



Peninsula Clean Energy Board of Directors Regular Meeting

July 27, 2023

Agenda

- Call to Order / Roll Call
- Public Comment (for items not on the Agenda)
 - Please note, send any chats to Board Clerk, Nelly Wogberg
- Action to set the Agenda and Approve Consent Items 1-3
 - Consent - Public Comment
- Regular Agenda
- Adjournment

Chair Report (Discussion)

CEO Report (Discussion)

CEO Topics For Tonight

- Cal-CCA Study Session on Rates Forecast and PCIA Update
- Staffing and Organizational Updates
- Surplus Funds Ad-hoc Committee
- Commercial Customer Engagement: Summer Heat Event Prep & Demand FlexMarket Rollout
- PCE Brand Audit
- FYI Items

Cal-CCA - PCIA and Rates Forecast Study Session

- Based on latest analysis of PCIA and PG&E generation rates:
 - 2023 is an exceptionally good year for revenues due to high energy and capacity prices; PCIA charges were 0 to negative in some cases, which benefited our customers and our balance sheet.
 - However, long-term market forecasts show energy prices dropping, leading to less favorable PCIA and PG&E rates in 2024 and beyond
 - This is consistent with the assumptions in our long-term budget forecast
 - More clarity on 2024 PCIA/PG&E gen rates will be available in Q4 of 2023

Staffing Updates: Promotions and New Hires

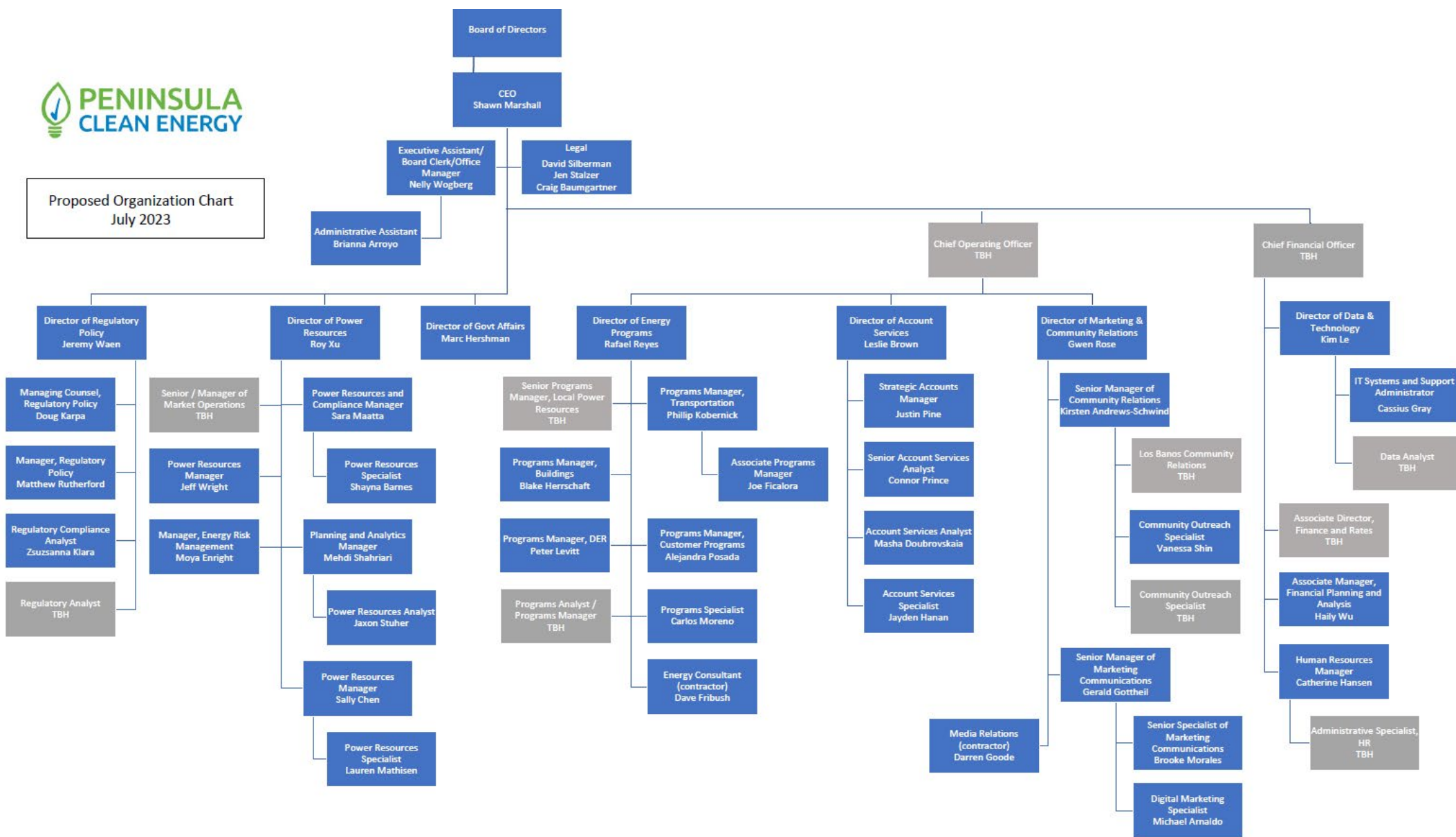


- **Kim Le**, from Senior Manager to Director of Data and Technology
- **Doug Karpa**, PhD/JD, from Sr Regulatory Analyst to Managing Counsel, Regulatory Policy
- **Philip Kobernick** from Manager to Senior Manager of Transportation Programs
- **Matthew Rutherford** from Senior Regulatory Analyst to Manager of Regulatory Policy
- **Alejandra Posada** from Associate Programs Manager to Programs Manager



- **Connor Prince**, Senior Analyst, Account Services (started 7/16)
- **Jayden Hanan**, Account Services Specialist (starting 8/16)
- **Jaxon Stuhler**, Power Resources Analyst (starting 9/1)

PCE Managed Growth & "Planned Redundancy"



Currently Posted Positions

Please help us spread the word!

