April 22, 2025

CPA CLEAN POWER ALLIANCE

Solar and Battery Access Program

About Clean Power Alliance

- CPA serves approximately 1 million customer accounts, representing over 3 million customers and businesses
- 35 member jurisdictions in Los Angeles & Ventura counties
- Largest CCA in CA; more customers on 100% renewable energy rates than any utility in the nation
- Revenues, after costs for power and operations plus financial reserve contribution, are pooled and invested into local programs and procurement
- 14 customer facing programs that address local procurement, grid reliability, and electrification

Solar and Battery Access Program

What is the Solar and Battery Access Program?

- The Solar and Battery Access Program provides income qualified customers with solar PV and battery storage systems at no up front cost
- Eligible homeowners do not need to make any upfront payments or perform credit checks to participate. Further, no property lien will be placed on their home
- This program is possible due to a combination of the federal ITC, Self Generation Incentive Program (SGIP) Residential Solar and Storage Equity (RSSE) funds, and outside funding from Clean Power Alliance (CPA) and Haven Energy, our competitively selected vendor

Load flexibility opportunities

- CPA will operate the installed battery storage systems as a virtual power plant for 3 years, helping customers save money and reducing resource adequacy costs

Customer Value

- **Bill savings:** Reduction in electricity bill costs. On average, each home will be equipped with 5 kW of solar PV and 15 kWh of battery storage.
- **Resilience:** At least 20% of the battery system reserved for back-up power in case of an outage.
- **Ownership:** After 10 years of Program participation with included maintenance, system ownership is transferred to the customer at no additional cost. Equipment warranty for 20 years (solar) and 10 years (battery) serviced by equipment manufacturers.
- **Community:** Allows customers to generate local clean energy and help protect the grid from blackouts.

Customer eligibility requirements:

1) CPA residential customer
2) Single family dwelling owner
3) Income at or below 80% area median income

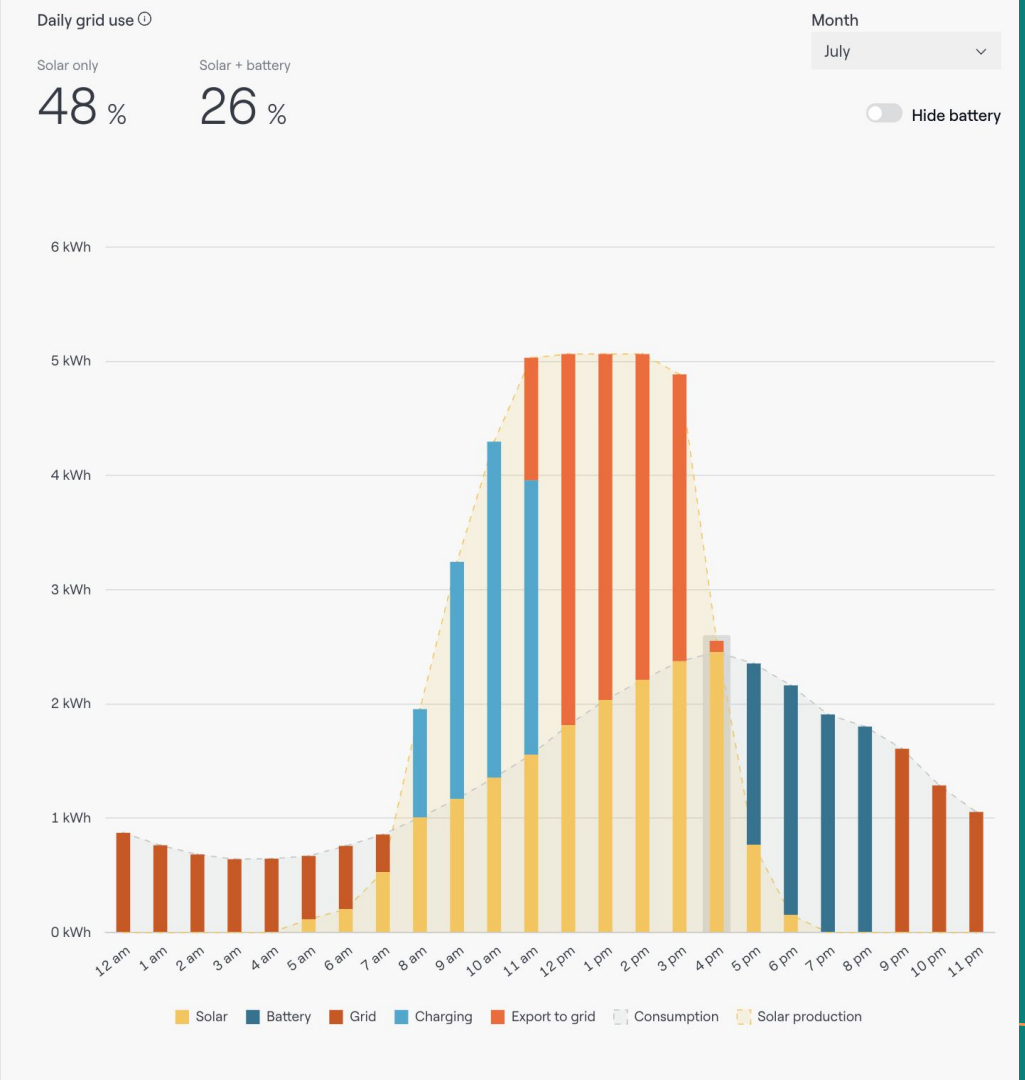
Virtual Power Plant

This program will develop a distributed virtual power plant of 300 battery storage systems that CPA can utilize to reduce costs and increase system reliability.

