



Texas RE Comments on ERCOT's Proposed 2027 Methodologies for Determining Minimum Ancillary Service (AS) Requirements

Texas Reliability Entity (Texas RE) appreciates the opportunity to comment on ERCOT's 2027 proposed methodology for determining minimum AS requirements. Texas RE is a not-for-profit organization with the delegated authority under Section 215(c) of the Federal Power Act to, among other things, establish, monitor compliance with, and enforce federal reliability standards in the ERCOT Interconnection. Within this role, Texas RE's sole mission is to assure effective and efficient reduction of risks to the reliability and security of the Bulk Power System within the ERCOT region. Texas RE serves as a voice for reliability that is independent from all owners, operators, and users of the bulk power system, including ERCOT and all market participants.

As part of its reliability and security mission, Texas RE develops data-driven assessments of the current risk environment, providing a regional focus with the benefit of additional information from the North American Electric Reliability Corporation's (NERC) continent-wide regulatory scope. From Texas RE's perspective, the ERCOT region is at the forefront of many challenges being experienced across the Bulk Electric System. These challenges pose unique risks that Texas RE will highlight in more detail in its upcoming 2026 Regional Risk Assessment, which will be released later this year. This risk environment should inform the approach ERCOT takes in procuring the AS necessary for the reliable operation of the ERCOT Interconnection.

Key aspects of the current risk environment include:

- **Large load integration:** Integration of large loads continues to be the primary risk for the interconnection. This issue is exacerbated by persistent low-voltage ride-through issues during transmission fault events, potentially resulting in frequency disturbances and localized voltage swings. By way of example, the ERO Enterprise has conducted several incident reviews of significant voltage-sensitive load reductions in ERCOT¹ and the Eastern Interconnection² and is currently reviewing an additional disturbance incident resulting in approximately 3,800 MW of load and significant frequency excursions in the East. The continued growth of large loads in the ERCOT interconnection increases the potential magnitude of such events that must be addressed. While ERCOT and NERC are taking proactive steps to mitigate these risks through the development of large load ride-through standards, substantial and growing uncertainty around these performance issues remain and must be addressed in the operational and planning processes.
- **Increasing dependence on variable resources:** ERCOT no longer has sufficient thermal generation capacity to serve its peak demand periods with thermal generation alone, requiring dependence on variable resources. These variable resources create challenges in real-time operations such as high solar ramp periods, which are currently exceeding 18,000 MW per hour. Texas RE has also observed a significant increase in periods of high renewable penetration and low inertia (321 hours year-to-date in 2026 with greater than 70% penetration compared to 163 hours in 2025 and only 39 hours in 2024). In 2026 the minimum calculated hourly inertia level was 114 GW-sec versus a 100 GW-sec critical inertia level. This was the lowest recorded inertia in the last 10 years. Frequency disturbances during low inertia periods can be more severe due to higher rate

¹ *Incident Review of Voltage-Sensitive Crypto Load Reductions* (Jan. 9, 2025).

² *Incident Review Considering Simultaneous Voltage-Sensitive Load Reductions* (Jan. 8, 2025).



of change of frequency, again warranting a conservative approach to procuring the necessary AS reserves to address these types of issues.

- **Extreme weather:** Prolonged periods of extreme cold weather will continue to test the resiliency of the grid. While ERCOT, the Public Utility Commission, and NERC have taken significant steps to address generation availability risks during such extreme events, ERCOT remains dependent on variable renewable resources, which have a relatively low effective load carrying capacity during cold weather periods, to meet potentially high demands.
- **Increasing dependence on a single resource type for critical ancillary services:** Energy storage resources have effectively saturated the regulation and Responsive Reserve Service (RRS) markets. While performance to date has been excellent, this dependence on a single resource type also brings risks and uncertainties, primarily due to battery-duration limitations. Approximately 85% of installed battery capacity in ERCOT has a duration limit of less than 2 hours. Over the summer of 2026, Texas RE has observed extended periods of lower energy storage resource aggregate State of Charge (including 197 hours with aggregate SOC% less than 15% in June-August). While the aggregate MWhr capacity is higher due to the increase in available Energy Storage Resource (ESR) capacity, the duration limitations still represent a risk that must be managed carefully.
- **Overall demand and energy growth:** Energy and demand growth rates are close to 6% per year over the past 5 years, far exceeding historical averages. This previous rate of growth, coupled with the uncertainty around potential future load growth rates, presents challenges for operating and planning the ERCOT system as new transmission and generation projects typically require longer lead times than the loads coming onto the system.

These risks and challenges are not unique to ERCOT, but it is important to note that ERCOT is navigating these challenges from a unique position. The ERCOT region is at the forefront of many of these changes and therefore tasked with developing innovative solutions to these challenges first. ERCOT has been tremendously successful in these endeavors and the risk mitigation approaches developed here are frequently discussed and implemented across the continent.³ Moreover, as its own interconnection, ERCOT also must rely almost entirely on its own resources to meet whatever uncertain conditions may emerge.

While Texas RE cannot endorse a specific AS procurement proposal, the overall risk environment and ERCOT's unique position in it warrants a conservative approach to procuring the necessary AS reserves. The ERCOT Board and ultimately the Public Utility Commission will decide the appropriate amount of conservatism within this dynamic risk environment. Texas RE looks forward to the continued discussions in the stakeholder process around this important topic.

³ For example, NERC recently referenced ERCOT's large load voltage ride-through requirements as a viable minimum baseline for the continent-wide large load disturbance performance project. *Disturbance Performance for Computational Loads Standards Authorization Request* (Aug. 26, 2026).