

**NERC**

NORTH AMERICAN ELECTRIC  
RELIABILITY CORPORATION

# Consideration of Comments Summary

Project 2013-04 Voltage and Reactive Control

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**RELIABILITY | ACCOUNTABILITY**



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## Introduction

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The Project 2013-04 standard drafting team (SDT) thanks all commenters who submitted comments on the draft VAR-001-4 and VAR-002-3 standards. These standards were posted for a 45-day public comment period from August 23, 2013 through September 3, 2013. Stakeholders were asked to provide feedback on the standards and associated documents through a special electronic comment form. There were 78 sets of responses, including comments from approximately 211 different people from approximately 124 companies representing all 10 Industry Segments.

All comments submitted may be reviewed in their original format on the standard's project page.

If you feel that your comment has been overlooked, 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, Mark Lauby, at 404-446-2560 or at [mark.lauby@nerc.net](mailto:mark.lauby@nerc.net). In addition, there is a NERC Reliability Standards Appeals Process.<sup>1</sup>

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<sup>1</sup> The appeals process is in the Standard Processes Manual: [http://www.nerc.com/files/Appendix\\_3A\\_StandardsProcessesManual\\_20120131.pdf](http://www.nerc.com/files/Appendix_3A_StandardsProcessesManual_20120131.pdf)

# Consideration of Comments

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## Purpose

The VAR SDT appreciates the comments from industry regarding the VAR-001-4 and VAR-002-3 standards. All comments were reviewed carefully by the SDT and changes were made to the standard accordingly. While all comments were reviewed, the new Standards Process Manual (SPM) does not require responses to each individual comment when a successive ballot is needed. However, this document provides a summary of responses to comments. The following pages will provide a summary of the comments received and how the comments were addressed by the VAR SDT. If a specific comment was not addressed in the summary of comments, please contact the NERC Standards Developer or one of the SDT members to discuss.

## Process Comments

Several commenters expressed concern that the simultaneous posting of the Standards Authorization Request (SAR) and the pro forma standard for initial comment and ballot was outside the scope of the Standards Process Manual (SPM). The SDT notes that, although this action was authorized by the NERC Standards Committee, NERC received an appeal of the SPM, which has been resolved. The SDT notes the process issue is outside the purview of the SDT.

## Separate Postings/Merging Standards

Some commenters suggested merging the VAR standards or balloting the standards separately. Based on industry feedback and the difference in the timing of audits, the VAR SDT decided to keep the standards separate. However, the team agreed that it would be beneficial to ballot the standards separately.

## WECC Variance

Some commenters were confused because the applicability section includes Generator Operators (GOP) within the Western Interconnection. This is necessary because the WECC variance in VAR-001-3 is being retained.

## VAR-001 Comments

### *Reliability Coordinator*

- Several commenters objected to adding Reliability Coordinators (RC) to the VAR-001 standard. In order to clarify the role of the RC, the VAR SDT is not going to add RCs to the standard at this time because the issue of RC monitoring is presently before FERC in another filing. Therefore, the VAR SDT will address this directive at a later time, pending a FERC order on the Interconnection Reliability Operations and Coordination (IRO) standards.

### *Administrative Burden*

- Several commenters were concerned that there would be an administrative burden for Transmission Operators (TOPs) and RCs with the new standard. However, the new standard is intended to provide a vehicle for more efficiency and better communication once the VAR-001-4 standard is implemented; for example, fewer unnecessary phone calls/notifications will be made to the TOP once the TOP provides notification requirements to the GOPs. In addition, the standard has been modified to provide schedules to adjacent TOPs and RCs only upon request. This should alleviate some of the administrative burden involved with communicating schedules. Also, the SDT has opted to not add RCs to the standard at this time. The directive regarding RC monitoring will be addressed after order on the pending IRO standards has been issued.

### *Vagueness of VAR-001*

- Several commenters said that several aspects of VAR-001-4 were “vague.” It was not clear to many what an “assessment” entailed and how compliance would be evaluated for many of the VAR-001-4

requirements. The revised VAR-001-4 is simplified and has clarified the standard by removing terms like “assessment,” “implement,” and “policies and procedures.”

#### *Duplication of Other Standards*

- Several commenters stated the VAR-001-4 requirements were duplicative of several other standards. The VAR SDT determined that there is some overlap, particularly with regard to Requirements R1 and R5 of the initial posting. Requirement R5 of the initial posting has been removed, and Requirement R1 has been revised to simply require the TOP to specify voltage schedules. However, in order to show that System Operating Limits (SOLs) will encompass the details for voltage limits, both SOLs and Interconnection Reliability Operating Limits (IROLs) are referenced.

