services) are relevant to new gas-fired generation facilities.
 - Type of generation facility and physical location of the facility are relevant issues.
 - Lack of North American electric scheduling standards is problematic.
 - Electric generation facility citing is a regulated process.
 - b. The impact on the gas infrastructure of non-scheduled gas-fired generation coming on or going off without notice.
 - Lack of planning for peaking needs.
 - Alignment of purchase of proper services, if available.
 - An increase in gas-fired generation coming on line could result in gas flow control which would limit the gas flow at particular points.
 - New services and/or procedures (such as 'real time' natural gas service) may be needed.
 - What are the current solutions for handling the needs of peaking generation facilities?
- 1.3. Identify differences in the factors driving dispatch priority between natural gas and power.

•If multiple priority of service levels are used in a nomination chain, the lowest service level may dictate the priority of the entire chain. eg. Firm service on an upstream service provider (commodity or transportation) tied to interruptible

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~~service on a downstream service provider may result in gas not being scheduled to flow as nominated. The converse is also true. The multiple levels of services on pipelines and LDCs can impact users (multiple jurisdictions).~~

- ~~• Available services impact scheduling.~~
- ~~• Natural Gas scheduling is driven by customer contracts with transportation service providers and producers. (Proposed Addition)~~
- ~~• Electric scheduling follows contractual commitments but it is impacted by economic dispatch and real time events. (Proposed Addition)~~
- Electric dispatch is subject to contractual commitments but is also impacted by: availability of prescheduled generation assets; congestion at bottlenecks on the transmission system; availability of incremental/decremental energy at various points in the transmission system and the economic value of real time incremental/decremental energy at various points in the transmission system.
- Natural Gas dispatch is subject to contractual commitments including the confirmation of the gas supply. The transportation providers must follow their tariff requirements, including priority of service and or curtailment procedures, but are not impacted by the price of the commodity.
- ~~□ Pipelines and transmission providers are common carriers and must follow tariffs (including priority of service and/or curtailment procedures) and are not impacted by the price of the commodity.~~
- Electric Load Serving Entities have ~~has~~ an overriding obligation to serve, ~~but the determination of which generation resources are used is based on pricing.~~
- Electric Generators have an obligation to perform because power cannot be stored, but the determination of which generation resources are used is sometimes based on pricing but also on availability of generation inputs.
- One to one versus conglomerate relationship.
- Electric transmission tariffs (OATTs) contain curtailment policies.
- The ISO works to maintain the balance between generation and load.
- There are several electric transmission priorities and curtailment of schedules according to the priorities is done to address congestion if market price does not act as a limiter.
- This issue affects the retail markets.
- How soon does the generator know when he needs the gas?
- A generator might not have Firm Transmission service on a pipeline.
- RTOs/ISOs don't verify a generator has gas supply and capacity arranged before they accept a generator's bid.
- That verification is not necessary due to the economics or risk – a generator is obligated to purchase the obligation on the real time market.
- The above was identified as a factor for the January 2004 difficulties in the North East.
- Potential inappropriate market rules or market mitigation (price cap).



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- Timing issue of when gas is scheduled versus when electric is scheduled.
 - Generation load projections might not equal real time load.
- 1.4. Distinguish between the need for changes to the NAESB WGQ Standards and the need to make adjustments to contract portfolios and/or infrastructure requirements. Additional incentives may be needed to encourage entities to diversify their contract portfolios to meet their market requirements.
- 1.5. The implications that changes allowing more flexibility to non-firm gas shippers might have on the service levels and contractual rights of existing / traditional firm shippers.
- If a pipeline is fully subscribed to FT shippers and a non-FT shipper comes on line it is because a firm shipper is not using the capacity.
 - ~~Resolution~~Resolution between an unscheduled non-FT user and pipeline would occur.
 - FERC Policy addresses this.
 - Unused firm capacity is sold.
- 1.6. Identify Examples of the service characteristics that could meet the market needs for increased delivery flexibility.
- Service Characteristics:
 - Firm vs. IT
 - Firm Balancing
 - Should be developed to work for both uniform flow markets and non-uniform flow markets without producing negative impacts on other markets.
 - Any service offerings are tied to operational characteristics.
 - Storage based services (non-notice or short notice).
 - Park & Loan
 - Linepack
 - Communication mitigation RFP procedure by pipeline.
 - There are economics to providing any service.
- 1.7. Is there a need for more intraday flexibility in gas scheduling?
- The need for intraday flexibility in gas scheduling should be weighed for the needs of both industries.
 - If a change is only for the benefit of the electric industry, then the change should not occur.
 - Additional intraday nominations opportunities increase the availability of feedback data for the pipelines and would make the industries more transparent.
 - There is the need for something closer to real time or same day flexibility, but the facilities are currently not in place.
 - LDCs cannot manage additional flexibility (logistical issues).

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- Flexibility is a commodity.
- The physical nature of the commodities is different. It takes 2.5 to 3 days for gas input in the gulf to travel to New York. Electricity is instantaneous and cannot be stored.

Timelines / Scheduling:

- 2.1. How does the NAESB WGQ standard gas day interact with the various power days? There is one NAESB WGQ standard gas day and there are many regional power days that create associated difficulties in cross-commodity standardization.
 - There are obvious mismatches between the gas day and electric day-ahead and real time markets.
 - Each electric market has its own timeline.
 - Can we narrow the multiple electric timelines? (policy issue).
 - Gas pipelines may serve multiple regional markets.
- 2.2. How do the NAESB WGQ standard nomination deadlines interact with the various power deadlines? Identify the impact of regional power timeline differences.
 - There are obvious mismatches between the gas day and electric day-ahead and real time markets.
 - Each electric market has its own timeline.
 - Can we narrow the multiple electric timelines? (policy issue).
 - Gas pipelines may serve multiple regional markets.
- 2.3. Identify notice requirements that are to be provided to pipelines and/or service providers by shippers regarding load and flow changes. Identify the need for increased and/or more formal communication protocols between natural gas and power operations / control room personnel.
 - Communication procedures should be formalized. This could include informing the pipelines of a day ahead generation plan and projected gas needs in MMBtu or MCF.
 - Modifications should be communicated when know.
 - There are potential confidentiality and code of conduct issues.
 - There is a potential for coordinated maintenance outages.
- 2.4. Identify the impact of the timing of peaking requirement differences between natural gas markets and power markets.
 - The winter gas usage peak is early in the morning or late in the afternoon. Electric shows the same peak.
- 2.5. Can the natural gas producers and marketers react to 'within the day' requirement changes?
 - Real time does not exist.
 - There is a need for coordinated process.
 - Producers will not sell to a user requiring hourly service, but marketers are interested in services.

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- What is the reasonable minimum amount of notice necessary to affect a change of supply to meet load?

Reliability:

- 3.1. Identify the impact of any contemplated changes on natural gas and power reliability.
 - Any possible changes need to be evaluated for their impact on reliability.
- 3.2. Distinguish between coordination issues that are originated by 1) true reliability issues versus 2) those caused by trading risk management practices.

Terminology:

- 4.1. Clarify the differences in terminology between natural gas and power (e.g., does "Firm" mean the same thing in both commodities?)