Consideration of Comments on Set of Reliability Coordination Standards (Project 2006-06)

The Reliability Coordination Standards Drafting Team (RC SDT) thanks all commenters who submitted comments on the set of Reliability Coordination Standards. These standards were posted for a 45-day public comment period from August 5, 2008 through September 16, 2008. Stakeholders were asked to provide feedback on the standards through a special electronic standard comment form. There were 29 sets of comments, including comments from more than 70 different people from approximately 50 companies representing 8 of the 10 Industry Segments as shown in the table on the following pages.

http://www.nerc.com/filez/standards/Reliability_Coordination_Project_2006-6.html

The following standards remain within the scope of this project:

COM-001-2 — Communications

COM-002-3 — Communication and Coordination

IRO-001-2 — Reliability Coordination — Responsibilities and Authorities

IRO-002-2 — Reliability Coordination — Facilities

IRO-005-1 — Reliability Coordination — Current Day Operations

IRO-014-2 — Coordination among Reliability Coordinators

IRO-015-1 — Notifications and Information Exchange between Reliability Coordinators

IRO-016-1 — Coordination of Real-time Activities between Reliability Coordinators

The RC SDT has revised some of the requirements, measures, violation risk factors and violation severity levels for COM-001, COM-002, and IRO-001, and IRO-014 based on the comments received. A summary of the drafting team's consideration of comments follows:

Requirements, Measures and VSLs in COM-001-2

Requirements: The RC SDT received several comments regarding the intent of the term "telecommunications facilities". For COM-001-2, the RC SDT envisions telecommunications to be voice or message communication between operating personnel. The standard has been renamed "Communications" and the term "telecommunications facilities" was replaced with "interpersonal communications capabilities" throughout the standard to better reflect the intent of the RC SDT.

We also received comments regarding the applicability of the standard that suggested adding the other entities listed in IRO-001 (Transmission Service Provider, Load-serving Entity and Purchasing-Selling Entity). The RC SDT contends that, in order to receive and carry out directives, an entity must be able to communicate with the Reliability Coordinator ...either directly or through other entities (e.g. – a Distribution Provider may receive a directive from the Transmission Operator who received it from the Reliability Coordinator). We have not expanded the applicability as suggested as we feel that this expands the standard beyond the reliability intent. The RC SDT contends that the addition of the Transmission Service Provider, Load-Serving Entity and Purchasing Selling Entity to COM-001 adds no reliability benefit as the interactions with these entities are commercial in nature. It is not necessary nor is it practical, for reliabilities with every other entity. The SDT did, however add the Transmission Service Provider, Load-serving Entity to the list of entities in R3 that must use English Language for inter-entity communications.

Other commenters had concerns with regard to R2 and the intent with regard to length of outages. The requirement was revised as:

116-390 Village Blvd. Princeton, NJ 08540 609.452.8060 | www.nerc.com **R2.** Each Reliability Coordinator, Transmission Operator and Balancing Authority shall notify impacted entities within 60 minutes of the detection of <u>a</u> failure (30 minutes or longer) of <u>its</u> their normal interpersonal communications capabilities telecommunications facilities, and verify the alternate means of telecommunications are functional.

The informational (last) sentence of R3 was removed per stakeholder suggestions:

R3. Unless agreed to otherwise, each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, Purchasing-Selling Entity, and Distribution Provider shall use English as the language for all inter-entity Bulk Electric System reliability communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System. Transmission Operators and Balancing Authorities may use an alternate language for internal operations.

Measures: Commenters suggested general as well as specific revisions to the measures. One general comment suggested making the language consistent among the measures regarding evidence. M1-M3 were revised to include the phrase "shall have and provide upon request evidence that ...".

Several commenters suggested revisions to M3. The RC SDT revised M3 based on the comments received suggesting that the applicability be expanded and added the Generator Operator, Distribution Provider, Transmission Service Provider, Purchasing-selling Entity, and Load-serving Entity to the measure. Several entities commented that M3 did not match R3 which included an explanatory sentence that allowed an entity to use a language other than English for its internal communications. The informational second sentence was removed from Requirement R3, thus eliminating the "disconnect" between the requirement and the measure. All measures were revised as necessary to reflect revisions to requirements.

VSLs: The RC SDT made revisions to the VSL's based on the comments received and also to reflect revisions to the associated requirements. The SDT received comments that the VSLs for R1 and R2 were based on multiple violations rather than a single violation and revised the VSLs to reflect a single violation, which is one of FERC's guidelines for VSLs.

Requirements, Measures and VSLs in COM-002-3

The work of the IROL SDT resulted in the retirement of R1 from the standard. The RC SDT received comments recommending expanding the applicability of the standard and separating Requirement R1 into two distinct requirements. The applicability was expanded to include Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity. The requirements were revised to:

R1. Each Reliability Coordinator, Transmission Operator, and Balancing Authority that issues a directive associated with real-time operational emergency conditions shall require the recipient of the directive to repeat the intent of the directive back; and shall acknowledge the response as correct or repeat the original statement to resolve any misunderstandings. [Violation Risk Factor: High][Time Horizon: Real-Time]

R2. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity that is the recipient of a directive issued per Requirement R1 shall repeat the intent of the directive back to the issuer of the directive. *[Violation Risk Factor: High][Time Horizon: Real-Time]*

The purpose statement was also revised to reflect the revisions to the standard: "To ensure communications by operating personnel are effective."

The RC SDT received comments recommending expanding the applicability of the standard and separating Requirement R1 into two distinct requirements. The applicability was expanded to include Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission

Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity. The measures were revised to:

- M1. Each Reliability Coordinator, Transmission Operator, and Balancing Authority that issues a directive associated with real-time operational emergency conditions shall have evidence such as voice recordings or transcripts of voice recordings to show that it required the recipient of the directive to repeat the intent of the directive back; and acknowledged the response as correct or repeated the original statement to resolve any misunderstandings.
- M2. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity that is the recipient of a directive issued per Requirement R1 shall have evidence such as voice recordings or transcripts of voice recordings to show that it repeated the intent of the directive back to the issuer of the directive.

VSLs: The RC SDT received comments recommending revisions to the VSLs based on revisions to the requirements and measures. The RC SDT did this and created new VSLs for new Requirement R2.

Requirements, Measures and VSLs in IRO-001-2

The RC SDT has received a notable number of comments suggesting edits to the proposed requirements and measures for the draft standard, particularly regarding the phrase "without intentional delay." The comments do not oppose the objective of the phrase, but often point out the issues of measuring intent and measuring delay time.

To maintain the intent while improving the measurability of the requirement, the SDT proposes to modify the standard as follows: delete the phrase 'without intentional delay' and leave the obligation of response and timing an unstated requirement of R1 "The RC shall act or direct actions..."

An RC that requires a given action in a given time will be expected to inform the impacted entities of those actions and time requirements. This would obviate the need for providing a measure for "intent", but still maintain the reliability intent of the original requirement.

The VSLs were revised to reflect revisions to the requirements as well as the comments of stakeholders. Several comments suggested that there was no fundamental difference between the RC "acting" or "directing actions". The RC SDT agreed and removed the High VSL for R1 and revised the Severe VSL accordingly. Other commenters suggested removing the High VSL from R2 as the VSL contradicted the requirement. The RC SDT agreed and removed the VSL.

Requirements, Measures and VSLs in IRO-002-2

Since the inception of this project (2006-06), the IROL Standards Drafting Team has proposed, successfully balloted and obtained NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data Specification and Collection. The work of the IROL SDT retired IRO-002-2 Requirement R1. The team also received concern about eliminating the requirement to monitor frequency. While the Standard Drafting Team (SDT) recognizes the concern raised, the SDT is even more concerned with the subjectivity that any attempt to measure "Monitoring" can provide. It is the SDT's contention that adherence to reliability standards that require the said monitoring cannot be demonstrated unless the entity is closely monitoring the system parameters. Furthermore, the SDT contends that any requirements that describe the monitoring facilities needed to fulfill fundamental duties should be embedded in entity certification requirements. With IRO-014 and IRO-001 R1 in place, the actual act of monitoring is a secondary task that is inherent in responding to situations or events that could have an adverse impact on reliability. The team declined to delete R2 (Reliability Coordinator veto over analysis tool outages) as it was a specific recommendation from the 2003 Blackout report. This requirement was revised and moved into IRO-001-2 as R6.

Retirement of IRO-005-1

Several commenters had concerns around removing the requirement to monitor frequency (IRO-005-1 R8). The intent of this monitoring activity was incorporated into IRO-002-2, R1. Other commenters had concerns with the removal of other monitoring requirements in the standard. While the Standard Drafting Team (SDT) recognizes the concern raised, the SDT is even more concerned with the subjectivity

associated with any attempt to measure "Monitoring." It is the SDT's contention that adherence to reliability standards that require the said monitoring cannot be demonstrated unless the entity is closely monitoring the system parameters. Furthermore, the SDT contends that any requirements that describe the monitoring facilities needed to fulfill fundamental duties should be embedded in entity certification process requirements. With IRO-014 and IRO-001 R1 in place, the actual act of monitoring is a secondary task that is inherent in responding to situations or events that could have an adverse impact on reliability.

Requirements, Measures and VSLs in IRO-014-2

Several commenters expressed concerns with the term "impacted" and suggested replacing this with "other". The RC SDT believes "impacted" directly relates to the purpose statement. The original wording of "one or more other" is vague and difficult to measure. Using the word "other" presents a similar situation. The RC SDT chose to use the word "impacted" to tighten the requirement and remove ambiguity. The RC SDT does not intend for non-contiguous Reliability Coordinators to have "Reliability Coordinator Agreements", but to have Procedures, Processes, or Plans with impacted Reliability Coordinators. Other commenters suggested striking the term "as a minimum" in R1 and the RC SDT agrees and has modified R1 accordingly.

Some commenters did not agree with the wording of the two new requirements in IRO-014 that were formerly in IRO-016. The SDT modified and subdivided the requirements into four requirements (R5 – R8) shown below:

R5. Each Reliability Coordinator, upon identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

R6. Each impacted Reliability Coordinator shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be agreed to by the impacted Reliability Coordinators. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

R7. The Reliability Coordinator with the identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability Coordinators can not agree that the problem exists. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

R8. Each impacted Reliability Coordinator shall implement the mitigation plan developed by the Reliability Coordinator who has the identified Adverse Reliability Impact when the impacted Reliability Coordinators can not agree on a mitigation plan, [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

Several commenters suggested that the High and Severe VSLs for R2 contradicted the requirement. The RC SDT agreed and removed the "nots" from the VSLs. Several commenters had suggested revisions for the VSLs for R6, which was imported from IRO-016. VSLs were changed to support the revised requirements.

IRO-015-2

Stakeholders agree with the proposal to move the requirements into IRO-014-2 and retire IRO-015 as a separate standard.

IRO-016-1

Stakeholders agree with the concept of moving the requirements of IRO-016-1 into IRO-014-2. Some commenters did not agree with the wording of the new requirements in IRO-014 that were formerly in IRO-016. The RC SDT made some revisions to the requirements listed in IRO-014-2. There are now 4 requirements are listed above in IRO-014-2 summary.

Implementation Plan - Proposed Effective Dates

The RC SDT received comments that COM-001-2, R5 should have an effective date immediately upon regulatory approval. The RC SDT agrees and will request an effective date that is the first possible effective date – the first day of the first calendar quarter following applicable regulatory approval – or in those jurisdictions where no regulatory approval is required, the first day of the first calendar quarter following Board of Trustees adoption.

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 Adamski, at 609-452-8060 or at <u>gerry.adamski@nerc.net</u>. In addition, there is a NERC Reliability Standards Appeals Process.¹

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

Index to Questions, Comments, and Responses

1.	Do you agree with the revisions to the Requirements in COM-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
2.	Do you agree with the revisions to the Measures in COM-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
3.	Do you agree with the Violation Severity Levels proposed in COM-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
4.	Do you agree with the revisions to the Requirements in COM-002-3 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
5.	Do you agree with the revisions to the Measures in COM-002-3 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
6.	Do you agree with the Violation Severity Levels proposed in COM-002-3 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
7.	Do you agree with the revisions to the Requirements in IRO-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
8.	Do you agree with the revisions to the Measures in IRO-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
9.	Do you agree with the Violation Severity Levels proposed in IRO-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area75
10.	Do you agree with the revisions to the Requirements in IRO-002-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
11.	Do you agree with the revisions to the Measures in IRO-002-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
12.	Do you agree with the Violation Severity Levels proposed in IRO-002-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
13.	Do you agree with the revisions to IRO-005-1 as shown in the posted Standard and Implementation Plan? The RC SDT is recommending retiring or moving all of the requirements and retiring this standard. If not, please explain in the comment area
14.	Do you agree with the revisions to the Requirements in IRO-014-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
15.	Do you agree with the revisions to the Measures in IRO-014-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
16.	Do you agree with the Violation Severity Levels proposed in IRO-014-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
17.	Do you agree with the RC SDT recommendation to retire IRO-015-2 and move the requirements into IRO-014-2? If not, please explain in the comment area
18.	Do you agree with the revisions to IRO-016-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area
19.	If you have any other comments, not expressed in questions above, on this set of revisions, please provide your comments here

The Industry Segments are:

- 1 Transmission Owners
- 2 RTOS, ISOS
- 3 Load-serving Entities
- 4 Transmission-dependent Utilities
- 5 Electric Generators
- 6 Electricity Brokers, Aggregators, and Marketers
- 7 Large Electricity End Users
- 8 Small Electricity End Users
- 9 Federal, State, Provincial Regulatory or other Government Entities
- 10 Regional Reliability Organizations, Regional Entities

Com	menter	Organization	Organization			Industry Segment											
				ĺ	1	2	3	4	5	6	7	8	9	10			
1.	Kris Manchur	Manitoba Hydro			Х		Х		Х	Х							
2.	Guy Zito	NPCC												Х			
Addi	tional Member Additional Organization	Region	Segment Selection														
1.	Roger Champagne	Hydro One TransEnergie	e NPCC	2													
2.	Lee Pedowicz	NPCC	NPCC	10													
3.	Gerry Dunbar	NPCC	NPCC	10													
3.	Jeffrey V Hackman	Ameren			х		Х		Х	Х							
4.	Dan Rochester	Independent Electric Ontario	city System Operator	· -		х											
5.	Linda Perez (WECC)	Reliability Coordinat Group	tor Comment Working	g										х			
6.	Fred Young		Northern California Power Agency					х									
7.	Denise Roeder	ElectriCities of North	n Carolina, Inc.				Х	Х		Х							
8.	Karl Bryan	US Army Corps of E Northwestern Division							х								
9.	Annette Bannon	PPL Supply Group							х	Х							
Addi	tional Member Additional Organization		Segment Selection														

Com	menter	Org	Organization					Industry Segment										
							1	2	3	4	5	6	7	7	8	9	10	
1.	Mark Heimbach	PPL Er	nergyPlus	RFC		6												
2.				MRO		6												
3.				NPCC		6												
4.				SERC		6												
5.				SPP		6												
6.	John Cummings	PPL Er	nergyPlus	WECC		6												
7.	Jon Williamson	PPL Er	nergyPlus	WECC		6												
8.	Tom Lehman	PPL Mo	ontana	WECC		5,6												
9.	Joe Kisela	PPL Ge	eneration	RFC		5												
10.				NPCC		5												
11.	David Gladey	PPL Su	usquehanna	a RFC		5												
10.	John Blazekovich (Commonwealth Edison)	Sul Dra	Standards bcommitte afting	e/Complia														
11.	Terry Bilke (MRO)		O NERC S		ds Review			х										
Add	itional Member Additional Organizatio	n Region		ment ection														
1.	Neal Balu	WPS	MRO		3, 4, 5, 6													
2.	Carol Gerou	MP	MRO		1, 3, 5, 6													
3.	Jim Haigh	WAPA	MRO		1, 6													
4.	Charles Lawrence	ATC	MRO		1													
5.	Ken Goldsmith	ALTW	MRO		4													
6.	Tom Mielnik	MEC	MRO		1, 3, 5, 6													
7.	Pam Sordet	XCEL	MRO		1, 3, 5, 6													
8.	Dave Rudolph	BEPC	MRO		1, 3, 5, 6													
9.	Eric Rudolph	LES	MRO		1, 3, 5, 6													
10.	Joseph Knight	GRE	MRO		1, 3, 5, 6													
11.	Joe DePoorter	MGE	MRO		3, 4, 5, 6													
12.	Maire Knox	MISO	MRO		2													

Com	menter	Organization	Organization			Industry Segment											
				1	2	3	4	5	6	7	8	9	10				
14.	Larry Brusseau	MRO MRO	10														
12.	Jim Busbin	Southern Company Tra	nsmission	х													
Add	itional Member Additional Organization	Region	Segment Selection														
1.	Raymond Vice	Southern Company Services	, Inc. SERC		1												
2.	Mike Hardy	Southern Company Services	, Inc. SERC		1												
3.	Chris Wilson	Southern Company Services	, Inc. SERC	•	1												
4.	Terry Coggins	Southern Company Services	, Inc. SERC		1												
5.	Dean Ulch	Southern Company Services	, Inc. SERC		1												
6.	J. T. Wood	Southern Company Services	, Inc. SERC		1												
7.		Southern Company Services		•	1												
8.		Southern Company Services			1												
13.	Kathleen Goodman	ISO New England Inc.	,		x				[1			Τ				
14.	Edward Davis	Entergy Services, Inc		х													
15.	Danny Dees	MEAG Power		Х		Х		Х									
16.	Mike Gentry	Salt River Project		Х		Х		Х	Х								
17.	Jim Griffith (Southern Company)	SERC OC Standards R	eview Group	х		Х		Х									
Add	itional Member Additional Organization	Region	Segment Selection														
1.	Alan Jones	Alcoa	SERC	1, 3, 5	5												
2.	AI McMeekin	SCE&G	SERC	1, 3, 5	5												
3.	Brett Koelsch	Progress Energy	SERC	1, 3, 5	5												
4.	Raymond Vice	Southern Co.	SERC	1, 3, 5	5												
5.	Danny Dees	MEAG	SERC	1, 3, 5	5												
6.	Raleigh Nobles	Ga System Operations Corp	SERC	1, 3, 5	5												
7.	Greg Stone	Duke Energy	SERC	1, 3, 5	5												
8.		PowerSouth	SERC	1, 3, 4													
9.		Dominion VP	SERC	1, 3, 5													
10.	Richard McCall	NCEMC	SERC	3, 4													
11.		Entergy	SERC	1, 3, 5	5												
12.		TVA	SERC	1, 3, 5													

Commenter				Organization				Industry Segment											
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13.		John Rembold	SI	PC		SERC		1, 3, 5	5										
14.		Lawrence Rodriquez	En	tegra Power		SERC		3, 4, 5	5, 6										
15.		Mike Bryson	PJ	IM		SERC		2											
18.	Jay Seitz			US Bureau of Re	eclamati	ion						Х							
19.	Patrick Bro	wn		PJM Interconned	ction				Х										
Addi	itional Memb	er Additional Organizati	ion	Region		egment election													
1.		William Harm	PJ	M Interconnection	RFC		2												
2.		Leanne Harrison	PJ	M Interconnection	RFC		2												
20.	Edison)	kovich (Commonwealth		#2 Standards Int Subcommittee/C Development Re	ompliar		nts												
21.		(TC) Thomas		Progress Energy	/ Carolir	nas		Х		х		Х	х						
22.	Sam Ciccor	ne		FirstEnergy				Х		х	Х	Х	Х						
Add	itional Memb	er Additional Organizati	ion Re	egion Segme Selecti															
1.		Dave Folk	FE	RFC		1, 3, 4, 5,	6												
2.		Doug Hohlbaugh	FE	RFC		1, 3, 4, 5,	6												
3.		Steve Lux	FE	RFC		1, 3, 4, 5,	6												
23.	Denise Koe	hn		Bonneville Powe	r Admir	nistration		Х		Х		Х	Х						
1	Additional Member	Additional Organization		Regio	'n			gment ection											
1.		Rich Ellison	Trans	smission Dispatch			WECC												
2.		Jeffrey Cook	Trans Mode	smission Communie eling	cations &	& Grid	WECC			1									
3.		Robin Chung	Gene	ration Support			WECC			3, 5, 6									
24.	Greg Rowla	and		Duke Energy				Х		Х		Х	Х						
25.	5. Thad Ness AEP						Х		Х		Х	х							
26.	Chris de Gr			Consolidated Ed		o. of NY, Ir	C.	х		Х			х						
27.	Kevin Koloi			Buckeye Power,						Х	Х	Х							
28.	Jason Shav			American Transr				х		_							└──		
29.	Charles Yeung (SPP) ISO/RTO Council Subcommittee				il Stand	ards Revie	ew										х		

1. Do you agree with the revisions to the Requirements in COM-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The RC SDT received several comments regarding the intent of the term "telecommunications facilities". For COM-001-2, the RC SDT envisions telecommunications to be voice or message communication between operating personnel. The standard has been renamed "Communications" and the term "telecommunications facilities" was replaced with "interpersonal communications capabilities" throughout the standard to better reflect the intent of the RC SDT. Based on stakeholder comments, R1 was changed as follows:

R1. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall operationally test, on a quarterly basis at a minimum, alternative interpersonal telecommunications facilities capabilities used for communicating real-time operating information. to ensure the availability of their use when normal telecommunications facilities fail. If the test is unsuccessful, the entity shall develop a mitigation plan to restore its interpersonal communications capabilities.

We also received comments regarding the applicability of the standard that suggested adding other entities listed in IRO-001. The RC SDT contends that, in order to receive and carry out directives, an entity must be able to communicate with the RC...either directly or through other entities (e.g. – a Distribution Provider may receive the directive from the Transmission Operator who received it from the Reliability Coordinator). We have not expanded the applicability of R1 to include the TSP, LSE and PSE as suggested as we feel that this expands the standard beyond the reliability intent. It is not necessary nor is it practical, for reliability purposes, for every entity to have normal and back-up interpersonal communications capabilities with every other entity. The TSP, LSE and PSE were, however, added to R3 to add these entities to the list of entities that must use the English language when exchanging inter-entity information.

Other commenters had concerns with regard to R2 and the intent with regard to length of outages. The requirement was revised as follows:

R2. Each Reliability Coordinator, Transmission Operator and Balancing Authority shall notify impacted entities <u>within 60</u> <u>minutes of the detection of the a failure (30 minutes or longer) of its normal interpersonal tele</u> communications <u>facilities a shall verify that alternate means of telecommunications are functional.</u>

The TSP, LSE and PSE were added to the list of responsible entities and the informational (last) sentence of R3 was removed per stakeholder suggestions:

R3. Unless agreed to otherwise, each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, Purchasing-Selling Entity, and Distribution Provider shall use English as the

language for all inter-entity Bulk Electric System (BES) reliability communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected BES. Transmission Operators and Balancing Authorities may use an alternate language for internal operations.

Organization	Question 1:	Question 1 Comments:								
AEP	No	A precise definition of telecommunications facilities needs to be established in this standard. R2 needs to be clarified regarding impacted utilities. FERC Order 693 suggests that this standard should apply Distribution Providers (DP) along with Generation Operators (GOP). AEP acknowledges that there needs to be some level of coordination and communication between DPs and other function model entities; however, the requirements, as applied to the DP, for telecommunications with the TOP and BA might not address the current communication paths adequately. Today, the DP usually does not communicate with the RTO (performing the BA and/or TOP function), but the DP could either communicate directly or through a joint action agency to the IOU that may serve as the TO (or maybe the TOP). As this draft is written the DPs would be required to have telecommunication facilities with the RTO in this scenario. There will likely be many exceptions to the rule that the requirements and measures create when applied to the DP. We ask that the drafting team consider the applicability, some of the current channels of communications, and options for addressing the FERC comments without creating telecommunication paths that do not make practical sense.								
Response: The RC S		or your comment. unications". The RC SDT envisions COM-001-2 as referring to voice or text communications only. We								
		ons facilities" to "interpersonal communications capabilities" to better reflect the intent.								
The requirements wer	In R2, the phrase, "impacted entities" refers to any entity with whom the TC, TOP or BA has lost interpersonal communications capabilities. The requirements were written to address the differences in any entity's facility needs allowing for adequate flexibility to incorporate cost effective solutions as well as accommodate future technologies (FERC Order 693 directives).									
ElectriCities of North Carolina, Inc. No We are a joint action agency registered on behalf of our member municipalities, who are all TD neither own nor operate any Bulk Electric System facilities, and perform no real-time operations operations planning for the BES. There are currently other standards that already apply to us to require us to have processes and means to communicate with our RC, BA, TOP, etc. The prop modifications to this standard would now make our members subject to this standard as well, b										

Organization	Question 1:	Question 1 Comments:							
		on the DP registration designation. Given that, we believe there needs to be additional clarification of specifically what type of "telecommunications facilities" are required to be considered compliant with this standard. Maybe in the past when this standard applied to TOPs, BAs, and RCs, it was intuitive what type of telecommunications facilities they needed to communicate with each other. However, when you bring in small DPs, it doesn't seem so clear. Obviously we already communicate with our TOP and BA, and have done so for years. As written, the standard is ambiguous in terms of what more, if anything, we would have to put in place to satisfy this standard.							
Response: The RC SDT thanks you for your comment. COM-001-2 has been renamed "Communications". The RC SDT envisions COM-001-2 as referring to voice or text communications only. We have revised the term "telecommunications facilities" to "interpersonal communications capabilities" to better reflect the intent. The purpose statement is revised as:									
To ensure that operati	ng entities have a	dequate interpersonal communication capabilities.							
The requirement R4 w	as written to mee	t a FERC directive with respect to COM-001. The requirement states:							
		on Operator shall demonstrate the existence of its interpersonal communications capabilities with its outhority for the exchange of Interconnection and operating information.							
		an be achieved through agreements with other entities to meet the intent of the requirement. The RC s, as this is the scope of NERC Compliance.							
US Army Corps of Engineers, Northwestern Division	No	R3 needs to have the last sentence revised to allow the Generator Operator and Distribution Provider to use an alternate language for internal operations.							
Response: The RC S a requirement, but only		r your comment. The requirement and measure were revised to delete the last sentence as it was not							
US Bureau of Reclamation									
Response: The RC S	DT thanks you fo	r your comment. The Purpose Statement was revised to:							
To ensure that operating entities have adequate interpersonal communication capabilities.									

Organization	Question 1:	Question 1 Comments:
CU of Springfield	No	City Utilities of Springfield, Missouri (CU) supports the effort of the drafting team to add Distribution Providers and Generator Operators to the "Applicability" section, the change in language regarding testing of alternate telecommunication facilities and the future effort to move COM-001-2 R3 to the new COM-003-1 standard.
		However, it is still necessary to define all parties that are responsible for having "adequate and reliable telecommunication facilities" and to require them to have both primary and backup telecommunication facilities. Since this standard is designed to address telecommunication facilities, any redundancy that exists should be removed from other standards instead. The proposal from the drafting team to remove all of the language from COM-001-1 R1 will create a gap in responsibility, since none of the standards mentioned in the Implementation Plan specifically require a RC, BA or TOP to have these facilities. It is the opinion of CU that you have defined the parties that need to communicate "Interconnection and operating information" in IRO-001-2, where a BA, TOP, GOP, TSP, LSE, DP and PSE receive and comply with directives from the RC. Therefore to maintain consistency are not all of these entities expected to have "adequate and reliable" telecommunication facilities?
		CU suggests that COM-001-2 R4 be moved to R1 and standard language changed to say:
		Purpose: Each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Distribution Provider, Load Serving Entity and Purchasing Selling Entity needs adequate and reliable telecommunications facilities internally and with others in the Reliability Coordinator's area, for the exchange of Interconnection and operating information necessary to maintain reliability.
		R1. Each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Distribution Provider, Load Serving Entity and Purchasing Selling Entity shall have primary and backup telecommunications facilities for the exchange of Interconnection and operating information.
		R2. Each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Distribution Provider, Load Serving Entity and Purchasing Selling Entity shall operationally test, on a quarterly basis at a minimum, alternative telecommunications facilities to ensure the availability of their use when normal telecommunications facilities fail.
		R3. Each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Distribution Provider, Load Serving Entity and Purchasing Selling

 Entity shall notify impacted entities of the failure of its normal telecommunications facilities, and shall verify that alternate means of telecommunications are functional. R4. Unless agreed to otherwise, each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Distribution Provider, Load Serving Entity and Purchasing Selling Entity shall use English as the language for all inter-entity Bulk Electric System (BES) reliability communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected BES. Transmission Operators and Balancing Authorities may use an alternate language for internal operations. The end result will be a standard that requires all applicable entities to: A. Have primary and backup telecommunication facilities. B. Test the telecommunication facilities. C. Utilize the telecommunication facilities.
 Authority, Generator Operator, Transmission Service Provider, Distribution Provider, Load Serving Entity and Purchasing Selling Entity shall use English as the language for all inter-entity Bulk Electric System (BES) reliability communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected BES. Transmission Operators and Balancing Authorities may use an alternate language for internal operations. The end result will be a standard that requires all applicable entities to: A. Have primary and backup telecommunication facilities. B. Test the telecommunication facilities.
A. Have primary and backup telecommunication facilities.B. Test the telecommunication facilities.
B. Test the telecommunication facilities.
C. Utilize the telecommunication facilities.
I for your comment.
gards to IRO-001 and the entities involved in carrying out directives. The RC SDT contends that, in order n entity must be able to communicate with the RCeither directly or through other entities (e.g. – a directive from the Transmission Operator who received it from the Reliability Coordinator). The RC SDT urd to "Communications and revised the Purpose Statement to:
e adequate interpersonal communication capabilities.
munications Facilities" with "interpersonal communications capabilities" to better reflect the intent of the e applicability of R1 or R2 as you suggest as we feel that this expands the standard beyond the reliability actical, for reliability purposes, for every entity to have normal and back-up interpersonal communications the SDT did, however, expand the applicability for the requirement to use English language to include the r suggestion.
R3 should include in the last sentence that the Generator Operator and Distribution Provider may use alternate language for internal operations.

informational only and not a requirement.

Organization	Question 1:	Question 1 Comments:
MRO NERC SDTandards Review Subcommittee	No	The new R2 requirement is too verbose. We suggest that you strike the final clause: "and shall verify that alternate means of telecommunications are functional." It is obviated by the requirement to notify impacted parties. The responsible entity is already implicitly required to verify its alternate means of communication is functional since it is required to notify its impacted parties of the failure of its normal telecommunications. It can't notify its impacted parties if the alternate communications means are not functional. This clause is similar to the old requirement one that the drafting team appropriately struck.
		We tend to agree that striking R1 makes sense due to the drafting team's reasoning. However, we are not clear why the new R4 is necessary then. If the drafting team does not believe R1 is necessary shouldn't they respond to the FERC directive with the same reason why R4 is not really necessary?
		The VRF for new requirement 1 should be lower. It does not fit the definition of a medium VRF. A medium VRF requires that a violation of the requirement directly affect the state or capability or the ability to effectively monitor and control. Failure to test does not result in directly affecting the state or capability or the ability to effectively monitor and control. At a minimum, a failure of the alternative communication systems and primary communication systems must occur first. The failure to perform a single test in a given quarter does not mean that primary and alternative communication systems will fail. Thus, testing is really an administrative issue and should thus be a lower VRF.
		In the Data Retention section, Distribution Provider and Generation Operators should be added. Currently, there are no data retention requirements listed for them. Suggest modifying the language regarding data retention for compliance violations to: " is found in violation of a requirement, it shall keep information related to the violation until it the Compliance Enforcement Authority finds it compliant."
Response: The RC S	DT thanks you fo	r your comments.
R2: The RC SDT dele	ted the final claus	se as you suggest.
R4: This was added b	ecause of the FE	RC directive:
		ation provider as applicable entities and include requirements for their telecommunications.
VRF: We concur and	have modified the	e VRF.

