State & Local Energy Climate Coordination (SLECC)

Meeting #2 | September 28, 2023

Quarterly coordination meetings between State and local leaders across California











Welcome to SLECC!

Featured Discussion Topic: *Energy Reliability, Load Constraints, and Constituent Communications*





TODAY'S AGENDA

- Welcome, Introductions, Purpose of SLECC
- Roundtable Updates
- Featured Discussion Topic
 - State Speakers + Discussion
 - Deana Carrillo, CEC
 - Christy Sanada, CAISO
 - Local Speakers + Discussion
 - Marna Schwartz, City of Berkeley
 - Marc Costa, The Energy Coalition/ Local Government Sustainable Energy Coalition (LGSEC)
- Operationalizing Strategic Objectives

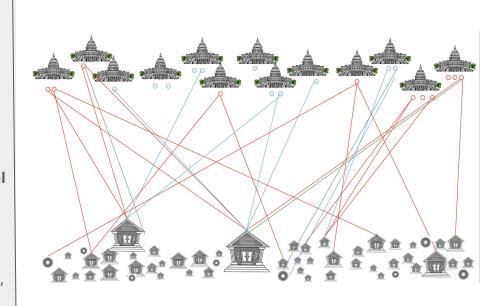
Build deeper understanding and stronger collaborative relationships between State and local agencies to identify barriers and streamline and improve delivery of energy and climate information, resources, and services.

Purpose

The SLECC will serve as a **statewide communication and ideation hub to help State and local leaders improve coordinated efforts** to more rapidly unlock the unique potential of California regions and communities to address energy and climate goals.

The SLECC will **identify priority needs and co-create operational solutions to advance place-based energy and climate action**.

The SLECC will primarily focus on clean energy and climate mitigation issues (including in buildings, transportation, and land use), but will also address aligned issues including energy and climate resilience, workforce and economic development, housing, health, and equity.





Roundtable Updates



SGC Priority 3: Housing, Climate, and Equity



Overview: Council Priority 3



- Resolution passed December, 2022
- A shared whole-of-Council vision and commitment to elevate, coordinate, and accelerate progress toward the State's housing, climate, and equity goals.
- A response to:
 - Growing number of State housing and climate policies and programs
 - Persistence of sprawl and vehicle emissions
 - Housing production falling short of need

From smart growth to *strategic* growth

- Objective: guide the location of housing development to support more vibrant, resilient, and connected communities
- Requires a three-tiered approach
 - Alignment across State policies and programs
 - Coordination between State, regional, and local governments
 - Public support



Work Plan

- The Work Plan is organized around three goals, outlined in the resolution.
 - 1. Ensure existing opportunities to simultaneously advance the State's housing, climate, and equity objectives are utilized to their full potential.
 - 2. Identify and elevate additional tools and strategies to meet the State's housing, climate, and equity goals in a coordinated way and at the scale and pace necessary to close existing gaps and meet the urgency of current and projected needs.
 - 3. Improve coordination and information sharing between State, local, federal, and Tribal partners at the nexus of housing, climate, and equity.
- Each goal is supported by 2-3 strategies, each of which includes actions for implementation.
- Each action is associated with a timeline (0-1 year; 1-2 years), and lead and supporting entities.

Goal 1: Ensure existing opportunities to simultaneously advance the State's housing, climate, and equity objectives are utilized to their full potential.

