

CESA Monthly Policy Update Call

September 22, 2023





Mission

CESA

The mission of CESA is to make energy storage a mainstream resource to advance a more affordable, efficient, reliable, safe, and sustainable electric power system for all Californians.

Our CESA Board Members









































Our CESA Members



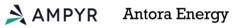


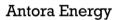




































































































































































































2023-4 State Legislative Update



Priority CESA Bills Awaiting Signature:

SB 38 (Laird) - requires all battery storage facilities to have emergency response and evacuation plans that include: procedures for malfunction or failure, safety for surrounding residents and facilities, notification procedures, as well as responses to off-site impacts and procedures for shelter-in-place and road closure if needed.

AB 1373 (Garcia, Ting & Becker) - Establishes a Central Procurement Entity at the Dept of Water Resources to procure, at request of CPUC IRP, long lead time clean energy resources, ie-offshore wind and certain LDES technologies.

SB 420 (Becker) - Amend GO 131-D to exempt transmission projects under 138 kV from CPCN, PTC or any other permit. Projects must either: be located on disturbed land, in an urbanized area, part of a project that has undergone CEQA, and NOT: in a wetland, unremediated hazardous waste site or critical habitat.

MARKET DEVELOPMENT FORUM 2023

The Leading Edge of Storage

Join 100+CESA industry leaders for premier in-person business networking opportunities and an insightful, educational program on safety, permitting, LDES, IRP, resource adequacy, financing, interconnection, and more.

October 17 – 18th in Berkeley!





Policy, and Regulatory Updates

Recurring Working Group Calendar



Working Group	Schedule	Key Issue Areas
California Independent System Operator (CAISO)	Biweekly (Monday, 11am-12pm PST)	 Energy storage enhancements Price formation and modifications Interconnection enhancements and deliverability method modifications
Distributed Energy Resources (DER)	Monthly (Wednesday, 9:30-10:30am PST)	 Updates on SGIP, DR, NEM permitting guidebook Multiple-use applications, high DER future Microgrid policy/tariffs, value of resiliency Distribution deferral and interconnection
Emerging Technology and Long Duration	Monthly (Tuesday, 9-10am PST)	 Solutions to barriers impeding new technologies EPIC and other grant opportunities Long-duration energy storage issues
Integrated Resource Planning (IRP)	Monthly (Thursday, 1-2pm PST)	 IRP modeling and scenarios (including SB 100) Emerging/long-duration storage procurement
Resource Adequacy (RA)	Monthly (Thursday, 1-2pm PST)	Central Buyer (CB) implementationEnergy & hourly capacity related reforms
Safety	Bimonthly (Tuesday of odd months, 9-10am PST)	Progress update on CESA safety initiativesSafety codes & standards



Resource Adequacy (RA) Updates



- CPUC RA Implementation
- CAISO RA Implementation

Resource Adequacy (RA) – Implementation



R.21-10-002 involves two tracks:

- Implementation Track: PRM/LOLE refinements; LCR/FCR needs; and other "time-sensitive" issues
- Reform Track: Implementation workstreams for Slice-of-Day (SOD) framework
 - D.23-04-010 adopted details to SCE's 24-hour slice framework for test year purposes

- Advanced Energy United, IEPA, AReM, and Microsoft requested an All-Party meeting to discuss issues common to RA and IRP proceedings
 - There appears to be some support, however, many of the issues already have a place within an existing proceeding/process
- Energy Division staff workshopped
 2024 SOD test year RA Plan templates
 - Templates include a built-in energy sufficiency optimization that dictates the usage of the energy storage resources
 - Templates do not clearly indicate the MW quantity of the must-offer obligation

Resource Adequacy (RA) – CAISO



The CAISO: establishes resource deliverability/net qualifying capacity (NQC); processes RA/Supply plans; and procures back-stop capacity for deficient LSE capacity procurement and significant events.

CAISO resource adequacy tariff applies to all load-serving entities in California, not just CPUC-jurisdictional entities.

- CAISO starting a new initiative to explore reforms needed to the ISO's resource adequacy rules, requirements, and processes to ensure the future reliability and operability of the grid
 - Working group format as a pre-cursor to CAISO issue paper
 - Discussion paper posted on 9/21 and first meeting on 10/5

Integrated Resource Planning & Procurement (IRP) Updates



- Station Power Treatment
- Integrated Resource Planning (IRP)
- New Permitting Rulemaking (OIR)

Station Power Treatment



Commission establishing rules for station power settlement for hybrid and co-located resources.

Station power is energy consumed by generating resources that is used for purposes other than supporting resale of energy to wholesale markets, such as information technology and communications, lighting, ventilation, and safety

- Commission filed proposed decision on 8/30
 - For Hybrids with on-site self-supply, storage may discharge to cover station power loads
 - For Hybrids with mixed self-supply and gridcharging, directs IOUs to confer with parties on an accounting methodology
 - For co-located resources, station power rules no applicable and netting to serve station power is not permitted
- IRP WG discussed position
- CESA filed comments on 9/19
 - Commission has clear jurisdiction
 - Hybrids and co-located resources are configurationally equivalent and should therefore receive equivalent treatment
 - Claims of cost shifts are not supported

Integrated Resource Planning (IRP)



The IRP process optimizes for leastcost portfolio to reach goals for GHG emissions, local pollutants, DAC impacts, reliability, RPS, etc.

Each LSE files own IRP in even years while modeling is done in odd years

Scope of IRP includes:

- Planning track to assess modeling inputs, assumptions, resource valuation, and analysis of cost, GHG emissions, air pollutants, and reliability
- Procurement track to evaluate reliability issues at system level and to direct procurement as needed

- Commission published scoping memo on upcoming IRP work
 - CESA/WPTF PFM to extend online dates for LLT procurement will be addressed by the Commission in Q3/Q4 2023
- PG&E and SCE filed a petition for modification to extend online dates for resources procured to meet the Diablo Canyon replacement requirement from 2025 to 2027
 - CESA supported this PFM with clarification that it would not impact the procurement of said resources, just give flexibility on the online date
 - Opposition posits that PFM disadvantages those LSEs that prioritized Diablo Canyon replacement over MTR procurement

New Permitting Rulemaking (OIR)



The Commission issued an Order Instituting Rulemaking (OIR) to update its General Order 131-D addressing the siting of electric transmission lines, substations, and related facilities.

Main driver is to effectuate purpose of Senate Bill (SB) 529, which is to allow electric utilities to use Permit to Construct path for all electric transmission/substation facilities.

Relevant Scope of OIR:

 Permitting requirements for electric utilityowned installation of battery storage

- SDGE held a Settlement Conference on 9/20
 - Edits to GO 131-D focused only on SB529 and changes in other rules since 1994
 - No edits related to energy storage permitting
 - IRP WG to consider supporting the proposal
 - Goal to build/upgrade transmission faster should translate to (a) existing energy storage projects converting from interim deliverable to full capacity deliverable and (b) avoid future interim deliverable status limbo





- Generation Deliverability Methodology
- Interconnection Process Enhancements
- Price Formation Enhancements

Generation Deliverability Methodology



Straw proposal was responsive to stakeholder comments

- Remove secondary system need (SSN) study
- No change to dispatch levels for variable energy resources
- Increase distribution factor for 500kv line overload constraints to 10%
- "Conditional" deliverability status for N-2 and PTO delayed network upgrades
- Guideline changes for area versus local deliverability upgrades

Key Updates:

CESA filled supportive comments on September 12.

"Conditional" deliverability status could provide a bridge between earlier COD and completion of transmission upgrades which would facilitate RA contracting. Additional details are required, but the intent is promising.

CAISO final proposal planned for October 9

Interconnection Process Enhancements



Interconnection Process Enhancements seeks to address

- Track 2 Broader reforms for cluster 15 and beyond
 - Managing Interconnection Request (IR)
 Intake
 - Focus on transmission zones consistent with IRP
 - Managing Projects Already in the Queue

- CAISO Straw Proposal posted September 21
- FERC Order No. 2023 compliance filing by December 5
- CESA did not submit comments on workshops
 - Viability criteria difficult to reach consensus position
 - Plan was to wait until formal CAISO proposal

Price Formation Enhancements



Price Formation Enhancements initiative will explore several topic area

- Phase 1: Scarcity pricing, BAA-level market power mitigation, fast-starting pricing (analysis)
- Phase 2: Fast-start pricing (policy), extended flexible ramping product
- Phase 3: multi-interval optimization + storage, replacement reserves + preparing for nodal ancillary services

Key Updates:

Working group process moving extremely slowly in developing guiding principles and problem statements.

Recent working groups provided education on BAA-level market power mitigation. Significant confusion on WEIM MPM implementation and system market power.

Phase 1 – CESA supports operating reserve demand curve, additional real-time bidding flexibility, and analysis of shorter real-time BCR netting.

Safety Updates



- Safety codes and standards developments
- ESS safety gaps and issues
- Decommissioning and permitting
- Recycling, second-life, and performance standards

Safety, Standards, & Circular Economy



- The CESA Safety Working Group is revisiting the Safety Series Project
 - The Working Group is establishing a Subcommittee to talk about the structure of a revamped safety series project, types of messaging and mediums to use and how to engage proactively at the local level. We anticipate convening the first meeting the first week of October
 - If you are interested in joining the Subcommittee, please email Cara Martinson
- SB 38 (Laird)- BESS Emergency Response & Action Plans Legislation
 - This bill was passed by the Legislature on 9/7 and is awaiting the Governor's signature
 - Requires each BESS in the state to have an emergency response and action plan that covers the premise
 - Requires the owner of the facility to coordinate with local emergency management agencies in the development of the plan
- The CESA Safety Committee is soliciting input on questions to ask the Safety Panel at the CESA Market Development Forum

Distributed Energy Resources (DER) Updates



- Distributed Energy Backup Assets (DEBA) Program
- Update: Income Graduated Fixed Charges
- Update: VNEM Proposed Decision





CESA met with Energy Commission staff several weeks ago to discuss the draft DEBA guidelines, and filed comments on August 31:

- Clarify technology eligibility all storage technologies for DER category; and list project types for bulk grid category
- Adjust payment structure to de-risk projects by both: 1) increasing upfront payment for DERs to 50% and 2) awarding the payment earlier in the process.
- An incentive program using existing SGIP and CSI models is the appropriate structure for DERs.
- Set aside 50% of GFO funding for DERs.
- DEBA project oversight must be streamlined and transparent
- Cap CEC administrative costs at 10% max, and disallow funding for CHIRP
- Allow for value stacking with RA, akin to proposed treatment for bulk grid assets.
- Remove 10% penalty for not participating in RA (DER category)
- Define key details and requirements up-front, such as: minimum expected dispatch criteria, weighting and ranking process, examples of projects that "replaces or displaces fossil fueled generation".

Vote expected at CEC Business Meeting on October 18th.



Update: Income Graduated Fixed Charges (R.22-07-005)

- CESA submitted Reply Testimony in June 2023.
- CESA joined both a joint case management statement, and a joint motion to submit evidence into the record, with many parties, led by PG&E.
- ALJ denied requests for a status conference, and for public workshops.

IGFC Event	Date
Opening briefs filed	October 6, 2023
Reply briefs filed	November 3, 2023
Proposed Decision	March/April 2024
Final Decision	April/May 2024



Update: Virtual Net Metering (VNEM) Proposed Decision

- Export rates based on the Avoided Cost Calculator (ACC), akin to the net billing tariff (aka. "NEM 3.0").
- Tariff set initially at ACC+ (~\$0.14 \$0.16/kWh), with adders that decline 20% per year for new customers, over 5 years.
- VNEM benefitting customers to take service on any available time of use (TOU) rate schedule.
- Nine-year legacy period tied to the property (not the owner).

Storage Provisions:

- Existing VNEM customers may add a battery without compromising VNEM tariff eligibility.
- Grid charging only allowed prior to a planned PSPS event.
- VNEM customers may participate in grid services/emergency programs

Emerging Technology Updates



- CEC/LDES Program Updates
- Market Development Forum

California Energy Commission Activity



- An <u>EPIC Symposium</u> will be held on Tuesday October 3 and Wednesday October 4. The annual symposium brings together policy makers, energy researchers, and technology developers, including recipients of EPIC grants, to spotlight technologies being deployed in the state.
- October 9th CEC Workshop on "Understanding the Role of Long Duration Energy Storage in California's Evolving Energy System." Registration is available on the <u>CEC LDES Workshop Page</u>.
- CEC webinar "EPIC Strategic Goals Emerging Strategies Workshop." The Workshop will focused on a selection of critical pathways and topic areas related to emerging technologies and strategies. The recording will likely be available early next week at <u>CEC Strategic Goals Process Page</u>.

Market Development Forum



- Emerging Technologies WG to host a panel made up of industry Experts:
 - Nyla Khan, DOE OE Office (critical energy storage materials, technology assessments, DOE OE funding opportunities)
 - Erik Stokes, CEC Lead Advisor on Lithium Valley to Commissioner Noemi Gallardo (critical energy storage materials, former EPIC symposium leader)
 - Andrew Maxson, EPRI Program Manager (bulk-energy storage, alternative technologies, project development)
 - Gabe Murtaugh, LDES Council (energy storage markets, LDES programs)
- Questions and discussion for Panel to be codeveloped with WG members

Q&A



Ask us anything!





Contact Us



For inquires, questions and more, contact:

Policy: Rachel McMahon – <u>rachel@storagealliance.org</u>

Membership: Elizabeth Cardwell - elizabeth@storagealliance.org



CALIFORNIA ENERGY STORAGE ALLIANCE