NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

ATTACHMENT 2

TO

THREE-YEAR ERO PERFORMANCE ASSESSMENT

STAKEHOLDER AND REGIONAL ENTITY

COMMENTS AND RECOMMENDATIONS

NERC DISCUSSION OF COMMENTS AND RECOMMENDATIONS

AND SPECIFIC NERC ACTIONS

July 1, 2009

Attachment 2
To
NERC Three-Year ERO Assessment

This Attachment 2 summarizes comments and recommendations[1] from Regional Entities and other interested entities for improvement of NERC's operations, activities, oversight and procedures in each of its principal program areas, and provides NERC's responses to these comments and recommendations as well as specific actions NERC plans to take or is taking in response to these comments and recommendations.

[1] Includes (1) comments and recommendations submitted in response to the initial stakeholder survey and initial comments and recommendations from the Regional Entities ("Round 1 Comments"); and (2) written comments and recommendations submitted prior to the May 5, 2009 Member Representatives Committee meeting, oral comments made at that meeting, Regional Entity recommendations in the May 14, 2009 draft "Joint Regional Entity Self-Assessment," oral comments and recommendations made at the May 19, 2009 workshop, and written comments submitted in response to the April 27, 2009 and May 15, 2009 postings of the draft three-year assessment report (collectively "Round 2 Comments").

A. Reliability Standards Development

1. Focus existing Reliability Standards and Reliability Standards development on areas that will lead to the greatest improvement in bulk power system reliability.

Stakeholders offered a number of comments regarding the large number of Reliability Standards that exist and are under development by NERC. Three fundamental stakeholder recommendations emerge from these comments: (1) focus the development of new Reliability Standards on those that will lead to the greatest improvement in reliability; i.e., address the greatest risks of wide-area cascading outages; (2) reduce the number of existing Reliability Standards to just those that have a critical impact on reliability of the bulk power system and convert the remaining Reliability Standards to guidelines; and (3) develop a more systematic process for prioritizing new Reliability Standards development projects based on risks to the bulk power system.

Commenters indicated that the number of Reliability Standards projects currently underway is overwhelming the ability of many stakeholders to participate on Reliability Standards drafting teams and to comment on and ballot proposed Reliability Standards. Commenters noted that this also causes delay in the development of Reliability Standards due to the demands on industry volunteers to serve on standard drafting teams. Finally, commenters stated that everything cannot be a priority and that we need to prioritize work on just those Reliability Standards that will yield the biggest benefits to bulk power system reliability. Round 2 commenters generally agreed with the Specific NERC Actions listed below.

Regional Entities commented that NERC should, on a priority basis, finalize its performance requirements necessary for the development of the regional fill-in-the-blank reliability standards so that Regional Entities may expedite completion of any necessary regional reliability standards. Regional Entities added that NERC should prioritize its reliability standards development activity and compliance review by focusing on those standards that are performance-based, rather than documentation-based, and that have the greatest potential to mitigate risk to reliability, and consider reformulating less critical standards into guides or technical references.

Regional Entities also commented that there is a benefit to developing stronger linkages between Reliability Assessments, Compliance, and Reliability Standards development. These benefits include a better understanding of compliance requirements and addressing emerging issues that may require accommodation in future Reliability Standards (e.g. issues identified in long term assessments).

<u>Discussion of Comments</u>

NERC currently has 28 active Reliability Standards development projects and eight interpretations of existing Reliability Standards underway, not counting Reliability Standards in the balloting or field test stage, or those pending regulatory filing. Most of these Reliability Standards projects were initiated to: (i) clean up and clarify language in the original Version 0

Reliability Standards for compliance monitoring purposes, or (ii) address directives in FERC orders on Reliability Standards submitted by NERC for approval. FERC issued a number of directives in Order 693 that it believes are necessary to bring NERC's Reliability Standards up to the level necessary to provide for an Adequate Level of Reliability. A significant number of the current Reliability Standards projects are aimed at addressing these directives. Very few of the current Reliability Standards projects address new, high priority reliability issues that were driven by findings from the Event Analysis or Compliance programs.

NERC remains committed to developing Reliability Standards that deliver an Adequate Level of Reliability. NERC's three-year Reliability Standards Development Plan serves as the foundation upon which Reliability Standards development efforts are undertaken. The primary reason for developing the annual 3-year Reliability Standards Development Plan is in fact to prioritize Reliability Standards development activity, both new Reliability Standards and revisions to existing Reliability Standards. The initial 3-year plan was developed in 2006 and has been updated annually since then. The plan is the management tool that guides, prioritizes, and coordinates revision or retirement of existing Reliability Standards and the development of new Reliability Standards. The initial plan was focused primarily on making modifications to NERC's initial set of Version 0 Reliability Standards. Starting in 2007, the plan's focus was expanded to begin identifying more proactively those projects needed to fill reliability gaps. While the initial plan was developed by the Standards Program staff, beginning in 2007 a concerted effort was undertaken to reach out not only to all the program areas within NERC, but to NERC's technical committees and industry groups, seeking input on the identification of the need for new or revised Reliability Standards.

The plan objectives include:

- Addressing remaining recommendations resulting from the investigation of the August 14, 2003 blackout that called for new or revised Reliability Standards.
- Addressing comments from industry, FERC, and others suggesting improvements to each Reliability Standard, including those comments received from industry stakeholders during public comment periods.
- Addressing quality issues to ensure each Reliability Standard has a clear statement of purpose, and has outcome-focused requirements that are clear and measurable.
- Ensuring measures and compliance elements are aligned to support the requirements within the Reliability Standards and follow definitions outlined in the Reliability Standards template.
- Reorganizing the Reliability Standards more logically based on topic and removing redundancies.
- Eliminating requirements that do not have an impact on bulk power system reliability; retiring redundant requirements; retiring or converting (into guidelines) lower level "facilitating" requirements that are already measured through compliance with higher level requirements; and moving basic "capability" requirements that are routinely used to the certification processes.
- Addressing other pending proposals for new Reliability Standards.
- Improving Reliability Standard requirements by incorporating approved interpretations.

- Incorporating feedback from other NERC program areas such as Compliance Monitoring and Enforcement, Reliability Assessments, and Event Analysis.
- Identifying less well-defined issues ("variables") that could lead to Reliability Standard development activities in the Reliability Standards Development Plan timeframe.
- Satisfying the requirement for a five-year review of all Reliability Standards.
- Addressing the "fill-in-the-blank" Reliability Standards.

The NERC Standards Committee, comprising industry representatives, assists NERC staff in prioritizing the projects that are included in the Reliability Standards Development Plan, which is ultimately approved by the NERC board. The Standards Committee also makes a determination on whether to accept each new SAR that is proposed. Under the existing Reliability Standards Development Procedure, NERC staff does not have the authority to "reject" a SAR for a proposed project; this authority rests with the Standards Committee. The Standards Committee's Process Subcommittee has a task force that is currently working to identify a "filter" for use in determining whether a proposed SAR should be accepted for development.

NERC continues to believe that the Reliability Standards Development Plan is the appropriate vehicle to focus and prioritize its Reliability Standards development activities. While there has been significant input received from regulatory authorities regarding improvements to Reliability Standards, there has not been commensurate input provided from the stakeholder community when presented with opportunities for input into the annual update of the Reliability Standards Development Plan. Furthermore, there has been reluctance expressed by Commission staff regarding proposals to remove "facilitating" requirements (such as the requirement to provide continuous monitoring) from the Reliability Standards that were approved in previous Orders, or to move basic "capability" requirements (such as the requirement to have monitoring capability) from the body of a Reliability Standard into the Organization Registration and Certification processes.

Taken in the aggregate, the stakeholder comments suggest a need for NERC to embark on a program to review all existing, FERC-approved Reliability Standards to: (i) eliminate Reliability Standards that are not essential to the reliability of the bulk power system (e.g., needed to prevent cascading outages); (ii) reduce "less significant" Reliability Standards to a lesser category, such as operating guides, policies or criteria; and (iii) remove documentation-related requirements from the requirements of Reliability Standards that can be violated, and make them instead compliance measures or some other component of the Reliability Standards that is not subject to findings of violation and imposition of penalties. NERC believes that in the spirit of paperwork reduction that this is a worthwhile endeavor, but one that should be pursued only as time and available resources allow.

NERC has, however, developed specific initiatives to identify possible "high impact" Reliability Standard development projects that may have significant impact on the reliability of the bulk power system. For example, NERC has developed a broad-based reliability initiative that addresses lessons learned from Event Analysis activities in the area of system protection and control. This initiative identifies a compendium of system protection and control issues that have contributed to many system events. The analysis of these events is providing the technical foundation for new Reliability Standards development activities. These projects focus efforts on

issues that have been known to cause bulk power system events and are therefore directly related to the improvement of reliability. Further, information from this initiative can be used to evaluate which Reliability Standards and standards requirements are most critical to bulk power system reliability.

Another source of "high impact" Reliability Standards development and modification projects is NERC's ongoing efforts to address the issues raised by Commission Order No. 706, namely the modification of Critical Infrastructure Protection (CIP) Reliability Standards to protect the electricity sector critical infrastructure from malicious cyber attack. NERC's multi-phase project to implement changes to the CIP Reliability Standards includes a thorough evaluation of the National Institute of Standards and Technology's (NIST) framework to identify improvements to protecting critical assets on the grid.

Specific NERC Actions

a. Continue to utilize the annual Reliability Standards Development Plan to prioritize and guide Reliability Standards development activities.
b. Continue outreach efforts to obtain feedback from industry stakeholders as well as from the NERC program areas, especially Compliance Monitoring and Enforcement, Reliability Assessment and Performance Analysis, and Event Analysis, for use as input into the 2010-2012 version of the Reliability Standards Development Plan, which is to be considered for approval by the board in November 2009, and in subsequent versions of the development plan.
c. Complete the Standards Committee activity to identify administrative requirements in the current set of Reliability Standards and provide these as input (as candidates to be removed from the Reliability Standards) to the 2010-2012 version of the Reliability Standards Development Plan.
d. Develop and begin implementing a plan that includes engagement of the regulatory authorities to convert the existing set of Reliability Standards and requirements to a smaller set of critical performance-based Reliability Standards. [Ongoing]
e. Develop a list of all outstanding FERC Reliability Standards directives and a prioritization process for Reliability Standards development that strikes a balance between regulatory directives, industry input, and feedback on reliability performance from the Event Analysis, Reliability Assessment, and Compliance programs. [by December 31, 2009]
f. Continue to use more broad-based initiative approaches, like the System Protection Initiative and NERC's efforts to address in Reliability Standards development the issues identified by the Commission in Order No. 706 to protect the critical electric infrastructure from malicious cyber attack, to identify and address requirements for improving bulk power system reliability that would be pursued in projects to develop new or revised Reliability Standards. [Ongoing]
g. Conduct a technical conference with invited subject matter experts to assess conformance of existing Reliability Standards to the stated reliability principles and to the definition of Adequate Level of Reliability [by June 30, 2010].

2. Accelerate the Reliability Standards Development Process.

Stakeholders commented that the Reliability Standards development process, including the process for developing Reliability Standards interpretations, needs to be made more timely and efficient. At the same time, however, comments also acknowledged the continuing need for adequate opportunity for stakeholder input and participation in order to develop high-quality, technically sound Reliability Standards. Stakeholder suggestions included reducing comment periods, instituting a more well-structured project management process and effective project management, and closer adherence to the published Reliability Standards Development Plan.

Stakeholders also commented that NERC's Reliability Standards Development Procedure as it currently exists requires substantial time to implement. As it is currently applied, the procedure is seem as a "one size fits all" process, whether dealing with a new Reliability Standard addressing a new topic, a change to one requirement in an existing Reliability Standard, or responding to a request for interpretation.

Discussion of Comments

NERC continues to press forward to best utilize the industry's technical expertise and resources in developing Reliability Standards. The commenters acknowledge the balance that is required and desired between expediency of the effort and the quality of the product. NERC acknowledges that its Reliability Standards development process is applied as a "one size fits all" process for any Reliability Standard change, whether that be a new Reliability Standard addressing a new topic or a change to one requirement in an existing Reliability Standard. NERC agrees that it and the industry need to revisit their thinking regarding the treatment of Standards Authorization Requests to recognize that different, and more effective, approaches may be possible for modifying or creating Reliability Standards depending on the nature of the SAR.

Additionally, the current construct for responding to requests for formal interpretation requires two separate and distinct development activities: one to respond to the interpretation itself, which includes assembling a team through balloting, followed by a second activity to modify the Reliability Standard to incorporate the interpretation. With the support of the industry stakeholders, NERC could implement a new or modified development process to address narrowly-defined standard changes such as those that result from interpretations. This proposed process would not "require" the full existing Reliability Standards development process to be implemented, would be more efficient, and would not sacrifice quality.

Further, NERC acknowledges the length of time it takes to complete the projects in the Reliability Standards development plan and agrees with commenters that enhanced project management skills by the team leaders and NERC staff coordinator would to some extent mitigate this concern. This effort is collaborative and the standard drafting team must be prepared to commit to a realistic schedule and actively work to meet it. The Standards Process Subcommittee of the Standards Committee is actively engaged in reviewing ways to improve the overall Reliability Standards development process, including changes to expedite Reliability Standards development. However, the Reliability Standards Development Procedure as it

currently exists requires substantial time to implement; significant reductions to the time to complete a project cannot be expected without fundamental structural changes to the procedure.

A number of Round 2 commenters disagreed with NERC's initial suggestion (in the April 27, 2009 draft) to not require a recirculation ballot if the initial ballot received an 85% approval threshold even though negative ballots included comments on the proposed standard. Commenters acknowledged that this would make the balloting time shorter but does not provide significant improvements to the standards time-line. The benefit of the re-ballot is to provide entities with the opportunity to see the negative comments and determine if they have identical concerns which they did not originally consider. In the end the product produced through the existing process is better because it gives stakeholders the opportunity to review and if necessary change their ballots. Similarly, Round 2 commenters disagreed with the initial suggestion to require that negative ballots must include comments in support of the negative vote. Based on these Round 2 comments, NERC has deleted these actions from the Specific NERC Actions list.

Implementing the Specific NERC Actions below will add flexibility to the Reliability Standards development process that will allow Reliability Standards and interpretations to be developed and approved more quickly and reduce the resource requirements on NERC and the industry.

Most of the Specific NERC Actions listed below aimed at expediting Reliability Standards development will require formal changes to the Reliability Standards Development Procedure. The board will direct the Standards Committee and its Standards Process Subcommittee to consider these suggested actions and develop proposed changes to the Reliability Standards Development Procedure to incorporate them.

<u>Specific NERC Actions</u>

a. Standards Authorization Requests
    i. For narrowly focused requests, post Standards Authorization Requests (SARs) without a comment period or for a single 15-day comment period without a requirement for the requester to respond to all comments individually.
    ii. For proposed Reliability Standards implementing new technical concepts, require a technical foundation document (i.e. research paper) to be developed before a SAR is accepted, not concurrent with or after acceptance.
    iii. Provide the option for a requestor to submit a draft Reliability Standard along with the request to develop a new or revised Reliability Standard.

b. Informal Comment Periods
    i. Permit standard drafting teams to use "informal" comment periods for feedback on concepts or information used to develop Reliability Standards requirements (but not for comments on proposed requirements) where they are not required to respond to the individual comments. [Changes to Section 300 of the NERC ROP and/or Appendix 3A – Reliability Standards Development Procedure may be necessary or desirable.]

c. Requirements
   i. Reinforce with the standards drafting teams the need to fully address regulatory directives during development activities such that subsequent modifications to the standards are not necessary, thereby reducing future workload. [Ongoing]

d. Ballots
   i. Permit multiple initial ballots without the need for multiple 30-day pre-ballot review periods. Permit modification to the balloted Reliability Standard between these multiple initial ballot periods if the ballot results and associated comments indicate such modifications will provide for continuous improvement to the Reliability Standard without lowering the thresholds for performance needed to support reliability [Changes to Section 300 of the NERC ROP and/or Appendix 3A – Reliability Standards Development Procedure may be necessary or desirable.].

e. Process Administration
   i. Give the NERC Standards Committee the option to appoint a single standard drafting team that is responsible for both SAR and Reliability Standard drafting development.
   ii. Review the Reliability Standards development process to identify, eliminate, and/or modify steps that are not explicitly required by ANSI to maintain accreditation – by December 31, 2009. [Changes to Section 300 of the NERC ROP and/or Appendix 3A – Reliability Standards Development Procedure may be necessary or desirable.]
   iii. Implement a streamlined single topic development process to correct a narrowly focused Reliability Standard deficiency without obligating a follow-up Reliability Standards development activity – by June 30, 2010. This process could be used for making conforming changes to Reliability Standards as a result of interpretations, etc. [Changes to Section 300 of the NERC ROP and/or Appendix 3A – Reliability Standards Development Procedure may be necessary or desirable.]
   iv. Explore how other ANSI standard development organizations implement their standard development processes to identify possible improvements to NERC's process, including the supermajority voting structure – by October 1, 2009.

f. Training and Support
   i. Conduct a detailed pre-kickoff session between NERC staff, standard drafting team chairs and vice-chairs, subject matter experts, and regulatory authority staff (if regulatory directives for improvement are involved) to discuss more fully the technical expectations of a Reliability Standard project and roles and responsibilities of the participants. [Ongoing]
   ii. Provide training for NERC staff coordinators in team-building, facilitation, and consensus-building skills – by October 1, 2009.
   iii. Provide enhanced training to the standard drafting team chairs and vice-chairs to ensure that they convey their expectations clearly and effectively to drafting team members.
   iv. Assign technical writers, regulatory specialists, or have legal support available as focused resources for standard drafting teams dealing with challenging requirements or directives.

v. At the discretion of the standard drafting team chair, permit a NERC-assigned legal or technical writer to draft Reliability Standard language based on the standard drafting team's discussion and direction.
vi. With permission of the standard drafting team chair, allow NERC staff coordinator to provide a straw man draft Reliability Standard in advance of the first standard drafting team meeting to optimize effective team discussion.

3. Promote, encourage, and facilitate participation by smaller entities.

Stakeholders commented that only the larger, vertically-integrated utilities are able to effectively participate on standard drafting teams or in the Reliability Standards development process, because only these entities have the staff resources to commit people to these teams. Smaller entities with fewer resources are effectively precluded from participating on standard drafting teams and even from reviewing drafts and participating in the commenting and balloting processes. The process needs to be made more user friendly for all stakeholders.

Discussion of Comments

NERC is sensitive to the industry resource requirements needed to support its Reliability Standards development activities and agrees that further outreach and communications to be more inclusive is appropriate. Over half of all NERC Reliability Standards activities are already conducted via conference call or web-ex but additional communication to those not directly participating on a standard drafting team or on the NERC Standards Committee would be helpful. NERC opens its standard drafting team servers to any interested party who requests information about a specific standard drafting team.

Specific NERC Actions

a. Encourage active participation by industry trade groups, especially APPA, NRECA and EPSA in the Reliability Standards development process to foster outreach to and solicit increased participation by smaller entities and/or representatives of their interests. [Ongoing]
b. Develop increased project communications to enable all stakeholders to understand the changes to Reliability Standards and the expectations therein for registered entities. [Ongoing]
c. Schedule meetings at more centralized locations to minimize the overall time burden from required travel and continue to conduct over half of standard drafting team activities by conference call or web-ex. [Ongoing]

4. Role of Regulatory and NERC staff in Reliability Standards development.

Stakeholders commented that FERC staff has been permitted to exert undue public and non-public pressure on the Reliability Standards development process and been given too much deference in the Reliability Standards development process. Stakeholders also commented that FERC directives are sometimes inconsistent with sound engineering judgment, and that NERC should seek rehearing or appeal of those directives that undermine the Reliability Standards development process, are technically incorrect, or show limited or no gains for reliability.

In addition, there are sometimes differing opinions between the NERC Standards Committee and NERC staff regarding NERC staff role in the Reliability Standards development process. In particular, it has not been made explicitly clear what the board expects of NERC staff when balloted Reliability Standards are submitted to the board for adoption.

Discussion of Comments

The relationship between NERC staff, FERC staff, and industry participants in the Reliability Standards development process has evolved over the past three years. FERC Order No. 693 set forth a foundation for Reliability Standards improvement that NERC, as the ERO, is obligated to address where specifically directed to do so. For its part, FERC, in general, has chosen to be actively engaged forthrightly in its reliability oversight activities, and the industry stakeholders seek more autonomy in the self-regulatory model for Reliability Standards development. The dichotomous views create the atmosphere for tension when standard drafting teams are engaged in developing Reliability Standards that include FERC directives. NERC has experienced this impact as it balances its obligation to deliver Reliability Standards that address the regulatory directives while respecting the technical expertise of those comprising the standard drafting teams. To better clarify expectations in this regard, the NERC Standards Committee in March 2009 approved a document entitled *Roles and Responsibilities: Standards Drafting Team Activities*, which incorporates the policy guidance from the NERC Board regarding response to FERC staff involvement in standard drafting team activities. In this regard, FERC staff participants in standard drafting team activities are to be treated like any other observer participant.

Additionally, Canadian stakeholders and cross-border Regional Entities expressed concern regarding the willingness of Canadian regulators and stakeholders to accept and adopt Reliability Standards that may have been imposed or dictated by the U.S. regulator, FERC. These stakeholders expressed concern that the perception that Reliability Standards content is being driven by FERC rather than developed through the industry consensus process threatens the ability to adopt and implement a uniform set of Reliability Standards that will apply to the entire interconnected North American bulk power grid.

NERC agrees with commenters that it should seek rehearing or appeal of directives that are of limited or no value to reliability. NERC has demonstrated its willingness to do so with regard to several orders after consultation with the standard drafting teams responsible for the Reliability Standards. However, a more focused effort is required to better engage the industry to obtain input into NERC's decisions in this regard within the 30 day window of opportunity for filing a request for rehearing or clarification.

Specific NERC Actions

a. NERC board to review and make recommendations for changes to the *Roles and Responsibilities* document approved by the Standards Committee in March, 2009 that identifies standard drafting team response to regulatory authority involvement in standard development activities. [Immediately]

b. NERC board to make clear its desire to have NERC staff provide the board with a technical evaluation of Reliability Standards proposed for adoption by the board, assurance that the Reliability Standards can be complied with and are auditable, and under what circumstances the board is seeking this input from staff.
c. Reinforce to standard drafting teams that they must develop an approach consistent with regulatory authority directives or, in the alternative, an equal and effective approach to that identified in the regulatory authority directives; if different than a FERC directive, the team must thoroughly document their technical rationale for doing so. [Immediately]
d. Conduct discussions with FERC staff upon issuance of a Notice of Proposed Rulemaking concerning adoption of a proposed Reliability Standard or group of Reliability Standards to ensure an understanding of the Commission's intent before issuance of a final order.
e. Develop a focused process to obtain feedback from the industry stakeholders regarding newly-issued orders and rulings on proposed Reliability Standards to determine if filing a request for rehearing or clarification is appropriate within the 30-day window.

5. Better align functional categories with current industry/market structure.

Stakeholders commented that the Functional Model, Compliance Registry Criteria and the requirements in the Reliability Standards do not comport well with the variety of business models and sizes of entities now represented by the owners, operators and users of the bulk power system, particularly in Regions now characterized by competitive electricity markets. These documents need to be better aligned to ensure that appropriate registration criteria are being applied and that Reliability Standards reflect the registration.

Discussion of Comments

NERC's Reliability Standards must work irrespective of the business models that exist within the industry or the size of the entities held to compliance with the Reliability Standards. The focus on performance expectations and the core reliability functions establish the basis for reliable operation of the bulk electric system. The core functions must be performed in order for reliability to be maintained and are at a basic functional level so as not to predestine the organizational or market structure that must exist to comply with the expectations embodied in the Functional Model and carried forth in the Reliability Standards themselves.

The registration criteria do not drive the Reliability Standards. The converse is true. If, in the determination of the standard drafting team and as approved through the industry ballot process, a particular activity requires the extension of Reliability Standards applicability beyond the criteria established in the NERC *Statement of Compliance Registry Criteria*, the standard drafting team has the latitude to do so but must provide the technical justification for why the extension is warranted. If the resulting new or revised standard identifies a new category of functional entity, that new functional entity and its characteristics will be added to the *Statement of Compliance Registry Criteria* and entities meeting the criteria will be registered for the new function.

Specific NERC Actions

a. The Functional Model Working Group (FMWG) will complete its Version 5 revisions that address key areas such as the planning function, the load serving entity, distribution provider function, and the interchange function, which changes will be incorporated into NERC reliability standard applicability. The target date for completion of Version 5 is October, 2009. Projects for implementing the changes related to the FMWG Version 5 activity into the Reliability Standards will be incorporated into the next three-year Reliability Standards Development Plan.
b. Implement the recommendations from the Ad Hoc Group for Generator Requirements at the Transmission Interface. The group is scheduled to complete its work by the end of 2009.

6. Provide clear measures for each standard requirement.

Stakeholders commented that Reliability Standards should include Measures corresponding to all Requirements and more clearly state what Registered Entities need to show to demonstrate compliance, including the documentation requirements, and that Reliability Standards should include examples of documentation that can be used to substantiate compliance. Stakeholders also commented that Reliability Standards need to focus more on the performance objectives necessary to achieve reliability and less on documentation requirements.

Discussion of Comments

NERC agrees with the general comments, however very prescriptive measures may force entities to change their existing processes and procedures without any real improvement to reliability. As Reliability Standards are developed in accord with the Reliability Standards Development Plan, each requirement must include an accompanying measure. Standard drafting teams are encouraged to provide examples of acceptable evidence without being overly prescriptive unless there is only a single way of demonstrating compliance with a requirement.

Specific NERC Actions

a. Work with the Compliance program to ensure that Measures (1) directly correspond to each requirement of each standard describing what an entity has to do to comply, (2) include examples of acceptable evidence without being overly restrictive, and (3) identify what documents are necessary to maintain and produce to demonstrate compliance. These expectations should be conveyed to stakeholders in the Reliability Standard Audit Worksheets (RSAWs) or through other suitable approaches.

7. Enhance Stakeholder Communications.

Stakeholders suggested that NERC provide a forum on its website on which stakeholders could communicate with each other on Reliability Standards-related topics.

Discussion of Comments

NERC agrees with the need to enhance stakeholder communications. NERC has taken positive steps toward better engaging the industry through increased web-ex opportunities on individual projects. However, NERC must do a better job of keeping its Website updated so the industry has the latest and correct information on Reliability Standards activities. Additionally, NERC also agrees that an industry forum or blog for stakeholders to exchange thoughts and ideas would facilitate greater levels of interaction and engagement in NERC's processes.

Specific NERC Actions

a. Continue to conduct open webcasts to present and obtain feedback on proposed concepts; for example, to stakeholders as Reliability Standards are being developed.
b. Provide the industry stakeholders with a NERC forum or blog to enable them to communicate with regard to Reliability Standards under development and on Reliability Standards activities in general. Target to provide is 2010.

8. Expedite completion of "fill-in-the-blank" Reliability Standards.

Regional Entities commented that NERC, in conjunction with Regional Entities, should refocus their collective efforts on expediting the "fill in the blank" Reliability Standards and place a hold on any non-emergency Reliability Standards. The speed at which the industry can absorb new Reliability Standards is resource limited. The priority should be to fix the "fill in the blank" Reliability Standards (those Reliability Standards not originally accepted by FERC), and Reliability Standards that address emerging issues or risks found through Event Analysis. The Fill-in-the-Blank Reliability Standards should be revised to remove the Fill-in-the-Blank components.

Discussion of Comments

NERC's current three-year Reliability Standards development plan, discussed in more detail under Issue #1, includes addressing the "fill-in-the-blank" Reliability Standards."

Specific NERC Actions

a. Address the "fill-in-the-blank" Reliability Standards" as part of NERC's three-year Reliability Standards Development Plan.

B. Organization Registration and Certification

1. Raise threshold criteria for requiring entities to be registered.

Stakeholder comments suggest that the registration criteria have very low thresholds that capture small to medium-sized entities that have no impact on bulk power system reliability. Comments recommend that registration criteria be modified to more appropriately determine responsibility to register based on material impact to the reliability of the bulk power system.

Some Regional Entities expressed concern that the time and resources spent on monitoring and enforcing compliance for smaller entities with minimal impact on the bulk power system is distracting focus and resources from monitoring entities with significant impacts on bulk power system reliability.

Regional Entities commented that NERC and the Regional Entities, in consultation with stakeholders, should review the registration criteria to determine if there should be a different threshold for materiality to the reliability of the bulk power system and to determine if compliance resources could be better prioritized by modifying the registration criteria. Regional Entities also recommended that NERC consider a more precise long-term solution of increasing the granularity of registration so that it focuses on the requirement level and includes registration by bulk power system facility, or classes of facilities.

One Regional Entity also commented that there have been numerous questions surrounding the inclusion of generators in the NERC Compliance Registry, and believes improvement in reliability could be made as well as the elimination of confusion and inconsistency in registration criteria if NERC would consider requiring all generators with nameplate ratings greater than 20 MVA, regardless of connection voltages to be included in the NERC Compliance Registry.

Discussion of Comments

The intended purpose of the Compliance Registry is to reasonably and fairly put registered entities on notice of the Reliability Standards with which they will be expected to comply. In cases where some of the requirements in a standard may not apply to a particular entity, given how it has organized and conducts its business, the entity need do nothing in regard to the requirement.

The original basis for NERC's registration criteria for generators reflected FERC orders related to large generators including Order 2003 – Standardization of Generator Interconnection Agreements and Procedures. In that order, FERC specified a 20 MW threshold for interconnecting generators. For loads, NERC used 25 MW as the threshold because 25 MW load was the level that regions and others normally used as a threshold in their transmission system modeling studies.

NERC, in conjunction with the Regional Entities and the Registration Working Group (RWG), reviews the registration categories and criteria on an ongoing basis, based on experience, and makes changes when deemed necessary. This is reflected in the facts that (i) the NERC

Statement of Compliance Registry Criteria is now at Version 5.0; and (ii) registered entities have in fact been removed from the Compliance Registry. In addition, review by NERC or a Regional Entity of the characteristics of individual registered entities or groups of registered entities, and their impacts on the reliability of the bulk power system, can result in registered entities being removed from the compliance registry. For example, in early 2009, FRCC recommended that a number of smaller generators in that Region should be removed from the compliance registry, and NERC concurred in that recommendation.

The RWG, with NERC oversight, is currently administering a survey of registered entities on registration criteria application issues.

Overall, NERC believes that the organization registration process is working well. While the following Specific NERC Actions are worth consideration, they are currently considered low priority actions.

Specific NERC Actions

a. Review existing registration criteria with NERC technical staff for possible changes.
b. Request comments from stakeholders on the existing criteria through the Organization Registration and Certification Subcommittee (ORCS) of the Compliance and Certification Committee (CCC), as well as from the NERC Planning and Operating Committees.
c. Request comments on the existing criteria from the Regional Entities through the Registration Working Group (RWG).
d. Review data from registered entities surveys currently being administered by the RWG with NERC oversight for criteria application issues.
e. Support Regional Entities working through existing procedures; continue the process of responding to specific issues related to registration criteria on a case by case basis.
f. Reinforce to Regional Entities that they can remove entities from the Compliance Registry, but that the Regional Entity must determine that removal of the entity creates no material impact to bulk power system reliability before the entity is removed from the Compliance Registry.
g. If an event analysis finds entities that meet the criteria for inclusion in the NERC Compliance Registry that were not on the Compliance Registry when they were involved in a disturbance, these entities will be immediately added to the Registry for all applicable functions. If an event analysis finds entities that do not meet the criteria for inclusion in the Compliance Registry, but were involved in a disturbance, the event analysis team can recommend to the applicable Regional Entity that these entities be added to the Compliance Registry.

2. Allow registration by requirement.

Stakeholder comments also recommend that registration requirements should be modified to allow entities to register for packages of Requirements that correspond to their activities, rather than be responsible for all Requirements applicable to a functional category to which they are

assigned, since some of the Requirements currently applicable to them may not correspond to their activities. Several Regional Entities have endorsed "registration by requirement."

Discussion of Comments

In general, NERC does not support this approach. The purpose of the Compliance Registry is to reasonably and fairly put registered entities on notice of the Reliability Standards they will be expected to comply with. The combination of the Reliability Standards, with their applicability clauses, the Compliance Registry, and the matrix of requirements and functions provides the registered entities with reasonable notice of the requirements that the registered entities must meet. It is true that some of the requirements in a standard may not apply to a particular entity, given how it has organized and conducts its business. In such cases, if the requirement does not apply, the entity need do nothing in regard to the requirement. In no case is a registered entity being held responsible for compliance with a requirement in a standard that applies to a function for which the entity is not registered. NERC has provided for joint registration agreements, which allow registered entities to allocate particular requirements between or among themselves. But based on NERC's experience during the development of the current registry, there are a myriad of ways that entities organize and carry out their businesses, even within a class of entities that would at first look appear to have a common set of interests. Neither NERC nor the Regional Entities has the detailed knowledge of individual entities to make the judgments necessary to properly and systematically apply registration by requirement. That information is in the hands of the registered entities. In addition, if registered entities were registered only for the requirements that they perform currently, there would be no certain way to keep track of additional requirements that they may take on over time. By registering entities by function, NERC maintains the ability to judge which requirements apply on a case by case basis.

NERC will continue to promote the use of joint registration agreements through the Joint Registration Organization (JRO) option. This option allows registered entities to jointly identify requirements for which they are responsible through an agreement among themselves. Such an approach provides for clarity regarding responsibilities for those entities through voluntary agreements.

Specific NERC Actions

a. NERC will continue to promote the use of JRO agreements.
b. NERC will attempt to identify other solutions short of "registration by requirement" that will address the concerns expressed by stakeholders.

3. Improve consistency across Regional Entities.

Stakeholders indicate NERC needs to do more to ensure consistency among Regions in registration determinations. Some entities with operations in more than one Region commented that similar assets and/or business operations are registered differently from one Region to another due to the Regions' differing interpretations of the reliability functions and registration criteria. Also, stakeholders indicate that the provision for an independent appeals process for

registration and certification as stated in the Rules of Procedure has not been consistently applied.

Discussion of Comments

NERC provides guidance to Regional Entities to ensure consistency in the organization registration process, through the *Statement of Compliance Registry Criteria*. NERC is fully aware of its responsibility to ensure that the registration categories and criteria are applied consistently across the Regions, and in fact has been instructed on this responsibility by the Commission in prior orders. NERC has implemented several successive revisions to the *Statement of Compliance Registry Criteria* to better refine the registration categories and criteria, based on experience. Additionally, any entity that disputes a registration determination by a Regional Entity is entitled to appeal that determination to NERC.

NERC has begun, in conjunction with the Registration Working Group, a project for updating Registered Entity information, including reporting relationships for functional entities. Review of the data from this survey will enable NERC to determine inconsistencies in registration across the regional entities. Target for completion of the project is late summer 2009.

Finally, NERC has established a Regional Operations group, headed by a Director of Regional Operations, to monitor and address with senior Regional Entity management issues of consistency among Regional Entities in all areas, including application of organization registration categories and criteria.

Specific NERC Actions

a. On an ongoing basis, review with Regional Entities current practices for organization registration and provide additional guidance, as necessary, to improve consistency.
b. Complete the project for updating registered entity information [by late summer 2009].
c. Complete the Specific NERC Actions listed in Organization Registration Issue #1.

4. Provide process for single registration for entities doing business in more than one Regional Entity.

Stakeholders recommend there should be a single registration process available for entities that perform the same functions in more than one Region and that the forms relating to registration should be standardized for all Regions.

Discussion of Comments

NERC is working with the Registration Working Group to develop processes and procedures for all issues associated with Multi-Regional Registered Entities (MRRE), including the possibility of a single registration process for those entities doing business in more than one region. An initial draft of the MRRE process is expected to be available in June or July, 2009.

Specific NERC Actions

a. Continue and complete development of the MRRE processes and procedures (initial draft by June-July 2009).
b. Amend the delegation agreements and ERO Rules of Procedure as necessary to include or accommodate such processes and procedures.

5. Improve joint registration procedures.

Stakeholders offered a number of comments and criticisms regarding the joint registration procedures, which included:

- NERC and the Regional Entities have not provided adequate guidance or information on the availability of or criteria for joint registration.
- The existing Functional Model makes it difficult to bifurcate responsibilities for purposes of joint registration.
- The Joint Registration procedures in Rules of Procedure Section 500 need more development with respect to establishing which entity has what responsibilities in a Joint Registration situation.
- The Joint Registration process should be modified since currently it can be used only where the entities have all registered for the same function.
- The NERC Rules of Procedure should provide an alternative registration process for those situations where compliance responsibilities are shared among entities by agreement and formation of a Joint Registration Organization is not required.
- The Joint Registration procedures should be modified to allow parties to develop a matrix assigning responsibilities, rather than the very formal process required by the NERC Rules of Procedure Section 507.

Discussion of Comments

The NERC JRO process is not designed for implementation using the Functional Model. The purpose of the Functional Model is to provide a guide for the development of Reliability Standards. The functional entities identified in the Reliability Standards are the entities required to be registered for those reliability functions. The JRO applicable functions are identified in the NERC Statement of Compliance Registry Criteria. The JRO process is for sharing reliability standard requirement responsibilities for one function between two or more Registered Entities. It is, by design, a formal process to ensure distinct identification of the responsibilities for compliance with Reliability Standards requirements agreed to by each member of the applicable JRO. The process for JRO registration gives the entities included in each agreement some flexibility in the format of the agreement and associated data as long as the formal requirements of section 507 of the NERC Rules of Procedure (ROP) are addressed. Some consistency in the agreements is required due the ROP requirement for NERC to post all JRO information for each JRO agreement. Significant inconsistencies in the posted agreements could lead to confusion in interpretation of the posted data.

However, on an ongoing basis, in conjunction with the Regional Entities, NERC continues to evaluate the JRO procedures for possible clarifications and improvements in light of experience in their application.

Specific NERC Actions

a. NERC will continue, in conjunction with the Regional Entities, to review the joint registration process for possible improvement.
b. NERC will revise presentations used at Regional Entity conferences and workshops to include more detailed information on JRO registration process and procedures.
c. NERC will review the JRO process with the NERC legal department and develop, as applicable, guidelines for JRO registration, including a suggested template for JRO agreements.

C. Compliance Monitoring and Enforcement

1. Put more emphasis on training, education, and assistance regarding what it takes to comply with, and to demonstrate compliance with, Reliability Standards.

Stakeholders commented that NERC and the Regional Entities should provide more interpretations, guidance, and assistance to registered entities on what is required to comply with, and what is sufficient to demonstrate compliance with, Reliability Standards requirements. Stakeholders offered a number of specific suggestions, which included:

- establishing a "Help Line" for questions about CMEP documents, forms and procedures;
- conducting more webinars and generic on-line courses on compliance topics including what constitutes compliance with particular Reliability Standards and examples of adequate documentation to show compliance;
- establishing advisory processes similar to the "No Action Letter" process offered by agencies such as the SEC, IRS and Department of Justice, through which a registered entity may describe a means it proposes to implement to comply with the requirement(s) of a standard, and NERC will advise the registered entity as to whether its proposed actions will constitute compliance with the requirement(s), so that if the registered entity then implements the described means of compliance, it will not be found in non-compliance;
- developing and making available templates of best practices to assist the industry in knowing what is necessary to achieve and demonstrate compliance with Reliability Standards; if a registered entity followed the template, it would be in compliance with the standard;
- making auditor training courses available to the industry;
- identifying best practices being used by registered entities as well as suggestions for improvements based on knowledge gained during compliance audits, such as by issuing periodic reports based on audits of functional entity types identifying best practices found in audits; and
- posting and disseminating "lessons learned" from compliance monitoring and enforcement activities including examples and guidance as to what compliance audits have found to be acceptable and unacceptable in terms of demonstrating compliance with Reliability Standards, even while the specific violations are still being processed (and therefore are not yet publicly posted).

Some stakeholders also expressed concern that the NERC Compliance Program has become a paper chase to find violations and penalties with a "gotcha" mentality, rather than focusing on helping entities to conduct their activities and operations so as to improve bulk power system reliability.

Discussion of Comments

NERC believes that its Compliance Program and the Regional Entity Compliance Programs already provide a considerable amount of guidance to registered entities on what is required to comply with Reliability Standards and to demonstrate compliance, including the Reliability

Standards Audit Worksheets (RSAWs), discussion/description in filed and posted notices of confirmed violations and penalties, and workshops and seminars on compliance (the materials from which are generally posted on NERC and Regional Entity websites and therefore available even to those who did not attend). Nevertheless, NERC agrees that it would be in the best interest of improving reliability to provide additional instruction, assistance and guidance to registered entities in the form of many of the suggestions offered as listed above. For example, consistent with the concept of the "No-Action" letter used by various regulatory bodies, if a registered entity presented to NERC or Regional Entity a hypothetical set of facts or a proposed future action for complying with a standard, NERC or the Regional Entity should be able to provide that registered entity with a determination whether that proposed action would be in compliance with a standard, and if not, why not.

However, NERC believes that it would not be appropriate to comment on whether what a registered entity has already done is in compliance with a standard or not. That is essentially a spot-check on compliance and NERC or the Regional Entity would be obligated under the terms of the current CMEP procedures to issue a Notice of Alleged Violation for any finding of non-compliance.

In light of the stakeholder comments, it may be appropriate for NERC and the Regional Entities to review the means currently used to publicize to registered entities the means of obtaining guidance that are currently available. Additionally, NERC believes that its Training and Education program should develop more documents and programs to educate registered entities on means for complying with Reliability Standards and appropriate documentation to demonstrate compliance. Such programs could include, for example, templates of best practices as mentioned in the comments.

Specific NERC Actions

a. Develop a proposed process or processes by which registered entities can submit hypothetical or proposed means of complying and demonstrating compliance with particular Reliability Standards for review and guidance by NERC. The implementation of any such processes must take into account the impacts on NERC and Regional Entity time and resource constraints.
b. Evaluate and implement ways to make registered entities more aware of means currently available to registered entities to obtain guidance on how to comply with Reliability Standards and how to demonstrate compliance.
c. Promote more assistance by others, including third-party providers and industry trade associations. Consider partnering with industry trade association where appropriate.
d. Increase the offerings of programs and information by the NERC Training and Education program focused on appropriate means of complying with and demonstrating compliance with particular Reliability Standards.
e. Get more compliance cases processed through the system as one means of providing guidance on what is leading to violations.

2. Eliminate the backlog of audit reports and compliance violations so more precedents are available to industry.

Stakeholders commented that the backlog of audit reports and compliance violations is preventing the industry from having a body of audit findings and violation determinations to generate a body of "precedents" that would enable registered entities to better understand what constitutes compliance with requirements and what is needed to demonstrate compliance. Stakeholders also commented that the Regional Entities have inadequate staffing to process the volumes of compliance violations, self-reports, and mitigation plans they are receiving, and that NERC should provide more guidance and oversight of the regions. Finally, stakeholders commented that in order to promote more expeditious and efficient processing of violations, NERC, the Regional Entities and FERC need to clearly delineate their respective roles and responsibilities and work to eliminate duplication and overlap. Regional Entities added that NERC and the Regional Entities should work together to provide a clearer division of responsibilities, both related to the division of performance of statutory functions and oversight of those functions, and to provide effective mechanisms to resolve routine differences.

Discussion of Comments

NERC takes seriously stakeholder concerns about the adverse impacts of the backlog and agrees with stakeholder comments in this regard. NERC is taking a number of steps to streamline its processes and those of the Regional Entities by directing additional resources to the processing of notices of alleged violations, settlements and mitigation plans to completion, in order to improve efficiency and eliminate existing backlogs. The factors that have led to the compliance backlog, and the steps NERC intends to implement to reduce processing times, are described in detail elsewhere in this report. NERC does believe that the processing times for processing notices of alleged violations, settlements and mitigation plans will decrease as NERC and the Regional Entities continue to gain experience with these processes, including better common understandings of what is necessary for a complete record concerning a notice of alleged violation and/or settlement and for the necessary components of a mitigation plan.

The NERC and Regional Entity 2009 budgets provide for significant increases in staffing and resources for their Compliance programs, which will assist in addressing this issue. NERC also plans to negotiate changes to the Regional Delegation Agreements, where needed to: (1) provide specific performance metrics and require consistent application of the CMEP processes as they are implemented by the Regional Entities; (2) provide the option for Regional Entities to invite NERC assistance early in the Regional Entity's processing of notices of alleged violations to ensure the record is complete before the notice is formally transmitted to NERC; (3) continue development of a centralized, common data hub to be used by NERC and the Regional Entities for the collection and management of compliance data and information; and (4) develop and implement a short-form settlement option, to be used for violations of documentation requirements and other administrative requirements, where the registered entity is performing the necessary task required by the standard and the risk to the bulk power system is low.

Greater acceptance and use of the short-form pro forma settlement approach, which requires fewer NERC and Regional Entity resources to process, particularly for newly self-reported or discovered violations, would enable NERC and the Regional Entities to continue to focus

compliance resources on eliminating the backlog. (Although an early version of the short-form, pro forma settlement option is now available, its use by Regional Entities has been very limited to date. NERC staff has been directed to review the scope of that option to allow for expanded use.)

The suggested actions listed below were developed based on comments and suggestions from the May 19 workshop and other "Round 2" comments. They represent what stakeholders and Regional Entities believe NERC should do to improve the speed of processing alleged violations, and to address other compliance program issues, in lieu of NERC becoming more directly involved in the Regional Entities' processes as NERC suggested in earlier posted drafts of this report.

Specific NERC Actions

a. Continue to develop and expand the uniform set of forms, templates and detailed set of processing steps, including "example" documents, which Regional Entities must follow.
b. Establish a more extensive training program for Regional Entity compliance personnel.
c. Develop a "traffic ticket" approach for certain frequently occurring violations that pose lower risk to the bulk power system (e.g., missing documentation and other administrative, low risk violations) by establishing standard penalties and standard mitigation plan elements that can be processed more expeditiously.
d. Explore concept of "non-cited violations" as employed by the Nuclear Regulatory Commission.
e. Develop and promote use of additional "short-form" settlement forms and processes for violations that pose lower risk to the bulk power system.
f. Continue to identify and implement improvements to the management plan for the compliance enforcement program, including the delegated functions.
g. Provide the option for Regional Entities to ask for help and advice in advance of filing Notices of Confirmed Violation, Notices of Penalty, settlement agreement and Mitigation Plans with NERC.
h. Increase NERC and Regional Entity staffing and other resources dedicated to the Compliance programs, including to processing notices of alleged violation, settlements and mitigation plans.
i. Continue development of a common, centralized platform for collection and maintenance of compliance information by NERC and the Regional Entities.
j. Continue to study NERC and Regional Entity compliance processes to identify and implement ways to eliminate duplication and overlap and streamline and shorten those processes.
k. Amend the delegation agreements and ERO Rules of Procedure as necessary to implement or accommodate the proposed actions.

3. Provide more guidance on mitigation plans and process proposed plans more quickly.

Stakeholders suggested that NERC provide more guidance on the type(s) of mitigation efforts that are appropriate for specific types of violations.

Stakeholders also commented that there is too much delay in completing review and approval of mitigation plans. Timely feedback on submitted mitigation plans is important so the entity knows its mitigation activities are appropriate, especially for self-reported violations.

Discussion of Comments

Recent changes to the uniform Compliance Monitoring and Enforcement Program, Appendix 4C to the ERO Rules of Procedure, in response to FERC orders, provide that Regional Entities have 30 days to review and accept mitigation plans and NERC has 30 days to review and approve the plans once received from the Regional Entity. NERC anticipates that implementation of these specific time lines will reduce the processing times for review and acceptance/approval of proposed mitigation plans.

NERC agrees that providing more guidance to registered entities on what constitutes an adequate mitigation plan is appropriate. Such guidance could be provided in the form of templates or lists of appropriate mitigation steps for different types of violations.

Specific NERC Actions

a. Continue to monitor the process for review, acceptance and approval of mitigation plans to ensure timely processing.
b. Develop templates and/or lists of "pre-approved" appropriate mitigation steps for particular types of violations.

4. There is no incentive for registered entities to self-report violations because there is no apparent benefit or advantage to self-reporting.

