**BEFORE THE**
**PROVINCE OF MANITOBA**

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| **NORTH AMERICAN ELECTRIC** | **)** |
| **RELIABILITY CORPORATION** | **)** |

# NOTICE OF FILING OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF PROPOSED RELIABILITY STANDARD EOP-004-2 – EVENT REPORTING


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# NOTICE OF FILING OF THE NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION OF PROPOSED RELIABILITY STANDARD EOP-004-2 – EVENT REPORTING

The North American Electric Reliability Corporation ("NERC") hereby provides notice of the proposed Reliability Standard —EOP-004-2—Event Reporting. EOP-004-2 was approved by the NERC Board of Trustees on November 7, 2012.[1]

NERC is submitting the proposed Reliability Standard, the associated implementation plan, Violation Risk Factors ("VRFs") and Violation Severity Levels ("VSLs"), and providing notice of retirement of the currently effective Reliability Standard as detailed below. Specifically, NERC provides notice of the following:

- Proposed Reliability Standard EOP-004-2 included in **Exhibit B**, effective as proposed herein;
  - Retirement of the following standards at midnight of the day immediately prior to the effective date of EOP-004-2:[2]
    - EOP-004-1 – Disturbance Reporting
    - CIP-001-2a – Sabotage Reporting

- Implementation plan for the proposed EOP-004-2 Reliability Standard which is included in **Exhibit C**.

[1] Unless otherwise designated, all capitalized terms shall have the meaning set forth in the Glossary of Terms Used in NERC Reliability Standards, available here: http://www.nerc.com/files/Glossary_of_Terms.pdf.

[2] Note, Compliance Application Notice CAN-0016 CIP-001 R1: Sabotage Reporting Procedure will be deemed to have been retired on midnight of the day immediately prior to the effective date of EOP-004-2.

The proposed effective date for the standard is just and reasonable and appropriately balances the urgency in the need to implement the standards against the reasonableness of the time allowed for those who must comply to develop necessary procedures, software, facilities, staffing or other relevant capability. The proposed effective date will allow applicable entities adequate time to ensure compliance with the requirements. This filing presents the technical basis and purpose of the proposed Reliability Standard EOP-004-2 and a demonstration that the proposed Reliability Standard meets the criteria for reliability.

## I. EXECUTIVE SUMMARY

The proposed Reliability Standard provides a comprehensive approach to reporting disturbances and events that have the potential to impact the reliability of the Bulk Electric System. The principal goal of NERC is to promote the reliability of the Bulk-Power System in North America and this goal is directly supported by evaluating events, undertaking appropriate levels of analysis to determine the causes of the events, promptly assuring tracking of corrective actions to prevent recurrence, and providing lessons learned to the industry.

The proposed Reliability Standard requires Responsible Entities to have an Operating Plan for reporting applicable events to NERC and others (*e.g.*, Regional Entities, applicable Reliability Coordinators and law enforcement) within 24 hours of the event according to the procedure specified in their Operating Plan. This requires Responsible Entities to report events in a timely manner to allow governmental authorities and critical infrastructure members the opportunity to react in a meaningful manner to such information which supports reliability principles and ultimately helps protect against future malicious physical attacks. The results-based approach of EOP-004-2 includes clear criteria for reporting, consistent reporting timelines, and encourages the development of an internal corporate culture of compliance that is focused on

reliability and communication. The proposed Reliability Standard provides for timely event analysis and ensures that NERC can develop trends and prepare for a possible next event.

The requirements of the proposed Reliability Standard complement the efforts of the NERC Bulk-Power System Awareness group and event analysis programs, and the standard drafting team worked in coordination with the Event Analysis Working Group to develop a list of the events that are required to be reported for reliability purposes.[3] This list is incorporated into the proposed EOP-004-2 standard as Attachment 1. Attachment 2 (or alternatively Department of Energy ("DOE") Form OE-417) is the form to be used by Responsible Entities for reporting when the threshold for an event listed in Attachment 1 is met.

NERC's Bulk-Power System Awareness group seeks to provide timely, accurate and complete information regarding the current status of the Bulk-Power System and threats to its reliable operation, enabling NERC and the industry to understand and learn from events and ultimately improve the reliability of the Bulk-Power System. The event analysis process also provides valuable input for training and education, reliability trend analysis efforts and reliability standards development, all of which support continued reliability improvement.

Proposed Reliability Standard EOP-004-2 is a result of merging EOP-004-1 and CIP-001-2a and represents a significant improvement in the identification and reporting of events. Successful event analysis depends on a collaborative approach in which registered entities, Regional Entities and NERC work together to achieve a common goal. The proposed Reliability Standard is just, reasonable, not unduly discriminatory or preferential and in the public interest.

