

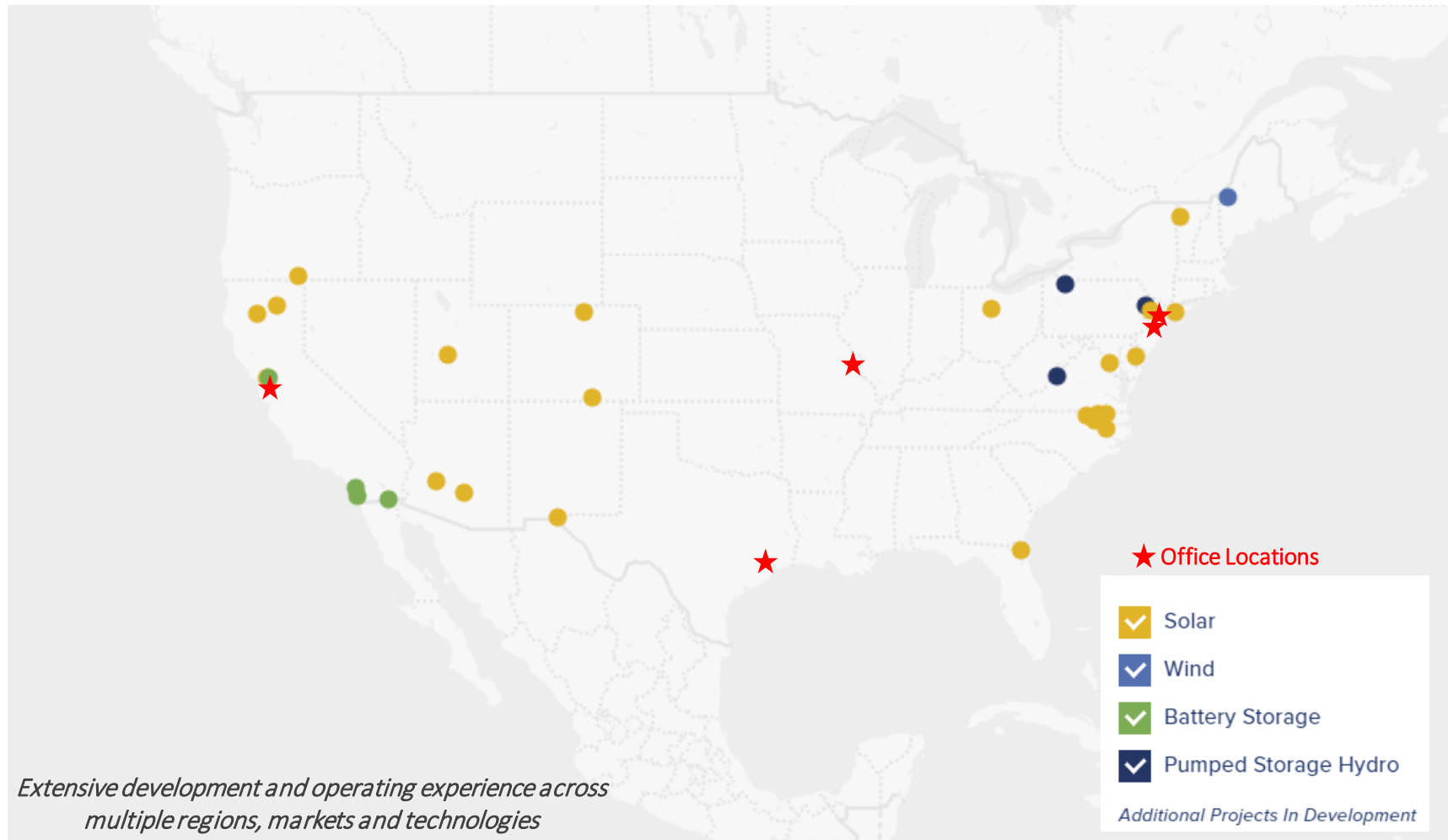


Battery Storage presentation for Power Association of Northern CA

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REV Project Operating Portfolio – 2.6 GW and Growing



REV's California Battery Storage Assets

Project Name	Size	Location	Online Date
Vista	40 MW	Vista, CA - San Diego County	2018
Gateway	250 MW	Otay Mesa, CA - San Diego County	August 2020
Diablo	200 MW	Pittsburg, CA – Contra Costa County	April 2022
LeConte	125 MW	Calexico, CA - Imperial County	Anticipated Summer 2022

REV has several other battery storage projects in California in development.