Stakeholders commented that NERC and the Regional Entities have not been effective in encouraging self-reporting, because (i) self-reports are not processed any more timely than violations reported/discovered through other means, (ii) the administrative process is burdensome even for minor self-reported violations, so the registered entity does not experience reduced administrative time and cost for self-reporting and (iii) there is no indication that the fact of self-reporting results in any reduction in penalties.

Discussion of Comments

The fact that a violation is self-reported does not mean the violation was simple and easy to process. Self-reported violations may contain complicated facts that require the Regional Entity to spend considerable time reviewing the circumstances surrounding the violation as well as the mitigation plan to correct it.

For self-reported or self-certified violations of a minor or administrative nature, the short-form settlement, if used by registered entities, should result in shorter processing times. NERC specifically designed the short form settlement process for self-reported and self-certified violations, because such cases require less effort to develop a record.

The determination of the appropriate level of penalty to impose for a specific violation depends on the unique set of facts and circumstances leading to that violation. Because self-reporting is only one of many factors that is taken into account in making these determinations, NERC believes it is impractical and inappropriate to indicate in final penalty determinations a specific dollar amount of credit given for self-reporting (or any other mitigating factor). NERC does provide in the final Notice of Violation and Proposed Penalty a statement of all the factors considered in determining the proposed penalty, including whether the violation was self reported. Further, Notices of Violation and Proposed Penalty or Sanction that have been issued for self-reported violation have in fact stated that the self-reporting of the violation was a factor taken into account in mitigating the penalty, in accordance with the NERC *Sanction Guidelines*.

Specific NERC Actions

a. Continue to offer the short-form pro forma settlement approach (as revised) for self-certified or self-reported minor violations and those of an administrative nature.
b. At such time as a significant sample of enforcement actions have been completed, evaluate such actions overall for the impact on self-reporting.

5. Focus audits on whether the registered entity's actual performance demonstrates compliance rather than on documentation and provide recommendations for improvement.

Stakeholders commented that the NERC and Regional Entity compliance programs are unduly focused on documentation and the wording of documentation rather than on actual performance that enhances reliability of the bulk power system. Commenters also stated that compliance auditors are too focused on literal application of Reliability Standards requirements and the Reliability Standards Audit Worksheets (RSAWs) and are unwilling to objectively examine the registered entity's evidence or consider alternative evidence demonstrations of compliance. Finally, commenters stated that the audit process does not give the registered entity the opportunity to point out items that demonstrate compliance or to explain their interpretation of the standard or rationale for why they believe they were in compliance.

Discussion of Comments

NERC is obligated to consider evidence demonstrating compliance with all the requirements that appear in approved Reliability Standards if they are subject to an audit, including requirements that documentation be maintained, until and unless the Reliability Standards are changed. Demonstration of compliance with the requirements requires some form of documentation or other evidence for the auditor to evaluate that shows or explains how the entity complied with the requirement. Among other things, the RSAWs provide for written explanations under oath (verified) to be provided and accepted as evidence of compliance. Additionally, under the uniform CMEP, the registered entity receives a draft compliance audit report and has the opportunity to submit comments on it, which provides the registered entity the opportunity to point out information demonstrating compliance that the entity believes the auditors overlooked or failed to sufficiently consider. The Regional Entity is then required to consider the registered entity's comments before issuing the final compliance audit report.

From the violations of Reliability Standards identified to date, nearly 3 of every 4 are self-reported and nearly 50% of all violations are documentation related. However, NERC is seeing a tapering off of these kinds of violations as registered entities incorporate the necessary information in their procedural documents as part of implementing approved mitigation plans, or from lessons learned from seminars and workshops or from reviewing notices of confirmed violations, settlements and mitigation plans of other entities.

As described above, compliance auditors are instructed to consider alternative means of compliance and demonstration of compliance as provided by the registered entity. However, except by observation in those compliance audits in which NERC personnel participate, NERC can only be aware if auditors are failing to consider alternatives if this is reported on the registered entity's post-audit questionnaire.

Specific NERC Actions

a. Continue to revise the RSAWS to improve their quality and usefulness.
b. Continuously review compliance audit processes and post-audit questionnaires to verify that the audit team provided the registered entity with adequate opportunity to explain and demonstrate how the registered entity has complied with the applicable requirements.

6. Provide more uniformity and consistency in audits between Regional Entities and between different audit teams.

Stakeholders commented that differences persist among Regional Entities in the interpretations of Reliability Standards, enforcement, and audit practices, including timing and type of documentation requests; the need to prove the negative; quantity and level of detail in evidence accepted; interpretation of specific Requirements; and willingness to consider alternative evidence presentations. Stakeholders indicated that similar circumstances and documentation considered compliant by one audit team were not found compliant by another audit team.

Stakeholders recommended that NERC take a stronger, leadership role in eliminating these differences and in ensuring uniformity and consistency across all Regions, including the development and implementation of a common set of auditing procedures and training that are consistently implemented across all Regions. They also suggested that greater use of NERC audit team members would promote greater inter-Regional consistency.

Finally, stakeholders suggested that NERC establish a hotline or FAQ site for audit teams to get prompt answers to questions that arise during audits, which would further promote consistency.

Discussion of Comments

NERC currently provides Regional Entity auditors with a compliance auditor's manual, pre-audit questionnaires, RSAWs, and auditor training before an auditor can participate on an audit team. In addition, NERC personnel observe Regional Entity compliance audits as time and resources permit (approximately 8% of all audits), which helps to promote consistency both among audit teams within a Region, and among audit teams across Regions. NERC acknowledges that

additional efforts (which would require more resources) could be devoted to ensuring uniformity and consistency, including increased training time for auditors, increased NERC participation in (observation of) Regional Entity audits, more feedback to Regional Entity compliance audits from NERC-led audits, and increased discussion in compliance audit reports of how compliance with Reliability Standards was demonstrated and what evidence was lacking for those requirements for which the auditors found non compliance.

NERC has recently established a Regional Operations group, headed by a Director of Regional Operations, within the Compliance program whose responsibility is to monitor the Regional Entities' implementation of their compliance programs, including audits, with a focus on (among other things) ensuring consistency.

NERC has considered development of a hotline or FAQ site for audit teams as suggested in the comments, but implementation of such a site will require additional funding resources.

Specific NERC Actions

a. In conjunction with the Training and Education program, review the need for additional auditor training, including remedial training or counseling in cases where specific problems are identified.
b. Develop templates or instructions for compliance audit reports that require specific discussion of how compliance was demonstrated by the registered entity and of what evidence was lacking in determinations of non-compliance.
c. Continue to monitor the Regional Entities' implementation of their compliance programs, including audits, through the Regional Operations group.
d. Amend the delegation agreements and ERO Rules of Procedure as appropriate to accommodate and support the proposed changes to ensure consistent implementation of the CMEP processes across Regional Entities.

7. Improve the efficiency and effectiveness of the compliance audit process.

Stakeholders commented that the current compliance audit process, which requires documentation of compliance with numerous Requirements for every day of the past 3 to 6 years, is extremely burdensome on registered entities, and is diverting resources from forward-looking activities to improve reliability. Among the comments and suggestions received regarding the audit process were:

- The Compliance audit program should be broken down into a series of more frequent audits that cover fewer Reliability Standards in each audit and focus on specific areas of the applicable Reliability Standards in each audit, but over the entire 3-year or 6-year cycle audit all the applicable Reliability Standards.
- More Reliability Standards are being scheduled to be covered in the audits than can reasonably be covered in the time provided for the audit.
- The time provided to fill out pre-audit questionnaires and RSAWs is not adequate; the RSAWs should be provided to the registered entity 120 days in advance of the audit.

- Additional information is often requested during the audit without reasonable notice and without indication of what Requirement it relates to.
- Some compliance auditors arrive on-site without having reviewed the information and documentation that was provided in advance, and ask for material that had already been provided.

Discussion of Comments

The ERO Rules of Procedure (Appendix 4C – CMEP, §3.1.4) currently require that all Reliability Standards that are actively monitored in the current year's and previous three years' annual CMEP Implementation Plan are to be audited in a compliance audit. NERC is currently monitoring actively 40 of the 95 approved Reliability Standards, and not all of the requirements of these Reliability Standards. (NERC and the Regional Entities must, however, pursue any violations of approved Reliability Standards that come to their attention, even if the standard is not one that is being actively monitored.) However, NERC will consider the suggestions for making the individual audits less burdensome. NERC is also considering lengthening the amount of on-site time allotted for each audit in order to ensure there is sufficient time for all the Reliability Standards scheduled to be audited to be covered adequately.

Except by observation in those Regional Entity audits in which NERC personnel participate, NERC cannot be aware of specific instances of auditor conduct such as listed in the last two points above unless it is reported by registered entities in their post-audit questionnaires.

Specific NERC Actions

a. NERC will continue to review the results of compliance violation results and Event Analyses to select Reliability Standards and requirements for active monitoring in order to focus attention on those areas where reliability could be most improved.
b. NERC will consider splitting the 3-year or 6-year audits into a series of audits that cover fewer Reliability Standards in each audit but that in the aggregate cover all the required Reliability Standards within the 3 or 6 year window.
c. NERC will continue to solicit feedback from registered entities on their audit experience (including through reviewing registered entities' responses to post-audit questionnaire), and consider the information gained and observations from participation by NERC personnel in Regional Entity audits, to identify areas for improvement in audit processes and training auditors.
d. NERC will consider revising the audit process (as specified in the uniform Compliance Monitoring and Enforcement Program, Appendix 4C to the ERO Rules of Procedure) to provide more time prior to audits to complete RSAWs. Some Regional Entities have already taken this action.

8. Improve the quality and value of the RSAWs.

Stakeholders commented that the NERC RSAWs (which are not FERC-approved) are unclear, poorly written, lack the specificity needed for a compliance audit, in some cases create additional requirements that expand the compliance obligations beyond the clear language of the Standard,

are inconsistent with the Measures in the Standard, and contain incorrect information. Stakeholders also offered specific format suggestions for the RSAWs, including:

- State the Standard title and number on the front page (cover) of the RSAW.
- Add page numbers and paragraph numbering.
- Order the questions in the RSAW consistent with the order of the Requirements they are addressing.
- Include at least one question that allows an explicit response to demonstrate compliance for each Requirement/sub-Requirement.
- The RSAWs are too long and should be condensed.
- While the text windows are a welcome addition, they provide little benefit unless the rest of the RSAW is protected.
- Signing and notarizing each individual RSAW is cumbersome and non-value-added; a form should be developed for one signature and verification for all the RSAWs being submitted by the Registered Entity.
- List specific minimum required evidence in the RSAWs.

Discussion of Comments

NERC agrees that the current version of the RSAWs can be improved. NERC recently completed a thorough review and revision of all the RSAWs in May 2009, and will consider the above-listed stakeholder comments as part of future reviews. NERC is currently drafting RSAWS for standards that have never had RSAWs and working with regions to update the CIP RSAWs. NERC views the RSAWs as living documents that will be reviewed and revised on a continuing basis.

A number of the Regional Entities have developed and are implementing a form that can be used by the registered entity to verify all RSAW submissions on one form with one signature, rather than having to separately verify each completed RSAW.

Specific NERC Actions

a. Work with Regional Entities to update the CIP RSAWS.
b. On a going-forward basis, in conjunction with Regional Entities, and based on feedback from registered entity post-audit questionnaires, continue to improve the quality and usefulness of the RSAWs.
c. Formalize the RSAW development and maintenance process in the ERO Rules of Procedure and the delegation agreements.

9. Compliance violation investigations take too long.

Stakeholders commented that compliance violation investigations following system events take too long to complete – sometimes more that a year; and that investigations are not being conducted efficiently. Stakeholders indicated that this results in the involved entities being kept in limbo as to whether they may have violated or may be continuing to violate Reliability

Standards, and also delays notifying the rest of the industry of lessons learned and process improvements.

Discussion of Comments

NERC will continue to review compliance violation investigation processes, procedures, and training for streamlining and improvement. NERC has recently formed a separate group in Compliance, with increased staffing, to conduct CVIs; this increase in resources should produce more timely CVIs.

NERC acknowledges that some Regional Entity-led CVIs have taken longer than desirable, due to resource constraints, i.e., Regional Entity compliance personnel assigned to CVIs also have ongoing responsibilities with respect to scheduled compliance audits and other compliance monitoring activities. Another reason CVIs have taken so long in the past is that the CVI was not initiated until after the Event Analysis of the underlying occurrence was completed or at least well under way. NERC is now conducting CVIs in parallel with the Event Analysis where doing so would produce more expeditious results.

Through its Alerts program and other means, NERC will also consider disseminating "lessons learned" information from occurrences that are under investigation even though the investigation has not been completed.

Specific NERC Actions

a. Continue to conduct compliance violation investigations in parallel with event analyses, where appropriate.
b. In conjunction with Event Analysis, review the process for coordinating the initiation of CVIs and event analyses.
c. Disseminate preliminary lessons learned from investigations to the industry as soon as practicable.

10. Basis for penalty determinations needs to be more transparent.

Stakeholders commented that NERC should make its penalty calculator public so registered entities can understand how penalties are determined and the consequences of various actions/inactions. Stakeholders also indicated that the ranges of penalties indicated by the *Sanction Guidelines* coupled with the number of mitigating and aggravating factors are too broad to be meaningful, and that the guidance in the *Sanction Guidelines* is too general to be helpful. Further, stakeholders commented that without the penalty calculator made public, registered entities cannot be sure the *Sanction Guidelines* are being followed and that the lack of transparency and clarity in penalty calculations makes it appear that penalties are subjective. Other comments regarding the determination of penalties included:

- A calibration process needs to be established to demonstrate and ensure that penalties are calculated consistently across Regions.

- The "per day" aspect of the penalties in the *Sanctions Guidelines* is unclear and makes it impossible to determine what a penalty would likely be for a violation.
- Penalties to date do not appear to be in line with the actual negative impact the violation has had on the reliability of the bulk power system (i.e. are too high in relation to potential impact on reliability).
- Penalties that have been issued for documentation errors or minor administrative violations with no impact on the bulk power system have been excessive and unreasonable.
- It does not appear that credit is being given for self-reporting or aggressive corrective action by the registered entity.
- Due to the enforcement backlog and small number of violations that have been processed to completion, it is not possible to assess whether penalties bear a reasonable relation to the severity of the violation and potential consequences to the bulk power system or take into account the entity's remedial efforts and overall compliance efforts (or lack thereof).

Discussion of Comments

The NERC Board of Trustees Compliance Committee recently considered whether the penalty tool should be made public and concluded that it should not at this time. This decision was based, among other factors, on the additional resources that would be required to support a public release. However, NERC will provide the option for Regional Entities to ask for help and advice in advance of filing Notices of Confirmed Violation, Notices of Penalty, settlement agreement and Mitigation Plans with NERC, as noted in C.2.g. above, with the objective, among others things, of promoting consistency in penalty determinations.

Regional Entities and NERC are applying the *Sanction Guidelines* which FERC has approved, including the penalty ranges and the VRFs and VSLs for each standard (some of which FERC has changed from NERC's original proposals); further, each penalty proposed by a Regional Entity is reviewed by NERC and ultimately by FERC. Finally, to date, no entity that has been assessed a penalty by a Regional Entity has disputed the amount through the Regional Entity hearing process, at NERC, or at FERC.

Each of the Notices of Alleged Violation and Proposed Penalty or Sanction describes the basis for the penalty imposed (including a $0 penalty), including the base penalty range and consideration of applicable mitigating and aggravating factors, as provided for in the *Sanction Guidelines*.

NERC does not agree that excessive penalties have been issued for documentation errors or minor administrative violations. In most cases, these violations have been assessed zero dollar penalties.

Specific NERC Actions

a. Conduct a policy level review of the Sanction Guidelines and address improvements in the penalty determination process.

b. Implement, through appropriate amendments to the delegation agreements and the ERO Rules of Procedure, increased and earlier NERC involvement in penalty determinations by the Regional Entities.

11. Improve system for submitting compliance information.

Stakeholders commented that NERC should encourage consistency in the tools and forms used by the Regional Entities, and require all Regions to use the same portal for reporting/submitting compliance information. Stakeholders added that the design of NERC and Regional Entity submittal systems (portals) does not allow entities to prepare drafts of submittals and circulate them for review, comment, editing and approval within the entity before submission. Portals should allow the user to close and save a draft, return later to make changes, and to save copies after they are submitted. Also, stakeholders commented that NERC uses electronic forms that do not allow the marking of confidential information. Finally, stakeholders indicated that, in many instances, Regional Entities do not provide notices of acceptance or acknowledgement of receipt of information submittals including self-certifications and self-reports.

