

# Contracted ESS Co-Located with Solar PV in CAISO

For a leading US wholesale energy provider, CES modeled the expected dispatch and developed revenue forecasts for contracted and co-located solar and energy storage projects in the CAISO market

## Client Needs

- Model the expected dispatch and performance of the individual resources over a 25-year forward period
- Assess potential revenues from participation in all relevant products in the CAISO wholesale energy and ancillary services market
- Apply contractual prices to estimate revenues for solar and charging costs for the battery per terms and duration of respective agreements

## Analysis Highlights

- Developed storage contract scenarios for the co-located resources under merchant and PPA models
- Aligned storage dispatch strategy to reflect commercial terms and constraints of the PPA
- Implemented aggregate capability constraints for modeling co-located facilities in CAISO
- Modeled potential market saturation scenarios for the AS markets to inform revenue forecasts
- Developed multiple revenue forecast sensitivities to include uncertainties with market price forecasts

## Outcomes

- CES provided the client with an independent view of revenue forecasts for the co-located facilities
- Forecasts included modeling for Merchant vs PPA scenarios to assess revenue potential beyond the PPA term.
- Client achieved a successful financial close on the projects and the projects are now commercially operational

