

CASE STUDY

Terra-Gen, LLC

Learn how Terra-Gen deployed the PowerCore™ software platform to optimize its California ISO market performance with more efficient bidding, scheduling, and asset performance reporting for its growing fleet of hybrid resources.

THE CLIENT

Terra-Gen, a merchant developer and operator of more than 2 gigawatts of wind, solar, battery and hybrid assets. It is an active participant in the CAISO energy, ancillary services and convergence bidding markets, with many complex counterparty agreements. To optimize its bidding, scheduling, settlement and market analytics on a single system, Terra-Gen selected the Power Settlements PowerCore™ platform.

CHALLENGES

Submitting hybrid and battery storage bids directly to CAISO's Scheduling Infrastructure Business Rules (SIBR) market portal was quite time consuming and increasingly complex.

Gaining flexibility in bid strategy development in a constantly changing CAISO market was critical, especially with a growing portfolio of hybrid and energy storage assets.

Day ahead convergence bidding was challenging since those bids and their constraints (e.g., battery State of Charge, etc.) are managed by Terra-Gen's Scheduling Coordinator.

Submitting hybrid resource Dynamic Limits to CAISO for all P-Nodes on a 5-minute basis - up to six hours out - was difficult and required sophisticated automation.

Settling PPAs and other complex contracts required functionality to build and modify calculations to analyze determinants, generate settlements, and invoice counterparties.

Complex reporting needs were hard to meet as the CAISO market portal data (CMRI, MRIS, OASIS, etc.) came in many formats requiring manual processing and intricate spreadsheets.



“ Power Settlements was the clear choice to provide us with comprehensive bid-to-bill functionality that could handle our complex renewable bidding and settlements requirements for the CAISO market. They worked closely with us throughout the implementation process to meet all our specific requirements, and the Terra-Gen team has already derived significant benefits in multiple areas.

Ryan Miller
Manager of Scheduling
Terra-Gen

RESULTS

Terra-Gen evaluated several software suppliers and chose Power Settlements to meet its enterprise requirements based on overall functionality, scalability, ease of deployment, customer support, and the Western energy market expertise of the Power Settlements staff.

BENEFITS

Terra-Gen has enjoyed numerous benefits after deploying the PowerCore platform, including:

1 Platform Auto-Updates

- PowerCore enhances Terra-Gen's front-to-back-office operations and the delivery of clean energy to consumers by continually incorporating all CAISO market policy, procedure, and workflow changes.

2 Boosted Productivity & Time Savings

- PowerCore improved staff productivity translating to significant financial savings.

3 Third-Party Optimization Vendor Eliminated

- PowerCore allowed Terra-Gen to create its own DA bid strategies and stop using third-party software.

4 Automation of Convergence Bidding

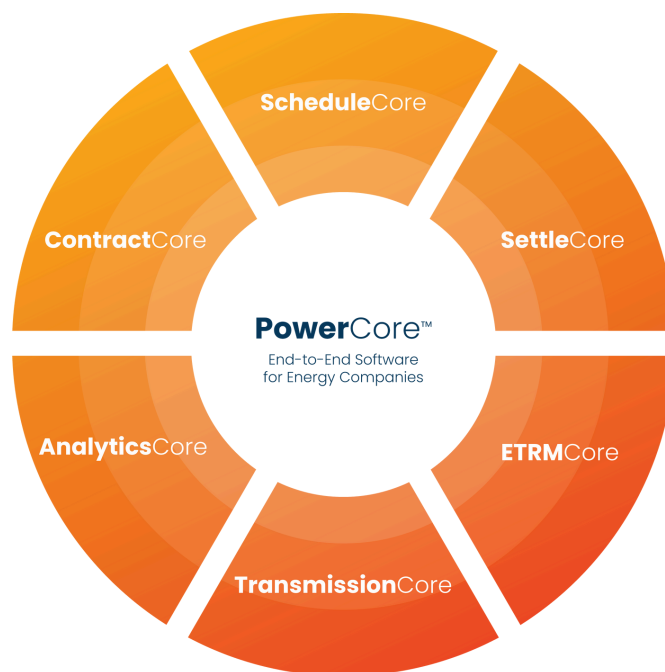
- Convergence bids and dynamic limits are optimized for top performance and strategic hedging for energy storage and hybrid resources.

5 Enhanced Enterprise Reporting

- PowerCore's reporting framework analyzes fleet performance, profitability, and "what-if" scenarios that fine-tune strategies and revenue allocation.

6 More Efficient Contract Management

- PowerCore better settles and invoices bilateral and PPA contracts in a secure, versioned, auditable system.



PowerCore™ is a platform of flexibly deployed, integrated solutions elevating how energy companies manage bid-to-bill operations in ISO and bilateral markets.



Our Mission

The Power Settlements team at Yes Energy builds, deploys, and supports software to help energy suppliers thrive while navigating complex markets incorporating volatility, 24/7 operations, and ever-changing rules.



Who We Are

We believe in a team-first, collaborative workplace that ensures our solutions elevate the user experience, productivity, and enterprise insight to capture all available benefits in competitive markets.