Discussion of Comments

NERC has requested the Regional Entities to develop and implement common forms for each type of report that is required to be submitted by registered entities on their respective reporting systems, and has given the Regional Entities common input specifications for the data and information that Regional Entities provide to NERC.

Also, NERC is working on a new data base and query system that will improve the overall submittal, analysis, and reporting of compliance information.

Specific NERC Actions

a. Complete the development and implementation of the new data base entry and query system.
b. Complete implementation of common report forms and common input specifications.
c. Amend the delegation agreements as appropriate to accommodate and support the proposed changes regarding common report forms and common input specifications.

12. Data retention requirements in compliance audit scopes conflict with those in Reliability Standards.

One Regional Entity commented that the data retention requirements in compliance audit scopes, as defined in the CMEP (Section 3.1.4) conflict with the implementation plan language included in certain Reliability Standards. As a result, the registered entities and the Regional Entity compliance staff are unclear as to what is enforceable in terms of the time period monitored. Revisions to the CMEP, Rules of Procedure, and/or implementation plans are needed to eliminate this inconsistency.

Discussion of Comments

NERC agrees that this issue needs to be addressed and the inconsistency resolved. NERC Compliance Process Bulletin #2009-005 "Current In-Force Document Data Retention Requirements for Registered Entities," Version 2.0, June 29, 2009, states, in part:

> *Registered Entities are expected to have sufficient documentation and evidence available to demonstrate compliance with the approved NERC Reliability Standards. The audit period is typically every three or six years. Investigations resulting from complaints or events will require that historical documents be provided.*
>
> *Certain NERC Reliability Standards contain provisions relating to document retention. In some cases, the document retention period is less than the three or six-year period. Such provisions were established where an undue burden existed due to the volume of the data or information required. However, there are others that do not relate to the volume of data or information required. For example, certain NERC Reliability Standards require retention only of the current, in-force version of a policy, plan procedure, or other singular document.*

Specific NERC Actions

a. Identify which Reliability Standards contain provisions related to document retention that are inconsistent with the CMEP and Rules of Procedure and initiate revisions to those Reliability Standards.
b. In conjunction with the Regional Entities, communicate with registered entities the provisions contained in Compliance Process Bulletin #2009-005: "Current In-Force Document Data Retention Requirements for Registered Entities."

13. Maintaining compliance with CIP Reliability Standards while providing critical energy infrastructure documentation to compliance teams.

One Regional Entity indicated that there have been several registered entities that have expressed concern that if they turn over their critical energy infrastructure documentation to compliance staff, that they will violate their own procedures that are developed in compliance to several CIP Reliability Standards. This potential conflict should be reviewed and resolved so registered entities can be given assurance that they will not be held in violation of CIP Reliability Standards if they provide critical energy infrastructure documentation to Regional Entity compliance staff for compliance monitoring purposes.

Discussion of Compliance

NERC has provided guidance to registered entities and Regional Entities on this issue. NERC's view is that the Regional Entity should review the data on site and leave it with the registered entity in a sealed tyvek envelope with a seal over the flap signed by everyone on the audit team and the registered entity. That way, the documentation is available if it is needed later and does not violate the registered entity's CIP requirements. This is a standard chain of custody type procedure. NERC is drafting a formal procedure for this for use throughout NERC. NERC is

also evaluating whether it should implement a secure portal for receiving critical energy infrastructure information, similar to what the NRC has implemented. This evaluation is in a preliminary stage.

Specific NERC Actions

a. Complete the development of a formal procedure describing how compliance audit teams will treat critical energy infrastructure information.
b. Continue evaluation of a secure portal at NERC for receiving critical energy infrastructure information from registered entities.

D. Event Analysis and Information Exchange

1. Backlog of final event analysis reports delays dissemination of lessons learned to the industry; consider interim reports.

Stakeholders commented that the backlog in completion of event analyses (e.g. MRO Separation Event – Sept. 2007, and Florida System Disturbance – Feb. 2008) has delayed implementation of lessons learned by the industry to enhance reliability. The pace of publication of event analyses has slowed. The reports are detailed, but the time spent in compiling them limits their effectiveness to the industry. Analyses should be completed and reported in 1-2 months, like in the nuclear industry, not 1-2 years. A process of issuing interim recommendations should be considered. Stakeholders also suggested that the slow pace of production of Event Analysis reports was due to (i) event analyses being conducted on occurrences that do not warrant an event analysis, thereby over-taxing resources (see issue 2 below), and/or (ii) not using expert consultant/contractor resources to assist in achieving more rapid completion of event analyses (see issue 3 below).

Discussion of Comments

The Event Analysis and Information Exchange program currently lacks sufficient staff resources to conduct and complete all the event analyses that have been determined to be necessary in a more expeditious manner. While there are open budgeted positions in the 2009 Budget, it has been difficult to find the kind of highly experienced candidates needed to conduct these analyses. NERC is currently working with the Regional Entity Event Analysis personnel through a new Event Analysis Coordinating Group to leverage these resources.

Specific NERC Actions

a. Revise the Event Analysis process to include Interim reports for detailed event analyses that are expected to take more than 3 months to complete.
b. Revise the Event Analysis process to issue Alerts as they are developed during the course of the analyses as circumstances warrant.
c. Complete hiring to fill open budgeted positions.

2. Establish threshold criteria for which events will be analyzed.

Stakeholders recommended that threshold criteria be established for determining what events will be analyzed. Stakeholders commented that event analyses are being conducted on occurrences that are not significant to warrant an event analysis.

Discussion of Comments

NERC Event Analysis has such criteria for determining what events are analyzed, and continues to review these criteria for possible improvements. The criteria was presented and discussed at the March 2009 NERC Operating Committee meeting; additional comments will be solicited from the Planning Committee and Operating Reliability Subcommittee.

Many events need to be analyzed, not just the catastrophic ones, to learn lessons that may enable registered entities to prevent major events. If NERC analyzes only the catastrophic events, opportunities will be missed to improve reliability by learning from weaker indicators to avoid the large events.

Specific NERC Actions

a. Review existing threshold criteria for possible revision. [By July 2009]

3. Use root cause analysis experts (staff or consultants) to expedite analyses.

Stakeholders commented that NERC should contract with professional root-cause consultants or hire people with root-cause experience to conduct the formal analyses and complete them more quickly.

Discussion of Comments

The use of contractors for root cause analysis work is currently included in the Event Analysis procedure. A proposal for root cause analysis training of NERC and Regional Entity Event Analysis staff has been proposed for inclusion in the 2010 Budget.

Specific NERC Actions

a. Use contractors for root cause analysis in event analyses, as needed and as budget allows.
b. Include budget item in 2010 Budget for root cause analysis training of NERC and Regional Entity Event Analysis staff.

4. Some recommendations to industry assume that the cause of an individual event represents a general practice.

Stakeholders commented that recommendations coming out of event analyses are not useful for the most part because they are based on incorrect assumptions that the causes of the events represent a general practice in the industry.

Discussion of Comments

Recommendations and lessons learned for specific event analyses are presented in the associated reports for each event. Information in Alerts can be based on a finding from a single event or on several events where a similar cause is identified. There is no assumption in either case that the information included in the Alert is describing a general practice in the industry, but rather is pointing out the cause of an individual or multiple events that NERC believes the industry should be made aware of. Recipients need to review the information provided and determine whether the cause or circumstances described are relevant to their own operations or practices.

Specific NERC Actions

a. Make clear in Alerts whether the basis for an Alert is derived from a single event, trends seen in multiple events, technical findings from analyses, or generic equipment problems.

5. Include more detail in Alerts.

Stakeholder comments indicated a concern that Alerts do not contain enough detail or "lessons learned" information to enable the industry to determine the scope and appropriate actions to take.

Discussion of Comments

In some cases, the information included in Alerts must include less detail in order to protect the confidentiality of the entity or entities involved. In other cases, divulging too much detail would create a risk to critical infrastructure.

Specific NERC Actions

a. Additional detail will be added to Alerts, where warranted, through hot links in the Alerts to controlled access portals in the new Secure Alerts System to avoid compromising critical infrastructure information.

6. Separate event analyses from compliance violation investigations to eliminate the prosecutorial presumption of violation aspects from event analyses.

Stakeholders commented that when a compliance violation investigation (CVI) is initiated at almost the same time as an event analysis, it inhibits entities from being open in discussing what happened in the event due to fear of self incrimination. This chilling effect is reinforced when it appears that every event results in a CVI, due to the apparent attitude of the ERO and regulators that "there must have been a compliance violation here and we're going to find it."

Stakeholders commented on the perception that event analyses are inappropriately becoming 'fishing expeditions' for compliance violations, and deviating from the original scope of the program, which was to conduct forensic analyses of events and system disturbances in order for industry participants to learn from these episodes and improve their planning and operations.

Some commenters suggested establishing a group within NERC with a role comparable to the National Transportation Safety Board whose sole responsibility would be to investigate incidents and events to determine and report on causes without assessing blame or responsibility.

Discussion of Comments

A compliance violation investigation can take advantage of data and information gathered during an event analysis rather than undertaking a separate (and duplicative) collection of information. However, there are times when it may be necessary to initiate a CVI in parallel with an Event

Analysis; e.g., when the event is a Category 4 or 5 event with severe consequences and significant regulatory attention, or when it is necessary to require the preservation of data and information that may be needed for determining whether any violations occurred but that may otherwise be lost due to the passage of time. NERC agrees that it should consider developing more explicit procedures for the interface and coordination between event analyses and compliance violation investigations so as to keep open the exchange of information about an event that is essential for improving reliability through feedback to the industry.

Specific NERC Actions

a. Review and expand existing procedures to clarify the interface between event analyses and compliance violation investigations with the objective of preserving and promoting, in event analyses, the open exchange of information necessary for feedback to the industry for purposes of reliability improvement.

E. Reliability Assessment

1. Assessment reports need to avoid taking policy advocacy positions and include more support from well-researched information.

Stakeholders commented that NERC should avoid taking policy advocacy positions in its reliability assessments and that some of its conclusions are not based on well-researched data and information.

Discussion of Comments

NERC remains committed to providing independent and unbiased assessments of the reliability of the bulk power system. NERC takes no advocacy position on any particular policy, technology, or industry practice but reserves the right to provide timely, accurate, and unequivocal positions on matters that directly impact the reliability of the system. Often, these matters are relevant to many political entities at different levels, but that should not prevent NERC from taking a measured position supportive of increased system reliability.

The conclusions presented in reliability assessments represent the work of NERC staff and its stakeholders. Every effort is made to ensure accuracy, completeness, and a lack of bias. NERC benefits from many valuable contributions from its stakeholders and augments these viewpoints with external information and many years of NERC staff experience. NERC strives to present fact-based, thoroughly researched, and consensus-driven material, but occasionally it must either rely on a narrower base of specialized information that may not satisfy some stakeholders or represent all viewpoints, or provide its independent assertions based on the data and information provided.

Specific NERC Actions

a. Investigate and validate assumptions, data, and conclusions in future reliability assessments to ensure that they line-up with data or information provided by the regional entities and/or Planning Committee and its subgroups.
b. NERC will avoid taking policy advocacy positions in its reliability assessments.

2. Improve reliability assessment metrics including their definition, calculations, and granularity, along with the transparency and process used to incorporate NERC comments into regional self assessments.

Stakeholders suggest NERC needs to make improvements in its metrics, their definition, granularity, and methods used to calculate the reliability assessments. Comments also reflect concern about the lack of a clear and transparent process on how NERC develops its independent assessment of the regions, along with data gathered from other sources, which can lead to differences between regional self assessments, and the overall NERC assessment. In addition, the stakeholders suggest presentation of data/information by Interconnection.

Discussion of Comments

NERC continually strives to develop the best metrics, provide clear and concise term definitions, and champion the best assessment methods. The ever-changing nature of the electric power industry provides a rich source of historical practices combined with cutting-edge technology that NERC leverages at every opportunity through committees, working groups, and task forces. Through the several subgroups that contribute to its reliability assessments, NERC ensures continual review and improvement of its practices and provides the industry with meaningful metrics that address the many facets of the bulk power system.

NERC staff works closely with the Regional Entities and other stakeholders to incorporate comments into the self-assessments, but recognizes that this is an area where improvement is possible. It is NERC's intention to provide Reliability Assessments that are accurate, complete, and transparent. Both NERC Staff and NERC committees individually report to NERC's independent Board of Trustees. NERC Staff and the Planning Committee (with support from the Operating Committee) provide an industry balance to ensure the independence and comprehensiveness of the reliability assessment process.

Specific NERC Actions

a. Reorganize its Long-Term Reliability Assessment to better reflect the Interconnections while respecting the boundaries of the NERC regions.
b. Refine NERC's peer review process, ensuring that comments of NERC and other regional representatives are reflected in reliability assessments and industry representative will have ample opportunity to voice their comments on the entire report.
c. Engage NERC's Reliability Metrics Working Group, to vet, validate and improve the metrics used in reliability assessment reports.

3. Recognize state-mandated capacity procurement requirements in assessments.

Stakeholders commented that NERC's assessments need to recognize state-mandated capacity procurement requirements.

Discussion of Comments

State or provincially mandated capacity requirements present notable operational and planning parameters for NERC stakeholders; however, incorporating capacity requirements for 48 US states and 8 Canadian provinces may distract from the high-level regional view that NERC desires to present. While NERC captures most of this data, it is not complete as bulk power system boundaries do not conform to political boundaries.

Specific NERC Actions

a. Consider including, in NERC's Reliability Assessment Guidebook, that regional self-assessments acknowledge the existence of state/provincial mandated capacity

requirements, where they exist, as well as address reliability issues beyond the current ten-year assessment horizon.

4. Expand the long term assessment beyond the present 10-year horizon.

Stakeholders commented that NERC, along with regional entities, should evaluate expansion of the Long-Term Reliability Assessment beyond its present ten-year horizon to support longer-term planning of a backbone transmission system and evaluate impacts of technology deployments to address emerging industry concerns.

Discussion of Comments

The 10-year horizon of the LTRA is consistent with industry and historical practices offering a reasonable forecast horizon for planning purposes. However, several emerging issues which have the potential to impact the bulk power system reliability may require a longer view. For example, transmission planning, the integration of high levels of variable generation, smart grid technologies, and the impact of Climate Change Initiatives all will require a longer view, perhaps up to 20 years.

Specific NERC Actions

a. With the NERC Planning Committee and the Reliability Assessment Subcommittee, study the suggestion of increasing the horizon of the LTRA beyond 10 years in light of increased interest in reducing Greenhouse Gases through Renewable Portfolio Standards, other climate change initiatives, and related state, provincial, and national policies that are driving change in the industry.
b. The special task force which studied the issue of accommodating high levels of variable generation is also a vehicle to study and make recommendations on issues that involve these longer time horizon issues.
c. Other matters requiring a longer view will be reviewed on a case-by-case basis.

5. *Expand NERC's data gathering to include more bulk power system entities for a more complete set of interconnection information: also reduce amount of data being collected.*

Stakeholders commented that NERC's approach for gathering information for its assessments fails to capture data from merchant generators, which can lead to incomplete data for reliability and adequacy assessments. Several comments also addressed concerns about the burden from NERC resulting from data and information collection for its assessments.

Discussion of Comments

Vertically-integrated utilities are generally large enough to support internal staff efforts that directly support NERC efforts to gather timely and accurate data. NERC recognizes that the changing nature of the electric power industry will likely continue to include more entities other than large-scale vertically-integrated utilities and it has made efforts to include these other

entities in its process. For instance, NERC staff has begun efforts to engage regional and sub-regional entities increasing their visibility of reliability assessment and listen to a broader spectrum of industry organizations. These collaborative efforts have been mutually beneficial to date and NERC will increase this engagement to ensure that all stakeholders of the bulk power system can be heard.

