FERC Conference on Competition in Wholesale Power Markets
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on behalf of Horizon Wind Energy and the American Wind Energy Association

Thank you for the opportunity to discuss this important topic. This is an exciting time for the US wind industry, and this conference is timely and important for us because transmission and market rules pose the greatest opportunity for long term wind energy contributions to electricity supply, energy security, and climate change mitigation. I want to particularly thank Commissioners and Commission staff for Order No. 890, the recent Final Rule to reform the Open Access Transmission Tariff. The order's changes to imbalance penalties and the creation of a new Conditional Firm transmission service will remove key barriers to entry for wind generators.

Wind energy is now a mainstream part of utility portfolios. In 2006, wind power generating capacity increased by 27 percent in the U.S. and 32 percent globally, and we expect to see similar rate of growth in 2007. The 11,603 MW of wind energy facilities installed in the U.S. by the end of 2006 will produce enough electricity to serve 2.9 million American homes and displace approximately 23 million tons of carbon dioxide. The company I represent, Horizon Wind Energy will have approximately 1300 MW of projects in operation by the end of this year and has an additional 9000 MW of projects under development across the United States.

We at Horizon Wind Energy learned early on that markets and transmission market rules and organizations have a major effect on our ability to deliver our product. One of our first projects was a 25 MW wind farm we started working on in 1999 with PPM Atlantic Renewable in western Pennsylvania. In 2000 we learned that the project faced imbalance penalties that threatened to render it infeasible. Luckily for us, Allegheny joined PJM at that time and the imbalance charges disappeared. We gained access to a large transparent spot market that made the project economics work, and ultimately we sold the electricity to Exelon. On many of our projects, we also rely heavily on Renewable Energy Credit trading which is facilitated by wholesale electricity markets, and allow for remote wind energy supply to be connected contractually with customers.

Today I am presenting a letter to the Commission from 22 renewable energy providers and environmental organizations. The letter makes the following points.

Well-structured regional wholesale electricity markets operated independently allow far greater amounts of renewable energy and demand response resources to be integrated into the nation's electric grid. In fact, approximately 73 percent of installed wind capacity is now located in regions with such markets, while only 44 percent of wind energy potential is found in these areas. Large, regional energy markets provide for cost-effective balancing of generation and load with significant penetrations of variable, nondispatchable power sources, and they facilitate delivery of resources remote from load centers. A summary of utility industry research by the Utility Wind Integration Group (www.uwig.org) states that "well-functioning hour-ahead and day-ahead markets provide

the best means of addressing the variability in wind plant output." Further, "consolidation of balancing areas or the use of dynamic scheduling can improve system reliability and reduce the cost of integrating additional wind generation into electric system operation."

A recent study required by the Minnesota legislature to assess the reliability and cost of providing 20 percent of the state's electricity from wind stated:

"The MISO [Midwest Independent System Operator] energy market also played a large role in reducing wind generation integration costs. Since all generating resources over the market footprint are committed and dispatched in an optimal fashion, the size of the effective system into which the wind generation for the study is integrated grows to almost 1200 individual generating units. The aggregate flexibility of the units on line during any hour is adequate for compensating most of the changes in wind generation." (See www.puc.state.mn.us/docs/**wind**rpt_vol%**20**1.pdf.)

Independently run regional grid operations can foster renewable energy and demand response development by:

• Eliminating "pancaked" transmission rates that are assessed across every utility area;
• Providing energy markets where variable or intermittent resources can sell excess energy or purchase shortages at a transparent and fair price;
• Minimizing operational impacts of variable resources by netting out aggregate load and generation over a wide region;
• Facilitating regional transmission planning to access generating resources as well as address reliability, congestion, and load growth in the most efficient overall manner;
• Providing a mechanism to pursue regional cost allocation policies; and
• Providing for flexible transmission tariffs that allow rates to be paid on an as-used basis as opposed to a capacity reservation basis.

Speaking now for Horizon and AWEA again, we have a vision of an electric industry that will evolve dramatically from its current state of 130 control areas acting independently in a balkanized fashion. RTOs as currently structured are the best way to accomplish the regional coordination we envision, but may not be the only way. RTOs have some challenges to address as I'm sure we will hear about today. The wind industry is prepared to participate in the process of continuing to improve electricity markets to promote reliability, fair market access, and renewable energy integration. We look forward to working with the Commission, public and private utilities, and the many participants in electric industry policy to promote these reforms.