

Review of EOP-005-2—System Restoration from Blackstart Resources (Deferred/Filing 2)

<http://www.nerc.com/files/EOP-005-2.pdf>

VRFs for Requirements R2, R5, R10, R11, and R17:

Standard, Requirement	Requirement Language	VRF Assignment	Original Guideline Explanation (from P. 28 of December 31, 2009 EOP filing)	Comments
EOP-005-2, R2	Each Transmission Operator shall provide the entities identified in its approved restoration plan with a description of any changes to their roles and specific tasks prior to the implementation date of the plan.	Lower Medium	A lower VRF was assigned to Requirements R2 and R5 which were seen as mainly administrative in nature.	<p>Citing a Guideline 4 concern, FERC is concerned that this requirement is more than purely administrative and might be better assigned a Medium VRF.</p> <p>While NERC staff does believe the requirement addresses a task that is, in and of itself, administrative, it recognizes that the implications could be more than administrative. Accordingly, NERC staff proposes changing the VRF to Medium.</p>
EOP-005-2, R5	Each Transmission Operator shall have a copy of its latest Reliability Coordinator approved restoration plan within its primary and backup control rooms so	Medium Lower	A lower VRF was assigned to Requirements R2 and R5 which were seen as mainly administrative in nature.	Citing a Guideline 4 concern, FERC is concerned that this requirement is more than purely administrative and might be better assigned a

	<p>that it is available to all of its System Operators prior to its implementation date.</p>			<p>Medium VRF.</p> <p>While NERC staff does believe the requirement addresses a task that is, in and of itself, administrative, it recognizes that the implications could be more than administrative. Accordingly, NERC staff proposes changing the VRF to Medium.</p>
<p>EOP-005-2, R10</p>	<p>Each Transmission Operator shall include within its operations training program, annual System restoration training for its System Operators to assure the proper execution of its restoration plan. This training program shall include training on the following:</p> <p>R10.1. System restoration plan including coordination with the Reliability Coordinator and Generator Operators included in the restoration plan.</p> <p>R10.2. Restoration priorities.</p>	<p>Medium</p>	<p>A medium VRF was assigned to those requirements dealing with the ‘infrastructure’ required to support those requirements that received a high VRF. These items, while certainly important in their own right, were not seen as directly leading to BPS instability. Therefore, a medium VRF was assigned to Requirements R3, R4, R6, R9, R10, R11, R12, R13, R14, R15, R16, R17 and R18.</p>	<p>Citing a Guideline 1 concern, FERC suggested changing the VRF to a High assignment.</p> <p>NERC staff continues to support the drafting team’s Medium VRF assignment. Failure to provide training, while important, would not directly lead to instability, etc. NERC staff believes the VRF assignment should remain a Medium.</p>

	<p>R10.3. Building of cranking paths.</p> <p>R10.4. Synchronizing (re-energized sections of the System).</p>			
EOP-005-2, R11	Each Transmission Operator, each applicable Transmission Owner, and each applicable Distribution Provider shall provide a minimum of two hours of System restoration training every two calendar years to their field switching personnel identified as performing unique tasks associated with the Transmission Operator’s restoration plan that are outside of their normal tasks.	Medium	A medium VRF was assigned to those requirements dealing with the ‘infrastructure’ required to support those requirements that received a high VRF. These items, while certainly important in their own right, were not seen as directly leading to BPS instability. Therefore, a medium VRF was assigned to Requirements R3, R4, R6, R9, R10, R11, R12, R13, R14, R15, R16, R17 and R18.	<p>Citing a Guideline 1 concern, FERC suggested changing the VRF to a High assignment.</p> <p>NERC staff continues to support the drafting team’s Medium VRF assignment. Failure to provide training, while important, would not directly lead to instability, etc. NERC staff believes the VRF assignment should remain a Medium.</p>
EOP-005-2, R17	Each Generator Operator with a Blackstart Resource shall provide a minimum of two hours of training every two calendar years to each of its operating personnel responsible for the startup of its Blackstart Resource	Medium	A medium VRF was assigned to those requirements dealing with the ‘infrastructure’ required to support those requirements that received a high	<p>Citing a Guideline 1 concern, FERC suggested changing the VRF to a High assignment.</p> <p>NERC staff continues to support the drafting team’s Medium VRF assignment.</p>

	<p>generation units and energizing a bus. The training program shall include training on the following:</p> <p>R17.1. System restoration plan including coordination with the Transmission Operator.</p> <p>R17.2. The procedures documented in Requirement R14.</p>		<p>VRF. These items, while certainly important in their own right, were not seen as directly leading to BPS instability. Therefore, a medium VRF was assigned to Requirements R3, R4, R6, R9, R10, R11, R12, R13, R14, R15, R16, R17 and R18.</p>	<p>Failure to provide training, while important, would not directly lead to instability, etc. NERC staff believes the VRF assignment should remain a Medium.</p>
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VSLs for Requirement R2:

Standard, Requirement	Requirement Language	Lower	Moderate	High	Severe	Comments
EOP-005-2, R2	Each Transmission Operator shall provide the entities identified in its approved restoration plan with a description of any changes to their roles and specific tasks prior to the implementation date of the plan.	The Transmission Operator failed to provide one of the entities identified in its approved restoration plan with a description of any changes to their roles and specific tasks prior to the implementation date of the plan.	The Transmission Operator failed to provide two of the entities identified in its approved restoration plan with a description of any changes to their roles and specific tasks prior to the implementation date of the plan.	The Transmission Operator failed to provide three of the entities identified in its approved restoration plan with a description of any changes to their roles and specific tasks prior to the implementation date of the plan.	The Transmission Operator failed to provide four or more of the entities identified in its approved restoration plan with a description of any changes to their roles and specific tasks prior to the implementation date of the plan.	<p>Citing a Guideline 1 violation, FERC expressed concern that starting the Lower VSL at 30 days late was inappropriate and too large a time frame to begin with.</p> <p>NERC staff reviewed the VSL language. Because</p>

		OR The Transmission Operator provided the information to all entities but was up to 1030 calendar days late in doing so.	OR The Transmission Operator provided the information to all entities but was more than 1130 and less than or equal to 2040 calendar days late in doing so.	OR The Transmission Operator provided the information to all entities but was more than 2140 and less than or equal to 3050 calendar days late in doing so.	OR The Transmission Operator provided the information to all entities but was more than 3150 calendar days late in doing so.	neither the requirements nor the measures reference a specific time frame or acceptable delay, NERC staff agrees that the 30-day starting point was not appropriate and modified the VSLs accordingly.
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Original Guideline Explanation for R2 VSLs in [December 1, 2010 VSL Filing 2](#):

In accordance with Guideline 2, the VSLs were modified from the previously filed version of this standard.

- *Guideline 1:* P. 878-890 of Guideline 1 Analysis in [March 5, 2012 VSL Filing 1](#)
- *Guideline 2:* In accordance with Guideline 2, the VSL assignments were modified to increase by ten-day increments for consistency with other VSLs. Additionally, NERC has reviewed the VSL text and has determined that, as written, the VSL text is clear, specific and objective and does not contain general, relative or subjective language satisfying Guideline 2b. Therefore, the text is not subject to the possibility of multiple interpretations of the VSL(s) and provides the clarity needed to permit the consistent and objective application of the VSL(s) in the determination of penalties by the Compliance Enforcement Authority.
- *Guideline 3:* NERC compared the existing VSLs to the stated requirement language to ensure the VSLs do not redefine or undermine the reliability goal of the requirement. In accordance with Guideline 3, the VSL assignments are consistent with the requirement and the degree of compliance can be determined objectively and with certainty.
- *Guideline 4:* The VSL assignments comply with Guideline 4, because they are based on a single violation of a Reliability Standard and are not based on a cumulative number of violations of the same requirement over a period of time.

VSLs for Requirement R16:

Standard, Requirement	Requirement Language	Lower	Moderate	High	Severe	Comments
EOP-005-2, R16	Each Generator Operator with a Blackstart Resource shall perform Blackstart Resource tests, and maintain records of such testing, in accordance with the testing requirements set by the Transmission Operator to verify that the Blackstart Resource can perform as specified in the restoration plan. R16.1. Testing records shall include at a minimum: name of the Blackstart Resource, unit tested, date of the test, duration of	The Generator Operator with a Blackstart Resource did not maintain testing records for one of the requirements for a Blackstart Resource. f <u>The GOP with a Blackstart Resource performed tests and maintained records but the records did not include all of the items in R16.1.</u> <u>OR</u> <u>The Generator Operator</u> did not supply the Blackstart Resource testing records as requested <u>for 31 to 60 within 59</u>	The Generator Operator with a Blackstart Resource did not maintain testing records for two of the requirements for a Blackstart Resource. f <u>The GOP with a Blackstart Resource performed tests but did not supply the Blackstart Resource testing records as requested for 6160 days to 9089</u> calendar days after the request.	The Generator Operator with a Blackstart Resource did not maintain testing records for three of the requirements for a Blackstart Resource. f <u>The GOP with a Blackstart Resource performed tests but either did not maintain records or did not supply the Blackstart Resource testing records as requested within 910 or more calendar days after the request. to 119 calendar days after the request.</u>	The Generator Operator with a <u>Blackstart Resource did not perform Blackstart Resource tests maintain testing records for a Blackstart Resource.</u> <u>OR</u> <u>did not supply the Blackstart Resource testing records as requested for 120 days or more after the request.</u>	Citing a Guideline 3 violation, FERC said that R16's subrequirements (R16.1 and R16.2) were not appropriately addressed in the VSLs. NERC staff agreed with these concerns, and also noted that the VSLs included some sentence fragments and interval issues. It has attempted to correct all of these issues in the redline VSLs.

	<p>the test, time required to start the unit, an indication of any testing requirements not met under Requirement R9.</p> <p>R16.2. Each Generator Operator shall provide the blackstart test results within 30 calendar days following a request from its Reliability Coordinator or Transmission Operator.</p>	calendar days of the request.				
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Original Guideline Explanation for R16 VSLs in [December 1, 2010 VSL Filing 2](#):

In accordance with Guideline 2, the VSLs from the previously filed version 2 of this standard were modified for clarity and consistency with other standards and VSLs and carry over for this standard.

- *Guideline 1:* P. 878-890 of Guideline 1 Analysis in [March 5, 2012 VSL Filing 1](#)
- *Guideline 2:* The VSLs were modified for clarity and consistency with other standards and VSLs. Additionally, NERC has reviewed the VSL text and has determined that, as written, the VSL text is clear, specific and objective and does not contain general, relative or subjective language satisfying Guideline 2b. Therefore, the text is not subject to the possibility of multiple interpretations of the VSL(s) and

provides the clarity needed to permit the consistent and objective application of the VSL(s) in the determination of penalties by the Compliance Enforcement Authority.

- *Guideline 3:* NERC compared the existing VSLs to the stated requirement language to ensure the VSLs do not redefine or undermine the reliability goal of the requirement. In accordance with Guideline 3, the VSL assignments are consistent with the requirement and the degree of compliance can be determined objectively and with certainty.
- *Guideline 4:* The VSL assignments comply with Guideline 4, because they are based on a single violation of a Reliability Standard and are not based on a cumulative number of violations of the same requirement over a period of time.