EGCSTF:
NAESB Gas Electric Harmonization Forum Update

Brian Fitzpatrick
Principal Fuel Supply Strategist

August 15, 2023
NAESB GEH Status

• Final report issued to FERC and NERC on July 28, 2023
• Report included 20 recommendations along with the NAESB quadrant voting results on those recommendations to gauge support
• NAESB GEH Chair Contentions:
  – “Houston, we have a problem”
  – A recommendation for the creation of “a natural gas reliability organization akin to the one currently responsible for electric reliability, NERC”
  – “The twenty recommendations included in this report are intended to identify possible actions for consideration by specific entities that could be taken to improve coordination and/or strengthen the overall reliability of the natural gas and bulk electric systems as they work interdependently”
• Recommendations receiving strong support from electric and gas sectors
  – 8 (alignment of electric and gas days)
  – 9 (adoption of multi day unit commitments)
  – 10 (state PUC’s encouragement of natural gas and electricity demand response programs)
  – 11 (state PUC’s encouragement of voluntary conservation public service announcements)
• Recommendations with divergent support from electric and gas sectors
  – 1 (revise NAESB business practice standards related to the timely reporting of natural gas pipeline informational website posting data) – **85% electric wholesale/46% gas wholesale**.
  – 3 (expanding the Argonne National Laboratory NGInsight tool to improve situational awareness and communication between (a) owners and operators of natural gas production and processing facilities and (b) Bulk Electric System operators) – **80% electric wholesale/57% gas wholesale**.
  – 7 (encouraging State public utility commissions and applicable state authorities in states with competitive energy markets to engage with producers, marketers and intrastate pipelines to ensure that such parties’ operations are fully functioning on a 24/7 basis in preparation for and during events in which extreme weather is forecasted) – **87% electric wholesale/41% gas wholesale**.
  – 15 (encouraging state authorities to consider establishing informational posting requirements for intrastate natural gas pipelines regarding operational capacity data, similar to the reporting and posting requirements mandated by the FERC for interstate natural gas pipelines) – **91% electric wholesale/57.5% gas wholesale**.
  – 16 (encouraging state authorities to consider the development of weatherization guidelines appropriate for their region/jurisdiction) – **92% electric wholesale/55% gas wholesale**.
### NAESB Gas Electric Forum Work Plan

<table>
<thead>
<tr>
<th>Key Recommendation 7 Directive:</th>
<th>“The time has come for a concerted effort among those who can address the natural gas-electric infrastructure interdependency problem to consider the topics set forth above [below], or other topics of their own choosing.”</th>
</tr>
</thead>
</table>
| Forum Outcome Goals: | • Concrete actions to increase reliability of the natural gas infrastructure system necessary to support [the] Bulk Electric System  
• Plans for implementing actions  
• Deadlines for implementing actions  
• Identifying entities responsible for implementing actions |
| Categories Identified by FERC and NERC Staff | 1. Measures to improve gas-electric information sharing for improved system performance during extreme cold weather emergencies  
2. Measures to improve reliability of natural gas facilities during cold weather (freeze protection, electric supply)  
3. Measures to improve the ability of generators to obtain fuel during extreme cold weather events when natural gas heating load and natural gas-fire generators are both in high demand for natural gas, at the same time that natural gas production may have decreased |
Links to NAESB GEH Forum Documents

• November 16, 2021 FERC, NERC and Regional Entity Staff Report, The February 2021 Cold Weather Outages in Texas and the South Central United States (Key Recommendation 7 on page 195)
  Joint Report
• July 29, 2022 Joint FERC/NERC Letter to NAESB
  Letter to NAESB
• August 30, 2022 FERC/NERC Presentation to NAESB
  FERC/NERC Presentation to NAESB
• NAESB GEH Website (Posting of Monthly Meeting Materials)
  NAESB GEH Website
• FERC should consider establishing a forum in which representatives of state legislatures and/or regulators with jurisdiction over natural gas infrastructure, in cooperation with FERC, NERC, and the Regional Entities (which collectively oversee the reliability of the Bulk Electric System), and with the input from the Balancing Authorities (which are responsible for balancing load and available generation) and natural gas infrastructure entities, identify concrete actions (consistent with the forum participants jurisdiction) to improve the reliability of the natural gas infrastructure system necessary to support the Bulk Electric System.
• Options for establishing the forum could include a joint task force with NARUC, a Federal Advisory Committee, or FERC-led technical conferences.

• Ideally, the forum participants will produce one or more plans for implementing the concrete actions, with deadlines, which identify the applicable entities with responsibility for each action.
Key Recommendation No. 7

- Whether and how natural gas information could be aggregated on a regional basis for sharing with Bulk Electric System operators in preparation for and during events in which demand is expected to rise sharply for both electricity and natural gas, including whether creation of a voluntary natural gas coordinator would be feasible;
- Whether Congress should consider placing additional or exclusive authority for natural gas pipeline reliability within a single federal agency, as it appears that no one agency has responsibility to ensure the systemic reliability of the interstate natural gas pipeline system;
- Additional state actions (including possibly establishing an organization to set standards, as NERC does for Bulk Electric System entities) to enhance the reliability of intrastate natural gas pipelines and other intrastate natural gas facilities;
- Programs to encourage and provide compensation opportunities for natural gas infrastructure facility winterization;
- Which entity has authority, and under what circumstances, to take emergency actions to give critical electric generating units pipeline transportation priority second only to residential heating load, during cold weather events in which natural gas supply and transportation is limited but demand is high;
- Which entity has authority to require certain natural gas-fired generating units to obtain either firm supply and/or transportation or duel fuel capability, under what circumstances such requirements would be cost-effective, and how such requirements could be structured, including associated compensation mechanisms, whether additional infrastructure buildout would be needed, and the consumer cost impacts of such a buildout;
- Expanding/revising natural gas demand response/interruptible customer programs to better coordinate the increasing frequency of coinciding electric and natural gas peak load demands and better inform natural gas consumers about real-time pricing;
- Methods to streamline the process for, and eliminate barriers to, identifying, protecting, and prioritizing critical natural gas infrastructure load;
- Whether resource accreditation requirements for certain natural gas-fired generating units should factor in the firmness of a generating unit’s gas commodity and transportation arrangements and the potential for correlated outages for units served by the same pipeline(s);
- Whether there are barriers to the use of dual-fuel capability that could be addressed by changes in state or federal rules or regulations. Dual-fuel capability can help mitigate the risk of loss of natural gas fuel supply, and issues to consider include facilitating testing to run on the alternate fuel, ensuring an adequate supply of the alternate fuel and obtaining the necessary air permits and air permit waivers. The forum could also consider the use of other resources which could mitigate the risk of loss of natural gas fuel supply;
- Electric and natural gas industry interdependencies (communications, contracts, constraints, scheduling);
- Increasing the amount or use of market-area and behind-the-city-gate natural gas storage; and
- Whether or how to increase the number of “peak-shaver” natural gas-fired generating units that have on-site liquid natural gas storage. (Winter 2022-2023)
SME/Presenter: Brian Fitzpatrick
brian.fitzpatrick@pjm.com

NAESB Gas Electric Harmonization Forum Update

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