- Allows CPA to pilot a new VPP structure and distributed energy resource management system (DERMS) platform approach with a minimal cost commitment
- 300 systems will provide 4.5 MWh of dispatchable load
- These systems will qualify as load modifying resources, which will reduce CPA's resource adequacy (RA) obligations. Estimated total RA savings of ~$387,000 from 2026-2028.

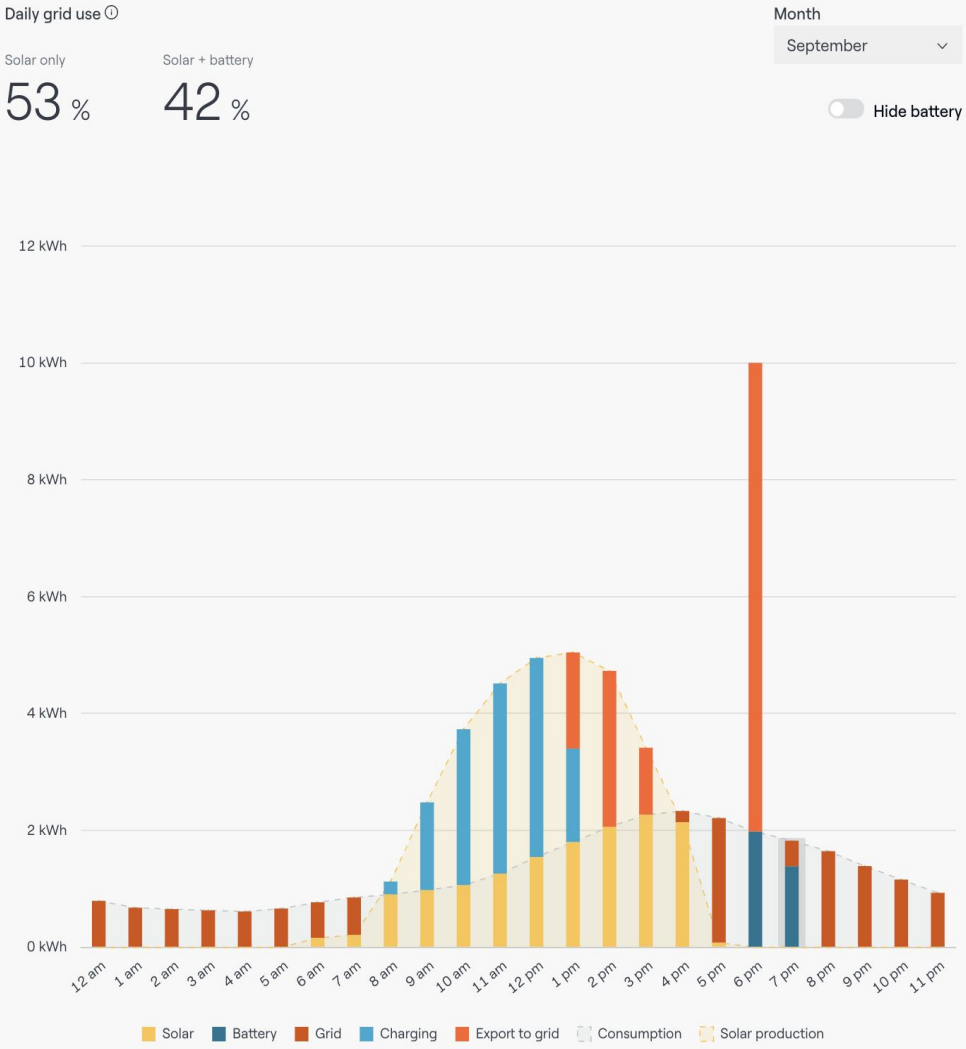
A Virtual Power Plant (VPP) is a network of energy devices that are used to balance energy supply and demand in real time.

This program would utilize battery storage systems to reduce energy demand for CPA during peak consumption hours.



Battery Storage Performance

- Battery storage systems can be optimized to reduce grid consumption, especially during peak demand times
- Customers are only reliant on the grid under non-peak hours when the solar PV system is not producing energy
- This makes sense for customers in the early summer months when export rates are not high enough to justify discharging batteries to the grid



Battery Storage Performance

- Alternatively, battery storage systems can be operated to export capacity during peak demand times
- For example, in months like September, high peak demand prices and export rates encourage battery systems to discharge during peak demand times
- DERMS allow for real time changes in battery operation strategies