

Posting #8

The WECC-0107, VAR-501-WECC-2, Power System Stabilizer Drafting Team (DT) thanks everyone who submitted comments on the proposed document.

Posting

This document was last posted for a 30-day public comment period from December 11, 2015 through January 11, 2016. The electronic portal remained open through January 22, 2016. All comments received were accepted.

WECC distributed the notice for the posting on December 4, 2015. The DT asked stakeholders to provide feedback on the proposed document through a standardized electronic template. WECC received comments from six companies, as shown in the WECC Standards Comment Table that follows.

Location of Comments

All comments received on the document can be viewed in their original format on the project page under the “Submit and Review Comments” accordion.

Changes in Response to Comment

After consideration of each comment received, the drafting team opted to make no substantive changes to the document. The drafting team did, however, make the following non-substantive changes to add clarity and readability.

In Requirement R2, the suffix sentence has been changed to read:

“A PSS that is out of service for less than 30 minutes does not create a violation of this Requirement, regardless of cause.”

To clarify those triggering events that would require installation of a new PSS, the Rationale section was updated as follows:

Mandate to Install a PSS

Nothing in this Regional Reliability Standard (RSS) should be construed to require installation of a PSS *solely because* a PSS is not currently installed as of the Effective Date of this RRS. Rather, installation is only mandated upon the occurrence of either of the triggering events described in Requirement R4, Bullet 1 or Bullet 2, after the Effective Date of the RRS.



It should be noted that a PSS is neither Transmission nor generation.

To clarify the focus of Requirement R3 and to show the Requirement is in harmony with the WECC-0107 Standard Authorization Request, the Rationale section for Requirement R3 was updated as follows:

“Nothing in this Regional Reliability Standard (RSS) should be construed to mandate the design criteria for the *equipment* used to produce the tuning output of the PSS. Rather, Requirement R3 is intended to address the design criteria for the *tuning output* of the PSS.”

Action Plan

On February 18, 2016, the DT agreed by majority vote of those DT members present to forward the project to the WECC Standards Committee (WSC) with a request for ballot and associated regulatory disposition. Only non-substantive changes were made to Posting 8. Posting 9 is the document forwarded for disposition. Posting 9 will be posted to the WECC-0107 Project Page and located on the Posted for Comment accordion.

The WSC is scheduled to meet March 8, 2016.

Contacts and Appeals

If you feel your comment has been omitted or overlooked, please contact the Manager, WECC Standards Processes, W. Shannon Black, at sblack@wecc.biz. In addition, there is a WECC Reliability Standards Appeals Process.

WECC Standards Comment Table

Committer		Organization
1	W. Shannon Black	WECC
2	Stephanie Little on Behalf of Kristie Cocco	Arizona Public Service Company
3	Hillary Dobson	Colorado Springs Utilities
4	Jeremy Voll	Basin Electric Power Cooperative
5	Laura Nelson	Idaho Power
6	Chad Edinger	City of Tacoma – Tacoma Power

Index to Questions, Comments, and Responses

Question

- 1. The drafting team welcomes comments on all aspects of the document.**

The drafting team welcomes comments on all aspects of the document.

Summary Consideration:		See summary in the preamble of this document.
Commenter / Comment		Response
WECC		
<p>The 30 Minute criterion in Requirement R2 needs clarification.</p> <p>Clarity is needed for Requirement R2 that states, "<i>This Requirement only applies when the PSS is out of service for a period greater than 30 minutes.</i>"</p> <p>When do the 4 bullets apply?</p> <p>Is it when the PSS is out of service due to a component failure or maintenance that lasts longer than 30 minutes? If this is correct, then the main Requirement (R2) should be rewritten to include this exemption language. Or, is it when the bulleted occurrence(s) duration last less than 30 minutes?</p> <p>Triggering Events Need Clarification</p> <p>The Guidance section states, "Nothing in this Reliability Standard should be construed to require installation of PSS solely because a PSS is not currently installed as of the Effective Date of this standard. However, when <u>triggering events</u> described in the Reliability Standard occur after the Effective Date of the standard, installation of PSS will become mandatory pursuant to the Requirements therein." (emphasis added)</p> <p>Regarding the above-quoted language, it is unclear as to what those <u>triggering events</u> are and where in the standard they can be located. Please specify.</p>		<p>The drafting team (DT) appreciates your comments and has made the following changes:</p> <p>In Requirement R2, the suffix sentence has been changed to read:</p> <p>"A PSS that is out of service for less than 30 minutes does not create a violation of this Requirement, regardless of cause."</p> <p>For clarity, the drafting team has incorporated the following language into the Rationale section"</p> <p>Mandate to Install a PSS</p> <p>Nothing in this Regional Reliability Standard (RSS) should be construed to require installation of a PSS <i>solely because</i> a PSS is not currently installed as of the Effective Date of this RRS. Rather, installation is only mandated upon the occurrence of either of the triggering events described in Requirement R4, Bullet 1 or Bullet 2, after the Effective Date of the RRS.</p> <p>It should be noted that a PSS is neither Transmission nor generation.</p>