NERC recognizes the burden of supplying data and information. NERC works diligently to reduce the amount of effort required to collect this data and strives to prevent redundant efforts. However, the increasing complexity of the industry and a need to understand the impacts of emerging issues combined with a broad interest in obtaining timely and detailed data, dictates that NERC request a substantial amount of data and information. To be successful, the level of data detail, the level of effort required collecting the data and the usefulness of the resulting metrics must be balanced. NERC welcomes stakeholder support to develop methods to reduce the burden of collecting data and information--especially since more, rather than less, data will be needed as NERC continually strives to gain deeper awareness and visibility of the reliability of bulk power system.

Specific NERC Actions

a. Staff will engage Regional stakeholder working groups as they develop the regional assessments.
b. Coordinate with EIA and FERC to minimize or eliminate duplicative reporting and data collection requirements.
c. Form a high-level industry group, under the direction of NERC's Planning Committee, entitled *Data Coordination Subcommittee* focused on data collection, coordination and substantiation.

6. Share reliability and adequacy assessments through web-based tools.

Stakeholders commented that NERC should share its reliability and adequacy assessments with stakeholders more effectively through web-based tools.

Discussion of Comments

Information sharing and transparency are very important NERC objectives. NERC is committed to efficiently and cost-effectively engage its stakeholders with outreach, web-based tools, and webinars. To further increase the robustness and transparency in its annual ten-year reliability assessments, NERC sponsors public workshops to discuss preliminary findings with industry experts and participants, identify industry concerns, explore emerging issues and solicit improvements. More information from previously held workshops is available at: http://www.nerc.com/filez/ltra_workshop.html.

Specific NERC Actions

a. Expand NERC's use of webinars and other web-based approaches to more effectively share the results and gather input from stakeholders of NERC's reliability assessment reports.

7. Conduct "scenario assessments" for NERC long-term reliability assessments.

Regional Entities, through the NERC Reliability Assessment Subcommittee, have recommended a "Scenario Assessment" be performed in 2009 for NERC's Long Term Reliability Assessment. This assessment will allow each region to develop a scenario in addition to their reference cases.

Discussion of Comments

NERC concurs with this suggestion, which mirrors the current processes in place as a result of the reliability assessment improvement plan. Going forward, the NERC Planning Committee will determine the need and subjects of future scenario analysis on an annual basis.

Specific NERC Actions

a. Continue with the processes outlined in the reliability assessment improvement plan.

F. Performance Analysis and Metrics

1. Improve process for data collection.

Stakeholders commented that a defined process is needed for implementation of NERC Rules of Procedure, Section 1600 that addresses data collection, including the role of owners, operators and users in determining need. Comments also indicated that present NERC proposals for metrics will not produce data on a periodicity that is timely enough to drive process improvement.

Discussion of Comments

NERC is proposing to develop a centralized data collection process and tools to automate the collection and reporting processes. The tool will support frequent updates (now limited to quarterly) and provide a user query feature to call different views of the reliability "dashboard" that is database driven, rather than the static files employed today. The processes will integrate substantial amounts of additional data required for metric developments into existing NERC databases along with Reliability "Dashboard" maintenance.

The Reliability Metrics Working Group (RMWG)[2] has proposed a set of preliminary metrics. NERC currently does not have suitable historic or forecast data for several of the proposed metrics (for example, relay and control system performance, generation voltage schedules and IROL exceeded.) NERC is working with the RMWG to determine how best to collect the data for these proposed metrics.

Specific NERC Actions

a. Develop a centralized automated data collection, reporting and validation process and calculation tools to support reliability metrics.

2. Develop only those metrics critical to bulk power system reliability.

Stakeholders commented that metrics (for which data must be collected from entities) should be justified on the basis of being benchmarks critical to bulk power system reliability (rather than just "good to have") before data collection starts.

Discussion of Comments

NERC had independently developed metrics as indicators of bulk power system reliability. In the past for a variety of reasons, these metrics had not been vetted by NERC's stakeholders.

[2] NERC's Planning Committee formed the Reliability Metrics Working Group, in early 2008, to advise and support the needs of the metrics and benchmarking program. The scope of the group is to develop general metrics for the characteristics of an Adequate Level of Reliability, identify data collection and reporting guidelines and recommend a metrics implementation plan.

A recently formed stakeholder group, the Reliability Metrics Working Group (RMWG), which supports the NERC's Performance Analysis and Benchmarking program, has developed a rigorous metric selection process. This process identifies key measures of the Bulk Power System Adequate Level of Reliability.[3] In March 2009, the RMWG proposed twelve reliability metrics in addressing the six characteristics of the Adequate Level of Reliability definition. The metrics proposed by the RMWG will be integrated with NERC's existing metrics. Where proposed metrics are found to be more suitable to address Bulk Power System reliability than existing ones, the existing metrics will be replaced by the proposed metrics.

Specific NERC Actions

a. Calculate metrics identified as key indicators of bulk power system reliability, measured against the six characteristics of the ALR.
b. Vet metric development, collection and analysis with industry stakeholders through the Reliability Metrics Working Group.

3. Consider what metrics ISOs and RTOs already have developed.

Stakeholders suggest that before starting data collection for new metrics/benchmarks, NERC should review if existing Regional, ISO or RTO metrics address the proposed NERC metrics.

Discussion of Comments

NERC staff and the Reliability Metrics Working Group have created an open process to actively seek metric input from all stakeholders. Fifteen committees and subgroups will be approached in April and May 2009, including the Reliability Coordinator Working Group, to solicit their recommendations on what metrics should be maintained and tracked. The metrics proposed by these groups will be compared to existing metrics, prioritized and integrated into those already identified. Where proposed metrics are found to be superior to existing ones, the existing metrics will be replaced by the proposed metrics.

Specific NERC Actions

a. Continue to call for metrics submittals from NERC's Committees and subgroups and all NERC stakeholders.
b. Submitted metrics will be assessed by the Reliability Metrics Working Group on an ongoing basis as a vehicle for continuous improvement of the metric development, deployment and retirement process.

[3] http://www.nerc.com/files/Adequate_Level_of_Reliability_Defintion_05052008.pdf

4. More dissemination of metrics to industry.

Stakeholders commented that dissemination of metrics information needs to be enhanced so that meaningful metrics can be used for benchmarking performance and improving the reliability of the bulk power system.

Discussion of Comments

NERC launched the benchmarking dashboard on www.nerc.com in July 2008 to fulfill a commitment in NERC Rules of Procedure to raise awareness of reliability performance through an online portal. The dashboard provides a high-level overview of key reliability metrics and trends, and highlights areas of concern. It has been updated quarterly starting 2009.

The first-ever assessment of reliability performance included in the 2008 *Long-Term Reliability Assessment* represented an initial step towards an annual analysis of bulk power system performance trends.

In March 2009, NERC's CEO Rick Sergel highlighted the initial results of one of NERC's efforts to ensure the reliability of the bulk power system in North America and the current set of reliability performance benchmarks and metrics. In his letter,[4] Mr. Sergel highlighted metrics that supported leading indicators and benchmarks such as bulk power system disturbances, energy emergency alerts, and vegetation related transmission outages.

Specific NERC Actions

a. NERC will work with its Reliability Metrics Working Group to issue the first annual reliability performance report in 2010 for the 2007-2009 timeframe and to share metric analysis results through its quarterly updates on NERC's website, NERC News and webinars.

[4] http://www.nerc.com/fileUploads/File/News/benchmarking-letter_31Mar09.pdf

G. Critical Infrastructure Protection

1. Centralize direction for implementation of CIP Reliability Standards at NERC rather than allowing Regional Entities to engage in their own efforts.

Stakeholders commented that direction for implementation of CIP Reliability Standards thus far have been disappointing and should be centralized at NERC. Comments also suggested that a NERC-sponsored nationwide approach would be more efficient and ensure consistency. Allowing the Regions to engage in their own efforts without stronger direction can result in an inconsistent set of approaches to enforcing the CIP Reliability Standards.

Discussion of Comments

NERC recognizes a need for improvement in this area and is committed to a continuous improvement in CIP implementation. NERC's efforts regarding training will facilitate a more informed and uniform implementation of the CIP across all of the Regions.

Internally these efforts include working across NERC's various program areas to provide enhanced auditor training. The enhanced training is designed to improve auditor capability, and provide guidance on consistent implementation.

NERC staff is also working with industry subject matter expert volunteers to provide additional industry requested guidance for meeting the directives found in FERC's Order 706. This guidance is intended to show NERC's commitment to improved industry communication and outreach to registered entities.

Specific NERC Actions

Specifically, NERC has further resourced a training effort designed to help the auditors and registered entities to effectively comply with the CIP Reliability Standards. This enhanced training is designed for both the auditor community and the registered entity community.

a. Develop and deliver the CIP fundamentals course to NERC and Regional Entity compliance auditors. This will help provide a cross-regional and NERC wide level base of understanding of both CIP's fundamentals but also the Auditor responsibilities.
b. Develop CIP fundamentals educational material for industry participants. This effort targets the individuals within the industry who are actually responsible for implementing the CIP's and will lead to a more uniform understanding of implementation issues.
c. Develop and deliver advanced skills training for auditors to improve their performance, including CIP knowledge and soft-skills applications. This more advanced training will again help ensure uniformity across all NERC regions in the auditing role.

2. More timely guidance on implementation of CIP Reliability Standards, especially for the identification of Critical Cyber Assets using risk-based methodologies; place greater reliance on technical committees.

Stakeholders commented that the approach to cyber security is disorganized, inefficient, expensive and unrealistic, due to undue pressure applied by U.S. Government and FERC. Comments also indicated that more timely development of guidance on implementation of CIP Reliability Standards is needed, with greater reliance placed on NERC technical committees and working groups. Information provided to date has not been as helpful as it could be. Stakeholders also commented that NERC has not produced guidelines for an appropriate risk-based methodology for identifying Critical Assets/Critical Cyber Assets (CIP-002) and has no timeline for producing such guidance. Guidance documents should be developed for other CIP Reliability Standards as well.

Discussion of Comments

NERC exists to establish Reliability Standards supported by broad stakeholder expertise and that are responsive to mandates from governmental authorities. The balance of influence makes the Reliability Standards development process functional. NERC Staff recognizes the pressures and influences from government and the stakeholder communities.

NERC agrees with the comments that NERC's approach to cyber security has been disorganized and that this has led to inefficiencies and expenses in some cases. The NERC approach to dealing with cyber security has been rapidly evolving over the past several months. Recent additions to NERC staff are anticipated to help align the NERC process and alleviate some resource constraints.

NERC Staff generally agrees with the comments for more timely production of guidance documents.

Specific NERC Actions

The following NERC specific actions are intended to address each of the actionable stakeholder comments.

a. NERC CIP and Standards staff is taking aggressive efforts and providing specialized support to the Project 2008-06 Cyber Security Order 706 standard drafting team. This is a multiple phase project in which NERC staff will work closely with the Cyber Security Order 706 standard drafting team to expeditiously complete work on revisions to CIP Reliability Standards 002 through 009.
   - The first phase (Phase I) of the project proposes version 2 CIP-002 thru CIP-009 Reliability Standards to primarily addresses the FERC directive to remove the phrase "reasonable business judgment" from Reliability Standards CIP-002 through CIP-009 but it also includes a number of other revisions to the same set of Reliability Standards. The revised CIP standards resulting from Phase I were adopted by the NERC Board on May 6, 2009, and filed with the Commission for approval on May 22. 2009.

- The second phase (Phase II) of the project will be much more complex and will involve drafting of version 3 CIP-002 thru CIP-009 Reliability Standards proposing how to best address the other directives in FERC Order 706. Consideration will be given to the applicable features of the National Institute of Standards and Technology (NIST) standard framework described in NIST 800-53 as well as the identification of what cyber equipment should be addressed by the CIP Reliability Standards.

b. Work with the CIPC to expeditiously finalize the development and issuance of guidelines on the implementation of CIP Reliability Standards, especially for the identification of Critical Assets and Critical Cyber Assets using risk-based methodologies.

   The CIPC security guideline working group document on identification of Critical Assets was presented at the March 2009 CIPC meeting and was unanimously approved for posting to solicit industry comments. The working group is currently reviewing the comments that were received on the posted draft and plans to develop a revised document for consideration for approval by CIPC in September 2009. The working group's document on identification of Critical Cyber Assets has been sent to CIPC for comment. It will also be posted for industry comment and is expected to CIPC for approval in December 2009. Following approval by CIPC, these guidelines will be submitted to the NERC Standards Committee for posting as reference documents associated with the CIP standards. NERC will continue to participate with the guideline standard drafting team to resolve any industry comments received during this markup process and support the CIPC in completing the guideline development and approval process.

3. Need for Technical Feasibility Exceptions.

Stakeholders commented that NERC has not established a process or procedure for a registered entity that is subject to Reliability Standards CIP-002 through CIP-009 to rely on a "technical feasibility exception" to specific actions specified in the requirements of these Reliability Standards, as contemplated by the Commission's Order No. 706.

Discussion of Comments

FERC Order No. 706 mandated a requirement to develop and implement a process for dealing with "technical feasibility exceptions" (TFE). The standard drafting team for Project 2008-06 Cyber Security Order 706 discussed this FERC mandate and decided that it was necessary to provide the industry with a procedure for relying on a TFE to certain requirements within the CIP-002 through CIP-009 Reliability Standards. NERC staff, working with these industry experts, then devised a process to satisfy these requirements from Order 706. The proposed procedure was posted for industry comment from March 16 through April 30, 2009. NERC is currently working with the Regional Entities to determine whether TFE requests should be reviewed by NERC, the applicable Regional Entity or both. Adoption of a procedure as a NERC Rule of Procedure will require approval of the NERC Board and then of FERC.

Specific NERC Actions

a. Finalize "Procedure for Requesting and Receiving Technical Feasibility Exception to NERC Critical Infrastructure Protection Standards" based on review of comments to the

posting, and submit it to the NERC Board and then to FERC for approval as amendments to the NERC Rules of Procedure.

4. Need fast track process for interpretation requests for CIP Reliability Standards

Stakeholders commented that there should be a fast-track process for interpretation requests relating to CIP Reliability Standards.

Discussion of Comments

NERC agrees with stakeholder comments and understands that the development of a fast-track process for interpretation requests associated with CIP Reliability Standards will require the combined efforts of the Reliability Standards, Compliance Monitoring and Enforcement, and CIP Programs. The development of improved guidance documents related to the implementation of CIP Reliability Standards and the revisions to these Reliability Standards that are underway should help reduce the need for interpretations.

Specific NERC Actions

a. Work with the Reliability Standards and Compliance Monitoring and Enforcement Programs to consider how to "fast-track" the development of interpretations to CIP Reliability Standards.
b. Evaluate the possibility of, and if determined to be appropriate, implement, a CIP Reliability Standards hotline or other assistance function similar to the assistance functions provided by other regulatory and self-regulatory organizations (e.g., NRC, FINRA, etc.) to address CIP Reliability Standards questions.

5. Cyber security Alerts insufficiently targeted and lack detail.

Stakeholders commented that cyber security advisories are insufficiently targeted to functional elements of the industry and lack detail. Comments also indicated that transparent processes do not exist for how threats and vulnerabilities are evaluated and prioritized. Additionally, stakeholders commented that compliance contacts are not being utilized as originally intended and that that cyber security alerts should not be sent to the registered entity's regular compliance contact, particularly in light of the requirement to acknowledge receipt of certain Alerts within 24 hours and the possibly time-sensitive nature of information provided in some Alerts, since the regular compliance contacts may not provide 24 X 7 coverage.

Discussion of Comments

NERC agrees that past cyber security advisories had issues in both level of detail and in targeting. Getting the targeting issue resolved is the goal of the NERC Secure Alerting and Notification System (NSANS). Getting the level of detail right is the goal of a newly formed group called HYDRA. HYDRA is a program that identifies and manages security knowledge resources and weaves them into the fabric of the ES-ISAC's business practices and workflow.

Together both the content, level of detail obtained via HYDRA, and the target audience delivery, executed via the NSANS application, will be substantially improve the overall Cyber Security Alert process. In addition, the specific targeting ability of the NSANS system allows the burden placed onto the compliance point of contact to be redirected to more appropriate personnel.

Specific NERC Actions

a. Complete the implementation of the NERC Secure Alerting & Notification System (NSANS) that will give the ES-ISAC/NERC the power to alert and notify registered entities of the bulk power system, and other utilities of the electricity sector, of vulnerabilities, threats, and/or abnormal events/conditions, or other significant events that may impact the bulk power system.
b. Continue to develop the HYDRA group and functionality and its use on emerging cyber security assessments.
c. Utilize the personnel targeting features of the NSANS to eliminate the burden applied to the Compliance point of contact.

H. Situational Awareness

1. Real-time situation awareness is outside of NERC's scope.

Stakeholder comments suggested that real-time situation awareness is outside of NERC's scope, is duplicative of the Reliability Coordinator function, adds expense, and that NERC participation, particularly during emergency situations, is not helpful or appropriate and may jeopardize reliability. However, stakeholders also commented that the legacy NERC Reliability Toolbox (IDC, ISN, electronic tagging, SDX, RCIS, book of flowgates, NERC factor viewer, and Reliability Coordinator hotline) are strongly supported by bulk power system owners, operators and users and should be continued.

Discussion of Comments

NERC's application to FERC to be certified as the Electric Reliability Organization (ERO) included a provision for NERC to develop and provide situational awareness (SA) for the bulk power interconnections in North America. This program was included as an ERO function because of the findings and recommendations of the U.S. - Canada Power System Outage task Force. The Task Force found the lack of situation awareness was one of four causes of the August 14, 2003 blackout. NERC's application addressed this by committing NERC to provide SA as the ERO.

NERC's Rules of Procedure, section 1000 state the requirements for NERC to monitor present conditions on the bulk power system and provide leadership coordination, technical expertise and assistance to the industry in responding to events as necessary. NERC has developed its SA program, as the only organization positioned to develop a picture of what is occurring across the separate interconnects of the bulk power system in North America. This allows NERC to supply appropriate information to government agencies in the U.S. and Canada, and to respond to questions from the agencies with the goal of limiting the distractions of direct calls to system operators. NERC also has obligations to supply bulk power system information to the U.S. Nuclear Regulatory Commission and International Power Line information to Canada's National Energy Board (NEB).

As a critical component of its Situational Awareness function, NERC serves as the Electricity Sector's Information Sharing and Analysis Center (ISAC). Each critical infrastructure industry has established an ISAC to communicate with its members, its government partners, and other ISACs about threat indications, vulnerabilities, and protective strategies. ISACs work together to better understand cross-industry dependencies and to account for them in emergency response planning. All entities in the electricity sector are participants in the ES-ISAC.

NERC is increasing its focus on situational awareness functions by implementing a functioning situational awareness system. NERC is identifying the necessary requirements and devising a feasible technical approach and system architecture that will enable NERC and regulatory authorities and organizations to securely tap into participating Reliability Coordinators to visualize conditions occurring on the bulk power system. The project team, named Situation Awareness for FERC, NERC, and the Regions, or SAFNR, is working to enable 100 percent of

the Reliability Coordinators in the United States to display interconnection-wide system conditions on a near real-time basis to the FERC, NERC, and the Regional Entities. This will be accomplished through internet-based systems that will provide visual displays for FERC, NERC, and the Regional Entities while all the data will reside at the Reliability Coordinators.

NERC's primary SA function is to provide information to regulators so that the RC does not have to be distracted by doing that; therefore, NERC's SA activities actually enable the RC to focus on performance of its responsibilities. Additionally, completion of the SAFNR project will enable NERC, FERC and the Regional Entities to obtain near real-time information directly from the RCs without having to interfere with the RC's activities by requesting and requiring the RC to provide the information.

FERC believes it is critical for FERC, NERC as the ERO, the Regional Entities, and the Reliability Coordinators to be able to all observe the same Reliability Coordinator monitoring displays and data on a near real-time basis throughout the interconnections in the United States. Industry is best served by presenting an accurate view of system conditions with NERC and the Regional Entities taking the responsibility of servicing information requests so that Reliability Coordinators can concentrate on their operating reliability responsibilities. In this way, NERC's SA functions add value and help to enhance reliability of the bulk power system. No reliability responsibilities will be shared or displaced from the Reliability Coordinators with the completion of this project. Thus, NERC's SA functions, as described above, are not duplicative of the functions performed by Reliability Coordinators during emergency situations. The SAFNR project will benefit the regulatory community by allowing regulatory groups (although a restricted audience of FERC, NERC, and Regional Entities) to observe and comprehend the SAFNR project-specific monitoring displays and specified core data within the Reliability Coordinators' geographical footprints in the U.S. The Technology Committee of the NERC board is actively engaged in the SAFNR project and will maintain control of its future development.

With respect to the legacy NERC Reliability Toolbox, NERC is committed to improving its ability to efficiently and effectively develop and manage existing and future reliability tools. The Situation Awareness and Infrastructure Security program will work closely with NERC's Chief Information Officer and the Technology Committee of the Board of Trustees to implement the new framework to better manage NERC's portfolio of reliability tools. The new framework takes a "cradle to grave" approach that will require NERC to develop plans to sustain, enhance, and in some cases turn over existing tools. NERC clearly recognizes the importance of today's tools and believes new technology will provide better ways to monitor and manage the bulk power system.

Specific NERC Actions

a. NERC will continue to develop its SA to meet obligations set forth in its ERO certification application and in NERC's Rules of Procedure, section 1000. In carrying out its responsibilities and obligations as the ES-ISAC, NERC will work to provide SA and facilitate emergency preparedness and response exchanges between the industry and

governmental authorities as appropriate. NERC will better communicate to the industry the need for, and measure the value of SA efforts to include, the SAFNR program.

b. NERC will continue to support and improve NERC's ability to efficiently and effectively develop and manage existing and future reliability tools.

2. Define acceptable communications protocols for use during system events.

Stakeholders commented that adequate processes and procedures have not been established to define acceptable communications protocols during system events.

Discussion of Comments

NERC agrees with these comments. NERC is establishing mechanisms for executive-level guidance and direction, reaching out to form effective industry and regional collaborations, and increasing the resources dedicated to the operation of the ES-ISAC. NERC recognizes the need to work with industry experts in the development of an acceptable communications protocol for use during system events. NERC staff is working with the technical committees to evaluate the best approach and is developing initial communication protocols associated with the SAFNR project.

Although the ES-ISAC has been operated by NERC since 2000, it has lacked a clear governance structure and guiding charter document. NERC's Board of Trustees has formed the Electricity Sector Steering Group (ESSG) to provide executive level guidance and strategic direction for the ES-ISAC. The ESSG was formed in the second quarter of 2008 and has conducted three meetings. The NERC Chief Security Officer has undertaken an effort to work with the Critical Infrastructure Protection Committee (CIPC) to create a program charter for the ES-ISAC, and develop an Electricity Sector Coordinating Council charter for the ESSG to review and consider for approval in the near future.

Additionally, the ES-ISAC is maturing its processes for engaging industry experts to assist in the evaluation of security threats and vulnerabilities. NERC is evaluating technologies to improve the quality, security and timeliness of ES-ISAC notifications.

Specific NERC Actions

a. NERC will continue to work with the Electricity Sector Steering Group, the ES-ISAC, and NERC technical committees to develop and improve upon communications protocols for use during system events.

I. Training, Education, and Personnel Certification

1. Broaden the operator certification program to include credentials for more functions and revise the criteria for qualifying activities.

Stakeholder comments suggested that NERC develop operator training and certification programs for all entities whose operational duties impact bulk power system reliability e.g., generator owners and operators, distribution providers involved in transmission and/or UFLS issues, support staff managers, plant operators, field personnel and regional dispatchers. Several comments suggest that personnel conducting training should get credit towards maintaining certification for conducting the training.

Some stakeholders seek improvements or changes to the continuing education hours used to maintain a credential. These changes seek to include more qualifying activities and periodic verification that NERC-approved Continuing Education providers are following all requirements.

Discussion of Comments

The certification program has met the defined needs of system operators and will seek to expand its usage among other professions in the industry. It will continue to address the quality of the activities that are acceptable to maintain a credential to honor the high integrity of the program and credential.

Stakeholders have requested additional credentials be developed for the industry. The Personnel Certification Governance Committee (PCGC) is currently researching the feasibility of offering an advanced system operator credential. It would be based on experience, and demonstrations of knowledge, skill, and performance. An advanced examination and simulation problem-solving will form the basis of the testing along with recognition through a nomination by supervisors or upper management.

Once this project is complete (if implemented) in 2011, the committee will research the feasibility of offering a credential for generator operators and regional dispatchers. Past research has found that developing these credentials may prove difficult due to the smaller amount of commonalities within those audiences compared with the four current audiences of system operators. This makes developing valid applicable testing difficult.

The second issue related to expanding the criteria to allow more and different activities to qualify towards maintaining a credential is under constant review. The PCGC established criteria defining what content is allowed to maintain a credential based on the job tasks a system operator performs. There are some NERC Reliability Standards and industry subject areas that are considered supplemental knowledge but are not central to the job of a system operator. Those supplemental areas are generally not approved for certification maintenance by the continuing education program. Activities also need to have a good form of feedback or testing to ensure that learning takes place. That is why conferences and workshops may not always be approved. Revising criteria is always being assessed by the PCGC, but the goal will always be for operators to receive quality training and education that is directly related to their job.

No pressing changes to the certification program itself have been suggested as the exams are updated on a regular basis according to program requirements.

Specific NERC Actions

a. Research the feasibility of offering an advanced system operator credential as well as credentials for generator operators, regional dispatchers.
b. The Personnel Certification Governance Committee will consider including more qualifying activities in the requirements used to maintain a credential.

2. Improve the current system used by system operators and training providers for tracking continuing education hours to maintain a credential.

Commenters suggested the need for improvement to the tracking system by allowing entity program administrators to see all courses (not just those the entity provided) to facilitate entity program administrators in tracking and maintaining records of their operators' CEH.

Discussion of Comments

The continuing education program and the system operator certification program implemented the System Operator Certification and Continuing Education Database (SOCCED) in 2007 to track the continuing education hours earned by operators to maintain their credentials. The initial rollout was a bare-bones functioning database that has been greatly improved upon in eight major upgrades.

The ability for another person, be it a trainer, supervisor, or administrator, to see the private certification records of a system operator has legal implications. A NERC System Operator Certification is an individual certification earned and owned by the individual. NERC currently restricts the ability of anyone else to view these private records. This creates the problem noted above, that an entity that needs to comply with PER Reliability Standards would like to know the certification and training status of the system operators it employs.

The PCGC is developing a solution to allow a trainer or supervisor view-only privileges to a subset of training records in the SOCCED only when specifically authorized by the system operator. No personal information will be accessible and no ability to change operator information will be allowed. This database change will occur later this year.

Specific NERC Actions

a. Continue to improve the database used by the program, including additional functionality to allow persons designated by a certified person to view full course records that are not sensitive or confidential.

3. Offer more targeted and timely education programs.

Stakeholders commented that the loss of technical talent and failure to replenish that talent has resulted in NERC not presenting training presentations or documents of the quality it presented in past years. Other comments suggested that system operator training should focus more time on new Reliability Standards being implemented as well as on "most violated Reliability Standards" and how/why they are being violated.

Stakeholders also commented that training and education programs should be developed by NERC and Regional Entities on Reliability Standards and compliance, including training for Registered Entities on the documentation requirements and other evidence required to demonstrate compliance with Reliability Standards as well as audit-related training. Workshops to date have not provided the necessary details on actions and documentation needed to demonstrate compliance.

Comments also indicated NERC should continue to expand use of webinars – more frequently and on more topics – with more web-based and electronic offerings with unlimited access to enable multiple persons from registered entities to participate.

Discussion of Comments

NERC continues to seek more opportunities to develop and deliver information and education to the industry. Better informed and educated participants result in a more reliably planned and operated bulk electric system. Limited resources have restricted NERC's ability to develop or deliver information and education to address Reliability Standards and concepts of demonstrating compliance to the Reliability Standards. Many have been calling upon the compliance program to provide this information, but that program does not provide this information due to concerns about potential conflicts in its role. The training and education program can provide some of the information sought by stakeholders. As more resources are made available to the training and education program, more targeted and directed education is planned for stakeholders. This education will address NERC programs, Reliability Standards, compliance, and reliability issues.

While NERC can directly provide some information to stakeholders, the ability to share information within the industry can also yield strong benefits. NERC is working with the standing committees to develop ways of sharing information among industry stakeholders. The Reliability Fundamentals Working Group of the Operating Committee is charged with using an "open source" concept to deliver and modify information relevant to the industry. NERC is working to provide the platform to accomplish and manage this charge. The result will be more timely and useful information on many topics.

Specific NERC Actions

a. Add a resource to the 2010 Budget to provide more targeted and timely information for stakeholders about upcoming changes to Reliability Standards, compliance requirements, etc.

b. Research a platform on which to establish an "open source" system for providing information to the industry.
c. Work in cooperation and coordination with Regional Entities and industry associations to determine what webinar topics would be most beneficial for bulk power system owners, operators, and users in an effort to provide useful feedback for improving reliability.

4. Requirements for training programs and training providers.

Stakeholders commented that the NERC training program would be more efficient if it would encompass all NERC training standards rather than requiring separate programs for Continuing Education that must be maintained at the entity level – comparable to other certification programs such as Project Management Institute, PMP certification, Professional Engineer certification and CPAs. That is, NERC should certify training courses and collect and maintain records of continuing education to verify continued certification.

Discussion of Comments

The continuing education program has fulfilled its requirements and is moving forward to expand the reach of its positive impact on reliability. The program has continuously clarified its requirements to meet the needs of training providers and meet the needs of the certification program.

The certification, continuing education, and training and education programs are the result of what was acceptable in the times they were approved. The strengths and shortcomings of the programs are constantly discussed by those who lead the programs with an eye towards improvement. One proposed solution to meet the major goal of improving overall training and reliability is to accredit training programs. One initiative currently being investigated will accredit those entities which voluntarily seek to have their system operator training program accredited.

NERC will play a large role in developing voluntary training program accreditation criteria that will focus on the overall quality of a training program. Potential criteria that go beyond current NERC PER-005 standard and continuing education program address the performance of an operator, training program model, training effectiveness, and advanced training.

Encouraging entities to voluntarily accredit their training programs will require incentives. One potential incentive that may be considered is allowing a system operator who is receiving training in an accredited program to automatically maintain his/her credential due to the quality of the program. This also has the benefit of simplifying administration at registered entities and NERC, reducing overall costs. A white paper with more thoughts on a proposed voluntary accreditation program will be released in late 2009 for industry input and comment.

Specific NERC Actions

a. Expand NERC's role in establishing accreditation criteria for training programs by releasing a white paper for comment in late 2009.

J. Finance and Controls

1. Reflecting stakeholder comments in budgets.

Stakeholders commented that their concerns and recommendations do not appear to be considered in the NERC budget process. Comments also suggested that NERC should provide more information on the reasons for cost and headcount increases and how they provide value for members.

Discussion of Comments

While NERC's Business Plan and Budget is approved by its Board of Trustees in late July or early August, the first draft is available for review and comment by stakeholders in May. As the Business Plan and Budget is developed, NERC solicits comments and suggestions from stakeholders through public postings of drafts of the Business Plan and Budget on its website, by conducting an annual budget workshop and by providing the opportunity for public comments in Board Finance and Audit Committee meetings at which the draft Business Plans and Budgets are discussed. NERC's 2009 Business Plan and Budget filing with FERC included a separate attachment that listed the major areas of stakeholder comment received on the drafts of the Business Plan and Budget during preparation, and how those comments were considered and addressed in the Business Plan and Budget development process. NERC intends to continue to include such an attachment in its Business Plan and Budget filings with FERC in future years. NERC must also take into account the directives of its regulators in developing its Business Plans and Budgets. Striking an appropriate balance of interests in its Business Plans and Budgets is a critical challenge for NERC.

Beginning with the initial 2007 Business Plan and Budget developed by NERC as the ERO for submission to FERC, the quality of explanations for increases in staffing and other resources, proposed new initiatives and resulting increases in requested statutory funding and assessments have evolved and improved through successive Business Plans and Budgets. NERC's 2010 Business Plan and Budget will continue to reflect this evolution and improvement in the presentation of the explanations and support for increases (and decreases) in its staffing and other resource requirements.

Specific NERC Actions

a. NERC will continue to strive to improve its Business Plan and Budget development processes and presentations.