- Chief Operating Officer (recruiter support)
- Chief Financial Officer (recruiter support)
- Senior Program Manager, Local Power Resources
- Energy Programs Analyst
- Regulatory Analyst



<https://www.peninsulacleanenergy.com/join-our-team/>

Surplus Funds Committee

Committee Members: Rick DeGolia, Donna Colson, Marty Medina, Tygarjas Bigstyck, Paul Llanez, Betsy Nash, Stephen Booker, PCE Staff

MEETINGS	TIMEFRAME	TOPICS/FOCUS
1	July 18	Kick-off; committee purpose, scope, gameplan; guiding principles, PCE background info/staff presentations
2	August 9	Carry over items and staff presentations from meeting 1; Evaluative framework discussion
3/4	Late Aug-Mid Sept	Presentation of various ideas for uses of funds; committee discussion and evaluation (likely 2 meetings)
5	Late September	Narrow options and develop recommendations
Recommendations	October/November	Executive Committee (October) and Board (November)

Commercial Customer Engagement: Heat Events



Summer Preparedness: Be Prepared and Get Compensated

July 19, 2023

We will begin shortly.

Looking Ahead

- EV Ready Program
- Building Electrification Technical Assistance Program
- Data Connect
- 24/7 Renewable Energy
- NEW – Cost of Service Study
- NEW – Commercial Flex Market

Next Steps

- **Enroll** into the Emergency Load Reduction Program at elrp.olivine.com
- **Make a plan** on actions you will take during the next heat wave to lower your building's energy usage
- Unsure where to start? **Reach out to Justin to schedule free 1:1 consult with one of our Building Electrification experts**

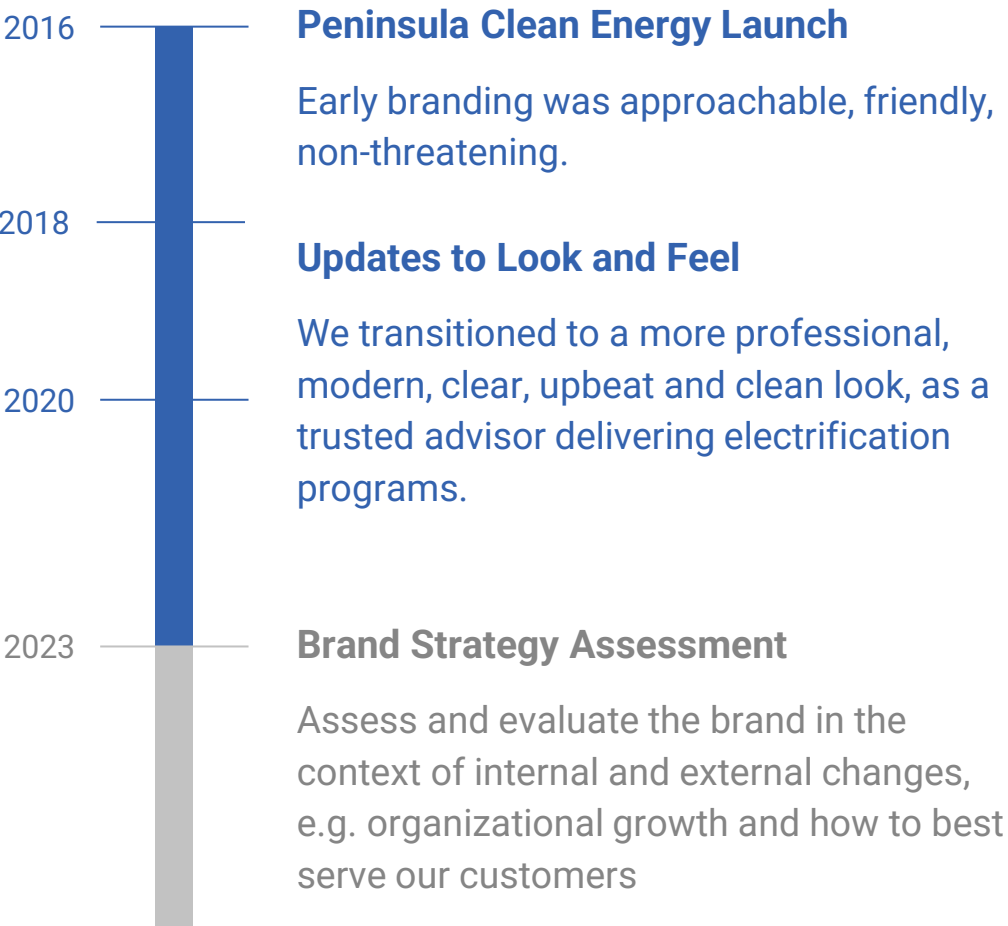


Commercial Customer Engagement



- Performance-based incentive platform that offers financial incentives to residential and commercial customers for load shaping and fuel switching.
- Focused on building electrification and energy efficiency (EE); compensates customers that complete certain EE and electrification measures demonstrating measurable load modification and reduction.
- Roll out to commercial customers is happening now.