Summary Consideration:		See summary in the preamble of this document.
Commenter / Comment		Response
<p>Scope and Intent of the SAR</p> <p>The SAR calls for the establishment of minimum design criteria for installation of new PSS-related equipment. It is not clear if the regional standard meets this requirement. If the DT intended to address this issue in the Guideline and Technical Basis (perhaps on page 15), then their intentions should be clearly stated.</p>		<p>The drafting team notes that the original Standard Authorization Request (SAR) called for the establishment of “minimum design-criteria for installation of new PSS-related equipment.” However, on June 25, 2014, the WECC Standards Committee (WSC) changed the scope of the SAR such that the design specifications of the equipment were no longer the focus; rather, the focus became: 1) where a PSS was installed, it should be operating unless exempted, 2) should be tuned as specified, and 3) if not currently installed, should specify when installation would be required. The current draft meets both the scope of the SAR and that call of the question.</p> <p>That said, WECC raises an important distinction. To meet the request for clarity, the following sentence replaces the introduction sentence to the Rationale section under the Requirement R3 header.</p> <p>“Nothing in this Regional Reliability Standard (RSS) should be construed to mandate the design criteria for the <i>equipment</i> used to produce the tuning output of the PSS. Rather, Requirement R3 is intended to address the design criteria for the <i>tuning output</i> of the PSS.”</p>
<p>Facilities</p> <p>The standard is not clear as to what facilities it applies to. Please specify.</p>		<p>The DT believes the Facilities statement is precise, to include those facilities meeting each of the specified criteria:</p> <ol style="list-style-type: none"> 1) Synchronous generators; 2) Connected to the Bulk Electric System, as defined in the Glossary of Terms Used in NERC Reliability Standards (Glossary); 3) Meeting the definition of Commercial Operation, as defined in the WECC-specific section of the Glossary.

Summary Consideration:		See summary in the preamble of this document.
Committer / Comment		Response
Arizona Public Service Company		
AZPS has no comments.		The drafting team appreciates AZPS' continued involvement in the standards development process.
Colorado Springs Utility		
1) Colorado Springs Utilities suggests that Requirement 3, part 3.3 be changed to include the original gain requirements or the new specification, i.e. that the gain be set to between 1/3 and 1/2 of the maximum practical gain or between 6 and 10.		The DT appreciates Colorado's suggested input but has opted not to make that change. Although the 6 and 10 gain margin is not specified in the Requirement in those terms, the Requirement does meet that same performance result but states the range differently. To add clarity, the "dB" designation was added to the Rationale section alongside the 1/3 and 1/2 explanation, under the Requirement R3 header.
2) Colorado Springs Utilities suggests clarifying Requirement 3, part 3.5 as to whether there is a mandatory timeline for the replacement or retrofitting of the voltage regulator or whether the exemption can be indefinite.		Please see the above response to WECC regarding triggering events.
Basin Electric Power Cooperative		
With R2 whether you go 31 minutes or 31 days you get the same violation severity. I would suggest that there be different violation severity levels depending on the time the PSS was not on over the 30 minutes.		VSLs define the degree to which compliance with a requirement was not achieved. Each requirement requires at least one VSL. While it is preferable to have four VSLs for each requirement, some requirements do not have multiple "degrees" of noncompliant performance and may have only one as is the case with a binary requirement. The objective of the requirement is to have the PSS "in service." Since the required performance cannot be broken down into degrees of compliance, the Requirement is classified as a Pass/Fail and must be assigned a "Severe" VSL.

Summary Consideration:		See summary in the preamble of this document.
Commenter / Comment		Response
Idaho Power		
Idaho Power reviewed the redlined standard and has no negative feedback. Idaho Power is in support of the revision to R2 that states the requirement is only applicable when the PSS is out of service for a period greater than 30 minutes.		The drafting team appreciates Idaho Power’s continued involvement in the standards development process.
City of Tacoma		
<p>Tacoma Power requests clarity and rewording as needed for consistency on the effective date of R3. The two sections (identified below) are in contradiction as to <u>when</u> compliance to R3 needs to be achieved for units placed in service prior to final regulatory approval of this standard.</p> <p>Section A. Introduction, 6. Effective Date, third paragraph states “For units placed in service prior to final regulatory approval, Requirement R3 is effective the first day of the first quarter that is five years after regulatory approval”</p> <p>Requirement R3, 3.5 reads “Units that have an excitation system or PSS that is incapable of meeting the tuning requirement of Requirement R3 are exempt from Requirement R3 until the voltage regulator is either replaced or retrofitted such that the PSS becomes capable of meeting the turning requirements”.</p>		<p>The DT does not believe there is a conflict between the two dates.</p> <p>The Effective Date dictates when the overall document is effective.</p> <p>Within the document itself, there are additional triggering events such as the running of the five-year period or, in the alternative, when the hardware is either replaced or retrofitted.</p>