

**Gas-Electric Coordination
Quarterly Update**

Docket No. AD12-12

Item No: A-4
June 20, 2013

Good morning Mr. Chairman and Commissioners. This presentation reports the highlights from staff's second Quarterly Update on Gas-Electric Coordination Activities. The full staff report will be publicly posted on the Commission's website.



This presentation captures events during the period March 2013 to June 2013. We highlight national and regional efforts on natural gas and electric coordination and include an overview of recent Commission activities.



At the national level, there continues to be significant activity. On May 22, the North American Electric Reliability Corporation (NERC) released its Phase II special assessment on natural gas and electric power interdependency. It focuses on vulnerabilities that can affect bulk power system reliability. As part of that assessment, NERC recommends incorporating fuel availability into national and regional reliability assessments.

The NERC assessment also recommends increased coordination and sharing of operational planning information through formalized communication. Next steps include identifying how risk assessments are performed in different regions and using this information to develop recommendations for a uniform seasonal and long-term reliability assessment process for consideration by the NERC Planning Committee.

There was also a Congressional hearing on May 9 and a Senate Forum on May 14, 2013 addressing increased interdependence of the natural gas and electricity sectors.

Other national trade organizations continue, both through the trade association and via individual members, to outreach with the RTOs and ISOs. Many of the trade associations' individual members continue to also be involved in the regional working group efforts and, in some instances, proceedings before the Commission.



Turning to individual regions, each region continued some level of engagement and focus on issues of gas-electric coordination. This information is based on staff outreach and monitoring of the regional gas-electric coordination task force meetings.

We start with New England. Efforts in New England continue to be led by the New England States Committee on Electricity (NESCOE) Gas-Electric Focus Group. The most recent Focus Group monthly communication meetings focused on evaluating last winter's challenges and identifying short-term solutions for next winter which included three proposals to ensure adequate fuel supplies for gas-fired and dual gas/oil-fired generators next winter. One proposal by ISO-NE would create a regional energy inventory of 4.2 million barrels of oil equivalent. ISO-NE's plan would rely on oil-fired units, dual-fuel generators and a winter demand response (DR) program.

NESCOE has also formed natural gas and electric markets subcommittees to examine existing market issues in the region. The subcommittees are continuing to investigate a common information platform to better employ communication systems to enhance opportunities to buy, sell, nominate, and schedule natural gas supply during the less liquid time of the gas markets.

In addition, Black & Veatch presented its findings from the Phase II of a multi-phase New England pipeline capacity study. Phase III of the Black & Veatch report is planned for completion in September 2013 and will update infrastructure cost estimates and provide recommended natural gas infrastructure and electric solutions for the region.

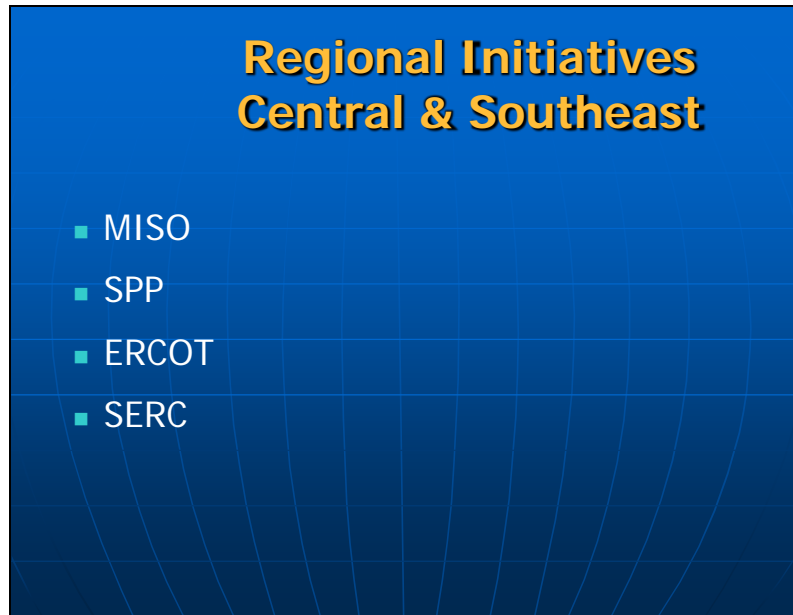
In addition, ISO-NE continues to coordinate with stakeholders through the Electric /Gas Operations Committee meetings. During the latest March meeting, the Committee discussed gas and electric post-winter operations, scheduled 2013 maintenance and system updates.

Turning to the Mid-Atlantic, progress continues on the Eastern Interconnection Planning Collaborative (EIPC) Study. The study will focus on a multi-regional natural gas/electric analysis of major interstate, intrastate, and local natural gas infrastructure serving the Eastern Interconnection. Recently American Gas Association (AGA) has been asked to provide a local distribution company perspective. The final documents for a request for proposal are being completed, with stakeholder outreach planned for June and a final RFP to be issued by mid-July. Final work is scheduled to be completed by May 2015.

NYISO staff continues its efforts through the Electric-Gas Coordination Working Group. Their working group reviewed gas-fired generation operating status during the Martin Luther King Jr. holiday cold snap. Additionally, the NYISO requested a short-term outlook "static" study conducted by Levitan & Associates is nearing completion.

PJM held its first meeting of a newly formed Gas Electric Senior Task Force on April 30, 2013. During the meeting the task force began creating a work plan including a charter and discussed gas electric issues. Their mission is to focus on

the exploration and prioritization of gas-electric issues that are not already being addressed by other PJM market and financial groups. The task force expects to be active over the next three to four years.



In the Midwest, MISO's Electric-Natural Gas Coordination Task Force continues to meet monthly to discuss MISO's resource adequacy construct and began initial discussions of criteria for the potential designation of critical generators. In addition, the Task Force announced Phase III of the MISO gas-electric infrastructure interdependency analysis, which will examine the potential impact specific natural gas delivery failures may have on electric reliability. The study is expected to be completed by 2014.

SPP has established a Gas-Electric Coordination Task Force. The Task Force is developing coordinated communication plans for use during gas supply events, and identifying any single-point-of-failure concerns in the SPP region.

ERCOT is working with the Texas Pipeline Association (TPA) and the Texas Railroad Commission (RRC) to incorporate the location of significant gas facilities into the ERCOT electric network model. This will facilitate ERCOT's study of the potential impact of electric outages on pipelines and pipeline outages on generators with plans to develop this analysis in 2014.

Regular discussions continue in the Southeast to ensure adequate coordination between the natural gas and electric industry.



The West has a number of subregional natural gas-electric coordination initiatives.

The Western Gas-Electric Regional Assessment Task Force issued an RFP for its Western Natural Gas - Electric and System Flexibility Assessment introduced last quarter. Responses are due July 3, 2013.

During the second quarter of 2013 the WECC Joint Guidance Committee discussed the recent FERC technical conferences and NERC Phase II report. Additionally, the Department of Homeland Security & FEMA conducted a successful Natural Gas-Electric Emergency Exercise during April examining emergency protocols in place during an energy disruption scenario. For the first time, the emergency exercise included electric and gas utilities, and WECC representatives. WECC is likely to hold a follow-up Natural Gas-Electric conference later in 2013.

ColumbiaGrid's Gas-Electric Interdependencies Study Team finalized its I-5 corridor study investigating electric transmission system reliability issues associated with a hypothetical limitation of gas supply to electric generators. The final study conclusions reaffirmed preliminary findings that the electric transmission system performed acceptably under this "what if" gas curtailment scenario.

In the Pacific Northwest, natural gas pipelines and electric utilities continue to discuss enhanced communications and coordination through the Power and Natural Gas Planning Task Force meetings. As part of the Northwest Mutual Assistance Agreement, a collaborative Emergency Planning Committee formed to discuss winter preparedness. The group met on June 12, 2013 to discuss how the group would function in an emergency situation and to learn how the new communications package will work.

