

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	<p>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 reliable operations of the BES in the event that its primary control center functionality is lost. This Operating Plan for backup functionality shall include the following, at a minimum:</p> <p>1.1 The location and method of implementation for providing backup functionality for the time it takes to restore the primary control center functionality.</p> <p>1.2. A summary description of the elements required to support the backup functionality. These elements shall include, at a minimum:</p> <p>1.2.1. Tools and applications to ensure that System Operators have situational awareness of the BES.</p> <p>1.2.2. Data communications.</p> <p>1.2.3. Voice communications.</p> <p>1.2.4. Power source(s).</p> <p>1.2.5. Physical and cyber security.</p>	<p>MediumHigh</p>	<p>FERC cited a possible inconsistency with Guideline 3, stating that EOP-005-2, R1 addresses the same risk but is assigned a High VRF.</p> <p>While NERC staff does not believe that EOP-005-2 R1 and EOP-008-1 address the same aspect of operations, it does agree that the differing VRF assignments could be seen as inconsistent and can support changing the assignment to a High.</p> <p>NERC staff does not believe that the comparison between EOP-005-2, R1 and EOP-008-1, R1 is an equitable one. EOP-005-2, R1 deals with the restoration plan for the primary control center. EOP-008-1, R1 deals with the backup facility. The capability of the backup facility is not a primary measure for reliable operations, and not having an Operating Plan for the backup facility could not cause or directly contribute to instability, separation, or Cascading. Failing to</p>

	<p>1.3. An Operating Process for keeping the backup functionality consistent with the primary control center.</p> <p>1.4. Operating Procedures, including decision authority, for use in determining when to implement the Operating Plan for backup functionality.</p> <p>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.</p> <p>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:</p> <p>1.6.1. A list of all entities to notify when there is a change in operating locations.</p> <p>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.</p> <p>1.6.3. Identification of the roles for personnel involved during the initiation and implementation of the Operating Plan for backup functionality.</p>		<p><u>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.</u></p>
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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, and Transmission Operator shall have a copy of its	Lower Medium	Citing a Guideline 4 concern, FERC pointed out that the requirement

	current Operating Plan for backup functionality available at its primary control center and at the location providing backup functionality.		<p>may not be purely administrative.</p> <p>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 changing 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 to Medium should remain Lower.</p>
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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	<p>Each Reliability Coordinator shall have a backup control center facility (provided through its own dedicated backup facility or at another entity's 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. To avoid requiring a tertiary facility, a backup facility is not required during:</p> <ul style="list-style-type: none"> • Planned outages of the primary or backup facilities of two weeks or less • Unplanned outages of the primary or backup facilities 	High	<p>Citing a possible Guideline 1 issue, FERC expressed concern that R3 deals with the failure to have a backup control center, leading to a reduced level of preparedness, which ties to the blackout report and should be a High VRF.</p> <p>NERC staff agrees that this reduced level of preparedness does tie to the blackout report and merits a High VRF assignment for R3.</p>

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 Operator shall have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) that includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority and Transmission Operator's primary control center	High	Citing a possible Guideline 1 issue, FERC expressed concern that R4 deals with the failure to have a backup control center, leading to a reduced level of preparedness, which ties to the blackout report and should be a High VRF. NERC staff appreciates the value in having consistency among <u>between</u>

	functionality respectively. To avoid requiring tertiary functionality, backup functionality is not required during: <ul style="list-style-type: none"> • Planned outages of the primary or backup facilities of two weeks or less • Unplanned outages of the primary or backup facilities 		R3 and R4, and can support changing this VRF assignment to High.
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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	<p>Each Reliability Coordinator, Balancing Authority, and Transmission Operator, shall annually review and approve its Operating Plan for backup functionality.</p> <p>5.1 An update and approval of the Operating Plan for backup functionality shall take place within sixty calendar days of any changes to any part of the Operating Plan described in Requirement R1.</p>	Medium	<p>Citing a Guideline 3 issues, FERC was concerned that EOP-008-1, R5 is a similar requirement to EOP-005-2, R4, which is assigned a Medium VRF. FERC encouraged NERC to consider changing the VRF assignment to Medium.</p> <p>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</p>

		<p><u>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.</u></p>
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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	<p>Citing Guideline 4 issues, FERC stated that while it not clear that violating the requirement could lead to the "Evil Three," <u>instability, separation, or Cascading</u> – a violation of the requirement would represent a reduction in reliability and should be considered for a High assignment.</p> <p>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.</p>

