

## MEMORANDUM

**TO:** Fred W. Gorbet, Chair  
NERC Board of Trustees

**FROM:** Allen Mosher, Vice President, Policy Analysis, American Public Power Association  
Jacqueline Sargent, General Manager, Platte River Power Authority, on behalf of the Large Public Power Council  
John Twitty, Executive Director, Transmission Access Policy Study Group

**DATE:** August 5, 2015

**SUBJECT:** Response to Request for Policy Input

---

The American Public Power Association, the Large Public Power Council, and the Transmission Access Policy Study Group concur with the Policy Input submitted today by the State/Municipal and Transmission Dependent Utility Sectors of the Member Representatives Committee in response to NERC Board Chair Fred W. Gorbet's July 16, 2015 letter requesting policy input in advance of the August 2015 NERC Board of Trustees meeting.



## MEMORANDUM

**TO:** Fred W. Gorbet, Chair  
NERC Board of Trustees

**FROM:** Carol Chinn  
Jackie Sargent  
Bill Gallagher  
John Twitty

**DATE:** August 5, 2015

**SUBJECT:** Response to Request for Policy Input to NERC Board of Trustees

---

The Sector 2 and 5 members of the NERC Member Representatives Committee (“MRC”), representing State/Municipal and Transmission Dependent Utilities (“SM-TDUs”), appreciate the opportunity to respond to your July 16, 2015 letter to Mr. Sylvain Clermont, Chair of the MRC, requesting policy input on topics that will be of particular interest during the upcoming August 12-13, 2015 meetings of the NERC Board of Trustees, Board committees, and the NERC MRC.

This response addresses each of the topics raised in your letter. We summarize our principal concerns and comments as follows:

➤ **Critical Infrastructure Protection (CIP) Version 5 Resolution of Outstanding Issues:**

- SM-TDUs support the development of Lessons Learned, FAQs and compliance guidance as mechanisms to bring more clarity, consistency and regulatory certainty to the compliance process.
- SM-TDUs are encouraged that NERC has withdrawn the five memos in the CIP Version 5 Transition effort. If consensus on these issues cannot be reached through the V5TAG process, then the SM-TDU would expect NERC to use compliance discretion until such time as standard revisions are developed to clarify the standard language.
- SM-TDUs are encouraged by the draft “Role of Compliance Guidance” report, but we see some core issues that need to be addressed, in order for this effort to be successful.
  - A clear problem statement is needed for this initiative.
  - Guidance should be developed collaboratively.
  - Unresolved policy issues may take more time to resolve than anticipated.
  - We encourage the Board to continue to support this effort and emphasize the need to get it right over getting it done.

➤ **Input for 2016-2019 ERO Enterprise Strategic Plan:**

- NERC should refocus ERO resources to study and characterize emerging risks, inform policy makers, and build these assessments into future industry planning.

- SM-TDUs continue to support ERO Enterprise Strategic Plan 2015-2018. During 2016-18, ERO and industry work plans should bring the standards and compliance programs to a mature set of processes.
  - Performance metrics indicate that Order No. 693 risks are well controlled.
  - The ERO and industry need to pivot to the implementation of new standards for cyber, physical security and GMD. Stability will do more to improve reliability than continuous pancaking of revisions to improve these standards.
  - Major policy/strategic focus in 2016 should be on framing emerging risks to BPS and the public and establishing study/assessment priorities, as described in the ERO Enterprise Longer-term Strategic Planning Considerations document.
  - SM-TDUs are particularly concerned about:
    - The impacts of the EPA Clean Power Plan plans on BPS adequacy and operations
    - Planning coordination including natural gas availability, accelerated generation retirements, and load-side changes
    - Operational impacts on the bulk power system due to changing resource mix, including variable generation and distributed resources
    - Changing customer expectations on reliability/resiliency
    - Impact of new technologies, including retail customer technologies, on BPS operations and planning.
- **ESCC Strategic Review of ES-ISAC:**
- SM-TDUs support the recommendations in the ESCC Strategic Review
  - The ES-ISAC must ensure that its services address the diverse needs of small and large utilities.
- **Other Items of concern:**
- SM-TDU's suggest that the ERO Enterprise Effectiveness Survey results should be presented in a different manner. Calculating averages or "mean" values of ordinal data can skew results and not accurately reflect stakeholder views. Other display methods, such as frequency charts are more appropriate and informative. Since this is the initial year for this effectiveness survey, it is important to set an appropriate baseline for improvement and continue to involve the advisory stakeholder group in this important effort.
  - SM-TDUs recommend that NERC resources be allocated to continue the work of the Risk-Based Registration Initiative. Phase II should remain as a priority so that the limited NERC, Regional and industry resources are actually focused on material risks to BPS reliability.