The California ISO continues to participate in discussions with the Western Electric Industry Leaders Group, providing inputs to the Western Interstate Energy Board gas infrastructure assessment. The California ISO is also exploring best practices in communicating with natural gas pipelines and coordinating electric system and natural gas pipeline operations with other RTOs and ISOs.

A new gas-electric task force was created in the Southwest, the Desert Southwest Task Force, with its initial meeting held on May 23. During the initial meeting, stakeholders provided an overview of gas-electric coordination issues as well as began discussion of how to best identify immediate issues in the Southwest and the next steps. The Task Force plans to meet monthly.



Our final area to report on is activity at the Commission. As you know, the Commission held two meetings - a conference in April and a special Commission meeting in May. From staff's perspective, the issues raised at the April conference were familiar and included concerns in some regions regarding the natural gas operating day start time, the mismatch between day-ahead electric commitments and the timely nomination cycle for natural gas transportation, and the potential need for additional standard natural gas pipeline nomination opportunities. Participants also suggested that additional services offered by pipelines increase flexibility in constrained markets, but could be improved with more relaxed requirements.

At the May meeting, representatives from each RTO and ISO, including ERCOT, shared their experiences from the winter and spring and described the progress made in refining existing practices to provide better coordination between the natural gas and electric industries and ensure adequate fuel supplies. The RTOs and ISOs addressed natural gas transportation concerns that emerged during the winter heating season, and identified fuel-related generator outages that occurred during the winter and spring. Both NYISO and ISO-NE noted that they faced operational challenges in January and February.

More generally, representatives from each RTO and ISO discussed common issues including growing dependence on gas-fired generation, as well as the need to improve situational awareness, address when communications are allowed, and consider market rule changes.

Relevant Natural Gas Filings

Region	Pipeline	Capacity/Initiative	Docket No.
Southeast	Gulf South Pipeline Company	Capacity expansion ~ 510,500 Dth/d	CP13-96
Southeast	Gulf Crossing Pipeline Company	Capacity expansion ~ 750,000 Dth/d	CP13-64
Midwest	Sierrita Gas Pipeline	Capacity expansion ~ 200,846 Dth/d	CP13-73, CP13-74
West	EI Paso Natural Gas Company	Capacity expansion ~ 90,000 Dth/d	CP13-112
Southeast	East Tennessee Natural Gas	Additional Nomination opportunities	RP13-676
Southeast	Saltville Gas Storage	Additional Nomination opportunities	RP13-677
Midwest/ Central	Trailblazer Pipeline	Additional Nomination opportunities	RP13-240

Pipelines continued to file applications to expand pipeline capacity and increase operational flexibility.

Gulf South, Gulf Crossing Pipeline Company and Sierrita Gas Pipeline proposed to construct facilities to provide new or expanded firm transportation service to electric power generators. Approximately 1.6 Bcf per day in overall design capacity is being added to the Southeast, the Midwest, and the West. These cases are still pending.

In addition, several interstate natural gas pipelines made filings to provide increased service flexibility. The changes are designed to allow shippers additional nomination opportunities beyond the four standard NAESB nomination cycles. The Trailblazer pipeline case is still pending.

Relevant Electric Filings

Entity	Filing Initiative	Docket No.
New England Power Generators Association	A 206 complaint regarding interpretation of ISO-NE's tariff.	EL13-66
ISO-NE and New England Power Pool	Earlier clearing of the Day-Ahead Energy Market and earlier completion of the initial Reserve Adequacy Analysis process	ER13-895
Dominion Energy Marketing	Recover over \$336,095 in fuel costs as well as regulatory costs	ER13-1291

Filings made by the electric industry to address increasing reliance on natural gas-fired generators are from the Northeast region and include a complaint by generators, a rule change by ISO-NE, and a filing by a generator to recover fuel costs. More information about these filings is included in the online report.

Staff's next quarterly report is due in October. Staff will continue regular outreach with national and regional entities and with regulated entities regarding their efforts on gas-electric coordination. This concludes today's presentation of the second Quarterly Update on Gas-Electric Coordination Activities. We are available to answer any questions you may have.



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