NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

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

January 18, 19, and 20, 2023

In-Person and WebEx

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 taken and quorum was determined on both days. The member attendance sheet is attached as attachment 1.

Key Recommendation 1G
FERC provided an overview of the intent of Key Recommendation 1g, which is communication of predicted capacity/availability during local forecasted cold weather by the GO/GOP to the BA who would then aggregate that data to develop a plan and share with the RC.

The team discussed David Lemmons' recommendations to revise standards language. To address the second bullet of Recommendation 1g, it was proposed TOP-002 be revised to require Operating Plans for the next seven days and be updated at least daily for changes in forecast, availability, etc. Language was added to Requirement 4 of that Standard. Requirement R4.5 was added to require the BA having a seven-day plan, which is updated daily when temps are below the Extreme Cold Weather Temperature for the majority of the generating sites within the BA area. The team discussed and concluded five days of Operating Plans/weather forecasts updated daily would be a more appropriate requirement. This requirement was made to Requirement R8 to not renumber the requirements already included in the standard. The team changes from Operating Plan to Operating Process were based on the NERC glossary terms.

Additionally, TOP-003 was discussed, specifically Requirement R2.3.1 and what the BA requires as part of the data specification with respect to cold weather and generator availability. Multiple members of the team and observers believe that the first bullet of Recommendation 1g is already covered in what the GO needs to provide as far as Operating limitations and that additional language is not necessary. The team decided that this type of data request is covered by 2.3.1.2 fuel supply and inventory concerns, but will ask a question on the comment form to get more industry input.

Technical Rationale
Recommendation 1i Technical Rationale drafted by Collin Martin was presented to the team. The team approved of the language proposed.

Annual training and maintenance from phase 1 comments Technical Rationale drafted by Derek Kassimer was presented to the team. The edits made to the previous draft include training prior to the season and in real time. The edits were accepted by the team.

The team then discussed the topic started at last week's meetings about weather data not going back to 2000 as required in the standard. The proposal to use the most appropriate weather for as long as it goes back and then use a different station that might not be as appropriate to fill in those missing years was discussed again. This proposal received team support. The team discussed the comment that the year 2000 is not far back enough in time to gather weather data. The team decided that 2000 was appropriate and is justified within the Technical Rationale.

The team reviewed Technical Rationale developed by Matt Harward relative to EOP-011 R2.2.9 addressing recommendation 1i. Team agreed to drafted language with minor edits.

Finally, the team reviewed the Technical Rationale developed by Eric Jebsen relative to EOP-011 R2.2.8. Team reviewed and agreed to drafted language with minor edits.

Generator Cold Weather Critical Component
The team discussed two comments received on this definition from Phase 1. It was suggestions to change the language "would likely" to "could" and "freezing" to "extreme cold weather". The team reviewed the dictionary for the definitions of would likely and could. The team discussed that the report is focused on freezing issues, which is why the team choose freeze during phase 1. Additionally, the team has not defined what extreme cold weather is and it could be different across the country based on generators location. The team conduced two votes on these topics and the results are below. The conclusion was to stay with the original drafted language.

Applicability Section
The comments on the applicability section received during Phase 1 were reviewed. The team believes all applicability comments were previously addressed, and no additional revisions were made. Matt Harward will draft an in-depth response to those comments still outstanding from Phase 1.

Implementation Plan
Matt Harward asked the team if the changes made in Phase 2 are the type that would require additional time or is it reasonable to expect the same timeline as Phase 1. He stated that the team will need clear justification for any IP timeline in order to get FERC leadership understanding and approval. David Lemmons proposed 12 months implementation for TOP-002 revisions because it revolves around processes that should be straightforward and the team agreed.

The team discussed an 18-month implementation for all of EOP-011-4. The revisions in this standard are mainly in R1.2.5, R1.2.5.5. and R1.2.5.6, R2.2.8, R7 and applicability in Responses to Key Recommendations 1H and 1I. Eighteen months is driven by the needed interaction between electricity and natural gas industries, and added functions to applicability.

For EOP-012-2, FERC proposed that the team consider a six-month implementation plan given the light lift associated with the phase 2 modifications. David Lemmons agreed with FERC that there is nothing significant in R1 and R2 modifications that would require additional time to implement. The team discussed rolling these two requirements into the Phase 1 IP. The team discussed a 12-month implementation on R3.5.3 only.

The team reviewed Implementation Plan Phase 1 comments. No changes were made based on the fact that Implementation Plan is filed with FERC. The team will address any issues that FERC directs to be changed once a decision is made on the filing.

FERC Filing Comments

The team looked at RTO comments filed with FERC suggesting a change from .2 to .02 percentile or to the lowest temperature over a 6-hour period in the Extreme Cold Weather Temperature calculation. The team noted that using either of these options makes the data set much smaller and less likely that generators will have historic operating data to prove compliance. Many units may not have run during either of those scenarios. In fact, with the change from .2 to 0.2 percentile, the data set goes from 96 hours to 9 hours. If the team pursued the suggestion to make it the lowest temperature over a 6-hour period, this would be difficult to perform, as multipole calculations has to occur to find that number. David Lemmons did research and showed going from .2 to .02 in DFW and Alabama saw a change in temp between 2 and 5 degrees, which the team does not think is significant to change a generators approach to protecting critical components. The team choose to leave the language as-is.

Attachment 1

Name	Organization	1/18	Could vs would likely	Freezing vs extreme cold weather	1/19	1/20
Kenneth Luebbert	Evergy, Inc.	Y	Would likely	Freezing	Y	Y
Matthew Harward	Southwest Power Pool, Inc.	Y	Would likely	Freezing	Y	Y
Venona Greaff	Oxy	Y	Would likely	Freezing	Y	Y
Derek Kassimer	ReliabilityFirst	Y			Y	Y
Jonathan Davidson	City Utilities of Springfield	Y	Would likely	Freezing	Y	Y
David McRee	Duke Energy	Y			Y	Y
Thor Angle	Puget Sound Energy	Y	Would likely	Freezing	Y	Y
Keith Smith	Orsted Onshore North American	Y	Would likely	Freezing	Y	Y
Chad Wiseman	Newfoundland & Labrador Hydro	N			N	N
Bradley Pabian	Louisville Gas & Electric and Kentucky Utilities	Y	Would likely	Freezing	Y	Y
Collin Martin	Oncor Electric Delivery, LLC	Y	Would likely	Freezing	Y	Y
Jill Loewer	Utility Services	Y	Would likely	Freezing	Y	Y
David Kezell	Electric Reliability Council of Texas, Inc. (ERCOT)	Y	Would likely	Extreme cold weather	Y	N
Ryan Salisbury	Oklahoma Gas & Electric	N			N	Y
David Deerman	Southern Company Services	Y	Would likely	Freezing	Y	Y