

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Reliability Technical Conference
North American Electric Reliability
Corporation

Docket No. AD12-1-000
Docket No. RC11-6-000

Public Service Commission of South
Carolina and the South Carolina Office of
Regulatory Staff

Docket No. EL11-62-000

**WRITTEN STATEMENT OF
ALLEN MOSHER
RELIABILITY TECHNICAL CONFERENCE
PANEL I: IDENTIFYING PRIORITIES
FOR NERC ACTIVITIES**

Thank you for the opportunity to participate today in this Reliability Technical Conference. I am Allen Mosher, Senior Director of Policy Analysis and Reliability for the American Public Power Association (“APPA”). I am appearing today on behalf of APPA. However, the bulk of my remarks and recommendations to the Commission reflect my vantage point and obligations to both NERC and industry stakeholders as Chair of the NERC Standards Committee.

My remarks today will focus on the tools used by NERC and the Standards Committee to set priorities for standards development, competing demands on NERC and industry resources, and the need for a variety of process improvements, both large and small, that need to be examined and embraced by the industry, NERC and the Commission so that we can focus our resources on issues with the greatest potential to ensure bulk power system reliability and improve upon current performance.

To summarize my key points:

- The Standards Committee works with NERC staff to set priorities through NERC's Reliability Standards Development Plan, based on criteria such as reliability benefits, time urgency, practicality and cost-effectiveness. These prioritization criteria include consideration of and give significant weight to issues such as the NERC technical priorities discussed at the February 8 Technical Conference.
- As new strategic priorities emerge, we do reprioritize – which in practical terms could mean delaying ongoing standards development projects to free up bandwidth for such emerging issues. However, it is critically important that NERC and the industry reach clarity if not consensus on the technical issues, reliability objectives and intended industry performance outcomes underlying an emerging issue *before* standards development is initiated. To do otherwise guarantees a protracted development process, with significant risks of protracted delays.
- Roughly one half to three-quarters of NERC's and the industry's standard development bandwidth is allocated to long term projects with significant reliability benefits. The remainder is allocated to regional standards, formal interpretations, and responses to various FERC NOPRs and orders. This subjective estimate is mine alone; the allocation varies widely over time. We attempt to hold some NERC staff and industry bandwidth in reserve to deal with new and emerging issues. However, identifying any major new project as high priority will delay work on other projects.
- The industry fully supports NERC's Compliance Enforcement Initiative, particularly the Find, Fix, Track and Report (FFTR) proposal, because this set of innovations promises to free up substantial NERC and industry resources for more important uses. The most important element of FFTR is that it radically shortens the time cycle between problem identification, mitigation in the field and resolution of associated regulatory activity. Further, a much greater proportion of

the associated industry resources will be devoted to reliability improvements rather than regulatory overhead.

- We need to identify similarly substantial improvements to the standard development process if we are to keep pace with industry and regulatory expectations. We need to work smarter, not just harder, even as we adhere to ANSI's fundamental principles. Working smarter entails adopting process innovations from wherever we can find them, whether they emerge from other industry standards organizations or are borrowed from regulatory agency processes. However, my goal is *not* rapid standard development and approval. The goal is to shorten the cycle from the identification of reliability gaps and other potential improvements to NERC's standards, to the implementation date of new enforceable standards and other technical measures that mitigate such risks and ambiguities.
- In 2012 and beyond, it is my expectation that NERC will place greater reliance on NERC technical committees and task forces to establish the technical foundations for NERC standards and then use multi-disciplinary teams to develop high quality standards. The Commission staff has an important role to fill within this development process. However, if the Commission staff has views to express during the standard development process, I need them to be submitted to the drafting team, in writing, during the development process.
- Deficiencies in NERC's remaining Version 0 standards continue to create competing pressures for formal interpretations as well as the issuance by NERC of Compliance Application Notices ("CANS"), Directives and Bulletins, and other compliance-related guidance. Ultimately, we can't interpret or guide our way out of an ambiguous standard. We need to fix the standard. It is widely believed within the industry that NERC interprets standards in ways that are inconsistent with the words and intent of certain standards. NERC staff appears equally certain that its interpretations of the standards accomplish the reliability objective underlying the standard. There has to be a middle ground here, where

we accept that the current performance requirement is ambiguous, even as we raise the bar for future performance.

- I continue to believe that overall, NERC and the industry are in fact on the right track. NERC, its Regional Entities and industry are becoming a *learning enterprise*, which establishes clear, widely-shared reliability objectives to prevent the so-called “evil three” – cascading, instability and uncontrolled separation – across the bulk power system. These objectives are reflected in a wide variety of NERC and industry programs, including reliability standards, that analyze and learn from experience and use that experience to improve performance.

