Unofficial Comment Form

Project 2021-07 Extreme Cold Weather Grid Operations, Preparedness, and Coordination | Phase 2

**Do not** use this form for submitting comments. Use the [Standards Balloting and Commenting System (SBS)](https://sbs.nerc.net/) to submit comments on **Phase 2 of Project 2021-07 Extreme Cold Weather Grid Operations, Preparedness, and Coordination** by **8 p.m. Eastern, Thursday, April 13, 2023.
m. Eastern, Thursday, August 20, 2015**

Additional information is available on the [project page](https://www.nerc.com/pa/Stand/Pages/Project-2021-07-ExtremeColdWeather.aspx). If you have questions, contact Senior Standards Developer, Alison Oswald (via email), or at 404-446-9668.

## Background Information

Extreme cold weather and precipitation affected the south central United States February 8-20, 2021. Many generating units experienced outages, derates, or failures to start, resulting in energy and transmission emergencies (referred to as “the Event"). The total Event firm Load shed was the largest controlled firm Load shed event in U.S. history and was the third largest in quantity of outaged megawatts (MW) of Load after the August 2003 northeast blackout and the August 1996 west coast blackout. The Event was most severe February 15-18, 2021, and it contributed to power outages affecting millions of electricity customers throughout the regions of ERCOT, SPP, and MISO South. Additionally, the February 2021 event is the fourth cold weather event in the past 10 years, which jeopardized bulk-power system reliability. A joint inquiry was conducted to discover reliability-related findings and recommendations from FERC, NERC, and Regional Entity staff. The FERC, NERC, and Regional Entity staff Joint Staff Inquiry into the February 2021 Cold Weather Grid Operations (“Joint Inquiry Report”) was published on November 16, 2021.

The scope of the proposed project is to address the ten recommendations for new or enhanced NERC Reliability Standards proposed by the Joint Inquiry Report. In November 2021, the NERC Board of Trustees (Board) approved a Board Resolution directing that new or revised Reliability Standards addressing these recommendations be completed in accordance with the timelines recommended by the joint inquiry team, as follows:

* New and revised Reliability Standards to be submitted for regulatory approval before Winter 2022/2023: development completed by September 30, 2022, for the Board’s consideration in October 2022 to address Key Recommendations 1d, 1e, 1f, and 1j;
* New and revised Reliability Standards to be submitted for regulatory approval before Winter 2023/2024: development completed by September 30, 2023, for the Board’s consideration in October 2023 to address Key Recommendations 1a, 1b, 1c, 1g, 1h, and 1i.

## Questions

**EOP-011-4 (Questions 1-4)**

**Recommendation 1h states: To require Balancing Authorities’ operating plans (for contingency reserves and to mitigate capacity and energy emergencies) to prohibit use for demand response of critical natural gas infrastructure loads.**

1. Proposed EOP-011-4 Requirement R2 was drafted to address recommendation 1h. Do the changes in EOP-011-4 Requirement R2 provide sufficient clarity in regards to limiting critical natural gas infrastructure participation in demand response?

[ ]  Yes

[ ]  No

Comments:

**Recommendation 1i states: To protect critical natural gas infrastructure loads from manual and automatic load shedding (to avoid adversely affecting Bulk Electric System reliability):**

* **To require Balancing Authorities’ and Transmission Operators’ (TOPs) provisions for operator controlled manual load shedding to include processes for identifying and protecting critical natural gas infrastructure loads in their respective areas;**
* **To require Balancing Authorities’, Transmission Operators’, Planning Coordinators’, and Transmission Planners’ respective provisions and programs for manual and automatic (e.g., underfrequency load shedding, undervoltage load shedding) load shedding to protect identified critical natural gas infrastructure loads from manual and automatic load shedding by manual and automatic load shed entities within their footprints;**
* **To require manual and automatic load shed entities to distribute criteria to natural gas infrastructure entities that they serve and request the natural gas infrastructure entities to identify their critical natural gas infrastructure loads; and**
* **To require manual and automatic load shed entities to incorporate the identified critical natural gas infrastructure loads into their plans and procedures for protection against manual and automatic load shedding.**
1. The standard drafting team (SDT) made changes to the applicability section based on the recommendation above (additional clarity included in the technical rationale). Do you believe these are the correct Functional Entities to include? If not, please provide details and any other Functional Entities be added with justification.

[ ]  Yes

[ ]  No

Comments:

1. Is the implementation timeframe for EOP-011-4 Requirement R7 reasonable given that it is applicable to Functional Entities who were not previously included in Applicability for EOP-011-3?

[ ]  Yes

[ ]  No

Comments:

1. Do the changes in EOP-011 provide sufficient clarity and flexibility in regards to the treatment of critical natural gas infrastructure in operator-controlled manual Load shedding and automatic load shedding?

[ ]  Yes

[ ]  No

Comments:

**TOP-002-5 (Questions 5-6)**

**Recommendation 1g of the Report states: The Reliability Standards should be revised to provide greater specificity about the relative roles of the Generator Owners, Generator Operators, and Balancing Authorities in determining the generating unit capacity that can be relied upon during “local forecasted cold weather,” in TOP-003-5:**

* **Based on its understanding of the “full reliability risks related to the contracts and other arrangements [Generator Owners/Generator Operators] have made to obtain natural gas commodity and transportation for generating units,” each Generator Owner/Generator Operator should be required to provide the Balancing Authority with data on the percentage of the generating unit’s capacity that the Generator Owner/Generator Operator reasonably believes the Balancing Authority can rely upon during the “local forecasted cold weather”.**
* **Each Balancing Authority should be required to use the data provided by the Generator Owner/Generator Operator, combined with its evaluation, based on experience, to calculate the percentage of total generating capacity that it can rely upon during the “local forecasted cold weather,” and share its calculation with the Reliability Coordinator.**
* **Each Balancing Authority should be required to use its calculation of the percentage of total generating capacity that it can rely upon to “prepare its analysis functions and Real-time monitoring,” and to “manag[e] generating resources in its Balancing Authority Area to address . . . fuel supply and inventory concerns” as part of its Capacity and Energy Emergency Operating Plans. (Report Key Recommendation 1g)**

**As explained by the Report on the 2021 event, Key Recommendation 1g was intended to “take the next logical step [after TOP-003-5 and EOP-011-2 changes take effect in April 2023] and eliminate doubt about which entity is responsible to provide information or act on information,” preventing BAs and RCs from being surprised during extreme cold weather events (See Report at pp 189-190). The SDT would like feedback on the first bulleted subpart of Key Recommendation 1g, which, in essence, recommends a requirement that the GOs/GOPs provide the BA with the generating units MWs, including MWh the GO/GOP reasonably believes that it can rely upon during the local forecasted cold weather.**

1. Please comment on whether information pertaining to the generating unit’s MWs, including MWhs the GO/GOP reasonably believes that the BA can rely upon during local forecasted cold weather, would be useful to your operations during local forecasted cold weather. Alternatively, is there a better way for the BA to develop assumptions related to cold weather needs to address this specific metric rather than asking for this information from the GO/GOPs? Please provide comments and revisions to the draft language.

[ ]  Yes

[ ]  No

Comments:

1. Recommendation 1g, bullets 2 and 3 of the Report suggests that each Balancing Authority should be required to use the data provided by the Generator Owner/Generator Operator to determine total generating capacity that can be relied upon during “local forecasted cold weather,” and utilize such information to “prepare its analysis functions and Real-time monitoring,” and to “manag[e] generating resources in its Balancing Authority Area to address . . . fuel supply and inventory concerns” as part of its Capacity and Energy Emergency Operating Plans.” The SDT proposes a new Requirement R8 in TOP-002 that requires a Balancing Authority to create an extreme cold weather Operating Process within its Operating Plan to formalize the Balancing Authority’s analysis functions and Real-time monitoring of its Balancing Authority Area during extreme cold weather. Do you agree the language in proposed Requirement R8 of TOP-002 addresses the intent of and is the appropriate manner in which to satisfy Recommendation 1g? Please provide the reasoning or justification for your position in the comments.

[ ]  Yes

[ ]  No

Comments:

**General (Questions 7-10)**

1. The SDT proposes that the modifications in EOP-011-4, and TOP-002-5 meet the key recommendations in The Report in a cost effective manner. Do you agree? If you do not agree, or if you agree but have suggestions for improvement to enable more cost effective approaches, please provide your recommendation and, if appropriate, technical or procedural justification.

[ ]  Yes

[ ]  No

Comments:

1. Do you agree with the implementation plan proposed by the SDT? If you think an alternate timeframe is needed, please propose an alternate implementation plan and time period, and provide a detailed explanation of actions planned to meet the implementation deadline.

[ ]  Yes

[ ]  No

Comments:

1. Is there any part of the proposed requirements, as currently drafted, that is unclear? If so, how would you make it clearer?

[ ]  Yes

[ ]  No

Comments:

1. Provide any additional comments for the SDT to consider, including the provided technical rationale document, if desired.

Comments: