MEMORANDUM

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

FROM: Allen Mosher, Vice President, Policy Analysis, American Public Power Association
John Di Stasio, President, Large Public Power Council
John Twitty, Executive Director, Transmission Access Policy Study Group

DATE: October 18, 2016

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 September 27, 2016 letter requesting policy input in advance of the November 1-2, 2016 NERC Board of Trustees meetings.

MEMORANDUM

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

FROM: Carol Chinn
Jackie Sargent
Bill Gallagher
Dave Osburn

DATE: October 18, 2016

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 letter dated September 27, 2016 to Mr. Nabil Hitti, 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 November 1-2, 2016.

Summary of Comments

- **Item 1: ERO Reliability Risk Priorities Report ("RISC Report")**

SM-TDUs endorse the analytical framework and issues identified by the Reliability Issues Steering Committee ("RISC") as high, moderate and lower priority for the ERO. We urge NERC to embrace these priorities and fully integrate them into the 2017-2020 ERO Enterprise Strategic Plan and Metrics ("Strategic Plan").

In our review of the RISC Report, we did not identify any significant (i.e., high or moderate) risks that had been overlooked. We do suggest that the ERO consider elevating Physical Security Vulnerabilities to high priority for the short and medium term for reasons discussed in further detail below. We also suggest that the ERO identify regulatory burden as an element of the Risk Profile associated with Cybersecurity Vulnerabilities.

- **Item 2: 2017-2020 ERO Enterprise Strategic Plan and Metrics ("Strategic Plan")**

SM-TDUs support the ERO Enterprise Strategic Plan and Metrics framework. It is a good first effort to align risk priorities, NERC's strategic plans, and the annual business planning process. We do, however, have a number of specific concerns that need to be addressed before the Strategic Plan is adopted by the Board of Trustees.

First, while we recognize that NERC has developed this document as an ERO Enterprise strategic plan, the allocation of responsibilities between the ERO, the industry, and governmental

authorities should be shared and collaborative. This shared responsibility affects how the ERO frames the Strategic Plan Goals, Contributing Activities and Metrics, the Measures of Success in Appendix 1, and the Recommendations for Mitigating Risk in Appendix 2.

Second, each element of the Strategic Plan should keep its focus on the Bulk Electric System, ensuring an Adequate Level of Reliability, and reflect due consideration of costs. In particular, a number of changes to the ERO Enterprise Goals and the Reliability Metrics are needed to ensure that NERC remains focused on its statutory duties, even as it collaborates with stakeholders to identify, characterize and help mitigate significant risks to BES reliability that are beyond NERC's regulatory authority.

Third, the specific Measures of Success identified in Appendix 1: Metrics require additional support. While these Measures of Success generally provide indicators that a reliability outcome has been achieved, they do not measure success in risk mitigation. Also, a complete reassessment of Metric 6 is needed. These performance measures target previously identified risk areas that are largely mitigated. It makes sense to track industry performance to ensure backsliding does not occur. But surely there are more important emerging risks to target for mitigation that could be drawn from the Recommendations for Mitigating Risk in Appendix 2: 2016 Risk Profile Recommendations.

Fourth, we recommend that the BOT request that the MRC form a small task force to work with ERO staff on the draft NERC Performance Metrics for 2017. The four proposed Performance Metrics are a start, but they struck us as a set of activity measures that do not really assess the effectiveness and efficiency with which NERC performs its responsibilities. Over the long term, we look for outcome-based measures that show that ongoing programs are run efficiently at reasonable cost with high customer and regulator satisfaction, combined with assurance that resources have been reallocated to address emerging risks.

Finally, we hope that NERC's efforts to move up the schedule for policy input will provide a better opportunity for informed discussions at the Board meeting, as well as course corrections on the draft ERO Strategic Plan for 2017-2020. Any Board Resolution proposing adoption of the Strategic Plan at the November Board meeting should leave open the option for meaningful, substantive modifications of the Strategic Plan at the February 2017 Board meeting. It's better to get it right than to get it done.

Item 1: ERO Reliability Risk Priorities Report:

The Board requests MRC policy input on the following:

1. *Are there additional reliability considerations that should require enhancement of the risk priorities or recommendations?*

SM-TDUs endorse the analytical framework and issues identified by the RISC as high, moderate and lower priority for the ERO. We urge NERC to embrace these priorities and fully integrate them into the 2017-2020 ERO Enterprise Strategic Plan and Metrics ("Strategic Plan").

SM-TDUs believe the RISC Report would benefit from a clearer discussion of the criteria used to categorize risks as high, moderate and lower, as well as the location of various risks on the "heat map" shown as Figure 2.1: Risk Map of ERO Risk Profiles. Moreover, additional discussion of both the urgency of certain risks as well as the implicit probability that they may occur is needed. Our understanding is that a number of risks were categorized as "moderate" or "lower" priority risks, as well as "stable" or "decreasing" on their Risk Trajectory, because they were viewed as both well-understood and on their way to being well-mitigated. This approach appears to make sense at a conceptual level.

What may be lost in the transition from the RISC Report to the ERO Enterprise Strategic Plan is a common understanding within the ERO, the RISC and NERC's technical committees of which recommended Near-term and Mid-term Actions could slip (if necessary) to ensure that High Priority Risks with Increasing Risk Trends are timely mitigated. Which risks and which recommendations for mitigating risks are urgent and important? What tasks are critical path on the ERO Gantt chart? And what risk vectors are sufficiently mitigated by compliance with existing NERC standards and voluntary industry programs such that additional resources would have a diminishing impact? Without this additional level of granularity, there can be no common understanding of what the ERO Enterprise is trying to accomplish through the Strategic Plan.

NERC should look to other organizations such as the Forums and to individual regions for guidance on characterizing and mitigating the different risk profiles. A region may have best practices, established frameworks, etc., that would help the ERO make progress on the recommendations. This point goes to the shared responsibility the ERO, industry and other stakeholders have in mitigating reliability risks, particularly for risks that span beyond the limits of NERC's statutory authorities and responsibility to develop and enforce reliability standards to ensure reliable operation of the bulk-power system.

2. *Are there additional reliability risks the RISC should consider now or in the future?*

In our review of the RISC Report, we did not identify any significant (i.e., high or moderate) risks that had been overlooked. We also support the ways in which the RISC combined a number of previously identified risks within broader categories.

We do suggest that the ERO consider elevating Physical Security Vulnerabilities to high priority for the short and medium term due to the heightened concern of many members of the public with physical attacks on critical infrastructure. In our view, additional reliability standards are not required. However, a heightened focus within the E-ISAC on physical security, coupled with enhanced information sharing and readiness activities by industry, are appropriate. These activities can leverage existing relationships between industry, NERC, and government agencies, including the Electricity Subsector Coordinating Council.

We also suggest that the ERO explicitly identify regulatory burden as an element of the Risk Profile associated with Cybersecurity Vulnerabilities. As discussed in previous policy input and discussions with the Board, SM-TDUs are concerned that our cyber-security subject matter experts are being overwhelmed by the cumulative demands of cyber-security standard development and compliance. These demands compete with other needs, such as information

sharing and coordination among entities through the E-ISAC and protection of corporate systems from the increasingly adverse cyber-security threat environment we face.

Item 2: 2017-2020 ERO Enterprise Strategic Plan and Metrics:

Specifically, the Board requests MRC input on the following:

1. *Do the ERO Enterprise goals and contributing activities focus on the right priorities?*

At the outset, SM-TDUs are concerned over the subtle, but important, changes NERC has made to the Goals and Core Values section of the Strategic Plan. In particular, NERC has:

- Removed "collaborative" under Strategic Goal 5: Effective and efficient ERO Enterprise operations
- Removed "BES" under Accountability and Independence
- Removed "due consideration of cost" under Excellence and Efficiency
- Moreover, there is no framing reference within the Goals to NERC's duty to ensure an Adequate Level of Reliability for the bulk power system.

In the discussion of each Goal, NERC identifies how various Contributing Activities address certain Risk Profiles, which is a good first step. However, we struggled with how the RISC Report priorities do or do not map to each of the ERO Enterprise Goals. There are a total of 105 recommendations for mitigating risk in the RISC Report, with 62 recommendations targeted for near-term action over a 1-2 year timeframe. See Appendix 2: 2016 Risk Profile Recommendations. Of these recommendations, 47 are mapped to ERO Goals 1, 3, or 4. However, it is not clear from our initial review whether the ERO Enterprise Strategic Plan is focused on the High and Moderate priority risk profiles identified by the RISC, as well as recommendations that require near-term action.

Moreover, responsibility for many of the RISC recommendations is shared jointly between industry and the ERO. In some cases, responsibility is not yet assigned. In others, assignments may be incorrect or incomplete. For example, who should be responsible for Risk Profile #3, Resource Adequacy and Performance, Recommendation 5, which calls for Near-term actions to "Improve load forecasting, generator modeling, and coordination between BPS and distribution planners and operators." Similarly, Recommendation 6 under this risk profile says: "The ERO Enterprise should develop new measures of reliability beyond reserve margins, including measures on the sufficiency of ERS." Responsibility for Recommendation 6 is clearly one that is shared by the ERO Enterprise *and* industry and will require the input of and discussion with regulatory authorities.

2. *Are the ERO Enterprise reliability metrics the best way of measuring the impact of the ERO in mitigating reliability risks?*

SM-TDUs conclude that the ERO's six proposed high-level Metrics (shown below) are generally on target, but could benefit from clarifying edits, as shown below in underlined additions, to ensure a focus on BES reliability and establish a performance target of an adequate level of reliability (ALR).

Metrics

- Metric 1: Fewer, less severe events affecting the BES, to ensure an adequate level of reliability
- Metric 2: No gaps in Reliability Standards and compliance monitoring
- Metric 3: Resource deficiencies are foreseen and timely acted upon
- Metric 4: No unauthorized physical or cyber security access resulting in disruption to BES facilities
- Metric 5: Reduced BES reliability risk from noncompliance
- Metric 6: Reduced risks in targeted areas that are identified as significant to BES reliability

The ERO Enterprise's performance objectives need to be anchored to achieving and maintaining an adequate level of reliability. Without this anchoring objective, we may implicitly set our goal at an unachievable, ever increasing and unaffordable outcome of zero BES events, and spend resources to mitigate specific BES risks that are already well controlled.

Similarly, performance metrics must reference the BES. With North America's increased reliance on natural gas and distributed energy resources, the ERO, industry and policy makers are increasingly focused on the performance characteristics and reliability of infrastructures that directly affect, but are not part of the BES. The ERO certainly can have an important assessment and educational role within these areas – but its performance metrics must focus on areas within its statutory authority.

With respect to Metric 3, resource deficiencies occur over both operational and planning time frames. The specific performance Measures of Success in Appendix 1 should address both time horizons.

Information showing past and current performance for each Metric and Measure should also be provided. It is difficult to assess whether the proposed thresholds and targets are difficult or easy to achieve, based on the information available to us.

The Measures of Success for Metric 6, "Reduced risk for targeted areas" drew particular concern in our discussions. Frankly, these Measures each appear to carry forward performance measures from previous reliability initiatives, e.g., improving generator preparation for and performance during extreme winter weather events, that are now largely mitigated. NERC should continue to measure industry performance in these areas, but SM-TDUs believe a forward-looking strategic

plan should target and look for measures of success for both significant risk and emerging risks to BES reliability, as shown in the Contributing Activities for Goals 3 and 4.

3. *Do the draft NERC performance metrics provide appropriate focus on improving ERO effectiveness and efficiency?*

Performance metrics, when applied correctly, can be useful tools to determine whether an organization is moving forward. We appreciate the steps taken by the ERO in a number of areas to enhance the ability to assess improvements. To that end, SM-TDUs believe that the NERC draft performance metrics appropriately identify the areas that must be evaluated to improve the effectiveness and efficiency of ERO operations. However, the current draft of the NERC performance matrix will not provide such focus.

While the four performance metrics (ERO Enterprise Effectiveness Survey, ERO Enterprise Technology Solutions, ERO Operations, and Business Plan and Budget) are reasonable to retain in the matrix, the structure of the matrix needs modification to be a useful tool. Each of the four performance measures needs a better-defined metric to measure success. Once a metric is identified, a threshold (or practical) objective can be identified, along with a target (aspirational) goal. An additional column could be added to the matrix, one that identifies actions that the ERO will be taking to improve its effectiveness and efficiency. These changes will provide the Board and stakeholders with a clear perspective on where the ERO is heading and the steps it is taking to help move the ERO Enterprise to more effective and efficient performance.

As an example of how the matrix could be improved using this approach, we focus on Performance Metric 1: ERO Enterprise Effectiveness Survey. Consider the following adjustments to the matrix that is shown below:

Performance Metric 1: ERO Enterprise Effectiveness Survey			
Measure of Success	**Threshold (Expected Outcome)**	**Target (Aspirational Goal)**	**Associated ERO Actions In 2017**
Reduced levels of stakeholder responses classified as "Unfavorable"	X% of responses classified as "Unfavorable"	Zero responses classified as "Unfavorable"	Implementation of action plans contained in Appendices D, C, and E of the 2016 ERO Enterprise Effectiveness Survey Results, as reported to the CGHRC in August 2016.

In this case, a new column is added to address ERO actions undertaken to improve the performance matrix in the future. Success over the longer-term related to the survey is measured by looking at a trendline of improved scoring by stakeholders in subsequent surveys over time, not simply by whether or not the ERO implemented an action plan. Cause and effect is better aligned using this approach: unfavorable responses from industry will clearly decline if the

associated ERO action plan is effectively implemented. In that case, ERO effectiveness is effectively measured, including the effectiveness of the actions taken to respond to industry concerns in the survey. The value of the Effectiveness Survey is significantly enhanced as well, because the Performance Metric establishes a feedback loop between implementation of ERO actions and responses to the surveys over time.

Similar adjustments could be made to the other three performance metrics. SM-TDUs would be pleased to discuss this further with the Board and the MRC.

Finally, we have several specific comments regarding the draft NERC performance metrics:

- Metric 1: ERO Enterprise Effectiveness Survey. It does not appear that Action Plan specifics were incorporated in the Measures. What measurable improvement is expected in the ERO Effectiveness Survey results due to execution of the Action Plans? How were these actions plans developed and were stakeholders involved in the development?

- Metrics 2: ERO Enterprise Technology Solutions and Metric 4: Business Plan and Budget. These are project plans to meet deadlines and budgets. Is there a goal to be cost-effective? If so, how is that to be measured?

- Metric 3: ERO Operations. (Regional Entity Oversight plans and ROP adherence.) The “Threshold” metric simply requires the ERO Enterprise management to implement agreed-upon audit report recommendations. The “Target” metric is to adhere with Rules of Procedures. These are minimum expectations. More broadly, we look for Metrics and Measures demonstrating that Regional Entities are committed to the ERO Strategic Plan and to achieving much greater consistency in business practices, procedures and outcomes across the regions. Our hope is that the ERO Enterprise Strategic Plan and Metrics do not complicate the alignment process.

Thank you for the opportunity to provide this policy input.