Review of PER-005-1—System Personnel Training (Deferred and Filing 2)

http://www.nerc.com/files/PER-005-1.pdf

VRFs for Requirements R1 and R3:

Standard, Requirement	Requirement Language	VRF Assignment	Guideline-Based Justification from September 30, 2009 PER-005-1 Filing	Comments
PER-005-1, R1	Each Reliability Coordinator, Balancing Authority and Transmission Operator shall use a systematic approach to training to establish a training program for the BES company-specific reliability-related tasks performed by its System Operators and shall implement the program.	~~Medium~~High	Reliability Standard PER-005-1, Requirement R1 has a Medium VRF. This requirement is primarily administrative in nature because it prescribes a certain process to be used when developing a training program. It is unlikely that, under emergency, abnormal or restoration conditions, a violation of this requirement would lead to bulk power system instability, separation or cascading failures or hinder restoration to a normal condition.	FERC cited possible Guidelines 1, 3, and 5 issues. With respect to Guideline 3, FERC staff was concerned that other standards involving implementation are more typically assigned a High VRF. With respect to Guideline 5, FERC was concerned that the requirement comingles a moderate risk requirement to develop a plan with a higher risk requirement of implementing the plan, and that the VRF should defer to the higher risk requirement. NERC staff can support FERC staff's concern that implementation is typically assigned a High VRF, and that in a case where two levels of VRF are comingled,

				the higher one should take precedence. Thus, NERC proposes changing this assignment to High.
PER-005-1, R3	At least every 12 months each Reliability Coordinator, Balancing Authority and Transmission Operator shall provide each of its System Operators with at least 32 hours of emergency operations training applicable to its organization that reflects emergency operations topics, which includes system restoration using drills, exercises or other training required to maintain qualified personnel.	~~Medium~~High	Reliability Standard PER-005-1, Requirement R3 has a Medium VRF. Although this requirement provides for certain types of training to be performed at least every 12 months, it is unlikely that under emergency, abnormal or restoration conditions, a failure to complete this training would lead to bulk power system instability, separation or cascading failures or hinder restoration to a normal condition.	Citing possible Guideline 1 and Guideline 3 issues, FERC notes that there is a compatibility issue with PER-002-0, R4, which is assigned a High VRF. NERC staff agrees that PER-005-1 R3 and PER-002-0 R4 (which addresses training and drills that simulate emergencies) are similar, and that emergency operations-related requirements are more appropriately assigned to High VRFs, as indicated in the proposed redline.

VSLs for Requirement R1:

Standard, Requirement	Requirement Language	Lower	Moderate	High	Severe	Comments
PER-005-1, R1	Each Reliability Coordinator, Balancing Authority and	~~None~~N/A	The responsible entity failed to update its BES company-specific	The responsible entity failed to design and develop learning	The responsible entity failed to prepare a BES company-specific	Citing a Guideline 3 violation, FERC pointed out that not all of the

	Transmission Operator shall use a systematic approach to training to establish a training program for the BES company-specific reliability-related tasks performed by its System Operators and shall implement the program.		reliability-related task list to identify new or modified tasks each calendar year. (R1.1.1) OR The responsible entity failed to evaluate its training program to identify needed changes to its training program(s) OR ~~or~~Aan entity evaluated its training program and identified changes, but failed to implement them. (R1.4)	objectives and training materials based on the BES company specific reliability related tasks. (R1.2)	reliability-related task list. (R1.1) OR The responsible entity failed to deliver training based on the BES company specific reliability related tasks. (R1.3)	subrequirements were accounted for – what would happen for R1.4 if an entity was evaluated and needed changes, but did not implement the changes? NERC staff agreed that this piece of R1.4 was not appropriately addressed and added language to the Moderate VSL accordingly.

Original R1 Guideline Explanation in the December 1, 2010 VSL Filing:

In accordance with Guideline 2, the VSLs were modified for clarity and consistency with other standards and VSLs.

