Unofficial Comment Form

Project 2016-EPR-02 Enhanced Periodic Review of Voltage and
Reactive (VAR) Standards | VAR-002-4

**Do not** use this form for submitting comments. Use the [electronic form](https://sbs.nerc.net/) to submit comments on the
**VAR-002-4 standard template**. The electronic form must be submitted by **8 p.m. Eastern, Thursday, April 13, 2017.**

Additional information is available on the [Project 2016-EPR-02 VAR page](http://www.nerc.com/pa/Stand/Pages/Project-2016-EPR-02-Enhanced-Periodic-Review-of-Voltage-and-Reactive-Standards.aspx). If you have questions, contact Senior Standards Developer, Scott Barfield-McGinnis (via email), or at (404) 446-9689.

**Executive Summary**

The periodic review team completed a comprehensive review of VAR-002-4 – Generator Operation for Maintaining Network Voltage Schedules. The team found the standard is sufficient to protect reliability and meet the reliability objective of the standard; however, there may be future opportunity to improve a non-substantive or insignificant quality and content issue. As such, the periodic team seeks comments to the following observations. Comments received from industry will be used to make a final recommendation of whether or not revisions are required to support reliability with a periodic review team initiated Standards Authorization Request.

Requirement 2, Part 2.3 is prescriptive and not performance based. It is not clear whether a methodology is required or equipment. The phrase "existing equipment" in Measure M2 causes this confusion. The phrase should be removed to eliminate an implied requirement or revise the requirement to be explicit.

Additionally, in the main part of Measure M2 the first sentence of the measure (“In order to identify when a generator is deviating from its schedule, the Generator Operator (GOP) will monitor voltage based on existing equipment at its Facility.”) implies a performance (i.e., monitoring) that is not required, but implicit. This sentence should be revised to remove the inference and moved to Part 2.3 of the measure to align with the requirement.

Requirement R3, does not identify the Reliability Coordinator (RC) to be included in notifications. A clarification on how the RC might receive automatic voltage regulator (AVR) notifications may be important as the AVR status could impact a System Operating Limit or Interconnection Reliability Operating Limit value. This may be addressed by a revision of VAR-001-4, alternative guidance, or existing requirements (e.g., IRO-010-2 – *Reliability Coordinator Data Specification and Collection* as the method for acquiring necessary notifications).

## Questions

1. VAR-002-4, Requirement R2, requires the GOP to maintain generator voltage or Reactive Power schedule. Requirement R2, Part 2.3 requires a methodology for converting the voltage to the point being monitored by GOP, as applicable. Is Requirement R2, Part 2.3 necessary as a Requirement or is it sufficient to be a Measure (or technical guidance) of maintaining the voltage or Reactive Power schedule as required by Requirement R2? If yes, please explain.

[ ]  Yes

[ ]  No

Comments:

1. In VAR-002-4 Requirement R3 the GOP notifies the TOP when the AVR status has changed after 30 minutes. There is no requirement for a notification from either the TOP (or GOP) to be submitted to the RC. Is there an impact to reliability? If yes, please explain.

[ ]  Yes

[ ]  No

Comments:

1. There are a number of errata (i.e., administrative) type observations listed in Attachment 4 of the VAR-002-4 template. If you disagree with any of the observations, please list the reference number when providing comment.

Comments:

1. There are a number of other observations in Attachment 5 of the VAR-002-4 template that could enhance the standard, but would require a drafting team to develop for industry feedback. If you have any comments about these, please list the reference number when providing comment.

Comments:

1. The team did not identify a concern related to cost effectiveness as drafted.  Do you agree?  If not, please provide additional detail.

[ ]  Yes

[ ]  No

Comments:

1. Given the items identified by the periodic review team in the VAR-002-4 template, do you agree that the Reliability Standard is sufficient to protect reliability and meet the reliability objective of the standard and does not need immediate modification through standards development; however, there may be a future opportunity to improve any non-substantive or insignificant quality and content issues? If you have any other comments on this review that you haven’t already mentioned above, please provide them here.

[ ]  Yes

[ ]  No

Comments: