

Agenda

Project Management and Oversight Subcommittee Conference Call

May 15, 2019 | 1:00-3:00 p.m. Eastern

Dial-in: 1-415-655-0002 | Access Code: 731 313 247 | Meeting Password: 051519

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Introduction and Chair's Remarks

NERC Antitrust Compliance Guidelines and Public Announcement NERC Participant Policy

Agenda Items

- 1. Consent Agenda Approve (C. Yeung)
 - a. March 20, 2019 Project Management and Oversight Subcommittee Meeting Minutes*
- 2. Prior Action Items Review (S. Barfield-McGinnis)
- 3. Project Tracking Spreadsheet (PTS) Review
 - a. 2015-09 Establish and Communicate System Operating Limits **Update** (K. Lanehome)
 - Potential schedule baseline Update
 - b. 2016-02 Modifications to CIP Standards (K. Lanehome, A. Mayfield, or K. Rosener)
 - i. (2016-02c) TO Control Centers performing TOP obligations (CIP-002) Update
 - ii. (2016-02d) Version 5 TAG, Cyber Asset and BES CA (BCA) definitions, Network and Externally Accessible Devices (ESP, ERC, IRA), Virtualization, and CIP Exceptional Circumstances – Update/Accept Baseline
 - iii. (2016-02e) CIP-003-8 Malicious Code Update
 - c. 2017-01 Modifications to BAL-003-1 (A. Casuscelli or L. Lynch)
 - i. 2017-01 (Phase 1) Update
 - ii. 2017-01(b) (Phase 2) Update/Accept Baseline
 - d. 2017-03 Periodic Review of FAC-008-3 Standard On Hold (M. Pratt)

¹ When joining the web portion, start with the web link first. Once logged in, a dialog box will open with all numbers or an option for WebEx to call your number. More importantly, it will give you your ATTENDEE ID#. Please use that number, if calling in, when prompted to do so. It links your web session to the caller on the phone.



- e. 2017-04 Periodic Review of Interchange Scheduling and Coordination Standards On Hold (C. Yeung)
- f. 2017-05 Project 2017-05 NUC-001-3 Periodic Review On Hold (C. Bellville or A. Casuscelli)
- g. 2017-07 Standards Alignment with Registration On Hold (M. Brytowski)
- h. 2018-03 Standards Efficiency Review (SER) Phase I Update (M. Brytowski or M. Pratt)
 - i. SER Phase II **Update** (M. Brytowski or L. Lynch)
- i. 2018-04 PRC-024-2 and Inverter Based Resources **Update** (L. Lynch)
- j. 2019-01 Modifications to TPL-007-3 **Update/Accept Baseline** (M. Brytowski or S. Cavote)
- k. 2019-02 BES Cyber System Information Access Management (CIP-004 and CIP-011) **Assign Liaison/Accept Baseline**

4. Other

- a. PTS project Complexity Factors Discussion
- b. Next meeting In-person at NERC on June 26 at 8:00-10:00 a.m. Eastern
- c. Other

5. Adjournment

^{*}Background materials included.



Public Announcements

Conference call:

Participants are reminded that this conference call is public. The access number was posted on the NERC website and widely distributed. Speakers on the call should keep in mind that the listening audience may include members of the press and representatives of various governmental authorities, in addition to the expected participation by industry stakeholders.



Antitrust Compliance Guidelines

I. General

It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.

It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

Antitrust laws are complex and subject to court interpretation that can vary over time and from one court to another. The purpose of these guidelines is to alert NERC participants and employees to potential antitrust problems and to set forth policies to be followed with respect to activities that may involve antitrust considerations. In some instances, the NERC policy contained in these guidelines is stricter than the applicable antitrust laws. Any NERC participant or employee who is uncertain about the legal ramifications of a particular course of conduct or who has doubts or concerns about whether NERC's antitrust compliance policy is implicated in any situation should consult NERC's General Counsel immediately.

