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Public Utility Commission of Texas

Memorandum

TO: Chairman Thomas J. Gleeson
Commissioner Kathleen Jackson
Commissioner Courtney K. Hjaltman

FROM: Werner Roth, Market Analysis

DATE: February 7, 2025

RE: **February 13, 2025 Open Meeting – Item No. 6**
Project No. 55999 – Reports of the Electric Reliability Council of Texas – ERCOT's Report on Reliability Standard Magnitude Methodology

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On February 6, 2025, ERCOT filed a report detailing its proposed methodology for determining the value for the magnitude criterion of the Commission's approved reliability standard for the ERCOT region.[1] This memo provides Staff's view on ERCOT's proposed methodology.

Background

The Commission established a reliability standard that consists of three criteria: frequency, duration, and magnitude of a loss of load event. The magnitude criterion is to be based on "the expected highest level of load shed during a loss of load event for the ERCOT region, measured as the average lost load for a given hour, must be less than the maximum number of megawatts of load shed that can be safely rotated during a loss of load event, as determined by ERCOT, in consultation with commission staff and the transmission operators, with a 1.00 percent exceedance tolerance."[2]

Over the last few months, ERCOT has actively worked with Staff and the transmission operators in developing the methodology that should be used to calculate the magnitude value. ERCOT sent out two sets of requests for information (RFIs) to the transmission operators to better understand their load shed rotation programs and gather more detail on the various categories of critical loads that were excluded. ERCOT also scheduled four consultation calls with Staff and the transmission operators to review the information provided in response to these RFIs and discuss a path forward.[3]

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[1] *Reports of the Electric Reliability Council of Texas*, Project No. 55999, Electric Reliability Council of Texas, Inc.'s Report on Reliability Standard Magnitude Methodology (AIS Item 96) (Feb. 6, 2025) (Magnitude Report).
[2] 16 Texas Administrative Code (TAC) § 25.508(b)(3).
[3] Magnitude Report at 2-3.

Staff Agrees That ERCOT's Proposed Methodology is Reasonable.

After reviewing the RFI responses from the transmission operators, ERCOT recommended that the methodology for establishing the value of the magnitude criterion be 20% of the forecasted base load for the 75th percentile of the forecasted winter base load from ERCOT's Capacity, Demand, and Reserves (CDR) report. Based on this methodology, the magnitude value that would be used in the reliability standard for 2024-2025 would be 16,000 MW.[4]

Staff believes this approach is reasonable for the following reasons:

This value aligns with the information provided by the transmission operator responses to the RFIs.

As ERCOT notes in its filing, this aligns with the information provided by the RFI responses. Accounting for load that could be shed at any one time to facilitate load shed during the first hour of a loss of load event and for transmission-connected customers that were not registered as a critical category, the total amount of load that could be shed at any one time to facilitate rotation was calculated to be 15,918.24 MW.[5] This value would exclude the minimum 25% Under-Frequency Load-Shedding (UFLS) obligation and three non-residential critical load categories: Critical Natural Gas Facilities, Critical Public Safety Customers, and Critical Load Industrial Customers.[6] While no customer categories, including those designated as critical, are guaranteed to be excluded from load shed in all circumstances, Staff views the approach of generally seeking to exclude these categories as consistent with the "safely rotated" language included in the rule.

Basing the value for the magnitude criterion on the load forecast included in the CDR report will allow it to scale with expected load growth and provide more transparency.

Directly linking the magnitude criterion of the reliability standard to a set percentage of the CDR report's load forecast will clearly indicate that, as the load forecast increases, the amount of load that can be shed at one time as part of a load shed program should also increase. Given the expectation of load growth, it is critical that this component of the reliability standard reflects this increase. Additionally, the CDR report is one of the most discussed and scrutinized documents that ERCOT produces. Using the load forecast value from the CDR report to determine the magnitude criterion of the reliability standard will allow for additional transparency, provide more opportunity for stakeholder discussion and input around the value used, and provide more predictability as to what the MW value for the magnitude criterion of the reliability standard will be in future years.

The Value Used for the Magnitude Criterion of the Reliability Standard is Not a Performance Standard for Transmission Operators

In its filing, ERCOT states that the magnitude value is not a performance standard for transmission operators during real-time load shed events, and the magnitude methodology does

[4] Magnitude Report at 7.
[5] *Id.*
[6] *Id.* at 4.

not direct transmission operators how to structure their load shed plans.[7] Staff agrees with this assessment. The purpose of the reliability standard is for the Commission to make the best policy choices regarding resource adequacy in the ERCOT region, taking into account **reliability and cost**; it is not intended to be a tool to enforce load shed standards. The value used for the magnitude criterion of the reliability standard should set a reasonable expectation on the amount of load that can safely be shed at any one time. This includes the ability to rotate distribution-level customers, avoid shedding customers that are registered as critical, and allows transmission operators to maintain their 25% UFLS obligations. As shown above, this closely aligns with approximately 20% of the forecasted load for the 75th percentile of the forecasted winter base load.

Consultation with Commission Staff and the Transmission Operators Must Continue

Staff agrees with ERCOT's view that, with the chosen methodology for calculating the magnitude component of the reliability standard, additional RFIs on an annual basis would no longer be necessary. However, as the relevant rule requires ERCOT to consult Staff and the transmission operators on how the magnitude component of the reliability standard is calculated annually, Staff believes that this consultation should continue, with meetings between the required parties being scheduled at least annually. These discussions should take place well in advance of the December 1st deadline set by rule, and provide an opportunity for ERCOT, Staff, and the transmission operators to discuss how the magnitude methodology has been working, any changes to the ERCOT system that might impact the effectiveness of this methodology going forward, and ultimately, whether any changes to the magnitude methodology will be needed.

Staff is available to address any questions you may have.

[7] Magnitude Report at 8.