

**Consideration of Comments on Non-binding Poll — Underfrequency Load Shedding\_ (Project 2007-01)**  
**Date of Non-binding Poll: September 24, 2010 – October 4, 2010**

**Summary Consideration:** A non-binding poll of the VRFs and VSLs proposed for PRC-06-1 – Underfrequency Load Shedding was conducted from September 23 – October 4, 2010 and achieved a quorum with 68% of those responding indicating support for the proposed VRFs and VSLs.

The majority of the comments received highlighted concerns with the WECC VSLs. Specifically, the comments indicated that the proposed WECC VSL EB2 High and Severe are identical. The SDT made the conforming changes to the WECC VSLs as requested by the commenters as well as other minor edits to improve the correlation in wording between the requirements and the VSLs in the WECC Variance for E.B.4 VSLs.

If you feel that the drafting team overlooked your comments, please let us know immediately. Our goal is to give every comment serious consideration in this process. If you feel there has been an error or omission, you can contact the Vice President and Director of Standards, Herb Schrayshuen, at 609-452-8060 or at herb.schrayshuen@nerc.net. In addition, there is a NERC Reliability Standards Appeals Process.<sup>1</sup>

Voter	Entity	Segment	Vote	Comment
Robert D Smith	Arizona Public Service Co.	1	Negative	The standard is complicated and too prescriptive. It does not allow enough flexibility to Planning Coordinator and does not account for safety nets.
Mel Jensen	APS	5		
<p><b>Response:</b> The SDT cannot fully consider the comment without additional detail. However, the SDT believes the approach taken provides the Planning Coordinators the greatest flexibility by defining <u>what</u> performance characteristics the UFLS program must meet to support system reliability rather than defining <u>how</u> the Planning Coordinators are to design the UFLS program.</p>				
Scott Kinney	Avista Corp.	1	Negative	Per a request to the drafting team the HIGH VSL for E.B.2 in the WECC regional variance should be replaced with a MODERATE VSL.
Edward F. Groce		5		
<p><b>Response:</b> The VSL has been revised per the commenter's request.</p>				
Donald S. Watkins	Bonneville Power Administration	1	Negative	For E.B.2. BPA suggests deleting the proposed wording of the HIGH VSL and replace it with the wording from the proposed MODERATE VSL, resulting in a HIGH and SEVERE VSL that are identical.
Rebecca Berdahl		3		
Francis J. Halpin		5		

<sup>1</sup> The appeals process is in the Reliability Standards Development Procedure: [http://www.nerc.com/files/RSDP\\_V6\\_1\\_12Mar07.pdf](http://www.nerc.com/files/RSDP_V6_1_12Mar07.pdf).

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Brenda S. Anderson		6		
<b>Response:</b> The VSL has been revised per the commenter's request.				
Claudiu Cadar	GDS Associates, Inc.	1	Negative	<p>1. Requirement. R8. The timing does not coordinate with the requirement</p> <p>2. Requirement. R10. The SDT should provide clarification on the capacitor banks if the VSL should reflect the percentage of banks switched or (and) the proper percentage of steps switched</p> <p>3. New requirement / measure. The standard should include a VSL pertaining the communication of UFLS program, design / event assessment to UFLS entities and TOs involved as required to the PCs.</p>
<p><b>Response:</b> 1. The VSLs for R8 refer to days beyond the schedule (that is, date) specified by the Planning Coordinator to receive the data. We are not sure what the commenter says does not coordinate.</p> <p>2. The SDT does not see how the R10 VSLs could be construed as other than the percentage of banks switched.</p> <p>3. The aspect of communication to UFLS entities of the UFLS program has been included in R3 and its VSLs (severe VSL) as "notification of."</p>				
Chifong L. Thomas	Pacific Gas and Electric Company	1	Negative	The High and the Severe VSLs for Variance E.B.2 are essentially identical since there are only two parts or sub-bullets identified in Variance E.B.2. The drafting team should consider moving the current wording for the Moderate VSL to the High VSL.
Richard J. Padilla		5		
<b>Response:</b> The VSL has been revised per the commenter's request.				
Laurie Williams	Public Service Company of New Mexico	1	Negative	During the development of the proposed VSLs for the Regional Variance for the WECC Interconnection, it was discovered that, because there are only two sub-bullets for Variance E.B.2, the HIGH and SEVERE VSLs for E.B.2 are essentially the same. This information along with other grammatical wording changes were provided to the drafting team prior to the posting for successive ballot, but were inadvertently omitted from the posted version of PRC-006-1. The suggested revisions to the VSLs for E.B.2 are to delete the proposed wording of the HIGH VSL and replace it with the wording from the proposed MODERATE VSL, resulting in a HIGH and SEVERE VSL.
<b>Response:</b> The VSL has been revised per the commenter's request.				
Catherine Koch	Puget Sound Energy, Inc.	1	Negative	The HIGH VSL for E.B.2 should be deleted and replaced with the wording from the proposed MODERATE VSL, resulting in a HIGH and SEVERE VSL.
<b>Response:</b> The VSL has been revised per the commenter's request.				
Tim Kelley	Sacramento Municipal	1	Negative	In the Regional Variance for the WECC Interconnection the HIGH and SEVERE VSLs for E.B.2 are nearly identical. Since there are only two sub-bullets for Variance E.B.2

