February 8, 2011

Statement from Gerry Cauley, President and CEO of NERC at the Federal Energy Regulatory Commission Technical Conference on Priorities for Addressing Risks to the Reliability of the Bulk-Power System (Panel 1)

“NERC’s mission is to ensure the reliability of the bulk power systems of North America and promote reliability excellence. To be effective we must understand and address risks that can lead to failures of the grid. In contrast to the emerging risks to be addressed in Panel 2, the conventional risk landscape is reasonably well understood. The generator failures, gas shortages, and rolling blackouts experienced with the record cold weather in Texas and the Southwest last week represent just one opportunity improve our readiness to address conventional risks such as extreme weather.

However, we cannot address reliability priorities without a common understanding of the meaning and scope of an adequate level of reliability. For several decades, reliability in the NERC arena meant preventing cascading failures, preserving the integrity of the grid, avoiding equipment damage, and providing an adequate bulk power supply. The Commission has in several instances raised the notion of continuity of service to customers as an additional factor and I believe this is a fair suggestion as long as we distinguish between unintentional load loss caused by grid failures and intentional load shedding used as an essential operational tool. Because the meaning of an adequate level of reliability is so important to setting priorities, I am directing a NERC review of this question and plan to file a proposal later in 2011.

I believe the reliability investment that we are promoting everyday through our standards, compliance program, alerts, and other initiatives, should be driven primarily by overall value to customers and ratepayers. It is important to achieve reliability risk mitigation in a manner that balances affordability of electricity in a competitive global market with the need to ensure the reliability and security of our North American electricity infrastructure. Priorities must be driven by a clear understanding of risks and consequences, and the costs and benefits associated with addressing them.

In assessing priorities going forward, it is helpful to see what we’ve accomplished looking back. Since the August 2003 blackout, not only have we stood up a mandatory compliance and enforcement program with 1,900 registered entities, we have completed a number of important reliability initiatives, including new standards on vegetation management, transmission line relay loadability, operator training, backup control centers, and cyber security. A few years from now, I want to be able to say we’ve conquered more big issues like these.

So what are my reliability priorities going forward with regard to conventional risk management? Each is a recurring theme we’ve seen over recent years:
1. Ensuring relay protection systems operate as expected and faults are cleared without unnecessarily tripping other equipment.

2. Ensuring field engineers and technicians modify system configuration, including protection and control settings, only after assessment of the consequences and after informing operating personnel when a change in configuration could temporarily set up a common mode failure.

3. Ensuring operating personnel use clear, unambiguous communications when issuing directives and communicating other operational information.

4. Preventing, non-random equipment outages, such as those caused by vegetation or objects within the safe clearance distance from energized lines, and common mode issues with generation, such as we saw last week during the extreme cold.

In the area of reliability standards development, the setting of priorities for NERC also takes into consideration the need to be responsive to regulatory directives, such as those on frequency response, personnel training, planning standard footnote b regarding use of load shedding following a contingency, the definition of bulk electric system, and dozens of other projects. We also have an opportunity to soon close out several standards projects that have been in development for a while, such as standards on transmission planning, reliability coordination and real-time operations.

Another opportunity in standards is to see how we can further expedite the development process. I believe that the highest priority standards call for a new procedure to resolve objectives and create a 90 percent draft in a short timeframe using a team of industry experts, attorneys, and compliance staff. The ANSI consensus process could then be used for vetting and balloting.

Beyond simply discussing priorities today, we must ensure there is a systematic approach for analyzing risks and setting priorities going forward. With our shift toward risk-based approaches and a learning industry, NERC is introducing quantitative measures of reliability performance and root cause analysis. We are beginning to see benefits from our transmission and generation transmission and generator outage databases. We also have a new database to monitor the performance of demand-side management programs. We recently formalized criteria for five event categories and engaged registered entities and regions in conducting cause analysis of reportable events. This data and analysis will provide a basis for prioritizing reliability issues in the future.”

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*The North American Electric Reliability Corporation’s mission is to ensure the reliability of the North American bulk power system. NERC is the electric reliability organization (ERO) certified by the Federal Energy Regulatory Commission to establish and enforce reliability standards for the bulk-power system. NERC develops and enforces reliability standards; assesses adequacy annually via a 10-year forecast, and summer and winter forecasts; monitors the bulk power system; and educates, trains and certifies industry personnel. Learn more at [www.nerc.com](http://www.nerc.com).*