CALIFORNIA

Efficiency + Demand Management

COUNCIL

Advancing Our Clean Economy

Monthly Member Readout

May 5, 2023

REC

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Today's Agenda

Council News

- Spring Symposium: May 24 in LA!
- What's Coming Up
- Solicitations
- Capitol Update

Issues/Topics

- CPUC: R.22-11-013: SCT Comments
- CEC: DSGS Updated Draft Guidelines
- CEC: Load Shifting Goal Comments
- Quick Updates

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Spring Symposium: May 24 in LA!

Wednesday, May 24, 2023

In-person with Online Viewing Option

Westin at Los Angeles Airport, Los Angeles, CA

Agenda and confirmed speaker list as of May 5 on the next slide.

The Spring Symposium is the Council's one-day professional education conference, focused on practical approaches that can be taken to more effectively deploy efficiency and demand management resources needed to combat climate change. Our guest speakers oftentimes inspire and inform us about the tools and tactics that hopefully lead to positive impacts for our future.

MORE INFORMATION HERE!

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Spring Symposium: May 24 in LA!

CALIFORNIA Efficiency + Demand Management COUNCIL

Description	Organization	Speaker	Title
Keynote Speaker	U.S. Department of Energy	Gene Rodrigues	Assistant Secretary for Electricity for the Office of Electricity
Keynote Speaker: LA County - Transportation Electrification & SoCalREN	County of Los Angeles	Minh S. Le	GM, Energy & Environmental Services
Lessons Learned: A Case Study of Denmark's experience deploying solutions to support consumer meter data, information sharing, connectivity, and price-responsiveness.	Consulate General of Denmark, Silicon Valley	Claus K. Ekman	Climate and Energy Attache / Consul
Data Access in the Context of Grid Modernization	Oracle Utilities/Opower	Erik Hobbie	
	Mission: Data	Michael Murry	President
Grid Modernization Index Readiness Framework: A tool for states and utilities to evaluate grid modernization progress.	Guidehouse	Michelle Fay	Partner, Global Solutions Lead: Energy, Sustainability & Infrastructure & Gridwise Alliance Director
Transportation Electrification: Update on PG&E Pilots	PG&E	Lydia Kreft	Director of Clean Energy Transportation
Energy Efficiency + Charging Stations	IO Energy	David Krueger	President
Cal-TF Integrative Data & Analytics & Equity	Future Energy Enterprises	Annette Beitel	President
Heat Pump Technology	Blue Frontier	Greg Tropsa	EVP for Business Development
Bringing Artificial Intelligence (AI) to the Grid Edge	Utilidata	Yingchen (Y.C.) Zhang	VP of Product Solutions

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What's Coming Up

- **5/08: CEC Workshop: On With the Wind: Toward 25 GW of Offshore Wind Energy in California**
  - 9:00 a.m. - 5:00 p.m. | Register here
- **5/09: CEC Work Group: Implementation of FY '22-'23 Incentives for Zero-Emission Public School Buses and Infrastructure**
  - 9:00 a.m. - 11:00 a.m. | Zoom
- **5/09: CEC Staff Workshop on Long Duration Energy Storage Analysis**
  - 10:00 a.m. - 12:00 p.m. | Zoom, (888) 475-4499 | Webinar ID: 823 4176 5390 | Passcode: 032465
- **5/09: CEC Commissioner Workshop on Clean Energy Interconnection – Electric Distribution Grid**
  - 10:00 a.m. - 5:00 p.m. | Information here
- **5/09 - 5/11: CEC: Vehicle Interoperability Testing Symposium In person in Long Beach, CA, remote may be available**
  - More information here
- **5/10: Workshop on the DR Providers 2023 Load Impact Protocol (LIP) Final Reports**
  - Teams; 608) 231-1398 | Conference IDE: 518 571 717#
- **5/10: California Energy Codes & Standards Stakeholder Meeting: Nonresidential Covered Processes**
  - 9:00 a.m. - 11:00 a.m. | Register here
- **5/11 - 5/12: CEC Retreat Meetings**
  - More information here
- **5/16: California Energy Codes & Standards Stakeholder Meeting: Lighting Language Cleanup, Controlled Equipment Horticulture, and Nonresidential Daylighting**
  - 10:00 a.m. - 11:45 a.m. | Register here

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What's Coming Up (Cont.)

