

Meeting Notes

Project 2023-07 Transmission System Planning Performance Requirements for Extreme Weather

September 3, 2024

Review NERC Antitrust Compliance Guidelines and Public Announcement

Jordan Mallory, NERC staff, called attention to the NERC Antitrust Compliance Guidelines and the public meeting notice

Roll Call

J. Mallory completed the team roll call and quorum was met. The member attendance sheet is attached as Attachment 1.

Review Meeting Agenda and Objectives

J. Mallory reviewed the agenda and let the drafting team know that reviewing Requirements R2 and R3 based on industry comments received would be the objective of this meeting.

TPL-008-1 Requirement R2 and R3

The drafting team (DT) reviewed an updated proposal for Requirement R2 through R4. See proposal considered below. The Paragraph (“P”) numbers are associated with FERC directives from FERC Order 896.

R2. Each Planning Coordinator shall coordinate (*P76*) with impacted Planning Coordinators within a climate zone, as defined by the Electric Reliability Organization (ERO) (*P50*), to select one extreme heat benchmark event and one extreme cold benchmark event for completing the Extreme Temperature Assessment. Selected benchmark events shall (*P38*):

- 2.1.** Consider no less than 20? years of metrological data [ending no more than 5? years prior to the time the benchmark events are selected?] (*P40*).
- 2.2.** Represent 95th? percentile extreme conditions for the climate zone [based on the 3-day average temperature across the climate zone?] (*P36, P38*).

R3. Each Planning Coordinator (*P60-62*) shall coordinate (*P76*) with impacted Planning Coordinators within a climate zone, as defined by the Electric Reliability Organization (ERO), to develop and implement a process for developing benchmark planning cases that represent the benchmark events selected in Requirement R2 and sensitivity cases (*P124-125*) to demonstrate the impact of changes to the basic assumptions used in the benchmark planning cases. This process shall include (*P39*):

- 3.1.** Selection of appropriate System models within the Long-Term Transmission Planning Horizon to serve as the starting point for the benchmark planning cases.

- 3.2. Seasonal and temperature dependent adjustments for Load (P116-117), generation, Transmission, and transfers within the climate zone.
- 3.3. Assumed seasonal and temperature dependent adjustments for Load, generation, Transmission, and transfers in other areas of the Interconnection.
- 3.4. For sensitivity cases, identification of changes to at least one of the following conditions:
 - Generation;
 - Real and reactive forecasted Load; or
 - Transfers.

R4. Each responsible entity (P60-62), as identified in Requirement R1, shall use the coordination process developed in accordance with Requirement R3 and data consistent with that provided in accordance with the MOD-032 standard (P72), supplemented by other sources as needed, to develop benchmark planning cases (P35) and sensitivity cases (P124-125).

Metrological Data Required

DT members and observers talked through if 20 years should be appropriate for metrological data or if it should be updated to the 40 years used by the ERO. It was discussed that extreme events do not happen often and that a long span of time would be appropriate for this type of event to be studied. 40 years would give an adequate snapshot of time to review the appropriate extreme events that have taken place. Some entities were concerned that they may not have the 40 years' worth of data to study. Entities can gather data from PNNL website for data needed. If historical data is not available for that specific entity, then they can make appropriate assumptions needed to complete studies. 40 years was agreed upon by the DT to propose in the standard.

Extreme Conditions Required

To meet FERC directive P 36¹ and 38² it was determined by the DT that a requirement is needed, but the team needed to determine what type of parameter to put into place. A suggestion of 95% of extreme conditions was proposed. There was concern that the 95% selection may not capture the worst extreme cases to be required. The subgroup would continue to think on possible options regarding extreme conditions to be required in TPL-008-1 to address FERC Order 896.

¹ FERC Order 896 P 36: *Although the NOPR outlined some of the Commission's expectations for the development of benchmark events, including that benchmark events be based on prior extreme heat and cold events and/or meteorological projections,¹ there is currently no established guidance or set of tools in place to facilitate the development of extreme heat and cold benchmark events for the purpose of informing transmission system planning. As recommended by commenters, NERC should consider the examples of approaches for defining benchmark events identified in the NOPR (e.g., the use of projected frequency or probability distribution).¹ NERC may also consider other approaches that achieve the objectives outlined in this final rule. Further, as recommended by PJM, we believe there is value in engaging with national labs, RTOs, NOAA, and other agencies and organizations in developing benchmark events. Considering NERC's key role, technical expertise, and experience assessing the reliability impacts of various events and conditions, we encourage NERC to engage with national labs, RTOs, NOAA, and other agencies and organizations as needed. To that end, as discussed in section IV.J below, we have modified the NOPR proposal to allow more time for NERC to consider these complex issues and engage additional expertise where necessary.*

² FERC Order 896 P 38: *At the same time, because different regions experience weather conditions and their impacts differently, a single benchmark event for the entire Nation is unlikely to meet the objectives of this final rule. Accordingly, in developing extreme heat and cold benchmark events, NERC shall ensure that benchmark events reflect regional differences in climate and weather patterns.*

The DT will pick up with possible solutions regarding criteria to address worst events for entities to consider at its next drafting team meeting along with reviewing the remainder of the proposed Requirements.

Future drafting team meetings

- September 4, 2024 | 2:00–3:00 p.m. eastern
- September 5, 2024 | 12:00–3:00 p.m. eastern

Adjourned

The DT meeting adjourned at 2:04 p.m. eastern.

Attachment 1

	Name	Entity	Attendance
Chair	Evan Wilcox	American Electric Power	N
Vice Chair	Jared Shaw	Entergy Services	N
Members	Josie Daggett	Western Area Power Administration	Y
	Michael Herman	PJM Interconnection	N
	Tracy Judson	Florida Power & Light	Y
	Sun Wook Kang	ERCOT	Y
	Andrew Kniska	ISO New England	Y
	Dmitry Kosterev	Bonneville Power Administration	Y
	David Le	California ISO	Y
	Karl Perman	CIP CORPS	N
	Meenakshi Saravanan	ISO New England	N
	Hayk Zargaryan	Southern California Edison	Y
PMOS Liaison	Jason Chandler	Con Edison	Y
	Donovan Crane	WECC	N