

# CESA Monthly

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# Policy Update Call

June 9, 2023



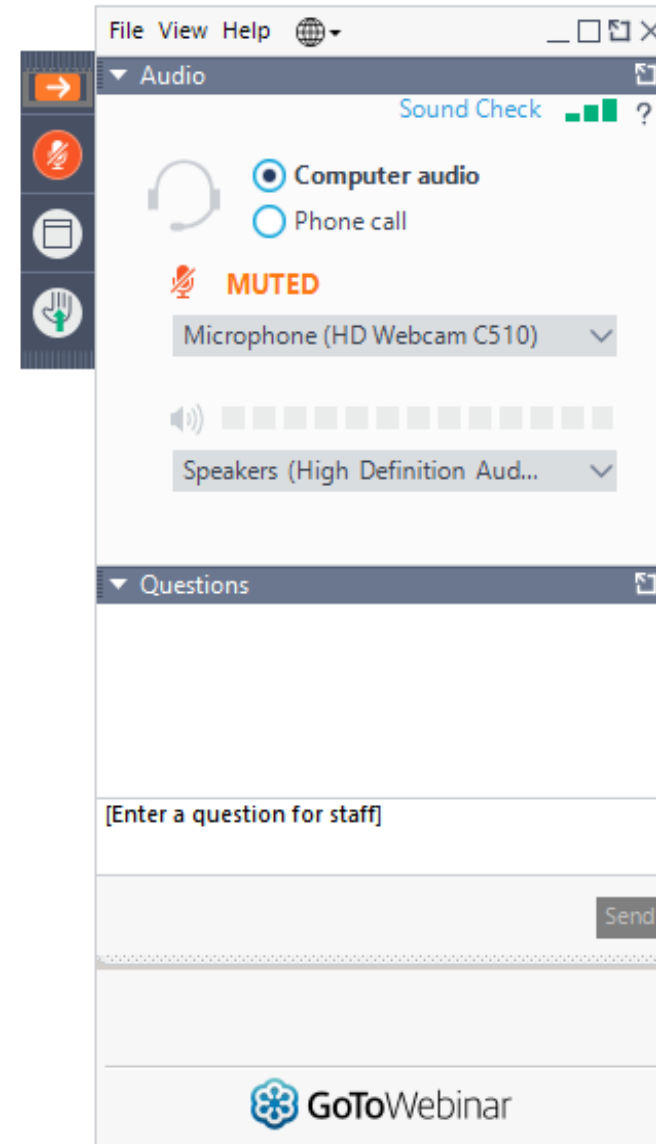
# Agenda

- Key Organizational Updates
- Business Development Opportunities
- California Policy Updates
- Member Q&A



# Housekeeping

- All participants are in listen-only mode
- Webinar is being recorded and notes circulated after call
- Use the “Raise Hand” feature to be queued up to speak
- Q&A conducted through “Questions” panel in menu
- Pause for Q&A



# Mission

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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



# CESA Leadership Update

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## ▪ **Transition from Strategen to New Association Management Firm and Policy Working Group Support**

- As CESA enters its new phase of growth, the CESA Board, together with Strategen, have decided to transition CESA to a stand-alone organization that hires the new full-time Executive Director, and manages the association management and technical policy teams.
  - [Smith Moore & Associates](#) will provide management and administrative support to the organization.
  - [GDS Associates](#) will manage the CAISO, IRP, RA, and Emerging Technology working groups.
  - [Public House Consulting](#) will manage the Safety working group.
  - Rachel McMahon, Principal of [Grid Power Consulting](#), will continue leading the DER/DRP and Legislative working groups.
- ## ▪ **Executive Director Search Committee is nearing the final selection of the new Executive Director.**
- We would like to thank Jin Noh for stepping in as the Interim Executive Director over the past 6 months, and for his insightful and impactful policy leadership over the last eight years.

