

Executive Committee Meeting
Wednesday, April 3, 2024
12:00 P.M.

Public comments may be made in person or remotely via the details below.

1125 Tamalpais Avenue, San Rafael, CA 94901 (MCE)
2300 Clayton Road, Suite 1150, Concord, CA 94920 (MCE)
391-5 Kagiyacho, Shimogyo Ward, Kyoto, Kyoto, Japan (Danville)

Remote Meeting Participation for Members of the Public

Video Conference: <https://t.ly/DnY7U>

Phone: Dial (669) 900-9128, Meeting ID 861 2234 3784, Passcode 415565

Agenda Page 1 of 2

1. Roll Call/Quorum
2. Board Announcements (Discussion)
3. Public Open Time (Discussion)
4. Report from Chief Executive Officer (Discussion)
5. Consent Calendar (Discussion/Action)
 - C.1 Approval of 3.6.24 Meeting Minutes
6. Virtual Power Plant Ten Year Vision (Discussion)
7. Achieving MCE's Mission by Addressing Risk (Discussion)
8. Committee & Staff Matters (Discussion)
9. Adjourn

The Executive Committee may discuss and/or take action on any or all of the items listed on the agenda irrespective of how the items are described.

DISABLED ACCOMMODATION: If you are a person with a disability who requires an accommodation or an alternative format, please contact MCE at (888) 632-3674 or ada-coordinator@mcecleanenergy.org at least 72 hours before the meeting start time to ensure arrangements are made.

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MCE EXECUTIVE COMMITTEE MEETING MINUTES

Wednesday, March 6, 2024

12:00 P.M.

Present:	Sally Wilkinson, City of Belvedere Eli Beckman, Town of Corte Madera, joined at 12:10 pm Cindy Darling, City of Walnut Creek David Fong, Town of Danville Gabriel Quinto, City of El Cerrito Max Perrey, City of Mill Valley Eduardo Martinez, City of Richmond
Absent:	Maika Llorens Gulati, City of San Rafael Devin Murphy, City of Pinole Shanelle Scales-Preston, City of Pittsburg Holli Thier, Town of Tiburon
Staff & Others:	Jesica Brooks, Board Clerk and Executive Assistant to the COO John Dalessi, Consultant, PEA Vicken Kasarjian, Chief Operating Officer Tanya Lomas, Internal Operations Assistant Lindsay Meehan, Manager of Human Resources Catalina Murphy, General Counsel Ashley Muth, Internal Operations Assistant Justine Parmelee, Director of Internal Operations Garth Salisbury, Chief Financial Officer & Treasurer Daniel Settlemyer, Internal Operations Coordinator Maira Strauss, Manager of Finance Jamie Tuckey, Chief of Staff Dawn Weisz, Chief Executive Officer

1. Roll Call

Chair Perrey called the regular Executive Committee meeting to order at 12:02 p.m. with quorum established by roll call.

2. Board Announcements (Discussion)

There were no comments.

3. Public Open Time (Discussion)

Chair Perrey opened the public comment period and there were no comments.

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4. Report from Chief Executive Officer (Discussion)

CEO, Dawn Weisz, introduced this item and addressed questions from Committee members.

5. Consent Calendar (Discussion/Action)

C.1 Approval of 12.6.23 Meeting Minutes

C.2 Proposed Third Amended and Restated Schedule A.2 to the Master Services Agreement with Association for Energy Affordability

C.3 Proposed Amended and Restated Energy Storage Service Agreement with Cormorant Energy Storage, LLC

Chair Perrey opened the public comment period and there were no comments.

Action 1: It was M/S/C (Martinez/Fong) to **approve Consent Calendar items C.1 and C.2.** Motion carried by unanimous roll call vote. (Absent: Directors Gulati, Murphy, Scales-Preston, and Thier).

Action 2: It was M/S/C (Beckman/Martinez) to **approve Consent Calendar item C.3.** Motion carried by unanimous roll call vote. (Absent: Directors Gulati, Murphy, Scales-Preston, and Thier).

6. Proposed Fiscal Year 2024/2025 Budget (Discussion/Action)

Garth Salisbury, Chief Financial Officer & Treasurer, and Maira Strauss, Manager of Finance, presented this item and addressed questions from Committee members.

Chair Perrey opened the public comment period and there were no comments.

