# Review of EOP-008-1—Loss of Control Center Functionality (Deferred)

http://www.nerc.com/files/EOP-008-1.pdf

# VRFs for Requirement R1:

Standard, Requirement	Requirement Language	VRF Assignment	Comments
EOP-008-1, R1	Each Reliability Coordinator, Balancing Authority,	Medium	FERC cited a possible inconsistency
	and Transmission Operator shall have a current		with Guideline 3, stating that EOP-
	Operating Plan describing the manner in which it		005-2, R1 addresses the same risk
	continues to meet its functional obligations with		but is assigned a High VRF.
	regard to the reliable operations of the BES in the		
	event that its primary control center functionality is		NERC staff does not believe that
	lost. This Operating Plan for backup functionality		the comparison between EOP-005-
	shall include the following, at a minimum:		2, R1 and EOP-008-1, R1 is an
			equitable one. EOP-005-2, R1 deals
	<b>1.1</b> The location and method of implementation for		with the restoration plan for the
	providing backup functionality for the time it takes		primary control center. EOP-008-1,
	to restore the primary control center functionality.		R1 deals with the backup facility.
			The capability of the backup facility
	<b>1.2.</b> A summary description of the elements		is not a primary measure for
	required to support the backup functionality. These		reliable operations, and not having
	elements shall include, at a minimum:		an Operating Plan for the backup
			facility could not cause or directly
	<b>1.2.1.</b> Tools and applications to ensure that System		contribute to instability,
	Operators have situational awareness of the BES.		separation, or Cascading. Failing to
			have a backup facility that provides
	<b>1.2.2.</b> Data communications.		the same functionality as the
			primary facility, covered in EOP-
	<b>1.2.3.</b> Voice communications.		008-1 R3 and R4, could cause or
			directly contribute to instability,
	<b>1.2.4.</b> Power source(s).		separation, or Cascading, and NERC
			is appropriately proposing that
	<b>1.2.5.</b> Physical and cyber security.		those VRFs be raised to High. For

<b>1.3.</b> An Operating Process for keeping the backup	these reasons, NERC believes that the VRF assignment for R1 should
functionality consistent with the primary control center.	remain Medium.
<b>1.4.</b> Operating Procedures, including decision authority, for use in determining when to	
implement the Operating Plan for backup functionality.	
<b>1.5.</b> A transition period between the loss of primary control center functionality and the time to fully	
implement the backup functionality that is less than or equal to two hours.	
<b>1.6.</b> An Operating Process describing the actions to be taken during the transition period between the	
loss of primary control center functionality and the time to fully implement backup functionality	
elements identified in Requirement R1, Part 1.2.	
The Operating Process shall include at a minimum:	
<b>1.6.1.</b> A list of all entities to notify when there is a change in operating locations.	
<b>1.6.2.</b> Actions to manage the risk to the BES during	
the transition from primary to backup functionality as well as during outages of the primary or backup	
functionality.	
<b>1.6.3.</b> Identification of the roles for personnel involved during the initiation and implementation	
of the Operating Plan for backup functionality.	

#### Original R1 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 2 (Consistency within a Reliability Standard):* The requirement has no sub-requirements so only one VRF was assigned. Therefore, there is no conflict.
- Guideline 3 (Consistency among Reliability Standards): There is a similar requirement (Requirement R1) in proposed EOP-005-2 that is assigned a High VRF. The requirements are viewed as similar since they both refer to the creation of a plan: EOP-005-2 for a restoration plan and EOP-008-1 for a backup plan. The VRF assigned to EOP-008-1, Requirement R1 is lower than EOP-005-2, Requirement R1. The SDT recognizes that the VRF for EOP-008-1, Requirement R1 is lower than the VRF for the similar requirement in EOP-005-2 which is assigned a High VRF, however, the SDT and stakeholders support the Medium VRF based on NERC's criteria for VRFs. The assignment of the Medium VRF was made based on the premise that failure to have an Operating Plan for backup functionality, by itself, would not directly cause or contribute to BPS instability, separation, or a cascading sequence of failures. For a requirement to be assigned a "High" VRF there should be the expectation that failure to meet the required performance "will" result in instability, separation, or cascading failures. This is not the case when an applicable entity fails to create an Operating Plan for backup functionality. While the SDT agrees that, under some circumstances, it is possible that a failure to have an Operating Plan for backup functionality may put the applicable entity in a position where it is not as prepared as it should be to address the potential situation, the failure to have an Operating Plan for backup functionality failed to have an Operating Plan for backup functionality failed to have an Operating Plan for backup functionality failed to have an Operating Plan for backup functionality failed to have an Operating Plan for backup functionality failed to have an Operating Plan for backup functionality failed to have an Operating Plan for backup functionality failed to have an Operating Plan for backup functionality failed to have an Operating Plan for backup functionality failed to have an Operating Plan for backup functionality, it would still
- *Guideline 4 (Consistency with NERC's Definition of a VRF):* Failure to have an Operating Plan for backup functionality could directly affect the electrical state or the capability of the BPS, and could affect the applicable entity's ability to effectively monitor and control the BPS. However, violation of this requirement is unlikely to lead to BPS instability, separation, or cascading failures. The applicable entities are always responsible for maintaining the reliability of the BPS regardless of the situation. Thus, this requirement meets NERC's criteria for a Medium VRF. Failure to have an Operating Plan for backup functionality will not, by itself, lead to instability, separation, or cascading failures.
- *Guideline 5 (Treatment of Requirements that Co-mingle More Than One Objective):* EOP-008-1, Requirement R1 contains only one objective, therefore only one VRF was assigned.

#### VRFs for Requirement R2:

Standard, Requirement	Requirement Language	VRF Assignment	Comments
EOP-008-1, R2	Each Reliability Coordinator, Balancing Authority,	Lower	Citing a Guideline 4 concern, FERC
	and Transmission Operator shall have a copy of its		pointed out that the requirement

current Operating Plan for backup functionality	may not be purely administrative.
available at its primary control center and at the	
location providing backup functionality.	Similar to its comments for EOP-
	005-2, R5, NERC staff maintains
	that this requirement is purely
	administrative and could not, in
	and of itself, affect the capability of
	the BES. It is simply about the
	possession of a document; the
	actual functionality of the backup
	facility is addressed in R3 and R4.
	The VRF should remain Lower.

# Original R2 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 2 (Consistency within a Reliability Standard):* The requirement has no sub-requirements so only one VRF was assigned. Therefore, there is no conflict.
- *Guideline 3 (Consistency among Reliability Standards):* EOP-008-1, Requirement R2 is a new requirement, so there are no comparable requirements with which to compare VRFs.
- *Guideline 4 (Consistency with NERC's Definition of a VRF):* Failure to have a copy of the Operating Plan for backup functionality at each of its control locations should not have an adverse impact on the BPS because operations at the different locations should be essentially identical. This is mainly an administrative requirement and thus meets NERC's criteria for a Lower VRF.
- *Guideline 5 (Treatment of Requirements that Co-mingle More Than One Objective):* EOP-008-1, Requirement R2 contains only one objective, therefore only one VRF was assigned.

#### VRFs for Requirement R3:

Standard, Requirement	Requirement Language	VRF Assignment	Comments
EOP-008-1, R3	Each Reliability Coordinator shall have a backup	High	Citing a possible Guideline 1 issue,
	control center facility (provided through its own		FERC expressed concern that R3
	dedicated backup facility or at another entity's		deals with the failure to have a

contro	l center staffed with certified Reliability	backup control center, leading to a
	nator operators when control has been	reduced level of preparedness,
	erred to the backup facility) that provides the	which ties to the blackout report
	onality required for maintaining compliance	and should be a High VRF.
	l Reliability Standards that depend on	0
	y control center functionality. To avoid	NERC staff agrees that this reduced
	ng a tertiary facility, a backup facility is not	level of preparedness does tie to
	ed during:	the blackout report and merits a
	Planned outages of the primary or backup	High VRF assignment for R3.
	facilities of two weeks or less	
•	Unplanned outages of the primary or	
	backup facilities	

#### Original R3 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 2 (Consistency within a Reliability Standard):* The requirement has no sub-requirements so only one VRF was assigned. Therefore, there is no conflict.
- Guideline 3 (Consistency among Reliability Standards): EOP-008-1, Requirement R3 is a new requirement, so there are no comparable requirements in other standards with which to compare VRFs. However, the SDT did assign the same VRF to EOP-008-1, Requirement R4 which is a similar requirement applying to Transmission Operators and Balancing Authorities. The assignment of the "Medium" VRF was made based on the premise that failure to have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center), by itself, would not directly cause or contribute to BPS instability, separation, or a cascading sequence of failures. The Reliability Coordinator is always responsible for maintaining the reliability of the BPS regardless of the situation. For a requirement to be assigned a "High" VRF, there should be the expectation that failure to meet the required performance "will" result in instability, separation, or cascading failures. This is not the case when a Reliability Coordinator fails to have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center). The SDT agrees that if the Reliability Coordinator fails to have a backup control center facility (provided through its own dedicated backup facility Coordinator in a position where they are not as prepared as they should be to address the situation. However, even if the Reliability Coordinator failed to have a backup control center), the Reliability or at another entity's control center facility (provided through its own dedicated backup facility or at about in a position where they are not as prepared as they should be to address the situation. However, even if the Reliability Coordinator failed to have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center facility or at another entity's control center facility (provided through its own dedicated backup facility or at another

Coordinator would still be expected to be operating in 'normal' mode thus providing comprehensive coverage of the BPS in the timeframe where the Reliability Coordinator has a problem.

- *Guideline 4 (Consistency with NERC's Definition of a VRF):* Failure to have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center) will impact the situational awareness of the Reliability Coordinator, and thus could affect the Reliability Coordinator's ability to effectively monitor and control the BPS, however violation of this requirement is unlikely to lead to BPS instability, separation or cascading failures. The Reliability Coordinator is required to maintain control and awareness of the BPS at all times. In addition, the Transmission Operators and Balancing Authorities who report to the affected Reliability Coordinator would still be expected to be operating in 'normal' mode thus providing comprehensive coverage of the BPS in the timeframe where the Reliability Coordinator has a problem. Therefore, the failure of a Reliability Coordinator to have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center) should not directly result in instability, separation, or cascading failures. Thus, this requirement meets the criteria for a Medium VRF.
- *Guideline 5 (Treatment of Requirements that Co-mingle More Than One Objective):* EOP-008-1, Requirement R3 contains only one objective, therefore only one VRF was assigned.

Standard, Requirement	Requirement Language	VRF Assignment	Comments
EOP-008-1, R4	Each Balancing Authority and Transmission	High	Citing a possible Guideline 1 issue,
	Operator shall have backup functionality (provided		FERC expressed concern that R4
	either through a facility or contracted services		deals with the failure to have a
	staffed by applicable certified operators when		backup control center, leading to a
	control has been transferred to the backup		reduced level of preparedness,
	functionality location) that includes monitoring,		which ties to the blackout report
	control, logging, and alarming sufficient for		and should be a High VRF.
	maintaining compliance with all Reliability		
	Standards that depend on a Balancing Authority		NERC staff appreciates the value in
	and Transmission Operator's primary control center		having consistency between R3 and
	functionality respectively. To avoid requiring		R4, and can support changing this
	tertiary functionality, backup functionality is not		VRF assignment to High.
	required during:		
	• Planned outages of the primary or backup		
	facilities of two weeks or less		

#### **VRFs for Requirement R4:**

Unplanned outages of the primary or	
backup facilities	

#### Original R4 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 2 (Consistency within a Reliability Standard):* The requirement has no sub-requirements so only one VRF was assigned. Therefore, there is no conflict.
- Guideline 3 (Consistency among Reliability Standards): EOP-008-1, Requirement R4 is a new requirement, so there are no comparable ٠ requirements in other standards with which to compare VRFs. However, the SDT did assign the same VRF to EOP-008-1, Requirement R3 which is a similar requirement applying to Reliability Coordinators. The assignment of the "Medium" VRF was made based on the premise that failure to have backup functionality (provided either through a facility or contracted services), by itself, would not directly cause or contribute to BPS instability, separation, or a cascading sequence of failures. The Transmission Operator and Balancing Authority are always responsible for maintaining the reliability of the BPS regardless of the situation. For a requirement to be assigned a "High" VRF, there should be the expectation that failure to meet the required performance "will" result in instability, separation, or cascading failures. This is not the case when a Transmission Operator or Balancing Authority fails to have backup functionality (provided either through a facility or contracted services). The SDT agrees that if the Transmission Operator or Balancing Authority fails to have backup functionality (provided either through a facility or contracted services), this failure will put the Transmission Operator or Balancing Authority in a position where they are not as prepared as they should be to address the situation. However, even if the Transmission Operator or Balancing Authority failed to have backup functionality (provided either through a facility or contracted services), the Transmission Operator or Balancing Authority is still required to maintain control and awareness of the BPS. In addition, the Reliability Coordinator who 'sits' above the affected Transmission Operator or Balancing Authority would still be expected to be operating in 'normal' mode thus providing comprehensive coverage of the BPS in the timeframe where the Transmission Operator or Balancing Authority has a problem.
- Guideline 4 (Consistency with NERC's Definition of a VRF): Failure to have backup functionality (provided either through a facility or contracted services) will impact the situational awareness of the Transmission Operator or Balancing Authority, and thus could affect the Transmission Operator's or Balancing Authority's ability to effectively monitor and control the BPS, however violation of this requirement is unlikely to lead to BPS instability, separation or cascading failures. The Transmission Operator or Balancing Authority is required to maintain control and awareness of the BPS at all times. In addition, the Reliability Coordinator who 'sits' above the affected Transmission Operator or Balancing Authority would still be expected to be operating in 'normal' mode thus providing comprehensive coverage of the BPS in the timeframe where the Transmission Operator or Balancing Authority has a problem. Therefore, the failure of a

Transmission Operator or Balancing Authority to have backup functionality (provided either through a facility or contracted services) should not directly result in instability, separation, or cascading failures. Thus, this requirement meets the criteria for a Medium VRF.