[3] *See e.g.*, Event Analysis Process Document – Version 1 at Appendix E, Categorization of Events, available at: http://www.nerc.com/page.php?cid=5|365.

## II. NOTICES AND COMMUNICATIONS

Notices and communications with respect to this filing may be addressed to the following:


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## III. BACKGROUND

### a. NERC Reliability Standards Development Procedure

The proposed Reliability Standard was developed in an open and fair manner. NERC develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of its Rules of Procedure and the NERC Standard Processes Manual.[4] NERC's proposed rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing Reliability Standards and thus satisfies certain of the criteria for approving Reliability Standards. The development process is open to any person or entity with a legitimate interest in the reliability of the Bulk-Power System. NERC considers the comments of all stakeholders, and a vote of stakeholders and the NERC Board of

[4] The NERC Rules of Procedure are available here: http://www.nerc.com/page.php?cid=1%7C8%7C169. The current NERC Standard Processes Manual is available here: http://www.nerc.com/files/Appendix_3A_StandardsProcessesManual_20120131.pdf.

Trustees is required to approve a Reliability Standard before the Reliability Standard is submitted to the applicable governmental authorities for approval.

**b. History of Project 2009-01, Disturbance and Sabotage Reporting**

Project 2009-01—Disturbance and Sabotage Reporting, was initiated on April 2, 2009, by PJM Interconnection, L.L.C. as a request for revision to existing standards CIP-001-1, Sabotage Reporting, and EOP-004-1, Disturbance Reporting. The Standard Authorization Request was initiated to provide clarity on an appropriate threshold for reporting potential acts of sabotage as required by CIP-001-1, and to revise several requirements in currently effective EOP-004-1 that reference out-of-date Department of Energy forms and to eliminate "fill-in-the-blank" components.

The Disturbance and Sabotage Reporting drafting team was formed in late 2009. The drafting team developed EOP-004-2, Event Reporting, by combining the requirements of EOP-004-1 and CIP-001-2a into a single reporting standard using the results-based standard development approach.[5] The EOP-004-1 standard contains the requirements for reporting and analyzing disturbances while the CIP-001-2a standard addresses sabotage procedures and reporting. The drafting team used the NERC Security Guideline for the Electricity Sector: Threat and Incident Reporting as a resource.[6] In 2010, the drafting team developed a concept paper that identified the major concepts that the team proposed to be incorporated into the EOP-004-2 standard and posted the paper for comments. Additionally, the drafting team worked in coordination with the Events Analysis Working Group to develop a list of the events that would

[5] The results-based initiative is intended to focus the collective effort of NERC and industry participants on improving the clarity and quality of NERC Reliability Standards by developing performance, risk and competency-based requirements that accomplish a reliability objective through a defense-in-depth strategy, while eliminating documentation-driven requirements that do not benefit Bulk-Power System reliability.

[6] Available here: http://www.nerc.com/files/Incident-Reporting.pdf.

be required to be reported for reliability purposes and incorporated that list into Attachment 1 of the EOP-004-2 standard.

### i. Issues With Respect to Defining the Term "Sabotage"

The drafting team considered the directive by the Federal Energy Regulatory Commission ("FERC") in Order No. 693 to "further define the term [sabotage] and provide guidance on triggering events that would cause an entity to report an event."[7] However, there was concern among stakeholders that such a definition could be ambiguous or otherwise subject to interpretation.[8] The drafting team determined that it was almost impossible to determine if a particular act constituted sabotage without the intervention of law enforcement. There is an inherently subjective component to the determination of whether or not any particular event is caused by a malicious act and this determination may vary based on various factors, including the local jurisdiction, given that there is also a legal component to whether or not a particular act is considered to be deliberate or malicious. Further, the definition of the term "sabotage" would have to exclude events such as unintentional operator error, whereas an action by a third party with the same exact consequences or outcome might be considered "sabotage." The drafting team thus determined that attempting to define the term "sabotage" would result in further ambiguity with respect to the reporting of events. Instead, the drafting team developed a list of events included in Attachment 1 to provide guidance for reporting events. The drafting team

[7] Order No. 693 at P 461 (internal citation omitted).

