

ONE HUNDRED ELEVENTH CONGRESS
Congress of the United States
House of Representatives
COMMITTEE ON ENERGY AND COMMERCE
2125 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515-6115

Majority (202) 225-2927
Minority (202) 225-3641

March 16, 2010

MEMORANDUM

TO: Members of the Subcommittee on Energy and Environment

FR: Energy and Environment Subcommittee Staff

RE: Hearing on the Federal Energy Regulatory Commission

On Tuesday, March 23, 2010, at 2:00 p.m. in Room 2123 of the Rayburn House Office Building, the Energy and Environment Subcommittee will hold a hearing entitled "Oversight of the Federal Energy Regulatory Commission." This hearing will examine how the Federal Energy Regulatory Commission (FERC) is implementing its statutory duties and authorities, focusing on a number of key priorities.

I. BACKGROUND ON FERC AUTHORITY AND RESPONSIBILITIES

FERC is an independent agency charged with, among other things, regulating the interstate sale of electricity, setting rates for interstate transportation of electricity, natural gas and oil, and issuing licenses and certificates for hydroelectric and natural gas projects. Created as the Federal Power Commission in 1920 to coordinate hydroelectric licensing, the Commission's responsibilities have expanded considerably over the last 90 years.

In the Department of Energy Organization Act of 1977, Congress renamed and transferred to FERC the role of ensuring reliable electric and natural gas supplies in the United States. During the following two decades, the Commission began to move towards implementation of this objective through competitive market mechanisms in lieu of cost-of-service ratemaking. Beginning in 1985, a series of rulings unbundled the services offered by natural gas pipelines and significantly exposed them to competitive pricing. In 1996, to promote competition in electricity transmission, FERC used authority provided under the Energy Policy Act of 1992 to require transmission utilities in the Commission's jurisdiction to have on file an open access transmission tariff with minimum terms and conditions of non-discriminatory

service.¹ In addition, the Commission has encouraged the development of Regional Transmission Organizations (RTOs) to promote well-functioning electric markets and to eliminate barriers to competition associated with vertically integrated utilities' control over transmission infrastructure. RTOs operate auction-based energy markets, and, in most cases, capacity markets, and RTOs also serve a regional transmission planning function. FERC expends significant resources overseeing the six RTOs that it regulates.

In the Energy Policy Act of 2005 (EPACT 2005), Congress significantly expanded the Commission's authority to regulate electricity markets, ensure reliability, promote the expansion of transmission infrastructure, and site liquefied natural gas terminals. A new Section 215 of the Federal Power Act provides for the establishment of mandatory reliability standards for the bulk power system, including standards addressing cybersecurity threats. EPACT 2005 also gave FERC significant new oversight and enforcement authorities to protect against fraud and market manipulation in the electricity and natural gas markets.

With regard to transmission, EPACT 2005 provided for the designation of national transmission corridors by the Department of Energy and backstop transmission siting authority by FERC in these corridors if, among other things, a State commission has "withheld approval [of a transmission facility] for more than one year." EPACT 2005 also authorized FERC to grant transmission incentives, including higher rates of return, to certain transmission projects.

In the Energy Independence and Security Act of 2007 (EISA), Congress directed FERC to determine demand response potential and develop an action plan for maximizing demand response resources (Section 529), to work with the Department of Energy to assess barriers to smart grid development (Section 1302), and to "institute a rulemaking proceeding to adopt such standards and protocols as may be necessary to insure smart-grid functionality and interoperability" in FERC-jurisdictional markets (Section 1305).

II. CURRENT FERC INITIATIVES

While FERC continues its work of several decades in establishing oil and natural gas pipeline rates, terms, and conditions, regulating electricity transmission rates and conditions, and approving new gas pipeline construction projects and right-of-way determinations (but not siting and facility approval for oil pipelines or electric transmission systems), the agency has undertaken several new initiatives in recent years.

¹ Federal Energy Regulatory Commission, *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Stats. & Regs. 31,036 (1996), *order on reh'g*, Order No. 888-A, FERC Stats. & Regs. 31,048, *order on reh'g*, Order No. 888-B, 81 FERC 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC 61,046 (1998).

