

# CESA Monthly --- Policy Update Call

March 10, 2023



# Agenda

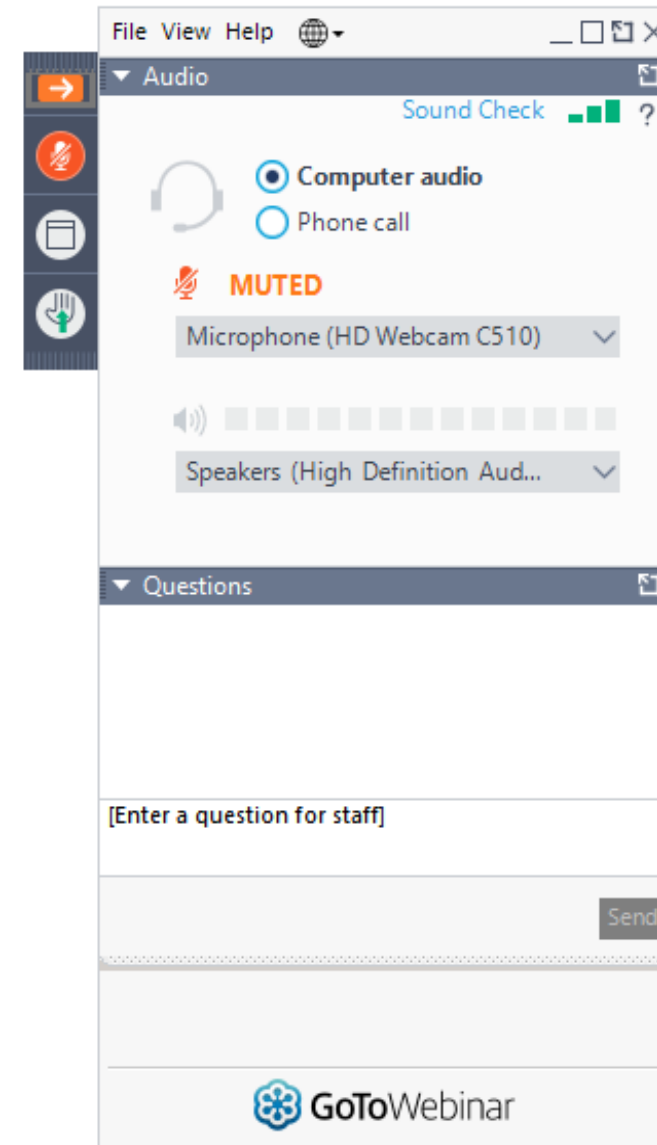
- Key Organizational Updates
- Business Development Opportunities
- California Policy Updates
- Member Q&A





# 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

- **Resource Adequacy (RA) slice-of-day (SOD) Proposed Decision (PD) issued:** Largely good for storage with greater flexibility and certainty in counting and project-specific configurations
- **CAISO is launching new interconnection initiative (IPE 2023):** Delay QC 15 study process to 2024 and consider long-term reforms (auctions, screening, generic studies)
- **Concerns and delays in implementation of energy storage operation fixes:** CAISO proposing minimum state of charge (MSOC) extension and modifications needed on imbalance reserve products
- **Summer 2023 assessments and action plans underway:** Finalized CERIP, draft DEBA and DSGS guidelines
- **Early legislative session shows several key bills to pay attention to:** Battery safety (SB 38, Laird) and RTO governance (AB 538, Holden)
- **Federal watch:** Ongoing appropriations process, 48C Advanced Energy Project Credit guidance, other pending IRA guidance, potential trade actions

**POLL**



# 2023 At-Large Board Member – Katie Guerry



**PLEASE WELCOME**

**KATIE GUERRY**

Senior Vice President,  
Regulatory and Government Affairs

**CESA'S 2023  
AT-LARGE BOARD  
MEMBER**

**CONVERGENT**

# Executive Director Search

CESA Executive Director position has been posted and is now **accepting applications through March 31, 2023.**

CESA Executive Director will provide strategic leadership and be CESA's voice to advance our mission, principles, and goals.

For more information, please find the job posting:

[https://candidates.perrettlaver.com/vacancies/3478/executive\\_director/](https://candidates.perrettlaver.com/vacancies/3478/executive_director/)

**Please share with your network!**

# Reminder: Update CESA Contact List

If you have **any new team members** who should receive CESA communications and working group access, have them complete this form:

<https://www.storagealliance.org/cesa-portal-request-access#join>

Please let Shannon McGuire know if you have **any former team members** who have departed your organization!



