

Consideration of Comments on the Third Draft of EOP-008-1 — Loss of Control Center Functionality (Project 2006-04)

The Backup Facilities Standard Drafting Team thanks all commenters who submitted comments on the third draft of EOP-008-1 — Loss of Control Center Functionality standard. This standard was posted for a 30-day public comment period from March 17, 2009 through April 15, 2009. Stakeholders were asked to provide feedback on the standards through a special electronic comment form. There were 36 sets of comments, including comments from more than 130 different people from over 60 companies representing 8 of the 10 Industry Segments as shown in the table on the following pages.

http://www.nerc.com/filez/standards/Backup_Facilities.html

Due to the industry comments provided, the SDT has revised the following: Requirements R1, R2, R5, R7, and part 8.1 under R8.

The SDT does not feel that any of these changes are significant in nature and recommends that this project be moved to the balloting stage.

There were several minority viewpoints expressed during the review period:

- Some commenters pointed out what they perceived as a possible gap in reliability that could be created by the deletion of Requirement R3. Some members of the SDT were sympathetic to this position. However, after consultations with the NERC Compliance Section and the Standards Committee, the SDT decided that Requirement R3 was not required for reliability purposes as it was being handled through other means.
- Some commenters expressed a concern regarding the 24 month implementation period for this standard. The SDT weighed these concerns carefully and feels that 24 months is the appropriate time frame. This finding is based on the idea that most of the applicable entities already have appropriate backup functionality in place and for those who do not, 24 months seems to be an acceptable period of time to reach compliance.
- Some comments were received on the amount of transition time that is being allowed in the revised standard. Concerns were expressed that the time had been increased and therefore, reliability was being unduly impacted. The SDT does not agree with this position nor did the majority of respondents. The revised standard is much tighter than the original in terms of what must be done in the transition period and thus should increase reliability.

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 gerry.adamski@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.¹

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

Index to Questions, Comments, and Responses

1. The SDT has discovered that Compliance is already enforcing Requirement R3 as part of its review of delegation agreements. Therefore, it appears that this requirement could be deleted. Do you agree that this requirement can be deleted? If not, please provide specific reasons why it shouldn't be deleted.	10
2. The SDT has made a change in the applicability of the Transmission Operator (see Section 4.1.2) so that all Transmission Operators are treated equally. Do you agree with the change that was made? If not, please provide specific suggestions for improvement.	15
3. The SDT has provided clarifications to the applicability of reliability standards, avoiding the need for tertiary functionality, and when backup functionality is not required in Requirements R4 and R5. Do you agree with these changes? If not, please provide specific suggestions for improvement.	19
4. The SDT has clarified the issue of independence of facilities in Requirement R7. Do you agree with this change? If not, please make specific suggestions for improvement....	28
5. Do you believe this standard is ready for balloting? If not, please supply the specific reasons for your position.	37

Consideration of Comments on Third Draft of EOP-008-1 — Project 2006-04

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

		Commenter	Organization	Industry Segment											
				1	2	3	4	5	6	7	8	9	10		
1.	Group	Guy Zito	Northeast Power Coordinating Council												X
	Additional Member	Additional Organization	Region	Segment Selection											
	1. Ralph Rufrano	New York Power Authority	NPCC	5											
	2. Randy MacDonald	New Brunswick System Operator	NPCC	2											
	3. Tony Elacqua	New York Independent System Operator	NPCC	2											
	4. Roger Champagne	Hydro-Quebec TransEnergie	NPCC	2											
	5. Kurtis Chong	Independent Electricity System Operator	NPCC	2											
	6. Sylvain Clermont	Hydro-Quebec TransEnergie	NPCC	1											
	7. Manny Couto	National Grid	NPCC	1											
	8. Chris de Graffenried	Consolidated Edison Co. of New York, Inc.	NPCC	1											
	9. Brian Evans-Mongeon	Utility Services	NPCC	6											
	10. Mike Garton	Dominion Resources Services, Inc.	NPCC	5											
	11. Michael Gildea	Constellation Energy	NPCC	6											
	12. Chris Orzel	FPL/NextEra Energy	NPCC	5											
	13. Kathleen Goodman	ISO - New England	NPCC	2											

Consideration of Comments on Third Draft of EOP-008-1 — Project 2006-04

	Commenter	Organization	Industry Segment																	
			1	2	3	4	5	6	7	8	9	10								
	14. David Kiguel	Hydro One Networks Inc.	NPCC	1																
	15. Michael Schiavone	National Grid	NPCC	1																
	16. Rick White	Northeast Utilities	NPCC	1																
	17. Lee Pedowicz	Northeast Power Coordinating Council	NPCC	10																
	18. Gerry Dunbar	Northeast Power Coordinating Council	NPCC	10																
	19. Brian Hogue	Northeast Power Coordinating Council	NPCC	10																
2.	Group	Gerry Beckerle	Ameren Services	X																
	Additional Member Additional Organization Region Segment Selection																			
	1. Jeff Hackman	Ameren	SERC	1																
	2. Mike Wedel	Ameren	SERC	1																
	3. Dennis Dare	Ameren	SERC	1																
	4. Gene Warnecke	Ameren	SERC	1																
3.	Group	Richard Kafka	Pepco Holdings, Inc - Affiliates	X		X		X	X											
	Additional Member Additional Organization Region Segment Selection																			
	1. Dave Thorne	Pepco	RFC	1																
	2. Vic Davis	Delmarva Power & Light	RFC	1																
4.	Group	JT Wood	Southern Company Transmission	X																
	Additional Member Additional Organization Region Segment Selection																			
	1. Marc Butts		SERC	1																
	2. Jim Griffith		SERC	1																
	3. Lee Taylor		SERC	1																
	4. Monroe Landrum		SERC	1																
	5. Steve Corbin		SERC	1																
	6. Steve Williamson		SERC	1																
	7. Tom Sims		SERC	1																
	8. Mike Sanders		SERC	1																

Consideration of Comments on Third Draft of EOP-008-1 — Project 2006-04

	Commenter	Organization	Industry Segment											
			1	2	3	4	5	6	7	8	9	10		
5.	Group	Denise Koehn	Bonneville Power Administration	X		X		X	X					
Additional Member Additional Organization Region Segment Selection 1. Jim Burns Transmission Technical Operations WECC 1														
6.	Group	Jason L. Marshall	Midwest ISO Standards Collaborators		X									
Additional Member Additional Organization Region Segment Selection 1. Barb Kedrowski We Energies RFC 3, 4, 5 2. Jim Cyrulewski JDRJC Associates RFC 8														
7.	Group	Sam Ciccone	FirstEnergy	X		X	X	X	X					
Additional Member Additional Organization Region Segment Selection 1. Dave Folk FE RFC 1, 3, 4, 5, 6 2. Doug Hohlbaugh FE RFC 1, 3, 4, 5, 6 3. John Reed FE RFC 1 4. Andy Hunter FE RFC 1 5. John Martinez FE RFC 1														
8.	Group	Michael Brytowski	MRO NERC Standards Review Subcommittee											X
Additional Member Additional Organization Region Segment Selection 1. Carol Gerou MP MRO 1, 3, 5, 6 2. Neal Balu WPS MRO 3, 4, 5, 6 3. Terry Bilke MISO MRO 2 4. Joe DePoorter MGE MRO 3, 4, 5, 6 5. Ken Goldsmith ALTW MRO 4 6. Jim Haigh WAPA MRO 1, 6 7. Terry Harbour MEC MRO 1, 3, 5, 6 8. Joseph Knight GRE MRO 1, 3, 5, 6 9. Scott Nickels RPU MRO 3, 4, 5, 6														

Consideration of Comments on Third Draft of EOP-008-1 — Project 2006-04

	Commenter	Organization	Industry Segment																	
			1	2	3	4	5	6	7	8	9	10								
	10. Dave Rudolph	BEPC	MRO	1, 3, 5, 6																
	11. Eric Ruskamp	LES	MRO	1, 3, 5, 6																
	12. Pam Sordet	XCEL	MRO	1, 3, 5, 6																
9.	Group	Jim S. Griffith	SERC OC Standards Review		X		X		X											
	Additional Member	Additional Organization	Region	Segment Selection																
	1. Eugene Warnecke	Ameren	SERC	1, 3, 5																
	2. Robert Thomasson	Big Rivers elec Coop	SERC	1, 3, 5																
	3. Steve Fritz	ACES Power																		
	4. John Neagle	AECI																		
	5. Eugene Warnecke	Ameren																		
	6. Gerry Beckerle	Ameren																		
	7. Robert Thomasson	BREC																		
	8. Alisha Anker	CWLP																		
	9. Carl Eng	Dominion VP																		
	10. Jack Kerr	Dominion VP																		
	11. David McRee	Duke Energy																		
	12. Greg Stone	Duke Energy																		
	13. Sam Holeman	Duke Energy																		
	14. George Carruba	EKPC																		
	15. Michelle Bourg	Entergy																		
	16. Paul Turner	GASOC																		
	17. Wayne Pourciau	GASOC																		
	18. Keith Porterfield	GSOC																		
	19. Dan Jewell	LA Generating																		
	20. Tim Lejeune	LA Generating																		
	21. Jason Marshall	MISO																		
	22. Michael Bryson	PJM																		
	23. Tim Hattaway	PowerSouth																		

Consideration of Comments on Third Draft of EOP-008-1 — Project 2006-04

	Commenter	Organization	Industry Segment																	
			1	2	3	4	5	6	7	8	9	10								
	24. Brady Williams	Progress Energy																		
	25. Phil Creech	Progress Energy																		
	26. Sammy Roberts	Progress Energy																		
	27. Glenn Stephens	Santee Cooper																		
	28. Rene' Free	Santee Cooper																		
	29. Al McMeekin	SCE&G																		
	30. Alvin Lanton	SIPC																		
	31. John Rembold	SIPC																		
	32. Gary Hutson	SMEPA																		
	33. Jim Griffith	Southern																		
	34. Lee Taylor	Southern																		
	35. Marc Butts	Southern																		
	36. Monroe Landrum	Southern																		
	37. Steve Corbin	Southern																		
	38. Steve Williamson	Southern																		
	39. Tom Sims	Southern																		
	40. Dave Pond	TVA																		
	41. Alan Jones	Yadkin																		
10.	Group	Ben Li	IRC Standards Review Committee					X												
	Additional Member	Additional Organization	Region	Segment	Selection															
	1. Matt Goldgerg	ISO-NE	NPCC	2																
	2. Anita Lee	AESO	WECC	2																
	3. James Castle	NYISO	NPCC	2																
	4. Steve Myers	ERCOT	ERCOT	2																
	5. Patrick Brown	PJM	RFC	2																
	6. Charles Yeung	SPP	SPP	2																
	7. Lourdes Estrada-Saliner	CAISO	WECC	2																
	8. Bill Phillips	MISO	MRO	2																

Consideration of Comments on Third Draft of EOP-008-1 — Project 2006-04

		Commenter	Organization	Industry Segment											
				1	2	3	4	5	6	7	8	9	10		
11.	Individual	John Tolo	Tucson Electric Power	X											
12.	Individual	Dan Rochester	Ontario IESO		X										
13.	Group	Patrick Brown	PJM's NERC & Regional Coordination Department		X										
14.	Individual	Jack Kerr	Dominion Virginia Power	X											
15.	Individual	Al McMeekin	South Carolina Electric & Gas Company	X		X		X							
16.	Individual	Randy Schimka	San Diego Gas and Electric Co	X		X									
17.	Individual	Thomas Fung	BCTC	X	X										
18.	Individual	Chris Scanlon	Exelon	X		X		X	X						
19.	Individual	Alice Murdock	Xcel Energy	X		X		X	X						
20.	Individual	Brent Ingebrigtsen	E.ON U.S.	X		X		X	X						
21.	Individual	Darryl Curtis	Oncor Electric Delivery	X											
22.	Individual	Sandra Shaffer	PacifiCorp	X		X		X	X						
23.	Individual	Thad Ness	American Electric Power (AEP)	X		X		X	X						
24.	Individual	Frank Gaffney, Regulatory Compliance Officer	FMPA and its ARP Participants Listed as Follows: City of Vero Beach; Kissimmee Utility Authority; and Beaches Energy Services	X		X	X	X	X						
25.	Individual	D. Bryan Guy	Progress Energy	X		X	X								

Consideration of Comments on Third Draft of EOP-008-1 — Project 2006-04

		Commenter	Organization	Industry Segment											
				1	2	3	4	5	6	7	8	9	10		
26.	Individual	Roger Champagne	Hydro-Québec TransEnergie (HQT)	X											
27.	Individual	Rao Somayajula	ReliabilityFirst Corporation												X
28.	Individual	Edward J Davis	Energy Services, Inc	X		X		X	X						
29.	Individual	Michael Ayotte	ITC	X											
30.	Individual	Rick White	Northeast Utilities	X											
31.	Individual	Kathleen Goodman	ISO New England Inc.		X										
32.	Individual	Greg Rowland	Duke Energy	X		X		X	X						
33.	Individual	Gregory Campoli	New York Independent System Operator		X										
34.	Individual	Catherine Koch	Puget Sound Energy	X											
35.	Individual	Jason Shaver	American Transmission Company	X											
36.	Individual	Mike Gammon	KCP&L												

1. The SDT has discovered that Compliance is already enforcing Requirement R3 as part of its review of delegation agreements. Therefore, it appears that this requirement could be deleted. Do you agree that this requirement can be deleted? If not, please provide specific reasons why it shouldn't be deleted.

