

**OVERSIGHT OF THE FEDERAL ENERGY
REGULATORY COMMISSION**

HEARING
BEFORE THE
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT
OF THE
COMMITTEE ON ENERGY AND
COMMERCE
HOUSE OF REPRESENTATIVES
ONE HUNDRED ELEVENTH CONGRESS
SECOND SESSION

MARCH 23, 2010

Serial No. 111-107



Printed for the use of the Committee on Energy and Commerce
energycommerce.house.gov

U.S. GOVERNMENT PRINTING OFFICE

76-019

WASHINGTON : 2012

For sale by the Superintendent of Documents, U.S. Government Printing Office
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OVERSIGHT OF THE FEDERAL ENERGY REGULATORY COMMISSION

TUESDAY, MARCH 23, 2010

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON ENERGY AND ENVIRONMENT,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to call, at 2:08 p.m., in Room 2123 of the Rayburn House Office Building, Hon. Edward J. Markey [Chairman of the Subcommittee] presiding.

Members present: Representatives Markey, Butterfield, Welch, Dingell, Baldwin, Barrow, Whitfield, Pitts, Burgess, Griffith, and Barton (ex officio).

Staff present: John Jimison, Senior Counsel; Jeff Baran, Counsel; Joel Beauvais, Counsel; Melissa Cheatham, Professional Staff Member; Caitlin Haberman, Special Assistant; Lindsay Vidal, Special Assistant; Mitchell Smiley, Special Assistant; Aaron Cutler, Minority Professional Staff; Andrea Spring, Minority Professional Staff; Mary Neumayr, Minority Counsel; and Garrett Goulding, Minority Legislative Analyst.

OPENING STATEMENT OF HON. EDWARD J. MARKEY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF MASSACHUSETTS

Mr. MARKEY. Ladies and gentlemen, we welcome you to the Subcommittee on Energy and Environment. We have had a very interesting, momentous day so far. Many of the Democratic members of our committee were down at the White House for the signing of the Health Care Bill which is why this hearing was postponed from the morning until the afternoon, and we apologize for the inconvenience that it presented to all of our witnesses and to everyone else that has a great interest in this subject. So welcome to this important hearing on Oversight of the Federal Energy Regulatory Commission or the FERC, as it is affectionately known around here.

This is the first time in over a decade that all of the FERC commissioners have testified before a House committee, all of them, together once in one place. We are glad to have you here and look forward to making this a more regular occurrence. You know, FERC kind of reminds me of Northern Iowa's basketball team. It is probably one of the least well-known teams in the Federal Government but it is right in the thick of things and can be surprisingly powerful when it needs to be.

Among FERC's many roles, there may be none more timely and important to discuss today than its frontline position in the battle

to protect America's grid. Threats to the grid from terrorists and hostile countries represent one of the single most critical national security concerns facing our country. Every one of our Nation's critical systems, water, health care, telecommunications, transportation, law enforcement, financial services depends on the grid. The commercially operated grid provides 99 percent of the electricity used to power our critical defense facilities.

This past weekend, a New York Times article reported on the work of Chinese researchers studying what type of cyber attacks could bring down the U.S. grid. That is just the latest in a wave of alarming news on this front. Over 2 years ago, the Department of Homeland Security revealed the so-called Aurora Vulnerability, through which hackers could use communications networks to physically destroy power plants. The intelligence community has made clear that the cyber systems controlling the grid are continuously probed by outside parties looking for weaknesses. FERC must be given the authority necessary to combat these growing threats.

After a subcommittee hearing, a classified briefing for members and months of discussions between my staff, the staff of the Ranking Member Upton, Ranking Member Barton and Chairman Waxman, we recently released bipartisan legislation that will give FERC the tools it needs to protect America's grid. I am proud and pleased to report that this committee will markup that legislation tomorrow, a crucial first step in safeguarding the grid.

In addition to FERC's emerging role in defending the grid, the Commission must also be a partner in addressing the massive energy challenges facing America. FERC is developing the rules to our energy road that will help America reach its clean energy and in energy independence goals. The energy sector, long the bastion of antiquated technology and entrenched business models is finally entering the innovation age. Wind, solar and other renewable technologies are providing an ever greater share of our electricity at competitive prices and with zero carbon emissions.

Last year alone, using market incentives, customers reached peak electricity demand by the equivalent of the output of 50 power plants. As smart grid technologies continue to penetrate the market, consumers will be able to turn their heat up on the way home from work, schedule their dishwasher to run when electricity is the cheapest and fuel their vehicles using clean, low-cost, American-made electricity instead of expensive OPEC oil. At the same time, a technology revolution in production of natural gas from deep shale formations has increased America's natural gas reserves by over 30 percent, giving us nearly a century long supply at current production rates.

Each of us these clean energy innovations brings with it significant challenges but more importantly, tremendous opportunities. FERC will be at the forefront of the effort to grapple with these challenges and seize these opportunities. We don't know yet who the starting five will be on our clean energy all-star team but if the team is going to be successful, it is going to need strong coaching and refereeing from the FERC.

I thank the commissioners for their work on these important issues to date and I look forward to hearing their views on how to

best achieve our clean energy and energy security goals. That completes the opening statement of the chair.

And I will turn to our ranking member, the gentleman from Kentucky, Mr. Whitfield, for his opening statement.

OPENING STATEMENT OF HON. ED WHITFIELD, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF KENTUCKY

Mr. WHITFIELD. Mr. Chairman, thank you very much.

We look forward to this oversight hearing on the Federal Energy Regulatory Commission. I also would like to extend a warm welcome to all of the commissioners. It is seldom that we have them all here and we do look forward to working with you today on the many issues facing all of us.

I look forward to hearing also from the panel as to how they intend to ensure that all sources of generation, including coal, nuclear, renewables, natural gas have access to electricity transmission and markets. FERC obviously has broad authority over the electricity infrastructure, as well as natural gas pipelines, and must make certain that FERC is helping provide safe and reliable energy while ensuring rates are competitive and fair.

The Energy Policy Act of 2005 gave FERC new authority against energy market manipulation, including civil and criminal penalty authority. I would like to hear how FERC has been using that authority and what its future plans on this subject are. I am also concerned that the financial services legislation which Congress is currently considering could limit FERC authority by failing to protect FERC's jurisdiction from encroachment by the CFTC.

Obviously, there are many issues before us today dealing with making sure that our electricity grid and natural gas pipelines are safe and reliable. Our subcommittee plans to consider electric cyber security legislation tomorrow and I hope that the witnesses will expound on why they believe additional authority to protect our grid from cyber terrorists and cyber warfare is necessary.

We look forward to your testimony. Thank you again for being here and I yield back the balance of my time.

Mr. MARKEY. Great, we thank the gentleman very much.

We are awaiting as well the arrival of Fred Upton from Michigan along with Mr. Barton and Mr. Waxman. There are three roll calls on the House floor and what we could do right now is we could recognize members to try to squeeze in their opening statements and then with a little bit of luck we could then recess.

Yes, excuse me, the gentlelady from Wisconsin.

Ms. BALDWIN. I could make it even easier. I welcome our witnesses and I waive my opening statement.

Mr. MARKEY. That is a gesture that is well received by the chair and we welcome all of the witnesses and we turn now and recognize the gentleman from Pennsylvania, Mr. Pitts.

OPENING STATEMENT OF HON. JOSEPH R. PITTS, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. PITTS. Thank you, Mr. Chairman, I will be brief. Thank you for holding this hearing on FERC oversight.

There are many issues I hope we explore today, including the implementation of the Energy Policy Act of 2005, market oversight, electric service security, transmission policy and cost allocation. The list is long.

As I understand it, FERC has asked Congress to work on legislation regarding cyber security which I think is of critical importance. In recent years it has become apparent that our electric grid is vulnerable to cyber attack by terrorists or other nations and as we move towards marking up a bill to protect our bulk power system, I am interested in hearing the panel's thoughts on how best to protect our grid from malicious intent.

In addition to cyber security, I think we must also focus on transmission policy here in the United States. The official report of the 2003 northeastern blackout concluded that, "As evidenced by the absence of major transmission projects undertaken in North America over the past 10 to 15 years, utilities have found ways to increase the utilization of their existing facilities to meet increasing demands without adding significant high-voltage equipment." Clearly, there is a significant need for an increase in transmission capacity and this need is amplified as we consider adding more and more renewable energy to the grid. However, my district includes some of the most pristine historic landscape in the Middle Atlantic. My district also has some of the most productive farmland in the U.S. and while I am supportive of adding more transmission capacity, I believe we do need to keep in mind the legitimate desires of localities to preserve green spaces and historic sites and the same can be said of the siting of natural gas pipelines.

Finally, I am interested in hearing the panel's thoughts on the regulation of over-the-counter derivatives. As you know, in my State of Pennsylvania, electric and natural gas companies use derivatives to hedge or lock prices of commodities they plan to use or sell in the future, and the Pennsylvania PUC has stated that mandatory, centralized clearing or exchange trading for all OTC transactions would needlessly increase expenses associated with the hedging and risk management activity, so important issues.

I look forward to hearing our witnesses and yield back.

Mr. MARKEY. We thank the gentleman very much.

Our time is running down here and we have 3 minutes left to go before we have to be on the floor. We will recognize the gentleman from Texas, Mr. Burgess, for an opening statement.

**OPENING STATEMENT OF HON. MICHAEL C. BURGESS, A
REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS**

Mr. BURGESS. Thank you, Mr. Chairman. I am also pleased we are having the hearing today to discuss with the full Commission the issues before the Federal Energy Regulatory Commission.

We are all well-aware of the expansion of infrastructure for electricity is critical as is the infrastructure for natural gas. In communities across this country, the electric grid is at or near capacity. With the price of oil fluctuating daily, it will likely increase again as it always does with the summer months. The demand for natural gas, a cheap and abundantly available energy source, may likewise increase.

The need for a strong infrastructure for natural gas is evident in my own backyard. My district is home to the Barnett Shale, which is one of several sources of natural gas throughout the country which thanks to new technologies and techniques in gas retrieval is providing both energy and economic opportunities in north Texas.

Beyond natural gas, Texas has been a leader in renewable energy as the leading State in wind power. Advances to the electric grid will enable increased uses of renewable energy as electricity from renewable sources is able to travel further in more advanced power lines, but we are all aware that renewable energy alone will not meet this country's needs, which is why new sources of energy from nuclear power are critical if we are serious about a cleaner energy portfolio.

I hope today's discussion will be productive in moving us toward a stronger infrastructure that will provide consistent power to every sector of our economy, and I yield back.

Mr. MARKEY. Great, the gentleman yields back. We thank the gentleman.

All time for opening statements by members has been completed unless Mr. Waxman or Mr. Barton shows up. And as a result, when we come back we will be recognizing you, Mr. Chairman, as the first order of business but you can expect that to occur in about 20 minutes. OK, so with that the subcommittee stands in recess.

[Recess.]

Mr. MARKEY. So the Subcommittee on Energy and Environment is called back into order and we welcome you all again, and now we are ready for testimony from our very distinguished panel. Our first witness today is the Chairman of the Federal Energy Regulatory Commission, Jon Wellinghoff. At FERC, Mr. Wellinghoff works to open wholesale electric markets to renewable resources and promote greater efficiency in the Nation's energy infrastructure. We look forward to hearing your testimony, Mr. Wellinghoff. You may proceed.

STATEMENTS OF JON WELLINGHOFF, CHAIRMAN, FEDERAL ENERGY REGULATORY COMMISSION; MARC SPITZER, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION; AND JOHN NORRIS, COMMISSIONER, FEDERAL ENERGY REGULATORY COMMISSION

STATEMENT OF JON WELLINGHOFF

Mr. WELLINGHOFF. Thank you, Mr. Chairman.

Mr. MARKEY. Could you move that microphone in a little bit closer, please?

Mr. WELLINGHOFF. Thank you, Mr. Chairman, Ranking Member Whitfield, member of the subcommittee. I thank you for the opportunity to appear before you today to discuss the Federal Energy Regulatory Commission's work on critical energy issues now facing our Nation. I will summarize my testimony but I request that my full written remarks please be included in the record.

Mr. MARKEY. Without objection, so ordered.

Mr. WELLINGHOFF. First, I want to convey to this subcommittee that it is my privilege and honor to serve as the head of, in my

opinion, one of the most extraordinary agencies in the Federal Government. We have over 1,400 dedicated, highly-skilled and extremely competent employees who come to work with the intent of making energy delivery system in this country work better to the benefit of consumers. Those employees are focused on FERC's mission as stated in the FERC's strategic plan that I provided to Congress last fall. The Commission's mission is to assist consumers in obtaining reliable, efficient and sustainable energy services at a reasonable cost through appropriate regulatory and market means. Our employees work to fulfill this mission every day and I am so proud to work with them.

Fulfilling our mission involves two primary goals. First, promoting the development of safe, reliable and efficient energy infrastructure that serves the public interest, and second, overseeing rates, terms and conditions for wholesale sales and transmission of electric energy and natural gas in interstate commerce. I would like to highlight some of the steps the Commission is taking in pursuit of each of those goals.

To promote the development of safe, reliable and efficient energy infrastructure, the Commission is among other actions siting natural gas pipelines to bring new, low-cost gas supplies to markets to serve consumers' needs. Siting hydropower projects to increase energy supply in markets, reviewing transmission planning cost allocation interconnection processes for the electric grid so that new resources of supply can be efficiently and economically delivered to markets to serve consumers. Using incentive-based rate treatments in appropriate circumstances to encourage investment in transmission infrastructure, including advanced transmission technologies and facilities designed to connect location constrained renewable energy resources to load centers. Protecting the reliability of the grid and facilitating the development of smart grid technology and standards that will increase efficiency, reliability and flexibility of the electric system.

In addition to overseeing rates, terms, and conditions for the Commission on Jurisdictional Services, the Commission is, among other actions, implementing Congressional policy that wholesale competition can provide benefits to consumers in all regions while respecting regional differences. Instituting improvements to organize wholesale electric markets including enabling a wider range of resources to compete thus delivering benefits to consumers, developing a national action plan on demand response that builds on the national assessment of demand response potential and will encourage the use of additional resources for the benefit of consumers, and pursuing a balanced approach to oversight and enforcement, including attention deterring market manipulation and promoting compliance with mandatory reliability standards for the bulk power system.

Each of my fellow commissioners will briefly discuss some of these important issues. First, I want to indicate for the committee my apology, Commissioner Moeller left. He had to leave. Apparently, there is a personal issue that has to deal with his house is on fire, is what he indicated to us so he literally has an emergency, and I will do Commissioner Moeller's section with respect to hydro-power and natural gas infrastructure.

Commissioner Spitzer will discuss the operation of the organized wholesale electric markets and corresponding benefits for consumers, as well as other competitive markets subject to Commission's jurisdiction. Commissioner Norris will discuss our Nation's potential for demand response and that progress being made in some organized wholesale electric markets to harness that potential.

I truly enjoy working with my fellow commissioners. They too, like our FERC staff, are dedicated to FERC's mission. The Commission's work is vital to achieving our Nation's energy goals, including the need for energy security and the availability to consumers of clean, affordable energy for our Nation's economic revitalization. My colleagues and I, and each and every FERC professional and administrative staff member are committed to our agency's mission and to ensuring that consumers' have access to those clean, affordable, reliable energy supplies they deserve.

Thank you for the opportunity to appear before you. I will be happy to answer any questions.

[The prepared statement of Mr. Wellinghoff follows:]

**Testimony of Chairman Jon Wellinghoff
Federal Energy Regulatory Commission
Before the Energy and Environment Subcommittee
Of the Committee on Energy and Commerce
United States House of Representatives
Oversight Hearing for the Federal Energy Regulatory Commission
March 23, 2010**

Mr. Chairman and members of the Subcommittee:

My name is Jon Wellinghoff, and I am the Chairman of the Federal Energy Regulatory Commission (Commission). Thank you for the opportunity to appear before you today to discuss the Commission's work on many of the important energy issues and challenges now facing our Nation.

Last fall, I provided Congress with the Commission's new Strategic Plan for the next five years. As stated in our Strategic Plan, the Commission's mission is to assist consumers in obtaining reliable, efficient, and sustainable energy services at a reasonable cost through appropriate regulatory and market means.

Fulfilling this mission involves pursuing two primary goals:

- (1) Promoting the development of safe, reliable, and efficient energy infrastructure that serves the public interest; and
- (2) Ensuring that rates, terms and conditions for wholesale sales and transmission of electric energy and natural gas in interstate commerce are just and reasonable and not unduly discriminatory or preferential.

These goals are fundamental. They arise from the Commission's longstanding authorizing statutes, particularly the Federal Power Act and the Natural Gas Act. However, the context in which the Commission is pursuing these goals is changing with our Nation's energy challenges. For example, our strategy to move toward energy independence and greater reliance on clean energy must include removing barriers so that a wider range of resources – including renewable energy resources and demand resources – can contribute to achieving our core goals.

Safe, Reliable, and Efficient Energy Infrastructure

The Commission plays an important role in the development of a strong energy infrastructure that operates safely, reliably, and efficiently.

Since 1920, the Commission has been charged with licensing and overseeing the operation of the Nation's non-federal hydropower projects. Under Part I of the Federal Power Act, the Commission has also sited thousands of miles of electric transmission lines that have delivered this hydropower to the Nation's consumers. Likewise, under the Natural Gas Act, the Commission has authorized the construction of natural gas pipelines for over 65 years. Under the Commission's oversight, the country has developed a robust, comprehensive pipeline system that moves natural gas supplies from distant producing areas to consuming regions. In implementing these and other authorities related to infrastructure development, the Commission has encouraged the development of appropriate energy projects, while also providing for public participation, protecting the interests of all stakeholders, and safeguarding the environment.

Commissioner Moeller will discuss in greater detail the Commission's role with respect to hydropower and natural gas infrastructure.

Electric Transmission Infrastructure

I would like to touch on another aspect of infrastructure development that is of great importance to the Commission and our Nation: the electric transmission grid. A robust electric transmission grid is essential to achieving the vision of an energy future that I believe most of us share. Before describing that vision and the related challenges we now face, it is useful to consider the current state of our transmission system. A few statistics are instructive.

Our transmission grid is currently divided among more than 300 transmission owners and more than 100 balancing authorities. The grid includes some 164,000 miles of transmission lines at 230 kV and above, but less than 3,000 miles of those lines are at 500 kV or above.

Recent years have seen the beginning of much needed investment in transmission infrastructure. Nonetheless, since 2001, only 3,000 miles of transmission lines at 230 kV or above have been put into service. Moreover, only 748 miles of those facilities at 345 kV or higher crossed state lines. By contrast, our Nation has added more than 13,000 miles of new interstate natural gas pipelines since 2000. Currently, there are approximately 220,000 miles of interstate natural gas pipeline in service.

The bottom line from such statistics is that our electric transmission system is balkanized and, in many respects, improving only slowly.

Why does the state of the grid matter? Because a robust transmission system is a key to realizing an energy future in which clean, affordable, and reliable energy is

the everyday norm. Indeed, a robust transmission system is essential to achieving many of our Nation's goals, such as revitalizing our economy, strengthening our national security, promoting fuel diversity, reducing greenhouse gas emissions, and ensuring reliability in the delivery of electricity.

As you know, our Nation's electric utilities historically transported fuels to generate electricity at plants located relatively near load centers. Delivering central station power to local distribution loads remains an important task for our transmission grid, but we are now asking that system to do much more.

For example, many of our renewable energy resources are located far from both consumers and existing transmission facilities. The potential of such location-constrained, renewable energy resources is tremendous. Various studies have estimated the potential of such resources as including:

- 350 gigawatts of wind power in the Midwest;
- 200 gigawatts of offshore wind power on the Atlantic shelf;
- 200 gigawatts of wind power in the West;
- 1,000 gigawatts of solar power in the Southwest;
- 50 gigawatts of conventional geothermal power in the West;
- 100 gigawatts of geopressure geothermal power in Texas and the Southeast;
- and
- 100 gigawatts of hydrokinetic power in rivers and streams.

As I stated earlier, removing barriers that keep renewable energy resources from competing in wholesale markets must be part of our strategy to move toward energy independence and greater reliance on clean energy. Toward that end, we cannot rely solely on either renewable energy resources that are located far from our Nation's load centers or those that are closer to loads. We need both of these categories of resources to meet our Nation's energy challenges.

However, as former Senate Energy Committee Chairman Bennett Johnston stated last year, transmission is the Achilles heel of renewable energy development. The tremendous potential of our renewable energy resources means little by itself. We must ensure that these resources can be reliably integrated into the transmission grid in order to be deliverable to consumers. To that end, I believe that we need a national policy commitment to developing a more reliable and robust transmission grid.

The Commission is taking action to support reliable and robust grid development. For example, in early 2007, the Commission issued rules to improve transmission planning processes, such as by requiring open, transparent, and coordinated regional transmission planning. Last fall, Commission Staff completed a series of

conferences held around the country to review how well those rules are meeting the needs of our Nation, and to collect input as to how the Commission can improve upon the regional planning processes. We are now in the process of reviewing comments that were submitted in response to questions that Commission Staff posed as a follow-up to those conferences.

In addition, section 1241 of the Energy Policy Act of 2005 (EPAAct 2005) directed the Commission to issue rules on incentive-based rate treatments. Under the rules developed pursuant to that directive, the Commission has granted rate incentives in a number of cases, including for proposed transmission facilities that are designed to connect location-constrained renewable energy resources to load centers. Rate incentives also facilitate the Commission's implementation of section 1223 of EPAAct 2005, as the Commission has used this authority to incentivize advanced transmission technologies to increase efficiency, enhance grid operations, and allow greater grid flexibility. Of course, the Commission does not grant incentives unless they are appropriate, and the Commission has denied requests for rate incentives where the applicant did not satisfy the standards established in our rules.

Notwithstanding the Commission's efforts, more action will be needed if we are to achieve a substantial expansion of renewable energy resources in our electricity supply portfolio. Regardless of where they are located, these resources will not be able to reach consumer markets without additional transmission facilities, network upgrades, and feeder lines. As I have previously testified before this Subcommittee, I believe that additional federal authority with respect to transmission planning, siting, and cost allocation would significantly increase the likelihood that those needed facilities will be constructed in a timely manner.

Electric Reliability

I also would like to return briefly to my earlier statements that there currently are over 100 balancing authorities responsible for operating the grid, and that we must ensure that our Nation's renewable energy resources can be reliably integrated into the transmission grid. With that need in mind, I have directed Commission Staff to conduct a study to determine the appropriate metrics for use in assessing the reliability impact of integrating large amounts of variable renewable generation into the transmission grid. That study, which is being undertaken by Lawrence Berkeley National Laboratory and overseen by Commission Staff, is due to be completed this summer. When the study is complete, it will help to inform policy makers about the current limitations of the grid, and to identify what investments will be necessary to reliably accommodate continued growth of renewable energy resources.

More generally, the Commission is using its authority with respect to reliability effectively. In EPAct 2005, Congress added a new section 215 to the Federal Power Act. That provision entrusted the Commission with a major new responsibility to oversee mandatory, enforceable reliability standards for the Nation's bulk power system. Congress required the Commission to select an Electric Reliability Organization (ERO) that is responsible for proposing, for Commission review and approval, reliability standards or modifications to reliability standards. The ERO also is authorized to impose, after notice and opportunity for a hearing, penalties for violations of the reliability standards, subject to Commission review and approval. The ERO may delegate certain responsibilities to "Regional Entities," again subject to Commission approval. The Commission has certified the North American Electric Reliability Corporation (NERC) as the ERO.

The reliability standards apply to the users, owners, and operators of the bulk power system and become mandatory only after Commission approval. The Commission itself does not have authority to modify proposed standards. Rather, if the Commission disapproves a proposed standard or modification, section 215 requires the Commission to remand it to the ERO for further consideration. The Commission, upon its own motion or upon complaint, may direct the ERO to submit a proposed standard or modification on a specific matter, but the Commission does not have the authority to modify or author a standard and must depend upon the ERO to do so.

In my view, section 215 of the Federal Power Act provides an adequate statutory foundation for the ERO to develop most reliability standards for the bulk power system. The Commission has approved many of the reliability standards proposed by NERC, making them mandatory and enforceable, while in some instances further directing NERC to submit improvements to standards.

However, there are certain critical reliability measures that should not, in the first instance, utilize the section 215 process. The nature of a national security threat by entities intent on attacking our country through vulnerabilities in the electric grid stands in stark contrast to other major reliability vulnerabilities that have caused regional blackouts and reliability failures in the past, such as inadequate tree trimming. Widespread disruption of electric service could quickly undermine our Nation's government, military, and economy, as well as endanger the health and safety of millions of citizens. Given the national security dimension to this threat, there may be a need to act quickly to protect the grid, to act in a manner where action is mandatory rather than voluntary, and to protect certain information from public disclosure.

The Commission's current legal authority is inadequate for such action. I believe that legislation to address this problem should address several concerns.

First, upon notification by a designated entity, such as the President or a national security agency that determines a national security threat exists, legislation should allow the Commission, in consultation with other agencies and industry as appropriate, to order actions necessary to protect the grid before a cyber or physical national security incident has occurred. Legislation should also allow the Commission to maintain appropriate confidentiality of sensitive information submitted, developed, or issued under this authority.

Second, it is important that Congress be aware that if additional reliability authority is limited to the bulk power system, as that term is currently defined in the Federal Power Act, then it would exclude protection against attacks involving facilities in Alaska or Hawaii, including any federal installations located in those states. The current interpretation of the term bulk power system also excludes some transmission and all local distribution facilities, including virtually all of the facilities in certain large cities such as New York, thus restricting possible Commission action to mitigate cyber or other national security threats to reliability that involve such facilities and major population areas.

Third, legislation should address not only cyber security threats, but also intentional physical malicious acts (targeting, for example, critical substations and generating stations) including threats from an electromagnetic pulse. The Commission should be granted authority to address both cyber and physical threats and vulnerabilities, primarily because the Commission is the one Federal agency with statutory responsibility to oversee the reliability of the grid. This additional authority would not displace other means of protecting the grid, such as action by law enforcement and the National Guard.

Smart Grid

The need for vigilance will increase as new technologies are added to the bulk power system. For example, smart grid technology will permit two-way communication between the electric system and a large number of devices located outside of controlled utility environments, which will introduce many potential access points. For this reason, security features must be an integral consideration when developing smart grid technology and related standards.

These considerations are particularly important because smart grid technology has tremendous promise. The increased efficiency, reliability, and flexibility of a "smart" electric system will result in long-term savings for consumers.

Among other benefits, smart grid technology will give consumers more tools to control their overall electric bills. Consumers will have greater ability to monitor and adjust their electricity use, which could enhance participation in demand response programs that benefit both individual consumers and the electric system.

In addition, advanced monitoring technology will enhance reliability by improving fault detection and restoration, routing power around problems, and minimizing the area affected by outages. Other smart grid technologies will improve distribution system automation, allowing remote meter reading, outage diagnoses, and outage scope and location analysis. Such changes can benefit consumers by reducing the frequency and duration of outages.

The Energy Independence and Security Act of 2007 (EISA) directed several actions related to development of a smart grid. For example, EISA directs the National Institute of Standards and Technology (Institute) to coordinate the development of a framework to achieve interoperability of smart grid devices and systems. A wide range of standards development organizations and other interested entities are participating in the Institute's process to develop those smart grid standards. The EISA also directs the Commission, once it is satisfied that the Institute's work has led to "sufficient consensus" on interoperability standards, to institute a rulemaking proceeding to adopt such standards and protocols as may be necessary to ensure smart grid functionality and interoperability in interstate transmission of electric power and regional and wholesale electric markets.

Last summer, the Commission issued a Smart Grid Policy Statement that discussed this responsibility pursuant to EISA. Among other steps, the Smart Grid Policy Statement identified what the Commission sees as priorities in the development of smart grid standards, including cyber security, communication and coordination across inter-system interfaces, wide-area situational awareness, demand response, electric storage, and electric vehicles. The Smart Grid Policy Statement also noted that EISA does not make any standards mandatory and does not give the Commission any new authority to enforce any such standards.

In January, the Institute published a Framework and Roadmap for Smart Grid Interoperability Standards, which is the output of the first phase of its above-noted process. The Institute states that it intends to coordinate the development of additional technical information on individual smart grid standards and specifications to support their evaluation and potential use for regulatory purposes. After that information becomes available, the Commission plans to initiate a rulemaking on the corresponding smart grid standards, as required by EISA.

Continued cooperation among the Institute, other federal agencies, state regulators, industry representatives, consumer representatives, and other interested entities is

essential to the successful deployment of innovative, secure smart grid technologies. The Commission is committed to that goal.

Rates for Jurisdictional Services that are Just and Reasonable and Not Unduly Discriminatory or Preferential

The Commission's commitment to the development of safe, reliable, and efficient energy infrastructure goes hand in hand with another of the Commission's fundamental responsibilities and the other primary goal in our new Strategic Plan: ensuring that rates, terms and conditions for Commission-jurisdictional services are just and reasonable and not unduly discriminatory or preferential.

Regulatory and Market Means

The Commission uses a combination of regulatory and market means to achieve this goal, consistent with national policy and priorities. For example, the Commission has acted over the last few decades to implement Congressional policy to facilitate entry of new participants and to encourage competition in wholesale electric power markets. The Commission's actions include sustained efforts to foster regional power markets. In these efforts, the Commission acknowledges that significant differences exist among regions, including differences in industry structure, mix of ownership, sources for electric generation, population densities, and weather patterns. Also, some regions have organized markets administered by a regional transmission organization (RTO) or independent system operator (ISO), while other regions rely solely on bilateral contracting between wholesale sellers and buyers. The Commission recognizes and respects such differences in implementing the above-noted Congressional policy that wholesale competition can serve consumers well in all regions.

Disputes continue about the operation of the organized wholesale electric markets. Recent years have seen many studies that alternately attack and defend those markets. As a general matter, I am disappointed that much of the effort devoted to development of those "dueling studies" was not instead focused on developing concrete recommendations for solutions to problems in the markets we regulate.

Commissioner Spitzer will discuss in greater detail the operation of the organized wholesale electric markets and corresponding benefits for consumers, as well as other competitive markets subject to the Commission's jurisdiction.

I would also like to make a few comments on the operation of the organized wholesale electric markets. First, as I testified before this Subcommittee in December, Commission-regulated energy markets may be affected by current or future laws focused on financial derivatives. Whatever decisions Congress makes

with respect to financial derivatives, those decisions should preserve the Commission's exclusive oversight of rates, terms and conditions for wholesale energy sales and prevent dual regulation of energy markets by the Commission and the Commodity Futures Trading Commission (CFTC).

Second, I believe that the organized wholesale electric markets create opportunities and encourage innovations that benefit consumers. For example, these markets create opportunities for a wider range of resources to compete on a level playing field with traditional generation resources. These less traditional resources include not only renewable energy resources, but also demand response, energy efficiency, distributed generation, and other distributed energy resources. Where such resources are lower cost than traditional generation resources, as is often the case, their use in our electric system can lower total costs to consumers.

To illustrate this point, it is useful to consider both our Nation's potential for demand response and the progress being made in some organized wholesale electric markets to harness that potential. Commissioner Norris will discuss these issues in greater detail.

I do not mean to suggest that the organized wholesale electric markets are working perfectly. Indeed, the Commission is committed to examining and implementing improvements to these markets that will improve their efficiency and lower total costs to consumers, consistent with reliable service.

To that end, the Commission in October 2008 issued rules to improve the operation of the organized wholesale electric markets. Those rules focus on reforms in the areas of demand response, long-term power contracting, market monitoring policies, and RTO and ISO responsiveness. Commission Staff held a technical conference on RTO and ISO responsiveness last month.

The Commission also made clear that the reforms we adopted in that proceeding are not our final effort to improve the functioning of the organized wholesale electric markets for the benefit of consumers. Rather, the Commission stated that we would continue to evaluate specific proposals that may strengthen those markets.

Indeed, the Commission's new Strategic Plan recognizes that improving the competitiveness of the organized wholesale electric markets is important to our core goals because it encourages new entry among supply-side and demand-side resources, spurs innovation and development of new technologies, improves operating performance, and exerts downward pressure on costs. The Strategic Plan also describes additional steps that the Commission will consider to ensure that the organized wholesale electric markets offer a level playing field for all

types of resources. For example, the Strategic Plan calls for further efforts to identify and eliminate barriers to participation by demand resources in the organized wholesale electric markets. The Strategic Plan also calls for exploring and, as appropriate, implementing market reforms that will allow renewable energy resources to compete fairly in Commission-jurisdictional markets. Toward that end, in January the Commission issued a Notice of Inquiry that seeks public comment on whether existing rules, regulations, tariffs, or practices within our jurisdiction hinder the goal of effectively integrating variable energy resources into the grid, while maintaining reliability and operational stability.

In addition, the Strategic Plan supports development of a common set of performance metrics for markets within and outside of the RTOs and ISOs. Such metrics will assist in making comparisons of various market structures.

Oversight and Enforcement

Finally, I would like to discuss the Commission's oversight and enforcement efforts, which have evolved considerably in light of Congressional enactment of EAct 2005.

The Commission uses a balanced approach to oversight and enforcement. Among other actions, our efforts in these areas include educating affected entities about market rules and other regulations; promoting internal compliance programs; employing robust audit and investigation programs; and, where appropriate, exercising the Commission's civil penalty authority.

The Commission also actively encourages companies to self-report violations of the Commission's rules. Self-reports provide a vehicle for companies to address shortcomings, and, in most cases, matters that are self-reported, caused no harm, and which the company has corrected are closed without investigation or sanctions. If the matters reported are sufficiently serious, however, a self-report may lead to an investigation and sanctions for the misconduct. Any sanctions take into account that the company self-reported its lapses.

Taken together, these efforts are designed to increase compliance with the Commission's rules and to deter market manipulation. In this way, oversight and enforcement are essential complements to the regulatory and market means I described earlier by which the Commission ensures that rates, terms and conditions of service are just and reasonable and not unduly discriminatory or preferential.

I would like to highlight some of the Commission's recent oversight and enforcement actions with respect to three areas in which Congress demonstrated

particular interest in EAct 2005: market transparency, market manipulation, and mandatory, enforceable reliability standards for the Nation's bulk power system.

First, to facilitate price transparency, EAct 2005 enhanced the Commission's authority to collect information about the availability and prices of natural gas and electricity sold at wholesale in interstate commerce. Among other steps, EAct 2005 permits the Commission to require any market participant, except for entities with a *de minimis* market presence, to provide information with due regard for the public interest, the integrity of the markets, fair competition, and the protection of consumers. In January, the Commission issued a Notice of Inquiry that seeks public comment on whether these goals warrant application of the Commission's existing Electric Quarterly Report (EQR) filing requirements to market participants that are typically beyond the Commission's jurisdiction for other purposes, such as municipalities and certain cooperatives with Rural Electrification Act financing. The Notice of Inquiry stated that this change would aid the Commission's oversight and surveillance of wholesale electric markets and would increase price transparency for market participants.

Second, in EAct 2005, Congress granted the Commission important new anti-manipulation authority. The Commission has placed significant emphasis and resources on monitoring electricity and natural gas markets and investigating possible instances of market manipulation. One such investigation identified and examined the trading activity of several entities and individual traders affiliated with the Amaranth hedge funds who appeared to have entered into trades that manipulated the NYMEX natural gas futures settlement prices for three months in early 2006, thereby affecting natural gas physical prices throughout the United States. The Commission set the matter for hearing. In August 2009, all of the subjects except an individual trader settled the allegations jointly with the Commission and the CFTC and agreed to pay a \$7.5 million civil penalty, an amount that reflected the adverse financial circumstances of the settling entities. The case against the individual trader also went to hearing in August. In January 2010, the Commission Administrative Law Judge who presided at that hearing issued her Initial Decision, finding that the individual trader's conduct was fraudulent and violated the Commission's Anti-Manipulation Rule. The Initial Decision is subject to review by the Commission.

Another investigation identified and examined a company alleged to have manipulated wholesale natural gas prices over a multi-month period at the Houston Ship Channel trading point, in violation of the market behavior rules the Commission had implemented prior to receiving anti-manipulation authority in 2005. That investigation also resulted in a settlement. In September 2009, the Commission approved a settlement under which Energy Transfer Partners, L.P. must pay \$30 million, consisting of a \$5 million civil penalty and \$25 million

placed in a disgorgement fund to be distributed, under supervision of a Commission Administrative Law Judge, to those harmed by the company's conduct. The settlement also requires Energy Transfer Partners to adhere to a compliance program, with outside auditing of that program, for two years.

Third, as I noted earlier, EPAct 2005 also entrusted the Commission with a major new responsibility to oversee mandatory, enforceable reliability standards for the Nation's bulk power system. Since then, electric reliability has been an expanding area of the Commission's enforcement efforts. Commission Staff coordinates its activities in this area with those of NERC, the Commission-certified Electric Reliability Organization, and the Regional Entities to which NERC has delegated certain responsibilities. This coordination means that Commission Staff sometimes observes or participates in NERC or Regional Entity efforts such as compliance audits or compliance violation investigations.

One example of the Commission's enforcement efforts with respect to reliability involves the blackout that occurred in Florida in February 2008. Commission Staff promptly coordinated with NERC to investigate the causes of the blackout. In October 2009, the Commission approved a settlement of alleged violations of several reliability standards. Under the settlement, Florida Power and Light Company is subject to a \$25 million penalty. Of this amount, \$10 million went to the United States Treasury, and \$10 million went to NERC. Florida Power and Light will use the remaining \$5 million on improvements in the reliability of its electric grid, subject to approval by Commission Staff and NERC Staff. Florida Power and Light also has committed to undertake other specific reliability enhancement measures.

In contrast to the Florida investigation, where Commission Staff was actively engaged in the investigation, in most reliability actions the Commission reviews penalty assessments made by Regional Entities and approved in the first instance by NERC. These actions are taken pursuant to guidance and enforcement protocols that the Commission has given to NERC and the Regional Entities. NERC then files Notices of Penalty with the Commission, which become effective unless appealed by the entity found to be in violation or unless the Commission determines that further investigation or consideration is needed.

As of March 1, 2010, NERC has filed with the Commission 153 Notices of Penalty that cover penalties that Regional Entities have assessed for a total of 961 alleged or confirmed violations of reliability standards by 262 entities that NERC has registered as performing reliability functions subject to section 215 of the Federal Power Act. Although most of these penalties are for "zero dollars," as the Commission permitted for violations that occurred shortly after the June 18, 2007 effective date on which reliability standards became mandatory, the Notices of

Penalty include civil penalties totaling some \$3.5 million that Regional Entities imposed against 78 registered entities. The Commission has declined further review of nearly all of these penalty determinations, including 564 penalties that NERC filed in a single Omnibus Notice of Penalty. Currently, to obtain additional information about one penalty of \$100,000 against a registered entity, the Commission has extended the period for its consideration of that penalty.

Conclusion

In summary, the Commission is actively pursuing its mission to assist consumers in obtaining reliable, efficient, and sustainable energy services at a reasonable cost through appropriate regulatory and market means.

To promote the development of safe, reliable, and efficient energy infrastructure that serves the public interest, the Commission is, among other actions:

- Implementing our authority with respect to siting of natural gas infrastructure and non-federal hydropower projects;
- Examining whether transmission planning processes for the electric grid can be improved to better meet our Nation's energy needs;
- Using incentive-based rate treatments in appropriate circumstances to encourage investment in transmission infrastructure, including advanced transmission technologies and facilities designed to connect location-constrained renewable energy resources to load centers;
- Implementing our authority with respect to reliability of the bulk power system; and
- Facilitating development of Smart Grid technology and standards that will increase the efficiency, reliability, and flexibility of the electric system.

To ensure that rates, terms and conditions for Commission-jurisdictional services are just and reasonable and not unduly discriminatory or preferential, the Commission is, among other actions:

- Implementing Congressional policy that wholesale competition can serve consumers well in all regions, while respecting regional differences;
- Exploring further improvements to the organized wholesale electric markets, including steps to advance those markets' potential to allow a wider range of resources to compete on a level playing field;
- Developing a National Action Plan on Demand Response that builds on the National Assessment of Demand Response Potential, as Congress directed in EISA; and

- Pursuing a balanced approach to oversight and enforcement, including attention to deterring market manipulation and promoting compliance with mandatory reliability standards for the bulk power system.

The Commission's work in these areas is important to meeting today's energy challenges, including the need to move toward energy independence and greater reliance on clean energy. I am committed to ensuring that the Commission does its part on these critical issues.

Thank you again for the opportunity to appear before you today. I would be happy to answer any questions you may have.

Mr. MARKEY. Thank you, Mr. Chairman, very much.

Our next witness is Commissioner Marc Spitzer. He is an experienced regulator who chaired the Arizona Corporation Commission before coming to the FERC. He has focused on expansion of natural gas infrastructure, demand-side management, and renewable energy policies.

We look forward to hearing your testimony, Mr. Spitzer. Whenever you are ready, please begin.

STATEMENT OF MARC SPITZER

Mr. SPITZER. Thank you very much, Mr. Chairman, and after your opening remarks, I was tempted to merely say I agree but I think you want me to say something.

Mr. MARKEY. But that is a good start.

Mr. SPITZER. It is hard to muzzle a lawyer.

Mr. MARKEY. Yes, I like testimony that starts that way.

Mr. SPITZER. Thank you. Mr. Chairman, I submitted written testimony that I will summarize.

Mr. MARKEY. And without objection, your testimony will be included in the record in its entirety as will Mr. Norris' and Mr. Moeller.

Mr. SPITZER. Thank you, Mr. Chairman.

FERC is endeavoring to combine the best of competitive markets with appropriate regulation so competitive market forces interact with consumer protection through appropriate regulatory oversight, and if I could illustrate. The chair alluded to my tenure in the Arizona Commission. In August, 2005, in the wake of Hurricane Katrina, the consumers of Arizona were faced with a horrendous burden when natural gas prices spiked to \$15 per MMBTU so the gas distribution companies as well as the power plants using natural gas to run electricity were first to go on the market and purchase gas that was spiked due to the shut-in of gas supply in the Gulf Coast. The Arizona consumers lacked natural gas storage. There was only one pipeline system and the consumers were greatly burdened. A price spike up to \$15 has long term, negative ramifications for consumers. Well, shortly thereafter, the Energy Policy Act was signed into law and Arizona consumers as well as regulators could look to Washington, D.C. for relief.

If you consider and the members have alluded to the phenomenon of greater production of shale gas, this is a phenomenon where competition through technology was spurred and improved by regulatory support so that the markets did, in fact, work. Pipelines were constructed. Storage facilities were constructed. This country now has a much greater diversity of energy supply specifically with natural gas then existed only a few short years ago.

Similarly, FERC has endeavored to pursue fair energy markets with appropriate oversight. We have brought a small number of manipulation cases that are very important to deter those who would seek to manipulate America's energy markets. We brought enforcement proceedings, similarly to ensure that the prices are fair.

The chairman alluded to the smart grid and I think the smart grid is a wonderful opportunity to pursue demand response, energy efficiency, and as the chair alluded, go to a twenty-first century

grid. We have seen the emergence of smart meters but I think that it is very important that we have smart prices to go along with those smart meters so that the ratepayers of the United States can fully derive the benefit from the smart grid.

On the area of cyber security, I would note the proposed legislation for markup with the observation that the Section 215, Federal Power Act process, is very ill-suited to deal with emerging cyber vulnerabilities. And I think that the proposed legislation should be seen as in partnership with the existing law under Section 215 to deal with reliability of the grid.

And then I guess finally, I want to thank the chairman for his efforts as well as my colleagues, Commissioner Norris and Commissioner Moeller, and since I arrived at FERC, I was also able to work with former Commissioner Kelly and former Chairman Kelleher in a way to provide for a reliable supply of energy at reasonable prices. It was truly a bipartisan and team effort, and we will work as very hard as possible to continue the efforts at FERC on behalf of the ratepayers of the United States.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Spitzer follows:]

**Testimony of
Commissioner Marc Spitzer
Federal Energy Regulatory Commission
Before the
Energy and Environment Subcommittee
Of the Committee on Energy and Commerce
United States House of Representatives
Oversight Hearing for the Federal Energy Regulatory Commission
March 23, 2010**

Mr. Chairman and members of the Subcommittee:

My name is Marc Spitzer, and I am a Commissioner with the Federal Energy Regulatory Commission (Commission). Thank you for the opportunity to appear before you today. Today, I will focus on the benefit that properly designed and monitored competitive markets provide to the nation's consumers.

The primary responsibility of the Commission is to ensure the Nation's consumers have reliable energy supplies at just and reasonable rates. Since the late 1970s, Congress has made clear that the optimal means to ensure just and reasonable rates for consumers is through use of competitive markets. The Commission has acted over the last several decades to implement Congressional policy to support competitive natural gas and electric markets.

Competitive markets are not unregulated markets. In developing competitive markets, the Commission evaluates the effectiveness of these markets to ensure they are properly designed and implemented. The Commission vigorously monitors the markets to prevent and to punish the exercise of market power and market manipulation. I will spend the next few minutes discussing how competitive interstate natural gas and electric transmission markets have benefitted consumers and how the Commission monitors the competitive markets.

Competitive Natural Gas Markets

In 1992, the Commission ushered in an open access, competitive interstate natural gas market. These reforms have resulted in an increase in the amount and diversity of natural gas supplies and expanded the infrastructure which has increased the deliverability of these supplies. These advances have moderated pricing volatility and have resulted in relatively lower prices.

According to the Commission's most recent Winter Assessment, "the prospects for natural gas markets are looking better for consumers than they have in many years. Gas prices are moderate, storage is full and supplies are plentiful." Current spot prices for natural gas are relatively low and are predicted to be in the \$5 to \$6 range for the next few years. Indeed, in 2009, the average spot natural gas prices declined 55% to the lowest levels in seven years. Several factors created the decline: flat demand, record storage inventories, a rebound in liquefied natural gas (LNG) imports, increased infrastructure and the development of unconventional shale natural gas reserves. Lower natural gas prices directly benefit gas consumers. However, lower gas prices have positive benefits on other sectors of the economy as well. For example, electricity consumers also benefit from lower gas prices because natural gas serves as a primary fuel for electric generation.

Low gas prices have not deterred gas production. Rather, competitive natural gas markets have led to production increases and therefore natural gas supplies were at an all-time high at the beginning of the 2009-10 heating season. In fact, during most of 2009, production ran ahead of 2008. Rig counts for horizontal drilling, typically used for shale gas, in Marcellus Shale are up 270% over September of 2008, while rig counts in Louisiana are up 194% (62 rigs). The large increase is almost entirely due to improvements in producers' ability to harvest gas from shale and to get it to markets at a reasonable cost. Notably, in June 2009, the Potential Gas Committee, an independent group that develops biennial assessments of gas resources, raised its estimate to over two quadrillion cubic feet, one-third more than its previous level, and almost 100 years of gas production at current consumption levels.

These new supply sources have led to an infrastructure boom, as Commissioner Moeller discusses in his testimony. Competitive markets work best when there is adequate infrastructure to move the supplies. For example, since enacting the reforms to allow for competitive interstate natural gas markets, interstate pipelines have added over 98.1 billion cubic feet per day (Bcf/d) of new pipeline capacity and over 854 Bcf/d of storage capacity with over 35,922 MMcf/d of deliverability. The addition of storage is a particular success story. During the traditional close of the injection season, October 31, 2009, there was 378 Bcf of gas in storage, and 186 Bcf of new storage capacity has been opened over the past two years, but even with this new capacity, U.S. storage fields were 98 percent full on November 1, 2009. Most importantly, investment in infrastructure has saved consumers money.

