

State-Federal RPS Collaborative Webinar  
February 10, 2009

### **Transmission Planning for Renewable Energy**

Clean Energy Group hosted its first State-Federal RPS Collaborative webinar of 2009 on February 10. The topic of the webinar was Transmission Planning for Renewable Energy. This topic was prompted by comments made by RPS program managers at our November, 2008 summit that many were concerned about the impact that transmission constraints could potentially have on their states' ability to meet their RPS requirements.

The five speakers who made presentations for the webinar are the following:

- Mike Jacobs, Vice President-Transmission for First Wind, a national wind developer with significant activity in New England
- Natalie McIntyre, a technical/policy consultant for Wind on the Wires, a wind energy/transmission advocacy organization focused on the Upper Midwest.
- Jess Totten, a staff member of the Texas Public Utilities Commission, active in the CREZ process in Texas.
- David Hurlbut, a transmission expert at the National Renewable Energy Laboratory, involved in the Western Governors Association transmission planning effort modeled after the Texas CREZ program.
- Bill White, a consultant with David Gardner and Associates, who, in conjunction with the Energy Futures Coalition, has been developing the concept for a new federal-state partnership in planning, siting and cost allocation for a network of high-voltage transmission lines to move large volumes of renewable energy from the Great Plains to distant load centers.

Mr. Jacobs' presentation focused on the problems faced by renewable energy developers in the Northeast with respect to transmission. He started his presentation by emphasizing that an RPS without a transmission development and funding plan is not really an energy policy since if renewable energy can't be moved to market it won't get built. He pointed out that the Northeast states do have a transmission cost allocation method for upgrades that improve system reliability. But there is no such agreement with respect to upgrades required to access more remote renewables. The wind developer's dilemma is determining whether a project can be squeezed into existing transmission lines and

piggyback off these reliability upgrades or whether a project's economics can support the cost of necessary line upgrades.

Natalie McIntire of Wind on the Wires discussed the current transmission planning efforts at the Midwest Independent System Operator (MISO) and the Midwest Governors' Association to access high-quality wind resources in the Dakotas and western Minnesota and bring them to load centers. MISO is currently conducting a "Regional Generation Outlet Study" to identify potential wind "zones" and corresponding transmission upgrades required to access them in order to meet the RPS requirements of Midwest states. MISO is also looking at the economic tradeoffs between accessing better wind resources which require more expansive transmission development and poorer wind resources that are closer to load centers. Natalie also reviewed MISO's current transmission cost allocation process (which again draws a distinction between reliability and "regionally beneficial" projects) and mentioned other potential cost allocation methods.

Jess Totten of the Texas PUC discussed the "chicken and egg" situation between transmission providers and wind developers in planning and constructing long transmission lines from windy areas in west Texas to the major population centers in the eastern part of the state. This began to be resolved through passage of legislation in 2005 which called for the development of Competitive Renewable Energy Zones (CREZ) and a transmission plan to support them. The PUC initiated a CREZ proceeding in December 2006 and issued a final order in August 2008 based on a particular scenario projecting 18,000 megawatts of total wind energy capacity. As a result of this order, the PUC awarded contracts to 8 transmission developers and anticipates construction to be completed by 2013.

David Hurlbut, a veteran of the CREZ proceedings in Texas, described a related set of activities in the western states as initiated by the Western Governors' Association (the Western Renewable Energy Zones initiative). The purpose of WREZ is to again identify areas of the most promising renewable energy development and to lay out high-voltage transmission corridors required to support them, being sensitive to protected lands and significant natural and cultural areas. Importantly, WREZ is not a regulatory proceeding and does not address cost-allocation issues; rather it is a detailed modeling process that is deliberately open and inclusive to all interested parties. Once the renewable energy zones are finalized, then the modeling will incorporate the levelized cost of energy by resource coming out of these zones and the cost of building the transmission required to access them.

The final speaker, Bill White of David Gardiner & Associates, discussed a broad policy initiative designed to reduce the fragmented and stalemated process involving state and regional planning and authority for high-voltage transmission lines. The proposal again addresses the need for high-voltage transmission corridors to access wind energy in the Great Plains. Mr. White envisions two separate planning regions corresponding to the Western and Eastern Interconnects. FERC would play a role in managing these planning efforts but the states would still have a meaningful role with respect to siting. With respect to cost allocation, the proposal envisions that these costs would be broadly shared by ratepayers in all states. By essentially socializing the costs, the actual rate impact of building out this system would be nominal.