Summary Consideration:

The majority of respondents indicated approval of the deletion of Requirement R3. However, the SDT did make a clarifying change to Requirement R1 at the suggestion of a commenter.

R1. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a current Operating Plan describing the manner in which it ensures reliable operations of the BES in the event that its primary control center functionality is lost.

Organization	Yes or No	Question 1 Comment
Dominion Virginia Power	No	If there is a reliability need for backup capabilities for delegated tasks, then this should be explicitly stated in a reliability standard. It should not be implied or be something that, on review, Compliance deems is necessary but that is without a clear basis in the standards.
Xcel Energy	No	If something is monitored by Compliance, then there needs to be an associated standard/requirement. In this case, what standard or requirement would apply if this were to be deleted?
Oncor Electric Delivery	No	This requirement should stay in EOP-008-1 because the "other entities" referred to in R3 are the entities that have actual device control of BES elements (very true in ERCOT).
PacifiCorp	No	Requirement 3 should be left in the Standard. While it may be redundant with present efforts to review delegation agreements, it stipulates the intent of the Standard: that entities remain responsible for operations on the BES even if those duties are implemented via others. Keeping this requirement in the Standard, explicitly, insures that all entities understand the requirements and intent of this Standard, regardless of changes that may occur in the future regarding a separate process associated with review of delegation agreements. The process to review delegation agreements can change without industry input, as that process is not subject to the same approval requirements as those necessary when a Standard is created or modified.
Response: Thank you for your response.		
KCP&L	No	Cannot render a judgement regarding deletion of R3 without knowledge of the content of the delegation agreements referred to here. As a result, cannot recommend removal or maintaining requirement R3 as proposed here.

Organization	Yes or No	Question 1 Comment
<p>Response: Thank you for your response.</p>		
<p>IRC Standards Review Committee</p>	<p>Yes</p>	<p>Yes, this requirement should be removed - but not for the reason stated above. If there is no R3, there is no requirement that Compliance would be able to enforce in the first place.</p> <p>However, we believe that R3 can be removed if the first 2 sentences in R1 are modified as follows (suggested deletion in parenthesis): Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a current Operating Plan describing the manner in which it ensures reliable operations of the BES in the event that its primary control functionality is lost. (center becomes inoperable.) This Operating Plan for backup functionality shall include the following, at a minimum:.....</p>
<p>Ontario IESO</p>	<p>Yes</p>	<p>Yes, this requirement should be removed - but not for the reason stated above. If there is no R3, there is no requirement that Compliance would be able to enforce in the first place.</p> <p>However, we believe that R3 can be removed if R1 is modified as follows (suggested deletion in parenthesis): "Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a current Operating Plan describing the manner in which it ensures reliable operations of the BES in the event that its primary control functionality is lost. (center becomes inoperable.) This Operating Plan for backup functionality shall include the following, at a minimum:"</p>
<p>Response: Requirement R1 has been changed as suggested.</p> <p>R1. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a current Operating Plan describing the manner in which it ensures reliable operations of the BES in the event that its primary control center functionality is lost.</p>		
<p>American Transmission Company</p>	<p>Yes</p>	<p>However, it appears that R3 has not been deleted in the redlined version of the Standard posted. If the redlined version is what is being voted upon, we disagree with the language as it is currently written. The way it is currently written it would require the TOP to ensure that the other entities have backup functionality, which puts the TOP in the role of regulator, and we have no such authority. We do not have the authority to monitor backup functionality of other entities nor to compel other entities to have backup functionality. The language suggested in the last redlined version is more appropriate.</p>
<p>Response: In the opinion of the SDT, if a Reliability Coordinator, Balancing Authority, or Transmission Operator has delegated particular primary control center functionality to another entity then it is the responsibility of that Reliability Coordinator, Balancing Authority, or Transmission Operator to ensure that backup functionality exists, either by the Reliability Coordinator, Balancing Authority, or Transmission Operator, the delegated entity, or a 3rd entity. Requirement R1 has been adjusted to clarify this position. Requirement R3 has been retained as described above.</p> <p>R1. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a current Operating Plan describing the manner in</p>		

Consideration of Comments on Third Draft of EOP-008-1 — Project 2006-04

Organization	Yes or No	Question 1 Comment
which it ensures reliable operations of the BES in the event that its primary control center functionality is lost.		
Northeast Power Coordinating Council	Yes	
Ameren Services	Yes	
Pepco Holdings, Inc - Affiliates	Yes	
Southern Company Transmission	Yes	
Bonneville Power Administration	Yes	
Midwest ISO Standards Collaborators	Yes	
FirstEnergy	Yes	We agree that the compliance concept of delegation agreements should not reside in this or any reliability standard. The rules governing delegation of tasks should be clearly described in the NERC Rules of Procedure or Registration Criteria.
MRO NERC Standards Review Subcommittee	Yes	With this clarification, the SDT has removed redundancy from this updated Standard, thank you. Please remove requirement 3 for the next posting of this standard.
SERC OC Standards Review	Yes	
Tucson Electric Power	Yes	I agree R3 should be deleted
PJM's NERC & Regional Coordination Department	Yes	We agree that Requirement R3 should be deleted. Backup capability is defined as "the ability to maintain situational awareness and continue to comply with reliability standards when primary control center facilities are not operational" as such, "backup capability" does not need to equate to "backup facility." The standard should be written to require the necessary/essential functionality (not require another facility) when the primary capability is lost (as is done in R1). Simply, the standard needs to require the principle need, yet not be too prescriptive on how that is accomplished.
South Carolina Electric & Gas	Yes	

Consideration of Comments on Third Draft of EOP-008-1 — Project 2006-04

Organization	Yes or No	Question 1 Comment
Company		
San Diego Gas and Electric Co	Yes	
BCTC	Yes	
Exelon	Yes	
E.ON U.S.	Yes	
American Electric Power (AEP)	Yes	
FMPA and its ARP Participants Listed as Follows: City of Vero Beach; Kissimmee Utility Authority; and Beaches Energy Services	Yes	
Progress Energy	Yes	
Hydro-Québec TransEnergie (HQT)	Yes	
ReliabilityFirst Corporation	Yes	
Entergy Services, Inc	Yes	
ITC	Yes	
Northeast Utilities	Yes	
ISO New England Inc.	Yes	
Duke Energy	Yes	

Organization	Yes or No	Question 1 Comment
New York Independent System Operator	Yes	
Puget Sound Energy	Yes	If the SDT believes this requirement will be covered in another location or in another standard that is most logical, then yes R3 should be deleted.
<p>Response: Thank you for your response. The SDT has made a slight adjustment to Requirement R1 to clarify this item.</p> <p>R1. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a current Operating Plan describing the manner in which it ensures reliable operations of the BES in the event that its primary control center functionality is lost.</p>		

2. The SDT has made a change in the applicability of the Transmission Operator (see Section 4.1.2) so that all Transmission Operators are treated equally. Do you agree with the change that was made? If not, please provide specific suggestions for improvement.

Summary Consideration:

The vast majority of comments received support the change in applicability. However, a clarifying change was made to Requirement R4 (formerly Requirement R5) to accommodate the concern brought up by FMPA.

R4. Each Balancing Authority and Transmission Operator shall have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators) that includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority and Transmission Operator’s primary control center functionality respectively. To avoid requiring tertiary functionality, backup functionality is not required during:

Organization	Yes or No	Question 2 Comment
American Electric Power (AEP)	No	It seems that 200 kV provides a reasonable demarcation of transmission facilities on the Bulk Electric System; below 200 kV are generally more localized distribution facilities. Within this segment, the existing applicability treated all Transmission Owners equally.
<p>Response: Based on comments that the SDT has received, the industry consensus seems to be that this standard should apply to all Transmission Operators. The SDT feels that this is a registration issue that doesn’t belong in this standard. No change made.</p>		
FMPA and its ARP Participants Listed as Follows: City of Vero Beach; Kissimmee Utility Authority; and Beaches Energy Services	No	We agree that all Transmission Operators should have a plan for loss of control center functionality, but, as written, the standard, particularly Requirement 5, seems to force all BAs and TOPs to have a back-up control center or contract for services for one (see paranthetical in R5 and M5). We believe that smaller BAs and TOPs can meet all of the requirements within the standard for backup functionality without a back-up control center or contracted services. For instance, we know of at least one TOP that is only a TOP for one substation, and therefore existing substation facilities can fulfill all of the backup functionality specified in the standard without the need for a backup control center. Similarly, we know of at least one BA who only has one power plant in its BA area, meaning that the BA can be operated from the power plant without a backup control center. We suggest striking the paranthetical in R5 and M5, or expanding it to read "provided either through a backup control center facility, contracted services, or other means".
<p>Response: The SDT understands the concerns raised here and has tried to be cognizant of the impact of this revised standard on smaller entities. However, ‘other means’ is an unmeasurable term. The SDT has made every effort to describe functionality instead of bricks and mortar facilities. The SDT believes that in the particular cases cited in the comment, that if the original location fulfills the duties of a control center and allows the entity to be compliant with all relevant</p>		

Organization	Yes or No	Question 2 Comment
<p>Reliability Standards, then the backup cited would be acceptable as well as long as all relevant Reliability Standards are complied with. However, the SDT has removed the term 'backup control center' from the parenthetical expression in Requirement R4 and M4 (formerly Requirement R5 and M5) to clarify this point.</p> <p>R4. Each Balancing Authority and Transmission Operator shall have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators) that includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority and Transmission Operator's primary control center functionality respectively. To avoid requiring tertiary functionality, backup functionality is not required during:</p>		
Northeast Power Coordinating Council	Yes	
Ameren Services	Yes	
Pepco Holdings, Inc - Affiliates	Yes	
Southern Company Transmission	Yes	
Bonneville Power Administration	Yes	Not sure if it should be applicable to small TOPs.
Midwest ISO Standards Collaborators	Yes	
FirstEnergy	Yes	
MRO NERC Standards Review Subcommittee	Yes	
IRC Standards Review Committee	Yes	This is a registration issue and really identifies an issue with the definition of the BES. A standard is not the proper place to address registration and BES definition issues. The applicability should be just to the TOP and any limitation should be handled in registration.
SERC OC Standards Review	Yes	
Tucson Electric Power	Yes	

Organization	Yes or No	Question 2 Comment
Ontario IESO	Yes	A standard is not the proper place to address registration and BES definition issues. The applicability should be just to the TOP and any limitation should be handled in registration.
PJM's NERC & Regional Coordination Department	Yes	
Dominion Virginia Power	Yes	
South Carolina Electric & Gas Company	Yes	
San Diego Gas and Electric Co	Yes	
BCTC	Yes	
Exelon	Yes	
Xcel Energy	Yes	
E.ON U.S.	Yes	
Oncor Electric Delivery	Yes	
PacifiCorp	Yes	
Progress Energy	Yes	
Hydro-Québec TransEnergie (HQT)	Yes	
ReliabilityFirst Corporation	Yes	
Energy Services, Inc	Yes	

Organization	Yes or No	Question 2 Comment
ITC	Yes	
Northeast Utilities	Yes	
ISO New England Inc.	Yes	
Duke Energy	Yes	
New York Independent System Operator	Yes	
Puget Sound Energy	Yes	Yes, this is a necessary change. It removes this standard from interpretation by each entity and requires each to have back-up provisions. This is critical as many entities rely on neighboring entities to operate from day to day.
American Transmission Company	Yes	
KCP&L	Yes	
<p>Response: Thank you for your response. A clarifying change was made to Requirement R4 and M4 (formerly Requirement R5 and M5) to accommodate the concerns brought up by FMPA.</p> <p>R4. Each Balancing Authority and Transmission Operator shall have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators) that includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority and Transmission Operator’s primary control center functionality respectively. To avoid requiring tertiary functionality, backup functionality is not required during:</p>		

3. The SDT has provided clarifications to the applicability of reliability standards, avoiding the need for tertiary functionality, and when backup functionality is not required in Requirements R4 and R5. Do you agree with these changes? If not, please provide specific suggestions for improvement.

