

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

The Missing Measures and Compliance Elements Standard Drafting Team thanks all commenters who submitted comments on the 'Missing Measures' standards that were posted for comment from July 10–August 23, 2006. The standard drafting team asked stakeholders to provide feedback on the standards through a special Standard Comment Form. There were 18 sets of comments, including comments from 96 different people from more than 43 companies representing 7 of the 9 Industry Segments as shown in the table on the following pages.

Based on the comments received, the drafting team is recommending that the Standards Committee authorize moving this set of standards forward to balloting.

In this 'Consideration of Comments' document stakeholder comments have been organized so that it is easier to see the responses associated with each question. All comments received on the standards can be viewed in their original format at:

http://www.nerc.com/~filez/standards/Compliance_Cleanup_V0.html

The drafting team made only minor changes to the standards, primarily to correct typographical errors or to improve clarity or consistency. The drafting team did add two measures in support of comments submitted by stakeholders:

- A measure was added to IRO-002 – Reliability Coordination – Facilities, Requirement 5 Part 1. In its initial assessment, the drafting team interpreted this requirement as being duplicated in IRO-005 R1 and R3 and IRO-003 R1. After closer inspection, the drafting team acknowledges that IRO-002 is looking at the capability of facilities – and IRO-003 and IRO-005 are looking at the use of those facilities.
- A measure was added to TOP-002 – Normal Operations Planning, Requirement 13. In its initial assessment, the drafting team interpreted this requirement as being duplicated in MOD-024 and MOD-025. After closer inspection, the drafting team acknowledges that MOD-024 and MOD-025 are looking for data used in the planning horizon, and TOP-002 is looking for data needed in the operating horizon.

The drafting team was unable to resolve the following minority issues:

– ***Samples of Evidence Could be Misused***

The drafting team added examples to the measures and some stakeholders indicated that, although these are clearly identified as 'examples' these will be interpreted as being 'all inclusive' or 'required' and may unnecessarily limit or unnecessarily place a burden on entities trying to demonstrate compliance.

The drafting team strengthened the language in the measures by using the following phrases to clarify that the examples listed are not intended to be 'all inclusive' or 'mandatory':

...evidence that could include, but is not limited to, ..., or other equivalent evidence to show...

– ***Delay Balloting and/or Filing Standards with FERC Until all Requirements are Perfected***

During the work to add measures and compliance elements to the standards, the drafting team found several requirements that seemed to be duplicates of requirements in other standards, or seemed to be written so that the desired performance wasn't clearly stated. In these situations the drafting team noted the condition and asked stakeholders to confirm the assessment. Where stakeholders confirmed the drafting team's assessment, the drafting team did not develop a measure and associated levels of

non-compliance. Several stakeholders indicated that, until the requirements are clarified, the drafting team should not move the standards forward to ballot.

The drafting team is working on Version 0 standards that have already been filed by NERC for approval. It is well known that the Version 0 standards were translated from historical standards, policies, and guides, and much work remains to clarify and complete the standards. However, recognizing the need to have an initial set of reliability standards for the ERO, it remains important to continue the transition as planned. NERC is striving to have as many of the existing standards as possible approved, so that there is not a reliability gap in the initial operation of the ERO – an important area of reliability not covered by standards.

- The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information.
- Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval.
- Not adding the measures or compliance information at this point would not resolve the concern the commenters have with the quality of some of the existing requirements.
- The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved.
- Stakeholders will be asked to ballot only on the addition of the new measures and compliance information.
- The underlying standards and their requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional measures and compliance information is not successful.

This project and the related project to develop violation risk factors are the final projects necessary to get the initial set of standards completed. Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received with this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.

In terms of the initial implementation of the standards, NERC is aware of the limitations in the existing standards and those limitations will be considered in the administration of the compliance program. FERC may approve some or all of the standards, or may conditionally approve some. NERC has proposed an initial pilot test of the compliance program during which penalties are calculated but not assessed. Once the standards are fully in effect, the NERC and regional compliance programs would continue to take into consideration any limitation or ambiguity within a particular standard in the determination of a violation or assessment of a penalty.

That said, the existing NERC standards have been the benchmark of good utility practice for years under a voluntary regime. Responsible entities should be expected to continue to follow the standards. It is principally the introduction of the mandatory regime and financial penalties that creates the concern. The best approach for individual entities is to meet the standards to the best of their ability.

– ***Ballot the Standards Individually***

The implementation plan posted for comment indicated that the set of 20 standards would be balloted with a single ballot. While most commenters seemed to agree with this proposal, some commenters indicated that they want to ballot each standard individually.

The desire to ballot the standards individually seems to be linked to a misperception that the ballot is designed to indicate overall acceptance of the standards. The ballot is only asking stakeholders to approve the ‘new’ measures and associated compliance information that was added to the standards. The standards were already approved by stakeholders and have been filed with FERC.

– ***Modify the Levels of Non-compliance to Match the Sanctions Guidelines Filed with the ERO Application***

The drafting team developed compliance elements following the instructions provided in the latest version of the Reliability Standards Procedure Manual (RSPM) and acknowledges that the RSPM’s instructions for developing ‘levels of non-compliance’ do not match the language in the ERO Sanctions Guidelines that indicates standards will include, ‘violation severity levels.’

The Reliability Standards Procedure Manual (page 11) includes the following guidance with respect to Levels of Non-compliance:

Defines the levels of non-compliance for each measure, typically based on the actual or potential severity of the consequences of non-compliance. The levels of noncompliance, which are part of the standard and are balloted with the standard, are to be developed by the NERC compliance program in coordination with the standard drafting team.

The ERO Sanctions Guidelines (pages 9–10) indicates that standards will include ‘violation severity levels’:

Violation severity levels (VSLs) are defined measurements of the degree to which a violator violated a requirement of a reliability standard. Whereas violation risk factors are determined pre-violation and indicate the relative potential impacts that violations of each standard could pose to the reliability of the bulk power system, the violation severity level of a violation is assessed post-violation and is an indicator of how severely the violator actually violated the standards requirements in question.

These guidelines utilize the violation severity levels that have been established² by the ERO for requirements of the reliability standards. Up to four levels can be defined for each requirement; the levels have been designated as: Lower, Moderate, High, and Severe. (*2 Assignment of these levels is scheduled to be complete by the end of 2006.*)

The drafting team could not easily remedy the mismatch between the guidance in the Reliability Standards Procedure Manual and the Sanctions Guideline. The drafting team apprised NERC staff of the need to modify the RSMP to align with the Sanctions Guidelines and has been assured that this will be addressed with the changes being made to the RSPM to conform to FERC’s directives regarding modifications to the standards process.

In addition, NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will include addressing the need to translate some of the levels of non-compliance into violation severity levels.

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

If you feel that your comment has been overlooked, please let us know immediately. Our goal is to give every comment serious consideration in this process! If you feel there has been an error or omission, you can contact the Vice President and Director of Standards, Gerry Cauley at 609-452-8060 or at gerry.cauley@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.¹

¹ The appeals process is in the Reliability Standards Process Manual:
<http://www.nerc.com/standards/newstandardsprocess.html>.

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

Commenter	Organization	Industry Segment								
		1	2	3	4	5	6	7	8	9
Anita Lee (G5)	AESO		x							
William J. Smith	Allegheny Power	x								
Ken Goldsmith (G3)	ALT									
Jason Shaver	ATC	x								
Dave Rudolph (G3)	BEPC									
Don Watkins (G7)	BPA	x								
Brian Tuck (G7)	BPA	x								
Wes Hutchison (G7)	BPA	x								
Tracy Edwards (G7)	BPA	x								
Jon Daume (G7)	BPA	x								
Rich Ellison (G7)	BPA	x								
Bob Windus (G7)	BPA					x				
Deanna Phillips (G7)	BPA	x								
Brant Kingsford (G5) (I)	CAISO		x							
Jim Stanton	Calpine						x			
John Dumas (G5)	ERCOT		x							
Dave Folk	First Energy Corp	x		x		x	x			
Linda Campbell (G6)	FRCC		x							
Steve McCoy (G6)	FRCC		x							
Dick Pursley (G3)	GRE									
Ajay Garg	Hydro One	x								
David Kiguel (G4)	Hydro One Networks, Ontario	x								
Ron Falsetti (G5) (I)	IESO		x							
Bill Shemley (G5)	ISO-NE		x							
Kathleen Goodman (G4) (I)	ISO-NE		x							
Peter Brandien (G5)	ISO-NE		x							
Donovan E Greening	ITC	x								
Jim Cyrulewski	ITC	x								
Ted Hobson	JEA									
Dennis Florom (G3)	LES									
Tom Mielnik (G3)	MEC									
Robert Coish (G3)	MHEB									
Bill Phillips (G5)	MISO		x							
Terry Bilke (G3)	MISO		x							
Edward Dahill	National Grid	x								
Mike Gopinathan (G4)	Northeast Utilities	x								

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

Brian Hogue (G4)	NPCC		x																
Guy Zito (G4)	NPCC		x																
Al Boesch (G3)	NPPD	x																	
Mike Calimano (G5)	NYISO		x																
Greg Campoli (G4)	NYISO		x																
Al Adamson (G4)	NYSRC		x																
Todd Gosnell (G3)	OPPD																		
Mark Godfrey	Pepco Holdings	x																	
Richard Kafka	Pepco Holdings	x																	
Thomas Bowe (G5)	PJM		x																
C. Robert "Bob" Moseley (G2)	PSC of SC																		x
David A. Wright (G2)	PSC of SC																		x
Elizabeth B. "Lib" Fleming (G2)	PSC of SC																		x
G. O'Neal Hamilton (G2)	PSC of SC																		x
John E. "Butch" Howard (G2)	PSC of SC																		x
Mignon L. Clyburn (G2)	PSC of SC																		x
Phil Riley (G2)	PSC of SC																		x
Randy Mitchell (G2)	PSC of SC																		x
Steve Wallace (G6)	Seminole Electric								x										
Tom Abrams	SERC																		
Andy Bowden (G1)	South Carolina Electric & Gas Co																		
Arnie Cribb (G1)	South Carolina Electric & Gas Co																		
Bob Smith (G1)	South Carolina Electric & Gas Co																		
Brad Stokes (G1)	South Carolina Electric & Gas Co																		
Dan Goldston (G1)	South Carolina Electric & Gas Co																		
Ernie Gibbons (G1)	South Carolina Electric & Gas Co																		
Henry Delk (G1)	South Carolina Electric & Gas Co																		
Hubert C. Young (G1)	South Carolina Electric & Gas Co								x										
Jay Hammond (G1)	South Carolina Electric & Gas Co																		
Jerry Lindler (G1)	South Carolina Electric & Gas Co																		
Jonh T. Blalock (G1)	South Carolina Electric & Gas Co																		
Lee Xanthakos (G1)	South Carolina Electric & Gas Co	x																	
Marion Frick (G1)	South Carolina Electric & Gas Co																		
Oscie Brown (G1)	South Carolina Electric & Gas Co																		
Pat Longshore (G1)	South Carolina Electric & Gas Co																		
Phil Kleckley (G1)	South Carolina Electric & Gas Co																		
Richard Jones (G1)	South Carolina Electric & Gas Co																		x
Sally Ballentine Wofford (G1)	South Carolina Electric & Gas Co	x																	
Shawn McCarthy (G1)	South Carolina Electric & Gas Co																		
Simon Shealy (G1)	South Carolina Electric & Gas Co																		

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

Todd Johnson (G1)	South Carolina Electric & Gas Co																		
Wayne Stuart (G1)	South Carolina Electric & Gas Co																		
Dan Baisden (G6)	Southern Co	x																	
Doug McLaughlin (G6)	Southern Co	x																	
J. T. Wood (G6)	Southern Co	x																	
Jim Busbin (G6)	Southern Co	x																	
Keith Calhoun (G6)	Southern Co	x																	
Marc Butts (G6)	Southern Co	x																	
Mike Oatts (G6)	Southern Co	x																	
Raymond Vice (G6)	Southern Co	x																	
Roman Carter (G6)	Southern Co	x																	
Terry Crawley (G6)	Southern Co								x										
Tom Higgins (G6)	Southern Co								x										
Wayne Guttormson (G3)	SPC																		
Paul Davis (G6)	Tampa Electric	x																	
Roger Champagne (G4)	TransEnergy Hydro-Quebec	x																	
Jay Seitz	U.S. Bureau of Reclamation								x										
Darrick Moe (G3)	WAPA																		
Paul Arnold	WECC/CCC																		
Jim Maenner (G3)	WPS																		
Pam Oreschnick (G3)	XEL																		

G1 - South Carolina Electric & Gas Co
 G2 – PSC of SC
 G3 - MRO
 G4 - NPCC CP9 RSWG
 G5 - ISO/RTO Council
 G6 – FRCC
 G7 - BPA

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3. The drafting team believes that this set of standards is ready to move forward to balloting. If you have any comments (that you haven't already provided to the drafting team in the comments above) relative to the changes made to this set of standards to add missing measures and compliance elements, please provide them here.....	68

1. Do you agree with the implementation plan? If not, provide specific comments on the elements you do not agree with.

Summary Response: There was no consensus on the acceptability of the implementation plan. Most commenters who disagreed with the plan disagreed with moving the standards forward until all requirements have associated measures and compliance elements. Some commenters indicated that the standards do not meet statutory criteria and should not be submitted to FERC. Some commenters felt that the drafting team should not have accelerated its project schedule.

The determination of whether any of the standards meet statutory criteria is expected to be the subject of a FERC NOPR on standards in September. The drafting chooses not to speculate on that subject, as it is outside their control.

The drafting team is working to improve and fill in missing information on Version 0 standards that have already been filed by NERC for approval. It is well known that the Version 0 standards were translated from historical standards, policies, and guides, and much work remains to clarify and complete the standards. However, recognizing the need to have an initial set of reliability standards for the ERO, it remains important to continue the transition as planned. NERC is striving to have as many of the existing standards as possible approved, so that there is not a reliability gap in the initial operation of the ERO – an important area of reliability not covered by standards.

The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.

NERC staff and the Standards Committee indicate that this project and the related project to develop violation risk factors are the final projects necessary to get the initial set of standards completed. Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.

In terms of the initial implementation of the standards, NERC is aware of the limitations in the existing standards and those limitations will be considered in the administration of the compliance program. FERC may approve some or all of the standards, or may conditionally approve some. NERC has proposed an initial pilot test of the compliance program during which penalties are calculated but not assessed. Once the standards are fully in effect, the NERC and regional compliance programs would continue to take into consideration any limitation or ambiguity within a particular standard in the determination of a violation or assessment of a penalty.

That said, the existing NERC standards have been the benchmark of good utility practice for years under a voluntary regime. Responsible entities should be expected to continue to follow the standards. It is principally the introduction of the mandatory regime and financial penalties that creates the concern. The best approach for individual entities is to meet the standards to the best of their ability.

