FOR IMMEDIATE RELEASE
Monday, February 9, 2009

Study: Billions Needed to Deliver Wind Power to Eastern Interconnection

(CARMEL, Ind.) The Joint Coordinated System Plan (JCSP’08), the first step of a transmission and generation system expansion analysis of the majority of the Eastern Interconnection, estimates the electricity sector will need over $80 billion in new transmission infrastructure to obtain 20% of the region’s electricity from wind generation.

This initial analysis, which was performed with participation from major transmission owners and operators in the Eastern U.S., looked at two scenarios to examine transmission and generation possibilities between 2008 and 2024. The first, a Reference Scenario, assumes “business as usual” with respect to wind development, with approximately 5% of the region’s energy coming from wind. The second was a 20% Wind Energy Scenario and was based on the U.S. Department of Energy’s Eastern Wind Integration and Transmission Study.

“We believe that, although JCSP’08 examined a small set of scenarios with limited variables, this study nonetheless gives a clear idea of the scale of commitment it will take to integrate large amounts of renewable resources into the grid,” said John Bear, President and CEO of the Midwest ISO. “This is information we believe that our leaders need to consider as they begin work under a new administration and start defining our energy future.”

JCSP’08 estimates that incorporating 5% wind energy (the “Reference Scenario”) will require the addition of approximately 10,000 miles of new extra-high voltage transmission at a cost of approximately $50 billion, in addition to nearly $700 billion in total generation capital costs by 2024.

The 20% Wind Energy Scenario is estimated to require 15,000 miles of new extra-high voltage lines, at an estimated cost of $80 billion, in addition to $1.1 trillion in total generation capital costs by 2024.
Under both scenarios, the generation capital costs would be borne by developers, while the funding source for the needed transmission is not known at this time.

The study represents the collaborative efforts of Midwest ISO, Southwest Power Pool, Inc., PJM Interconnection, the Tennessee Valley Authority, Mid-Continent Area Power Pool (MAPP), and participants within SERC Reliability Corporation (SERC). Among the key features of the study are:

- It used a collaborative, transparent, stakeholder process to develop and screen assumptions and postulate transmission expansion possibilities.
- It used a common approach with system condition assumptions to characterize the majority of the Eastern Interconnection in a single multi-regional analysis, rather than conducting parallel, region-specific analyses.
- It used study tools and databases that are in common use in the electric power industry.

As previously stated, this is only the initial phase of the analysis that must be performed to derive the most effective and efficient answer. A follow-on phase of the study will be initiated in the first quarter of 2009 to investigate additional scenarios that must be analyzed to develop a better understanding of the possible solutions available, perform a detailed reliability assessment, better refine the existing assumptions, and recommended new transmission facilities and the costs and benefits.

Members of the JCSP’08 plan to present the full study to the Federal Energy Regulatory Commission, Congressional representatives and staffers for their consideration during the first few months of the new administration.

Editors note: The executive summary of the study is currently available at http://www.jcspstudy.org. The full study will be posted within the next several days.