[8] *See e.g.*, Disturbance and Sabotage Reporting Standard Drafting Team (Project 2009-01) Reporting Concepts Paper at 3 ("One thing became clear in the [drafting team's] discussion concerning sabotage: everyone has a different definition."). *Available here*: http://www.nerc.com/filez/standards/Project2009-01_Disturbance_Sabotage_Reporting.html.

determined that this method is an equally effective and efficient means of addressing the FERC directive in accordance with Order No. 693.[9]

## III. JUSTIFICATION OF THE PROPOSED RELIABILITY STANDARD

### a. Basis and Purpose of Reliability Standard and Improvements in this Revision

As noted herein, EOP-004-2 merges CIP-001-2a, which addresses sabotage procedures and reporting, and EOP-004-1, which addresses the reporting and analyzing of disturbances, into a single comprehensive Reliability Standard.[10] EOP-004 is part of the Emergency Preparedness and Operations ("EOP") body of Reliability Standards. The EOP group of Reliability Standards consists of eight Reliability Standards that address preparation for emergencies, necessary actions during emergencies and system restoration and reporting following disturbances.[11] CIP-001 is part of the Critical Infrastructure Protection body of standards.[12]

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[9] Order No. 693 at P 31 ("we do expect the ERO to respond with an equivalent alternative and adequate support that fully explains how the alternative produces a result that is as effective as or more effective that the Commission's example or directive.").

[10] Requirement R2 of existing Reliability Standard EOP-004-1, which provides that each Reliability Coordinator, Balancing Authority, Transmission Operator, Generation Operator and Load-Serving Entity must promptly analyze Bulk Electric System disturbances on its system or facilities, is incorporated into Requirement R1 of the proposed EOP-004-2 Reliability Standard and is addressed by the NERC Bulk-Power System Awareness group and the NERC events analysis program. The Requirements of EOP-004-2 specify that certain types of events are to be reported, but do not include explicit provisions to analyze events. However, events reported under EOP-004-2 are incorporated into the real-time understanding of the grid that is maintained by the Bulk-Power System Awareness group. Further, such reports may trigger further scrutiny by the NERC event analysis program. If warranted, the events analysis program personnel may request that more data for certain events be provided by the reporting entity or other entities that may have experienced the event.

[11] EOP-001 is dedicated to Emergency Operations Planning. EOP-002 is dedicated to Capacity and Energy Emergencies. EOP-003 is dedicated to Load Shedding Plans. EOP-004 is dedicated to Event Reporting. EOP-005 is dedicated to System Restoration Plans and Blackstart Resources. EOP-006 is dedicated to System Restoration Coordination, [note there is no EOP-007]. EOP-008 is dedicated to Loss of Control Center Functionality and EOP-009 is dedicated to Documentation of Blackstart Generating Unit Test Results.

[12] CIP-001-1 was submitted on December 5, 2006. On May 6, 2010, NERC filed a petition for approval of an interpretation to Requirement R2 of CIP-001-1.

### i. Proposed Reliability Standard, EOP-004-2

Proposed Reliability Standard EOP-004-2 requires reporting of events that impact or may impact the reliability of the Bulk Electric System, provides clear criteria for reporting, includes consistent reporting timelines, including a reporting hierarchy for reporting of disturbances, and provides clarity regarding who will receive the reported information. The proposed Reliability Standard consists of three Requirements. Requirement R1 mandates that Responsible Entities will have an event reporting Operating Plan for reporting specific types of events. Requirement R2 establishes a timeframe for reporting of events, and Requirement R3 states that Responsible Entities must validate the contact information contained in the Operating Plan each calendar year. The proposed Reliability Standard provides a comprehensive approach to disturbance and event reporting as explained in further detail below.

**Proposed Requirements**

**R1**. Each Responsible Entity shall have an event reporting Operating Plan in accordance with EOP-004-2 Attachment 1 that includes the protocol(s) for reporting to the Electric Reliability Organization and other organizations (e.g., the Regional Entity, company personnel, the Responsible Entity's Reliability Coordinator, law enforcement, or governmental authority). *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*

**R2.** Each Responsible Entity shall report events per their Operating Plan within 24 hours of recognition of meeting an event type threshold for reporting or by the end of the next business day if the event occurs on a weekend (which is recognized to be 4 PM local time on Friday to 8 AM Monday local time). *[Violation Risk Factor: Medium] [Time Horizon: Operations Assessment]*

**R3.** Each Responsible Entity shall validate all contact information contained in the Operating Plan pursuant to Requirement R1 each calendar year. *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*

**Requirement R1**

Requirement R1 of proposed Reliability Standard EOP-004-2 requires Responsible Entities to have an event reporting Operating Plan that includes, but is not limited to the protocol(s) for reporting, and each organization identified to receive an event report, for event

types specified in Attachment 1 of EOP-004-2. Attachment 1 of EOP-004-2, Reportable Events, lists: (i) events, (ii) the relevant entity with reporting responsibility and (iii) the threshold for reporting the event. In these situations, Responsible Entities are requirement to submit EOP-004-2 (or DOE Form OE-417) Attachment 2, pursuant to Requirements R1 and R2. The last column of Attachment 1, "Threshold for Reporting" is a bright line that, if reached, triggers the obligation for the entity to report that they experienced the applicable event per Requirement 1.