A. Integration of Renewable Resources into the Power System

In the last three years, FERC has taken several steps to support the integration of clean energy into the electricity grid. For example, in Order No. 890, the Commission reduced the otherwise applicable penalties for load imbalances caused by intermittent resources, like wind and solar.² Also in Order No. 890, the Commission created a new firm point-to-point transmission service that provides for the long-term use of transmission lines that are constrained a few hours of the year. Such service could prove beneficial to intermittent renewable resources that do not necessarily need firm service at all times yet formerly were unable to obtain long-term rights.³ In addition, in April 2007, FERC accepted a cost allocation mechanism to apply in California to encourage development of facilities connecting location-constrained renewable energy resources.⁴

In January 2010, seeking to generically address any barriers to integration of renewable resources, FERC issued a Notice of Inquiry (NOI) – a tool for determining whether or not to move forward with a new rulemaking. The NOI seeks comment on the extent to which barriers may still exist that impede the reliable and efficient integration of renewable resources into the electric grid, and whether reforms instituted by FERC could reduce or eliminate those barriers.⁵ As discussed below, the Commission plans to address issues related to transmission planning and cost allocation in connection with integration of renewable resources in the ongoing transmission planning process initiated by Order No. 890.⁶

B. Smart Grid and Demand Response

EISA defines the smart grid to include the increased use of digital information and controls technology to improve reliability, security, and efficiency of the electric grid. Smart grid technologies have the potential to increase consumer response to changes in electricity prices (i.e., demand response) and to facilitate integration of distributed generation and renewable resources. FERC's role in promoting smart grid technology is primarily one of coordination. Under EISA, the National Institute of Standards and Technology (NIST) has primary responsibility for development of an "interoperability framework" allowing smart grid

² Federal Energy Regulatory Commission, *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, FERC Stats. & Regs. 31,241, *order on reh'g*, Order No. 890-A, FERC Stats. & Regs. 31,261 at PP 664-65 (2007), *order on reh'g*, Order No. 890-B, 123 FERC 61,299 (2008), *order on reh'g*, Order No. 890-C, 126 FERC 61,228, *order on clarification*, Order No. 890-D, 129 FERC 61,126 (2009).

³ Federal Energy Regulatory Commission, Order No. 890 at P 912.

⁴ *California Independent System Operator Corp.*, 119 FERC 61,061, *order on reh'g and clar.*, 120 FERC 61,244 (2007).

⁵ Federal Energy Regulatory Commission, *Integration of Variable Energy Resources*, 130 FERC 61,053 (2010).

⁶ *Id.* at P 9.

technologies to communicate and work together. In July 2009, FERC issued a policy statement to provide guidance on the development of the smart grid, focusing on the interoperability standards.⁷ Once NIST reaches consensus on the interoperability standards, FERC is charged with promulgating them. In January 2010, NIST released a proposal for the first set of standards based on the priorities FERC identified in its guidelines.

In addition, FERC can use its existing rate authority to facilitate implementation of smart grid by providing rate incentives for appropriate projects and guidance on cost recovery for such projects. On January 21, 2009, FERC used that authority for the first time to approve rate treatment for a synchrophaser project to increase the reliability of the Western Interconnection.⁸

Demand response refers to changes in electric usage by customers from their normal consumption patterns in response to changes in the price of electricity over time, or to incentive payments designed to induce lower electricity use at times of high wholesale market prices or when system reliability is jeopardized. FERC is required to assess the nationwide demand response potential in five- and ten-year horizons, evaluate the barriers to demand response programs, and recommend options for overcoming barriers to increase use of demand response. FERC's most recent assessment, issued in September 2009, estimated that 7.95 million advanced meters allowing for demand response are currently deployed and that about 80 million advanced meters will likely be installed by 2019. The report estimated that demand response reduced peak demand by 37 gigawatts in 2009 and could achieve reduction of between 38 and 188 gigawatts by 2019.⁹ FERC is now developing a National Action Plan on demand response as required by EISA.¹⁰

FERC has also acted to increase participation of demand response in organized electricity markets. To that end, FERC's Order No. 719 required RTOs to ensure comparable treatment of demand response resources and allow demand response aggregators to bid into the different types of sub-markets.¹¹ Demand response participation in these markets has increased considerably in recent periods. For example, more than 2000 megawatts of demand response

⁷ Federal Energy Regulatory Commission, *Smart Grid Policy*, 128 FERC 61,060, at P 10 (2009).

⁸ Federal Energy Regulatory Commission, *Pacific Gas and Electric Company*, 129 FERC 61,251 (2010).

⁹ FERC Staff Report, *Assessment of Demand Response and Advanced Metering*, 2-3 (Sept. 2009).

¹⁰ Federal Energy Regulatory Commission, *National Action Plan on Demand Response*, Notice Providing New Technical Conference Date And Announcing Release Of Discussion Draft (issued Oct. 28, 2009). Discussion draft available online at www.ferc.gov/EventCalendar/Files/20091028124306-AD09-10-000-Discussion.pdf.

¹¹ Federal Energy Regulatory Commission, *Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719, 73 Fed. Reg. 64,100 (Oct. 28, 2008), FERC Stats. & Regs. 31,281, at P 16 (2008), *order on reh'g*, Order No.719-A, 128 FERC 61,059 (2009).

resources are committed as capacity resources in PJM's 2011/2012 capacity market.¹² For the 2012/2013 auction, over 9800 megawatts of demand response were offered and, of that, about 7,000 megawatts were selected as capacity resources.¹³

C. Transmission

Under FERC's Order No. 890, transmission providers are required to adopt a transmission planning process that satisfies nine principles, including a requirement to coordinate among neighboring regions.¹⁴ Recognizing that Order No. 890 provides limited guidance on the objectives of planning, FERC convened three technical conferences in September 2009 to assess the adequacy of existing planning processes, including "whether existing processes are sufficient to meet emerging challenges to the transmission system, such as the development of interregional transmission facilities, the integration of large amounts of location-constrained generation, and the interconnection of distributed energy resources."¹⁵

Section 216 of the Federal Power Act, enacted as part of EPACT 2005, gave FERC backstop authority, in five specified circumstances, to issue permits for lines in areas designated by the Department of Energy as national interest electric transmission corridors. In one such circumstance, FERC may issue a permit if a state commission has "withheld approval [of a transmission facility] for more than one year." FERC interpreted this language to include not only cases where a state fails to act, but also those in which a state denies a permit to construct a line. Last year, the United States Court of Appeals for the Fourth Circuit reversed that decision, concluding the FERC interpretation was contrary to the plain meaning of the statute.¹⁶ Under the Fourth Circuit decision, FERC's backstop siting authority would not be triggered if a state actively rejects, rather than merely declines to act on, a permit application within a one-year period from the filing of the application. The Supreme Court recently declined to review that decision.

FERC also has responsibility for overseeing the recovery of costs for transmission lines subject to its jurisdiction. The Department of Energy's Electricity Advisory Committee has characterized cost allocation as "the single largest impediment to any transmission development"

¹² PJM Interconnection, Inc., *Demand Response Fact Sheet* (Apr. 14, 2009) (online at www.pjm.com/about-pjm/newsroom/~media/about-pjm/newsroom/downloads/demand-response-fact-sheet.ashx).

¹³ PJM Interconnection, Inc., 2012/2013 RPM Base Residual Auction Results 1, 5 (2009) (online at www.pjm.com/markets-and-operations/rpm/~media/markets-ops/rpm/rpm-auction-info/2012-13-base-residual-auction-report-document-pdf.ashx).

¹⁴ Federal Energy Regulatory Commission, Order No. 890, FERC Stats. & Regs. 31,241 at P 418-602.

¹⁵ Federal Energy Regulatory Commission, Transmission Planning Processes Under Order No. 890, Notice Of Technical Conferences (June 30, 2009).