Peninsula Clean Energy Brand Assessment



August Meetings

- Citizens Advisory Committee:
 - Thursday, August 10 at 6:30 p.m.
- Audit and Finance Committee:
 - Monday, August 14 at 8:30 a.m.
- Executive Committee:
 - Monday, August 14 at 10:00 a.m.
- Board of Directors:
 - Thursday, August 24 at 6:30 p.m.



And Finally...



- Friday morning office hours with the CEO; sign-up link in the weekly Board newsletter
- Board Survey due tomorrow. Check your inbox and please reply!

CAC Report

Review of 2022-23 Citizens Advisory Committee Work Plan Deliverables (Discussion)

July 27, 2023

2022-23 CAC Work Plan

In summer 2022, the Board of Directors approved an annual work plan for the Citizens Advisory Committee

- Included forming ad hoc working groups to collaborate with PCE staff on specific projects
- Each working group wrote a brief memo as deliverable
- Memos included in this agenda packet

Working Group Result Highlights

Building Electrification Education: Informed community networks about reach codes

Home Upgrade Program: Gave feedback on early program implementation

Demand-Side Strategies for 24/7 Grid Decarbonization: Gave feedback on potential strategies for load shifting

Education Initiatives: Brainstormed ways to serve students and schools in Los Banos

Working Group on Function of CACs

Conducted two surveys:

1. Staff liaisons for advisory committees at other CACs
2. Advisory committee members at other CACs

Low participation in surveys, but we did see some trends:

- Challenge of finding the best ways to engage volunteer talents
- Solution: working groups with well-defined tasks to channel expertise
- Some tension between the priorities of staff and CAC members
- Community outreach is an important and useful role
- Best practice: send meeting materials ahead of time

Approval of 2023-24 Citizens Advisory Committee Work Plan, Objectives, and New Committee Name (Action)

July 27, 2023

Proposed CAC Name Change

- The Citizens Advisory Committee (CAC) recommended changing its name to the “Community Advisory Committee”
- Intended to increase inclusivity
 - United States citizenship is not a requirement of service



New and reappointed CAC members take the Oath of Office

Proposed Update to CAC Role and Responsibilities

- Advise on substantial public-facing program initiatives before they are presented to the Board for approval, as practical given staff and CAC capacity.
- Engage in outreach to the community and advocate for Peninsula Clean Energy mission, goals, and programs.
- Advise on high-level legislative and regulatory direction of the organization
- Provide a forum for community discussions on a wide variety of strategies to reduce carbon emissions in conjunction with staff and board.
- Form working groups, as recommended by the CAC membership, to assist Peninsula Clean Energy's staff and Board with projects of importance to the organization.

CAC Work Plan Development

- Ad hoc working groups focus on specific projects with PCE staff
- 2023 working group projects suggested by staff and CAC members

Work Plan Guiding Principles

- Ensure PCE Staff and Board understand how to leverage CAC in a way that is useful and drives PCE strategic priorities
- Ensure CAC members feel fully engaged and utilized if they have interest and bandwidth
- Maximize efficiency of CAC impact on staff resources

Proposed 2023 CAC Working Groups

Project	Proposed Task Description and Deliverables	Staff Liaison
Building Electrification Programs	<p>Provide input on the next iteration of Peninsula Clean Energy's building electrification programs and strategy.</p> <p>Deliverable: Brief memo summarizing input provided by CAC members regarding building electrification programs and strategy between June 2023 and April 2024. Delivered to staff prior to the April 2024 CAC meeting.</p>	Rafael Reyes, Programs Team
Electric Vehicle (EV) Managed Charging Program	<p>Develop ideas for scaling Peninsula Clean Energy's EV managed charging program, including recommendations for program design and recruitment strategy.</p> <p>Deliverable: Brief memo summarizing input on the EV managed charging program between June 2023 and April 2024. Delivered to staff prior to the April 2024 CAC meeting.</p>	Phillip Kobernick, Programs Team

Proposed 2023 CAC Working Groups (continued)

Project	Proposed Task Description and Deliverables	Staff Liaison
Local Solar + Storage Programs	<p>Conduct research on successful residential solar + storage and virtual power plant programs in the United States, including:</p> <ul style="list-style-type: none">• Summary of program equity metrics (especially low-income customer participation), program benefits, potential challenges, and applicability for Peninsula Clean Energy's customers• Recommendations on additional areas of research required to vet a scalable solar + storage program <p><i>Deliverable: Brief memo summarizing research conducted between June 2023 and April 2024. Delivered to staff prior to the April 2024 CAC meeting.</i></p>	Peter Levitt, Programs Team

Proposed 2023 CAC Working Groups (continued)

Project	Proposed Task Description and Deliverables	Staff Liaison
Education Initiatives	<p>Provide input on initiatives to expand clean energy curriculum and decarbonization projects in schools, especially in the City of Los Banos.</p> <p><i>Deliverable: Brief memo summarizing input on education initiatives provided between June 2023 and April 2024. Delivered to staff prior to the April 2024 CAC meeting.</i></p>	Vanessa Shin, Marketing Team
Diversity, Equity, Accessibility, and Inclusion (DEAI)	<p>Provide occasional feedback to staff on development of new organizational guidelines to implement the DEAI Action Plan.</p> <p><i>Deliverable: Brief memo summarizing input on DEAI Action Plan implementation provided between June 2023 and April 2024. Delivered to staff prior to the April 2024 CAC meeting.</i></p>	Kirsten Andrews-Schwind, Marketing Team

Approval of Proposed School Partnership with the San Mateo County Office of Education (SMCOE) (Action)

July 27, 2023

Schools Engagement Goals in PCE Strategic Plan

Continue to support schools-based literacy programs focused on energy

1. Work with San Mateo County Office of Education, San Mateo County Community College District and Los Banos schools to identify and support opportunities to educate students, teachers and administrators about energy-related environmental impact in order to inspire action
2. Sponsor awards that recognize student and schools-based achievements in energy and the environment

Problem 1: To achieve our goals, we need to educate all students about clean energy and related careers.

