

**Summary of Prepared Testimony of Jon Wellinghoff, Commissioner
Federal Energy Regulatory Commission
Before the House Energy and Commerce Subcommittee on Energy and Air Quality
May 3, 2007**

Commissioner Wellinghoff's prepared testimony addresses the potential of a "smart" electric transmission grid that employs advanced communications and control technologies to enable and utilize bidirectional flows of information.

A decades-long decline in transmission investment and a precipitous decline in investment in demand response, primarily in the last decade, now threaten to impair the reliability of the electric transmission grid in the United States and cause substantial congestion costs. Commissioner Wellinghoff states that the country must promote investment in efficient transmission facilities and state-of-the-art transmission technologies, as well as facilitate demand response and distributed generation, in order to address the nation's energy challenges and ensure the greatest benefits for consumers.

Moreover, Commissioner Wellinghoff states that policymakers should not underestimate the power of consumers to drive smart-grid technologies. The more that consumers see economic benefits of demand response, the more they will want demand response opportunities and the more they will support investments in the smart electric grid that makes more demand response possible. Thus, not only does a smart grid enable wider use of demand response, but demonstrating the benefits of demand response to consumers also spurs more rapid implementation of the technologies necessary to enable a smart grid.

In the Energy Policy Act of 2005, the Congress required the Federal Energy Regulatory Commission (Commission) to promote reliable and economically efficient transmission and bulk power markets by, among other things, encouraging deployment of demand response and other advanced technologies. Commissioner Wellinghoff discusses how, in response to that directive, the Commission recently has taken a number of actions to develop a platform to support a smart electric grid.

Finally, Commissioner Wellinghoff discusses work that remains to be done to achieve the full potential of a smart electric grid. Commissioner Wellinghoff addresses the importance of advanced metering technology and recent research that highlights the benefits to be gained from wider deployment of demand response enabled by a smart electric grid. Commissioner Wellinghoff also states that the Commission and the National Association of Regulatory Utility Commissioners (NARUC) have jointly launched a Demand Response Collaborative. He further states that it would be valuable for Congress to formalize such coordination by establishing a federal-state working group through which the Commission and interested state representatives would be tasked with identifying best practices and developing consistent standards for demand response.