SM-TDUs elaborate below on these high-level points.

### ***Item 1: Critical Infrastructure Protection (CIP) Version 5 Resolution of Outstanding Issues:***

*The Board would appreciate feedback from the MRC as to whether NERC's continued efforts to support transition to CIP V5, given the significant progress described in the background MRC materials, is providing the necessary guidance and implementation support for an efficient and effective transition to the CIP V5 Standards, and whether there are any additional specific NERC activities necessary to achieve such goals.*

Registered Entities need regulatory certainty in order to comply with NERC Standards. Certainty comes from a clear understanding of how the standards will be enforced. A lack of clarity continues to exist with regard to several aspects of CIP Version 5 compliance expectations and possible audit approach.

SM-TDUs support the development of Lessons Learned, FAQs and compliance guidance as mechanisms to bring more clarity, consistency and regulatory certainty to the compliance process. However, if standards are unclear or the industry and NERC/Regional Entities have different understandings of the plain meaning of the text in a standard, then a SAR must be developed to clarify the standard. The development of guidance cannot be a substitute for revising the standard language through the standard development process.

SM-TDUs are encouraged that NERC has withdrawn the five memos in the CIP Version 5 Transition effort. The process to develop the memos was not collaborative with industry and did not follow the regular standard development process for guidance documents. Having the CIP V5 Transition Advisory Group (V5TAG) working on these issues will hopefully bring final resolution. However, since the V5TAG meetings have not been open and meeting updates have not been shared publicly, from the general industry point of view there appears to be no progress at all. Therefore, SM-TDUs recommend that the V5TAG provide regular status updates and a timeline for completion of current projects. Also, NERC should develop an open and public process for submitting future questions and receiving answers to CIP V5 compliance issues to help facilitate industry's successful implementation of compliance programs by April 1, 2016.

If consensus on these issues cannot be reached through the V5TAG process then the SM-TDUs would expect that NERC will use its authority to offer compliance discretion to registered entities until such time as the standard development and approval process is completed.

To give registered entities the confidence to wisely invest limited compliance dollars NERC needs to communicate clearly and quickly CIP V5 compliance expectations. The April 1, 2016 compliance deadline is approaching fast.

To assure a successful outcome for any further requests for clarification on CIP V5 transition and for general guidance in support for other standards, the SM-TDUs support the efforts of the Board on the guidance process development group.

We all need to learn from this CIP v5 transition experience. SM-TDUs are encouraged that a Compliance Guidance Team has been formed. The CIP v5 transition is just one example of

this need for compliance guidance and historically, clarity of compliance expectations has been a significant matter for the ERO.

In reviewing the July 20, 2015 draft of “The Role of Compliance Guidance” report included in the MRC Agenda package, we are encouraged. But we see some core issues that need to be addressed, in order for this effort to be successful.

First, there needs to be a statement up front of the problem we are solving. SM-TDUs believe that the industry can help to develop solutions that assure compliance expectations for NERC Standards have clarity.

Secondly, the principle that states “Guidance should be developed collaboratively” provides the impression that the ERO and stakeholders will collaborate with each other. This was not the case in the CIP guidance development, which has proven unsuccessful, so far. Reading further into this Guidance report, though, it becomes less clear that the ERO and stakeholders will collaborate with each other. Instead, it appears that the ERO collaboration will be between NERC and the Regions, while industry stakeholders collaborate amongst themselves. It is not stated why this should be the case. Collaboration is a basic tenet that must have one common understanding. This is a discussion we cannot avoid any longer.

Additionally, there are many other open issues in this report that raise significant policy matters which may take more time to resolve than anticipated. We encourage the Board to continue to support this effort and emphasize the need to get it right over getting it done.