Organization	Question 1:	Question 1 Comments:
Data Retention: We h	ave revised the D	ata Retention to section to comport with your comment.
Southern Company Transmission	No	1.1 - In R1, we suggest that "operationally test by way of operator action" should be defined to remove any confusion regarding what the term requires. The word "ensure" needs to be changed to "assure" to more accurately convey the intent of the requirement. We also suggest changing the word "facilities" to "capabilities".
		1.2 - R2 is overly broad and should include a reasonable time frame for notification. For example, as currently written, a telecom outage of only one minute for which a notification is not made would be a severe violation. The VSL should be consistent with the language of the requirement. A very short, insignificant telecom outage with no notification could result in a severe violation as the requirement is presently written and VSL's applied.
		1.3 - R1, R2 and R3 should be expanded to include the list of entities the RC needs to talk with as included in the Applicability section of IRO-001-2 (RC, TO, BA, GO, DP, TSP, LSE, PSE). These entities should also be included in the purpose statement and R4 and M4 can then be eliminated.
		1.4 - In R3, we suggest that the last sentence of R3 should be changed to "entities may use an alternative language for internal operations" rather than allowing only TOs and BAs to have this option.

Response: The RC SDT thanks you for your comment.

1.1: The RC SDT removed the word "operationally" from the requirement. The requirement was revised to remove the "assurance" part as it does not add to the requirement. We have changed to term "telecommunications facilities" to "interpersonal communication capabilities" to better reflect the intent of the standard.

1.2: We have revised the requirement to place time bounds on outages that require notification. The new R2 is:

Each Reliability Coordinator, Transmission Operator and Balancing Authority shall notify impacted entities within 60 minutes of the detection of a failure (30 minutes or longer) of its normal interpersonal communications capabilities. [Violation Risk Factor: Medium][Time Horizon: Realtime Operations]

1.3: The RC SDT contends that the addition of the TSP, LSE and PSE to R1 and R2 of COM-001 expands the scope beyond the reliability intent, but has added the TSP, LSE and PSE to the list of entities that must use the English language in R3.

1.4: We have removed the informational (last) sentence as it is not a requirement. Others can use an alternate language, but the entities must agree to do so. This is in the first sentence of the requirement which states "Unless agreed to otherwise..." R3 was revised so that the last

Organization	Question 1:	Question 1 Comments:								
sentence, which was e	explanatory and di	d not include any required performance, was deleted.								
Progress Energy Carolinas	No	R1 - The proposed requirement R1 as stated is too broad in reference to "telecommunications facilities". It is unclear as to whether it is intending to specify facilities and equipment which provide VOICE/VERBAL communications, or ELECTRONIC MESSAGING notifications systems, or DATA EXCHANGE links or all of these. Please clarify either within the requirement or within the Glossary of Terms which accompany the full standards set.								
		R2 - The proposed requirement R2 as stated is too broad in reference to "telecommunications facilities". It is unclear as to whether it is intending to specify facilities and equipment which provide VOICE/VERBAL communications, or ELECTRONIC MESSAGING notifications systems, or DATA EXCHANGE links or all of these. Please clarify either within the requirement or within the Glossary of Terms which accompany the full standards set.								
		R4 - The proposed requirement R4 as stated is too broad in reference to "telecommunications facilities". It is unclear as to whether it is intending to specify facilities and equipment which provide VOICE/VERBAL communications, or ELECTRONIC MESSAGING notifications systems, or DATA EXCHANGE links or all of these. Please clarify either within the requirement or within the Glossary of Terms which accompany the full standards set.								
001-2 as referring to v	oice or message o	r your comment. COM-001-2 has been renamed "Communications". The RC SDT envisions COM- communications only. We have revised the term "telecommunications facilities" to "interpersonal t the standard to better reflect the intent.								
NPCC										
requirement, but an in	Response: The RC SDT thanks you for your comment. The provision that you mention was removed from the requirement since it is not a requirement, but an informational statement. The English language Requirement begins with the phrase "Unless agreed to otherwise". This allows for the use of other languages where agreed to.									
ISO New England	No	ISO New England does not support the removal of Requirement 1.								
Inc.		Also, we believe Requirement 3 is written such that it may pose an unnecessary requirement on the								

Organization	Question 1:	Question 1 Comments:
		Hydro Quebec area given the terminology "inter-entity" and support further clarification.
Response: The RC	SDT thanks you fo	or your comment. The majority of commenters agreed with the removal of R1.
The last sentence of t the phrase "Unless ag	the requirement 3 greed to otherwise	was deleted as it was an informational statement only. The English language Requirement begins with" This allows for the use of other languages where agreed to.
FirstEnergy	No	Purpose - The purpose does not include the GOP and DP entities. It may be better if the purpose was written more generally as "To ensure adequate and reliable telecommunications facilities for the exchange of Interconnection and operating information necessary to maintain BES reliability".
		R1 - This requirement makes no distinction between data and voice communications facilities and assumes a designated primary and backup facility configuration such that the backup communications systems are not used regularly. This may be an accurate assumption for data communications; however voice communications may be different. Today many organizations use voice communications systems that allow the system to choose the communication path each time a call is placed. This design ensures that all communications paths are tested regularly in day-to-day use. However, the design of these systems makes it difficult, if not impossible, to substantiate that a functional test of the circuitry has been performed. This requirement should be broken into two requirements. The first should cover data circuitry and the second should cover voice circuitry. This will allow the drafting team to address the inherent differences in these two methods of communications. Lastly, the requirements need to be much more specific concerning the criticality of the facilities to be tested to improve the measurability of the standard. The drafting team dropped the phrase "for the exchange of Interconnection and operating data" from the standard requirement. This deletion appears to open the application of this standard to virtually every communication path used by an RC, BA, TOP whether or not it is used for communicating real-time operating information or not. We do not believe this was the intention of the drafting team and suggest this phrase be reinserted or another one added that limits applicability to only those communication paths that support the real-time reliability of the bulk electric system.
		R2 - It is not clear who the "impacted entities" would be in this requirement. The SDT should consider specifying these entities.
		R3 - The last sentence of this requirement should be deleted. It is not a requirement, it does not add clarity, and the first sentence is very specific as to the communications covered by the requirement.
		R4 - This requirement makes no distinction between data and voice communications facilities and

Organization	Question 1:	Question 1 Comments:	
		assumes a designated primary and backup facility configuration such that the backup communications systems are not used regularly. This may be an accurate assumption for data communications; however voice communications may be different. Today many organizations use voice communications systems that allow the system to choose the communication path each time a call is placed. This design ensures that all communications paths are tested regularly in day-to-day use. However, the design of these systems makes it difficult, if not impossible, to substantiate that a functional test of the circuitry has been performed. This requirement should be broken into two requirements. The first should cover data circuitry and the second should cover voice circuitry. This will allow the drafting team to address the inherent differences in these two methods of communication.	
Response: The RC S	DT thanks you fo	r your comment.	
Purpose: To better ref	lect the intent of t	he standard, we have modified the Purpose Statement to:	
To ensure that operation	ng entities have a	dequate interpersonal communication capabilities.	
	R1: The standard has been revised to remove the term "telecommunications facilities" and replace it with "interpersonal communications capabilities". This reflects the intent of the standard, which is to have voice and message communication capabilities. R1 has been revised as:		
communications capat	Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall test, on a quarterly basis, alternative interpersonal communications capabilities used for communicating real-time operating information. If the test is unsuccessful, the entity shall develop a mitigation plan to restore its interpersonal communications capabilities. [Violation Risk Factor: Lower][Time Horizon: Real-time Operations]		
R2: The term "impacter revised to:	R2: The term "impacted entities" indicates those entities with which you have lost interpersonal communications capabilities. R2 has been revised to:		
Each Reliability Coordinator, Transmission Operator and Balancing Authority shall notify impacted entities within 60 minutes of the detection of a failure (30 minutes or longer) of its normal interpersonal communications capabilities. [Violation Risk Factor: Medium][Time Horizon: Real- time Operations]			
R3: We concur and have deleted the sentence.			
R4: COM-001-2 only covers voice and message communications and R4 has no provision for primary / alternate capabilities.			
Duke Energy	No	Purpose - The purpose statement does not read very well. It either needs another sentence or changes to the current sentence. The purpose of the standard is to assure proper communications, not to suggest entities need proper communications as currently written. Suggest changing to, "To	

Organization	Question 1:	Question 1 Comments:
		assure each Reliability Coordinator, Transmission Operator and Balancing Authority develops and maintains".
		Requirement R1 - What is the definition of "alternative telecommunications facilities"? Is there another requirement somewhere to have alternative telecommunications facilities — or is this a new requirement being introduced by this standard? What is the relationship, if any, between "alternative telecommunications facilities" and EOP-008-1? What is the requirement for maintaining and testing "alternative telecommunications facilities"; what does "operationally test" mean Just because an alternative facility works when it is tested does not mean it will work during an actual failure of the primary system. Furthermore, what do we do if the "test" fails — are we still compliant? The word "ensure" needs to be changed to "assure".
		Requirement R2 - What does "impacted entity" mean?
		Requirement R3 - Why can't others use alternate language — this limits alternate language to just TOPs and BAs internal operations. TOs, GOPs, and others may want to use alternate language internally. Need to define language to be used with and between other relationships — BA to PSE, as an example. Is this a reliability issue or a certification issue? Simply state that: "Entities may use alternative language for internal operations". This will allow any entity to use alternative language for internal operations. The inclusion of TSPs, LSEs, and PSEs in IRO-001-2 indicates the need to include these functions in the COM-001-2 applicability and requirements concerning the use of English as the approved language.
		Requirement R4 - Remove R4 and add DP and GO, as well as all of the other entities listed in IRO-001-2, to R1 thru R3.
Response: The F	RC SDT thanks you fo	r your comment.
-		he standard, we have modified the Purpose Statement to:

To ensure that operating entities have adequate interpersonal communication capabilities.

R1: "Alternative telecommunications facilities" was used in place of "redundant". Many entities have multiple "primary facilities" which could be construed as redundant. The use of "alternative" is intended to indicate at least one primary and one other facility.

R2: The term "impacted entities" indicates those entities with which you have lost communications capabilities. Based on other's comments, R2 has been revised to:

Each Reliability Coordinator, Transmission Operator and Balancing Authority shall notify impacted entities within 60 minutes of the detection of

Organization	Question 1:	Question 1 Comments:
a failure (30 minutes o time Operations]	r longer) of its nor	mal interpersonal communications capabilities. [Violation Risk Factor: Medium][Time Horizon: Real-
		d as it was a statement and not a requirement. Others can use an alternate language, but the entities sentence of the requirement which states "Unless agreed to otherwise"
add requirements not e TSP, LSE and PSE (fro	envisioned by the om IRO-001) to C	is standard per a FERC directive (paragraph 509 of Order 693). Putting these entities in R1-R3 would directive and provide no additional reliability benefit. The RC SDT contends that the addition of the CM-001 R1 and R2 expands the scope beyond the reliability intent, but has added the TSP, LSE and the English language in R3.
ISO/RTO Council Standards Review Subcommittee	Yes and No	We suggest that a definition of telecommunications be written by the drafting team because it is not clear what all telecommunications is intended to be included. Does this requirement apply to data, voice, rtus, networks, etc?
		For requirement R2, we suggest that you strike the final clause: "and shall verify that alternate means of telecommunications are functional." It is obviated by the requirement to notify impacted parties. The responsible entity is already implicitly required to verify its alternate means of communication is functional since it is required to notify its impacted parties of the failure of its normal telecommunications. It can't notify its impacted parties if the alternate communications means are not functional.
		The VRF for new requirement 1 should be lower. It does not fit the definition of a medium VRF. A medium VRF requires that a violation of the requirement directly affect the state or capability or the ability to effectively monitor and control. Failure to test does not result in directly affecting the state or capability or the ability to effectively monitor and control. At a minimum, a failure of the alternative communication systems and primary communication systems must occur first. The failure to perform a single test in a given quarter does not mean that primary and alternative communication systems will fail. Thus, testing is really an administrative issue and should thus be a lower VRF.
		In the Data Retention section, Distribution Provider and Generation Operators should be added. Currently, there are no data retention requirements listed for them. Suggest modifying the language regarding data retention for compliance violations to: "is found in violation of a requirement, it shall keep information related to the violation until it the Compliance Enforcement Authority finds it compliant."

Organization	Question 1:	Question 1 Comments:	
Response: The RC S	Response: The RC SDT thanks you for your comment. The intent of this standard is reflected in the revised purpose statement:		
To ensure that operati	To ensure that operating entities have adequate interpersonal communication capabilities.		
	COM-001-2 only deals with voice or message communications. We have renamed the standard to "Communications" and replaced the term "telecommunications facilities' with "interpersonal communications capabilities" throughout the standard.		
R2: We have revised	R2 as you sugges	st. R2 has been revised to:	
		ion Operator and Balancing Authority shall notify impacted entities within 60 minutes of the detection of mal interpersonal communications capabilities. [Violation Risk Factor: Medium][Time Horizon: Real-	
VRF: We concur and	have modified the	VRF.	
Data Retention: We h	ave revised the D	ata Retention as you suggested.	
SERC OC Standards Review Group	Yes and No	1.1 - In R1, we suggest that "operationally test" should be defined to remove any confusion regarding what the term requires. The word "ensure" needs to be changed to "assure" to more accurately convey the intent of the requirement. We also suggest changing the word "facilities" to "capabilities".	
		1.2 - R2 is overly broad and should include a reasonable time frame for notification. For example, as currently written, a telecom outage of only one minute for which a notification is not made would be a severe violation.	
		1.3 - R1, R2 and R3 should be expanded to include the list of entities the RC needs to talk with as included in the Applicability section of IRO-001-2 (RC, TO, BA, GO, DP, TSP, LSE, PSE). These entities should also be included in the purpose statement and R4 and M4 can then be eliminated.	
		1.4 - In R3, we suggest that the last sentence of R3 should be changed to "entities may use an alternative language for internal operations" rather than allowing only TOs and BAs to have this option.	
Response: The RC S	Response: The RC SDT thanks you for your comment.		
	1.1: The RC SDT removed the word "operationally" from the requirement. The requirement was revised remove the "assurance" part as it does not add to the requirement. We have changed to term "facilities" to "capabilities" as you suggest.		

Organization	Question 1:	Question 1 Comments:
1.2: We have revised	the requirement to	o place time bounds on outages that require notification. The new R2 is:
		ion Operator and Balancing Authority shall notify impacted entities within 60 minutes of the detection of rmal interpersonal communications capabilities. [Violation Risk Factor: Medium][Time Horizon: Real-
		dition of the TSP, LSE and PSE to COM-001 expands the scope beyond the reliability intent, but has of entities that must use the English language in R3.
		al (last) sentence as it is not a requirement. Others can use an alternate language, but the entities must ince of the requirement which states "Unless agreed to otherwise"
Buckeye Power, Inc.	Yes and No	What constitutes "telecommunications facilities"?
renamed "Communica throughout the standa	tions. We have re rd to better reflect	r your comment. COM-001-2 deals with voice or message communications only and has been eplaced the phrase "telecommunications facilities" with "interpersonal communications capabilities" the intent. The purpose statement has been revised to dequate interpersonal communication capabilities.
American Transmission Company	Yes and No	If some language is clarified, we support the revisions. R2 states that "Each TO shall notify impacted entities of the failure of its normal telecommunications facilities". If a phone line goes down and an alternate phone line is used, it is an excessive requirement to notify the impacted entities when there is no impact upon communication or the BES. The wording should be clear that notification is only required if an alternate means of communication is necessary. A defined timeframe for notification should be added to the requirement. It is possible that the loss of telecommunication faculties can occur without the loss of a control center. So, the redundancy with EOP-008 to R4 should be clarified.
line could be cut and s necessary. We have revised the r	that entities shoul comeone trying to equirement to place	r your comment. Id contact others when their normal communication capability is lost. For example, the normal phone contact that entity may only get a busy signal and have no idea that alternate communications is ce time bounds on outages that require notification as you suggest. The new R2 is: ion Operator and Balancing Authority shall notify impacted entities within 60 minutes of the detection of

Organization	Question 1:	Question 1 Comments:
a failure (30 minutes o time Operations]	r longer) of its not	rmal interpersonal communications capabilities. [Violation Risk Factor: Medium][Time Horizon: Real-
Based on these revision	ons, we do not be	lieve further clarification with regards to EOP-008 is necessary.
PJM Interconnection	Yes	We agree with the revisions, but recommend adding applicability to Distribution Providers and Generator Operators for data retention requirements.
Response: The RC S	DT thanks you fo	or your comment. The data retention requirements have been revised as you suggested.
Entergy Services, Inc	Yes	The drafting team should consider expanding the second sentence of R3 to apply to internal communications of any affected entity not just BAs and TOPs.
not a requirement, but	an informational	or your comment. We concur with your sentiment and the second sentence has been removed as it was statement. Use of an alternate language by any entity is allowed under the requirement which begins erwise" The requirement has been revised to:
Service Provider, Load Bulk Electric System (d-Serving Entity, F BES) reliability co	Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Purchasing-Selling Entity, and Distribution Provider shall use English as the language for all inter-entity mmunications between and among operating personnel responsible for the real-time generation control S. [Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]
Salt River Project	Yes	
Manitoba Hydro	Yes	
Ameren	Yes	
Independent Electricity System Operator - Ontario	Yes	
Reliability Coordinator	Yes	

Organization	Question 1:	Question 1 Comments:
Comment Working Group		
PPL Supply Group	Yes	
Bonneville Power Administration	Yes	

2. Do you agree with the revisions to the Measures in COM-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: Commenters suggested general as well as specific revisions to the measures. One general comment suggested making the language consistent among the measures regarding evidence. M1-M3 were revised to include the phrase "shall have and provide upon request evidence that ...".

The revisions to M1 are shown below:

M1. Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall <u>have and provide upon request</u>, evidence that <u>could include</u>, <u>but is not limited to dated test records</u>, <u>operator logs</u>, <u>voice recordings or transcripts of voice recordings</u>, <u>electronic communications</u>, <u>or equivalent</u>, it operationally tested, on a quarterly basis at a minimum, alternative <u>interpersonal tele</u>communications facilities capabilities used for communicating real-time operating <u>information</u>. to ensure the availability of their use when normal telecommunications facilities fail. If the test was unsuccessful, the entity shall have and provide upon request evidence that it developed a mitigation plan to restore the interpersonal communications capabilities.

Several commenters suggested revisions to M3. The RC SDT revised M3 based on the comments received suggesting that the applicability be expanded to include Generator Operators, Transmission Service Providers, Load-Serving Entities, Purchasing-Selling Entities, and Distribution Providers. Several entities commented that M3 did not match R3 which included an explanatory sentence that allowed an entity to use a language other than English for its internal communications. The informational second sentence was removed from Requirement R3, thus eliminating the "disconnect" between the requirement and the measure.

The revisions to M3 are shown below:

M3. The Each Reliability Coordinator, Transmission Operator or Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, Purchasing-Selling Entity, and Distribution Provider shall have and provide upon request evidence that could include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent, that will be used to determine that personnel used English as the language for all inter-entity BES reliability communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected BES. If a language other than English is used, each party shall have and provide upon request evidence that could include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent, of agreement to use the alternate language. M4 was revised based on stakeholder comments as follows:

M4. Each Distribution Provider and Generation Operator <u>shall demonstrate the existence of <u>has its teleinterpersonal</u> communications <u>facilities capabilities</u> with its Transmission Operator and Balancing Authority for the exchange of Interconnection and operating information.</u>

All measures were revised as necessary to reflect revisions to requirements.

Organization	Question 2:	Question 2 Comments:
NPCC	No	There is inconsistency between R3 and M3. In R3, there is a provision for agreement between entities (RC, TOP, BA, GOP, DP) to use a language other than English in their communications. In M3, that option is not presented. M3 should reflect what is written in R3.
Response: The RC SD longer a disconnect betw		our comment. The informational second sentence was removed from the requirement so there is no nent and the measure.
CU of Springfield	No	CU suggests that COM-001-2 M4 be moved to M1 and language in the measures changed to:
		M1. Each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Distribution Provider, Load Serving Entity and Purchasing Selling Entity shall have evidence of primary and backup telecommunication facilities.
		M2.Each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Distribution Provider, Load Serving Entity and Purchasing Selling Entity shall provide evidence that it operationally tested, on a quarterly basis at a minimum, alternative telecommunications facilities to ensure the availability of their use when normal telecommunications facilities fail.
		M3. Each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Distribution Provider, Load Serving Entity and Purchasing Selling Entity shall provide evidence that it notified impacted entities of failure of their normal telecommunications facilities, and verified the alternate means of telecommunications were functional.
		M4. Each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Distribution Provider, Load Serving Entity and Purchasing Selling Entity shall have and provide upon request evidence that could include, but is not limited to operator

Organization	Question 2:	Question 2 Comments:
		logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent, that will be used to determine that personnel used English as the language for all inter-entity BES reliability communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected BES.
		our comment. We have revised the requirements for COM-001 based on the comments received from asures to reflect the new verbiage of the requirements.
We have replaced the te standard.	rm "Telecommun	ications Facilities" with "interpersonal communications capabilities" to better reflect the intent of the
has added the TSP, LSE	and PSE to the	f the TSP, LSE and PSE to COM-001 to R1 and R2 expands the scope beyond the reliability intent, but list of entities that must use the English language in R3. It is not necessary nor is it practical, for e normal and back-up interpersonal communications capabilities with every other entity.
Independent Electricity System Operator - Ontario	No	M3: The evidence to show that concurrence is in place to allow communication using a language other than English is missing. The Measure as written merely asks for evidence that communication in a different language has occurred.
Response: The RC SDT longer a requirement for		our comment. The informational second sentence was removed from the requirement so there is no ng this.
Reliability Coordinator Comment Working Group	No	On Measure 3 need to remove the word "all" in reference to voice logs. Measure needs to include evidence of concurrence for using a language other than English
Response: The RC SDT longer a requirement for		our comment. The informational second sentence was removed from the requirement so there is no ng this.
Northern California Power Agency	No	M3 should include Generator Operator and Distribution Provider in the applicability.
Response: The RC SDT Provider.	thanks you for y	our comment. The measure has been revised to include the Generator Operator and Distribution

Organization	Question 2:	Question 2 Comments:
ElectriCities of North Carolina, Inc.	No	See comments on Question 1
Response: Please see	response to ques	tion 1.
US Army Corps of Engineers, Northwestern Division	No	M3 needs to include the GO and DP in its requirement for inter-utility communications in English.
Response: The RC SD Provider.	T thanks you for y	your comment. The measure has been revised to include the Generator Operator and Distribution
MRO NERC SDTandards Review Subcommittee	No	M4 does not appear to be worded as a measurement. If R4 is kept, we suggest the following modification: "The Distribution Provider and Generation Operator shall demonstrate the existence of its telecommunication systems identified in R4."
Response: The RC SD	T thanks you for y	our comment. We have revised M4 per your suggestion.
Southern Company Transmission	No	2.1 - A general comment regards the production of evidence - such language should be standardized as "have and provide upon request" and the authorized requestors identified. This comment should apply to all standards.
		2.2 - M2 is overly broad and should include a reasonable time frame for notification. For example, as currently written, a telecom outage of only one minute for which a notification is not made would be a severe violation.
		2.3 - The Drafting Team should coordinate the data retention time frame with the requirement measures for R1. DPs and GOs should also be included in the measures requirements.
Response: The RC SE	OT thanks you for	your comment.
2.1 - The measures for	this standard have	e all been revised per your comment.
2.2 – The requirement for outage. The measure h		as been modified to reflect time frames for notification as well as a length of time applicable to the accordingly.

Organization	Question 2:	Question 2 Comments:
2.3 - The Data Retention added to the measure.	section for this s	standard has been revised to comport with NERC Compliance guidelines. DP and GOP have been
ISO New England Inc.	No	See answer to #1.
Response: Please see	response to ques	stion 1.
Salt River Project	No	M3 should include providing evidence of concurrence to use a language other than English. This will better align the measure with the VSL language.
Response: The RC SD	T thanks you for	your comment. We have revised the measure by adding the following sentence:
		both parties shall have and provide upon request evidence that could include, but is not limited to pts of voice recordings, electronic communications, or equivalent, of agreement to use the alternate
SERC OC Standards Review Group	Yes and No	2.1 - A general comment regards the production of evidence - such language should be standardized as "have and provide upon request" and the authorized requestors identified. This comment should apply to all standards.
		2.2 - M2 is overly broad and should include a reasonable time frame for notification. For example, as currently written, a telecom outage of only one minute for which a notification is not made would be a severe violation.
		2.3 - The Drafting Team should coordinate the data retention time frame with the requirement measures for R1. DPs and GOs should also be included in the measures requirements
Response: The RC SD	T thanks you for	your comment.
2.1 - The measures for the	his standard have	e all been revised per your comment.
2.2 – The requirement for outage. The measure has		as been modified to reflect time frames for notification as well as a length of time applicable to the accordingly.
2.3 - The Data Retention section for this standard has been revised to comport with NERC Compliance guidelines. DP and GOP have been added to the measure.		

Organization	Question 2:	Question 2 Comments:	
Progress Energy Carolinas	No	M1 - The proposed measure M1 as stated is too broad in reference to "telecommunications facilities". It is unclear as to whether it is intending to specify facilities and equipment which provide VOICE/VERBAL communications, or ELECTRONIC MESSAGING notifications systems, or DATA EXCHANGE links or all of these. Please clarify either within the requirement or within the Glossary of Terms which accompany the full standards set.	
		M2 - The proposed measure M2 as stated is too broad in reference to "telecommunications facilities". It is unclear as to whether it is intending to specify facilities and equipment which provide VOICE/VERBAL communications, or ELECTRONIC MESSAGING notifications systems, or DATA EXCHANGE links or all of these. Please clarify either within the requirement or within the Glossary of Terms which accompany the full standards set.	
		M4 - The proposed measure M4 as stated is too broad in reference to "telecommunications facilities". It is unclear as to whether it is intending to specify facilities and equipment which provide VOICE/VERBAL communications, or ELECTRONIC MESSAGING notifications systems, or DATA EXCHANGE links or all of these. Please clarify either within the requirement or within the Glossary of Terms which accompany the full standards set.	
	ext communicatio	your comment. COM-001-2 has been renamed "Communications". The RC SDT envisions COM-001-2 ns only. We have revised the term "telecommunications facilities" to "interpersonal communications	
FirstEnergy	No	The measures should be modified per our suggested modifications in question 1.	
Response: The RC SDT thanks you for your comment. The measures were revised based on the revisions to requirements that resulted from stakeholder comments.			
Duke Energy	No	General comments - Not using consistent language regarding "provide evidence" and "shall have and provide upon request evidence". Also need to add corresponding requirement number after each measure.	
		Measure M1 - Just because an alternate facility works when it is tested does not mean it will work during an actual failure of the primary system what do we do if the "test" fails — are we complaint? Clarify that the requirement and measure is to "test" not "to test successfully". We may test and find that something does not work as expected.	

Organization	Question 2:	Question 2 Comments:			
Response: The RC SDT thanks you for your comment. We have modified the "evidence" language for consistency. Each measure corresponds to the measure with the same number. There is a one-to-one relationship between requirements and measures – however the SDT did add the requirement numbers to ensure this is clear to all stakeholders.					
M1: We have added the	M1: We have added the following sentence to R1 and M1.				
R1: If the test is unsucce	R1: If the test is unsuccessful, the entity shall develop a mitigation plan to restore its interpersonal communications capabilities.				
M1: If the test was unsuccessful, the entity shall have and provide upon request evidence that it developed a mitigation plan to restore the interpersonal communications capabilities.					
AEP	No	M2 needs to be clarified regarding impacted functions.			
Response: The RC SD	Response: The RC SDT thanks you for your comment. The requirement, as written, has sufficient clarity regarding the impacted entities.				
American Transmission Company	No	M2 should be changed to reflect the comments noted in Question 1 for R2.			
Response: The RC SDT thanks you for your comment. The RC SDT believes that entities should contact others when their normal communication capability is lost. For example, the normal phone line could be cut and someone trying to contact that entity may only get a busy signal and have no idea that alternate communications is necessary. We have revised the requirement to place time bounds on outages that require notification. The new R2 is:					
Each Reliability Coordinator, Transmission Operator and Balancing Authority shall notify impacted entities within 60 minutes of the detection of a failure (30 minutes or longer) of its normal interpersonal communications capabilities. [Violation Risk Factor: Medium][Time Horizon: Real-time Operations]					
The measure reflects the new requirement.					
ISO/RTO Council Standards Review Subcommittee	Yes and No	M3: The evidence to show that concurrence is in place to allow communication using a language other than English is missing. The Measure as written merely asks for evidence that communication in a different language has occurred.			
Response: The RC SDT thanks you for your comment. The measure has been revised as: M1: The Reliability Coordinator, Transmission Operator or Balancing Authority shall have and provide upon request evidence that could include,					

Organization	Question 2:	Question 2 Comments:	
but is not limited to dated test records, operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent, that will be used to determine that personnel used English as the language for all inter-entity Bulk Electric System reliability communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System. If a language other than English is used, both parties shall have and provide upon request evidence that could include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent, of agreement to use the alternate language.			
PJM Interconnection	Yes	M4 should be revised to reflect that each Distribution Provider and Generation Operator has evidence demonstrating the functionality of telecommunications facilities with the TOP and BA for the exchange of interconnection and operating information.	
Response: The RC SDT thanks you for your comment. The measure was modified as: Each Distribution Provider and Generation Operator shall demonstrate the existence of its interpersonal communications capabilities with its Transmission Operator and Balancing Authority for the exchange of Interconnection and operating information.			
Buckeye Power, Inc.	Yes and No	Abstain	
US Bureau of Reclamation	Yes		
Bonneville Power Administration	Yes		
Manitoba Hydro	Yes		
Ameren	Yes		
PPL Supply Group	Yes		
Entergy Services, Inc	Yes		

3. Do you agree with the Violation Severity Levels proposed in COM-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The RC SDT made revisions to the VSLs based on the comments received and also to reflect revisions to the associated requirements. We received comments that the VSLs for R1 and R2 were based on multiple violations, which do not support FERC's Guideline 4 for VSLs - Guideline 4 requires that a VSL should be based on a single violation. We agreed and revised the VSLs to reflect a single violation.

Organization	Question 3:	Question 3 Comments:		
Independent Electricity System Operator - Ontario	No	R1: Suggest to revise the conditions for all levels to read "failed to operationally test the alternative communication facilities within the last???		
		R2: The second part under Severe is not needed since failing to notify any impacted entities would imply no communication to the affected entities anyway. If verification of the functionality of the alternate means of telecommunications is also critical even without communicating to the affect entities, then the second condition should be an "OR".		
		R3: Failure to having concurrence to use a language other than English for communications between and among operating personnel responsible for real-time operations by itself does not constitute a violate of any requirements; it is the absence of such a concurrence AND having used a language other than English that would constitute a violation. Suggest to revise this condition.		
Response: The RC SDT thanks you for your comment.				
We have revised the VSLs per your suggestions and comments from other stakeholders, and revisions made to the wording of the associated requirement.				
We have revised the VSLs per your suggestions and the revisions made to the associated requirement				
We have revised the VSLs per your suggestions.				
CU of Springfield	No	Revise to reflect proposed changes above		
Response: The RC SDT thanks you for your comment. The Requirement, Measures and VSLs have been revised per your and other				

Organization	Question 3:	Question 3 Comments:		
stakeholders' commen	stakeholders' comments.			
ElectriCities of North Carolina, Inc.	No	Depends of what is meant by "telecommunications facilities"		
Response: The RC SDT thanks you for your comment. We have clarified the requirements and measures to use the term "interpersonal communications capabilities" rather than "telecommunications facilities".				
MRO NERC SDTandards Review Subcommittee	No	The VSLs as defined for Requirement 1 appear to violate Guideline 4 that the Commission established in their "Order on Violation Severity Levels Proposed by the Electric Reliability Organization". Guideline 4 requires that a VSL should be based on a single violation. The VSLs as defined accumulate the number of consecutive quarters. This would imply that a single violation could last more than a year and that the compliance auditor could not determine sanctions until the entity becomes compliant or year has passed. A single violation appears to be the failure to test in a single quarter. This requirement is binary in nature in that it is either met or it isn't. We suggest that only a lower VSL should be defined as: "The RC, TOP, or BA failed to test the backup telecommunication facilities for a single calendar quarter."		
		primary telecommunication system requires the use of the alternative telecommunications systems which is a form of verifying that the alternative telecommunications facilities are functional. The drafting team should consider applying the numeric performance category of the VSL Development Guideline Criteria for R2.		
Response: The RC SDT thanks you for your comment.				
R1: We have revised	the VSLs per the	guideline and the revised requirement.		
R2: We have revised the requirement to have time constraints for the length of an outage as well as a timeframe for notification. The VSL has been revised to reflect the revised requirement.				
PJM Interconnection	No	Recommend the following VSLs for R1:		
		Proposed Lower VSL: The Reliability Coordinator, Balancing Authority or Transmission Operator failed to operationally test alternative telecommunications every three months on at least one occasion.		

Orgar	nization	Question 3:	Question 3 Comments:
			Proposed Moderate VSL: The Reliability Coordinator, Balancing Authority or Transmission Operator failed to operationally test alternative telecommunications every three months on two separate occasions.
1			Proposed High VSL: The Reliability Coordinator, Balancing Authority or Transmission Operator failed to operationally test alternative telecommunications every three months on three separate occasions.
			Proposed Severe VSL: The Reliability Coordinator, Balancing Authority or Transmission Operator failed to operationally test alternative telecommunications every three months on more than three separate occasions.
			Recommend the following VSLs for R2:
			Proposed Lower VSL: The Reliability Coordinator, Balancing Authority or Transmission Operator failed to operationally test alternative telecommunications every three months on at least one occasion.
			Proposed Moderate VSL: The Reliability Coordinator, Balancing Authority or Transmission Operator failed to operationally test alternative telecommunications every three months on two separate occasions.
1			Proposed High VSL: The Reliability Coordinator, Balancing Authority or Transmission Operator failed to operationally test alternative telecommunications every three months on three separate occasions.
			Proposed Severe VSL: The Reliability Coordinator, Balancing Authority or Transmission Operator failed to operationally test alternative telecommunications every three months on more than three separate occasions.
			Recommend the following VSLs for R4:
			Proposed High VSL: The Responsible Entity failed to establish telecommunications with either their Balancing Authority or Transmission Operator for the exchange of Interconnection and operating information.
			Proposed Severe VSL: The Responsible Entity failed to establish telecommunications with their Balancing Authority and Transmission Operator for the exchange of Interconnection and operating information.
Respo	Response: The RC SDT thanks you for your comment.		

Organization	Question 3:	Question 3 Comments:
R1: The proposed VS	SLs reflect multiple	violations of the requirement. Each VSL must be written for a single violation (failure to test quarterly).
R2: The proposed VS	SLs reflect multiple	violations of the requirement and are a duplication of the VSLs proposed for R1, not for R2.
R4: We have revised	the VSLs per you	r suggestion.
FirstEnergy	No	The VSL should be modified per our suggested modifications in question 1.R1 VSL - The statement in the VSL that the responsible entity did not "operationally test" is too broad. It should be more specific with the language used in the requirement.
		r your comment. The requirement, measure and VSLs have been revised per stakeholder comments o longer used in the standard.
Duke Energy	No	VSL for Requirement R1 - The VSL for R1 seems to imply that an operational test needs to have been performed in the last 90 days — this is read in conjunction with the data retention requirements. Need to clarify in the requirement how ?quarter basis? is defined - is it the calendar quarter, or a rolling 90 days? In addition, the VSLs for Requirement R1 appear to violate NERC guidelines, since the Moderate, High and Severe VSLs are based upon cumulative violations of the Lower VSL.
		r your comment. The data retention was changed from three months to three years. The VSLs were suggested. There are now 2 VSLs.
ISO/RTO Council Standards Review Subcommittee	No	The VSLs as defined for Requirement 1 appear to violate Guideline 4 that the Commission established in their "Order on Violation Severity Levels Proposed by the Electric Reliability Organization". Guideline 4 requires that a VSL should be based on a single violation. The VSLs as defined accumulate the number of consecutive quarters. This would imply that a single violation could last more than a year and that the compliance auditor could not determine sanctions until the entity becomes compliant or year has passed. A single violation appears to be the failure to test in a single quarter. This requirement is binary in nature in that it is either met or it isn't. We suggest that only a lower VSL should be defined as: "The RC, TOP, or BA failed to test the backup telecommunication facilities for a single calendar quarter."
		The Lower VSL for R2 is not possible. The act of notifying all impacted entities of the failure of their primary telecommunication system requires the use of the alternative telecommunications systems which is a form of verifying that the alternative telecommunications facilities are functional. The

Organization	Question 3:	Question 3 Comments:
		drafting team should consider applying the numeric performance category of the VSL Development Guideline Criteria for R2.
		(i) R1: Suggest to revise the conditions for all levels to read "failed to operationally test the alternative communication facilities within the last
		(ii) R2: The second part under Severe is not needed since failing to notify any impacted entities would imply no communication to the affected entities anyway. If verification of the functionality of the alternate means of telecommunications is also critical even without communicating to the affect entities, then the second condition should be an "OR".
		(iii) R3: Failure to having concurrence to use a language other than English for communications between and among operating personnel responsible for real-time operations by itself does not constitute a violate of any requirements; it is the absence of such a concurrence AND having used a language other than English that would constitute a violation. Suggest to revise this condition.
Response: The RC S	DT thanks you fo	r your comment.
R1: We have revised to VSLs reflect the revise		o have a provision to test as well as a provision to develop a mitigation plan when a test fails. The
R2: (i) We have rev VSLs reflect the revise		nent to have a provision to test as well as a provision to develop a mitigation plan when a test fails. The
The second	part of the VSL w	vas removed.
The VSL wa	as revised to:	
The responsible entity failed to provide evidence of concurrence to use a language other than English for communications between and among operating personnel responsible for the real-time generation control or operation of the interconnected Bulk Electric System when a language other than English was used.		
SERC OC Standards Review Group	Yes and No	3.1 - The expanded list of entities recommended in comment 1.3 and 1.4 need to be included the VSLs

Organization	Question 3:	Question 3 Comments:
Response: The RC S	DT thanks you fo	r your comment. Please see response to comment 1.3 and 1.4.
Buckeye Power, Inc.	Yes and No	abstain
Southern Company Transmission	Yes	3.1 - The expanded list of entities recommended in comment 1.3 and 1.4 need to be included the VSLs
		3.2 - The Severe VSL for R2 should be corrected. Add the word 'to' as follows: "and failed to verify the"
Response: The RC S	DT thanks you fo	r your comment.
3.1 - Please see respo	nse to comment	1.3 and 1.4.
3.2 - The VSLs were re	evised based on r	revisions to the requirement.
American Transmission Company	Yes	Based upon revisions to Question 1.
Response: The RC S	DT thanks you fo	r your comment. The VSLs were revised to reflect changes to the requirements.
Bonneville Power Administration	Yes	
AEP	Yes	
Manitoba Hydro	Yes	
NPCC	Yes	
Ameren	Yes	
Reliability	Yes	

Organization	Question 3:	Question 3 Comments:
Coordinator Comment Working Group		
Northern California Power Agency	Yes	
Entergy Services, Inc	Yes	
Salt River Project	Yes	
US Bureau of Reclamation	Yes	

4. Do you agree with the revisions to the Requirements in COM-002-3 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The work of the IROL SDT resulted in the retirement of R1 from the standard. The RC SDT received comments recommending expanding the applicability of the standard and separating Requirement R2 (now R1) into two distinct requirements. The applicability was expanded to include Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity. The requirements were revised to:

- R1. Each Reliability Coordinator, Transmission Operator, and Balancing Authority <u>that issues a verbal directive associated with</u> <u>real-time operational emergency conditions</u> shall <u>issue directives in a clear, concise, and definitive manner; shall</u> <u>ensurerequire</u> the recipient of the <u>verbal</u> directive <u>to</u> repeats the <u>intent of the directive back</u> <u>information back correctly</u>; and shall acknowledge the response as correct or repeat the original statement to resolve any misunderstandings.
- R2. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity that is the recipient of a directive issued per Requirement R1 shall repeat the intent of the directive back to the issuer of the directive

The purpose statement was also revised to reflect the revisions to the standard:

To ensure Balancing Authorities, Transmission Operators, and Generator Operators have adequate communications and that these communications capabilities are staffed and available for addressing a real time emergency condition. To ensure <u>emergency</u> communications by <u>between</u> operating personnel are effective.

Organization	Question 4:	Question 4 Comments:
Southern Company Transmission	No	 4.1 - We agree with the recommendation to retire COM-002-3 when COM-003-1 is approved; however we suggest the following changes should be made for the interim applicability of COM-002-3:
		4.2 - The Purpose statement should be revised to re-align with the revisions in the Standard.
		4.3 - The applicability of COM-002-3 should be consistent with the applicability of IRO-001-2.
		4.4 - The words "clear, concise, and definitive manner" in R1 are ambiguous and impossible to

Organization	Question 4:	Question 4 Comments:	
		measure. We suggest they be replaced with "the RC shall direct".	
		4.5 - An additional requirement, R2, should be added that requires the Operator to repeat the information back correctly (i.e., separate this requirement from R1).	
		4.6 - Grammatical changes are suggested. The revised requirement reads as follows: " To ensure Balancing Authorities, Transmission Operators, and Generator Operators have adequate communications; to ensure that these communication capabilities are staffed and available for addressing a real-time emergency condition; and to ensure effective communications by operating personnel."	
		 4.7 - At the Data Retention section, the reference to 'Requirement 3, Measure 3' should be consistent with the modified standard. The revised standard only has one requirement. 4.8 - The use of calendar days in the Data Retention section is inconsistent with related standards where 'months' are used. 	
Response: The RC	SDT thanks you fo	r your comments.	
4.2 - We have revise	ed the purpose state	ement to:	
To ensure emergene	cy communications	between operating personnel are effective.	
4.3 – We have chan	4.3 – We have changed the applicability of COM-002 to match that of IRO-001.		
4.4 and 4.5 - We have separated the requirement into two requirements to ensure that the requirements are measurable and distinct. We concur with your comments and have revised the requirements to:			
operational emerger	R1. Each Reliability Coordinator, Transmission Operator, and Balancing Authority that issues a verbal directive associated with real-time operational emergency conditions shall require the recipient of the verbal directive to repeat the intent of the directive back; and shall acknowledge the response as correct or repeat the original statement to resolve any misunderstandings. [Violation Risk Factor: High][Time		

Horizon: Real-Time]

R2. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity that is the recipient of a verbal directive issued per Requirement R1, shall repeat the intent of the directive back to the issuer of the directive. *[Violation Risk Factor: High][Time Horizon: Real-Time]*

4.6 - We have revised the purpose statement to:

To ensure emergency communications between operating personnel are effective.

Organization	Question 4:	Question 4 Comments:			
4.7 and 4.8 – We have	4.7 and 4.8 – We have updated the data retention section with the latest compliance template information.				
ISO New England Inc.	No	ISO New England believes it is inefficient to have a (temporary) Standard with only one Requirement and recommend including this Requirement in COM-001, with COM-001 renamed to "Communications."			
		r your comments. Based on other stakeholder feedback, we have added applicable entities and This standard will be retired upon adoption of COM-003-1.			
US Bureau of Reclamation	No	Purpose: Since Generator Operators were deleted from the applicability; the Purpose should be revised to reflect that and include Reliability Coordinators. The language is somewhat redundant, recommend it be simplified to "To ensure Balancing Authorities, Reliability Coordinators, and Transmission Operators communicate in an effective manner."			
revised to:	-	your comments. Several entities were added to the applicability and the purpose statement was between operating personnel are effective.			
FirstEnergy	No	Purpose - The GOP is still shown in the purpose statement although it was removed from the applicability. Also, it may be better if the purpose was written more generally as "To ensure adequate communications capabilities for addressing real-time emergency conditions and ensure communications by operating personnel are effective to maintain BES reliability".			
		Applicability - In the SDT's document "Scope of Work Assigned to the Reliability Coordination Standard Drafting Team", the team decided to not include the FERC directive to include the DP in the applicability with the following reasoning "The proposed revisions do not include the DP entity because they are not applicable." We would like clarification on this.			
		R1 - It does not appear that the implementation plan addresses the FERC direction to consider comments from Santa Clara, FirstEnergy, and Six Cities per 693 par. 539 regarding staffing requirements. Santa Clara asks that these requirements apply "only to operating staff available on site at all times or includes repair personnel who are available only on an on-call basis". FirstEnergy asks that the "term [staffed] should not require a physical presence at all facilities at all times because some units, such as peaking units, are not staffed 24 hours a day". FirstEnergy also suggest "because nuclear units are already subject to communications requirements in their operating			

Organization	Question 4:	Question 4 Comments:	
		procedures, their compliance with NRC operating procedures should be deemed in compliance with the NERC Reliability Standards". Six Cities "states that, to avoid unnecessary staffing burdens, particularly for smaller entities, the Commission should direct NERC to clarify COM-002-2 by providing that identification of an emergency contact person on call to respond to real-time emergency conditions will constitute adequate compliance".	
		R1 - Just as an FYI, with regard to the proposed replacement requirement statement in the implementation plan: "TOP-005-1, R1 and R3 require adequate telecommunications for BAs and TOPs to provide each other with operating data as well as providing data to the RC", per recently stakeholder approved ballots, R1 of TOP-005-1 has been retired and now covered in new standard IRO-010-1.R1.1 - The existing requirement includes "through predetermined communication paths of any condition that could threaten the reliability of its area or when firm load shedding is anticipated". The proposed replacement requirements do not address the need for "predetermined communication paths".	
Response: The RC	SDT thanks you for	br your comments.	
Purpose: Several en	tities were added	to the applicability and the purpose statement was revised to:	
To ensure emergenc	y communications	between operating personnel are effective.	
	Applicability: The applicability was expanded to include Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity.		
R1: The RC SDT considered these comments when developing the proposed COM-001-2 specification requirements. We have revised the requirement to indicate that directives being issued relate to real-time operating emergencies. We do not feel that this would place an undue burden on any entity with respect to staffing as the requirement makes no mention of staffing.			
R1 FYI: Thank you for	or the FYI.		
Duke Energy	No	Requirement R1 - As defined by Merriam Webster, the use of the word "ensure" implies virtual guarantee of the government has ensured the safety of the refugeess; while the use of the alternative	

NO	Requirement R1 - As defined by Merriam Webster, the use of the word "ensure" implies virtual
	guarantee <the ensured="" government="" has="" of="" refugees="" safety="" the="">; while the use of the alternative</the>
	word "assure" implies the removal of doubt and suspense from a person's mind. We suggest that
	"assure" is more appropriate than "ensure" in this context in the standards. The use of words like
	"clear, concise, and definitive manner" is subject to interpretation. This same language is used in the
	VSLs. Depending on the interpretation of this phrase, an entity could be found to be in a "Severe"
	violation level. The issuer of the directive should not be subject to non-compliance if the recipient of

Organization	Question 4:	Question 4 Comments:
		the directive refuses to repeat back. Need to add a requirement, measure, and VSL that clarifies that the recipient of a directive is obliged to perform their portion of a repeat-back. The inclusion of TSPs, LSEs, and PSEs in IRO-001-2 indicates the need to include these functions in the COM-002-3 requirement concerning repeat-backs. What is a "directive"? The regional compliance processes are having difficulty in auditing this existing standard due to lack of clarity of what constitutes a directive. "Directive" should be defined as being associated with real-time operational emergency conditions, and not ordinary day-to-day communications. Otherwise a VRF of High is not warranted.
Response: The RC S	SDT thanks you fo	or your comments. We concur with your comments and have revised the requirements to:
operational emergenc	y conditions shall	mission Operator, and Balancing Authority that issues a verbal directive associated with real-time require the recipient of the verbal directive to repeat the intent of the directive back; and shall repeat the original statement to resolve any misunderstandings. [Violation Risk Factor: High][Time
Serving Entity, Distribution	ution Provider, an	cing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load- d Purchasing-Selling Entity that is the recipient of a verbal directive issued per Requirement R1, shall the issuer of the directive. [Violation Risk Factor: High][Time Horizon: Real-Time]
Northern California Power Agency	Yes and No	Remove Generator Operator from the Purpose Statement. The re-written standard no longer applies to GOP
	on Operator, Gene	or your comments. The applicability was expanded to include Reliability Coordinator, Balancing erator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and
We have revised the p	ourpose statemen	t to: "To ensure emergency communications between operating personnel are effective[ML1]."
SERC OC Standards Review Group	Yes and No	4.1 - We agree with the recommendation to retire COM-002-3 when COM-003-1 is approved; however we suggest the following changes should be made for the interim applicability of COM-002-3:
		4.2 - The Purpose statement should be revised to re-align with the revisions in the Standard.
		4.3 - The applicability of COM-002-3 should be consistent with the applicability of IRO-001-2.
		4.4 - The words "clear, concise, and definitive manner" in R1 are ambiguous and impossible to

Organization	Question 4:	Question 4 Comments:	
		measure. We suggest they be replaced with "the RC shall direct".	
		4.5 - An additional requirement, R2, should be added that requires the Operator to repeat the information back correctly (i.e., separate this requirement from R1).	
Response: The RC SI	DT thanks you for	your comments.	
4.2 - We have revised	the purpose state	ement to:	
To ensure emergency	communications	between operating personnel are effective.	
4.3 – We have change	d the applicability	of COM-002 to match that of IRO-001.	
		equirement into two requirements to ensure that the requirements are measurable and distinct. We evised the requirements to:	
operational emergency	R1. Each Reliability Coordinator, Transmission Operator, and Balancing Authority that issues a verbal directive associated with real-time operational emergency conditions shall require the recipient of the verbal directive to repeat the intent of the directive back; and shall acknowledge the response as correct or repeat the original statement to resolve any misunderstandings. [Violation Risk Factor: High][Time Horizon: Real-Time]		
Serving Entity, Distribu	ition Provider, and	cing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load- d Purchasing-Selling Entity that is the recipient of a verbal directive issued per Requirement R1, shall the issuer of the directive. [Violation Risk Factor: High][Time Horizon: Real-Time]	
Buckeye Power, Inc.	Yes and No	Abstain	
PJM Interconnection	Yes	We note that this requirement really is "3-part communication" and will be moved to the new communications standard, COM-003-1.	
Response: The RC SDT thanks you for your comments. As envisioned, the 3-part communication requirements in this standard are temporary – they will be retired when COM-003-1 becomes effective.			
CU of Springfield	Yes	CU supports moving R1 to COM-003 and retiring COM-002.	
Response: The RC SDT thanks you for your comment. As envisioned, the 3-part communication requirements in this standard are temporary – they will be retired when COM-003-1 becomes effective.			

Organization	Question 4:	Question 4 Comments:	
PPL Supply Group	Yes	PPL agrees with the changes to COM-002-3. However, for clarity PPL suggests that Generator Operator should be removed from the purpose statement of this standard.	
	Response: The RC SDT thanks you for your comments. The applicability was expanded to include Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity.		
We have revised the p	urpose statement	t to:	
To ensure emergency	communications	between operating personnel are effective.	
Manitoba Hydro	Yes		
Bonneville Power Administration	Yes		
AEP	Yes		
American Transmission Company	Yes		
ISO/RTO Council Standards Review Subcommittee	Yes		
NPCC	Yes		
Ameren	Yes		
Independent Electricity System Operator - Ontario	Yes		

Organization	Question 4:	Question 4 Comments:
Reliability Coordinator Comment Working Group	Yes	
MRO NERC SDTandards Review Subcommittee	Yes	
Entergy Services, Inc	Yes	
Salt River Project	Yes	

5. Do you agree with the revisions to the Measures in COM-002-3 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The RC SDT received comments recommending expanding the applicability of the standard and separating Requirement R1 into two distinct requirements. The applicability was expanded to include Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity. The requirements and measures were revised to:

R1. Each Reliability Coordinator, Transmission Operator, and Balancing Authority <u>that issues a verbal directive associated with</u> <u>real-time operational emergency conditions</u> shall_<u>issue directives in a clear, concise, and definitive manner; shall ensure require</u> the recipient of the <u>verbal</u> directive_to repeats the <u>information_intent of the directive</u> back <u>correctly;</u> and shall acknowledge the response as correct or repeat the original statement to resolve any misunderstandings. [Violation Risk Factor: High][Time Horizon: Real-Time]

R2. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity that is the recipient of a verbal directive issued per Requirement R1, shall repeat the intent of the directive back to the issuer of the directive. *[Violation Risk Factor: High][Time Horizon: Real-Time]*

- M1. Each Reliability Coordinator, Transmission Operator, and Balancing Authority <u>that issues a verbal directive associated with</u> <u>real-time operational emergency conditions</u> shall have evidence such as voice recordings or transcripts of voice recordings to show that it <u>required issued directives in a clear</u>, <u>concise</u>, <u>and definitive manner</u>; <u>ensured</u> the recipient of the <u>verbal</u> directive to repeated the <u>information</u> <u>intent of the directive</u> back <u>correctly</u>; and acknowledged the response as correct or repeated the original statement to resolve any misunderstandings.
- M2. Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing-Selling Entity that is the recipient of a verbal directive issued per Requirement R1 shall have evidence such as voice recordings or transcripts of voice recordings to show that it repeated the intent of the directive back to the issuer of the directive.

Organization	Question 5:	Question 5 Comments:
Southern Company	No	5.1 - The measures need to be revised to match the new requirements.

Organization	Question 5:	Question 5 Comments:	
Transmission			
Response: The RC S	SDT thanks you fo	or your comment. The measures have been revised to reflect revisions to the requirements.	
SERC OC Standards Review Group	No	5.1 - The measures need to be revised to match the new requirements.	
Response: The RC S	SDT thanks you fo	or your comment. The measures have been revised to reflect revisions to the requirements.	
ISO New England Inc.	No	See response to Q#4	
Response: The RC S	SDT thanks you fo	or your comment. Please see response to Q4.	
FirstEnergy	No	The measures should be modified if our comments in question 4 result in changes to the proposed requirements.	
Response: The RC S	SDT thanks you fo	or your comment. The measures have been revised to reflect revisions to the requirements.	
Duke Energy	No	The use of words like "clear, concise, and definitive manner" is subject to interpretation. The issuer of the directive should not be subject to non-compliance if the recipient of the directive refuses to repeat back. Need to add a requirement, measure, and VSL that clarifies that the recipient of a directive is obliged to perform their portion of a repeat-back.	
removed from the star	ndard and the requ	or your comments. We concur with you comments – the phrase, "clear, concise, and definitive" was uirement was subdivided so that there is a separate requirement that obligates the recipients to repeat d VSLs were revised to reflect the modifications to the requirements. The new measures are:	
emergency conditions	shall have evider repeat the intent of	on Operator, and Balancing Authority that issues a verbal directive associated with real-time operational nce such as voice recordings or transcripts of voice recordings to show that it required the recipient of of the directive back; and acknowledged the response as correct or repeated the original statement to	
Each Reliability Coordinator, Balancing Authority, Transmission Operator, Generator Operator, Transmission Service Provider, Load-Serving			

Organization	Question 5:	Question 5 Comments:		
Entity, Distribution Pro evidence such as voice	Entity, Distribution Provider, and Purchasing-Selling Entity that is the recipient of a verbal directive issued per Requirement R1 shall have evidence such as voice recordings or transcripts of voice recordings			
American Transmission Company	Yes and No	As long as the measurement of compliance does not include proving the negative, that no directives were issued.		
Response: The RC S	DT thanks you fo	r your comment.		
Buckeye Power, Inc.	Yes and No	Abstain		
CU of Springfield	Yes	CU supports moving M1 to COM-003 and retiring COM-002.		
Response: The RC S	DT thanks you fo	r your comment.		
Manitoba Hydro	Yes			
NPCC	Yes			
Ameren	Yes			
Independent Electricity System Operator - Ontario	Yes			
Reliability Coordinator Comment Working Group	Yes			
Northern California Power Agency	Yes			

Organization	Question 5:	Question 5 Comments:
MRO NERC SDTandards Review Subcommittee	Yes	
Salt River Project	Yes	
US Bureau of Reclamation	Yes	
PJM Interconnection	Yes	
Bonneville Power Administration	Yes	
AEP	Yes	
ISO/RTO Council Standards Review Subcommittee	Yes	

6. Do you agree with the Violation Severity Levels proposed in COM-002-3 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The RC SDT received comments recommending revisions to the VSLs based on revisions to the requirements and measures. The RC SDT did this and created new VSLs for new Requirement R2. The revised VSLs are:

Requirement	Lower	Moderate	High	Severe
R1	N/A	The responsible entity provided a clear-issued a verbal directive in a clear, concise and definitive manner-associated with real- time operating emergency conditions and required the recipient to repeat the directiveintent of the directive, but did not acknowledge the recipient was correct in the repeated directive OR failed to repeat the intent of the original statement to resolve any misunderstandings.	The responsible entity provided a clear issued a verbal directive associated with real-time operating emergency conditionsin a clear, concise and definitive manner, but did not require the recipient to repeat the intent of the directive.	The responsible entity issued a verbal directive associated with real-time operating emergency conditions and required the recipient to repeat the intent of the directive, but did not acknowledge the recipient was correct in the repeated directive AND failed to repeat the intent of the original statement to resolve any misunderstandings The responsible entity failed to provide a clear directive in a clear, concise and definitive manner when required.
<u>R2</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	The responsible entity that is the recipient of a verbal directive issued per Requirement R1 failed to repeat the intent of the directive back to the issuer of the directive.

	Organization	Question 6:	Question 6 Comments:
	Southern Company Transmission	No	6.1 - The severity levels need to be revised to match the new requirements.
	Response: The RC S	DT thanks you for	your comment. The VSLs were revised based on revisions to the requirements.
	SERC OC Standards Review Group	No	6.1 - The severity levels need to be revised to match the new requirements
	Response: The RC S	DT thanks you for	your comment. The VSLs were revised based on revisions to the requirements.
	PJM Interconnection	No	The word "clear" is redundantly used in the High and Severe columns.
			Recommend that "Moderate" should read: "The Responsible Entity provided a directive in a clear, concise and definitive manner, but did not require the recipient to repeat the directive back to the originator."
			Recommend that "High" should read: "The Responsible Entity failed to issue a directive in a clear, concise and definitive manner while ensuring the recipient of the directive repeated the information back correctly with acknowledgment by the originator that the response was correct."
I			Recommend that "Severe" should read: "The Responsible Entity failed on more than one occasion to issue a directive in a clear, concise and definitive manner while ensuring the recipient of the directive repeated the information back correctly with acknowledgment by the originator that the response was correct."
	requirements, measure	es and VSLs. Base ree with your sugg	your comment. We have removed the language "clear, concise and definitive manner" from the ed on the requirements, the VSLs were revised as shown above in the Summary Consideration estion on the Severe VSL regarding the number of occasions. The requirement is a stand alone th time.
	FirstEnergy	No	The VSL should be modified if our comments in question 4 result in changes to the proposed requirements.

Organization	Question 6:	Question 6 Comments:	
Response: The RC S	Response: The RC SDT thanks you for your comment. The VSLs were revised based on revisions to the requirements.		
Duke Energy	No	The use of words like "clear, concise, and definitive manner" is subject to interpretation. The issuer of the directive should not be subject to non-compliance if the recipient of the directive refuses to repeat back. Need to add a requirement, measure, and VSL that clarifies that the recipient of a directive is obliged to perform their portion of a repeat-back.	
		your comment. We concur with your comments. The words "clear, concise, and definitive manner" t, measure and VSLs. A separate requirement has been added per your suggestion.	
American Transmission Company	No	R1-High VSL-If the directive was followed and there was no threat to the BES, then a lack of repetition of the directive does not constitute a "high" VSL. Suggest that this be a low or moderate VSL.	
		your comment. We have revised the requirements, measures and VSLs to reflect that these al-time operating emergency conditions.	
Buckeye Power, Inc.	Yes and No	abstain	
Manitoba Hydro	Yes		
NPCC	Yes		
CU of Springfield	Yes		
Ameren	Yes		
Independent Electricity System Operator - Ontario	Yes		
Reliability Coordinator	Yes		

Organization	Question 6:	Question 6 Comments:
Comment Working Group		
Northern California Power Agency	Yes	
MRO NERC SDTandards Review Subcommittee	Yes	
Entergy Services, Inc	Yes	
Salt River Project	Yes	
US Bureau of Reclamation	Yes	
Bonneville Power Administration	Yes	
AEP	Yes	
ISO/RTO Council Standards Review Subcommittee	Yes	

7. Do you agree with the revisions to the Requirements in IRO-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The RC SDT has received a notable number of comments suggesting edits to the proposed requirements and measures for the draft standard, particularly regarding the phrase "without intentional delay." The comments do not oppose the objective of the phrase, but often point out the issues of measuring intent and measuring time delay.