The requirement to have an Operating Plan for reporting specific types of events provides the entity with a method to have its operating personnel recognize events that affect reliability and to be able to report them to appropriate parties; *e.g.*, Regional Entities, applicable Reliability Coordinators, and law enforcement and other jurisdictional agencies when so recognized. In addition, these event reports are an input to the NERC event analysis program. The results-based approach of EOP-004-2 encourages the development of a culture of compliance that is focused on reliability and communication.

It is generally accepted that as a good business practice, every Registered Entity that owns or operates elements or devices on the grid should have a formal or informal process, procedure, or steps it takes to gather information necessary to analyze events.[13] Requirement R1 mandates that the Responsible Entity establish documentation on how that procedure, process, or plan is organized. This documentation may be a single document or a combination of various documents that achieve the reliability objective.

The communication protocol(s) could include a process flowchart, identification of internal and external personnel or entities to be notified, or a list of personnel by name and their

[13] *See e.g.*, PJM Manual 13, Emergency Operations, available at: http://www.pjm.com/~/media/documents/manuals/m13.ashx; *see also*, Midwest ISO Disturbance Reporting Procedure RTO-OP-023-r9.1, available at: https://www.midwestiso.org/Library/Repository/Procedure/RTO-OP-023-r9%201%20Disturbance%20Reporting%20Procedure.pdf.

associated contact information. An existing procedure that meets the requirements of CIP-001-2a may be included in this Operating Plan along with other processes, procedures or plans to meet this requirement.[14]

**Requirement R2**

Requirement R2 of proposed Reliability Standard EOP-004-2 requires Responsible Entities to report events within 24 hours of recognition of meeting an event type threshold for reporting, or, if an event occurs on a weekend, by the end of the next business day.[15] This incorporation of a deadline for reporting satisfies the FERC directive in Order No. 693 to "require an applicable entity to contact appropriate governmental authorities in the event of sabotage within a specified period of time."[16] Requirement R2 is based on "recognition" of meeting an event type threshold because basing the reporting of events on when the events actually occur would be impractical. In practice, an entity may not be immediately aware of destruction or damage to a remote piece of equipment.[17] Further, requiring Responsible Entities to constantly monitor all equipment and property for destruction or damage would be a waste of resources and would not serve the best interests of the reliability of the Bulk Electric System. For these reasons, the drafting team's incorporation of the term "recognition" is reasonable and

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[14] Proposed Reliability Standard EOP-004-2 incorporates existing Reliability Standard CIP-001-2a in its entirety. CIP-001-2a requires that each Reliability Coordinator, Balancing Authority, Transmission Operator, Generation Operator and Load-Serving Entity have procedures for recognizing and for making operating personnel aware of sabotage events (Requirement R1 of CIP-001-2a), and communicating information concerning sabotage events to appropriate "parties" in the Interconnection (Requirements R2 through R4 of CIP-001-2a). The requirements of CIP-001-2a are encompassed by Requirement R1 of EOP-004-2 and Attachment 1.

[15] Holidays are not specifically recognized in Requirement R2.

[16] Order No. 693 at P 471.

[17] *See e.g., Comments of Xcel Energy Services, Inc.*, Docket No. RM06-16-000 (January 3, 2007) at p. 24 ("The triggering event for disclosure of an act of sabotage often will be unclear. That is, it is often not clear whether an event is the result of an act of sabotage, the result of negligent misconduct by an individual, or by equipment failure for other reasons. The Xcel Energy Operating Companies operate thousands of miles of bulk power transmission facilities, and many of these facilities are in remote locations. For this reason, it may require investigation to determine whether the triggering event was an act of sabotage, or the result of some other cause (such as weather or unintentional vehicle contact). This investigation will take time –especially if the event occurs at an unstaffed and/or remote station or facility.")(internal citation omitted).

is consistent with FERC's support in Order No. 693 for defining the specified period of time for reporting an event based on when an event is discovered or suspected to be sabotage.[18]

Each Responsible Entity must report and communicate events according to its Operating Plan based on the information in Attachment 1 of EOP-004-2. By implementing the event reporting Operating Plan, the Responsible Entity will assure that NERC has situational awareness so that NERC can develop trends and prepare for a possible next event, and mitigate the current event through the event analysis program.

Responsible Entities that have multiple registrations will only have to submit one report for any individual event.[19] For example, if an entity is registered as a Reliability Coordinator, Balancing Authority and Transmission Operator, the entity would only submit one report for a particular event rather submitting three reports as each individual registered entity. However, there may be several reports as a result of any individual event and this is appropriate as it will provide NERC with a better understanding of the depth and breadth of system conditions based on the given event.

Requirement R3 of existing Reliability Standard EOP-004-1, which requires each Reliability Coordinator, Balancing Authority, Transmission Operator, Generation Operator and Load-Serving Entity experiencing a reportable incident to provide a preliminary written report, has been incorporated into Requirement R2 of proposed Reliability Standard EOP-004-2.

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[18] Order No. 693 at P 470 ("Thus, the Commission directs the ERO to modify CIP-001-1 to require an applicable entity to contact appropriate governmental authorities in the event of sabotage within a specified period of time, even if it is a preliminary report. The ERO, through its Reliability Standards development process, is directed to determine the proper reporting period. In doing so, the ERO should consider suggestions raised by commenters such as FirstEnergy and Xcel to define the specified period for reporting an incident beginning from when an event is discovered or suspected to be sabotage, and APPA's concerns regarding events at unstaffed or remote facilities, and triggering events occurring outside staffed hours at small entities.").

[19] *See* Guideline and Technical Basis for EOP-004-2, Multiple Reports for a Single Organization.

**Requirement R3**

Requirement R3 of proposed Reliability Standard EOP-004-2 calls for the Responsible Entity to validate the contact information contained in the Operating Plan each calendar year. This requirement helps ensure that the event reporting Operating Plan is up to date and Responsible Entities will be able to effectively report events to NERC to assure situational awareness.

The incorporation of this annual validation in Requirement R3 satisfies the FERC directive in Order No. 693 to "incorporate a periodic review or updating of the sabotage reporting procedures and for the periodic testing of the sabotage reporting procedures."[20]

**Attachment 1: Reportable Events**

Attachment 1 of EOP-004-2, Reportable Events, lists (i) events, (ii) the relevant entity with reporting responsibility and (iii) the threshold for reporting the event. In these situations, entities are required to submit EOP-004-2 Attachment 2, pursuant to Requirements R1 and R2. The events addressed in Attachment 1 include, among others: damage or destruction of a Facility, transmission loss, generation loss and a BES Emergency[21] requiring public appeal for load reduction. Such events and the thresholds identified for reporting these events, are an equivalent alternative approach that ensures that Responsible Entities respond to events. Therefore, Attachment 1 addresses FERC's underlying concern as efficiently and effectively as FERC's directive to define the term "sabotage." Collectively, Requirement R1 and Attachment 1

[20] Order No. 693 at P 466.

[21] "BES Emergency" as used in EOP-004-2 is a defined term set forth in the Glossary of Terms Used in NERC Reliability Standards, available here: http://www.nerc.com/files/Glossary_of_Terms.pdf.

require entities to properly identify and respond to events to minimize the adverse impact on the Bulk Electric System.[22]

In Attachment 1, the drafting team used the term "Facility" as defined in the Glossary of Terms Used in NERC Reliability Standards.[23] A Facility is defined as: "A set of electrical equipment that operates as a single Bulk Electric System Element (e.g., a line, a generator, a shunt compensator, transformer, etc.)" The drafting team does not intend the use of the term "Facility" to mean a substation or any other facility that one might consider in everyday discussions regarding the grid. This is intended to mean *only* a Facility as defined above. The use of the defined term provides greater clarity for entities regarding the specific types of events that are to be reported. Through the use of the term "Facility," all of the equipment within a substation that is critical to reliability is included.

**Attachment 2: Event Reporting Form**

Attachment 2 (or alternatively DOE Form OE-417) is the form to be used by Responsible Entities for reporting when the threshold for an event listed in Attachment 1 is met.

The DOE Office of Electricity Delivery and Energy Reliability uses Form OE-417, "Emergency Incident and Disturbance Report," to monitor major system incidents on electric power systems. Tracking disturbances that impact the integrated generating and transmission facilities is an important part of DOE's responsibilities, along with examining issues associated with insufficient capacity reserves. The form collects information on electric emergency incidents and disturbances for DOE's use in fulfilling its overall national security and other energy management responsibilities. The form is a mandatory filing whenever an electrical

[22] This is responsive to the FERC directive at P471 of Order No. 693 requiring NERC to "specify baseline requirements regarding what issues should be addressed in the procedures for recognizing sabotage events and making personnel aware of such events").