Train educators on energy literacy curriculum

Raise awareness of clean energy careers among students & educators

Use school districts as living labs

Coordinate Teacher Fellowship & Workshops to Introduce Clean Energy Concepts and Curriculum

Provide Curriculum, Training, and Field Trip Funding to Teach About Clean Energy Careers

Support Electrification of School Districts and Related Curriculum

Problem 2: Districts are not taking advantage of the funding & resources available for school decarbonization

**Build staff capacity
& expertise around
decarbonization
of facilities**

**Understand current
needs and track
progress towards
goals**

**Foster school
champions and
inspire leadership**

Support Updates of Facilities
Master Plans to Include
Decarbonization

Collect Baseline Data
Related to Electrification
from School Districts;
Track Progress Through
Energy Dashboards

Convene Administrators &
Youth at Decarbonization
Summits; Recognize School
Districts for Decarbonization
Projects

Green Career Awareness Program – Already Funded

- Expand education on clean energy careers to 7-12th grade students
- Led by SMC Office of Education, Career Technical Education (CTE)
- \$190,000 in funding from 2023-25:
 - Middle school clean energy curriculum
 - Clean energy field trips



Teacher Fellowship & Workshops

- Make it easier for K-12 teachers to deliver energy curriculum
 - Year-long Teacher Fellowship; OR
 - 2-hour workshops with windmill kits
- PCE to collaborate on curriculum content and present directly to participants



School Facility Decarbonization Program



Provide capacity and technical expertise to help school districts decarbonize

- Collect baseline data on district buildings, fleets, etc.
- Connect districts with available funding
- Identify equipment upgrades

FY23-24 Schools Budget Proposal

Status	Program		Budget
Current Request	SMCOE	School Decarbonization Program	\$120,000.00
		Energy Teacher Fellowship & Lesson Plan Workshops	\$ 32,500.00
		Decarbonization Summits & Awards	\$ 7,500.00
		School Facilities Dashboard Support	\$ 12,000.00
		Indirect Expenses	\$ 24,733.60
		Contingency Funds	\$ 8,267.00
	SMCOE Total		\$205,000.00
Committed	SMCOE	Green Careers Awareness Program	\$ 65,000.00
Budgeted	BCEC	Youth Climate Ambassadors	\$ 87,500.00
	SMCCCD	Museum of Tomorrow Fellow & Interns	\$128,250.00
	TBD	Los Banos School Programs Placeholder	\$ 50,000.00
Total			\$535,750.00

Recommendation



Adopt a resolution to delegate authority to the Chief Executive Officer to finalize and execute a contract with the San Mateo County Office of Education for an amount not to exceed \$205,000 in 2023-24

Electricity Grid Regionalization and AB 538 (Continued from June 26, 2023 BOD Meeting)

