Prepared Remarks of Gerry Cauley
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Good afternoon Mr. Chairman and Commissioners. My name is Gerry Cauley, President and CEO of the North American Electric Reliability Corporation.

I would like to share a few thoughts on NERC's process for developing standards to ensure the reliability of the North American bulk power system. We hear this process described in many ways. Some claim it is slow to produce standards, or produces least-common-denominator standards, or lets the industry vote down revisions to standards directed by regulatory policymakers. We hear that the standards are ambiguous or focused on administrative requirements, that there are too many requirements, and that industry is overwhelmed by documentation rather than focusing on reliability. At the same time, most of the industry vigorously defends our ANSI-accredited process with a resolute conviction that the process is essential for delivering technically sound and defensible standards.

I view the NERC reliability standards development process as simply a tool – in the right hands, for the right purposes, it works well. The tool can certainly be sharpened and improved, but ultimately we need to understand what the process can and cannot do. We need to understand how to use it properly within a broader context of policy-level, consultative decision-making that includes setting strategic goals and priorities necessary to ensure the reliable operation of the North American bulk power system.

The American National Standards Institute (ANSI) has established ten essential requirements for due process in the development of consensus standards. The NERC process has adopted these principles, including for example: openness, lack of dominance, balance, due notice, consideration of all views, and consensus voting. NERC's process was first accredited by ANSI as meeting these principles in March 2003 and we have maintained our accreditation as a standards developer since that time.

NERC's process was created well before the August 14, 2003 blackout and the enactment of EPAct 2005. Given that the principal tensions within industry at the time centered on enabling wholesale competition, organized markets, and open transmission access, it is understandable that the process included rigorous safeguards, in some respects exceeding the ANSI minimum requirements, to protect the rights of individual entities, large and small, providers as well as users, and to set high thresholds for consensus.

One of these safeguards was the creation of ten diverse segments to ensure balance of interests in voting on standards. It is noteworthy that four of these segments, carrying 40% of the weighted vote, represent small and large end use customers, government regulators, and regional reliability organizations. The vast majority of members in these segments are not subject to the reliability standards but have significant interest in a reliable bulk power system. The process, therefore, brings to bear not only the formidable expertise of the industry owners and operators to develop sound standards, but also the balanced interests of end-use customers

and other users who depend on a reliable bulk power system. This careful deliberation ensures that the standards achieve their reliability purpose; that the standards collectively work in harmony with each other; and that standards do not introduce unintended consequences to the system they are designed to protect. The process works. The ballot pool, a group on average about 217 members, has only turned down two standards since the process has been in place.

Even with high thresholds for consensus building, the process has been used successfully to produce reliability standards, including several key advancements recommended in the final report on the August 14, 2003 northeast blackout:

- An initial set of reliability standards that moved from inception to NERC board adoption in a ten-month period ending in April 2005;
- Nearly 100 Commission-approved mandatory and enforceable standards that address resource and demand balancing, communications, critical infrastructure, emergency preparedness, facilities design, operations and maintenance;
- A new reliability standard on vegetation management, the issue that triggered the 2003 blackout, that has reduced the number of vegetation outages and eliminated grow-in contacts in the last three quarters;
- A new reliability standard on transmission line relay loadability, which was the predominant cause of the widespread cascade in the August 2003 blackout;
- New standards for the protection of critical cyber assets;
- A set of standards on determining total and available transfer capability, which was a high priority for the Commission;
- Solid relationships with Canadian regulators, resulting in NERC standards being or on the way toward becoming mandatory and enforceable in each of the provinces; and
- A successful coordination arrangement with the North American Energy Standards Board (NAESB) to ensure that NERC's standards for reliability and NAESB's standards for business practices complement and coordinate with each other.

We also know we have much more work to do. With several years of experience, we have learned there are indeed opportunities to improve the standards development process, particularly with regard to improving the timely delivery of results. On June 10, 2010, NERC filed with the Commission proposed modifications to the reliability standards development process to address these concerns. Specific changes include:

- Streamlining the early development of a standard by allowing informal comment periods that do not require formal written responses to every comment received;
- Increased technical writing support for drafting teams;
- Additional training of drafting teams on how to develop quality standards;
- Introduction of controls to ensure each standard meets certain quality attributes;
- Clarifying accountability of the Standards Committee and drafting teams to manage priorities and meet targeted timelines; and
- Inserting checks to ensure regulatory directives from policymakers have been addressed.

In an effort to improve the overall quality of standards, NERC has also introduced the concept of "results-based" standards. This concept enhances our communications with drafting teams and industry regarding the structure of a well-written standard. This term is sometimes confused with performance-based standards. Performance-based standards can have the

connotation of measuring only ultimate performance – no oil spills, no mine disasters, no plane crashes, etc. The difficulty with a purely performance-based approach is that if the system fails, the consequences are unacceptable. For the bulk power system, only a small percentage of our standards will be performance-based. Control performance (BAL-001) is a good example of a necessary performance-based standard. A majority of our standards will be risk-based, or preventative. We need standards that, if followed, drastically reduce the risk of cascading failures. And if something does happen, we need standards that ensure quick recovery and restoration of essential services. The third kind of standard is 'competency-based', meaning we need good tools, training, communications, and backup facilities. Results-based standards should not be associated with lax rules for industry. We are developing a strong portfolio of standards that address performance, risk containment, and competency. We are applying a defense in depth strategy that has proven successful in managing risks in the nuclear industry, in aerospace, and in other critical sectors. I am fully confident that this approach will work well in managing risks to the reliability of the bulk power system.