[23] *Available here*: http://www.nerc.com/files/Glossary_of_Terms.pdf .

incident or disturbance is sufficiently large enough to cross the reporting thresholds. Reporting coverage for the Form OE-417 includes all 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S. Trust Territories.

In an effort to minimize administrative burden, U.S. entities may use the DOE OE-417 form, rather than Attachment 2, to report under EOP-004.[24] Pursuant to the DOE's new online process, entities may record email addresses associated with their Operating Plan so that when the report is submitted to DOE, it will automatically be forwarded to the posted email addresses, thereby eliminating some administrative burden to forward the report to multiple organizations and agencies.[25] This approach is consistent with FERC's suggestion in Order No. 693 for NERC to "consider consolidation of the sabotage reporting forms and the sabotage reporting channels with the appropriate governmental authorities to minimize the impact of these reporting requirements on all entities."[26]

### b. Enforceability of the Proposed Reliability Standard, EOP-004-2

The proposed Reliability Standard contains measures that support each standard requirement by clearly identifying what is required and how the requirement will be enforced. These measures help provide clarity regarding how the requirements will be enforced, and ensure that the requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party.[27] The VSLs also provide further guidance on how NERC will enforce the requirements of the standard.

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[24] Canadian entities are required to use Attachment 2 to report events.

[25] *See* http://www.oe.netl.doe.gov/oe417.aspx.

[26] Order No. 693 at P 471.

[27] Order No. 672 at P 327 ("There should be a clear criterion or measure of whether an entity is in compliance with a proposed Reliability Standard. It should contain or be accompanied by an objective measure of compliance so that it can be enforced and so that enforcement can be applied in a consistent and non-preferential manner.").

### i. Violation Risk Factors and Violation Severity Levels

There are three requirements in EOP-004-2. Requirement R1 was assigned a Lower VRF while Requirements R2 and R3 were assigned a Medium VRF. The VRFs and VSLs for the proposed standard comport with NERC guidelines related to their assignment. For a detailed review of the VRFs, the VSLs, and the analysis of how the VRFs and VSLs were determined using these guidelines, please see **Exhibit E**.

## IV. SUMMARY OF THE RELIABILITY STANDARD DEVELOPMENT PROCEEDINGS

The development record for proposed Reliability Standard EOP-004-2 is summarized below. **Exhibit D** contains the Consideration of Comments Reports created during the development of the Reliability Standards. **Exhibit F** contains the complete record of development for the standards.

### a. Overview of the Drafting Team

The technical expertise of the ERO is derived from the drafting team. For this project, the drafting team consisted of four industry experts with a diversity of experience. A detailed set of biographical information for each of the team members is included along with the drafting team roster in **Exhibit G**. The development record for the proposed EOP-004-2 standard is summarized below.

### b. Standard Authorization Request Development

The first draft of the Standard Authorization Request was posted for a 30-day public comment from April 22, 2009 to May 21, 2009. The drafting team received 40 sets of comments

from 120 people from more than 60 companies representing 9 of the 10 industry segments. Most commenters agreed on the need for revisions to CIP-001-1 and EOP-004-1, but voiced concerns on issues including:

- The applicability of the final requirements;
- Whether or not the standards should be merged;
- The inclusion of vandalism and the thresholds for defining sabotage; and
- Onerous or duplicative reporting required by the current standards.

The Disturbance and Sabotage Reporting drafting team was formed in late 2009. In 2010, the drafting team developed a concept paper that identified the major concepts that the team proposed to be incorporated into the EOP-004-2 standard and posted the paper for a 30-day public comment period from March 17, 2010 to April 16, 2010. NERC received 41 sets of comments from 95 different people from approximately 50 companies representing 8 of the 10 industry segments. Most commenters agreed that the guidance in the concept paper should be used as a foundation for revising the standards. In the concept paper, the drafting team proposed to consolidate disturbance and event reporting under a single standard in EOP-004.

**c. The First Posting – Informal Comment Period**

The first draft of EOP-004-2 was posted for a 30-day informal comment period from September 15, 2010 to October 15, 2010. A mapping document that showed the translation of CIP-001-1 and EOP-004-1 into EOP-004-2 was posted for guidance with the first draft. There were 60 sets of comments, with comments from more than 175 different people from approximately 100 companies representing 9 of the 10 industry segments. In response to comments, the drafting team made several changes to the draft standard including:

- Revised the purpose statement to address the concern that the drafting team went beyond the reliability intent of the standard by concentrating too much on event analysis;

- Added a proposed working definition for “impact events” to the NERC Glossary of Terms;
- Deleted all references to “situational awareness” and instead using the terms “industry awareness” where appropriate;
- Added Load Serving Entities as applicable entities;
- Deleted Requirement R1 and proposed revisions to the NERC Rules of Procedure to include a central system with responsibility for receiving and distributing impact event reports;
- Revised Requirement R2 to include Operating Plan, Operating Process and Operating Procedure;
- Removed Parts 2.5 through 2.9 of Requirement R2 and replaced with Requirement R1, Part 1.4 to require updates to the Impact Event Operating Plan within 90 days of any change to content;
- Rewrote Requirement R3 to eliminate the need to assess the probable cause of an impact event;
- Rewrote Requirement R4 by taking out prescriptive guidance;
- Removed Requirement 5, Parts 5.3 and 5.4 and removed Requirements R7 and R8;
- Removed several bright-line criteria from Attachment 1, modifying it to assign clear responsibility for reporting for each category of impact event, and clarifying the types of events included in Attachment 1; and
- Clarified that NERC will accept DOE OE-417 form in lieu of Attachment 2 if the responsible entity is required to submit an OE-417 form, and added a process for the reporting of a Cyber Security Incident.

### d. The Second Posting – Informal Comment Period

The second draft of the standard was posted with the implementation plan for a public 30-day informal comment period from March 9, 2011 to April 8, 2011. The drafting team received 60 sets of comments from 188 different people from approximately 132 different companies representing all 10 industry segments. Several changes were made to the draft of the EOP-004-2 standard including:

- Deleted proposed definition of “Impact Event”;
- Revised the reporting time to 24 hours from 1 hour for most events
- Rewrote Requirement R1 to specify that the responsible entity have an Operating Plan for identifying and reporting events listed in Attachment 1;
- Revised the wording in Requirement R2 and R3 to more closely track the actions that need to be taken for reporting events and communications involving the Operating Plan;

- Rewrote Requirement R4 to more closely match the rationale language on annually verifying the communication process in its Operating Plan to provide better guidance to responsible entities; and
- Added clarity on which entities report and to whom events should be reported to.

**e. Third Posting – Formal Comment Period and Initial Ballot and Non-Binding Poll**

The third draft of the standard was posted for a public 45-day formal comment period from October 28, 2011 to December 12, 2011, and included an initial ballot and non-binding poll from December 2, 2011 to December 12, 2011. A mapping document and the VRF/VSL justification document were provided to aid in the review. The initial ballot for the draft of EOP-004-2 received a quorum of 87.97% and a 36.21% approval. The non-binding poll received a quorum of 85.28% and a 45% approval. The drafting team received 76 sets of comments from 171 individuals from 140 different companies representing nine of the ten industry segments. As a result of the comments, the drafting team made changes to the draft standard including:

- Revised the purpose statement to remove ambiguous language "with the potential to impact reliability";
- Revised Requirement R1 for clarity and matched the language more closely to FERC Order No. 693, Paragraph 471, and eliminated Part 1.2 and reworded Part 1.3 (now 1.2);
- Removed Part1.4 and made Part 1.5 a new Requirement R4;
- Revised Requirement R4 and made it R3;
- Deleted Requirement R2 and merged with R3 to eliminate redundancy;
- Reformatted the table in Attachment 1 to separate one hour reporting requirements from 24-hour reporting requirements; and
- Revised the language and eliminated redundancy in types of events included in Attachment 1.

In response to comments on the third draft, the drafting team also addressed in depth the different processes and reasons for using either the DOE OE-417 form or EOP-004-2 Attachment 2 to report events, and why it was necessary for standard EOP-004-2 to retain Attachment 2 as a reporting option.

