

# CESA Monthly

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# Policy Update Call

February 10, 2023



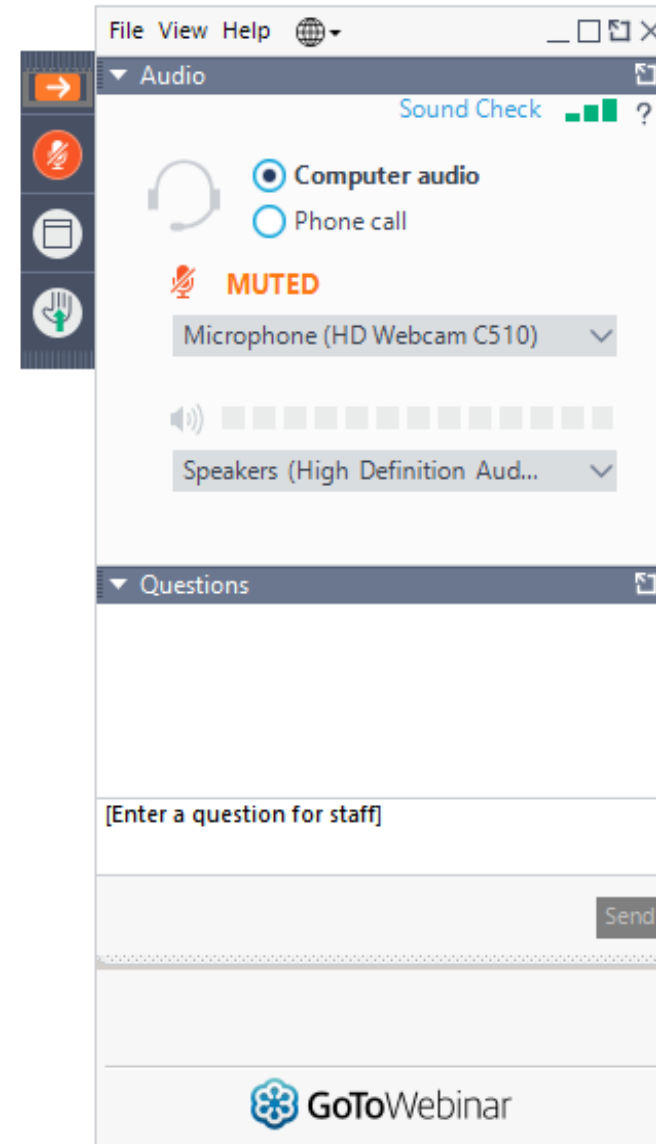
# Agenda

- 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



# Interim Executive Director Update

- **IRP Supplemental Mid-Term Reliability (MTR) Procurement Order shows California will continue to be top storage market in nation/world:**
  - Energy storage positioned well for 4,000 MW NQC all-source opportunity
  - More runway for LDES resources as long lead-time (LLT) resources
- **QC15 supercluster expected , with new initiatives planned (IPE, Deliverability Reform)**
- **Concerns with delays in implementation of energy storage market operation fixes, with CAISO proposing minimum state of charge (MSOC) extension**
- **Summer 2023 assessments and action plans underway:**
  - Emergency plans and programs under development (DEBA, DSGS, CERIP)
- **Early legislative session shows several key bills to pay attention to: battery safety (SB 38, Laird) and RTO governance (AB 538, Holden)**

## 2023 At-Large Board Member Nominations are Closing Today!

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[Submit your nominations](https://forms.office.com/r/Lb7AD4WGsg) **by TODAY:**  
<https://forms.office.com/r/Lb7AD4WGsg>

The At-Large Board Member provides functions critical to the healthy governance and transparency principles of CESA.

### Purpose of the At-Large Board Member:

- Represent the interests of the overall CESA membership on the CESA Board
- Act as a channel for feedback from the membership to the CESA Board of Directors
- Includes 1 voting seat on the CESA Board of Directors



# Member Portal Updates Coming on 2/17

Changes to the Member Portal will go into effect **Friday, February 17.**

Once the changes are made, **you will need to reset the password** to your account in order to access the Member Portal.

We will provide instructions next week on how to reset your passwords.