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Commenter	Yes/No	Comment
FRCC	Yes	
MRO	Yes	
Ted Hobson, Jim Stanton, Tom Abrams, Paul Arnold	Yes	
Jay Seitz, US Bureau of Reclamation	Yes	
Paul Arnold, WECC, CCC	Yes	
William J. Smith, Allegheny Power	Yes	
South Carolina Electric & Gas	Yes	
Southern Co	Yes	
Richard Kafka, Mark Godfrey, Pepco Holdings	Yes	
David Folk, First Energy	Yes	
Brent Kingsford	Yes	
BPA	No	<p>We do not agree with the proposed implementation plan. Through this effort, the CEDST has found and industry agreed, for a variety of reasons, that specific measures could not be developed for may of the individual requirements in this package of Missing Measures Standards. Without these measures, it is not possible for responsible entities to comply with the requirements in that standard, a stated in the Compliance with Standards section of this implementation plan.</p> <p>For this reason, we request that the COMPLINCE WITH STANDARDS portion of the implementation plan be modified to ensure that 1) responsible entities are only expected to demonstrate compliance with those requirements for which measures have been developed, and 2) compliance with each of these requirements will be measured only as specified in the measurements.</p> <p>Additionally, we feel that this implementation plan must be modified to specify that NERC will undertake a Standards Development Project to specifically revisit and revise as required those requirements that the CEDST has identified as having one or more issues that prevent the industry from being able to develop the measures necessary to asses compliance with them, as required (i.e. lacking measurements, unmeasurable criteria, vague or confusing language, inappropriate applicability, duplicate requirement measured elsewhere, etc.). Until this type of process is completed and all identified issues have been</p>

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Commenter	Yes/No	Comment
		resolved, there is no way that responsible entities can be expected to demonstrate full compliance with all requirements in these standards, as specified and required in this Implementation Plan.
<p>Response: Please see the summary response to this question.</p>		
Jason Shaver, ATC	No	<p>ATC does not agree with the short implementation plan. Although these standards have been in place for some time the measure are new and will take time for an entity to become auditable compliant. Based on the large number of new measures the industry should be allowed a minimum of nine months before the standards take effect.</p> <p>As with our earlier comments NERC should follow the approved SAR, which allowed for the development of measures for these twenty standards over a four year period.</p> <p>It seems that with this set of standards both the SAC and the SDT is being allowed to determine their own Standards Process rules. The original SAR that was accepted had a four year process for development and that was changed to a 9 month process for all twenty standards. In addition, the SDT was allowed to change the requirements in one standard and not in others. (See IRO-005 Question 3) ATC is concerned that the SDT is not holding itself to the approved SAR.</p>
<p>Response: Please see the summary response to this question. Most commenters agreed with the proposed effective dates. As you indicated, entities are already responsible for compliance with these requirements. The measures are not asking entities to produce any evidence that shouldn't already exist. The Standards Committee has reviewed the issue of drafting teams modifying their SARs. The Standards Committee has reviewed the revised schedule of this team and has indicated that the accelerated schedule is within the scope of the SAR.</p> <p>The drafting team did not make any changes to the requirements in IRO-005. The drafting team used V0 of IRO-005 for its first posting and should have used IRO-005-1. The red lines shown in the last posting were there to highlight the requirements as they should have appeared.</p>		
ISO/RTO Council Ron Falsetti, IESO	No	<p>There are many elements that we do not agree with. These elements are provided in detail below. In essence, we do not believe the process takes into account the quality and effectiveness of standard development. The 20 standards still have a large number of requirements not having compliance measures, hence quite a bit work is still required to refine the requirements and develop appropriate measures before they can be regarded complete, measurable and enforceable.</p>
<p>Response: Please see the summary response to this question. There is an effort underway to develop a long-term project to address the requirements that need additional work. This project should be presented to stakeholders in September, and to the BOT in November.</p> <p>When stakeholders are asked to ballot on these standards, they will be asked to vote on the acceptability of the measures and compliance elements that were added – the ballot is not to indicate the acceptability</p>		

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Committer	Yes/No	Comment
of the overall standards.		
Kathleen Goodman, ISO-NE	No	Because changes are needed to the requirements themselves to meet the statutory requirements, ISO New England recommends that the drafting team recall this work and individual teams be formed to address each standard that has missing compliance elements because a single drafting team approach is no longer appropriate since NERC should provide a targeted technical focus to each individual standard, thereby requiring individual or at most multiple drafting teams.
<p>Response: Please see the summary response to this question. The determination of whether any of the standards meet statutory criteria is expected to be the subject of a FERC NOPR on standards in September. The drafting chooses not to speculate on that subject, as it is outside their control. Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.</p>		
Ajay Garg, Hydro One	No	I agree with the plan to have the effective date of Jan 1, 2007 subject to the fact that standards have gone through the established NERC process. However, from a fundamental principle point I do not support a single ballot for a set of standards.
Response: The consensus of the stakeholders who responded to this question accepted balloting the set of standards with a single ballot.		
PSC of South Carolina	No	The PSCSC notes progress in completing missing measures, but also notes a significant number yet to be developed. If these standards come to a vote, the PSCSC will strongly consider a "NO" vote due to standards lacking complete requirements and associated performance measures unless there is a specific accompanying action plan to develop the missing information.
Response: Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful. Please see the summary response to this question.		
Jim Cyrulewski, Donovan Greening, ITC	No	The majority of these standards still require additional work with respect to measures and compliance levels. The standards should be balloted individually or balloted in subject matter groups.
Response: The consensus of the stakeholders who responded to this question accepted balloting the set of standards with a single ballot. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful. Please see the summary response to this question.		

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Commenter	Yes/No	Comment
Edward Dahill, National Grid	No	If approved by the stakeholder process, only the three proposed standards EOP-006-1, INT-001-2 and INT-003-2 should be presented to the NERC Board of Trustees for its approval in November 2006. The remaining 17 proposed standards require additional work to complete the missing compliance elements. Given the amount of indicated additional work, it is doubtful that the 17 can be completed and obtain stakeholder approval before the November 2006 NERC Board of Trustees meeting. Additionally, depending on the treatment of consolidating duplicate requirements presented in multiple standards, the impacted standards will need to be revised for applicability and compliance elements and obtain stakeholder approval before submittal to the NERC Board of Trustees.
<p>Response: Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful. Please see the summary response to this question.</p>		

- 2. The drafting team made conforming changes to the standards in response to stakeholder comments. The conforming changes were highlighted in the consideration of the comments which has been posted. Please identify any changes that you disagree with.**

William J. Smith, Allegheny Power	I do not disagree with the conforming changes.
South Carolina Electric & Gas	South Carolina Electric & Gas Company does not specifically disagree with any changes made in the measures and compliance elements.
Richard Kafka, Mark Godfrey, Pepco Holdings	PHI agrees with the conforming changes, but recognizes such changes are beyond the scope of the CESDT.

CIP-001-1: Sabotage Reporting Reliability Coordinators

Summary of Changes:

In response to stakeholder comments, the drafting team modified M1 to refer back to the requirement without duplicating all of the elements that must be contained within the procedure. The team replaced the phrase, “that will be used to confirm that its operating personnel are made aware of sabotage events on its facilities and multi-site sabotage affecting larger portions of the Interconnection. (Requirement 1)” with the phrase, “as defined in Requirement 1”.

No other changes were made to the measures or compliance elements.

Commenter	Comment
Richard Kafka, Mark Godfrey, Pepco Holdings	<p>CIP-001-0 R1: CESDT has removed the reference to -for the recognition of- since this phrase was determined to be un-measurable, and its removal from the measure was not detrimental to the requirement. PHI disagrees with -was not detrimental to the requirement-. CIP-001 R1 is similar to CIP-008-1 R1.</p> <p>The measure for CIP-008-1 R1 states: M1. The Cyber Security Incident response plan as indicated in R1 and documentation of the review, updating, and testing of the plan... Also, unlike the measures for CIP-002-1 through CIP-009-1, the measures for CIP-001 include the Functional Model entities listed in the requirement.</p> <p>PHI recommends that going forward, each requirement and measure list the applicable Functional Model entities. PHI also recommends that going forward, each requirement have a similarly numbered measure (e.g. M5 relates to R5). These really are long-term issues, given the number of issues with the requirements that have been noted by the CESDT. There are several typos or misspellings in the listed standards, at least in the red-lined version.</p>
<p>Response: CIP-001 Measure 1 was modified in support of your comment. The drafting team will forward your suggestions for standardizing the format of measures and requirements to the Standards Process Manager. In the future, please be specific identifying typos, as you may be the only one who has caught a specific typographical error.</p>	
Southern Co	<p>CIP001 M1 Change wording (...sabotage affecting larger portions of the ... to ... sabotage affecting wide area of the ...). Wide area is defined in the NERC glossary.</p>
<p>Response: The phrase, ‘affecting larger portions’ was in the requirement, and the drafting team had been trying to match the requirement as closely as practical. Note that the measure was modified to reference back to the requirement without duplicating all of the elements that must be contained within the procedure.</p>	
Edward Dahill, National Grid	<p>NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval</p> <p>The CESDT has not provided a measure for Requirement 2 as it is a subset of Requirement 3. Without the Requirement 2 measure this Standard should be considered incomplete.</p> <p>Recommend that Requirements 2 and 3 be combined into a single Requirement.</p>
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance</p>	

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<p>information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p> <p>The drafting team did develop a measure for requirement 2.</p> <p>Modifying requirements as suggested, is outside the scope of the drafting team.</p>	
<p>Jay Seitz, US Bureau of Reclamation</p>	<p>The term “sabotage” is used through out this Standard. Determination of “sabotage” implies that there is sufficient knowledge to determine that there is a “treacherous” or “enemy” agent involved in the event. It is more likely that the event will appear, to those affected by this standard, to be an act or interconnected acts of vandalism.</p> <p>This then results in a meaningless standard, as it is unlikely that any organization that is not law enforcement or national security or intelligence related will be able to discern the difference between a vandalism event and a sabotage event. So the real emphasis should be on defining those acts of vandalism that need to be reported to the appropriate authorities for further action.</p> <p>Or is it the intent, that all acts that cause damage or destruction of a power system component be classified as an ace of “sabotage.” Thus vandalism is degraded to merely those acts that cause no damage or destruction, such as tagging with paint or blocking a access road.</p> <p>Measure 3: Was there an oversight in requirement 4 to not include the participation of the Comision Federal de Electricidad (CFE) in the WECC? We recommend a reference be added including the appropriate Republic of Mexico counterpart for FBI and RCMP.</p> <p>In addition the scope of this measure is not clear, is the intent to establish pre-emptive contacts with the FBI or RCMP? If it is important to have pre-established contacts then it follows that there should be a period of time over which the contact should be refreshed, e.g. three years.</p>
<p>Response: The drafting team is not charged with making interpretations of the requirements. If you want an interpretation of the requirements in this standard, you are encouraged to follow the process for an interpretation as outlined in the Reliability Standards Procedure Manual (page 29).</p> <p>Adding a reference to require ‘refreshing’ the contacts would be an expansion of the requirements, and would be outside the scope of the drafting team.</p> <p>The drafting team cannot make a change to the requirements. We will forward your comments to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p>	
<p>CCC</p>	<p>The CCC agrees with the measures as written, but believes that the levels of noncompliance are not appropriate for Yes/No requirements. Items listed in sections 2.2.1, 2.1.2, 2.1.3, and 2.3 should all be level 4 (severe) violations. The rational is that these requirements are either met or they are not. If they are met, they are in compliance. If the requirements are not met, they missed them completely and there is no possibility to partially meet the requirement. Since levels are based on how badly they missed the requirement, this should then be a level 4 (severe).</p>
<p>Response: The drafting team is developing compliance elements following the instructions provided in the latest version of the Reliability Standards Procedure Manual (RSPM) and acknowledges that the RSPM’s</p>	

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instructions for developing 'levels of non-compliance' do not match the language in the ERO Sanctions Guidelines that indicates standards will include, 'violation severity levels.' The drafting team will forward your comment to the team working on identifying suggested modifications to the standards.

COM-001-2: Telecommunications

Summary of Changes:

In response to stakeholder comments, the drafting team modified the data retention for Measure 3 to better align with the measure – and now the evidence that must be retained was changed from “the previous two calendar years plus the current year” to current operating instructions and procedures”.

Commenter	Comment
BPA	<p>We agree that most of COM-001-1 is duplicated in COM-002-R1. However, COM-002-R1 does not address R1.4 in any way. This requirement specifies that ... Where applicable, these facilities shall be redundant and diversely routed. These diversity and redundancy requirements are fundamental to the reliability of the bulk power system. As such, we request that this requirement remain and that a measure be developed to ensure adherence to it. At this point, the measure would need to reside in COM-001 with the requirement as written. Were this requirement to be merged into COM-002-R1 in the future, then it would be appropriate to move the related measure at that time.</p> <p>REQUIREMENT 2: The purpose of COM-001-2 R2 is to ensure that disciplined voice communication practices are observed. To measure this, we ask that a measure be developed for this requirement that specifically verifies that the BA, TO, RC has policies in place defining proper communication procedures and form for all types of voice communications relating to ALL operational concerns; not just those in which the RC issues a formal DIRECTIVE to a TO or BA to take action. Voice recordings and/or transcripts of voice recordings should be used to verify that utility procedure is followed.</p>
<p>Response: There are several ambiguous phrases in COM-001-1 R1 including terms such as, ‘adequate and reliable’, ‘as necessary’, and ‘Where applicable’. The drafting team does not believe an objective measure can be written for this requirement.</p> <p>Your suggestions for merging requirements and for developing a measure that expands on the language currently in requirement 2 are both outside the scope of the drafting team.</p> <p>We will forward your comments to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p>	
FRCC	<p>NERC should be removed as a compliance monitor. We commented on this in the previous draft and the SDT said they agreed. Looks like it was left in error.</p>
<p>Response: If the RRO is a NERCNet user, then NERC will be the compliance monitor for the RRO.</p>	
Southern Co	<p>COM-001-1: Data Retention – The drafting team should consider making the data retention for M1 and M3 consistent with the other standards being reviewed for this effort. Rather than “two current years plus the current year” (which seems excessive for these measurements) use something like “most recent or current documentation” for M1 and “current, in-force documents” for M3 (similar to words used in IRO-001 for data retention for M2 through M6).</p>
<p>Response: The intent is to ensure there is sufficient evidence in place for the compliance monitor to</p>	

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review the evidence when trying to determine if an entity is compliant without placing an unnecessary burden on the responsible entity.

For M1 two years plus current is needed to ensure there is evidence for the compliance monitor to review during a periodic audit.

For M3, the data retention was modified to better align with the measure – and now the evidence that must be retained is limited to the current versions of its operating instructions and procedures.

<p>ISO/RTO Council</p>	<ol style="list-style-type: none"> 1. We understand that the drafting team’s scope is the Measures. We request clarification and or definitions of the following terms in the COM-001 Requirements: <ul style="list-style-type: none"> • From R1, adequate and reliable • From R2, special attention • From R2, emergency telecommunications facilities • From R3, means to coordinate 2. The CESDT states in the (COM-001 and COM-002) Measures that they have not developed Measures for a Requirement or part of a Requirement. Are these open items? The CESDT appears to agree with our request for clarification or definition of “special attention” in R2 (COM-001). These CESDT comments imply the Requirements need work. Is the CESDT suggesting or asking if the Requirements need work? 3. While we expect to be fully compliant (for COM-001 and COM-002) by the proposed effective date, based on our interpretation of this update. We nonetheless expect another draft which clarifies open items from us and the drafting team. This expectation assumes that the Functional Model Entities have not changed. 4. The proposed (COM-001 and COM-002) Measures include the phrase “upon request.” We request clarification of “upon request.” 5. COM-001, M4 seems to be a repeat of M2. Should one be removed? M4 is a measure of the NERCnet Security Policy (Attachment 1). Attachment 1 has great detail. M4 is very high level. This appears to be a conflict. We question the M4’s value it provides the auditors with huge volume of information that the auditors will need to review to determine if the NERCnet Security Policy was violated. 6. The proposed (COM-001 and COM-002) Measures imply keeping records. Since no data retention period is specified, someone could be found non-compliant for not keeping records an unreasonable length of time. We suggest that the Standard should specify the data retention period(s), or there should be a Requirement about documenting one’s retention period. 7. The response indicates that evidence for only M1 needs to be retained for current year plus 2 years. However, the redline version has both M1 and M3 having this requirement. 8. The IRC continues to disagree with the lack of measure and non-compliance level for not having communication facilities in place . The CESDT’s response that “..the essential requirement to have the facilities in place is duplicated in COM-002 R1 and the failure to have the facilities is a level four.” does not really address this. COM-002 R1 stipulates the requirements for TOP, BA and GOP to have communications (voice and data link), which could be interpreted as the facilities, with the RC, but does not stipulate the same requirement for the RC. Hence, the Level 4 in COM-002 would not apply to an RC even if it does not have any
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	<p>telecommunication facilities. On the other hand, R1 in COM-001 clearly stipulates that RC, TOP and BA shall have adequate and reliable telecommunication facilities. We still feel it necessary that in COM-001, a Level 4 should be assigned for not meeting R1, namely, having the telecommunication facilities.</p>
<p>Response:</p> <ol style="list-style-type: none"> 1. The drafting team is not charged with making interpretations of the requirements. If you want an interpretation of the requirements in this standard, you are encouraged to follow the process for an interpretation as outlined in the Reliability Standards Procedure Manual (page 29). 2. The CESDT is stating that it believes the requirement needs work and asked stakeholders to respond to this. The drafting team cannot modify the requirements, as this is outside its scope. 3. The drafting team is not planning to produce another draft of this standard but does expect that in the future measures will be added once the requirements are clarified. This additional work will not be done by this drafting team. (Please see the drafting team’s summary at the beginning of this document.) 4. There is no specific time period associated with the phrase, ‘upon request’. As envisioned, the Compliance Enforcement Program will allow a reasonable time period for gathering evidence needed to demonstrate compliance. 5. While the measures are phrased similarly, they are measuring different requirements. Measure 2 is looking for compliance with Requirement 4 which requires use of English language – and Measure 4 is looking for compliance with Requirement 6 which addresses compliance with the NERCnet Security Policy. 6. Both standards do include data retention elements. These can be found in the Compliance Monitoring Sections of the Standards – Section D.1.3. 7. This was a typo in the red line version. M3 should only require the current version be available as evidence. 8. There are several ambiguous phrases in COM-001-1 R1 including terms such as, ‘adequate and reliable’, ‘as necessary’, and ‘Where applicable’. The drafting team does not believe an objective measure can be written for this requirement and therefore levels of non-compliance cannot be added. 	
<p>Edward Dahill, National Grid</p>	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 1 as duplicate of COM-002-2 Requirement 1 ○ 2.2 based on need to define the term ‘Special attention shall be given’ ○ 3 need to clarify the terms ‘shall provide a means to coordinate’ and ‘shall include the ability to investigate’ • National Grid recommends having Requirement 1 be present in only one standard. Therefore, recommend removing Requirement from Standard COM-002-2. • National Grid continues to agree with FERC’s assessment that telecommunication facilities are an integral part of a complex set of operating tools and that they are necessary in maintaining a reliable system. Specifications defining adequate and reliable telecommunications facilities would assist in ensuring compliance. • The CESDT also concluded that the proposed NERC standards were lacking recommendations; specifically the tightening of communication protocols during alerts and emergencies. National Grid may agree that proper communication protocols among the operating entities are essential for maintaining reliable system operations. However,

