# 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:** February 2, 2016

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

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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 January 12, 2016 letter requesting policy input in advance of the February 10-11, 2016 NERC Board of Trustees meeting.



TAPS

**MEMORANDUM**

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

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

**DATE:** February 2, 2016

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

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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 letter of January 12, 2016 to Mr. Sylvain Clermont, Chair of the MRC, requesting policy input on topics that will be of particular interest during the upcoming meetings of the NERC Board of Trustees, Board committees, and the NERC MRC on February 10-11, 2016.

## *Summary of Comments*

We summarize here our views on each of the topics raised in your letter. As in previous comments, we give NERC high marks on strategic direction – but urge continuing, laser-like focus on implementation of current initiatives, including cyber and physical security, risk-based compliance and enforcement, implementation of the bulk electric system exception process and risk-based registration. We also commend NERC for its continuing leadership on the identification, characterization and communication of emerging risks to BES reliability associated with environmental regulations and the increasing reliance on renewable and distributed resources to meet North America's electricity requirements.

- **Item 1: 2017 Business Plan and Budget (BP&B) Development**

**Risk-Based Strategy – High Priority Risk Projects:** SM-TDUs recommend that NERC combine the "Changing Resource Mix" and "Risks in Resource Planning" projects into a single strategic initiative focused on the impact of statutory and regulatory requirements that affect resource planning and reliable operations.

**CIP Version 5 Implementation:** SM-TDUs request that the NERC Board and Management give clear assurances that the ERO Enterprise will afford compliance discretion to Transmission Owners (TOs) with respect to application of CIP Version 5 Medium or High Impact requirements if such registered entities in good faith self-identify TO control centers as Low Impact.

- **Item 2: ERO Enterprise Strategic Planning Design**

SM-TDUs support NERC's efforts to better synchronize strategic plan and annual business plan metrics into a single set of performance-based metrics. We also welcome NERC's efforts to provide opportunities for stakeholder input early in the planning process and seek our support for specific goals and programs as well.

- **Item 3: Cost Effectiveness Method and Pilot Proposal**

SM-TDUs support NERC's proposal and provide guidance on how the Cost Effectiveness Analysis Process (CEAP) pilot should be implemented. In particular, the informal development stage of proposed standards provides many opportunities to assess whether incremental reliability benefits exceed costs or whether there are cost-effective alternatives to a proposed standard. During actual standard development, requirements and the applicability of the standard to BES elements and functional entities should be narrowly targeted to minimize costs, while ensuring that reliability objectives are achieved and reliability gaps are avoided.

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

## *Item 1: 2017 Business Plan and Budget (BP&B) Development:*

> *Specifically, the Board requests MRC input regarding the priorities and activities that should be highlighted in the NERC and Regional Entities' 2017 BP&Bs based on the ERO Enterprise Strategic Plan 2016-2019. A summary of priorities and major activities for 2016 can be found on pages 2–6 of the 2016 NERC BP&B.*

SM-TDUs have reviewed the ERO Enterprise Strategic Plan, as well as the 2016 priorities and major activities identified in the 2016 NERC BP&B. Most of these priorities and activities should be carried over into 2017 because they are still relevant and important. However, we do recommend an increased focus on the impact of environmental regulations, greater transparency on the methods NERC uses for BES risk assessment and continued focus on implementation of ongoing initiatives such as risk-based compliance, the BES exception process, risk-based registration and the transition of standards to an "enhanced maintenance" mode.

