TESTIMONY OF
THE HONORABLE JON WELLINGHOFF
NOMINEE TO BE A MEMBER OF THE
FEDERAL ENERGY REGULATORY COMMISSION

December 18, 2007

Chairman Bingaman, Senator Domenici, and distinguished members of the Committee, I am honored to be here today as a nominee to the Federal Energy Regulatory Commission (FERC). Thank you, Chairman Bingaman, for scheduling this hearing. I thank President Bush for renominating me to this position, and I thank Majority Leader Reid for his continued support and the confidence he has expressed by recommending me to the President for renomination.

At my confirmation hearing before this Committee in June, 2006, I promised to use my 30-plus years of experience with consumers, utilities, and energy policy and regulation to work at FERC to improve the efficiency of our nation's energy infrastructure and operations, and the effectiveness and responsiveness of the agency to the needs of consumers through the more efficient administration of energy regulation. I believe I have worked to fulfill that promise in my last 16 months at the Commission. That work, however, has not and cannot be done alone. Chairman Kelliher, and fellow Commissioners Moeller, Spitzer, and Kelly have not only been supportive of these efforts, but they have actively collaborated and contributed significantly to the progress made in that time. The competent and capable staff of the Commission is also to be commended for their work in these areas.

In terms of sheer numbers, the work has been substantial. In the time since I took office in August 2006, I have reviewed, discussed, and voted on over 1684 orders. These orders range from uncontested settlements of minor tariff issues to massive rulemaking proceedings of thousands of pages affecting fundamental issues such as the operation of our interstate transmission system and electric system reliability. With each of these orders I have considered, I have applied a consistent philosophy and approach. For each I have asked the following two questions:

1. How will the order impact the consumer?
2. Can the order be structured to improve efficiency and consumer benefits?

Improving efficiency while maintaining reliability of the infrastructure and operations of our nation's energy system will, in most instances, lower total life-cycle costs to consumers. Improving efficiency also often has the added benefits of reducing energy use and thus reducing local and global emissions, including greenhouse gas emissions. Improvements in efficiency must be considered, however, in the context of reliability and first costs, both of which are also important to consumers. It is within this context that I relate to you a sample of my experience to date at the Commission.

Energy Infrastructure

There have been significant opportunities to consider mechanisms to improve efficiency in energy infrastructure in the numerous cases presented to the Commission since my arrival. These have included the areas of electric transmission systems, natural gas pipeline and storage systems, and innovative technologies including renewable systems.

In the area of transmission, the Congress in the Energy Policy Act of 2005 (EPAct 2005) directed the Commission to provide for incentives for the construction of new electric transmission facilities. The Commission complied by issuing Order No. 679 that provided for such incentives. In section 1223 of EPAct 2005, the Congress directed the Commission to encourage advanced transmission technologies that improve system efficiency. In those cases where transmission developers have requested incentives for transmission construction under our Order No. 679, I have linked that incentive in my decision making to the developer also establishing that efficiency improvements have been incorporated into the line using some of the innovative technologies outlined by the Congress in EPAct section 1223. This linkage is important to encouraging improved transmission efficiency and use of the EPAct 2005 advanced transmission technologies.

As another transmission example, in Order No. 890 the Commission has reformed its open access transmission procedures. In that Order, efficient transmission grid expansion is encouraged by improving the transmission planning process. Order No. 890 explicitly recognizes that demand side resources are an integral part of the transmission planning process and must be considered on a comparable basis to supply side resources. Consideration of such resources benefits consumers by promoting efficiency and allowing lower cost options to be considered by transmission planners.

The natural gas pipeline system in this country delivers essential fuel for space and water heating, cooking and other domestic and commercial uses in homes and businesses. It is also vital to the delivery of fuel for electric generation, process heat, and as an industrial feedstock. The operation of that system consumes tremendous energy to compress the gas to move it through the interstate pipeline system. It is this compression process and the efficiency of the process that has been another area of focus for me while on the Commission. It has been estimated that there are between 10 and 15 gigawatts of energy that could be recovered from our natural gas pipeline system through waste heat recovery at compressor stations and pressure recovery at pressure let down points. To the extent that this energy can be recovered economically and used to service consumers, they will benefit and all will benefit from the reduced carbon emissions. With assistance of the Chairman and the Commission staff, I began last year to explore the opportunities to recover this lost energy to generate electricity. At my request and the Chairman's direction, inquiries are now sent by staff to new pipeline developers to determine the extent to which they have considered these energy recovery techniques in their project. In addition, I have initiated talks with the pipeline industry to investigate opportunities for energy recovery on pipelines. I am confident that those discussions will prove productive, and the industry will agree to voluntarily collaborate with the Commission to identify and explore such opportunities.

