Unofficial Comment Form
2015-08 Emergency Operations – EOP-004-4

Do not use this form for submitting comments. Use the electronic form to submit comments on Project 2015-08 Emergency Operations; EOP-004-4 – Event Reporting. The electronic form must be submitted by 8 p.m. Eastern, Thursday, September 8, 2016.

Additional information is available on the project page. If you have questions, contact Manager of Standards Development, Sean Cavote (via email), or at (404) 446-9697.

Background Information

Project 2015-08 Emergency Operations (EOP) implements the recommendations of the Project 2015-02 Periodic Review Team (PRT), including the recommendation to revise EOP-004-3 Attachment 1, and retire Requirement R3.¹ The EOP standards drafting team (SDT) considered those recommendations, along with additional input from the industry during the comment period on the project Standard Authorization Request (SAR) for this project. Additionally, the SDT has entered into collaborative efforts among NERC and the U.S. Department of Energy (DOE) to better align reporting requirements pursuant to EOP-004-3 and OE-417. Based on those inputs, the SDT proposes the changes to EOP-004-3 as indicated in this posting.

With respect to DOE collaboration, the SDT has discussed with DOE changes that would be necessary to EOP-004 Attachment 1 and to OE-417 to more closely align EOP-004-4 Attachment 1 Reportable Events with events reported on OE-417. Based on those discussions and the changes proposed in this posting, the SDT and DOE have made significant progress in harmonizing reporting requirements, which would relieve many entities from having to report Reportable Events on both forms. That collaboration continues, but it is important to note that regardless of whether OE-417 is harmonized with EOP-004-4 Attachment 1, entities will be required to report all Reportable Events as required by EOP-004-4.

The EOP SDT recommends the following changes to EOP-004-3:

- Update and clarify language in Requirements R1 and R2
- Retire Requirement R3
- Revise Attachment 1: Reportable Events and Attachment 2: Event Reporting Form

¹ The review included EOP-004-3, EOP-005-2, EOP-006-2 and EOP-008-1 to evaluate, for example, whether the requirements are clear and unambiguous. Recommended revisions to EOP-005-2, EOP-006-2, and EOP-008-1 have been posted for comment and ballot in a separate posting.
Update and Clarify Requirements R1 and R2

The SDT proposes a conforming edit in Requirement R1 to reference the correct version number of EOP-004-4 assuming EOP-004-4 ultimately is approved. Specifically, reference to “EOP-004-3” has been changed to “EOP-004-4.” That conforming change also is made to Measure M1.

The SDT proposes to clarify in Requirement R2 that each Responsible Entity shall report events “specified in EOP-004-4 Attachment 1 to the entities specified” in its Operating Plan. The SDT proposes this addition to ensure the Responsible Entity is reporting on the event types and thresholds from EOP-004-4 Attachment 1. Additionally, the SDT proposes to clarify what constitutes a weekend for the purpose of implementing the requirement, i.e., “4 PM local time on Friday to 8 AM local time on Monday.” The SDT proposes similar language and additional clarifications in Measure M2.

Retire Requirement R3

The SDT recommends retiring Requirement R3 under Criterion B1, administrative, because it requires responsible entities to perform a function that is administrative in nature, does not support reliability, and is needlessly burdensome. The SDT notes that contact lists are administrative in nature and should not be part of a mandatory reliability standard.

Revise Attachment 1: Reportable Events and Attachment 2: Event Reporting Form

The SDT proposes several changes to the Event Type, Entity with Reporting Responsibility, and Threshold for Reporting in response to SAR comments and its own analyses. The SDTs changes intend to: clarify appropriate Responsible Entity responsibilities; eliminate duplicative reporting by the Generator Operator (GOP) and Balancing Authority (BA); clarify Generation loss criteria specific to Quebec Interconnection; and align reporting requirements OE-417 where appropriate. The SDT provided its reasoning in the redlined standard, also repeated here:

