NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

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

July 12, 13, and 14, 2022

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

Temperature Discussion

The team had discussion around how new and old units will demonstrate operations during cold weather. A concern was raised that a unit might not have run during cold weather, or are old with limited or no original design data or engineering analysis. The team believes that if a unit is operated prior to the "go-live" date of the cold weather standard and the temperature is such that it is at or below the lowest 0.2% when the unit is operated, it would meet the cold weather standard. The statistical approach of calculating the temperature will cover the operations analysis/cold weather reliability for units in traditionally very warm climates (i.e. Florida, southern California, etc.). Team members believe that standard language is a reasonable "bar" for existing unit to meet the cold weather standard requirements with historic operating data and NOAA data. A NOAA data collection "how-to" guide has been drafted and shared with the team.

The definition of Cold weather Critical Component was reviewed by Venona Greaff. She asked what a "significant de-rate" means. The team had extensively discussed and decided to replace "significant" with 10% de-rate for four hours.

The definition of Extreme Cold Weather Design Temperature was discussed. The team deleted "Design" in the definition. Additionally, the team decided the language "Current date" will be discussed later. After further discussion, the team agrees with keeping lowest 0.2% language.

Review of Facilities language

The team discussed Facilities Section 4.2 part 4.2.1 language "12 continuous hours" and "plan to operate". Further, the team discussed IPP's that are "not counted on" by the BA, but want to bid into the market. The team concluded to drop 12 continuous hours to 6 continuous hours, but keep the "plan to operate" phrase. The team can clarify further in phase 2 of the project if needed.

Section 4.2.1.1 was discussed around capacity, transmission, and energy emergencies language. The team settled on the language "unless called upon during BES emergencies."

Revise Standards

Requirement R1 was discussed around the exceptions. A concern was raised that Merchant generation might take a "liberal" interpretation of these cold weather standards and how these standards might impact the effect on the operability of merchant generators. The team discussed and believes that cost recovery mechanisms and the effects of this standard would be effective. The team voted on if "commercial exception" language should be in or out? The vote concluded to take commercial out of the language.

The team discussed a concern around the cooling effects of wind language and how it is written in the standard. The team decided to remove the reference to wind in R2, but keep it in R3. The team then discussed R2 requiring implementation and R3 requiring a plan. The "Plan" does not require to implement freeze protection measures and the team agreed to add "freeze protection measure as defined in cold weather plan."

The team reviewed the language contained within Requirement R4 Parts 4.1, 4.2, and 4.3. Every five years the entities will do a "refresh" of the cold weather preparedness plan.

The team discussed Requirement R6 and its applicability to wind turbines. The team intends for R6 to apply to the total wind farm generating capacity and not a sole wind turbine and/or inverter. Inclusion I4 was proposed as an example of how this approach could apply to cold weather standards.

Next, the team discussed the 10% de-rate language. The MW impact to the BES was raised and if a 10% de-rate was the right number. ERCOT proposed 50% de-rate as the correct number for a BES unit. Additionally, a proposal of a 10% de-rate and the de-rate being greater than 20 MW was put forward which the team ultimately decided to go with.

The team next discussed temporary limits notifications in the CAP. Additionally, CAP's with long lead-time to repair parts was discussed and how that could be addressed within this standard. The team decided that temporary operating limitations, as a result of long lead-times, should be identified in the CAP's corrective actions.

Next, a question was asked if the 0.2% temperature now becomes a trigger for a CAP if a unit does not operate at that minimum temperature. The team discussed if the dry bulb temperature is at or above the extreme cold weather temperature (0.2% temperature) for that BES generator, and if the unit does not meet operating obligations as defined elsewhere, a CAP shall be conducted.

July 13

Definitions

The team discussed the Cold Weather Critical Component definition. David Kezell suggested adding "fuel delivery component" to definition. He noted it is important to include, as these components may not be part of generating unit or within close proximity to generator. It is important that it is clear that this component is under GO control so natural gas pipelines are not brought under the standard. Another team member asked if bulldozers would be included. It was also stated if redundancy exists, these fuel supply components may not fall under definition. David Kezell will draft additional technical rationale to cover this topic. The team decided to add "installed" prior to fuel supply component. Further discussion on this topic lead to replacing "installed" with "fixed".

