



Project Highlight

United Power, CO



AMERESCO 

Transformational Battery Energy Storage System to Enhance Resiliency Across the Northern Front Range

The Largest Distributed BESS in Colorado

Technology Type:

Battery Energy Storage System (BESS) |
Energy Storage Agreement

BESS Power Capacity

~78 MW

Energy Project Size

~313 MWh

Project Scope

8 substations

Peak Load Generation Capacity

13%



Summary

United Power, a member-owned, not-for-profit electric cooperative delivering electricity to homes and businesses throughout Colorado's northern front range, collaborated with Ameresco to design, build, own, and operate multiple BESS across eight substations. The system is designed optimize United Power's energy resources to provide cooperative members with a more reliable and efficient power supply. The project underscores significant advancements in utility infrastructure, enhancing resiliency and energy security.



Solution

Working collaboratively with United Power, Ameresco strategically located four ~12 MW and four ~8 MW battery facilities throughout the electric cooperative's distribution territory in Adams, Broomfield, and Weld counties. Ameresco's services encompass the design including site selection, permitting, procurement, construction, financing, ownership, operation, and maintenance of the eight battery facilities. Together they represent the largest wholly owned BESS asset portfolio in Ameresco's history.



The use of batteries on our distribution network is essential to a resilient and responsive power grid, and we are excited to be moving ahead with one of the most aggressive plans for such a system. These battery systems will allow us to balance our power needs throughout the day and incorporate local renewables more efficiently.

Mark A. Gabriel
CEO and President, United Power



Benefits

The ~78 MW / 313 MWh of BESS, owned and operated by Ameresco, is designed to enable United Power to store and dispatch power efficiently during periods of high consumption. The BESS capacity represents approximately 13% of the cooperative utility's 634 MW peak load.

The system is designed to enable United Power to optimize its energy resources, enhance its grid resilience, and ensure a reliable electricity supply for its members. Strategically positioned throughout United Power's service territory, these eight advanced battery systems are pivotal in enabling the cooperative to enhance load balancing and integrate renewable resources seamlessly. Additional benefits include:

- Provides 78 MW of capacity which can be dispatched for multiple purposes including to offset system peaks, leverage for arbitrage opportunities, or be available for resiliency
- Represents a key resiliency resource for United Power to participate in two bi-lateral markets and the Southwest Power Pool (SPP) Western Energy Imbalance Service (WEIS)

Ameresco's team of energy experts can assist you in identifying the solution that fits your needs.

For more information about Ameresco and our full-range of energy efficiency and renewable energy solutions, please call **1-866-AMERESCO** or visit **ameresco.com**.