I have relied upon three external documents to develop my written statement and excerpt portions of these documents below. Attachment A to my statement is a letter to the NERC Board of Trustees, stakeholders and regulatory authorities from Herb Schrayshuen, NERC’s Vice President and Director of Standards and Training and myself, that is included in the NERC Reliability Standards Development Plan for 2012-14.¹ The 2012-14 RSDP was approved by the NERC Board at its November 3 meeting and will be filed with the Commission for informational purposes in the near future. The letter is in essence a three page distillation of a number of the points I make below.

Second, I have attached my written opening statement for the Commission’s July 6, 2010 Technical Conference on Reliability Standards Development and NERC and Regional Entity Enforcement in Docket No. AD10-14-000.² The Standards Committee continues to execute the policy priorities identified in my statement. These include

¹ The NERC Reliability Standards Development Plan for 2012-14 as presented for Board approval is posted at: http://www.nerc.com/files/RSDP2012-2014_FOR_2011NOV03-BOT-2011OCT19.pdf

² Opening Statement of Allen Mosher in Docket No. AD10-14-000, July 6, 2010. Go to: http://elibrary.ferc.gov:0/idmws/file_list.asp?document_id=13830429

development of results-based standards, implementation of various standards process innovations, quality review of draft standards before they are posted for industry comment, and active oversight and prioritization of NERC's standards projects. The Standards Committee has overseen the completion of most – but not all – of the high priority standards projects identified in my July 2010 report. We have made similar progress this year on high priority projects identified in our 2011-13 Reliability Standards Development Plan.

Finally I have incorporated into my statement two PowerPoint slides titled “Reliability Risk Management Concepts” that were developed by NERC staff. The first slide is a heuristic that can be used to illustrate various strategies for BPS risk management and to frame these concepts in empirically meaningful ways. The second slide illustrates where various major BPS events fall on the severity/frequency curve.

The NERC Standards Program: Goals, Objectives and Achievements

NERC is committed to the development of clear, technically excellent standards for the reliable planning and operation of the North American bulk power system. NERC's industry-based standard development process strives to leverage the knowledge and experience of subject-matter experts to develop stakeholder consensus in support of standards that achieve reliability objectives and are responsive to regulatory directives, balanced against the burdens and costs of compliance imposed upon the more than 1,900 entities that are now subject to these standards. No single standard can ensure this outcome. Rather, NERC strives to develop and enhance a portfolio of performance, risk-mitigation, and competency-based reliability standards that achieve a consistent defense in depth against credible events that may lead to cascading, uncontrolled separation, or

instability and ensure prompt system restoration when extreme events occur. NERC standards are intended to work in concert with other NERC programs, including events analysis, reliability metrics, education and training, and compliance and enforcement, to accomplish these reliability objectives.

As described in greater detail within the 2012-14 RSDP, during the first ten months of 2012, 20 new or revised standards were approved by the Board of Trustees, and are either filed or in the process of being filed with the FERC. Among the projects that have been filed with the Commission is NERC's October 19 *Petition for Approval of a Revised Transmission Planning System Performance Requirements Reliability Standard TPL-001-2*. One additional continent-wide standard, FAC-003-2, Vegetation Management, was approved by the NERC Board in November, along with three regional reliability standards. FAC-003-2 is noteworthy because it is NERC's first attempt at complete development of a results-based reliability standard, with a combination of performance, risk-reduction and capability-based requirements.

On November 22, NERC announced that the proposed definition of Bulk Electric System, associated implementation plan and the supporting application form titled "Detailed Information to Support a BES Exception Request" received greater than 81% super-majority support from the industry and will be presented to the NERC Board of Trustees for adoption and subsequently filed with regulatory authorities. A set of proposed changes to the Rules of Procedure to provide a process for determining exceptions to the definition of BES is near completion and will be presented to the NERC Board of Trustees for approval at the same time as the BES definition. The regulatory deadline in FERC Order Nos. 743 and 743-A requires that the revised definition of BES

and process for handling exceptions be filed by January 25, 2012. Next steps for the BES drafting team, in addition to assisting NERC staff in the development of regulatory filing materials, will be a focused “Phase 2” effort to address a number of significant technical issues, including the appropriate MVA threshold for including small generating units and stations within NERC’s definition of the BES.

NERC is now conducting an extended 60-day formal comment and initial ballot period for Version 5 of NERC’s Critical Infrastructure Protection (cyber-security) Reliability Standards. The comment and ballot period for Version 5 CIP standards will run through January 6, 2012, with a completion target for the CSO706 Project in the third quarter of 2012. This project raises particularly complex implementation issues for the industry, in that the implementation timetables for Versions 4 and 5 of the CIP standards may overlap in unforeseen ways.

