

## Meeting Minutes Project 2008-02 Undervoltage Load Shedding Standard Drafting Team

August 16, 2013 | 3:00–5:00 p.m. ET

Conference Call with ReadyTalk Web Access

### Administrative

#### 1. Introductions and chair remarks

E. Chanzas, NERC brought the meeting to order at 3:00 p.m. There were no chair remarks as Chairman G. Vassallo, BPA was not able to attend. Those in attendance were:

Name	Company	Member or Observer
José Conto	ERCOT	Member
Erika Chanzas (Standards Developer)	NERC	Observer
Bill Harm	PJM	Member
Sharma Kolluri	Entergy	Member
Ben Lewiski	Midwest Reliability	Observer
Charles-Eric Langlois	Hydro-Quebec	Member
Steve Myers	ERCOT	Observer
Manish Patel	Southern Company	Member
Fabio Rodriguez	Duke Energy	Member
Anthony Sleva	Altran	Member
Jennifer Sterling	Exelon	Observer
Matthew Tackett	MISO	Member
Phil Tatro (Technical Advisor)	NERC	Observer

## 2. Determination of quorum

The rule for NERC standard drafting team (SDT or team) states that a quorum requires two-thirds of the voting members of the SDT. Quorum was achieved as 8 of the 11 SDT members were present.

## 3. NERC Antitrust Compliance Guidelines and Public Announcement, Email Listserv Policy, and Participant Conduct Policy

The NERC Antitrust Compliance Guidelines and public announcement were reviewed by E. Chanzas. E. Chanzas also gave an overview of the Participant Conduct and Email Listserv policies.

## 4. Review meeting agenda and objectives

E. Chanzas noted that the goal of this conference call is to firm up the SAR, definition, requirements, measures, and rationale boxes for an internal NERC quality review. This will allow the team to address quality review comments at the next SDT meeting in preparation for posting the SAR and supportive draft standard language for an informal comment period in early to mid-September.

## Agenda Items

### 1. Review definition, requirements, measures, and rationales

- a. E. Chanzas brought up the definition of Automatic UVLS Program, which was currently defined as:

A coordinated load shedding program consisting of distributed controls or relays that automatically protect portions of the BES against severe undervoltage conditions. Locally applied undervoltage relays intended to protect the local load, which are not part of a coordinated program, are not included in the above definition. Centrally-controlled undervoltage-based load shedding programs are also not included in the above definition.

- b. The team then looked at proposed changes sent by C. Langlois, Hydro-Quebec, which were then sent with additional tweaks from H. Singh, Xcel Energy, which changed the definition to:

A coordinated automatic load shedding program consisting of distributed controls or relays used to protect portions of the BES against severe undervoltage conditions by arresting voltage decline and thus preventing cascading voltage collapse in the BES. This excludes undervoltage-based load shedding that is centrally-controlled (e.g., by EMS in control center) or one that is used to arrest voltage decline limited to a local portion of the BES.

- c. The team expressed that this was too much of a rewrite. There was agreement that neither the term wide area nor the phrase portions of the BES should be used.
- d. P. Tatro, NERC confirmed that the intention is to add this term to the NERC Glossary upon the standard's effective date. He then noted that the last sentence of the revised definition seems to

treat the two exclusions equally. P. Tatro also raised the question if the language should say that centrally-controlled UVLS is considered an SPS. The team noted that they were hesitant to say that it's something else—we should only say what it's not.

- e. P. Tatro pointed out that the real issue is that there needs to be some sort of background. The team agreed that a rationale box should be included with the definition and would be added at a later time.
- f. The team looked at the existing definition and changed “Locally applied undervoltage relays intended to protect the local load, which are not part of a coordinated program, are not included in the above definition” to “Undervoltage relays not part of a coordinated program that are used to protect local loads are not included in the above definition.”
- g. It was asked if someone would question what is meant by “local load”. There are different types of undervoltage relays; we need to specify that we’re talking about relays that shed load. In response, there was the concern that if you add the specificity, you’re essentially saying that undervoltage load shedding is not load shedding.
- h. It was pointed out that the decision tree that the team worked on at the last SDT meeting that illustrated how the team came to define the UVLS programs the standard is applicable to does not include the local relay exclusion. This might be something we t want to consider adding, depending on the purpose of the diagram (internal versus external).
- i. J. Sterling, Exelon noted that Exelon’s UVLS system is designed to be armed at a particular load level. How do they know if this is classified as centrally-controlled?
- j. The team wondered if taking out “undervoltage-based” from “centrally controlled undervoltage-based loading shedding programs are also not included in the above definition” would help avoid this confusion.
- k. S. Myers, ERCOT gave a suggestion of defining the UVLS program as those that are part of a CAP. The team responded by noting that we are not being that specific, and that one typically doesn’t think of a list of actions as a program.
- l. E. Chanzas pointed out that both J. Sterling and S. Myers’s comments demonstrate that the definition is unclear.
- m. The following wording was considered: “load shedding programs that include centrally-controlled elements.” It was explained that there are clearly defined centrally-controlled UVLS programs, but

some are more like hybrid schemes. The team also considered the terms central-controller and remote.

- n. The point was raised that the programs we're talking about have a single point of failure EMS, and that we opted to call these centrally-controlled.
- o. It was then suggested to simply add "or centrally-armed". The team was amenable to that term and the wording was changed to say "centrally-controlled or centrally-armed load shedding programs are also not included in the above definition".
- p. The team moved on to look at the Applicability section. E. Chanzas noted that now that we aren't including centrally-controlled UVLS programs, the team had said that it needs to reconsider the applicability to the RC and TOP.
- q. It was remarked that these entities should stay, but be moved to be encompassed with the TO and DP in the term UVLS entities. Some members disagreed because of how the requirements are written, and it was noted that PRC-006-1 UFLS does not include the RC or TOP.
- r. Members discussed that the RC and TOP only need to know how much load is shed; these entities wouldn't need anything more than the UFLS standard, and the UFLS standard does not include them. The team agreed and removed the RC and TOP from the Applicability section.
- s. The team then moved on to R1, which requires the PC or TP to consider coordination between the Automatic UVLS Program and applicable protection systems. The team reviewed the edits that had been provided M. Tackett, MISO, which added the word "other" before "applicable protection systems" and added the phrase "in the development or modification process" after it. The team did not think the edits were necessary.
- t. They moved on to M1, which notes that the PC or TP shall have evidence, such as reports or other documentation, that identifies the applicable protection and control systems that were considered. Noting that there are different levels and aspects to coordinate with, M. Tackett suggested the change in wording: "shall have evidence for Requirement R1 that must include, but is not limited to, documentation of the specific considerations given to coordination between the Automatic UVLS Program and other applicable protection and control systems."
- u. P. Tatro noted that the original wording was asking for a list and that the altered wording is getting more at a rationale. There is a difference between a list of considered systems and providing why you picked them.

- v. As the meeting was coming to a close, the team agreed to keep M. Tackett's edits to M1 for the time being.

## 2. **Review and revise SAR**

As the time spent during the meeting was taken up by the other agenda items, E. Chanzas noted that she would review the SAR and incorporate input she had received and would make any additional changes to bring the SAR in line with the current draft standard. She said she would send the edits to the group for review.

## 3. **Discuss August 26–28 SDT meeting expectations and logistics**

E. Chanzas explained that the August 26–28 SDT meeting at Xcel Energy in Denver, CO would need to focus on finalizing the revised SAR and draft standard for an informal comment period, during which they would review any comments from an internal NERC quality review as part of that process. She added that the other main focus will be setting a date for and developing talking points for an industry webinar to coincide with the informal comment period.

## 4. **Adjourn**

The meeting adjourned at 5:00 p.m. ET on Friday, August 16, 2013.