NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Meeting Notes
Project 2019-04 Modifications to PRC-005-6

May 4, 2021

Conference Call

Administrative

1. **Introductions**

   The meeting was brought to order by the Chair, Brian Kasmarzik, at 11:34 a.m. Eastern on Wednesday, May 4, 2021. Participants were introduced and those in attendance were:

Name	Company	Member/ Observer	In-person (Y/N)	Conference Call/Web (Y/N)
Brian Kasmarzik	Ameren Services	Member	N	Y
Devon Tremont	Tauton Municipal Lighting Plant	Member	N	Y
Giuseppe Giannuzzi	Hydro-Quebec	Member	N	Y
Eric Graftaas	Xcel Energy	Member	N	Y
Cesar Huerta	AEP	Member	N	Y
Randy Rhinier	Duke Energy	Member	N	Y
Mark Pratt	Southern Company	PMOS Liaison	N	Y
Laura Anderson	NERC	NERC Staff	N	Y
Daniel Woldermariam	FERC	FERC Observer	N	Y
Juan Villar	FERC	FERC Observer	N	Y
Paul Felker		Observer	N	Y
Don Steinmetz	Duke Energy	Observer	N	Y

Name	Company	Member/ Observer	In-person (Y/N)	Conference Call/Web (Y/N)
Louis Guidry	CLECO	Observer	N	Y
Toni Orth	Utility Services	Observer	N	Y
Philip Winston	IEEE	Observer	N	Y
Stephen Oskiera	Duke Energy	Observer	N	Y

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 6 of 8 total members were present.

3. **NERC Antitrust Compliance Guidelines and Public Announcement**
   NERC Antitrust Compliance Guidelines and public announcement were reviewed by Laura Anderson, NERC staff. There were no questions raised.

Agenda

1. **Review of Meeting Notes from Previous Meetings**
2. **Discussion**
   a. The SAR DT will consider adding definition of Protection System to the SAR based on comments received.
   b. The SAR DT discussed clarifying language for "other" control systems.
3. **Action Item Review**
   a. Discussion was held regarding draft responses to Question 2 of the Unofficial Comment Form: The SAR is meant to address control systems outside of Generating plant protection. For instance, synchronous condensors, Static Var Compensators, and Capacitor Banks utilize controllers or control systems which can (and often do) contain BES protective functions that respond to measured BES electrical quantities.

      The SAR Drafting Team agreed with comments received and has removed the word "other" from the SAR, editing the SAR to read, "Control systems that do not contain BES protective functions that respond to measured BES electrical quantities are not within the scope of this SAR. The clarifying changes would apply to the Facilities as defined in PRC-005-6."

      Per the NERC Standards Committee response to an RFI from Xcel Energy in 2016, AVR protective functions are already included within the applicability of the standard. The SAR Drafting Team seeks to add clarity by including this within the standard itself. The risk of BES protective functions failing and tripping unnecessarily is not mitigated by redundant protective relays. Additionally, data regarding the frequency of these types of misoperations is not available due to the lack of clarity as to whether these functions meet the definition of a Protection System (and therefore are subject to PRC-004 and its associated Section 1600 data request).

      The SAR Drafting Team considers the risk and probability of unmaintained protective functions causing Misoperations to be the same as the risk of unmaintained protective relays because they utilize the same technology and provide the same outcome. While the likelihood of a single transmission line misoperating due to a protective relay is both small and of minimal impact, the industry has already generally agreed that it is great enough to justify the existence of PRC-005. The SAR Drafting Team believes that same justification should be used for BES protective functions, especially those which protect the grid's most critical elements such as generators, which can have long lead times and cannot be quickly restored from an outage.

      The SAR and future standard drafting teams are tasked with producing quality standards centered around the risk to the Bulk Electric System, not around specific technologies such as synchronous generator excitation systems. Since failing to maintain BES protection systems embedded in control systems presents the same risk to the BES regardless of the control system in question (synchronous generator excitation system or otherwise), the scope was expanded to ensure the future standard drafting team has all the available tools to create a

standard which meets the quality and intent of NERC standards. This was based on industry comment in addition to the desire to produce quality standards.

b. Discussion was held regarding draft responses to Question 4 of the Unofficial Comment Form: From Page 98 of Supplementary Reference and FAQ PRC-005-6 Protection System, Automatic Reclosing, and Sudden Pressure Relaying Maintenance and Testing:

> "While UFLS and UVLS equipment are located on the distribution network, their job is to protect the Bulk Electric System. This is not beyond the scope of NERC's Section 215 authority. FPA section 215(a) definitions section defines bulk power system as: "(A) facilities and control Systems necessary for operating an interconnected electric energy transmission network (or any portion thereof)."

That definition, then, is limited by a later statement which adds the term bulk power system "…does not include facilities used in the local distribution of electric energy." Also, Section 215 also covers users, owners, and operators of bulk power Facilities. UFLS and UVLS (when the UVLS is installed to prevent system voltage collapse or voltage instability for BES reliability) are not "used in the local distribution of electric energy," despite their location on local distribution networks. Further, if UFLS/UVLS Facilities were not covered by the reliability standards, then in order to protect the integrity of the BES during under- frequency or under-voltage events, that Load would have to be shed at the Transmission bus to ensure the Load-generation balance and voltage stability is maintained on the BES."

4. Future meeting(s)

a. May 12, 2021 – Conference Call

b. May 26, 2021 – Conference Call

5. Adjourn

The meeting adjourned at 1:28 p.m. Eastern on May 4, 2021.