

Nearly five years ago, I testified at the Commission's first reliability technical conference as Administrator of the Bonneville Power Administration. At that time, just three years after the establishment of mandatory reliability standards, FERC, NERC and the industry were struggling to craft an effective framework for standards development, compliance and enforcement. The move to mandatory and enforceable standards posed an inevitable challenge for us all, and was cause for much tension. Many of the standards were not well-crafted (or necessary), and NERC maintained extensive backlogs both of FERC directives to develop or modify standards, as well as enforcement violations. The sheer magnitude of reliability requirements and an overemphasis on administrative minutia and documentation strained resources, and it made compliance cumbersome and costly, with enforcement and compliance programs too often focused on low risk activity. In 2010, I stressed the need for greater dialogue between FERC, NERC and industry at the executive level as a critical first step towards improving relations and addressing many of the challenges we collectively faced.

There has been much progress since those days. I am pleased that our reliability dialogue continues, and heartened that the Commission and NERC have made a concerted effort to develop a more collaborative approach to addressing the critical issue of enhancing reliability. The standards development process has improved, and the standards themselves streamlined to a meaningful degree. NERC's enforcement backlog has been substantially reduced, thanks in substantial part to the Find-Fix-Track & Report (FFT) approach to routine, lower-risk violations. As well, NERC has now embarked on the further reform of its compliance and enforcement program (Risk-Based Compliance Monitoring and Enforcement; formerly, the Reliability Assurance Initiative) which holds promise, as I discuss below.

In the meantime, NERC has been drawn into a new and important role in evaluating the impact on grid reliability of a host of changes to the electric industry resulting from public policy initiatives, both federal and state. I believe that decision-makers should welcome the input that NERC will provide in the context of these initiatives. While the merit of these initiatives is often politically charged, NERC's unparalleled core competence on electric reliability matters and its unbiased input can help the industry and decision-makers reach intelligent, well-informed solutions. FERC also must play a role as the governmental entity responsible for assessing, understanding and acting within its statutory mandate on NERC's reliability evaluations.

In the sections that follow, I address the following issues:

- NERC's essential role in providing critical information on the reliability of the grid as it is impacted by rapidly changing policy affecting the electric industry, and by technological change;
- The state of reliability standards;
- Compliance and enforcement reform;
- Security challenges and the role of the ESCC and ES-ISAC; and
- CIP Version 5 implementation transition.

II. COMMENTS

A. Reliability Assessment is An Essential Component of the Electric Industry's Evolution

Our industry is in the midst of transformational change, due in substantial part to efforts to respond to climate change. Many states have launched increasingly aggressive plans to move away from carbon-based generation, and the proposed outline of the Environmental Protection Agency's Clean Power Plan would trigger a considerable shift in generating resources, initially toward increased reliance on natural gas resources in several regions of the country and later to substantial reliance on renewable resources. The stress these changes would place on electric

and natural gas infrastructure are significant, and must be accounted for in devising plans to meet these new goals.

FERC and NERC have critical roles to play in evaluating the impact of these changes, in support of efforts to ensure they can be effectively managed while maintaining reliability. NERC has several indispensable tools at its disposal to carry out this mission. As the FERC-certified Electric Reliability Organization, NERC is obligated by statute to perform “periodic assessments of the reliability and adequacy of the bulk-power system in North America,”² and it has a wealth of technical expertise to assist the industry and decision-makers in managing change thoughtfully and deliberately. In addition, NERC is uniquely situated to perform this work from an unbiased perspective, without advocating a policy position, or promoting a specific agenda.

For its part, as the governmental entity with responsibility for protecting reliability, FERC must play an important role in assuring that the reliability impact of issues arising in the public policy arena is fully understood and addressed. FERC has significant executive authority that may be used to ensure system reliability in a number of ways, including oversight of related cost recovery and system planning. In addition, FERC has the standing to advise other government agencies with respect to the reliability impact of their rules.

B. Report Card on NERC’s Reform Initiatives and What Remains to be Done

1. Reliability Standards

NERC is nearing what some have referred to as a steady-state with respect to its suite of FERC-approved mandatory and enforceable reliability standards. This is a welcome shift from the exhaustive cycle of standards development and revisions we have seen over the years.

² 16 U.S.C. 824o.

Achieving stability in the core body of standards will enable our subject matter experts to focus their attention on responding to existing standards more effectively and efficiently.

Over the past few years, the quality and content of reliability standards has improved meaningfully, as the industry, NERC and FERC staff have worked to eliminate unnecessary requirements and refine others. In 2013, FERC approved NERC's filing to retire over one hundred requirements that were either redundant or that did little to benefit reliability. *See Electric Reliability Organization Proposal to Retire Requirements in Reliability Standards*, 145 FERC ¶ 61,147 (2013).