- System-wide voltage reduction to maintain the continuity of the BES: The TOP is operating the system and is the only entity that would implement system-wide voltage reduction.
- Generation loss: The EOP SDT discussed dispersed power producing resources and their generation loss due to weather patterns or fuel source unavailability and determined that reporting of generation loss would be used to report Forced Outages not weather patterns or fuel source unavailability for these resources.
- Complete loss of Interpersonal Communication capability at a BES control center: To align EOP-004-4 with COM-001-2.1. COM-001-2.1 defined Interpersonal Communication for the Glossary of Terms as: “Any medium that allows two or more individuals to interact, consult, or exchange information.”
- Complete loss of monitoring or control capability at a BES control center: Language revisions to: “Complete loss of monitoring or control at a BES control center for 30 continuous minutes or
more” provides clarity to the “Threshold for Reporting” and better aligns with the ERO Event Analysis Process.

The SDT proposes several changes to Attachment 2 to clarify to whom the Event Reporting Form should be submitted and to more appropriately describe the “Event Identification and Description” field on the form.
Questions

1. Do you agree with the SDT’s recommended changes to EOP-004-3, Requirements R1 and R2? If you do not agree, or if you agree but have comments or suggestions on the SDT’s recommendation, please provide your explanation and suggested language.

☐ Yes
☐ No

Comments:
We recommend removing the words “but is not limited to” in M1. This language is not used in R1 and adds no value. It could be interpreted that the Operating Plan must not be limited to the protocols and therefore create an obligation that is not intended to include other elements which are not defined in R1.

M1 should read:
M1. Each Responsible Entity will have a dated event reporting Operating Plan that includes the protocol(s) and each organization identified to receive an event report for event types specified in EOP-004-3 Attachment 1 and in accordance with the entity responsible for reporting.

Drafting team should consider adding more specificity to the “other organizations” from Requirement 1. As written this is a potential compliance issue if the Registered Entity elects not to include any “other organizations” such as the Regional Entity or the RC. It is unclear if adding other organizations is voluntary or specifically required by the Requirement.

The examples should be removed unless they are required. These would be more appropriate in the measure, not the language of the requirement. If it is not removed, then the Drafting team should consider removing any entities from the example section not specifically related to the ERO Enterprise. For example, the inclusion of law enforcement is unclear. There are many events listed in Attachment 1 in which law enforcement is not required to be notified. Conversely, there are many types of situations that should be reported to law enforcement that are not considered in Attachment 1. Further, all entities that need to be notified of conditions in real-time should be removed from consideration, such as the RC. Notifications to these types of entities is already required within other standards (changes in operating conditions or capabilities in IRO and TOP standards). As this is in the “Operation Planning” time horizon and will be used to inform the industry as needed and support events analysis the only entities that should be listed in this standard is NERC and the Applicable Regional Entity.

In R1 and R2 all provisions related to weekends should be removed. The standard requires notification within 24 hours of recognition. If an event occurs on the weekend at an unstaffed location and is not recognized until Monday morning, the entity should still have the 24-hour time frame to complete the notification. As the reporting obligation time frame begins upon “...recognition of meeting an event type threshold for reporting...” there is no need to have a
weekend provision. This also removes an ambiguity in R2 which does not have the provision for “recognition of meeting an event type...” for events on the weekend. As written, weekend occurring events must be reported by the end of business Monday regardless of recognizing it as an event identified in Attachment 1.

M2 should be revised to remove the implication that EOP-004-4 Attachment 2 or the DOE-OE-417 forms are the only acceptable forms of evidence. As these forms are not specifically listed in the requirement language there should be flexibility written into the measure allowing for other evidence of event reporting. Conversely, the Attachment 2 and OE-417 forms should be listed in the R2 if they are required to demonstrate compliance.

2. Do you agree with the recommendation to retire EOP-004-3 Requirement R3? If you do not agree, or if you agree but have comments or suggestions on the SDT’s recommendation, please provide your explanation and suggested language.

☐ Yes  ☑ No

Comments:

3. Do you agree with the proposed revisions to EOP-004-3, Attachment 1? If you do not agree, or if you agree but have comments or suggestions on the SDT’s recommendation, please provide your explanation and suggested language.