To accommodate the changes in natural gas supply and demand, the U.S. and Canada will need 28,900 to 61,900 miles of additional natural gas pipeline by 2030. This will require an investment of \$108 to \$163 billion in pipeline assets.

Moreover, between now and 2030, the U.S. and Canada will need 371 to 598 Bcf of additional gas storage capacity. Total expenditures on new storage capacity range from \$2 to \$5 billion. Consequently, the Commission will continue to encourage competitive natural gas market reforms.

Competitive Electric Markets

The Commission is committed to competitive electric markets that will achieve the same degree of supply diversity and investment in infrastructure as has been maintained in the competitive natural gas market.

We have undertaken various efforts to ensure the competitiveness of the wholesale electric markets of the Regional Transmission Organizations (RTOs) and Independent System Operators (ISOs). As the Chairman mentioned, in October 2008 the Commission issued rules to improve the operation of organized wholesale electric markets. These reforms finalized regulations that strengthen the operation and improve the competitiveness of organized wholesale electric markets through the use of demand response and by encouraging long-term power contracts, strengthening the role of market monitors and enhancing RTO and ISO responsiveness. In addition, during my tenure with the Commission we have also reexamined our open access transmission tariff and the ways in which those policies should be implemented in RTO and ISO regions. As part of that analysis, the Commission instituted reforms to its decade-old open-access transmission regulatory framework that will ensure transmission service is provided on a non-discriminatory basis at just and reasonable rates, as well as provide for more effective regulation and transparency in the operation of the transmission grid.

Competitive wholesale electric markets have also been enhanced through a diversity of supply. Coal and natural gas continue to account for more than 70% of the total installed generation capacity. However, the push for cleaner and more efficient generation sources has led to advances from hydroelectricity, wind, geothermal, solar and other resources. As Chairman Wellinghoff noted, the Commission's policies also recognize that non-generation resources such as demand response are competing with traditional generation resources. Importantly, the Commission does not make decisions about the best supply mix for a particular community; those decisions are properly made at the state level. The Commission does, however, seek to ensure a diversity of supply by ensuring there are no undue barriers to resources' ability to participate in the wholesale electric markets.

The RTO and ISO competitive markets also play an important role in providing market signals to highlight where generation and electric transmission should be built. Consumers are the ultimate beneficiaries of these investments.

Another benefit of competition is that it allows technological developments to compete as alternative resources. We have seen that through the increased development of storage technologies, such as batteries and flywheels. The Commission also recognizes that new technological advances are essential to ensuring that wholesale electric markets are working properly. One of these advances is the development and deployment of smart grid technology, as Chairman Wellinghoff discussed. I anticipate that smart grid technology will permit regulators and consumers to more accurately quantify usage and demand. This, in turn, will allow for the design of rates that encourage appropriate and efficient usage of electricity and the nation's transmission grid. I envision that this technology will ultimately allow regulators (federal and state) to customize rates and services in a manner to date not possible. Smart rates that are tailored to the users' needs will, in turn, allow for higher quality of service to consumers at better rates.

As I mentioned earlier, competitive markets do not mean unregulated markets. In the Energy Policy Act of 2005, Congress greatly expanded the Commission's enforcement authority over natural gas and electric markets. The Commission has increased its monitoring of market manipulation and price transparency. Moreover, the Commission's Division of Energy Market Oversight regularly monitors and analyzes the wholesale natural gas and electric power markets and related financial markets. Further, the Commission's Office of Enforcement focuses on fraud and market manipulation, violations of the reliability standards, anticompetitive conduct, and behavior that threatens transparency in regulated markets. In short, the Commission is monitoring competitive natural gas and electric markets for anticompetitive conduct or conduct that interferes with market transparency, which could ultimately undermine the confidence in the wholesale energy markets upon which the nation's consumers rely.

Conclusion

As a proponent of competitive markets, I believe that the Commission must continue to focus on enhancing competition in wholesale electric and interstate natural gas markets. The Commission must continue in its role as an independent wholesale energy regulator by developing rules and policies that allow all types of resources and infrastructure to compete fairly. Just as we should not adopt rules or

policies that ignore the laws of supply and demand, we should not adopt rules or policies that ignore any type of energy resource or infrastructure. Likewise, our rules and policies should not favor one type of resource or infrastructure over another. If we are to achieve the two primary goals of the Strategic Plan laid out by Chairman Wellinghoff, then the Commission's role should be to establish rules and policies that ensure all types of resources, whether they are natural gas, oil, hydro, nuclear, wind, solar or demand resources, have a full and fair opportunity to compete for the ultimate benefit of consumers.

Mr. MARKEY. Thank you, Commissioner Spitzer, very much.

And our final witness is John Norris. He has years of experience in energy policy and regulatory affairs as a lawyer, a top official at the Department of Agriculture, and Chairman of the Iowa Utilities Board.

We thank you for joining us, Mr. Norris. Whenever you are ready, please begin.

STATEMENT OF JOHN NORRIS

Mr. NORRIS. Thank you, Chairman Markey. Good afternoon and thank you, members of the committee, for inviting me here today. I have only been on the Commission for a couple of months now so I appreciate this chance to get my feet wet with the subcommittee here.

I also have consulted my colleagues yet but I like the metaphor of Northern Iowa as for FERC's role for going forward and I can—being an Iowan, I can assure you for both us and Northern Iowa, our best days are yet to come.

Mr. MARKEY. And as you know very well because we have seen each other in Iowa many times and as a former future cabinet officer in the Kennedy, Dukakis, Gore and Kerry Administrations, I have spent a lot of time in Dubuque in my life. I could very comfortably run for city councilman in Dubuque. That is where they always send the Irish guy from Boston, to Dubuque. That is where the Catholics are in Iowa and so when Boston College actually played Northern Iowa this year and got crushed, there was a very good bet from me in my pool. I mean no money exchanging hands, of course, but I did select Northern Iowa to go a lot further than I would have if again, it was another experience of Boston College going to Iowa and learning some things about not just politics but basketball, so none of that is going to come off of your time. If we could go back to 5 minutes for the Commissioner, please again begin, welcome.

Mr. NORRIS. Thank you. We do take great pride in our Panther basketball.

Well, let me just give an overview of my written comments which largely pertain to the demand side of resources and demand response. If there is one most important takeaway from those comments, it is that our best energy outlook for the future includes an efficient mix of both demand-side resources and supply-side resources. By providing a level playing field and the opportunity for the demand-side of resources to participate on a comparable basis to traditional supply-side resources, we could make a positive difference for our markets and our consumers by allowing innovation, ingenuity and competition, and customer choice to foster competition.

Let me briefly review what has evolved so far. The Commission has allowed demand response resources to be used to comply with certain reliability standards and has required that such resources be considered as a solution in utilities transmission planning processes. In the organized markets, the Commission has gone further, requiring ISOs and RTOs to accept bids from demand response resources in their ancillary services markets and enable aggregators to bid demand response on behalf of retail customers, and we are

beginning to see results. The most recent Commission survey results for demand response showed a total potential peak load reduction across the Nation of 35 gigawatts, which is up 26 percent from the 2006 Commission survey results, and represents approximately five percent of the total forecasted U.S. peak demand for the summer of 2008, but there still remains a tremendous untapped reservoir. Last summer's national assessment of demand response potential projected through 2019 that the potential for peak electricity demand reductions across the country is up to 188 gigawatts or up to 20 percent of our national peak demand.

So where will the changes occur? Well, existing reliability and market rules and structures were developed around the needs and operating characteristics of traditional generation resources. There is not always consensus as to how and whether specific rules and structures should be modified to create a level playing field for demand response resources, but my expectation is that as we gain additional experience, the Commission will continue to modify and shape demand response policies. Just last week, the Commission issued a notice of proposed rulemaking to address compensation of demand response resources. The notice proposes and seeks comment on requiring RTOs and ISOs in which demand response resources participate at a resource to pay demand response providers the market price for energy for reducing consumption below their expected levels.

In June of this year, the Commission will issue the National Action Plan for Demand Response which will identify communication strategies, technical assistance to States and tools necessary to achieve the potential identified in that assessment. FERC also remains engaged with the States in the demand response collaborative. We are mindful that States have a large role in shaping the policies that affect demand response participation in electricity markets and we continue to work closely with our State colleagues on the FERC demand response collaborative to ensure that our efforts are coordinated and achieve the greatest impact.

There are remaining barriers such as the measurement and verification of demand response that are yet to be finalized or agreed upon. The rules and software that the system operators use in organized markets to schedule and dispatch resources were developed around the needs and operating characteristics of traditional generation resources, and may pose a barrier to a demand response in other resources, and the market rules and business practices are yet unclear as to how they are to apply to demand response. The Commission is analyzing these and other issues and if appropriate, may conduct one or more rulemakings to help further eliminate barriers to a demand response.

Thanks again for the opportunity to be here. I look forward to meeting the challenges of diversifying our electricity market in the future and I think the Commission is well-positioned to help lead the country in that effort.

[The prepared statement of Mr. Norris follows:]

**Testimony of Commissioner John Norris
Federal Energy Regulatory Commission
Before the Subcommittee on Energy and the Environment
Of the Committee on Energy and Commerce
United States House of Representatives
Oversight Hearing for the Federal Energy Regulatory Commission
March 23, 2010**

Good morning, Chairman Markey and members of the Subcommittee. As the newest FERC Commissioner, I appreciate the opportunity to participate in the discussion today. I joined the Commission about two months ago and have observed firsthand the hard work and dedication that the Chairman and my fellow Commissioners have brought to the job during their time at the Commission. I am looking forward to adding my voice to the ongoing dialogue regarding our Nation's energy future.

Today, I would like to discuss the essential role that demand response will serve as we step forward into our energy future. I will first briefly emphasize the many benefits that demand response offers and then identify actions that the Commission has taken in recent years to establish a level playing field so that demand response can fully participate in wholesale electricity markets. I will then highlight certain outcomes in these markets that are in part a direct result of the Commission's actions and policies. In addition, I will also note that our work is not done and that barriers remain to demand response participation that the Commission continues to address.

Benefits of Demand Response

Demand response can provide many benefits to our energy markets. Effective demand response can help reduce electric price volatility, mitigate market power, and enhance reliability. Demand response can in some instances serve as a fast and effective solution to address reliability needs, especially where there may be insufficient time to plan and develop new transmission. It can also increase efficient market operation and awareness of energy usage. Further, demand response can help to improve the economic operation of electric power markets by aligning prices more closely with the value customers place on electric power. In particular, consumers as a whole can realize significant savings when demand response is used to substitute for expensive power during periods of peak demand. Finally, demand response can serve as a "dance partner" to renewable generation such as wind and solar whose energy production is variable in nature. In other words, demand response can complement these renewable energy resources by

managing the sharp down-ramps in wind and solar output and providing flexibility to the grid through the use of ancillary services.

I believe that the best energy outlook will include an efficient mix of both demand-side resources and supply-side resources. By providing a level playing field and the opportunity for demand-side resources to participate on a comparable basis to traditional, supply-side resources, we can make a positive difference for our markets and consumers, allowing innovation, ingenuity, and customer choice to foster competition.

Let me take a moment to talk about what will be required to create a level playing field and ensure that demand response can participate in wholesale electricity markets on a comparable basis to other resources. While in many cases it is clear that existing reliability and market rules and structures were developed around the needs and operating characteristics of traditional generation resources, there is not always consensus as to how and whether specific rules and structures should be modified to create a level playing field for demand response resources. My expectation is that, as we gain additional experience, the Commission will continue to modify and shape its demand response policies.

Recent Commission Activity

Recognizing how critical it is for demand-side resources to participate in electricity markets, the Commission has taken many steps to encourage demand response participation in those markets. The Commission explicitly addressed demand response in several rulemakings. In its Open Access Transmission Tariff (OATT) Reform (Order No. 890),¹ the Commission took measures to encourage the participation of demand response and other resources, for example, by allowing these resources to provide ancillary services and by having transmission planning processes consider them on a comparable basis to other solutions. Similarly, in its reliability standards rulemaking (Order No. 693),² the Commission established opportunities for demand response to contribute to reliability by directing the Electric Reliability Organization, the North American

¹ *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 (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 (2009).

² *Mandatory Reliability Standards for the Bulk-Power System*, Order No. 693, FERC Stats. & Regs. ¶ 31,242, order on reh'g, Order No. 693-A, 120 FERC ¶ 61,053 (2007).

Electric Reliability Corporation (NERC), to enable demand response and other demand resources that meet certain criteria to be used to comply with reliability standards governing reserves, reactive power, emergencies, and planning of the bulk power system.

In Order No. 719, the Commission made further strides towards incorporating demand response into organized markets on a comparable basis to other resources.³ Among other things, Order No. 719 required RTOs/ISOs to: (1) accept bids in its markets for ancillary services from technically capable demand response resources as it does for other resources; (2) eliminate certain charges to buyers in the energy market for voluntarily reducing demand during a system emergency; (3) in certain circumstances, permit an aggregator of retail customers to bid demand response on behalf of retail customers directly into the organized energy market; and (4) assess and report on any remaining barriers to comparable treatment of demand response resources in its organized markets.

Our Nation has a tremendous reservoir of demand response that is still largely untapped. To help find out just how big that reservoir is, Commission staff last summer completed a National Assessment of Demand Response Potential (Assessment) out to 2019. The Commission submitted the Assessment to Congress in June 2009, as required by the Energy Independence and Security Act of 2007 (EISA). The Assessment found that the potential for peak electricity demand reductions across the country is 188 gigawatts, up to 20 percent of national peak demand. That is equivalent to the output of roughly 2,500 peaking power plants, assuming the typical average size of 75 megawatts.

To build on the Assessment, Congress also, in EISA, directed the Commission to develop a National Action Plan on Demand Response (Action Plan). The Action Plan will identify the communications strategies, technical assistance to states, and tools necessary to achieve the potential identified in the Assessment and to maximize the amount of demand response resources that can be developed and deployed. Work on the Action Plan is well underway. For example, Commission staff earlier this month released a draft of the Action Plan for a final round of public comment. As required in EISA, the Action Plan will be submitted to Congress by June 2010.

³ *Wholesale Competition in Regions with Organized Electric Markets*, Order No. 719, 73 Fed. Reg. 64100 (Oct. 28, 2008), FERC Stats. & Regs. ¶ 31,281 (2008) (Order No. 719), *order on reh'g*, Order No. 719-A, 74 Fed. Reg. 37776 (July 29, 2009), FERC Stats. & Regs. ¶ 31,292 (2009), *reh'g denied*, Order No. 719-B, 129 FERC ¶ 61,252 (2009).

Additionally, just last week the Commission issued a notice of proposed rulemaking (NOPR) to address compensation of demand response resources. The NOPR proposes, and seeks comment on, requiring RTOs and ISOs in which demand response resources participate as a resource, to pay demand response providers the market price for energy for reducing consumption below their expected levels. The Commission is seeking comment on this proposal and on the merits of alternative approaches in comparison to the approach proposed. We are also seeking comment on whether regional differences among the markets justify the current difference in compensation across the RTOs and ISOs.

Finally, FERC is mindful that the states have a large role in shaping the policies that affect demand response participation in electricity markets, and we continue to work closely with our state colleagues to ensure that our efforts are coordinated and achieve the greatest impact. To that end, I will serve as a co-chair of the Demand Response Collaborative, which is a joint effort of the Commission and members of the National Association of Regulatory Utility Commissioners (NARUC). Phyllis Reha, from the Minnesota Public Utilities Commission, is the other co-chair. Participants in the collaborative include more than a dozen state utility regulators representing all regions of the country. When I served as Chairman of the Iowa Utilities Board I was a member of the collaborative, and I believe that experience will serve me well as I work with my state colleagues toward our mutual goal of providing more opportunities to integrate demand response into the electricity markets.