### f. Fourth Posting – Formal Comment Period and Successive Ballot and Non-Binding Poll

The fourth draft of the EOP-004-2 standard was posted for a public formal comment period from April 25, 2012 to May 24, 2012 with a ten day successive ballot and non-binding poll held from May 15, 2012 to May 24, 2012. The mapping document, a "Consideration of Issues and Directives" document, a VRF/VSL justification document, and a proposed NERC Rules of Procedure Section 812 document were posted to assist in review. The successive ballot received a quorum of 84.43% and an approval of 46.18%. The non-binding poll results achieved a 79.95% quorum and a 52.67% supportive opinion. The drafting team received 87 sets of comments from 210 different people from approximately 135 different companies representing 9 of the 10 industry segments. Based on the comments received, NERC made the following changes to the draft standard:

- Removed the reporting of Cyber Security Incidents from EOP-004 and directed the team developing CIP-008-5 to retain this reporting;
- Removed Interchange Coordinator, Transmission Service Providers, Load-Serving Entity, Electric Reliability Organization and Regional Entity as Responsible Entities;
- Moved most of the "Background" Section language to the "Guidelines and Technical Basis" Section;
- Made minor language changes to the measures and the data retention section.
- Revised Attachment 2 to list events in the same order in which they appear in Attachment 1;
- Revised requirement R1 to include the Parts in the main body of the Requirement;
- Deleted Requirement R3 and R4 and established a new Requirement R3 to have the Registered Entity "validate" the contact information in the contact list(s) they may have for the events applicable to them;
- Updated Attachment 1 by assigning event titles and entity responsibilities.

In this iteration, the drafting team noted that NERC had initiated a new effort to forward event reports to applicable government authorities, so the proposed Section 812 of the NERC Rules of Procedure was no longer needed and was removed from the project. Due to suggestions received

during this comment period to improve the standard, the drafting team decided to post the standard for a second successive ballot period.[28]

### g. Fifth Posting – Formal Comment Period and Successive Ballot and Non-Binding Poll

A fifth draft of the EOP-004-2 standard was posted for a 30-day public formal comment period from August 29, 2012 to September 27, 2012, with a second ten-day successive ballot and non-binding poll held during the last ten days of the comment period, from September 18, 2012 to September 27, 2012. The mapping document, the "Consideration of Issues and Directives" document, and the VRF/VSL justification document were posted to assist in review. The second successive ballot received a quorum of 78.54% and an approval of 63.40%, and the non-binding poll received a 72.59% quorum and a 63.05% supportive opinion. The drafting team received 56 sets of comments from 181 different people from 125 companies, representing 9 of the ten industry segments. In response to comments received, the drafting team made several changes:

- Added language to the Guidelines and Technical Basis section to clarify the applicability of Requirement R1 and R3 to Distribution Providers;
- Added language to the Guidelines and Technical Basis section to clarify that only one report per event is necessary for entities that are registered in several different categories of industry segments;
- Added clarifying language to Requirement R2 on 24-hour reporting; and
- Revised the VSL language for Requirement R1 to address the case in which the event reporting Operating Plan fails to include event types.

In response to the fifth round of comments, the drafting team explained that the investigation and analysis portions of the current mandatory and enforceable standards EOP-004-1 and CIP-001-2a will not be incorporated in EOP-004-2. Instead, the analysis provisions will be addressed in the NERC event analysis program upon regulatory approval of EOP-004-2.

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[28] On July 30, 2012, the drafting team hosted a webinar in order to receive informal feedback and to explain proposed changes to the standard. The slides are available on the project page: http://www.nerc.com/filez/standards/Project2009-01_Disturbance_Sabotage_Reporting_RF.html.

### h. Sixth Posting – Recirculation Ballot and Non-Binding Poll

Given that EOP-004-2 failed the second successive ballot with 63.4% support, on October 22, 2012, the drafting team conducted an industry webinar to explain several issues, including the applicability to Distribution Providers, duplicative reporting, the role of the Paragraph 81 project and the reporting burden of the standard.[29]

The sixth and final draft of the EOP-004-2 standard was posted for a recirculation ballot and non-binding poll from October 24, 2012 to November 5, 2012. The standard received a quorum of 85.14% and an approval of 71.39%. The non-binding poll resulted in a quorum of 78.93% and an approval of 71.04%.

### i. Board of Trustees Approval of EOP-004-2

The final proposed EOP-004-2 standard was presented to the NERC Board of Trustees on November 7, 2012. NERC staff provided a summary of the proposed standard, as well as a summary of minority issues and associated drafting team responses. The NERC Board of Trustees approved the standard, and NERC staff recommended that it be filed with applicable governmental authorities.

[29] Slides from the webinar are available here: http://www.nerc.com/docs/standards/dt/Disturbance_and_Sabotage_Reporting_Webinar_20121022_final.pdf.

Respectfully submitted,

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**January 11, 2013**

**EXHIBITS A -G**

(Available on the NERC Website at
http://www.nerc.com/fileUploads/File/Filings/Attachments_EOP-004-2_Filing)