# CESA Information Sharing Tools



# California Storage Market Snapshot

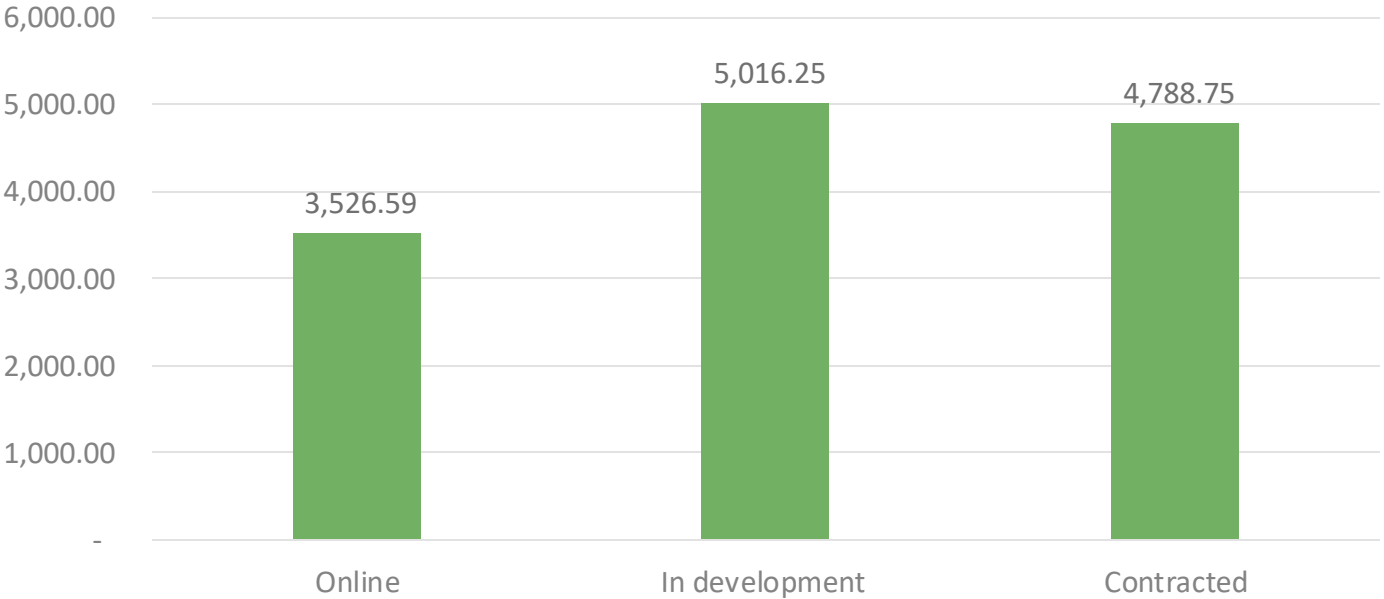


Energy storage capacity procured by LSE (MW)	
LSE	MW
Southern California Edison	4,684.73
Pacific Gas & Electric	3,539.70
Clean Power Alliance	1,120.50
San Diego Gas & Electric	945.66
Los Angeles Department of Water & Power	431.01
East Bay Community Energy	518.75
Marin Clean Energy	320.00
Central Coast Community Energy	429.13
San Diego Community Power	215.50
Clean Power SF	140.00
Valley Clean Energy Alliance & Redwood Coast Energy Authority	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 March 10, 2023, there are **13,332 MW** of active energy storage procurements since 2010

SGIP has enabled the installation of an additional **586 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 Midterm Reliability Phase 3 RFO: Offers due 3/16**
- **SCE 2023 MTR Phase 3 RFO: Offers due 4/3**
- **PG&E and SCE 2023 PCIA RPS Long-Term Market Offer RFOs: Bids due 4/11**
- **SCE Catalina Island Clean Energy All-Source RFP: Proposals due 5/1**
- **Section 48C Round 1 Allocation Credit: Funding opens 5/31, concept papers due 7/31**
- **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

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



# California Independent System Operator (CAISO) Updates

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

# 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:

- Interconnection Process Enhancements (IPE) Issue Paper and Straw Proposal published (3/9) accepting QC15 applications in April 2023 but delaying study process to 2024, until QC14 Phase II studies completed
- CAISO proposes various reform ideas for Track 2, including limits based on TPD availability/plans, screening criteria, auctions, PPA/shortlisting, as-needed application window
- New initiative on deliverability reform expected in March 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:**