# Connect with the CESA Team at ISNA/ESNA



Come meet the CESA team at  
**Booth #2339!**

Want to connect? Reach out to  
**Shannon McGuire**  
([smcguire@storagealliance.org](mailto:smcguire@storagealliance.org))

**CESA** CALIFORNIA ENERGY STORAGE ALLIANCE

## Energy Storage Interconnection Basics & Best Practices

This workshop is designed to present the basics and best practices for navigating the interconnection process for energy storage in today's energy landscape. Participants will hear from multiple experts covering interconnection issues relevant for both the transmission and distribution system processes, highlighting key considerations from a development, regulatory, and financial perspective.

 Monday, February 13, 2023 | 1:00 PM-4:00 PM PDT

  
**SERGIO DUEÑAS**  
Policy Manager

**inter solar** NORTH AMERICA |  ENERGY STORAGE NORTH AMERICA February 14-16, 2023  
Long Beach Convention & Entertainment Center

# WESTERN ENERGY STORAGE TASKFORCE (WEST)

*Shaping and Scaling Western Storage Markets*

2023 Cost: \$12,500

## What is WEST?

- Monthly working group meetings from January - December
- Covers and tracks emerging developments in Arizona, Colorado, New Mexico, Oregon, Utah and Washington
- Results-driven, action-oriented advocacy aligned with member input

Next meeting  
2/24!

Contact us to join WEST: [info@storagealliance.org](mailto:info@storagealliance.org)



# CESA Information Sharing Tools

# California Storage Market Snapshot

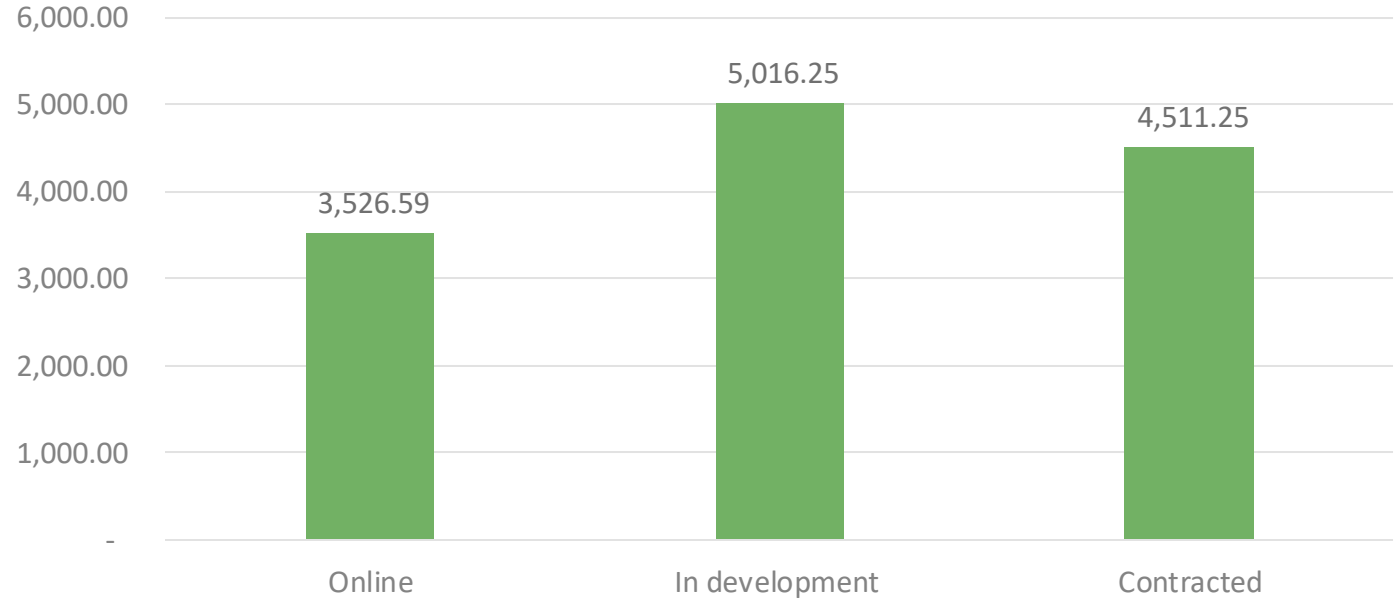


Energy storage capacity procured by LSE (MW)	
LSE	MW
Southern California Edison	4,684.73
Pacific Gas & Electric	3,309.70
Clean Power Alliance	1,120.50
San Diego Gas & Electric	945.66
Los Angeles Department of Water & Power	431.01
East Bay Community Energy	471.25
Marin Clean Energy	320.00
Central Coast Community Energy	429.13
San Diego Community Power	215.50
Clean Power SF	140.00
Valley Clean Energy Alliance & Redwood Coast Energy Authority	125.50
California Community Power	119.00
Silicon Valley Clean Energy & Monterey Bay Community Power	105.00
Silicon Valley Clean Energy	96.63
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 February 10, 2023, there are **13,054 MW** of active energy storage procurements since 2010