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	<p>Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall conduct and document results of an annual test of its Operating Plan that demonstrates:</p> <p>7.1 The transition time between the simulated loss of primary control center functionality and the time to fully implement the backup functionality.</p> <p>7.2. The backup functionality for a minimum of two continuous hours.</p>	Medium	<p>Citing Guideline 4 issues, FERC expressed concern that because testing and functionality show indisputable proof of performance, this requirement should be assigned a High VRF.</p> <p>NERC staff does not believe that testing can show indisputable proof of performance; rather, it shows 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-<u>instability, separation, or Cascading.</u></p>

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	Requirement Language	Lower	Moderate	High	Severe	Comments
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 reliable	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 entity did not	FERC was concerned about an overlap between the High and Severe VSLs. NERC staff agreed with the concern and clarified the overlap.

	<p>operations of the BES in the event that its primary control center functionality is lost. This Operating Plan for backup functionality shall include the following, at a minimum:</p> <p>1.1 The location and method of implementation for providing backup functionality for the time it takes to restore the primary control center functionality.</p> <p>1.2. A summary description of the elements required to support the backup functionality. These elements shall include, at a minimum:</p>				<p>have a current Operating Plan for backup functionality.</p>	
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	<p>1.2.1. Tools and applications to ensure that System Operators have situational awareness of the BES.</p> <p>1.2.2. Data communications.</p> <p>1.2.3. Voice communications.</p> <p>1.2.4. Power source(s).</p> <p>1.2.5. Physical and cyber security.</p> <p>1.3. An Operating Process for keeping the backup functionality consistent with the primary control center.</p> <p>1.4. Operating Procedures, including decision authority, for use</p>					
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	<p>in determining when to implement the Operating Plan for backup functionality.</p> <p>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.</p> <p>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</p>					
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	<p>elements identified in Requirement R1, Part 1.2. The Operating Process shall include at a minimum:</p> <p>1.6.1. A list of all entities to notify when there is a change in operating locations.</p> <p>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.</p> <p>1.6.3. Identification of the roles for personnel involved during the initiation and implementation</p>					
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	of the Operating Plan for backup functionality.					
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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	Requirement Language	Lower	Moderate	High	Severe	Comments
EOP-008-1, R3	Each Reliability Coordinator shall have a backup control center facility (provided through its own dedicated backup facility or at another entity's control center staffed with certified Reliability Coordinator	The Reliability Coordinator has a backup control center facility (provided through its own dedicated backup facility or at another entity's control center	The Reliability Coordinator has a backup control center facility (provided through its own dedicated backup facility or at another entity's control center	The Reliability Coordinator has a backup control center facility (provided through its own dedicated backup facility or at another entity's control center	The Reliability Coordinator does not have a backup control center facility (provided through its own dedicated backup facility or at another entity's	FERC was concerned that these VSLs raise double jeopardy issues because they are contingent upon violations of other requirements in

	<p>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:</p> <ul style="list-style-type: none"> • Planned outages of the primary or backup facilities of two weeks or less • Unplanned outages of the primary or backup facilities 	<p>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 <u>N/A</u> Lower VRF.</p>	<p>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. <u>N/A</u></p>	<p>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. <u>N/A</u></p>	<p>control center staffed with certified Reliability Coordinator operators when control has been transferred to the backup facility)-) <u>that provides the functionality required for maintaining compliance with all Reliability Standards that depend on primary control center functionality. .</u></p>	<p>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.</p> <p>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</p>
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						<p>VSLs are appropriately written, given that language. Staff cannot fix the content of a is confusing. The requirement of 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.</p>
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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	Requirement Language	Lower	Moderate	High	Severe	Comments
EOP-008-1, R4	Each Balancing Authority and Transmission Operator shall have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) that includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority and Transmission Operator's primary control center functionality respectively. To avoid requiring tertiary	The responsible entity has backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) in accordance with Requirement R4 but it did not include monitoring, control, logging, and alarming sufficient for maintaining compliance with one or more of the Requirements in	The responsible entity has backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) in accordance with Requirement R4 but it did not include monitoring, control, logging, and alarming sufficient for maintaining compliance with one or more of the Requirements in	The responsible entity has backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) in accordance with Requirement R4 but it did not include monitoring, control, logging, and alarming sufficient for maintaining compliance with one or more of the Requirements in	The responsible entity does not have backup functionality (provided either through a facility or contracted services staffed by applicable certified operators when control has been transferred to the backup functionality location) <u>that includes monitoring, control, logging, and alarming sufficient for maintaining compliance with all Reliability Standards that depend on a Balancing Authority and</u>	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 <u>agrees that initially supported the reference to</u>