2. Provide executive level summary graphs and tables in future business plans and budgets.

Stakeholders commented that the NERC business plans and budgets should provide summary information including graphs, in addition to all the details, for the benefit of regulators and senior executives.

Discussion of Comments

The Introduction to NERC's Business Plan and Budget provides summary information regarding Full Time Equivalents, Statutory Expenses and ERO Funding Assessments. In addition, the Introduction provides a summary comparison of assessment and expense projections to budget along with an explanation of the variances and a comparison of current budget to future budget. Lastly, a comparison of changes that occurred in the various drafts of the budget is provided.

Specific NERC Actions

a. In the 2010 Business Plan and Budget, NERC will review the content of the Introduction and consider providing additional graphs and tables to summarize information contained in the body of the document.

3. Develop multi-year business plans for NERC.

Stakeholders suggested that NERC develop multi-year (3 year or 5 year) business plans so entities can get insight into future programs and cost and resource changes in future years.

Discussion of Comments

In its 2009 Business Plan and Budget, NERC included a projection of its budget and funding requirements for 2010 and 2011. These projections were not approved by the NERC Board, but were included to provide FERC and stakeholders a view of the future direction of NERC's resource requirements. Additionally, NERC does develop five-year strategic plans every 2-3 years to provide long-term strategic direction to the organization. However, predicting with any degree of accuracy the future programs and cost and resource changes beyond one year is extremely difficult as NERC matures in its role as the Electric Reliability Organization. Since NERC already provides budget projections and periodic five-year strategic plans, the additional projected information that might be available to NERC, FERC and stakeholders in a 3 to 5 year Business Plan would not appear to justify the overhead resources NERC would need to devote to developing such long-term Business Plans.

Specific NERC Actions

a. Consider including in future business plans and budgets discussions of possible future programs, or anticipated expansions of or increases in resources needed by existing programs, and their cost and resource requirements.

4. Responding to FERC on business plan and budget submittals.

Stakeholders commented that NERC should stand behind its business plan and budget submissions when questioned by FERC and rely on the concept of drawing from contingency reserve or realigning resources if needed rather than special assessments.

Discussion of Comments

NERC believes it has in fact stood behind its Board-approved business plan and budget submissions when questioned by FERC, and utilized the concept of drawing from cash reserves or realigning resources. For example, when FERC's order on NERC's 2009 Business Plan and Budget filing questioned the adequacy of NERC's budgeted staffing and resources in Reliability Standards and Compliance, and questioned NERC's elimination of the Readiness Evaluation Program, and required NERC to make a compliance filing addressing these issues, NERC's compliance filing (i) identified a small increase in staffing and resources for Reliability Standards, to be funded out of reserves, not through an additional assessment, (ii) identified an increase in staffing and resources for Compliance, to be funded out of reserves, not through an additional assessment, and (iii) adhered to and defended NERC's decision to eliminate the Readiness Evaluation program. In addition, NERC has frequently shifted staffing and other resources among programs during the year as developments indicated that greater staffing and resources were needed in some programs than budgeted while fewer resources were needed in other programs than had been budgeted. Further, to date, NERC has not needed to request FERC approval for supplemental funding (as permitted by FERC's ERO regulations) between its annual Business Plan and Budget filings.

NERC does note, however, that the long lead time necessary between the start of annual Business Plan and Budget preparation and the required August filing date with FERC, and the additional time to the start of the budget year (January 1), can result in budgeted staffing and resources requirements and underlying assumptions already being obsolete or in need of revision by the start of the budget year.

Specific NERC Actions

None.

5. Allocation of budget costs.

Stakeholders commented that NERC should consider a cost allocation based on net generation, net energy for load (NEL) and transmission kV-miles; under this approach generators and transmission-only entities would help pay for NERC as well as load-serving entities. Canadian entities expressed concern about paying for programs that are driven exclusively by FERC.

Discussion of Comments

Reliability of the bulk power system is a public good. Section 215(c)(2)(B) of the FPA recognized that by requiring that the rules of the ERO "allocate equitably reasonable dues, fees, and other charges among end users for all activities under this section." The Principles Governing an International ERO agreed to by U.S. and Canadian governmental authorities called for the costs of the ERO to be allocated generally on a net energy for load basis. That is the approach reflected in NERC's rules and annual budgets, with appropriate adjustments for programs that benefit only particular areas (for example, the costs of the Interchange Distribution Calculator used for the Eastern Interconnection are allocated only to the Eastern

Interconnection). The value of the general NEL basis for allocating costs is that it allocates the costs among all end-users, ensures that no one pays twice, and is relatively simple to administer. NERC and NPCC have negotiated Memoranda of Understanding with appropriate authorities in Ontario and Quebec and are working on similar MOUs for other Canadian provinces regarding the allocation of certain compliance program costs to Canadian provinces and entities on bases other than NEL, in recognition that entities in these provinces may already perform certain functions that NERC and/or NPCC would otherwise perform.

Specific NERC Actions

a. In conjunction with future annual business plans and budgets, review the rationale for continued use of NEL as the sole basis for allocating costs.
b. Consider in developing the basis for cost allocation to Canadian entities those costs associated with FERC-specific requirements.

6. Request net energy for load information directly from load-serving entities.

Stakeholders suggested that NERC should directly question all load-serving entities for load information, rather than obtaining it from balancing authorities, which do not have good information.

Discussion of Comments

If improved or more accurate NEL data would be available if it was collected by NERC directly from load-serving entities, and it could be collected in a cost-effective manner without placing increased burden on NERC staff and resources, NERC would consider a modification to the collection methodology.

Specific NERC Actions

a. Review with Regional Entities the mechanism for collecting NEL data and evaluate if there is any advantage in terms of accuracy, efficiency or cost-effectiveness to having NERC collect these data directly from load-serving entities, rather than the Regional Entities collecting the data.

7. Amend the budget templates.

One Regional Entity suggested that NERC amend the budget templates used by NERC and the Regional Entities to:

- Compare prior year budget to the proposed budget rather than to "projected actual prior year";
- Use percentages for the comparison rather than dollars, since FERC has used percentages of increase to inquire about questionable items;
- Require that explanations be submitted with the budgets for any increase or decrease of 15% on any line item [rather than 10%];

- Ensure that information be thoroughly discussed amongst the Regional Entity Budget Group for relevance and necessity; and
- Correct common titles, names of functions, etc. before the templates are reissued.

Discussion of Comments

2010 Budget templates have already been modified to address the first and last of the comments above. Item four has been an ongoing endeavor at NERC since 2008. With respect to Items two and three, NERC believes that in the context of budget to budget and budget to actual variance analysis actual dollars is a more appropriate and typical measure rather than percentages.

Specific NERC Actions

None.

8. Apply standard language for Reliability Standards development and compliance in NERC and Regional Entity business plans and budgets.

One Regional Entity suggested that standard language with regard to Reliability Standards development and compliance and enforcement be applied to all of the NERC and Regional Entity future business plans and budgets. Exception or expansion text could be included where specificity is called for. This approach would make review more seamless to the stakeholders and boards as well as for FERC and Canadian governmental and/or regulatory authority review. Another Regional Entity suggested that Regional Entities and NERC to collaborate on a review of the NERC and regional processes across various functions, including the interfaces between NERC and the regions during the startup phase of the business planning cycle. This process review would allow identification of any areas of duplication or inefficiencies and provide an opportunity for incremental improvements to be made each year.

Discussion of Comments

NERC and the Regional Managers have met in 2009 on a number of occasions in person and by conference call to discuss goals, objectives and assumptions for the 2010 Business Plan and Budget. The results of these meetings have been compiled in a document that will be used in the 2010 planning cycle.

Specific NERC Actions

a. Utilize the common goals, objectives and assumptions in the 2010 planning cycle.

9. Change the timing of the budget process.

One Regional Entity suggested an improvement for which all regions have offered past support is changing the timing of the budgeting process. While regulatory requirements dictate the current budget milestones, the process could be modified to allow business plan and budget changes within October. These changes could be approved by all governing bodies through an

accelerated approval process. This would give each Regional Entity an opportunity to true up its business plan and budget to reflect any known changes.

Discussion of Comments

The current budget process requires that Regional Entity budgets be produced by early July, to support the required filing date with FERC of August 24. NERC agrees that producing budgets for the following year without having the benefit of current year actual results is difficult. NERC would, however, be concerned about modifying the current process to permit changes to budgets in October. Not only would this change require amendment to FERC and possibly other ERO governmental authorities' regulations, but it is unrealistic to assume that all concerned governing bodies could act on an accelerated basis to approve modifications in a timely manner so that the approved assessments could be reflected in invoices that must be distributed to load serving entities by year end. Finally, the FERC regulations do provide for the opportunity for NERC or a Regional Entity to file a supplemental budget request, if necessary, subsequent to FERC approval of the annual budgets.

Specific NERC Actions

None.

10. NERC and the Regional Entities should update annually their rolling three-year goals.

One Regional Entity commented that NERC set a good example by developing a three-year plan leading into its 2009 business planning cycle, and encourages NERC and other regions to continue taking this same approach, updating the rolling three-year goals each year. A rolling three-year planning horizon would enable the ERO and regional entities to more effectively manage organizational change and control costs.

Discussion of Comments

NERC agrees that this would be a useful process. However, for the reasons discussed above under issue #3, this would be a more top-level three-year plan, not a detailed three-year budget.

Specific NERC Actions

a. Discuss the proposal with the Regional Entity Budget Group (REBG) to identify whether it is generally supported and what steps would be required to implement it.

11. Share best practices and tools.

One Regional Entity commented that there is an opportunity for the regions and NERC to share best practices, and perhaps to share tools, to achieve a high level of consistency and quality in the tracking and reporting of costs. There may in fact be an opportunity to reduce the cost by using common budgeting and cost accounting tools.

Discussion of Comments

NERC agrees with this comment.

Specific NERC Actions

a. Discuss proposal with the REBG to identify overall level of acceptance and possible implementation steps.

12. Consider a "shared reserve" among Regional Entities and NERC.

One Regional Entity commented that one of the major uncertainties in business planning is the amount of resources needed for certain activities that can be more "lumpy" in the assignment of personnel resources and budget. The two clearest examples in the Regional Entity budgeting process are the number and cost of hearings and large event analysis. On one end of the spectrum there could be no hearings and no large event to address in a year. However, each Regional Entity must plan some reserve for such occasions. The approach used by most Regional Entities has been to assume a very small number of hearings and large event analyses and a modest cost for each. There is some risk that these assumptions could be exceeded and the individual Regional Entity would be at risk of quickly burning through its reserve required for operations. One way to address this issue is a "shared reserve" among the Regional Entities, and perhaps NERC. Each entity would contribute a requisite amount to the common reserve and be entitled to use the reserve under certain conditions. Anyone using the reserve would be required to repay the reserve in the next business cycle. Such an approach would provide greater financial strength to all of the participants and provide a tool for managing risk and uncertainty regarding unexpected peaks in workload or legal expenses. As envisioned, each entity would retain operating reserves for normal business but participate in the reserve sharing for certain high risk and high cost activities. This approach would allow an appropriate coverage for budget uncertainties but at a much lower total cost through sharing of the risk.

Discussion of Comments

NERC agrees that a reserve or fund available to the Regional Entities and NERC to handle the costs of hearings and event analyses has merit. NERC disagrees with the specific approach suggested above because it would create major accounting issues for the Regional Entities and for NERC. If all Regional Entities and NERC agreed unanimously with the basic concept, then NERC should raise the fund by increasing assessments to load serving entities. NERC would then "lend" funds to a Regional Entity involved in a hearing and/or event analysis to cover expenses in excess of that Regional Entity's cash reserve. The Regional Entity would then recover the funds in the following year through increased assessments and repay NERC.

Specific NERC Actions

a. Continue discussion with Regional Entities concerning this concept as future budgets are developed.

13. Standardize language and expectations on components of indirect costs.

Several Regional Entities commented that NERC and the Regional Entities need to standardize language and expectations regarding the acceptable components of indirect costs so that the Regional Entities can consistently budget certain expenses as either indirect (overhead) or direct (functional). With two full years of experience, and in accordance with FERC guidance, NERC and the Regional Entities should be able to implement a uniform expense allocation that will enhance consistency among the Regional Entities and NERC.

One area of particular concern to one Regional Entity is the labeling of committee/forum activities as indirect. In that region, stakeholder experts participating in committee activities are direct contributors to reliability improvements in the region, yet allocating that expense to several functional areas as defined in the NERC budget template is not practical or efficient.

Discussion of Comments

The topic of the definition of, and cost items to be included in, indirect costs, has been and continues to be subject to ongoing discussion among NERC and the regions. To date, consensus has not been reached. Certain Regional Entities have been unable to modify their current practices and consensus has not been achieved among all parties on acceptable approaches.

Specific NERC Actions

a. Continue discussions in an attempt to reach consensus.

14. Implement a uniform budgeting tool.

Two Regional Entities suggested NERC consider implementing a uniform budgeting tool, in place of the NERC-supplied Excel spreadsheet templates, to capture and project expected budgetary needs for each region. Due to the complexity of budgeting to the function level for so many entities, it would be useful if a common tool could be used by NERC and all Regional Entities. This could help improve efficiency and consistency by allowing each organization to prepare its budgets in a more automated fashion.

Discussion of Comments

NERC is of the opinion that this would be a useful undertaking assuming that it was cost effective for all involved entities to convert to using the common budgeting tool.

Specific NERC Actions

a. Discuss concept with the REBG to evaluate if there is consensus to pursue development of such a tool.

15. Adopt uniform budget metrics.

Two Regional Entities commented that the adoption of uniform metrics would enable the identification of trends that would be useful for projecting future resource needs. NERC and the Regional Entities have already started making efforts toward this goal.

Discussion of Comments

As stated above, NERC and the Regional Entities are already engaging in efforts toward this goal.

Specific NERC Actions

a. Continue efforts in the 2010 budget cycle.

16. NERC and Regional Entities should use Generally Accepted Accounting Principles.

Two Regional Entities suggested that NERC and the Regional Entities use generally accepted accounting principles to increase the level of consistency in the business plans and budgets. This would require NERC and each Regional Entity to prepare an operating budget and a separate capital expenditures budget.

Discussion of Comments

The development and tracking of separate operating and capital expenditures budgets has already been adopted for development of the 2010 budget and in reporting of 2009 actual results.

Specific NERC Actions

a. Continue implementation in the 2010 and future year budgets and in the 2009 and future year reporting of actual costs

K. Stakeholder Communications and Public Relations

1. NERC website functionality and ease of use.

Stakeholder comments highlighted navigation, information architecture, search functionality, and data presentation as areas in need of improvement for www.nerc.com. Specific comments pertaining to the Reliability Standards page included: both board- and FERC-approved dates for Reliability Standards should be shown; and instructions for balloting Reliability Standards should be easier to find.

Discussion of Comments

NERC's website underwent a complete re-design in July of 2007. While the new site represents a significant improvement over the previous site, work is still needed to improve the user experience, increase functionality, and meet the needs of the growing organization. A large part of NERC's activities depend upon its website to share information, facilitate discussions, and manage processes. As such, it is essential that appropriate priority be given to this tool.

Specific NERC Actions

a. NERC will continue to conduct regular surveys of the users of the NERC website and develop tools to track and measure usability of its website based on the survey results. The most recent survey has been completed.
b. NERC will implement improvements to the website based on these results.
c. Add a standard "Approvals" box in the footer of each standard to indicate NERC board and FERC approval dates along with a link to the table of "Effective Dates for Mandatory Standards."
d. Display more prominently and obviously on the NERC website the listing of "Effective Dates for Mandatory Standards" and change the title to "List of FERC-Approved Standards and Effective Dates."
e. Provide better access to frequently used information, including where to find information about balloting.

2. Outreach to non-traditional and smaller entities.

Stakeholders indicated that information disseminated by NERC (newsletters etc.) is geared toward traditional vertically-integrated utilities and not towards LSEs, PSEs, DPs etc. NERC should pursue a better outreach program for non-traditional and smaller entities.

Discussion of Comments

The audiences for NERC information span a broad spectrum of entities, each of which has different interests. Feedback on NERC issuances is always invited, encouraged and welcomed.

Specific NERC Actions

a. NERC will seek input from industry associations on improving outreach to non-traditional and smaller entities.
b. NERC will work to implement specific suggestions received as a result of these discussions.