

Unofficial Comment Form for Project 2008-01 — Voltage and Reactive Planning and Control

Please **DO NOT** use this form. Please use the [electronic comment form](#) located at the link below to submit comments on the proposed SAR for Voltage and Reactive Planning and Control. Comments must be submitted by **September 14, 2009**. If you have questions please contact Stephen Crutchfield by e-mail at Stephen.crutchfield@nerc.net or by telephone at 609-651-9455.

http://www.nerc.com/filez/standards/Project2008-01_Voltage_and_Reactive_Planning_and_Control.html

Background:

In August 2008 the Transmission Issues Subcommittee (TIS) formed the Reactive Support/Control Subteam (RSCS) to develop a report to address the fundamental issues associated with voltage and reactive control. The results of the report are being used to support improvements to the existing VAR standards, and may result in development of an additional VAR standard:

VAR-001-1a — Voltage and Reactive Control

VAR-002-1 — Generator Operation for Maintaining Network Voltage Schedules

The Reactive Support and Control White Paper was produced by the TIS and identifies technical requirements needed to determine the reactive resources required under different system states. The white paper identifies the need for requirements that address:

- Criteria and associated rationale needed to determine the split of dynamic reactive supply (such as reactive power provided by the generators and other dynamic devices) and static reactive power supply (such as static capacitors and other static devices).
- Criteria for distribution of the Interconnection's reactive resource needs among transmission, distribution, and generation facilities.

Please review the SAR and the Reactive Support and Control White Paper, and then answer the following questions on the electronic comment form.

1. Do you agree that there is a reliability-related need for the proposed standards action? If not, please explain in the comment area.

Yes

No

Comments:

We only agree because BES reliability might be enhanced by suitable improvements to the existing VAR standards. There have not been many events of unreliable BES voltage levels or voltage instability. We agree the VAR standards need to be reviewed and improvements could be made.

2. Do you agree with the scope of the proposed standards action? If not, please explain in the comment area.

Yes

No

Comments:

While the scope of the SAR should include addressing the FERC Order 693 directives, we urge the use of caution in utilizing elements in the TIS "Reactive Support & Control Whitepaper" that have not been tested or proven.

The scope of the SAR and associated whitepaper could cause the standards drafting team to focus their efforts on developing a prescriptive standard that focuses on "how" rather than "what". As an example, the SAR proposes to establish dynamic reactive power requirements and along with the white paper implies this should be a percentage of the overall reactive capability. There are other equally or more effective ways to ensure there is sufficient dynamic reactive power capability on-line that do not involve setting a percentage threshold. Establishing a voltage drop or deviation threshold following a contingency is one example that will allow an entity to manage dynamic reactive power without setting a direct threshold. The standard should not be so prescriptive that it prevents an entity from meeting the requirements in this manner.

3. Do you agree that the scope of the proposed standards action addresses the relevant directives from Order 693? If you disagree with the proposed method of addressing a directive, or if you believe that one or more of the directives isn't addressed, please identify the directive and provide a suggestion for achieving the reliability intent of that directive.

Yes

No

Comments:

We believe the scope of the drafting team is clear that it plans to address the FERC directives. We caution and remind the drafting team that by the Commission's own statements in subsequent standards rulings and orders that the directives only require

the drafting team to consider the reliability intent of the directive and the drafting team could offer equally effective alternatives to the Commission's directives. Furthermore, the NERC standards committee has developed a policy that FERC directives must be addressed by implementing the recommendation, developing an equally effective alternative or providing a reliability reason why implementation of the directive is unnecessary or might compromise reliability.

4. Do you agree with the applicability of the proposed standards action? If not, please explain in the comment area.

Yes

No

Comments:

A. Resource Planning has historically focused on ensuring an LSE has real power (MW) resources sufficient to supply its real load plus reserve margin; this is a generation planning function. In contrast, Voltage and Reactive Planning and Control are primarily transmission planning and transmission operation functions. Any contemplated standard should avoid requiring a Resource Planner, Generator Owner, or Generator Operator in any way to morph into a Transmission Planner.

Generation Owners can provide information about the VAR and voltage control capabilities of the resources (generators) under their control. Generator owners can comply with requirements of generator interconnection agreements. Generator operators can, within the operating limits of the generators, follow prescribed voltage schedules. But Generator Owners/Operators and Resource Planners who are not also Transmission Planners and Transmission Operators are not in a position to develop, and should not have responsibility for developing, voltage or VAR plans and should not have responsibility for controlling transmission system voltage, except that Generator Operators should follow reasonable and prudent directions from the Transmission Operator in providing system voltage support.

Assessing VAR adequacy and developing voltage and VAR plans are Transmission Planning functions that require the use of transmission system models and simulations. Similarly, ensuring VAR adequacy for the transmission system should be a transmission system planning and operating responsibility. Controlling transmission voltages should be the responsibility of the Transmission Operator with authority to direct resource operators to follow voltage or VAR schedules within the resource operating limits.

B. We do not know of specific reasons why the standard should be applicable to the Load Servicing Entity, Distribution Provider, Purchase Servicing Entity, Market Operator, or Resource Planner. It is unclear why the DP should be applicable in this instance please share the rationale for their inclusion.

C. We also believe the BA may have a small role such as following the directive of a TOP or RC to adjust generation patterns to allow more VAR output from generators or to bring off-line generators on-line for VAR support.

5. If you are aware of the need for any regional variances or business practices that should be considered with this SAR, please identify them.

Regional Variance:

Business Practice:

6. If you have any other comments on the SAR that you haven't already provided in response to the previous questions, please provide them here.

Comments:

FERC order 672 indicated a standard should be clear and unambiguous. A standard should focus on what is required and not how this can be accomplished. The TIS "Reactive Support & Control Whitepaper" is prescriptive.