- **5/17: California Energy Codes & Standards Stakeholder Meeting: Single Family Buried Ducts & High Performance Windows, Multifamily Envelope, and Multifamily Indoor Air Quality (IAQ)**
  - 8:30 a.m. - 11:15 a.m. | Register here
- **5/17: CEC Staff Workshop on Draft Equitable Building Decarbonization Direct Install Program Guidelines**
  - 10:00 a.m. - 1:00 p.m. | Zoom; (888) 475-4499 | Webinar ID: 854 6650 6983 |Passcode: 941385
- **5/18: California Energy Codes & Standards Stakeholder Meeting: Pools, Nonresidential Space Heating, and Commercial Kitchens**
  - 9:30 a.m. - 12:00 p.m. | Register here
- **5/22: California Energy Codes & Standards Stakeholder Meeting: Nonresidential Envelope, Existing Buildings, and Multifamily Restructuring**
  - 9:00 a.m. - 12:00 p.m. | Register here
- **5/23: California Energy Codes & Standards Stakeholder Meeting: Nonresidential and Multifamily Elevators**
  - 10:00 a.m. - 11:00 a.m. | Register here

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Open Solicitations

5/08/23: SVCE RFP submissions due re: Electrification Concierge Services Consultant
5/12/23: SVCE & 3CE RFI due re: Battery Energy Storage Systems Bidding Optimization Software
5/12/23 SDCP & CEA RFP, Regulatory Legal Counsel Services
5/23/23: SCP RFP, Workplace Electric Vehicle Supply Equipment (EVSE) Technical Assistance
5/26/23: CEC GFO-22-609, Responsive, Easy Charging Products with Dynamic Signals due
5/31/23: PG&E RFP due re: Zonal Equity Electrification Pilot Program Solicitation
5/31/23: SDG&E RFA [PDF download] due re: Residential Equity Education and Outreach Request for Abstracts
6/23/23: CEC GFO-22-611 due re: FAST - Fast and Available Charging for All Californians
7/12/23: CEC GFO-22-612 due re: Electric School Bus Bi-Directional Infrastructure
- *Note: Questions are due May 5, 2023 by 5PM.*

8/2/23: CEC GFO-22-614 due re: Reliable, Equitable, and Accessible Charging for Multi-family Housing 2.0 (REACH 2.0)
9/01/23: SCE RFO due re: 2022 Catalina Island Clean Energy All-Source
- Note: The original submission date *was* May 1, 2023.

9/22/23: CEC GFO-20-305 - The Next EPIC Challenge

Ongoing: EE program 3P solicitation information and links found on the CAEECC Website

DOE: Funding Opportunity Exchange

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Capitol Update from the Council Lobbyists

