

Meeting Notes

Project 2016-EPR-02 Enhanced Periodic Review of VAR Standards

November 22, December 6 and 8, 2016¹

Conference Calls

Administrative

1. Introductions

The meeting was brought to order by the Chair, S. Solis at 2:00 p.m. Eastern on Tuesday, November 22, 2016. S. Solis provided the team with general comments and a note that he would cover items from a recent ISO/RTO engagement. Those in attendance were:

Name	Company	Member/ Observer	11/22	12/8
Stephen Solis	Electric Reliability Council of Texas, Inc. (ERCOT)	Chair	Y	Y
Dennis Sauriol	American Electric Power (AEP)	Vice Chair	Y	Y
Alex Chua	Pacific Gas & Electric (PG&E)	Member	-	Y
Kevin Harrison	ITC Holdings	Member	Y	Y
Bill Harm	PJM Interconnection, LLC	Member	Y	-
Tim Kucey	PSEG Fossil, LLC	Member	-	Y
Michael Scott	NextEra Energy, Inc.	Member	Y	Y
Amy Casuscelli	Xcel Energy	PMOS Liaison	Y	-
Laura Anderson	North American Electric Reliability Corporation	NERC Staff	Y	Y
Scott Barfield-McGinnis	North American Electric Reliability Corporation	NERC Staff	Y	Y

¹ The December 6, 2017 call was cancelled.

Name	Company	Member/ Observer	11/22	12/8
Soo Jin Kim	North American Electric Reliability Corporation	NERC Staff	-	Y
Lauren Perotti	North American Electric Reliability Corporation	NERC Staff	Y	-
Juan Villar	Federal Energy Regulatory Commission (FERC)	Observer	-	Y
Juan Luz	Federal Energy Regulatory Commission (FERC)	Observer	Y	Y
Greg Anderson	Southern California Edison	Observer	Y	-
Terry Crawley	Southern Generation	Observer	-	Y
Nick Griffin	ATC	Observer	-	Y
Shane Kronebusch	L&S Electric, Inc.	Observer	Y	-
Steve Rueckert	Western Electricity Coordinating Council	Observer	Y	-

2. Determination of Quorum

The rule for NERC Standard Drafting Team (SDT or team) states that a quorum requires two-thirds of the voting members of the SDT. Quorum was achieved as five of the seven members were present on November 22, 2016 and six of the seven members on December 8, 2016. The December 6, 2016 call was cancelled.

3. NERC Antitrust Compliance Guidelines and Public Announcement

NERC Antitrust Compliance Guidelines and public announcement were read by S. Barfield-McGinnis. The group was reminded at the beginning of each call that participants are under the guidelines. There were no questions.

4. Roster Updates

The team reviewed the roster and confirmed that it was accurate and up to date.

5. Review Meeting Agenda and Objectives

S. Barfield-McGinnis reviewed the meeting agenda and noted that the team would be discussing the WECC variance in addition to the other agenda items.

Agenda

1. WECC Variance Discussion

S. Solis pointed out that the enhanced periodic review team (EPRT) may be recommending the later standard drafting team to consider whether “voltage schedule” and/or “reactive power schedule” needs defining. G. Anderson commented the variance was addressing issues raised of maintaining a target. For example, without a band a generator operator would have to constantly (i.e., actively) monitor the voltage in order to remain compliant. S. Kronebusch agreed that was his recollection. S. Rueckert recommended the EPRT review variance E.A.18 (an others) to consider whether it is desirable to have it in the continent-wide standard(s). Not that it is necessary, but does it make sense to do so. G. Anderson responded that his experience is to try to operate to the variance level at non-WECC resources, but was not sure if having something as stringent would be beneficial continent-wide. K. Harrison thought E.A.18, if incorporated into a continent-wide standard, should be considered for VAR-002 for correctness. S. Barfield-McGinnis took an action item to investigate what the process is to make revisions, should they occur, to the Regional variance and/or Regional Entity standard(s). S. Solis reiterated

2. Review of Notes from Previous Meetings

The SDT conducted a review of the October 25-27, 2016 meeting notes. The team made a few revisions and were satisfied with the content of the notes. S. Solis commented during the review of meeting notes that he received mixed comments from the ISO/RTO Council SRC and FAC drafting team on whether there are concerns about reactive reserves. Some understood the issue, but there was no definitive direction on whether the EPRT should address. S. Solis recommended that S. Barfield-McGinnis check with NERC staff on how to go forward before the ERPT makes a recommendation.