• *Guideline 5 (Treatment of Requirements that Co-mingle More Than One Objective):* EOP-008-1, Requirement R4 contains only one objective, therefore only one VRF was assigned.

## VRFs for Requirement R5:

Standard, Requirement	Requirement Language	VRF Assignment	Comments
EOP-008-1, R5	Each Reliability Coordinator, Balancing Authority,	Medium	Citing a Guideline 3 issues, FERC
	and Transmission Operator, shall annually review		was concerned that EOP-008-1, R5
	and approve its Operating Plan for backup		is a similar requirement to EOP-
	functionality.		005-2, R4, which is assigned a
			Medium VRF. FERC encouraged
	<b>5.1</b> An update and approval of the Operating Plan		NERC to consider changing the VRF
	for backup functionality shall take place within sixty		assignment to Medium.
	calendar days of any changes to any part of the		
	Operating Plan described in Requirement R1.		NERC staff notes that while EOP-
			005-2, R4 and EOP-008-1, R5 are
			quite different requirements, EOP-
			008-1 R5 does contain a
			subrequirement that is similar to
			the subrequirement in EOP-005-2
			R4. Similar to EOP-005-2, R2 this
			requirement might appear
			administrative at first glance, but
			annually reviewing and approving
			the Operating Plan is about more
			than the possession of a piece of
			paper; it's about updating the
			Operating Plan any time a change
			in required action might be
			necessary. Thus, the VRF is
			appropriately raised to Medium.

#### Original R5 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 2 (Consistency within a Reliability Standard):* The requirement has no sub-requirements so only one VRF was assigned. Therefore, there is no conflict.
- Guideline 3 (Consistency among Reliability Standards): There is a similar requirement (Requirement R4) in proposed EOP-005-2 that is assigned a High VRF. The requirements are viewed as similar since they both refer to the update of a plan: EOP-005-2 for a restoration plan and EOP-008-1 for a backup plan. The VRF assigned to EOP-008-1, Requirement R5 is lower than EOP-005-2, Requirement R4. The SDT recognizes that the VRF for EOP-008-1, Requirement R5 is lower than the VRF for the similar requirement in EOP-005-2 which is assigned a High VRF, however the SDT and stakeholders support the Medium VRF based on NERC's criteria for VRFs. The assignment of the Medium VRF was made based on the premise that failure to update an Operating Plan for backup functionality, by itself, would not directly cause or contribute to BPS instability, separation, or a cascading sequence of failures. For a requirement to be assigned a "High" VRF there should be the expectation that failure to meet the required performance "will" result in instability, separation, or cascading failures. This is not the case when an applicable entity fails to update an Operating Plan for backup functionality. While the SDT agrees that, under some circumstances, it is possible that a failure to update an Operating Plan for backup functionality may put the applicable entity in a position where it is not as prepared as it should be to address the potential situation, the failure to have an Operating Plan for backup functionality would not, by itself, result in instability, separation, or cascading failures. If the applicable entity failed to update an Operating Plan for backup functionality, the assignment of a Medium VRF to this requirement is consistent with the VRF assignment for Requirement R1.
- *Guideline 4 (Consistency with NERC's Definition of a VRF):* Failure to update an Operating Plan for backup functionality could directly affect the electrical state or the capability of the BPS, and could affect the applicable entity's ability to effectively monitor and control the BPS. However, violation of this requirement is unlikely to lead to BPS instability, separation, or cascading failures. The applicable entities are always responsible for maintaining the reliability of the BPS regardless of the situation. Thus, this requirement meets NERC's criteria for a Medium VRF. Failure to update an Operating Plan for backup functionality will not, by itself, lead to instability, separation, or cascading failures.
- *Guideline 5 (Treatment of Requirements that Co-mingle More Than One Objective):* EOP-008-1, Requirement R5 contains only one objective, therefore only one VRF was assigned.