#### *Interconnection Point*

- Some commenters took issue with the phrase “at the interconnection point between the generator facility and Transmission Owner’s facility.” In order to allow the TOP the discretion for how to provide a voltage schedule, the phrase has been removed.

#### *Technically Justified Schedules/Tolerance Bands*

- Several commenters expressed concern because the standards did not require technically justified schedules or tolerance bands. In order to balance the needs for maintaining a TOP’s ability to monitor its system, the SDT did not add language requiring a “technically justified” schedule. Instead, the TOPs are now required under VAR-001-4 to provide the criteria to the GOPs for how the schedules were determined. This would provide GOPs with the ability to review technical documentation for schedules and tolerance bands, and this would prevent a TOP from having to dispute all of its schedules.

#### *Power System Stabilizer*

- Some commenters requested that the requirement for knowing the status of Power System Stabilizers (PSS) is a duplicate of the TOP standards. The VAR SDT determined that the importance of PSS monitoring varies by region and entity, and this requirement was removed because the TOP standards allow for the monitoring of certain data specifications. This allows the areas that require monitoring of the PSS to have this action included in the TOP data specifications, but for areas that do not need to monitor for reliability, the PSS will not have to be included. PSS equipment has not been removed from VAR-002-3 notification requirements because that equipment is part of the automatic voltage regulator (AVR).

#### *Tap Setting Changes*

- Many entities commented that the tap setting changes should have an “agreed upon” timeframe for making those changes. In order to maintain the TOPs authority, the VAR SDT only modified VAR-001-4 to require TOPs to include an implementation schedule as part of the tap setting consultation. However, the standard was not modified to require a particular timeframe for when a unit must be taken off line to make a tap setting change.

## **VAR-002 Comments**

#### *Testing*

- Some commenters suggested modifying VAR-002-3 Requirement R1 to allow for testing of a unit. The revised standard now lists testing as a time when the unit does not have to be in AVR.

#### *Multiple AVR Settings*

- A commenter requested that the standard be updated to allow for multiple AVR settings if necessary for reliability purposes. The VAR-001-4 standard has been updated to allow for the TOPs to provide very

flexible exemptions based on system needs. These exemptions encompass being in various AVR settings based on the TOP's exemption criteria.

#### *Timeframes for Notifications*

- Many commenters questioned the timeframes proposed as a non-compliance window. It was very difficult to set a minimum notification requirement for the entire continent, particularly for being out of schedule, so the SDT opted to allow the TOPs to tailor when it should be notified by GOPs. Therefore, VAR-001-4 has a requirement to provide GOPs with their notification requirements for being out of schedule or tolerance based on system needs.

#### *Monitoring and Conversion of a High-Side Schedule*

- Although the VAR SDT initially added that the conversion of a high-side voltage schedule was acceptable in the measures for VAR-002-3, there were numerous comments that this needed to be a requirement. Thus, the VAR SDT added the requirement to provide conversion methodology for those units that do not have high-side monitoring capability.

#### *Facility Ratings*

- Some commenters suggested changing "Facility Ratings" to capability. The VAR SDT adopted this change.

#### *VRFs/VSLs*

- Some commenters recommended changes to the VRFs/VSLs for VAR-002-3 because they can be interpreted as being too severe with little to no reliability benefit. The VSLs have been simplified, and the VAR SDT modified the VRFs/VSLs significantly by removing several time constraints. The team reviewed the revised VSLs against the FERC order regarding VSL guidelines (123 FERC ¶ 61284).

#### *Generator Owner*

- One commenter suggested that the tap setting changes requirement should not include both the Generator Owner (GO) and GOP. However, both entities should be included. Several GOs are impacted when a unit has to come off-line, but the GOP is the one that will usually performs the actual changes.

## **Compliance Input**

Comments were received regarding the posting of a Reliability Standards Audit Worksheet (RSAW). NERC is providing a Compliance Input document that acts as a draft RSAW and addresses compliance assessment questions for the draft standard.

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## Attachment A – SDT Members Contact Information

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	Participant	Entity
Chair	Bill Harm	PJM
Vice Chair	Martin Kaufman	ExxonMobil Research and Engineering
Member	Stephen Hitchens	Bonneville Power Authority
Member	Sharma Kolluri	Entergy
Member	Hari Singh	Xcel
Member	Joshua Pierce	Southern Company
Member	Joe Seabrook	Puget Sound Energy
Member	Scott Berry	Indiana Municipal Power Authority
Member	Brian Buckley	Tampa Electric Company
Member	Mike Swearingen	Tri-County Electric Cooperative
Member	Hamid Zakery	Calpine