### Risk-Based Strategy

SM-TDUs agree that NERC must focus its resources on the greatest risks to the reliability of the BES. Identifying and completing specific high-priority risk projects is key to this Risk-Based Strategy. SM-TDUs reviewed the 2015 ERO Enterprise High-Priority Risk Projects and the preliminary set of 2016 projects provided in the Reliability Assessment and Performance Analysis Department's 2016 activities in Section A of the 2016 NERC BP&B. While we support extending most of the 2016 projects through 2017, we are concerned about the long and growing list of high priority projects. For 2015, NERC identified 6 high-priority risk projects:

1. Changing Resource Mix,
2. Extreme Physical Events,
3. Cybersecurity Preparedness,
4. Protection System Misoperations,

5. Extreme Weather Preparedness and Resiliency Efforts, and
6. Right-of-Way Clearances.

For 2016, BP&B Section A, pp. 41-44 identifies 8 "preliminary" top-priority reliability risk programs:

1. Changing Resource Mix,
2. Risks in Resource Planning
3. Protection System Reliability
4. Protections System Misoperations
5. Uncoordinated Protection Systems
6. Extreme Physical Events
7. Availability of Real-Time Tools and Monitoring
8. Right-of-Way Clearances

There is also a voluminous listing of RAPA deliverables in Section A, a number of which are important to the industry as a whole but not mission-critical for NERC. NERC should avoid creating an encyclopedic-type list of projects, as it erodes the focus achieved by identifying certain projects as "high priority." This does not mean the other items are not important – they are. However, labels such as "High-Priority Risk Projects" should be reserved for a few select items that merit NERC's primary focus and limited resources.

SM-TDUs strongly suggest that NERC explicitly combine Changing Resource Mix and Risks in Resource Planning into a single strategic initiative focused on responding to statutory and regulatory requirements that affect resource planning and reliable operations. Elevating these programs to a strategic initiative would also bundle together most of the key deliverables identified under ERO Strategic Plan Goal 4 (see pp. 6-7). There has always been the risk of regulatory uncertainty and the effects on the reliable operation of the BES. However, recently, a few new regulations are likely to have significant, far reaching effects, including EPA's Clean Power Plan and new ground-level ozone rules under the National Ambient Air Quality Standards. And there will likely be continued expansion of environmental and other regulations in the near future, as well as state requirements and local initiatives that will mandate much greater reliance on renewable and distributed resources that have operational characteristics that limit dispatchability and may not provide certain essential reliability services when and where they are needed to ensure reliable BES operations. In fact, the NERC Reliability Issues Steering Committee (RISC) October 2015 report[1](the RISC Report) identifies "Regulatory Uncertainty: Markets, States, and Federal" as a High Evolving Risk, which signifies continuously evolving reliability risks with high likelihood and anticipated large potential impacts to the BPS. The 2016 Reliability Risk Management Program high-priority program/projects "Changing Resource Mix" and "Risks in Resource Planning" both address components of the expanding regulatory landscape. We believe NERC should focus on the regulatory aspect of these two items and identify regulatory impact assessment as a High-Priority Risk Program or even a Strategic Initiative.

[1] NERC ERO Reliability Risk Priorities RISC Recommendations to the NERC Board of Trustees, October 2015, p.13.

SM-TDUs believe "Right-of-Way Clearances" should be removed from the High-Priority Risk Project list for 2017. This project is based on the 2010 Facility Ratings Alert report which has provided Transmission Owners and applicable Generation Owners ample time to identify and address any incorrect ratings. We recognize that this is not the first time it has been suggested to remove this item from the High-Priority list (e.g., EEI in 2014 made a similar recommendation). While it is clearly important to ensure correctly rated transmission rights-of-way, the industry has made significant strides to identify and correct any incorrect ratings through conducting LIDAR (Light Detection and Ranging) surveys of transmission facilities and walking lines. This effort is now in its sixth year and no-longer warrants a high-priority status by NERC.

SM-TDUs believe Extreme Physical Events (including both natural and man-made events) are an important priority for the industry but may not merit identification as a High-Priority Risk Program for NERC in 2017. The October 2015 RISC Report indicates that physical security is a moderately evolving risk which by the RISC's definition signifies that, while there are some aspects of evolving risk, the expectation of likelihood and potential impacts to the BPS is being managed through existing measures and efforts.[2] The CIP-014 Physical Security standard became effective in 2015 and enforcement began Oct. 1, 2015. Utilities have conducted risk assessments required by CIP-014 (R1 and R2) and now know their risk vulnerability under the standard and whether they are subject to additional R3-R6 security control requirements. The implementation of CIP-014 should be monitored to assure the effectiveness for these controls in reducing the risk to reliability, but physical security should be removed as a high priority item. With respect to Extreme Physical Natural Events (RISC Report, p. 10)/Extreme Weather Preparedness and Resiliency Efforts (2016 BP&B), this project area is certainly important to the industry, but largely falls outside of the scope of the ERO's responsibilities. NERC's educational efforts in this area have been completed. Geomagnetic Disturbances should continue to be an area of focus, but not a top priority. Implementation of the GMD standard EOP-010 is underway and TPL-007 is pending regulatory approval. Additional technical research on the interaction of space weather, earth geology and EHV electrical equipment is needed as well, but we view this as a long term project to further delineate BES risk.

With respect to Protection Systems, it was not apparent to SM-TDUs why Protection System Reliability, Protections System Misoperations, and Uncoordinated Protection Systems each constitute separate high priority programs. Further, it is not clear that these risk areas rise to the level of strategic importance to the ERO. Instead, they fall within the category of the must-do, blocking and tackling efforts that are being fully addressed through a comprehensive body of NERC reliability standards, technical assessments and NERC performance measures such as the misoperations database.

SM-TDUs support identification of Availability of Real-Time Tools and Monitoring as a high-priority program. There is sufficient risk of changing BES performance due to changing load and resource characteristics to warrant increased attention to BES real time data, models, and monitoring tools.

[2] Id at p. 13.

The SM-TDUs offer the following additional guidance on how NERC should focus its efforts in 2016-2017, based on pp. 2-6 of the 2016 BP&B.

**Physical Security and Cybersecurity**

We agree that cybersecurity should remain a focus for 2017 and beyond. On the CIP compliance side, utilities are moving with urgency to develop and implement compliance programs prior to the implementation deadlines for the CIP V5 standards. We remind NERC that a significant number of new entities will be required to comply with the Low Impact requirements in 2017. To support these compliance efforts, NERC should make cybersecurity a high priority and have adequate resources to develop guidance and outreach for these new entrants into the CIP compliance realm. This guidance must be delivered timely to be of use to compliance managers.

We are particularly concerned about the impact categorization of TO-only control centers as either Low Impact (with requirements that have an April 1, 2017 implementation date) or as Medium or High Impact (with different requirements and an April 1, 2016 implementation date). Without clear compliance guidance from NERC and the regions, entities must wait until they are audited, possibly 2 years or more after the implementation date, to verify that they designated facilities in the correct impact category.

To date, NERC and industry have not come to consensus on which TO-only control centers should be designated as Low, Medium or High Impact based on the plain reading of the standard language. The CIP V5 Standard Drafting Team will try to address the ambiguous language through the standard development process, but this effort will be completed well after the CIP V5 implementation date of April 1, 2016. Therefore, SM-TDUs request that the NERC Board and Management give clear assurances that the ERO Enterprise will afford compliance discretion to TOs with respect to application of CIP Version 5 Medium or High Impact requirements if such registered entities in good faith self-identify TO control centers as Low Impact. Further, if a control center categorization error is identified through audit, an entity should be provided safe harbor from the Medium or High Impact requirements for an implementation period equal to the period applicable to newly identified facilities. These assurances should be communicated to registered entities prior to the April 1, 2016 implementation date of CIP Version 5.

On the information sharing side of NERC, we support the continued efforts to develop the E-ISAC into a trusted source for electricity cyber and physical threat and vulnerability information sharing. Proper resources must be allocated to this program to maintain the momentum. We also support the recommendations coming from the E-ISAC Member Executive Committee to continue to improve the products and services.

As discussed above, SM-TDUs believe Physical Security can be removed from the list of priority projects for NERC in 2017. NERC can and should focus on compliance and enforcement of CIP-014-001, as well as further development and implementation of the E-ISAC's strategic plan and preparation for future industry-wide exercises such as Grid-Ex 3. NERC should continue its participation in government-industry coordination through the Electricity Subsector Coordinating Council.

**Risk-Based Compliance and Enforcement**

We strongly support NERC's risk-based approach. While work on implementing this Initiative began in earnest in 2015, Risk-Based Compliance and Enforcement is clearly a multiyear effort that must be continually included in NERC work planning, supported by industry and Trades, monitored, course corrected as needed and refined. Do not let this Initiative die or wither on the vine.

Our one "ask" of NERC and the regions is to enhance the transparency and consistency of the risk assessment methods used to assess inherent and entity-specific risks to the BES. The Inherent Risk Assessment module has a common set of principles, but lacks the granularity and specificity required for registered entities to be confident that its application will be consistent across different entities and regions.

**BES Implementation**

SM-TDUs worked hard on the BES definition and exception process effort. Based on the initial statistics and anecdotal information, we are concerned that the BES exception process may not be achieving the objective of fine-tuning the application of the generic BES definition criteria to ensure that the right facilities are included in the BES. Unfortunately, the posted case notes are not sufficiently informative to provide comfort that the outcomes reflect a realistic assessment of the impact of the facilities in question on BES reliability. We recommend that the Board direct NERC staff to explore ways to make more information publicly available so that stakeholders can both judge the effectiveness of the program and assess whether a particular exception request is likely to be granted.

The currently posted case notes particularly raise concerns regarding NERC's "aggregate effects" evaluation. Our understanding is that in an aggregate effects evaluation, a facility that may not itself have a material impact on reliability is considered together with many others that, in the aggregate, may have a material impact, to conclude that the facility in question must remain part of the BES. While consideration of aggregate effects may be appropriate in particular cases, the contours of the aggregate class considered must have a rational basis. In *Mosaic Fertilizer, LLC*, 121 FERC ¶ 61,058 (2007), FERC expressed concern that NERC had chosen too broad an aggregate class, and directed NERC, if it did not remove the entity in question from the compliance registry (which NERC ultimately did), to explain why it had chosen that aggregate class and the limits and parameters on the class, and provide various information on the other generators included in the class that would be relevant to determining whether they were in fact similarly situated. *Mosaic Fertilizer* at P37. Three of the four posted case notes point to "consideration of significant aggregate effect of similarly situated generation" but do not state how the aggregate effects analysis was performed, nor how it factored into the decision. It is vital to the success of the BES exceptions process that such analyses be done right and that they be transparent. Consideration of aggregate impacts based on an overly broad class must not be used as an excuse to retain in the BES facilities that are not necessary for the reliable operation of the grid.

**Risk-Based Registration**

SM-TDUs strongly support the risk-based registration initiative to right-size the compliance registry. Phase I efforts have made great strides and Phase II – case-by-case determinations as to whether particular GO/GOPs and TO/TOPs should be subject to only a subset of otherwise applicable standards/requirements – is ongoing. We are hopeful that case-by-case decisions by the NERC-led panel will show patterns that will allow predefined subset lists to be created going forward, helping industry and NERC to focus resources on the most significant issues to reliable operation of the BES. To achieve its objectives, the RBR program should remain a strategic focus for NERC. NERC senior leadership should remain engaged in the implementation process and hold staff accountable for consistent application across the regions and the successful completion of this process. In addition, as we previously commented:

- NERC should develop a clear and repeatable process for evaluating case-by-case requests, in accordance with the NERC Rules of Procedures. As required, the facts, circumstances, and technical criteria for determinations should be publicly reported, so that industry and the regions can identify trends that may lead to future removal of unnecessary compliance obligations. Outcomes should be reviewed for consistency and approved by senior leadership from the ERO Enterprise.

- NERC staff should develop metrics to show the program's success and progress. NERC should utilize the data sets to demonstrate that removal of unnecessary compliance obligations will have minimal potential impact on BES reliability. This analysis can be used by the Board of Trustees to help assure the Commission, regions, industry and the public that NERC is allocating resources wisely to focus on the most significant risks to BES reliability.

- The selection of Regional Entity participants for the NERC-led panel should be transparent, with publication of how the members are selected and their expertise. This will assure the industry that the program combines appropriate subject matter expertise, with management perspective and appreciation of the goals to be achieved through RBR, for a fair and repeatable outcome that serves those goals.

**Transforming Standards to Steady State**

While many stakeholders would like standards development to be "done", to lock down existing NERC standards and requirements from further revisions, NERC staff and stakeholders understand that we need to fix the uneven quality of many existing requirements. We must also recognize that ANSI requires that industry standards be open to changes requested by stakeholders and that FPA section 215 requires the ERO to develop new standards and revisions directed by FERC. While Order No. 693 standards are increasingly well-settled, NERC continues to address newer, emerging risks such as physical and cyber-security and geo-magnetic disturbances.

For these reasons, the term "steady state" is at best a misnomer and should be discarded to call things as they are: NERC is well under way to conducting what might be best described as "enhanced maintenance" of a fundamentally sound body of standards that still have a number of quality and clarity concerns to be addressed. NERC should continue using the three-year periodic review requirement in the Standard Processes Manual to target improving the quality of existing

standards, continue the Paragraph 81 process of eliminating requirements that are redundant or do not have clear reliability objectives, and wherever possible consider using guidance documents and education as alternatives to more granular, prescriptive standards. While NERC cannot bind FERC, we should continue to encourage FERC staff to participate in the standard development plan process and in specific projects, and to incorporate deficiencies identified by FERC staff and others into the three-year review process, rather than leaving such issues unaddressed until FERC issues one-off directives to make revisions by a specific date.

We of course recognize that FERC will likely continue to direct changes in emerging risk areas such as GMD, physical security and cyber security. In other areas, we have seen a marked reduction in FERC directives and some willingness to allow NERC to use education and alerts in lieu of standards. There are examples where education, lessons learned and alerts have fulfilled the need for industry adopting best practices without the use of a standard. Each is also a signal of a maturing, effective relationship between the ERO, its regulators and the industry.

## *Item 2: ERO Enterprise Strategic Planning Design:*

*The Board requests MRC input on how the format of and approach to the ERO Enterprise's three-year strategic plan, metrics, and longer-term strategic planning considerations should be enhanced. Specifically, the Board requests input on the following:*

1. *How can the documents ensure the ERO Enterprise's strategy is more clearly and accurately conveyed to stakeholders?*

2. *What changes are needed to ensure the goals, objectives, deliverables, and annual metrics are more clearly aligned and provide meaningful results for reliability?*

SM-TDUs support the Board's focus on this item, as there is a disconnect between the ERO's three year plan (2016-2019) and the annual metrics. There needs to be more linkage between the two; thus, we are pleased by NERC's statement during the Jan. 12th MRC webinar that it plans to combine them into one document. NERC needs to link specific annual metrics directly to the Strategic Plan Goals. This will be an iterative process throughout 2016, as NERC indicates that it will look for input in July and October on revisions to the strategic planning documents and the identification of annual plan goals and metrics that will ultimately be reflected in the NERC Business Plan and Budget.

SM-TDUs appreciate the opportunity for stakeholders to provide input, although we believe it is the responsibility of ERO Management and the Board to craft a Strategic Plan that meets stakeholder expectations and garners regulatory agency approval. For this to be achieved, it is important that enough time is built into the strategic planning cycle for a robust discussion with stakeholders on the draft documents developed by the ERO. In previous planning and business plan cycles, there was not enough time to incorporate revisions from stakeholder feedback into final documents while meeting deadlines for required ERO Board approval and regulatory filings.