- Draft Resolution E-5252 issued on Transmission Project Review Process (TPR Process) to add more transparency to certain transmission projects; expected CPUC vote for approval on 3/16
- Still awaiting Transmission Planning Enhancements (TPE) Final Proposal on timelines, long lead-time “reservations,” etc.
- Draft 2023-2024 Transmission Study Plan prepared



# 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:**

- 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
  - Original proposal sought to extend the application of the MSOC requirement adopted 2021 through Summer 2024
  - Final proposal posted 3/6 would limit extension to Summer 2023 or “when successor elements are ready”

# 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
- CAISO staff held three DAME workshops in recent weeks to allow for more stakeholder discussion of the tradeoffs of nodal vs. zonal designs for IR
  - The need for downward products (or lack thereof) was also discussed at the workshops
- CESA and other stakeholders are actively collaborating with CAISO staff to address storage concerns with the FP
  - Representing impacts of IR on SOC will ensure feasible dispatch

# 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):
  - 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 from June 1, 2026, to June 1, 2028
  - Recommends electricity portfolios for the CAISO to study in its 2023-2024 Transmission Planning Process (TPP)

# 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
- CESA submitted comments 2/22 and replies 3/3 underscoring:
  - The Commission should adopt Energy Division’s (ED) proposal to extend the application of the effective PRM through 2025 and increase the 2024 PRM to 18-20%.
  - The Commission should establish a methodology to better assess what “high pricing” means in the context of CPE procurement
  - The Commission should adopt Southern California Edison’s (SCE) maximum cumulative capacity (MCC) buckets proposal for 2024

# Resource Adequacy (RA) – Reform

## 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 March 3, the Commission issued a Proposed Decision on the RA Reform Track, noting:
  - Solar and wind resources shall use a 12-season exceedance valuation
  - For paired (hybrid and co-located) resources, an energy-only (EO) resource may count towards the storage charging sufficiency requirement if the EO resource charges exclusively on-site storage
  - Storage resources that are operationally and contractually able to provide multiple cycles in a 24-hour cycle may be shown for multiple cycles per day provided that the LSE shows sufficient excess energy and time between discharge cycles to charge the battery
  - No action on UCAP
  - Elimination of MCC buckets, except for the DR bucket, for the SOD test year
- CESA will submit comments on the matter 3/23 and replies 3/28

# 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
  - COD deadline modified to be 24 months after the signing of a Microgrid Operation Agreement
- CESA and MEC commented on the lack of stakeholder consensus in MIP scoring system
- Sunnova Microgrid CPCN Proposed Decision released dismissing the Application

# 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



# 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:**

- 25 parties submitted comments on DEBA and DSGS program design
  - Eligibility: Agreement that all IOU customers should be eligible for DEBA and DSGS
  - DSGS Providers: Industry supported third-party options, while POUs want to oversee customer enrollment
  - Payments: Support for incentive-style DEBA and out of market participation pathway for DSGS
- CEC expected to release draft guidelines for both DEBA and DSGS in March

# 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 have submitted supplemental DR testimony:
  - SCE shared new CBP Elect and Elect+ proposals
  - SCE requesting increased ELRP budgets due to number of Flex Alerts in 2022
  - PG&E recommends that cost-effectiveness requirements be temporarily suspended – given reliability needs
- CPUC released an updated version of the DRAM Nexant evaluation with additional data

# Rule 21 Interconnection

## Phase 2 of the R.17-07-007 is beginning with the scope including:

- Limited Generation Profiles
- Interconnection Portal Improvements
- Non-NEM interconnection fees
- Distribution cost sharing: both among Rule 21 resources and Rule 21 vs the Wholesale Distribution Access Tariff
- Other follow-up items from Phase 1

## Proposed Decision on Phase 2 is expected in Q2 2023

## Key updates:

- Load Masking Workshop held on impact of non-exporting, transmission-connected Rule 21 resources:
  - PG&E shared that Rule 21 telemetry requirements provide sufficient visibility into operations
  - CAISO raised general DER visibility concerns and impacts of DERs on load forecasts

# 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 will convene LDES Pitch Day on March 14 for members



# Q&A

Ask us anything!



# Next Policy Update Call

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April 7, 2023



# Contact Us

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

Shannon McGuire

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CESAA

CALIFORNIA ENERGY STORAGE ALLIANCE