UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

TRANSMISSION SYSTEM PLANNING PERFORMANCE REQUIREMENTS FOR EXTREME WEATHER	DOCKET NO. RM22-10-000

COMMENTS OF TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION, INC. ON COMMISSION NOTICE OF PROPOSED RULEMAKING

Pursuant to the Federal Energy Regulatory Commission's ("Commission" or "FERC") June 16, 2022 Notice of Proposed Rulemaking ("NOPR") in the above referenced proceeding,[1] Tri-State Generation and Transmission Association, Inc. ("Tri-State") respectfully submits these comments on Transmission System Planning Performance Requirements for Extreme Weather by FERC.[2]

I. COMMUNICATIONS

All correspondence and communications in this proceeding should be addressed to the following persons:

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1 Transmission System Planning Performance Requirements for Extreme Weather, 179 FERC ¶ 61,195 (2022) ("NOPR").

2 Notice of Proposed Rulemaking, Docket No. RM22-10-000 (Issued June 16, 2016)

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II. INTEREST OF TRI-STATE

Tri-State is a cooperative corporation headquartered in Westminster, Colorado. Tri-State's primary functions involve the generation, transmission, transformation and sale of electricity at wholesale to its 42 member-owner distribution cooperatives within the states of Colorado, Nebraska, New Mexico and Wyoming. Tri-State operates on a not-for-profit basis. Founded in 1952, Tri-State was previously exempt from Federal Power Act ("FPA") jurisdiction. Tri-State became FPA-jurisdictional in 2019. *See Tri-State Generation & Transmission Ass'n, Inc.*, 170 FERC ¶ 61,224, at P 82 (2020). Tri-State is interconnected with numerous utilities across four states and interconnects with generation facilities as requested.

Tri-State has a direct and substantial interest in this proceeding. Given the geography of the Tri-State system and the span across four states, Tri-State operates a diverse generation and transmission system.

III. BACKGROUND

On June 16, 2022, FERC issued its Notice of Proposed Rulemaking in Docket No. RM22-10-000 proposing to revise TPL-001-5.1 for Transmission System Planning Performance Requirements for Extreme Weather. The Commission proposes reforms designed to address reliability concerns pertaining to transmission system planning for extreme heat and cold weather events that impact the reliable operations of the Bulk-Power System.

Specifically, the Commission proposes to direct NERC to develop modifications to Reliability Standard TPL-001-5.1 to require: development of benchmark planning cases based on information such as major prior extreme heat and cold weather events or future meteorological projections; planning for extreme heat and cold events using steady state and

transient stability analyses expanded to cover a range of extreme weather scenarios including the expected resource mix's availability during extreme weather conditions, and including the broad area impacts of extreme weather; and corrective action plans that include mitigation for any instances where performance requirements for extreme heat and cold events are not met.

IV. COMMENTS

Evaluation of extreme weather events at the Transmission Planner level is too localized to accomplish the objective and instead would be best conducted at a regional planning level. Local extreme weather events are already covered by TPL-001-4 (Table 1, Extreme Events), such as hurricanes, tornados, and wildfires. Other types of extreme weather events, such as heat waves or blizzards, will cover a larger geographic region. For a Transmission Planner to evaluate a large area weather event, it would need to be modeled within the Transmission Planner's area, as well as neighboring entities. For example, any extreme weather along the Front Range of Colorado would likely impact multiple Transmission Planners, so a regional approach is prudent to accurately evaluate the impact to multiple Transmission Planners in an area.

Much of the analysis proposed is related to resource adequacy. It is inappropriate for Transmission Planners to be responsible for developing corrective action plans related to resource adequacy issues, as they are not responsible for resource adequacy within their area. Transmission Planners are provided resources and loads by transmission customers and plan the system to meet the needs identified by the transmission customers. However, Balancing Authorities are responsible for resource adequacy within their Balancing Authority Area and can provide a more holistic and accurate evaluation

of a larger area. Therefore, we propose resource adequacy evaluation and corrective action plans be the responsibility of the Balancing Authority.

Reliability Coordinator should facilitate an evaluation of transmission export and import between the Balancing Authorities to determine if they can bring in adequate resources during extreme events. The Reliability Coordinator would be best suited to direct the process as they have a regional perspective.

Tri-State has prioritized its concerns and is responding to specific paragraphs in the NOPR. The following section headings represent each paragraph where we are providing a response.

A. Response to NOPR Paragraph 62

The Commission seeks comments on whether planning coordinators and transmission planners should include contingencies based on their planning area and perform both steady state and transient stability (dynamic) analyses using extreme heat and cold cases.

Tri-State agrees that Planning Coordinators and Transmission Planners should be looking at contingencies based on their planning area and perform both steady state and transient stability (dynamic) analyses using extreme heat and cold cases.

B. Response to NOPR Paragraph 63

The Commission seeks comment on whether the existing Reliability Standards are sufficient to ensure that responsible entities performing studies of extreme heat and cold weather conditions have the necessary data, or whether the Commission should direct additional changes pursuant to FPA 215(d)(5) to address that issue.

Tri-State does not believe that the existing Reliability Standards are sufficient to ensure that responsible entities performing studies of extreme heat and cold weather

conditions have the necessary data. Studies are based on load and resource forecasts provided by transmission customers. There are no requirements for transmission customers to provide data for extreme heat and cold weather conditions. The only data that is required under Transmission Provider's OATT's is ten-year projects loads and resources provided annually by customers. Load forecast data during extreme weather events is not available. Modification to the pro-forma OATT or new NERC standards are needed to require customers to provide a range of forecasts to Transmission Planners. Otherwise, Transmission Planner must make arbitrary assumptions of load increases or resource availability under extreme weather events.

C. Response to NOPR Paragraph 67

The Commission seeks comment on: (1) whether wide-area planning studies should be defined geographically or electrically; (2) which entities should oversee and coordinate the wide-area planning models and studies (e.g., reliability coordinators, regional planning groups); (3) which entities should have responsibility to address the results of the studies, and how they should communicate those results among transmission planners; and (4) how to develop corrective action plans that mitigate issues that require corrective action by, and coordination among, multiple transmission owners.

(1) Wide-area planning studies should be done geographically. Local extreme weather events are already covered by TPL-001-4 (Table 1, Extreme Events), such as hurricanes, tornados, and wildfires). Other types of extreme weather events, such as heat waves or blizzards, will cover a larger geographic region. For a Transmission Planner to evaluate a large area weather event, it would need to be modeled within the Transmission Planner's area, as well as neighboring entities. Importantly, some Transmission Planner areas are

very small and localize, or heavily intertwined with neighboring transmission systems (i.e., different Transmission Planner). For example, any extreme weather along the Front Range of Colorado would likely impact multiple Transmission Planners, so a regional approach is prudent to accurately evaluate the impact to multiple Transmission Planners in an area.

(2) The Reliability Coordinator should coordinate the wide-area planning models and studies. The Reliability Coordinators (in the West) or Planning Coordinator (in the East and Texas) oversee a large enough geographic area to properly coordinate wide-area planning models and studies.

(3) The Balancing Authority should address the results of the studies and how they should communicate those results among Transmission Planners. The Balancing Authority is responsible for resource adequacy with their Balancing Authority Area and should communicate the resource needs for the area with the incumbent Transmission Planner(s). The Transmission Planner(s) can evaluate system needs to provide access to remove resource needs.

(4) If the corrective action plan is an importing and exporting issue the Planning Coordinator should be responsible. If it's a resource adequacy issue the Balancing Authority should be responsible. The Balancing Authority is responsible for resource adequacy within its area. The Planning Coordinator(s) and/or Transmission Planner(s) need to know the resource needs to properly evaluate import/export needs so transmission can be identified.

D. Response to NOPR Paragraph 74

The Commission seeks comment on: (1) requiring transmission planners and planning coordinators to assess reliability in the planning horizon for sensitivity cases in which multiple inputs, e.g., load and generator failures, change simultaneously during extreme heat and cold events; and (2) the range of factors and the number of sensitivity cases that should be considered to ensure reliable planning.

Looking at it at the Transmission Planner level is too narrow. Some Transmission Planner areas are very small and localized, or heavily intertwined with neighboring transmission systems (i.e., different Transmission Planners). Any extreme weather along the Front Range of Colorado would likely impact multiple Transmission Planners, so a regional approach is prudent to accurately evaluate the impact to multiple Transmission Planners in an area. However, requiring this of Planning Coordinators would not ensure a regional purview either. In the eastern Interconnection, the RTOs/ISOs are the Planning Coordinators for large geographic areas with each RTO/ISO covering multiple states. In contrast, within the western interconnection, the only ISO is in California. Along the Colorado Front Range alone, there are six different Transmission Planners (who are each also their own Planning Coordinator). Said differently, there is not an overarching Planning Coordinator over large geographic regions covering multiple transmission planners in the western interconnection.

E. Response to NOPR Paragraph 79

The Commission seeks comments on industry's experience and opinion on combining or layering probabilistic and deterministic approaches when planning for extreme heat and cold weather conditions in the context of Reliability Standard TPL-001-5.1. Specifically, we seek comments on the use of the proposed hybrid planning approach

and: (1) the assumptions from the deterministic and probabilistic approaches that should be applied to study extreme heat and cold weather events; (2) the potential planning challenges from combining the two planning approaches; (3) the costs associated with adjustments to the currently applied deterministic approach; (4) the implementation period necessary for proposed changes; and (5) the reliability benefits that could result.

Probabilistic planning needs to be studied further and best practices developed. Tri-State recommends directing NERC to create a task force to evaluate and develop best practices.

F. Response to NOPR Paragraph 92

The Commission seeks comments on whether drought should be included along with extreme heat and cold weather events within the scope of Reliability Standard TPL-001-5.1 system planning requirements.

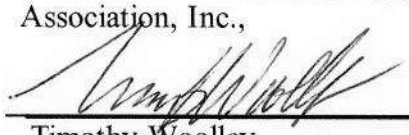
Drought is already sufficiently included in the resource forecasts developed by Resource Planners.

V. CONCLUSION

WHEREFORE, Tri-State respectfully requests that the Commission accept its comments herein and issue a Final Rule consistent with the modifications suggested in the foregoing discussion.

Respectfully submitted,

Tri-State Generation and Transmission Association, Inc.,



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