II. Prohibited Activities

Participants in NERC activities (including those of its committees and subgroups) should refrain from the following when acting in their capacity as participants in NERC activities (e.g., at NERC meetings, conference calls and in informal discussions):

- Discussions involving pricing information, especially margin (profit) and internal cost information and participants' expectations as to their future prices or internal costs.
- Discussions of a participant's marketing strategies.
- Discussions regarding how customers and geographical areas are to be divided among competitors.
- Discussions concerning the exclusion of competitors from markets.
- Discussions concerning boycotting or group refusals to deal with competitors, vendors or suppliers.



• Any other matters that do not clearly fall within these guidelines should be reviewed with NERC's General Counsel before being discussed.

III. Activities That Are Permitted

From time to time decisions or actions of NERC (including those of its committees and subgroups) may have a negative impact on particular entities and thus in that sense adversely impact competition. Decisions and actions by NERC (including its committees and subgroups) should only be undertaken for the purpose of promoting and maintaining the reliability and adequacy of the bulk power system. If you do not have a legitimate purpose consistent with this objective for discussing a matter, please refrain from discussing the matter during NERC meetings and in other NERC-related communications.

You should also ensure that NERC procedures, including those set forth in NERC's Certificate of Incorporation, Bylaws, and Rules of Procedure are followed in conducting NERC business.

In addition, all discussions in NERC meetings and other NERC-related communications should be within the scope of the mandate for or assignment to the particular NERC committee or subgroup, as well as within the scope of the published agenda for the meeting.

No decisions should be made nor any actions taken in NERC activities for the purpose of giving an industry participant or group of participants a competitive advantage over other participants. In particular, decisions with respect to setting, revising, or assessing compliance with NERC reliability standards should not be influenced by anti-competitive motivations.

Subject to the foregoing restrictions, participants in NERC activities may discuss:

- Reliability matters relating to the bulk power system, including operation and planning matters such as establishing or revising reliability standards, special operating procedures, operating transfer capabilities, and plans for new facilities.
- Matters relating to the impact of reliability standards for the bulk power system on electricity markets, and the impact of electricity market operations on the reliability of the bulk power system.
- Proposed filings or other communications with state or federal regulatory authorities or other governmental entities.

Matters relating to the internal governance, management and operation of NERC, such as nominations for vacant committee positions, budgeting and assessments, and employment matters; and procedural matters such as planning and scheduling meetings.



NERC Participant Conduct Policy

General

Consistent with its Rules of Procedure, Bylaws, and other governing documents, NERC regularly collaborates with its members and other stakeholders to help further its mission to assure the effective and efficient reduction of risks to the reliability and security of the grid. Many NERC members and other bulk power system experts provide time and expertise to NERC, and the general public, by participating in NERC committees, subcommittees, task forces, working groups, and standard drafting teams, among other things. To ensure that NERC activities are conducted in a responsible, timely, and efficient manner, it is essential to maintain a professional and constructive work environment for all participants, including NERC staff, members of NERC committees, subcommittees, task forces, working groups, and standard drafting teams, as well as any observers of these groups. To that end, NERC has adopted the following Participant Conduct Policy (this "Policy") for all participants engaged in NERC activities. Nothing in this Policy is intended to limit the powers of the NERC Board of Trustees or NERC management as set forth in NERC's organizational documents, the NERC Rules of Procedure, or under applicable law. This Policy does not apply to the NERC Board of Trustees or the Member Representatives Committee.

Participant Conduct Policy

All participants in NERC activities must conduct themselves in a professional manner at all times. This Policy includes in-person conduct and any communication, electronic or otherwise, made as a participant in NERC activities. Examples of unprofessional conduct include, but are not limited to, verbal altercations, use of abusive language, personal attacks, or derogatory statements made against or directed at another participant, and frequent or patterned interruptions that disrupt the efficient conduct of a meeting or teleconference.

Additionally, participants shall not use NERC activities for commercial purposes or for their own private purposes, including, but not limited to, advertising or promoting a specific product or service, announcements of a personal nature, sharing of files or attachments not directly relevant to the purpose of the NERC activity, and communication of personal views or opinions, unless those views are directly related to the purpose of the NERC activity. Unless authorized by an appropriate NERC officer, individuals participating in NERC activities are not authorized to speak on behalf of NERC or to indicate their views represent the views of NERC, and should provide such a disclaimer if identifying themselves as a participant in a NERC activity to the press, at speaking engagements, or through other public communications.