A question was raised if a GO that owns natural gas infrastructure would need to account for natural gas infrastructure under definition. Johnathan Davidson noted that it owns generator and natural gas infrastructure under same company. After discussion, the definition was changed to include "its" prior to fixed fuel supply component.

A question was raised if "generating unit" used in the Generator Cold Weather Critical Component definition would cause confusion since "generating unit" is also referenced in the "Facilities" section. The team agreed that this will not cause issue since it is only referenced for Facility applicability purposes within the standard.

There were no concerns with Extreme Cold Weather Temperature definition.

Facilities Section

The team added language to show generators that are pursuant to an OATT or other contractual arrangement. Additionally, the team included BES Emergency to the exclusion section.

There were concerns raised about what "committed" means under OATT. ERCOT stated the units are committed by bidding into the market. SPP has Resource Adequacy Attachment A where units provide firm commitment and are penalized if they cannot meet obligation. Also, day-ahead and real-time markets are for unit commitment.

ERCOT voiced concerns regarding the six-hour language potentially removing a large number of units from applicability. The team determined to keep the unit commitment language and rely on exclusion language to address the temperature component.

FERC states that cost recovery was not intended to be accomplished through the standard. The intent is that the BA knows which generators will be available during the upcoming winter season.

July 14

Implementation Plan
The team discussed the Implementation Plan. Previous drafts of the IP proposed 5 years for R1 and R2, 18 months for all other requirements. The team discussed that R4 should be implemented at 5 years + 18 months to match periodicity structure of other plans. Utilities will have to stagger the start date of their plans to spread them out if so desired. Lauren Perotti from NERC Legal will draft specific language for implementation to match intent of drafting team.

Facilities Section
The team discussed clarifying specific language in Facilities section around four-hour intervals. The team agreed to edit the standard to refer to four-hour continuous runs.

Technical Rationale
Matt presented TR for the facilities section and edits were made. Venona reviewed R1 and R2 with edits made. Brad, David, and Heather reviewed R3 and edits were made. R4 and R5 TR was largely unchanged from prior version. In the discussion of R6 technical rationale, the team touched on the temperature threshold in the standard language. Ultimately there was no change made to the standard language.

Timeline Review
The industry webinar is scheduled for August 8. Team members will be responsible for the same sections of the standard as the first webinar. Focus of the webinar will be to identify areas that were changed to attempt to address industry comments. Team members should send response to industry comments to Alison before the meeting Tuesday of next week.

Attachment 1

Name	Organization	7/12	Commercial Constraints	7/13	Vote	Facilities Language	7/14
Kenneth Luebbert	Evergy, Inc.	Y	N	Y	B	Y	Y
Matthew Harward	Southwest Power Pool, Inc.	Y	N	Y	B	Y	Y
Venona Greaff	Oxy	Y	N	Y	B	Y	Y
Derek Kassimer	ReliabilityFirst	N	-	N	-	-	N
Jonathan Davidson	City Utilities of Springfield	Y	Y	Y	B	Y	Y
David McRee	Duke Energy	Y	N	Y	B	Y	Y
Thor Angle	Puget Sound Energy	Y	N	Y	B	Y	Y
Keith Smith	Orsted Onshore North American	Y	Y	Y	B	Y	Y
Chad Wiseman	Newfoundland & Labrador Hydro	N	-	N	-	-	N
Bradley Pabian	Louisville Gas & Electric and Kentucky Utilities	Y	N	Y	B	Y	Y
Collin Martin	Oncor Electric Delivery, LLC	Y	N	Y	-	Y	Y
Jill Loewer	Utility Services	Y	Y	Y	B	Y	Y
David Kezell	Electric Reliability Council of Texas, Inc. (ERCOT)	Y	N	Y	B	Y	Y
Ryan Salisbury	Oklahoma Gas & Electric	Y	Y	Y	B	Y	Y
David Deerman	Southern Company Services	Y	Y	Y	B	Y	Y