It is important that the development and review of the annual metrics become more results-focused and include an ERO Enterprise review of past performance. We would support efforts to develop metrics that are performance or results-based, e.g., metrics that are designed to assess reliability outcomes, rather than the resources expended in pursuit of the objective.

Additionally, in order for stakeholders to provide substantive policy input on metrics, as requested, there needs to be more information provided on the quarterly NERC Performance Reports to stakeholders.

Currently quarterly reports provide only green, yellow and red status indicators and some high-level bullet points. It appears that the Internal Auditor validates the status indicators, so the performance evidence exists and could also be provided to and discussed with stakeholders. Additionally, the venue for presenting this information should be conducive to stakeholders asking questions to assure an understanding of performance results, gaps and action plans. The 2015 3rd quarter performance status was provided during a Corporate Governance and Human Resources Committee conference call.

We look forward to a robust report on 2015 results and performance at the February meetings.

## *Item 3: Cost Effectiveness Method and Pilot Proposal*

*The Board requests MRC input on the following:*

1. *Will the proposed approach enable stakeholders to identify the potential costs to implement a NERC Reliability Standard?*

2. *Will the proposed approach provide adequate information for stakeholders to compare potential implementation costs with risks to reliability?*

3. *Is there a preferred alternative approach, or enhancements to the proposed approach, which would enable comparison of potential implementation costs with risks to reliability?*

SM-TDUs support NERC's cost effectiveness methodology and pilot proposal and hope it eventually leads to less onerous and costly standards. We agree with NERC's suggestion to use the TPL-001 standard project for the pilot.

The two phase process should address two issues: First, the standard development process should be used to determine whether or not a new or revised standard is likely to provide significant net benefits compared to currently enforceable requirements. For example, if the projected costs to achieve the outcome through the proposed reliability standard significantly outweigh anticipated reliability benefits, the decision should be made to not develop a new standard or to investigate the use of alternative approaches such as guidelines, lessons learned or FAQs. We agree that this effort should be performed during the earliest stages of project development, preferably at the Standard Authorization Request stage, during informal outreach,

when the technical foundation for the project is still under development. We do, however, expect broad questions of costs and benefits to be raised during actual standard development, because the preliminary assessment is just that – an initial assessment of costs and benefits.

Second, if a standard is needed and meets the preliminary net benefits test, then cost effectiveness analysis can help assure the standard is drafted to achieve the BES reliability objective (maximize benefits) while minimizing costs incurred by entities affected by the proposed standard. This step entails carefully targeting requirements to achieve reliability objectives at least cost, as well as targeting the applicability of the proposed requirements to only those BES elements and functional entities that are required to achieve the reliability outcome.

We hope that this task of evaluating risk and benefits in the TPL pilot can be approached without preconceived biases. As with previous standard process innovations, it will likely take more than one attempt to develop consistent, transparent and repeatable processes and procedures that garner confidence among stakeholders, the ERO and regulatory authorities.

## *Other items of concern:*

We also wish to express our thanks for the timely issuance of NERC's newest report on the reliability implications of EPA's Clean Power Plan (CPP). NERC's January 27, 2016 report, *Reliability Considerations for Clean Power Plan Development*, provides much-needed advice and guidance to the states on reliability issues associated with CPP implementation. By issuing the report in advance of the February 2016 NERC Board meetings and NARUC winter committee meetings, NERC will help frame the policy and technical issues concerning electric reliability and adequacy in valuable ways, while helping state and local officials understand concerns that are second nature for those who work on these issues day in and day out. We share NERC's concerns that we need to procure and arrange for the reliable operation of grid resources, including distributed energy resources, that are capable of and available as needed to provide "*essential reliability services*," including frequency response, ramping capability and voltage performance when and where they are needed.

Thank you for the opportunity to provide this policy input.