



# LONG DURATION STORAGE

## Joint Procurement with Seven Community Choice Aggregators

In 2020, a group of Community Choice Aggregators (CCAs) issued a Request for Offers for up to 500 MW of long-duration storage (LDS). This is the largest known single procurement effort for this amount of LDS in the state.

### What is Long-Duration Storage?

LDS is an energy storage technology that can store and discharge energy for long periods of time. Typical storage technologies are utility-scale, lithium-ion batteries backed by solar resources which can store and discharge 4 hours of energy. LDS can be a variety of technology solutions that can go beyond 4 hours, does not have to be paired with a renewable resource, and can be charged from the grid. In this Request For Offers, the CCAs are evaluating LDS technologies that have the ability to charge and discharge at a minimum of 8 hours.

### Example LDS Technologies

- Lithium-Ion Batteries
- Chemical Flow Batteries
- Compressed Air
- Pumped Storage Hydro
- Thermal Storage
- Gravity-Based
- Hydrogen Production
- Other Concepts

### Why Long-Duration Storage?

For most of the year and particularly during the middle of the day, California produces an excess amount of renewable energy leading to the curtailment of clean power. When renewable energy is plentiful, LDS will take the excess energy and discharge power for longer periods of time when supply is low. LDS will be able to supply energy for longer stretches of time and give grid operators the flexibility of a full day's (8+ hours) worth of discharging capacity.

LDS is one solution in maintaining grid reliability and resiliency as California transitions to a cleaner grid. As California pursues its 2045 carbon-free energy mandate and the CPUC's 2026 LDS installation target, LDS provides the flexibility needed to balance the intermittency of renewables. LDS will also help accelerate the transition to a clean grid as the nearly three million customers in the communities served by the joint CCAs continue to demand cost-effective renewable energy.

## How does Long-Duration Storage help meet state goals?

LDS is just one component of energy storage that is pivotal in providing reliability to the power grid. The CCAs believe there will be a suite of solutions, in addition to all forms of storage, necessary for this transition to a clean grid.

The Joint CCAs are procuring LDS to aid in meeting California's greenhouse gas reduction targets by 2030 as outlined in the CPUC's 2021-2030 Integrated Resource Plan (IRP). This LDS procurement serves as a pathway to meet the CPUC's Mid-term Reliability Procurement Mandate to replace the Diablo Canyon Power Plant. The IRP identified LDS as a resource necessary to meet required GHG reductions by 2026. Additionally, because these are capital intensive projects that may take years to develop, the Joint CCAs wanted to get ahead of future procurement requirements with enough lead time.

## RFO Update

- **51 Entities submitted offers (over 9,000 MW)**
- **8 Technology types - 18 distinct technologies**
- **5 Projects short-listed**
- **Includes emerging technology and lithium-ion batteries**

Learn More: [www.svcleanenergy.org/joint-lds-rfo](http://www.svcleanenergy.org/joint-lds-rfo)

## About Community Choice Aggregators

Community Choice Aggregators, or CCAs, are not-for-profit, public agencies providing competitively priced, clean energy choices to their communities while reinvesting revenues into local and statewide projects and programs, supporting sustainability, and enhancing their local economies. There are 23 CCAs in California serving more than 11 million customers from Humboldt County to San Diego County, and Placer County in the east.

Through CCA, communities can join to pool (or aggregate) their electricity load in order to purchase clean energy and develop local projects and programs on behalf of their residents and businesses. CCAs work in partnership with the region's existing Investor-Owned Utility, which continues to deliver power and maintain the grid.

The LDS procurement effort is being administered by California Community Power, a Joint Powers Agency, with 10 CCA members that collectively represent one of the largest electricity buyers in the state. More info at [cacommunitypower.org](http://cacommunitypower.org).