SGIP has enabled the installation of an additional **575 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:

- **PG&E 2022 Mesa Substation RFO:** Offers due 2/10
- **RCEA 2023 Demand Response Providers & Aggregators RFQ:** Statement of Qualifications due 2/22
- **3CE 2023 Renewable Energy & Standalone Storage RFP:** Proposals due 3/1
- **DOE OCED LDES Demo Project (10-24+ hours) FOA:** Applications due 3/3
- **SDCP 2023 Long-Term California RPS-Eligible Renewable Energy RFP:** Responses due 3/3
- **CPA 2023 Power Ready RFO for Solar + Storage systems at 12 public facilities:** Proposals due 3/10
- **PG&E Midterm Reliability Phase 3 RFO:** Offers due 3/16
- **SCE Catalina Island Clean Energy All-Source RFP:** Proposals due 5/1
- **SCPPA 2023 Renewable Energy and Storage Solutions RFP:** Responses due 6/29

# Policy, Market, and Regulatory Updates

# Recurring Working Group Calendar

Working Group	Schedule	Key Issue Areas
California Independent System Operator (CAISO)	Biweekly (Monday, 11am-12pm PST)	<ul style="list-style-type: none"> <li>Energy storage enhancements</li> <li>Price formation and modifications</li> </ul>
Distributed Resource Planning (DRP)	Monthly (Monday, 1-2pm PST)	<ul style="list-style-type: none"> <li>Microgrid policy/tariffs, value of resiliency</li> <li>Distribution deferral and interconnection</li> </ul>
Distributed Energy Resources (DER)	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> </ul>
Electric Vehicles (EV)	Bimonthly (Tuesday of odd months, 9-10am PST)	<ul style="list-style-type: none"> <li>Transportation electrification, including smart rates, vehicle-grid integration &amp; interconnection</li> </ul>
Emerging Technology and Long Duration	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>
Integrated Resource Planning (IRP)	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>
Resource Adequacy (RA)	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>
Safety	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

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



# 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

# RPS & Hybrid/Co-Located Storage Policy

## Renewable Portfolio Standard (RPS) rulemaking (R.18-07-003) address ongoing oversight of the RPS program:

- Revisiting and possibly revising the RPS feed-in tariffs (e.g., ReMAT, BioMAT)
- Revising and updating the least-cost, best-fit (LCBF) methodology for evaluating RPS-eligible procurement
- Developing a methodology for determining ELCC values

## Key updates:

- CESA completed and submitted workshop report on hybrid/co-located resource station power regarding: (1) rebutting IOU policy arguments and draft physical assurance proposal for 100% onsite charging case; and (2) applying netting for mixed charging case
- Ruling expected for further comments, with PD targeted for Q2 2023

# 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:**

- A Proposed Decision was issued January 13th, 2023
  - Requires procurement of a total of 4 GW of NQC in addition to the 11.5 GW ordered previously in D.21-06-035
  - Modifies requirements for procurement of long lead-time resources from D.21-06-035 by automatically postponing them to 2028
  - Recommends electricity portfolios for the CAISO to study in its 2023-2024 Transmission Planning Process (TPP)
- The PD will be heard, at the earliest, February 23<sup>rd</sup>, 2023

# Resource Adequacy (RA) Updates

- Central Procurement Entity (CPE) implementation
- Energy requirements and limitations
- Local Capacity Requirements (LCR)
- Behind-the-meter (BTM) export capacity

# Resource Adequacy (RA) – Implementation

**D.22-06-050 adopted SCE’s 24-hour slice framework, with modifications**

**Phase 3 of 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

**Key updates:**

- On January 20, parties to the RA proceeding submitted proposals pursuant to Implementation Track topics, including:
  - Planning Reserve Margin (PRM)
  - Central Procurement Entity (CPE)
  - Maximum Cumulative Capacity (MCC) buckets
  - Unforced Capacity (UCAP) for thermal assets
  - Demand Response (DR) proposals
- A workshop on these matters was held February 8<sup>th</sup>

