**PROJECT NO. 54584**

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| **RELIABILITY STANDARD FOR THE ERCOT MARKET** | **§****§****§** | **PUBLIC UTILITY COMMISSION****OF TEXAS** |

**TCPA COMMENTS ON PROPOSAL FOR PUBLICATION OF NEW 16 TAC §25.508 AND RESPONSE TO STAFF QUESTIONS**

 TCPA[[1]](#footnote-2) appreciates the efforts of Commissioners, Commission Staff, and ERCOT toward advancing the reliability standard that has resulted in the proposal for publication (PfP) as well as the opportunity to provide comments. An ERCOT-wide reliability standard, as directed by the Sunset Commission’s management directive[[2]](#footnote-3) and required by the Public Utility Regulatory Act (PURA),[[3]](#footnote-4) will ensure that policymakers and stakeholders have a clear understanding of future reliability needs and the opportunity to take proactive steps to address any potential deficiencies through market-based solutions. The reliability standard should reflect the reliability expectations policymakers are committed to achieving through the competitive market without the need for out-of-market actions such as Reliability Unit Commitment (RUC), utility load management programs, or any type of capacity procurement outside the ERCOT wholesale electric markets.

In addition to the overarching principle of achieving the reliability standard through competitive wholesale market solutions, there are modeling and process components TCPA supports. First, the reliability standard parameters for frequency, magnitude, and duration (and their associated exceedance tolerances) should be at thresholds striking a reasonable balance between cost and reliability that serves the public interest. Increased reliability will result in periodic increased costs so it will be important to establish reliability standard parameters that reflect the realistically tolerable expectations of each aspect in concert with cost. The best way for the Commission to achieve this is to set the reliability standard parameters according to Texans’ and Texas policymakers’ revealed preferences and what Texans are willing to accept from a lived experience standpoint and use the exceedance tolerances to balance the costs of achieving those standards. The PfP generally strikes this balance.

The rule should also clearly delineate a process that prospectively examines whether the wholesale electric markets are expected to meet or exceed the reliability standard. If the assessment indicates the reliability standard may not be achieved, then a process and timeline should require the Commission, ERCOT, and stakeholders to examine what modifications to market design parameters are necessary and sufficient to achieve the reliability standard. Following that examination, the Commission should decide on what market design modifications should be made and provide a timeline by which they must be completed. The PfP provides such a general framework; however, as drafted, it does not reflect a full commitment of the Commission to take action in response to a projected failure to achieve the reliability standard. TCPA respectfully requests that the Commission take that incremental but critical step in its final rule to send a clear signal of its commitment to the reliability standard.

TCPA believes that legislation enacted during the last two sessions to address grid reliability is sufficient. Market participants are already responding and will continue to respond with the development of new dispatchable generation to follow the incentives of those implemented policies as long as there is sufficient confidence that ERCOT markets will continue to support those investment decisions. Therefore, it is critical that the Commission makes a full commitment to strengthening the ERCOT market design when there is a risk the reliability standard will not be achieved. Additional reforms, beyond those already underway or committed to statutorily, may undermine current market design efforts, resulting in more regulatory and market uncertainty and undermining investor confidence. For these reasons, TCPA does not support using state-sponsored or utility-owned capacity additions, or other ad hoc out-of-market mechanisms like ERCOT’s recent attempted capacity and demand response procurements through RFPs to address deficiencies in the reliability standard. These approaches distract from real solutions and harm the investment signals needed to sustainably achieve the reliability standard over the long-term.

**RESPONSE TO STAFF QUESTIONS**

1. **What are the advantages and disadvantages of enshrining an exceedance tolerance for magnitude and duration in the commission’s rule?**

 TCPA strongly supports enshrining the exceedance tolerance criteria in the rule, as proposed in the PfP. One clear advantage to doing so is that it will dampen any impulses to frequently change the reliability standard parameter values to achieve a particular outcome. Frequent changes have the potential to undermine confidence in the ERCOT markets, and the exceedance tolerances provide a clearly defined “good cause exception” threshold to the experience-based reliability standard parameters that balances cost considerations.