Of course, there is room for improvement. Some standards and requirements would benefit from further refinement and others may no longer be needed. What is clear, however, is that wholesale change to the standards is neither necessary nor prudent.

Going forward, NERC should remain engaged in periodic reviews that consider, among other things, the cost-effectiveness of existing standards and the compliance burden they pose as compared to their reliability benefits. NERC and stakeholders should collectively address remaining reliability gaps, deficiencies in the quality or clarity of standards, and means for implementing lessons learned. But the highest priority now is the completion of a risk-based approach to reliability compliance and enforcement.

2. Compliance and Enforcement Reform

NERC has spent several years developing a risk-based approach to reliability compliance and enforcement, in response to complaints that the compliance and enforcement program as initially conceived was not focused on what is most important. NERC's effort was formerly referred to as the Reliability Assurance Initiative (RAI) and is now dubbed the Risk-Based Compliance Monitoring and Enforcement Program (Risk-Based CMEP). In its May 5, 2015

implementation plan (ERO Compliance Monitoring and Enforcement Implementation Plan, p. 6), NERC described RAI as having "transformed its compliance and enforcement program into one that is forward-looking, focuses on areas that represent a high risk to BPS [Bulk Power System] reliability and reduces the administrative burden on registered entities." These are aggressive and appropriate goals, addressed to the well-founded concern that NERC's compliance and enforcement program had developed an unproductive focus on details and "administrivia," instead of higher-risk activity. In its February 19, 2015 Order addressing NERC's RAI informational filing, FERC agreed with NERC that its "overall goal of focusing ERO and industry compliance resources on higher-risk issues that matter more to reliability is reasonable." *See Order on Electric Reliability Organization Reliability Assurance Initiative and Requiring Compliance Filing*, 150 FERC ¶ 61,108 (2015).

I agree that this direction offers promise. The conceptual basis established by NERC for the risk-based approach appears to be sound. The fundamental driver for the compliance and enforcement program should be to address activity that has the greatest impact on the BPS, while facilitating the effective management of lower risk matters. The program should not be one-size-fits-all, but instead provide tailored review based on the risk that each responsible entity poses to the BPS. By starting with a risk assessment at the Regional Entity level and then working down to individualized assessments for registered entities, NERC appears to be taking actions that will lead to an approach tailored to individual registered entities. NERC's proposal to tailor compliance activity to reflect inherent risk assessment and an evaluation of internal controls is sensible, and enforcement reform permitting a compliance exception process and self-logging program should yield much-needed efficiencies.

Having said this, it is clear to me, based on the experiences of my own organization and LPPC members involved in regional RAI pilot programs, that the expense of a transition to this new framework will likely be significant. Though I recognize that opting for the Internal Control Evaluation (ICE) element of the Risk-Based CMEP is voluntary, registered entities choosing to adopt use of the ICE must live in two worlds for at least an interim period – fully managing compliance with all existing standards and rules, while developing and adopting new practices through the use of internal controls. In my experience and those of my colleagues, it is a costly and all-consuming proposition, at least in the short run, to prepare for an ICE, while managing an existing compliance program. For those entities which have undertaken pilot programs, and those considering the next iteration of their programs, opting for a risk-based assessment poses the prospect of adding a significant layer of work with minimal reductions in the existing program requirements. It is important that we not lose sight of the fact that our objective is to reduce administrative burden, while furthering grid reliability.

With this in mind, FERC, NERC and the industry must work together to build a persuasive case for the benefits of the risk-based approach. I have several suggestions toward this end. First, NERC should develop as one of its measures of success a way of demonstrating that entities employing the Risk-Based CMEP will enjoy better tailored audits, with associated efficiency and cost savings. In the February 19 Order (P 32), FERC directed NERC to provide data-driven metrics demonstrating the Risk-Based CMEP's success. Auditing that is appropriately tailored to an entity's risk profile should be one of the most attractive features of the new program, and we should work together to develop ways to track success.

Second, and again on the subject of audits, NERC should more fully define the potential benefits associated with the imposition of a more extended audit cycle. While an audit can be a

useful exercise, these events are costly and disruptive to a registered entity's day-to-day functions. Particularly for those entities on three-year audit cycles, I would think that extending the cycle to four or five years in circumstances where justified by an entity's risk profile could result in significant savings without compromising reliability. I recognize that this would require an amendment to NERC's Rules of Procedure.