To maintain the intent while improving the measurability of the requirement, the SDT proposes to modify the standard as follows: delete the phrase 'without intentional delay' and leave the obligation of response and timing an unstated requirement of R1 "The RC shall act or direct actions..."

R2 was modified as shown below – note that the phrase, "without intentional delay" was removed from all requirements, measures and VSLs:

R2. <u>Each</u> Transmission Operators, Balancing <u>AuthoritiesAuthority</u>, Generator Operators, Transmission Service Providers, Load-Serving <u>EntitiesEntity</u>, Distribution Providers, and Purchasing-Selling <u>EntitiesEntity</u> shall <u>act without intentional delay to</u> comply with <u>its</u> Reliability Coordinator's directives unless such actions would violate safety, equipment, or regulatory or statutory requirements.

An RC that requires a given action in a given time will be expected to inform the impacted entities of those actions and time requirements. This revision would obviate the need for providing a measure for "intent", while still maintaining the reliability intent of the original requirement.

The SDT proposes to re-post the standard to obtain stakeholder feedback on the suggested revisions

Organization	Question 7:	Question 7 Comments:
Manitoba Hydro	No	I do not agree with the way IRO-001-2 R1 is written. In the present form the requirement may infer that directing action is not an action. It may also infer that the RC is only required to do "act "or "direct actions" but not both. The way it is written also leads to problems with the VSLs. Perhaps R1 can be edited along the lines of:
		R1. The Reliability Coordinator shall act to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts. When required, the actions initiated by the Reliability Coordinator will include, but is not limited to, directing the actions to be taken by Transmission

Organization	Question 7:	Question 7 Comments:	
		Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load- Serving Entities, Distribution Providers and Purchasing-Selling Entities within its Reliability Coordinator Area.	
		I agree with the other Requirements in IRO-001-2 with the exception of the "High" Violation Risk Factor assigned to IRO-001-2 requirement R5. This should be a "Medium" VRF at the most. If the emergency has been mitigated, and the entities are not aware, they will still be operating to restrictions, which means the grid is operating well within limits. Not notifying the entities that the problem has been mitigated may have some financial implications but it should not place the grid at risk.	
Response: The RC S not modify the original		r your comment. The recommended language change is what the requirement means. The SDT did say the same thing.	
The RC SDT agrees a	nd modified the V	'RF for R5 to medium.	
Independent Electricity System	No	R2: the phrase "act without intentional delay" is not necessary since the urgency of taking any actions as directed by the RC's are generally understood to be conveyed in the RC's directives.	
Operator - Ontario		R3: Given R2 requires the responsible entities to comply with the RC directives, the part that says "immediately confirm the ability to comply with the directive or" is not needed. R3 should simply require the responsible entities to notify the RC upon recognition of the inability to perform the directive.	
		The VRF for R5 should not be High. Failure to notify others when potential threats to system reliability have been mitigated does not constitute a high risk to the interconnected system. We suggest it be reduced to a Medium (i.e., that it affects control of the BES).	
Response: The RC S	Response: The RC SDT thanks you for your comment.		
The RC SD	The RC SDT agrees to remove this phrase. The majority of commenters found this to be unnecessary.		
Agreed, the	Agreed, the RC SDT modified R3 to remove "immediately confirm the ability to comply with the directive or"		
The RC SD	The RC SDT agrees and modified the VRF for R5 to medium.		
MRO NERC SDTandards Review	No	New requirement R2 should omit act without intentional delay. The desired outcome is for the responsible entity to comply with the RC directive. Adding act without intentional delay only confuses	

Organization	Question 7:	Question 7 Comments:
Subcommittee		the situation and adds questions. What is an intentional delay? The word act implies that the requirement is met simply if the responsible entity attempted to meet the directive but was unable to do so. That is already considered in with the clause that begins "unless such actions would violate". Thus, the word act is not necessary.
		The word immediately should be removed from the new R3. This attempts to time frame the response of the responsible entity and remove the judgment from the compliance auditor. We agree with the concept of doing this but in reality it only confuses the issue and the compliance auditor will likely apply his judgment regarding what immediate is anyway. Additionally, the requirement attempts to separate the act of confirming that the responsible entity can take the action from notifying the RC that the entity can't take the action. This is not logical. What RC is going to request a responsible entity to take action that would violate safety, equipment, statutory, or regulatory requirements? The RC should already be aware of those requirements and likely won't direct actions that violate them. Thus, the likely scenario is that the responsible entity will attempt to take action and discover that equipment is not function properly and thus notify the RC. We suggest striking the "shall immediately confirm the ability to comply with the directive or" from the requirement. This part of the requirement is not needed because the responsible entity is already obligated to follow the RCs directive (see order 693.) Thus, the assumption is that the order will be followed unless it can't be followed because it will violated safety, equipment, statutory, or regulatory requirements.
		Requirements R4 and R5 are unnecessary. New R1 requires the RC to direct actions to be taken by the TOP, BA, GOP, TSP, LSE, DP and PSE to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts. The RC can't direct these actions without notifying all impacted TOPs and BAs. They would also have to notify them when actions are no longer necessary.
Response: The RC S be unnecessary.	DT thanks you fo	or your comment. The RC SDT agrees to remove this phrase. The majority of commenters found this to
The RC SDT agrees.	We have modified	d R3 to remove "immediately" and "confirm the ability to comply with the directive or".
		d to R4 and R5, as some impacted entities may not need to take action or be issued directives but eness associated with knowing the status of operating issues.
Southern Company	No	7.1 - Applicability 4.2 - Transmission Operator should be plural.

Organization	Question 7:	Question 7 Comments:
Transmission		7.2 - The revised definition of "Adverse Reliability Impacts" (R1) should be included at the top of Standard IRO-001-2, per Glossary of Terms Used in Standards: All defined terms used in reliability standards shall be defined in the glossary. Definitions may be approved as part of a standard action or as a separate action. All definitions must be approved in accordance with the standards process.
		7.3 - In R2 insert the word "its" before Reliability Coordinator.
		7.4 - In R3, replace "immediately" with "without intentional delay", replace "ability" with "intent", replace "or" with "and" and replace "the" with "its" before Reliability Coordinator.
Response: The RC S	SDT thanks you fo	r your comment.
7.1 agreed, The RC S	DT modified the a	pplicability section.
7.2 The revision to the	e definition will be	placed in the correct location on the next posting and will be balloted along with the standard revisions.
7.3 The RC SDT agre	es and modified F	2, the expectation is the entity's RC will issue the directives, not a different RC.
		"the" with "its" before RC. Note that based on comments from other stakeholders, the phrase, ly" has been omitted from the revised requirement.
ISO New England Inc.	Yes and No	We believe the word "threat" should be replaced with "events" in Requirements 4 and 5.
	ay be taken to pre	or your comment. The RC SDT chose the term "threat with Adverse Reliability Impacts" to convey the vent an event when an RC identified a potential threat. This will help better ensure reliability by an event to occur.
Entergy Services, Inc	No	PER-003 R1 does not specifically address delegated functions; therefore, this requirement is not redundant with IRO-001 R6 without changes to PER-003 to specifically deal with employees
		performing delegated functions.
Response: The RC S	SDT thanks you fo	
Response: The RC S		
Response: The RC S The RC SDT referenc	es the NERC ROI	r your comment.

Organization	Question 7:	Question 7 Comments:		
		The review team shall conduct at least one on-site visit to the applicant's facilities. This may also ble for delegated tasks. During the visit, the review team will:		
a. Review with the ap	a. Review with the applicant the data collected through the questionnaires;			
b. Interview the opera	b. Interview the operations and management personnel;			
c. Inspect the facilities	and equipment;			
d. Request a demonst	tration of all tools i	dentified in the certification standard;		
e. Review all necessa	ry documents and	data including all agreements, processes, and procedures identified in the certification standard;		
f. Review certification	documents and pr	ojected system operator work schedules; and		
g. Review any addition	nal documentation	that is needed to support the completed questionnaire or inquiries arising during the site-visit.		
MEAG Power	No	Directives that are mandatory under R2 of IRO-001-2 should have boundaries consistent with the proper role of an RC. For example, if an RC directs an LSE with a 15% planning reserve margin to execute purchase power agreements until its reserve margin is at least 20% and the LSE refuses, then the LSE may have violated this standard. Other examples of improper RC directives are directives to increase coal inventories, buy firm fuel transportation rights, reconductor transmission lines, purchase spare equipment, etc. Granted entities may be able to conjure up a regulatory or statutory basis for refusing many improper RC directives but in some instances there may be no permissible grounds to refuse. The appropriate solution is to modify the standard to ensure that improper directives are never mandatory in the first place. Specifically, NERC is urged to state that RC directives are mandatory only if they pertain to specific categories such as: switching orders to reconfigure the BES, orders to postpone scheduled outages of BES equipment, orders to change generator output, orders to curtail transactions or orders to curtail load.		
	Response: The RC SDT thanks you for your comment. It is envisioned by the RC SDT that such RC directives consist of real-time and same- day operating actions that prevent or mitigate events that may or will cause Adverse Reliability impacts.			
FirstEnergy	No	R3 - should be a sub requirement of R2. These two requirements are sequential in nature and should be measured at the same time. The VRFs and Time Horizons are the same for both requirements lending to their combination into a requirement with a sub requirement. In the VSL for R2, an entity is being penalized with a high severity level for not completely following an RC directive even though it violated safety, equipment, statutory, or regulatory requirements. Measuring R2 and R3 at the same		

Organization	Question 7:	Question 7 Comments:		
		time allows for the process to complete prior to the measurement taking place.		
		R3 - The "or" between "Distribution Provider" and "Purchasing-Selling Entity" should be replaced with an "and".		
		R4 - Should be revised by adding the phrase "of the expected or actual threat" to the end of the requirement to add clarity.		
		Existing R7 requirement - This requirement is proposed for retirement because it is redundant with IRO-014-1 R1. However, it is not clear how the existing requirement to "have clear, comprehensive coordination agreements with adjacent RCs to ensure that SOL or IROL violation mitigation requiring actions in adjacent RC areas are coordinated" is covered in IRO-014-1 R1. IRO-014-1 R1 requires agreements for coordination of actions between RCs to support Interconnection reliability, but it does not specifically require "clear" and "comprehensive" agreements to mitigate SOL or IROL violations. IRO-014-1 only vaguely covers the existing requirement R7 of IRO-001-1.		
	Response: The RC SDT thanks you for your comment. The intent of the drafting team is to have distinct requirements that are measured independently. Having one as a subrequirement will not allow that to occur.			
The RC SDT revised the	The RC SDT revised the "or" to an "and".			
R4, The recommended same thing.	ended language change is what the requirement means. The RC SDT did not modify the original language as they say the			
R7, The industry comn	e industry comments do not support being more specific in IRO-014-1 R1 in order to retire IRO-001-1 R7.			
SERC OC	Yes and No	7.1 - Applicability 4.2 - Transmission Operator should be plural.		
Standards Review Group		7.2 - The revised definition of "Adverse Reliability Impacts" (R1) should be included at the top of Standard IRO-001-2, per Glossary of Terms Used in Standards: All defined terms used in reliability standards shall be defined in the glossary. Definitions may be approved as part of a standard action or as a separate action. All definitions must be approved in accordance with the standards process.		
		7.3 - In R2 insert the word "its" before Reliability Coordinator		
		7.4 - In R3, replace "immediately" with "without intentional delay", replace "ability" with "intent", replace "or" with "and" and replace "the" with "its" before Reliability Coordinator.		

Organization	Question 7:	Question 7 Comments:		
Response: The RC S	Response: The RC SDT thanks you for your comment.			
7.1 The RC SDT agree	es and will modify	the applicability section.		
7.2 The revision to the	definition will be	placed in the correct location on the next posting and will be balloted along with the standard revisions.		
7.3 Agreed, The RC S	DT modified R2, t	the expectation is the entities RC will issue the directives, not a different RC.		
		"the" with "its" before RC. Note that based on comments from other stakeholders, the phrase, ly" has been omitted from the revised requirement.		
US Bureau of Reclamation	No	R4. and R5. Both of these Requirements use the phrase "without intentional delay" to describe the urgency of the notification to impacted entities. In both requirements we recommend the language be changed from "notify, without intentional delay" to "immediately notify".		
Response: The RC S	DT thanks you fo	r your comment. We have removed the phrase from the requirements.		
American Transmission Company	No	R2 refers to "intentional delay". The determination of intent should be left to the VSL portion of the standard, not the requirement portion.		
Response: The RC S	DT thanks you fo	r your comment. The RC SDT has removed "without intentional delay" from the proposed requirement.		
Consolidated Edison Co. of NY, Inc.	Yes and No	Wording in question: R.2/M.2 Each Load-Serving Entity, or Purchasing-Selling Entity shall have evidence that it acted without intentional delay to comply with the Reliability Coordinator's directives.R.3/M.3 Each — Load-Serving Entity, or Purchasing-Selling Entity shall have evidence that it confirmed its ability to comply with the Reliability Coordinator's directives.		
		[1] Question: Is this wording absolutely necessary? And then, is it sufficient, if needed? Comment: First, we would question whether there is a specific need to include this wording. Is the IRO-001 Reliability Standard sufficient without it?		
		[2] Question: Is this wording unambiguous? Comment: The wording seems somewhat vague and ambiguous. Analysis: The wording appears to establish performance standards ("without intentional delay", "shall immediately confirm") and evidentiary requirements ("evidence that it acted" or "evidence that it confirmed"), but without using pre-existing defined terms, establishing new defined		

Organization	Question 7:	Question 7 Comments:
		terms, or defining these terms as used in context.
		[3] Intentional vs. Unintentional, Valid Intentional vs. Inappropriate Intentional? How does one differentiate between intentional and unintentional delay? When is and how much delay is valid or inappropriate? Isn't some intentional delay necessary to ensure that the other parts of the requirement being are met, e.g., — unless such actions would violate safety, equipment, or regulatory or statutory requirements?? Mightn't some acceptable amount of valid intentional delay be necessary to insure that any such RC directive and entity action would not in fact violate these safety, equipment, or regulatory or statutory or statutory or statutory or statutory requirements?
		[4] What is the timeliness standard?
		How are the terms "without delay" and "immediately conform" defined? What standard commercial measures would apply, e.g., "reasonably efforts" vs. "best efforts"? Are these terms measured in units of time (seconds or minutes) or in units of performance quality? Does a poorly considered "immediate" reply meet the standard, while a well considered reply, which is intentionally delayed, yet still appropriate, fail to meet this standard? Is that the best outcome?
		[5] What is this Evidentiary Standard? Is the sought-after "evidence" sufficiently well defined, e.g., phone logs, computer e-mail, control center computer logs, hand-written operator journals, etc.? What form of evidence is necessary and sufficient to demonstrate that the entity met this evidentiary standard? How is failure to meet this uncertain standard measured, judged and penalized?
Response: The RC S	SDT thanks you fo	r your comment.
The RC SDT has remo	oved the phrases	"immediately" and "without intentional delay" from the proposed requirements.
Duke Energy	No	Requirement R1 - What happens if the RC failed to recognize that such an event was happening as opposed to failed to take action? Is this intended to cover both scenarios? The term "Adverse Reliability Impacts" is being changed and is listed in the associated Implementation Plan. The revision development of this definition needs to go thru Due Process. The inclusion of TSPs, LSEs, and PSEs here indicates the need to include these functions in the COM-001-2 requirements concerning the use of English as the approved language. In addition, this also indicates the need for all of these listed entities to be included in COM-002-3 requirements concerning repeat-backs. The RC, TOP, and BA should not be placed in a possible non-complaint state because the counter party refuses a repeat-back AND these requirements are not applicable to the counter party.

Organization	Question 7:	Question 7 Comments:	
		Requirement R2 - The language in the Moderate VSL of R2 recognizes another potential reason for delay in execution of a directive. Requirement 2 of the Standards needs to be modified to also recognize this potential.	
		Requirements R2 and R3 - Clarify that entities are obligated to take action and confirm directives only from their Reliability Coordinators, not from any Reliability Coordinator. Requirements R2, R3, R4, R5 - Inconsistent use of "timing" words in the standards — "without intentional delay" and "immediately". Suggest deleting these words due to the difficulty of determining compliance.	
		Requirement R4 - The term "Adverse Reliability Impacts? is being changed and is listed in the associated Implementation Plan. The revision of this definition needs to go through Due Process.	
		Requirement R5 - The VRF should be "Lower" instead of "High" since the notification is that the threat has been mitigated. Also, the term "Adverse Reliability Impacts" is being changed and is listed in the associated Implementation Plan. The revision of this definition needs to go through Due Process.	
Response: The RC SDT thanks you for your comment.			
	R1 Both scenarios are envisioned by the requirement. The proposed revision to the definition will be balloted along with the standard revision. & R4, &R5. The TSPs, LSEs, and PSEs have been added to COM-001 and COM-002 as you suggest.		
R2, already included in	R2, already included in R2 "unless such actions would violate safety, equipment, or regulatory or statutory requirements."		
R2, R3, The RC SDT r the standard.	nodified R2, R3 to	o identify "its" RC. The phrases "immediately" and "without intentional delay" have been removed from	
R4 The revision to the	definition will be	placed in the correct location on the next posting and will be balloted along with the standard revisions.	
R5, The RC SDT modi	R5, The RC SDT modified the VRF for R5 to medium based on other industry comments.		
Buckeye Power, Inc.	Yes and No	abstain	
ISO/RTO Council Standards Review Subcommittee	Yes and No	New requirement R2 should omit act without intentional delay. Use of intentional implies willful disregard for compliance for the requirement. Intention should not be addressed as part of the compliance with the requirement but rather through the enforcement process once the compliance auditor has identified a violation.	

Organization	Question 7:	Question 7 Comments:
		The word immediately should be removed from the new R3. This attempts to time frame the response of the responsible entity and remove the judgment from the compliance auditor. We agree with the concept of doing this but in reality it only confuses the issue and the compliance auditor will likely apply his judgment regarding what immediate is anyway. Additionally, the requirement attempts to separate the act of confirming that the responsible entity can take the action from notifying the RC that the entity can't take the action. This is not logical. What RC is going to request a responsible entity to take action that would violate safety, equipment, statutory, or regulatory requirements? The RC should already be aware of those requirements and likely won't direct actions that violate them. Thus, the likely scenario is that the responsible entity will attempt to take action and discover that equipment is not functioning properly and thus notify the RC. We suggest striking the "shall immediately confirm the ability to comply with the directive or" from the requirement. This part of the requirement is not needed because the responsible entity is already obligated to follow the RCs directive (see order 693.) Thus, the assumption is that the order will be followed unless it can't be followed because it will violate safety, equipment, statutory, or regulatory requirements. Requirements R4 and R5 are unnecessary. New R1 requires the RC to direct actions to be taken by the TOP, BA, GOP, TSP, LSE, DP and PSE to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts. The RC can't direct these actions without notifying all impacted TOPs and BAs. They would also have to notify them when actions are no longer necessary.
Response: The RC SDT thanks you for your comment. The RC SDT has removed the phrases "immediately" and "without intentional delay" from the proposed requirements. The RC SDT modified R3 based on industry comments and the phrase, "shall immediately confirm the ability to comply with the directive or" was removed from the requirement.		
The RC SDT does not agree with regard to R4 and R5, as some impacted entities may not need to take action or be issued directives but would benefit from the situational awareness associated with knowing the status of operating issues.		
The RC SDT modified	The RC SDT modified the VRF for R5 to medium based on industry comments.	
CU Springfield	Yes	CU supports the effort to consolidate redundant requirements in the standards.

Organization	Question 7:	Question 7 Comments:
Response: The RC S	DT thanks you fo	or your comment.
PJM Interconnection	Yes	
Salt River Project	Yes	
NPCC	Yes	
Ameren	Yes	
Reliability Coordinator Comment Working Group	Yes	
Northern California Power Agency	Yes	
Bonneville Power Administration	Yes	
AEP	Yes	

8. Do you agree with the revisions to the Measures in IRO-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration:

The RC SDT has received a notable number of comments suggesting edits to the proposed requirements and measures for the draft standard, particularly regarding the phrase "without intentional delay." The comments do not oppose the objective of the phrase, but often point out the issues of measuring intent and measuring time delay.

To maintain the intent while improving the measurability of the requirement, the SDT proposes to modify the standard as follows: delete the phrase 'without intentional delay' and leave the obligation of response and timing an unstated requirement of R1 "The RC shall act or direct actions..."

An RC that requires a given action in a given time will be expected to inform the impacted entities of those actions and time requirements. This revision would obviate the need for providing a measure for "intent", while still maintaining the reliability intent of the original requirement.

The SDT proposes to re-post the standard to obtain stakeholder feedback on the suggested revisions.

Organization	Question 8:	Question 8 Comments:
CU of Springfield	No	M2 and M3 should include Distribution Provider as one of the entities to comply with directives from the Reliability Coordinator.
Response: The RC SDT thanks you for your comment. The SDT will correct the oversight.		
Independent Electricity System Operator - Ontario	No	Wording in some of the Measures needs to be revised to reflect changes to R2 and/or R3, if our proposed changes are accepted. Also, we suggest the Requirement numbers be referenced in the Measures.
Response: The RC SDT thanks you for your comment. The SDT has revised the R2 and R3 and the associated measures per stakeholder comments. We have also added the associated requirement number to each measure.		

Organization	Question 8:	Question 8 Comments:
Reliability Coordinator Comment Working Group	No	Measures do not align with VSLs (see question 9)
Response: The RC S	SDT thanks you fo	br your comment. We will ensure that the VSLs and measures align.
MRO NERC SDTandards Review Subcommittee	No	Some compliance auditors have been taking the need for evidence to the extreme. We have encountered actual situations where if a measure states evidence shall be provided for requirements that are event based, the compliance auditor expected evidence even if no event occurred. For example, some RCs rarely issue directives. As M1 is written, some compliance auditors would require the RC to provide evidence that no reliability directives were issued. This is not possible. We suggest modifying the measurement to: Each Reliability Coordinator shall have evidence that it acted, or issued directives, to prevent or mitigate the magnitude or duration of Adverse Reliability Impacts within its Reliability Coordinator Area if needed. If there were no directives issues (assuming there are no complaints or evidence to the contrary of the need to issue a directive), no evidence is necessary."
auditor). This issue s	hould be address	or your comment. The RC SDT agrees with the principle (i.e. should not have to prove a negative to an ed with NERC or Regional Compliance personnel. The RC SDT has the obligation to draft measures ure (M1) for R1 accomplishes that as written.
Southern Company Transmission	No	 8.1 - In M2 and M3, Add Distribution Provider. 8.2 - In M2 add "intentional" between "without" and "delay". 8.3 - In M3 replace "ability" with "intent", replace "or" with "and" and replace "the" with "its" before Reliability Coordinator's and Reliability Coordinator.8.4 - In M5, change "has" to "had".
We have removed the	phrases "immedi	or your comment. We have added DP to the measures M2 and M3. ately" and "without intentional delay" from the measures. " in the measure to mirror the requirement. We have made the other revisions that you suggested.

Organization	Question 8:	Question 8 Comments:
MEAG Power	No	The M2 measure should not mandate compliance with RC directives that are improper as defined in my response to question 7.
		your comment. It is envisioned by the RC SDT that RC directives consist of real-time and same-day e events that may or will cause Adverse Reliability impacts.
SERC OC	Yes and No	8.1 - In M2 and M3, Add Distribution Provider.
Standards Review Group		8.2 - In M2 add "intentional" between "without" and "delay".
Croup		8.3 - In M3 replace "ability" with "intent", replace "or" with "and" and replace "the" with "its" before Reliability Coordinator's and Reliability Coordinator.8.4 - In M5, change "has" to "had".
Response: The RC S	DT thanks you fo	r your comment. We have added DP to the measures M2 and M3.
We have removed the	phrases "immedi	ately" and "without intentional delay" from the measures.
The RC SDT has left t	he word "inability"	in the measure to mirror the requirement. We have made the other revisions that you suggested.
US Bureau of Reclamation	No	M4. and M5. In both Measures, recommend "without intentional delay" be changed as described above for R4. and R5.
Response: The RC S the requirement and m		r your comment. Based on stakeholder comments, we have removed "without intentional delay" from
Progress Energy Carolinas		
FirstEnergy	No	M2 - The word "intentional" should be added between "without" and "delay".
Response: The RC S delay" from the require		r your comment. Based on stakeholder comments, we have removed the phrase "without intentional re.
Duke Energy	No	Measures M2, M4 and M5 use the terms "without delay" and "without intentional delay". Suggest deleting these words due to the difficulty of determining compliance. The term "Adverse Reliability

Organization	Question 8:	Question 8 Comments:
		Impacts" is being changed and is listed in the associated Implementation Plan. The revision of this definition needs to go through Due Process.
Response: The RC SDT thanks you for your comment.		
We have removed the phrases "immediately" and "without intentional delay" from the measures.		
The proposed definition has been added to the standard and will be posted with the proposed revisions to the standard.		
Consolidated Edison Co. of NY, Inc.	Yes and No	[Comments repeated for Measures] Wording in question:R.2/M.2 Each Load-Serving Entity, or Purchasing-Selling Entity shall have evidence that it acted without intentional delay to comply with the Reliability Coordinator's directives.R.3/M.3 Each Load-Serving Entity, or Purchasing-Selling Entity shall have evidence that it confirmed its ability to comply with the Reliability Coordinator's directives.
		[1] Question: Is this wording absolutely necessary? And then, is it sufficient, if needed? Comment: First, we would question whether there is a specific need to include this wording. Is the IRO-001 Reliability Standard sufficient without it?
		[2] Question: Is this wording unambiguous? Comment: The wording seems somewhat vague and ambiguous. Analysis: The wording appears to establish performance standards ("without intentional delay", "shall immediately confirm") and evidentiary requirements ("evidence that it acted" or "evidence that it confirmed"), but without using pre-existing defined terms, establishing new defined terms, or defining these terms as used in context.
		[3] Intentional vs. Unintentional, Valid Intentional vs. Inappropriate Intentional? How does one differentiate between intentional and unintentional delay? When is and how much delay is valid or inappropriate? Isn't some intentional delay necessary to ensure that the other parts of the requirement being are met, e.g., unless such actions would violate safety, equipment, or regulatory or statutory requirements?? Mightn't some acceptable amount of valid intentional delay be necessary to insure that any such RC directive and entity action would not in fact violate these safety, equipment, or regulatory or statutory requirements?
		[4] What is the timeliness standard? How are the terms "without delay" and "immediately conform" defined? What standard commercial measures would apply, e.g., "reasonably efforts" vs. "best efforts"? Are these terms measured in units of time (seconds or minutes) or in units of performance quality? Does a poorly considered "immediate" reply meet the standard, while a well considered reply, which is intentionally delayed, yet still appropriate, fail to meet this standard? Is that the best

Organization	Question 8:	Question 8 Comments:
		outcome?
		[5] What is this Evidentiary Standard? Is the sought-after "evidence" sufficiently well defined, e.g., phone logs, computer e-mail, control center computer logs, hand-written operator journals, etc.? What form of evidence is necessary and sufficient to demonstrate that the entity met this evidentiary standard? How is failure to meet this uncertain standard measured, judged and penalized?
Response: The RC S measures.	OT thanks you fo	or your comment. We have removed the phrases "immediately" and "without intentional delay" from the
Buckeye Power, Inc.	Yes and No	abstain
American Transmission Company	Yes	If some language is changed, we support the revisions. R2 has language in it that should be added to M4 to be consistent. In M2, we propose adding language "unless such actions would violate safety, statutory or regulatory requirements."
Response: The RC S	DT thanks you fo	r your comment.
The suggested change	e has been made.	
Manitoba Hydro	Yes	
NPCC	Yes	
Ameren	Yes	
Northern California Power Agency	Yes	
Entergy Services, Inc	Yes	
Salt River Project	Yes	

Organization	Question 8:	Question 8 Comments:
PJM Interconnection	Yes	
Bonneville Power Administration	Yes	
AEP	Yes	

9. Do you agree with the Violation Severity Levels proposed in IRO-001-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The VSLs were revised to reflect revisions to the requirements as well as the comments of stakeholders. Several comments suggested that there was no fundamental difference between the RC "acting" or "directing actions". The RC SDT agreed and removed the High VSL for R1 and revised the Severe VSL accordingly. Other commenters suggested removing the High VSL from R2 as the VSL contradicted the requirement. The RC SDT agreed and removed the VSL. All of the revised VSLs are in the table below.

Requirement	Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	N/A	N/A	N/A	The Reliability Coordinator failed to act or direct actions to prevent or mitigate the magnitude or duration of Adverse Reliability Impacts
R2	N/A	N/A	N/A	The responsible entity failed to follow the Reliability Coordinator directive and it would not have violated the safety, equipment, statutory or regulatory requirements. The responsible entity did not follow the Reliability Coordinators directive per requirement 2.
R3	N/A	N/A	N/A	The responsible entity failed to inform the its Reliability Coordinator upon recognition of the its inability to perform the directive.

R4	The Reliability Coordinator whe identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area and failed to issue an alert to one, but not all, impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area.	The Reliability Coordinator whe identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area <u>and</u> failed to issue an alert to two, but not all, impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area.	The Reliability Coordinator whe identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area and failed to issue an alert to three or more, but not all, impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area.	The Reliability Coordinator who identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area and failed to issue an alert to all impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area.
R5	The Reliability Coordinator <u>issued an alert failed to notify</u> <u>entities of a transmission problem</u> <u>but failed</u> to notify one, but not all, impacted Transmission Operators, Balancing Authorities, when the transmission problem had been mitigated.	The Reliability Coordinator issued an alert to notify entities of a transmission problem but failed to notify two, but not all, impacted Transmission Operators, Balancing Authorities, when the transmission problem had been mitigated.	The Reliability Coordinator issued an alert to notify entities of a transmission problem but failed to notify three or more, but not all, impacted Transmission Operators, Balancing Authorities, when the transmission problem had been mitigated.	The Reliability Coordinator <u>issued an alert to notify entities of</u> <u>a transmission problem but</u> failed to notify all impacted Transmission Operators, Balancing Authorities, when the transmission problem had been mitigated.
R6	N/A	N/A	N/A	The Reliability Coordinator failed to provide its <u>Operating operating</u> <u>Personnel personnel</u> with the authority to veto planned outages of its own analysis tools.

