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,	<u>Medium</u> High	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		While NERC staff does not believe
	lost. This Operating Plan for backup functionality		that EOP-005-2 R1 and EOP-008-1
	shall include the following, at a minimum:		address the same aspect of
			operations, it does agree that the
	1.1 The location and method of implementation for		differing VRF assignments could be
	providing backup functionality for the time it takes		seen as inconsistent and can
	to restore the primary control center functionality.		support changing the assignment
			to a High.
	1.2. A summary description of the elements		NERC staff does not believe that
	required to support the backup functionality. These		the comparison between EOP-005-
	elements shall include, at a minimum:		2, R1 and EOP-008-1, R1 is an
			equitable one. EOP-005-2, R1 deals
	1.2.1. Tools and applications to ensure that System		with the restoration plan for the
	Operators have situational awareness of the BES.		primary control center. EOP-008-1,
			R1 deals with the backup facility.
	1.2.2. Data communications.		The capability of the backup facility
			is not a primary measure for
	1.2.3. Voice communications.		reliable operations, and not having
			an Operating Plan for the backup
	1.2.4. Power source(s).		facility could not cause or directly
			contribute to instability,
	1.2.5. Physical and cyber security.		separation, or Cascading. Failing to

- **1.3.** An Operating Process for keeping the backup functionality consistent with the primary control center.
- **1.4.** Operating Procedures, including decision authority, for use in determining when to implement the Operating Plan for backup functionality.
- **1.5.** 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.
- **1.6.** 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:
- **1.6.1.** A list of all entities to notify when there is a change in operating locations.
- **1.6.2.** 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.

have a backup facility that provides the same functionality as the primary facility, covered in EOP-008-1 R3 and R4, could cause or directly contribute to instability, separation, or Cascading, and NERC is appropriately proposing that those VRFs be raised to High. For these reasons, NERC believes that the VRF assignment for R1 should remain Medium.

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 would not, by itself, result in instability, separation, or cascading failures. If the applicable entity failed to have an Operating Plan for backup functionality, it would still be expected to handle the situation if it occurred.
- 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,	<u>Lower</u> Medium	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.	While Similar to its comments for
	EOP-005-2, R5, NERC staff does
	believe the maintains that this
	requirement addresses a task that
	is purely administrative and could
	not, in and of itself, administrative,
	it recognizes that affect the
	capability of the implications could
	be more than administrative.
	Accordingly, NERC staff proposes
	changingBES. It is simply about the
	possession of a document; the
	actual functionality of the backup
	facility is addressed in R3 and R4.
	The VRF to Medium.should remain
	<u>Lower.</u>

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
	control center staffed with certified Reliability		backup control center, leading to a
	Coordinator operators when control has been		reduced level of preparedness,
	transferred to the backup facility) that provides the		which ties to the blackout report
	functionality required for maintaining compliance		and should be a High VRF.
	with all Reliability Standards that depend on		
	primary control center functionality. To avoid		NERC staff agrees that this reduced
	requiring a tertiary facility, a backup facility is not		level of preparedness does tie to
	required 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 or at another entity's control center), this failure will put the Reliability 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 facility (provided through its own dedicated backup facility or at another entity's control center), the Reliability Coordinator is still required to maintain control and awareness of the BPS. 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.

- 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.

VRFs for Requirement R4:

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	
	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 amongbetween

functionality respectively. To avoid requiring	R3 and R4, and can support
tertiary functionality, backup functionality is not	changing this VRF assignment to
required during:	High.
Planned outages of the primary or backup	
facilities of two weeks or less	
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 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
	5.1 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. A modification to a Medium
			VRF assignment in EOP 008-1-R5
			should be made for consistency.
			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, it would still be expected to handle the situation if it occurred. Additionally, 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, 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.	Medium	Citing Guideline 4 issues, FERC stated that while it not clear that violating the requirement could lead to the "Evil Three,"" — 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
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
	7.2. 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
			the big three 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 Coordinator, Balancing Authority, and Transmission Operator shall have a current Operating Plan describing the manner in which it continues to meet its functional obligations with regard to the	The responsible entity had a current Operating Plan for backup functionality but the plan was missing one of the requirement's six Parts (1.1 through 1.6).	The responsible entity had a current Operating Plan for backup functionality but the plan was missing two of the requirement's six Parts (1.1 through 1.6).	The responsible entity had a current Operating Plan for backup functionality but the plan was missing three of the requirement's six Parts (1.1 through 1.6).	The responsible entity had a current Operating Plan for backup functionality, but the plan was missing four or more of the requirement's six Parts (1.1 through 1.6) OR The responsible	FERC was concerned about an overlap between the High and Severe VSLs. NERC staff agreed with the concern and clarified the overlap.
					The responsible entity did not	

operations of the BES in the event that its primary control center functionality is lost. This Operating Plan for		have a current Operating Plan for backup functionality.	
backup functionality shall include the following, at a minimum:			
1.1 The location and method of implementation for providing			
backup functionality for the time it takes to restore the			
primary control center functionality. 1.2. A summary			
description of the elements required to support the backup functionality.			
These elements shall include, at a minimum:			