To influence cultural change as a learning industry, NERC's philosophy for accomplishing its reliability mission is based on a continuous cycle of activities to achieve reliability improvements: (1) measuring reliability performance – past, present, and future; (2) analyzing and benchmarking the results of those measurements; (3) identifying problems and assessing needs for improvement; (4) developing solutions to address those problems and needs, including new or revised reliability standards; and (5) implementing solutions, including expanded compliance monitoring and enforcement. This ongoing cycle of activities promotes continuous, measurable improvements in reliability. These programs have the added benefit of feeding back into the standards process potential risks and opportunities to improve reliability standards.

NERC has also recently begun to publish informal guidance regarding how standards are being applied and enforced in the field. Initially started in early 2008 in collaboration with regional entities, this practice has now evolved to publication of Compliance Application Notices that describe the intent of the standards, how to apply them, and lessons learned from past violations. The intent is to reduce the need for formal written interpretations that must go through the standards process and to simply provide actionable information to industry as expeditiously as possible.

My observation is that the standards process can work and is working. As President and CEO of NERC, I am committed to guiding further substantial improvements to the process. Where we've delivered successful results to date, there has been a shared vision and compelling motivation to get the standards in place in a timely manner for reliability. When an agreed-upon set of goals and priorities is not available, or when there are differing expectations regarding what is needed for reliable operation, these policy decisions cannot simply be thrust upon the technical experts in the standards development process through a myriad of directives with the expectation that the answers will be worked out there. Examples of just a few of the questions that need to be answered at the policy level include:

- Are we moving from a paradigm outlined in Section 215 of the Federal Power Act that defines bulk power system reliability as avoiding instability, uncontrolled separation, or cascading failures to one that includes complete avoidance of loss of load?

- Is load shedding an acceptable operational procedure following a single contingency in a rural, fringe area of the system where the rest of the interconnection is not affected and customers have chosen not to build reinforcements?
- What is the proper balance between reliability and cost to customers?
- What are our strategic objectives and design-basis threats with regard to protecting the physical and cyber security of our critical infrastructure assets?
- How should we address the integration of renewables, demand-side management, and smart grid devices in our long-term strategy for maintaining a reliable bulk power system?
- What are the most significant unresolved risks to the grid and how should these be addressed to minimize the chances of catastrophic failure and ensure rapid recovery?

These decisions and the overall setting of goals and priorities cannot be developed by the technical teams that are developing standards. They should be developed through periodic consultation among the senior leaders at the Commission and Canadian authorities, NERC, and the industry. At one time, NERC's board was made up principally of chief executive officers from industry who could apply the necessary pressure to address emerging reliability priorities. As NERC moved to its independent board of trustees, one of the consequences has been a gradual disengagement of industry leaders at the CEO level. Success of the electric reliability organization model depends on reengaging industry leaders, along with leaders at NERC, FERC, and Canadian authorities, to set a clear strategic direction for a reliable bulk power system.

The current relationship between the Commission and the ERO is modeled after other regulatory relationships held by the Commission. However, the ERO framework is unique in that the ERO is both regulated by the Commission and also is associated with the Commission in carrying out delegated responsibilities, including developing reliability standards. The current style of directing new or revised standards in an order, for which there is subsequently only 30 days to file for rehearing, is insufficient for understanding the policy issues and priorities that can arise. I would encourage the Commission to consider an ongoing consultative process with industry and NERC leadership to establish appropriate broad goals and targets for reliability. I would also encourage the Commission to consider that when it contemplates issuing standards directives, that it provide sufficient lead time to allow technical analysis of the feasibility and impacts of the directives and inputs on priorities. A 30-day period for rehearing does not provide sufficient time, especially for orders that cover a large number of standards or present technically challenging or vaguely perceived issues.

Order 693 presented more than 550 directives, of which we have addressed approximately one-third. Considering all orders related to standards, NERC has received more than 700 directives to address. It is clear that in the future NERC must be more diligent about reporting its progress on addressing outstanding directives. It would also be beneficial if the Commission would be more restrained in issuing prescriptive directives regarding standards and instead provide the directives in the form of a reliability objective to be met or a problem to be solved. We have recently undertaken special initiatives to accelerate work on the remaining directives. Some will be difficult or impractical to achieve, but we will do our best to provide practical, cost-effective solutions that address the Commission's objectives.

In conclusion, I would like to thank the Commission for holding this conference today. If I could leave only one message today, it would be the importance of an open and frank dialog among senior leaders at the Commission and its Canadian counterparts, NERC, and industry regarding the setting of strategic priorities and direction regarding our standards that ensure the reliability of North America's bulk power system. I believe we are moving in the right direction with regard to standards quality and timeliness. We need to continue that trend. We should never lose sight that our overall purpose is the reliability of the bulk power system. Thank you.