July 27, 2023



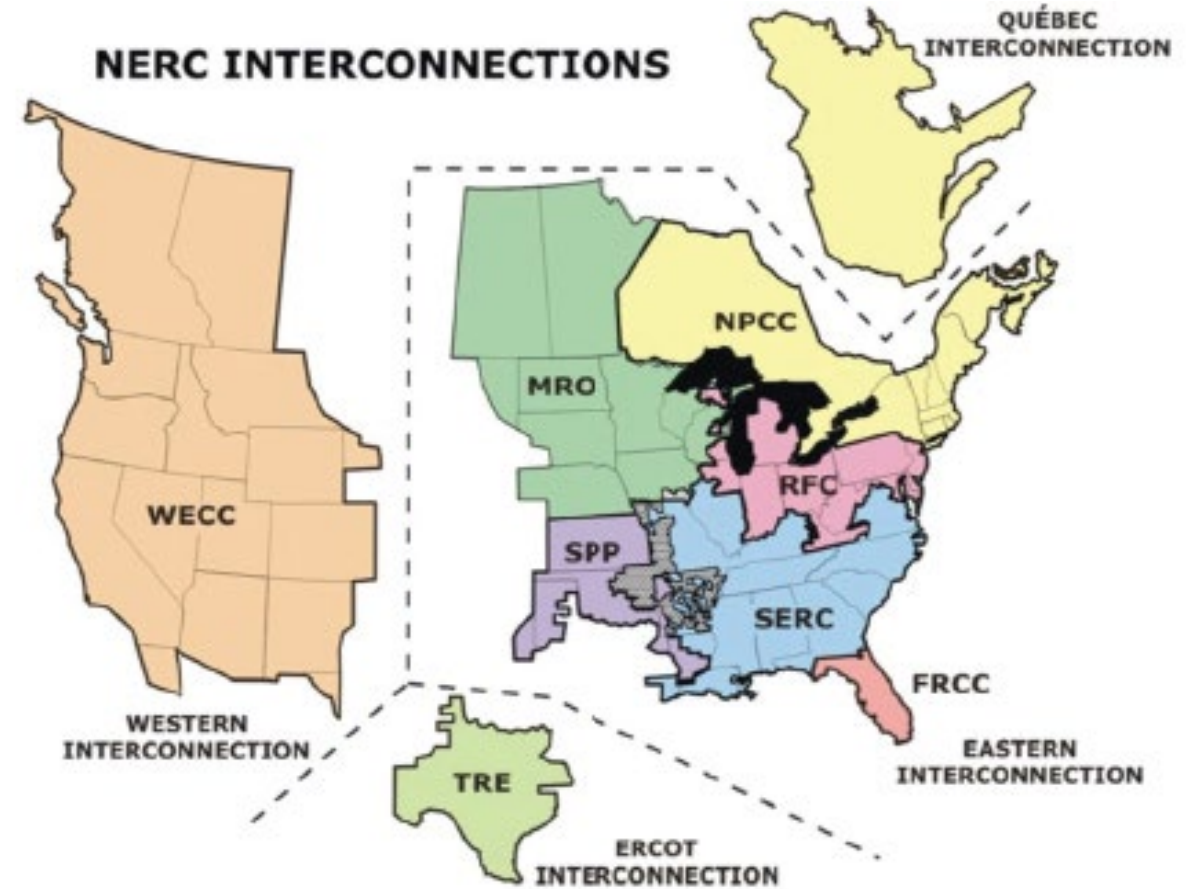
Summary

- The California Legislature is considering a bill that would enable the State's grid operator (CAISO) to expand to other states
- This is a significant policy question that the State has previously considered
- Key stakeholders are split on how the State should approach this issue
- Staff is seeking feedback from the Board on how PCE should approach this issue



The U.S. Power Grid and California

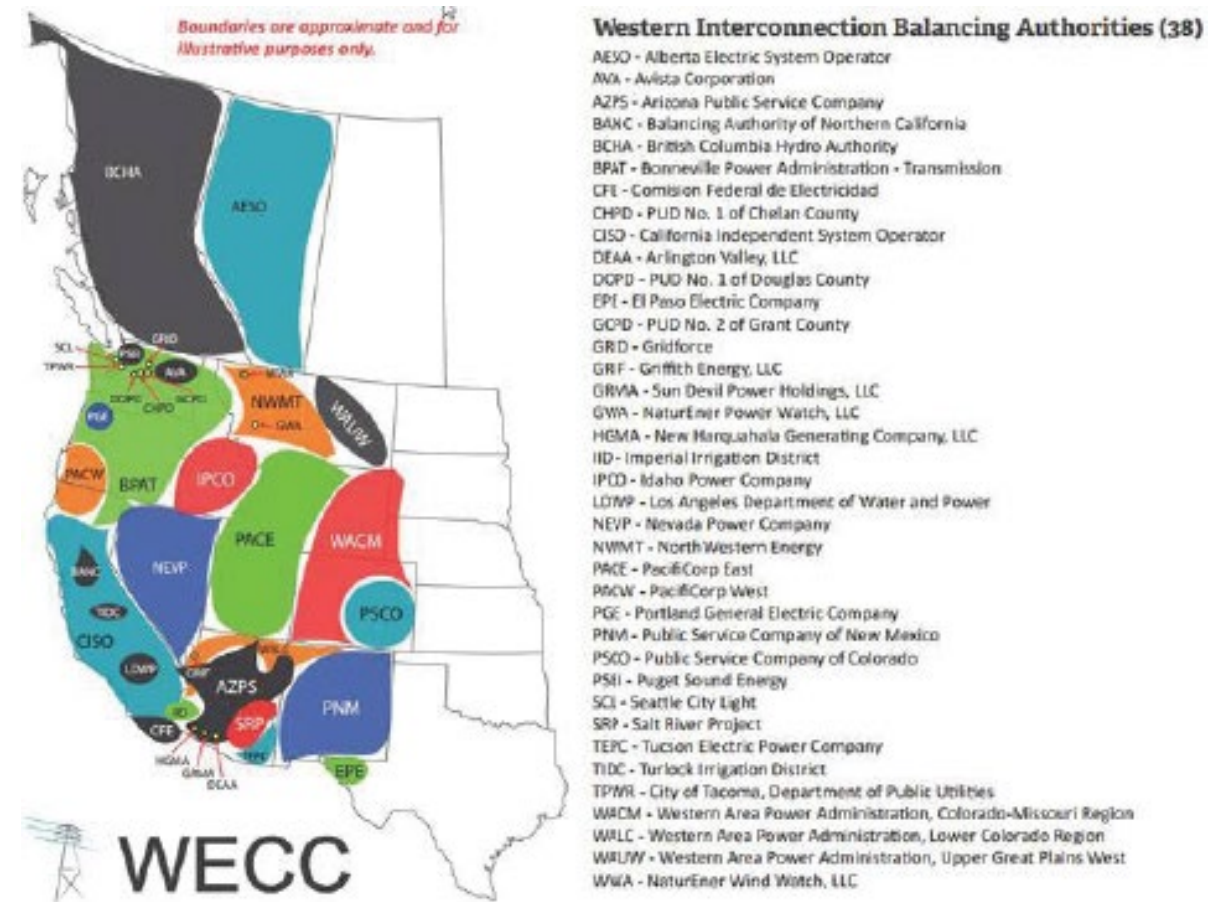
- The U.S. power grid consists of the bulk power system, high-voltage transmission equipment, and the lower-voltage distribution system.
- It is broken into 3 independent grids.
 - **The Western Interconnect**, which includes 38 separate balancing authorities, including CAISO.
 - **The Eastern Interconnect**, which includes 36 balancing authorities
 - The Electric Reliability Council of **Texas** (ERCOT)
- The Western Interconnect is overseen by the Western Electric Coordinating Council (WECC)



1. <https://www.tanc.us/understanding-transmission/the-western-us-power-system/>

Electric System Operations

- The actual operations of the electric system are managed by balancing authorities (BA), which manage the supply and demand of energy across their territory, and transfer of electricity with other BAs.
- There are 38 BAs within the WECC, representing about 20% of all generation capacity in the U.S. and Canada.
- BAs are regulated by both the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC).

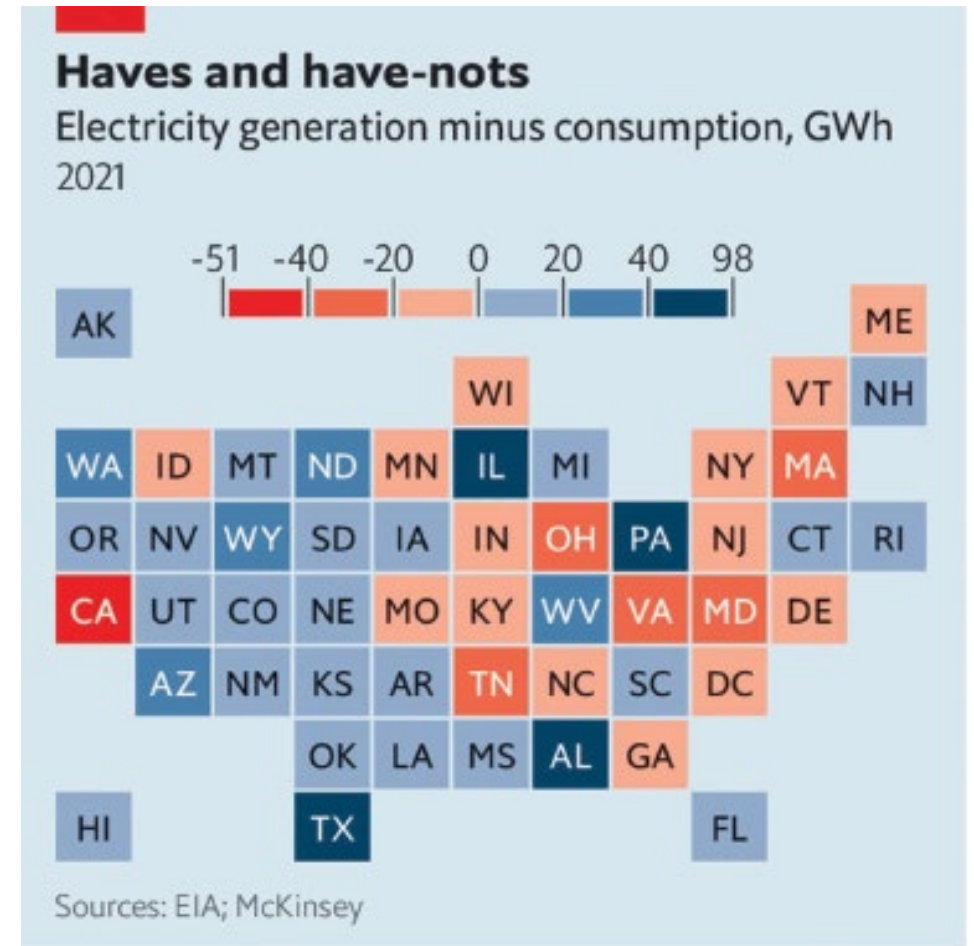


CAISO Today

- **Overview:** The CAISO is both a BA and regional transmission operator that manages the flow of electricity across the high-voltage bulk power system that makes up 80% of California's and a small part of Nevada's electric grid.
- **Governance:** CAISO is regulated by both the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC).
 - Unlike other RTOs, the CAISO's 5-person governing board is appointed by the California Governor and confirmed by the Senate
- **Interstate Markets:** CAISO operates 2 markets that involve multiple states and participants:
 - WEIM: The Western Energy Imbalance Market (WEIM), a real-time bulk power trading market that involves 19 voluntary participants (and more coming) across 10 western states
 - EDAM: Building on the success of WEIM, the extended day-ahead market (EDAM) is a voluntary day-ahead electricity market that CAISO will launch in early 2024
- Both market programs are designed to deliver economic, environmental, and reliability benefits to participants by increasing regional coordination

