

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO**

PROCEEDING NO. 22M-0342E

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IN THE MATTER OF THE COMMISSION’S INVESTIGATION INTO SHORT TO MEDIUM TERM ELECTRIC RESOURCE ADEQUACY AND THE IMPACT OF CLIMATE CHANGE AND EXTREME WEATHER.

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**COMMISSION DECISION OPENING PROCEEDING**

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Mailed Date: August 2, 2022  
Adopted Date: June 22, 2022

**I. BY THE COMMISSION**

**A. Background**

1. The State of Colorado, and the Western region as a whole, is facing potential resource adequacy concerns extending at least through the summers of 2023 and 2024.

2. A Summer Reliability Assessment from the North American Electric Reliability Corporation (NERC), published on May 18, 2022, for both the Western Electric Coordinating Council (WECC) and Southwest Power Pool (SPP) regions, states: “Expected resources meet operating reserve requirements under normal peak-demand scenarios. Above-normal summer peak load and outage conditions could result in the need to employ operating mitigations (*i.e.*, demand response and transfers) and EEAs (Energy Emergency Alerts). Load shedding may be needed under extreme peak demand and outage scenarios studied.”<sup>1</sup> The study further notes that “Energy output from hydro generators throughout most of the Western United States is being affected by widespread drought and below-normal snowpack.”<sup>2</sup>

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<sup>1</sup> NERC 2022 Summer Reliability Assessment, May 2022, pages 28, 33, and 4.

<sup>2</sup> *Id.*

3. This is not the first report to raise concerns about resource adequacy in the West. The introduction to the WECC Summer Assessment, published in December of 2021, likewise states “ [t]he generation, load, and climate diversity in the West is shifting, variability is increasing, and both are occurring at an increasing pace. The changes are also widespread and require attention at an interconnection-wide level.”<sup>3</sup> The report goes on to conclude that: “The West needs to change its approach to resource planning to avoid a deterioration of reliability over both the near-term (1–4 years) and long-term (5–10 years).”<sup>4</sup>

4. Resource adequacy ties to climate change and extreme weather events. A recent weather outlook from NOAA indicates Colorado is in the bull’s-eye for high probability of above average temperatures for the entire summer. Colorado is also expected to have below average precipitation.

5. In addition to the climactic conditions and increasing variability of generation, there are also a number of other factors contributing to the short-term capacity situation in our region. Substantial generation is retiring or will soon be retiring across the West. At the same time, there are challenges in bringing new generation on-line due to global supply chain problems (product unavailability, shipping delays, labor shortages) and the U.S. Commerce Department Solar tariff investigation (anti-circumvention and countervailing duties). These factors impact the delivery of new solar facilities intended to replace retiring generation in particular, leading to long delays or outright project cancellations.

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<sup>3</sup> WECC 2021 Western Assessment of Resource Adequacy.

<sup>4</sup> *Id.*

**B. Discussion**

6. On January 28, 2022, the Commission issued Decision No. C22-0062 opening investigatory Proceeding No. 22I-0052EG. The Commission sought to examine how climate change and extreme weather may impact Colorado's electric and gas utilities. The specific purpose of that proceeding was to solicit "information from climate and weather experts; studies performed or actions taken by other regulatory entities addressing changing climate and weather; and comments from utilities and other interested persons."<sup>5</sup> The Commission conducted two information meetings and received information and comments from several utilities before closing the proceeding by minute entry on June 22, 2022.

7. We recognize that the investigation into climate change and extreme weather is pertinent to the discussion of resource adequacy and planning. As such, the Commission takes administrative notice of the information filed in Proceeding No. 22I-0052EG in this Proceeding.

8. We further seek additional information regarding the short-term (roughly of 2022 through 2025) and medium-term (roughly 2026 through 2030) resource adequacy and planning. Initially, we direct Public Service Company of Colorado (Public Service) to file information in this Proceeding within 45 days of the effective date of this Decision on the following topics:

- a) Potential for additional near-term demand response options that could provide incremental resources in the 2022 to 2024 timeframe;
- b) Due diligence regarding whether existing interruptible customers are appropriately participating in interruptible rates and will reliably interrupt demand during extreme weather or other reliability events. In addition, report on whether additional, appropriate interruptible customers can be added to the interruptible rates and whether those rates need to be modified to incorporate economic events, not just reliability events;

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<sup>5</sup> Decision No. C22-0062, Proceeding No. 22I-0052EG at p.3, ¶7, issued January 28, 2022.

- c) Analysis regarding the timing of system peak demand and peak net of renewable generation for the short term of 2022 through 2025 and the medium term of 2026 through 2030;
- d) Conservation messaging procedures and the potential benefits of conservation messaging for both economic and reliability concerns;
- e) Evaluation of options to extend certain existing resources that may be retiring or terminating in the next several years including owned generation resources and purchase power resources;
- f) Project-by-project update regarding resource additions with on-line dates from 2022 through 2025;
- g) Scenario analysis evaluating extreme temperatures and significantly above normal unit de-rates or outages consistent with the approach in the May 2022 NERC summer of 2022 Resource Adequacy report. In addition, provide updated Loss of Load Probability (LOLP) study for the summers of 2023 and 2024;
- h) Analysis of the potential for correlated events such as extreme heat coupled with wildfires, unit outages or limitations on key transmission or distribution assets;
- i) Analysis of the impact of extreme weather and regional resource adequacy concerns on regional market prices for wholesale energy in the West;
- j) Any available information or analysis regarding resource balance within Public Service's balancing authority, across the state of Colorado or across the West as a whole; and
- k) Any other information pertinent to the consideration of short- and medium-term resource adequacy concerns.

9. We therefore open this miscellaneous proceeding to serve as a repository for the filing of presentations, studies, and comments regarding current and medium-term resource adequacy. In addition, this proceeding will serve as a platform from which to: facilitate Commissioner Information Meetings; solicit information from other states, other regulatory entities, utilities, and interested parties; and issue decisions to further the Commission's understanding.

10. We direct the Staff of the Commission (Staff) to work with Public Service to address the initial information requested by the Commission. In addition, the Commission directs

Staff to facilitate the development of future Commission Information Meetings as appropriate through discussions at Commissioner Weekly Meetings.

11. The Commission will conduct this Miscellaneous Proceeding *en banc*.

## II. ORDER

### A. The Commission Orders That:

1. The Commission opens this Proceeding to solicit information that will be helpful in understanding short- and medium-term resource adequacy and planning including the impact of climate change and extreme weather.

2. Public Service Company of Colorado is directed to prepare and file within 45 days of the mail date of this Decision, information addressing the topics identified, consistent with the discussion above.

3. This Proceeding shall serve as: a repository for Commissioner Information Meeting presentations; a platform to issue decisions, pose questions, and solicit comments from utilities and interested persons; and a repository for comments and responses received.

4. The Commission takes administrative notice of the information filed in Proceeding No. 22I-0052EG.

5. This Proceeding is initially designated as an administrative proceeding under 4 *Code of Colorado Regulations* 723-1-1004(b) of the Commission's Rules of Practice and Procedure.

6. The Commission will conduct this proceeding *en banc*.

7. This Decision is effective upon its Mailed Date.

**B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING  
June 22, 2022**

(S E A L)



ATTEST: A TRUE COPY

A handwritten signature in cursive script that reads "Doug Dean".

Doug Dean,  
Director

THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF COLORADO

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JOHN GAVAN

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Commissioners