Unofficial Comment Form
Project 2014-03 Revisions to TOP/IRO Reliability Standards

Please DO NOT use this form for submitting comments. Please use the electronic form to submit comments on the Standard. The electronic comment form must be completed by 8 p.m. EST Friday, September 19, 2014.

If you have questions please contact Ed Dobrowolski at ed.dobrowolski@nerc.net or by telephone at 609-947-3673.

The project web page can be found at: http://www.nerc.com/pa/Stand/Pages/Project-2014-03-Revisions-to-TOP-and-IRO-Standards.aspx

Background Information - Project 2014-03 - Revisions to TOP/ IRO Reliability Standards
On April 16, 2013, NERC submitted two petitions requesting Commission approval of TOP and IRO standards.

On November 21, 2013, FERC issued a NOPR proposing to remand three revised TOP Reliability Standards: TOP-001-2 (Transmission Operations), TOP-002-3 (Operations Planning), TOP-003-2 (Operational Reliability Data), and one Protection Systems (PRC) Reliability Standard, PRC-001-2 (System Protection Coordination) to replace the eight currently-effective TOP standards and four revised IRO Reliability Standards: IRO-001-3 (Responsibilities and Authorities), IRO-002-3 (Analysis Tools), IRO-005-4 (Current Day Operations), and IRO-014-2 (Coordination Among Reliability Coordinators) to replace six currently-effective IRO standards. In the NOPR, FERC stated that NERC “has removed critical reliability aspects that are included in the currently-effective standards without adequately addressing these aspects in the proposed standards.”

In response, NERC filed a motion requesting that FERC defer action on the NOPR until January 31, 2015 to provide NERC and the industry the opportunity to thoroughly examine the technical concerns raised in the NOPR and afford time to review the proposed TOP and IRO Standards through the NERC standards development process. That motion to defer action was granted on January 14, 2014.

The standard drafting team (SDT) formed to address those concerns made revisions to the TOP and IRO standards proposed to be remanded, along with several other IRO standards to provide consistency amongst the TOP and IRO standards, to address NOPR issues and recommendations made by the Independent Expert Review Panel, the IRO five-year review team, and the 2011 SW Outage Report. The initial draft standards were posted for an initial comment period and ballot through July 2, 2014.

This is the second posting of the standards. The SDT has made numerous changes in the second posting to the proposed standards and definitions in order to respond to industry comments raised in the first posting.
The SDT requests that commenters objectively evaluate the work of the SDT in responding to the issues raised in FERC’s November 21, 2013 NOPR, along with the recommendations made by the Independent Expert Review Panel (IERP), the IRO FYRT, and the SW Outage Report. The drafting team has committed to address these issues and is not at liberty to question the issues in the FERC NOPR.

You do not have to answer all questions. Enter comments in simple text format. Bullets, numbers, and special formatting will not be retained.

Questions
1. Do you agree with the changes made to respond to industry comments to proposed IRO-001-4? If not, please provide technical rationale for your disagreement along with suggested language changes.
   Yes:
   No: X

   Comments: The Purpose of IRO-004-4 is: “To establish the responsibility of Reliability Coordinators to act or direct others to act.” The Functional Model states that Reliability Coordinators interact with Transmission Service Providers, and Transmission Service Providers interact with Reliability Coordinators. Why is the TSP being removed from the Applicability and the Requirements?

The contents of the Rationale boxes need to be reviewed and revised. For example, The Rationale under Applicability mentions Purchasing-Selling Entity and Load-Serving Entity being deleted from IRO-001-1.1. The Rationale for Requirements R2 and R3 mentions the retirement of IRO-004-2. The Rationale for IRO-001-4 should deal with IRO-001-4. The Drafting Team should consider the removal of the Rationale Box for R2 and R3.

   Suggest that the Drafting Team consider replacing the word “ensure” where used in the Requirements and Measures and VSL Table with the word “maintain”. Ensure imposes a “zero defect” on standards that is overly restrictive.

   Because Transmission Service Provider is being removed from the Applicability of the standard, Transmission Service Provider needs to be removed from the body of the standard. For example, the Quality Review did not catch its use in the Data Retention section.

2. Do you agree with the changes made to respond to industry comments to proposed IRO-002-4? If not, please provide technical rationale for your disagreement along with suggested language changes.
   Yes:
No: X

Comments: The contents of the Rationale boxes must be reviewed with respect to their applicability to IRO-002-4.

The Drafting Team should clarify and coordinate the requirements between voice and data equipment requirements and the associated COM-001 and IRO-002-4. The SDT should clarify the COM-001 is restricted to voice communications and the IRO-002-4 R1 is intended to address data. It is also not clear that IRO-002-4 R2 is limited to voice communication and/or data. A wording change for R2 to be considered: Each Reliability coordinator shall have the authority to approve planned outages and maintenance of its telecommunication and data exchange capabilities (as referenced in R1).

Requirement R3 has had the word “telecommunication” added to it. Should also add the word telemetering to make the requirement read “…telecommunication and telemetering…”. Then use of telecommunication and telemetering should be made consistent throughout the document.

In Requirement R4 delete the comma between “…Special Protection Systems, and sub-100kV…” to make it read “…Special Protection Systems and sub-100kV…”. This makes it clear that both Special Protection Systems and sub-100kV facilities shall be monitored.

3. Do you agree with the changes made to respond to industry comments to proposed IRO-008-2? If not, please provide technical rationale for your disagreement along with suggested language changes.

Yes:

No: X

Comments: “Ensure” or “ensured” should not be used in the standard.

The contents of the Rationale boxes must be reviewed to ensure they are consistent with their associated Requirements. For example, the Rationale for Requirements R5 and R6 refers to the use of the word “impacted”. Impacted is not used in Requirement R5. The contents of the Rationale for R1, and R3 and R4 should be expanded to provide a short background statement for the Rationale.

The wording of requirements should be made consistent.

Why is Requirement R7 being deleted?

4. Do you agree with the changes made to respond to industry comments to proposed IRO-010-2? If not, please provide technical rationale for your disagreement along with suggested language changes.
Yes: X

No:

Comments:

5. Do you agree with the changes made to respond to industry comments to proposed IRO-014-3? If not, please provide technical rationale for your disagreement along with suggested language changes.
Yes:

No: X

Comments: The Rationale for Requirement R1 explains what review changes were made, and do not address the contents of the Requirements. The Rationale for Requirement R1 should be removed.

Measure M1 reflects Part 1.5 not being removed. Why is Part 1.5 being removed? A RC should have the detailed authority.

What Requirements does the Rationale on page 7 refer to?

The replacement of the word “other” with “adjacent” may leave a reliability gap. Because the words “may impact” already serve as the qualifier for the RC to select who to notify, then the RC is not obligated to notify all RCs hence the scope of notification is finite. We urge the SDT to consider reinserting the word “other” into R1.

The Drafting Team should review the use of the phrase “Wide Area” in IRO-008-2 (and other IRO standards) and the phrase “Reliability Coordinator Area” in IRO-014-3. If these phrases are synonymous, then use of one or the other should be decided upon.

Regarding the Retention Period, there are no data retention periods for Requirements R3 and R4. Instead, there are retention period requirements for R8 and R9, which do not exist. We urge the SDT and NERC to conduct a thorough and independent quality review for all standards posted for commenting and balloting to avoid unnecessary delays in approving standards due to these errors.

Suggest restoring the standard to its original wording.

6. The drafting team has proposed a new standard to address outage coordination concerns. Do you agree with the changes made to respond to industry comments to the new standard, IRO-017-1? If not, please provide technical rationale for your disagreement along with suggested language changes.
Yes:

No: X
Comments: “Operations Planning” in the Purpose is not defined in the NERC glossary and should not be capitalized.

Regarding the Rationale and Time Horizon boxes on page 5: The words in the Rationale is appropriate for a guideline or announcement. It does not belong in a Rationale box. Neither “Time Horizon” nor “Operations Planning Time Horizon” is in the NERC Glossary and should not be capitalized. If those terms are to be considered for inclusion in the NERC Glossary, then they should be included on the Definitions of Terms Used in Standard.

The R1 wording “…within its Reliability Coordinator Area” should be removed. Part 1.4 refers to “…other Reliability Coordinators”.

The box “Note on part 1.5” does not belong in the standard. It is a comment response.

“Near-Term Transmission Planning Horizon” is defined as “The transmission planning period that covers Year One through five.”

The Rationale for Requirement R4 should be revised to just address the “why”, and justification for R4.

During the last posting, we commented that the requirement for TOP and BA to coordinate outage plans is inappropriate since the BA does not develop outage plans or schedules; it only receives them from the Generator Owners and may suggest adjustments based on resource/demand/interchange assessments. The SDT’s response suggests that these details would be elaborated in the process document and hence no changes were made. While we agree that such details can be elaborated in the process document, sub-Part 1.1.2 should be expanded to include facility owners in order for the RC to develop a workable and appropriate outage coordination process involving the correct entities.

We are unable to support sub-Part 1.1.2 as written, and suggest the Drafting Team to either revise it to remove the BA from it, or to expand it to include the facility owners and/or operators. Corresponding changes will need to be made to Requirement R2.

7. Do you agree with the changes made to respond to industry comments to proposed TOP-001-3? If not, please provide technical rationale for your disagreement along with suggested language changes.