#### **VRFs for Requirement R6:**

Standard, Requirement	Requirement Language	VRF Assignment	Comments
EOP-008-1, R6	Each Reliability Coordinator, Balancing Authority,	Medium	Citing Guideline 4 issues, FERC

and Transmission Operator shall have primary and	stated that while it not clear that
backup functionality that do not depend on each	violating the requirement could
	<b>o</b> 1
other for the control center functionality required	lead to the "Evil Three" –
to maintain compliance with Reliability Standards.	instability, separation, or Cascading
	– a violation of the requirement
	would represent a reduction in
	reliability and should be considered
	for a High assignment.
	NERC staff does not agree that
	FERC staff's concerns are consistent
	with the VRF Guidelines. The
	Medium assignment is consistent
	with the published VRF Guidelines
	and should remain a Medium.

# Original R6 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 2 (Consistency within a Reliability Standard):* The requirement has no sub-requirements so only one VRF was assigned. Therefore, there is no conflict.
- *Guideline 3 (Consistency among Reliability Standards):* EOP-008-1, Requirement R6 is a new requirement, so there are no comparable requirements with which to compare VRFs.
- *Guideline 4 (Consistency with NERC's Definition of a VRF):* EOP-008-1, Requirement R6 addresses the situation applicable entities primary and backup capabilities can't depend on each other. A violation of this requirement is assigned a "Medium" VRF because, if the applicable entity did have a dependence between their primary and backup capabilities it is not clear that this could directly lead, without any other violations of any other requirements, to instability, separation, or cascading failures.
- *Guideline 5 (Treatment of Requirements that Co-mingle More Than One Objective):* EOP-008-1, Requirement R6 contains only one objective, therefore only one VRF was assigned.

#### **VRFs for Requirement R7:**

Standard, Requirement         Requirement Language         VRF Assignment         Comments
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EOP-008-1, R7	Each Reliability Coordinator, Balancing Authority,	Medium	Citing Guideline 4 issues, FERC
	and Transmission Operator shall conduct and		expressed concern that because
	document results of an annual test of its Operating		testing and functionality show
	Plan that demonstrates:		indisputable proof of performance,
			this requirement should be
	7.1 The transition time between the simulated loss		assigned a High VRF.
	of primary control center functionality and the time		
	to fully implement the backup functionality.		NERC staff does not believe that
			testing can show indisputable proof
	<b>7.2.</b> The backup functionality for a minimum of two		of performance; rather, it shows
	continuous hours.		proof or capability and concept. No
			amount of testing can prove that
			the entity will meet performance
			on the day in question, as too many
			variables are subject to change.
			Testing just reduces the probability
			of problems. Thus, NERC staff
			believes this should remain a
			Medium, as it can't directly cause
			instability, separation, or
			Cascading.

#### Original R7 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 2 (Consistency within a Reliability Standard):* The requirement has no sub-requirements so only one VRF was assigned. Therefore, there is no conflict.
- *Guideline 3 (Consistency among Reliability Standards):* EOP-008-1, Requirement R7 is a new requirement, so there are no comparable requirements with which to compare VRFs.
- Guideline 4 (Consistency with NERC's Definition of a VRF): EOP-008-1, Requirement R7 mandates testing of an applicable entity's
  Operating Plan for backup capability. A violation of this requirement is assigned a "Medium" VRF because, if the applicable entity did not
  test their Operating Plan for backup capability it is not clear that this could directly lead, without any other violations of any other
  requirements, to instability, separation, or cascading failures.

• *Guideline 5 (Treatment of Requirements that Co-mingle More Than One Objective):* EOP-008-1, Requirement R7 contains only one objective, therefore only one VRF was assigned.

# VSLs for Requirement R1:

Standard,	Requirement	Lower	Moderate	High	Severe	Comments
Requirement	Language					
EOP-008-1, R1	Each Reliability	The responsible	The responsible	The responsible	The responsible	FERC was
	Coordinator,	entity had a	entity had a	entity had a	entity had a	concerned about
	Balancing	current Operating	current Operating	current Operating	current Operating	an overlap
	Authority, and	Plan for backup	Plan for backup	Plan for backup	Plan for backup	between the High
	Transmission	functionality but	functionality but	functionality but	functionality, but	and Severe VSLs.
	Operator shall	the plan was	the plan was	the plan was	the plan was	
	have a current	missing one of the	missing two of the	missing three of	missing four or	NERC staff agreed
	Operating Plan	requirement's six	requirement's six	the requirement's	more of the	with the concern
	describing the	Parts (1.1 through	Parts (1.1 through	six Parts (1.1	requirement's six	and clarified the
	manner in which	1.6).	1.6).	through 1.6).	Parts (1.1 through	overlap.
	it continues to				1.6)	
	meet its					
	functional				OR	
	obligations with					
	regard to the				The responsible	
	reliable				entity did not	
	operations of the				have a current	
	BES in the event				Operating Plan for	
	that its primary				backup	
	control center				functionality.	
	functionality is					
	lost. This					
	Operating Plan for					
	backup					
	functionality shall					