# California Independent System Operator (CAISO) Updates

- Energy Storage Enhancements (ESE)
- Price Formation Enhancements (PFE)
- Interconnection Process Enhancements (IPE)
- Transmission Planning Process (TPP)

# Energy Storage Enhancements (ESE)

**Within ESE, the CAISO seeks to establish new market rules and enhance existing energy storage optimization**

**The ESE Final Proposal included the following elements:**

- Two proposals to minimize the likelihood of storage being unable to meet AS awards
- A new type of exceptional dispatch, state-of-charge exceptional dispatch (SOC ED), to cure some current concerns with the minimum state-of-charge (MSOC) requirement
- The implementation of a new electable co-located model to ease compliance with the federal Investment Tax Credit (ITC) and minimize grid-charging

**Key updates:**

- The ESE Final Proposal (FP) was approved unanimously at the 12/14 Board of Governors meeting
  - CAISO has not submitted this policy to FERC
- Due to CAISO staff's anticipation that ESE policy will not be in place for Summer 2023, CAISO has initiated the Minimum State of Charge (MSOC) Extension Initiative
  - Seeks to extend, at least this summer, the application of the MSOC requirement adopted 2021



# 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 DAME Final Proposal (FP) was posted 1/11 and discussed informationally at the 2/1 Board of Governors meeting
- A decision on this matter has now been delayed to ~ May 2023
- The delay will allow for more stakeholder discussion, particularly of the nodal vs. zonal concern, and storage issues
  - The nodal approach is a significant departure from other AS
  - There seem to be few guardrails against the potential for unfeasible IR awards for storage

# CAISO Interconnection

## CAISO approved QC14 Supercluster procedures

### Interconnection Process Enhancements (IPE) Initiative is considering following issues:

- PPA Criteria for TPD Allocation Priority
- Non-LSE PPA Requirements for TPD Allocation Priority
- Data Transparency
- Higher Fees, Deposits, and Other Criteria
- Alternative Cost Allocation Treatment for NUs to Local (< 200 kV) Systems
- Affected Study Policy
- GIA Termination Period

## Key updates:

- New initiative on deliverability reform expected in March 2023
- Good possibility of QC15 supercluster in April 2023 given only incremental changes with site exclusivity changes and 270+ IAs expected
- New Issue Paper for 2023 Interconnection Process Enhancements (IPE) Initiative expected end of February 2023

# Transmission Planning

**Transmission Planning Process (TPP) is an annual study process for reliability, economic, and policy needs:**

- Phase 1 involves proposing and adopting a Study Plan and Phase 2 involves a number of technical studies and identification of transmission projects
- Recent studies on local capacity requirement (LCR) for alternatives to gas-fired generation

**Transmission Development Forum (TDF) provides quarterly status updates on transmission projects previously approved through TPP and network upgrades identified in generation interconnection process**

**Key updates:**

- **Transmission Project Review Process (TPR Process)** Draft Resolution E-5252 issued to add more transparency to certain transmission projects; comments due 2/13
- **CESA will be submitting comments for the TPR Process on the following topics:**
  - Ensure appropriate prioritization of transmission solutions and network upgrades.
  - Refine the threshold for transmission projects that fall under the TPR Process over time.
  - Energy storage systems and other DERs should be strongly considered as an alternative to self-approved transmission projects where appropriate.

# Distributed Resource Planning (DRP) Updates

- Distributed Resource Plans (DRP)
- Integrated Distributed Energy Resources (IDER)
- Microgrids
- De-Energization
- Wildfire Mitigation Plans (WMPs)

# Microgrid Commercialization Framework

**Pursuant to SB 1339, R.19-09-009 will develop microgrid framework and policies.**

**The proceeding includes 5 tracks:**

- **Track 1:** 2020 wildfire resiliency solutions and strategies
- **Track 2:** Microgrid service standards, new rates or tariffs, other barriers and principles
- **Track 3:** IOU standby charges and Resiliency and Microgrids WG (RMWG)
- **Track 4:** Emergency Reliability (Phase 1) and Microgrid Incentive Program & Microgrid Multi-Property Tariff (Phase 2)
- **Track 5:** Value of Resiliency