 TCPA interprets this question as expressing concern for whether the Commission might not get the exceedance tolerances “right” (especially as a matter of first impression) and recognizes that appropriate exceedance tolerance thresholds depend on confidence in the assumptions and study parameters. The Commission may, if it desires greater flexibility, want to establish clear guidelines for when it will consider a good cause exception beyond that enshrined in the exceedance tolerance. As noted above, the exceedance tolerance itself is essentially a good cause exception, but if additional flexibility is desired then it may be appropriate to provide guidelines to market participants regarding what would constitute a good cause exception to ensure a broad understanding of what risk to market policy certainty may be created.

1. **Should the exceedance tolerance be evaluated more frequently than the reliability standard? If so, what is the appropriate frequency?**

 As an initial matter, this question seems to presume a cadence for review of the reliability standard that is not apparent from the PfP itself. While the PfP includes a periodic “reliability assessment” of the system’s ability to meet the reliability standard, nowhere in the PfP is there a proposed cadence for review of the standard itself – which presumably would have to be done through a rulemaking to revise the newly proposed 16 TAC § 25.508(b) and include all reliability standard parameters, including the exceedance tolerances (subject to the Commission’s scoping guidance).

 The exceedance tolerance is an expression of how much extreme weather risk the region is willing to accept, and the relationship between this risk and the market signals necessary to bring sufficient investment to mitigate the risk depends on the reliability assessment methodology. If the evaluation of the exceedance tolerance contemplated in this question is intended to be performed concurrently with the assessment of whether the anticipated system configuration would achieve reliability equal to or greater than the standard, then TCPA warns the Commission against that path as inappropriately interjecting regulatory uncertainty through a system evaluation process. Such a frequent review of an exceedance tolerance is unnecessary and may undermine investor confidence in the ERCOT market. If there is interest in reviewing the exceedance tolerances more frequently initially as stakeholders gain experience with the model and the model is refined, TCPA would instead recommend that the Commission establish clear criteria for when it may consider good cause exceptions to the exceedance tolerances.

 Overall, however, we caution against changing the exceedance tolerances frequently as this may discourage confidence in the stability of market orientation toward the reliability standard. If the Commission’s intent is to formally establish periodic wholesale reviews of the reliability standard metrics of loss-of-load-expectation (LOLE), duration, and magnitude, then TCPA recommends that this review occur no more frequently than every ten (10) years with the exceedance tolerance being reviewed at the same time. The reliability standard should be durable and somewhat static from a regulatory certainty perspective, so a cadence of every 10 years is appropriate.

**COMMENTARY ON REDLINES TO PROPOSED RULE**

 Staff has done an excellent job of bringing the many memos and model iterations to fruition through the proposed rule, and TCPA appreciates the extensive work that has been done and commends the staff on the resulting proposal. The changes TCPA recommends in the redline below are intended to provide greater clarity, efficiency, and transparency to the components of the reliability standard as well as to the process for evaluating its effectiveness and the steps to be taken should the assessment demonstrate an expected upcoming deficiency in the system’s reliability. These changes are important to ensure a robust and transparent process for stakeholders, policymakers, and the public as well as providing certainty for all stakeholders.

Cadence and Scope of Reliability Assessment

TCPA strongly urges the Commission to adopt an assessment frequency of annually and reduce the scope of the required assessment to only test whether the region is expected to meet or exceed the reliability standard over the test period. First, PURA 39.159(b)(2) is clear that “the commission shall ensure that [ERCOT] … periodically, *but at least annually*, determines the quantity and characteristics of ancillary or reliability services *necessary to ensure appropriate reliability* during extreme heat and extreme cold weather conditions and during times of low non-dispatchable power production in the power region.” (*emphasis added*). The evaluation function described here is the assessment contemplated in the PfP’s 16 TAC § 25.508(c): evaluation of the system’s ability, under various extreme circumstances, to meet the reliability standards; in turn, if a deficiency is identified, the Commission and ERCOT must determine market design changes necessary to ensure the reliability standard is met. Therefore, TCPA believes the Commission is statutorily bound to an annual reliability assessment cadence.

From a practical standpoint, assessing system reliability prospectively every 5 years may result in an inability to identify trends of decaying reliability, would shorten the window to implement market reforms, and reduce the time for investors to respond to those reforms before reliability is compromised. Development of dispatchable generation is a multi-year endeavor, and the investor, or “market,” response must be considered in the “reliability assessment – market changes – market response” cycle to ensure reliability is delivered through market-based solutions. The ERCOT system is dynamic with frequent changes in resource mix and load growth trends, which further justify annual reliability assessments.