#	Action	Horizon	Lead Entity	State Partners			
Strategy 1.1: Improve internal and external understanding of California's housing and climate policy landscape							
1	Compile an inventory of State policies, programs, and funding opportunities at the nexus of housing, climate, and equity.	Short Term	SGC				
2	Assess the utilization of existing tools, funding opportunities, and other State resources intended to meet the State's housing and climate goals.	Medium Term		Council agencies			
	Strategy 1.2: Evaluate, prioritize, and develop strategies to implement existing non-budgetary and non-le	egislative recomm	endations				
3	Implement selected recommendations contained in the Draft 2022 Progress Report on California's Sustainable Communities and Climate Protection Act (SB 150 Report), the 2022 Scoping Plan Appendix E Sustainable and Equitable Communities, the California Transportation Assessment (AB 285 Report), and other relevant reports	Medium Term	HTC+C	CalEPA, CalSTA, BCSH,			
4	Develop implementation strategies for selected recommendations on building electrification and reducing embodied carbon in building materials contained in the 2022 Scoping Plan Appendix F Building Decarbonization, and other relevant reports.	Medium Term	BDWG	CalEPA			
5	Understand and develop strategies to address barriers to implementing densification opportunities under existing policies.	Medium Term	HTC+C	BCSH			
6	Explore measures to provide greater consistency and alignment between Regional Housing Needs Allocations (RHNA), Sustainable Communities Strategies (SCSs), and regional plans, such as strategic planning that prioritizes green space and conservation and encourages greater integration of state housing and conservation policy priorities.	Medium Term	HTC+C	BCSH, CDFA, CNRA			
	Strategy 1.3: Identify and remove barriers to accessing and implementing opportu	unities					
7	Convene implementation workshops with local and regional planners, community-based organizations, and stakeholder groups focused on barriers and opportunities to leveraging existing policies and practices.	Medium Term		CalEPA, BCSH			
8	Explore opportunities for more holistic and context-specific accounting of climate and equity benefits of housing development patterns by, for example, assessing benefits and costs at the regional rather than project scale.	Medium Term					
9	dentify opportunities to decrease burdens on individuals and organizations applying for State funds related to housing, climate, and equity.	Medium Term		Council agencies			
10	Evaluate and develop implementation strategies for recommendations in the HCD Data Strategy and the Statewide Data Strategy (ODI/GovOps) to address data gaps and streamline existing data and mapping tools.	Medium Term	H+T D	Council agencies			
11	Promote and improve access to resources available via the Department of Housing and Community Development's Housing Open Data Tools platform, including the CEQA Site Check Tool and HCD's Excess Sites Tool	Short Term	BCSH	OPR			

Goal 1: Ensure existing opportunities to simultaneously advance the State's housing, climate, and equity objectives are utilized to their full potential.

Strategy 1.3: Identify and remove barriers to accessing and implementing opportunities

A7: Convene implementation workshops with local and regional planners, community-based organizations, and stakeholder groups focused on barriers and opportunities to leveraging existing policies and practices.

A9: Identify opportunities to decrease burdens on individuals and organizations applying for State funds related to housing, climate, and equity.

Workshop: Advancing Housing, Climate, and Equity Goals through State-Local Coordination

- First in-person regional convening of the newly established State/Local Energy and Climate Coordination (SLECC)
- Workshop structure (~2 hrs)
 - 1. Overview of State resources, tools, and opportunities
 - HCD, OPR, and CARB
 - 2. Practitioner perspectives on advancing housing, climate, and equity objectives
- Details
 - Thursday, October 26, 9 11 am
 - Chicano Park Museum and Cultural Center, 1960 National Ave, San Diego

Thank you

Sean Kennedy, Ph.D.

Special Projects

California Strategic Growth Council

sean.kennedy@sgc.ca.gov



Featured Discussion





Joint Agency Reliability Planning Assessment

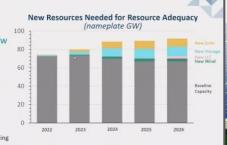
SB 846 Third Quarterly Report



Energy Reliability, Load Constraints, and Constituent Communications

California Will Need Many New Resources for Reliability

- The CPUC determined that a 22.5% reserve margin is needed to operate reliably under adverse conditions
- To meet that, they ordered the procurement of 11.5 GW Net Qualifying Capacity (NQC)
- CEC's Midterm Reliability Analysis translates that into >20 GW of new nameplate capacity over the next 5 years, of resources consistent with clean energy goals:
- >8.7 GW Solar by 2025
- >10 GW of 4-hr Storage by 2025
- 2 GW of Long Lead-Time Resources by 2026
- · Our analysis takes the above as a goal and...
- Recognizes that deploying so much capacity will require siting and interconnecting resources at unprecedented rates; and supply chain issues may continue
- Examines the impact of potential deployment delays on the ability to meet the 22.5% RM



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CHAPTER 3: California Energy Demand Forecast

A foundational component of the state's energy planning is the California Energy Commission's (CEC) California Energy Demand Forecast (CED).⁶² The CED is a set of several forecasting products that are used in various energy planning proceedings, including the California Public Utilities Commission's (CPUC) oversight of energy procurement and the California Independent System Operator's (California ISO) transmission planning. The demand forecast includes:

- Ten-year annual consumption forecasts for electricity and gas by customer sector, eight planning areas, and 20 forecast zones.
- Annual peak electric system load with different weather variants for eight planning areas.
- Annual projections of load-modifier impacts including adoption of photovoltaic (PV) and other self-generation technologies, battery storage, electric vehicles (EVs), and energy efficiency and electrification standards and program impacts.

Presented here is a discussion of the process for developing the forecast, an update on the method used, and a description of the key drivers and trends. Forecast results were presented at the December 7 and 16, 2022, workshops on Updates to the CED 2022-2035 Forecast⁶³ and included in the final 2022 Integrated Energy Policy Report Update (2022 IEPR Update).



Featured Discussion

Join us on Jamboard:

https://jamboard.google.com/d/1JkJqrBWI_W2ET0vh 9E8wEYhWWO8jAffxQUkIHamlxDg/viewer?f=0

Energy Reliability, Load Constraints, and Constituent Communications



Director, Reliability, Renewable Energy &
Decarbonization Incentives (RREDI) Division
California Energy Commission
Deana Carrillo



Manager, California Regulatory Affairs

CAISO

Cristy Sanada



California's Clean Energy Transition & Reliability

State & Local Energy and Climate Coordination Meeting

September 28, 2023

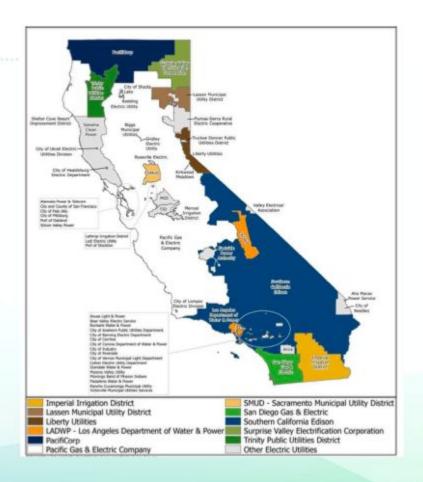
Deana Carrillo, Director Reliability, Renewable Energy & Decarbonization Incentives (RREDI) Division

California's Electric Sector

 3 primary state energy institutions – California Energy Commission (CEC), California Public Utilities Commission (CPUC) and California Independent System Operator (CAISO) - plus, the California Department of Water Resources (DWR) serving in backstop grid reliability role.

80+ electric retail sellers includes -

- 40+ Load-Serving Entities (LSEs) electric investor-owned utilities (IOUs), community choice aggregators (CCAs) and energy service providers (ESPs) — operating in the 3 large electric IOU territories (PG&E, SCE & SDG&E)
- 40+ publicly owned electric utilities
- All electric retail sellers are required to procure sufficient energy and capacity to meet electric demand 24/7, 365 days of the year

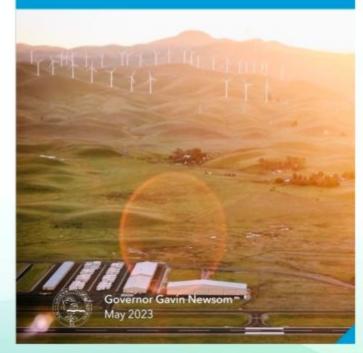


Transitioning to California's Clean

Energy Future

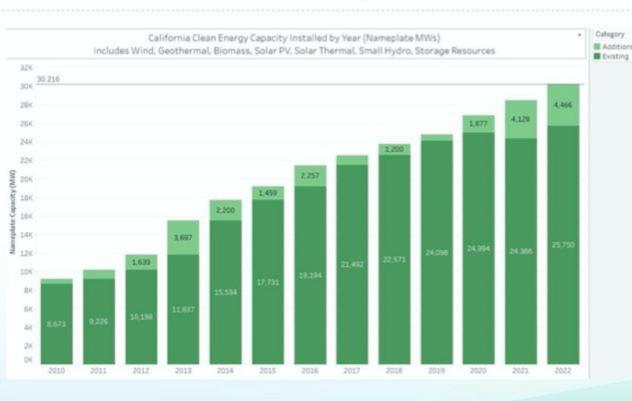
- Cornerstones of California climate change leadership
 - Electrifying our economy
 - Decarbonizing the grid
- · Ambitious clean energy goals
- · Clean, safe, affordable, and reliable grid of the future
- Climate change is causing unprecedented stress mour grid