# CESA Policy Update

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- **Cautiously optimistic for Summer 2023 reliability:** Recent analyses suggest California could be at a surplus under expected load conditions given historic deployment of new resources in the last years, but fears remain with widespread extreme heat events
- **Policy leaders continue efforts to revamp interconnection processes:** CAISO has put forth a series of concepts to manage the intake and processing of requests, including the notion of “priority zones” and auction mechanisms
- **CAISO approves imbalance reserves proposal, notes that implementation will require robust stakeholder engagement:** After introducing late-arriving changes that raised concerns among stakeholders (*e.g.*, bid cap), ISO staff and leadership committed to continuous revision of parameters of the initiative and robust engagement
- **CPUC restarts Inputs and Assumptions process for Integrated Resource Planning:** Updates include incremental candidate resources, reflection of IRA impacts, and enhanced modeling capabilities related to transmission constraints and reliability contributions
- **CPUC moves to limit CCA expansion:** As part of the RA proceeding, the CPUC has argued that LSEs that are not able to meet the requirements related to current customers may face delays in the approval of their expansion plans



# CESA Information Sharing Tools

# California Storage Market Snapshot

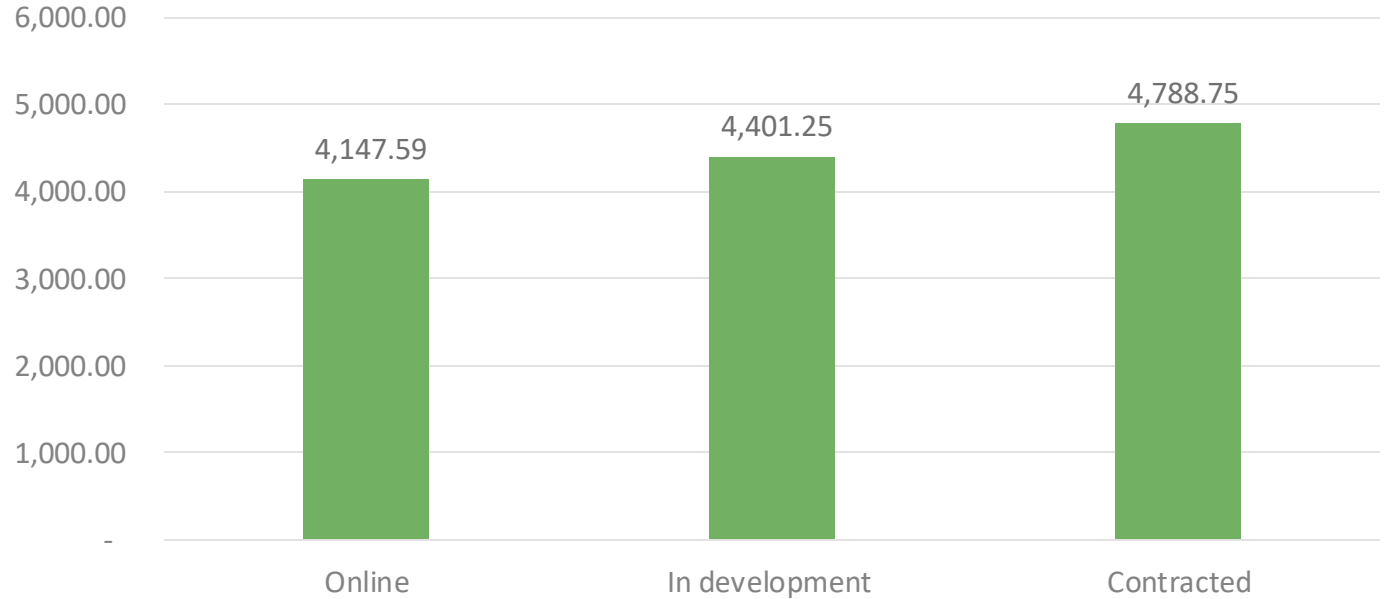


Energy storage capacity procured by LSE (MW)	
LSE	MW
Southern California Edison	4,684.73
Pacific Gas & Electric	3,539.70
Clean Power Alliance	1,120.50
San Diego Gas & Electric	945.66
Los Angeles Department of Water & Power	431.01
East Bay Community Energy	518.75
Marin Clean Energy	320.00
Central Coast Community Energy	429.13
San Diego Community Power	215.50
Clean Power SF	140.00
Valley Clean Energy Alliance & Redwood Coast Energy Authority	130.50
California Community Power	119.00
Silicon Valley Clean Energy & Monterey Bay Community Power	105.00
Silicon Valley Clean Energy	97.63
Sonoma Clean Power	80.00
Imperial Irrigation District	60.00
Desert Community Energy	50.00
Redwood Coast Energy Authority	45.00
California Choice Energy Authority	15.00
San Jose Clean Energy	10.00
Riverside Public Utilities	7.85
Sacramento Municipal Utilities District	4.87
Redding Electric Utility	3.60