Erin Niemela

Tiffany Phan

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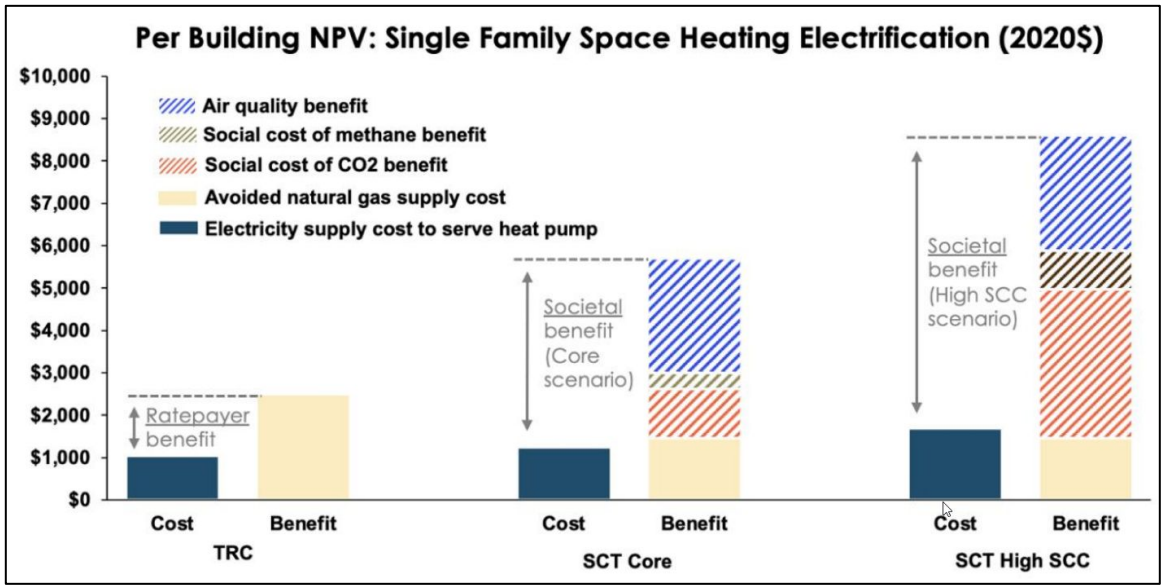
CPUC: R.22-11-013: SCT Comments

- R.22-11-013 re: DER Program Cost-Effectiveness Issues, Data Access and Use, and Equipment Standards.
- The ALJ issued a Ruling in February requesting stakeholder comments on if and how to incorporate the SCT into CE considerations for DERs.
- The Council submitted comments on April 28. Key takeaways:

1) Use the SCT per Staff recommendations as an informative, interim solution



- Adopt the SCT with high SCC per staff recommendation, interim CE Test for DERs.
  - Increased clean energy resource procurement reducing GHG emissions from 38 MMT to 19 MMT by 2030, added cost of $1B/year or 0.5¢/kWh increase)
  - Increases DER avoided costs by ~35% in most hours except the mid-day hours
  - Drives electrification through more C/E

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CPUC: R.22-11-013: SCT Comments (Cont.)

2) Launch a stakeholder/expert Working Group to develop and recommend new SCT inputs/tests to stand-up, enable, and evaluate DER programs over decades

- Existing SCT is outdated and generally inaccurate. This leads to undervaluing and inadequate investment in and deployment of DERs.
- SCT has some good components, but so do other cost tests.
- Looking to pick and choose appropriate parts of other cost tests, while ensuring the following benefits are captured:
  - Load Shifting benefits;
  - Incentive or policy stackability;
  - Anticipated grid condition changes;
  - Forecasted, long-term effects of the changing climate; and
  - Ability to dispatch as either a ramp-up or ramp-down resource.

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CPUC: R.22-11-013: SCT Comments (Cont.)

3) Transition from the interim SCT to the long-term solution developed by the Working Group.

- The interim high SCC SCT is intended to be short-lived and largely informative in order to mitigate any potential market/investment impacts to the resource
- Likely ongoing stakeholder efforts to continue the discussion.

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CEC: DSGS Updated Draft Guidelines

- April 26, the CEC held a workshop on the Demand Side Grid Support Program.
- The DSGS will offer incentives to electric customers that provide load reduction and backup generation to support the state's electrical grid during extreme events, reducing the risk of blackouts.
- **AB 209**: "...only those customers enrolled in those demand response or emergency load reduction programs ineligible for the program. The bill would authorize the Energy Commission, in consultation with the PUC, to adopt additional participation requirements or limitations."

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CEC: DSGS Updated Draft Guidelines (Cont.)

- Phased rollout:
  - 2022: Expedited development and launch
  - 2023: Update, incorporate lessons learned, prepare for long-term program
  - 2024+: Scale, unlock and grow cleaner resources for the SRR.
- CEC has explicit interest in building a successful, scalable, and long-standing program.
- The April 26 workshop was to discuss proposed updates to the DSGS guidelines. The Council responded to the first version of updates in February.

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CEC: DSGS Updated Draft Guidelines (Cont.)

	Current	Proposed Modifications
Provider Eligibility	POUs, Federal power marketing admins	All retail suppliers, FPMAs, aggregators
Participant Eligibility	POU + FPMA customers. No dual enrollment	No dual enrollment. All POU + FPMA customers. CCA + IOU customers: - with backup generators - Option 2 or 3 - Water agencies
Option 1: Standby and Energy Payment	1) Separate energy payment only and standby + energy payment 2) June - October 31 (4:00 - 9:00 p.m.) 3) Non-combustion: EEA 1	1) Consolidates those two options 2) May - October 31 (available all hours) 3) Non-combustion: EEA Watch
Option 2: Incremental Market-Integrated DR Capacity		New Option
Option 3: Market-Aware BTM Battery Storage		New Option

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CEC: DSGS Updated Draft Guidelines (Cont.)

Option 2: Incremental Market-Integrated DR Capacity

- Incremental DR capacity incentive payments will be made based on demonstrated capacity in excess of capacity commitments (the maximum monthly sum total of PDR capacity (MW) of a DR provider across the month ahead resource adequacy showings of all LSEs).

Table 1: Incremental DR Capacity Prices by Month ($/MW)

Month	Capacity Value
May	$9,000
June	$9,300
July	$16,800
August	$18,000
September	$19,200
October	$10,500
Season Total	**$82,800**

- Demonstrated capacity will be calculated based on resource availability and performance during a defined daily availability window. No minimum MWh.

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CEC: DSGS Updated Draft Guidelines (Cont.)

Option 3: Market-Aware Behind-the-Meter Battery Storage

- VPP aggregation. VPP aggregators must:
  - Send dispatch signals *or* directly control individual batteries
  - Collect/provide data (hourly or subhourly)
- BTM storage requirements:
  - Participants have minimum stationary battery: 1 kW for 2 hrs
    - Aggregated BTM storage minimum of 500 kW
  - All sites within same service territory
  - All resources within VPP aggregation nominated for same duration
- Incentive payments shall be made based on the demonstrated battery capacity of an aggregated VPP.
- Availability/triggers:
  - Daily, 4PM - 10PM
  - 35 maximum events
  - Minimum once/month
  - Triggers based on price

Table 2: Monthly BTM Storage Capacity Prices by Month ($/kW)

Month	4-Hour	3-hour	2-Hour
May	$9.00	$8.10	$6.75
June	$9.30	$8.37	$6.98
July	$16.80	$15.12	$12.60
August	$18.00	$16.20	$13.50
September	$19.20	$17.28	$14.40
October	$10.50	$9.45	$7.88
Annual Total	**$82.80**	**$74.52**	**$62.10**

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CEC: DSGS Updated Draft Guidelines (Cont.)

- Verification: DSGS providers and participants must provide CEC with access to relevant documents verifying load reduction activities. Funding expenditures required for providers.
- Verification steps may include:
    1. Requesting relevant documents or other materials from the DSGS provider or participant.
    2. Contacting the participant or its retail supplier.
    3. Contacting the ISO or applicable balancing authority.
    4. Performing an audit, as discussed below in Section E.

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CEC: DSGS Updated Draft Guidelines (Cont.)

Target Dates (Subject to Change)	Milestone
April 20, 2023	• Draft Proposed DSGS Guidelines 2nd edition Released
April 26, 2023	• Workshop
May 2023	• Public comments due May 11th by 5:00pm • Continued collaboration with CPUC and CAISO • Staff consideration of comments and revisions • Release revised draft modified guidelines
June 2023	• CEC consideration of modified guidelines at business meeting
Summer 2023	• DSGS Program Guidelines 2nd Edition effective • CEC to notify interested parties when incentive options are available for participant enrollment

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CEC: Load Shifting Goal Comments

- SB 846 (Dodd, 2022) re: Diablo Canyon, includes provision re: CEC establishing a load shifting goal, to be updated biennially in IEPR.
- April 19: held workshop alongside CAISO, CPUC, presenting goal ranges, “ambitious… achievable”

Category	Intervention	2022 Estimate	Goal Setting Potential
Load Modifying	TOU Rates	1,200 MW	3,000 – 4000 MWs
	Dynamic Pricing	30 MW	
	Programs Optimizing Load	7 MW	
Resource Adequacy	Economic Supply-side DR (PDR)	825 MW	3,350 – 4,050 MWs
	Reliability Supply-Side DR (RDRR)	740 MW	
Emergency & Incremental	Emergency-Only Programs	800 MW	
	Back-Up Generators*	375 MW*	
Total (nearest hundred)		**3,600 MW**	**~ 6,400 – 8100 MW**

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CEC: Load Shifting Goal Comments (Cont.)

Council comments submitted 5/03:

- Several current efforts are promising to advance important resource (22-07-005, 22-11-013, DSGS, DEBA, CERIP, the LSG…)
- Several current efforts may contradictory to the LSG (i.e. proposals re: Income Graduated Fixed Charge (ironically - under 22-07-005))

- VC Gunda: How do we make Demand Flexibility a fungible resource that can be considered anywhere?
  - Bringing up to par DM resources alongside other resources, treating them like renewable/clean energy resources.
- Pres. Reynolds: Demand Flexibility needs to be affordable and equitable
  - Agreed - load shifting and DM efforts must ensure affordability, equity

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CEC: Load Shifting Goal Comments (Cont.)

- Suggested improvement Re: Transportation Electrification Adoption Rates
  - TE forecasted in high electrification rate was still fairly low. Urge to find forecasts that align with state goals and achievability of those goals.
- Implementing CalFUSE methodology will take time, need to ensure interim period enables and advances load shifting. This includes incorporating key issues in IEPR update.
- Address issues with transparency, accountability, metrics, and engagement
- Warned about potential significant impacts of IGFC proposals.
- Advance funding/investments.

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Quick Updates

- Updates to EBDP issued
    - Workshop: 5/17
    - Comments due: 6/30
- P&G Study comments due 5/08
- DSGS comments due 5/11
- Food Production Investment Program comments due 5/12 (Council will not be submitting comments)
- DR Testimony
    - Rebuttal testimony: 5/12
    - Opening briefs: 6/21
    - Reply briefs: 8/18

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Quick Updates (Cont.)

- The Council submitted the following filings since our last Monthly Member Readout:
  - May 3 – CEC 21-ESR-01 Council comments re: April 19 CEC Load Shift Goal Workshop
  - April 28 – CPUC R.22-11-013 (Customer DER) Council Opening Comments on ALJ Ruling re: Societal Cost Test (SCT) and Air Quality Research
  - April 15 – Council Coalition Letter to the U.S. Senate re: U.S. Department of Energy (DOE) FY2024 Appropriations
  - April 15 – Council Coalition Letter to the U.S. House re: U.S. Department of Energy (DOE) FY2024 Appropriations
- The Council submitted the following testimony since our last Readout:
  - April 21 – CPUC A.22-05-002 et al. (DR Applications) Council Phase II Testimony
  - April 10 – Desmond Testimony to Senate Energy, Utilities, & Communications Committee Hearing Supporting SB 48 (Becker)

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Discussion & Q&A

Thank You!

Please contact us if you have any questions.

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Next Monthly Member Readout: June 2

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