NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Meeting Notes
Project 2021-07 Extreme Cold Weather Grid Operations, Preparedness, and Coordination Standard Drafting Team

November 8 and 10, 2022 | 1:00 – 2:30 p.m. Eastern

Review NERC Antitrust Compliance Guidelines and Public Announcement
Alison Oswald, NERC staff, called attention to the NERC Antitrust Compliance Guidelines and the public meeting notice.

Roll Call and Determination of Quorum
A team roll call was performed and quorum was determined. The member attendance sheet is attached as attachment 1.

Opening Remarks
Lauren Perotti, NERC Legal, notified the team that Phase 1 was filed on 10/28/22 and assigned Docket RD231-000. A copy of the petition can be found on the NERC website. Comments close on 12/1/22.

EOP-012-1 Requirement R2
Brad Pabian introduced potential solution to clarify the intent and measures associated with EOP-012-1 Requirement R2 which is applicable to existing generators. The team discussed whether to add the demonstration of the one-hour capability into the requirement language instead of just leaving it in measures language. The team stated that entities must have reliable evidence that generators can run at the extreme cold weather temperature. The one-hour time frame was selected as a reasonable duration to be able to practically demonstrate capabilities.

FERC staff asked if the required duration should be longer so that generators are not perceived as doing the "minimum" effort to only be able to run for 60 minutes. The team discussed this concern and had the following feedback:

- Historical data is not kept forever.
- Only 2 out of 1,000 winter hours are statistically applicable in any given year.
- Need to have attainable method of demonstrating existing capability for units that are not having trouble in cold weather.
- Not in generators' interest to design systems so they just barely get by.

David Kezell asked if the one-hour time requirement should be exclusive to the measure and not in the requirement. It was suggested that R2 should require a longer duration such as 8 or 12 hours from a

design standpoint, but M2 would only require a demonstration of one hour. The leadership team believes that timeframe in the measure and requirement must match. It was also suggested to not include the timeframe in requirement and only include it in the measure.

Team agreed with utilizing language proposed by Brad Pabian and striking the one-hour duration references from R2. The team added "for a period of not less than one hour" to M2.

Matt Harward suggested a small edit to change operating to operation. Jill Loewer suggested breaking up the R2 Requirements into R2.1 and R2.2 sub-bullets to develop a CAP and update the plan with the new freeze protection measures, respectively. The team reviewed this suggestion and agreed to this edit.

David Lemmons suggested an edit to 'each generating unit' from "unit(s)". Observer Eric Jebsen asked for clarity on "generating unit" and if that means one wind turbine. David Kezell stated the team discussed this before. Matt Harward noted the team can look to the BES definition and the Inclusions.

Eric Jebsen also asks about how these edits will be incorporated with the Phase 1 edits which are in the process for FERC approval. Kenny Luebbert stated this Requirement has a long Implementation Plan so should not be an issue.

EOP-012-1 Requirement R2

Matt Harward suggested looking at the revised language of the requirement and expanding on the Measure language. David Huff from FERC asked if the 'may include' language in the Measure will cover the document added/new freeze protection measures in the requirement. B. Pabian noted he copied the language from other Measures, but agrees with D. Huff that this needs more clarity. Kenny Luebbert stated the 'may include' language gives GO multiple options about what is in the CAP. David Huff suggested language from R6.4, adding "their freeze protection measures". David Kezell suggested adding "list" to Cold Weather Critical Components. David Lemmons suggests adding "'and/or their freeze protection measures". The team agreed and made these changes.

Philip Shafeei asked how entities coordinate R2 and R6 when R6 gives the entity 150 days to develop a CAP but R2 does not give a timeframe. Kenny Luebbert noted R2 is forward looking, where R6 is reactive. An entity would have had a failure to operate, an Event that would trigger the CAP in R6.

Kenny Luebbert asked if the group felt we had addressed Recommendation 1b. David Huff asked about the "considering previous freeze related issues' part of the recommendation and if this had been covered. Kenny noted this should be incorporated in the Technical Rationale and agrees to write this up.

Recommendation 1c

The team began discussing recommendation 1c and David Huff suggested an edit to R3.5.2 to add additional language "incorporating the effects freezing precipitation and the accelerated cooling effect of wind, where known" to the requirement. David Kezell asked if R3.3 doesn't already cover this and what benefit is there to add it to R3.5.2. David Huff says Recommendation 1c was written specifically per EOP-011-2 R7.3.2, which does not translate to R3.5.2 in EOP-012-2, around temperature data that the

RC/BA/TOP might need in their data specifications. David Huff provided an example of installing a wind break per 3.3 and that lowers the temperature that you can operate at, so that's the additional temperature data point to provide to the BA/TOP/RC. David Kezell asked what we are trying to address; design conditions or design temperature. David Huff stated it's both being able to operate at your ECWT and also when there is freezing precipitation and wind. Kenny Luebbert believes this is more about communicating to the BA/TOP/RC what conditions can you operate at and is really a Recommendation 1d issue;, some sort of communication protocol. Heather Polzin from FERC stated 1c was a very narrowly focused Recommendation to address R3.5.2 only. The team will continue the discussion at the next call.

Attachment 1

Name	Organization	11/8	11/10
Kenneth Luebbert	Evergy, Inc.	Y	Y
Matthew Harward	Southwest Power Pool, Inc.	Y	Y
Venona Greaff	Oxy	Y	N
Derek Kassimer	ReliabilityFirst	Y	N
Jonathan Davidson	City Utilities of Springfield	Y	N
David McRee	Duke Energy	Y	Y
Thor Angle	Puget Sound Energy	N	Y
Keith Smith	Orsted Onshore North American	Y	Y
Chad Wiseman	Newfoundland & Labrador Hydro	N	N
Bradley Pabian	Louisville Gas & Electric and Kentucky Utilities	Y	Y
Collin Martin	Oncor Electric Delivery, LLC	Y	N
Jill Loewer	Utility Services	Y	Y
David Kezell	Electric Reliability Council of Texas, Inc. (ERCOT)	Y	Y
Ryan Salisbury	Oklahoma Gas & Electric	N	Y
David Deerman	Southern Company Services	N	Y