

## Press Release

FOR IMMEDIATE DISTRIBUTION

CONTACT: Kelly Ziegler

609.240.4346

[kelly.ziegler@nerc.net](mailto:kelly.ziegler@nerc.net)

### **Transmission, Renewables Integration Top List of Issues in Ten-Year Electric Reliability Outlook**

PRINCETON, N.J., October 29, 2009 — Key issues such as transmission siting, cyber security, integration of renewables, climate policy, and the “smart” grid will require changes to policy, planning, and operations over the next ten years, announced the North American Electric Reliability Corporation (NERC) in its *2009 Long-Term Reliability Assessment* today.

The organization also issued a companion *Scenario Reliability Assessment* that provides an initial view of the bulk power system with a continent-wide 15 percent renewable portfolio standard, with a nuclear allowance in the Southeast, in place. The Scenario identified several possible approaches to meeting the goal: the Northeast proposed, for example, to integrate new renewable resources within the region and the Midwest proposed to transport wind power over longer distances from areas of high wind potential to population centers. Substantial transmission resources would be required in either approach.

Highlights from the *2009 Long-Term Reliability Assessment* include:

**Economic Recession, Demand-Side Management Lead to Decreased Demand, Higher Reserve Margins** — Reduced economic activity and higher adoption of energy efficiency and demand response programs have led to decreased projected peak demand for electricity and, as a result, higher reserve margins throughout North America for much of the ten-year period. While some regions, including Texas, continue to see record peak demand, overall peak demand forecasts for 2009 have decreased by four percent from forecasts projected in 2008. The pace and shape of economic recovery are uncertain and will dramatically influence actual load growth across North America over the ten-year period. Combined, energy efficiency and demand response resources will account for roughly 40,000 MW (or four percent) of the peaking resource portfolio by 2018, effectively offsetting peak demand growth by nearly five years.

**260,000 MW of New Renewable Resources Included in Forecasts** — Approximately 260,000 MW of new renewable “nameplate” capacity (biomass, geothermal, hydro, solar, and wind) is included in forecasts for the coming ten years. Roughly 96 percent of this total is comprised of wind (229,000 MW) and solar (20,000 MW). However, only 38,000 MW of wind and 17,000 MW of solar are projected to be available at times of peak demand. Though not all of these resources may come to fruition, the integration of this volume of “energy-dominant” resources (or those resources predominately available during off-

peak hours) will require significant changes to traditional planning and operating techniques to ensure reliability.

**Natural Gas Expected to Replace Coal as the Leading Fuel for Overall Peak Capacity by 2011** —By 2011, natural gas is projected to overtake coal as the dominant fuel source for peak capacity generation in North America. By 2018, natural gas is projected to account for 32 percent of the on-peak resource mix. Natural gas-fired generation is typically easier to site, has shorter construction times, and has lower carbon emissions than other types of traditional generation, making it an attractive option for utilities and independent power producers. These advantages have resulted in an overwhelming preference for the resource over the ten-year period, as installed, “nameplate” natural gas capacity is projected to increase 38 percent over the ten-year period, while coal is projected to increase by only six percent.

**Transmission Siting and Construction Must Accelerate to Meet Plans and Ensure Reliability** — Over 11,000 miles of the total 32,000 miles of transmission (200 kV and above) proposed and projected in this report must be developed on time to ensure reliability over the next ten years. Constructing needed transmission facilities will require entities to more than double the average number of transmission-miles constructed over any five-year period since 1990. Ranked as the number one emerging issue in terms of likelihood and consequence, transmission siting remains a significant obstacle to meeting this goal. One 90-mile, 765 kV line, for example, took American Electric Power fourteen years to site and only two years to construct. State and provincial siting and permitting processes must be expedited to allow for the development of needed resources and ensure reliability.

“The economic recession has essentially bought us a few years to address capacity and resource concerns across North America,” commented Mark Lauby, Director of Reliability Assessments and Performance Analysis at NERC. “But the ‘benefits’ of reduced demand growth are expected to be short lived. The time is now to address concerns like transmission siting, secure smart grid implementation, and the integration of renewable resources.”

The *2009 Long-Term Reliability Assessment* can be found at: [http://www.nerc.com/files/2009\\_LTRA.pdf](http://www.nerc.com/files/2009_LTRA.pdf)

The *2009 Scenario Reliability Assessment* can be found at:  
[http://www.nerc.com/files/2009\\_Scenario\\_Assessment.pdf](http://www.nerc.com/files/2009_Scenario_Assessment.pdf)

The North American Electric Reliability Corporation (NERC) is an international regulatory authority for the reliability of the bulk power system in North America. NERC develops and enforces reliability standards; assesses adequacy annually via a 10-year forecast and winter and summer forecasts; monitors the bulk power system; and educates, trains, and certifies industry personnel. NERC is a self-regulatory organization, subject to oversight by the U.S. Federal Energy Regulatory Commission and governmental authorities in Canada. Learn more at [www.nerc.com](http://www.nerc.com).

###