In the area of innovative technologies, to the extent that new energy resources such as renewable technologies can be better integrated into the electric grid and wholesale electric markets, consumers benefit from diverse supplies providing greater competition and consumer choice. In an effort to provide for more opportunities to integrate wind energy resources into the electric grid, Order No. 890 provides for a "conditional firm" transmission service option that allows wind developers to take service that may better match the unique characteristics of wind systems. With respect to the financing of transmission necessary to provide for the delivery of renewable energy from remote locations, the Commission in a declaratory order issued to the California Independent System Operator (CAISO) allowed for sharing the costs of trunkline transmission lines necessary to deliver wind and other renewable energy from remote areas of California. This financing mechanism could apply not only to projects in California, but to any area where there are remote dispersed location-constrained resources (wind, geothermal, solar, hydrokinetic) that can be developed to provide consumers with new diverse energy choices. This order was applauded by the American Wind Energy Association (AWEA) and will serve as a model for other regions of the country.

Energy System Operations and Administration

With respect to energy system operations there have been multiple opportunities to improve efficiency and thus benefit consumers. Areas where I believe I have had a substantial impact include work to further incorporate demand response and other distributed resources into wholesale electric markets, enhanced collaboration between FERC and the states on demand side issues, and the institutionalization of energy innovations and efficiency into the FERC structure.

David Morenoff, an attorney in my office, and I recently published an article in the Energy Law Journal that has been supplied to the Committee. In that article we document the substantial consumer savings possible from the incorporation of demand response into organized wholesale electric markets. One recent study estimated that the net present value to electric consumers over a twenty-year horizon could be as much as $35 billion. In an effort to accelerate the incorporation of demand response into these markets and secure these benefits for consumers, I have worked on a number of initiatives at the Commission.

In Order No. 890, the Commission concluded that further reforms were needed to address deficiencies in its open access transmission tariff (OATT). For example, the Commission found that sales of ancillary services by "load resources . . . should be permitted where appropriate on a comparable basis to service provided by generation resources." In support of this finding, the Commission stated that "comparable treatment of load resources is consistent with" EPAct section 1252(f), which establishes a national policy to eliminate "unnecessary barriers to demand response participation in energy, capacity and ancillary service markets . . . ." Such comparable treatment in wholesale energy markets will enable the expeditious incorporation of demand-side measures like demand response into those markets thus saving consumers substantial money.

In another example, in Order No. 693, the Commission approved a number of electric reliability standards proposed by the North American Electric Reliability Corporation (NERC) and further directed NERC to submit improvements to several of these standards. In particular, the Commission directed modifications to include an explicit provision recognizing that demand response and other demand-side resources may be used to comply with certain reliability standards. Allowing demand-side resources to be used to comply with certain reliability standards again potentially saves consumers costs and increases efficiency.

In the area of federal state collaboration, I have been designated by Chairman Kelliher to serve as the co-chair of the FERC/NARUC (National Association of Regulatory Utility Commissioners) joint collaborative on demand response. I serve with two NARUC co-chairs. The collaborative meets three times a year and

investigates the relationship between wholesale and retail electric markets and the use of demand response to make those markets more efficient for consumers. We are currently undertaking a study to investigate the barriers to more robust incorporation of demand response into those markets and mechanisms to reduce those barriers.

Finally, in the area of effective administration at FERC in the incorporation of efficiency in energy infrastructure and operation, I -- in collaboration with Commissioner Kelly -- developed a proposal for the Chairman to create at FERC an "Energy Innovations Sector". The Chairman endorsed our proposal and created the Sector. This new staff department is responsible for institutionalizing within FERC the consideration of enhanced efficiency in energy infrastructures and operations, incorporation of innovative technologies into energy infrastructure and operations, and investigating issues related to demand-side, renewable, and other resources that are now underutilized and considered innovative. The Sector has been operational for several months and has a chief and several staff in place, as well as part-time assigned staff from other areas within the Commission.

Future Activities

There is considerable work that lies ahead to advance efficiency in the realm of energy infrastructure and operations. As an example, if we could improve the operational efficiency of our electric grid by 5% through optimization of transmission software, we could save the equivalent of 50 large coal plants. Integration of storage into the grid with the promise of plug-in hybrid electric vehicles (PHEVs) could revolutionize the entire grid operation and provide economic support to consumers who purchase new advanced transportation technologies like PHEVs. On October 24th of this year, we demonstrated at FERC for the first time an electric vehicle providing regulation services to the grid in real time via a signal over the internet with a response time of less than a second. This demonstration provided the type of frequency response necessary to keep the grid stable and reliable and did so in a manner and time interval far superior to that of a generating resource that currently provides such grid services. FERC has taken initial steps, as I indicated above, to allow such ancillary services to be provided by demand-side resources like a PHEV. But much still needs to be done to ensure that the tariffs and infrastructure are in place so that consumers who own these vehicles can receive payments for the provision of these services when PHEVs become commercially available.

In the area of demand response the Senate just passed legislation that directs FERC to conduct a National Assessment of Demand Response and develop a National Action Plan on Demand Response. Given the work I have already done

in this area while at the Commission I believe I can provide a substantial contribution to this effort going forward.

Conclusion

I appreciate this opportunity to relate to you my experiences and efforts at FERC. It has been truly an honor and a privilege to have served as a Commissioner. I have had the good fortune to work with the Chairman, fellow Commissioners and staff who have all been open and interested in my ideas and proposals to improve the efficiency of our energy system for the benefit of consumers. I look forward to continuing that work. I would be happy to answer any questions that you might have.