Summary Consideration: The majority of the commenters agreed with the SDT’s position although some questions were raised as to the exact wording of some of the requirements. The SDT has provided explanations for the positions taken or agreed to change the requirements. Due to industry comments, Requirement R3, parts 3.1 & 3.2, and Requirement R4, parts 4.1, and 4.2 (formerly Requirements R4 & R5) have been changed to be parts of bulleted lists and Requirement R4 was changed as follows:

R4. Each Balancing Authority and Transmission Operator shall have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators) that includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority and Transmission Operator’s primary control center functionality respectively. To avoid requiring tertiary functionality, backup functionality is not required during:

Organization	Yes or No	Question 3 Comment
KCP&L	No	<p>Agree with the intent of the SDT regarding the need to avoid back-up plans on top of back-up plans, however, the sub-requirements may be in need of some additional work. It appears the intent of requirements R4 & R5 is to prevent the need to develop a temporary back-up plan when either the primary or back-up capability becomes temporarily unavailable. Recommend removal of sub-requirements R4.2 and R5.2 as the condition for the unexpected loss of either the primary or back-up capability is covered by R9.</p> <p>Recommend an alignment of sub-requirement R4.1 and R4.2 with the 6 month timing requirement in R9. If it is OK to be without a back-up plan for up to 6 months for the unanticipated loss of the primary or back-up capability why is two weeks such a concern for a planned loss?</p>
<p>Response: The SDT does not agree that unexpected short-term loss of the primary or backup capability is covered by Requirement R8 (formerly Requirement R9). The language of Requirement R8 is intended to cover a major loss of functionality, such as a catastrophic event. Other unplanned events such as a failure of the backup EMS or other equipment could cause a short term loss of functionality which formerly Requirements R4 & R5) Requirement R3, part 3.2 and Requirement R4, part 4.2 (now parts of bulleted lists) are intended to address. No change made.</p>		
Ameren Services	No	<p>R4 and R5 should be combined and all three entities, RC, BA, and TOP should be required to have at least two facilities that are independent of each other to the extent that compliance to NERC Standards can be maintained from those facilities. These facilities maybe a primary facility, with backup(s), or multiple primary facilities. Facilities may be shared with other entities, but must be able to meet the compliance requirements of all the entities sharing the facility. If an entity has two independent facilities that they can operate from, whether shared</p>

Organization	Yes or No	Question 3 Comment
		<p>or not, a tertiary is not required. If for any reason an entity does not have at least two facilities to operate independantly from, that entity must prepare a mitigation plan acceptable to their Regional Entity.</p>
<p>Response: The language of Requirements R3 & R4 (formerly Requirements R4 & R5) follows the directives supplied in Order 693. The standard has been drafted to take those directives into account and the industry comments have not provided a consensus opinion that the direction provided by FERC should be modified with respect to different treatment of the Reliability Coordinator. The SDT has attempted to allow certain time periods to be allowed for planned and unplanned outages without a tertiary set of functionality being provided. If the entity does not maintain backup capability as specified in the standard, a non-compliance event will occur and a mitigation plan will have to be developed and submitted to the Regional Entity. The SDT does not agree that the standard should address mitigation measures for non-compliance in the requirements of the standard. No change made.</p>		
Southern Company Transmission	No	<p>We suggest combining R4 and R5 into one requirement and indicating that a tertiary functionality is not required for the functional entities listed. If a tertiary functionality is required, conditions for when it is required should be addressed rather than stating when it is not required.</p> <p>We have additional suggested revisions to R4 and R5, which are included in the comments for Question 5.</p>
SERC OC Standards Review	No	<p>We suggest combining R4 and R5 into one requirement and indicating that a tertiary functionality is not required for the functional entities listed. If a tertiary functionality is required, conditions for when it is required should be addressed rather than stating when it is not required.</p> <p>We have additional suggested revisions to R4 and R5, which are included in the comments for Question 5.</p>
<p>Response: The language of Requirements R3 & R4 (formerly Requirements R4 & R5) follows the directives supplied in Order 693. The standard has been drafted to take those directives into account and the industry comments have not provided a consensus opinion that the direction provided by FERC should be modified with respect to different treatment of the Reliability Coordinator.</p> <p>See response to comments on Question 5.</p>		
Bonneville Power Administration	No	<p>If we have a planned outage for 3 weeks (longer than 2 weeks criteria) of either the primary or the backup facility we need a alternate (tertiary facility under the new requirements) facility in place.</p> <p>Current standard says we need interim provisions during transfer if it will take longer than 1 hour to implement plan. New standard has a 2 hour window requirement for the plan to be fully implemented.</p>
<p>Response: Planned outages that last more than 2 weeks must be reported to your Regional Entity and a mitigation plan must be submitted.</p> <p>The SDT was not able to discern a question from these statements.</p>		

Organization	Yes or No	Question 3 Comment
Midwest ISO Standards Collaborators	No	<p>We agree with the intent of the changes and support the need to avoid creating a requirement for a tertiary control center. However, we believe the changes are confusing and there is large amount of extraneous information that only confuses the mater. For instance, there is no need to state "that provides the functionality required for maintaining compliance with all Reliability Standards". RCs are already required to comply with all applicable standards regardless of this statement and whether they are operating from their primary or backup facility. This clause does nothing to increase or strengthen those requirements and is unneeded.</p> <p>We suggest modifying R4 to:"Each RC shall have a backup control center facility available except:during planned outages of the primary or backup facilities of two weeks or less or during unplanned outages of the primary or backup facilities."</p> <p>Likewise, we suggest the following wording for R5:"Each BA and TOP shall have backup functionality that includes monitoring, control, logging, and alarming available execpt:during planned outages of the primary or backup facilities of two weeks or less or during unplanned outages of the primary or backup facilities."</p>
Exelon	No	<p>We agree with the intent of the changes and support the need to avoid creating a requirement for a tertiary control center. However, we believe the changes are confusing and there is large amount of extraneous information that only confuses the mater. For instance, there is no need to state "that provides the functionality required for maintaining compliance with all Reliability Standards". RCs are already to comply with all applicable standards regardless of this statement and whether they are operating from their primary or backup facility. This clause does nothing to increase or strengthen that requirement and is unneeded.</p> <p>We suggest modifying R4 to:"Each RC shall have a backup control center facility available except:during planned outages of the primary or backup facilities of two weeks or less or during unplanned outages of the primary or backup facilities."</p> <p>Likewise, we suggest the following wording for R5:"Each BA and TOP shall have backup functionality that includes monitoring, control, logging, and alarming available execpt:during planned outages of the primary or backup facilities of two weeks or less or during unplanned outages of the primary or backup facilities."</p>
<p>Response: The phrase "that provides the functionality required for maintaining compliance with all Reliability Standards" also includes the following qualifier: "that depend on primary control center functionality" The intent of this language is to make it clear that the backup functionality includes all aspects of the Reliability Standards that apply to a control center, and only those. There are other standards that apply to processes such as long term planning activities that are outside the scope of activities required to be performed at a control center. Those activities do not have to be replicated in the backup control functionality. The SDT believes this is an important distinction. No change made due to this comment.</p> <p>R3 & R4 (former Requirements R4 & R5): The SDT appreciates you comment, but believes that the requirement as written contains sufficient detail to express the intent of the standard. No change made due to this comment.</p>		

Organization	Yes or No	Question 3 Comment
Dominion Virginia Power	No	As written, the clarifications do not appear to have avoided the need for tertiary facilities/functionalities. In fact, the proposed wording implies that there is a need for tertiary facilities/functionalities if a planned outage of more than two weeks is anticipated. An RC or TOP is not likely to assume that some day they might have to plan an outage in excess of two weeks and then go ahead and acquire tertiary facilities/functionalities to have on hand just in case. Therefore, it should be clear that, under normal operations (all systems "Go"), only primary and adequate backup facilities/functionalities are required for compliance. Failure to provide adequate backup in the first place would constitute non-compliance. Under degraded operations (loss of primary facilities/functionalities or loss of the adequate backup facilities/functionalities previously provided), there should be separate and specific requirements for plans an RC or TOP should make and/or actions they should take until normal operations are restored (similar to what R1.6.2 now says but promoted to a stand-alone requirement). Compliance under degraded operations would be evaluated based on these new requirements specific to degraded operations instead of the original requirements to have backup facilities/functionalities. This eliminates the conundrum of being non-compliant when primary or backup facilities/functionalites are lost. Tertiary facilities/functionalities are not cost effective and are not necessary to achieve an Adequate Level of Reliability. Some entities, especially those who operate markets, may chose to acquire tertiary facilities/functionalities for various reasons. In doing so, they are choosing to "plan and operate their portion of the System to achieve a level of reliability that is above the standards." (Words in quotes are from the NERC definition of Adequate Level of Reliability.)
<p>Response: Planned outages that last more than 2 weeks must be reported to your Regional Entity and a mitigation plan must be submitted. This is standard operating procedure so no change to the requirements is necessary.</p>		
South Carolina Electric & Gas Company	No	Suggested language for R4: Each Reliability Coordinator shall have backup control center functionality provided through its own dedicated backup facility or at another entity's control center with certified Reliability Coordinator operators for maintaining compliance with all applicable Reliability Standards. No tertiary functionality is required. Suggested language for R5: Each Balancing Authority and Transmission Operator shall have backup functionality provided through a backup control center facility or contractual services, for maintaining compliance with all applicable Reliability Standards. No tertiary functionality is required.
ITC	Yes	We agree with the intent of the SDT, however the proposed wording is clumsy. Suggest removal of the phrase ""that provides the functionality required for maintaining compliance with all Reliability Standards".
<p>Response: The phrase "that provides the functionality required for maintaining compliance with all Reliability Standards" also includes the following qualifier: "that depend on primary control center functionality" The intent of this language is to make it clear that the backup functionality includes all aspects of the Reliability Standards that apply to a control center, and only those. There are other standards that apply to processes such as long term planning activities that are outside the scope of activities required to be performed at a control center. Those activities do not have to be replicated in the backup control functionality. The SDT believes this is an important distinction. No change made due to this comment.</p>		

Organization	Yes or No	Question 3 Comment
E.ON U.S.	No	<p>R5 - The first sentence is long and redundant. Compliance is required whether operating from the primary facility or backup facility. The sentence could end after "maintaining compliance".</p> <p>Also, R5.1 and 5.2 should not be sub-requirements but rather bullets.</p> <p>Finally, the standard should explicitly state that tertiary functionality is not required.</p>
<p>Response: The phrase "that provides the functionality required for maintaining compliance with all Reliability Standards" also includes the following qualifier: "that depend on primary control center functionality" The intent of this language is to make it clear that the backup functionality includes all aspects of the Reliability Standards that apply to a control center, and only those. There are other standards that apply to processes such as long term planning activities that are outside the scope of activities required to be performed at a control center. Those activities do not have to be replicated in the backup control functionality. The SDT believes this is an important distinction.</p> <p>The SDT agrees that having Requirements R4.1, R4.2, R5.1, and R5.2 (now Requirements R3 & R4) as sub-requirements is awkward, and has changed the draft so that the language is included as bullets.</p> <p>The standard already states that tertiary functionality is not required. No change made.</p>		
Progress Energy	No	We suggest combining R4 and R5 into one requirement.
Duke Energy	No	Both R4 and R5 are too long, awkwardly worded, and are subject to too much interpretation. Suggest combining them into one requirement reducing it to basically the last sentence used in R4 and R5, explaining that a tertiary is not required when the listed events occur. This could then be combined with another requirement ? possibly R1.
<p>Response: The language of Requirements R4 & R5 (now Requirements R3 & R4) follows the directives supplied in Order 693. The standard has been drafted to take those directives into account and the industry comments to the standards language have not provided a consensus opinion that the direction provided by FERC should be modified with respect to different treatment of the Reliability Coordinator.</p>		
FirstEnergy	Yes	However, the change to R4 that requires "certified Reliability Coordinator Operators" should be carried through to R5 to require BAs and TOPs delegate tasks to NERC certified BAs and TOPs. This will make R4 and R5 consistent.
<p>Response: The SDT agrees with the suggested change to ensure that backup functionality is performed by certified operators. Requirement R5 (now Requirement R4) has been changed accordingly.</p> <p>R4. Each Balancing Authority and Transmission Operator shall have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators) that includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority and Transmission Operator's primary control center functionality respectively. To avoid requiring tertiary</p>		