¹⁶ *Piedmont Environmental Council v. FERC*, 558 F. 3d 304 (4th Cir. 2009).

and has stated that “cost allocation disagreements can also impact transmission siting” such that “resolution of these two issues must be linked.”¹⁷ A recent case illustrates the challenges surrounding cost allocation. In 2007, FERC determined that the costs of new transmission facilities in the PJM RTO should be allocated differently based on voltage level: Users pay the costs of smaller facilities based on an identification of direct beneficiaries, whereas the costs of higher voltage facilities are spread to all users of the grid. On August 6, 2009, the United States Court of Appeals for the Seventh Circuit remanded the decision to FERC for “rough quantification” of the benefits of the proposed extra high voltage lines.¹⁸ According to some observers, the decision could make it more difficult to build transmission lines to bring power from location-constrained renewable resources to market because it calls into question whether the cost of such lines can be spread among all grid users.¹⁹

D. Market Oversight and Natural Gas Pipeline Rates

EPACT 2005 gave the Commission the authority to assess substantial penalties (\$1 million per day per violation) for fraud and market manipulation in the electricity and natural gas markets. The Commission has initiated several proceedings based on this authority. According to recent testimony before this subcommittee, in 2009, “FERC’s efforts yielded settlements worth approximately \$38 million in penalties and \$38 million in disgorgement. Six of those matters involved market manipulation claims and accounted for approximately \$20.8 million in penalties and \$28.8 million in disgorgement.”²⁰ Exercising this anti-manipulation authority for the first time, a FERC administrative law judge recently ruled that a futures trader manipulated the price of physical gas, and thereby violated FERC’s anti-manipulation regulations.²¹

On the ratemaking front, on November 19, 2009, FERC, acting on its own motion, established an investigation into the rates of three natural gas pipelines. The proceeding will determine whether Northern Natural Gas Company, Great Lakes Gas Transmission LP and Natural Gas Pipeline Company of America, LLC are recovering costs in excess of just and reasonable rates. The action resulted from another initiative by FERC in early 2008 to require greater transparency and more detail in natural gas pipeline financial reporting.²²

¹⁷ Department of Energy, Electricity Advisory Committee, *Keeping the Lights on in a New World* (Jan. 2009) (online at www.oe.energy.gov/eac.htm).

¹⁸ *Illinois Commerce Commission v. FERC*, 576 F. 3d 470 (7th Cir. 2009).

¹⁹ *GRID: FERC Enters a Maze of Questions about Renewable Energy Transmission*, E&E Reporter, (Nov. 23, 2009).

²⁰ Energy and Environment Subcommittee, Testimony of FERC Chairman Jon Wellinghoff, *Hearings on the Impacts of H.R. 3795, the Over-the-Counter Derivatives Markets Act of 2009, on Energy Markets*, (Dec. 2, 2009).

²¹ *Brian Hunter*, Initial Decision, 130 FERC 63,004 (2010).

²² Federal Energy Regulatory Commission, *Revisions to Forms, Statements, and Reporting Requirements for Natural Gas Pipelines*, Order No. 710, 73 FR 19389 (Apr. 10,

E. Grid Security

As discussed above, Section 215 of the Federal Power Act provides for the establishment of mandatory reliability standards for the bulk power system, including standards addressing cyber security threats. FERC has certified the North American Electric Reliability Corporation (NERC) as the Electric Reliability Organization to develop the mandatory reliability standards and has approved a number of standards. In August 2006, NERC submitted eight proposed cyber security standards, known as the Critical Infrastructure Protection (CIP) standards, for Commission approval. On January 18, 2008, FERC issued Order No. 706, approving the CIP reliability standards while concurrently directing NERC to develop significant modifications addressing specific concerns. NERC filed the first phase of the modifications to the CIP Reliability Standards on May 22, 2009.

II. WITNESSES

The following witnesses have been invited to testify:

The Honorable Jon Wellinghoff
Chairman
Federal Energy Regulatory Commission

The Honorable Mark Spitzer
Commissioner
Federal Energy Regulatory Commission

The Honorable Philip Moeller
Commissioner
Federal Energy Regulatory Commission

The Honorable John Norris
Commissioner
Federal Energy Regulatory Commission

2008), FERC Stats. & Regs. 31,267 (2008), *reh'g and clarification*, Order No. 710-A, 123 FERC 61,278 (2008).