- *Guideline 1:* This is a new standard. Accordingly, no historic performance has been established.
- *Guideline 2:* 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. Thus, 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 R2:

Standard, Requirement	Requirement Language	Lower	Moderate	High	Severe	Comments
PER-005-1, R2	Each Reliability Coordinator, Balancing Authority and Transmission Operator shall verify each of its System Operator's capabilities to perform each assigned task identified in R1.1 at least one time. **2.1** Within six months of a modification of	N/A	The responsible entity failed to verify 5% or less of its System Operators' capabilities to perform each assigned task from its list of BES company-specific reliability-related tasks. (R2)	The responsible entity failed to verify more than 5% up to (and including) 10% of its System Operators' capabilities to perform each assigned task from its list of BES company--specific reliability-related tasks. (R2) ~~OR~~	The responsible entity failed to verify more than 10% of its System Operators' capabilities to perform each assigned task from its list of BES company-specific reliability-related tasks. (R2) OR The responsible entity failed to verify its System	FERC staff was concerned that the second part of the High VSL, which addresses R2.1, should be assigned as Severe. NERC staff agrees that the inconsistency should be addressed for consistency among

	the BES company-specific reliability-related tasks, each Reliability Coordinator, Balancing Authority and Transmission Operator shall verify each of its System Operator's capabilities to perform the new or modified tasks.			~~The responsible entity failed to verify its System Operators capabilities to perform each new or modified task within six months of making a modification to its BES company-specific reliability-related task list. (R2.1)~~	Operators capabilities to perform each new or modified task within six months of making a modification to its BES company-specific reliability-related task list. (R2.1)	requirements, per Guideline 2. For consistency with the VSL assignments for R3, NERC staff has proposed moving the VSL assignment for R2.1 to Severe.

Original R2 Guideline Explanation in the December 1, 2010 VSL Filing:

In accordance with Guideline 2, the VSLs were modified for clarity and consistency with other standards and VSLs.

- *Guideline 1:* This is a new standard. Accordingly, no historic performance has been established.
- *Guideline 2:* 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. Thus, 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 R3:

Standard, Requirement	Requirement Language	Lower	Moderate	High	Severe	Comments
PER-005-1, R3	At least every 12 months each Reliability Coordinator, Balancing Authority and Transmission Operator shall provide each of its System Operators with at least 32 hours of emergency operations training applicable to its organization that reflects emergency operations topics, which includes system restoration using drills, exercises or other training required to maintain qualified personnel.	N/A	The responsible entity failed to provide at least 32 hours of emergency operations training applicable to its organization, affecting 5% or less of their System Operators. (R3)	The responsible entity failed to provide at least 32 hours of emergency operations training applicable to its organization, affecting more than 5% and up to (and including) 10% of its System Operators. (R3)	The responsible entity failed to provide at least 32 hours of emergency operations training applicable to its organization, affecting more than 10% its System Operators (R3) OR The responsible entity did not include simulation technology replicating the operational behavior of the BES in its emergency operations training. (R3.1)	FERC staff pointed out that the assignment of VSLs for the subrequirements in PER-005-1 R2 and PER-005-1 R3 is inconsistent. NERC staff agrees that the inconsistency should be addressed for consistency among requirements, per Guideline 2. The VSL assignments for R3 will remain as written, with violation of R3.1 in the Severe category.

	3.1 Each Reliability Coordinator, Balancing Authority and Transmission Operator that has operational authority or control over Facilities with established IROLs or has established operating guides or protection systems to mitigate IROL violations shall provide each System Operator with emergency operations training using simulation technology such as a simulator, virtual technology, or other technology that replicates the operational behavior of the BES during normal and emergency					

	conditions.					

Original R3 Guideline Explanation in the December 1, 2010 VSL Filing:

No changes from previously filed VSLs.

- *Guideline 1:* This is a new standard. Accordingly, no historic performance has been established.
- *Guideline 2:* 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. Thus, 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.