OF THE FUTURE: CALIFORNIA'S
CLEAN ENERGY TRANSITION PLAN





Clean Energy Resources - Progress



- 59% of electric retail sales were from renewable and zerocarbon energy resources in 2021
- More clean energy capacity developed in 2022 than any other year in the last ten years!
- 5,600 MW of energy storage on the CAISO bulk grid

Actions - Grid Reliability & Clean Energy Transition

- Improving Grid Planning Processes
 - Improve accounting for climate change-induced weather variability
 - Improve interconnection & permitting process
- Scaling Supply & Demand-Side Clean Energy Resources
 - Increase demand flexibility
 - Accelerate clean energy deployment
- Preparing for Extreme Events (Contingencies)
 - Retain existing and construct new assets & procure imports to backstop uncertainties
 - Create emergency demand flexibility opportunities



Reliability Impacts

Capacity Needed During Coinciding Extreme Events





New CEC Funding: Grid Reliability

Multiyear Budget Agreement





Distributed Electricity Backup Assets and Utility-Scale Assets



\$5 Million

Energy Data Infrastructure DOE Grid Resilience and Analysis



\$319 Million

Demand Side Grid Support



\$5 Million

Match



\$7 Million

Energy Modeling

\$931 MILLION TOTAL

July 2023

"Includes \$24 million from Clean Energy Reliability Investment Plan (CERIP)

Summary of Contingencies

Туре	Contingency Resource
Strategic Reliability Reserve (AB 205)	DWR ESSRRP (Long start, short start, imports)
	Demand Side Grid Support
	Distribute Energy Backup Assets (under development)
CPUC Ratepayer Programs	Ratepayer Programs (ELRP, Smart Thermostats, etc.)
	Capacity at Co-gen or Gas Units Above Resource Adequacy
Non-Program	Balancing Authority Emergency Transfers
	DWR State Water Project
	Thermal Resources Beyond Limits: Gen Limits
	Thermal Resources Beyond Limits: Gen Limits Needing 202c

Total Contingencies up to 2,800 MW



CEC Summer Stack Analysis - Results

- Overall improved outlook under all scenarios
- Grid remains vulnerable during widespread heat events
- Hours of most vulnerability are declining and continue to shift to hours after sunset

	Projected September Surplus or Need for Contingencies		
	2022 Projection	2023 Projection	
Planning Standards	-1,700	2,300	
2020 Equivalent Event	-3,000	-200	
2022 Equivalent Event	-7,000	-1,900	

Green is surplus, Red is shortfall

Shortfalls do not include coincident catastrophic fire risk



California Key Takeaways

- Increasingly powering the economy with clean energy resources
- Challenges with scaling up clean energy resources, while retiring fossil resources and maintaining grid reliability during climate induced extreme events
- New investments, tools and mechanisms focusing on supply and demand to ensure grid reliability during peak-demand summer months.
- Need to sustain these efforts, while considering new policy and investment approaches to proactively address our challenges now and going forward.



Senate Bill 100 Scoping Underway

Officially titled "The 100 Percent Clean Energy Act of 2018," Senate Bill 100 (SB 100, De León):

- Sets a 2045 goal of powering all retail electricity sold in California with renewable and zero-carbon resources.
- Updates the state's Renewables Portfolio Standard to ensure that by 2030 at least 60 percent of California's electricity is renewable.
- Requires the CEC, CPUC, and CARB to use programs under existing laws to achieve 100 percent clean electricity and issue a joint policy report on SB 100 by 2021 and every four years thereafter.

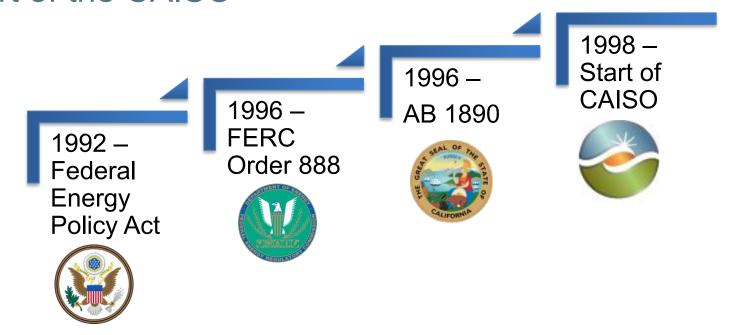
For more information: https://www.energy.ca.gov/sb100



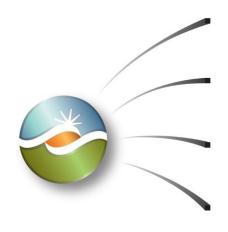
CAISO Overview

Cristy Sanada, Senior Manager, California Regulatory Affairs SLECC Quarterly Meeting September 28, 2023

Start of the CAISO



Who oversees the CAISO?