Organization	Yes or No	Question 3 Comment
functionality, backup functionality is not required during:		
MRO NERC Standards Review Subcommittee	Yes	<p>With this clarification, the SDT has removed redundancy from this updated Standard, thank you.</p> <p>The MRO NSRS suggests that in R4.2 and R5.2 the SDT include R9's time line of six months to submit a plan to the RE or RC. Then R9 can be deleted.</p>
<p>Response: The language of Requirement R9 (now Requirement R8) is intended to cover a major loss of functionality, such as a catastrophic event. Other unplanned events such as a failure of the backup EMS, or other equipment could cause a short term loss of functionality which Requirements R4.2 and R5.2 (now parts of bulleted lists and Requirements R3 & R4) are intended to address.</p>		
IRC Standards Review Committee	Yes	<p>We agree with the clarification language that is added to avoid the need for tertiary functionality. However, we wonder why R4 stipulates specifically the requirement for a "backup control center facility (provided through its own dedicated backup facility or at another entity's control center with certified Reliability Coordinator operators" as opposed to adopting the more appropriate language used in R5, viz. "backup functionality (provided either through a backup control center facility or contracted services)". It is conceivable that an RC may arrange for backup capability with another entity as opposed to having its own backup facility. Also, it has been raised by many commenters in previous postings that it is the backup "capability" or "functionality" that matters, not the facility. We suggest R4 be revised to adopt this more flexible and appropriate language. If the different language in R4 was intended to also stipulate the need for having certified RC operators, then why is this not a requirement in R5? The two requirements should have similar if not identical language.</p> <p>We also think that the last part of both requirements that says: "compliance with all Reliability Standards that depend on a primary control center functionality" is unnecessary. The responsible entity must comply with all reliability standards under either the primary functionality or backup capability condition. Isn't meeting all reliability standards and continuing to operating, monitor and maintain BES reliability the very reason for having the backup functionality?</p>
Ontario IESO	Yes	<p>We agree with the clarification language that is added to avoid the need for tertiary functionality. However, we wonder why R4 stipulates specifically the requirement for a "backup control centre facility (provided through its own dedicated backup facility or at another entity's control center with certified Reliability Coordinator operators" as opposed to adopting the more appropriate language used in R5, viz. "backup functionality (provided either through a backup control center facility or contracted services)". It is conceivable that an RC may arrange for backup capability with another entity as opposed to having its own backup facility. Also, it has been raised by many commenters in previous postings that it is the backup "capability" or "functionality" that matters, not the facility. We suggest R4 be revised to adopt this more flexible and appropriate language. If the different language in R4 was intended to also stipulate the need for having certified RC operators, then why is this not a requirement in</p>

Organization	Yes or No	Question 3 Comment
		<p>R5? The two requirements should have similar if not identical language.</p> <p>We also think that the last part of both requirements that says: "compliance with all Reliability Standards that depend on a primary control center functionality" is unnecessary. The responsible entity must comply with all reliability standards under either the primary functionality or backup capability condition. Isn't meeting all reliability standards and continuing to operating, monitor and maintain BES reliability the very reason for having the backup functionality?</p>
<p>Response: The language of Requirements R4 & R5 (now Requirements R3 & R4) follows the directives supplied in Order 693. The standard has been drafted to take those directives into account and the industry comments to the standards language have not provided a consensus opinion that the direction provided by FERC should be modified with respect to different treatment of the Reliability Coordinator.</p> <p>The phrase "that provides the functionality required for maintaining compliance with all Reliability Standards" also includes the following qualifier: "that depend on primary control center functionality" The intent of this language is to make it clear that the backup functionality includes all aspects of the Reliability Standards that apply to a control center, and only those. There are other standards that apply to processes such as long term planning activities that are outside the scope of activities required to be performed at a control center. Those activities do not have to be replicated in the backup control functionality. The SDT believes this is an important distinction.</p>		
<p>PJM's NERC & Regional Coordination Department</p>	<p>Yes</p>	<p>We agree that the clarifications provided are correct and that there is no need for 'tertiary functionality.' However, it appears some clarifying language is needed to better articulate the need for "backup capability." In addition, while the language in R4 is fairly clear, the language in R5 is very confusing and has the affect of including multiple requirements in one run on sentence. This will pose problems both in terms of trying to adhere to the requirement as well as trying to audit the requirement. Although it appears the SDT was looking to include acceptable risk for time periods of two weeks or less for planned outages when backup functionality is not required, we do not believe that there should be any reference to 'tertiary facility' or 'backup facility' in this requirement with respect to planned or unplanned outages. As such, we believe these sub requirements can be omitted.</p> <p>We propose the following language to the SDT for Requirements 4 and 5 with the caveat that the SDT must resolve the frequency for which it is acceptable to not have backup capability (it should be a risk-informed basis):R4. Each Reliability Coordinator shall have backup capability (provided either through a backup control center or through contracted services or other pre-established means) utilizing certified Reliability Coordinator operators and the functionality necessary to maintain compliance with all reliability standards and the situational awareness provided by the primary control center when it is operational. The unavailability of backup capability is permissible for periods of up to two weeks per _____ due to planned or unplanned outages as long as the Responsible Entity implements continuing and reasonable efforts to restore its backup capability.</p> <p>R.5. Each Balancing Authority and Transmission Operator shall have backup capability (provided either through a backup control center or through contracted services or other pre-established means) that includes monitoring,</p>

Organization	Yes or No	Question 3 Comment
		control, logging, and alarming functionality necessary to maintain compliance with all reliability standards and the situational awareness provided by the primary control center when it is operational. The unavailability of backup capability is permissible for periods of up to two weeks per _____ due to planned or unplanned outages as long as the Responsible Entity implements continuing and reasonable efforts to restore its backup capability.
<p>Response: The SDT agrees that these statements are clarifying in nature and has changed this draft so that the language from Requirements R4.1, R4.2, R5.1, and R5.2 are included as bullet items in Requirements R4 and R5 (now Requirements R3 & R4) , not as sub-requirements.</p> <p>The language of Requirements R4 & R5 (now Requirements R3 & R4) follows the directives supplied in Order 693. The standard has been drafted to take those directives into account and the industry comments have not provided a consensus opinion that the direction provided by FERC should be modified with respect to different treatment of the Reliability Coordinator. Additionally, the decision to have a 2 week consecutive planned outage period and no specific limit on unplanned outages was a result of the comments to draft 2. Few suggestions were made to change this language concerning the time period of unavailability, so the language will remain as is in draft 3.</p>		
Xcel Energy	Yes	Recommend R5.2 include a time limit (e.g. 14 days) as well; may need to add a cumulative limit per year on both as well to prevent abuse.Enhance the allowable planned outage time as a reference to days (e.g. 14 days), rather than weeks, for more clarity.
<p>Response: The decision to have a 2 week consecutive planned outage period and no specific limit on unplanned outages was a result of the comments to draft 2. Few suggestions were made to change this language concerning the time period of unavailability, so the language will remain as is in draft 3.</p>		
American Transmission Company	Yes	However, we recommend removing the phrase "To avoid requiring tertiary functionality" so that it reads better as a requirement.
<p>Response: The SDT has reviewed your comment and does not believe that removing the indicated phrase provides any additional clarity. No change made.</p>		
Oncor Electric Delivery	Yes	
PacifiCorp	Yes	
American Electric Power (AEP)	Yes	
FMPA and its ARP Participants Listed as Follows: City of Vero Beach; Kissimmee Utility Authority; and Beaches Energy	Yes	

Organization	Yes or No	Question 3 Comment
Services		
Hydro-Québec TransEnergie (HQT)	Yes	
ReliabilityFirst Corporation	Yes	
Entergy Services, Inc	Yes	
Northeast Utilities	Yes	
ISO New England Inc.	Yes	
New York Independent System Operator	Yes	
Puget Sound Energy	Yes	
Northeast Power Coordinating Council	Yes	
Pepco Holdings, Inc - Affiliates	Yes	
Tucson Electric Power	Yes	
San Diego Gas and Electric Co	Yes	
BCTC	Yes	
Response: Thank you for your response.		

4. The SDT has clarified the issue of independence of facilities in Requirement R7. Do you agree with this change? If not, please make specific suggestions for improvement.

Summary Consideration: With the exception of some concerns raised as to specific wording in Requirement R7 (now Requirement R6), the majority of respondents agreed with the SDT’s position. The SDT re-wrote Requirement R6 and its accompanying Measure and VSL to accommodate these concerns and provide additional clarity as to the SDT’s intent.

R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards.

M6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have dated evidence that its primary and backup capabilities can independently maintain the functionality required to maintain compliance with Reliability Standards in accordance with Requirement R6.

R6 VSL	N/A	N/A	N/A	The Reliability Coordinator, Balancing Authority, or Transmission Operator’s evidence does not demonstrate that its primary and backup capabilities can independently maintain the functionality required to maintain compliance with Reliability Standards.
--------	-----	-----	-----	--

Organization	Yes or No	Question 4 Comment
Northeast Power Coordinating Council	No	<p>We agree with the approach. We recommend that the term "data center" be defined.</p> <p>How will the independence of any single data center be evaluated? This is almost impossible to prove.</p> <p>What type of dated evidence (see M7) will be required to be compliant to this requirement?</p> <p>Also, M7 use "any common facility" while R7 use "any single data center"; for consistency, the same term should be used.</p>

Organization	Yes or No	Question 4 Comment
Hydro-Québec TransEnergie (HQT)	No	<p>We agree with the approach. We recommend that the term "data center" be defined.</p> <p>How will the independence of any single data center be evaluated? This is almost impossible to prove.</p> <p>What type of dated evidence (see M7) will be required to be compliant to this requirement?</p> <p>Also, M7 use "any common facility" while R7 use "any single data center"; for consistency, the same term should be used.</p>
Northeast Utilities	Yes	<p>We agree with the approach. We recommend that the term "data center" be defined.</p> <p>How will the independence of any single data center be evaluated? This is almost impossible to prove.</p> <p>What type of dated evidence (see M7) will be required to be compliant to this requirement?</p> <p>Also, M7 use "any common facility" while R7 use "any single data center"; for consistency, the same term should be used.</p>
ISO New England Inc.	No	<p>We agree with the approach. We recommend that the term "data center" be defined.</p> <p>How will the independence of any single data center be evaluated? This is almost impossible to prove.</p> <p>What type of dated evidence (see M7) will be required to be compliant to this requirement?</p> <p>Also, M7 use "any common facility" while R7 use "any single data center"; for consistency, the same term should be used.</p>
New York Independent System Operator	No	<p>We agree with the approach, however we believe the term "data center" needs to be defined for this standard.</p> <p>How will the independence of any single data center be evaluated? This is almost impossible to prove.</p> <p>It is not clear what type of dated evidence (see M7) will be required to be compliant to this requirement?</p> <p>Also, M7 use "any common facility" while R7 use "any single data center"; for consistency, the same term should be used.</p>
<p>Response: The SDT has rewritten Requirement R7 (now Requirement R6) in order to remove the term "data center". The rewritten requirement focuses on the functionality required to maintain reliability and compliance rather than configuration. For entities that currently employ a single data center under their control, a level of redundancy of that data center will be required by the new requirement. Measure M6 has been rewritten with consistent language.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards.</p>		

Organization	Yes or No	Question 4 Comment
<p>M6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have dated evidence that its primary and backup capabilities can independently maintain the functionality required to maintain compliance with Reliability Standards in accordance with Requirement R6.</p>		
Ameren Services	No	R7 is redundant of R1 and should be removed. If a facility becomes "inoperable", and the entity has another facility capable of operating and meeting the NERC compliance standards, then it would be independent.
Southern Company Transmission	No	The language should be more specific in indicating that an event that could make the primary center inoperable should not make the backup functionality inoperable. We suggest adding language in R1 that addresses mitigation of single points of failure and, therefore, eliminate R7.
SERC OC Standards Review	No	The language should be more specific in indicating that an event that could make the primary center inoperable should not make the backup functionality inoperable. We suggest adding language in R1 that addresses mitigation of single points of failure and, therefore, eliminate R7.
E.ON U.S.	No	R7 - Rather than a separate requirement R. 7, the drafting team should consider adding language to R1 that specifies required redundancy.
Xcel Energy	Yes	However, this seems misplaced. possibly move in R1?
<p>Response: The SDT believes that Requirement R7 is a standalone requirement, so as not to be confused as part of the plan required by Requirement R1. Requirement R7 (now R6) has been rewritten to insure that primary and backup functionality are independent of each other.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards.</p>		
Midwest ISO Standards Collaborators	No	<p>We agree with the drafting team's intent. However, we believe this requirement should be a sub-requirement of R1.</p> <p>Also, the VSL associated with Requirement 7 violates the Commission established VSL guideline that a VSL can't add to the requirement. Instead of using the data center as the requirement does, the VSL uses common facility. Facility could be construed to mean any communication equipment outside of the control centers and data center and ultimately out of the control of the registered entity if they rely on third party communications.</p>
<p>Response: The SDT believes that Requirement R7 (now R6) is a standalone requirement, so as not to be confused as part of the plan required by Requirement R1. The VSL has been rewritten to be consistent with the rewritten Requirement R6.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the</p>		