## ***Item 2: Input for 2016-2019 ERO Enterprise Strategic Plan:***

*The Board requests MRC input on the following questions:*

- 1. Are there additional risks to reliability, areas of focus, or industry trends that should be added to either the 2015-2018 ERO Enterprise Strategic Plan or ERO Enterprise Longer-term Strategic Planning Considerations?*
- 2. Are there any risks to reliability, strategic elements or industry trends for which either the priority should be reduced or the item eliminated in either document?*

SM-TDUs continue to support the ERO Enterprise Strategic Plan 2015-2018 and NERC’s identification, through the Reliability Issues Steering Committee (RISC), of ERO Enterprise Longer-term Strategic Planning Considerations. The industry and the ERO face a daunting array of emerging trends that will challenge bulk power system reliability over the next decade and beyond. We see several areas with emerging risks that are worthy of increased focus and resource commitments by NERC over the next three years, starting with assessing the reliability impacts of the EPA Clean Power Plan, planning coordination including natural gas availability, accelerated generation retirements, and load-side changes as well as the operational impacts on the bulk power system due to changing resource mix, including variable generation and distributed resources.

These emerging issues make it doubly urgent that NERC and the industry spend the next two years ensuring that the NERC standards and compliance programs complete development and implementation of a mature set of risk-based processes. Performance metrics included in the 2015 State of Reliability Report indicate that Order 693 risks are increasingly well-understood and managed. Therefore, we believe that Order 693 standards must go into maintenance mode, with routine upgrades to improve quality on a three to four year cycle. New risk-based CMEP processes are still being developed and implemented, but violation and event analysis trends are positive, indicating that NERC can show flexibility in how it implements risk-based compliance without undue risk to BES reliability.

Significant resources will be needed to address implementation of new standards for cyber, physical security and GMD. These commitments will stretch NERC, RE and industry capabilities to the breaking point. SM-TDUs firmly believe that regulatory stability will do more to assure BPS reliability than continuous pancaking of revisions to these NERC standards.

NERC's major policy/strategic focus in 2016 should be on framing and communicating emerging risks to BES and establishing study/assessment priorities, as described in the ERO Enterprise Longer-term Strategic Planning Considerations document. We need to develop a clearer understanding, through NERC, industry and government assessments, of the relative BPS risks and consequences of these emerging risks. The sky is not falling. The grid is not in imminent danger of collapse. But we must nonetheless move with alacrity to better characterize and quantify the potential reliability risks we face, reduce the uncertainty perceived by policy-makers, and identify prudent measures we can take over the planning horizon to mitigate such risks to reliability.

SM-TDUs are particularly concerned about:

- Coordination with industry to assess the impacts of EPA Clean Power Plan compliance on BPS adequacy and reliable operations
- Planning coordination including natural gas availability, accelerated generation retirements, and load-side changes
- Operational impacts on the bulk power system due to changing resource mix, including variable generation and distributed resources
- Changing customer expectations on reliability/resiliency
- Impact of new technologies, including retail customer technologies, on BPS operations and planning.

In summary, we recommend that NERC refocus ERO resources to study and characterize emerging risks, inform policy makers, and build these assessments into future industry planning. Most of this work does not fall within scope of section 215 standards. Nonetheless, NERC as the ERO has a responsibility to perform unbiased assessments and recommendations to policy makers. We stand ready to assist NERC in these initiatives.

### ***Item 3: ESCC Strategic Review of ES-ISAC:***

*The Board requests MRC input regarding the ESCC Strategic Review Team's initial recommendations, as well as the formation of the Member Executive Committee.*

SM-TDU utility members were involved with the development and provided input to the ESCC strategic review of the ES-ISAC. The recommendations within the report address the fundamentals for success of the ES-ISAC. The industry stands behind the vision to make the ES-ISAC a trusted source for the analysis and sharing of Electricity Subsector information.

SM-TDUs support the formation of the Member Executive Committee with its broad representation of industry stakeholders. Their expertise and guidance provided to the ES-ISAC leadership will help develop a roadmap to improve the services provided by the ES-ISAC. Two key recommendations are of interest to the SM-TDU members: improving member outreach and improving tools and technology.