Glendale Water & Power	3.50
City of Santa Clara Utilities	3.25
City of Anaheim Public Utilities	3.15
Pasadena Water & Power	0.74
Moreno Valley Utilities	0.08
Lancaster Choice Energy	0.03
Colton Public Utilities	0.02
Alameda Municipal Power	0.01
Burbank Water & Power	-

As of June 9, 2023, there are **13,340 MW** of active energy storage procurements since 2010

SGIP has enabled the installation of an additional **623 MW** of customer-sited electrochemical storage

Chart 1. Energy storage procurement since 2010 by status (MW)



# Business Development Opportunities



Procurement Obligations in September NQC MW						
LSE	2023	2024	2025	2026 (LLT)	2025 (Zero-Emission)	Total
PG&E Bundled	400	1,201	300	400	500	2,302
PG&E Direct Access (Aggregated)	77	230	58	77	96	441
Clean Power SF	31	93	23	31	39	179
East Bay Community Energy	73	218	55	73	91	418
King City Community Power	0.3	1.0	0.3	0.3	0.4	1.9
Marin Clean Energy	58	173	43	58	72	332
Monterey Bay Community Power	51	152	38	51	63	291
Peninsula Clean Energy	38	113	28	38	47	217
Pioneer Community Energy	12	37	9	12	15	70
Redwood Coast Energy Authority	7	20	5	7	8	38
San Jose Clean Energy	43	129	32	43	54	248
Silicon Valley Clean Energy	41	124	31	41	52	237
Sonoma Clean Power	25	74	18	25	31	141
Valley Clean Energy Alliance	8	23	6	8	10	44
SCE Bundled	687	2,060	515	687	858	3,948
SCE Direct Access (Aggregated)	90	271	68	90	113	520
Apple Valley Choice Energy	3	8	2	3	3	16
Baldwin Park	3	8	2	3	3	15
Pomona	5	14	3	5	6	26
Clean Power Alliance	118	354	89	118	148	679
Desert Community Energy	6	18	4	6	7	34
Lancaster Clean Energy	6	19	5	6	8	37
Pico Rivera Innovative Municipal	2	7	2	2	3	14
Rancho Mirage Energy Authority	3	9	2	3	4	18
San Jacinto Power	2	5	1	2	2	10
Santa Barbara Clean Energy	2	7	2	2	3	13
Western Community Energy	15	46	12	15	19	89
SDG&E Bundled	63	188	47	63	78	361
SDG&E Direct Access	26	79	20	26	33	152
Clean Energy Alliance	7	20	5	7	8	38
San Diego Community Power	99	297	75	99	124	570

## Active/ongoing:

- **SCPPA 2023 RE & ES Solutions RFP: Responses due 6/29**
- **Section 48C Round 1 Allocation Credit: Funding opens 5/31, concept papers due 7/31**
- **Southern California Edison (SCE) New Home Energy Storage Pilot (NHESP): Applications open May 22, 2023 through November 2024.**
- **Department of Water Resources (DWR) RFIs**
  - Energy Storage: Responses due 8/7
  - Non-Fossil Fuel and Clean Energy Resources: Responses due 7/14