Vista Energy Storage



Gateway Energy Storage



Diablo Energy Storage

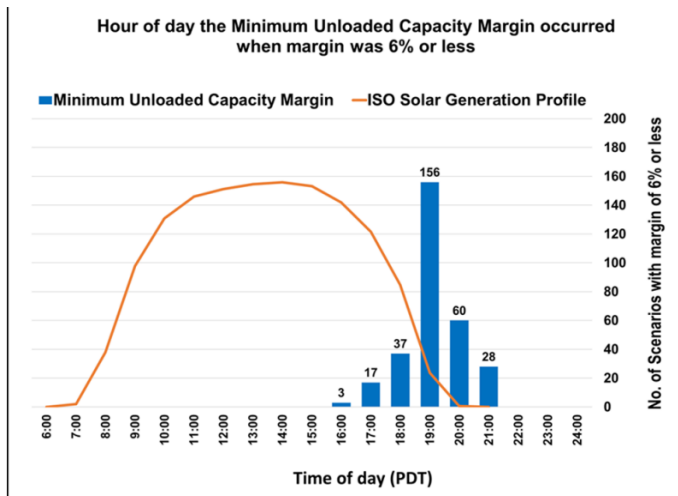
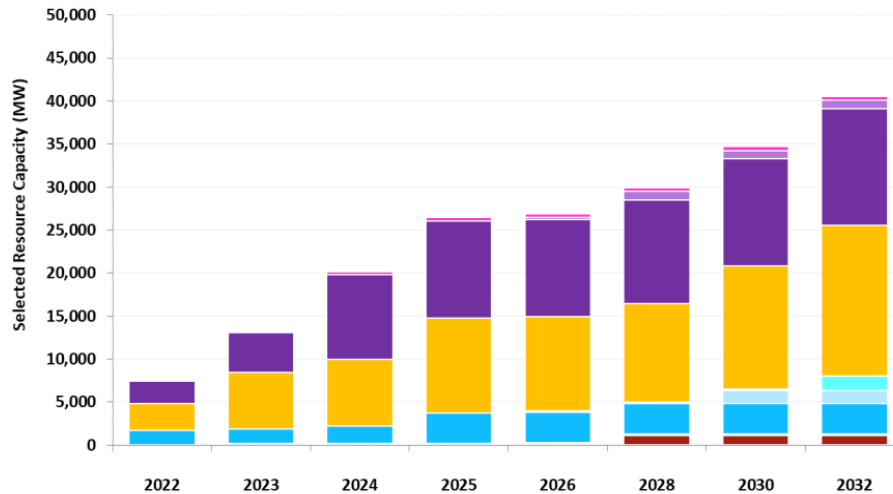


Diablo Energy Storage overview

- Diablo Energy Storage is a 200MW/4hr Li-ion based energy storage project located in Pittsburg, CA.
- The plant achieved Commercial Operations Date (COD) in April 2022 and has been operating in CAISO wholesale markets since then.
- The system utilizes CATL's lithium iron phosphate (LFP) based liquid cooled batteries housed in Fluence's enclosures.
- Power Electronics is the inverter supplier to the project.
- The plant hosts an onsite 230kV substation that connects to the PG&E's Pittsburg substation through approx. 1.2 miles of underground and overhead gen-tie line.

Storage is critical to meet California's reliability and greenhouse gas goals

Figure 5. 38 MMT Core with 2020 IEPR Demand and High EV Penetration



- 81% percent of the minimum reserve margins occurred during the hours ending 19:00 to 21:00 – hours of little to no production from solar resources.

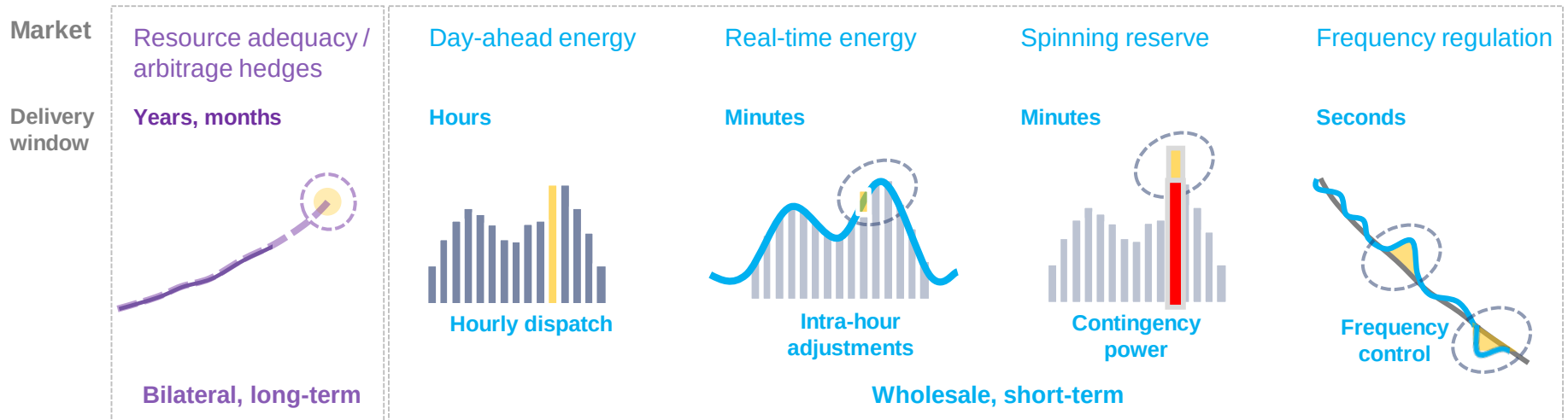
- Storage assets are able to charge in mid-day with abundant solar, helping reduce curtailment, and shifting that energy to other hours as needed.
- The CPUC's Preferred System Plan expects 13.5 GW of storage in the next 10 years.
 - With planned retirements during this time period of Diablo Canyon and once-through cooling plants, it will be critical to meet these resource buildout needs in order to maintain reliability.
- The SB 100 joint agency report expects by 2045, on average, the state will need to build 6 GW of new solar, wind and battery storage resources annually.
 - By comparison over the last decade, the state has built on average 1 GW of utility solar and 300 megawatts (MW) of wind per year.
- Storage can meet net-peak demand hours
 - For Summer 2022, CAISO identified the greatest hours of risk are during net-peak hours when solar is unavailable. The net peak demand is expected to be the hours of greatest reliability risk for years to come.

Energy Storage Services in California

- Provides capacity services in Resource Adequacy (local, system, and flexible) to load serving entities
 - Consistent with RA Must Offer Obligations, RA storage assets operate daily in the CAISO market.
- Operates in the CAISO Energy and Ancillary Service markets – Day Ahead and Real Time
 - Assets submit bid curves (to charge below or discharge above price points) in Day Ahead and Real Time markets.
 - CAISO uses bid curves in market optimization, then dispatches the resources to charge and discharge based on when storage is needed on the grid, and/or award Ancillary Services.
 - Assets follow CAISO dispatch signals for energy and/or ancillary services.
 - As with any new technology, plant operators and CAISO continue to learn how to best integrate storage in the markets. CAISO has launched stakeholder initiatives to improve storage participation:
 - Energy Storage Enhancements Initiative
 - Price Formation Enhancements Initiative
 - Storage Modeling Enhancements Initiative (coming soon)

Storage serves the electric grid across the market

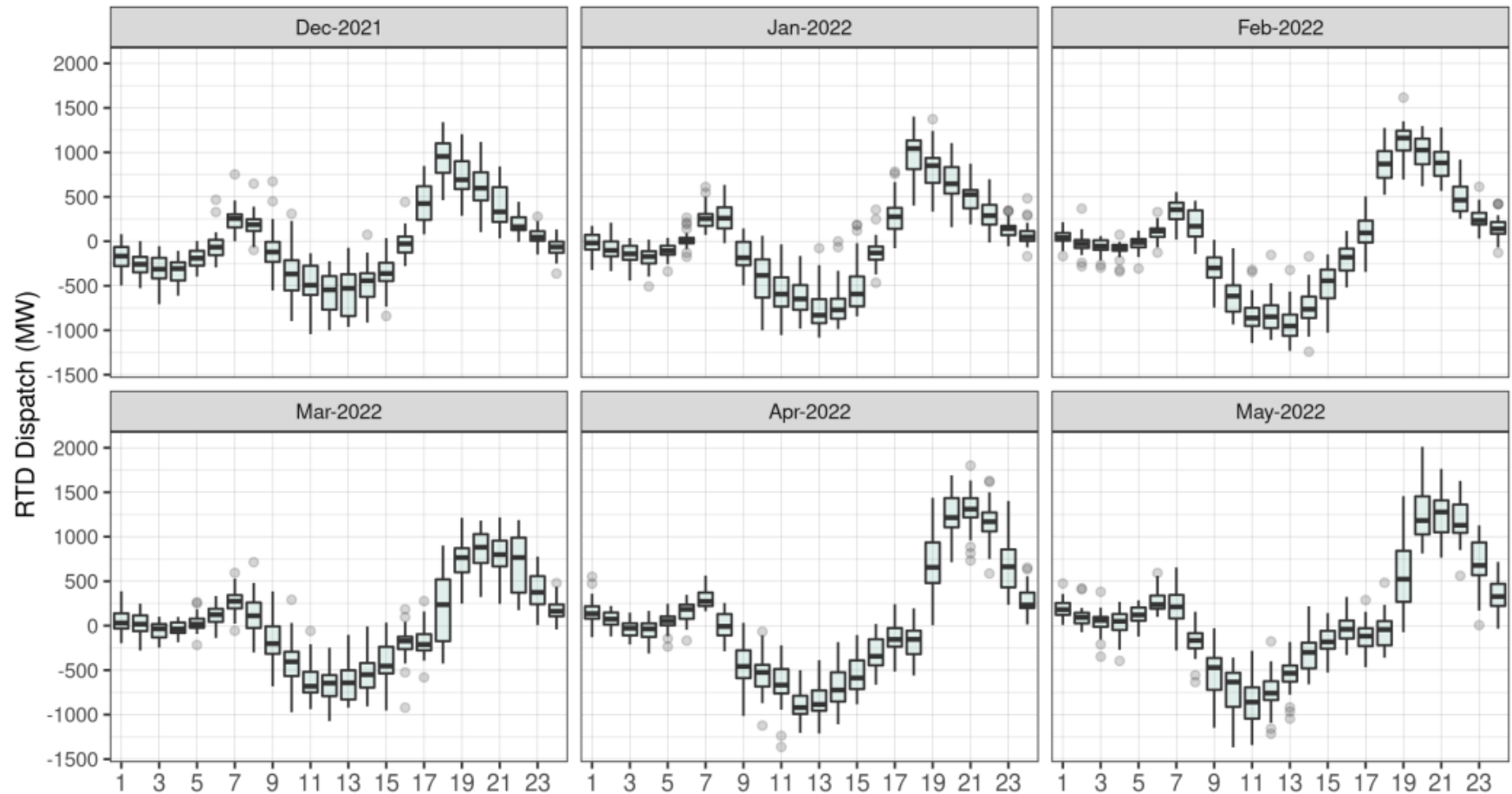
Obligations we need to meet...



...using a mix of these services.

CAISO Storage Fleet is Performing as Expected

Storage resources consistently charge during high solar hours and discharge during net load peaks



1. Source: CAISO Market Performance and Planning Forum, June 2022