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	<p>we disagree these communication protocols be included (or mixed) with the standards for communication facilities.</p> <p>1. The proposed NERC standard (effective 01/01/07) does not truly specify nor define adequate or reliable telecommunication facilities. Nevertheless, Measures and Compliance have been added. Operators would be required to have and provide upon request evidence and/or documentation of compliance. The coordination of such would take some effort.</p>
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p> <p>The drafting team cannot modify any requirements, including adding specifications to the requirements. The drafting team did not write a measure for COM-001 Requirement 1 because the drafting team felt that the phrase, 'adequate and reliable' was too vague to measure.</p> <p>Note that all requirements in this standard were approved and are in effect today. Entities should already be compliant with these requirements.</p>	
<p>Jim Cyrulewski, Donovan Greening, ITC</p>	<p>For Transmission Operators, Balancing Authority or Reliability Coordinator revised item 2.3.1 should be moved to Level 4. As commented previously critical that all parties are speaking the same language to ensure no misinterpretations.</p>
<p>Response: Most stakeholders who submitted comments on this question seemed to support the levels of non-compliance as written.</p>	
<p>Ron Falsetti, IESO</p>	<p>The response indicates that evidence for only M1 needs to be retained for current year plus 2 years. However, the redline version has both M1 and M3 having this requirement.</p> <p>The IESO continues to disagree with the lack of measure and non-compliance level for not having communication facilities in place. The CESDT's response that "...the essential requirement to have the facilities in place is duplicated in COM-002 R1 and the failure to have the facilities is a level four." does not really address this. COM-002 R1 stipulates the requirements for TOP, BA and GOP to have communications (voice and data link), which could be interpreted as the facilities, with the RC, but does not stipulate the same requirement for the RC. Hence, the Level 4 in COM-002 would not apply to an RC even if it does not have any telecommunication facilities. On the other hand, R1 in COM-001 clearly stipulates that RC, TOP and BA shall have adequate and reliable telecommunication facilities. We still feel it necessary that in COM-001, a Level 4 should be assigned for not meeting R1, namely, having the telecommunication facilities.</p>
<p>Response: M3 should only require the current version be available as evidence. This was a typo in the red line version and has been corrected.</p> <p>There are several ambiguous phrases in COM-001-1 R1 including terms such as, 'adequate and reliable', 'as necessary', and 'Where applicable'. The drafting team does not believe an objective measure can be written for this requirement and therefore levels of non-compliance cannot be added.</p>	

COM-002-2: Communications and Coordination

Summary of Changes: The drafting team did not make any changes to this measures and compliance elements already added to this standard.

Commenter	Comment
Southern Co	<p>M2 – This measure uses terms of R1.1 that leave it ambiguous and, in fact, would require additional evidence not indicated to prove that compliance was achieved. The R1.1 and M2 are trying to require and assess compliance whether an RC was “notified” if a condition “could” threaten reliability. The pre-requisite determination of notification is what conditions “could” threaten reliability. In order to determine if a BA and TOP complied on all events/conditions the “could” one must first determine which conditions warrant such notifications and which ones don’t. To audit this measure, it appears the BA and TOP would also have to keep documentation for all potentially threatening conditions and evidence why it considered them threatening or not. This retention is not evident nor required by the Measurement. Without this information what conditions would be audited for the notification compliance? In addition, is the judgment of the BA and/or TOP acceptable as to what conditions “could” require notification to the RC? If not, what other corroborating evidence from other entities is required for this Measurement? Perhaps R1.1 should not be given a measure like was done for R 2 until these issues are clarified as well. Data Retention – The drafting team should consider making the data retention for M1 consistent with the other standards being reviewed for this effort. Rather than “two current years plus the current year” (which seems excessive for these measurements) use something like “current, in-force documents” for M1 (similar to words used in IRO-001 for data retention for M2 through M6).</p>
<p>Response: Most stakeholders who commented seemed to support this measure as written. If an entity anticipates an abnormal condition that may have an adverse impact on reliability, the communications that occur between entities (relative to that abnormal condition) will normally be recorded on a voice recorder and an operating log.</p>	
Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ Requirement 1.2 as need to define requirement in such a manner that it is effectively measurable. ○ Requirement 2 requires additional defining of terms.
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p>	
Jim Cyrulewski, Donovan	<p>There are missing measures that should have been developed for Requirements 4, 5, 6 and 7 and the levels of non compliance does not</p>

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Greening, ITC	reflect the requirements to have voice and data links working and available. There should be a level of non-compliance for failure to maintain voice and data links. Also for Balancing Authority, missing Level 3 requirements.
<p>Response: COM-002 does not have requirements 4, 5, 6 or 7.</p> <p>COM-002 does not include any requirement to maintain the voice and data links so there can not be any levels of non-compliance for failure to maintain voice and data links.</p> <p>For the Generator Operator, non-compliance with R1 is addressed specifically in the levels of non-compliance.</p> <p>For the RC and TOP, non-compliance with R1.1 is really addressing both R1 and R1.1 because compliance with R1.1 couldn't reasonably be expected without having the voice and data links working (R1).</p> <p>The drafting team did not develop a specific level 3 non-compliance for the GO – it is listed as 'not applicable' in the standard.</p>	
Paul Arnold, WECC/CCC	Failure to follow the communication procedures in Requirement 2 should result in a level 1 violation, unless the directive was not followed due to a communications problem. If, in addition to failing to use the required communications procedures, the directive was not followed, then failure to follow the procedures should result in a level 4 violation.
<p>Response: The drafting team did not develop a measure for R2 because too many of the words in the requirement are ambiguous (clear, concise, definitive), therefore there are no levels of non-compliance.</p>	
Jay Seitz, US Bureau of Reclamation	<p>Measure 1: Although a measure was not made for "Requirement 1 part 2," this requirement as written implies a 24/7 availability. For small generator operator/owners is not reasonable, nor are they likely to have a major impact on the system. In many instances small plants are not staffed or are not staffed 24/7. If the intent is to include all generation the measure is not practical.</p> <p>Compliance 3.4: This compliance item as written, is acceptable. However if there is an implied 24/7 aspect to the item, then for certain generating facilities it is not practical or cost effective to meet this requirement.</p>
<p>Response: The drafting team is not charged with making interpretations of the requirements. If you want an interpretation of the requirements in this standard, you are encouraged to follow the process for an interpretation as outlined in the Reliability Standards Procedure Manual (page 29).</p> <p>The drafting team cannot refine the applicability section of the standard. Note that communication can take place via cell phones or other means.</p>	
CCC	<p>The CCC agrees with the CESDT and believes that the requirement needs to be reworded in order to create a valid measurement.</p> <p>Additionally, the CCC believes that Requirement 2 can also be measured. Potential wording could be: "Each Transmission Operator, Balancing Authority, and Reliability Coordinator shall provide evidence that could include, but is not limited to, voice recordings or other equivalent evidence that can be used to determine if the Reliability Coordinator, Transmission Operator, or Balancing Authority uses the issue, repeat and confirm method of communication described in Requirement 2 when issuing directives."</p> <p>Failure to follow the communication procedures in Requirement 2 should result in a level 4 (severe) violation consistent with the comment on CIP-001-1.</p>

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Response: The drafting team did not develop a measure for R2 because too many of the words in the requirement are ambiguous (clear, concise, definitive). Although you've provided a suggested measure, it only addresses a portion of the requirement – it does not address the quality of the communication nor the scope of communications that would be required to be handled in this manner. Because there is no measure for R2, there are no levels of non-compliance for R2.

EOP-002-2: Capacity and Energy Emergencies

Summary of Changes: In response to stakeholder comments, the drafting team made the following changes:

Measure 2- removed the words, 'acceptable and' from the following phrase: 'to determine if the actions it took to relieve emergency conditions were **acceptable and** in conformance with its Capacity and Energy Emergency Plan.' Stakeholders indicated the term, 'acceptable,' is not objective.

Measure 4 – changed the phrase, 'has been notified of,' to, 'has notified the Reliability Coordinator' to clarify what was intended with the requirement.

The drafting team also corrected a typographical error in the levels of non-compliance (3.3)

Commenter	Comment
BPA	<ol style="list-style-type: none"> 1. We disagree with the removal of the original measures numbered M4 and M5, as well as and the associated Levels of Compliance language in sections 3.2 and 3.3.1; which measure compliance with R5 Part 1 and 2 respectively. 2. We also disagree that the requirement to perform all actions necessary is too broad. Though we agree with the other commenters that these measures need to be clarified, we have the following suggestions for resolving the issues, rather than avoiding them by removing the measurements and thereby removing enforceability of this very important requirement. To this end, we request that the issue of --all actions being considered-- be dealt with by adding language to the original M4 stating that the phrase - -all available-- is to be evaluated using a list of available resources that has previously been developed by each BA and provided for this purpose. We also feel that though the industry may want to undergo a future process to further clarify the specific ... time needed to implement corrective actions ... language, as used in the original M4, it is possible to develop an appropriate measurement. This measure should include language specifying - -a determination of whether or not the System Operator 1) initiated the steps required to implement the necessary corrective actions without delay and 2) relinquished use of the emergency assistance as soon as the necessary corrective actions were able to replace the energy being received through emergency assistance.-- Further, we request that the issue of unilaterally adjusted generation be clarified to refer to instances in which a Balancing Authority adjusts generation without a corresponding ACE or interchange schedule requiring such change. 3. M2 and M3 focus on the need for the BA and RC to provide the data that the entity responsible for monitoring compliance needs to determine compliance with R2 and R3 respectively. But as written, M2 and M3 do not adequately get at answering the essential question of ?? Did the performance demonstrated by the entity actually meet the specific Requirement in question? ?. Therefore, we ask that these measures be modified to include additional metrics that specifically address how the Compliance Monitor is to determine whether or not RC and/or BA has met the specific requirement in each case.
<p>Response:</p> <ol style="list-style-type: none"> 1. Most stakeholders who responded to this question seemed to agree with the removal of the original measures numbered M4 and M5 and the associated Levels of Compliance language in sections 3.2 and 3.3.1. 2. The drafting team is not charged with making interpretations of the requirements. If you want an 	

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<p>interpretation of the requirements in this standard, you are encouraged to follow the process for an interpretation as outlined in the Reliability Standards Procedure Manual (page 29).</p> <p>3. Most stakeholders who responded to this question seemed to agree with the measures as written. The drafting team cannot add metrics that go beyond the current requirements because changing the requirements is outside the scope of the work assigned to the drafting team.</p>	
FRCC	<p>In M4, should change "has been notified of" to "that has notified the RC of". It is the BA that is doing the notification, not the RC.</p> <p>For Level 3 non-compliance it appears that there are words missing as there is nothing after the colon. This needs to be corrected.</p>
<p>Response: The drafting team adopted your suggestion for M4 and it is reflected in the revised standard. The drafting team corrected the error in level 3 non-compliance – this should have been listed as ‘not applicable’ when the associated measure was deleted with the last set of revisions.</p>	
Southern Co	<p>M2 – The drafting team should consider removing the Measurement for Req. 2 because the term “acceptable” is too broad just as the term “all actions” for Req. 4 was considered too broad and thus no measurement was developed. For example, does “acceptable” mean “in compliance with the Emergency Plan” or does it mean “successful in addressing the Capacity or Energy Emergency”?</p>
<p>Response: The drafting team modified the measure by removing the word, ‘acceptable’.</p>	
Edward Dahill, National Grid	<ol style="list-style-type: none"> 1. NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 4 due to current wording is too broad and needs to be clarified ○ 5 due to the Requirement is not measurable as written. ○ 6 due to the Requirement is not measurable as written. ○ 7 due to need to define Requirement 6 first ○ 9 due to the Requirement is not measurable as written. ○ 9.1 due to the Applicability provisions do not include Load Serving Entities. • National Grid recognizes that Measure M1 list examples of evidence. However it neglects the most important evidence that being the approved procedures giving authority to take actions as necessary. Procedures should be added.
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p> <p>Regarding M1 - The list of examples was not meant to be an exhaustive list.</p>	

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<p>Jim Cyrulewski, Donovan Greening, ITC</p>	<p>Resolve missing measurement provisions and increase data retention to one year.</p>
<p>Response: The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p> <p>Based on stakeholder comments during the first posting of this standard, the drafting team shortened the data retention to be as reasonable as possible, while still ensuring that there would be sufficient evidence to demonstrate compliance.</p> <p>Note that there are other standards that will require data associated with significant events be retained for longer periods of time. (PRC-018)</p>	
<p>CCC</p>	<p>In the levels of noncompliance (3.3) there is no subset of violations for level 3 (high) as the description implies there would be.</p> <p>Requirement 3.2 should be a level 4 (severe) as it is a yes/no requirement.</p>
<p>The drafting team corrected the error in level 3 non-compliance – this should have been listed as 'not applicable' when the associated measure was deleted with the last set of revisions. Response: The drafting team is developing compliance elements following the instructions provided in the latest version of the Reliability Standards Procedure Manual (RSPM) and acknowledges that the RSPM's instructions for developing 'levels of non-compliance' do not match the language in the ERO Sanctions Guidelines that indicates standards will include, 'violation severity levels.' The drafting team will forward your comment to the team working on identifying suggested modifications to the standards.</p>	

EOP-003-1: Load Shedding Plans

Summary of Changes: In response to stakeholder comments, the drafting team made the following change:

- Measure 1 – added the words, 'or directs the deployment of' in the following phrase to more accurately reflect the associated requirement: 'or directs the deployment of undervoltage and/or underfrequency load shedding facilities'

Commenter	Comment
BPA	<p>EOP-003-1: We disagree with the removal of the original measure M2 and associated original Level of Compliance specified at 2.4.1. Coordination of load shedding plans is a very important component in maintaining the reliability of the bulk power system. Though we agree with commenters that there are probably differing interpretations within the industry of what is meant by the word coordinate, we do not feel that this is a reason to remove this measure; thereby remove enforcability of this requirement, which is such a vital compoment of maintaining reliability of the bulk power system, and moving to a lowest common denominator interpretation of this important requirment. The dictionary definition of this usage of the term COORDINATE is -->to harmonize in a common action or effort <--. Though this interpretation might not require the level of formal agreement and approval that would technically be required to ensure that all of the load shedding plans do in fact work together harmoniously, we suggest that this measure be modified to, at a minimum, require that --all TOs with a load shedding program discussed these programs with each of its interconnected BAs and TOPs and evaluated its interactions with any loadshedding programs that they may have to identify and resolve any potential problems that might arise with interactions between them were either or both of them to be put into action.—</p> <p>REQUIREMENT 7: We ask that specific requirements be developed to specifically measure BA and TOP compliance with ROP-003-1 R7, as written. Though EOP-003-1 R7 is similar and related to PRC-006-0, they are not entirely duplicative. Where EOP-003 R7 is written to specifically address the roles and responsibilities of the TOP and BA to coordinate its UFLS programs with its interconnected BAs and TOPs, PRC-006-0 addressses only the more global responsibilities of RROs to develop and document a regional UFLS program, of which the BA and TOP Load Shedding Programs are a subset. As such, PRC-006 R1 is applicable only to RROs, and not TOPs and BAs, as specified in EOP-003-1 R7. Therefore, it does not replace the responsibility of each individual BA and TOP to ensure that all of its underfrequency load shedding is coordinated as required in EOP-003 R1.</p>

Response: The drafting team is not charged with making interpretations of the requirements. If you want an interpretation of the requirements in this standard, you are encouraged to follow the process for an interpretation as outlined in the Reliability Standards Procedure Manual (page 29).

The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.

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<p>The drafting team did not add a measure for R7 because R7 is covered in PRC-006, PRC-007, PRC-010, PRC-012 and PRC-014.</p>	
<p>ISO/RTO Council Ron Falsetti, IESO</p>	<p>It is appropriate that M1 asks for a BA to demonstrate its automatic load shedding plans. However, we suggest the wording be changed to "Each Transmission Operator and Balancing Authority that has or directs the deployment of undervoltage and/or underfrequency." since the BA doesn't normally own these facilities. Load shedding capability is usually arranged through deployment authority/agreements with the Distribution Provider.</p>
<p>Response: The drafting team adopted this suggestion and the modification is reflected in the revised standard.</p>	
<p>Edward Dahill, National Grid</p>	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 1 due to need to improve wording ○ 3 due to need to more clearly define terms ○ 4 due to need to improve wording ○ 5 due to need to more clearly define terms ○ 6 due to requirement is not measurable as currently written ○ 7 due to this Requirement is covered by PRC-006-0, Requirement1. Requirement should be present in a single Standard requirement not multiple Standards. ○ 8.2 due to need to improve wording.
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p>	
<p>Jim Cyrulewski, Donovan Greening, ITC</p>	<p>Resolve missing measurement provisions for requirements 2, 5 and 6 and the standard does not have a measure or compliance level for not maintaining EMS or load shedding relaying scheme to ensure manual or automatic load shedding is possible.</p>
<p>Response: The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p> <p>There are other standards that require maintenance of these facilities – look at the PRC family of standards. The requirements in this standard do not include requirements for maintenance of this equipment.</p>	
<p>MRO</p>	<p>The MRO believes that compliance (Section D.2) should be to a Regional Loadshed plan. The Regional Entity should be responsible for</p>

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	coordinating the various regional studies and implementation guidelines to insure compliance with the NERC standards.
Response: The requirements in this standard do not include a requirement for adherence to a Regional load shed plan.	
CCC	The CCC agrees with the CESDT and believes that the requirement needs to be reworded or enhanced in order to create a valid measurement.
Response: Thank you for your support.	

EOP-004-2: Disturbance Reporting

Summary of Changes:

The drafting team did not make any changes to the measures or compliance elements already added to this standard. The drafting team had originally used EOP-004-1 as the starting point for adding measures and compliance elements – but EOP-004-1 was withdrawn when it failed to achieve a quorum, and the drafting team reverted to using EOP-004-0 as the ‘starting point’ for the measures and compliance elements.

Commenter	Comment
BPA	MEASURE 1: As written this measure does not address how the compliance evaluator is to determine whether or not the specific procedure provided by the RRO actually meets the requirement to ... facilitate preparation of ... disturbance reports, as specified in Requirement 1. Therefore, we ask that EOP-004-1 M1 be modified to give guidance as to how this determination is to be made. Otherwise, this becomes a subjective rather than objective measure.
Response: The measures are intended to identify ‘what’ the compliance monitor will review – they are not intended to identify ‘how’ the compliance monitor will review the evidence.	
FRCC	The starting point for these changes was EOP-004-1 which was balloted several times and never achieved quorum. The CESDT needs to go back to version 0 and make the appropriate revisions as those contemplated in version 1 were never approved.
Response: Agreed. The change to the requirements did not result in a need to change any of the measures or levels of non-compliance.	
Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 2 due to need to define requirement in manner that is measurable ○ 3.2 due to missing reference forms ○ 4 due to belief that requirement is not appropriate ○ 5 as this should be part of the Regional Delegation Agreement
Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.	
Jim Cyrulewski, Donovan Greening, ITC	Resolve missing measurement provisions for requirement 4. For Levels of Non-Compliance for RCs, BAs, etc., Level 1 should be Level 3. Timely reporting is a must by all cited entities.
Response: Please review the CESDT’s reasoning for not providing a measure for Requirement 4. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the	

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requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.

Most stakeholders who responded to this comment form seemed to support the levels of non-compliance as proposed.

CCC

The CCC believes that a measurement can be written for Requirement 5. A possible wording could read:

Part 1:
 “The RRO shall provide evidence they track the status of all final report recommendations twice each year.”

Part 2:
 “The RRO shall provide evidence that any recommendation older than 2 years has been brought to the PC and/or the OC and shall provide all a list of steps taken to accelerate implementation of the recommendations.”

The CCC, understanding that modifications to the standard is beyond the scope of the CESDT, believes the requirement needs to be brought to the attention of the SC. This requirement needs to be reworded regarding bringing the issue to the PC and the OC, and that it changed to the appropriate entity.

Violating part 1 should be a level 3 (high) violation. Violating part 2 should be a level 1 (lower) violation, violating both should be a level 4 (severe) violation.

Response: The requirement includes elements that are not objectively measurable – phrases such as, ‘acted upon in a timely manner,’ and ‘sufficient diligence’ are examples of some of the language in the requirement that is ambiguous.

The drafting team will list all requirements that do not have measures and will provide the list to the Standards Committee.

The drafting team is developing compliance elements following the instructions provided in the latest version of the Reliability Standards Procedure Manual (RSPM) and acknowledges that the RSPM’s instructions for developing ‘levels of non-compliance’ do not match the language in the ERO Sanctions Guidelines that indicates standards will include, ‘violation severity levels.’ The drafting team will forward your comment to the team working on identifying suggested modifications to the standards.

EOP-006-1: Reliability Coordination - System Restoration

Summary of Changes: The drafting team corrected a typographical error in the levels of non-compliance (2.3) but made no changes to the measures and compliance elements already added to this standard.

Commenter	Comment
BPA	<p>MEASURE 1 and MEASURE 3: As written, EOP-006-1 M1 and M3 do not address how the compliance evaluator is to determine whether or not the specific plan provided in the specified measure actually meets the specifications of the Requirement in question. Therefore, we ask that M1 and M3 be modified to include additional metrics that specifically address how these determinations are to be made in a consistent manner in each case.</p> <p>MEASURE 2 and MEASURE 5: As written, M2 and M5 do not address how the compliance evaluator is to determine whether or not the actions of the Reliability Coordinator met the specifications the specified Requirement. We ask that M2 and M5 be modified to give guidance as to how these determinations are to be made.</p>
<p>Response: The measures are intended to identify 'what' the compliance monitor will review – they are not intended to identify 'how' the compliance monitor will review the evidence.</p>	
FRCC	<p>We agree with the addition of M6, but question the inclusion of system restoration plan as evidence. It is supposed to measure that it implemented its plan, not that it had one. We suggest removing that piece of evidence.</p>
<p>Response: The requirement indicates that actions must be taken in accordance with the plan – without the plan it would be difficult to measure this requirement.</p>	
Edward Dahill, National Grid	<ul style="list-style-type: none"> Considered complete – submit to NERC Board of Trustees for approval and submittal to FERC
<p>Response: Thank you for your comment. Note that the drafting team has no control over what standards are submitted to the NERC Board of Trustees.</p>	
Jim Cyrulewski, Donovan Greening, ITC	<p>Measurement #2 is redundant with measure #4.</p>
<p>Response: While portions of the measures are identical, they are looking at different performances – M2 is looking for evidence that the Reliability Coordinator monitored restoration progress and coordinated the restoration effort – and M4 is looking for evidence that the Reliability Coordinator served as the primary contact for disseminating information to entities not involved in the restoration.</p>	
Ron Falsetti, IESO	<p>We requested that a measure be developed for R5 but the CESDT felt that providing a measure for this requirement would not be appropriate because this will be addressed through Regional Delegation. But if this is the rationale, shouldn't most of the measures on RRO's compliance be addressed in the Delegation Agreement? Yet there are a number of measures already developed and included in the standards themselves, for example: M1 of EOP-004, M1 of IRO-001. Please elaborate if we are missing something behind this rationale.</p> <p>Level 2.3 should read "...a separate Level 3 non-compliance, for every one.."</p>
<p>Response: There is a measure for R5. If this comment was intended for EOP-004, here is the drafting team's reasoning for not providing a measure: The requirement includes elements that are not objectively measurable – phrases such as, 'acted upon in</p>	

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a timely manner,' and 'sufficient diligence' are examples of some of the language in the requirement that is ambiguous. The drafting team will list all requirements that do not have measures and will provide the list to the Standards Committee.

The error in the levels of non-compliance was corrected.

CCC

The CCC noticed that in section 2.3 the CESDT mentions a level 4 (severe) noncompliance in the text that lies under the level 3 (high) section. This needs to be corrected.

Response: This error was corrected.

ISO/RTO Council

Level 2.3 should read "...a separate Level 3 non-compliance, for every one.."

Response: This error was corrected.

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INT-001-2: Interchange Information

Summary of Changes: The drafting team corrected typographical errors and made minor wording changes for clarification, but did not significantly change the measures or compliance elements already added to this standard.

Commenter	Comment
BPA	INT-001-2: REGIONAL DIFFERENCES: We request that the Regional Differences section of INT-001-2 be modified as required to specify that all tagging requirements for Dynamic Schedules in the Western Interconnection are subject to the WECC Dynamic Schedule Business Practice.
Response: The drafting team is not authorized to modify the language in Regional Differences. If WECC needs a change to the Regional Difference, then WECC can submit a SAR for this.	
Southern Co	INT-001-2: Language needs to be consistent throughout standard. At times the LSE/PSE and Sink BA is used together and at other times just the PSE and BA is used together. INT-001-2: M2 – Change “operator lots” to "operator logs".
Response: The drafting team modified the language in the standard to use the same term throughout the measure and levels of non-compliance that were added. The drafting team used the term, ‘PSE that serves the load’. The typo was fixed.	
Edward Dahill, National Grid	<ul style="list-style-type: none"> Considered complete – submit to NERC Board of Trustees for approval and submittal to FERC
Response: Thank you for your comment. Note that the drafting team has no control over what standards are submitted to the NERC Board of Trustees.	
Jim Cyrulewski, Donovan Greening, ITC	Increase data retention to one year
Response: Based on stakeholder comments during the first posting of this standard, the drafting team shortened the data retention to be as reasonable as possible, while still ensuring that there would be sufficient evidence to demonstrate compliance.	
MRO	INT-001 Compliance D.1.2 change “twelve” to “12” for consistency with the other standards. Compliance D.2. change “Levels of Non-Compliance for Balancing Authorities” to Levels of Non-Compliance for Sink Balancing Authorities”
Response: The drafting team made the suggested modifications.	
David Folk, First Energy	Int-001-2 has requires "operator lots" this should be operator logs.
Response: This typo was corrected.	
Southern Co	INT-001-2-(D2. Non-Compliance): Not sure if non-compliance levels cover this situation. For example, consider a dynamic schedule that should run 09:00-15:00 Monday through Friday. There are generally two ways that an entity might schedule this interchange. The entity may submit one schedule to run for 5 days or submit a schedule for each day of the week. If the entity does not submit a schedule (arranged interchange) to the IA, then is this considered (after-the-fact) a Level1 or a Level 4 violation?
Response: As envisioned, each arranged interchange would be reviewed as a separate ‘instance.’	

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INT-003-2: Interchange Transaction Information

Summary of Changes: The drafting team corrected typographical errors, but did not significantly change the measures or compliance elements already added to this standard.

Commenter	Comment
BPA	The section titled Levels of Non-Compliance for BAs Level 4 contains multiple typos. It looks like it should be identical to Levels 1 - 3 except replacing the specified number with "four or more". We ask that this be corrected.
Response: The language in level four was modified to 'four or more' as suggested.	
FRCC	For the Level 4 non-compliance it sites "three instances of..". Should this be "four"? Also the numbering seems to be incorrect.
Response: The language in level four was corrected to 'four or more' as suggested.	
Southern Co	INT-003-2-(2.4.1) Level 4: This may be a typo, but the standard says three violations would result in a Level 4 non-compliance. Which is the same number of violations as a Level 3. Suggestion: Make Level 4 violations the same as in INT-001-2.
Response: The language in level four was corrected to 'four or more' as suggested.	
Edward Dahill, National Grid	Considered complete – submit to NERC Board of Trustees for approval and submittal to FERC
Response: Thank you for your comment. Note that the drafting team has no control over what standards are submitted to the NERC Board of Trustees.	
Jim Cyrulewski, Donovan Greening, ITC	Increase data retention to one year.
Response: Based on stakeholder comments during the first posting of this standard, the drafting team shortened the data retention to be as reasonable as possible, while still ensuring that there would be sufficient evidence to demonstrate compliance.	
Ron Falsetti, IESO ISO/RTO Council	We are unable to make a difference between "for every one of" in 2.3 and "either of" in 2.4 for Level 3 and Level 4 non-compliance, respectively. On the surface, they both involve 3 occurrences of either (i) not entering a schedule into the ACE equation or (ii) not coordinating interchange schedule with the TOP of HVDC tie.
Response: The language in level four was corrected to 'four or more' as suggested. The language in level three was also corrected to use the phrase, 'either of'.	
Brent Kingsford, CAISO	D 2.3 and 2.4 non compliance measures appear to provide both a level 3 and a level 4 non-compliance for the exact same measure (3 instances of non-compliance in both levels with the distinguisher being the words every one or either. Further clarification of the difference is required.)
Response: The language in level four was corrected to 'four or more' as suggested.	
Southern Co	INT-003-2-C-M1: See note from DWB: INT-001-2 above about using "NET" interchange.
Response: The drafting team does not understand the context of this comment.	
MRO	INT-003 Measures C.M1 change "energy profile, were confirmed" to "energy profile, was confirmed" Compliance D.1.3 change "shall each keep" to "shall keep"

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	Compliance D.2.3 change “separate Level 3 non-compliance, for everyone of the following” to “separate Level 3 non-compliance, if either of the following” Compliance D.2.4.1 change “Three” to “Four or more” Compliance D.2.4.2 change “Three” to “Four or more”
<p>Response: The phrase, ‘was confirmed’ is not correct – this is a plural. The extra, ‘each’ in D.1.3 was removed as suggested. D2.3 and D2.4.1 and D2.4.2 were all corrected.</p>	

IRO-001-1: Reliability Coordination - Responsibilities and Authority

Summary of Changes: The drafting team corrected a typographical error in measure 7 but did not make any other changes to the measures and compliance elements already added to this standard.

Commenter	Comment
Southern Co	IRO-001-1 D.1.3 paragraph 3 measure 8 should be measure 7 due to renumbering
Response: This typographical error was corrected.	
Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 2 as current definition is too broad to measure effectively ○ 9 as current definition is too broad to measure effectively
Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.	
Jim Cyrulewski, Donovan Greening, ITC	Many of the requirements are not measurable. Also resolve missing measurement provisions for requirements 2 and 9 and increase data retention to one year
Response: The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. Based on stakeholder comments during the first posting of this standard, the drafting team shortened the data retention to be as reasonable as possible, while still ensuring that there would be sufficient evidence to demonstrate compliance.	
Ron Falsetti, IESO	We believe the 90-day historical data retention requirement applies to M7, not M8, as the latter does not exist.
Response: This typographical error was corrected.	
Jay Seitz, US Bureau of Reclamation	<p>Measure 7: The measure (and Requirement 8) states “shall comply with Reliability Coordinator directives unless such actions would violate safety, equipment, or regulatory or statutory requirements.” We believe that a lack of fuel and or water for hydro should be an acceptable means of not being able to comply with a Reliability Coordinator directive.</p> <p>Compliance 1.3: Third paragraph, the reference should be to Measure 7, not Measure 8.</p>

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	Compliance 4: Levels of Non-Compliance for a Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, or Purchasing-Selling Entity:, 4.4 Level 4, 4.4.1 a lack of fuel and or water (fuel for hydro), or should be added to the list of an acceptable reasons of not being able to comply with a Reliability Coordinator directive.
<p>Response: The specific language addressing lack of fuel and/or water for hydro does not exist in the requirement as currently written. The drafting team cannot expand on the language included in the requirement. The requirement is related to informing the RC that the entity cannot meet the RC's directives.</p> <p>The reference to Measure 8 was corrected as suggested.</p> <p>Because the drafting team cannot add the suggested language to the requirement, it was not added to the measure or the levels of non-compliance.</p>	
ISO/RTO Council	We believe the 90-day historical data retention requirement applies to M7, not M8, as the latter does not exist.
<p>Response: The reference to Measure 8 was corrected as suggested.</p>	

IRO-002-1: Reliability Coordination – Facilities

Summary of Changes: In support of stakeholder comments, the drafting team made minor wording changes to M1, M2, M5, and M7 to eliminate ambiguous language and improve the alignment between requirements and measures.