# Policy, Market, and Regulatory Updates

# Recurring Working Group Calendar

Working Group	Schedule	Key Issue Areas
<b>California Independent System Operator (CAISO)</b>	Biweekly (Monday, 11am-12pm PST)	<ul style="list-style-type: none"> <li>• Energy storage enhancements</li> <li>• Price formation and modifications</li> <li>• Interconnection enhancements and deliverability method modifications</li> </ul>
<b>Distributed Energy Resources (DER)</b>	Monthly (Wednesday, 9:30-10:30am PST)	<ul style="list-style-type: none"> <li>• Updates on SGIP, DR, NEM permitting guidebook</li> <li>• Multiple-use applications, high DER future</li> <li>• Microgrid policy/tariffs, value of resiliency</li> <li>• Distribution deferral and interconnection</li> </ul>
<b>Emerging Technology and Long Duration</b>	Monthly (Tuesday, 9-10am PST)	<ul style="list-style-type: none"> <li>• Solutions to barriers impeding new technologies</li> <li>• EPIC and other grant opportunities</li> <li>• Long-duration energy storage issues</li> </ul>
<b>Integrated Resource Planning (IRP)</b>	Monthly (Thursday, 1-2pm PST)	<ul style="list-style-type: none"> <li>• IRP modeling and scenarios (including SB 100)</li> <li>• Emerging/long-duration storage procurement</li> </ul>
<b>Resource Adequacy (RA)</b>	Biweekly (Thursday, 1-2pm PST)	<ul style="list-style-type: none"> <li>• Central Buyer (CB) implementation</li> <li>• Energy &amp; hourly capacity related reforms</li> </ul>
<b>Safety</b>	Bimonthly (Tuesday of odd months, 9-10am PST)	<ul style="list-style-type: none"> <li>• Progress update on CESA safety initiatives</li> <li>• Safety codes &amp; standards</li> </ul>

# Policy Update Agenda

- Resource Adequacy (RA)
- California Independent System Operator (CAISO)
- Integrated Resources Plan (IRP)
- Emerging Technology and Long Duration Storage
- Distributed Energy Resources (DER)



# Resource Adequacy (RA) Updates

- 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

## Key updates:

- **A PD on the RA Implementation Track was issued May 25th, 2023**
  - Modifies availability assessment hours for March-May to 5-10 PM
  - Retains 17% de jure PRM, preserves effective PRM construct through 2025
  - Proposes limitations to LSE expansion
  - Enhances CPE transparency and allows for LSEs that have self-shown to sell excess system/flex RA
  - Refrains from modifying the QC methodology for supply-side DR
  - Adopts a bid cap for PDR assets providing RA of \$500/MWh in the DA and RT markets
- **CESA to submit comments 6/14**



# California Independent System Operator (CAISO) Updates

- Day-Ahead Market Enhancements (DAME)
- Transmission Planning
- CAISO Interconnection

# Day-Ahead Market Enhancements

## **Day-Ahead Market Enhancements (DAME) Initiative aims to reduce the burden on the real-time market to resolve imbalance and net load forecast uncertainty:**

- Creates the Imbalance Reserve (IR) product
- Enhances the Residual Unit Commitment (RUC) process through the creation of the Reliability Capacity (RC) product
- Introduces Market Power Mitigation for both new products

## **Key updates:**

- The Revised FP (posted 4/6) and the Addendum (posted 4/19) were approved during the 5/17 Board of Governors meeting
  - Stakeholders noted concerns with initiative development process, especially late additions
  - CAISO staff and leadership noted this approval is not a “one and done”, and that the flexible parameters, including storage tools and the bid cap, will be assessed continuously with stakeholders
  - CAISO is targeting FERC filing by August 2023

# Transmission Planning

## 2022-2023 CAISO Transmission Plan Draft published on April 3rd.

- Developed through the annual Transmission Planning Process (TPP).
- The Transmission Plan is developed to identify and plan solutions needed to meet the future needs of the ISO transmission grid.

**The Transmission Plan takes a more strategic and proactive approach to resource, procurement, transmission planning and interconnections.**

## Key updates:

**CAISO has initiated a Deliverability Methodology Review initiative with the posting of the Issue Paper on 5/31**

- CAISO has made some revisions to their assumptions previously, but stakeholders like CESA urged a deeper review
- CAISO believes that their deliverability assessments are comparable to those of other RTOs
- CAISO believes that the move to slice-of-day may necessitate more, not fewer, deliverability assessments
- CAISO believes that levels studied in HSN and SSN may need to be revised
- CESA is coordinating with other stakeholders to prepare joint comments from industry's perspective

# CAISO Interconnection

## CAISO 2023 Interconnection Process Enhancements (IPE) Issue Paper and Straw Proposal published (3/9) and stakeholder conference held on 3/13.

- Track 1 proposed immediate adjustments to schedule of QC 15 and proposed a separate track for Long-Lead Time (LLT) resources.
- CAISO proposed various reform ideas for Track 2, including limits based on TPD availability/plans, screening criteria, auctions, PPA/shortlisting, as-needed application window.

**Track 1 concluded and was approved by the board of governors on 5/17, adopting adjustments to the schedule of QC 15**

## Key updates:

**2023 IPE Track 2 Discussion Paper was published by CAISO on 5/31 and stakeholder meeting was held on 6/7**

## Proposed three concepts for managing interconnection request intake:

1. Qualification process for determining projects studied for FCDS and a study path for all others.
2. Only study projects requested by LSEs and other offtakers.
3. Only study projects that are successful in an auction process for proposed projects.

**High-level comments on Track 2 Discussion Paper are due on 6/14**

**Working group sessions will be held on 6/20-6/21, 6/27, and 7/11**

# Integrated Resource Planning & Procurement (IRP) Updates

- Integrated Resource Planning (IRP)
- SB 100 Study
- LA100 Advisory Group
- Energy Storage Procurement Applications
- Renewable Portfolio Standard (RPS) Program

# Integrated Resource Planning (IRP)

**The IRP process optimizes for least-cost 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

## **Key updates:**

- D.23-02-040, issued 2/28, required procurement of a total of 4 GW of NQC and modified requirements for procurement of long lead-time resources from D.21-06-035 by automatically postponing them from June 1, 2026, to June 1, 2028
  - CESA and WPTF filed a Petition for Modification (PFM) of D.23-02-040 on 5/30 to allow for a potential 2030 extension if good-faith efforts are demonstrated
    - Motion to shorten response time was denied.
- On 6/6, CPUC presented their Draft Inputs and assumptions (I&A) process for 2023 IRP cycle.
  - RESOLVE updates
  - Transmission constraint modeling
  - Storage + Solar ELCC

# Emerging Technology Updates

- 2023 Inputs & Assumptions (I&A) Document

# Long Duration Energy Storage Updates

## On Wednesday, June 7th the California Public Utilities Commission (CPUC) hosted a workshop to present the draft updates to the 2023 Inputs and Assumptions (I&A) document

- This work is done in partnership with E3, the CPUC's consultants
- The I&A document describes the method, sources, and values used to develop the Preferred System Portfolio

## Key updates:

- On 6/6, CPUC presented their Draft Inputs and assumptions (I&A) process for 2023 IRP cycle.
  - Emerging Low -and Zero- Carbon Technologies
  - LDES Solar + Storage ELCC surface
  - Inflation Reduction Act Impacts



# Distributed Energy Resources (DER) Updates

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- **Legislative Update (bills & budget)**
- **CEC Load Shift Goal (SB 846)**
- **Residential fixed charges (CESA reply testimony)**
- **Interconnection - IEPR**

