

**UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION**

Transmission System Planning	)	Docket No. RM22-10-000
Performance Requirements for Extreme	)	
Weather	)	
	)	

**COMMENTS OF THE  
BONNEVILLE POWER ADMINISTRATION**

On June 16, 2022, the Federal Energy Regulatory Commission (“Commission”) issued a Notice of Proposed Rulemaking (“NOPR”) proposing to direct the North American Electric Reliability Corporation (“NERC”) to modify Reliability Standard TPL-001-5.1 and submit such modifications to the Commission for approval. The Commission is proposing that Reliability Standard TPL-001-5.1 “address [reliability] concerns pertaining to transmission system planning for extreme heat or cold weather events that impact the reliable operation of the Bulk-Power System.”<sup>1</sup> The Bonneville Power Administration (“Bonneville”) submits these comments in response to the NOPR.

Bonneville is a Federal Power Marketing Administration established to market wholesale electric power from the Federal hydroelectric projects in the Pacific Northwest. Bonneville currently markets power from 31 Federal hydro projects, one non-Federal nuclear plant, and several small non-Federal power plants. These resources provide about 28 percent of the electric power used in the Northwest. Bonneville also operates over 15,000 circuit miles of transmission lines. Bonneville’s service territory is within the WECC footprint and covers Washington,

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<sup>1</sup> *Transmission System Planning Performance Requirements for Extreme Weather*, 179 FERC ¶ 61,195, P 1 (2022). (“NOPR”).

Oregon, Idaho, western Montana, and portions of California, Nevada, Utah, and Wyoming. Bonneville's wholesale power customers include public utilities, public utility districts, municipal districts, public cooperatives, investor-owned utilities, and a few large industrial customers. Bonneville is registered for multiple functions under the NERC registry, including as a Balancing Authority, Transmission Owner, Transmission Planner, and Transmission Operator.

## **COMMENTS**

Bonneville believes Reliability Standard TPL-001-5.1 already provides Transmission Planners the framework for incorporating extreme heat or cold weather events into their Planning Assessments, and that Transmission Planners should be doing so based on conditions specific to their geographic area. Consequently, Bonneville supports the Commission ordering modifications to the current standards in order to specifically require extreme heat and cold weather events. However, because not all geographic areas have the same likelihood of extreme weather, in both degree and duration, Transmission Planners should be afforded the flexibility to consider conditions likely to occur in their geographic area.

### **A. Requirements to consider extreme heat and cold weather events should be made within the existing framework of Reliability Standard TPL-001-5.1**

Reliability Standard TPL-001-5.1 R2 requires a Transmission Planner to perform steady state analyses, short circuit analyses, and Stability analyses for both the Near-Term and Long-Term Planning Horizons. These analyses include assumptions about system peak load. Extreme heat and cold weather events will likely factor into what the system peak load will be (additional heating or cooling load). For example, under R2.4.3, a Transmission Planner must use sensitivity cases “to demonstrate the impact of changes to the basic assumptions used in the model” and “must vary one or more of the [listed] conditions by a sufficient amount to stress the System within a range of credible conditions that demonstrate a measurable change in

performance.” The conditions listed include “Load level, Load forecast, or dynamic Load model assumptions.” This requirement could be modified to obligate Transmission Planners to specifically consider the effect of extreme heat or cold weather events on load levels without having to make significant changes to the standard.

Note, however, that Requirement R2.4.3 uses the language “credible conditions.” Bonneville stresses this language, as not all extreme heat or cold weather events are likely to occur in all parts of the country, and therefore may not be credible for consideration. In ordering modifications to the standard, the Commission should ensure that for a benchmark case, Transmission Planners have flexibility to consider only extreme heat and cold weather events that are likely to occur in a particular geographic area.

In addition, TPL-001-5.1 R3 and R4 require Transmission Planners to include “extreme events” in the steady state and stability portions of the Planning Assessment. TPL-001-5.1 Table 1, 3.a.iv lists extreme events that Transmission Planners must consider. Table 1, 3.b also gives Transmission Planners discretion to consider “[o]ther events based upon operating experience that may result in wide area disturbances.” Should Transmission Planners experience or expect event contingencies to occur due to extreme heat or cold weather, Transmission Planners could account for those events through this framework as well. Thus, the obligation for Transmission Planners to account for extreme heat or cold weather events should be specifically referenced in Table 1.

**B. Corrective Action Plans developed pursuant to the TPL Reliability Standards should not encroach upon actions taken during the Operational time horizon**

The Commission suggests that corrective action plans could include “planning for additional contingency reserves or implementing new energy efficiency programs to decrease load, planning for additional interregional transfer capability, transmission

switching/reconfiguration, or adjusting transmission and generation maintenance outages based on longer-lead forecasts.”<sup>2</sup> Several of these appear to be Operating actions and would likely be covered by Reliability Standard EOP-11-2 (effective date of April 1, 2023), which requires Transmission Operators and Balancing Authorities to have Operating Plans to mitigate operating emergencies and Capacity and Energy Emergencies, including determining the reliability impacts of extreme weather events, such as cold weather conditions. Any modifications to the TPL Reliability Standards should be careful not to encroach upon the authority and discretion of Transmission Operators and Balancing Authorities.

**C. The Commission should give the Transmission Planner discretion to consider other weather-related events based on its specific circumstances**

The Commission seeks comment on whether other weather conditions, particularly drought, should be considered in addition to extreme heat and cold weather.<sup>3</sup> Bonneville believes that Transmission Planners should already be considering all weather-related events that are likely to occur on their systems. For example, because Bonneville largely relies on hydro generation, variations in the amount of water available due to differing weather conditions are already considered in order to determine transfer capability across the system. Bonneville does not oppose additional requirements, provided Transmission Planners are given the flexibility to determine what weather events are likely to occur on their systems.

**CONCLUSION**

Bonneville appreciates the opportunity to submit comments. Bonneville supports modifications to Reliability Standard TPL-001-5.1 to specifically incorporate consideration of

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<sup>2</sup> NOPR at P 36.

<sup>3</sup> NOPR at P 92.

extreme heat and cold weather, provided Transmission Planners are given the flexibility to determine the degree of extreme weather considered based on their geographic area.

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Respectfully submitted,

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