☐ Yes  ☑ No

Comments: There are numerous “its” references in the description of the Event Type, but not clear who this is in reference to? Is it intended to imply that “its” is in referencing the Functional Entity that’s identified in the respective row of the second column – “Entity with Reporting Responsibility”? Will these always match up? Are there instances where the reporting entity and the owning entity are different? For example, in ISO-NE the RC submits all the reports. This may need some clarity.

GOP should be removed from the “Entity with Reporting Responsibility” for the “Physical Threats to its Facility” event type and added to the “Physical threats to its BES control center” event type. 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.)” and thus does not capture a GOP control center. So in order for these critical assets to be captured in the physical threats reporting requirements of the Attachment 1, GOP must be added to the “Physical threats to its BES control center” event type.

Same as comment 2 for “Physical threats to its Facility” event type.
For the “Public appeal for load reduction” event type, TOP should be added to the “Entity with Reporting Responsibility”. EOP-001-2.1b, R4 – “R4. Each Transmission Operator and Balancing Authority shall include the applicable elements in Attachment 1-EOP-001 when developing an emergency plan.”

Attachment 1-EOP-001, Elements for Consideration in Development of Emergency Plans
5. Public appeals — Appeals to the public through all media for voluntary load reductions and energy conservation including educational messages on how to accomplish such load reduction and conservation.

“System-wide voltage reduction to maintain the continuity of the BES” event type
a. BAs and RCs can potentially implement a system-wide VR due to capacity and energy emergencies in accordance with their emergency plans, as required under EOP-002-3.1 - Capacity and Energy Emergencies, so we don’t see why these functions are being excluded from the reporting requirement.

b. should be better aligned with the EAP event category 1d –

<table>
<thead>
<tr>
<th>EOP-004-4</th>
<th>EAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Threshold for reporting -</td>
<td>1.d. System-wide voltage reduction of three percent or more</td>
</tr>
<tr>
<td>System wide voltage reduction of 3% or more.</td>
<td>or more that lasts more than 15 continuous minutes due to a</td>
</tr>
<tr>
<td>Event Type -</td>
<td>BES emergency.</td>
</tr>
<tr>
<td>System-wide voltage reduction to maintain</td>
<td></td>
</tr>
<tr>
<td>the continuity of the BES</td>
<td></td>
</tr>
</tbody>
</table>

Recommend –
Threshold for reporting – no change
Event Type – System-wide voltage reduction in accordance with the entity’s emergency plan resulting from a BES Emergency.

c. Threshold requirement of “system wide” should be clarified to specify whose system it is. This is a similar ambiguity as the one being requested for clarity in item 1 above. Are we implying that it’s the TOP’s (Entity with Reporting Responsibility) system? Are there instances when the requesting entity is a BA/RC requesting a voltage reduction for a particular TOP? In such cases, would it be reportable and who would be the Entity with reporting responsibility. Is the intent to require reporting of such events? Should BAs and RCs be added to the Reporting Entities?

EOP-002-3_1 R6 -
R6. If the Balancing Authority cannot comply with the Control Performance and Disturbance Control Standards, then it shall immediately implement remedies to do so. These remedies include, but are not limited to:
R6.1. Loading all available generating capacity.
R6.2. Deploying all available operating reserve.
R6.3. Interrupting interruptible load and exports.
R6.4. Requesting emergency assistance from other Balancing Authorities.
R6.5. Declaring an Energy Emergency through its Reliability Coordinator; and
R6.6. Reducing load, through procedures such as public appeals, voltage reductions, curtailing interruptible loads and firm loads.

For “Transmission Loss” event type please consider changing “Element” to “Facility” in the description of the Threshold for Reporting (as category 1.a. in the EAP).

For the transmission loss category: The term “contrary to design” should be better defined. In October 2015 an addendum for Category 1a Events was created for the Event Analysis Process. This addendum indicates that breaker failure operations are not as intended. Is the intent to mimic the EA Process? Also, the term “excluding successful automatic reclosing” does not align with the EA Process language for Transmission loss.

NERC Definition of Element - Any electrical device with terminals that may be connected to other electrical devices such as a generator, transformer, circuit breaker, bus section, or transmission line. An Element may be comprised of one or more components.