Finally, participants shall not distribute work product developed during the course of NERC activities if that work product is deemed Confidential Information consistent with the NERC Rules of Procedure Section 1500. Participants also shall not distribute work product developed during the course of NERC activities if distribution is not permitted by NERC or the relevant committee chair or vice chair (e.g., an embargoed report), provided that NERC, or the committee chair or vice chair in consultation with NERC staff, may grant in writing a request by a participant to allow further distribution of the work product to one or more



specified entities within its industry sector if deemed to be appropriate. Any participant that distributes work product labeled "embargoed," "do not release," or "confidential" (or other similar labels) without written approval for such further distribution would be in violation of this Policy. Such participants would be subject to restrictions on participation, including permanent removal from participation on a NERC committee or other NERC activity.

Reasonable Restrictions on Participation

If a participant does not comply with this Policy, certain reasonable restrictions on participation in NERC activities may be imposed, as described below.

If a NERC staff member, or committee chair or vice chair after consultation with NERC staff, determines, by his or her own observation or by complaint of another participant, that a participant's behavior is disruptive to the orderly conduct of a meeting in progress or otherwise violates this Policy, the NERC staff member or committee chair or vice chair may remove the participant from a meeting. Removal by the NERC staff member or committee chair or vice chair is limited solely to the meeting in progress and does not extend to any future meeting. Before a participant may be asked to leave the meeting, the NERC staff member or committee chair or vice chair must first remind the participant of the obligation to conduct himself or herself in accordance with this Policy and provide an opportunity for the participant to comply. If a participant is requested to leave a meeting by a NERC staff member or committee chair or vice chair, the participant must cooperate fully with the request.

Similarly, if a NERC staff member, or committee chair or vice chair after consultation with NERC staff, determines, by his or her own observation or by complaint of another participant, that a participant's behavior is disruptive to the orderly conduct of a teleconference in progress or otherwise violates this Policy, the NERC staff member or committee chair or vice chair may request the participant to leave the teleconference. Removal by the NERC staff member or committee chair or vice chair is limited solely to the teleconference in progress and does not extend to any future teleconference. Before a participant may be asked to leave the teleconference, the NERC staff member or committee chair or vice chair must first remind the participant of the obligation to conduct himself or herself in accordance with this Policy and provide an opportunity for the participant to comply. If a participant is requested to leave a teleconference by a NERC staff member or committee chair or vice chair, the participant must cooperate fully with the request. Alternatively, the NERC staff member or committee chair or vice chair may choose to terminate the teleconference.

At any time, a NERC officer, after consultation with NERC's General Counsel, may impose a restriction on a participant from one or more future meetings or teleconferences, a restriction on the use of any NERC-administered listserv or other communication list, or such other restriction as may be reasonably necessary to maintain the orderly conduct of NERC activities. Before approving any such restriction, the NERC General Counsel must provide notice to the affected participant and an opportunity to submit a written objection to the proposed restriction no fewer than seven days from the date on which notice is provided. If approved, the restriction is binding on the participant, and NERC will notify the organization employing or contracting with the restricted participant. A restricted participant may request removal of the restriction by submitting



a request in writing to the NERC General Counsel. The restriction will be removed at the reasonable discretion of the NERC General Counsel or a designee.

Upon the authorization of the NERC General Counsel, NERC may require any participant in any NERC activity to execute a written acknowledgement of this Policy and its terms and agree that continued participation in any NERC activity is subject to compliance with this Policy.

Guidelines for Use of NERC Email Lists

NERC provides email lists, or "listservs," to NERC stakeholder committees, groups, and teams to facilitate sharing information about NERC activities. It is the policy of NERC that all emails sent to NERC listservs be limited to topics that are directly relevant to the listserv group's assigned scope of work. NERC reserves the right to apply administrative restrictions to any listserv or its participants, without advance notice, to ensure that the resource is used in accordance with this and other NERC policies.

Prohibited activities include using NERC-provided listservs for any price-fixing, division of markets, and/or other anti-competitive behavior. Recipients and participants on NERC listservs may not utilize NERC listservs for their own private purposes. This may include lobbying for or against pending balloted standards, announcements of a personal nature, sharing of files or attachments not directly relevant to the listserv group's scope of responsibilities, or communication of personal views or opinions, unless those views are provided to advance the work of the listserv's group. Any offensive, abusive, or obscene language or material shall not be sent across the NERC listservs.

Any participant who has concerns about this Policy may contact NERC's General Counsel.

Version History

Version	Date	Change Tracking
1	February 6, 2019	
2	February 22, 2019	 Clarified policy does not apply to Board or MRC Addressed participants speaking on behalf of NERC

Agenda Item 1a Project Management and Oversight Subcommittee May 15, 2019

Meeting Minutes Project Management and Oversight Subcommittee (PMOS)

March 20, 2019 | 8:00 p.m. - 10:00 a.m. Central

Introduction and Chair's Remarks

Chair C. Yeung called the meeting, held in-person at Austin Energy in Austin, Texas, to order at 8:01 a.m. Central. The meeting was announced via the PMOS email distribution list on March 13, 2019 as well as being publicly posted on nerc.com. The chair provided the subcommittee with opening remarks and welcomed members¹ and guests. The secretary, C. Yeung, had each attendee in attendance both inperson and remotely identify themselves. Those in attendance included:

Members: Charles Yeung (PMOS chair), Michael Brytowski (PMOS vice chair), Colby Bellville (remote), Ken Lanehome, Mark Pratt, and Kirk Rosener. A quorum of voting members (i.e., six of nine) were present along with non-voting members Andrew Gallo and Amy Casuscelli.

Observers: from industry: John Allen, Todd Bennet, Yee Chou, Rachel Coyne, Venona Greaff, Matthew Harward, Lin Oelker, Alexander Vedvik, Douglas Webb, William Winters, Kimberly Zimmerman, and Guy Zito; from FERC: Michael Gildea; from NERC: Scott Barfield-McGinnis (secretary), Howard Gugel, Soo Jin Kim, Jordan Mallory, and Lauren Perotti.

NERC Antitrust Compliance Guidelines and Public Announcement

NERC Antitrust Compliance Guidelines and Public Announcement were presented and reviewed by the secretary. The secretary noted the full antitrust guidelines and public announcement were provided in the agenda package to each member via email and posted on the PMOS webpage. There were no questions.

NERC Participant Policy

The secretary noted that the revised NERC Participant Policy was included in the meeting announcement and that there would be a full presentation of the policy during the Standards Committee meeting following this meeting.

Agenda Items

1. Review of Agenda

C. Yeung reviewed the agenda with members and attendees.

2. Consent Agenda

The February 13, 2019 Meeting Minutes were reviewed, not amended, and the agenda and the Meeting Minutes were approved by unanimous consent.

¹ The PMOS is composed of industry stakeholders where the chair or vice chair must be a member of the Standards Committee (SC) and the SC leadership are non-voting members of the PMOS.



3. Review of Prior Action Items

- S. Barfield-McGinnis reported on the following action items from the February 13, 2019 in-person meeting:
 - a. Follow up with the Project 2016-02d Standards Developer to consider a rebase for aligning the project to 18 months. (In progress pending team work in April)
 - b. Create a Phase II of Project 2017-01 (BAL-003) that will address IFRO and FRM, for example. (Complete)
 - c. Archive Project 2018-01 (TPL-007-2, Canadian GMD Variance) as it was filed with regulatory authorities on December 7, 2018. (Complete)
 - d. On the March 20, 2019 PMOS Agenda, show the action for Project 2018-02 (CIP-008) as "archive" pending the filing. (Complete)
 - e. Add C. Yeung to Project 2018-04 and confirm he is on the distribution list. (Complete)
 - f. Add M. Brytowski and L. Lynch as the PMOS Liaisons for Phase II of the SER project and confirm they are on the distribution list(s). (Complete)

4. Project Tracking Spreadsheet (PTS) and Project Review

- a. 2015-09 Establish and Communicate System Operating Limits (SOL) K. Lanehome reported:
 - The standard drafting team (SDT) held webinar on February 21 and is review reviewing survey feedback. The logging/reporting issue and the proposed way forward is on the agenda for the March SC meeting. Lastly, an ad-hoc team is working with the Critical Infrastructure Protection (CIP) SDT to address CIP-002 criterion regarding IROLs. A meeting is scheduled this week and the CIP SDT will handle posting for additional ballot in April.
- b. 2016-02 Modifications to Critical Infrastructure Protection (CIP) Standards K. Lanehome reported the following:
 - i. (2016-02c) CIP-002-5.1a: The SOL SDT to address criterion regarding IROLs in Project 2015-09 and will look to achieve consensus before posting for additional comment and ballot anticipated in April. J. Mallory added that an ad-hoc team is working with the Critical Infrastructure Protection (CIP) SDT to address CIP-002 criterion regarding IROLs. A meeting is scheduled this week and the CIP SDT will handle posting for additional ballot in April.
 - ii. (2016-02d) Version 5 TAG, Cyber Asset and BES CA (BCA) definitions, Network and Externally Accessible Devices (ESP, ERC, IRA), Virtualization, and CIP Exceptional Circumstances: The SC has approved a request from the SDT to add members to the team and the SDT has been working on a white paper and executive summary to explain why changes to the standards are necessary. A virtualization webinar is planned for April and a schedule is to be determined and presented at the May PMOS conference call meeting. S. Kim added the white paper will be stating "a case for



- change" from the SDT describing the need for Reliability Standards to evolve based on changes in technology.
- iii. (2016-02e) CIP-003-8 Malicious Code (FERC Order #843 Malicious Code Example Directive): The standard passed ballot in 2018 and has been on hold due to the implementation timeline being tied to the passage of CIP-002. NERC legal has assisted in modifying language to no longer be dependent on CIP-002 and is in the review process with NERC and will be reviewed by the SDT. The standard is expected to go to final ballot in April.
- c. 2017-01 Project 2017-01 Modifications to BAL-003-1.1 S. Kim reported the following: Phase I: Phase 1 will proceed to final ballot, but a date has yet to be determined due to NERC staff is conducting a study regarding Interconnection Frequency Response Obligation (IFRO) to ensure there will not be reliability issues created by any SDT proposed changes. The completion date of the study is still undetermined, but with a possibility of a May NERC Board approval. There are no anticipated issues at this time.

Phase II:

The SDT is working on the questions and format for the Technical Conference scheduled for March 26 in Atlanta. For Phase II, the SDT is developing a formal problem statement and objectives. There are 4 elements in the Standard Authorization Request (SAR) that will be addressed:

- 1. IFRO (Load response, mix, and type of generation);
- 2. Allocation Existing and possible;
- 3. FRM (Frequency Response Measure) Plan for monitoring; and
- 4. Appropriate Registered Entities | Equitable allocations.

Following the technical conference, the SDT will meet on March 27-28 to realign Phase II work based on the feedback.

- d. 2017-03 Periodic Review of FAC-008-3 Standard No report as the project is on hold pending the outcome of the SER project.
- e. 2017-04 Periodic Review of Interchange Scheduling and Coordination Standards No report as the project is on hold pending the outcome of the SER project.
- f. 2017-05 Project 2017-05 NUC-001-3 Periodic Review No report as the project is on hold pending the outcome of the SER project.
- g. 2017-07 Standards Alignment with Registration No report as the project is on hold pending the outcome of the SER project.
- h. 2018-03 Standards Efficiency Review Phase I M. Pratt reported the following:

 The Standard Authorization Request (SAR) SDT is recommending 83 Requirements (~78% of the original SAR) including 12 Standard. There was discussion on industry's difficulty of managing 17 different ballots for this project in the Standards Balloting System (SBS). An Industry Webinar is planned to be held March 21, 2019 to facilitate industry's understanding of the technical rationale for each proposed retirement. The remaining



Requirements not being retired under Phase I have been handed off to Phase II for consideration. The SC approved for initial posting to end on April 12, 2019.

