

IESO Communication on Standards – Interpretation to VAR-002

Please review the attached NERC announcement regarding interpretation of VAR-002-1 (Generator Operation for Maintaining Network Voltage Schedules), Requirements 1 and 2

Sent: March 15, 2007 3:04 PM

Subject: Announcement: Pre-ballot Window and Ballot Pool Open on March 15, 2007

This email was sent to the standards List Serve
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Maureen E. Long
Standards ProcessManager



March 15, 2007

TO: REGISTERED BALLOT BODY

Ladies and Gentlemen:

**Announcement:
Pre-ballot Window and Ballot Pool Open on March 15, 2007**

The Standards Committee announces the following standards actions:

Pre-ballot Window and Ballot Pool Open on March 15, 2007 for Interpretation of VAR-002-1, Requirements 1 and 2

Mariner Consulting Services, Inc., requested a formal interpretation to VAR-002-1 — Generator Operation for Maintaining Network Voltage Schedules, Requirements 1 and 2. Members of the Phase III–IV Standards Drafting Team, working with NERC staff, developed the interpretation.

VAR-002-1, Requirements 1 and 2 states:

- 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.

- R2.** Unless exempted by the Transmission Operator, each Generator Operator shall maintain the generator voltage or Reactive Power output (within applicable Facility Ratings^[1]) as directed by the Transmission Operator.
- R3.** 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.
- R4.** When directed to modify voltage, the Generator Operator shall comply or provide an explanation of why the schedule cannot be met.

Two specific questions need to be answered.

- *First, does AVR operation in the constant PF or constant Mvar modes comply with R1?*

Answer: No, only operation in constant voltage mode meets this requirement. This answer is predicated on the assumption that the generator has the physical equipment that will allow such operation and that the Transmission Operator has not directed the generator to run in a mode other than constant voltage.

- *Second, does R2 give the Transmission Operator the option of directing the Generation Owner to operate the AVR in the constant Pf or constant Mvar modes rather than the constant voltage mode?*

Yes, if the Transmission Operator specifically directs a Generator Operator to operate the AVR in a mode other than constant voltage mode, then that directed mode of AVR operation is allowed.

In accordance with the *Reliability Standards Development Procedure*, the interpretation must be posted for a 30-day, pre-ballot review, and then balloted. There is no public comment period for an interpretation. Balloting will be conducted following the same method used for balloting standards. If the interpretation is approved by its ballot pool, then the interpretation will be appended to the standard and will become effective when adopted by the NERC Board of Trustees and approved by the applicable regulatory authorities. The interpretation will remain appended to the standard until the standard is revised through the normal standards development process. When the standard is revised, the clarifications provided by the interpretation will be incorporated into the revised standard.

The [Interpretation of VAR-002-1, Requirements 1 and 2](#) is posted for a 30-day, pre-ballot review. A [ballot pool](#) to vote on the interpretation has been formed and will remain open through 8 a.m. (EDT) Friday, April 16, 2007. During the pre-ballot window, members of the ballot pool may communicate with one another by using their "ballot pool list server." The list server for this ballot pool is called: bp-interpret_var-002-1_in@nerc.com

Before joining the ballot pool, please make sure that you will be available during the ballot window to cast your ballot. The initial ballot for the interpretation to VAR-002-1 will be

^[1] When a Generator is operating in manual control, reactive power capability may change based on stability considerations and this will lead to a change in the associated Facility Ratings.

conducted from 8 a.m. (EDT) on Friday, April 16 through 8 p.m. (EDT) Monday, April 26, 2006.

Standards Development Process

The [Reliability Standards Development Procedure](#) contains all the procedures governing the standards development process. The success of the NERC standards development process depends on stakeholder participation. We extend our thanks to all those who participate. If you have any questions, please contact me at 813-468-5998 or maureen.long@nerc.net.

Sincerely,

Maureen E. Long

cc: Registered Ballot Body Registered Users
Standards Mailing List
NERC Roster