The Demand Response Collaborative first convened in late 2006 and meets regularly three times a year. Since that time, the collaborative has learned of demand response activities around the country such as in Vermont, New Jersey, Florida, Connecticut, Washington, Arkansas, New York, Texas and California, as well as in the Pacific Northwest, New England, and the mid-Atlantic and mid-West states. One premise of this forum is that states can learn about other initiatives around the country and identify and adopt best practices. Important stakeholders, including large customers, retail utility companies, and demand response providers also bring their perspectives to the table. In addition, there are regular reports about key research on topics such as integrating price-responsive demand into wholesale and retail markets, cost-effectiveness guidelines for valuation of demand resources, and policy options for eliminating barriers to demand response. This forum is also an excellent opportunity for the Commission to share its expertise with its state colleagues, for example, through discussion of the National Assessment of Demand Response Potential and the upcoming National Demand Response Action Plan.

NARUC and FERC have a second collaborative on Smart Grid. Recently, NARUC and FERC decided that there was considerable overlap in the topics

discussed at both the Smart Grid and Demand Response collaborative meetings so they will now be held as one meeting so that members of both collaboratives can learn from one another. In addition, I expect that there will continue to be separate tracks for Demand Response and Smart Grid to explore relevant issues in more depth. The Smart Grid Collaborative is led by Chairman Wellinghoff and Commissioner Orjiakor Isiogu of the Michigan Public Service Commission.

Both collaboratives are designed to explore issues that cut across wholesale and retail energy markets. The dialogue that occurs through this process helps regulators understand that we now have a critical opportunity to develop coordinated policies that will accelerate smart grid and demand response programs, moderate the cost of electricity to consumers, and protect the environment. At the most recent meeting of the collaboratives in February 2010, the members discussed the development of interoperability standards for the smart grid. I expect that topics for future meetings will include, among other things, how to bring a new focus on customers and communication strategies – to learn how to better engage them in responding to energy market signals. I look forward to working with my colleagues across the country in this important effort that we all hope will lead to a more efficient system for electricity consumers.

Results for Demand Response in Wholesale Markets

Evidence points to increased demand response participation in electricity markets. The most recent Commission survey results for demand response show a total potential peak load reduction across the nation of 37,335 MW, which is up 26 percent from the 2006 Commission survey results, and represents approximately five percent of total forecasted U.S. peak demand for summer 2008 (752,579 MW). In its 2009 Long-Term Reliability Assessment, NERC estimates that demand response and energy efficiency resources will account for roughly 40,000 MW (or four percent) of the peaking resource portfolio by 2018, effectively offsetting peak demand growth for nearly five years. NERC has also noted that demand response accounts for over six percent of peak demand in Florida and the Midwest and that demand response is increasingly being used as reserves. According to the ISO/RTO Council, demand response capacity in organized markets under Commission jurisdiction approximately doubled from 13,000 MW to 26,000 MW between the years 2006 and 2008.

I want to offer two examples of how the organized markets have made strides in recent years to capture greater potential from demand response and other distributed resources such as energy efficiency. In PJM's forward capacity auctions, the total quantity of demand response resources that cleared in PJM's latest auction -- for the 2012-2013 delivery year -- was over 7,000 megawatts of unforced capacity. That figure represents about five percent of the total resources

that cleared the market. Also, PJM's latest auction for the first time permitted energy efficiency resources to bid offers into the auction as a capacity supply. The amount of energy efficiency resources cleared in that auction was nearly 570 megawatts.

Similarly, one of the most notable features of the first two auctions in ISO New England's forward capacity market is the large amount of qualified and cleared capacity from demand resources. Demand resources accounted for seven percent of the cleared capacity in the first forward capacity auction, including 2,046 megawatts of demand response resources and 890 megawatts of energy efficiency resources. In the second forward capacity auction, total cleared capacity from demand resources increased by about 500 megawatts and accounted for eight percent of the total cleared capacity. Most of the demand resources in both of these auctions were existing resources. Also in both auctions, approximately two-thirds of the capacity from cleared demand resources came from active demand resources, such as real-time demand response or real-time emergency distributed generation. Most of these resources came from third-party providers, while the bulk of passive demand resources came from state-sponsored utility energy efficiency programs.

Remaining Barriers to Demand Response

More work remains to be done to ensure that demand response resources are fully integrated into electricity markets on a comparable basis to generation resources. While the Commission has diligently worked to remove barriers to demand response participation, tough issues remain to be resolved. For example, robust methods to measure and verify reductions in consumption that are a result of demand response have yet to be finalized and/or agreed upon. The Commission is conducting a rulemaking proposing to incorporate by reference into its regulations the North American Energy Standards Board (NAESB) measurement and verification standards.⁴ In the NOPR, the Commission stated that, while the NAESB standards provide a starting place to develop a more comprehensive set of standards, more work needs to be done. The Commission emphasized that the industry should take the lead in developing and implementing demand response standards that will be both practical and workable.

⁴ *Standards for Business Practices and Communication Protocols for Public Utilities*, Notice of Proposed Rulemaking, 74 Fed. Reg. 48,173 (Sept. 22, 2009), FERC Stats. and Regs. ¶ 32,646 (2009).

Still other barriers to entry remain. For example, some market participants have noted that the rules and software that system operators use in organized markets to schedule and dispatch resources has been developed around the needs and operating characteristics of traditional generation resources and may pose a barrier to demand response and other resources. Others point to market rules and business practices that are unclear as they apply to demand response resources. The Commission is analyzing these and other issues, and, if appropriate, may conduct one or more rulemakings to help eliminate barriers to demand resources.

Thank you for the opportunity to testify today. I look forward to meeting the challenges of a diversifying electricity market during my time here at the Commission. I believe the Commission is well-placed to meet those challenges.

Mr. MARKEY. Thank you, Commissioner Norris, very much.
Can I just very briefly, Mr. Chairman, in terms of Commissioner
Moeller's testimony, should I make a unanimous consent request
that that be included in the record in its entirety?
Mr. WELLINGHOFF. Please, we would appreciate that.
Mr. MARKEY. OK, without objection, so ordered.
[The prepared statement of Mr. Moeller follows.]

**Testimony of Commissioner Philip D. Moeller
Federal Energy Regulatory Commission
Before the Energy and Environment Subcommittee
Of the Committee on Energy and Commerce
United States House of Representatives
Oversight Hearing for the Federal Energy Regulatory Commission
March 23, 2010**

Mr. Chairman and Members of the Subcommittee:

Thank you for the opportunity to address the Subcommittee and discuss some of the major issues keeping us challenged at the Federal Energy Regulatory Commission. These issues will affect the future of energy production and consumption in our nation.

From my position, I see several major trends affecting the domestic energy markets that are relevant to the Commission's jurisdiction. In my testimony today I wish to highlight several of these trends and briefly mention how the Commission is addressing their impacts.

First, I believe this nation will be consuming an increasing amount of natural gas in the next several decades. Regardless of whether Congress enacts legislation affecting the cost of carbon dioxide emissions, it appears that more and more natural gas will be used to generate electricity as utilities shift away from constructing new coal-fired generation plants. With this assumption as a backdrop, I believe it is our responsibility at the Commission to adopt policies within our jurisdiction that provide for robust development of the nation's natural gas infrastructure.

As our chairman previously mentioned, the Commission has a major role in assuring adequate and safe energy infrastructure. Specific to natural gas infrastructure, the Natural Gas Act tasks the Commission with siting interstate pipelines, and certificating underground storage projects and on-shore terminals that ship or receive liquefied natural gas (LNG).

The Commission has been successful in promoting policies that have led to the deployment of this infrastructure. Since I joined the agency just prior to the beginning of Federal Fiscal Year 2007, the Commission has approved 6,768 miles of interstate natural gas pipelines representing 56,310 Million Cubic Feet per Day (MMcf/d) of pipeline capacity, 601 billion cubic feet of natural gas storage capacity, seven new LNG terminals and expansions of two existing LNG terminals. In addition, we have spent significant time and effort providing

guidance for potential developers of an Alaska natural gas pipeline. These infrastructure additions combined with abundant additions to our nation's natural gas supplies – especially from shale formations – and a downturn in demand has led to a period of relatively low and stable natural gas prices over the last 18 months.

When discussing energy infrastructure, it is also important to highlight the Commission's primary role in regulating the nation's system of hydropower production – the ultimate renewable source of energy. We serve as the safety regulator for approximately 2,500 existing non-federal hydropower projects throughout the nation. This responsibility is primarily accomplished on the ground through our five regional hydropower offices located in Atlanta, Chicago, New York, San Francisco, and Portland, Oregon.

As for our role in licensing, nearly all large hydropower project licenses considered by the Commission involve re-licensing of existing structures with the exception of several pump-storage projects. Since the beginning of FFY 07, the Commission has authorized almost 900 MW of new hydro capacity, in original licenses, relicenses, and exemptions for hydro-power in existing conduits and other small projects. Pending license applications propose almost 2,500 additional MW of new capacity, and applications for another 5,580 MW are expected to be filed in the next five years.

Breaking those numbers down further, since October 1, 2007, the Commission has issued 14 original license having a total proposed installed capacity of 149.3 MW, five 5-MW exemptions having a total proposed installed capacity of 1.1 MW, 30 license amendments and conduit exemptions authorizing a total additional capacity at existing projects of 458.1 MW, 11 conduit exemptions having a total proposed installed capacity of 15.3 MW, and six relicenses authorizing a total additional capacity at existing projects of 270.1 MW. The total new capacity authorized by the above issuances is 893.9 MW.

Pending license applications include: 21 original license applications proposing a total installed capacity of 1,943.5 MW, five 5-MW exemption applications proposing a total installed capacity of 1.0 MW, four applications for license amendments proposing a total additional capacity at existing projects of 52.1 MW, six conduit exemption applications proposing a total installed capacity of 0.556 MW, seven relicense applications proposing a total additional capacity at existing projects of 484.6 MW. If approved, the above applications would authorize 2,481.8 MW of new capacity.

In addition, there are significant relicense applications due to be filed in the next five years (2010-2015) that include 14 relicense applications for projects having

an installed capacity of more than 100 MW each. These projects represent a total installed capacity of 5,580 MW.

On the newer hydrokinetic front, including wave power, tidal power, and in-stream hydropower, the Commission has undertaken several efforts to facilitate the development of these exciting new technologies. Specifically, the Commission has implemented a five-year hydrokinetic pilot license that allows for these facilities to be placed in the water if the facilities are located outside of a sensitive environmental area, can be quickly removed if found to have problematic environmental consequences, and have a capacity of less than five megawatts. As for small hydropower development, the Commission held a technical conference late last year focused on improving the licensing process for small hydropower projects. The comment period closed last month and while Commission staff is still reviewing the submissions, we have already identified several common issues that we believe can be addressed.

Another emerging trend is that our nation is enjoying a significant expansion of renewable sources of electricity into the electric system. Most of these new resources are from wind, although hydropower, the newer hydrokinetic technologies, solar, and geothermal resources all have significant potential in various locations. Particularly with wind, increasing amounts of these new resources are challenging long-accepted approaches to grid operations and infrastructure planning. The variable nature of wind and solar resources present significant but not insurmountable challenges as we work to adjust the operation systems of the bulk-power grid, which was primarily designed around base load resources.

The Commission has recently undertaken two significant efforts to address the policy challenges of intermittent resources. In May 2009 the Commission contracted with Lawrence Berkeley Laboratory to conduct a comprehensive study of the implications of frequency variations that may occur as greater amounts of intermittent resources are added to the grid.

Earlier this year the Commission initiated a comprehensive Notice of Inquiry to address a wide range of issues pertaining to better integration of intermittent resources. Through this Inquiry, we are seeking comments on data and reporting requirements, scheduling practices, commitment process, balancing authority area coordination, the role of reserve products, capacity market reforms, and re-dispatch and curtailment practices necessary to accommodate these resources in real time. I am looking forward to reviewing the comments addressing these key areas in an effort to better integrate these valuable resources into the grid.

Another major trend is the extent to which the concept of a “smart grid” has received significant attention and regularly receives coverage in the mainstream media. This is a good development, as having consumers more aware and focused on the consequences of their electricity consumption has clear benefits. But this situation presents challenges as well. There exists a wide range of opinions of what the “smart grid” entails. And there is growing evidence that some consumers are showing signs of a backlash against the concept as in some cases its benefits have been oversold.

From my perspective, there are two major categories of “smart grid” applications. The first is at the wholesale or bulk-power level. In this category, “smart grid” investments entail new technologies (such as synchrophasor units) that allow the electric transmission system to be operated more efficiently and reliably. These investments are clearly within the jurisdiction of the Commission and are occurring now. In December, we approved a \$50 million synchrophasor investment submitted by the Pacific Gas and Electric Company. This is a regional project with neighboring utilities and the Western Electricity Coordinating Council intended to provide real-time data on key transmission system operating measurements in the region.

Most consumers however are more likely to think of the smart grid as some type of system or technological device that better manages their retail electricity consumption to reflect the real-time value of the electricity they consume. Energy policymakers – especially state and federal regulators – must take care not to “overpromise” the benefits of the smart grid, as it will take a relatively long transition period for retail electricity users to enjoy and appreciate the benefits of retail smart grid applications. If ratepayers perceive they are paying more for infrastructure while receiving little or no benefits from these investments we could face a consumer backlash that could significantly set back these efforts.

As someone who spent significant time working on telecommunications issues during its major transition period between the mid 1980s and the mid 1990s, I witnessed the benefits that consumers enjoyed when they were empowered with more choices and a greater ability to manage their telecommunications services. This led to new products and services enjoyed by consumers that were nearly unimaginable 25 years ago. This did not necessarily lead to lower bills or lower consumption; in fact it was just the opposite for most consumers. This could be the case for electricity consumers as well, but ideally smart grid applications will lead to more efficient usage of the resources we consume.

However, it is important to recognize that many of the benefits associated with a “smart grid” will be realized at the retail level and this will largely depend on state and local regulators embracing the concept of “dynamic” or “real time” pricing of

electricity. Admittedly, this transformational shift to adopt “smart grid” technology will not be easy, but if done carefully I believe that widespread benefits will be realized by the people of this nation.

Thank you again for the opportunity to address the Subcommittee, and I look forward to answering any questions.

Mr. MARKEY. So the chair will now recognize himself for a round of questions.

As you know, tomorrow this subcommittee will markup legislation giving FERC new authorities to protect the U.S. electric grid against attack. How serious in your view is the threat to the grid from cyber and other threats, and how serious are the consequences if we don't protect the grid from those threats?

Mr. WELLINGHOFF. Mr. Chairman, in my opinion, the threat is extremely serious. I know that members of this committee have had classified briefings with respect to the issues that we are facing. I believe that it is critical that we address this threat as quickly as possible. It is something that FERC has been concerned about for a number of years and I know has been working with Congress to try to get a piece of legislation together that would do the job of actually the threats and I believe the legislation that you have, I haven't seen the latest draft. I have seen some earlier drafts but I believe that it really does fully look at not only threats but vulnerabilities as well which I think is important. I understand that there may be some issues that DOD still has that would like to discuss with you but other than that from what I have seen so far, I think that the legislation will provide FERC the tools that we need to ensure that cyber security is not an issue for this country with respect to the grid.

Mr. MARKEY. Thank you, Mr. Chairman.

Now, there are some industry stakeholders who take the view that although there may be a need for new Federal authority to react to a grid security emergency, that the current system of industry standard-setting through the NERC is adequate to defend the grid against attack by terrorists or of hostile nation states. What in your view are the limitations in the current system and why should we give the FERC the authority to establish interim requirements if you determine that NERC standards haven't addressed a critical weakness to attack?