Organization	Question 9:	Question 9 Comments:
Manitoba Hydro	No	IRO-001-2 R1 VSLs: You can not split "shall act" and "or direct actions" into separate VSLs. They are one and same. If the RC directs action then they have acted. If the RC failed to direct action or have failed to other wise act then they have failed to act appropriately. Perhaps the VSLs can be drafted along the lines of the following: IRO-001-2 R1 High VSL The Reliability Coordinator's action was incomplete in that it failed to demonstrate a specific action to prevent or mitigate the magnitude or duration of Adverse Reliability Impacts. IRO-001-2 R1 Severe VSL The Reliability Coordinator failed to act to prevent or mitigate the magnitude or duration of

Organization	Question 9:	Question 9 Comments:
		Adverse Reliability Impacts.
		IRO-001-2 R2 VSLs: (1) Entities may be justified in an intentional delay in responding to an RC directive. A justified intential delay may due be equipment problems, a generators ramp rate or system voltage adjustments prior to large system reconfiguration or large transmission loading changes. (2) An entity cannot be faulted for not following an RC directive because to it would violate safety, equipment, regulatory or statutory requirements. Perhaps the VSLs can be drafted along the lines of the following: Moderate VSL should be deleted. High VSL The responsible entity followed the Reliability Coordinators directive but with an unjustified delay. Severe VSL no edits required.
		IRO-001-2 R5 VSLs: Perhaps the VSLs can be drafted along the lines of the following to reflect to what degree the RC missed the mark: Lower VSLThe Reliability Coordinator failed to notify <25% of its impacted Transmission Operators and Balancing Authorities when the transmission system problem had been mitigated. Moderate VSL The Reliability Coordinator failed to notify >24% but <50% of its impacted Transmission Operators and Balancing Authorities when the transmission system problem had been mitigated. High VSLThe Reliability Coordinator failed to notify >49% but <75% of its impacted Transmission Operators and Balancing Authorities when the transmission system problem had been mitigated. Severe VSL The Reliability Coordinator failed to notify >74% of its impacted Transmission Operators and Balancing Authorities when the transmission system problem had been mitigated. Severe VSL The Reliability Coordinator failed to notify >74% of its impacted Transmission Operators and Balancing Authorities when the transmission system problem had been mitigated.

R1: The RC SDT agrees with you regarding "act" and direct actions. Based on your and other stakeholders' comments, we have removed the High VSL and revised the severe VSL.

R2: 1. The SDT removed the "intentional delay" wording. 2. We concur with your statement. The RC SDT believes that the revised requirement is a binary and thus only requires one VSL. We have removed the High VSL and revised the severe VSL to:

The responsible entity failed to follow the Reliability Coordinator directive and it would not have violated the safety, equipment, statutory or regulatory requirements.

R5: The RC SDT developed a revised set of VSLs that are graded in a way that gives consideration to the number of impacted entities since some entities will have a very small number of entities to contact, and using percentages may not be effective.

		No	R1: There should not be any distinction made between an RC acting and an RC directing others to act. Failure to
Electri	city System		mitigate adverse reliability impacts a severe violation of the requirement. We therefore suggest to revise the High and Severe
			levels as: High if the RC did not act or direct actions to prevent an Adverse Reliability Impact; Severe if the RC did not act or

Organization	Question 9:	Question 9 Comments:
Operator - Ontario		direct actions to mitigate the magnitude or duration of an existing Adverse Reliability Impact.
		R2: The High VSL seems contradictory to the requirement, which already has provision of not fully complying with the RC directives due to safety, equipment, or regulatory or statutory requirements.
		R3: We have proposed some wording change to R3, which if adopted, would precipitate a need to revise the VSLs for R3 accordingly.
		(iv) R4 and R5: The VSLs for these two requirements could be graded by assessing the number and/or timing of notifying the affected entities.
Response: The RC S	DT thanks you for yo	ur comment.
The RC SI revised the severe VS		garding "act" and "direct actions". Based on yours and other stakeholders' comments, we have removed the High VSL and
We agree	and have removed the	e High VSL.
R3. The re	equirement was revise	ed and the Lower VSL removed.
R4 and R5	: We concur and hav	e expanded the VSLs to include notification of a varying number of entities.
Reliability	No	R1 talks about "shall act or direct actions to be taken".
Coordinator Comment Working		High VSL - failure to act.
Group		Severe VSL - failure to act and direct. Does "act" mean any action taken short of issuing a directive? Change Severe VSL to failure to act or direct and eliminate the High VSL all together.
		R2 delay in issuing a directive due to equipment problems should be included in the moderate VSL and the body of the requirement and in the measure. The High VSL should be removed because not following the directive for equipment failure is allowed per R2.
		R5 - Severe VSL should be changed to moderate VSL since the problem has been mitigated and the system is stable and it does not adversely impact reliability.
1		M3 talks about the ability of reliability entities to meet a directive. What constitutes evidence that confirms you are able to immediately comply with the directive? If the entity agrees to the directive and then is unable to comply due to events outside of their control, such as a CT not starting, do they meet the measure? If the entity, based on the circumstances at the time of the directive, agrees to comply in good faith are they compliant? The Lower VSL should be made N/A because it is not practical for an entity to immediately confirm they are able to meet the directive in all cases.
Response: The RC S	DT thanks you for yo	ur comment.

Organization	Question 9:	Question 9 Comments:
R1 - The RC SDT agre	es with you regarding	"act" and "direct actions" and has removed the High VSL and revised the Severe VSL.
R2 - Based on your an	d other stakeholders'	comments, we have removed the High VSL and revised the severe VSL.
R5: The VSL relates to developed a revised set		missed the requirement, not the threat to reliability (this is the VRF). The requirement is to notify "all". The RC SDT has this requirement.
M3. The requirement v	was revised to remove	e words such as "immediately" and intentional delay:
		g Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, and Purchasing- dinator upon recognition of its inability to perform a directive.
The measure was revis	sed to reflect the new	requirement which addresses your concerns. The Lower VSL was revised to N/A.
MRO NERC SDTandards Review Subcommittee	No	The R1 High and Severe VSL appear to differ only by the inclusion of directing actions in Severe. From a practical perspective, what is the difference between directing actions and acting? We don't believe there is any. The actions are the result of the RC authority whether the RC takes the actions themselves or directs someone else to. We suggest a better alternative for the VSL levels would be for the High level to reflect that the RC did not act or direct actions to prevent an Adverse Reliability Impact and Severe would be that the RC did not act or direct actions to mitigate the magnitude or duration of an existing Adverse Reliability Impact.
		The moderate VSL for R2 is not practical and too subjective. What constitutes a delay? What if the responsible entity takes five minutes to determine how to carry out the action or if their equipment currently is capable of carrying out the action? Is this a delay? We suggest striking this Moderate VSL. The High VSL does not agree with the requirement. It considers the inability to fully follow an RC directive due to a violation of the safety, equipment, statutory, or regulatory requirements a violation. This is in direct conflict with the requirement. We suggest that the High VSL should be struck. We suggest the Severe VSL should be that the responsible entity failed to follow the RC directive and it would not have violated the safety, equipment, statutory or regulatory requirements. Currently, the Severe category does not allow that the responsible entity may not be able to carry out the directive due to the violation of safety, equipment, statutory, or regulatory requirements.
		In question 7, we request that the drafting team strike part of requirement 3. The striking of that portion of requirement 3 obviates the lower VSL.
		In paragraph 27 of the ORDER ON VIOLATION SEVERITY LEVELS PROPOSED BY THE ELECTRIC RELIABILITY ORGANIZATION, the Commission expresses "that, as a general rule, gradated Violation Severity Levels, wherever possible, would be preferable to binary Violation Severity Levels". Given that it is possible to define gradated VSLs for R4 and R5, we suggest that the drafting team should consider applying the numeric performance category of the Violation Severity Levels Development Guidelines Criteria based on the number of impacted TOPs and BAs that were notified.

Organization	Question 9:	Question 9 Comments:			
	R1: The RC SDT agrees with you regarding "act" and "direct actions". Based on your and other stakeholders' comments, we have removed the High VSL and revised the severe VSL to include failure to "act or direct actions".				
R2. We have removed the table. The Severe		" verbiage and subsequently removed the Moderate VSL. We agree with you regarding the High VSL and have removed it from your suggestion.			
R3. The requirement v	vas revised and the Lo	ower VSL removed.			
R4 and R5: We concu	r and have expanded	the VSLs to include notification of a varying number of entities.			
Southern Company Transmission	No	9.1 - R1 is a binary requirement and should have only a severe VSL. The RC either acts or he doesn't - If he fails to act, he fails to direct and mitigate the problem by default.			
		9.2 - R2 VSLs need to be rewritten to recognize that some directives may not be followed because of safety, regulatory or statutory requirements.			
		9.3 - Remove the Lower severity level in R3 to conform to changes in R3 and M3.			
Response: The RC S	DT thanks you for you	ir comment.			
		"act" and "direct actions". Based on your and other stakeholders' comments, we have removed the High VSL and revised the requirement with just one VSL.			
R2. We agree and hav	ve removed the High \	/SL and revised the severe VSL to:			
The responsible entity	failed to follow the Re	liability Coordinator directive and it would not have violated the safety, equipment, statutory or regulatory requirements.			
R3. The requirement v	vas revised and the Lo	ower VSL removed.			
Entergy Services, Inc	No	The VSL for R2 does not seem consistent with the language in the requirement. It is not clear why the entity should be subject to a high VSL if the entity did not comply with an RC directive due to safety or regulatory prohibition, and made the RC aware of same.			
Response: The RC S	DT thanks you for you	ir comment. Please see Summary Consideration above. The High VSL for R2 was removed.			
Salt River Project	No	R1 states the RC must act OR direct. The R1 VSLs attempt to distinguish between act and direct. The requirement allows for either action. I suggest that the High VSL be removed and replaced by an N/A. The Severe VSL should be amended so that the words "act and direct" are replaced by the words "act OR direct" as is consistent with the requirement and the measure.			
		R2: The moderate VSL introduces the phrase "equipment problems" for the first time in the Standard. "Equipment Problems" needs to be included in the Requirement, R2, and defined in the Measure for			

Organization	Question 9:	Question 9 Comments:
		R2.R5: The Severe VSL needs to be moved to the Moderate category. This condition does not constitute an Adverse Reliability Impact that severely threatens the BES.
Response: The R	C SDT thanks you for y	/our comment.
	agrees with you regardi the phrase, "act or dire	ng "act" and "direct actions". Based on your and other stakeholders' comments, we have removed the High VSL and revised the ct."
R2. The moderate	VSL was removed.	
	es to how badly an enti ropriate VSLs for this r	ty missed the requirement, not the threat to reliability (this is the VRF). The requirement is to notify "all". The RC SDT believes it equirement.
FirstEnergy	No	R2 VSL - The Severe VSL should include after the word directive: "that would not violate safety, equipment, statutory or regulatory requirements".
Response: The R revised to:	C SDT thanks you for y	your comment. We agree with your premise, but the suggested wording of the VSL appears cumbersome. The VSL has been
The responsible en	tity did not follow the R	eliability Coordinator's directive per Requirement R2.
Duke Energy	No	The language in R1 of the VSL is not consistent with the requirements and measures in the standard. The VSL needs to recognize that the RC may EITHER act or give direction to others to act.
		The term "Adverse Reliability Impacts" is being changed and is listed in the associated Implementation Plan. The revision of this definition needs to go through Due Process.
		The language in R2 of the VSL places an entity in Moderate or High violation level even if failure is "allowed" in the standard; i.e. failure to act is due to violation of safety, regulatory, statutory requirements.
I		The language in R2 of the VSL recognizes another potential reason for delay in execution of a directive. Requirement R2 of the Standard needs to be modified to also recognize this potential.
Response: The R	C SDT thanks you for y	your comment.
R1: The RC SDT a severe VSL to use	agrees with you regardi the phrase, "act or dire	ng "act" and "direct actions". Based on your and other stakeholders' comments, we have removed the High VSL and revised the ct."
The proposed revis	ion to the term, "Adver	se Reliability Impact" will be posted for stakeholder comment with the next version of the standard.
R2 We agree and	have removed the Mo	derate and High VSLs and revised the Severe VSL to :

Organization	Question 9:	Question 9 Comments:
The responsible enti	ty failed to follow the R	eliability Coordinator directive and it would not have violated the safety, equipment, statutory or regulatory requirements.
The requirement alre	eady addresses equipn	nent.
American Transmission Company	No	VSLs for R2 and R3 are not appropriate. In order to assess a situation we may not be able to immediately inform the RC of our ability to comply with the directive. The high VSL for R2 currently states that if we do not follow the directive because of safety, statutory or regulatory requirements, it is a high VSL. An entity should not be penalized for not breaking the law.
Response: The RC	SDT thanks you for yo	bur comment.
R2: We agree and h	nave removed the Mode	erate and high VSLs.
R3. The requirement	t was revised to remov	re the "immediately" verbiage and the VSLs were revised accordingly – the Lower VSL was removed.
ISO/RTO Council Standards Review Subcommittee	No	The R1 High and Severe VSL appear to differ only by the inclusion of directing actions in Severe. From a practical perspective, what is the difference between directing actions and acting? We don't believe there is any. The actions are the result of the RC authority whether the RC takes the actions themselves or directs someone else to. We suggest a better alternative for the VSL levels would be for the High level to reflect that the RC did not act or direct actions to prevent an Adverse Reliability Impact and Severe would be that the RC did not act or direct actions to mitigate the magnitude or duration of an existing Adverse Reliability Impact.
		The moderate VSL for R2 is not practical and too subjective. What constitutes a delay? What if the responsible entity takes five minutes to determine how to carry out the action or if their equipment currently is capable of carrying out the action? Is this a delay? We suggest striking this Moderate VSL. The High VSL does not agree with the requirement. It considers the inability to fully follow an RC directive due to a violation of the safety, equipment, statutory, or regulatory requirements a violation. This is in direct conflict with the requirement. We suggest that the High VSL should be struck. We suggest the Severe VSL should be that the responsible entity failed to follow the RC directive and it would not have violated the safety, equipment, statutory or regulatory requirements. Currently, the Severe category does not allow that the responsible entity may not be able to carry out the directive due to the violation of safety, equipment, statutory, or regulatory requirements.
		In question 7, we request that the drafting team strike part of requirement 3. The striking of that portion of requirement 3 obviates the lower VSL.
		In paragraph 27 of the ORDER ON VIOLATION SEVERITY LEVELS PROPOSED BY THE ELECTRIC RELIABILITY ORGANIZATION, the Commission expresses "that, as a general rule, gradated Violation Severity Levels, wherever possible, would be preferable to binary Violation Severity Levels". Given that it is possible to define gradated VSLs for R4 and R5, we suggest that the drafting team should consider applying the numeric performance category of the Violation Severity Levels Development Guidelines Criteria based on the number of impacted TOPs and BAs that were notified.

Organization	Question 9:	Question 9 Comments:
Response: The RC S	DT thanks you for you	ir comment.
R1: The RC SDT agre severe VSL to use the		"act" and "direct actions". Based on your and other stakeholders' comments, we have removed the High VSL and revised the
R2. We agree and have	ve removed the Moder	rate and High VSLs and revised the Severe VSL to :
The responsible entity	failed to follow the Re	liability Coordinator directive and it would not have violated the safety, equipment, statutory or regulatory requirements.
R3. The requirement w	was revised and the Lo	ower VSL removed.
R4 and R5: We concu	r and have expanded	the VSLs to include notification of a varying number of entities.
SERC OC Standards Review	Yes and No	9.1 - R1 is a binary requirement and should have only a severe VSL. The RC either acts or he doesn't - If he fails to act, he fails to direct and mitigate the problem by default.
Group		9.2 - R2 VSLs need to be rewritten to recognize that some directives may not be followed because of safety, regulatory or statutory requirements.
		9.3 - Remove the Lower severity level in R3 to conform to changes in R3 and M3.
Response: The RC S	DT thanks you for you	ir comment.
R1: The RC SDT agrees with you regarding "act" and "direct actions". Based on your and other stakeholders' comments, we have removed the High VSL and revised the severe VSL to use the phrase, "act or direct."		
R2. We agree and have	ve removed the High \	/SL and revised the Severe VSL to:
The responsible entity	failed to follow the Re	liability Coordinator directive and it would not have violated the safety, equipment, statutory or regulatory requirements
R3. The requirement w	was revised and the Lo	ower VSL removed.
Consolidated Edison Co. of NY, Inc.	Yes and No	Agreement uncertain, subject to further clarification of Requirements and Measures performance standards and definitions (see our comments on Requirements and Measures). Without clearer definitions, e.g., for "immediate," or any allowance for appropriate intentional delay, it is not entirely clear that the VSLs comport with the ultimate meaning, intent and needed wording to be incorporated into the Requirements and Measures. Why would failure to fully comply, when precluded by conditions specifically allowed in the standard, necessarily be a problem, so long as the RC received timely notice, however defined?
Response: The RC SDT thanks you for your comment. The SDT removed the word, "immediate" and the phrase, "without intentional delay" from the standard.		

Organization	Question 9:	Question 9 Comments:
Buckeye Power, Inc.	Yes and No	abstain
Northern California Power Agency	Yes	
CU of Springfield	Yes	
NPCC	Yes	
Ameren	Yes	
US Bureau of Reclamation	Yes	
PJM Interconnection	Yes	
Bonneville Power Administration	Yes	
AEP	Yes	

10. Do you agree with the revisions to the Requirements in IRO-002-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The last proposed version of IRO-002-2 had two requirements – R1 required the Reliability Coordinator to request data from other entities; R2 required the Reliability Coordinator to provide its operating personnel with authority to veto planned outages of analysis tools.

Since the inception of this project (2006-06), the IROL Standards Drafting Team has proposed, successfully balloted and obtained NERC Board of Trustees' approval for a new Standard IRO-010-1: Reliability Coordinator Data Specification and Collection. The work of the IROL SDT retired IRO-002 Requirement R1 and eliminated the need for the proposed R2.

The team received comments expressing concern about eliminating the requirement to monitor frequency which had been in an earlier approved version of IRO-002. While the Standard Drafting Team (SDT) recognizes the concern raised, the SDT is even more concerned with the subjectivity that any attempt to measure "Monitoring" can provide. It is the SDT's contention that adherence to reliability standards that require the said monitoring cannot be demonstrated unless the entity is closely monitoring the system parameters. Furthermore, the SDT contends that any requirements that describe the monitoring facilities needed to fulfill fundamental duties should be embedded in Certification Requirements. With IRO-014 and IRO-001 R1 in place, the actual act of monitoring is a secondary task that is inherent in responding to situations or events that could have an adverse impact on reliability. The team retained the remaining requirement (Reliability Coordinator's authority to veto analysis tool outages) as it was a specific recommendation from the 2003 Blackout report. This requirement was revised and moved into IRO-001-2, R6.

<u>R6.</u> Each Reliability Coordinator shall <u>haveprovide its operating personnel with</u> the authority to veto planned outages to <u>its</u> <u>own</u> analysis tools, <u>including final approvals for planned maintenance</u>. [Violation Risk Factor: Medium] [Time Horizon: Real-time Operations, Same Day Operations and Operations Planning]

Organization	Question 10:	Question 10 Comments:
Independent Electricity System	No	R1: There is a duplicating requirement in TOP-005 R1.1. Suggest to eliminate one of the two.
Operator - Ontario		We do not agree with eliminating all of R5 to R8. There is a fundamental need for RCs to

Organization	Question 10:	Question 10 Comments:	
		monitor its area, and even some portion of its adjacent areas to be aware of situations that require preventive and mitigating actions. While arguments can be made that requiring RCs to prevent and mitigate adverse reliability impacts would imply monitoring, the latter is a fundamental duty of any RCs to ensure system reliability. If monitoring is not explicitly stated as a requirement, then the same argument may be extended to training and operational facilities. We do not agree with the drafting team's conclusion that it is not practical to measure real-time monitoring. Measuring can be illustrated, for example, by a compliance audit to review system logs and assess the extent to which an RC follows and assesses system conditions.	
		ou for your comment. Several NERC drafting teams are working on related standards. The RTO SDT II retire that standard upon approval. Therefore, there will be no redundancy because TOP-005 R1.1	
Monitoring: While the Standard Drafting Team (SDT) recognizes the concern raised, the SDT is even more concerned with the subjectivity that any attempt to measure "Monitoring" can provide. It is the SDT's contention that adherence to reliability standards that require the said monitoring cannot be demonstrated unless the entity is closely monitoring the system parameters. Furthermore, the SDT contends that any requirements that describe the monitoring facilities needed to fulfill fundamental duties should be embedded in Certification Requirements. With IRO-014 and IRO-001 R1 in place, the actual act of monitoring is a secondary task that is inherent in responding to situations or events that could have an adverse impact on reliability.			
Reliability Coordinator Comment Working Group	No	For R1, this should be 2 separate requirements and measures. R1 should have a methodology for determining what data is needed and then a R2 should be a requirement to request this data from the reliability entities.	
proposed, successfu	Response: The RC SDT appreciates your comments. Since the inception of this project (2006-06), the IROL Standards Drafting Team has proposed, successfully balloted and obtained NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data Specification and Collection. The work of the IROL SDT retired R1.		
MRO NERC SDTandards Review Subcommittee	No	New Requirement R1 is duplicate to the requirement TOP-005-1 R1.1. If the drafting team can't delete TOP-005-1 R1.1, they should notify other appropriate drafting teams of the need to remove the requirement.	
Subcommittee		We do not agree with eliminating requirements R5, R6, R7, and R8 in their entirety. The requirements as they are written are problematic. However, we do believe that there is a need for a basic	

Organization	Question 10:	Question 10 Comments:
		requirement to monitor the system. The requirements should be that the RC should compare actual system flows to SOLs and IROLs. While some will argue SOLs are not the responsibility of the RC, failure to monitor SOLs could cause the RC to miss unknown IROLs since an SOL can become an IROL. Several SOL violations in a given area also can be indicative of a broader system problem the RC should be addressing. We also do not agree with the drafting team's conclusion that it is not practical to measure real-time monitoring. It is very easy to measure. As an example, a compliance auditor could select a day and an SOL or IROL and ask for the system flows from that day or hour etc. This is generally easy for any RC to produce with today's data archiving software. We believe that there should be a requirement that the RC have a state estimator and real-time contingency analysis as well (RTCA). The drafting team needs to be careful in the construction of these requirements to make them practical and measurable. For instance, making the requirement to have a state estimator and RTCA is measurable in that the compliance auditor can verify their existence but this is not stringent enough because they may only run once a week. At the same time, if we create a requirement that SE and RTCA must run every 5 minutes, we could inadvertently create a requirement that there is a real-time assessment of voltage as well. New Requirement R2 is no longer needed as a result of paragraph 112 in Order 693-A. Since the RC's "authority to issue directives arises out of the Commission's approval of Reliability Standards" the RC already has veto authority or will have once R1 IRO-001-2 is approved. This requirement obligates the RC to take actions or direct actions to prevent Adverse Reliability Impacts. Veto outages of equipment and analysis tools would fall into this category even if the RC couldn't say for certain that an Adverse Reliability Impact was going to occur but rather they are concerned one could occur due to heavy loads for exam

Response: The RC SDT appreciates your comments. The RTO SDT has recently posted the proposed retirement of TOP-005. This eliminates the redundancy with R1.

The RC SDT appreciates your comments and recognizes that NERC standards historically have included requirements to ensure that each entity is acting responsibly in the portion of the Interconnect over which it has authority. The IRO-014, as proposed by this team, requires RCs to act in coordinated fashion to protect the Interconnection. With IRO-014 and IRO-001 R1 in place, the actual act of monitoring is a secondary task that is inherent in responding to situations or events that could have an adverse impact on reliability.

The RC must respond to these situations proactively in order to prevent separation or cascading events.

The RC SDT agrees philosophically with your comment regarding the redundancy of Requirement R2, however, this issue was enumerated in

Organization	Question 10:	Question 10 Comments:
	some point in the fu	by improvement. The team believes that, while this is redundant as you stated, it is too soon to remove it it it is too soon to remove it it it is too soon to remove it
Southern Company	No	10.1 - We propose that R1 and R2 should be moved to the RC Certification Procedure and this standard retired. If this standard is not retired then we recommend Comments
Transmission		10.2 and 10.3.10.2 - At Requirement R2, the RC is given 'veto' authority. Is a standard an appropriate place to give this type of authority?
		10.3 - The revised Purpose basically provides that the RC will have access to information and control of analysis tools. What is the correlation of information/control to veto authority/approval of planned maintenance?
proposed, successfu Specification and Co R2. This is a Blacko	Illy balloted and ob Ilection. The work out recommendation	our comments. Since the inception of this project (2006-06), the IROL Standards Drafting Team has tained NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data of the IROL SDT retired R1. In and therefore is appropriate within a standard. We revised the wording to indicate that the RC will hority. This clarified the intent of the requirement. This requirement will also be moved into IRO-001-2,
10.3 This standard	will be retired makir	ng the purpose statement moot.
ISO New England Inc.	Yes and No	Suggest changing with word "request" to "document" in Requirement 1.
proposed, successfu	Illy balloted and ob	your comments. Since the inception of this project (2006-06), the IROL Standards Drafting Team has tained NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data of the IROL SDT retired R1.
Entergy Services, Inc	No	IRO-002-1 R9, the deleted language of the second sentence is not adequately covered by the language in EOP-008-0 R1, unless those outages are tied to the loss of a control center. EOP-008-0 is in the process of being revised and this language could be included in the revision, but it isn't adequately addressed by the version 0 standard.

Organization	Question 10:	Question 10 Comments:
requirement as we	Il as to COM-001-2 r	your comments. The RC SDT took this comment into consideration when making revisions to this egarding specifications. The data specification required in IRO-010 should address mitigation plans for M-001 specifications should include mitigation plans for communications outages.
US Bureau of Reclamation	No	R2. This requirement provides authority to the Reliability Coordinator to veto planned outages and approve planned maintenance to "analysis tools". It is not clear in this standard what these "analysis tools" are. Per FERC Order 693, NERC was to identify a minimum set of analysis tools and the task was assigned to the Real-Time Tools Best Practices Task Force. Until the tools are identified, it is premature to insert a placeholder in a mandatory standard; this also applies to the violation severity levels table.
well as to provide a responsibility of the	a wide area view. Th e Reliability Coordina I-time Tools Best Pra	your comments. The Reliability Coordinator has a set of tools in use to monitor and analyze its area as ese tools may include a SCADA system, state estimator and contingency analysis programs. It is the tor to ensure that these tools are operational or that a plan or procedure is in place to mitigate their actices Task Force work has resulted in the inception of a new standard development project. It is
FirstEnergy	No	R2 - As written, this requirement does not clearly define the scope of the authority of the Reliability Coordinator over analysis tools. Is it the intent of the drafting team to give the RC authority over analysis tools owned and operated by the RC. Is it the intent of the drafting team to give the RC authority over the analysis tools owned and operated by the BA, TOP, GOP, etc.? Are the tools intended to be the real-time (EMS) or the off-line engineering planning analysis tools or any analysis tool used in real-time. Does this include the analysis tools used by field personnel? This requirement should be revised to specify exactly the analysis tools under the authority of the Reliability Coordinator.
Response: The R requirement is revi		or your comment. The intent of the requirement is to have veto authority over its own tools. The
		provide its Operating Personnel with the authority to veto planned outages to its own analysis tools. Iorizon: Real-time Operations, Same Day Operations and Operations Planning]
The intended tools	are any tools that th	e Reliability Coordinator needs to perform its reliability functions.

Organization	Question 10:	Question 10 Comments:	
Duke Energy	No	Requirement R1 - This requirement is in the wrong standard — this is a Facilities standard. This requirement belongs in another standard. Question: Is there a requirement in another standard that compels the TOPS, BAs, etc to provide the requested data? Requirement R2 - Need to clarify whose analysis tools (I assume it is the RCs analysis tools, not the analysis tools of another entity) and planned maintenance to what — is it tools, facilities, transmission, generation, etc. Depending on the answer above, this requirement is in the wrong standard — this is a Facilities standard. This requirement belongs in another standard. Question: Where is the Requirement for the RC to have analysis tools? It appears that the Requirement the RC has analysis tools have been removed in the revisions to the standard.	
proposed, successfu	lly balloted and obt	r your comment. Since the inception of this project (2006-06), the IROL Standards Drafting Team has ained NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data of the IROL SDT retired R1 and does compel entities to provide data to the Reliability Coordinator	
For R2, the intent of	the requirement is t	to have veto authority over its own tools. The requirement is revised to:	
		rovide its Operating Personnel with the authority to veto planned outages to its own analysis tools. orizon: Real-time Operations, Same Day Operations and Operations Planning]	
The intended tools a	re any tools that the	e Reliability Coordinator needs to perform its reliability functions.	
ISO/RTO Council Standards Review Subcommittee	No	New Requirement R2 is no longer needed as a result of paragraph 112 in Order 693-A. Since the RC's "authority to issue directives arises out of the Commission's approval of Reliability Standards" the RC already has veto authority or will have once R1 IRO-001-2 is approved. This requirement obligates the RC to take actions or direct actions to prevent Adverse Reliability Impacts. Veto outages of equipment and analysis tools would fall into this category even if the RC couldn't say for certain that an Adverse Reliability Impact was going to occur but rather they are concerned one could occur due to heavy loads for example.	
enumerated in the re soon to remove it fro	Response: The RC SDT agrees philosophically with your comment regarding the redundancy of Requirement R2, however, this issue was enumerated in the report on the 2003 Blackout as a key improvement. The team believes that, while this is redundant as you stated, it is too soon to remove it from standards. At some point in the future after the industry assimilates the set of changes currently proposed, this requirement could be proposed for deletion.		
SERC OC	Yes and No	10.1 - We propose that R1 and R2 should be moved to the RC Certification Procedure and this	

Organization	Question 10:	Question 10 Comments:	
Standards Review Group		standard retired.	
proposed, successfu	Response: The RC SDT appreciates your comments. Since the inception of this project (2006-06), the IROL Standards Drafting Team has proposed, successfully balloted and obtained NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data Specification and Collection. The work of the IROL SDT retired R1.		
For R2, the intent of	the requirement is t	to have veto authority over its own tools. The requirement is revised and moved into IRO-001-2, R6:	
		rovide its Operating Personnel with the authority to veto planned outages to its own analysis tools. orizon: Real-time Operations, Same Day Operations and Operations Planning]	
This will retire IRO-0	02-1.		
Buckeye Power, Inc.	Yes and No	Abstain	
PJM Interconnection	Yes		
Manitoba Hydro	Yes		
NPCC	Yes		
Ameren	Yes		
Northern California Power Agency	Yes		
Salt River Project	Yes		
Bonneville Power Administration	Yes		

Organization	Question 10:	Question 10 Comments:
AEP	Yes	
American Transmission Company		Abstain.

11. Do you agree with the revisions to the Measures in IRO-002-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: Since the inception of this project (2006-06), the IROL Standards Drafting Team has proposed, successfully balloted and obtained NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data Specification and Collection. The work of the IROL SDT retired R1 and M1.

For R2, the intent of the requirement is to have veto authority over its own tools. The requirement and measure have been revised based on stakeholder comment and moved into IRO-001-2 as Requirement R6. The revisions made are shown below:

R6. Each Reliability Coordinator shall have provide its operating personnel with the authority to veto planned outages to its own analysis tools including final approvals for planned maintenance. [Violation Risk Factor: Medium] [Time Horizon: Real-time Operations, Same Day Operations and Operations Planning]

M6. Each Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, a documented procedure or equivalent evidence that will be used to confirm that the Reliability Coordinator has provided its operating personnel with the authority to veto planned outages to of its own analysis tools., including final approvals for planned maintenance as specified in Requirement 2.

Organization	Question 11:	Question 11 Comments:
Independent Electricity System Operator - Ontario	No	M1: We suggest to change the word "letter" to "documented request" If our recommendations to retain some of R5 to R9, some measures will need to be provided.
Response: The RC SDT thanks you for your comments. Since the inception of this project (2006-06), the IROL Standards Drafting Team has proposed, successfully balloted and obtained NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data Specification and Collection. The work of the IROL SDT retired R1 and M1.		
As stated in our response to your comments in Question 10, we do not intend to retain R5 through R9.		
MRO NERC SDTandards Review	No	Measure 1 should not focus on a letter as evidence. A more appropriate measure would be a data specification document and actual verification that data has been received. The letter or equivalent is only needed if data has not been supplied. Demonstration of the actual receipt the data would be

Organization	Question 11:	Question 11 Comments:
Subcommittee		easy. Requirement 2 is not needed and thus Measure 2 is not needed per paragraph 112 of Order 693-A. Additional measures are needed to address the proposed requirements in question 10.
proposed, successfully	/ balloted and obta	your comments. Since the inception of this project (2006-06), the IROL Standards Drafting Team has ined NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data f the IROL SDT retired R1 and M1.
The RC SDT did not a	gree to remove R2	in response to your comments in Question 10.
Southern Company Transmission	No	11.1 - Moving R1 and R2 to the RC Certification Procedure will eliminate measurement requirements.
Response: The RC S	DT thanks you for	your comments. See our response to your comments in Question 10.
Salt River Project	No	R1: The Requirement and VSLs mention that the RC will determine it's data needs. Yet the Measure for R1 does not mention this, it only mentions the RC requesting the data from it's member entities. This Measure needs to include a measure for how the RC determines it's data needs.
proposed, successfully	/ balloted and obta	our comments. Since the inception of this project (2006-06), the IROL Standards Drafting Team has ined NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data f the IROL SDT retired R1 and M1.
US Bureau of Reclamation	No	M2 again "analysis tools" have not been identified.
Response: The RC S	DT appreciates yo	our comments. See our response to your comments on Question 10.
FirstEnergy	No	The measures should be modified per our suggested modifications in question 10.
Response: The RC S Question 10.	DT thanks you for	your comments. The requirements were not modified. See our response to your comments on
Duke Energy	No	See response to Question #12 above. If the requirements are moved to another standard, the measures aren't needed here.

Organization	Question 11:	Question 11 Comments:			
	Response: The RC SDT thanks you for your comments. We believe that "#12" in this comment was a typo and that you intended it to read "Q10". See our response to your comments on Question 10.				
ISO/RTO Council Standards Review Subcommittee	No	Measure 1 should not focus on a letter as evidence. A more appropriate measure would be a data specification document and actual verification that data has been received. The letter or equivalent is only needed if data has not been supplied. Demonstration of the actual receipt the data would be easy.			
proposed, successfully	balloted and obta	your comments. Since the inception of this project (2006-06), the IROL Standards Drafting Team has ined NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data f the IROL SDT retired R1 and M1.			
Buckeye Power, Inc.	Yes and No	abstain			
SERC OC Standards Review Group	Yes and No	11.1 - Moving R1 and R2 to the RC Certification Procedure will eliminate measurement requirements.			
Response: The RC S	DT thanks you for	your comments. See our response to your comments in Question 10.			
Reliability Coordinator Comment Working Group	Yes	add measures for R1 & R2 see question 10			
Response: The RC SDT appreciates your suggestion. See our response to Question 10.					
Entergy Services, Inc	Yes				
PJM Interconnection	Yes				
AEP	Yes				

Organization	Question 11:	Question 11 Comments:
Bonneville Power Administration	Yes	
Manitoba Hydro	Yes	
NPCC	Yes	
Ameren	Yes	
Northern California Power Agency	Yes	
American Transmission Company		Abstain.

12. Do you agree with the Violation Severity Levels proposed in IRO-002-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: Since the inception of this project (2006-06), the IROL Standards Drafting Team has proposed, successfully balloted and obtained NERC Board of Trustees approval for a new Standard IRO-010-1: Reliability Coordinator Data Specification and Collection. The work of the IROL SDT retired R1 and M1. The RC SDT has revised R2 and M2 and moved them to IRO-001-2, as Requirement R6 and Measure M6. The VSLs have been revised to reflect the modifications made to the requirement and measure and in response to stakeholders who indicated this is a "binary" requirement.

<u>R6</u>	Reliability Coordinator has	N/A	N/A	Reliability Coordinator failed to provide its
	approval rights for planned			operating personnel with the authority to
	outages of analysis tools but			<u>veto</u>
	does not have approval			approval is not required for planned
	rights for maintenance on			maintenance or planned outages of its
	analysis tools.			own analysis tools.

Organization	Question 12:	Question 12 Comments:
Independent Electricity System Operator -	No	R1: The wording for Low VSL is contradictory (e.g. it determined and requested in the first part but did not request in the second part). Suggest to revise it.
Ontario		R1: We suggest to grade the VSLs according to the extent to which the percentage of data specification and/or the number of entities not requested.
		R2: The RC either has the right or it doesn't, and hence it's a binary requirement. The VSL should be developed accordingly. Further, the wording for the Severe VSL does not correspond to the requirement and measure. The condition should simply be that the Reliability Coordinator failed to demonstrate that it had the authority to veto planned outages to analysis tools, including final approvals for planned maintenance.

Organization	Question 12:	Question 12 Comments:		
of the IROL project. The	lower VSL was re	moved as proposed for the second requirement.		
Southern Company Transmission	No	12.1 - Moving R1 and R2 to the RC Certification Procedure will eliminate VSL requirements.		
Response: The RC SD IRO-001 as Requirement		our comment. Please see Summary Consideration above. R1 was retired – and R2 was moved into r R6 are still needed.		
US Bureau of Reclamation	No	Until the tools are identified, it is premature to insert a placeholder in a mandatory standard; this also applies to the violation severity levels table.		
analysis tools used by rea tools in this standard. Th operating personnel will a	Response: The RC SDT thanks you for your comment. Please see Summary Consideration above. As envisioned, the intent is to protect the analysis tools used by real time operating personnel – and not all companies have the same set of tools, so the SDT will not name specific tools in this standard. The intent is to give the real time operating personnel control over the availability of their tools so that the real time operating personnel will always know if their tools are "unavailable" due to maintenance. Names of specific tools are not needed to enforce the intent of this requirement.			
MRO NERC SDTandards Review Subcommittee	No	For R1, the lower VSL contradicts itself. It states that RC demonstrated that it determined its data requirements and requested that data and then follows with that it didn't request that data. The second option in the Lower VSL category is not practical and a compliance auditor would not be in a position to determine this. In fact, if the administrative data is not requested, other administrative requirements for reporting would be violated. Additionally, it does not make sense that an RC would determine its data needs and then omit data for administrative reporting. Further, is it the compliance auditor's job to judge if the data the RC requests is sufficient or is it his job to see that the RC has met the requirements. This does not seem likely. Why would the RC do this? This VSL appears to add to the requirement. This violates Guideline 3 of the FERC ORDER ON VIOLATION SEVERITY LEVELS PROPOSED BY THE ELECTRIC RELIABILITY ORGANIZATION. Practically, it would not be enforceable anyway. It would require the RC to admit that they did not include administrative data in their data requirements. It is doubtful this would happen because the RC likely believes they prepared a complete data requirement document.		

Organization	Question 12:	Question 12 Comments:
		We suggest that the VSLs should be:
		Severe: The RC did not determine it data requirements or the RC could not demonstrate it requested the necessary data if actual receipt of the necessary data can't be demonstrated for greater than 75 to 100% of the TOPs, BA, TO, GO, GOPs, LSEs and adjacent RCs.
		High: The RC could not demonstrate it requested the necessary data if actual receipt of the necessary data can't be demonstrated for greater than 50 and less than or equal to 75% of the TOPs, BA, TO, GO, GOPs, LSEs and adjacent RCs.
		Medium: The RC could not demonstrate it requested the necessary data if actual receipt of the necessary data can't be demonstrated for greater than 25% and less than or equal to 50% of the TOPs, BA, TO, GO, GOPs, LSEs and adjacent RCs.
		Lower: The RC could not demonstrate it requested the necessary data if actual receipt of the necessary data can't be demonstrated for greater than 0% and less than or equal to 25% of the TOPs, BA, TO, GO, GOPs, LSEs and adjacent RCs.
		R2 VSLs are not needed or paragraph 112 of Order 693-A. The Severe VSL contradicts the requirement.
of the IROL project. For	R2, based on you	our comment. Please see Summary Consideration above. The first requirement was retired as part r comments and the comments of others, the VSLs were modified – the lower was removed and the a Severe VSL rephrased to more closely match the language in the revised requirement.
FirstEnergy	No	The VSL should be modified per our suggested modifications in question 10.
Response: The RC SDT thanks you for your comment. Please see Summary Consideration above.		
Duke Energy	No	R1 VSL - As a general comment, this VSL is unclear and would be difficult to audit. This VSL uses subjective terms like "material impact" and "minimal impact". These terms are not used in the associated requirement or measure and should be removed from the VSL. This VSL uses terms like "majority, but not all"; "some, but less than a majority" which provides an opportunity for

Organization	Question 12:	Question 12 Comments:
		a subjective review by Compliance as to what a complete listing of data requirements should be. This term is not used in the Requirements or Measures and should be removed from the VSL. This VSL introduces a concept, data the RC needs for ? ? administrative purposes, such as data reporting ??. This concept is not included in the Requirements or Measures portions of the Standard and should be removed from the VSL. This VSL should be written to simply assess whether the RC has made determination of what its data needs are and whether those needs have been communicated to the entities in the footprint.
		R2 VSL - This VSL clarifies the questions posed above regarding what the RC needs approval rights over. R2 needs to be modified to include this clarity. This VSL needs to clarify that the RC approval rights are for the RC's tools, not tools of other entities. The Severe level of this VSL needs to be re-written along the lines of: The RC does not have approval rights for planned maintenance or outages to its analysis tools.
of the IROL project. For	R2, based on your	bur comment. Please see Summary Consideration above. The first requirement was retired as part comments and the comments of others, the requirement, measure and VSLs were all modified – it was treated as binary with just a Severe VSL rephrased to more closely match the language in the
ISO/RTO Council Standards Review Subcommittee	No	For R1, the lower VSL contradicts itself. It states that RC demonstrated that it determined its data requirements and requested that data and then follows with that it didn't request that data. The second option in the Lower VSL category is not practical and a compliance auditor would not be in a position to determine this. In fact, if the administrative data is not requested, other administrative requirements for reporting would be violated. Additionally, it does not make sense that an RC would determine its data needs and then omit data for administrative reporting. Further, is it the compliance auditor's job to judge if the data the RC requests is sufficient or is it his job to see that the RC has met the requirements. This does not seem likely. Why would the RC do this? This VSL appears to add to the requirement. This violates Guideline 3 of the FERC ORDER ON VIOLATION SEVERITY LEVELS PROPOSED BY THE ELECTRIC RELIABILITY ORGANIZATION. Practically, it would not be enforceable anyway. It would require the RC to admit that they did not include administrative data in their data requirements. It is doubtful this would happen because the RC likely believes they prepared a complete data requirement document.

Organization	Question 12:	Question 12 Comments:
		 We suggest that the VSLs should be: Severe: The RC did not determine it data requirements or the RC could not demonstrate it requested the necessary data if actual receipt of the necessary data can't be demonstrated for greater than 75 to 100% of the TOPs, BA, TO, GO, GOPs, LSEs and adjacent RCs. High: The RC could not demonstrate it requested the necessary data if actual receipt of the necessary data can't be demonstrated for greater than 50 and less than or equal to 75% of the TOPs, BA, TO, GO, GOPs, LSEs and adjacent RCs. Medium: The RC could not demonstrate it requested the necessary data if actual receipt of the necessary data can't be demonstrate it requested the necessary data if actual receipt of the TOPs, BA, TO, GO, GOPs, LSEs and adjacent RCs. Medium: The RC could not demonstrate it requested the necessary data if actual receipt of the necessary data can't be demonstrated for greater than 25% and less than or equal to 50% of the TOPs, BA, TO, GO, GOPs, LSEs and adjacent RCs. Lower: The RC could not demonstrate it requested the necessary data if actual receipt of the necessary data can't be demonstrated for greater than 25% and less than or equal to 50% of the TOPs, BA, TO, GO, GOPs, LSEs and adjacent RCs.
		TOPs, BA, TO, GO, GOPs, LSEs and adjacent RCs. R2 VSLs are not needed er paragraph 112 of Order 693-A. The Severe VSL contradicts the requirement.
of the IROL project. For	R2, based on you	our comment. Please see Summary Consideration above. The first requirement was retired as part r comments and the comments of others, the requirement, measure and VSLs were all modified – it was treated as binary with just a Severe VSL rephrased to more closely match the language in the
SERC OC Standards Review Group	Yes and No	12.1 - Moving R1 and R2 to the RC Certification Procedure will eliminate VSL requirements.
Response: The RC SDT into IRO-001 as Requirer		our comment. Please see Summary Consideration above. R1 was retired – and R2 was moved _s for R6 are still needed.

Organization	Question 12:	Question 12 Comments:
Buckeye Power, Inc.	Yes and No	abstain
Manitoba Hydro	Yes	
NPCC	Yes	
CU of Springfield	Yes	
Ameren	Yes	
Reliability Coordinator Comment Working Group	Yes	
Northern California Power Agency	Yes	
Entergy Services, Inc	Yes	
Salt River Project	Yes	
AEP	Yes	
PJM Interconnection	Yes	
Bonneville Power Administration	Yes	
American Transmission Company		Abstain.

13. Do you agree with the revisions to IRO-005-1 as shown in the posted Standard and Implementation Plan? The RC SDT is recommending retiring or moving all of the requirements and retiring this standard. If not, please explain in the comment area.

Summary Consideration: Several commenters had concerns around removing the requirement to monitor frequency. Other commenters had concerns with the removal of other monitoring requirements in the standard. While the Standard Drafting Team (SDT) recognizes the concerns raised, the SDT is even more concerned with the subjectivity that any attempt to measure "Monitoring" can provide. It is the SDT's contention that adherence to reliability standards that require the said monitoring cannot be demonstrated unless the entity is closely monitoring the system parameters. Furthermore, the SDT contends that any requirements that describe the monitoring facilities needed to fulfill fundamental duties should be embedded in organization certification process requirements. With IRO-014 and IRO-001 R1 in place, the actual act of monitoring is a secondary task that is inherent in assessing and responding to situations or events that could have an adverse impact on reliability.

Organization	Question 13:	Question 13 Comments:
Independent Electricity System	No	R1: We not agree with removing this requirement for the same reason given for the proposal to remove R5 to R8 from IRO-002 (see comments on 10 (ii), above).
Operator - Ontario		R8: We do not agree with completely removing this requirement, especially that part that requires an RC to monitor system frequency. While DCS and CPS are largely a BA's responsibility, the RC is the last line of defense for abnormal system performance and needs to monitor its BAs' performance including their ability to address large frequency deviations, and direct or take corrective actions as needed including requesting emergency assistance on the BAs' behalf and directing load shedding.
		R9: The second part of this requirement needs to be retained. IRO-004 covers operational planning, not current day operations. Coordinating pending generator and transmission facility outages is an essential and necessary task by the RC to ensure reliability.
		R11: The RC needs to monitor ACE, detect and identify the cause of any abnormal ACE, and direct its BAs to take necessary actions to return ACE to within a normal range.
		R13: We do not agree with removing the latter part of R13. The FAC standards cover the methodology used in calculating SOLs and IROLs. Regardless of how these limits are calculated, in practice there always exists the possibility that different entities come up with SOLs/IROLs, especially of the inter-ties, that could be different. Operating to the lowest SOLs/IROLs when more than one set

Organization	Question 13:	Question 13 Comments:
		exists is a necessary requirement for reliable operation.
Response: The RC	SDT thanks you fo	r your comment.
attempt to measure cannot be demonstra that describe the mo Requirements. With	"Monitoring" can pro ated unless the enti nitoring facilities ne IRO-014 and IRO-	OT) recognizes the concern raised, the SDT is even more concerned with the subjectivity that any by by b
		e, the actual act of monitoring is a secondary task that is inherent in assessing and responding to adverse impact on reliability.
		quirement as it is redundant with TOP-003 and IRO-004 (all requirements) for next day requirements. pending outages in real-time through IRO-001-2, R1 (proposed).
		venues to ensure BAs operate within established and acceptable thresholds as described in the BAL- andards projects are addressing revisions to the BAL set of standards.
		redundant with FAC-014. FAC-014 states the requirement for developing and sharing SOL and IROL the planning and operating time frames.
American Transmission Company	No	The accountability and monitoring addressed in this Standard is still required. The drafting team's intent was that the ability to monitor is part of the certification process. However, certification is to Standards, and if there is not a Standard which addresses this issue, then an entity cannot certify to it.
even more concerner reliability standards to Furthermore, the SD embedded in organiz	ed with the subjectiv that require the said T contends that any zation certification p	r your comment. While the Standard Drafting Team (SDT) recognizes the concern <u>s</u> raised, the SDT is ity that any attempt to measure "Monitoring" can provide. It is the SDT <u>'s</u> contention that adherence to monitoring cannot be demonstrated unless the entity is closely monitoring the system parameters. Y requirements that describe the monitoring facilities needed to fulfill fundamental duties should be rocess Requirements. With IRO-014 and IRO-001 R1 in place, the actual act of monitoring is a nding to situations or events that could have an adverse impact on reliability.
MRO NERC SDTandards	No	R1 includes many requirements for monitoring the system that are important, measurable and should be retained. Monitoring is too critical to operating the system to completely eliminate these

Organization	Question 13:	Question 13 Comments:		
Review		requirements.		
Subcommittee		R4, R8 and R11 are problematic as currently written. However, there have been actual instances of a large BA intentionally operating short hundreds of MWs of energy. I believe this occurred during the summer of 1999. Thus, the RC should be monitoring the BAs ACE and directing the BA to correct it if it becomes too large. It is not necessary or even useful for the RC to monitor the BA CPS performance.		
and acceptable three standards need to re can be objectively m several processes us certification process reliably. With IRO-0	Response: The RC SDT thanks you for your comment. The SDT feels that there are better avenues to ensure BAs operate within established and acceptable thresholds as described in the BAL-001 and BAL-002 standards. If a BA chooses to operate off schedule then the BAL standards need to revisited and tightened up. This is being done in the current projects addressing the BAL standards. Monitoring capability can be objectively measured and is essential to real-time operations – however real-time monitoring is a supporting activity and is only one of several processes used to support operation within defined parameters. Monitoring capability should be assessed during the entity registration certification process and should not be a requirement. Note that certification is aimed at verifying that an entity has the "capability" of operating reliably. With IRO-014 and IRO-001 R1 in place, the actual act of monitoring is a secondary task that is inherent in assessing and responding to situations or events that could have an adverse impact on reliability.			
Ameren	Yes and No	While we agree that most of the requirements are redundancies that properly belong elsewhere, we are concerned that Requirement 4 and Requirement 8 are not properly represented elsewhere and should not be retired until they re-surface in another standard explicitly. We believe it is still very important for an RC to monitor their respective BAs reserves and CPS performance. Likewise in R8, while the frequency monitoring is a BA function, we think that it is important enough to also be included as an RC function explicitly.		
Response: The RC SDT thanks you for your comment. The SAR for this project included eliminating redundancies within the standards. In the Implementation Plan for this standard, we show the redundancy between this requirement, R4, and EOP-002-2. (please see pages 6-8 of the Implementation Plan). While the Standard Drafting Team (SDT) recognizes the concern raised, the SDT is even more concerned with the subjectivity that any attempt to measure "Monitoring" can provide. It is the SDT's contention that adherence to reliability standards that require the said monitoring cannot be demonstrated unless the entity is closely monitoring the system parameters. Furthermore, the SDT contends that any requirements that describe the monitoring facilities needed to fulfill fundamental duties should be embedded in organization certification process Requirements. With IRO-014 and IRO-001 R1 in place, the actual act of monitoring is a secondary task that is inherent in responding to situations or events that could have an adverse impact on reliability.				
Buckeye Power,	Yes and No	Abstain		

Organization	Question 13:	Question 13 Comments:
Inc.		
CU Springfield	Yes	CU supports the retirement of this standard.
Response: The RC	SDT thanks you for	or your comment.
Southern Company Transmission	Yes	13.1 - We agree with retiring this standard.
Response: The RC	SDT thanks you for	or your comment.
SERC OC Standards Review Group	Yes	13.1 - We agree with retiring this standard
Response: The RC	SDT thanks you for	or your comment.
ISO New England Inc.	Yes	
Entergy Services, Inc	Yes	
Reliability Coordinator Comment Working Group	Yes	
Northern California Power Agency	Yes	
US Army Corps of	Yes	

Organization	Question 13:	Question 13 Comments:
Engineers, Northwestern Division		
Salt River Project	Yes	
US Bureau of Reclamation	Yes	
PJM Interconnection	Yes	
FirstEnergy	Yes	
Bonneville Power Administration	Yes	
Duke Energy	Yes	
AEP	Yes	
Manitoba Hydro	Yes	
NPCC	Yes	

14. Do you agree with the revisions to the Requirements in IRO-014-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: Several commenters expressed concerns with the term "impacted" and suggested replacing this with "other". The RC SDT believes "impacted" directly relates to the purpose statement. The original wording of "one or more other" is vague and difficult to measure. Using the word "other" presents a similar situation. The RC SDT chose to use the word "impacted" to tighten the requirement and remove ambiguity. The RC SDT does not intend for non-contiguous reliability coordinators to have "RC agreements", but to have Procedures, Processes, or Plans with impacted reliability coordinators. Other commenters suggested striking the term "as a minimum" in R1 and the RC SDT agrees and has modified R1 accordingly. Some commenters did not agree with the wording of the new requirements in IRO-014 that were formerly in IRO-016. The RC SDT reviewed the Implementation Plan for IRO-016 and its requirements and made some revisions to the requirements listed in IRO-014-2. The requirement that was transferred from IRO-016 has been translated into 4 requirements in IRO-014:

R5. When an expected or actual reliability issue is detected, the Each Reliability Coordinator, upon identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. confirm the existence of the issue with the impacted Reliability Coordinators.

<u>R6.</u><u>In the event that the issue cannot be confirmed, e</u>Each <u>impacted</u> Reliability Coordinator shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be agreed to by the impacted Reliability Coordinators.

<u>R7.</u> The Reliability Coordinator with the identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability Coordinators can not agree that the problem exists.

R6R8. Each impacted Reliability Coordinator shall implement the mitigation plan developed by the Reliability Coordinator who has the identified Adverse Reliability Impact when When an expected or actual reliability issue exists and the impacted Reliability Coordinators cannot agree on a mitigation plan, all impacted Reliability Coordinators shall implement the mitigation plan developed by the Reliability Coordinator who has the reliability issue.

Organization	Question 14:	Question 14 Comments:
Independent Electricity System	No	We suggest to replace the word "impacted" with "other" since there is a preconception that the concerned RC makes an assessment of which other RCs are impacted by the coordinated actions,

Organization	Question 14:	Question 14 Comments:
Operator - Ontario		which may not be the perspective of the other RCs who may in fact be impacted by any coordinated actions among other RCs.
original wording of "o	one or more other" i d "impacted" to tig	or your comment. The RC SDT believes "impacted" directly relates to the purpose statement. The s vague and difficult to measure. Using the word "other" presents a similar situation. The RCSDT oten the requirement and remove ambiguity. Additionally, R1.1 reconciles the preconception of the sment:
		, including the mutually agreed to conditions under which one Reliability Coordinator notifies other follow in making those notifications; and the data and information to be exchanged with other Reliability
MRO NERC SDTandards	No	Please strike "as a minimum" in R1. By definition, the requirement defines the minimum. Please strike R1.6. RCs already have the authority to act per paragraph 112 of Order 693-A.
Review Subcommittee		Since R2 requires the RCs to agree, is the "mutually agreed to" clause in R1.1 necessary?
		Please strike requirements R4 and R4.1. It is duplicative to R1.1. Conference calls are a form of communication and should be address per R1.1.
		R5 is confusing. If a reliability issue isn't confirmed, doesn't this mean there is no reliability issue? Isn't this the point of confirming? Additionally, we suggest using validate instead of confirm.
		R6 appears to be a rewrite of requirements R1, R2 and their sub-requirements in IRO-016. We agree that those requirements do need to be written more succinctly or removed altogether. However, R6 does not accomplish the goal and only confuses that matter further. The reason the RCs may not be able to agree on a mitigation plan is that RC with the reliability issue may be requesting mitigations that the other RCs believe may cause them reliability issues. This requirement appears to suggest that the solution to a disagreement on the mitigation plan is cut and dried. Generally, the reason the disagreement arises is due to one RC not fully understanding the impact of their actions on another RC. The bottom line is that the RCs may have disagreements and there is no way to require a solution in these types of situations. Please revise R6 to require using the mitigation plan developed by the Reliability Coordinator who has the reliability issue provided that the mitigation plan does not cause a reliability issue in the other region.
		As Requirement 1 is currently written, one could interpret the requirement for every Operating Process, Procedure and Plan to address each of the sub-requirements. That is not necessary. The

Organization	Question 14:	Question 14 Comments:
		drafting team needs to consider modifying the requirement to make it clear that not every sub- requirement must be addressed in every Operating Process, Procedure, and Plan and to also make it clear that the some sub-requirements may only be appropriately addressed in a Process but not a Plan for instance.
Response: The R	C SDT thanks you fo	pr your comment.
		as a minimum" and the requirement is modified accordingly. The RC SDT believes that the term on of R1 (your last comment).
112 of 693-A which	clarifies the reliabili	MRO interpretation of 693-A and believes R1.6 reinforces the Commission's determination in paragraph ty coordinator's authority stating "authority to issue directives arises out of the Commission's approval ompliance with such directives."
R1.1: R1.1 provide beyond notification		er which the RC's will communicate or notify each other. R2 deals with actions that are to be taken
		vith the duplicity. R1.1 is a sub-requirement of R1 which requires the reliability coordinator "to have"
	mentation Plan for IF	ree with the wording of the new requirements in IRO-014 that were formerly in IRO-016. The RC SDT RO-016 and its requirements and made some revisions to the requirements listed in IRO-014-2. There
		identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation perations Planning, Same Day Operations and Real-time Operations]
agreed to by the in		ator shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be pordinators, [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day
Coordinators can r		e identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability blem exists. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day
Adverse Reliability	Impact when the imp	ator shall implement the mitigation plan developed by the Reliability Coordinator who has the identified pacted Reliability Coordinators can not agree on a mitigation plan, [Violation Risk Factor: anning, Same Day Operations and Real-time Operations]

Organization	Question 14:	Question 14 Comments:
Southern Company Transmission	No	14.1 - R1 and R2 - The word "impacted" tends to broaden the requirements to have procedures, processes and plans in place with each RC within the RC's Interconnection. We suggest the phrasing should be tightened up to convey the original meaning that the team intended. For example, does the team intend for the FRCC RC to have an agreement with the PJM or MISO RC?
		14.2 - We suggest bringing R6 under R1 as subrequirement R1.7 and rewrite it as follows: R1 - The Dispute Resolution process will be followed when the Reliability Coordinator issuing a mitigation plan and the Reliability Coordinator(s) receiving a mitigation plan disagree on the proper steps to be taken.
		14.3 - We suggest deleting R4.1 and adding a second sentence to R4: The frequency of these communications shall be at least weekly.
		14.4 - R4: The word "impacted" makes it sound like these calls are only to be made when problems are expected or are occurring. If this requirement is intended more for operational awareness calls (such as the daily SERC RC call), then the word "impacted" needs to be changed to "contiguous" or a similar term.
		14.5 - We suggest rewriting R5 to read: In the event that a reliability issue cannot be confirmed, each Reliability Coordinator shall operate as though the problem exists.
		14.6 - At Requirement R1, the use of the phrase "as a minimum" seems to add some flexibility for development of procedures, processes and plans. A negative consequence is that it introduces more ambiguity. The recommendation is to strike the phrase.
		14.7 - At Requirement R1.6, consider the following: "Authority to act to prevent and mitigate instances 'that have the potential to cause' Adverse Reliability Impacts to other Reliability Coordinator Areas."

Response: The RC SDT thanks you for your comments.

14.1: The RC SDT believes "impacted" directly relates to the purpose statement. The original wording of "one or more other" is vague and difficult to measure. Using the word "other" presents a similar situation. The RCSDT chose to use the word "impacted" to tighten the requirement and remove ambiguity. The RC SDT does not intend for non-contiguous reliability coordinators to have "RC agreements", but to have Procedures, Processes, or Plans with impacted reliability coordinators.

14.2: The RC SDT respectfully disagrees with your comment. R6 requires implementation ("shall implement") and R1 is a "shall have" requirement; keeping these separate provides clarity of related measures. The Dispute Resolution process is more administrative in nature regarding compliance, certification, audit processes, or contracts.

Organization	Question 14:	Question 14 Comments:
		R4 to: "The RC shall participate in agreed upon conference calls at least weekly and other eliability Coordinators."
		acted" after much discussion. Impacted has the implication that the RC is immediately impacted or the on. We feel that the requirement for weekly calls addresses your concern.
		ot agree with the wording of the new requirements in IRO-014 that were formerly in IRO-016. The RC ements listed in IRO-014-2. There are now 4 requirements:
		identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation perations Planning, Same Day Operations and Real-time Operations]
	pacted Reliability Co	tor shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be ordinators, [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day
	ot agree that the prol	identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability blem exists. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day
Adverse Reliability I	mpact when the imp	tor shall implement the mitigation plan developed by the Reliability Coordinator who has the identified bacted Reliability Coordinators can not agree on a mitigation plan, [Violation Risk Factor: nning, Same Day Operations and Real-time Operations]
14.6: The RC SDT a	agrees with striking "	as a minimum" and the requirement is modified accordingly.
14.7: The RC SDT I	pelieves that if a relia	ability coordinator acts to prevent or mitigate instances the "potential to cause" already exists.
ISO New England Inc.	Yes and No	As Requirement 1 is currently written, one could interpret the requirement for every Operating Process, Procedure and Plan to address each of the sub-requirements. That is not necessary. The drafting team needs to consider modifying the requirement to make it clear that not every sub- requirement must be addressed in every Operating Process, Procedure, and Plan and to also make it clear that the some sub-requirements may only be appropriately addressed in a Process but not a Plan for instance. Use of the term collectively may resolve this dilemma.
Response: The RC already included in		r your comment. The RC SDT agrees that the term "collectively" addresses your interpretation and it is

Organization	Question 14:	Question 14 Comments:
FirstEnergy	No	R1 - Should be revised as follows to improve readability and clarity:
		R1.3 - Add "Exchanging" before "Planned"
		R1.4 - Add "Control of voltage" at the beginning of the requirement and delete "for voltage control" at the end of the requirement.
		Add a new R1.7 as follows: "A process for resolution of the disagreement covered by R6 of this standard."
Response: The RC	SDT thanks you fo	r your comment.
R1.3: The RC SDT b	elieves adding the	term "Exchanging" before "Planned" is redundant with " exchange of information" stated in R1.
R1.4: The RC SDT n	nodified R1.4 to rea	d as "Control of voltage including the coordination of reactive resources."
R1.7: R6: To addres	s the process for re	esolution of disagreements, the RC SDT proposes the 4 requirements:
		dentification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation perations Planning, Same Day Operations and Real-time Operations]
	acted Reliability Co	tor shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be ordinators, [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day
	t agree that the prol	identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability plem exists. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day
Adverse Reliability In	npact when the imp	tor shall implement the mitigation plan developed by the Reliability Coordinator who has the identified acted Reliability Coordinators can not agree on a mitigation plan, [Violation Risk Factor: nning, Same Day Operations and Real-time Operations]
Duke Energy	No	R1 and R2 - The word "impacted" tends to broaden the requirements to have procedures, processes and plans in place with each RC within the RC's Interconnection. We suggest the phrasing should be tightened up to convey the original meaning that the team intended. For example, does the team intend for the FRCC RC to have an agreement with the PJM or MISO RC? We suggest bringing R6 under R1 as subrequirement R1.7 and rewrite it as follows:

Organization	Question 14:	Question 14 Comments:
		R1 - The Dispute Resolution process will be followed when the Reliability Coordinator issuing a mitigation plan and the Reliability Coordinator(s) receiving a mitigation plan disagree on the proper steps to be taken. We suggest deleting R4.1 and adding a second sentence to R4: The frequency of these communications shall be at least weekly.
		R4: The word "impacted" makes it sound like these calls are only to be made when problems are expected or are occurring. If this requirement is intended more for operational awareness calls (such as the daily SERC RC call), then the word "impacted" needs to be changed to "contiguous". We suggest rewriting R5 to read: In the event that an operating issue cannot be confirmed, each Reliability Coordinator shall operate as though the problem exists.

Response: The RC SDT thanks you for your comment.

R1 and R2: The RC SDT believes "impacted" directly relates to the purpose statement. The original wording of "one or more other" is vague and difficult to measure. Using the word "other" presents a similar situation. The RC SDT chose to use the word "impacted" to tighten the requirement and remove ambiguity. The RC SDT does not intend for non-contiguous reliability coordinators to have "RC agreements", but to have Procedures, Processes, or Plans with impacted reliability coordinators.

To address your comments on the process for resolution of disagreements and R5, the RC SDT proposes the 4 requirements:

R5. Each Reliability Coordinator, upon identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

R6. Each impacted Reliability Coordinator shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be agreed to by the impacted Reliability Coordinators, [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

R7. The Reliability Coordinator with the identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability Coordinators can not agree that the problem exists. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

R8. Each impacted Reliability Coordinator shall implement the mitigation plan developed by the Reliability Coordinator who has the identified Adverse Reliability Impact when the impacted Reliability Coordinators can not agree on a mitigation plan, [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

R4: The RC SDT deleted 4.1 modified R4 to: "The RC shall participate in agreed upon conference calls, at least weekly, and other communication forums with impacted Reliability Coordinators." The RC SDT chose the word "impacted" after much discussion. Impacted has the implication that the RC is immediately impacted or the RC may be impacted by a future situation. We feel that the requirement for weekly

Organization	Question 14:	Question 14 Comments:
calls addresses you	r concern	
ISO/RTO Council Standards Review Subcommittee	No	Please strike "as a minimum" in R1. By definition, the requirement defines the minimum. Please strike R1.6. RCs already have the authority to act per paragraph 112 of Order 693-A. Since R2 requires the RCs to agree, is the "mutually agreed to" clause in R1.1 necessary? Please strike requirements R4 and R4.1. It is duplicative to R1.1. Conference calls are a form of communication and should be address per R1.1.
		R5 is confusing. If a reliability issue isn't confirmed, doesn't this mean there is no reliability issue? Isn't this the point of confirming? Additionally, we suggest using validate instead of confirm. As Requirement 1 is currently written, one could interpret the requirement for every Operating Process, Procedure and Plan to address each of the sub-requirements. That is not necessary. The drafting team needs to consider modifying the requirement to make it clear that not every sub-requirement must be addressed in every Operating Process, Procedure, and Plan and to also make it clear that the some sub-requirements may only be appropriately addressed in a Process but not a Plan for instance. Use of the term collectively may resolve this dilemma.
Response: The RC	SDT thanks you f	or your comment.
R1: The RC SDT ag "collectively" addres		as a minimum" and the requirement is modified accordingly. The RC SDT believes that the term tion of R1.
of 693-A which clarif	ies the reliability co	interpretation of 693-A, and believes R1.6 reinforces the Commission's determination in paragraph 112 pordinator's authority stating "authority to issue directives arises out of the Commission's approval of upliance with such directives."
R1.1: The RC SDT	pelieves "mutually a	agreed to" reinforces R2.
		vith the duplicity. R1.1 is a sub-requirement of R1 which requires the reliability coordinator "to have"
R5: The RC SDT pro	oposes the 4 requir	rements for clarity:
		identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation perations Planning, Same Day Operations and Real-time Operations]
		ator shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be oordinators, [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day

Question 14:	Question 14 Comments:
time Operations]	
	identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability olem exists. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day
pact when the impa	tor shall implement the mitigation plan developed by the Reliability Coordinator who has the identified acted Reliability Coordinators can not agree on a mitigation plan, [Violation Risk Factor: nning, Same Day Operations and Real-time Operations]
Yes and No	14.1 - R1 and R2 - The word "impacted" tends to broaden the requirements to have procedures, processes and plans in place with each RC within the RC's Interconnection. We suggest the phrasing should be tightened up to convey the original meaning that the team intended. For example, does the team intend for the FRCC RC to have an agreement with the PJM or MISO RC?
	14.2 - We suggest bringing R6 under R1 as subrequirement R1.7 and rewrite it as follows: R1 - The Dispute Resolution process will be followed when the Reliability Coordinator issuing a mitigation plan and the Reliability Coordinator(s) receiving a mitigation plan disagree on the proper steps to be taken.
	14.3 - We suggest deleting R4.1 and adding a second sentence to R4: The frequency of these communications shall be at least weekly.
	14.4 - R4: The word "impacted" makes it sound like these calls are only to be made when problems are expected or are occurring. If this requirement is intended more for operational awareness calls (such as the daily SERC RC call), then the word "impacted" needs to be changed to "contiguous".
	14.5 - We suggest rewriting R5 to read: In the event that an operating issue cannot be confirmed, each Reliability Coordinator shall operate as though the problem exists.
	ime Operations] oordinator with the agree that the prob ime Operations] eliability Coordina bact when the imp n: Operations Plan

14.1: The RC SDT believes "impacted" directly relates to the purpose statement. The original wording of "one or more other" is vague and difficult to measure. Using the word "other" presents a similar situation. The RCSDT chose to use the word "impacted" to tighten the requirement and remove ambiguity. The RC SDT does not intend for non-contiguous reliability coordinators to have "RC agreements", but to have Procedures, Processes, or Plans with impacted reliability coordinators.

14.2: To address your comments on the process for resolution of disagreements and R5, the RC SDT proposes the 4 requirements:

R5. Each Reliability Coordinator, upon identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation

Organization	Question 14:	Question 14 Comments:
Risk Factor: Medium] [Time Horizon: Op	perations Planning, Same Day Operations and Real-time Operations]
	acted Reliability Co	tor shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be ordinators, [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day
	t agree that the pro	identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability blem exists. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day
Adverse Reliability Ir	mpact when the imp	tor shall implement the mitigation plan developed by the Reliability Coordinator who has the identified bacted Reliability Coordinators can not agree on a mitigation plan, [Violation Risk Factor: nning, Same Day Operations and Real-time Operations]
		R4 to: "The RC shall participate in agreed upon conference calls at least weekly and other eliability Coordinators."
		acted" after much discussion. Impacted has the implication that the RC is immediately impacted or the on. We feel that the requirement for weekly calls addresses your concern.
14.5: R5 was modifie	ed as above.	
Buckeye Power, Inc.	Yes and No	abstain
Entergy Services, Inc	Yes	
Salt River Project	Yes	
US Bureau of Reclamation	Yes	
PJM Interconnection	Yes	

Organization	Question 14:	Question 14 Comments:
Bonneville Power Administration	Yes	
Manitoba Hydro	Yes	
NPCC	Yes	
CU of Springfield	Yes	
Ameren	Yes	
Reliability Coordinator Comment Working Group	Yes	
Northern California Power Agency	Yes	
AEP	Yes	
American Transmission Company		Abstain

15. Do you agree with the revisions to the Measures in IRO-014-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: The RC SDT received comments to revise M1 to remove "System operators" as it added to the requirement and to remove "for real-time use". The RC SDT agrees and has modified the measure as shown below:

M1. The Reliability Coordinator's System Operators shall have available for Real-time use, the latest approved documented version of Operating Procedures, Processes, or Plans that require notifications, information exchange or the coordination of actions among impacted Reliability Coordinators. This documentation may include, but is not limited to, dated, current in force documentation with the specified elements.

M1.1 These Operating Procedures, Processes, or Plans shall address:

- M1.1.1 Communications and notifications, including the mutually agreed to conditions under which one Reliability Coordinator notifies other Reliability Coordinators; the process to follow in making those notifications; and the data and information to be exchanged with other Reliability Coordinators.
- -M1.1.2 Energy and capacity shortages.
- -M1.1.3 Planned or unplanned outage information.
- -M1.1.4 Voltage control, including the coordination of reactive resources for voltage control.
- -M1.1.5 Coordination of information exchange to support reliability assessments.
- M1.1.6 Authority to act to prevent and mitigate instances of causing Adverse Reliability Impacts to other Reliability Coordinator Areas.

<u>Most o</u>Other <u>The</u> measures were <u>also</u> revised to conform to changes in the requirements <u>and to provide samples of acceptable</u> <u>evidence</u>.

Organization	Question 15:	Question 15 Comments:
Independent Electricity System Operator -	No	Measure 1 actually contains a number of subrequirements that should be stipulated in R1, not M1. If indeed these are required, they should be stipulated in the Requirement section, not the Measures Section.

	Question 15:	Question 15 Comments:
Ontario		
	RC SDT thanks you uded only in the requ	for your comment. The RC SDT modified M1 deleting "System Operators" and the submeasures were uirement.
ISO/RTO Council Standards Review Subcommittee	No	Measure 1 appears to add to the requirement. Requirement 1 does not mention anything about System Operators yet the measurement does. The measurement should just be to verify that the RC has have Operating Processes, Procedures, and Plans. The sub-measurements are not measurements at all. There should be the single measurement to verify the Operating Processes, Procedures, and Plans have been developed and address the sub-requirements. This really points
	uded only in the requ	out the problem with making the criteria that must be considered in the Operating Processes, Procedures, and Plans sub-requirements in the first place. They aren't requirements of any sort. They represent criteria. The drafting team should consider making them a bulleted list without the Rs, then the drafting team won't feel compelled to write sub-measures that don't measure anything.

Organization	Question 15:	Question 15 Comments:
situations". RC's	need to coordinate so	lutions and the revised wording of the requirements R5-R8 will require that.
Southern Company Transmission	No	15.1 - In M1, delete "for Real-time use".15.2 - Modify the measures to be consistent with changes requested in R1, R2, R4, R4.1 and R5.
Response: The F	RC SDT thanks you fo	or your comment. The RC SDT modified M1 and deleted "for Real-time use."
The measures we	re revised based on re	evisions to the requirements (see response to Q14).
FirstEnergy	No	The measures should be modified per our suggested modifications in question 14.
Response: The F Q14).	RC SDT thanks you fo	or your comment. The measures were revised based on revisions to the requirements (see response to
Duke Energy	No	See comment #14 above. Also, Measure M5 is inconsistent with Requirement R5. It should mirror the requirement. Also, need to add the requirement number at the end of each Measure.
		or your comment. See response to question 14. M5 was modified to reflect the entirety of R5 and new for clarity and completeness. .
SERC OC Standards Review Group	Yes and No	15.1 - In M1, delete "System Operator" and "for real-time use".15.2 - Modify the measures to be consistent with changes requested in R1, R2, R4, R4.1 and R5.
Response: The Fuse."	RC SDT thanks you fo	r your comment. The RC SDT modified M1 and deleted both, "System Operators" and "for Real-time
The measures we	re revised based on re	evisions to the requirements (see response to Q14).
Buckeye Power, Inc.	Yes and No	Abstain
Manitoba Hydro	Yes	

Organization	Question 15:	Question 15 Comments:
NPCC	Yes	
Ameren	Yes	
Reliability Coordinator Comment Working Group	Yes	
Northern California Power Agency	Yes	
CU of Springfield	Yes	
Entergy Services, Inc	Yes	
Salt River Project	Yes	
US Bureau of Reclamation	Yes	
PJM Interconnection	Yes	
Bonneville Power Administration	Yes	

Organization	Question 15:	Question 15 Comments:
AEP	Yes	
American Transmission Company		Abstain

16. Do you agree with the Violation Severity Levels proposed in IRO-014-2 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: Several commenters suggested that the High and Severe VSLs for R2 contradicted the requirement. The RC SDT agreed and removed the "nots" from the VSLs to correct this error.

The VSL for R4 was originally proposed as a binary requirement with only a Lower VSL – since that time, a determination was made that noncompliance with any binary requirement must be classified a Severe VSL – thus the VSL for R4 was changed from Lower to Severe.

Several commenters had suggested revisions for the VSLs for R6. This requirement was imported from IRO-016 and several commenters suggested expanding the set of requirements regarding the Implementation Plan. The RC SDT expanded the requirements to 4 separate requirements and developed VSLs for these requirements (R5-R8). This made some of the comments on the VSLs moot.

Organization	Question 16:	Question 16 Comments:
Independent Electricity System Operator - Ontario	No	R2: the High and Severe VSLs contradict with the requirement. We believe all of the "nots" should be removed.
		R6: The Low VSL should be a High since not agreeing to a plan but implementing one that has not been agreed to is a high violation of the requirement.
		The VSLs for R1 may need to be revised if our comments on M1 are adopted.
Response: The RC We have r		r your comment. sed on your comment.
R6 – The revised requirements	requirements were	revised and additional requirements were added for clarity. The VSLs were written based on the
The VSL f	or R1 was unchang	ed as R1 remained unchanged.
MRO NERC SDTandards Review	No	For R2, the High and Severe VSLs contradict the requirement. We believe all of the "nots" should be removed. We don't agree with the VSLs in R4 since we believe R4 should be struck.

Organization	Question 16:	Question 16 Comments:
Subcommittee		The Lower VSL for R6 should not even be a violation unless the impact was negative. If the RC implemented a different mitigation plan and resolved the issue, then the RC was likely correct to disagree.
Response: The R	C SDT thanks you for	or your comment.
We have revised the	ne VSL for R2 per yo	ur suggestion.
R4 – R4 remains in	n the standard	
R6 - The requirements.	ents were revised an	d additional requirements were added for clarity. The VSLs were written based on the revised
Southern	No	16.1 - In R2, severe should be " and no action was taken by the RC".
Company Transmission		16.2 - In R5, severe should also include " or that the RC failed to operate as though the problem existed."
		16.3 - Modify the VSLs to be consistent with changes requested in R1, R2, R4, R4.1 and R5.
Response: The R	C SDT thanks you for	br your comment.
16.1 The requirem	nent is to have agree	d to plans and to distribute the plans. Other requirements address the actions to be taken.
16.2 The requirem requirements.	nents were revised a	nd additional requirements were added for clarity. The VSLs were written based on the revised
16.3 The VSLs we	ere revised based on	stakeholder comments and revised requirements.
FirstEnergy	No	The VSL should be modified per our suggested modifications in question 14.
Response: The R	C SDT thanks you for	or your comment. The VSLs were revised to reflect revisions to the requirements.
Duke Energy	No	See comments #14 and #15 above - VSLs need to be revised to correspond to the revised Requirements and Measures.
Response: The R	C SDT thanks you for	br your comment. Please see responses to comment 14 and 15 above. VSLs were revised to reflect

Organization	Question 16:	Question 16 Comments:		
revised requirements	revised requirements.			
ISO/RTO Council Standards Review	No	For R2, the High and Severe VSLs contradict the requirement. We believe all of the "nots" should be removed.		
Subcommittee		We don't agree with the VSLs in R4 since we believe R4 should be struck.		
		The Lower VSL for R6 should not even be a violation unless the impact was negative. If the RC implemented a different mitigation plan and resolved the issue, then the RC was likely correct to disagree.		
Response: The RC	SDT thanks you fo	r your comment.		
The VSL for R2 was	revised per your su	iggestion.		
R4 – R4 remains in t	he standard. The \	/SLs were revised to reflect that noncompliance with a binary requirement is Severe.		
R6 – The requiremen requirements.	nts were revised an	d additional requirements were added for clarity. The VSLs were written based on the revised		
SERC OC	Yes and No	16.1 - In R2, severe should be "no action was taken by the RC".		
Standards Review Group		16.2 - In R5, severe should also include that the RC failed to operate as though the problem existed.		
Croup		16.3 - Modify the VSLs to be consistent with changes requested in R1, R2, R4, R4.1 and R5.		
Response: The RC	SDT thanks you fo	r your comment.		
16.1 - The requireme	ent is to have agree	d to plans and to distribute the plans. Other requirements address the actions to be taken.		
16.2 - The requiremer requirements.	ents were revised a	nd additional requirements were added for clarity. The VSLs were written based on the revised		
16.3 - The VSLs wer	e revised based on	stakeholder comments and revised requirements.		
Buckeye Power, Inc.	Yes and No	abstain		

Organization	Question 16:	Question 16 Comments:
US Bureau of Reclamation	Yes	
Entergy Services, Inc	Yes	
Salt River Project	Yes	
Bonneville Power Administration	Yes	
AEP	Yes	
PJM Interconnection	Yes	
Manitoba Hydro	Yes	
NPCC	Yes	
Ameren	Yes	
CU of Springfield	Yes	
Reliability Coordinator Comment Working Group	Yes	
Northern California Power Agency	Yes	

Organization	Question 16:	Question 16 Comments:
American Transmission Company		Abstain

17. Do you agree with the RC SDT recommendation to retire IRO-015-1 and move the requirements into IRO-014-2? If not, please explain in the comment area.

Summary Consideration: Stakeholders agree with the proposed revisions.

Organization	Question 17:	Question 17 Comments:
Buckeye Power, Inc.	Yes and No	abstain
SERC OC Standards Review Group	Yes	17.1 - We agree with the recommendation to retire IRO-015-2
Response: The RC	SDT thanks you fo	r your comment.
Southern Company Transmission	Yes	17.1 - We agree with the recommendation to retire IRO-015-2.
Response: The RC	SDT thanks you fo	r your comment.
Manitoba Hydro	Yes	
NPCC	Yes	
Ameren	Yes	
Independent Electricity System Operator - Ontario	Yes	

Organization	Question 17:	Question 17 Comments:
CU of Springfield	Yes	
Reliability Coordinator Comment Working Group	Yes	
Northern California Power Agency	Yes	
MRO NERC SDTandards Review Subcommittee	Yes	
ISO New England Inc.	Yes	
Entergy Services, Inc	Yes	
Salt River Project	Yes	
US Bureau of Reclamation	Yes	
PJM Interconnection	Yes	
FirstEnergy	Yes	
Bonneville Power	Yes	

Organization	Question 17:	Question 17 Comments:
Administration		
Duke Energy	Yes	
AEP	Yes	
ISO/RTO Council Standards Review Subcommittee	Yes	
American Transmission Company		Abstain

18. Do you agree with the revisions to IRO-016-1 as shown in the posted Standard and Implementation Plan? If not, please explain in the comment area.

Summary Consideration: Stakeholders agree with the concept of moving the requirements of IRO-016-1 into IRO-014-2. Some commenters did not agree with the wording of the new requirements in IRO-014 that were formerly in IRO-016. The RC SDT reviewed the Implementation Plan for IRO-016 and its requirements and made some revisions to the requirements listed in IRO-014-2. There are now 4 requirements formed to cover the intent of the requirement transferred from IRO-016:

R5. Each Reliability Coordinator, upon identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

R6. Each impacted Reliability Coordinator shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be agreed to by the impacted Reliability Coordinators, [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

R7. The Reliability Coordinator with the identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability Coordinators can not agree that the problem exists. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

R8. Each impacted Reliability Coordinator shall implement the mitigation plan developed by the Reliability Coordinator who has the identified Adverse Reliability Impact when the impacted Reliability Coordinators can not agree on a mitigation plan, [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]

Organization	Question 18:	Question 18 Comments:
Duke Energy	No	See comment #14 above regarding re-write needed for Requirement R6 of IRO-014-2.
Response: The RC SDT thanks you for your comment. Please see response in #14 above.		
MRO NERC SDTandards Review Subcommittee	Yes	We do agree with moving the requirement. However, the drafting team needs to revisit the wording of the requirement. The new wording is much more confusing. Until we reviewed IRO-016-2, it was not clear at all that R6 in IRO-014 was attempting to mimic R1 and its sub-requirements in IRO-016-2.

Organization	Question 18:	Question 18 Comments:	
	Response: The RC SDT thanks you for your comment. The RC SDT reviewed the Implementation Plan for IRO-016 and its requirements and made some revisions to the requirements listed in IRO-014-2. There are now 4 requirements:		
		identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation perations Planning, Same Day Operations and Real-time Operations]	
	acted Reliability Co	tor shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be pordinators, [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day	
	t agree that the pro	e identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability blem exists. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day	
Adverse Reliability Ir	R8. Each impacted Reliability Coordinator shall implement the mitigation plan developed by the Reliability Coordinator who has the identified Adverse Reliability Impact when the impacted Reliability Coordinators can not agree on a mitigation plan,. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]		
Southern Company Transmission	Yes	18.1 - We agree with the recommendation to retire IRO-016-2.	
Response: The RC	Response: The RC SDT thanks you for your comment.		
Buckeye Power, Inc.	Yes and No	Abstain	
SERC OC Standards Review Group	Yes	18.1 - We agree with the recommendation to retire IRO-016-2	
Response: The RC SDT thanks you for your comment.			
ISO/RTO Council Standards Review	Yes	We do agree with moving the requirement. However, the drafting team needs to revisit the wording of the requirement. The new wording is much more confusing. Until we reviewed IRO-016-2, it was not clear at all that R6 in IRO-014 was attempting to mimic R1 and its sub-requirements in IRO-016-	

Organization	Question 18:	Question 18 Comments:	
Subcommittee		2.	
	Response: The RC SDT thanks you for your comment. The RC SDT reviewed the Implementation Plan for IRO-016 and its requirements and made some revisions to the requirements listed in IRO-014-2. There are now 4 requirements:		
		identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation perations Planning, Same Day Operations and Real-time Operations]	
	acted Reliability Co	tor shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be ordinators, [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day	
Coordinators can no	R7. The Reliability Coordinator with the identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability Coordinators can not agree that the problem exists. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]		
Adverse Reliability Ir	R8. Each impacted Reliability Coordinator shall implement the mitigation plan developed by the Reliability Coordinator who has the identified Adverse Reliability Impact when the impacted Reliability Coordinators can not agree on a mitigation plan,. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]		
Manitoba Hydro	Yes		
NPCC	Yes		
Ameren	Yes		
Independent Electricity System Operator - Ontario	Yes		
CU of Springfield	Yes		
Reliability Coordinator Comment Working	Yes		

Organization	Question 18:	Question 18 Comments:
Group		
Northern California Power Agency	Yes	
ISO New England Inc.	Yes	
Entergy Services, Inc	Yes	
MEAG Power		
Salt River Project	Yes	
US Bureau of Reclamation	Yes	
PJM Interconnection	Yes	
FirstEnergy	Yes	
Bonneville Power Administration	Yes	
AEP	Yes	
American Transmission Company		Abstain

19. If you have any other comments, not expressed in questions above, on this set of revisions, please provide your comments here.

Summary Consideration: The RC SDT received comments that COM-001-2, R5 should be retired upon regulatory approval. The RC SDT will propose the earliest possible retirement date – the first day of the first calendar quarter following applicable regulatory approval, or in those jurisdictions where no regulatory approval is required, the first day of the first calendar quarter following BOT adoption.

Organization	Question 19:	
Southern Company Transmission	19.1 - We suggest the effective date for the retirement of R5 (NERC Net Security Policy) in the COM- 001-2 Standard should be effective immediately upon regulatory approval. As written, the Policy is unenforceable, contains no measures and is not germane to BES Reliability.	
Response: The RC SDT thanks yo	ou for your comment. We concur and will request an effective date as you suggest.	
SERC OC Standards Review Group	19.1 - We suggest the effective date for the retirement of R5 (NERC Net Security Policy) in the COM- 001-2 Standard should be effective immediately upon regulatory approval. As written, the Policy is unenforceable, contains no measures and is not germane to BES Reliability	
Response: The RC SDT thanks you for your comment. We concur and will request an effective date as you suggest.		
Entergy Services, Inc	Overall, we think the coordinated set of standards being developed by the RTOSDT and IROLSDT are good for reliability, crisp, and tightens up the reliability concepts.	
Response: The RC SDT thanks you for your comment.		
MEAG Power	My other concerns are addressed in the comments of the SERC OC Standards Review Group.	
Response: The RC SDT thanks you for your comment.		
Salt River Project	I appreciate the new comment form in Word version. his allows me to comment on each requirement specifically addressing the requirement, measure or the VSL's	

Organization	Question 19:		
Response: The RC SDT thanks yo	Response: The RC SDT thanks you for your comment.		
#2 Standards Interface Subcommittee/Compliance Elements Development Resource Pool	Standard – COM-001-2 Telecommunications: Requirement 1: Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall operationally test, on a quarterly basis at a minimum, alternative telecommunications facilities to ensure the availability of their use when normal telecommunications facilities fail. Proposed Measure: Each Reliability Coordinator, Transmission Operator, and Balancing Authority shall provide evidence that it operationally tested, on a quarterly basis at a minimum, alternative telecommunications facilities to ensure the availability of their use when normal telecommunications facilities fail. SDT Proposed Lower VSL The Reliability Coordinator, Transmission Operator, or Balancing Authority failed to operationally test within the last quarter. CEDRP Proposed Lower VSL: The Reliability Coordinator, Balancing Authority or Transmission Operator performed operational testing of alternative telecommunications, but did not perform a test in one of the previous four quarters. SDT Proposed Moderate VSL: The Reliability Coordinator, Transmission Operator, or Balancing Authority failed to operationally test within the last 2 quarters. CEDRP Proposed Moderate VSL: The Reliability Coordinator, Transmission Operator, or Balancing Authority failed to operationally test within the last 2 quarters. CEDRP Proposed Moderate VSL: The Reliability Coordinator, Transmission Operator, or Balancing Authority failed to operational testing of alternative telecommunications, but did not perform a test in two of the previous four quarters. SDT Proposed High VSL: The Reliability Coordinator, Transmission Operator, or Balancing Authority failed to operationally test within the last 3 quarters. CEDRP Proposed High VSL: The Reliability Coordinator, Transmission Operator, or Balancing Authority failed to operationally test within the last 3 quarters. CEDRP Proposed High VSL: The Reliability Coordinator, Balancing Authority or Transmission Operator performed operational testing of		

Organization	Question 19:
	SDT Proposed Severe VSL: The Reliability Coordinator, Transmission Operator, or Balancing Authority failed to operationally test within the last 4 quarters. CEDRP Proposed Severe VSL: The Responsible Entity failed to operationally test alternative telecommunications every quarter on more than three separate occasions (i.e. more than any three different quarters).
	Standard – COM-001-2 R2 Telecommunications Each Reliability Coordinator, Transmission Operator and Balancing Authority shall notify impacted entities of the failure of its normal telecommunications facilities, and shall verify that alternate means of telecommunications are functional.
	Proposed Measure: Each Reliability Coordinator, Transmission Operator and Balancing Authority shall provide evidence that it notified impacted entities of failure of their normal telecommunications facilities, and verified the alternate means of telecommunications were functional. Discussion - This requirement needs to be re-written to be more clearly define who the entities are that are "impacted." The key attributes appear to be notification of ALL (communication) impacted entities (possible omission if some, but not all are not notified). The requirement does not give any guidance on the "verification" side – this is a problem, one entity can interpret that to mean "we looked and it was working", another may be to verify with all impacted entities that alternate communication is working. We suggest this requirement needs a little more clarification.
	Response: The RC SDT believes that entities should contact others when their normal communication capability is lost. For example, the normal phone line could be cut and someone trying to contact that entity may only get a busy signal and have no idea that alternate communications is necessary.
	We have revised the requirement to place time bounds on outages that require notification. The requirement was rewritten to:
	R2. Each Reliability Coordinator, Transmission Operator and Balancing Authority shall notify impacted entities within 60 minutes of the detection of a failure (30 minutes or longer) of its normal interpersonal communications capabilities. [Violation Risk Factor: Medium][Time Horizon: Real-time Operations]
	The CEDRP does not feel it can write a valid VSL for this requirement as currently worded.
	SDT Proposed Lower VSL:

Organization	Question 19:
	The Reliability Coordinator, Transmission Operator or Balancing Authority notified all impacted entities of the failure of their normal telecommunications facilities, but failed to verify the alternate means of telecommunications are functional. CEDRP Proposed Lower VSL: See Discussion
	SDT Proposed Moderate VSL: The Reliability Coordinator, Transmission Operator or Balancing Authority notified some, but not all, impacted entities of the failure of their normal telecommunications facilities, and failed to verify the alternate means of telecommunications are functional. CEDRP Proposed Moderate VSL: See Discussion:
	SDT Proposed High VSL: N/A CEDRP Proposed High VSL: See Discussion SDT Proposed Severe VSL: The Reliability Coordinator, Transmission Operator or Balancing Authority failed to notify any impacted entities of the failure of their normal telecommunications facilities, and failed verify the alternate means of telecommunications are functional. CEDRP Proposed Severe VSL: See Discussion
	Standard – COM-001-2 R3 Telecommunications Unless agreed to otherwise, each Reliability Coordinator, Transmission Operator, Balancing Authority, Generator Operator and Distribution Provider shall use English as the language for all inter-entity Bulk Electric System (BES) reliability communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected BES. Transmission Operators and Balancing Authorities may use an alternate language for internal operations. Proposed Measure: The Reliability Coordinator, Transmission Operator or Balancing Authority shall have and provide upon request evidence that could include, but is not limited to operator logs, voice recordings or transcripts of voice recordings, electronic communications, or equivalent, that will be used