The drafting team also added a measure and associated compliance elements for Requirement 5 Part 1. In its initial assessment, the drafting team interpreted this requirement as being duplicated in IRO-005 R1 and R3 and IRO-003 R1. Stakeholders commented that these requirements are not duplications - IRO-002 is looking at the capability of facilities – and IRO-003 and IRO-005 are looking at the use of those facilities.

Commenter	Comment
BPA	<ol style="list-style-type: none"> 1. MEASURE 1 and MEASURE 2: As written, M1 and M2 do not address how the Compliance Monitor is to determine whether or not the data communications methodologies ... meet the reliability needs of the interconnection ... as specified in R4. We ask that M1 and M2 be modified to give guidance as to how these determinations are to be made. Otherwise, these become subjective rather than objective measures. 2. REQUIREMENT 7 and MEASURE 5: In order to meet R7, entities must implement some tools that few have working. Yet as written, the associated measures do not include any specific performance requirements for these tools (i.e. transient & voltage stability programs). Therefore, we request that M5 be modified to both 1)document both the minimum performance requirements for each system, and 2) give additional metrics and guidance as to how the Compliance Monitor is to determine whether or not the performance of these systems meet the minimum performance requirements of this requirement in each unique and specific instance. 3. MEASURE 6: We request that IRO-002-1 M6 be modified to include both 1) the specific criteria that must be met by a --backup facility--, and 2)what documentation is necessary to support evaluation of compliance with these criteria. As presently written, there is inadequate specification in M6 of what constitutes ... adequate back-up ... as specified in R8. This measure works in a vague sense but not sufficiently to be meaningful in exacting performance. It is for these reasons that, we ask that this measure be improved by implementing our suggestion above. 4. REQUIREMENT 9: There are no performance or evaluation specifications for this that allow IRO-002-1 R9 to be meaningful (i.e. determine that the RC was not able to ... control its RC analysis tools (i.e. documentation shows that outages are allowed only during low stress conditions, or a fully redundant system is employed, etc.) 5. REQUIREMENT 3: We ask that a specific measure be developed to measure compliance with IRO-002-1 R3. We disagree with CEDST there is insufficient language in IRO-002-1 R3 to write such a measure. Though some may interpret that there is confusion as to who is ultimately responsible for this communication taking place, whenever implementation of the data exchange that is accomplished via direct links between the TOs and/or BAs and the 3rd party involved, it is done because the task of communicating this information has been DELEGATED to the TO or BA by the RC. In each case, the RC remains ultimately

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	<p>responsible for ensuring that this communication actually occurs as required. Therefore, the RC is the correct party to hold RESPONSIBLE FOR COMPLIANCE. The measures associated with this requirement should include the data and evaluation criteria necessary to verify that these links are in place and meet the appropriate security and reliability requirements. A decision to not develop such a measure would constitute implementation of a lowest common denominator approach to implementation of this important requirement throughout the electric utility industry.</p> <p>6. REQUIREMENT 5: Requirement 5 Part 1 is not an exact duplicate of IRO-005 R1 and R3 and IRO-003 R1. Therefore, we ask that specific measures be developed to monitor compliance with R5. These specific measurements should include language such as -- shall provide documentation of complete SOL, IROL, limits and loading information from all TOs in RC area--. Additionally, we ask that additional language be added to this measure to provide specific metrics and guidance in making the determination of whether or not the infrastructure involved is --redundant and highly reliable-- as specified in R5. A decision to not develop such a measure would constitute implementation of a lowest common denominator approach to implementation of this important requirement throughout the electric utility industry.</p>
<p>Response:</p> <p>1. The measures are intended to identify ‘what’ the compliance monitor will review – they are not intended to identify ‘how’ the compliance monitor will review the evidence.</p> <p>2-5. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p> <p>6. A measure was added as requested for R5 along with associated data retention and level of non-compliance. The additional metrics and guidance cannot be added because they require modifications to the requirement.</p>	
FRCC	<p>The numbering of the measures needs to be corrected.</p> <p>We do not agree with 2.1 - Level 1 Non-compliance. We believe that R2 is the same importance as R9 and both should be a level 3.</p>
<p>Response: The numbering was corrected.</p> <p>The drafting team adopted your suggestion, which was consistent with the suggestion of the CCC, and revised this to be a higher level.</p>	
Southern Co	<p>1. M5, M6 and M7 need to be renumbered</p> <p>2. M1 – The drafting team should consider removing the Measurements for Req. 1 and 4 because the term “adequate” is too broad. For example, does “adequate” mean “it has land-line telephones with cell phone back-up” or does it mean “satellite phones are available in the event normal telecommunications infrastructure is non-functional”?</p> <p>3. M2 – The drafting team should consider if it should remove the Measurements for Req. 1 and 4 because the term “appropriate” is too broad. For example, does “appropriate” mean “it has established a data link” or does it mean the data link has a minimum frequency of exchange rate and/or minimum capacity</p>

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	<p>value?</p> <p>4. M4 – Where did “that describes the capability of its analysis tool” come from? It is not in the Requirement 7 and if it is to help confirm the “adequacy” of the tools, the measurement is merely avoiding the fact that “adequacy” is too broad a term as used in the Requirement. Is an “adequate” tool one that solves every 30 minutes or 30 seconds? Is it one that due to modeling issues only reliability solves 50% of the time or is 100% required? Should it model only the RC’s footprint or the whole Interconnection?</p> <p>5. M7 – Why was the specification of “operating personnel” uniquely necessary in the measurement for Req. 9, part 1? This degree of specification was not deemed necessary by the Drafting Team for the other measurements although many would also seem to expect the “operating personnel” of a functional entity (RC, BA, TOP, etc.) to actually be performing a requirement.</p>
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Response:

1. The numbering was corrected.
2. The drafting team modified the language to avoid use of the word, ‘adequate’.
3. The drafting team modified the language to avoid use of the word, ‘appropriate’
4. The drafting team modified the language to remove the phrase, ‘ that describes the capability of its analysis tool’.
5. The drafting team modified the measure so that it more closely matches the language in the requirement as suggested.

Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 3 as issue of which entities are subject to the Requirement ○ 5.1 is duplicate of IRO-005-2 Requirements 1 and 3 ○ 5.2 as current definition is too broad to measure effectively ○ 6 is duplicate of IRO-005- 2 Requirements 1 through 5.
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Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.

Jim Cyrulewski, Donovan Greening, ITC	Resolve missing measurement provisions for requirements 3, 5 and 6 and increase data retention to one year
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Response: The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to

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review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.

Based on stakeholder comments during the first posting of this standard, the drafting team shortened the data retention to be as reasonable as possible, while still ensuring that there would be sufficient evidence to demonstrate compliance.

CCC

The CCC believes that the level of noncompliance for section 2.1 should be a level 4 (severe). In addition, in section 2.3 the exercising of final approvals for planned maintenance is in Requirement 9, not Requirement 7 and the CCC respectfully requests the drafting team review these requirements.

Response: The drafting team adopted your suggestion to raise the level of non-compliance, which was consistent with the suggestion of the FRCC, and revised this to be a higher level of non-compliance (level 3). Level 4 already addresses the direct use of the facilities – level 3 was used (for R2) because the provision of information was interpreted as being a less severe violation.

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IRO-003-1: Reliability Coordination - Wide-Area View

Summary of Changes: In support of stakeholder comments, the drafting team modified M1 to eliminate 'training modules' as a sample of acceptable evidence and to eliminate the subjective phrase, 'at any time'.

Commenter	Comment
Southern Co	M1 – The use of the term “at any time” in the Requirement would require data retention that could provide continuous evidence that the requirement to monitor was met. This is not consistent with the Data retention section and also is considered impractical. It is suggested that this Requirement may be too broad to be measured.
<p>Response: The requirement is broad but can be measured at specific points in time using the compliance monitoring techniques identified (self-certification, spot check, periodic audits, etc.) to verify that monitoring is taking place and/or did take place. The drafting team removed the phrase, 'at any time' from the measure.</p>	
Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 2 as essentially duplicate of IRO-005-2 Requirement 1
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p>	
Jim Cyrulewski, Donovan Greening, ITC	The measure should be revised to provide evidence for both pre and post contingency conditions
<p>Response: The drafting team cannot modify the requirements as this is outside the scope of the SAR assigned to this drafting team.</p>	
Ron Falsetti, IESO ISO/RTO Council	We do not agree that training modules should be included as evidence that the RC monitors system condition and is able to determine any actual or potential SOL or IROL violations. System operators may be trained to perform the monitoring task but absent the essential facilities and track record of actual monitoring, whether or not the trained personnel has performed this task is questionable.
<p>Response: The drafting team removed 'training modules' as suggested.</p>	

IRO-005-2: Reliability Coordination - Current Day Operations

Summary of Changes: In support of stakeholder comments, the drafting team made the following modifications:

- Measure 1 – eliminated ‘training modules’ as a sample of acceptable evidence.
- Measure 2 – added the words, ‘was aware of and’ in the following the phrase, ‘to confirm that it was aware of and made Interchange Transaction information available. . .’ This change improves the measures alignment with the associated requirement.
- Measure 5 – added the words, ‘and, if needed, assisted’ to the measure (to determine if the Reliability Coordinator directed and, if needed, assisted the Balancing Authorities)so that the measure could be used for Requirement 10 in addition to Requirement 4 part 2.
- Added the missing entities to M12 and to the Levels of non-compliance

Commenter	Comment
BPA	<ol style="list-style-type: none"> 1. M12: Since this standard has been corrected through errata to apply to GOPs, LSEs and PSEs as required, these entities should be added back into M12 as it was originally written. 2. New M14: We agree with the dissimilarities between R14 Part 2 and TOP-005-1 and the resultant need for M14 to be written. However, we feel that M14 should be modified as required to specify both that 1) data from TO showing SOLs and IROLs made known by the RC, and 2) evidence that the TO respected SOLs and IROLs from RC and 3) specific methodology be used by compliance evaluator to determine whether or not the TO complied with requirement to respect these SOLs and IROLs. 3. REQUIREMENT 2: Add a separate measure that determines whether or not the RC is ... aware of all Interchange Transactions that wheel through, source, or sink in its Reliability Coordinator Area ..., as required R2 part 1. 4. MISSING Compliance measure: Add Level 4: RC Did not identify the source of --large Area Control Errors--. Also need to also develop a metric to determine what amount of ACE is considered -large-- in each case. 5. NUMEROUS ERRORS: There are numerous errors in references used to tie elements in the Levels of Non-Compliance back to specific Requirements and Measures in the standard. In some cases, the requirement is referenced, but not the measurement. In other cases, the referenced requirement and measure do not match. These need to be investigated and corrected as required. (For example, Compliance Levels 3.3.1 and 3.3.2 should be changed to refer to R5 and R6 respectively). 6. REQUIREMENT 9: We ask that a specific measure be developed to measure IRO-005-1 Requirement 9 Part 2. R9 part 2 is not an exact duplicate of IRO-001 R7. Therefore, separate measures are needed and must be added to monitor specific compliance with R9 Part 2. 7. REQUIREMENT 10: We ask that a specific measure be developed to measure IRO-005-1 Requirement 10. Though R4 and R10 are related, the intent of R10 for the RC requirement to -- ... assist the BA ... -- is distinctly different than the intent within R4 that -- ... RC shall monitor ... RC shall direct the BA ...-- . The measurement for R10 should include both 1) RC provide necessary supporting information, and 2) criteria for determining that -- RC assisted the BA in arranging for assistance, as required.

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	<p>8. REQUIREMENT 14 PART 2: We ask that a specific measure be developed to measure IRO-005-1 Requirement 14 Part 2. We disagree that there is a similarity between R14 Part 2 and TOP-005 R1. TOP-005 R1 requires that the TO tell the RC what its transmission limitations are. It does NOT obligate the TO to respect SOLs or IROLs that the RC may place upon their facilities due to limitations placed upon these facilities due to system conditions outside the TO's service territory, etc., as required by R 14 Part 2. The specific measure developed for R14 Part 2 should include specific metrics addressing 1) data from TO showing SOLs and IROLs made known by the RC, 2) evidence that the TO respected SOLs and IROLs from RC, and 3) specific methodology to be used by compliance evaluator to determine whether or not the TO complied with requirement to respect these SOLs and IROLs.</p> <p>9. REQUIREMENT 16: We ask that a specific measure be developed to measure IRO-005-1 Requirement 16. We disagree with CEDST that this requirement is too vague to be measured. Measures for this requirement should include specific metrics addressing the need for 1) proof of coordinated and approved procedures for confirming reliability assessment results, 2) records of all discussions of and actions taken to mitigate potential or actual SOL or IROL violations, and 3) assessment of the effectiveness of the assessments and effectiveness of actions taken.</p>
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Response:

1. The drafting team added these entities into the measure as suggested.
2. (M14) The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Your suggestion for expanding on the measure would require an associated modification to the requirement. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.
3. The drafting team modified the measure so it addresses both parts of Requirement 2.
4. There is already a level of non-compliance associated with R11.1 – it is level 4 – 3.4.7. The wording in the level of non-compliance is tied with issuing a directive to correct ACE – and this can only happen if the RC identified the BA with an ACE that needs adjustment. Adding a metric to identify what constitutes a large ACE would be modifying the requirement and is outside the scope of the Drafting Team.
5. The references to R5 and R6 were correct in the posted standard.
6. TOP-003 R4 states: Each Reliability Coordinator shall resolve any scheduling of potential reliability conflicts. This is the duplication of IRO-005 R9 Part 2 that the drafting team referenced in its notes to stakeholders.
7. The drafting team modified the measure for R4 so it also addresses R10.
8. The drafting team did develop a measure for R14 Part 1 and Part 2.
9. The suggestion provided would modify the requirement and is outside the scope of the drafting team.

