

THE COMMITTEE ON ENERGY AND COMMERCE Memorandum

March 15, 2013

TO: Members, Subcommittee on Energy and Power

FROM: Committee Staff

RE: Hearing on "American Energy Security and Innovation: The Role of Regulators and Grid Operators in Meeting Natural Gas and Electric Coordination Challenges"

On March 19, 2013, at 10:00 a.m. in room 2322 of the Rayburn House Office Building, the Subcommittee on Energy and Power will hold a hearing entitled "American Energy Security and Innovation: The Role of Regulators and Grid Operators in Meeting Natural Gas and Electric Coordination Challenges." This hearing will examine the role of federal and state regulators and electric grid operators in meeting the challenges resulting from the increased use of natural gas to generate electricity and the convergence of the natural gas and electric industries.

I. <u>WITNESSES</u>

Panel I

The Honorable Philip D. Moeller Commissioner Federal Energy Regulatory Commission

Panel II

The Honorable Barry T. Smitherman Chairman Railroad Commission of Texas

The Honorable Todd A. Snitchler Chairman Public Utilities Commission of Ohio

Mr. Gordon van Welie President and CEO ISO New England, Inc. The Honorable Cheryl A. LaFleur Commissioner Federal Energy Regulatory Commission

The Honorable Joshua B. Epel Chairman Colorado Public Utilities Commission

Mr. Clair J. Moeller Executive Vice President, Transmission & Technology Midwest Independent Transmission System Operator, Inc.

Mr. Paul J. Hibbard Vice President Analysis Group Majority Memorandum for the March 19, 2013, Subcommittee on Energy and Power Hearing Page 2

II. <u>BACKGROUND</u>

The nation's electric generation portfolio is experiencing a dramatic shift, spurred by low natural gas prices and a suite of new environmental regulations affecting the power sector. According to the Energy Information Administration (EIA), the share of natural gas in the generation mix has increased from 25 percent in 2011 to 30 percent in 2012 (*see* Appendix). This trend is likely to continue as more coal-fired generating units are retired,¹ new intermittent renewable resources require more backup support from natural gas-fired power plants, and anticipated low prices for natural gas encourage its greater use to generate electricity.

Natural gas is used for many different purposes, ranging from residential, industrial, and commercial uses to power generation. The increased use of natural gas to generate electricity has numerous benefits but also raises potential integration issues as the electric and natural gas industries become increasingly interdependent. Challenges such as pipeline infrastructure and storage, and inconsistent scheduling practices between the industries, could impact electric reliability and put upward pressure on electricity rates in some regions. Recent events and reports have highlighted this interdependency and the importance of greater coordination between the sectors.²

Recognizing the critical implications of this electric-gas convergence, the Federal Energy Regulatory Commission (FERC) has initiated a series of technical conferences to further explore the issue. In August 2012, FERC held five regional conferences in the Northeast, Mid-Atlantic, Central, West, and Southeast.³ Subsequently, FERC held a technical conference on February 13, 2013, focused specifically on information sharing and communications, and has ordered a future conference on scheduling differences between the sectors.⁴

indicated that significant investments in infrastructure expansion may be required to keep pace with growing demand – and identified potential pipeline capacity shortfalls under peak demand days in the MISO system."); PJM, "2012 Regional Transmission Expansion Plan Report, Book 1: PJM 2012 RTEP in Review," at p. 93 (Feb. 28, 2013) ("PJM is in the early stages of an interregional study with other regional grid operators to gauge the interdependence of the electric and natural gas systems, and the challenges these present for planning."); *see also*

NY Times, "In New England, a Natural Gas Trap," (Feb. 15, 2013).

¹ North American Electric Reliability Corporation, "<u>2012 Long-Term Reliability Assessment</u>," (Nov. 2012) (finding that over 70,000 megawatts of fossil-fuel fired generating capacity will retire over the next 10 years, 90% of which will retire over the next 5 years).

² See, e.g., FERC and NERC, "<u>Report on Outages and Curtailments During the Southwest Cold Weather Event of</u> <u>February 1-5, 2011</u>," at p. 189 (Aug. 2011) ("The February 2011 cold weather event highlights the interdependency of electricity and natural gas, an interdependency that has grown in recent years."); Midwest ISO, "<u>EPA</u> <u>Compliance: MISO's Concerns</u>," (Mar. 11, 2013) ("MISO's Phase I and Phase II analyses of gas infrastructure indicated that significant importment in infrastructure and the required to logge with grouping.

³ FERC, "<u>Staff Report on Gas-Electric Coordination Technical Conferences</u>," Docket No. AD12-12-000 (Nov. 15, 2012). The regional conferences focused on three sets of issues: scheduling and market structures/rules; communications, coordination, and information sharing; and reliability concerns. *Id*.

⁴ See generally FERC Docket AD12-12-000.

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FERC's efforts, and similar efforts being undertaken in various regions, are helping to identify the challenges – and potential solutions – to addressing the inherent operational and business differences in the natural gas and electricity sectors. Improved coordination and harmonization of the rules, terms, and practices of the industries may be necessary in some regions to address these issues in a timely and appropriate manner in order to ensure the continued provision of reliable and affordable electricity.

The Subcommittee anticipates holding a subsequent hearing to further explore these issues, featuring witnesses from the natural gas and electric industries and consumers.

III. <u>ISSUES</u>

The following issues will be examined at the hearing:

- Challenges arising from increased interdependence of the natural gas and electricity sectors.
- Potential impacts on reliability and electricity prices resulting from the operational differences between the natural gas and electricity sectors.
- The role of Federal and State regulators in ensuring greater coordination between the natural gas and electric industries to ensure reliable and affordable energy.
- The role of electric grid operators in meeting reliability challenges arising from natural gas-electric convergence.

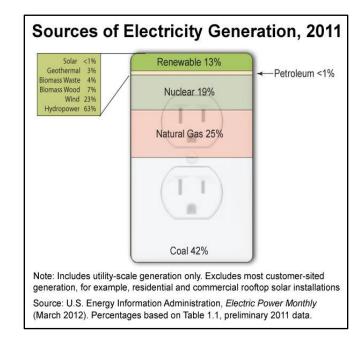
IV. <u>STAFF CONTACTS</u>

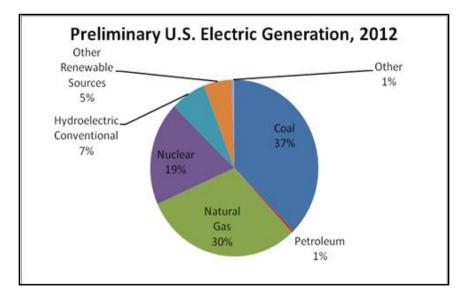
If you have any questions regarding this hearing, please contact Tom Hassenboehler or Patrick Currier at (202) 225-2927.

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APPENDIX

Comparison of 2011 and 2012 Electric Generation Portfolios





** Note: EIA data for 2012 is preliminary and subject to change