Organization	Question 19:
	to determine that personnel used English as the language for all inter-entity BES reliability communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected BES.
	NOTE: OK with this as is because the requirement and VSLs have been re-written, will be removed from this standard shortly, and included in the new COM-003-1 standard.
	Response: Thank you for your comment.
	SDT Proposed Severe VSL: The Responsible Entity failed to provide evidence of concurrence to use a language other than English for all communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System. CEDRP Proposed Severe VSL: The Responsible Entity failed to provide evidence of the concurrence to use a language other than English for all communications between and among operating personnel responsible for the real-time generation control and operation of the interconnected Bulk Electric System.
	Standard – COM-001-2 R4 Telecommunications Each Distribution Provider and Generation Operator shall have telecommunications facilities with its Transmission Operator and Balancing Authority for the exchange of Interconnection and operating information. Proposed Measure: Each Distribution Provider and Generation Operator has telecommunications facilities with its Transmission Operator and Balancing Authority for the exchange of Interconnection and operating information.
	"has" telecomm with TOP and BA Discussion – Telecommunication Facilities is ambiguous and is not included in the NERC glossary of terms – the CEDRP recommend deleting the word "facilities" from the requirement and measure and leaving it just as "telecommunications" with its TOP and BA.
	Response: The term "telecommunications facilities" was replaced with "interpersonal communications

	Organization	Question 19:
1		capabilities" to clarify the intent of the requirement.
		SDT Proposed High VSL: N/A
		CEDRP Proposed High VSL: The Responsible Entity failed to establish telecommunications with either their Balancing Authority OR Transmission Operator for the exchange of Interconnection and operating information.
		SDT Proposed Severe VSL: The Distribution Provider or Generation Operator failed to have telecommunications facilities with its Transmission Operator and Balancing Authority
		CEDRP Proposed Severe VSL: The Responsible Entity failed to establish telecommunications with their Balancing Authority AND Transmission Operator for the exchange of Interconnection and operating information.
		5. Is the VSL language clear & measurable (ambiguity removed)? If no, does the requirement or measure need to be revised? Yes, considering the wording of the requirement as written. More specifically, the word "have" as used in the requirement is a bit vague. A better choice could have been, "established and maintains."
		Response: Thank you for your comment.
		Standard: COM-002-3 Communications and Coordination
ſ	Response: The RC SDT thanks you for your comments. Please see responses embedded above.	
	In the future, please do not submit comments in this format. It is extremely burdensome on the drafting team in trying to respond to the comments. Please answer each question individually. If you encounter difficulty, please contact NERC for assistance.	
	Standards Interface Subcommittee/Compliance Elements Drafting	Standard – IRO-001 R1 The Reliability Coordinator shall act or direct actions to be taken by Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, Distribution Providers and Purchasing-Selling Entities within its Reliability Coordinator Area to prevent or mitigate the magnitude or duration of events that result in Adverse Reliability Impacts. [Violation Risk

Organization	Question 19:
	 Factor: High] [Time Horizon: Real-time Operations and Same Day Operations] Proposed Measure Each Reliability Coordinator shall have evidence that it acted, or issued directives, to prevent or mitigate the magnitude or duration of Adverse Reliability Impacts within its Reliability Coordinator Area Discussion – 1. As currently worded it can be interpreted that any time an event occurs the RC would be in violation of the standard simply because they had failed "to prevent" an event. 2. This requirement does not have a "timing" element included, although it implies timing based on the "duration of the event". Including that "duration of the event" is problematic – it appears to imply that human intervention may provide a more timely response than relay operation, we would suggest more clarification about what the "duration" element of the requirement is intended to address (e.g. generation re-dispatch?). 3. There also appears to be a "quality" element included based on the mitigation of magnitude of the event. As a result we believe that timeliness, effectiveness and communication should be the basis of the VSLs. 4. The VSLs as differentiate between directing actions and acting. Practically, there is no difference. The RC is still giving the directive. It is just a matter of who is carrying it out. This is not a valid basis for differentiating between VSLs. We suggest the VSLs be defined based on actual system impact (i.e. Was the RC acting or directing actions to prevent or to mitigate?) and to either modify the requirement to remove timing aspects or to add the timing aspects to the VSLs. Response:
	1. The RC SDT does not agree that there would be a violation any time an event occurred. The RC should always be looking ahead. Even though events can occur that were not foreseeable or due to catastrophic failures of system equipment.
	2. The intent of the phrase of "duration of the event" is to emphasize that there are actions that can be taken to shorten the duration of an event. These include ordering redispatch and system reconfiguration (including load shedding) to mitigate an Adverse Reliability Impact, thus shortening the event and its impact on the interconnection.
	3. The VSL has been re-written to include only a Severe VSL.
	4. We agree and have revised the VSL to only have a Severe VSL.
	SDT Proposed High VSL IRO-001 R1

Organization	Question 19:
	The Reliability Coordinator failed to act to prevent or mitigate the magnitude or duration of Adverse Reliability Impacts. CEDRP Proposed VSL The Reliability Coordinator failed to act to prevent the magnitude or duration of Adverse Reliability Impacts.
	SDT Proposed Severe VSL IRO-001 R1 The Reliability Coordinator failed to act and direct actions to prevent or mitigate the magnitude or duration of Adverse Reliability Impacts CEDRP Proposed VSL The Reliability Coordinator failed to act and direct actions to mitigate the magnitude or duration of Adverse Reliability Impacts
	CAE Resource Pool Comments The Enforcement Authority Statement, "NERC shall be responsible for compliance monitoring of the Regional Entity." Is not clear, if it is intended to encompass Regional Entities that perform RC functions is should be clearly stated, if not it should not be included in the Enforcement Authority section.
	Standard – IRO-001 R2 Transmission Operators, Balancing Authorities, Generator Operators, Transmission Service Providers, Load-Serving Entities, Distribution Providers, and Purchasing-Selling Entities shall act without intentional delay to comply with Reliability Coordinator directives unless such actions would violate safety, equipment, or regulatory or statutory requirements. [Violation Risk Factor: High] [Time Horizon: Real-time Operations and Same Day Operations] Proposed Measure
	Each Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, or Purchasing-Selling Entity shall have evidence that it acted without delay to comply with the Reliability Coordinator's directives unless such actions would violate safety, equipment, or regulatory or statutory requirements. Discussion - The team would suggest "intentional delay" be eliminated from the requirement – e.g. "shall act to"). To act with an intentional delay represents a willful act to disregard the requirement. Willful disregard of requirements is one of the factors that the enforcement authority uses to magnify penalties. Requirements should not include attempts to avoid willful disregard of the requirement.

Organization	Question 19:
	The measure and VSLs do not consider the exceptions for not following the RC objective. The drafting team should consider combining requirements R2 and R3. Thus, one VSL would become failure to notify the RC of the inability to comply. The drafting team could consider applying the numerical category of VSLs for some directives such as an order to redispatch. Obviously, it would not work well if the directive was to reconfigure the system.
	Response:
	The term "intentional delay" was eliminated from the standard as you suggested. The VSLs were revised to reflect the requirement.
	SDT Proposed Moderate High VSL The responsible entity followed the Reliability Coordinators directive unless such actions would violate safety, equipment, or regulatory or statutory requirements with a delay. not caused by equipment problems. CEDRP Proposed VSL IRO-001 R2 The team does not agree that this is a valid VSL.
	SDT Proposed High VSL — The responsible entity followed the majority of the Reliability Coordinators directive but did not fully follow the directive because it would violate safety, equipment, statutory or regulatory requirements. CEDRP Proposed VSL IRO-001 R2 The team does not agree that this is a valid VSL. The word majority implies some ability to numerically measure the response to the directive. Thus, the drafting team should consider applying the numerical category of the VSL guidelines.
	SDT Proposed Severe VSL — The responsible entity did not follow the Reliability Coordinators directive. The responsible entity did not follow the Reliability Coordinators directive, the directive would not have violated safety, equipment, regulatory, or statutory requirements, and responsible entity did not communicate the inability to follow the directive to the Reliability Coordinator. CEDRP Proposed VSL IRO-001 R2 The responsible entity did not follow the Reliability Coordinators directive, the directive would not have violated safety, equipment, regulatory, or statutory requirements, and responsible entity did not communicate the inability to follow the directive to the Reliability Coordinator.

Organization	Question 19:
	 Standard - IRO-001 R3 The Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider or Purchasing-Selling Entity shall immediately confirm the ability to comply with the directive or inform the Reliability Coordinator upon recognition of the inability to perform the directive. [Violation Risk Factor: High] [Time Horizon: Real-time Operations and Same Day Operations] Proposed Measure Each Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, or Purchasing-Selling Entity shall have evidence that it confirmed its ability to comply with the Reliability Coordinator's directives, or if for safety, equipment, regulatory or statutory requirements it could not comply, informed the Reliability Coordinator upon recognition of the inability to comply. Discussion – The requirement appears to be based on communication and can be problematic by including the requirement to immediately confirm the ability to comply, a directive can be issued to one entity or several entities at one time (e.g. conference call, all call, electronic notification) that may create several issues when attempting to process all confirmations, the requirement language presents a risk of being found out of compliance for following a directive but not providing an "immediate" confirmation to the RC. The CEDRP believes it to be a reasonable expectation that all entities will comply with reliability directives and notification should be made only on exception. The SDT should consider combining this requirement with R2.
	Response:
	The phrase "immediately confirm the ability to comply" was removed from the requirement. The new wording is:
	R3. Each Transmission Operator, Balancing Authority, Generator Operator, Transmission Service Provider, Load-Serving Entity, Distribution Provider, or Purchasing-Selling Entity shall inform its Reliability Coordinator upon recognition of its inability to perform the directive. [Violation Risk Factor: High] [Time Horizon: Real-time Operations and Same Day Operations]
	SDT Proposed Lower VSL IRO-001 R3 The responsible entity failed to immediately confirm the ability to comply with the directive issued by the Reliability Coordinator.

Organization	Question 19:
	CEDRP Proposed VSL See above discussion note
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	Each Reliability Coordinator that identifies an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area shall notify, without intentional delay, all impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area. [Violation Risk Factor: High] [Time Horizon: Real-time Operations, Same Day Operations and Operations Planning] Proposed Measure Each Reliability Coordinator shall have evidence that it notified, without intentional delay, all impacted Transmission Operators and balancing Authorities in its Reliability Coordinator Area when it identified a real or potential threat with Adverse Reliability Impacts, within its Reliability Coordinator Area.
	Discussion – To act with an intentional delay represents a willful act to disregard the requirement. Willful disregard of requirements is one of the factors that the enforcement authority uses to magnify penalties. Requirements should not include attempts to avoid willful disregard of the requirement. This requirement appears to fit the numerical category of the VSL guidelines best.
	Response:
	The term "intentional delay" was eliminated from the standard as you suggested. The VSLs were revised as you suggested.
	SDT Proposed Lower VSL IRO-001 R4 N/A CEDRP Proposed VSL The Reliability Coordinator who identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area failed to notify 25% or less of the Transmission Operators and Balancing Authorities within its Reliability Coordination Area.
	SDT Proposed Moderate VSL IRO-001 R4 N/A CEDRP Proposed VSL

Organization	Question 19:
	The Reliability Coordinator who identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area failed to notify more than 25% but less than or equal to 50% of the Transmission Operators and Balancing Authorities within its Reliability Coordination Area.
	SDT Proposed High VSL IRO-001 R4 N/A CEDRP Proposed VSL The Reliability Coordinator who identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area failed to notify more than 50% but less than or equal to 75% of the Transmission Operators and Balancing Authorities within its Reliability Coordination Area.
	SDT Proposed Severe VSL: IRO-001 R4 The Reliability Coordinator who identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area failed to issue an alert to all impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area.
	CEDRP Proposed Severe VSL: The Reliability Coordinator who identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area failed to notify more than 75% of the Transmission Operators and Balancing Authorities within its Reliability Coordination Area.
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	Each Reliability Coordinator who identifies an expected or actual threat with Adverse Reliability Impacts, within its Reliability Coordinator Area shall notify, without intentional delay, all impacted Transmission Operators and Balancing Authorities in its Reliability Coordinator Area when the transmission problem has been mitigated. [Violation Risk Factor: High] [Time Horizon: Real-time Operations, Same Day Operations and Operations Planning] Proposed Measure
	Each Reliability Coordinator shall have evidence that it notified, without intentional delay, all impacted Transmission Operators and balancing Authorities in its Reliability Coordinator Area when the real or potential threat with Adverse Reliability Impacts within its Reliability Coordinator Area has been mitigated.

Organization	Question 19:
	Discussion – To act with an intentional delay represents a willful act to disregard the requirement. Willful disregard of requirements is one of the factors that the enforcement authority uses to magnify penalties. Requirements should not include attempts to avoid willful disregard of the requirement. Measure 5 is written implying that there is an Adverse Reliability Impact. The drafting team should consider wording the measurement to consider that there may not be an Adverse Reliability Impact requiring a directive. The Commission in paragraph 27 of the VSL order has stated that multiple VSLs are preferable where possible. Suggest applying the numerical category of the VSL Guidelines based on the number of entities notified.
	Response:
	The term "intentional delay" was eliminated from the standard as you suggested. The VSLs were revised per your suggestion.
	SDT Proposed Lower VSL: IRO-001 R5
	N/A CEDRP Proposed Lower VSL: The Reliability Coordinator who identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area failed to notify 25% or less of the impacted Transmission Operators and Balancing Authorities within its Reliability Coordination Area that the Adverse Reliability Impact had been mitigated.
	SDT Proposed Moderate VSL: IRO-001 R5 N/A CEDRP Proposed Moderate VSL:
	The Reliability Coordinator who identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area failed to notify more than 25% but less than or equal to 50% of the impacted Transmission Operators and Balancing Authorities within its Reliability Coordination Area that the Adverse Reliability Impact had been mitigated.
	SDT Proposed High VSL: IRO-001 R5 N/A
	CEDRP Proposed High VSL: The Reliability Coordinator who identified an expected or actual threat with Adverse Reliability Impacts
	within its Reliability Coordinator Area failed to notify more than 50% but less than or equal to 75% of the

Organization	Question 19:
	impacted Transmission Operators and Balancing Authorities within its Reliability Coordination Area that the Adverse Reliability Impact had been mitigated.
	SDT Proposed Severe VSL: IRO-001 R5 The Reliability Coordinator failed to notify all impacted Transmission Operators, Balancing Authorities, when the transmission problem had been mitigated. CEDRP Proposed Severe VSL: The Reliability Coordinator who identified an expected or actual threat with Adverse Reliability Impacts within its Reliability Coordinator Area failed to notify more than 75% of the impacted Transmission Operators and Balancing Authorities within its Reliability Coordination Area that the Adverse Reliability Impact had been mitigated.
	 Standard – IRO-002-2 R1 Each Reliability Coordinator shall determine the data requirements to support its reliability coordination tasks and shall request such data from its Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities, or adjacent Reliability Coordinators. [Violation Risk Factor: Medium] [Time Horizon: Real-time Operations, Same Day Operations and Operations Planning] Proposed Measure Each Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, a letter to Transmission Operators, and Load-Serving Entities, or adjacent Reliability Coordinators, or other equivalent evidence that will be used to confirm that the Reliability Coordinator has requested the data required to support its reliability coordination tasks.
	Discussion – The VSLs attempt to measure the quality of the data requirements. They require the compliance auditor to judge if another RC has material impact and what data is administrative and what data is substantial. Given the typical length of a compliance audit, it is doubtful that the compliance auditor can make these types of judgments about the quality of the data and the material impact of another RC. The drafting team should consider applying numerical category of VSLs based on the number of entities the data request is made from. It is interesting that the measure also does not require

Organization	Question 19:
	any documentation of a data specification.
	Response:
	The requirement was retired by the work of the IROLSDT. It is no longer in the standard.
	SDT Proposed Lower VSL: The Reliability Coordinator demonstrated that it 1) determined its data requirements and requested that data from its Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load- Serving Entities or Adjacent Reliability Coordinators with a material impact on the Bulk Electric System in its Reliability Coordination Area but did not request the data from Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities or Adjacent Reliability Coordinators with minimal impact on the Bulk Electric System in its Reliability Coordination Area or 2) determined its data requirements necessary to perform its reliability functions with the exceptions of data that may be needed for administrative purposes such as data reporting. CEDRP Proposed Lower VSL: IRO-002-2 R1
	The Reliability Coordinator failed to request data to support its reliability coordination tasks from 25% or less of its Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities, or adjacent Reliability Coordinators.
	SDT Proposed Moderate VSL: The Reliability Coordinator demonstrated that it determined the majority but not all of its data requirements necessary to support its reliability coordination functions and requested that data from its Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities or Adjacent Reliability Coordinators. CEDRP Proposed Moderate VSL: IRO-002-2 R1 The Reliability Coordinator failed to request data to support its reliability coordination tasks from more than 25% but less than or equal to 50% of its Transmission Operators, Balancing Authorities,
	Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities, or adjacent Reliability Coordinators. SDT Proposed High VSL: The Reliability Coordinator demonstrated that it determined 1) some but less than the majority of its data requirements necessary to support its reliability

Organization	Question 19:
	coordination functions and requested that data from its Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities or Adjacent Reliability Coordinators
	Or
	2) all of its data requirements necessary to support its reliability coordination functions but failed to demonstrate that it requested data from two of its Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities or Adjacent Reliability Coordinators.
	CEDRP Proposed High VSL:_IRO-002-2 R1 The Reliability Coordinator failed to request data to support its reliability coordination tasks from more than 50% but less than or equal to 75% of its Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities, or adjacent Reliability Coordinators.
	SDT Proposed Severe VSL: The Reliability Coordinator failed to demonstrate that it 1) determined its data requirements necessary to support its reliability coordination functions and requested that data from its Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities or Adjacent Reliability Coordinators
	Or
	2) requested the data from three or more of its Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities or Adjacent Reliability Coordinators.
	CEDRP Proposed Severe VSL:_IRO-002-2 R1 The Reliability Coordinator failed to request data to support its reliability coordination tasks from more than 75% of its Transmission Operators, Balancing Authorities, Transmission Owners, Generation Owners, Generation Operators, and Load-Serving Entities, or adjacent Reliability Coordinators,

Organization	Question 19:
	Or, The Reliability Coordinator failed to determine data requirements to support its reliability coordination tasks. Standard – IRO-002-2 R2
	Each Reliability Coordinator shall have the authority to veto planned outages to analysis tools, including final approvals for planned maintenance. [Violation Risk Factor: Medium] [Time Horizon: Real-time Operations, Same Day Operations and Operations Planning] Proposed Measure Each Reliability Coordinator shall have and provide upon request evidence that could include, but is not limited to, a documented procedure or equivalent evidence that will be used to confirm that the Reliability Coordinator has the authority to veto planned outages to analysis tools, including final approvals for planned maintenance as specified in Requirement 2. Is this requirement needed? R1 IRO-001-2 requires the RC to mitigate Adverse Reliability Impacts. R2 IRO-001-2 requires responsible entities to comply with the RC directives. Wouldn't the RC thus have the right to cancel all types of outages (i.e. analysis tools, transmission equipment, etc). FERC has stated in paragraph 112 of Order 693-A that an RC does not derive their authority from agreements but rather from FERC's approval of the standards.
	Barring the team's decision to remove this requirement, the Severe VSL is confusing. We have suggested different wording.
	Response:
	While the RC SDT agrees that the other requirements should cover this subject, this is a direct response to the 2003 blackout and is included here. We have revised the Severe VSL to reflect the revised requirement.
	SDT Proposed Severe VSL IRO-002-2 R2 Reliability Coordinator approval is not required for planned maintenance or planned outages. CEDRP Proposed VSL Reliability Coordinator does not approve planned maintenance or planned outages.

Organization	Question 19:
	Standard – IRO-014-2 R1 No comments
	Standard – IRO-014-2 R2 R2. Each Reliability Coordinator's Operating Procedure, Process, or Plan that requires one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) shall be: [Violation Risk Factor: Lower] [Time Horizon: Real-time Operations and Operations Planning] R2.1. Agreed to by all the Reliability Coordinators required to take the indicated action(s). R2.2. Distributed to all Reliability Coordinators that are required to take the indicated action(s).
	Proposed Measure M2. The Reliability Coordinator shall have evidence that the Operating Procedures, Processes, or Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were: M2.1 Agreed to by all the Reliability Coordinators required to take the indicated action(s). M2.2 Distributed to all Reliability Coordinators that are required to take the indicated action(s).
	Discussion – The High and Severe VSLs appear to use "not" incorrectly.
	Response:
	We agree and have revised the VSLs.
	SDT Proposed Moderate VSL: IRO-014-2 R2 The Reliability Coordinator failed to did not have evidence that the Operating Procedures, Processes, or Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were distributed to all Reliability Coordinators that are required to take action. CEDRP Proposed Moderate VSL: IRO-014-2 R2 The Reliability Coordinator did not have evidence that the Operating Procedures, Processes, or Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were distributed to all Reliability Coordinators that are required to take

Organization	Question 19:
	action. SDT Proposed High VSL: The Reliability Coordinator failed to did not have evidence that the Operating Procedures, Processes, or Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were not agreed to by all Reliability Coordinators that are required to take action CEDRP Proposed High VSL: The Reliability Coordinator did not have evidence that the Operating Procedures, Processes, or Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were agreed to by all Reliability Coordinators that are required to take action SDT Proposed Severe VSL: The Reliability Coordinator failed to did not have evidence that the Operating Procedures, Processes, or Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were agreed to by all Reliability Coordinators that are required to take action
	required to take action and were not distributed to all Reliability Coordinators that are required to take action CEDRP Proposed Severe VSL: The Reliability Coordinator did not have evidence that the Operating Procedures, Processes, or Plans that require one or more other Reliability Coordinators to take action (e.g., make notifications, exchange information, or coordinate actions) were agreed to by all Reliability Coordinators that are required to take action and were distributed to all Reliability Coordinators that are required to take action
	Standard – IRO-014-2 R3 [Response: The SDT appreciates the comments. To better emphasize the distinction, the SDT decided to underline the "and" and the "or".] Requirement (including sub-requirements) R3. The Reliability Coordinator shall make notifications and exchange reliability–related information with impacted Reliability Coordinators using its predefined Operating Procedures, Processes, or Plans for conditions that may impact other Reliability Coordinator Areas or other means to accomplish the notifications and exchange of reliability-related information. [Violation Risk Factor: Medium][Time

Organization	Question 19:
	Horizon: Real-time Operations and Operations Planning]
	Proposed Measure M3. The Reliability Coordinator shall have evidence it made notifications and exchanged reliability– related information with impacted Reliability Coordinators using its predefined Operating Procedures, Processes, or Plans for conditions that may impact other Reliability Coordinator Areas or other means to accomplish the notifications and exchange of reliability-related information.
	Discussion: The VSLs appear to be appropriate. Since the only difference is the use of the "and" and "or", we suggest emphasizing those words in bold. We read this more than once before we noticed the difference.
	Response:
	We revised the VSL to emphasize the "OR" and "AND" parts.
	SDT Proposed High VSL: The Reliability Coordinator failed to make notifications or exchange reliability–related information with impacted Reliability Coordinators. CEDRP Proposed High VSL: IRO-014-2 R3 The Reliability Coordinator failed to make notifications or exchange reliability–related information with impacted Reliability Coordinators.
	SDT Proposed Severe VSL: The Reliability Coordinator failed to make notifications and exchange reliability–related information with impacted Reliability Coordinators. CEDRP Proposed Severe VSL: IRO-014-2 R3 The Reliability Coordinator failed to make notifications and exchange reliability–related information with impacted Reliability Coordinators.
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Organization	Question 19:
	 Horizon: Real-time Operations] The frequency of these conference calls shall be agreed upon by all involved Reliability Coordinators and shall be at least weekly. Proposed Measure M4. The Reliability Coordinator shall have evidence it participated in agreed upon (at least weekly) conference calls and other communication forums with impacted Reliability Coordinators. Discussion – This requirement is purely administrative and probably does not rise to a level of a reliability standard requirement. It is in essence redundant, with R1.1 IRO-014-2? It appears R1.1 addresses the same information that would be expected to be discussed in a weekly conference call. Should the drafting team disagree and retain this requirement, please consider applying multiple VSLs based on how often the RC participates in conference calls, how many they missed, or how many impacted RCs they participated in conference calls with.
	Response:
	R1.1 is a sub-requirement of R1 which requires the reliability coordinator "to have" procedures, processes, or plans, and R4 requires "participation." R4 requires participation on calls. If the RC fails to participate, that is a violation of the requirement, making it a binary requirement with only one VSL.
	SDT Proposed Lower VSL: The Reliability Coordinator failed to participate in agreed upon (at least weekly) conference calls and other communication forums with impacted Reliability Coordinators. CEDRP Proposed Lower VSL: IRO-014-2 R4
	The Reliability Coordinator participated in agreed upon conference calls and other communication forums with impacted Reliability Coordinators bi-weekly, Or
	the Reliability Coordinator failed to participate in one weekly conference call, Or
	the Reliability Coordinator agreed to participate in conference calls with 25% or less of the impacted Reliability Coordinators.
	SDT Proposed Moderate VSL: N/A

Organization	Question 19:
	CEDRP Proposed Moderate VSL: IRO-014-2 R4 The Reliability Coordinator participated in agreed upon conference calls and other communication forums with impacted Reliability Coordinators every third week, Or
	the Reliability Coordinator failed to participate in two weekly conference calls, Or
	the Reliability Coordinator agreed to participate in conference calls with more than 25% but less than or equal to 50% of the impacted Reliability Coordinators.
	SDT Proposed High VSL: N/A
	CEDRP Proposed High VSL: IRO-014-2 R4 The Reliability Coordinator participated in agreed upon conference calls and other communication forums with impacted Reliability Coordinators fourth week, Or
	the Reliability Coordinator failed to participate in three weekly conference calls, Or
	the Reliability Coordinator agreed to participate in conference calls with more than 50% but less than or equal to 75% of the impacted Reliability Coordinators.
	SDT Proposed Severe VSL: N/A
	CEDRP Proposed Severe VSL: IRO-014-2 R4 The Reliability Coordinator participated in agreed upon conference calls and other communication forums with impacted Reliability Coordinators at least every fifth week,
	Or the Reliability Coordinator failed to participate in four weekly conference calls, Or
	the Reliability Coordinator failed to agree to participate in any conference calls, Or
	the Reliability Coordinator agreed to participate in conference calls with more than 75% but less than 100% of the impacted Reliability Coordinators.

Organization	Question 19:
	Standard – IRO-014-2 R5
	R5. When an expected or actual reliability issue is detected, the Reliability Coordinator shall confirm the existence of the issue with the impacted Reliability Coordinators. Until In the event that the issue cannot be has been proven to not exist, confirmed, each Reliability Coordinator shall operate as though the problem exists. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations] Proposed Measure
	The Reliability Coordinator shall have evidence that, in cases when an expected or actual reliability issue was detected, it has confirmed the existence of the issue with the impacted Reliability
	Coordinators. Discussion – This requirement is confusing in the way it is worded. We think it is trying to say that the RC should operate as though the reliability issue (should this be Adverse Reliability Impact) is detected until the issue is confirmed not to exist. The way it is worded might imply that if one doesn't confirm it to exist, operate as though it does. This leaves open the interpretation that a confirmation that it doesn't exist must still be operated to as though it does exist.
	The drafting team should consider splitting operating to prevent from operating to mitigate an existing event in the VSLs. Response:
	The RC SDT reviewed the Implementation Plan for IRO-016 and its requirements and made some revisions to the requirements listed in IRO-014-2. There are now 4 requirements:
	R5. Each Reliability Coordinator, upon identification of an Adverse Reliability Impact, shall notify impacted Reliability Coordinators. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]
	R6. Each impacted Reliability Coordinator shall operate as though the problem exists when the identified Adverse Reliability Impact cannot be agreed to by the impacted Reliability Coordinators, [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]
	R7. The Reliability Coordinator with the identified Adverse Reliability Impact shall develop a mitigation plan when the impacted Reliability Coordinators can not agree that the problem exists. [Violation Risk

Organization	Question 19:
	Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]
	R8. Each impacted Reliability Coordinator shall implement the mitigation plan developed by the Reliability Coordinator who has the identified Adverse Reliability Impact when the impacted Reliability Coordinators can not agree on a mitigation plan,. [Violation Risk Factor: Medium][Time Horizon: Operations Planning, Same Day Operations and Real-time Operations]
	The RC SDT has revised / created VSLs based on the new requirements.
	SDT Proposed Lower VSL The Reliability Coordinator that detected an expected or actual reliability issue contacted the other Reliability Coordinator(s) to confirm that there was a problem but could not confirm that the problem existed and failed to operate as though the problem existed. CEDRP Proposed VSL IRO-014-2 R5 N/A
	SDT Proposed High VSL N/A CEDRP Proposed VSL IRO-014-2 R5 The Reliability Coordinator that detected an expected reliability issue failed to contact the other Reliability Coordinator(s) to confirm that there was a problem.
	SDT Proposed Severe VSL The Reliability Coordinator that detected an expected or actual reliability issue failed to contact the other Reliability Coordinator(s) to confirm that there was a problem. CEDRP Proposed VSL IRO-014-2 R5 The Reliability Coordinator that detected an actual reliability issue failed to contact the other Reliability Coordinator(s) to confirm that there was a problem.
	Standard – IRO-014-2 R6 When an expected or actual reliability issue exists and the impacted Reliability Coordinators cannot agree on a mitigation plan, all impacted Reliability Coordinators shall implement the mitigation plan developed by the Reliability Coordinator who has the reliability issue. [Violation Risk Factor: Medium] [Time Horizon: Operations Planning, Same Day Operations and Real-time Operations] Proposed Measure

Organization	Question 19:	
	The affected Reliability Coordinators shall have evidence that, in cases when an expected or actual reliability issue existed and the impacted Reliability Coordinators could not agree on a mitigation plan, they implemented the mitigation plan developed by the Reliability Coordinator who has the reliability issue. Discussion: We are concerned the validity of this requirement, it may force an RC to implement a solution that they don't agree with and ultimately result in an Adverse Reliability Impact. The RC may not agree with the solution because it may not be reliable for their footprint. They need to have the ability to veto mitigation plans that cause Adverse Reliability Impacts in their footprint without incurring a compliance violation.	
	Response:	
	R6 was brought into this standard from IRO-016, R1 and R2. The RC SDT removed the wording relating to the "most conservative solution" because it can not be measured. We are proposing to use the mitigation plan of the RC who is experiencing the issue in cases where an agreed to mitigation plan can not be developed.	
	SDT Proposed Lower VSL The Reliability Coordinator did not agree on a mitigation plan and implemented a plan other than the one developed by the Reliability Coordinator who had the reliability issue. CEDRP Proposed VSL IRO-014-2 R6 N/A	
	SDT Proposed Severe VSL The Reliability Coordinator did not agree on a mitigation plan and did not implement a mitigation plan. CEDRP Proposed VSL IRO-014-2 R6 What if the RC is correct in disagreeing and the mitigation plan would have caused an Adverse Reliability Impact on their system?	
Promotion The DO ODT the star		
Response: The RC SDT thanks you for your comments. Please see responses embedded above.		
In the future, please do not submit comments in this format. It is extremely burdensome on the drafting team in trying to respond to the comments. Please answer each question individually. If you encounter difficulty, please contact NERC for assistance.		