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Southern Co	R2 and M2 – The requirement 2 and the measurement proposed are in conflict with the requirement in INT-008-01 for the Interchange Authority to provide Interchange information to the reliability assessment systems used by the RC's (i.e. the IDC in the Eastern Interconnection). The RC's are not in a position with tools to individually exchange a comprehensive set of interchange data – particularly since their time frames of analysis are limited into the future. This Measurement should not be created and instead the Drafting Team should recommend the requirement be retired.
<p>Response: The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. The Coordinate Interchange drafting team should have identified any conflicts with the new Coordinate Interchange standards in its implementation plan.</p>	
Jim Cyrulewski, Donovan Greening, ITC	Resolve missing measurement provisions for requirement 3 part 3, 10, 13 part 1, 16 and 17 and increase data retention to one year. Also re insert Reliability Coordination requirements in R7. Measure 13 is missing wording
<p>Response: The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p> <p>Based on stakeholder comments during the first posting of this standard, the drafting team shortened the data retention to be as reasonable as possible, while still ensuring that there would be sufficient evidence to demonstrate compliance.</p> <p>The red line version did have a typo that looked like missing words and this has been corrected.</p>	
Jay Seitz, US Bureau of Reclamation	Although this Standard is shown as applying to Generator Operators, there are no Requirements, Measures or Compliance items that indicate a direct impact to Generator Operator. There are no compliance levels that apply to Generator Operators; all references are that there be coordination with Generation Operators.
<p>Response: Requirement 13 and Measure 12 have performance elements that apply to Generator Operators. The levels of non-compliance were corrected to also include the Generator Operator for compliance to R13.</p>	
Ron Falsetti, IESO ISO/RTO Council	<ol style="list-style-type: none"> 1. M1: We do not agree with inclusion of training module as evidence that the RC monitors its RC area in accordance with R1.1 through R1.9. 2. M11: We do not agree with inclusion of training modules and training records as evidence that the RC is aware of SPS being armed and its impact on the system. 3. GOP, LSE and PSE were removed from M12 with the rationale that this standard was not applicable to them. Yet R13 still holds these entities responsible to operate to the most limiting parameter, and the Applicability Section has these entities added in anticipation of a change in the next standard revision. There

	<p>seems to be a misalignment among Applicability, Requirements and Measures.</p> <ol style="list-style-type: none">4. In response to our first comment on the previous draft, the CESDT holds the opinion that R9 Part 2 is essentially covered in TOP-003 R4. R9 Part 2 states "The Reliability Coordinator shall coordinate pending generation and transmission maintenance outages with Transmission; whereas TOP-003 R4 states "Each Reliability Coordinator shall resolve any scheduling of potential reliability conflicts." We do not see "coordinating pending generation and transmission maintenance outages" in the former requirement is necessarily covered by "resolve any scheduling of potential reliability conflicts" in the latter. We would suspect that it would normally be through the act of coordination to discover or identify any potential reliability conflicts. Not having a measure for R2 Part 9 leaves the act to coordinate not measured.5. In response to our fourth comment, CESDT holds the opinion that while it agrees that R12 Part 2 is not explicitly covered, it is essentially covered and would be caught by the TOP-005 R1 requirement. We do not agree with this assessment. R12 Part 2 states "The Transmission Operator shall immediately inform the Reliability Coordinator of the status of the Special Protection System including any degradation or potential failure to operate as expected"; whereas TOP-005 R1 stipulates that "Each Transmission Operator and Balancing Authority shall provide its Reliability Coordinator with the operating data that the Reliability Coordinator requires to coordinate reliable operations within the Reliability Coordinator Area. We do not see how operating data required in the latter would necessarily be interpreted by all that it includes SPS status and assessed potential degradation in the former. We are afraid that without a measure, SPS status including potential degradation may not be reported, leaving a reliability gap in this aspect - the looseness that we believe is one of FERC's concerns with many of the existing standards.6. (c) The CESDT has consistently stated that changing requirements is outside of its scope. However, we noticed that a number of changes have been made to R7, R9, R11, R12 and R15. We cannot find any notes associated with these changes and hence wonder what process did the CESDT go through to made these changes. And if the CESDT can make these changes, why would other suggested requirement changes not be taken. Please clarify.
<p>Response:</p> <ol style="list-style-type: none">1. M1 - The drafting team removed 'training modules' as suggested.2. M11 - The drafting team did not remove 'training modules' because the information in the training program could be used in conjunction with other evidence, to demonstrate compliance with the associated requirement.3. As envisioned, the training information could be used, in combination with other evidence, to show compliance.4. This was fixed – errata can be corrected at any time by submitting a request to the Standards Process Administrator – and the drafting team did this. Now the requirement, measure and associated levels of non-compliance all include the GOP, LSE and PSE.5. Monitoring the status of the SPS is addressed in Requirement 1.1.6. The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance	

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information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.

PER-004-1: Reliability Coordination – Staffing

Summary of Changes: The drafting team did not make any changes to the measures and compliance elements already added to this standard.

Commenter	Comment
BPA	<p>PER-004-1: REQUIREMENT 1: We request that the technical differences between the associated measures and levels of compliance in PER-004-R1 and PER-003 R1 must be reconciled. Though the measures in PER-004-R1 and PER-003 R1 are similar, their compliance levels are different. The compliance levels required for RC should be at least as stringent, if not more so, than those required in PER-003 for TOs and BAs; which does not seem to be the case.</p> <p>PER-004-1: REQUIREMENT 5: We ask that a specific measure be developed to measure PER-004-1 Requirement 5. The most appropriate measure to meet the intent of PER-004-1 R5 must include metrics that verify that the RC had access to displays and alarms required to keep them aware of the status of all potential SOLs and IROLs within their jurisdiction.</p>
<p>Response: In the most recently posted version of the standards, the drafting team removed the measures for PER-004 Requirement 1 because it is essentially duplicated either in PER-003 R1 or in PER-004 R2. The drafting team did not develop a measure because the associated requirement contains wording such as “pay particular attention to” and “have the best available information” are not measurable.</p>	
FRCC	<p>The CESDT note under C. Measures indicates that Requirement 1 was eliminated. It should either refer to Measure 1.</p>
<p>Response: The notes from the drafting team will all be eliminated when the standards are posted for pre-ballot review.</p>	
Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 5 as definition is too vague to measure
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p>	
Jim Cyrulewski, Donovan Greening, ITC	<p>Resolve missing measurement provisions for requirement 5.</p>
<p>Response: The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to</p>	

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<p>review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p>	
<p>MRO</p>	<ol style="list-style-type: none"> 1. PER-004 The MRO Disagrees with the removal of Measure M1. If a Requirement is not measurable, we would agree that the standard should not include a corresponding Measure. In this instance, however, commenters stated that “this is a duplicate Requirement and that both the Requirement and Measure should be removed from the standard”. While we would agree that duplicate Requirements should be avoided, it is beyond the scope of the current task. If measurable Measures can be composed for the existing Requirements they should be, regardless of the Requirements feasibility or duplicity. Standards PER-003 and PER-004 should be reworked in the future to fix the redundancy. For now a Measure bridging the two standards might be the best solution. Proposed measure: M1. Reliability Coordinator NERC certification shall be measured and enforced by the elements in Reliability Standard PER-003. 2. Compliance D2.4 the MRO recommends that 2.4.1 be classified as a Level 2 Non-Compliance and that 2.4.2 and 2.4.3 be classified as a Level 4 non-compliance. 3. Compliance D2.4 change “for every one of the following requirements that is in violation” to “if either of the following conditions exist” 4. General comment on PER-004: Requirements 2, 3, 4 and 5 are all vague and difficult to measure. We understand that changing requirements is beyond the scope of this drafting team and therefore support the measures M1 and M2 as written, though PER-004 should be reworked in the future to include measurable requirements.
<p>Response:</p> <ol style="list-style-type: none"> 1. The drafting team has been consistent in avoiding writing measures for tasks that are duplicated – in each case of duplication, the drafting team selected the most technically complete requirement and developed an associated measure and compliance elements. 2, 4. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. 3. Most commenters agreed with the drafting team that the levels of non-compliance are appropriate for the associated performance. 	
<p>ISO/RTO Council Ron Falsetti, IESO</p>	<p>We are not convinced that M3 can provide evidence that operating personnel possess "an extensive understanding of the RC area" (R3) and "an extensive understanding of the various entities in the RC area" (R4). Merely showing the training program and training record does not equate to operating personnel has acquired the required understanding. If the CESDT is unable to revise the requirements, which the Team feels should be stronger, we suggest that M3 be removed as it is not an effective measure. See our comments on M3 for R3 and R4. If M3 is removed, Level 2.4.2 and 2.4.3 should be removed accordingly.</p>

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Response: As envisioned, the training information could be used, in combination with other evidence, to show compliance. (Since M3 was not removed, the associated compliance elements were not removed.) The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.

PRC-001-1: System Protection Coordination

Summary of Changes: Based on stakeholder comments, the drafting team modified the data retention for measure 1 from 'previous two calendar years plus current' to 'current in-force documents'. The drafting team also corrected typographical errors in the levels of non-compliance.

Commenter	Comment
BPA	<p>REQUIREMENT 8: Modify Measure 4 to require status notification only for --major changes or additions, or when the scheme is unavailable--. Special Protection Schemes are constantly asdjusted based upon schedules and outages. Adjustments include enabling or disabling various portions of the scheme and are made based upon various system studies. M4 appears to require that TOPs and BAs to notify someone for every change in operating and/or arming level of the scheme. In fact, the notification requirements in M4 should be limited to overall changes or additions to schemes and not routine changes based upon current system conditions or when a redundant part of a special protection scheme is unavailable because of maintenance, testing, or construction, etc.</p> <p>Level 4 Non-compliance for special protection status notification should only be required for major changes or additions, or when the scheme is unavailable.</p>
<p>Response: The drafting team cannot change requirement 8 – and the levels of non-compliance need to support the requirements.</p>	
Jason Shaver, ATC	<p>The requirement for this measure is too broad and needs to be clearly defined. The requirement would require entities to coordinate all new protective systems and changes to existing protective system even if they do not have an impact on neighboring Transmission Operators and Balancing Authorities.</p> <p>This requirement makes not distinction from protection work being performed on a radial line from work on a interconnection line. Because of this concern ATC requests that the SDT follow find these requirement as being to broad to write a meaningful measure.</p> <p>If you choose not to remove the requirement please identify which protective systems need to be coordinated and which do not.</p>
<p>Response: If you want an interpretation of which protective systems need to be coordinated, the drafting team is not charged with writing interpretations - we encourage you to submit a request for an interpretation by following the process outlined in the Reliability Standards Procedure Manual. Most stakeholders who responded to this comment seemed to support the inclusion of a measure for this requirement.</p>	
FRCC	<p>In 3.4.1 Level of Non-Compliance, should say "neighboring Transmission Operator" rather that "its Transmission Operator".</p>
<p>Response: The levels of non-compliance for both the GOP and TOP were modified to align more closely with the associated requirements.</p>	
Kathleen Goodman, NE-ISO	<p>The PRC standard does not have appropriate measures and also there is an issue with the timeframe: FERC staff criticized PRC-001-0 for not specifying a time frame for the TO/GO to take corrective actions if there are relay failures that affect reliability. This has not been addressed in the latest draft.</p>
<p>Response: The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to</p>	

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Committer	Comment
	standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.
Southern Co	<p>M1 Change wording to indicate only relay settings impacting neighboring systems require notification change ... changes as noted in Requirements 3, 3.1, and 3.2. to ... changes impacting neighboring systems as required in Requirements 3, 3.1 and 3.2.</p> <p>Data Retention – The drafting team should consider making the data retention for M1 consistent with the other standards being reviewed for this effort. Rather than “two current years plus the current year” (which seems excessive for this measurements) use the “current, in-force documents” used in the other similar measurements requiring letters of agreement, studies, etc. as evidence.</p>
<p>Response: The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p> <p>The drafting team modified the data retention period for M1 as suggested.</p>	
Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 1 as further definition of Protection system required ○ 2 as Requirement requires clarification in determining equipment failure relationship to reliability performance ○ 4 due to conflict of what is being required versus actual operational practices ○ 5,6 and 7 as asking entities to determine or know how a change in their system configuration will impact a third party • National Grid additional technical comments: <ul style="list-style-type: none"> ○ In other cases National Grid does not agree with the CESDT that there are legitimate obstacles for writing Measures. For example they indicate with regard to Requirement 4 that a Measure cannot be written because coordination between TOs and GOs does not occur. This is precisely why there is a requirement and the TOs and GOs who are not coordinating protections had better do so. With regard to Requirements 5, 6, and 7 the CESDT indicates that a TO or GO cannot always know whether a change in their protection will affect another entity. In cases where they can not assess this on their own they need to verify this with neighboring entities. ○ Recommend that Requirements reflect the need to coordinate actions between any entities that may be

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Commenter	Comment
	impact.
	<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p> <p>There are requirements in the standard with measures that require coordination of protection amongst those entities that are electrically connected with one another – but the requirement to coordinate with other neighboring entities does not have any measures because it is not clear what performance is expected. For example, what is intended by 'neighbors' is very vague and could be interpreted as widely as all entities in the interconnection.</p> <p>There are other standards that require coordination between entities.</p>
<p>Jim Cyrulewski, Donovan Greening, ITC</p>	<p>Resolve missing measurement provisions for requirements 1, 4, 5, 6 and 7</p> <p>CEDST did not develop a measure for requirement 4 because Transmission Operator do not coordinate protection with other Transmission Operators. There is a reasonable expectation that interconnected Transmission Operation organizations coordinate system protective schemes ITC does not agree with this comment</p> <p>With respect to levels of non compliance- There should be a violation level for not properly maintaining or updating the installed protection schemes.</p>
	<p>Response: The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p> <p>R4 which requires coordination with other neighboring entities does not have any measures because it is not clear what performance is expected. For example, what is intended by 'neighbors' is very vague and could be interpreted as widely as all entities in the interconnection.</p> <p>There are no requirements in this standard to maintain or update installed protection schemes.</p>
<p>Brent Kingsford, CAISO</p>	<p>D.3.4.1 Levels of non-compliance for transmission operators. This level of non-compliance requires appears to be requiring a transmission operator to coordinate the installation of protective systems with itself in addition to its BA. I would suggest correcting this by changing the wording to read Neighboring Transmission Operators.</p>
	<p>Response: This was corrected in support of your suggestion.</p>
<p>Jay Seitz, US Bureau of Reclamation</p>	<p>1. General There is a requirement, but no measure for a TO to coordinate with neighboring Generator Operators, but not with interconnected Generator Operators. Is the intent that changes to a line's protection scheme do not have to be coordinated with an interconnected generator?</p>

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Commenter	Comment
	<ol style="list-style-type: none"> 2. Measure 1: This measure and the associated requirements are too far reaching. The use of the term “all new protective systems and all protective system changes,” would require coordination of the changing of settings for the circuit breaker trip points for sump pumps, lighting circuits etc. This needs to narrow its scope to those associated with system protection schemes or devices directly affecting the system. 3. Compliance 2.4: The requirement to provide “evidence of coordination when installing new protective systems and all protective system changes” is too far reaching. This needs to narrow its scope to those associated with system protection schemes or devices directly affecting the system. 4. Compliance 3: A Transmission Operator could never coordinate with interconnected Generation Operator and there would be no compliance issues as these are written. 5. Compliance 3.4.2 and 4.4: Are the references to R8.1 and 8.2 obsolete?
<p>Response:</p> <ol style="list-style-type: none"> 1. The drafting team did not write a measure for the requirement for the TOP to coordinate with its neighboring GOPs because the language in the requirement is vague – for example, it isn’t clear which generators would be considered, ‘neighboring GOPs’. FAC-001 R2.1.5 addresses facility connection requirements, including those associated with system protection coordination. 2. The measure is an accurate reflection of the language in the associated requirement – changing the requirement to narrow the scope is beyond the work of this drafting team. 3. The data retention requirement was reduced so the Generator Operator only needs to keep the ‘current in-force’ documents for evidence of compliance with Measure 1. 4. The measure is an accurate reflection of the language in the associated requirement – changing the requirement to narrow the scope is beyond the work of this drafting team. 5. The references to R8.1 and R8.2 have been removed from the revised standard. 	

TOP-001-1: Reliability Responsibilities and Authority

Summary of Changes: Based on stakeholder comments, the drafting team made the following modifications:

- Measure 1 – corrected the samples of evidence to more accurately list only evidence that could reasonably be used to show that the entity has authority
- Measure 3 and 4 – corrected typographical errors
- Measure 7 – added the phrase from the requirement, ‘if removing those facilities would burden neighboring systems’ to more accurately reflect the associated requirement.
- Data retention – corrected typographical errors and added the following phrase to clarify that entities must retain evidence as well as evidence of directives
- Levels of non-compliance 4.4.2 - Added the following phrase ‘unless such actions would violate safety, equipment, or regulatory or statutory requirements’ to more exactly match the associated requirement.

Commenter	Comment
Southern Co	<p>M6 – The last part of the measurement contains the “exception” condition “unless such actions would violate safety, equipment, or regulatory or statutory requirements’ contained in R6. The measurement is not clear/specific on any additional information that would be required to demonstrate compliance in the “unless” exception conditions. It only seems to require evidence that it rendered assistance to others as requested. Different evidence probably is required (e.g. regulatory/statutory references, safety concerns, equipment names, etc.) should assistance be withheld as allowed under the requirement.</p> <p>M7 – The measurement does not capture the “burden” characteristic stated in the requirement. Without this being captured in the measurement, it gives the impression that evidence of notification should be provided when any facility is removed from service – whether burdensome to a neighbor or not.</p>
<p>Response: Additional evidence can be used to demonstrate compliance. M7 – the drafting team added the phrase, ‘if removing those facilities would burden neighboring systems” to the measure in support of your comment.</p>	
Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 8 due to additional explanation of reactive power balance is required ○ Should note that there is no Requirement 8 identified in TO-001-1 • National Grid’s additional technical comments: <p>Within Requirements 3 and 6, there needs to be a definition of what comprises emergency assistance. Without a standard definition there will always be problem with implementation and compliance measurements.</p>
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by</p>	

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<p>regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p> <p>Adding definitions or interpretations is beyond the scope of the drafting team.</p>	
<p>Jason Shaver, ATC</p>	<p>By the way this measure is written it seems that the requirement is a duplicate of PER-001-0 requirement 1. Standard PER-001-0 requirement one states that operating personal must have “authority to implement real-time actions to ensure the stable and reliable operations of the Bulk Electric System”. To demonstrate requirement one in PER-001-0 the entity has to have a “written current job description that states operating personnel are responsible for complying with NERC reliability standards.”</p> <p>PER-001-0 seems to do what the SDT wants from TOP-001-1. Since PER-001-0 is a duplicate requirement ATC recommends that this measure be deleted.</p> <p>Please provide clarification of the two requirements if you disagree with our interpretation of the two requirements.</p> <p>ATC also requests that the SDT provide detail information on what constitutes a “clear decision-making authority”.</p>
<p>Response: The requirement in PER-001 addresses the authority given to the entity – and TOP-001 addresses the authority given to the operating personnel within the entity. The measure in TOP-001 was modified to clarify that the requirement is looking for the authority within the entity, not the position – and the drafting team removed ‘position description, operating logs, etc.’ from the samples of evidence since these were linked to positions rather than the entity.</p> <p>The drafting team is not charged with making interpretations of the requirements. If you want an interpretation of the requirements in this standard, you are encouraged to follow the process for an interpretation as outlined in the Reliability Standards Procedure Manual (page 29).</p>	
<p>Jim Cyrulewski, Donovan Greening, ITC</p>	<p>Resolve missing measurement provisions for requirement 8</p>
<p>Response: The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p>	
<p>Jay Seitz, US Bureau of Reclamation</p>	<ol style="list-style-type: none"> 1. Measures 3, 4 and 6 (and underlying Requirements) state “... did not comply with the directive because it would violate safety, equipment, regulatory or statutory requirements. . .” We believe that a lack of fuel and or water for hydro should be an acceptable means of not being able to comply with a directive. We also note that a full regulating reservoir would fall under the regulatory or statutory limits (i.e. no spilling except for flood control). 2. Measure 7 (and Requirement 7) We believe there are occasions for which the Transmission Operator should also inform the Generator Operator of events and outages. For instance a line section outage may require a change in a generator dropping scheme. The measure should reflect this two way need for information sharing. 3. The note following Measure 7 makes no sense as there is no

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	<p>“Requirement 8.”</p> <ol style="list-style-type: none"> 4. Compliance 4.4.2 as written, does not recognize the exceptions of the Requirement. 5. Compliance 4.4.3 refers to Requirements 7.1, 7.2 and 7.3. These do not exist in this document.
<p>Response:</p> <ol style="list-style-type: none"> 1. Additional evidence can be used to demonstrate compliance. 2. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. 3. The auto-numbering in word malfunctioned and these elements were in the standard but were not correctly numbered. 4. The drafting team added the ‘exceptions’ language to the levels of non-compliance. 5. The auto-numbering in word malfunctioned and these elements were in the standard but were not correctly numbered. 	
<p>MRO</p>	<ol style="list-style-type: none"> 1. M4. Change “it immediately informed the Reliability Coordinator of its inability to perform the directive.” To “it immediately informed the Transmission Operator of its inability to perform the directive. 2. Data Retention 1.3 Second paragraph. Change “Each Transmission Operator, keep 90 days of historical data (evidence) for Measures 1 through 7, including evidence of directives issued for Measure 4.” TO “Each Transmission Operator shall keep 90 days of historical data (evidence) for Measures 1 through 7, including the issued directives for Measures 3 and 4.” 3. Data Retention 1.3 Third paragraph. Change “Each Balancing Authority shall keep 90 days of historical data (evidence) for Measures 3,4,and 6.” TO “Each Balancing Authority shall keep 90 days of historical data (evidence) for Measures 3,4,and 6, including evidence of issued directives for measures 3 and 4. 4. Data Retention 1.3 Forth paragraph. Change “Each Generator Operator shall keep 90 days of historical data (evidence) for Measures 3,4,6, and 7.” TO “Each Generator Operator shall keep 90 days of historical data (evidence) for Measures 3,4,6, and 7, including evidence of issued directives for measures 3 and 4. 5. Data Retention 1.3 Fifth paragraph. Change “Each Distribution Provider and Load-serving Entity shall keep 90 days of historical data (evidence) for Measures 4.” TO “Each Distribution Provider and Load-serving Entity shall keep 90 days of historical data (evidence) and evidence of issued directives for Measure 4.”
<p>Response:</p> <ol style="list-style-type: none"> 1. Agree- the standard was modified as indicated. 2. The drafting team modified the data retention to require all of the responsible entities to retain evidence of the directives. 3-5. The typographical errors in the data retention section were all corrected – the corrections are reflected in the revised standard. 	

TOP-002-1: Normal Operations Planning

Summary of Changes: Based on stakeholder comments, the drafting team made the following modifications:

- Measure 1 – deleted the phrase, ‘for the past several weeks’ because this is subjective.
- Measure 4 – deleted the phrase, ‘copies of’, because this is subjective and made conforming changes to the associated data retention.
- Added a measure and associated compliance elements for requirement 13. In its initial assessment, the drafting team interpreted this requirement as being duplicated in MOD-024 and MOD-025. Stakeholders indicated that MOD-024 and MOD-025 are looking for data used in the planning horizon, and TOP-002 is looking for data needed in the operating horizon.
- Corrected the data retention requirements for the Balancing Authority
- Fixed the typographical error in the heading of Levels of Non-compliance to indicate which levels were applicable to the Load-serving Entity.

Commenter	Comment
BPA	<p>REQUIREMENT 3: We disagree with CEDST determination that R3 is too vague and request that a measure be developed for R3. Demonstration of coordination, as specified in this requirement, would best be measured by demonstrating that a process exists and is followed to provide BA with current, accurate, maintenance schedules, estimated load, etc. (Similar in structure to M7 as written for R15).</p> <p>REQUIREMENT 4: We ask that a specific measure be developed to measure TOP-002-1 Requirement 4. We disagree with CEDST determination that R4 is too vague and request that a measure be developed for R4. Demonstration of coordination, as specified in this requirement, would best be confirmed by metrics that ask for documentation showing BA, TO, and RC participation in regional outage coordination processes, reserve pools, etc. (Similar in structure to M7 as written for R15).</p> <p>REQUIREMENT 12: We ask that a specific measure be developed to measure TOP-002-1 Requirement 12. Though they are related and similar, the requirements placed upon the TSP in R12 are NOT the same as FAC-013, which applies only to the RC and PA. Appropriate measures for TOP-002-1 R12 must include metrics that require 1) the provision of the necessary data and 2) a verification that all known SOLs and IROLs were actually included in the TSP determination of transfer capabilities.</p>
<p>Response: The drafting team cannot modify requirements. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p>	
Southern Co	<p>M1 – The Drafting Team should consider withdrawing the measurement since the “through a reasonable future time period” of the requirement is too broad and vague. The attempt in the measurement to define this better with the terms such as “current day plans for the past several weeks” fails to capture the “future” aspect of the requirement. Each “current day” may have a new set of “future” considerations as system conditions change and the time period into the future from the current day is still left open to interpretation. If the Drafting Team decides to leave the measurement “as is”, it should at</p>

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	<p>least consider moving the “for the past several weeks” to the Data Retention section since it would be out of place in the measurement itself.</p>
<p>Response: The drafting team removed the reference to ‘for the past several weeks’ as suggested.</p>	
<p>Edward Dahill, National Grid</p>	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 1.2 as wording of what is to be accomplished is too vague ○ 2 as wording is too vague for development of effective measures ○ 3 as wording is too vague for development of effective measures ○ 4 as wording is too vague for development of effective measures ○ 12 as Requirement is essentially duplicate of FAC-013 ○ 13 as requirement is essentially duplicate of MOD-024 and MOD-025 ○ 17 as Requirement is incorrectly written ○ 19 as wording of what is to be accomplished is too vague • National Grid additional technical issues: <ul style="list-style-type: none"> ○ Related to Requirement 11.1 and Data Retention, in New England, the Control Center next-day and current-day studies are based on power flow cases which are based on forecasted (next-day) or actual (current-day) system conditions. The cases are not saved for more than a week. The saved cases are based on the current model. Essentially the model is saved with every case. Any changes to the model (addition of even a single element) would prevent the case from solving. The result is the cases cannot be saved electronically with out considerable changes to the computerized Energy Management System. Providing a hard copy of past system conditions and studies could require producing an enormous amount of printed data.
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team’s scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p> <p>The drafting team modified the language in Measure 4 and the associated data retention to require only the ‘current’ plan be retained.</p>	

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<p>Jim Cyrulewski, Donovan Greening, ITC</p>	<p>Resolve missing measurement provisions for requirements 2, 3, 4, 13 and 19 and increase data retention times to one year. For Compliance Generation Operators Level 3 item in original proposal should be part of Level 4. Critical to Balancing Authorities and Transmission Operators that Generation Operators perform such verifications. Should not be eliminated</p>
<p>Response: The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p> <p>The last posted version of the standard set non-compliance for GOPs at level 1 for R18 and level 4 for R14 and R15.</p>	
<p>Jay Seitz, US Bureau of Reclamation</p>	<p>Measure 6: As stated this Measure and the underlying Requirement are too vague. Is the intent that for hydro generators a change in output due to reservoir fluctuation requires notification? If so there must be a defined value change that triggers a need for notification. Compliance 4.4.1: The compliance level needs to recognize practical, defined changes in output values.</p>
<p>Response: Adding more definition to the requirements (and associated levels of non-compliance) is outside the scope of the drafting team. The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p>	

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MRO	<ol style="list-style-type: none">1. A Measure was not developed for Requirement 13 because according to the CEDST "the Requirement is essentially duplicated in MOD-024 and MOD-025." The MRO would disagree with this assessment. MOD-024 and MOD-025 essentially list the key elements that the RRO must include in their procedures for verifying Generator Gross and Net Reactive and Real Power Capability. The 2 standards go on to state that the Generator Owner must follow the RRO's procedures.2. Requirement 12 of TOP-002 states that the Generator Owner must perform the fore mentioned procedures at the request of the Balancing Authority or the Transmission Operator, which is not a requirement in either MOD-024 or MOD-025. Furthermore, TOP-002 is applicable to Generator Operator whereas MOD-024 and MOD-025 are applicable to the Generator Owner. The MRO recommends the CEDST develop a Measure for Requirement 13.3. Data Retention 1.3. Transmission Operator is grouped in with the Balancing Authority in regards to Measures 1,2,3, when in fact Measure 3 is only applicable to Balancing Authorities.4. The levels of Noncompliance for Load Serving entities should not be removed as they are a part of the Requirements and The Measures.
<p>Response:</p> <ol style="list-style-type: none">1. MOD-024 and MOD-025 do address the periodicity and scheduling of model and data verification and reporting.2. As envisioned, the generator operator would do the verification for the generator owner – making sure the verification is done was assigned to the Generator Owner in MOD-024 and MOD-025.3. This data retention section of the standard was corrected as noted.4. LSEs were added to the applicable heading for the levels of non-compliance as noted.	

TOP-004-1: Transmission Operations

Summary of Changes: The drafting team corrected a typographical error in Measure 1, but did not make any other changes to the measures and compliance elements already added.

Committer	Comment
Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 1 as requires operates that are not always achievable ○ 2 as Requirement needs to be re-written to reflect measuring actions to prevent an incidence occurring ○ 5 as not possible to ensure Requirement is accomplished
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p>	
Jim Cyrulewski, Donovan Greening, ITC	<p>Resolve missing measurement provisions for requirements 1, 2, 3 and 5 .</p> <p>Operating within SOL and IROL limits is not optional. Operating outside system limits for more than 30 minutes is a violation of NERC standards, also increase retention time to one year</p>
<p>Response: The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p>	
David Folk, First Energy	<p>TOP-004-1 M1 states "Each Transmission Operator enters ..." This should read "Each Transmission Operator that enters..." ,</p>
<p>Response: This typographical error was corrected as noted.</p>	

TOP-006-1: Monitoring System Conditions

Summary of Changes: Based on stakeholder comments, the drafting team added the 'Reliability Coordinator' to M4 and the associated compliance elements. The Reliability Coordinator is a functional entity with responsibility for the associated requirement.

Commenter	Comment
Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> • 3 as Requirement needs to completely define the information and equipment involved • 6 as wording is too vague for development of effective measures
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p>	
Jim Cyrulewski, Donovan Greening, ITC	There is no requirement or measure for the responsible entities to have post contingent capability or a back up to EMS. Resolve missing measurement provision for requirement 3 and 6, also increase data retention time to one year
<p>Response: The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p> <p>Based on stakeholder comments during the first posting of this standard, the drafting team shortened the data retention to be as reasonable as possible, while still ensuring that there would be sufficient evidence to demonstrate compliance.</p>	
MRO	<p>TOP-006 Reliability Coordinator should be added to Measure 4, and Data Retention 1.3 should also be changed to reflect this addition. Recommend changing Level 4 Non-Compliance for Generators Operators to a Level 2. The level states "Did not inform its Host Balancing Authority and/or the Transmission Operator of all generation resources available for use (R1.1)" This is not seen as a major violation because this is often a joint effort between the Balancing Authorities and the Generator Operators.</p> <p>Furthermore, though beyond the scope of this drafting team, it would seem appropriate to identify a minimum size in Requirement 1.1. As the requirement stands now, even generators less than 1 MW would be required to continually report their status to the BA.</p>
<p>Response: The Reliability Coordinator was added to Measure 4 and to the associated data retention and</p>	

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levels of non-compliance.

Most stakeholders who responded to this posting seemed to support the levels of non-compliance as proposed.

The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.

Southern Co

M5 – The use of the term “important” in the Requirement 5 and carried forward into the measurement in reference to deviations is open to interpretation. It is suggested that this Requirement is too broad to be measured and no measurement provided.

Response: Most stakeholders who responded to this posting seemed to support the measure as written.

TOP-008-1: Response to Transmission Limit Violations

Summary of Changes: The drafting team did not make any changes to the measures and compliance elements already added to this standard.

Committer	Comment
Edward Dahill, National Grid	<ul style="list-style-type: none"> • NOT COMPLETE – additional revisions required – DO NOT submit to NERC Board of Trustees for approval • CESDT did not provide measures for Requirements: <ul style="list-style-type: none"> ○ 2 as being asked to measure an indefinable occurrence ○ 4.2 as wording is too vague for development of effective measures
<p>Response: The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p>	
Jim Cyrulewski, Donovan Greening, ITC	Resolve missing measurement provision for requirement 2 and 4 part 2. There should be a level of non compliance for operating over system operating limits for more than 30 minutes.
<p>Response: The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. We will forward your comment to the project team working on identifying suggested modifications to standards. These suggestions and others are being used in the development of a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November.</p>	

- 3. The drafting team believes that this set of standards is ready to move forward to balloting. If you have any comments (that you haven't already provided to the drafting team in the comments above) relative to the changes made to this set of standards to add missing measures and compliance elements, please provide them here.**

Commenter	Comment
FRCC	<p>The FRCC is very concerned with the number of Requirements in these Reliability Standards that Measures were not able to be written for due to poorly written Requirements. How will the CESDT transfer their concern with these requirements to the Standards Process? Will the CESDT provide SAR's recommending change? We wonder how will FERC adopt these standards that still have missing Measures. In many cases, all, of the Requirements of the Reliability Standard are necessary for the standard to be effective for promoting reliability.</p> <p>If the plan is to submit these to FERC for conditional approval, expecting FERC to provide instruction to NERC to start a process to rewrite the Requirements and develop Measures as needed to complete the standards, the FRCC would be able to support balloting at this time.</p>
	<p>Response: Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.</p> <p>In terms of the initial implementation of the standards, NERC is aware of the limitations in the existing standards and those limitations will be considered in the administration of the compliance program. FERC may approve some or all of the standards, or may conditionally approve some. NERC has proposed an initial pilot test of the compliance program during which penalties are calculated but not assessed. Once the standards are fully in effect, the NERC and regional compliance programs would continue to take into consideration any limitation or ambiguity within a particular standard in the determination of a violation or assessment of a penalty.</p> <p>That said, the existing NERC standards have been the benchmark of good utility practice for years under a voluntary regime. Responsible entities should be expected to continue to follow the standards. It is principally the introduction of the mandatory regime and financial penalties that creates the concern. The best approach for individual entities is to meet the standards to the best of their ability.</p> <p>Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p>
Jason Shaver, ATC	<p>The SDT has been given the authority to change some requirements. (see the red line version of Standards IRO-005-2 requirements 2, 12 and 15) These three requirements were changed by the SDT to clarify the requirement. Why this standard and these three requirements?</p> <p>A review of these 20 standards shows that many requirements are either duplicative or too broad to write a meaningful measure. ATC believes that this effort should be scrapped for a replacement effort that</p>

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

Commenter	Comment
	<p>would look at each of these standards completely. To quickly fill in the measures and compliance section without being allowed to also adjust the requirements is just delaying the overall improvement of each standard.</p>
	<p>Response: The drafting team did not make any changes to the requirements in IRO-005. The drafting team used V0 of IRO-005 for its first posting and should have used IRO-005-1. The red lines shown in the last posting were there to highlight the requirements as they should have appeared.</p> <p>Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.</p>
<p>NPCC CP9 RSWG</p>	<p>We are not prepared to vote to approve these Standards until all of the Measures are explicitly stated.</p> <p>In addition, I don't think the data retention period is correct since FERC has already specified 5 years to be consistent with the following:</p> <p>A related proposed rule would extend the existing requirement for retaining records from the current three years to five years, to match the five-year statute of limitations under the Commission's civil penalty authority. Comments on this proposal will be due 30 days after the notice of proposed rule is published in the Federal Register. Feb. 16, 2006.</p>
	<p>Response:</p> <p>Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p> <p>Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.</p> <p>At this point, the drafting team is not aware of any data retention period specified by FERC.</p> <p>The data retention required in the standard is part of the standard and can't be changed except through the standards development process.</p>
<p>Kathleen Goodman, ISO-NE</p>	<p>We are not prepared to vote to approve these Standards until many of the inherent flaws within the individual standards themselves (i.e. the requirements and measures) are addressed as well as compliance assessment.</p> <p>A related proposed rule would extend the existing requirement for retaining records from the current three years to five years, to match the five-year statute of limitations under the Commission's civil penalty authority. Comments on this proposal will be due 30 days after the notice of proposed rule is published in the Federal Register. Feb. 16, 2006. Therefore, it is premature to even contemplate a vote on Standards that contain potentially conflicting retention requirements.</p>

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

Commenter	Comment
	<p>Response: Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p> <p>Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.</p> <p>At this point, the drafting team is not aware of any data retention period specified by FERC.</p> <p>The data retention required in the standard is part of the standard and can't be changed except through the standards development process.</p>
Ajay Garg Hydro One	<p>Again, if this is the case we should ballot each of the standards on its own merit and completeness. The balloting schedule for each one of them can be same.</p>
<p>Response: The consensus of the stakeholders who responded to this question accepted balloting the set of standards with a single ballot as stated in the draft implementation plan.</p>	
Jay Seitz, US Bureau of Reclamation	<p>In a number of these Standards the group charged with creating measures and compliance criteria have indicated that they could not determine what measures could be used for requirements or portions of requirements. In addition, in a number of cases the requirement was so broad or ill-defined as to preclude a measure being developed.</p> <p>Serious consideration should be made to revisiting those requirements that cannot be measured to determined if they are a requirement that needs more definition, narrowing of scope or transfer to another standard. A number appear to be of a philosophical nature, expressing an intent that the other requirements are to deliver.</p>
<p>Response: Agree. Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.</p>	
Ron Falsetti, IESO ISO/RTO Council	<p>We are disappointed that the CESDT continues to state that making requirement changes is outside of its scope. We understand this is the current restriction, and may even be beyond the CESDT's ability to propose a change to this process. We will seek other avenue to convey our concern over this restriction, which in our view will severely hamper the effective development of quality and complete standards without repetitive work.</p> <p>(1) We are curious as to why our message on CESDT not having the ability to change requirements was forwarded to NERC staff but not the CCC or SAC. These two Committees are the oversight authorities for standard and compliance measures development.</p> <p>(2) In response to our question on why the SAR said staged implementation but the actual posting of the draft standards actually presents missing measures and compliance elements for 20 standards, the CESDT indicates that the comments was noted and</p>

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

Committer	Comment
	<p>forwarded to NERC. We are not sure which body in NERC the CESDT referred to. Again, we feel strongly that it is the SAC's and CCC's responsibility to oversee the scope, appropriateness and effectiveness of standard development, not NERC staff or the Standard Process Manager.</p> <p>(3) In response to our comments on several standards, e.g. EOP-004, EOP-006, etc. under Q5, the CESDT states that focusing on the SAR can ensure that the drafting teams cannot have "scope creep". Yet in responding to our question on why the SAR said staged development of missing measures but the actual posting put out measures for all 20 standards, the CESDT held the view that "by expediting the development of the missing compliance elements from five years to one year could provide clarity to the industry as to what needs to be measured. While we applaud the CESDT's efficiency, did this decision go beyond the scope of the final SAR, and hence itself a "scope creep", and lend itself to the speculation of different philosophy, if not double standard, being applied?</p> <p>The IRC (IESO) does not believe that this set of standards is ready to move forward to balloting. While we understand the CESDT's ability to make changes has been restricted by the scope of the SAR, we are very uncomfortable with endorsing these standards for the following reasons:</p> <ul style="list-style-type: none"> a. There are known deficiencies (which the CESDT admits) in the existing requirements for which measures cannot be developed, b. There are still a large number of missing measures owing to much more work is needed to refine the requirements, c. There are overlaps among several related standards for which measures are provided in one standard but not in the others. It makes measuring compliance with standards very cumbersome, if not difficult. The standards need to be fixed to properly align with measures. <p>The IRC (IESO) is very concerned with the apparent push to provide partial measures to the 20 standards without truly refining the standards and providing the full set of measures, just for the sake of following the scope of the SAR and completing the process. By doing so, the industry is handed a set of standards that does not meet one of the fundamental principles for reliability standards: that a standard must be measurable and its compliance enforceable. We are very disappointed with the authorities' (don't know exactly who, though) decision to continue to march forward on this ill-fated route.</p> <p>In brief, the IRC (IESO) does not support putting the standards out for ballot. If these standards were to be balloted without a wholesale review and changes, the IRC will most probably vote NO, with regrets.</p>
<p>Response: NERC staff and the Standards Committee indicate that this project and the related project to develop violation risk factors are the final projects necessary to get the initial set of standards completed. Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.</p>	

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

Commenter	Comment
	<p>In terms of the initial implementation of the standards, NERC is aware of the limitations in the existing standards and those limitations will be considered in the administration of the compliance program. FERC may approve some or all of the standards, or may conditionally approve some. NERC has proposed an initial pilot test of the compliance program during which penalties are calculated but not assessed. Once the standards are fully in effect, the NERC and regional compliance programs would continue to take into consideration any limitation or ambiguity within a particular standard in the determination of a violation or assessment of a penalty.</p> <p>That said, the existing NERC standards have been the benchmark of good utility practice for years under a voluntary regime. Responsible entities should be expected to continue to follow the standards. It is principally the introduction of the mandatory regime and financial penalties that creates the concern. The best approach for individual entities is to meet the standards to the best of their ability.</p> <p>The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved.</p> <p>Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p>
William J. Smith, Allegheny Power	I have no additional comments relative to changes made to this set of standards.
Response: Thank you.	
South Carolina Electric & Gas	<p>Although South Carolina Electric & Gas Company does not disagree specifically with any of the added compliance measures, we would like to take this opportunity to point out that good measures are of no consequence if the requirements to which a company is being measured against are so vague and non-specific that the requirement could be interpreted in many different ways by any number of auditors. Specifically we would like to request that Standards which use vague phrases such as "where applicable" and "adequate and reliable" be addressed. We realize that this drafting team is charged with only adding measures and compliance elements, but we would like to make the argument that sound, auditable compliance measures cannot be categorically separated from sound, specific requirements. Measures tie to and direct compliance with the requirements. You will not be successful in adding compliance measures until the requirements specifically state what will be measured.</p>
<p>Response: Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.</p>	
Edward Dahill, National Grid	Need to verify Levels of Non-Compliance to ensure consistency for all 102 Standards filed on April 4, 2006 and any Standards filed thereafter. In many cases, there only is the possibility of Level 4 non-

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

Commenter	Comment
	<p>compliance. Typically a lower level of non-compliance is assessed prior to reaching Level 4, particularly in cases where the level of risk associated with the non-compliance is low. The Levels of Non-Compliance need to be reviewed to ensure they are consistent with the associated risk.</p> <p>Only the three Standards EOP-006-1, INT-001-2 and INT-003-2 should be considered as complete and may be submitted to the NERC Board of Trustees for approval and submission to FERC under the ERO process.</p> <p>The seventeen Standards CIP-001-1, COM-001-1, COM-002-2, EOP-002-2, EOP-003-1, EOP-004-2, IRO-001-1, IR)-002-1, IRO-003-1, IRO-005-2, PER-004-1,PRC-001-1, TOP-001-1, TOP-002-1, TOP-004-1, TOP-006-1 and TOP-008-1 are incomplete and require additional Requirements and Measures modifications before submittal to the NERC Board of Trustees for approval.</p> <p>Requirements that are defined by the CESDT to be duplicates should be consolidated into a single Standard with appropriate changes to the Applicability section of the resultant Standard.</p> <p>National Grid proposes the elimination of any Requirement that the CESDT has defined as vague or needs additional definition to provide a effectively measurable and enforceable Requirement. Unless one can clearly and concisely define a requirement, the requirement has no value and should be eliminated. The determination to eliminate any Requirements should be made by the entities that will be impacted by the Requirement. Any entity desiring to maintain the Requirement to be eliminated will have the responsibility to justify why the Requirement should be maintained. This would include providing the appropriately worded compliance element sections for the Requirement.</p> <p>In National Grid's opinion, the process associated with providing the missing compliance elements has highlighted several major flaws in the method NERC has taken to complete these standards. Each group of Standards should have been completed by subject matter experts at a minimum, if not the original Drafting Team for each Standard. Many of the incomplete Measures are the result of the Compliance Elements Standards Drafting Team (CESDT) members not being familiar with the technical content of the Standards. National Grid is also concerned that the CESDT may be overwhelmed the by the number of Standards that must be addressed, and as a result are "short-cutting" the development of Levels of Non-Compliance such that many Standards have only Level 4 non-compliance associated with each and every Requirement. The Levels of Non-Compliance need to be consistent with the level of risk associated with each Requirement.</p>
	<p>Response:</p> <p>Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. This work will include converting 'levels of non-compliance' to 'violation severity levels'. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.</p>

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Commenter	Comment
	<p>The drafting team has no authority over what standards are submitted to the NERC Board of Trustees. The drafting team's scope, defined in the SAR, does not permit the drafting team to make substantive revisions to the requirements, only to add missing measures and compliance information. Adding the measures and compliance information is intended to improve the proposed standards that are already filed and under FERC consideration for approval. Not adding the measures or compliance information at this point would not resolve the concern the commenter has with the quality of some of the existing requirements. The requirements have already been filed and are pending approval by regulatory authorities. Adding the measures and compliance information can only improve the ability to implement the requirements, should they be approved. Stakeholders will be asked to ballot only on the addition of the new measures and compliance information. The underlying standard and its requirements are not subject to ballot at this time and will remain in effect as NERC standards even if the ballot on the additional compliance information is not successful.</p> <p>NERC staff and the Standards Committee indicate that this project and the related project to develop violation risk factors are the final projects necessary to get the initial set of standards completed. Future work on the standards will be geared toward making the improvements suggested during the Version 0 project, the comments received in this project, the FERC assessment of the standards, and other comments received. NERC is developing a three-year work plan to review and upgrade all standards needing improvement. The plan will be presented to the Standards Committee in late September and the NERC board in early November and will be filed with FERC and authorities in Canada in November. This plan will not place any restrictions on modifying or improving requirements to provide greater clarity and address other quality concerns.</p> <p>In terms of the initial implementation of the standards, NERC is aware of the limitations in the existing standards and those limitations will be considered in the administration of the compliance program. FERC may approve some or all of the standards, or may conditionally approve some. NERC has proposed an initial pilot test of the compliance program during which penalties are calculated but not assessed. Once the standards are fully in effect, the NERC and regional compliance programs would continue to take into consideration any limitation or ambiguity within a particular standard in the determination of a violation or assessment of a penalty.</p> <p>That said, the existing NERC standards have been the benchmark of good utility practice for years under a voluntary regime. Responsible entities should be expected to continue to follow the standards. It is principally the introduction of the mandatory regime and financial penalties that creates the concern. The best approach for individual entities is to meet the standards to the best of their ability.</p>
<p>Jim Cyrulewski, Donovan Greening, ITC</p>	<p>As a general comment there is a lack on consistency with respect to data retention in the standards. The retention requirements vary widely from 90 days to two years. Data retention should be standardized for all of the standards.</p> <p>There are still a number of missing measures throughout the twenty standards in question. For each requirement included in a standard there should be a corresponding measure. All requirements and measures should be in place before balloting</p>
	<p>Response: The drafting team did not try to make data retention the same for all requirements. The drafting team reviewed each requirement and the associated measure and made a good faith effort to identify a data retention period that would be as reasonable as possible - ensuring that there would be sufficient evidence to demonstrate compliance while not being overly burdensome to the responsible entities.</p>
<p>MRO</p>	<p>Throughout the Measures and Compliance section of these standards, the Requirements are referenced as "Requirement 1", "Requirement R1" and just "R1".</p> <p>Furthermore, in INT-001-2 in both the Measures section and the Levels of Non-Compliance section Requirement 2 is referenced as its subsections R2.1 and R2.2, whereas Requirement 1 is referenced only as R1 rather than its subsection R1.1. We would recommend the CESDT work out a consistent naming convention and apply it to all of</p>

Consideration of Comments on Third Posting of Missing Measures and Compliance Elements

Committer	Comment
	<p>the 20 standards currently being worked on.</p> <p>As more Measures and more Levels of Non Compliance continue to get added to the NERC Version Zero standards the standards are becoming increasingly harder to follow. It would seem more intuitive to list a single Requirement followed by its corresponding Measure and Level of Non-Compliance. This would eliminate the need to essentially restate the Requirement in the Measure and in the Levels of Non-Compliance sections as is currently the case. This would decrease the size of the standard while increasing its readability.</p>
<p>Response: The recommendations regarding format consistency and improvements will be forwarded to NERC staff who are currently looking at a host of suggested improvements for standards.</p>	
CCC	<p>The CCC notes that the CESDT used the Level 1-4 nomenclature to identify the severity of the violation. The CCC believes that these levels should be replaced with the names Lower, Moderate, High, and Severe, which are identified in the Sanction Guidelines document. This change could either be applied here with adoption in other standards as they move through their five year review procedures, or it could be done as a technical edit and applied to all standards simultaneously.</p>
<p>Response: The drafting team is developing compliance elements following the instructions provided in the latest version of the Reliability Standards Procedure Manual (RSPM) and acknowledges that the RSPM's instructions for developing 'levels of non-compliance' do not match the language in the ERO Sanctions Guidelines that indicates standards will include, 'violation severity levels.' The drafting team will forward your comment to the team working on identifying suggested modifications to the standards.</p>	
BPA	<p>BPA developed and submitted comments to Draft 1 of the Missing Measure. But we have subsequently found that though we have evidenced that we sent them in through the appropriate process, they were not received by NERC and considered by CEDST. We have gone through those comments found that the following issues have not been addressed in this Draft 2 and are therefore still applicable. <i>(Note the comments were distributed so they appear with other comments under the associated standard number)</i></p>
<p>Response: The drafting team does not know why your initial set of comments was not received. Note that the drafting team is not required to accept comments that are submitted later than the due date. The comments submitted in response to this posting were not submitted before the deadline but were considered as an act of good faith.</p>	
David Folk, First Energy	<p>We agree that these measures are ready for balloting with the changes suggested in item 2 above.</p>
<p>Response: Please see the responses to your suggestions for modifications.</p>	