

Regulatory Landscape: All Eyes on Energy Storage

February 21, 2024 Diana Liebmann, Jennifer Littlefield, Carlos Carrasco, Victor Salazar

PRACTICES Energy, Power and Natural Resources, Energy Regulatory, Energy Transition, Renewable Energy

At the state and federal level, regulators are focused on policy changes that impact battery storage projects. Changes to regulatory requirements for interconnecting, operating, and maintaining storage facilities can greatly impact the financial outlook for storage projects. Here's a look at what's on the regulatory horizon for storage projects in Texas at the state and federal level.

Transmission Interconnection Charges

Battery storage developers may face increased costs when interconnecting future projects to the transmission system. In 2023, the Texas Legislature passed Senate Bill 1500, establishing a new transmission interconnection cost allowance for generation facilities, including storage projects, seeking to interconnect to the Texas transmission system. In response, the Public Utility Commission of Texas (PUCT) recently amended rule 16 Texas Administrative Code § 25.195 to implement the transmission cost allowance. Under the newly amended rule, the interconnection cost allowance will apply to all generation projects with transmission-level Standard Generation Interconnections Agreements (SGIAs) that are executed after December 31, 2025. Interconnection costs that exceed a pre-determined allowance amount will be directly assigned to and collected from the interconnecting generation resource by the transmission service provider. The interconnection allowance for projects up to 138 kV is \$14,000,000 and the allowance for projects greater than 138 kV is \$20,000,000. The PUCT established the two-tiered methodology after determining that voltage level was the most significant cost driver for interconnections. The PUCT will make an annual inflation adjustment to the allowance amounts on January 1 of each calendar year. Once a project is energized, the generation resource is responsible for the cost of any new or upgraded transmission facilities needed to support the generation resource for a period of ten years. However, any "leftover" interconnection allowance balances may be applied to the interconnection costs borne by the interconnecting generator.

State of Charge Requirements

The proposal by the Electric Reliability Council of Texas, Inc. (ERCOT) to require batteries, termed "energy storage resources" (ESRs) under ERCOT rules, to maintain a certain state of charge to participate in the ERCOT ancillary services market has been met with heavy scrutiny by the PUCT. In October 2023, the ERCOT Board of Directors unanimously approved Nodal Protocol Revision Request (NPRR) 1186, which requires ESRs to maintain a full state of charge throughout an ancillary service obligation. ERCOT proposed NPRR 1186 as an interim solution to give ERCOT greater visibility into the available capacity of ESRs until ERCOT has implemented its long-awaited dispatching system overhaul, known as Real-Time Co-Optimization + Batteries, which is targeted for full implementation in 2026. Despite its unanimous approval from the ERCOT Board of Directors, the NPRR faced much stakeholder criticism that it will limit the ability of batteries to provide "up" and "down" ancillary services in response to instantaneous system needs.

As a response to Winter Storm Uri, the Legislature now requires all ERCOT Protocol Revisions to be approved by the PUCT. Over the last several months, PUCT Commissioners expressed

repeated concerns that the new state of charge requirements will chill investment in new ESRs and disincentivize existing ESRs from participating in ERCOT's ancillary service markets. Though the Commissioners have been aligned in offering full support for ERCOT to require ESRs to provide telemetry data informing ERCOT of an ESR's current state of charge, the Commissioners raised concerns about certain provisions of NPPR 1186 that would subject an ESR to enforcement action if the ESR fails to maintain the required state of charge. Under existing ERCOT Protocols, any generator that fails to provide an ancillary service is subject to enforcement action, including administrative penalties up to \$25,000 per violation. Under NPPR 1186, ESRs could be subject to enforcement actions for failure to maintain a state of charge even when the ESR fully complied with its ancillary service deployment obligation. In January 2024, citing concerns about the potential unintended outcome of having ESRs forego providing much needed reliability services to ERCOT out of fear of compliance liability, the PUCT voted to remand NPPR 1186 to ERCOT for further deliberation. The PUCT recommended that ERCOT remove the state of charge enforcement provisions from the Protocol revision. ERCOT has not yet taken up the remanded item for consideration.

NERC Inverter-Based Resource Compliance Focus

At the federal level, the North American Electric Corporation, Inc. (NERC) is currently drafting new NERC Standards for inverter-based resource performance requirements. Draft Standards are expected to be filed by NERC in October 2024. Additionally, NERC has identified inverter-based resources as one of eight areas of compliance focus for 2024. The Texas Reliability Entity (Texas RE), which is the entity authorized to conduct compliance and enforcement actions in the ERCOT region on behalf of NERC, has stated that it intends to focus on the performance and modeling of inverter-based resource issues in compliance engagements this year. The compliance engagements include audits, spot checks, and investigations. Not all the inverter-based resource compliance obligations will fall on the generation project; some may fall on the interconnecting transmission service provider or on ERCOT. For example, Texas RE seeks to ensure that there are clear and consistent interconnection requirements for inverter-based resources and that such resources will be adequately studied prior to interconnection. Texas RE will also emphasize appropriate voltage control and frequency ride-through in its compliance engagements.

If you have any questions about how these regulatory changes may impact your battery storage project, please contact one of the lawyers listed below.