- S. Barfield-McGinnis provided an update of what the Phase II subteam is addressing. The four member team (i.e., John Allen, Gary Nolan, Charles Rogers, and Bob Staton) will be identifying which Reliability and Standards that could not be outright retired and those that the Efficiency Concept team will address (i.e., the delta). The subteam will have an inperson meeting the day before the SER Phase II team meets April 17-18 at NERC in Atlanta, Georgia.
- i. 2018-04 Modifications to PRC-024-2 C. Yeung reported: The SDT met February 26-27, 2019 and held a conference call on March 7, 2019 as part of their expedited schedule. They have plans to post for an initial comment and ballot by April 17, 2019. The SDT is meeting March 18-20, 2019 in Washington, DC to continue the "SAR Scope" revisions that include developing "proposed solutions" and to address a list of action items. There are no pressing issues this time.
- j. 2019-01 Modifications to TPL-007-3 C. Yeung requested a volunteer from the membership to be the liaison for the project. M. Brytowski volunteered to oversee the project.

5. Other

- a. PTS Project Historical Look
 - S. Barfield-McGinnis gave a presentation of an analysis he conducted on the PTS. In summary, he populated data from Archived Reliability Standards Under Development projects webpage. He showed graphically in a chart the total number of days it took to complete a project from the SAR start date as the beginning to the Final Ballot end date as the ending point. The chart revealed that older projects (i.e., pre-2008) had substantially longer (i.e., >2,000) days to complete. This was attributed to early projects requiring SDTs to conduct the technical research sometimes lasting years before actually posting a project. Among other things, the chart clear revealed that the typical time to complete a project is converging on 18 months and less.

A part of the analysis was to evaluate the time to complete a project based upon "complexity factors" that effect the duration. S. Barfield-McGinnis explained that the analysis used four complexity factors, which are: (1) the number of affected standards, (2) the priority of the project as assigned by the SC, (3) the number of regulatory directives, and (4) the number of guidance(s) (i.e., "soft directives"). He explained that there was not statistical significance of the four complexity factors due to the small of number of projects available. However, a positive correlation was observed when evaluating the number of directives and priority of a project complexity factors individually. To incorporate all four complexity factors, a weighted average complexity factor was established and resulted in a positive correlation.

Lastly, S. Barfield-McGinnis illustrated graphically how projects in the last five years have performed based on both the PMOS planned time and expected time based on the last ten



years of performance. He also noted that the data is available in the PTS that is publicly posted on the NERC Standards webpage by unhiding the applicable tabs in the Excel® spreadsheet.

b. Subscribing to NERC mailing lists

- S. Barfield-McGinnis demonstrated that the NERC Standards webpage has been updated to end using the "catch all" SARCOMM@NERC.NET email for questions and inquiries. The links that are now available for inquiries and mailing lists direct stakeholders to the NERC Information Technology support system. He highlighted the various options from things like the Standards Balloting System ("SBS"), Coordinated Functional Registration ("CFR"), and "Standards," which generates a second drop box for refining the request to a SAR, Standards Effective Dates, and Request for Interpretation.
- c. Next meeting Conference Call on May 15 at 1:00-3:00 p.m. Eastern.

6. Action Items

- S. Barfield-McGinnis took the following action items to be addressed prior to the next meeting:
- a. Add FAC-011 as an affected standard to Project 2015-09.
- b. Obtain a baseline schedule from the SDT for Phase 2 of Project 2017-01(b).
- c. Add an agenda item for the May 15 conference call concerning the four projects (i.e., 2017-03, 2017-04, 2017-05, and 2017-07) that are currently on hold to address: (1) how to restart these and any other future projects that are on hold from a duration standpoint; (2) the current status of the held projects pending the SER Phase I & II work; and (3) the efforts being made to ensure the projects are reviewed and aligned with the SER outcomes.
- d. Remove the listing of Project 2018-01 from the PTS "home page."
- e. Archive Project 2018-02 (CIP-008) in the PTS, including the home and summary pages.
- f. Add M. Brytowski as the liaison for Project 2019-01 Modifications to TPL-007-3

7. Adjournment

C. Yeung adjourned the meeting at 9:28 a.m. Central by consent.