Mr. WELLINGHOFF. Mr. Chairman, currently under the NERC-FERC reliability process, we have I believe it is eight cyber security standards that we have approved but those standards came to us through a process where FERC takes to its stakeholder group these proposals. The proposals are discussed over a period of time. They are voted upon and then they are ultimately submitted to us. That process, I believe, is not expeditious enough to deal with threats certainly, where we have an immediate threat that is identified by the President or really to deal with vulnerabilities in a really effective manner. Number one, we still don't have a process where we can provide information to the utilities on a confidential basis which is a real gap, I believe, because we certainly don't want the fixes to get out to the opposition with respect to these cyber security threats. And we also don't have the ability to immediately send out a fix to the proper entities who need to be identified when we determine that there is a threat that exists. So I believe that that the current process has allowed us to go so far but as far as we have gone it doesn't take us all the way that we need to go to close off the threat.

Mr. MARKEY. Let me ask one final question on this round and this is for any of the commissioners. There have been concerns that

a recent FERC decision could negatively impact deployment of renewable energy. As I understand it, the decision involving the Kansas Utility Westar could disadvantage renewal energy projects because they would be forced to pay for the variability of their power generation. Are there options that we could pursue to include additional factors in calculating the cost of this variability? As I understand it, wind and solar variability goes down considerably if the grid is able to dispatch generation more quickly and schedule generators more frequently, Mr. Chairman.

Mr. WELLINGHOFF. Mr. Chairman, the Westar decision is currently pending rehearing so I can't discuss the decision specifically but I can talk in general terms about your question. Are there other ways we can look at how to allocate these costs relative to I believe it is regulation service for the grid that under that particular decision is being, wind is being asked to pay some portion of. I think we really do need to examine how those costs are allocated and look at very carefully how loads are involved in posing those costs on the grid versus how resources like wind are. So I am very open with respect to the rehearing as to what we might be able to look at there but again I can't talk specifically about the particular case given it is pending for rehearing.

Mr. MARKEY. OK, Commissioner Spitzer.

Mr. SPITZER. Thank you, Mr. Chairman, and again without discussing the specific Westar case, as is the case in many regulatory environments, we need to balance competing interests and the overarching goal is just and reasonable rates. If you look at the Commission's generator interconnection rules and the changes thereto to accommodate wind that took place in 2005, the Commission has shown a great willingness to incorporate and integrate wind. If you look at our Notice of Inquiry regarding variable resources, we have striven greatly to increase not just wind but solar and other resources into the grid in a way that preserves reliability and minimizes costs to ratepayers. So in many cases, these costs are about balancing efforts to integrate variable resources into the grid and at the same time justly assign the costs of integrating those resources in a fair manner, and that is as you know often complex but I don't think you can extrapolate one particular case to either hostility to wind or hostility to the ratepayers who are varying the cost of integrating wind.

Mr. MARKEY. OK, great, thank you, Commissioner Spitzer.

The chair recognizes the gentleman from Kentucky, Mr. Whitfield.

Mr. WHITFIELD. Thank you very much and thank you all so much for your testimony.

Either one of you can answer this question. When the Fourth Circuit Court of Appeals in the Piedmont case ruled that FERC did not have the authority for new transmission facilities location, that you do not have that authority which was given to you under the Energy Policy Act, I know a number of organizations did appeal the decision, the American Wind Energy Association, Edison Electric Institution and so forth, appealed to the U.S. Supreme Court. Evidently, the Obama Administration filed a brief on FERC's behalf telling the Supreme Court that it should not take the case and review the Fourth Circuit decision. When we hear almost every day

a need to expand the grid, to modernize the grid, I was curious how would FERC or the Administration make a decision and not to appeal that decision?

Mr. WELLINGHOFF. That was an interesting discussion in the solicitor's office and as I understand it, first of all, it is the solicitor in the Administration who makes the decision and not FERC.

Mr. WHITFIELD. OK, so FERC was really not consulted?

Mr. WELLINGHOFF. No, we were consulted and I want to tell you the nature of that consultation. We were consulted. In fact, the solicitor, as I understand it, agreed with it substantively that we were correct in our initial decision that the Fourth Circuit was incorrect, and I still believe we are correct. However, it was my understanding that the solicitor decided not to take it up to the Supreme Court or not to ask for cert to the Supreme Court on procedural grounds in that there was no conflicts in the circuits. It was only the Fourth Circuit that made the decision so therefore we only had one circuit decision so they didn't feel that it was a significant enough case to take up. That was not our call. It was the solicitor's call.

Mr. WHITFIELD. Mr. Spitzer.

Mr. SPITZER. Thank you, Congressman. So there is no mistake, my opinion is that the Fourth Circuit decision was wrong. I would like a dissenting opinion.

Mr. WHITFIELD. OK.

Mr. SPITZER. Sometimes lawyers lose cases and it was we lost two to one.

Mr. WHITFIELD. Right.

Mr. SPITZER. One of the issues was whether the case was in fact ripe and this gets into the unique nature of the case before the First Circuit, Fourth Circuit.

Mr. WHITFIELD. Right.

Mr. SPITZER. It was on a power line for which the application had not yet been filed at FERC and so one of the views of the Supreme Court does not like taking cases if they are not ripe for adjudication and given the fact that there was no actual power line case filed at FERC, there was a real question as to procedurally whether it was correct to seek certuari to the Supreme Court. Secondly, as the chairman noted, oftentimes you look for conflicts between Circuit Courts of Appeal to have a case go up to the Supreme Court.

Mr. WHITFIELD. Right.

Mr. SPITZER. So I think it is one of those unique factual circumstances but doesn't gainsay that the final rule that FERC voted not that was basically reversed by the Fourth Circuit was adopted by either FERC and I think we believe that the Fourth Circuit was incorrectly decided. In the Piedmont case, the only question is what is the best procedural mechanism to pursue reversal, either in the courts or with Congressional clarification?

Mr. WHITFIELD. Right, so you all feel quite strongly that your legal team does believe that under the Energy Policy Act that FERC does have backstop siting authority?

Mr. SPITZER. Yes, sir.

Mr. WELLINGHOFF. Yes.

Mr. WHITFIELD. OK, thank you very much.

I note in, Mr. Wellinghoff, your testimony, I believe it was your testimony you talked about a strategic plan to explore as appropriate and implementing market reforms that will allow renewable energy resources to compete fairly in Commission jurisdictional markets. When do you expect that study or that strategic plan to be completed?

Mr. WELLINGHOFF. Excuse me. The strategic plan is completed. We have started to implement different aspects of that strategic plan including looking at variable renewable resources. We just issued an NLI, Notice of Investigation, in January on that issue asking for comments as to the barriers of integrating into the system. The problem we have with these variable resources, both wind and solar, is that you are not completely able to forecast when you are going to have them into the system and because of that variability, you have to look at how you are going to operate the grid in a way to ensure reliability because we are charged with reliability on the grid. So we are very interested in determining how we can have larger and larger amounts and there are a lot of areas in the country, one of them being the northwest, for example, Bonneville's area. Another one being the south central portion of the country, Oklahoma-Kansas area where larger and larger amounts of wind are coming onto the system because they are developing them there and they apparently are economic and so they are coming onto the grid and as doing such, we need to ensure that they do it in a reliable fashion. So we want to make sure that this integration is done in a way that will protect this.

Mr. WHITFIELD. Just one follow-up if I could, Mr. Chairman.

In the Notice of Inquiry, you are asking for public input. When do you expect that period will end for public input?

Mr. WELLINGHOFF. I think it is the end of March.

Mr. WHITFIELD. Thank you.

Mr. BUTTERFIELD [presiding]. Thank you, Mr. Chairman. All right, the gentleman's time has expired.

The gentleman from Michigan, the chair emeritus of this committee.

Mr. DINGELL. Thank you, Mr. Chairman.

I have a splendid opening statement which I ask to be inserted in the record.

Mr. BUTTERFIELD. Without objection.

[The prepared statement of Mr. Dingell follows:]



Statement of Representative John D. Dingell
March 23, 2010
House Committee on energy and Commerce
Subcommittee on Energy and Environment
"Oversight of the Federal Energy Regulatory Commission"
10 am, 2123 RHOB

Mr. Chairman – thank you for holding this hearing today. We have before us a most complex set of issues. FERC has a seeming simple mission: To assist consumers in obtaining reliable, efficient and sustainable energy services at a reasonable cost through appropriate regulatory and market means. And according to FERC, this means fulfilling two goals: 1) ensure that rates, terms and conditions are just, reasonable and not unduly discriminatory or preferential; and, 2) promote the development of safe, reliable and efficient energy infrastructure that serves the public interest.

I know most of us in the room understand this, but FERC's mission and goals bear thinking about, especially in this political climate.

The Energy Policy Act of 2005 gave FERC so-called "backstop authority" to site interstate transmission lines under certain circumstances, including when a state has not yet acted on a particular siting proposal within one year. FERC has interpreted this authority as applying to cases not only where the state fails to act, but also when a state denies a permit.

At the time of the Act's consideration, I supported Mr. Boucher's motion to strike this language, because it seemed like an overly blunt instrument and unnecessary preemption of authority in an area traditionally reserved to the states.

Last year the 4th Circuit struck down FERC's exercise of this "back-stop authority", on the grounds that the statute did not authorize this when a state had specifically disapproved a new line

As is often the case, the 4th Circuit decision has given rise to proposals to "clarify" FERC's preemptive authority under EPACT.

In addition to clarifying FERC preemptive authority, the calls are getting louder for the need to expand transmission capability due to the increase in renewable energy. I think that is probably true, for we all support the basic premise of getting more renewables on line.

However, it is important we not do this in a haphazard manner. We do not want to increase capacity to the point that ratepayers overpay for useless capacity. That would certainly go against FERC's mission.

And, of course, we have the particularly sticky question of who pays for new transmission lines.

In addition, we must balance the delicate intersection of federal and state authority over electricity regulation. To date, we have little or no record on which to judge how well the existing Federal Power Act addresses those concerns.

As Congress moves forward in considering transmission legislation, members need to fully understand the effects of any new language. That did not happen last summer when transmission provisions were put in the American Clean Energy and Security Act via the Manager's Amendment.

For example, I have concerns about the wisdom of splitting the country in two parts, the eastern and western interconnections, for purposes of regulating transmission siting and planning.

Procedural rights must to be open not only to applicants for federal licenses to build new lines - but also to members of the public whose property would be affected, or to other parties who have legitimate interests.

As we move forward, it is critical that we concern ourselves with conservation values, including protection of wilderness areas,

natural and historic monuments, and conservation easements protecting open space.

Finally, it is critical that we all understand the effect of any new language on existing law. Otherwise, it will only lead to more litigation and delay, of which we already have quite enough.

Mr. DINGELL. Gentlemen of the Commission, is the Commission or any members of the Commission asking to have the Federal Power Act amended on this matter, yes or no?

Mr. WELLINGHOFF. Excuse me, Congressman Dingell, on the matter of cyber security?

Mr. DINGELL. Yes, are you seeking to have any amendments made to the Commission or rather to the Federal Power Act?

Mr. WELLINGHOFF. Yes, we have supported legislation on cyber security that would require.

Mr. DINGELL. Would you please submit those amendments to the committee so that we could see what they are, please?

Mr. WELLINGHOFF. We would be happy to do that.

Mr. DINGELL. Is this the Commission or just individual members of the Commission?

Mr. WELLINGHOFF. The Commission has submitted.

Mr. DINGELL. By what vote, sir?

Mr. WELLINGHOFF. Excuse me?

Mr. DINGELL. By what vote, in other words?

Mr. WELLINGHOFF. We haven't.

Mr. DINGELL. This is the request of the Commission or is this just individual commissioners who are seeking it?

Mr. WELLINGHOFF. The Commission doesn't typically vote with respect to proposals of legislation. We usually respond to requests from committees for more information and that comes from the Commission.

Mr. DINGELL. All right, would you please submit it to us and with a statement including whether this is the Commission's suggestion to the committee or whether it is that of individual Commissioners?

Now, next question, what, let us see, the Commission, I want to address the question of siting, transmission siting authority. Has the Commission decided who it is that should pay for new lines? In other words, is it going to be the originator of the power, the transmission company, the ultimate recipients and customers? Who will be the person who pays for these new lines and how will the allocation of these costs and benefits be decided according to the rules of the Commission?

Mr. WELLINGHOFF. Congressman Dingell, currently it depends on how the line is built. If it is built by a merchant then the merchant will pay for the line. If it is built by a developer who wishes to allocate costs more broadly, then it depends upon the region, and different regions do it differently. Certain RTOs have certain allocations.

Mr. DINGELL. So you are not going to have a standard approach to this?

Mr. WELLINGHOFF. There currently is not a standard approach.

Mr. DINGELL. If I understand you correctly, you are telling me you have different rules for different States or different regions?

Mr. WELLINGHOFF. That is correct.

Mr. DINGELL. How is that to be justified?

Mr. WELLINGHOFF. Each region decides they believe that methodology is appropriate for their region. They come to FERC, we look at it and review it, and determine whether or not it is appropriate for them and in those instances we then make a final determina-

tion but we do try to look at regional differences and there certainly are differences with respect to regions and how those costs may or should be allocated. They may be different in PGM.

Mr. DINGELL. Well, I am going to submit a letter on this. We are consuming time that I don't have for this because we only have 5 minutes.

Now, what evidence is there that FERC needs backstop authority as granted in the Interview Policy Act of 2005? Is there broad consensus that the States are not capable of siting new transmission lines or that the States are acting in any way in bad faith? Is there a consensus that the consumers are suffering because these States are unwilling or unable to site new lines?

Mr. WELLINGHOFF. The 2005 Act provides backstop siting authority in the instance of a congested corridor designated by DOE.

Mr. DINGELL. Well, I understand you have got backup authority. Do you feel it is necessary to use that backup authority and if so, where, when and why?

Mr. WELLINGHOFF. I believe that in those instances where we have location-constrained resources that are needed to get the load by a long transmission line over multiple States or regions to the extent that a particular.

Mr. DINGELL. Have you ever used this authority, this backup authority or have you left the matter to the States?

Mr. WELLINGHOFF. Currently, the backup authority is only for congestion corridors designated by DOE which are in very limited areas of the country.

Mr. DINGELL. So you have not used it yet?

Mr. WELLINGHOFF. We have not used it yet.

Mr. DINGELL. Do you have any plans to use it and if so, where, when and why?

Mr. WELLINGHOFF. We do not have any current plans to use it.

Mr. DINGELL. Do you think that it is necessary to use it for any particular reason at this time?

Mr. WELLINGHOFF. Not at this time.

Mr. DINGELL. OK, well, I know my time has expired, Mr. Chairman. I thank you for your courtesy.

Mr. BUTTERFIELD. I thank the gentleman.

The gentleman from Alabama.

Mr. GRIFFITH. Thank you, Mr. Chairman.

Along those same lines and this is a comment. Is there a possibility because of the diversity not only of our power generation but also of our geography here in the States, is there any possibility that this is complicated enough that we might consider before any regulation that would be one size fits all, that we could do a pilot program or a couple of pilot programs that would take a particular geography and see how the integration and the reliability impact of integrating these large amounts of renewable energy into the grid, how we might do that on a pilot program before we decide that it is good for everyone? Is that unreasonable?

Mr. WELLINGHOFF. Congressman Griffith, I don't think it is unreasonable. In fact, I think it is going on right now. We have a great pilot going on in a place called Texas. Texas right now is integrating in 8,000 megawatts of wind and they are going to go to 18,000 megawatts of wind. They have just developed a \$5 billion

transmission upgrade to do that. I just had some conversations with Chairman Smitherman, the chairman of the Texas Public Utilities Commission on that matter so I think we have a great incubator there of a pilot going on. We also I think have it going on in the different RTOs, as well, in California, in the Midwest, in SPP. They all have varying amounts of renewable energy that they are integrating in their systems there and so they are all sort of different pilots going on right now and I think it is good idea to have that happening.

Mr. GRIFFITH. The sharing of costs of transmission and who is responsible for it from the maintenance to the charging of it, how is that, do you think, that is going to be decided?

Mr. WELLINGHOFF. The sharing the cost of transmission, I hope, is initially and primarily decided by the regions and the States. And again, it is something that I hope can be worked out on that regional State level. It is largely being done that way now within the RTOs. They are working out various proposals. I know though for example in MISO, the Midwest ISO, there is two different groups. One being the State commissioners primarily and another group being the transmission owners that have different ideas of how to allocate costs and they haven't come together yet. I think they are, as I understand it, may be coming to FERC ultimately to have us resolve for them which would be the most appropriate way to do it but my preference would be to have the States and the regions work it out on their own.

Mr. GRIFFITH. My concern, of course, in my district is I am Tennessee Valley Authority. What impact do these proposed or suggested regulations do you think would have on that particular utility?

Mr. WELLINGHOFF. I don't believe they would have an impact directly. I believe that the TVA determines how to allocate their costs within their own region.

Mr. GRIFFITH. Thank you.

Thank you, Mr. Chairman.

Mr. BUTTERFIELD. Thank you.

At this time, the chair recognizes the gentlelady from Wisconsin.

Ms. BALDWIN. Thank you, Mr. Chairman.

Chairman Wellinghoff, welcome.

Mr. WELLINGHOFF. Thank you.

Ms. BALDWIN. As you, I think, noted in your testimony and I am sorry, I saw it in the written testimony. I am sorry I missed your oral testimony today but FERC has convened several technical conferences around the country asking for input and comment on matters relating to transmission planning, coordination and cost allocation. And I have been hearing some observers recently speculate that these activities should leave little doubt that FERC intends to set down concrete rules of cost allocation for transmission projects. And so I am wondering if you can confirm whether there is a cost allocation rulemaking in the works and if so, what details can you provide us?

Mr. WELLINGHOFF. We are currently reviewing, as I understand it, several thousand pages of comments on those workshops that you referred to regarding cost allocation and planning. When we complete that review, we will consider a rulemaking with respect

to cost allocation and I am certain that that rulemaking will be informed also by other proceedings like the filing that we expect from the Midwest ISO and their cost allocation proposals. So it is possible that we would move to rulemaking. I can't tell you today that it is a certainty but we are looking at those comments and considering that in conjunction with the other filings that are coming in on cost allocation because we are getting sort of a disparate request with respect to cost allocation from different parts of the country, and it would be good to look at them in sort of a unified whole not saying one size fits all because I really don't believe in that per se. I think you do have to account for regional differences on the one hand but it may be good to set down some sort of general principles with respect to cost allocation. And I would like to see that go forward but again what will ultimately come out of it will be up to a vote of the Commission.

Ms. BALDWIN. What light could you shed on the timeframe for making that decision of whether you are going to move forward with a rulemaking?

Mr. WELLINGHOFF. I think we should know where we are going to be in 6 months.

Ms. BALDWIN. OK.

Mr. WELLINGHOFF. It shouldn't be that long. I mean if a rulemaking comes out and I can't tell you when exactly it would come out but it would be my hope at least that we would have enough analysis done on the comments and have a good enough idea from the filings from places like MISO as to what some of the alternative proposals are to look within a 6-month timeframe to whether or not we want to do a rulemaking.

Ms. BALDWIN. OK, last year the Seventh Circuit Court of Appeals struck down a FERC-approved tariff to distribute costs through a postage stamp rate in the PJM RTO, and I wonder if you can tell me what steps the Commission has taken in response to this case?

Mr. WELLINGHOFF. Excuse me, I am sorry. I just had to get a little update there. The case is pending before the Commission right now, the remand to us, but we did ask parties in the case to submit additional evidence to us because basically the Seventh Circuit asked us to do some cost benefit analysis with respect to the way that we spread those costs in that allocation, and so we are asking for information from the critical parties in the case to ensure that we had adequate evidence to be able to go back to the Seventh Circuit and show them and demonstrate to them that our allocation methodology was appropriate.

Ms. BALDWIN. So in light of the fact that you are taking in additional evidence, do you believe that the Commission has the authority to approve a tariff that includes some level of broad cost-sharing for large transmission projects?

Mr. WELLINGHOFF. Yes, I believe we do if we do it under the Seventh Circuit principles and I think they laid it out that we don't have to be exactly precise in how we look at the cost allocation but we do have to show how the costs and benefits were considered, and I believe we can develop sufficient evidence in the record to do that.

Ms. BALDWIN. OK, as you may be aware, on March 16 of this year, NARUC sent a letter to Senators Reid, McConnell, Bingaman

and Murkowski expressing some concerns that any dramatic shift by Congress in the current balance between State and Federal jurisdiction over transmission line permitting and cost allocation will undermine significantly the just initiated interconnection-wide transmission planning efforts and produce gridlock. And I would ask, by the way, unanimous consent, Mr. Chairman, that that letter be inserted in the record of our proceedings today.

[The information appears at the conclusion of the hearing.]

Ms. BALDWIN. That same letter goes on to say that they, and this is NARUC, remain unconvinced that additional Federal authority over transmission is needed. I give you as an aside, in Wisconsin since 2001, the total value of transmission construction and upgrades that are in-service or currently approved by our State's public service commission for future construction is approximately \$2.7 billion. The letter adds that taking action now to disrupt the existing planning process actually contradicts the Congressional intent of the ARRA, the American Recovery and Reinvestment Act, which directed the Department of Energy to give the States \$27 million to coordinate transmission planning efforts across the country's three grids, the Eastern Interconnection, the Western Interconnection and the Electric Reliability Council of Texas. Each of the 40 States in the Eastern Interconnection are participating in the Eastern Interconnection States Planning Council. Are you supportive, Mr. Chairman, of the platform that has been created by the American Recovery and Reinvestment Act for States and stakeholder cooperation and information-sharing? And what is FERC going to do to support these ongoing efforts?

Mr. WELLINGHOFF. We are very supportive of that provision of that Act. In fact, we were sure to get FERC inserted in that so we could be advisors to DOE with respect to that particular planning process, and so we have people who are participating in both the Eastern and Western Interconnect, the planning processes. We are making our FERC staff available to those two entities to ensure that if they need technical information support, we will be happy to provide that to them, and I don't see that activity as any way inconsistent with the provision in the Bingaman Bill, for example, in the Senate that provides FERC with backstop siting authority and also some clarification of our cost allocation authority. I believe that planning process can and should and will go forward, and it will go forward with FERC's full support.

Ms. BALDWIN. OK, thank you, Mr. Chairman. I see that my time has expired.

Mr. BUTTERFIELD. I thank the gentlelady.

The gentleman from Vermont, Mr. Welch.

Mr. WELCH. Thank you, Mr. Chairman.

I have some questions following up on Dr. Griffith. There are some of us who believe that we really need much more of an energy boost from FERC to protect consumers in the planning process of these transmission lines. And, be specific, in Vermont there is going to be very significant cost allocations and there is a sense among our utilities that we have very little control and very little advocacy to make certain that the planning is done on a least integrated cost basis. Mr. Chairman, my understanding is that the RTOs do have an obligation to implement principle number five

and that approach would be least cost integrated resource planning. Is that your understanding as well, Mr. Wellinghoff?

Mr. WELLINGHOFF. Yes, the RTOs are a very interesting entity.

Mr. WELCH. No, answer my question. I mean I know they are interesting.

Mr. WELLINGHOFF. I am intending to.

Mr. WELCH. OK, good.

Mr. WELLINGHOFF. They are voluntary entities that are formed by the transmission owners in the region and as a part of that voluntary operating and cooperation agreement, those owners decide to what extent planning is part of an integrated least cost plan so it would be up to the stakeholders in each RTO to determine specifically what aspects of planning they will do and whether that planning goes to the point of an integrated resource plan.

Mr. WELCH. So then you don't see FERC as having some responsibility to make certain that they do the least cost integrated planning?

Mr. WELLINGHOFF. FERC is responsible for ensuring that rates are just and reasonable.

Mr. WELCH. Yes, but that is built upon a major cost foundation in the transmission system.

Mr. WELLINGHOFF. And we are also responsible for ensuring that costs in the interstate transmission system are prudently incurred.

Mr. WELCH. All right, let me tell you how I am translating this, OK.

Mr. WELLINGHOFF. Sure.

Mr. WELCH. My utilities in Vermont work pretty hard to try to keep the cost to ratepayers down and the ISO New England does not perceive, as I understand it, they don't perceive that it is charged with doing least cost integrated resource planning but just transmission planning. And absent a very clear sense of direction from FERC, that is the way they are going to do it to the detriment of the consumers.

Mr. WELLINGHOFF. Again, it is my understanding that the RTOs can make that decision internally. I don't believe that FERC has the authority to dictate to the RTOs in that regard. In fact, we have had a California case that has indicated.

Mr. WELCH. OK, let me just stop and I am not arguing with you. I just want to understand this because maybe we need some legislative authority.

Mr. WELLINGHOFF. Sure.

Mr. WELCH. Either the ISOs have to do least integrated resource planning or they don't. Their perception as I understand it right now is that all they have to do is transmission planning and is it your testimony today that FERC doesn't have a point of view on that?

Mr. WELLINGHOFF. No, it is my testimony today that FERC doesn't have the authority to order them to do that. My point of view and I authored the least cost utility planning statute in the State of Nevada so I am very familiar with the process is that everybody should be doing least cost utility planning.

Mr. WELCH. OK, would it be your advice to this committee that you need enabling legislation to permit you to make certain that

that least cost integrated planning is done? Would that help you do your job?

Mr. WELLINGHOFF. I would be happy to have that authority.

Mr. WELCH. All right, would you be willing to give me some draft language that would be helpful to you to help the consumers?

Mr. WELLINGHOFF. I would be happy to do that.

Mr. WELCH. All right, thank you.

I yield back.

Mr. BUTTERFIELD. I thank the gentleman.

We have just received word that we have got three votes coming up very shortly. Any of the members on either side of the aisle wish to ask any additional questions?

I have one for my close.

Commissioner Spitzer, your testimony discussed the revolution in natural gas production from shales. Much of this new production will come from the Marcellus Shale located in an area that has not traditionally been a major gas producing area. What is it going to require in terms of new pipeline infrastructure to get all of this new gas to market?

Mr. SPITZER. Thank you, Mr. Chairman. There have already been some discussions of open seasons for shale to come from Pennsylvania, western Pennsylvania into the eastern markets to reduce the high prices of the eastern markets. They have not yet filed certificates to my knowledge with the FERC and if and when those certificates are filed, they will be handled in a way that is consistent with FERC's authority under the Natural Gas Act. So it is while we recognize that shales have been produced in various parts of the country including the Marcellus, it is also recognized that there needs to be some pipeline capacity to get that gas into the consuming markets and that is under longstanding Federal law siting resides with the FERC.

Mr. BUTTERFIELD. All right.

The ranking member has returned. The chair recognizes the gentleman from Kentucky.

Mr. WHITFIELD. Thank you and thank you all again for being here today.

As you know or maybe you don't know but I do represent a State that produces a lot of coal, and we all understand that there are environmental concerns with coal and, Mr. Wellinghoff, I know you had made a statement at one point in time that we probably wouldn't need any more nuclear power plants or coal plants, and I know that subsequent to that you, you know, clarified that statement. But when I read a lot of documents today we talk about renewable energy and we know that a lot of States have renewable energy mandates and in the Cap and Trade Bill that came out of the House there is a renewable energy mandate and of course the Senate has not acted yet. And I am not any kind of legal expert on the intricacies of FERC but in your opinion, would it be discriminatory in any way to adopt a policy providing incentives or give an advantage to one source of energy production over another?

Mr. WELLINGHOFF. From a Congressional standpoint or a FERC standpoint? FERC standpoint. We under our statute are required to ensure that rates are just and reasonable, and that there is no undue discrimination, and we uphold that policy. I believe that we

have in fact in all our initiatives ensured that there is not undue discrimination with respect to any resource on the grid and that is my goal, and I think it is, I don't want to speak for my fellow commissioners but I think it is their goal as well. So to the extent that coal or nuclear is developed and is wishing to integrate to the grid, we certainly would do whatever we could to ensure that there is a fair and open transparent policy to do that. You just have to appreciate that over the 3-and-a-half years that I have been at FERC, we have seen mostly wind come onto the grid and that has been the thing that we have had to worry about. Last year, as a matter of fact, in this country we had 9,900 megawatts of wind come onto the grid and it has been a huge challenge. And it has been a challenge as I indicated from the standpoint of ensuring grid reliability, integration in a way that we can make sure the grid is stable, and that because we have the variable resources coming into the grid, ensuring that that grid is going to operate to the reliability and benefit of the consumers. So it may seem that we have emphasized to some degree renewable resources but certainly to the extent that coal and nuclear is eventually built in this country, the open transmission processes for integration will serve those resources as well.

Mr. WHITFIELD. OK, Mr. Spitzer, would you?

Mr. SPITZER. Thank you. I think it might be helpful, Mr. Chairman and Congressman, in response to briefly read the last paragraph of my statement which is, "As a proponent of competitive markets, I believe the Commission must continue to focus on enhancing competition in wholesale electric and interstate natural gas markets. The Commission must continue in its role as an independent wholesale energy regulator by developing rules and policies that allow all types of resources and infrastructure to compete fairly. Just as we should not adopt rules or policies that ignore the laws of supply and demand, we should not adopt rules or policies that ignore any type of energy resource or infrastructure. Likewise, our rules and policies should not favor one type of resource or infrastructure over another. If we are to achieve the two primary goals of the strategic plan laid out by Chairman Wellinghoff, that the Commission's role should be to establish rules and policies that ensure that all types of resources whether they are natural gas, oil, hydro, nuclear, wind, solar or demand resources have a full and fair opportunity to compete for the ultimate benefit of consumers." So that would reflect my and I believe the Commission's standpoint.

Mr. WHITFIELD. Now, yes, I understand what you were saying and the fact that I didn't see coal in there was on demand resources.

Mr. SPITZER. I apologize.

Mr. WHITFIELD. But anyway, I know what you mean and, Mr. Norris, what would be your reply?

Mr. NORRIS. Let me echo what the chairman and Commissioner Spitzer said and that is I think we create all fuel sources fairly and equally, and leave it to this body to tell us how we evaluate cost and if the other costs associated with fuel sources be it internal or external costs, that becomes a factor I think in how we move forward but that is our job that to fulfill what you tell us to do in that

regard. Barring that, I think we are trying not to be the choosers or pickers of fuel but make sure they are treated fairly.

Mr. BUTTERFIELD. I thank the gentleman.

All right, will there be any further questions from either side?

All right, let me on behalf of the chairman and the full committee thank you, gentlemen, for your testimony today. It has been very informative and your comments are part of the record. This will conclude the hearing for this afternoon. Thank you.

[Whereupon, at 3:47 p.m. the Subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

**Congressman Gene Green
Energy and Environment Subcommittee Hearing
“Oversight of the Federal Energy Regulatory Commission”
March 23, 2010**

I want to thank the Chairman for holding today’s oversight hearing on the Federal Energy Regulatory Commission, or FERC.

Since its founding in 1920, FERC has played an ever increasing role in ensuring reliable energy services and infrastructure at reasonable cost in the U.S.

I was proud to support the Energy Policy Act of 2005 (EPACT) which made some of the most significant changes to FERC’s congressionally mandated authorities, including expanding FERC’s role to:

- Oversee the reliability of the nation’s electric grid;
- Promote investment in electric transmission infrastructure;
- Prevent manipulation in energy markets; and
- Provide backstop transmission siting authority for national interest electric transmission corridors.

I was especially pleased EPACT included provisions advocated for by me and my colleague, Lee Terry, which vested in FERC federal authority to site LNG terminals.

FERC has diligently executed these and other responsibilities, especially over the past several years which have seen a flurry of initiatives at the Commission.

With Texas as the Number 1 producer of wind energy in the nation -- and with growing solar energy potential -- states must be able to integrate location-strained renewable energy into the electricity grid to access growing markets.

FERC must continue to identify and reduce barriers to renewable resource integration and infrastructure, including disclaiming jurisdiction over potential transmission facilities in Texas which may attempt to link state renewable resources to other regions of the country.

The Commission has also moved quickly on demand response and smart grid efforts which are critical to reducing energy usage in America.