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Mike Ramirez	Utility District	4		the suggested revisions to the VSL for E.B.2 are to replace the High VSL with the current language of the Moderate VSL and leave the Moderate VSL blank. With these issues addressed SMUD will support the VSL.
Bethany Wright		5		
James Leigh-Kendall	Sacramento Municipal Utility District	3	Negative	In the Regional Variance for the WECC Interconnection the HIGH and SEVERE VSLs for E.B.2 are nearly identical. Since there are only two sub-bullets for Variance E.B.2 the suggested revisions to the VSL for E.B.2 are to replace the High VSL with the current language of the Moderate VSL and leave the Moderate VSL blank.
<b>Response:</b> The VSL has been revised per the commenter's request.				
Robert Kondziolka	Salt River Project	1	Negative	The HIGH and SEVERE VSLs for E.B.2 are the same.
John T. Underhill		3		
Glen Reeves		5		
<b>Response:</b> The VSL has been revised.				
Pawel Krupa	Seattle City Light	1	Negative	The HIGH and SEVERE VSLs for E.B.2 are the same.
Dana Wheelock		3		
Hao Li		4	Negative	
Michael J. Haynes		5		
<b>Response:</b> The VSL has been revised.				
Rich Salgo	Sierra Pacific Power Co.	1	Negative	Negative vote because "High" and "Severe" Violation severity levels for E.B.2 are the same. There should be a distinction.
<b>Response:</b> The VSL has been revised.				
James L. Jones	Southwest Transmission Cooperative, Inc.	1	Negative	Delete the proposed wording of the HIGH VSL and replace it with the wording from the proposed MODERATE VSL, resulting in a HIGH and SEVERE VSL. HIGH and SEVERE VSLs for E.B.2 are the same.