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1.2.1. Tools and applications to ensure that System Operators have situational awareness of the BES.			
1.2.2. Data communications.			
1.2.3. Voice communications.			
1.2.4. Power source(s).			
1.2.5. Physical and cyber security.			
1.3. An Operating Process for keeping the backup functionality consistent with the primary control center.			
1.4. Operating Procedures, including decision authority, for use			

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vhen to	
mplement the	
Operating Plan for	
packup	
unctionality.	
5. A transition	
period between	
he loss of	
primary control	
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unctionality and	
he time to fully	
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s less than or	
equal to two	
nours.	
6. An Operating	
Process describing	
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aken during the	
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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.

VSLs for Requirement R3:

Standard,	Requirement	Lower	Moderate	High	Severe	Comments
Requirement	Language					
EOP-008-1, R3	Each Reliability	The Reliability	The Reliability	The Reliability	The Reliability	FERC was
	Coordinator shall have	Coordinator has a	Coordinator has a	Coordinator has a	Coordinator does	concerned that
	a backup control	backup control	backup control	backup control	not have a	these VSLs raise
	center facility	center facility	center facility	center facility	backup control	double jeopardy
	(provided through its	(provided	(provided	(provided	center facility	issues because
	own dedicated backup	through its own	through its own	through its own	(provided	they are
	facility or at another	dedicated backup	dedicated backup	dedicated backup	through its own	contingent upon
	entity's control center	facility or at	facility or at	facility or at	dedicated backup	violations of
	staffed with certified	another entity's	another entity's	another entity's	facility or at	other
	Reliability Coordinator	control center	control center	control center	another entity's	requirements in

operators when control has been transferred to the backup facility) that provides the functionality required for maintaining compliance with all **Reliability Standards** that depend on primary control center functionality. To avoid requiring a tertiary facility, a backup facility is not required during: Planned outages of the primary or

- Planned outages of the primary or backup facilities of two weeks or less
- Unplanned outages of the primary or backup facilities

staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) in accordance with Requirement R3 but it did not provide the **functionality** required for maintaining compliance with one or more of the Requirements in the Reliability **Standards** applicable to the **Reliability** Coordinator that depend on the primary control center functionality and which have a N/ALower VRF.

staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) in accordance with Requirement R3 but it did not provide the **functionality** required for maintaining compliance with one or more of the Requirements in the Reliability **Standards** applicable to the Reliability Coordinator that depend on the primary control center functionality and which have a Medium VRF. N/A

staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility) in accordance with Requirement R3 but it did not provide the **functionality** required for maintaining compliance with one or more of the Requirements in the Reliability **Standards** applicable to the **Reliability** Coordinator that depend on the primary control center functionality and which have a High VRF. N/A

control center staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility).) that provides the functionality required for maintaining compliance with all Reliability Standards that depend on primary control center functionality. .

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 agrees that initially supported the reference to other reliability standards is atypical, it believes that the issue is VSL assignments because of their consistency with the language of the requirement language and that, after further consideration, it agrees with commenters that gradating the

			VSLs are
			appropriately
			written, given
			that language.
			Staff cannot fix
			the content of a
			is confusing. The
			requirement or
			standard using
			VSL
			modifications.
			Beyond the slight
			redline changes,
			NERC does not
			propose changing
			the VSLs.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 <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.

VSLs for Requirement R4:

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

functionality backurs	the Reliability	the Reliability	the Reliability	Transmission	other reliability
functionality, backup	,	Standards	Standards		,
functionality is not	Standards			Operator's	standards is
required during:	applicable to the	applicable to the	applicable to the	primary control	atypical, it
 Planned 	responsible	responsible	responsible	<u>center</u>	believes that the
outages of the	entity that	entity that	entity that	functionality	issue is <u>VSL</u>
primary or	depend on the	depend on the	depend on the	respectively.	<u>assignments</u>
backup	primary control	primary control	primary control		because of their
facilities of	center	center	center		consistency with
two weeks or	functionality and	functionality and	functionality and		the <u>language of</u>
less	which have a	which have a	which have a		the requirement
 Unplanned 	Lower VRF.	Medium VRF.	High VRF.		language and
outages of the	N/A	N/A	N/A		that, after further
primary or					consideration, it
backup					agrees with
facilities					commenters that
					gradating the
					VSLs are
					appropriately
					written, given
					that language.
					Staff cannot fix
					the content of a
					is confusing. The
					requirement or
					standard using
					VSL
					modifications.
					Beyond the slight
					redline changes,
					NERC does not
					propose changing
					the VSLs.is
					<u>focused on</u>
					<u>having a</u>

			functional backup
			control center,
			and the VSL
			assignments are
			better off binary
			so long as they
			focus on that.