Third, with respect to self-logging – an area where there should be significant savings – I strongly urge NERC and the Commission to consider extending eligibility to violations with a moderate risk profile, as was done for violations eligible for the FFT program. *North American Elec. Reliability Corp.*, 148 FERC ¶ 61,214 (2014). LPPC members engaged in the RAI pilot programs have found that limiting eligibility for CMEP treatment to violations with a minimal risk profile substantially limits the value of the program. Relaxing this threshold for entities that otherwise meet the criteria for eligibility should produce substantial benefits.

Fourth, with respect to the evaluation of internal controls, I note that NERC has provided little definition as to what will be deemed adequate, leaving it to registered entities to make their case. While this flexibility can be useful, and the nature of internal controls will inevitably differ between standards and entities, LPPC encourages NERC to develop and share lessons learned about best practices that achieve reliability objectives in the most efficient manner. There may also be a role for the North American Transmission Forum in this endeavor. This should not be by way of encouraging auditors to become hidebound in their evaluation of registered entity programs, but rather to serve as examples to which an entity searching for an acceptable approach to internal controls may turn.

Finally, NERC should look for additional opportunities to streamline the reporting requirement associated with self-logging. I recognize that in the February 19 Order (PP 33-36),

FERC directed NERC to publicly post compliance exceptions. While LPPC fully supports transparency in the administration of the Risk-Based CMEP program, LPPC members involved in the RAI pilots have found that preparation for a monthly public report has been cumbersome and costly. Alternatives may include less frequent posting. As trust is built, the option of reviewing self-logging at the time of audit should be considered. Transparency may also be facilitated by NERC undertaking to distill lessons learned from these reports.

As a final note, I want to emphasize my conviction that the transition towards a more efficient risk-based approach to compliance monitoring and enforcement will require building an even greater amount of trust between regulators and industry. The efforts to work collaboratively over the last five years have borne fruit. We should strive to build even greater trust through collaboration, and by ensuring that registered entities that are taking their obligations seriously can have confidence they will be rewarded with more efficient, streamlined oversight. For our part, that efficiency benefit will be passed on directly to our customer-owners. Clear up-front signals regarding the benefits of this new program will greatly facilitate its full implementation.

C. Security Challenges

NERC's Electric Sub-Sector Coordinating Council (ESCC) and its Electricity Sector Information Sharing and Analysis Center (ES-ISAC) are performing well, by all accounts I have heard. The ESCC stands as the preeminent forum for government and industry to share information. LPPC strongly supports the ESCC process. Similar organizations have been helpful in creating connections across industries such as banking and transportation. It is also useful for developing resiliency against terrorist attacks, by facilitating the development of proactive and reactive strategies. This is an area where we see the federal government doing

well in terms of engagement with the non-federal sector. An area for improvement reported by public power's representative on the ESCC is the speed with which actionable information can be shared.

D. CIP Version 5 Implementation and Compliance Challenges

The risk-based approach taken in CIP Version 5 offers substantial promise vis-à-vis the relatively more rigid Version 3. The key to the new approach lies in giving registered entities flexibility in evaluating the risks they face and needed responses, enabling them to take into account their unique circumstances and rapidly evolving risks.

Some significant concern has arisen regarding the transition from CIP Version 3 to Version 5 and interpretations of these new cybersecurity standards. LPPC members have been concerned that NERC has advanced various interpretations that go beyond the requirements of the CIP standards themselves, limiting the flexibility that a risk-based approach should invest in registered entities.

LPPC members are concerned that NERC compliance guidance may be altering the meaning of approved standards outside the standards development process or the stakeholder process set out in Section 11 of NERC's Standards Process Manual (SPM) for issuance of documentation supporting the standards. The standards development process and the procedures outlined in SPM Section 11 ensure the integrity of the ANSI-accredited standards development process (the legitimacy of which turns on stakeholder input), and guards against interpretations that veer away from the intent of the standard drafting teams. While NERC commendably convened a stakeholder-populated Version 5 Transition Advisory Group (VTAG), disagreement in addressing core issues has led NERC to more aggressively advance its interpretations unilaterally.

LPPC members participating in these processes are hopeful that the logjam among stakeholder groups can be broken, with the assistance of senior-level officials from NERC and industry. In the interim, LPPC believes that unilateral NERC guidance may have some value, but must be carefully couched to ensure it is non-binding and not intended to foreclose other reasonable interpretations of FERC-approved standards. Further, NERC should acknowledge that its guidance may be superseded by further definition through the standards development process, or the stakeholder process convened under SPM Section 11.

III. CONCLUSION

While work remains to be done, substantial progress has been made since the Commission first convened the discussion of which today's technical conference is a part. I believe a good deal of this progress resulted from improved communication between NERC, FERC and the industry, and I commend the Commission for fostering this exchange.