We are governed by a governor appointed/ Senate confirmed Five Member Board

We are regulated by **FERC** Federal Energy Regulatory Commission

We are compliant with **NERC** North American Electric Reliability Corporation

We are part of WECC Western Electricity Coordinating Council

CAISO's core responsibilities

 The CAISO is a federally-regulated nonprofit, independent, technology-neutral organization that manages the high-voltage electric grid for 80% of California and a portion of Nevada.



California ISO facts

52,061 MW record peak demand (September 6, 2022)

32 million people served

224.8 million megawatt-hours of electricity delivered (2020)

One of 9 ISO/RTOs in North America



Western Energy Imbalance Market (WEIM)

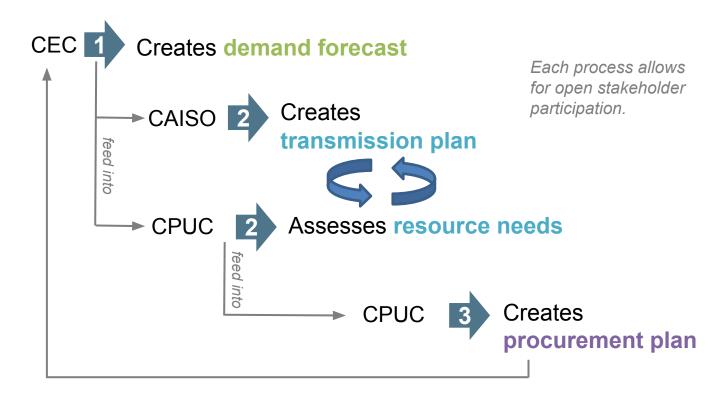
Since its launch in 2014, the WEIM has enhanced grid reliability, generated millions of dollars in benefits for participants, and improved the integration of renewable energy resources.

- Gross benefits exceeding \$4 billion
- Reduced over half a million metric tons of CO2
- 11 states





Example: Coordination with state processes

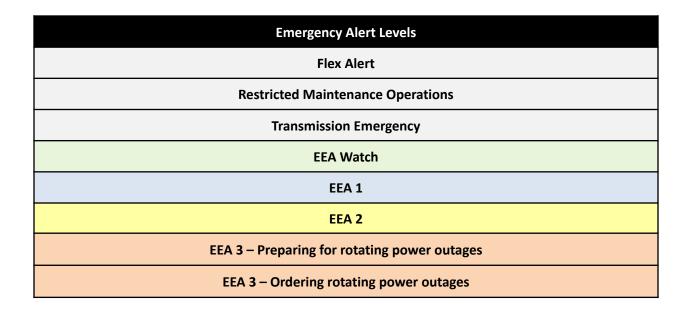






CAISO Emergency Playbook and Energy Emergency Alerts (EEAs)

Emergency Alert (EA) Levels



See more on CAISO EEA Alerts here: http://www.caiso.com/Documents/Emergency-Notifications-Fact-Sheet.pdf



Heat Event Process and Communications: 4 – 7 days out

4-7 Days Out

Operational Assessments

Operational
Coordination with
External Entities

Monitors demand forecast 7 days out, assesses resource adequacy, system conditions, weather, and other potential grid impacts, and plans for next possible steps

Depending on actual and potential system conditions, outreach and coordination re: possible extreme event to:

- Governor's Office (GO)
- Long-start strategic reserve resource scheduling coordinators (LS-SRR SCs)

Consider need for DOE 202c orders and whether other government agency assistance may be needed

Public and Customer Communications

CAISO may issue High temperature heads up via

- CAISO website
- · CAISO social media

See Summer Heat Event Process and Communications document here:

http://www.caiso.com/Documents/SummerHeatEvent-ProcessandCommunications.pdf



Heat Event Process and Communications: 1 – 4 Days Out

1 - 4 Days Out

Operational Assessments

Reviews and validates most current information on actual and potential system conditions, resource adequacy, weather, and other potential factors impacting the grid.

Operational Coordination with External Entities

To prepare entities for possible conservation efforts and free up additional supply, CAISO may take the following actions: Initiate communication to:

- Water agencies (CDWR, MWD)
- · Neighboring Balancing Areas
- · Emergency Load Reduction (ELRP) Board
- Utilities
- RC West
- Regulatory Agencies

Coordinate the following:

- · Requests for DOE 202c Orders
- · Emergency supply above approved permit and/or GIA
- GO Proclamation of a State of Emergency and/or GO Executive Orders

Public and Customer Communications

The ISO may issue a Heat Bulletin via:

- ISO Website
- News release
- · Notice (Daily Briefing)
- · ISO social media

CAISO may issue Restricted Maintenance Operations (RMO) via:

- ISO Today mobile app
- MNS
- Fmail
- · Today's Outlook

Also publicly posted:

- DOE Orders
- GO Proclamations and Orders



Heat Event Process and Communications: 1 Day Out

Operational Assessments

Operational
Coordination with
External Entities

Public and Customer Communications

1 Day Out

Reviews and validates Day Ahead Market results and most current information on actual and potential system conditions, resource adequacy, weather and other potential factors impacting the grid.

Operational coordination with:

- Utilities
- · Neighboring BAs
- · ELRP Board
- RC West

CAISO may issue Flex Alert and/or EEA Watch notice via:

- ISO Today mobile app
- MNS
- Email
- · News release
- · Daily Briefing notice
- · Social media

Flex Alert only:

- FlexAlert.org
- Flex Alert subscription lists
- · Flex Alert and ISO social media



Heat Event Process and Communications: Operating Day

Operating Day

Operational Assessments

Reviews actual and potential system conditions and takes actions in accordance with Operating Procedures.

Operational Coordination with External Entities

Operational coordination with:

- · Utilities
- · Neighboring BAs
- ELRP Board
- RC West

Public and Customer Communications

The ISO may issue EEA notices as needed based on system conditions:

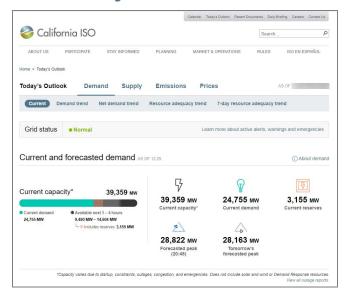
- ISO Today mobile app
- MNS
- Email
- · Today's Outlook
- · News release
- · Daily Briefing notice
- · Social media

De-escalate/ all-clear notices issued via:

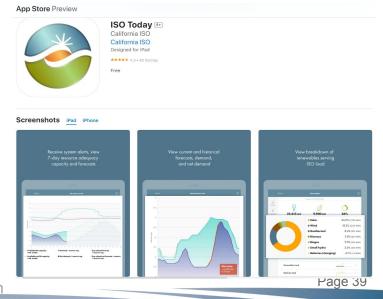
- ISO Today mobile app
- MNS
- Email
- · Today's Outlook
- · Social media



Today's Outlook and ISO Today Mobile App



 Today's Outlook is accessible through <u>www.caiso.com</u> Download ISO Today App and connect to ISO social media through the CAISO website



Cristy Sanada Senior Manager, California Regulatory Affairs California ISO

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Please virtually raise your hand or add your question or comment to the chat

- Be brief
- Be curious
- Be respectful
- Be constructive



Featured Discussion - Local Speakers

Energy Reliability, Load Constraints, and Constituent Communications



Board Chair

Local Government Sustainable Energy

Coalition (LGSEC)

Marc Costa



Sustainability Coordinator

City of Berkeley

Marna Schwartz



LGSEC Service Capacity Working Group

Marna Schwartz- City of Berkeley

State/Local Energy and Climate Coordination 9/28/23



Local Governments Implementing Goals

State Goals: Increase affordable housing, economic development and jobs, EV charging infrastructure, clean energy generation

Local Governments make it happen: Years of planning, complex financing packages, community and stakeholder engagement, braiding of Federal, State, and local funds, limited locations for siting projects, sensitive timelines and competing deadlines

REJECTED.