# Legislative Update

- **Budget Update (SGIP):** Governor's May Revise contains funding for low-income residential SGIP (\$630M). Competing proposals between leadership. Senate has proposed funding the full \$900M; Assembly silent thus far.
- **Budget Update (SRR):** Initial proposals from Senate and Assembly would claw back unspent SRR funds (\$100M and full remaining allocation est at \$937M, respectively.)
- **SB 851 (Stern) & AB 1664 (Friedman) both would have established would establish a block grant structure for SGIP for specific electricity customers. Both bills are dead for this year.**

# CEC Load Shift Goal (SB 846) - Adopted 5/31



	Category	Intervention	2022 Estimate	Goal Setting Potential
<b>Core Planning</b>	<b>Load Modifying</b>	TOU Rates	1,200 MW	<b>3,000 – 4,000 MW</b>
		Dynamic Pricing	30 MW	
		Programs Optimizing Load	7 MW	
	<b>Resource Adequacy</b>	Economic Supply-side DR (PDR)	825 MW	<b>3,350 – 4,050 MW</b>
		Reliability Supply-Side DR (RDRR)	740 MW	
	<b>Emergency &amp; Incremental</b>	Emergency-Only Programs	800 MW	
		Back-Up Generators*	375 MW*	
<b>Total (nearest hundred)</b>			<b>3,600 MW</b>	<b>6,400 – 8100 MW</b>

\*Diesel Back-up generators are part of the current emergency framework but are not considered true load flexibility. This capacity is not included in load flexibility totals.

# CEC Load Shift Goal (SB 846) - Overview

Categorizes resources/programs into the following categories, with the following policy recommendations:

- **Load modifying** - *TOU & dynamic rates (3-4 GWs)*
  - Support dynamic pricing; encourage alternative rate and programs to incent load shifting; provide incentives for load shift technologies paired with dynamic rates; information infrastructure deployment; adopt standards to enable appliance operations to be shifted; complete deployment of advanced AMI
- **RA (aka supply side)** - *PDR, RDRR, DRAM, IOU Programs (2 GWs)*
  - Incentive-based capacity valuation for SSSR; centralized DR procurement process; adder on wholesale market revenue for SSSR; reform availability rules and requirements; EM&V on SSSR load impacts
- **Emergency & incremental** - *ELRP, DSGS, BUGs (2 GWs)*
  - Pilot compensating for incremental capacity during extreme conditions, pilot BTM storage in emergency & incremental programs, pilot short duration load shift, reassess role of emergency resources in planning

## CEC Load Shift Goal (SB 846) - Overview



Budget Trailer bill from 2022-23 required the CPUC to consider whether to adopt an income-graduated fixed charge for residential customers by July 2024. Initial proposals were filed via testimony, with a wide range of proposed fixed charges for residential customers. IOU proposal proposes fixed charges ranging from \$15-\$24 to \$92-\$128/month.

### **CESA submitted Rebuttal Testimony on June 2nd, focused on the following points:**

- High fixed charges frustrate policy efforts to encourage and utilize storage as a flexible customer side resource.
- No evidence that high fixed charges will support electrification
- Proposal high enough to trigger serious discussion of grid defection

# CEC IEPR Interconnection



**CEC held a joint agency workshop on May 9th, focused on distribution system interconnection.**

**CESA participated in a developer panel, and filed comments on May 23rd, with the following recommendations:**

- 1) Expedite Rule 21 interconnection for standalone storage.
- 2) Improve energization timelines for behind the meter energy storage, with both MPU funding and installation practices.
- 3) Reconsider non-export provisions in Rule 21 in light of grid services programs and wholesale market participation.
- 4) Consider a cost sharing approach for distribution upgrades deemed needed to interconnect non-exempt BTM systems.

Ask us anything!



# Next Policy Update Call

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July 14, 2023





# Contact Us

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**For membership inquiries, policy questions, and more, contact:**

Shannon McGuire

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**CESAA**

The letters C, E, S, A, and A are filled with a close-up photograph of a green leaf with water droplets. The background of the entire image is a solid blue color with a subtle, faint pattern of water droplets.

**CALIFORNIA ENERGY STORAGE ALLIANCE**