	<p>functionality, backup functionality is not required during:</p> <ul style="list-style-type: none"> Planned outages of the primary or backup facilities of two weeks or less Unplanned outages of the primary or backup facilities 	<p>the Reliability Standards applicable to the responsible entity that depend on the primary control center functionality and which have a Lower VRF. N/A</p>	<p>the Reliability Standards applicable to the responsible entity that depend on the primary control center functionality and which have a Medium VRF. N/A</p>	<p>the Reliability Standards applicable to the responsible entity that depend on the primary control center functionality and which have a High VRF. N/A</p>	<p><u>Transmission Operator's primary control center functionality respectively.</u></p>	<p>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 of standard using VSL modifications. Beyond the slight redline changes, NERC does not propose changing the VSLs is focused on having a</p>
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						functional backup control center, and the VSL assignments are better off binary so long as they focus on that.
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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	Requirement Language	Lower	Moderate	High	Severe	Comments
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<p>EOP-008-1, R5</p>	<p>Each Reliability Coordinator, Balancing Authority, and Transmission Operator, shall annually review and approve its Operating Plan for backup functionality.</p> <p>5.1 An update and approval of the Operating Plan for backup functionality shall take place within sixty calendar days of any changes to any part of the Operating Plan described in Requirement R1.</p>	<p>The responsible entity did not update and approve its Operating Plan for backup functionality for more than 60 calendar days and less than or equal to 70 calendar days after a change to any part of the Operating Plan described in Requirement R1.</p>	<p>The responsible entity did not update and approve its Operating Plan for backup functionality for more than 70 calendar days and less than or equal to 80 calendar days after a change to any part of the Operating Plan described in Requirement R1.</p>	<p>The responsible entity did not update and approve its Operating Plan for backup functionality for more than 80 calendar days and less than or equal to 90 calendar days after a change to any part of the Operating Plan described in Requirement R1.</p>	<p>The responsible entity did not have evidence that its dated, current, in force Operating Plan for backup functionality was annually reviewed and approved. OR, The responsible entity did not update and approve its Operating Plan for backup functionality for more than 90 calendar days after a change to any part of the Operating Plan described in Requirement R1.</p>	<p>FERC staff was concerned that the VSLs were elaborating on the standard and applying the standards more stringently than intended. (They cited the reference to change in the VSLs.)</p> <p>NERC staff does not believe that the VSLs elaborated on the standard; the VSLs simply roll requirement R5.1 into the VSL assignments. No change is proposed- <u>Based on commenter suggestions, however, NERC has deleted “its dated, current, in force” from the Severe VSL assignment as that language</u></p>
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						<u>does not appear in the requirement.</u>
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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	Requirement Language	Lower	Moderate	High	Severe	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.	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. <u>N/A</u>	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. <u>N/A</u>	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.	<p>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.</p> <p>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</p>

						<p><u>consistency</u> with the <u>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.</u></p>
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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	Requirement Language	Lower	Moderate	High	Severe	Comments
EOP-008-1, R7	Each Reliability Coordinator, Balancing Authority, and Transmission Operator shall conduct and document results of an annual test of its Operating Plan that demonstrates: 7.1 The transition time between the simulated loss of primary control center functionality and the time to fully	The responsible entity conducted an annual test of its Operating Plan for backup functionality but it did not document the results. OR, The responsible entity conducted an annual test of its Operating Plan for backup functionality but the test was for less than two continuous hours	The responsible entity conducted an annual test of its Operating Plan for backup functionality but the test was for less than 1.5 continuous hours but more than or equal to 1 continuous hour.	The responsible entity conducted an annual test of its Operating Plan for backup functionality but the test did not assess the transition time between the simulated loss of its primary control center and the time to fully implement the backup functionality OR,	The responsible entity did not conduct an annual test of its Operating Plan for backup functionality. OR, The responsible entity conducted an annual test of its Operating Plan for backup functionality but the test was for less than 0.5 continuous hours.	FERC staff expressed concern that documentation was not covered in the VSLs. NERC staff points out that documentation is appropriately “Lower” because there are other ways of proving that the test was conducted, other than documentation; i.e., affidavits or other

	implement the backup functionality. 7.2. The backup functionality for a minimum of two continuous hours.	but more than or equal to 1.5 continuous hours.		The responsible entity conducted an annual test of its Operating Plan for backup functionality but the test was for less than 1 continuous hour but more than or equal to 0.5 continuous hours.		corroborating evidence-receipts. No change proposed.
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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.