While TCPA appreciates the analytical interest in determining market equilibrium reserve margin (MERM) and believes that MERM has a role to play in ERCOT’s evaluation of market design modifications, TCPA believes the paramount objective is to provide the Commission, Commission Staff, ERCOT, and stakeholders with timely information about the system’s ability to meet the standard while preserving the maximum amount of time to recognize the need for and consider market reforms, for investors to respond to those market reforms, and to mitigate the urge to resort to out of-market actions. The assessment of whether the system achieves the reliability standard could be a standalone analysis from modeling the MERM, if necessary to perform the assessment annually; therefore, modeling that requires more complicated cost and revenue inputs (such as updating the CONE parameters and value) should not be performed at the expense of evaluating reliability less frequently than annually. If the results of the reliability assessment conclude that the region may be at risk of not achieving the reliability standard, more complex economic modeling should instead be part of the requisite future rulemaking to update market design parameters in order to achieve the reliability standard.

TCPA wants to be clear that maintaining up-to-date CONE values and reference technology choices will be critical to ERCOT’s performance of the requirements of proposed 16 TAC § 25.508(c)(1)(D). Because those activities are conditional upon an assessment finding that a modeled system falls below the reliability standard, TCPA did not recommend including reference to CONE under this rule but instead anticipates addressing the scope and frequency of the CONE update under the anticipated Protocol revisions or other rules for the CONE study.

Other Comments

The remaining edits to the proposed rule are intended only to enhance the clarity of the rule and are not meant to substantively change the rule.

First, TCPA recommends the following changes to proposed “definitions” in subsections (a) and (b) of the proposed rule:

* The recommended changes to the definition of “exceedance tolerance” clarify that the percentage of simulations are in aggregate relative to the reliability standard metrics and not individual simulated loss of load events.
* The recommended modification to the “loss of load event” definition makes explicit that while simulating loss of load events ERCOT will carry the minimum required reserves.
* The recommended changes to the definition of “transmission operator” are intended to provide transparency within the rule without a need to consult other resources, such as ERCOT Protocols. Hard-coding the definition in the rule, rather than referring to a policy document that is subordinate to the Commission rule, provides a static definition for the sake of both transparency and certainty.
* The recommended changes to the definition of “weatherization effectiveness” ensures it is applicable to all resource types, not just thermal resources, as all resource types are subject to the Commission’s weatherization rules and inspections.
* The recommended clarification to the definition of “frequency” is to better align the definition with what is being measured – the probability of a loss of load event occurring within a modeled year. As initially drafted in the PfP as “0.1 days,” TCPA had concern this could be misinterpreted as a duration metric of 2.4 hours, and recommends avoiding such potential confusion.

 Second, the recommended changes below regarding the ERCOT assessment are intended to provide the clarity of process and information needed should the system be expected not to meet the reliability standard in a given year or years. To be clear, the first question that needs to be answered is whether or not the system is expected to meet the standard. The second important component is determining the difference between the amount of resources the anticipated system configuration has when not meeting the standard and the amount it actually needs in order to meet the standard. While parties may argue over what system configuration is necessary to meet the standard, the additional amount of resources needed to meet the standard, if a deficit is detected, should be an objective quantifiable amount that ERCOT should calculate as part of its assessment initially presented to the Commission. If the Commission desires to estimate a cost associated with the additional resources needed to meet the standard, CONE could be used for this purpose; but as noted above, TCPA does not consider this information a necessary part of this rule, especially if it further delays or complicates the analysis required by ERCOT.

