California Energy Storage Market Update

Energy Storage Systems Safety & Reliability Forum
March 5, 2020
The California Energy Storage Alliance (CESA) is a 501c(6) membership-based advocacy group committed to advancing the role of energy storage in the electric power sector through policy, education, outreach, and research. CESA was founded in 2009.

Mission: Make energy storage a mainstream resource to advance a more affordable, efficient, reliable, safe and sustainable electric power system for all Californians.
CA Storage Market is Technology-Diverse

R&D is moving toward long-duration
Legislation is driving procurement

- Passage of SB 700 will continue momentum in the behind-the-meter, customer-sited storage segment of the market:
  - Over $400M is available through 2019 for BTM storage systems, including Equity Budget set-aside, but SB 700 will extend program at $166M/year through 2024

- A landmark bill (SB 100) sets the market fundamentals that will likely identify a significant need for storage to integrate renewables
  - 100% Clean Energy (SB 100, De Leon) Bill sets a 60% RPS requirement by December 31, 2030 and requires 100% of retail sales of electricity to come from zero-carbon resources by December 31, 2045
Each of California’s three investor-owned utilities (IOUs) are making major progress toward their 1,325 MW energy storage procurement target by 2020.

Source: CESA compilation of AB 2514 compliance filings and applications for approval
Case study: Aliso Canyon 2015-2016

99.5 MW of energy storage that was procured and operational *in 6 months* to address reliability issues stemming from limitations of the Aliso Canyon gas storage facility.
CESA Safety Working Group

CESA is committed to the safe deployment of all energy storage resources in California so that people, property and the environment are protected from harm.

Focus areas:

- Education and awareness with CA stakeholders
- Safety best practices resource library for industry members
- Accelerate adoption of standards (ex: NFPA 855)
- Support Authorities Having Jurisdiction (AHJs) through trainings and streamlining of storage permitting at local level
Key Takeaways

- Via SB100, CA grid is transitioning from gas to 100% renewables.
- IRP calls for up to 11,000 MW storage needed in next 10 years.
- Long-duration (4+hr) storage needs are growing.
- Wildfires & grid resiliency will play a role in grid planning.
- Safe deployment of energy storage is critical to industry success.
Thank You!

Questions?

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