Yes:

No: X

Comments: Regarding Requirements R1 and R2, “ensure” should not be used as mentioned in previous comments. This must be honored THROUGHOUT the standard. For this particular requirement, consider using the word “maintain” or “restore” instead. Throughout the standard,
consider replacing “address” with “maintain”. The Time Horizon should not include Operations Planning, or Same-Day Operations.

The phrase, ‘within its TOP/BA Area’ should not be removed. Entities do not have authority to direct others outside of their area. In addition R3 only requires those to comply that are in the TOP/BA Area. For consistency, we suggest retaining that above language.

Regarding Requirement R3, Time Horizons should not include Operations Planning, or Same-Day Operations.

Regarding ALL the standard’s requirements, where Operating Instruction is used, the Time Horizon category must be reviewed.

In Requirement R7, the “e” in emergency must be capitalized. “Comparable” should be added before “assistance”.

In R7, the previous language should be retained to limit the assistance up to and including emergency procedures implemented by the requesting entity. As worded, this could expose the assisting entity to violations for not going beyond what has been implemented. This addition would distinguish it from the previous requirements. To address the Drafting Team response to the previous posting, when declaring an emergency, entities have a number of corrective actions to restore the system to normal. The previous language allows assisting entities to implement similar steps, which increase in severity, with the entity that is in the emergency.

In Requirement R9, strike the words “interconnected NERC registered” to be consistent with TOP-002-4 Requirement R3. The language in Requirement R16 should be made consistent with the language in Requirement R9. There should be consistent language used in requirements R9, R16, and R17.

During the last posting, a concern was expressed over the ambiguity in R9 as the words “between the affected entities” can be interpreted as any two entities (external to the one who is notifying others) that are affected by the outages of telemetering and telecommunication equipment, control equipment, monitoring and assessment capabilities, and associated communication channels.

To clarify the intent of the requirement, suggest R9 be revised to:

R9. Each Balancing Authority and Transmission Operator shall notify its Reliability Coordinator and impacted interconnected NERC registered entities of outages of telemetering equipment, control equipment, monitoring and assessment capabilities, and associated communication channels between THEM AND the impacted entities.

Regarding Requirement R10, a Transmission Operator cannot be held responsible for monitoring ANY facilities in neighboring Transmission Operator areas. A Transmission Operator can only rely on what information is provided by a neighboring Transmission Operator. The new requirement R19 addresses the data exchange capabilities needed. The Drafting Team should consider removing R10.

If Requirement R10 is to remain, then if a sub-100 kV facility is needed to maintain reliability, it should be included in the BES by exception. This standard should require the TOP to monitor BES Elements in its area. Monitoring BES Elements beyond that is the responsibility of the RC. Monitoring of neighboring facilities presents an authority issue, which is clearly defined in the IERP Report, and
Paragraphs 84 and 87 of the NOPR. R10 as written implies the TOP needs to monitor its neighboring TOP’s entire area when in reality a subset of facilities may be all that is required. One suggested rephrasing is: Each Transmission Operator shall monitor Facilities within its Transmission Operator Area and those Facilities it determines as necessary in its neighboring Transmission Operator Areas to maintain reliability within its Transmission Operator Area... Another suggestion is:

Each Transmission Operator shall monitor Facilities within its Transmission Operator Area including sub-100 kV facilities needed to maintain reliability and the status of Special Protection Systems within its Transmission Operator Area and neighboring Transmission Operator Areas to maintain reliability within its Transmission Operator Area.

The Drafting Team should consider removing “ensure” or its replacement word from Requirement R11. Refer to standard PRC-001-1.1.

Requirement R13 should be reworded to:

Each Transmission Operator shall perform or have performed a Real-time Assessment at least once every 30 minutes.

The “s” in system should be capitalized in Requirement R15.

The word “own” should not be deleted from Requirement R16. It provides clarity that this is only pertaining to the equipment the Transmission Operator owns and not other equipment.

“Always” should be removed from Requirement R18.

In Requirement R19 “(Balancing Authority Area)” is not needed and should be removed.

In Requirement R20 remove “(Balancing Authority Area)” and “Transmission Operator Area”.

What defines a neighboring Transmission Operator Area? There are many instances where the loss of a facility several Transmission Operator Areas away from a Transmission Operator Area impacts that Transmission Operator Area.

8. Do you agree with the changes made to respond to industry comments to proposed TOP-002-4? If not, please provide technical rationale for your disagreement along with suggested language changes.

Yes:

No: X
Comments: The proposed definition for Operational Planning Analysis shown in the Definitions of Terms Used in Standard should be a redline of what is in the NERC Glossary.

The Rationale for Requirement R1 can be removed, and be placed in a guideline or support document.

The Rationale for Requirement R3, and Rationale for Requirements R4 and R5 can be removed. It belongs in Consideration of Comments.

