

Federal Energy Regulatory Commission's Workshop on Improvements of North American Electric Reliability Standards

Comments of Dave Goulding,
President and CEO
May 14, 2004
Washington, DC

ASSUMED SCOPE

Agenda Item 3. Based on the findings and recommendations of the blackout investigation, discussion of any necessary changes in the reliability standards (60 minutes)

- *Speakers to discuss what the priorities should be for what's reliability-critical and should be done first.*
- *What needs to change in the NERC standards/policies /guidelines? More specifically, "What existing topics need changing"; "What topics need standards that aren't currently covered"; and " What should be the priorities to get the most critical reliability issues dealt with first. The objective of this agenda item seems to be to identify the standards that need to be revised or developed and agree on priorities - it is not to delve into the standards themselves.*

INTRODUCTORY REMARKS

- The IMO is very supportive of the efforts of FERC and the blackout task force to maintain and improve the reliability of the North American grid.
 - I particularly commend the Commission for its recent reliability policy statement, with its linking of NERC standards with “good utility practice” to which utilities must adhere under their Commission-approved tariffs.
 - I can assure you this view is shared by my industry colleagues across Canada.
 - The IMO, Hydro One, and many other parties in Canada have been and continue to be heavily involved in the blackout investigation and associated activities at NERC and the regional councils.
- I want to briefly remind you of the Canadian framework. I will use Ontario's framework for electric reliability as an example:
 - The Ontario framework makes compliance with standards and rules mandatory. Statute-based powers are in place that assign to the IMO, an independent entity, the accountability for system reliability, and the authorities to oversee reliability compliance in the Province. In short, we have in place here in Ontario much of

what the U.S. has been attempting over the last few years to put in place by means of Federal legislation.

- We commend the Ontario model to you. The Ontario reliability framework continues to function effectively in setting and monitoring compliance with standards – and is backed up by sanctioning authority.
- In my final introductory remark I want to comment on the impact of markets on reliability, and vice versa.
 - We have first hand evidence in Ontario of the beneficial role of markets in sustaining reliability. Without a real-time market in Ontario we would not have been able to maintain reliability without load shedding on several occasions during the past two years. Because of the market we were able to effectively draw on imports from neighbouring jurisdictions through bids into our market.
 - Concerning the impact of reliability on markets, power marketers and others have expressed concern that the developers and users of reliability standards, in their zeal to maintain reliability, will take unnecessarily conservative approaches in processes such as curtailment. The concern marketers have is that this may unnecessarily impact commercial interests.

While the potential exists for such impacts on markets, I believe that NERC has adequate mechanisms to prevent this - for example, it has the Market Committee with the mandate to address such concerns. Also, the NERC ballot pool has ample representation from commercial interests, who will necessarily bring a commercial perspective into the development of reliability standards.

SPECIFIC COMMENTS

1. With respect to reliability standards, the highest priority for the industry is to get on with the ambitious plan initiated by NERC's Board of Trustees

- The fast track plan is an excellent start. The industry needs to commit to this plan and make it work. The plan includes the following elements:
 - revisions to strengthen NERC operating policies 5 ("Emergency Operations"), 6 ("Operations Planning") and 9 ("Reliability Coordinator Procedures").
 - a set of revised compliance templates that strengthen and clarify existing reliability standards, and has integrated these templates into its Compliance Enforcement Program.
 - a vegetation management template and a requirement to report all associated outages.
 - guidelines for reporting and disclosure of violations of NERC reliability standards and the results of its readiness audits.

- accelerated adoption of new reliability standards, which will translate the existing NERC operating policies and planning standards, along with the new compliance templates, into an integrated and comprehensive set of measurable reliability standards (“Version 0”) by February 2005.
- In parallel with the work on Version 0, NERC is developing Version 1 standards, based on the previously defined SARs and the new standards currently under development.
- This volume of planned work is without precedent. I believe we are approaching the limit of the amount of work NERC and the industry can undertake without compromising the quality of the outcomes. In fact, a number of people believe we have already exceeded that limit. I suggest, therefore, that we need to be careful before we add significantly to NERC workloads, or accelerate or make major changes to the course we are on.
- My following comments on additional changes should therefore be understood in the context that such changes must not undermine the changes already underway.

2. The NERC audit process has improved but needs to be strengthened

- NERC audits have improved substantially in their quality and value. However, audits should be further enhanced in the future by combining experienced industry personnel with experienced auditors to provide a more rigorous review and assurance of reliability capability. The nuclear industry’s INPO peer review process, which is often cited as best practice, may be instructive.
- This will lead to greater standardization of the audit process, including the information requirements placed on the audited organizations.
- More thorough audits will likely lead to and benefit from the development of more precise and measurable standards.
- I commend the Commission for establishing its reliability division and employing FERC staff on the readiness audits. Their participation both enhances the expertise on the audits and sends a clear message as to the importance of compliance with standards.
- I want to comment briefly on the question of whether audits need to be conducted by an independent entity. For me, the real issue is quality, not independence. Enhanced quality will result from ensuring audits demonstrate compliance to a much greater depth than at present, and involve a significant presence of experienced auditors.
- In addition, I recommend that audits be extended beyond Reliability Coordinators and Control Areas to cover transmission operators. Unless transmission operators are fully trained and competent, and have good tools, clear authorities and situational awareness, they can pose a risk to interconnected reliability. I note that in Ontario, Hydro One, the largest transmitter, is voluntarily seeking NERC certification for its operating staff.

3. Concerns with the NERC standards development process, and how it might be made more efficient and effective

- There is widespread concern that the current NERC standards development and approval process will not produce standards in a timely fashion and that the standards themselves will not be sufficiently stringent and clear. This concern is grounded in the relatively slow progress in redeveloping standards over the past two years.
- One problem for NERC has been the fact the Reliability Functional Model for the industry has been under review for much of the past two years. The model has not been able to provide the needed stable set of functional definitions and responsibilities for the new standards, certification, and monitoring and enforcement programs being developed during the same time period. This has been a major source of delay and frustration for those developing standards.
 - The NERC Board, in February, took the important step of approving Version 2 of the model. This should help NERC move forward on the several fronts that depend on the Functional Model.
 - There are outstanding comments from a posting of Version 2 of the model. If there is a need for clarifications arising from such comments, in order to keep to the fast track program, they should be addressed quickly and individually by the Board.
- However, even with a stable and effective Functional Model, the success of the ANSI-approved process currently used by NERC is far from certain.

It would therefore be prudent for there to be high-level contingency planning within NERC to anticipate the potential shortcomings of the present process and examine potential solutions.

- Such solutions might involve minor changes to the current ANSI-approved process or more substantial changes.
- An example of a substantial change would be to assign authority within the NERC committee structure to intervene directly in the standards development process, in situations where the normal process is not developing effective and needed standards.
- I also want to be very clear that while I am offering suggestions and observations, I fully support the current NERC plan, including the development of the temporary Version 0 standards while the permanent, Version 1, standards are being developed.
- I see any such intervention happening within NERC. With all respect to the Commissioners, I do not believe it is appropriate or desirable for FERC, as a regulator, to become a developer of standards.

4. NERC can evolve to become “ERO-like” despite the absence of legislation. Here are some suggestions on how this might be achieved

- The exercise of anticipating new US reliability legislation has been frustrating for all concerned. There is a wide consensus that such legislation is needed, but this has been the case for almost a decade.
- My view is that NERC should not wait for the legislation to initiate additional structural changes. NERC should voluntarily move to become as close as possible to the ERO envisaged in the draft legislation.
 - A benefit of this course is that it should make the ultimate transition following the passage of legislation that much easier.
- The recent FERC reliability policy statement has started a process that will lead to changes at NERC, for example regarding new funding mechanisms for NERC and the councils that will increase independence.
- NERC in recent years has already made a number of changes, such as moving to an independent Board of Trustees and designing the new standards development process. It is time to continue to make the remaining changes. A few years ago there was an extensive study and dialogue on the transition of NERC to an ERO that should be revisited.
- One change to be addressed is that of NERC’s membership. Under the proposed legislation the ERO would have a membership composed primarily of industry participants, whereas the formal members of today’s NERC are the regional councils.
 - A related matter is defining the future relationship between a restructured NERC and the regional entities. This question has been recognized and discussed for some time. It is time to advance the dialogue.
 - I support the development of regional standards that are no less stringent than the associated NERC standard, and that have no adverse impacts on neighbouring regions. This means there will be a need for NERC to review such proposed regional standards to ensure these conditions are met.
- There may also be a need to change NERC’s bylaws to better reflect the international nature of the organization.
 - An appropriate and equitable level of designated Canadian representation is one area.
 - Another area would arise if an ERO is established subject to the oversight of FERC and appropriate regulatory authorities in Canada and Mexico. In this regard we have supported the use of a coordinating mechanism among the provinces to ensure that any exercise of a remand (veto) of a proposed NERC standard or NERC bylaw would be undertaken only following collective resolution by all authorities in Canada. This would potentially accommodate the challenge posed by having authority for reliability vested in the provinces individually.

- In connection with oversight of NERC by regulatory authorities in Canada there will also be the need to fill any gaps in provincial legislative and regulatory frameworks respecting clear authority over reliability.

5. There are a number of areas in which new or enhanced standards are required.

The following are areas in which new or enhanced standards are required.

- (a) **Vegetation management:** There is a need for maintenance standard for rights of way. This may have to be done on a Regional basis to recognize geographic or climactic differences.
- (b) **Training:** Standards should be developed for training of operators that go beyond the NERC Certification requirements to include the fundamentals of power system operation and knowledge of operator tools
- (c) **Tools:** Standards are needed for:
 - modeling, state estimation and security applications (which ones are required, cycle time, triggers)
 - monitoring
 - reliability requirements, freshness of data
 - extent of external monitoring
 - alarms - what needs to be alarmed
- (d) **Actions of neighbouring Reliability Coordinators** during emergencies, with respect to not only assisting neighbours, but also safeguarding their own systems.