Organization	Yes or No	Question 4 Comment		
functionality required to maintain compliance with Reliability Standards.				
R6 VSL	N/A	N/A	N/A	The Reliability Coordinator, Balancing Authority, or Transmission Operator's evidence does not demonstrate that its primary and backup capabilities can independently maintain the functionality required to maintain compliance with Reliability Standards.
South Carolina Electric & Gas Company	No	See my suggested version of the standard.		
Response: Please see response in question 5 where the suggestions were spelled out.				
San Diego Gas and Electric Co	No	We agree with the change in principle, but there is different language in requirement R7 vs. the measure M7. The requirement states "Each other or any single data center" and the measure states "Each other or any common facility", which has a different meaning to us. Our preference would be for both sentences to use the "common facility" language.		
<p>Response: Requirement R7, Measure M7, (now R6 & M6) and the associated VSL have all been rewritten with consistency in terminology between the 3.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards.</p> <p>M6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have dated evidence that its primary and backup capabilities can independently maintain the functionality required to maintain compliance with Reliability Standards in accordance with Requirement R6.</p>				
R6 VSL	N/A	N/A	N/A	The Reliability Coordinator, Balancing Authority, or Transmission Operator's evidence does not demonstrate that its primary and backup capabilities can

Organization	Yes or No	Question 4 Comment
		independently maintain the functionality required to maintain compliance with Reliability Standards.
Exelon	No	We agree with what we believe is the drafting team's intent. However, the current wording is ambiguous and is subject to inconsistent interpretation and application. Therefore we suggest the wording for R7 being changed to: Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup facilities that can independently maintain the functionality, data availability and communications needed to maintain compliance with Reliability Standards.
<p>Response: The SDT has employed your suggestion with modifications in rewriting Requirement R7 (now R6).</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards.</p>		
FMPA and its ARP Participants Listed as Follows: City of Vero Beach; Kissimmee Utility Authority; and Beaches Energy Services	No	As written, the requirement R7 (and M7) could be interpreted as requiring redundant Remote Terminal Units (RTUs) at substations and associated communications. The wording of the requirement should be made to define more accurately what primary and backup capabilities are, and that they do not include the RTUs or communication from the RTUs.
<p>Response: The SDT agrees that Requirement R7 (now R6) should not require an additional level of redundancy to RTUs or the associated communications. Requirement R6 has been rewritten to focus on the functionality required to maintain reliability and compliance and does not require that level of redundancy.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards</p>		
Puget Sound Energy	No	<p>R7 indicates "does not depend on each other or any single data center". M7 changes the words of "any single data center" to "any common facility". The difference in these terms and how they could be interpreted is significant. The SDT should revise M7 to match R7 at a minimum. The term "common facility" could be extremely interpreted to require duplicative RTU sensors at all substations and communications systems transmitting the information to isolate the primary and the backup control centers from any dependency.</p> <p>Also it would be helpful to clarify whether "depend on each other" or "common facility" includes the building the centers reside in. In previous comments, the SDT responded that "the intent (of R7) is that if the primary control center is destroyed, the backup facility will be capable of collecting the data needed to support the reliable operation of the BES.". This response could imply the centers must reside in separate buildings or at</p>

Organization	Yes or No	Question 4 Comment
		<p>some significant distance from each other to prevent both locations from being impacted by a natural disaster. The SDT should explicitly list the components that the backup control center should not be dependent on.</p>
<p>Response: Requirement R7 (now R6) has been modified and Measure M7 has been changed to match that modification. The SDT agrees that Requirement R6 should not require an additional level of redundancy to RTUs or the associated communications. Requirement R7 has been rewritten to focus on the functionality required to maintain reliability and compliance and does not require that level of redundancy. The SDT does not believe that listing the components would be able to cover all the different configurations of communications and facilities that exist, and believes that the focus on functionality and reliability requirements meets the need without being overly specific.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards.</p> <p>M6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have dated evidence that its primary and backup capabilities can independently maintain the functionality required to maintain compliance with Reliability Standards in accordance with Requirement R6.</p>		
Duke Energy	No	<p>This requirement raises complex issues of redundancy that go beyond the need to provide backup functionality.</p>
<p>Response: The SDT is in agreement with this statement and has rewritten Requirement R7 (now R6) to attempt to address these issues without being overly specific.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards.</p>		
ITC	Yes	<p>Suggest removing the phrase "that depend on the primary control functionality." from the end of R7 as it is unnecessary. R7 references a "single data center" while the VSL matrix for R7 references "common facility". Common facility is much broader than data center.</p>
<p>Response: Requirement R7 (now R6) has been modified and Measure M7 has been changed to match that modification.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards.</p> <p>M6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have dated evidence that its primary and backup capabilities can independently maintain the functionality required to maintain compliance with Reliability Standards in accordance with Requirement R6.</p>		
American Transmission Company	Yes	<p>However, the sentence is long and could be broken up into two sentences. The phrase in blue at the end of the requirement does not add value and could be removed, "?that depend on the primary control functionality".</p>

Organization	Yes or No	Question 4 Comment		
IRC Standards Review Committee	Yes	We agree with the clarifying language, but hold the opinion that the last part of the requirement "that depend on the primary control functionality" is unnecessary. The responsible entity must comply with all reliability standards under either the primary functionality or backup capability condition, hence the need for the backup functionality.		
Ontario IESO	Yes	We agree with the clarifying language, but hold the opinion that the last part of the requirement "that depend on the primary control functionality" is unnecessary. The responsible entity must comply with all reliability standards under either the primary functionality or backup capability condition, hence the need for the backup functionality.		
<p>Response: Requirement R7 (now R6) has been modified and that phrase has been removed.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards.</p>				
Bonneville Power Administration	Yes	May be OK: Uncertainty due to the phrase "or any single data center". Not sure what that means. In data retention and VSL sections it refers to it as a common FACILITY.		
<p>Response: That phrase has been removed from Requirement R7 (now R6) and the VSL has been changed to match that modification.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards</p>				
R6 VSL	N/A	N/A	N/A	The Reliability Coordinator, Balancing Authority, or Transmission Operator's evidence does not demonstrate that its primary and backup capabilities can independently maintain the functionality required to maintain compliance with Reliability Standards.
FirstEnergy	Yes	Although we agree with R7, it should be clear that this requirement cannot be met during the time period when the primary or back-up functionality is lost for more than six months as provided by R9. We ask that this be		

Organization	Yes or No	Question 4 Comment
		<p>clarified by adding the wording "except as permitted by R9" at the end of Requirement R7.</p> <p>Also, we would like confirmation from the SDT that R7 is not describing an "N-2" contingency. To alleviate any confusion, we suggest a slight change in wording to R7 as follows: "Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that do not depend on each other, and that do not depend on any single data center for any functionality required to maintain compliance with Reliability Standards that depend on the primary control functionality."</p> <p>We are not clear on the need for the phrase "that depend on the primary control functionality" in R7. It is ambiguous and seems unnecessary, so we ask the SDT to explain the need for this phrase.</p>
<p>Response: It is not the SDTs intent for entities to require more than one backup location, through contract or its own facility, to provide backup functionality. Requirement R7 (now R6) has been modified to clarify the redundancy requirements.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards</p>		
Dominion Virginia Power	Yes	<p>The SDT should be aware of the concerns about NERCnet and the ISN that have been discussed by the Reliability Coordinator Working Group. If the loss of "any single data center" at a service provider facility can result in the ISN data being unavailable, is this a potential compliance issue?</p> <p>The measure M7 refers to "any common facility" instead of to "any single data center". The requirement and the measure should use the same terms.</p>
<p>Response: The SDT believes that any loss of data or control that would affect reliable operations of the grid and violate Reliability Standards could be a compliance issue. If an entity relies on the ISN and/or NERCnet for its operation it needs to have a means to ensure reliable operations should that function fail.</p> <p>The term data center has been removed from Requirement R7 (now R6) and the measure and requirement will use the same terms.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards.</p> <p>M6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have dated evidence that its primary and backup capabilities can independently maintain the functionality required to maintain compliance with Reliability Standards in accordance with Requirement R6.</p>		
KCP&L	Yes	
Pepco Holdings, Inc - Affiliates	Yes	

Organization	Yes or No	Question 4 Comment
MRO NERC Standards Review Subcommittee	Yes	
Tucson Electric Power	Yes	
PJM's NERC & Regional Coordination Department	Yes	
BCTC	Yes	
Oncor Electric Delivery	Yes	
PacifiCorp	Yes	
American Electric Power (AEP)	Yes	
Progress Energy	Yes	
ReliabilityFirst Corporation	Yes	
Entergy Services, Inc	Yes	
Response: Thank you for your response.		

5. Do you believe this standard is ready for balloting? If not, please supply the specific reasons for your position.

Summary Consideration: While there were many comments for this question, the SDT found few changes to be required. The following requirements were changed due to industry comments:

R2. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a copy of its current Operating Plan for backup functionality available at its primary control center and at the location providing backup functionality.

R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards

Part 7.1 under R7: The transition time between the simulated loss of primary control center functionality and the time to fully implement the backup functionality.

Organization	Yes or No	Question 5 Comment
Northeast Power Coordinating Council	No	<p>Once "data center" is clearly defined, we believe the standard will be ready for balloting.</p> <p>For lack of a general comments question, would like to propose here the following change: in R1.5 and R8.1 the terms " to fully implement the backup functionality" should be replaced by "to fully implement the backup functionality elements identified in Requirement R1.2".</p> <p>Regional Entity has been replaced with Reliability Assurer to reflect what is proposed in Version 4 of the Functional Model. The terms Regional Entity, and Regional Reliability Organization are used throughout the NERC Standards. One term should be used consistently throughout the Standards.</p>
Hydro-Québec TransEnergie (HQT)	No	<p>Once "data center" is clearly defined, we believe the standard will be ready for balloting.</p> <p>For lack of a general comments question, we would like to propose here the following change: in R1.5 and R8.1 the terms " to fully implement the backup functionality" should be replaced by "to fully implement the backup functionality elements identified in Requirement R1.2".</p> <p>Regional Entity has been replaced with Reliability Assurer to reflect what is proposed in Version 4 of the Functional Model. The terms Regional Entity, and Regional Reliability Organization are used throughout the NERC Standards. One term should be be consistently used throughout the Standards.</p>
Northeast Utilities	No	<p>Once "data center" is clearly defined, we believe the standard will be ready for balloting.</p> <p>For lack of a general comments question, would like to propose here the following change: in R1.5 and R8.1</p>

Organization	Yes or No	Question 5 Comment
		<p>the terms " to fully implement the backup functionality" should be replaced by "to fully implement the backup functionality elements identified in Requirement R1.2".</p> <p>Regional Entity has been replaced with Reliability Assurer to reflect what is proposed in Version 4 of the Functional Model. The terms Regional Entity, and Regional Reliability Organization are used throughout the NERC Standards. One term should be be consistently used throughout the Standards.</p>
ISO New England Inc.	No	<p>Once "data center" is clearly defined, we believe the standard will be ready for balloting.</p> <p>For lack of a general comments question, would like to propose here the following change: in R1.5 and R8.1 the terms " to fully implement the backup functionality" should be replaced by "to fully implement the backup functionality elements identified in Requirement R1.2".</p> <p>Regional Entity has been replaced with Reliability Assurer to reflect what is proposed in Version 4 of the Functional Model. The terms Regional Entity, and Regional Reliability Organization are used throughout the NERC Standards. One term should be be consistently used throughout the Standards.</p>
New York Independent System Operator	No	<p>Once "data center" is clearly defined, we believe the standard will be ready for balloting. For lack of a general comments question, would like to propose here the following change: in R1.5 and R8.1 the terms " to fully implement the backup functionality" should be replaced by "to fully implement the backup functionality elements identified in Requirement R1.2". Regional Entity has been replaced with Reliability Assurer to reflect what is proposed in Version 4 of the Functional Model. The terms Regional Entity, and Regional Reliability Organization are used throughout the NERC Standards. One term should be be consistently used throughout the Standards.</p>
<p>Response: 1. See response to question 4.</p> <p>2. R1.5 & R8.1: The SDT doesn't see where the suggested change adds clarity to the requirement. You need to look at the standard as a whole. For example, Requirements R4 & R5 also discuss required functionality. Requirement R1.2 merely addresses the high level elements needed in the written plan. No change made.</p> <p>3. The standards are being changed to reflect consistent terminology as the different projects come across the terms in question.</p>		
Ameren Services	No	<p>R1: Delete the word "current", it is not defined and adds nothing.</p> <p>R1: "backup functionality" should be restored to "backup capability"</p> <p>R1.1: "functionality" should be replaced with "facility" and "for a prolonged period of time" defined. This may be the period of time it would take to completely replace the facility that became inoperable.</p>

Organization	Yes or No	Question 5 Comment
		<p>R3: Agree that it should be removed as mentioned in Question 1, above.</p> <p>R4 and R5: In addition to the consideration of the comments in question 3, above; R4 should be clear that an RC's backup control center, that happens to be another entity's control center, does not depend on their primary control center. Likewise R5 should be clear that an BA/TOP backup control center, that happens to be provided through contracted services, does not depend on their primary control center</p> <p>R4.1, R4.2, R5.1, and R5.2 are exceptions and if they remain should be clearly stated as such. No subrequirements should be worded, such that on their own they could be mis-interpreted.</p> <p>R6.1 Only changes pertinent to the implementation of the operating plan should be required within the time frame specified.</p> <p>R7: As noted above in question # 4, R7 is redundant of R1 and should be removed. If a facility becomes "inoperable", and the entity has another facility capable of operating and meeting the NERC compliance standards, then it would be independent.</p> <p>R8: Define "annual"; is it a calendar year or something else. Under the effective date section of this standard, clearly state when the first test needs to be completed.</p> <p>R8.1 Add "simulated" in front of "loss of primary control"</p> <p>M1: Is there a significance in the words "current, in force Operating Plan"? Is not "current" and "in force" the same? If not, please explain.</p> <p>M2: Is there a significance in the words "current, in force Operating Plan"? Is not "current" and "in force" the same? If not, please explain.</p> <p>M6: Is there a significance in the words "current, in force Operating Plan"? Is not "current" and "in force" the same? If not, please explain.</p>
<p>Response: R1: The SDT does not feel a need to remove the word "current". The word "current" has been used to infer that the Operating Plan is to be the most recent version. No change made.</p> <p>R1: The SDT feels that "functionality" describes the intent of the requirement. It denotes the essentials needed to support the backup. No change made.</p> <p>R1.1: Because a backup facility is not required for the Balancing Authority and Transmission Operator, the word "functionality" will not be changed. The Balancing Authority and Transmission Operator can obtain backup functionality by contract.</p> <p>"Prolonged period of time" is the term used by FERC in Order 693 to mean the time to replace the primary control center functionality. Order 693 states "be capable of operating for a prolonged period of time, generally defined by the time it takes to restore the primary control center".</p> <p>R3: See answer to question 1.</p>		

Organization	Yes or No	Question 5 Comment
		<p>R4 & R5: The intent is that backup control centers or backup capabilities should not depend on the primary control center that has been evacuated. The SDT believes that the requirement as written addresses this concern. No change made.</p> <p>R4.1, R4.2, R5.1, R5.2: These have been changed to bullets.</p> <p>R6.1: Any changes to the Operating Plan, whether they are plans, processes, procedures or implementation, need to be included in the update. Pertinent is too flexible and open-ended and impossible to measure. No change made.</p> <p>R7: See response to Question 4.</p> <p>R8: "Annual" means once in a calendar year as per Webster's. No change made. Tests should be performed within one year of implementation.</p> <p>R8.1: The word "simulated" has been added.</p> <p>Part 8.1 under R8 (now part 7.1 under Requirement R7): The transition time between the simulated loss of primary control center functionality and the time to fully implement the backup functionality.</p> <p>M1, M2, and M6: The current Operating Plan is the one that should be "in force".</p>
KCP&L	No	<p>The term "Reliability Assurer" referred to in R9, and throughout the proposed Standard, is not a defined term. Recommend the SDT either propose a definition for this term and for the definition to be placed in the NERC Glossary of Terms or use a term that is defined and serves its applicable purpose in R9.</p> <p>It is not clear from requirement R8 or its sub-requirements that training of personnel who are to execute back-up plans are trained in the plans. Recommend the SDT consider including some personnel training requirements.</p> <p>The VSL's for R3 include the phrase, "that is depended upon for compliance with one or more Requirements in the Reliability Standards having a [Lower, Medium, High] VRF". This is problematic in the VSL as it can be debatable as to what requirements out of all the Reliability Standards apply here. Recommend NERC Staff and/or the SDT remove this phrase from the R3 VSL's. Also recommend NERC Staff and/or the SDT consider modifying the VSL's for R3 to reflect not ensuring back-up capability through others with one facility as Lower VSL, two facilities as Moderate, three facilities as High, and four or more as Severe.</p> <p>The VSL's for R4 and R5 include the phrase, "one or more of the Requirements in the Reliability Standards applicable to [the Reliability Coordinator, a Balancing Authority and Transmission Operator respectively] that depend on the primary control center functionality and which have a [Lower, Medium, High] VRF." This is problematic in the VSL as it is debatable as to what requirements out of all the Reliability Standards apply here. Recommend NERC Staff and/or the SDT consider removing this language and replace with language that is measurable and definitive.</p> <p>Recommend moving the following language from the Lower VSL for R6 to the Medium VSL on the basis of it is</p>

Organization	Yes or No	Question 5 Comment
		<p>more of a concern to have updated a plan that needed updating after a year and less of a concern to have updated a plan that needed updating after 60 days but less than a year. The suggested language move is: "The Reliability Coordinator, Balancing Authority, or applicable Transmission Operator, has evidence that it's dated, current, in force Operating Plan for backup functionality, with evidence of its last issue, was reviewed and approved but it was not done in one calendar year."</p>
<p>Response: Regional Entity is the correct term and the standard has been corrected. Training requirements are dealt with in the PER standards. The SDT believes that this language is quite clear and non-problematic in that applicability of a standard or requirement is clear and the accompanying VRF is clearly stated. The VSL as written covers the situation adequately. No change made. The SDT believes that this language is quite clear and non-problematic in that applicability of a standard or requirement is clear and the accompanying VRF is clearly stated. No change made. The SDT believes that the VSL is correct with the use of 'or' to differentiate the 2 different conditions and that Lower is the appropriate location for the first occurrence. No change made.</p>		
Southern Company Transmission	No	<p>We have the following comments regarding the noted requirements of this standard: R1: The word, "current", should be removed from the language of the requirement. R1: What is the difference between "operability" and "functionality"? Are they the same? R1.1: Delete "for a prolonged period of time." R1.3: What does "consistent" mean? does it mean "adequate to meet compliance"? 1.6.2: This requirement appears to be redundant to R1.6. R2: The word, "current", should be removed from the language of the requirement. R4: In the first sentence, change "facility" to "functionality" and delete all remaining language of the sentence following "functionality." R5: In the first sentence, delete all remaining language of the sentence following "functionality". R6.1: We suggest that changes that are necessary for the operator to implement the back-up plan should be updated within 60 days - all other changes shall be addressed during the annual review. R8: When does the first test have to be performed, following implementation, to be compliant? - one day or within one year after implementation? We request that "annual" be replaced with "a calendar year".</p>

Organization	Yes or No	Question 5 Comment
		<p>R8.1: We suggest adding the word "simulated" in front of "loss of primary control".</p> <p>General Comment: Measures and VSLs should use the same words and be consistent with the requirements of the Standard.</p>
SERC OC Standards Review	No	<p>We have the following comments regarding the noted requirements of this standard:</p> <p>R1: The word, "current", should be removed from the language of the requirement.</p> <p>R1: What is the difference between "operability" and functionality? Are they the same?</p> <p>R1.1: Delete "for a prolonged period of time."</p> <p>R1.3: What does "consistent" mean? does it mean "adequate to meet compliance"?</p> <p>1.6.2: This requirement appears to be redundant to R1.6.</p> <p>R2: The word, "current", should be removed from the language of the requirement.</p> <p>R4: In the first sentence, change "facility" to "functionality" and delete all remaining language of the sentence following "functionality."</p> <p>R5: In the first sentence, delete all remaining language of the sentence following "functionality".</p> <p>R6.1: We suggest that changes that are necessary for the operator to implement the back-up plan should be updated within 60 days - all other changes shall be addressed during the annual review.</p> <p>R8: When does the first test have to be performed, following implementation, to be compliant? - one day or within one year after implementation? We request that "annual" be replaced with "a calendar year".</p> <p>R8.1: We suggest adding the word "simulated" in front of "loss of primary control".</p> <p>General Comment: Measures and VSLs should use the same words and be consistent with the requirements of the Standard.</p>
<p>Response: The SDT does not feel a need to remove the word "current". The word "current" has been used to infer that the Operating Plan is to be the most recent version. No change made.</p> <p>R1: The primary control center becoming inoperable means that the control center is unable to process the functions needed to support grid operations. No change made.</p> <p>R1.1: "Prolonged period of time" is the term used by FERC in Order 693 to mean the time to replace the primary control center capability. Order 693 states "be capable of operating for a prolonged period of time, generally defined by the time it takes to restore the primary control center". No change made.</p> <p>R1.3: "Consistent" is a word used by FERC in Order 693. Order 693 states: "provides that the extent of the backup capability be consistent with the impact of the</p>		

Organization	Yes or No	Question 5 Comment
<p>loss of the entity’s primary control center on the reliability of the Bulk-Power System”. No change made.</p> <p>R1.6.2: The commenter has not provided a reason for assuming that Requirements R1.6 and R1.6.2 are redundant. The SDT believes the requirements are not redundant. No change made.</p> <p>R2: The SDT does not feel a need to remove the word “current”. The word “current” has been used to infer that the Operating Plan is to be the most recent version. No change made.</p> <p>R4: As per Order 693, the RC needs to have a backup facility and not just backup functionality. No change made.</p> <p>R5: The commenter has not provided the rational for making the deletion. The SDT has decided not to delete the words suggested.</p> <p>R6.1: Any changes to the Operating Plan, whether they are plans, processes, procedures or implementation, need to be included in the update. No change made.</p> <p>R8: “Annual” means once in a calendar year as per Webster’s. No change made. The first test of the operating plan must be completed within one year of the effective date of the standard.</p> <p>R8.1: The word “simulated” has been added.</p> <p>Part 8.1 under R8 (now Requirement R7, part 7.1): The transition time between the simulated loss of primary control center functionality and the time to fully implement the backup functionality.</p>		
Bonneville Power Administration	No	It has potential, but not sure about possible planned construction outage time duration.
<p>Response: The commenter has not indicated when the planned construction outage is to occur so the SDT is unable to provide a response.</p>		
Midwest ISO Standards Collaborators	No	<p>There is significant clean up identified in this standard. A fourth comment period should be pursued to verify that the drafting team has addressed concerns appropriately. Additionally, we offer these comments.</p> <p>We suggest it is possible to create four VSLs for requirement 9 based on the number of months the plan is late. FERC established in their June 2008 VSL order that their preference is to create a VSL for every level if possible. This is clearly possible based on our suggestion.</p>
<p>Response: The SDT does not feel that any significant changes have been made to the third revision and does not see the necessity for a 4th posting.</p> <p>R9 VSL: The SDT feels that the VSLs identified satisfy FERCs intent.</p>		
FirstEnergy	No	<p>We ask that our comments provided above have been appropriately considered before balloting begins.</p> <p>Also, we provide the following comments:In Requirement R9, the SDT changed the term "Regional Entity" to "Reliability Assurer". "Reliability Assurer" is a new term used in Version 4 of the NERC Functional Model but it</p>

Organization	Yes or No	Question 5 Comment
		<p>is not clear if Version 4 is the latest approved Model. From looking at the NERC website, it only appears as though Version 3 is approved. We ask the SDT to confirm. Furthermore, if Version 4 is approved and Reliability Assurer is, in fact, an approved term, we believe the standard would be much clearer if Regional Entity was still used because it is much more familiar to industry at this point in time since Version 4 of the Functional Model is new. If still desired to be used, the SDT can put Reliability Assurer in parenthesis immediately following Regional Entity, i.e. "Regional Entity (Reliability Assurer)"</p>
<p>Response: Please see the responses to comments in previous questions to determine if your comments have been adequately addressed. Regional Entity is the correct term and the standard has been corrected.</p>		
<p>MRO NERC Standards Review Subcommittee</p>	<p>No</p>	<p>R1, Requires the entity to "have a current Operating Plan". NERC defines Operating Plan as "A document that identifies a group of activities that may be used to achieve some goal. An Operating Plan may contain Operating Procedures and Operating Processes. A company-specific system restoration plan that includes an Operating Procedure for black-starting units, Operating Processes for communicating restoration progress with other entities, etc., is an example of an Operating Plan". Contained in the defined term, NERC explains that an Operating Procedure and Operating Process are sub-components within the Operating Plan. R1.3 and R1.6 dictate the use of an Operating Process. R1.4 dictates the use of an Operating Procedure. This will lead to confusion within the industry. Recommend the SDT streamline these requires since they are sub-components of an Operating Plan. R1, R4, R5 and R7,</p> <p>Request clarification, The Operating Plan described in R1 is to contain items for "backup functionality" and at a minimum contain the sub-requirements in R1.2. Then in R4 (and in R5 for the BA and TOP), the SDT requires the RC to "have a backup control center facility that provides the functionality required for maintaining compliance with ALL Reliability Standards that depend on primary control center functionality". The PURPOSE of this Standard is for continued reliability operations of the BES (also stated in R1, and R3). FERC Order 693 states in paragraph 672, under (3) "provide for a minimum functionality to replicate the critical reliability functions of the primary control center". Note: same paragraph (5) states: "includes a Requirement that all reliability coordinators have full backup control centers". Does this proposed Standard apply to the Reliability of the BES or all Standards assigned to a RC, TOP, and BA, please clarify.</p> <p>R1.5, States that an entity has up to 2 hours to fully implement the backup functionality. Where did the two hour time frame come from and what is the justification for it? There are some examples in actual emergencies that indicates the backup control center should be a substantial distance from the primary, to prevent the possibility of losing both the primary and backup facilities to the emergency, which may make it impossible to have the backup up, running, and fully functional within 2 hours. Please note the hurricanes in New Orleans, floods in Iowa.</p> <p>R5, The SDT is adding more components to the non-defined term of "backup functionality" as stated in the</p>