The Need to Revisit Regionalization

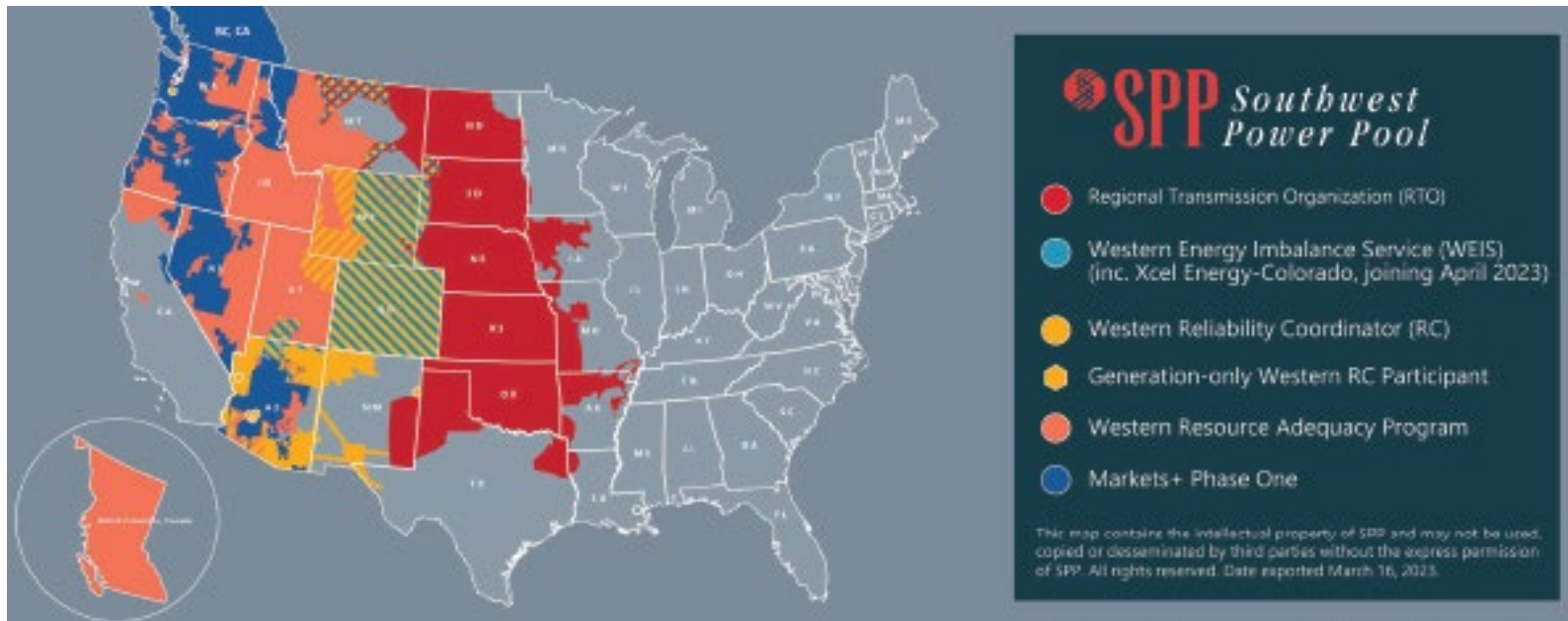
- California has set ambitious climate goals to reach 100% clean energy by 2045. CPUC's integrated resource planning analysis shows that the grid would need an additional 86 GWs, more than double what is currently on the grid.
- California needs to import electricity to meet its Resource Adequacy requirements, and to meet the demand of extreme summer heat events
- There are doubts as to whether California can build the new 86 GW of resources it needs fast enough inside California to both meet climate goals and reliability needs if the supply of imports begins to decline.



