Unofficial Comment Form
Project 2011-INT-02 - Rapid Revision to Address Interpretation of VAR-002 for Constellation

Please DO NOT use this form for submitting comments. Please use the electronic form to submit comments on the Standard. The electronic comment form must be completed by June 20, 2012.

If you have questions please contact Stephen Crutchfield at Stephen.crutchfield@nerc.net or by telephone at 609-651-9455.

Background Information
The drafting team received feedback from stakeholders concerning the rapid revision process as well as the specific language that was proposed to address the interpretation request. The drafting team is posting the revised standard for a concurrent 30 day formal comment period and successive ballot. The intent of the rapid revision is to add clarity to the existing FERC approved standard regarding the AVR status during generator startup and shut down. The Standards Committee and the SDT felt that a Rapid Revision provided greater clarity on the issue raised by the Interpretation request. The Rapid Revision provides a change in the VAR-002 Requirement language which directly addresses the Interpretation request. This approach gives greater certainty to the entities subject to the standard.

In response to industry comments on the rapid revision, the SDT has revised the wording to add further clarity to the standard. The revised requirement now reads:

R1. The Generator Operator shall operate each generator connected to the interconnected transmission system in the automatic voltage control mode (automatic voltage regulator in service and controlling voltage) unless the Generator Operator has notified the Transmission Operator of one of the following: [Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]

- That the generator is being operated in start-up\(^1\) or shutdown\(^2\) pursuant to a Real-time communication or a procedure that was previously provided to the Transmission Operator; or

- That the generator is not being operated in the automatic voltage control mode for a reason other than start-up, shutdown.

\(^1\) Start-up is deemed to have ended when the generator is ramped up to its minimum continuously sustainable load and the generator is preparing for continuous operation.

\(^2\) Shutdown is deemed to begin when the generator is ramped down to its minimum continuously sustainable load and the generator is preparing to go offline.
**M1.** The Generator Operator shall have evidence to show that it notified its associated Transmission Operator any time it failed to operate a generator in the automatic voltage control mode as specified in Requirement 1. If a generator is being started up or shut down with the automatic voltage control off and no notification of the AVR status is made to the Transmission Operator, the Generator Operator will have evidence that it notified the Transmission Operator of its procedure for placing the unit into automatic voltage control mode. Such evidence must include, but is not limited to, dated evidence of transmittal of the procedure such as an electronic message or a transmittal letter with the procedure included or attached.

The scope of the rapid revision project was also expanded to include revisions to Requirement R2 and its VSLs. The SDT received approval from the SC to address deficiencies in Requirement R2 and has made further changes to R2 to address stakeholder concerns. Requirement R2 is intrinsically linked to VAR-001-2, Requirement R4:

**R4.** Each Transmission Operator shall specify a voltage or Reactive Power schedule at the interconnection between the generator facility and the Transmission Owner’s facilities to be maintained by each generator. The Transmission Operator shall provide the voltage or Reactive Power schedule to the associated Generator Operator and direct the Generator Operator to comply with the schedule in automatic voltage control mode (AVR in service and controlling voltage).

The footnote associated with the above requirement states:

> ¹The voltage schedule is a target voltage to be maintained within a tolerance band during a specified period.

The SDT has revised VAR-002-2b, R2 to change the word “output” to “schedule” to reflect the link between VAR-001-2, R4 and VAR-002-2b, R2. The SDT also added the footnote to VAR-002-2b, R2:

**R2.** Unless exempted by the Transmission Operator, each Generator Operator shall maintain the generator voltage or Reactive Power schedule (within applicable Facility Ratings) as directed by the Transmission Operator. [Violation Risk Factor: Medium] [Time Horizon: Real-time Operations]

**R2.1.** When a generator’s automatic voltage regulator is out of service, the Generator Operator shall use an alternative method to control the generator voltage and reactive output to meet the voltage or Reactive Power schedule directed by the Transmission Operator.

**R2.2.** When directed to modify voltage, the Generator Operator shall comply or provide an explanation of why the schedule cannot be met.
Footnote 3 for R2 above is a variation of the footnote from VAR-001-2, R4 above, with more explanation about who establishes the target schedule and tolerance band:

3 The voltage or Reactive Power schedule is a target value communicated by the Transmission Operator to the Generator Operator establishing a tolerance band within which the target value is to be maintained during a specified period.

The VSLs for R2 were revised to reflect a violation based on the time the Generator Operator operated the generator outside the voltage or Reactive Power schedule range. The lower VSL is for violations of less than 5 minutes. The VSLs are written such that each is incremented 5 minutes until a severe VSL is:

When directed by the Transmission Operator to maintain the generator voltage or reactive power schedule the Generator Operator failed to meet the directed values for more than 15 minutes.
You do not have to answer all questions. Enter all comments in simple text format. Bullets, numbers, and special formatting will not be retained.

Insert a “check” mark in the appropriate boxes by double-clicking the gray areas.

Questions

1. The scope of the SDT has been revised to address deficiencies in Requirement R2 and its associated VSLs. Do you agree with the proposed revisions to Requirement R2 and its VSLs? If No, please explain your concerns.
   - Yes
   - No
   Comments:

2. If you have any other comments on the SAR or on the proposed Standard that you have not provided above, please provide them here.
   Comments: