

## Unofficial Comment Form for Project 2008-02 — Undervoltage Load Shedding

Please DO NOT use this form. Please use the electronic 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 **February 19, 2009**. If you have questions please contact Stephen Crutchfield by email at [Stephen.crutchfield@nerc.net](mailto:Stephen.crutchfield@nerc.net) or by telephone at 609-651-9455.

### Background:

The purpose of the SAR is to improve the existing standards on Under Voltage Load Shedding (UVLS) to include criteria for Under Voltage Load Shedding programs such that the programs work as intended to shed load when needed and prevent voltage collapse and voltage instability in the Bulk Electric System.

There are two standards to be revised under this SAR:

PRC-010-0 — “Assessment of the Design and Effectiveness of UVLS Program” specifies requirements for the responsible entity to periodically conduct and document an assessment of the effectiveness of the UVLS program.

PRC-022-1 — “Under-Voltage Load Shedding Program Performance” specifies requirements for responsible entities to analyze and document operation and misoperation of UVLS systems.

Conforming revisions to the TPL family of standards may be necessary.

Load characteristics have changed drastically over the last few years and Fault-Induced Delayed Voltage Recovery (FIDVR) events have become increasingly more probable with the increased penetration of low-inertia air conditioner loads that lack compressor undervoltage protection. Protection and controls impacts on FIDVR events abound. Requirements are needed for FIDVR studies that include protection and controls actions and potential misoperations.

Two 2003 Blackout recommendations 8b and 13c relating to UVLS need to be considered in the standard development process.

Recommendation 8b: Each regional reliability council shall complete an evaluation of the feasibility and benefits of installing under-voltage load shedding capability in load centers within the region that could become unstable as a result of being deficient in reactive power following credible multiple-contingency events. The regions are to complete the initial studies and report the results to NERC within one year. The regions are requested to promote the installation of under-voltage load shedding capabilities within critical areas, as determined by the studies to be effective in preventing an uncontrolled cascade of the power system.

Recommendation 13c: The Planning Committee, working in conjunction with the regional reliability councils, shall within two years reevaluate the criteria, methods and practices used for system design, planning and analysis; and shall report the results and recommendations to the NERC board. This review shall include an evaluation of transmission facility ratings methods and practices, and the sharing of consistent ratings information.

Technical studies addressing FIDVR and the two blackout recommendations, as well as an evaluation of the existing standards have been prepared by various NERC technical committees and identify areas where the existing standards need improvement to prevent voltage collapse and voltage instability through UVLS programs.

Please review the SAR and then answer the following questions.

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:

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

Yes

No

Comments:

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:

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

Yes

No

Comments: The applicability should be limited to those registered entities where a UVLS program is needed as determined by a regional analysis as developed by entities which have a wide-area view.

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: N/A

Business Practice: N/A

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: