



April 13, 2026

After RTC+B: What are Top-Performing BESS Operators Doing Differently?

When ERCOT's Real-Time Co-Optimization plus Batteries (RTC+B) market redesign went live on December 5, 2025, it fundamentally changed how energy storage resources bid into the market and are dispatched. Now that months of post-implementation operating data are available, it is clear that RTC+B worked as intended. It is also clear that some battery energy storage system (BESS) operators are thriving under the new rules, while others are still navigating the learning curve. This raises an important question: what are 'winners' under RTC+B doing differently, and what lessons can be learned from them?

In a recent webinar, Mike Huisenga, Managing Director of Bid Optimization at Ascend Analytics, and Martin Chown, Senior Energy Analyst, discussed the impact of RTC+B, analyzed post-implementation market data, and identified clear lessons for BESS owners and operators in ERCOT.

Key Takeaways

- Overall, energy prices were largely undisturbed by the transition to RTC+B. However, day-ahead (DA) ancillary service (AS) prices surged immediately after go-live before gradually returning toward typical levels, and a moderate DA premium over RT AS prices has remained.
- ERCOT'S enforcement of state-of-charge (SOC) constraints has created a durable structural price hierarchy in which Non-Spin commands a premium over the ERCOT Contingency Reserve Service (ECRS) and Spin.
- Thermal generators, not batteries, captured the majority of the early DA AS price premium. Thermal operators responded to the December 5 price signals almost immediately, while battery operators took more than two weeks to meaningfully increase DA Non-Spin participation.
- Post-implementation, the top-performing ERCOT batteries share consistent strategies, including greater day-ahead energy and AS commitment, more active real-time re-optimization relative to their DA positions, and higher daily cycling rates.
- As the post-RTC+B market matures, the operators best positioned to maximize risk-adjusted returns will be those who leverage dynamic, interval-by-interval optimization capabilities. Taking on more market risk through greater DA commitment and active real-time position management has been consistently rewarded under RTC+B, and that dynamic is likely to endure.
- Ascend's SmartBidder energy bid and offer optimization software analytics platform can be a powerful tool in helping battery owners and operators maximize risk-adjusted revenue under RTC+B. SmartBidder contains the new market rules, and has been updated to include real-time ancillary forecasts, realized prices, and RTC+B-compliant bidding strategies.

What Changed Under ERCOT’s RTC+B Market Rules?

RTC+B encompasses three interconnected rule changes that together reshape how every battery in ERCOT is modeled, dispatched, and settled. Real-time co-optimization integrated AS awards directly into the Security-Constrained Economic Dispatch (SCED) engine, replacing the legacy Operating Reserve Demand Curve (ORDC) with Ancillary Service Demand Curves (ASDCs). Energy and AS offers are now co-optimized in every 5-minute SCED interval, with real-time AS prices and awards generated simultaneously with Locational Marginal Prices (LMPs).

ERCOT also moved energy storage resources from a combo model, in which batteries were treated as separate charging and discharging assets, to a single, unified representation in ERCOT’s core systems, with one set of telemetry, one bid/offer curve, and one settlement structure. New state-of-charge rules introduced explicit MWh accounting into Reliability Unit Commitment and SCED, so that SOC constraints now directly shape both energy and AS awards.

Taken together, these rules require bidding strategies to update dynamically with every SCED run. In practice, this means that ERCOT BESS operators now have a second chance to optimize AS participation in real-time, but only if they have the tools to take advantage of it.

How Did Energy and Ancillary Service Prices Respond when RTC+B Launched?

Hub energy prices were essentially undisturbed by the transition, with tight day-ahead to real-time price parity staying mostly steady, outside of Winter Storm Fern in late January 2026.

With ancillary services, however, DA prices surged immediately after the December 5 go-live, with the AS-to-energy price ratio spiking sharply before gradually returning to more typical levels, as shown in **Figure 1**. This surge was not driven primarily by increased AS procurement volumes, but rather reflected a rapid tightening of the Non-Spin supply stack as participants rationalized the increased state of charge (SOC) duration requirements.

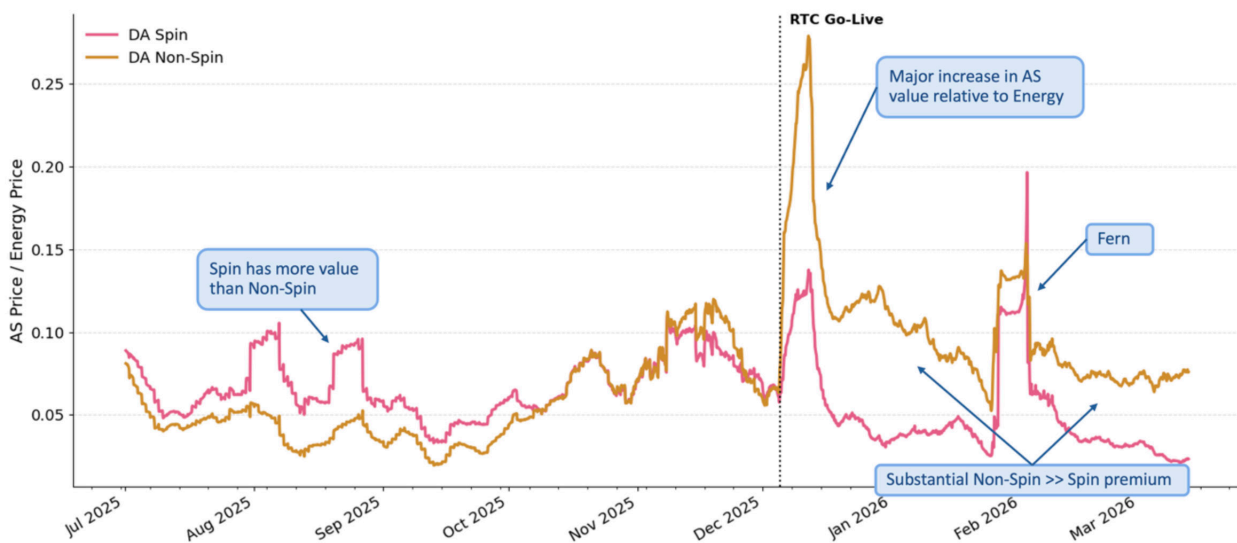


Figure 1. Ancillary services to energy price ratio – 7-day rolling average

Two structural pricing shifts are underway since the transition. First, the DA premium over RT AS prices is eroding. Initially, DA ancillary prices carried a substantial premium over RT prices; that gap is narrowing as the market matures. Second, Non-Spin now commands a persistent premium over Spin, with ECRS falling in between. State-of-charge duration requirements mean that products requiring less SOC commitment carry higher clearing prices, creating a durable price hierarchy – Non-Spin, then ECRS, then Spin – that ERCOT BESS operators need to account for explicitly in their product prioritization.

Who Captured the Early AS Price Premium, and Why Didn't Batteries?

The first weeks after go-live revealed an asymmetry in how quickly different resource types adapted. As shown in **Figure 2**, thermal generators responded almost immediately to elevated DA AS prices on December 5 with a significant number of Non-Spin offers the next day. Battery operators, by contrast, did not meaningfully increase DA Non-Spin participation until December 21.

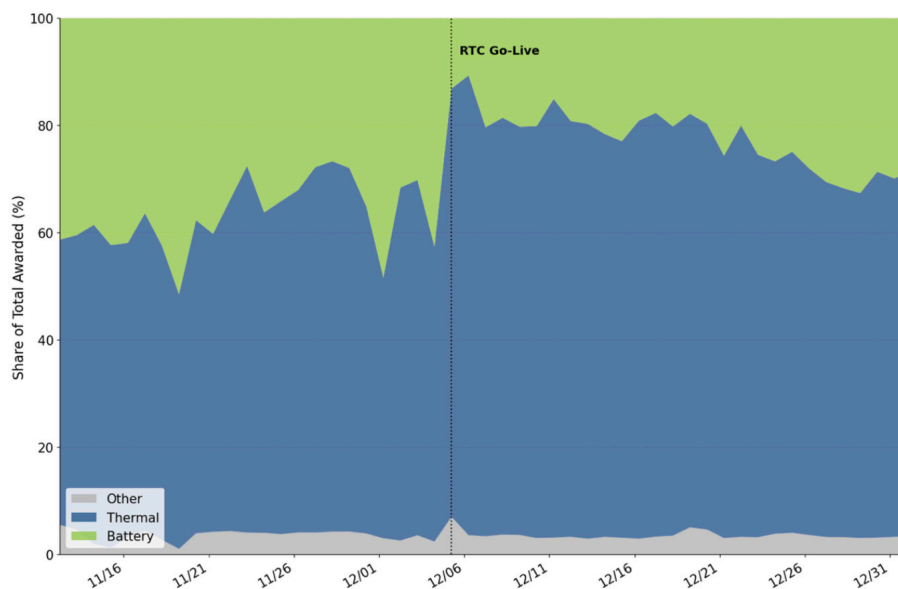


Figure 2. Percentage Non-Spin awarded by resource

The result was that thermal assets captured the majority of the early AS value premium while many battery operators were still adjusting. It was clear that storage operators needed faster feedback loops between observed price signals and offer strategy updates.

What Are Top-Performing ERCOT Batteries Doing Differently?

Of approximately 250 batteries operating in ERCOT since RTC+B went live, Ascend's analysis of settlement and participation data identified around 50 assets consistently beating both day-ahead and real-time TBX benchmarks, as shown in **Figure 3**. These top performers span all four ERCOT hubs, range from 10 to 200 MW, and represent a variety of owners and optimizers. Thus, the performance gap is not primarily a function of asset size or location, and is instead a function of strategy, risk tolerance, and sophistication.

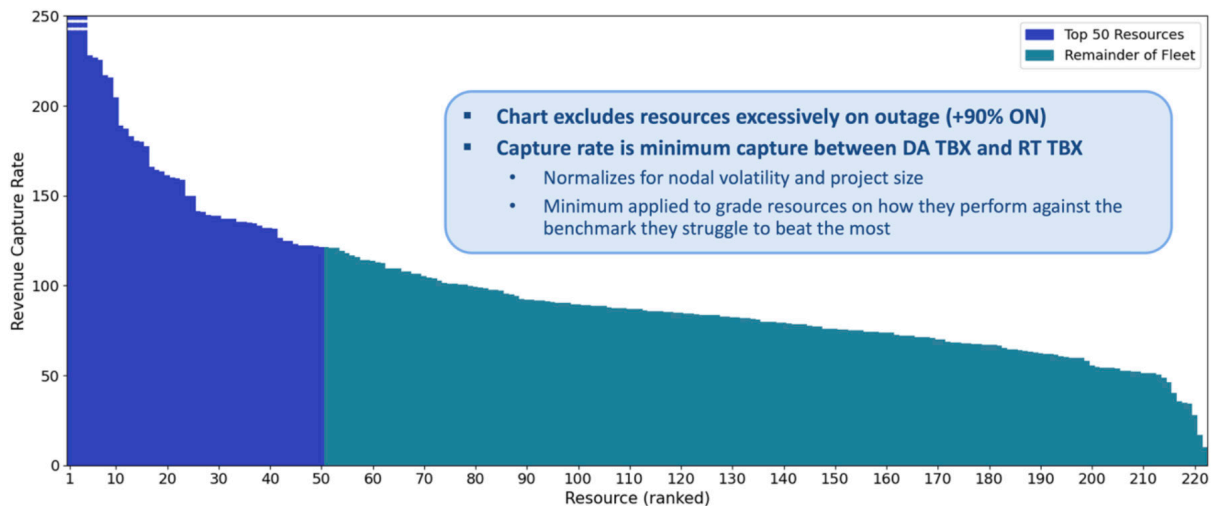


Figure 3. ERCOT Revenue Battery Capture Rate Since RTC+B Go-Live

Here are lessons learned thus far from observing top-performing BESS assets in ERCOT after RTC+B went live:

- **Commit more to day-ahead markets.** Top-performing assets sell roughly 40% of their SOC capacity into DA energy each day, even excluding Winter Storm Fern. The rest of the ERCOT fleet sells closer to 10%, largely avoiding DA energy commitments. Top assets also commit nearly 50% of their High Sustainable Limit (HSL) to DA ancillary service awards on normal days, compared to far lower levels in the broader fleet. More DA commitment means more risk, though that risk has been consistently rewarded.
- **Balance DA and RT ancillary participation.** While the rest of the ERCOT fleet relies heavily on real-time ancillary services as its primary revenue channel, the top 50 assets sell comparable volumes of DA and RT ancillary services. This balanced approach captures the remaining DA-RT price premium while preserving flexibility to respond dynamically to real-time conditions that develop throughout the day.
- **Cycle more, and more intelligently.** Top-performing assets average roughly 0.8 daily cycles compared to approximately 0.65 for the rest of the fleet. That additional cycling reflects more aggressive day-ahead energy participation and a disposition to trade the value in front of them rather than waiting for opportunities that don't materialize.
- **Move dynamically to earn more during high-value events.** During Winter Storm Fern on January 26, 2026, top-performing assets allocated nearly 80% of HSL to combined DA energy and AS awards at peak, nearly double the roughly 40% seen in the rest of the fleet. They also moved dynamically in real-time, shorting DA Spin and Regulation awards and opting for RT ECRS and RT Non-Spin instead as conditions evolved rather than executing a static DA plan. Top performers earned \$2,728/MW on Fern versus \$1,654/MW for the rest of the fleet, representing a 65% premium. Notably, both groups entered the event with similar SoC profiles, having kept batteries charged heading into the evening of January 25. The difference in outcomes came entirely from what each group did with that position once the storm hit.
- **Reprice product strategy around SOC.** The enforcement of SOC constraints has created a durable structural price hierarchy: Non-Spin clears at a premium to ECRS, which clears at a premium to Spin. Operators who have adapted their offer curves and product prioritization to reflect this hierarchy, rather than defaulting to legacy pre-RTC assumptions, are better positioned to capture available AS revenue across both normal and high-value operating days.

What Does This Mean for Battery Operators Going Forward?

Post-RTC+B, it is clear that the market is rewarding complexity and penalizing passivity. Operators who remain anchored to pre-RTC+B bidding strategies, such as heavy RT-only AS participation, minimal DA commitments, and static hourly schedules, are leaving significant revenue on the table.

The DA-RT AS price premium that characterized the early post-go-live period will continue to erode as the market matures. The operators who will be best positioned as that window narrows are those who have built genuinely dynamic, interval-by-interval optimization capabilities: adjusting DA offer strategies quickly in response to strong price signals, actively managing real-time positions relative to DA awards, and continuously repricing the relative value of ancillary products in light of SOC constraints.

Interested in Learning More?

SmartBidder™ uniquely provides a unified platform for custom bid and offer optimization combined with scheduling services to manage asset performance and operations for storage, renewable, and hybrid assets. SmartBidder maximizes revenue and reduces risk, offering asset owners and operators a 100% increase relative to traditional arbitrage strategies, and a 10-25% improvement over similar competing platforms. The solution enables users to develop their own customized bid strategies based on nodal specific forecasts, asset specific constraints, and risk-based optimization for day-ahead and real-time bids. Contact us to learn more.

Ascend Analytics is the leading provider of market intelligence and analytics solutions for the power industry.

The company's offerings enable decision makers in power development and supply procurement to maximize the value of planning, operating, and managing risk for renewable, storage, and other assets. From real-time to 30-year horizons, their forecasts and insights are at the foundation of over \$50 billion in project financing assessments.

Ascend provides energy market stakeholders with the clarity and confidence to successfully navigate the rapidly shifting energy landscape. Visit us at ascendanalytics.com