3. Develop Recommendations

The team reviewed the comments from the Standing Review Team (SRT) grading process. Those comments included:

- VAR-001-4.1, R4
 - Revisit due to NERC rating it lower
- VAR-001-4.1, R6
 - G. Zito—considering a timeframe for when the TOP provide documentation to the GO
 - J. Case—this looks like a procedure rather than a requirement
- VAR-002-4, R1
 - Comments from G. Zito—DGR considerations
- VAR-002-4, R4
 - Either strike the word “status” or include the same bullet in R3 as well
 - Visit whether criteria should be spelled out or self-developed for “status”
 - What constitutes a status change? That should be communicated to the TOP

- General comments regarding changing facts and circumstances

The team reviewed and added items to their recommendations list to eventually be added to the template.

4. Development of VAR-001-4.1 Template

The team started the December 8, 2016 conference call by going through the template containing the team's observations from the periodic review. T. Crawley asked if the team had discussed temporary or permanent exemptions under VAR-001-4.1, Requirements R4/R5. Specifically, the team had not and would consider the thought under item 6 of the template. After further review, T. Crawley believed the team's recommendation listed below captured the thought in the clause "...or possibly some other action."

*For VAR-001-4.1 R4, the PRT identified possible concerns that the TOP or GOP may need to raise concerns over the inability to meet the voltage schedule. This concern may result in an exemption, voltage schedule revision, **or possibly some other action**. The SDT should consider if this concern should be addressed with a revision to the Standard or some equivalent technical guidance (e.g., guideline). If changes are implemented to address concerns around monitoring reactive reserves, those changes may minimize or fully address this concern. Maintaining reactive reserves may cause an operator to take action to prevent a unit from running out of reactive capability.*

The team reviewed their observation about adding background to the Guidelines and Technical Basis regarding implementation of seasonal Voltage schedules. The team concurred it was duplicative of another recommendation concerning Requirement R5.

The team re-reviewed the comments from PSEG and elected to remove ("The PRT considered a PSEG recommendation to require the schedule to be provided in writing, however requiring a voltage schedule in writing restricts the availability to provide dynamic schedules.") since it was only information and not a recommendation. T. Kucey (PSEG) was amendable to moving to the meeting notes as noted here:

1. It makes no sense for the TOP to have situational awareness then tell a GOP not to inform the TOP of a status. Does 30 minutes timeframe align with reliability for "situational awareness." Where IRO-010 may allow for notification and more frequent periodicity, is 30 min sufficient? The PRT can consider in terms of RTA where 30 min makes sense to me or real time monitoring where less than 30 min may make sense.
2. Wind generators struggle with understanding what an AVR or "alternative voltage controlling" device is or appear to struggle when asked about them. There are wind farm management systems (and other controlling mechanisms) that are available for controlling voltage. This appears to be education outreach in addition to the issues noted on the subject. Various interpretations on what constitutes the AVR. Definitions will help, but is there a recommendation for technical guidance here, or educational outreach beyond our current recommendation.

3. Examples of an “alternative method to control” voltage may be beneficial (when the AVR is out of service). This is beneficial guidance that can be suggested.
4. In VAR-001 the issue of an AVR at a wind facility is exacerbated by 5.1 language (“the AVR is in service...”). This concern is partially addressed by defining what an AVR is, but maybe a more general recommendation to review any VAR-001 and VAR-002 changes to ensure that together the two standards complement each other.

5. Action Items

- a. S. Barfield will investigate the process for Regional Entity standards versus continent-wide variances.
- b. S. Barfield-McGinnis will have S. Rueckert, G. Anderson, and S. Kronebusch added to the EPRT plus list.
- c. S. Barfield-McGinnis will reach out to NERC’s Essential Reliability Services Working Group (ERSWG) that is working on the concern of reactive reserves to determine if the topic will be addressed by the working group or should the EPRT make recommendations or support the ERSWG.
- d. S. Barfield-McGinnis will reach out to the previous DGR drafting team to see if they have any concerns within the VAR standards.
- e. A. Chua will provide additional text for Requirement R5 concerning the exemption relating to his comments about VAR operations in the WECC Region.

6. Future Meeting(s)

- a. Conference call on December 6, 2016 from 2:00 – 4:00 p.m. Eastern (cancelled)
- b. Conference call on December 8, 2016 from 2:00 – 4:00 p.m. Eastern
- c. Conference calls before the holidays and in early January 2017 – to be determined

7. Adjourn

The meeting adjourned 5:02 p.m. Eastern on Thursday, December 8, 2016.