

# Revolution Mining Achieves ERCOT CLR Qualification using OBM | Foreman



## Situation

The electric grid faces unprecedented challenges as energy-intensive industries drive exponential growth in power demand while capacity and transmission constraints limit infrastructure expansion. Bitcoin mining, AI data centers, and other high-consumption operations require intelligent load management solutions that can balance operational needs with grid stability requirements.

Revolution Mining presented OBM with the opportunity to demonstrate Foreman's advanced capabilities in meeting ERCOT's most stringent grid control requirements. As a Texas-based bitcoin mining operation the company faced a critical constraint when their power supplier, Texas New Mexico Power (TNMP), capped the facility at 2 megawatts (MW) until Revolution could demonstrate controllable load capabilities.

### The Challenge for OBM:

- Meet ERCOT's Controllable Load Resource (CLR) program requirements
- Deliver precise 15-second frequency response and linear load adjustments every 5 minutes
- Demonstrate that Foreman could enable energy-intensive operations to participate in advanced grid programs that require direct control capabilities
- Overcome complex integration requirements between mining infrastructure, grid control systems, and energy markets

### Technical Requirements:

- ERCOT's CLR program represents a more advanced form of demand response that gives power suppliers direct control over loads, unlike traditional programs that rely on customers to implement curtailment requests
- Rigorous testing protocols with tight tolerances demanded exceptional precision from Foreman
- Multiple potential failure points required robust system design and flawless execution

## Executive Summary

REVOLUTION  
MINING

### Challenge:

Qualify for ERCOT's CLR program to enable full 15 MW capacity.

### Solution:

- Integrated with ERCOT for direct grid control
- Delivered precise 15-second frequency response & 5-minute load adjustments
- Passed rigorous ERCOT testing

### Results:

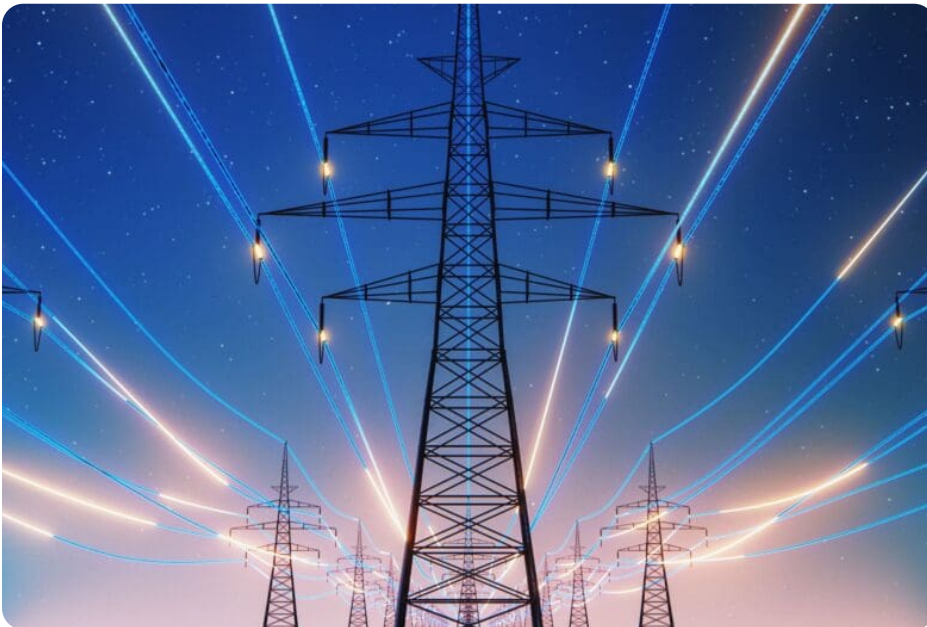
- **Increased Capacity**  
Miner able to scale operations from 2 MW to their full 15 MW facility capacity
- **Power Market Enablement**  
Power suppliers can confidently bring energy-intensive customers online without compromising grid stability.

## Solution

OBM took the lead in the project, coordinating with Priority Power Management (PPM), ERCOT, Texas New Mexico Power (TNMP), and Revolution Mining.

### Foreman Integration:

OBM development team created a CLR integration enabling precise grid control through Revolution's mining operations and facilitated the implementation of specialized firmware and hardware installation including PPM's Real-Time Automated Controller (RTAC) for direct grid communication. The work ultimately delivered bidirectional load control capabilities allowing ERCOT to both increase and decrease power consumption in real-time.



### Rigorous Validation Process:

OBM guided Revolution through ERCOT's most demanding testing protocols, including offline Primary Frequency Response (PFR) testing and live SCED validation, intensive collaboration sessions with ERCOT officials monitoring performance in real-time, and multiple testing phases with minimal margin for error.



There's no one that does it better than OBM, these guys are the best in the industry. They're wizards. **Without Foreman none of this would have been possible.**

**Ed Nersessian**

COO and co-founder of  
Revolution Mining.

**OBM** | Foreman

# Results

OBM Foreman successfully achieved a historic milestone with Revolution Mining qualifying for ERCOT's CLR program.

## Technical Excellence Validated

Foreman exceeded ERCOT's most demanding specifications, demonstrating:

- Precise 15-second frequency response times and linear load adjustments every 5 minutes
- Successful completion of both offline Primary Frequency Response (PFR) testing and live SCED validation
- Flawless performance during live monitoring sessions with over 20 ERCOT officials

## Power Capacity Increased

Revolution Mining achieved transformational growth through Foreman's successful CLR qualification. TNMP released the remaining 13 megawatts of contracted power capacity, enabling Revolution Mining to scale operations from 2 MW to their full 15 MW facility capacity—representing a **750% increase in operational potential**. The company transformed from a capacity-constrained operation into a scalable, grid-integrated resource with access to additional revenue streams through energy market participation.

## Power Supplier Market Enablement

Power suppliers can now engage high-power customers knowing they have the technology to precisely manage operational risks while optimizing existing infrastructure through intelligent load management.

**As the leader of flexible load management solutions for energy-intensive industries, OBM delivered a solution that benefits the entire energy ecosystem while addressing infrastructure constraints.**



OBM

**15-second  
response time**

**SCED Validation**

**750% increase in  
power capacity**

## ABOUT OBM

OBM is a leader in flexible load management solutions. We provide energy agility, operational simplicity and risk mitigation through our innovative compute management platform, comprehensive energy optimization technology, and broad energy partnerships. With a proven track record of managing loads up to 500 MW and integrating them into leading demand response programs nationwide, as well as mitigating operational and financial risk, OBM is transforming the landscape of compute-intensive operations.