Rejected: Stymied by IOUs when go to build

Capacity Issues for LG Priority Projects

ICA Maps out of date and unreliable

Lack of communication from IOUs

Capacity issues only discovered after paying for engineering assessment



Capacity upgrades can take years – jeopardizing or significantly delaying much-needed projects

Berkeley as an example



- Identified EV charging sites using ICA maps for DC fast charging
- EBCE paid engineer to design drawings & submit to PG&E with service planning review fee
- PG&E determined no capacity at site & years to add capacity at site
- 8 of 15 EBCE countywide projects showed capacity on ICA maps but were rejected by PG&E during planning review
- Still working together to come up with alternative possibilities: using capacity from further afar, adding batteries, scouring for other sites
- Not done yet—but now in better communication with PG&E

What are we asking for?

- State agencies to work together, including with CPUC and IOUs, to align goals with on-the-ground practice
- Better, publicly available tools and maps to estimate real-time capacity
- Collaborative distribution planning with IOUs for priority projects and sites
- Improved communication between cities and utilities to ensure maps include new/soon-to-be developed projects
- LGSEC working group sign up!











Please virtually raise your hand or add your question or comment to the chat

- Be brief
- Be curious
- Be respectful
- Be constructive



Operationalizing Strategic Objectives

We'd love your help making this effort as valuable and constructive as possible

Please review the <u>Charter</u> and <u>Needs and Solutions</u>
 <u>Tracker</u> and feel free to add comment

• Discussion:

- How can this group operate to be valuable and constructive for YOUR organization?
- What are major barriers your organization is experiencing that are not already on the list?

DRAFT - 9/20/23

State & Local Energy and Climate Coordination (SLECC) Charter

Purpose

The SLECC will serve as a statewide communication and ideation hub to help State and local leaders improve coordinated efforts to more rapidly unlock the unique potential of California regions and communities to address energy and climate goals.

The SLECC will identify priority needs and co-create operational solutions to advance place-based energy and climate action. The SLECC will primarily focus on clean energy and climate mitigation issues (including in buildings, transportation, and land use), but will also address aligned issues including energy and climate resilience, workforce and economic development, housing, health, and equity.

Background

For over 20 years, CA local governments have led on energy and climate issues, implementing some of the nations most innovative energy efficiency and clean energy programs and climate action plans. Local and regional governments are essential and natural partners in meeting the State of CA's ambibious energy, carbon neutrality, and climate goals. They offer unparalleled administrative advantages including unique authorities, trust, provinty, fiscal management capabilities, and demoratic accountability.

Eighty (80) local government representatives registered to attend an initial State and Local Coordination meeting oc-hosted by Civiovell's Californias Climate and Energy Collaborative (CCEC) and the Local Government Sustainable Energy Coalition (LGSEC) on June 13, 2023. The meeting occurred the morning before the 14th Annual CCEC Forum. It was facilitated by Angle Hacker, CCEC Statewide Best Practices Coordinator in partnership with leadership from Forum sponsors California Energy Commission (CEC) and California Air Resources Board (CARB), as well as Strategic Growth Council (SGC). The slide deck can be found here and meeting notes can be found here. Participating local and State representatives indicated tremendous interest in continuing to discuss ways to help State and local leadership increase coordinated efforts to more effectively empower the unique strengths of CA communities to accelerate energy and climate action.

The SLECC is intended to support several active policies or initiatives that encourage State agencies to engage in greater coordination with local and regional agencies such as:

- Strategic Growth Council's Council Priority 3 Resolution on Housing. Climate and Equity, which aims to leverage existing State efforts at the housing-climate nexus through improved interagency alignment and coordination with local and regional partners. Central to this work is understanding how local and regional implementers perceive and experience State policies and programs, which can then inform State actions to improve access to resources and reduce burdens on local and regional agencies.
 - Announcement: Strategic Growth Council Priority on Housing, Climate, and Equity Request for Information (RFI) - Strategic Growth Council (ca.gov)
 - CALIFORNIA STRATEGIC GROWTH COUNCIL PRIORITY 3: HOUSING CLIMATE, AND EQUITY, Draft Work Plan – April 2023
- California Energy Commission's 2022 Integrated Energy Policy Report includes a key recommendation to continue a regional approach and work more consistently with local governments in future LIPR proceedings and other major efforts. The IEPR asserts 'that

Have a topic you'd like to see discussed at an upcoming SLECC?

Contact ahacker@civicwell.org

What's Next?

- Provide feedback
 - Topic Jamboard
 - Charter and Tracker
- October 26th Regional Workshop in San Diego
- Next meeting date: December 14
 - Topic: Listening Session with the California Air Resources Board (CARB) on Barriers to Climate Action

Thank you for sharing your insights!