Center Point Energy and Reliant Energy in our congressional district were recently awarded \$200 million and \$19.9 million in stimulus funding, respectively, for smart grid and demand response projects. FERC's work will continue to encourage the regulatory framework for these efforts nationwide.

I am also interested in FERC's efforts on energy market manipulation, including recent natural gas case proceedings as well as potential jurisdictional overlap in electric markets with the CFTC.

I look forward to today's testimony and yield back my time.

Thank you Mr. Chairman.

**Opening Statement of the Honorable Joe Barton
Ranking Member, Energy and Commerce Committee
For Subcommittee on Energy and the Environment Hearing:
“Oversight of the Federal Energy Regulatory Commission”
March 23, 2010**

Thank you, Mr. Chairman, and thank you for calling this hearing on FERC oversight. I’m especially glad to see all of the commissioners here today. When we passed the Energy Policy Act of 2005, we gave FERC a big job to do, and I’m looking forward to hearing the commissioners tell us how they’ve been following through on our direction.

We reaffirmed Congress’s support for competitive wholesale markets because market-based solutions provide the most efficient solution to develop resources and promote diverse new generation and transmission. The American economy runs on energy, and it requires energy from all the sources that are available, including nuclear, coal, natural gas, and renewables.

Our people suffer from 9.7 percent unemployment and family energy budgets are already straining to pay gasoline prices that threaten to hit \$4 this summer, so I hope to hear that FERC is not

going to turn their double whammy into a triple whammy by suppressing affordable supplies of electricity for the sake of political correctness.

Realizing that our aging grid and increased electricity demand required the building of new transmission, we crafted a common-sense solution to get new transmission built by giving FERC backstop siting authority to ensure that needed interstate facilities would be constructed if states were unable or unwilling to do so. Unfortunately, this authority was severely limited by a decision of the Fourth Circuit Court of Appeals, and I'd like to hear your suggestions as to what Congress should do to remedy this matter.

One of the areas that is most important to me is the strong market oversight authority for electric and natural gas markets. We gave FERC the tools, including strong civil and criminal penalties, to protect consumers from fraud and manipulation. I am eager to hear about how FERC has used this authority to punish wrongdoers and promote fair, functioning markets. I also have some concerns that ongoing jurisdictional disputes between the CFTC and FERC could make it more difficult for FERC to fulfill its role as a strong regulator over energy markets. We held a

hearing on this last year, and I am hopeful that any final financial reform bill will include strong protections for FERC authority.

Congress repealed the Public Utility Holding Company Act of 1935, recognizing that new challenges for the industry called for a different sort of regulation. In its place, we gave FERC enhanced and more flexible authority to audit, to review books and records, and to review mergers and acquisitions. We reformed the Public Utility Regulatory Policies Act to promote a more market-based way of developing diverse energy resources.

Finally, we asked FERC to oversee the reliability of our electric grid. FERC exercises this role through the North American Electric Reliability Corp. I know that great strides have been made in mandatory, enforceable reliability standards since 2005. However, I have some concerns that increasing cyberattacks on our electric system and lack of emergency authority to protect our electric system leave our country vulnerable to a new era of cyberwarfare and cyberterrorists. So I'm pleased that this subcommittee plans to markup a bill to address electric cybersecurity, and I'd appreciate hearing from the commissioners about this issue.



N A R U C
National Association of Regulatory Utility Commissioners

March 16, 2010

Sen. Harry Reid
Majority Leader
United States Senate
Office: S-221
Washington, D.C. 20510

Sen. Mitch McConnell
Minority Leader
United States Senate
Office: S-231
Washington, D.C. 20510

Sen. Jeff Bingaman
Chairman
Committee on Energy & Nat. Resources
United States Senate
Office: SH-703
Washington, D.C. 20510

Sen. Lisa Murkowski
Ranking Member
Committee on Energy & Nat. Resources
United States Senate
Office: SH-709
Washington, D.C. 20510

Dear Majority Leader Reid, Senators McConnell, Bingaman, and Murkowski:

On behalf of the National Association of Regulatory Utility Commissioners (NARUC), we are writing to address the various transmission planning, permitting, and cost-allocation proposals pending in Congress. NARUC is the national association representing the State Public Service Commissioners who regulate essential utility services, such as energy, telecommunications, and water. Our members are responsible for assuring reliable utility service at fair, just, and reasonable rates.

NARUC members support the modernization of the country's transmission grid, particularly with regard to carrying additional renewable resources, ensuring reliability, and decreasing congestion. State commissioners have taken a leadership role in working with the federal government, utilities, and stakeholders in the new interconnection-wide transmission planning efforts funded under federal stimulus monies. Our members and sister agencies at the State-level have permitted a record number of new transmission lines in recent years, working to ensure that the lines are needed, provide benefits to those who pay for the lines, and meet environmental laws. Any dramatic shift by Congress in the current balance between State and federal jurisdiction over transmission line permitting and cost allocation will, we believe, undermine significantly the just-initiated interconnection-wide transmission planning efforts, and rather than expedite a State-federal partnership on modernizing the nation's transmission system, it will instead produce gridlock.

Our Association supports federal action to mitigate climate change to remove existing uncertainties that are hampering investment in the nation's utility infrastructure. We recognize that increased access to renewable resources is an important component of any climate policy. However, language in the American Clean Energy Leadership Act of 2009, passed by the Senate Energy and Natural Resources Committee last year and may be incorporated into a broader "vehicle," includes provisions that greatly expand the federal government's jurisdiction over siting

and approving transmission lines. While the bill is substantially improved over earlier versions, we remain unconvinced that additional federal authority over transmission is needed.

The record of State commissions and agencies speaks for itself. In Wisconsin, since 2001, the total value of transmission construction and upgrades that are in-service or approved by the State's Public Service Commission for future construction is approximately \$2.7 billion. In the last three years, the California Public Utilities Commission has approved more than \$4.5 billion of new transmission infrastructure. These lines are being built with the exception of projects that are awaiting federal land-use permits. Arizona's Corporation Commission sited 14 high-voltage transmission projects covering 430 miles and costing \$610 million since 2007. These are just a few of many examples.

Moreover, taking action now to disrupt the existing planning process actually contradicts the congressional intent of the American Recovery and Reinvestment Act (ARRA) of 2009. ARRA directed the U.S. Department of Energy to give the States \$27 million to coordinate transmission planning efforts across the country's three grids—the Eastern Interconnection, the Western Interconnection, and the Electric Reliability Council of Texas (ERCOT). NARUC members and relevant State agencies are already working expeditiously to meet ARRA's requirements by securing the grant funding and creating unprecedented partnerships to conduct this work.

Each of the 40 States in the Eastern Interconnection are participating in the Eastern Interconnection States Planning Council (EISPC). This group has held initial meetings and taken a leadership role in these interconnection-wide transmission studies. This process, along with similar efforts in the West and ERCOT, should be given an opportunity to thrive without being undermined by premature federal action. Congress has already committed substantial taxpayer funds for these projects, so it only makes sense that they be given the opportunity to succeed before changing the rules midstream.

If Congress addresses transmission policy in a larger energy and/or carbon-reduction bill, it must leave the States as the primary authority. Since the purpose of the ARRA transmission planning process is to identify needed transmission expansions that will be endorsed by States and other stakeholders, the States should be given the opportunity to implement those expansions with their permitting authority, rather than legislating a separate, federal approval process that circumvents this process.

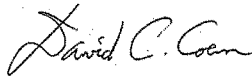
We are also concerned about proposed federal legislative language imposing a one-size-fits-all cost-allocation scheme for the entire country. NARUC staunchly opposes such an approach, as the nation's transmission grids are regional in nature. A top-down methodology will not result in the best or most cost-effective grid for the nation. Indeed, a single cost-allocation methodology for the transmission system will strongly influence the grid's design, turning the whole point of a deliberate planning process on its head. Broad new federal cost-allocation authority, even if intended to promote greater usage of renewables and carbon emission reductions, could result in construction of unneeded lines and not necessarily reduce carbon emissions. Again, the stakeholder-driven, State-federal partnership in transmission planning

initiated through ARRA is meant to ensure that careful planning – not cost recovery – drives new transmission.

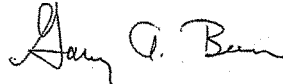
No one better than us knows that transmission projects are controversial and expensive; our members deal with this issue every day. But we also know that expanded federal transmission authority will disrupt the current, federally funded efforts being undertaken to find workable solutions that will benefit consumers rather than a small portion of interested stakeholders. States are successfully finding innovative ways to promote energy efficiency and demand resources to develop both regional and local renewable energy, while focusing clearly on consumer costs. We hope Congress will support these efforts rather than disrupting them in favor of an untried federal scheme.

NARUC looks forward to working with you to address these issues in the 111th Congress.

Sincerely,



David C. Coen
President, NARUC
Member, Vermont Public Service Board



Garry Brown
Chairman, NARUC Committee on
Electricity
Chairman, New York State Public
Service Commission

CC: Members of the U.S. Senate Committee on Energy and Natural Resources

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426

OFFICE OF THE CHAIRMAN

April 30, 2010

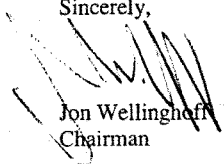
The Honorable G. K. Butterfield
United States House of Representatives
Washington, D.C. 20515

Dear Representative Butterfield:

On March 23, 2010 the Energy and Commerce Committee Subcommittee on Energy and Environment held a hearing titled "Oversight of the Federal Energy Regulatory Commission." Enclosed are my responses to the post hearing questions you submitted.

Should you need additional information, please do not hesitate to contact me.

Sincerely,



Jon Wellinghoff
Chairman

Enclosure

**Subcommittee on Energy and Environment
March 23, 2010 House Oversight Hearing:
FERC Responses to
On-Record Questions**

Congressman Butterfield Questions

1. You mentioned in your prepared statement that the current bulk power system definition under Section 215 does not cover distribution level assets with respect to grid security authority. Why should FERC have authority to order grid security measures at the distribution-level?

Response: The entire electric system, including power plants, substations, transmission lines, and local distribution lines, is potentially subject to cyber and physical attacks involving risks to national security. Federal Power Act section 215 and the current interpretation of the “bulk power system” exclude some transmission and all local distribution facilities, including virtually all of the facilities in certain large cities such as New York, as well as the electric systems in Alaska and Hawaii and any federal installations located therein. The potential exists for off-grid equipment to adversely affect the bulk power system. One such example is a cyber attack through smart grid applications which compromises a utility’s communications and system operations.

2. FERC last week issued a guidance order on penalties. The order applies a variety of penalties for different activities ranging from paper reliability violations to market manipulation. How did you come to your decisions on what penalties apply in these situations?

Response: First, I will note that if “paper reliability violations” means de minimis violations of reliability standards that present no risk of harm, they would not be covered by the Penalty Guidelines. In drafting the Policy Statement on Penalty Guidelines, the Commission considered the factors mandated by Congress in EAct 2005: The seriousness of the violation as well as efforts to remediate the harm from the violation. The Commission also examined penalties imposed by other federal agencies and considered factors we have emphasized in prior penalty determinations, including whether the entity self-reported the violation, cooperated in the investigation and had an effective compliance program in place at the time of the violation. In the specific example of penalties for market manipulation, the loss caused by the manipulation plays a significant role in determining the penalty. For violations of the reliability standards, the penalty depends on any actual harm caused by the violation as well as the risk of harm resulting from the violation.

3. It appears they may in some instances result in higher penalties for paper reliability violations than for deliberate market manipulation. Is this accurate?

Response: I interpret “paper reliability violations” to mean de minimis violations of reliability standards that present no risk of harm. As a result, they would not be covered by the Penalty Guidelines. Thus far, the Commission has imposed two penalties for violations of the reliability standards, both relating to a widespread blackout in Florida in 2008. In its 2009 Report on Enforcement, the staff of the Office of Enforcement indicated that its priorities included serious violations of the reliability standards and that its enforcement efforts would focus particularly on cases resulting in actual harm as well as cases involving repeat violations of the Reliability Standards, a violation of a standard that carries a high Violation Risk Factor, or substantial actual risk to the Bulk Power System. While the Electric Reliability Organization has issued Notices of Penalty for violations of the standards relating to documentation, the penalties have frequently been low and in many cases have been for zero dollars. The Commission has permitted each such Notice to take effect without modification.

4. Do you have an idea what percentage of market participants in RTO Markets are purely financial, in that they conduct no physical transactions?

Response: The percentage of financial market participants varies considerably depending on the RTO and the particular segment of the RTO market at issue. For instance, while some of the entities in the market for Financial Transmission Rights hold portfolios that are financial in nature, others may hold both financial and physical positions and may use FTRs as a means to hedge physical congestion risk.

5. Has FERC studied the activities of these market participants and whether their impact on RTO market prices is positive?

Response: FERC has examined the activities of financial market participants in a variety of contexts. While it is difficult to summarize their impact in these complex markets, FERC constantly monitors the market prices and other outcomes in the RTOs. FERC is aware of the importance of swiftly detecting and eliminating market manipulation or other problems in the RTO markets to meet our obligation to assist consumers in obtaining reliable, efficient and sustainable energy services at a reasonable cost.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426

OFFICE OF THE CHAIRMAN

April 30, 2010

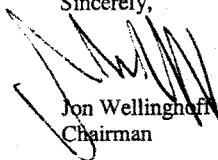
The Honorable Roy Blunt
United States House of Representatives
Washington, D.C. 20515

Dear Representative Blunt:

On March 23, 2010 the Energy and Commerce Committee Subcommittee on Energy and Environment held a hearing titled "Oversight of the Federal Energy Regulatory Commission." Enclosed are my responses to the post hearing questions you submitted.

Should you need additional information, please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Wellington".

Jon Wellington
Chairman

Enclosure

**Subcommittee on Energy and Environment
March 23, 2010 House Oversight Hearing:
FERC Responses to
On-Record Questions**

Congressman Blunt Questions

1. It appears that the experiment with regional transmission entities is becoming more complicated, rather than less, especially in Missouri where they are dealing with 5 RTO's. As an example, on Monday, March 22nd, the joint action agency for Missouri's Municipal Utilities was unable to supply six cities in east central Missouri with its regular source of power because of a dispute over rule interpretations between SPP and MISO. The agency and their member cities had to incur additional expenses to sell the power and transmission rights they would have normally used and purchase other power and transmission rights from a different RTO.

Why is FERC not doing more to reduce these inter-RTO disputes over rule interpretations?

Response: The Commission has developed a number of mechanisms to effectively resolve rule disputes, outside of the formal complaint and litigation courses of action traditionally pursued. First, the Commission has approved public utility tariffs that specifically provide for dispute resolution procedures, thus providing a mechanism for the customer and utility to resolve issues that arise amongst themselves. If the parties are not able to resolve the issues amongst themselves, such parties can work through the Commission's alternative dispute resolution (ADR) process, which offers a variety of methods to resolve the matter in lieu of going through formal litigation in an administrative hearing. The Commission has an ADR team, law judges and trial staff, who can serve as a neutral party to aid the participants in developing a mutually acceptable solution.

Additionally, the Commission runs an Enforcement Hotline, which affords market participants the opportunity to report, on a confidential basis, tariff violations and various market abuses. Through this process, thousands of disputes have been resolved without the need for formal complaints.

The Commission is continuously working with the RTOs and their market monitors to improve the market design and rules under which the RTOs provide service, particularly regarding interregional coordination between the RTOs, in order to improve the efficiency and reliability of the electric grid. The Commission has encouraged entities to have "seams" agreements which

provide the rules for coordination of operations between neighboring RTOs and between the RTOs and non-market utility neighbors. Also, our Enforcement Staff has regular meetings with the market monitors of the RTOs to discuss issues with regard to potential market abuses or market rule violations.

Regarding the specific issue concerning the joint action agency for Missouri's Municipal Utilities, the Commission has not been approached to resolve this issue. However, it is my understanding that the RTOs and parties addressing these issues have already reached, or soon expect to reach, a mutually agreeable solution to these issues. If they are unable to resolve the dispute, the RTOs and parties may contact the Commission through one of the options discussed above.