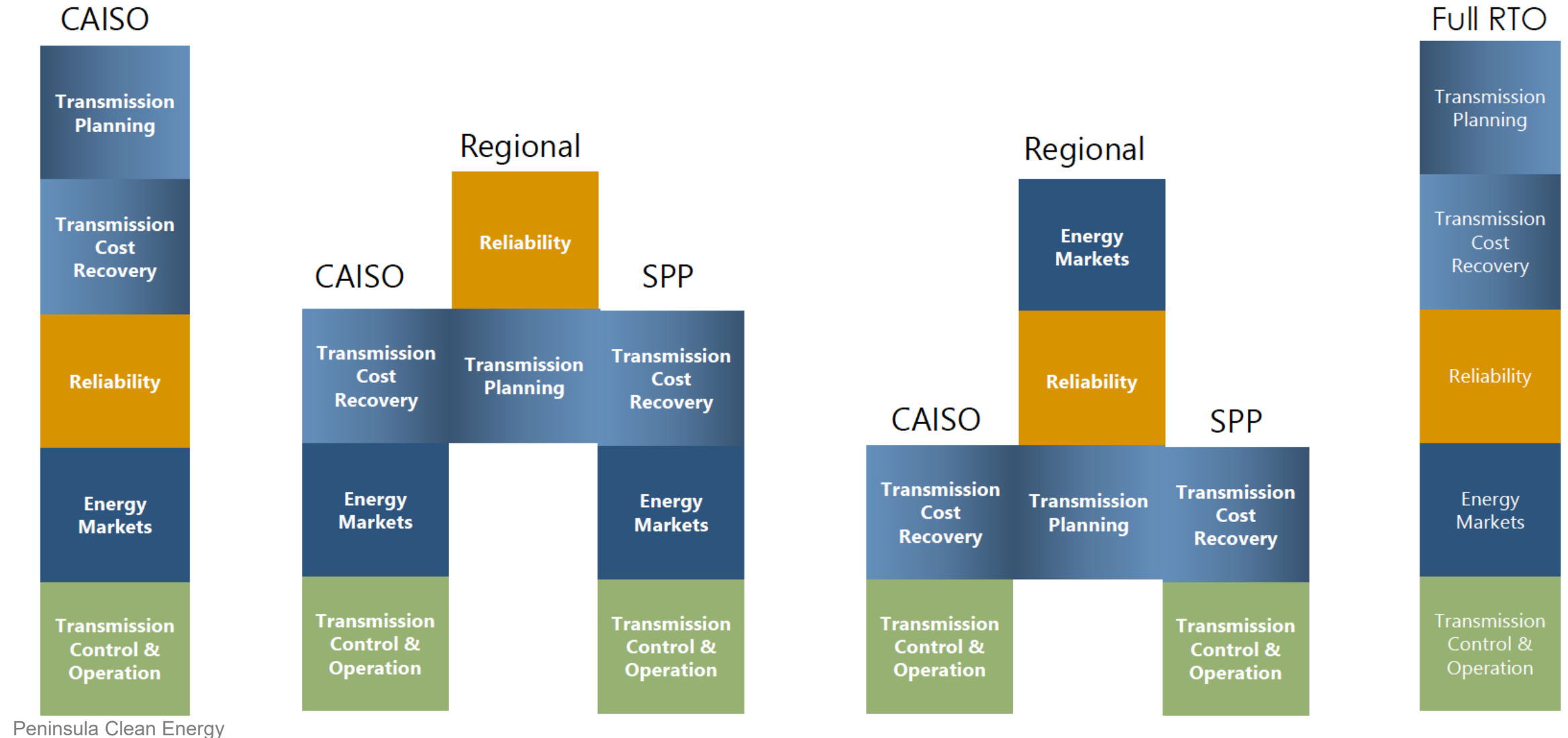
The Economist

The Need to Revisit Regionalization, continued

- An existing RTO, the Southwest Power Pool (SPP), is asking Western States to join their new market, called Markets+, similar to CAISO's WEIM and EDAM. Unlike WEIM and EDAM, Markets+ will be operated by a governance board that is not appointed by a specific state or participant.
- Many WEIM participants have already made commitments to leave WEIM for Markets+, jeopardizing resources available to WEIM and CAISO.
- Supporters of regionalization have raised concerns that if California doesn't expand to an RTO, resources across Western states will become less and less available to California.



How Could Regionalization Be Structured?



Arguments in Support of Regionalization

- **Improved reliability:** Better coordination on Resource Adequacy by pooling generation resources across a larger region
- **Accelerated decarbonization:** Easier to match variable demand and renewable generation across the region; less curtailment of wind and solar resources
- **Improved transmission planning:** Streamlining the process of long-term resource planning
- **Cost reduction:** Reduce transmission congestion costs, streamlining the cost of RA/operating reserve to maintain reliability, more efficient use of renewables are estimated to save \$379 Million to \$574 million annually for California electricity customers, approx. 4.5% of total annual costs

Key Supporters

Environmental

- NRDC
- Environmental Defense Fund
- California Environmental Voters (formally CLCV)
- Ceres

Business

- CalChamber
- CA Manufacturing & Technology Association
- CA Community Economic Development Association
- Microsoft
- San Jose Chamber of Commerce
- Silicon Valley Leadership Group

Energy

- CAISO
- American Clean Power
- Apex Clean Energy
- CA Energy Storage Association
- EDF Renewable Energy
- Engie North America
- Independent Energy Producers
- MCE
- Pattern Energy
- Southern California Edison
- Solar Energy Industry Association
- CA Wind Energy Association

Arguments Against Regionalization

- **Loss of state control:** A regional board of directors will likely be less accountable to California ratepayers and California's environmental and energy policy goals. California will likely only have one vote whereas California's load is much larger than other Western states
- **Federal oversight:** FERC may have greater oversight over California policies that express preferences for renewable or carbon-free resources and is more subject to national politics and policies
- **Job Creation:** More projects may be built outside of California and California LSEs may purchase more of those resources
- **State-level decarbonization:** While more states have adopted renewable/carbon-free electricity goals, fossil fuel resources will still be more abundant across the west and therefore may be imported into California more easily

Key Opponents

Environmental

- Sierra Club
- Clean Coalition
- Food and Water Watch
- The Climate Center
- CA Alliance for Community Energy
- CA Climate Voters
- CFROG
- Climate Reality Project Ventura County
- Various 350 chapters
- All indivisible chapters

Labor

- California Labor Federation
- Coalition of California Utility Employees
- CA State Association of Electrical Workers
- CA State Council of Laborers
- CA State Pipe Trades Council

Ratepayer/Other

- Consumer Watchdog
- CMUA
- TURN

AB 538: Regionalization Process

Enable the transition of the CAISO to a regional transmission operator with independent governance. Process:

- Introduced by Asm. Holden, it is possibly a 2-year bill
- CAISO develops and submits a governance proposal to the CEC to meet specific governance requirements (next slide)
- CEC, in consultation with CPUC and CARB, reviews the governance proposal and holds at least 5 public hearings (plus additional verification between agencies)
- Legislature reviews and provides feedback on the structure
- CAISO implements a governance structure, if there is intention from non-participating transmission owners to join and the FERC has approved any changes to CAISO tariff that are necessary. Open to transmission owners, retailers, POU's
- Additional checks and balances to ensure compliance with FERC requirements, CEC, CAISO, and the Secretary of State

AB 538: Regionalization Process

Governance requirements include:

- Governance by a western states' committee with an equal number of representatives from each state. California rep is appointed by Governor and confirmed by Senate
- Open meeting standards consistent with Bagley-Keene Act plus public access to records
- Maintaining state authority over state matters related to procurement policy, resource planning, and resource or transmission siting within the state, including setting resource adequacy standards, and prohibiting the operation of a centralized capacity market
- Ensuring the dispatch of resources appropriately reflects the costs for resources to comply with California's climate policies
- Establishing a clear structure for state regulators to provide guidance to the organization
- Enabling participation of demand response, storage, and distributed energy resources
- Maintaining California's renewable portfolio standard compliance requirements that favor in-state renewable energy development over out-of-state development

Questions and Discussion



Adjournment