 Finally, it is critical to have a process for Commission review and action when the reliability standard is not met. PURA 39.159 clearly requires the Commission to establish the requirements for meeting the reliability needs of ERCOT and to review the products and parameters for those products at least annually; PURA § 39.159 also clearly delineates the type of qualities policymakers expect the resources primarily responsible for achieving that reliability standard to possess. It is reasonable, therefore, for the Commission to demonstrate commitment in its rule to achieving the reliability standard and ensure the Commission provides a transparent review of ERCOT’s recommendations, e.g., through a rulemaking proceeding. HB1500 recently added PURA § 39.1514, which requires that when the Commission directs ERCOT to take an official action, if that action will create a new cost or fee, increase an existing cost or fee, or impose significant operational obligations on an entity, then the directive must take the form of a rulemaking or a contested case. In order to ensure a fully transparent and exhaustive process that serves the public interest, the rule should address this constraint by requiring that any Commission-directed changes to market design occur through a rulemaking, affording stakeholders the opportunity to review and provide feedback regarding recommended changes. Ultimately, the Commission’s decision would then be finalized through the rule adoption so that anyone impacted by the electric market will have an ability to participate in crafting those changes and be able to gain a full understanding of the changes.

**PROPOSED REDLINES**

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

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

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

(2) **Loss of load event** -- an occurrence when the system load is greater than the available resource capacity to serve that load while carrying the required minimum physically responsive capacity reserves, resulting in involuntary load shed.

(3) **Transmission operator** – a Transmission and/or Distribution Service Provider (TDSP) designated by itself or another TDSP for purposes of communication with ERCOT and taking action to preserve reliability of a particular portion of the ERCOT System ~~as the term is defined in the ERCOT protocols~~.

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

(b) **Reliability standard for the ERCOT region.** The bulk power system for the ERCOT region meets the reliability standard if an ERCOT ~~model~~ analysis performed in accordance with subsection (c) of this section finds that the systemmeets each of the criteria provided in this subsection.

(1) **Frequency.** The expected loss of load events for the ERCOT region must be less than or equal to a 10% probability of a loss of load event occurring within each of the ~~0.1 days per~~ years modeled ~~on average~~, i.e., 0.1 loss of load expectation (LOLE).

(2) **Duration.**  The maximum expected length of a simulated loss of load event for the ERCOT region, measured in hours, must be less than or equal to 12 hours, with a 1.00 percent exceedance tolerance.

(3) **Magnitude.** The expected highest instantaneous level of load shed during a simulated loss of load event for the ERCOT region, measured in megawatts, 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, and approved by the Commission, with a 0.25 percent exceedance tolerance.

(c) **Reliability assessment.**

(1) **ERCOT’s assessment.**  Beginning January 1, 2026, ERCOT must initiate an assessment to determine whether the bulk power system for the ERCOT region is meeting the reliability standard described in subsection (b) of this section and is likely to continue to meet the reliability standard for the three consecutive years following the date of assessment. The assessment must be conducted at least ~~once every five years~~ annually.

(A) Before conducting the assessment, ERCOT must file a list of proposed modeling assumptions to be used in the reliability assessment for commission review. The proposed assumptions must include:

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

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

(iii) the weatherization effectiveness; and

(iv) ~~an update to the calculation for the cost of new entry, including review of the current reference technology; and~~

~~(iv)~~ any other assumptions that would impact the modeling results, along with an explanation of the possible impact of the additional assumptions.

(B) ERCOT’s assessment must include review and analysis of the resource fleet, loads, and other pertinent system characteristics for the ERCOT region ~~for the~~ and include the following ~~points in time~~:

(i) the current year’s system configuration; and

(ii) the expected system configuration for each of the next three years from the date of the current year’s system analysis~~; and~~

~~(iii) the system configuration three years from the date of the current year’s system analysis that would be required to achieve the market equilibrium reserve margin~~.

(C) The assessment results must include, at a minimum, the following metrics for each ~~point in time~~ year studied under paragraph (B):

(i) the LOLE;

(ii) the probability of a loss of load event exceeding the duration threshold established in subsection (b)(2) of this section;

(iii) the probability of a loss of load event exceeding the magnitude threshold established in subsection (b)(3) of this section;

(iv) the expected unserved energy; and

(v) the normalized expected unserved energy.

(D) If the assessment shows that any reviewed systems fall below the reliability standard described in subsection (b) of this section, ERCOT must: ~~include in its assessment recommended~~

(i) quantify the amount of dispatchable generation, in megawatts, that is necessary to achieve the reliability standard for any study year that fails to achieve the reliability standard; and

(ii) recommend changes to components of the ERCOT market design intended to address that deficiency.

(2) **Commission’s review of assessment.**

 (A) The Commission must ensure that the reliability standard in subsection (b) is met through competitive procurement of energy, ancillary services, and reliability services from appropriately qualified dispatchable generation resources capable of meeting continuous operating requirements for the season to ensure appropriate reliability during extreme heat and extreme cold weather conditions and during times of low non-dispatchable power production in the power region.

(B) ERCOT must file its assessment with the commission. The commission will review ERCOT’s assessment and recommendations, and will ~~to~~ determine, by rule, ~~whether~~ any market design changes that are necessary to comply with paragraph (2)(A) of this subsection.

**CONCLUSION**

 TCPA appreciates the opportunity to provide these comments and recommended changes and looks forward to continuing to work with the Commission, ERCOT, staff and other stakeholders on implementation of this rule.

July 15, 2024

Respectfully submitted,



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 Michele Richmond

 Executive Director

 Texas Competitive Power Advocates (TCPA)

 michele@competitivepower.org

(512) 653-7447

**EXECUTIVE SUMMARY OF TCPA COMMENTS**

* The reliability standard should reflect the reliability expectations of Texans that policymakers are committed to achieving through the competitive market, without out-of-market actions.
* Parameters for frequency, magnitude, and duration (and their exceedance tolerances) should be at thresholds that strike a balance between cost and reliability to serve public interest. The PfP generally strikes this balance.
* The PfP appropriately delineates a process to prospectively examine whether the wholesale electric market is expected to meet or exceed the reliability standard.
	+ However, the final rule should reflect the Commission’s full commitment to take action in response to a projected failure to the meet the standard which provides confidence to market participants investing in new dispatchable generation that the Commission will ensure ERCOT will continue to support those investment decisions.
	+ Specifying the process to require a time certain for ERCOT to deliver the assessment and for the Commission to initiate a rule making in which stakeholders and the public may engage will ensure a transparent and thorough process, simultaneously providing confidence and certainty to investors of policymakers commitment to a reliable ERCOT system through the competitive wholesale market.
	+ Any changes adopted by the Commission should be accomplished through a formal rule adoption to comply with PURA § 39.1514.
* TCPA supports enshrining the exceedance tolerances in rule as frequent changes have the potential to undermine confidence in the ERCOT markets. Enshrining the exceedance tolerances in rule essentially provide a good cause option.
* Annual review of the exceedance tolerances, concurrent with the statutorily-required assessment of whether the system meets the reliability standard, inappropriately interjects regulatory uncertainty into a system evaluation process.
* If periodic wholesale reviews of the reliability standard metrics are formally established, TCPA recommends the review occur no more frequently than every ten years to avoid discouraging confidence in the stability of market orientation toward the reliability standard.
* The process for determination of whether the system is meeting the reliability standard need not necessitate a full-scale economic modeling, if such modeling would render an annual assessment impractical to achieve .
	+ PURA 39.159(b)(2) requires a review “at least annually”
	+ Assessing system reliability prospectively every 5 years may result in an inability to identify trends of decaying reliability, would shorten the window to implement market reforms, and reduce the time for investors to respond to those reforms before reliability is compromised.
	+ If needed to perform an annual assessment, the assessment of whether the system achieves the reliability standard could be a standalone analysis from modeling the MERM. Therefore, modeling that requires more complicated cost and revenue inputs (such as updating the CONE parameters and value) should not be performed at the expense of evaluating reliability less frequently than annually. However, maintaining up-to-date CONE values and reference technology choices will be critical to ERCOT’s performance of the requirements of proposed 16 TAC § 25.508(c)(1)(D).
* TCPA recommends clarifications to the definitions of “exceedance tolerance” and “loss of load event,” and to formally include a definition of “transmission operator” rather than defer to the ERCOT Protocols.
* TCPA recommends that “weatherization effectiveness” be applied to all resource types, not just thermal resources.
* TCPA recommends clarifications to the definition of “frequency” to better align the definition with what is being measured – the probability of a loss of load event occurring within a modeled year.
1. Shell has not joined these comments. [↑](#footnote-ref-2)
2. [Public Utility Commission of Texas | Texas Sunset Advisory Commission](https://www.sunset.texas.gov/reviews-and-reports/agencies/public-utility-commission-texas) [↑](#footnote-ref-3)
3. Tex. Util. Code §§ 11.001-66.016 (PURA); *see* *id.* § 39.159(b). [↑](#footnote-ref-4)