Organization	Yes or No	Question 5 Comment
		<p>sub-requirements of R1.2. Added are the processes of "monitoring, control, logging, and alarming". If these are components of R1.2.1, then they should be added to R1.2.1, which will stream line the Standard.</p> <p>R2, The MRO NSRS does not believe that it is necessary for an unmanned facility (like a repeater tower) that "supports" the backup facility to have a copy of the Operating Plan and suggests the requirement be modified to clarify.</p> <p>R7 and R9, please clarify what backup "capability" is when the rest of the proposed standard references backup "functionality".</p> <p>R9, Uses the term Reliability Assurer and is undefined as stated by NERCs Reliability Functional Model (V4) "While the specific role of the Reliability Assurer is not fully developed at the present time, the following are representative of the Tasks that might be performed:". The term Regional Entity or Reliability Coordinator should be used since they are defined and should be contained in R9. If at a later date Reliability Assurer is approved, NERC may submit an errata to update the Requirement.</p>
<p>Response: R1: The SDT has reviewed the NERC Glossary definitions and believes that the terms have been used correctly. No changes made. The standard applies to the reliability of the BES which is achieved through the compliance to standards.</p> <p>R1.5: The SDT has discussed the rationale for the transition to the backup functionality in the case of failure of the primary control center in previous comments. No change made.</p> <p>R5: Requirement R1.2 addresses the elements required to support functionality. The SDT does not believe that a change is needed.</p> <p>R2: A change has been made for clarity.</p> <p style="padding-left: 40px;">R2. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a copy of its current Operating Plan for backup functionality available at its primary control center and at the location providing backup functionality.</p> <p>R7: Using the term "functionality" instead of capability in Requirement R7 (now R6) would be problematic as the Reliability Coordinator can't have backup "functionality" since they are required to have "a backup control center facility" per Requirement R4 (now R3). Backup capabilities seems to be the right term to describe what the SDT is requiring in the standard. The same issue applies in Requirement R9 (now R8) since it is also describing Reliability Coordinator's and Transmission Operator's/Balancing Authority's. No change made.</p> <p>R9. Regional Entity is the correct term and the standard has been corrected.</p>		
IRC Standards Review Committee	No	<p>Whether or not the standard is ready for ballot will depend on the extent to which the above comments are addressed.</p> <p>Further, the following comments also need to be addressed:VSLs for R2: The Severe condition is "The Reliability Coordinator, Balancing Authority, or Transmission Operator has an Operating Plan for backup</p>

Organization	Yes or No	Question 5 Comment
		<p>functionality but no version of the plan is available at all of its control locations." There is no mention of having no version at one of the primary and backup control locations. If one version is missing, what VSL is assigned?</p> <p>VSLs for R3: VSL measures the extent to which an entity fails a requirement, not how impactful the failure is. However, the VSLs for R3 are assigned according to what level of VRFs the requirements have failed. Factoring the impact of a failure in the determination of the extent of failure is improper. These need to be revised.</p> <p>VSLs for R4: Similar comments as for VSLs for R3.</p> <p>Further, please note our comments and suggestions under Q3. If R4 is to be revised, the VSLs (and Measure) will need to be revised accordingly.</p> <p>VSLs for R5: Same comments as for VSLs for R4.</p> <p>We are particularly concerned with the determination of VSL based on VRFs for R3, R4 and R5. This is improper in applying the fundamental concept of VRF and VSL. We feel that the standard is not ready for balloting until these VSLs are revised to remove the VRF component.</p>
Ontario IESO	No	<p>Whether or not the standard is ready for ballot will depend on the extent to which the above comments are addressed.</p> <p>Further, the following comments also need to be addressed: VSLs for R2: The Severe condition is "The Reliability Coordinator, Balancing Authority, or Transmission Operator has an Operating Plan for backup functionality but no version of the plan is available at all of its control locations." There is no mention of having no version at one of the primary and backup control locations. If one version is missing, what VSL is assigned?</p> <p>VSLs for R3: VSL measures the extent to which an entity fails a requirement, not how impactful the failure is. However, the VSLs for R3 are assigned according to what level of VRFs the requirements have failed. Factoring the impact of a failure in the determination of the extent of failure is improper. These need to be revised.</p> <p>VSLs for R4: Similar comments as for VSLs for R3. Further, please note our comments and suggestions under Q3. If R4 is to be revised, the VSLs (and Measure) will need to be revised accordingly.</p> <p>VSLs for R5: Same comments as for VSLs for R4.</p> <p>We are particularly concerned with the determination of VSL based on VRFs for R3, R4 and R5. This is improper in applying the fundamental concept of VRF and VSL. We feel that the standard is not ready for balloting until these VSLs are revised to remove the VRF component.</p>

Organization	Yes or No	Question 5 Comment
<p>Response: Please see the responses to comments in previous questions to determine if your comments have been adequately addressed.</p> <p>R2: The SDT believes that it is a severe violation regardless of whether the plan is missing at one or more locations. No change made.</p> <p>R3, R4, & R5: The SDT believes that the technique employed is within FERC guidelines and is an acceptable method of quantifying the issue.</p>		
<p>PJM's NERC & Regional Coordination Department</p>	<p>No</p>	<p>Numerous requirements need to be rewritten for clarification and subsequently, VSLs will need to be rewritten followed by another posting prior to this standard being ready for balloting.</p> <p>In addition, there are still some areas which should be cleaned up: R1 - the term current should be omitted as it adds a new term which should simply be covered by R6.</p> <p>R1.2.5 - does this refer to CIP 003 - CIP 009, or some other cyber security requirements?</p>
<p>Response: The SDT does not feel that any significant changes have been made to the third revision and does not see the necessity for a 4th posting.</p> <p>R1: The SDT does not feel a need to remove the word "current". The word "current" has been used to infer that the Operating Plan is to be the most recent version. No change made.</p> <p>R1.2.5: This requirement identifies the need to address how Cyber and Physical security will be maintained for the backup functionality. The Cyber and Physical security requirements are identified in the CIP standards.</p>		
<p>Dominion Virginia Power</p>	<p>No</p>	<p>1) See response to question 3.</p> <p>2) Requirement R9 allows 6 months after an unplanned outage before a plan is needed for restoration of the primary or backup capability. This is too long. A plan should be required within two weeks even if it is only a preliminary plan. The plan should be updated at least monthly thereafter until the restoration is complete.</p>
<p>Response: 1. See response to question 3.</p> <p>2. The SDT has reviewed the 6 month time frame for developing the plan and believes that it is an appropriate time frame. No change made.</p>		
<p>South Carolina Electric & Gas Company</p>	<p>No</p>	<p>See my suggested version of standard.</p> <p>R1. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a copy of their most recently approved Operating Plan describing the manner in which it ensures reliable operations of the BES in the event that its control center becomes inoperable. This Operating Plan for backup functionality shall be available in its primary control center and at the location supporting backup functionality. The Operating Plan shall include the following:</p>

Organization	Yes or No	Question 5 Comment
		<p>R1.1. Operating Procedures that stipulate:</p> <ul style="list-style-type: none"> R1.1.1 Who has the decision-making authority for determining when to implement the Operating Plan. R1.1.2 The actions required to transition from loss of primary control center functionality to backup control functionality. R1.1.3 The actions required during the transition period. R1.1.4 The estimated transition time to fully implement the backup functionality which must be attained in less than or equal to two hours. R1.1.5 The list of all entities to notify when a change of operating locations or functionality is required. R1.1.6 The roles for personnel involved during the initiation and implementation of the Operating Plan. <p>R1.2. A summary description of the elements required to support the backup functionality. These elements shall include:</p> <ul style="list-style-type: none"> R1.2.1. Tools and applications that allow visualization capabilities to ensure operating personnel maintain situational awareness of the BES. R1.2.2. Data communications. R1.2.3. Voice communications. R1.2.4. Power source(s). R1.2.5. Physical and cyber security. <p>R1.3. A description of the methods used for keeping the backup functionality compatible with the primary control center functionality.</p> <p>R2. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall annually review and approve its Operating Plan for backup functionality</p> <ul style="list-style-type: none"> R2.1. An Operating Plan shall be updated and approved within sixty calendar days of any changes described in Requirement R1. <p>R3 (Deleted)</p> <p>R4. See Question 3.</p> <p>R5. See Question 3.</p> <p>R6. (Now R2)</p>

Organization	Yes or No	Question 5 Comment
		<p>R7. Incorporated into R1.</p> <p>R8. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall conduct a test of its Operating Plan once each calendar year and document the results. The results should state:</p> <p>R8.1 The transition time from loss of primary control center functionality to full backup control functionality.</p> <p>R8.2 The length of time the backup functionality was utilized to operate the BES. A minimum of two continuous hours is required.</p> <p>R9. Each Reliability Coordinator, Balancing Authority, and Transmission Operator that has experienced a loss of its primary or backup capability, and anticipates that loss will last for more than six calendar months shall provide a plan to its Reliability Assurer within six calendar months of the date the functionality was lost, detailing how it will re-establish backup capability.</p>
<p>Response: The SDT believes that the existing requirements for the proposed standard are appropriate and necessary and that additional clarity would not be achieved at this time due to the suggested changes. No changes made.</p>		
San Diego Gas and Electric Co	No	<p>We have a few issues related to the language in the revised standard that we feel need to be addressed:R1.1 - the phrase "prolonged period of time" needs to be defined more clearly. One person could interpret that phrase to mean 3 months, while another person might think anything over 1 week is prolonged.</p> <p>R3 - "Transmission Operator directing BES operations through other entities"...We would suggest replacing the word "entities" with something else, such as parties or organizations. We feel that "entities" is too closely related to the registration process. What if the party in question is not a registered entity? It gets confusing.</p> <p>R6.1 - We would suggest adding the word "substantial" so that the second line reads "shall take place within sixty calendar days of any substantial changes". Other wording that is more precise is also welcome, but we wanted it to be clear that an update of the plan is not necessary for more trivial changes that happen several times per month at the control centers.</p> <p>R9 - We don't understand who the "Reliability Assurer" is. We actually liked the previous "Regional Entity" wording.Thanks very much,Randy SchimkaSDG&E</p>
<p>Response: R1.1: "Prolonged period of time" is the term used by FERC in Order 693 to mean the time to replace the primary control center capability. Order 693 states "be capable of operating for a prolonged period of time, generally defined by the time it takes to restore the primary control center". No change made.</p> <p>R3: The SDT believes that the word "entities" is appropriate. No change made.</p> <p>R6.1: The requirement was changed for the 3rd posting to reflect that only those changes that impact Requirement R1 need to be approved within 60 days. The SDT believes that this is appropriate. No change made.</p>		

Organization	Yes or No	Question 5 Comment
R9. Regional Entity is the correct term and the standard has been corrected.		
Exelon	No	There are significant opportunities for rewording requirements in this revision, for example the ambiguous wording in R7 requires a fourth comment period.
Response: The SDT cannot appropriately respond without specific concerns/suggestions. However, the SDT does not feel that any significant changes have been made to the third revision and does not see the necessity for a 4 th posting.		
Xcel Energy	No	We agree with the intent of the standards but would like the items mentioned in our comments addressed prior to balloting. R1.1 "prolonged" is a subjective term and will need to be changed or defined in order to have a standard that minimizes interpretation. R1.3 "consistent" is a subjective term and will need to be changed or defined in order to have a standard that minimizes interpretation.
Response: R1.1: "Prolonged period of time" is the term used by FERC in Order 693 to mean the time to replace the primary control center capability. Order 693 states "be capable of operating for a prolonged period of time, generally defined by the time it takes to restore the primary control center". No change made. R1.3: "Consistent" is a word used by FERC in Order 693. Order 693 states: "provides that the extent of the backup capability be consistent with the impact of the loss of the entity's primary control center on the reliability of the Bulk-Power System". No change made.		
E.ON U.S.	No	R1.6.2 appears redundant with R1.6 which requires a description of the actions to be taken during the transition. The phrase "manage the risk" is vague and subject to differing interpretations by organizations and auditors. R1.6.2 also describes outages of primary or backup functionality which can be different from a "loss of primary control center" used in R1.6. Requirement R. 8 requires "an annual test of its Operating Plan that demonstrates: the transition time?". R8 introduces additional reliability risk for the BES by requiring RC/BA/TOPs to annually remove from service their primary control center, relocate staff, and then re-initialize all systems. This standard should allow for simulated exercises rather than actual test, similar to requirements in EOP-005. Annual test should be defined as a test each "calendar year".
Response: R1.6.2 adds clarification that the plan includes actions for when the primary or backup functionality is "out" for planned circumstances (as opposed to the unplanned loss of the primary control center). The risk for each entity will be different depending on circumstances and the plan. The plan should identify how each entity will respond to any risks associated with their particular situation. No change made.		

Organization	Yes or No	Question 5 Comment
<p>R8: The requirement does not require that the primary control center be “removed from service”. The word ‘simulated’ has been added for clarity to Part 8.1. Part 1 under R8 (now Requirement R7, part 7.1): The transition time between the simulated loss of primary control center functionality and the time to fully implement the backup functionality.</p>		
PacifiCorp	No	<p>R9 is ambiguous and requires clarification prior to balloting. It is unclear whether R9 requires that the responsible entity must submit a plan within six months showing how it will re-establish backup capability or whether it requires the responsible entity to completely re-establish backup capability within six months. This is a very critical distinction.</p> <p>In addition, R9 contains the term "Reliability Assurer" which is not a NERC defined term. It is unclear to what entity this term is referring. This must be clarified before the Standard is ready for balloting.</p>
<p>Response: R9: The SDT believes that the requirement states that a plan be submitted to its Regional Entity within 6 months. The actual time frame required to re-establish the primary control center should be defined in the plan. No change made.</p> <p>R9: Regional Entity is the correct term and the standard has been corrected.</p>		
<p>FMPA and its ARP Participants Listed as Follows: City of Vero Beach; Kissimmee Utility Authority; and Beaches Energy Services</p>	No	<p>See comments above.</p> <p>We suggest: 1) removing the paranthetical from R5 and M5;</p> <p>2) defining what "primary and backup capabilities" in R7 and M7 mean more specifically, and specifically excluding the need for redundant RTUs and associated communications;</p> <p>3) Reliability Assurers (referred to in R9 and M9) ought to be a defined term, or we suggest staying with Regional Entity at this time until Reliability Assurers is a defined term in NERC's Glossary; and</p> <p>4) although R1.2 only refers to physical and cyber security and does not refer to "Critical Assets" or "Critical Cyber Assets", it ought to be clear that just because there may be a backup control center, it does not automatically become a Critical Asset or Critical Cyber Asset, especially if the primary control center is not a Critical Asset or Critical Cyber Asset</p>
<p>Response: Please see responses above for previous comments.</p> <p>1) The SDT believes that the parenthesis add clarity to the requirement. No change made.</p> <p>2) Requirement R7 (now R6) has been modified to clarify the redundancy requirements.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards</p>		

Organization	Yes or No	Question 5 Comment
<p>3) Regional Entity is the correct term and the standard has been corrected.</p> <p>4) The SDT believes that the determination of critical assets and therefore, critical cyber assets, is covered by a separate standard and should not be duplicated in this one.</p>		
Progress Energy	No	<p>Effective Date: Include when the first test of the Operating Plan (R8) has to be performed. Is it (a) before the effective date, (b) within the same calendar year as the effective date, or (c) within 1 year of the effective date? To be consistent with the once per calendar year recurring requirement, we suggest option (b).</p> <p>R1.3: The term “consistent” can have too many interpretations - it could be interpreted that the backup tools must be exactly the same as the primary, which should not be required. If this statement was intended as a reminder to keep Operator tools similar at the backup, then make this a "should" statement instead of a "shall." Another option would be to reword it to say "for keeping the backup functionality adequate to meet compliance."</p> <p>R8: Suggest clarifying "annual" here and in all other applicable sections of the standard. Based upon the SDT's response to previous comments, we recommend using the phrase "once per calendar year"</p>
<p>Response: R8: The first test of the operating plan must be completed within one year of the effective date of the standard.</p> <p>R1.3: “Consistent” is a word used by FERC in Order 693. Order 693 states: “provides that the extent of the backup capability be consistent with the impact of the loss of the entity’s primary control center on the reliability of the Bulk-Power System”. No change made.</p> <p>R8: “Annual” means once in a calendar year as per Webster’s. No change made.</p>		
ITC	No	<p>In addition to changes suggested in Q4, we believe that VSL's for R7 should be developed for lower and medium/high. We suggest it is possible to create four VSLs for all requirements. FERC established in their June 2008 VSL order that their preference is to create a VSL for every level if possible.</p>
<p>Response: The SDT believes that the VSL's are appropriate for each requirement. No change made.</p>		
Duke Energy	No	<p>In addition to the comments for Questions #3 and #4 above, this standard lacks sufficient clarity in the following areas to proceed to ballot:</p> <p>R1. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a current (what does “current” mean?) Operating Plan describing the manner in which it ensures reliable operations of the BES in the event that its primary control center (some entities have concerns with premise of primary and secondary - they have dual “primary” centers so the notion of primary and secondary is problematic) becomes inoperable (what does “inoperable” mean ? should this be clarified to mean "loss of functionality"?).</p>

Organization	Yes or No	Question 5 Comment
		<p>R1.3. An Operating Process for keeping the backup functionality consistent (what does this mean ? does this mean exact duplicate functionality, does this mean every application, process, etc needs to be exactly consistent, what is the time dimension allowed for achieve consistency?) with the primary control center.</p> <p>R1.6. An Operating Process describing the actions to be taken during the transitionperiod between the loss of primary control center functionality and the time to fully implement the backup functionality elements identified in Requirement R1.2. The Operating Process shall include at a minimum: R1.6.1. A list of all entities (all is a very inclusive word ? suggest something like ?primary?) to notify when there is a change in operating locations.</p> <p>R1.6.2. Actions to manage the risk to the BES (what does this phrase mean? what is the risk to the BES associated with loss of a control center?) during the transition fromprimary to backup functionality as well as during outages of the primary or backup functionality.</p> <p>R1.7. Identification of the roles for personnel (is this by name or by function, i.e. Manager of the Control Center?) involved during the initiation and implementation of the Operating Plan for backup functionality.</p> <p>R3. Each Reliability Coordinator, Balancing Authority, and Transmission Operator directing BES operations through other entities shall ensure that backup functionality exists for the BES operations performed through those other entities. [Violation Risk Factor = Medium] [Time Horizon =Operations Planning] (This requirement is vague and subject to different interpretations. Suggest removing the entire requirement.)</p> <p>R4 and R5: See comment above on Question # 3.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and TransmissionOperator, shall annually review and approve its Operating Plan for backupfunctionality. [Violation Risk Factor = Lower] [Time Horizon = Operations Planning]R6.1. An update and approval of the Operating Plan for backup functionality shall take place within sixty calendar days of any changes in capabilities described in Requirement R1. (How significant of a change in capabilities requires a revised/approved update within 60 days?)</p> <p>R9. Each Reliability Coordinator, Balancing Authority, and Transmission Operator that has experienced a loss of its primary or backup capability and that anticipates that the loss of primary or backup capability will last for more than six calendar months, shall provide a plan to its Reliability Assurer (who is this? This is apparently a new term defined in the next version of the Functional Model; since this new version is not yet approved, should it be used here?) within six calendar months of the date when the functionality is lost, showing how it will reestablish backup capability. [Violation Risk Factor = Medium] [Time Horizon = Operations Planning]</p> <p>After these clarifications are made, the measures need to be closely reviewed again to assure they are aligned with the words in the requirements. For instance, the measures should not introduce new requirements as several appear to do as currently written.</p>

Organization	Yes or No	Question 5 Comment
		Likewise the VSL matrix will need to be reviewed again for alignment with the requirements.
		<p>Response: R1: The word “current” has been used to infer that the Operating Plan is to be the most recent version. The standard does not discuss secondary control centers. Each entity will need to develop a plan that will meet the requirements of the standard. Inoperable would mean that the control center can no longer be used to ensure the reliable operation of the BES.</p> <p>R1.3: “Consistent” is a word used by FERC in Order 693. Order 693 states: “provides that the extent of the backup capability be consistent with the impact of the loss of the entity’s primary control center on the reliability of the Bulk-Power System”. No change made.</p> <p>R1.6: The SDT believes that each entity should determine the other entities that need to be contacted for this requirement and that the wording is appropriate. No change made.</p> <p>R1.6.2: The SDT cannot determine every risk that might be faced with the loss of a primary control center; nor is it appropriate to try to determine and detail each risk in the standard. Each entity will need to develop a plan for the transition period from the loss of the primary control center to fully implement the backup functionality that ensures the reliable operations of the BES. The basic elements that support functionality are defined in Requirement R.1.2.</p> <p>R1.7: By function.</p> <p>R3: The SDT believes the requirement is necessary and clearly stated. For reference, see discussions in Question 1. No change made.</p> <p>R4/R5: See answers on question #3.</p> <p>R6: Only those changes that impact R1 need to be approved within 60 days.</p> <p>R9. Regional Entity is the correct term and the standard has been corrected.</p> <p>All measures and VSL’s have been reviewed to ensure that they are appropriate to the associated requirement.</p>
Puget Sound Energy	No	<p>Puget Sound Energy commented previously that the 24 month implementation timeline was not reasonable. The SDT responded that "The SDT agrees with the majority of commenters that 24 months is the correct timeframe for this standard." The questions/comments regarding the terms used in R7/M7 mentioned in response to question 4 could have significant impact on the ability for an entity to meet within this timeframe. Until R7 is further clarified, the SDT should extend the implementation timeframe from 24 months to 36 months.</p> <p>Also in accordance with FERC's "Order on Violation Severity Levels Proposed by the Electric Reliability Organization," issued June 19, 2008 (Docket No. RR08-4-000), FERC has stated its preference for graduated VSLs since the application of any penalty for a violation can be more consistently and fairly applied based on the degree of the violation. In light of this, NERC should revise the proposed VSLs to include graduated violation severity levels for each and every requirement.</p>

Organization	Yes or No	Question 5 Comment
<p>Response: Requirement R7 (now R6) has been clarified; therefore, the SDT does not see any reason to change to the Implementation Plan.</p> <p>R6. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup capabilities that can independently maintain the functionality required to maintain compliance with Reliability Standards</p> <p>The SDT believes that the VSL's are appropriate for the requirements of the standard.</p>		
American Transmission Company	No	<p>R9 uses the term Reliability Assurer which is not currently defined by NERC. It should be replaced with Regional Entity.</p> <p>R7 and R9 use the term "backup capability". The rest of the requirements use the term "backup functionality". For consistency and clarity, it is recommended that one term is used consistently in all of the requirements.</p> <p>The changes or deletion of R3 needs to be clarified. If R3 is kept, then the verbiage needs to be modified as stated above.</p> <p>R2 should read "at the location which provides backup functionality", not "at the location supporting backup functionality". Many locations may support backup functionality, not all of which are manned and would need a copy of the plan. This re-write would remove the need for unmanned locations to have a copy of the Operating Plan.</p>
<p>Response: R9. Regional Entity is the correct term and the standard has been corrected.</p> <p>R7: Using the term “functionality” instead of capability in Requirement R7 (now R6) would be problematic as the Reliability Coordinator can’t have backup “functionality” since they are required to have “a backup control center facility” per Requirement R4 (now R3). Backup capabilities seem to be the right term to describe what the SDT is requiring in the standard. The same issue applies in Requirement R9 (now R8) since it is also describing Reliability Coordinator’s and Transmission Operator’s/Balancing Authority’s. No change made.</p> <p>R3: Please see the discussion for question 1. No change made.</p> <p>R2: A change has been made as suggested.</p> <p>R2. Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have a copy of its current Operating Plan for backup functionality available at its primary control center and at the location providing backup functionality.</p>		
American Electric Power (AEP)	Yes	<p>While ready for ballot, a couple other suggestions: (a) The term "Reliability Assurer" should be defined within the applicability of the standard. Is it typically the RC, NERC, or some other entity?</p> <p>(b) R9 - What is the action that the Reliability Assurer to take when it receives the plan. If no action is required, the plan could be maintained by the RC, BA, or TO. We are not sure of what value is intended to be provided by the Reliability Assurer when the plan is received perhaps months after the loss of primary and/or back-up</p>

Organization	Yes or No	Question 5 Comment
		capability. (c) R3, M3 - We are not sure that references to third party entities is necessary as the applicable entity is ultimately still responsible.
<p>Response: a) Regional Entity is the correct term and the standard has been corrected.</p> <p>b) The standard does not require that the Regional Entity take any action with the plan. The intent is to have the entity that has lost its primary control center develop a plan for re-establishing full functionality.</p> <p>c) Please see the discussion for question 1.</p>		
Entergy Services, Inc	Yes	We request the drafting team consider increasing the maximum transition time to 3 hours from 2 hour in R1.5. The cost of full implementation of backup functionality in 2 hours is significantly greater than implementation within 3 hours with little attendant increase of reliability resulting from the additional one hour.
<p>Response: The SDT has discussed the rationale for the transition to the backup functionality in the case of failure of the primary control center in previous comments. No change made.</p>		
Pepco Holdings, Inc - Affiliates	Yes	
Tucson Electric Power	Yes	
BCTC	Yes	
Oncor Electric Delivery	Yes	
ReliabilityFirst Corporation	Yes	
<p>Response: Thank you for your response.</p>		