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 dated,	elaborating on the
	Transmission	Operating Plan for	Operating Plan for	Operating Plan for	current, in force	standard and
	Operator, shall	backup	backup	backup	Operating Plan for	applying the
	annually review	functionality for	functionality for	functionality for	backup	standards more
	and approve its	more than 60	more than 70	more than 80	functionality was	stringently than
	Operating Plan for	calendar days and	calendar days and	calendar days and	annually reviewed	intended. (They
	backup	less than or equal	less than or equal	less than or equal	and approved.	cited the
	functionality.	to 70 calendar	to 80 calendar	to 90 calendar	OR,	reference to
		days after a	days after a	days after a	The responsible	change in the
	5.1 An update and	change to any	change to any	change to any	entity did not	VSLs.)
	approval of the	part of the	part of the	part of the	update and	
	Operating Plan for	Operating Plan	Operating Plan	Operating Plan	approve its	NERC staff does
	backup	described in	described in	described in	Operating Plan for	not believe that
	functionality shall	Requirement R1.	Requirement R1.	Requirement R1.	backup	the VSLs
	take place within				functionality for	elaborated on the
	sixty calendar				more than 90	standard; the VSLs
	days of any				calendar days	simply roll
	changes to any				after a change to	requirement R5.1
	part of the				any part of the	into the VSL
	Operating Plan				Operating Plan	assignments. No
	described in				described in	change is
	Requirement R1.				Requirement R1.	proposed. Based
						on 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	The responsible entity has primary and backup functionality that do depend on each other for the control center functionality required to maintain compliance with Requirements in the Reliability Standards applicable for the entity that have a Lower VRF. 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 Requirements in the Reliability Standards applicable for the entity that have a Medium VRF. 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 Requirements in the Reliability Standards applicable for the entity that have a High VRF.	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 agrees that initially supported the reference to other reliability standards is atypical, it believes that the issue is VSL assignments because of their

consistency with the language of the requirement language and that, after furthe consideration, it agrees with commenters that gradating the VS are appropriately written, given the language. Staff cannot fix the content of a is confusing. The requirement or standard using VSL modification	$\overline{}$
the requirement language and that, after furthe consideration, it agrees with commenters that gradating the VS are appropriately written, given the language. Staff cannot fix the content of a is confusing. The requirement or standard using VSL modification	1
language and that, after furthe consideration, it agrees with commenters that gradating the VS are appropriately written, given the language. Staff cannot fix the content of a is confusing. The requirement or standard using VSL modification	
that, after further consideration, it agrees with commenters that gradating the VS are appropriately written, given the language. Staff cannot fix the content of a is confusing. The requirement or standard using VSL modification	
consideration, it agrees with commenters that gradating the VS are appropriately written, given the language. Staff cannot fix the content of a is confusing. The requirement or standard using VSL modification	
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commenters that gradating the VS are appropriately written, given the language. Staff cannot fix the content of a is confusing. The requirement or standard using VSL modification	
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are appropriately written, given the language. Staff cannot fix the content of a is confusing. The requirement or standard using VSL modification	_
written, given the language. Staff cannot fix the content of a is confusing. The requirement or standard using VSL modification	
language. Staff cannot fix the content of a is confusing. The requirement or standard using VSL modification	
cannot fix the content of a is confusing. The requirement or standard using VSL modification	at
content of a-is confusing. The requirement or standard using VSL modification	
confusing. The requirement or standard using VSL modification	
requirement or standard using VSL modification	
standard using VSL modification	
VSL modification	
	ı s.
Beyond the slight	ŧ
redline changes,	
NERC does not	
propose changing	g
the VSLs.is	
focused on havin	ng
<u>a functional</u>	_
backup control	
center, and the	
<u>VSL assignments</u>	
are better off	
binary so long as	<u>;</u>
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 shall	functionality but it	functionality but	functionality but	backup	in the VSLs.
	conduct and	did not document	the test was for	the test did not	functionality.	
	document results	the results.	less than 1.5	assess the		NERC staff points
	of an annual test		continuous hours	transition time	OR,	out that
	of its Operating	OR,	but more than or	between the		documentation is
	Plan that		equal to 1	simulated loss of	The responsible	appropriately
	demonstrates:	The responsible	continuous hour.	its primary control	entity conducted	"Lower" because
		entity conducted		center and the	an annual test of	there are other
	7.1 The transition	an annual test of		time to fully	its Operating Plan	ways of proving
	time between the	its Operating Plan		implement the	for backup	that the test was
	simulated loss of	for backup		backup	functionality but	conducted, other
	primary control	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 fully	continuous hours				other

implement the	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.
7.2. The backup		for backup	
functionality for a		functionality but	
minimum of two		the test was for	
continuous hours.		less than 1	
		continuous hour	
		but more than or	
		equal to 0.5	
		continuous hours.	

Original R7 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.