NERC Definition of Facility - 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 intent is to capture the outage of three or more Facilities (each Facility can be comprised of two or more Elements), not the underlying Elements.

Loss of firm load (BA, TOP, DP) - Loss of firm load for ≥ 15 Minutes: ≥ 300 MW for entities with previous year’s demand ≥ 3,000 OR ≥ 200 MW for all other entities.

Recommend adding the following qualifiers:
- This does not include the loss of load when it is caused by “customer actions to protect their systems” and not the utility (e.g. customer’s relays settings to swap over to own generation set higher than the utility’s UFLS/UVLS settings).
- This excludes radially connected industrial load loss. Design and level of reliability was approved and accepted.

Suggest replacing the “uncontrolled” in the Event Type with the “unintended” language (similar to the EAP category). “Uncontrolled” implies or may get interpreted as a cascading type of an event, limiting the reporting requirement to only those types of events.

Unplanned BES control center evacuation (RC, BA, TOP) - Unplanned evacuation from BES control center facility for 30 continuous minutes or more.

Add GOP to the Entity with Reporting Responsibility. Similar reasons specified in the Attachment 1, Item 2 above. Additionally, if the GOP BES control centers are subject to consideration and
classification as High, Medium and Low impact facilities in accordance with the CIP-002 evaluation, they should be considered in this reporting criteria, at least for the GOP’s Control Centers that meet the reporting threshold for “Generation Loss” event type (≥ 2,000 MW for entities in the Eastern, or Western, or Quebec Interconnection OR ≥ 1,000 MW for entities in the ERCOT or Quebec Interconnection); or, as an alternative, High Impact (as classified under the CIP-002) control centers – CIP-002-5.1 - Attachment 1 Impact Rating Criteria

The criteria defined in Attachment 1 do not constitute stand-alone compliance requirements, but are criteria characterizing the level of impact and are referenced by requirements.

1. High Impact Rating (H) Each BES Cyber System used by and located at any of the following: 1.4 Each Control Center or backup Control Center used to perform the functional obligations of the Generator Operator for one or more of the assets that meet criterion 2.1, 2.3, 2.6, or 2.9.

Complete loss of monitoring capability (RC, BA, TOP)- Complete loss of monitoring capability affecting a BES control center for 30 continuous minutes or {more such that analysis capability (i.e., State Estimator or Contingency Analysis) is rendered inoperable.}

Add the word “staffed” to the threshold column for “Complete loss of monitoring or control at a BES control center” so that it is consistent with the event Type above it which states: Complete loss of Interpersonal Communication capability affecting a “staffed” BES control center for 30 continuous minutes or more.

The BA should also be identified as an “Entity with Reporting Responsibility” for System-wide voltage reduction since according to the functional model the BA may request the TOP or directly address a DP to reduce voltage to ensure balance within its BA area.

Agree with the changes eliminating the bracketed statement as it is not indicative of a complete loss of monitoring capability and has caused confusion throughout the industry.

4. Do you agree with the proposed revisions to EOP-004-3, Attachment 2? If you do not agree, or if you agree but have comments or suggestions on the SDT’s recommendation, please provide your explanation and suggested language.

☐ Yes
☒ No

Comments:
In the header of the Attachment 2, add “select Option 1” after the voice number provided for the submittal of the form. Similar as in the Attachment 1.

Under section 4, there are two instances of “Unplanned BES control center evacuation.” Remove the first instance so that the order of the list in Attachment 2 matches the Attachment 1.
Attachment 2 is not required for use and it should be stated in Attachment 2 that it is a guidance document, not tied to compliance. The change to attachment 2 implies that it is a compliance obligation to supply a completed Attachment 2 to all entities listed in the Event Reporting Operating Plan. This is not the case as written in R2 and a correction to either Attachment 2 or the requirement language should be made.

5. Please provide any additional comments you have on the proposed revisions and clarifications to EOP-004-3.

Comments:
Change “control center” to “Control Center” throughout the document to be consistent with the NERC Glossary.