



Case Study: Ameresco Customizing Clean Energy Solutions for Electric Cooperatives

Ameresco, Inc. is a leading cleantech integrator and renewable energy asset developer, owner and operator. With over 70 regional offices located throughout North America and the United Kingdom, Ameresco serves a wide range of clients including governments, education, healthcare, commercial and industrial businesses, and electric cooperatives.

In April 2021, Ameresco announced a 5MW solar PV project with 15MWh of battery energy storage for Holy Cross Energy (HCE), an electric cooperative serving 44,500 members in Western Colorado. HCE has set a goal to source 100% of electricity used to serve members' load with renewable resources by 2030.

As a certified partner in Stem's Partner Program, Ameresco selected Stem as the project's expert energy storage partner. In addition to tapping Stem's system design expertise, Ameresco will leverage Stem's best-in-class Athena® software platform built to seamlessly integrate and optimize energy resources.



Stem's support in system design enables us to deliver an innovative solution, customized for Holy Cross Energy and Colorado Mountain College, that will significantly benefit the communities they serve today and over the long term.

Louis Maltezos
Executive Vice President, Ameresco



Location

Glenwood Springs, CO

Facility Type

Electric Cooperative

Solutions

Solar Plus Storage, Coincident Peak Mitigation, Renewable Energy Integration

Stem Operational Date

Early 2022

Energy Storage System Size

5MW / 15MWh plus 5MW solar PV



Challenge

Ameresco thrives on finding and utilizing the solutions that best fit their customers. In this case, Ameresco needed a proven energy storage expert to help craft a successful, customized solution for HCE and its members. The project also had to meet the needs of Colorado Mountain College (CMC), which leased the land for the project and itself seeks to become carbon-neutral by 2050.



Solution

With Stem's system design support, Ameresco built, operates, and maintains the solar plus storage facilities. Stem's Athena software enables HCE to dispatch the battery into system peaks to minimize costs and maximize efficiency during peak times. Athena also empowers HCE and Ameresco to monitor and manage the project to achieve desired energy targets. By providing direct bill savings to the co-op while enabling a higher penetration of low-cost renewable energy, the battery reduces costs for co-op members while facilitating the achievement of clean energy goals.



Results

The project helps HCE meet its "100x30" goal and reduces annual greenhouse gas emissions by roughly 7,000 metric tons of carbon dioxide equivalent. CMC is also expected to move closer to carbon neutrality, as the college receives renewable energy credits from HCE offsetting electricity usage at three campuses. And as more electric cooperatives explore the addition of solar and storage to their systems, Ameresco and Stem will have demonstrated the unique combination of capabilities we bring to deliver value and enhance project returns for co-ops and their members.

To learn more about Stem's solutions, contact stem.com/contact-us.