



Filing Receipt

Filing Date - 2024-08-28 05:24:03 PM

Control Number - 54584

Item Number - 105

OPEN MEETING COVER SHEET COMMISSIONER MEMORANDUM

MEETING DATE: August 29, 2024

DATE DELIVERED: August 28, 2024

AGENDA ITEM NO.: 16


CAPTION: Project No. 54584 Reliability Standard
for the ERCOT Market

DESCRIPTION: Commissioner Lori Cobos Memorandum

Public Utility Commission of Texas

Commissioner Memorandum

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

FROM: Commissioner Lori Cobos 

DATE: August 28, 2024

RE: August 29, 2024 Open Meeting – Agenda Item No. 16
Project No. 54584, *Reliability Standard for the ERCOT Market* (Proposal for Adoption)

First and foremost, I want to thank Commission Staff for their hard work on the proposed rule and ERCOT for their hard work in conducting the analysis and studies associated with the reliability standard. Establishing a reliability standard for the ERCOT region is a critically important step toward ensuring our state has an adequate supply of electricity to meet future needs. It is also important that the Commission develop a robust and clear process for reviewing ERCOT's ongoing assessments of the reliability standard. Therefore, I recommend that the Commission make the proposed redline changes, attached hereto, to the proposed rule to make the Commission's review process more robust and transparent.

Thank you for your consideration. I look forward to discussing this important matter with you at tomorrow's open meeting.

1 **§25.508. Reliability Standard for the Electric Reliability Council of Texas (ERCOT) Region.**

2 (a) **Definitions.** The following words and terms, when used in this section, have the following
3 meanings, unless the context indicates otherwise.

4 (1) **Exceedance tolerance** – the maximum acceptable percentage of simulations in
5 which the modeled ERCOT system experiences a loss of load event that exceeds
6 the threshold for a given ~~metric~~criteria of the reliability standard.

7 (2) **Loss of load event** – an occurrence when the system-wide firm load plus minimum
8 required operating reserves during an Energy Emergency Alert 3 event is greater
9 than the available resource capacity to serve that load, resulting in involuntary load
10 shed.

11 (3) **Transmission operator** ~~— as the term is~~ has the same meaning as defined in the
12 ERCOT protocols.

13 (4) **Weatherization effectiveness** – the assumed percentage reduction in the amount
14 of weather-related unplanned outages for ~~thermal~~generation resources and energy
15 storage resources included in the model, due to compliance with the weatherization
16 standards in §25.55 of this title (relating to Weather Emergency Preparedness).

17
18 (b) **Reliability standard for the ERCOT region.** The bulk power system for the ERCOT
19 region meets the reliability standard if an ERCOT probability-based model analysis-simu-
20 lation demonstrates~~finds~~ that the system-meets each of the criteria provided in this subsec-
21 tion.

1 (1) **Frequency.** The expected loss of load events for the ERCOT region must be equal
2 to or less than ~~one~~0.1 ~~day~~events per ~~ten~~ years on average, i.e., 0.1 loss of load ex-
3 pectation (LOLE).

4 (2) **Duration.** The maximum expected length of a loss of load event for the ERCOT
5 region, measured in hours, must be less than 12 hours, with no less than a 1.00
6 percent exceedance tolerance.

7 (3) **Magnitude.** The expected highest ~~instantaneous~~ level of load shed during a loss of
8 load event for the ERCOT region, measured ~~in megawatts~~ as the average lost load
9 for a given hour, must be less than the maximum number of megawatts of load shed
10 that can be safely and effectively rotated during a loss of load event, as determined
11 by ERCOT, in consultation with commission staff and the transmission operators,
12 with no less than a ~~0.25~~1.00 percent exceedance tolerance. Beginning December
13 1, 2024, ERCOT must file, at least annually on December 1 of each year, the max-
14 imum number of megawatts of load shed that can be safely and effectively rotated
15 during a loss of load event and a summary of the methodology used to calculate
16 this value.

17
18 (c) **Reliability assessment.**

19 ~~(1) — ERCOT's assessment.~~ Beginning January 1, 2026, ERCOT must initiate an assessment
20 to determine whether the bulk power system for the ERCOT region is meeting the reliabil-
21 ity standard and is likely to continue to meet the reliability standard for the three years
22 following the date of assessment. The assessment must be conducted at least once every
23 three ~~five~~ years.

1 (1) Modeling assumptions.

2 (A) Before conducting the assessment, ERCOT must file a comprehensive list
3 of proposed modeling assumptions to be used in the reliability assessment.

4 ~~for commission review.~~ The proposed assumptions must include:

5 (i) the number of historic weather years that will be included in the
6 modeling;

7 (ii) the amount of new resources and retirements, in megawatts, listed
8 by resource type;

9 (iii) the weatherization effectiveness; and

10 ~~(iv) an update to the calculation for the cost of new entry, including re-~~
11 ~~view of the current reference technology; and~~

12 ~~(iv)~~ (iv) any other assumptions that would impact the modeling results, along
13 with an explanation of the possible impact of the additional assump-
14 tions.

15 (B) Commission staff will provide interested persons with at least 30 days from
16 the date ERCOT files its proposed modeling assumptions to file comments
17 recommending modifications to ERCOT's proposed modeling assumptions.

18 Commission staff may include filing requirements or additional questions
19 for comment.

20 (C) After reviewing filed comments, ERCOT, in consultation with commission
21 staff, must file its final recommended modeling assumptions for commis-
22 sion review. Commission staff may provide a separate recommendation on

1 ERCOT's final recommended modeling assumptions for the commission's
2 consideration.

3 (2B) Assessment components.

4 (A) ERCOT's assessment must include review and analysis of the resource
5 fleet, loads, and other system characteristics for the ERCOT region for the
6 following points in time:

- 7 (i) the current year's system configuration;
- 8 (ii) the expected system configuration three years from the date of the
9 current year's system analysis; and
- 10 ~~(iii) the system configuration three years from the date of the current~~
11 ~~year's system analysis that would be required to achieve the market~~
12 ~~equilibrium reserve margin.~~

13 (BE) The assessment results must include, at a minimum, the following metrics
14 for each point in time:

- 15 (i) the LOLE;
- 16 (ii) the probability of a loss of load event exceeding the duration thresh-
17 old established in subsection (b)(2) of this section;
- 18 (iii) the probability of a loss of load event exceeding the magnitude
19 threshold established in subsection (b)(3) of this section;
- 20 (iv) the expected unserved energy; and
- 21 (v) the normalized expected unserved energy.

22 ~~(CE) If the assessment shows that any reviewed systems fall below the reliability~~
23 ~~standard described in subsection (b) of this section, ERCOT must include~~

1 ~~in its assessment recommended changes to components of the ERCOT mar-~~
2 ~~ket design intended to address that deficiency. ERCOT must include the ex-~~
3 ~~pected system costs associated with any of the recommended changes.~~

4 **(32) Commission's review and determination of assessment.**

5 (A) ERCOT must file its assessment with the commission.

6 (B) Commission staff will provide interested persons with at least 30 days from
7 the date ERCOT files its assessment to file comments on ERCOT's assess-
8 ment. Commission Staff may include filing requirements or additional
9 questions for comment.

10 (C) If the assessment shows that any reviewed system fails to meet the reliabil-
11 ity standard described in subsection (b) of this section:

12 (i) ERCOT must provide the commission with a summary explanation
13 of the deficiency and its supporting analysis. ERCOT must provide
14 the commission with a menu of proposed recommended market de-
15 sign changes that are intended to address the deficiency. ERCOT
16 must provide the commission with the expected system costs asso-
17 ciated with each of its proposed recommended changes.

18 (i)(ii) the independent market monitor must conduct an independent re-
19 view of any ERCOT's proposed recommended market design
20 changes, including any associated expected system costs for each
21 proposed recommended change by ERCOT under paragraph (2)(C)
22 of this subsection, and file its review no later than the deadline es-
23 tablished in subparagraph (B) of this paragraph; and-

1 (ii)(iii) commission staff must provide a recommendations to the commis-
2 sion, considering expected system costs and reliability benefits, on
3 whether any market design changes or other changes that may be
4 necessary to address a the deficiency identified under this subsec-
5 tion.

6 (D) The commission will review ERCOT's assessment, the independent market
7 monitor's review, commission staff's recommendations, and stakeholder
8 comments to determine whether any market design changes are may be nec-
9 essary.