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<b>Response:</b> The VSL has been revised per the commenter's request.				
John Tolo	Tucson Electric Power Co.	1	Negative	VRFs and VSLs should not be approved until such time that the concerns with the proposed PRC-006 standard are addressed
<b>Response:</b> The SDT has addressed comments received on the proposed standard. See the Consideration of Comments report.				
Jason L Marshall	Midwest ISO, Inc.	2	Negative	R3, R9 and R10 should not have high VRFs. UFLS is designed as a backstop to prevent cascading, blackouts, and instability should other measures fail. Many other things, such as an IROL violation, will have to occur before the BES ever reaches the need for UFLS actuation. NERC's definition of a High VRF requires a direct connection between violation of the requirement and cascading, blackout, or instability. Given that other things must happen (such as an IROL violation) these requirements do not meet the definition of a High VRF for lack of the direct connection.
<b>Response:</b> The SDT maintains that "high" is the appropriate VRF and disagrees that there is not a direct connection between an improperly or poorly designed UFLS program and blackouts. The commenter rightly acknowledges that "UFLS is designed as a backstop to prevent cascading, blackouts and instability." While it may be true that many other violations could or even would occur before UFLS actuation, UFLS is, nevertheless, as a backstop, still in the direct line of defense against blackouts.				
Henry Ernst-Jr	Duke Energy Carolina	3	Affirmative	There is a typographical error on the "High" VSL for EOP-003-2 Requirement R3. The phrase "or less" after 15% should be struck.
<b>Response:</b> The SDT agrees that this is an error, but must adhere to the scope of its supplemental SAR and refrain from any changes not specific to removing automatic UFLS. Please bring this to attention of Project 2009-03 SDT at an appropriate time.				
Greg Lange	Public Utility District No. 2 of Grant County	3	Negative	During the development of the proposed VSLs for the Regional Variance for the WECC Interconnection, it was discovered that, because there are only two sub-bullets for Variance E.B.2, the HIGH and SEVERE VSLs for E.B.2 are essentially the same. This information along with other grammatical wording changes were provided to the drafting team prior to the posting for successive ballot, but were inadvertently omitted from the posted version of PRC-006-1. The suggested revisions to the VSLs for E.B.2 are to delete the proposed wording of the HIGH VSL and replace it with the wording from the proposed MODERATE VSL, resulting in a HIGH and SEVERE VSL. The drafting team has indicated that the revised wording provided for the VSLs for the WECC variance will be utilized, however, we are urging that a negative vote for the VRFs and VSLs be submitted with a comment that the HIGH and SEVERE VSLs for E.B.2 are the same.
<b>Response:</b> The VSL has been revised per the commenter's request.				
Scott Peterson	San Diego Gas & Electric	3	Negative	Voting not because the HIGH and SEVERE VSLs for E.B.2 are the same
<b>Response:</b> The VSL has been revised.				

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Janelle Marriott	Tri-State G & T Association, Inc.	3	Negative	Tri-State appreciates the hard work by the drafting team and its attempt to address the concerns of many entities by inserting a WECC variance. We also agree that a standard of this nature is necessary to ensure reliable operation of the Bulk Electric System. However, we believe that the functional entity responsible for developing and documenting the UFLS program should be the Regional Entity through its registration as the Reliability Assurer. The drafting team addressed earlier comments in that regard by stating that the drafting team had confirmed "that the Planning Coordinator is the appropriate entity to design UFLS and conduct the other UFLS related activities based on the definition of the Planning Coordinator in the Functional Model Version 5." We do not reach that same conclusion. We do not see any assigned function of the Planning Coordinator that includes UFLS plan development. The NERC Reliability Functional Model Technical Document-Version 5, however, does state that a representative task undertaken by the Reliability Assurer might be to "perform high-level evaluations, such as at a regional or Interconnection level, of protection systems as they relate to the reliability of the Bulk Electric System." FERC, when addressing PRC-006-0, also states in Order 693, Paragraph 1480 "The Commission expects that this function will pass from the regional reliability organization to the Regional Entity after they are approved." This comment would affect the Applicability section as well as nearly all the requirements in the continental standard and in the WECC variance.
<p><b>Response:</b> The SDT believes that the WECC variance specifically addresses this concern by requiring a single coordinated program in the WECC interconnection. The Planning Coordinators will need to work together on this coordinated, region-wide program. The SDT believes the Planning Coordinator is still the appropriate entity to perform this function. The assignment of these functions to the Planning Coordinator is consistent with the role as defined in the Functional Model version 5 which says that the Planning Coordinator is: "The functional entity that coordinates, facilitates, integrates and evaluates (generally one year and beyond) transmission facility and service plans, and resource plans within a Planning Coordinator area and coordinates those plans with adjoining Planning Coordinator areas...The Planning Coordinator is responsible for assessing the longer-term reliability of its Planning Coordinator area. While the area under the purview of a Planning Coordinator may include as few as one Transmission Planner and one Resource Planner, the Planning Coordinator's scope of activities may include extended coordination with integrated Planning Coordinators' plans for adjoining areas beyond individual system plans. By its very nature, Bulk Electric System planning involves multiple entities."</p>				
James R. Keller	Wisconsin Electric Power Marketing	3	Negative	In our standard ballot comments, we recommend that R5 be strengthened to prevent conflicting UFLS programs. As such, the Violation Risk Factor for R5 should be changed to High as conflicting UFLS programs do not promote reliability.
Anthony Jankowski	Wisconsin Energy Corp.	4		

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Linda Horn	Wisconsin Electric Power Co.	5		
<p><b>Response:</b> The SDT maintains that “medium” is still the appropriate VRF for R5 and that two overlapping Planning Coordinators was not intended when the function was defined; however, because of the registration these scenarios exist. The SDT does not believe the standard should be adjusted since the tasks assigned to the Planning Coordinator align with the existing definition and tasks aligned with this entity in the current version of the Functional Model. If the case of two overlapping Planning Coordinators persists, it should behoove them to coordinate their designs in such fashion that a DP is not presented with a situation in which it is impossible to achieve compliance.</p>				
Thomas J. Bradish	RRI Energy	5	Negative	The two sub-bullets for Variance E.B.2, the HIGH and SEVERE VSLs for E.B.2 are essentially the same. The suggested revisions to the VSLs for E.B.2 are to delete the proposed wording of the HIGH VSL and replace it with the wording from the proposed MODERATE VSL, resulting in a HIGH and SEVERE VSL.
Trent Carlson		6		
<p><b>Response:</b> The VSL has been revised per the commenter’s request.</p>				
Dennis Sismaet	Seattle City Light	6	Negative	In addition to the ballot of PRC-006-1 and EOP-003-2, a non-binding poll of the Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs) is being conducted. WECC staff and WECC subject matter experts have reviewed the proposed VRFs and VSLs and recommend a negative vote with comment for the VRFs and VSLs. During the development of the proposed VSLs for the Regional Variance for the WECC Interconnection, it was discovered that, because there are only two sub-bullets for Variance E.B.2, the HIGH and SEVERE VSLs for E.B.2 are essentially the same. This information along with other grammatical wording changes were provided to the drafting team prior to the posting for successive ballot, but were inadvertently omitted from the posted version of PRC-006-1. The suggested revisions to the VSLs for E.B.2 are to delete the proposed wording of the HIGH VSL and replace it with the wording from the proposed MODERATE VSL, resulting in a HIGH and SEVERE VSL. The drafting team has indicated that the revised wording provided for the VSLs for the WECC variance will be utilized, however, we are urging that a negative vote for the VRFs and VSLs be submitted with a comment that the HIGH and SEVERE VSLs for E.B.2 are the same.
<p><b>Response:</b> The VSL has been revised per the commenter’s request.</p>				

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William Mitchell Chamberlain	California Energy Commission	9	Negative	There appears to be a problem with the VSLs proposed for the WECC variance. I understand a change was agreed to by the drafting team but the change did not make it into this balloted version. I'm voting NO only to assist in making the agreed correction.
<b>Response:</b> The VSL has been revised per the commenter's request.				
Louise McCarren	Western Electricity Coordinating Council	10	Negative	Because there are only two sub-bullets for WECC Variance E.B.2, the HIGH and SEVERE VSLs for E.B.2 are essentially the same. This information along with other grammatical wording changes were provided to the drafting team prior to the posting for successive ballot, but were inadvertently omitted from the posted version of PRC-006-1. The suggested revisions to the VSLs for E.B.2 are to delete the proposed wording of the HIGH VSL and replace it with the wording from the proposed MODERATE VSL, resulting in a HIGH and SEVERE VSL. If these changes, along with other gamatical revisions to the VSLs submitted to NERC on September 24, for E.B.4 are made, WECC supports the VRFs and VSLs.
<b>Response:</b> The VSL has been revised per the commenter's request.				