	1		
include the			
following, at a			
minimum:			
<b>1.1</b> The location			
and method of			
implementation			
for providing			
backup			
functionality for			
the time it takes			
to restore the			
primary control			
center			
functionality.			
<b>1.2.</b> A summary			
description of the			
elements required			
to support the			
backup			
functionality.			
These elements			
shall include, at a			
minimum:			
<b>1.2.1.</b> Tools and			
applications to			
ensure that			
System Operators			
have situational			
awareness of the			
BES.			

	<b>1.2.2.</b> Data		
	communications.		
	<b>1.2.3.</b> Voice		
	communications.		
	<b>1.2.4.</b> Power		
	source(s).		
	1.2.5. Physical and		
	cyber security.		
	cyber security.		
	1.3. An Operating		
	Process for		
	keeping the		
	backup		
	functionality		
	consistent with		
	the primary		
	control center.		
	control center.		
	1.4. Operating		
	Procedures,		
	including decision		
	authority, for use		
	in determining		
	when to		
	implement the		
	Operating Plan for		
	backup		
	functionality.		
	<b>1.5.</b> A transition		
	period between		
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the loss of			
primary control			
center			
functionality and			
the time to fully			
implement the			
backup			
functionality that			
is less than or			
equal to two			
hours.			
incuro:			
<b>1.6.</b> An Operating			
Process describing			
the actions to be			
taken during the			
transition period			
between the loss			
of primary control			
center			
functionality and			
the time to fully			
implement			
backup			
functionality			
elements			
identified in			
Requirement R1,			
Part 1.2. The			
Operating Process			
shall include at a			
minimum:			
<b>1.6.1.</b> A list of all			

entities to notify			
when there is a			
change in			
operating			
locations.			
<b>1.6.2.</b> Actions to			
manage the risk			
to the BES during			
the transition			
from primary to			
backup			
functionality as			
well as during			
outages of the			
primary or backup			
functionality.			
1.6.3.			
Identification of			
the roles for			
personnel			
involved during			
the initiation and			
implementation			
of the Operating			
Plan for backup			
functionality.			

# Original R1 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

• *Guideline 1:* The most comparable VSLs for a similar requirement are for the proposed EOP-005-2, Requirement R1. Those VSLs are based on missing one element for Lower, two for Moderate, and so forth, which is analogous to the VSL structure for EOP-008-1,

Requirement R1. Thus, the VSLs in the proposed standard do not lower the level of compliance currently required by setting VSLs that are less punitive than those already proposed.

- *Guideline 2:* The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.
- *Guideline 3:* The proposed VSLs use the same terminology as used in the associated requirement, and are, therefore, consistent with the requirement.
- Guideline 4: The VSLs are based on a single violation and not cumulative violations.

Standard,	Requirement	Lower	Moderate	High	Severe	Comments
Requirement	Language					
EOP-008-1, R3	Each Reliability	N/A	N/A	N/A	The Reliability	FERC was
	Coordinator shall have				Coordinator does	concerned that
	a backup control				not have a	these VSLs raise
	center facility				backup control	double jeopardy
	(provided through its				center facility	issues because
	own dedicated backup				(provided	they are
	facility or at another				through its own	contingent upon
	entity's control center				dedicated backup	violations of
	staffed with certified				facility or at	other
	<b>Reliability Coordinator</b>				another entity's	requirements in
	operators when				control center	other standards.
	control has been				staffed with	If you violate the
	transferred to the				certified	requirement of
	backup facility) that				Reliability	another standard,
	provides the				Coordinator	as cited, then you
	functionality required				operators when	also definitely
	for maintaining				control has been	violate this one.
	compliance with all				transferred to the	Typically, VSLs are
	Reliability Standards				backup facility)	not tied to other

#### VSLs for Requirement R3:

that depend on		that provides the	standards in this
primary control center		functionality	fashion.
functionality. To avoid		required for	
, requiring a tertiary		maintaining	While NERC staff
facility, a backup		compliance with	initially supported
facility is not required		all Reliability	the VSL
during:		Standards that	assignments
Planned		depend on	because of their
outages of the		primary control	consistency with
primary or		center	the language of
backup		functionality	the requirement,
facilities of			after further
two weeks or			consideration, it
less			agrees with
<ul> <li>Unplanned</li> </ul>			commenters that
outages of the			gradating the
primary or			VSLs is confusing.
backup			The requirement
facilities			is focused on
			having a
			functional backup
			control center,
			and the VSL
			assignments are
			better off binary
			so long as they
			focus on that.

#### Original R3 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 1:* The proposed requirement is new and there are no comparable VSLs.
- *Guideline 2:* The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.

- *Guideline 3:* The VSLs use the same terminology as used in the associated requirement and are, therefore, consistent with the requirement.
- *Guideline 4:* The VSLs are based on a single violation and not cumulative violations.

# VSLs for Requirement R4:

Standard,	Requirement	Lower	Moderate	High	Severe	Comments
Requirement	Language					
EOP-008-1, R4	Each Balancing	N/A	N/A	N/A	The responsible	FERC was
	Authority and				entity does not	concerned that
	Transmission Operator				have backup	these VSLs raise
	shall have backup				functionality	double jeopardy
	functionality (provided				(provided either	issues because
	either through a				through a facility	they are
	facility or contracted				or contracted	contingent upon
	services staffed by				services staffed	violations of
	applicable certified				by applicable	other
	operators when				certified	requirements in
	control has been				operators when	other standards.
	transferred to the				control has been	If you violate the
	backup functionality				transferred to the	requirement of
	location) that includes				backup	another standard,
	monitoring, control,				functionality	as cited, then you
	logging, and alarming				location) that	also definitely
	sufficient for				includes	violate this one.
	maintaining				monitoring,	Typically, VSLs are
	compliance with all				control, logging,	not tied to other
	Reliability Standards				and alarming	standards in this
	that depend on a				sufficient for	fashion.
	Balancing Authority				maintaining	
	and Transmission				compliance with	While NERC staff
	Operator's primary				all Reliability	initially supported
	control center				Standards that	the VSL
	functionality				depend on a	assignments

respectively. To avoid	Balancing because of	their
requiring tertiary	Authority and consistency	y with
functionality, backup	Transmission the language	ge of
functionality is not	Operator's the require	ment,
required during:	primary control after furthe	er
Planned	center considerati	on, it
outages of the	functionality agrees with	ı
primary or	respectively. commenter	rs that
backup	gradating t	he
facilities of	VSLs is cont	fusing.
two weeks or	The require	ement
less	is focused o	on
Unplanned	having a	
outages of the	functional b	backup
primary or	control cen	iter,
backup	and the VSI	L
facilities	assignment	ts are
	better off b	binary
	so long as t	hey
	focus on th	at.

# Original R4 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 1:* The proposed requirement is new and there are no comparable VSLs.
- *Guideline 2:* The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.
- *Guideline 3:* The VSLs use the same terminology as used in the associated requirement and are, therefore, consistent with the requirement.
- *Guideline 4:* The VSLs are based on a single violation and not cumulative violations.

# VSLs for Requirement R5:

Standard,	Requirement	Lower	Moderate	High	Severe	Comments
Requirement	Language					
EOP-008-1, R5	Each Reliability	The responsible	The responsible	The responsible	The responsible	FERC staff was
	Coordinator,	entity did not	entity did not	entity did not	entity did not	concerned that
	Balancing	update and	update and	update and	have evidence	the VSLs were
	Authority, and	approve its	approve its	approve its	that its Operating	elaborating on the
	Transmission	Operating Plan for	Operating Plan for	Operating Plan for	Plan for backup	standard and
	Operator, shall	backup	backup	backup	functionality was	applying the
	annually review	functionality for	functionality for	functionality for	annually reviewed	standards more
	and approve its	more than 60	more than 70	more than 80	and approved.	stringently than
	Operating Plan for	calendar days and	calendar days and	calendar days and	OR,	intended. (They
	backup	less than or equal	less than or equal	less than or equal	The responsible	cited the
	functionality.	to 70 calendar	to 80 calendar	to 90 calendar	entity did not	reference to
		days after a	days after a	days after a	update and	change in the
	5.1 An update and	change to any	change to any	change to any	approve its	VSLs.)
	approval of the	part of the	part of the	part of the	Operating Plan for	
	Operating Plan for	Operating Plan	Operating Plan	Operating Plan	backup	NERC staff does
	backup	described in	described in	described in	functionality for	not believe that
	functionality shall	Requirement R1.	Requirement R1.	Requirement R1.	more than 90	the VSLs
	take place within				calendar days	elaborated on the
	sixty calendar				after a change to	standard; the VSLs
	days of any				any part of the	simply roll
	changes to any				Operating Plan	requirement R5.1
	part of the				described in	into the VSL
	Operating Plan				Requirement R1.	assignments.
	described in					Based on

Requirement R1.		commenter suggestions, however, NERC has deleted "its dated, current, in force" from the Severe VSL
		assignment as that language does not appear in the requirement.

#### Original R5 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 1:* The most comparable VSLs for a similar requirement are for the proposed EOP-005-2, Requirement R4. Those VSLs are based on late distribution of a plan which is analogous to the VSLs for EOP- 008-1, Requirement R5. The VSLs assignments are similar between the two standards. Thus, the VSLs in the proposed standard do not lower the level of compliance currently required by setting VSLs that are less punitive than those already proposed.
- *Guideline 2:* The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.
- *Guideline 3:* The VSLs use the same terminology as used in the associated requirement and are, therefore, consistent with the requirement.
- *Guideline 4:* The VSLs are based on a single violation and not cumulative violations.

#### VSLs for Requirement R6:

Standard,	Requirement	Lower	Moderate	High	Severe	Comments
Requirement	Language					
EOP-008-1, R6	Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall have primary and backup functionality that do not depend on each other for the control center functionality required to maintain compliance with Reliability Standards.	N/A	N/A	N/A	The responsible entity has primary and backup functionality that do depend on each other for the control center functionality required to maintain compliance with Reliability Standards.	FERC was concerned that these VSLs raise double jeopardy issues because they are contingent upon violations of other requirements in other standards. If you violate the requirement of another standard, as cited, then you also definitely violate this one. Typically, VSLs are not tied to other standards in this fashion.
						While NERC staff initially supported the VSL assignments because of their consistency with the language of the requirement, after further consideration, it agrees with

			commenters that
			gradating the VSLs
			is confusing. The
			requirement is
			focused on having
			a functional
			backup control
			center, and the
			VSL assignments
			are better off
			binary so long as
			they focus on
			that.

#### Original R6 Guideline Explanation in February 11, 2011 EOP-008-1 Petition:

- *Guideline 1:* The proposed requirement is new and there are no comparable VSLs.
- *Guideline 2:* The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.
- *Guideline 3:* The VSLs use the same terminology as used in the associated requirement and are, therefore, consistent with the requirement.
- *Guideline 4:* T The VSLs are based on a single violation and not cumulative violations.

# VSLs for Requirement R7:

Standard,	Requirement	Lower	Moderate	High	Severe	Comments
Requirement	Language					
EOP-008-1, R7	Each Reliability	The responsible	The responsible	The responsible	The responsible	FERC staff
	Coordinator,	entity conducted	entity conducted	entity conducted	entity did not	expressed
	Balancing	an annual test of	an annual test of	an annual test of	conduct an annual	concern that
	Authority, and	its Operating Plan	its Operating Plan	its Operating Plan	test of its	documentation
	Transmission	for backup	for backup	for backup	Operating Plan for	was not covered

Operator sha		-	functionality but	backup	in the VSLs.
conduct and	did not document	the test was for	the test did not	functionality.	
document re	esults the results.	less than 1.5	assess the		NERC staff points
of an annual	test	continuous hours	transition time	OR,	out that
of its Operat	ing OR,	but more than or	between the		documentation is
Plan that		equal to 1	simulated loss of	The responsible	appropriately
demonstrate	es: The responsible	continuous hour.	its primary control	entity conducted	"Lower" because
	entity conducted		center and the	an annual test of	there are other
<b>7.1</b> The tran	sition an annual test of		time to fully	its Operating Plan	ways of proving
time betwee	n the its Operating Plan		implement the	for backup	that the test was
simulated lo	ss of for backup		backup	functionality but	conducted, other
primary con	trol functionality but		functionality	the test was for	than
center	the test was for			less than 0.5	documentation;
functionality	and less than two		OR,	continuous hours.	i.e., affidavits or
the time to f	ully continuous hours				other
implement t	he but more than or		The responsible		corroborating
backup	equal to 1.5		entity conducted		evidence-
functionality	continuous hours.		an annual test of		receipts. No
			its Operating Plan		change proposed.
<b>7.2.</b> The bac	kup		for backup		
functionality	for a		functionality but		
minimum of	two		the test was for		
continuous ł	nours.		less than 1		
			continuous hour		
			but more than or		
			equal to 0.5		
			continuous hours.		

# Original R7 Guideline Explanation in <u>February 11, 2011 EOP-008-1 Petition</u>:

• *Guideline 1:* The proposed requirement is new and there are no comparable VSLs.

- *Guideline 2:* The proposed VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. Guideline 2a is inapplicable.
- *Guideline 3:* The VSLs use the same terminology as used in the associated requirement and are, therefore, consistent with the requirement.
- *Guideline 4:* The VSLs are based on a single violation and not cumulative violations.