**Key updates:**

- Microgrid Incentive Program (MIP) Proposed Decision released
  - Maintains IOU point scoring system
  - Business plan must be included in MIP application
  - COD deadline modified to be 24 months after the signing of a Microgrid Operation Agreement
- CESA will be submitting comments on the PD on 3/1

# Distributed Energy Resources (DER) Updates

- Self-Generation Incentive Program (SGIP)
- Demand response (DR)
- Rule 21 interconnection
- Net Energy Metering (NEM)
- Energy storage permitting
- TOU, real-time pricing, and load management standards
- Building decarbonization
- Clean energy financing options

# Net Energy Metering (NEM)

## **R.20-08-020 will develop a NEM Successor Tariff (“NEM 3.0”):**

- Program elements or specific features
- Methods for development of tariff
- Other issues related to the current NEM tariff and subtariffs, including NEM-A, VNEM, RES-BCT, and NEM-FC

**CESA focuses on enabling storage in the program and enhancements related to virtual pairing, oversizing, and VPP enablement.**

## **Key updates:**

- CPUC held a workshop on Virtual NEM and NEM Aggregation on 2/8
  - Parties highlighted the value that these systems bring to customers
  - VNEM systems are metered separately from customer accounts – highlighting the need for netting

# CEC Emergency Reliability Programs

**2022 Legislative Session created two DER programs for emergency reliability.**

## **Distributed Electric Backup Assets (DEBA) Program:**

- \$700 million in funding
- Incentives for construction of DERs to serve as emergency resources

## **Demand Side Grid Support (DSGS):**

- \$295 million in funding
- DR program providing payments for load reduction/exports during extreme events

## **Key updates:**

- CEC held a workshop on 1/27 giving an update on the next stages of the DSGS and DEBA programs.
  - Launching DEBA with a \$50 million Grant Funding Opportunity this Summer
  - Modifying DSGS capacity payment option to allow for out of market participation pathway
- CESA will be submitting comments on 2/17 recommending an incentive approach for BTM resources



# Demand Response & Flexibility

## 2023-2027 IOU DR Applications are currently open, addressing:

- Potential extension of DR Auction Mechanism (DRAM)
- Extension of ELRP through 2027 and other existing programs (BIP, CBP, ADR)
- New pilots, including for VPPs, VGI, etc.

## New OIR to Advance Demand Flexibility Through Electric Rates released

- Phase 1: Rate design and guiding principles
- Phase 2: Rate reform and establishing policies and programs to advance demand flexibility

## Key updates:

- IOUs submitted Advice Letters proposing modifications to ELRP
  - Reducing minimum dispatch hours for VPPs and VGI aggregations
  - Aligning baselines across all Group A customers (10 in 10)
  - CESA submitted a protest to the AL to maintain minimum dispatch hours
- Energy Division released DR RA staff proposals, including:
  - PDR bid cap of \$500/MWh
  - Lowering RDRR trigger to EEA Watch

# Emerging Technology Updates

- Electric Program Investment Charge (EPIC) Program
- EPIC Program Renewal (A.19-10-005)
- CEC Technology Roadmaps
- Storage Procurement Framework

# CEC LDES Commercialization Program

## Governor Newsom's proposed budget includes \$380M for a long-duration energy storage program:

- Program will be administered by CEC
- Targeting durations of 8+ hours, maybe with stretch duration (20-100 hr.) carveouts
- Tech must be on the “verge of commercialization” – Li-ion and pumped hydro excluded

## Key updates:

- Governor Newsom's budget includes \$190M in additional LDES funding
  - Reduces original proposal by \$50M
- CESA has reserved March 14 for all-day pitch sessions with members
  - 25 minutes per speaker/member
  - Contact Jin if you'd like to join
- DOE OCED funding opportunity includes 4 categories for LDES
  - CESA released a survey to help members find partners due 2/14

Ask us anything!



# Next Policy Update Call

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March 10, 2023



# Contact Us

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

Shannon McGuire

[smcguire@storagealliance.org](mailto:smcguire@storagealliance.org)

**CESAA**

The letters 'CESAA' are rendered in a large, bold, sans-serif font. Each letter is filled with a detailed, close-up photograph of a green leaf, showing its veins and several clear water droplets. The background of the entire image is a solid, deep blue.

**CALIFORNIA ENERGY STORAGE ALLIANCE**