

Meeting Notes Project 2010-05.1 – Protection Systems (Misoperations) Standard Drafting Team April 9-12, 2013

Conference Call

Administrative

1. Introductions

The meeting was brought to order by Mr. Barfield in the absence of the chair, at 8:10 a.m. ET, Tuesday, April 9, 2013. Mr. Barfield noted that he would be facilitating the meeting for the primary Standards Developer, Mr. McMeekin. The successive ballot of draft 2 ending on February 20, 2013 received 50.66% industry approval. Those in attendance over the four day meeting were:

Name	Company	Member/ Observer	4/9	4/10	4/11	4/12
Art Buanno	ReliabilityFirst Corporation	Member	Х	Х	Х	Х
Paul DiFilippo	Hydro One Networks, Inc.	Member	Х	Х	Х	Х
Mark Gutzmann, Acting Chair	Xcel Energy, Inc.	Member	х	Х	Х	Х
Bill Middaugh	Tri-State G & T Association, Inc.	Member	Х	Х	Х	Х
John W. Miller	Georgia Transmission Corporation	Member	х	х	Х	Х
Steve Paglow	American Electric Power	Member	Х	Х	Х	-
Richard A. Purdy, P.E.	Dominion Virginia Power	Member	х	х	Х	Х
Patrick Sorrells	Sacramento Municipal Utility District	Member	х	х	Х	-
Juan Villar	Federal Energy Regulatory Commission	Observer	Х	Х	Х	Х



Name	Company	Member/ Observer	4/9	4/10	4/11	4/12
Scott Barfield- McGinnis (Standard Developer)	North American Electric Reliability Corporation	Observer	Х	Х	Х	Х
Al McMeekin (Standard Developer)	North American Electric Reliability Corporation	Observer	х	-	Х	Х
William Edwards (Attorney)	North American Electric Reliability Corporation	Observer	Х	х	-	-
Michael Gildea	North American Electric Reliability Corporation	Observer	-	Х	-	-
Bill Schultz	Southern Company	Observer	7	-	-	Х

2. Determination of Quorum

NERC standard drafting meetings require two-thirds of the members to meet quorum when a particular matter requires a vote. Quorum was achieved on the first, second, and third day as eight of the twelve members were present. On day four, quorum was not achieved as only six of the twelve members were present.

3. NERC Antitrust Compliance Guidelines and Public Announcement

NERC Antitrust Compliance Guidelines and public disclaimer were presented by Mr. Barfield. There were no questions. Each day, Mr. Barfield reminded participants that the NERC Antitrust Compliance Guidelines and public disclaimer remain in effect.

4. Review Roster

Mr. McMeekin presented the team roster and noted there have been no changes to the roster. The team is providing contact information updates to Mr. McMeekin off-line.

Agenda

1. Review of meeting notes

Previous meeting notes were not reviewed.

2. Open business from last meeting

The following represents assignments given to complete the consideration of comments. Discussion as a result of these action items are incorporated under the Response to Comments heading.

a. Mr. McMeekin:

i. Rules of Procedure Section 1600 – Mr. McMeekin provided language provided by NERC Legal staff to use in the Consideration of Comments.



- ii. Internal Controls language Mr. McMeekin provided language provided by NERC Legal staff to use in the Consideration of Comments.
- iii. Natural disaster issue Commenters were requesting exception to the timelines during storms or natural disasters.
- b. Mr. Buanno (Question 1): Update the corresponding parts of the Application Guidelines to reflect changes to the Misoperation definition. (Complete)
- c. Mr. Gutzmann and Mr. DiFilippo (Question 2): Update Q2 responses, R1 rationale, and the corresponding parts of the Application Guidelines to reflect the revisions to R1. (Complete)
- d. Mr. Middaugh (Question 3): Rework VSLs without the use of the percentages and update to reflect R1 revisions. Then update Q3 responses accordingly. (Complete)
- e. Mr. Sorrells (Question 4): Work on Application Guidelines per comments to Question 4 and changes to standard attached. Schedule conference call with Mr. McMeekin and Mr. Gutzmann. (Complete)
- f. Mr. Miller and Mr. Paglow (Question 5): Review and reconcile responses against Draft 4 revisions. (Complete)

3. Respond to comments

Data Request

The drafting team discussed the concern stakeholders had regarding the NERC Rules of Procedure, Section 1600 Request for Information or Data. The development of the standard includes removing reporting requirements which are anticipated to be facilitated through a data request process. Development of the data request is expected to be handled contemporaneously with the development of the standard with the assistance of other NERC staff. The following text is under consideration by the team to respond to stakeholders:

"The drafting team removed the reporting obligations from the standard and is working with NERC staff to develop a data request under Section 1600 of the NERC Rules of Procedure. The data request will be submitted for approval at the time the revised standard is submitted. Data retention is still included as part of the standard because it is essential for auditing compliance with the standard. The 1600 data request does not eliminate the need to retain data."

The drafting team discussed the issues stakeholders had about the compliance aspects of the data request. Mainly, stakeholders were concerned that data reported would be used to measure an entity's compliance with the standard. Mr. Edwards provided feedback to the drafting team about the Section 1600 data request. Entities should retain the data like any other information provided to NERC. The evidence retention period for the data request may be identified in the standard under the compliance section. Furthermore, Section 1600 is not intended to be used to collect information relative to Reliability Standard requirements, meaning that duplication should not occur. It is not the intent of NERC to use data reported as compliance evidence with the standard. The drafting team removed the statement in the standard Background section that stated that data submitted would not be used by NERC for compliance. Mr. Barfield brought this



to the drafting team's attention along with advice from Mr. Edwards that this type of statement could not change the authority of another process.

Internal Controls

With respect to "internal controls," stakeholders continue to express concern over how NERC and the Regions will measure an entity's performance using internal controls. The following text from NERC staff was presented to the drafting team for discussion:

"The SDT continues to support the proposed draft standard as currently structured. The current draft requirements allow Compliance Enforcement Authorities to take into account use of internal controls in connection with monitoring activities. However, internal controls are only a mechanism to help auditors determine the depth and breadth of testing as it pertains to compliance with the related Reliability Standard and specific requirements and when necessary understand the facts and circumstances of instances of potential non-compliance. How any Possible Violations may be treated is outside of the scope of the project and reserved to the enforcement process."

Mr. Edwards noted the above text was crafted with the assistance of NERC staff. It is important to note that an entity that has internal controls is not a mechanism to eliminate self-reporting of potential violations. Mr. Paglow noted that an entity can create their own internal controls outside the scope of having a requirement in the standard. Mr. DiFilippo noted that it appears that entities are wanting to avoid reporting for single occurrences. The discussion resulted in the following paragraph change from above:

"The SDT continues to support the proposed draft standard as currently structured. The entity has the flexibility to use internal controls whether the requirement includes internal controls language or not. The current draft requirements allow Compliance Enforcement Authorities to take into account use of internal controls in connection with monitoring activities. However, internal processes are a mechanism to help auditors determine the depth and breadth of testing (e.g., scope and frequency of audits) as it pertains to compliance with the related Reliability Standard and specific requirements and when necessary understand the facts and circumstances of instances of potential non-compliance. Specific instances identified using internal controls still results in a Potential Violation and would need to be reported in the usual manner."

Natural Disasters

The drafting team raised the stakeholder concerns about natural disasters and storms with regard to allowing an entity to extend the time frames provided by the standard. One consideration was to allow the entity an extension of time equal to the amount of time afforded by the disaster. Mr. Edwards provided the team feedback to the drafting team about this issue. He referenced footnote 2 in the standard FAC-003-2 – Transmission Vegetation Management Program. Also, Mr. Edwards noted that once it is in the footnote the amount of flexibility provided to the entity is greatly reduced. In short, the entity is allowed an extension in the timeframe to complete its work under the standard that comport with the timeframe which the entity was prevented from completing its work.



Mr. Paglow suggested that there be a way to request NERC for an exception upfront. Mr. DiFilippo noted that sounds like a whole new process that is not currently in place. Mr. Paglow noted that having an exception is important because maintenance activities are generally delayed during storms and other natural disasters. The drafting team was unable to definitively decide on how to address this issue.

Standard Changes

Mr. Buanno presented his modifications of the consideration of comments to the drafting team. The drafting team restructured the subparts of Requirement R1 for clarity. Mr. Buanno also raised a question about the use of "entity" and how would a vertically integrated company comply with R1. For example, a company that is registered ("Registered Entity") as a Transmission Owner and Generation Owner comply with the notification portion of the requirement where the Transmission Owner may owner the breaker, but the Generation Owner owns part of the protection system. Mr. Edwards noted that the entity could declare that within the scope of their business practice. He also noted that guidance could be added to the Reliability Standard Audit Worksheet (RSAW) to provide the audit with assistance in handling such cases. In the end, it is best to have a process that captures notification in a manner that a reasonable person could identify as suitable evidence of compliance. The drafting team rewrote the measure to be more flexibility in terms of the evidence that may be acceptable to demonstrate compliance with Requirement R1.

The drafting discussed concerns raised by stakeholders about conditions where a BES interrupting device was operated by some other action other than the Protection System operation itself. After discussion, the drafting team concluded that activities involving routine and normal activities were excluded; however, noted that a gap remained for conditions where a BES System Operator may take action to operate a BES interrupting device. The condition would be when and in the operator's judgment the Protection System should have operated and then takes action to operate the BES interrupting device. The drafting team agreed this was an important distinction and added the clause "...or by manual intervention in response to a Protection System operation failure."

The drafting team discussed concerns in R1.2.1 through R1.2.3 about the term "contributed to" and decided that "caused" was clearer and consistent with the term used in R1.2.4. Mr. Middaugh raised a concern about the structure of R1.2 that the parts R1.2.2-R1.2.3 should be reorganized for clarity. The drafting team agreed formatting and structure changes would be beneficial in Requirement R1, Part 1.2. The discussion resulted in removing the three bullets below:

- determined that its Protection System component(s) did not contribute to the Misoperation, or
- cannot determine if its components contributed to the Misoperation, or
- cannot determine whether the operation was correct.

Based on stakeholder comments, the drafting team considered replacing the term "contributed to" with "caused." The decision was to replace the term with "caused" to be consistent with other uses throughout the body of this standard. Other minor editorial changes were made for



readability to Requirement R1. Comments received also expressed concern over the Measure M1. The drafting team agreed the measure needed revision. The Measure M1 was modified to address acceptable evidence for Requirement R1 without being prescriptive to each part of the requirement. The drafting team focused on identifying the forms of evidence (i.e., electronic or hard copy) and providing examples of the types of evidence that are acceptable. For example, including but not limited to, sequence of events, relay targets, Disturbance Monitoring Equipment (DME) records, test results, or transmittals. The drafting team agreed that entities should have sufficient industry acumen regarding the standard to be able to understand which types of evidence apply to the respective parts of the Requirement.

Mr. Purdy was concerned about the use of "entity" in the sub-parts of Requirement R1. His concern was how an entity would be audited, either as the "registered entity" or "functional entity." Mr. Barfield noted the standards are developed in such a manner that the functional entity is applicable to the standard and the registered entity is registered for certain functions. The concern was further complicated by a question from Mr. Buanno. He was concerned how an entity would comply, for example with R1, Part 1.2 where an entity would be required to notify others, for the case where a single entity might be registered as different functions. Mr. Edwards provided feedback that an entity should be conservative in their approach and take an appropriate action to document any required notifications.

The drafting team made a minor modification to Requirement R2 to address an industry concern about conditions that would lead to closing an "action plan." The resulting change was to insert the language "... corrective actions are beyond the entity's control or would reduce BES reliability ..." to provide the entity with clarification of what would be a reason for closing an action plan. The Measure M2 was modified based on a team member's concern that is was duplicative. The phrase "... explaining why there is no need to develop a CAP" was removed to eliminate this unnecessary duplication with something that was obvious in the Requirement.

The drafting team changed "Misoperation" to its lowercase form in Requirement R3 because it is a verb, not a noun as defined by the *Glossary of Terms used in NERC Reliability Standards*. Also, a team member raised a concern that the second bullet of R3 was not consistent with the first bullet. To achieve consistency, the word "action" was removed and reinserted with the phrase "...actions investigative actions or Protection System modifications ..." to eliminate future stakeholder comments about the difference.

Requirement R4 received significant discussion about the phrase "as needed" based on stakeholder comments. Previously, the drafting team considered changing this to "if needed," but the suggestion provided no additional clarity. This issue was that the phrase provided no definitive performance or guidance to the entity when an update or revision should occur, if ever. The discussion resulted in removing this phase and replacing it with two discrete events (i.e., actions or timetables) that would require updating; therefore making it measurable. The replacement language was "... and update if actions or timetables change, through completion." This comports with the definition of the NERC defined term "Corrective Action Plan" (CAP) which by definition is comprised of "actions" and "timetables."

Stakeholders expressed other concerns about Requirement R4 that it provided no connection with Requirements R2 and R3. The drafting team considered the issues and elected to move



language that supported Requirement R4 from its Rationale Box and add it to the Requirement to provide a "loop back" to the Requirements R2 and R3. The Measure M4 was modified for clarity, including removing many of the "date" measures for evidence because these were not relevant to the requirement. Some language was removed because it could be construed as an expansion of the requirement.