Most SM-TDUs are small to medium-sized utilities that increasingly rely on the ES-ISAC as a primary source of physical and cyber security threat information. The services the ES-ISAC provides to different entities may vary based on their size and security maturity. A large entity with many security staff may need very different services than a small entity with fewer resources. Therefore, SM-TDUs see the need for the ES-ISAC to reach out to its members to understand the diverse needs of each of the industry segments it serves and provide services scaled to the size and information needs of these utilities.

The Cybersecurity Risk Information Sharing Program (CRISP) provides a case in point. SM-TDUs support investigation of the latest tools and technologies that help facilitate the collection and processing of threat information for the industry, including CRISP. However, deployment of tools with the scale and complexity of CRISP cannot be cost-justified by most SM-TDU members. Therefore, alternative technologies must be investigated so all utility segments can participate in the information sharing process through automated means.

### ***Other items of concern:***

**ERO Enterprise Effectiveness Survey:** SM-TDUs appreciate the report provided for the first annual stakeholder survey results measuring the effectiveness of the ERO Enterprise. SM-TDUs strongly support the use of an effectiveness survey as an important tool to measure ERO performance, including effectiveness of the ERO's core programs. While there are a number of opportunities for improvement, we wanted to emphasize one area of concern at the outset, due to its potential impact on results/conclusions and the establishment of a baseline for future surveys.

ERO Enterprise Effectiveness Survey results should be presented in a different manner. Calculating averages or "mean" values of ordinal data can skew results and not accurately reflect diverse stakeholder views. Other methods such as frequency or bar charts are more appropriate and informative.

Items were evaluated via a five-point, agreement-based rating scale (“Strongly Disagree” to “Strongly Agree”):

- 1 – Strongly Disagree
- 2 – Disagree
- 3 – Neither Disagree nor Agree
- 4 – Agree
- 5 – Strongly Agree

The results were presented as a calculated “mean” of the respondent scores. But given that this is ordinal data, it should be counted and described in frequency tables, *not* means and standard deviations. For example, if you take the mean of two responses, “Strongly Agree (5)” and “Strongly Disagree (1)”, you end up with a mean result of “(3) Neither Disagree nor Agree”, which can be misleading and not necessarily reflective of the actual responses. There are two charts on page 17 of the report that provide much more insight than the “mean” charts and with some enhancements can lead to a much more actionable set of results.

The following is a reference from American Society for Quality on this topic:

*As a general rule, mean and standard deviation are invalid parameters for descriptive statistics whenever data are on ordinal scales, as are any parametric analyses based on the normal distribution. Nonparametric procedures—based on the rank, median or range—are appropriate for analyzing these data, as are distribution free methods such as tabulations, frequencies, contingency tables and chi-squared statistics.”*

<http://asq.org/quality-progress/2007/07/statistics/likert-scales-and-data-analyses.html>

Given this is the initial year for this combined survey, it is important to set an appropriate baseline for improvement. The ERO Enterprise Effectiveness Survey report concluded that “Overall, the results of the survey were positive” and the ERO did not need to take additional improvement actions beyond what was already in place and stated as such:

*“After evaluating the results of the survey, NERC identified three main areas for improvement based on the lowest-rated items for NERC. These areas are in alignment with those the ERO Enterprise has previously identified for improvement. Therefore, action plans have already been developed and initiated. “*

SM-TDUs would appreciate seeing further analysis and evaluation of the survey results as outlined above. We also understand that the survey’s “comments received” will be further analyzed and we look forward to seeing those results as well. When this information is made available, we would appreciate the opportunity to assess the conclusions and the adequacy of the established action plans.

SM-TDUs appreciate that a stakeholder advisory group was involved in the front end of the survey process. We ask that the stakeholder advisory group be involved in the results and conclusion phases of the process, along with having the opportunity to recommend



enhancements to the assessment tools to help improve ERO Enterprise performance and core program effectiveness.

**Risk-Based Registration Initiative:** SM-TDUs reiterate their strong support for Phase II of NERC's Risk-Based Registration Initiative, with the associated commitment of NERC resources to this project. A significant number of NERC registered entities pose little to no material risk to BPS reliability. Their compliance obligations should be commensurate to the risks they pose. Phase II should remain as a priority so that the limited NERC, Regional and industry resources are actually focused on material risks to BPS reliability.

Thank you for the opportunity to provide this policy input.