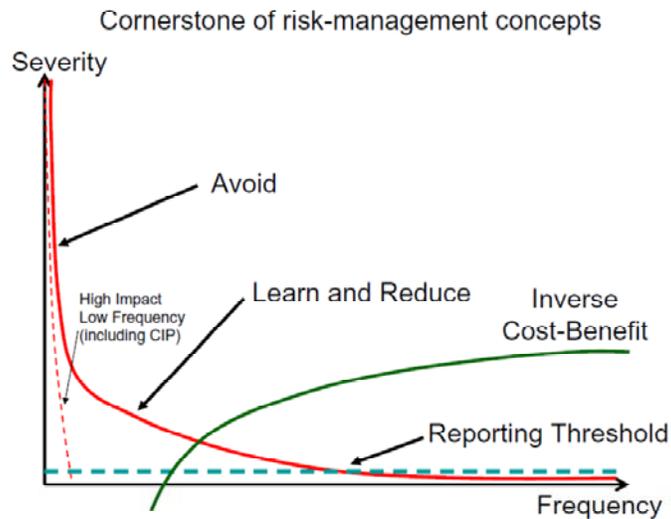
At any one time, we try to have roughly twelve standards projects under active development. Note that project size and complexity can vary widely. At any one time, we generally have three formal interpretations being readied for or posted for industry comment. For example, on November 18, we finished posting of an ISO-RTO Council request for interpretation concerning requirements for three-part communications associated with directives issued under COM-002-2. However, the underlying issues associated with that project will not be fully resolved until work is completed to revise several related IRO and COM standards.

Reliability Risk Management: A Conceptual Framework

Ultimately, NERC’s ability to accomplish its statutory obligations as the Commission-certified Electric Reliability Organization rests upon its ability to identify

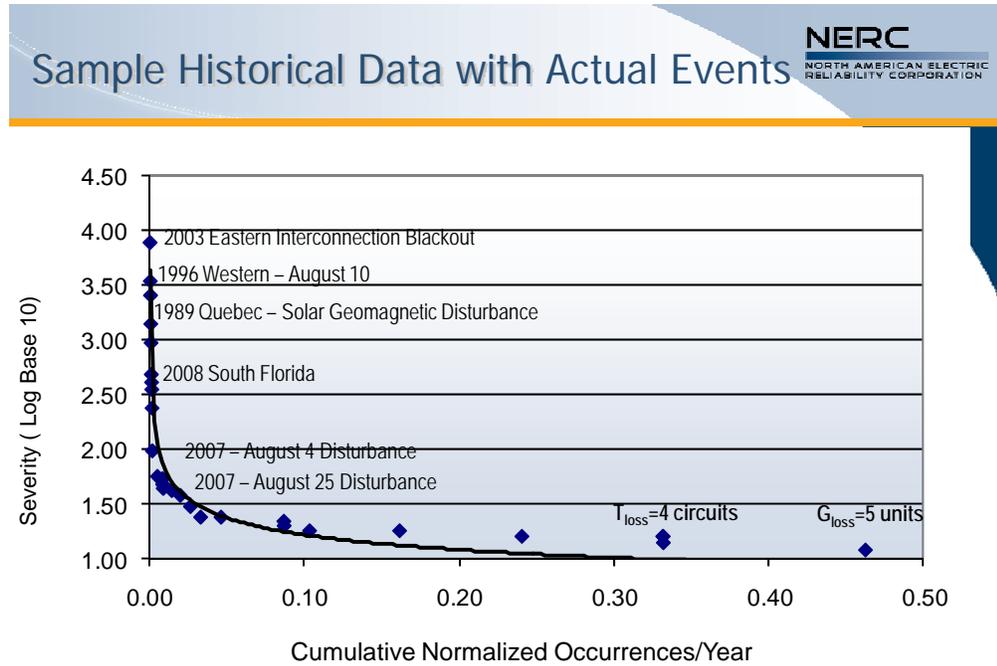
major reliability risks to the bulk power system. I have used the NERC diagram pasted below as a heuristic that illustrates what we are trying to accomplish. Above all we seek to reduce the frequency and severity of events and other conditions that results in major BPS disturbances – the so-called Big Three: cascading, instability and uncontrolled separation of the BPS.

Reliability Risk Management Concepts



As shown on the next NERC slide, the frequency of severe events is in fact quite low – but far from low enough for NERC and the industry to rest on its laurels. What we seek to do is to take a variety of initiatives, some through the NERC standards program, and many others through event analysis, metric analysis, codification of lessons learned and best practices, and industry education, to reduce the frequency and severity of extreme events, while learning from performance breakdowns that have only small or local impacts. However, the industry perceives that much of the time, we are spending

significant resources on frequent events that rarely if ever result in a material impact on BPS performance.



Thank you for the opportunity to address the Commission today. I look forward to your questions and the panel's discussion of these important issues.