The drafting team updated the Evidence Retention section to comport with concerns noted in comments.

Mr. Middaugh noted he increased the time allowance in the VSLs based on the recent posting of the Violation Severity Level (VSL) Guidelines. This was done in response to comments. Some drafting team members raised questions about consistency with NERC VSL Guidelines. Mr. Middaugh noted that NERC had published an updated VSL Guidance document in February 2013 and that he used the more recent version as a basis. Although, the VSL timeframe was not extended to the extent provided by the VSL Guidelines, it was extended according to stakeholder comments. The drafting team raised concern about the VSL Guidance and Mr. Barfield, having worked with the team that modified the document, provided background information on the that team's intent for assigning time-based VSLs.

Application Guidelines

The drafting team made minor editorial corrections with the Application Guidelines. Several team members provided additional supporting language in being responsive to stakeholder comments. Specifically, the team clarified differences in protective functions and control functions with respect to the use of reverse power relays in Section 6. Stakeholders were concerned about what condition applied to the standard with regard to when a BES interrupting device operation would be a Misoperation.

Exelon's concern raised about the CAP examples presented in the Application Guideline led to discussion regarding closing a CAP upon implementation of a program. The drafting team debated this issue and how it would be interpreted in the standard. Their conclusion was the CAP may be closed once actions that remedied a specific problem were complete. This comports with the Glossary of Terms Used in NERC Reliability Standards definition of a "Corrective Action Plan." Furthermore, the drafting team agreed that if one of the actions in a CAP was to develop a program to address other potential problems (i.e., those that may have been identified by the entity in its evaluation of other locations), the entity may close the CAP once it had developed the program. Mr. Barfield was concerned that this might not meet the expectation of regulators because those items when transitioned into a program would no longer be within the scope of the standard and may present a gap in reliability that would not be auditable. Mr. Villar's opinion regarding a CAP was that once the specific problem was remedied, the CAP is complete. This may include the creation of a program or other activity as an action within the CAP. If so, once the program or maintenance plan as an action of the CAP has been established, the CAP may be closed.

Also, Mr. Miller noted that the excessive use of dates within the examples may give the appearance to stakeholders that all the illustrated dates must be retained for evidence. The drafting team concurred and decided to remove all irrelevant dates. Mr. Barfield noted that the



examples appeared to give the unintended idea that an entity had already identified earlier problems which should have been addressed. Drafting team members also raised concern about the use of modifiers like "occasionally" and "frequently" which added no substantial value to the examples. The examples were updated for clarity and to demonstrate an entity evaluating other locations as called for in Requirement R2. The drafting team also added clarifying language that would denote the CAP was closed or completed.

Mr. Miller provided a flowchart via email illustrating a flow of the standard for the drafting team to consider adding to the Application Guidelines of the standard. The drafting team did not discuss adding the flowchart to the standard.

4. Review of the schedule

Mr. McMeekin reviewed the schedule of upcoming events with the team.

5. Action items or assignments

- a. Mr. McMeekin:
 - Discuss adding a flowchart to the standard
 - ii. Revisit and decide on how to address the natural disaster issue
 - iii. Webinar items -
 - 1. Need to present the change to R1 about "manual intervention"
 - 2. Can you close a CAP before remedying the problem? How about if an entity establishes a program to close the CAP?
 - 3. What triggers the review (e.g., the operation of a BES interrupting device)
 - 4. What are the differences between a CAP and action plan
 - 5. What goes into a CAP or action plan (amount of detail)
 - 6. Ownership of the BES interrupting device why do they have to initiate the review?

b. Mr. Kuras

- i. Creating the webinar
- ii. Need to revisit adding "cause" in Requirement R1 in front of "...or by manual intervention" for clarity
- c. Entire team assist Mr. Kuras with questions on the webinar

6. Next steps

- a. Webinar scheduled for Wednesday, May 7, 2012 from 1:00 to 3:00 p.m. Mr. Purdy noted that the Georgia Tech relay conference is being held at the same time and fault analysis conference starts on the prior day.
- b. Post the standard following the webinar

7. Future meeting(s)

NERC Offices



Atlanta, GA May 7-9, 2013

8. Adjourn

The meeting adjourned at 12:05 p.m. ET on Friday, April 12, 2013.