The Rationale for Requirements R6 and R7 can be removed, and be placed in a guideline or support document.

9. Do you agree with the changes made to respond to industry comments to proposed TOP-003-3? If not, please provide technical rationale for your disagreement along with suggested language changes.
   
   Yes:

   No: X

   Comments: The proposed definitions for Real-time Assessment and Operational Planning Analysis shown in the Definitions of Terms Used in Standard should be a redline of what is in the NERC Glossary.

   Additional information should be added to the Rationale for Requirement R5 for justification and background.

10. Do you have any comments on the changes made to respond to industry comments on the SOL Exceedance White Paper? If so, please provide technical rationale for your disagreement along with suggested language changes.

   Yes: X

   No:

   Comments: In the White Paper System Operating Limit Definition and Exceedance Clarification, delete the phrase “unit/intra-area instability,” from the Transient Stability Limits description. Individual unit instability is not being looked at; operations are to prevent system instability. During the last posting, the need to shed load under the pre-contingency loading condition when the 4-hour rating is exceeded was commented on. The Drafting Team’s response indicates that “it has revised the whitepaper to include “as necessary and appropriate”. However, this change is made to
the post-contingency condition for exceeding the 15-minute Emergency Rating, but not to the pre-contingency loading condition when the 4-hour rating is exceeded as it still stipulates that “All of the above plus load shed to control violation below Emergency Rating consistent with timelines identified in Operating Plan.”

We speculate that the insertion of “as necessary and appropriate” to the post-contingency condition when the 15-minute Emergency rating is exceeded was an error. However, if the SDT really meant to keep load shedding under the pre-contingency loading condition when the 4-hour rating is exceeded, then we will again express our disagreement with the approach.

When the 4-hour rating is exceeded, the TOP still have up to 15 minutes to reduce loading to within the Normal rating. Further, as stated in the paragraph preceding Table 1, “However, operating between 900 MVA and 950 MVA (commenter insert: i.e. exceeding the 4-hour rating but not the 15-minute rating) is not an SOL exceedance unless the associated Operating Plan time parameter is exceeded as explained in Figure 1 (commenter insert: i.e. 15 minutes have elapsed and still unable to return loading to below 4-hour rating).”

We urge the SDT to reassess whether or not the “as necessary and appropriate” should be inserted to the pre-contingency loading condition for exceeding the 4-hour rating.

11. The SDT has made revisions to VRFs and VSLs as needed to conform to changes made to requirements and to respond to industry comments. Do you agree with the VRFs and VSLs for the nine posted standards? If you do not agree, please indicate specifically which standard(s) and requirement(s), and whether it is the VRF or VSLs you disagree with, and explain why.

Yes: X

No:

Comments:

12. Are there any other concerns with these standards that haven’t been covered in previous questions and comments?

Yes: X

No:

Comments: Because of the similarities in Purposes, Applicabilities, and Requirements of standards within the group that is posted, combining requirements with the intent on reducing the number of standards should be considered.
During the last posting, we expressed a concern over the proposed retirement of TOP-004-2, Requirement R4, which stipulates that:

R4. If a Transmission Operator enters an unknown operating state (i.e. any state for which valid operating limits have not been determined), it will be considered to be in an emergency and shall restore operations to respect proven reliable power system limits within 30 minutes.

The SDT’s response to our comment indicates that:

As presented in the white paper on the Treatment of SOLs, the proposed requirements are based on the concept of not depending on pre-determined existing SOLs/IROLs but rather to monitor the existing and potential operating conditions and evaluate them against the same ratings and limits that SOLs/IROLs would be based upon. Those ratings and limits rarely change due to changes in system conditions, whereas predetermined SOLs and IROLs may change due to the assumptions they were based on. No change made.

While we agree that the ratings and limits upon which the SOLs/IROLs are based rarely change due to changes in system conditions, the changes in system condition themselves can render any SOLs/IROLs invalid. In other word, there does not exist any “proven reliable power system limits” as stated in R4 of TOP-002-4.

While the concept of not depending on pre-determined existing SOLs/IROLs but rather to monitor the existing and potential operating conditions and evaluate them against the same ratings and limits that SOLs/IROLs would be based upon may seem appropriate, the concept itself (and being in a “white paper” status), or use of any information in the white paper, does not help or mandate re-calculation of valid SOLs and IROLs when entering an unknown state.

If R4 in TOP-004-2 is retired, it leaves a potential reliability gap. The white paper does not mandate the proper and necessary action to “restore operations to respect proven reliable power system limits within 30 minutes” when entering into an unknown state. We again urge the SDT to consider not retiring Requirement R4 of TOP-002-4.

A proper Quality Review of the postings would have eliminated the necessity of submitting many of the above comments.