Action: It was M/S/C (Quinto/Beckman) **recommend approval of the proposed Fiscal Year 2024/25 budgets and the creation of the Asset Acquisition Fund to the full Board.** Motion carried by roll call vote. (Abstained: Fong, and Wilkinson, Absent: Directors Darling, Gulati, Murphy, Scales-Preston, and Thier).

7. Review Draft 3.21.24 Board Agenda (Discussion)

Jamie Tuckey, Chief of Staff, presented this item and addressed questions from Committee members.

Chair Perrey opened the public comment period and there were no comments.

Action: No action required.

8. Committee Matters & Staff Matters (Discussion)

Comments were made by Directors Quinto, and Wilkinson.

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9. Adjournment

Chair Perrey adjourned the meeting at 2:59 p.m. to the next scheduled Executive Committee Meeting on April 3, 2024.

Max Perrey, Chair

Attest:

Dawn Weisz, Secretary

Virtual Power Plant Ten Year Vision

April 2024

VISION

Lead California to an equitable, clean, affordable, and reliable energy economy by serving as a model for community-based renewable energy, energy efficiency, and cutting-edge clean-tech products and programs.

MISSION

Confront the climate crisis by eliminating fossil fuel greenhouse gas emissions, producing renewable energy, and creating equitable community benefits.

VALUES

Innovation: We fight climate change with leading edge, community-centered programs and policies.

Equity: We prioritize environmental and economic justice for communities of concern.

Accessibility: We serve our communities and customers through open and transparent engagement.

Inclusivity: We celebrate diverse identities at work and in our communities.

Sustainability: We strive for a sustainable workplace, community, and planet.

Fiscal Responsibility: We maintain financial strength to deliver sustainable programs and rates.

Market Challenges

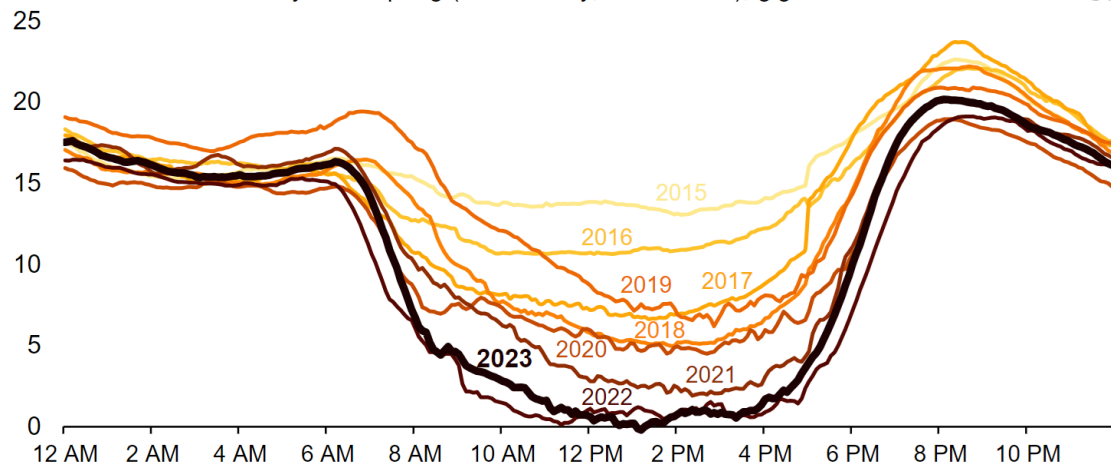
MCE's '**peaky load**' results from widespread solar, causing customer demand spikes in late afternoon to early evening as solar power ramps down and household electricity use surges.

This is what we call the "duck's neck."

Addressing the Over-Generation of Solar Energy

California's duck curve is getting deeper

CAISO lowest net load day each spring (March–May, 2015–2023), gigawatts



Market Challenges

'Settlement' in energy markets is the process of reconciling all transactions between electricity suppliers and customers, ensuring accurate payment to generators and billing for customers.

Settlement processes can vary in frequency, from hourly to daily, and involve complex calculations.

Evolving Settlement Requirements

- Managing energy in **shorter time frames** requires faster controls to keep up with supply and demand changes.
- Resource matching for **24x7 settlement** to ensure energy supply matches the energy demand on a continuous basis, every day of the week, all year round.
- As California retires natural gas power plants, we need new tools so grid operators can **match load / supply on a 4 second basis**.

Market Challenges



Managing Rising Costs

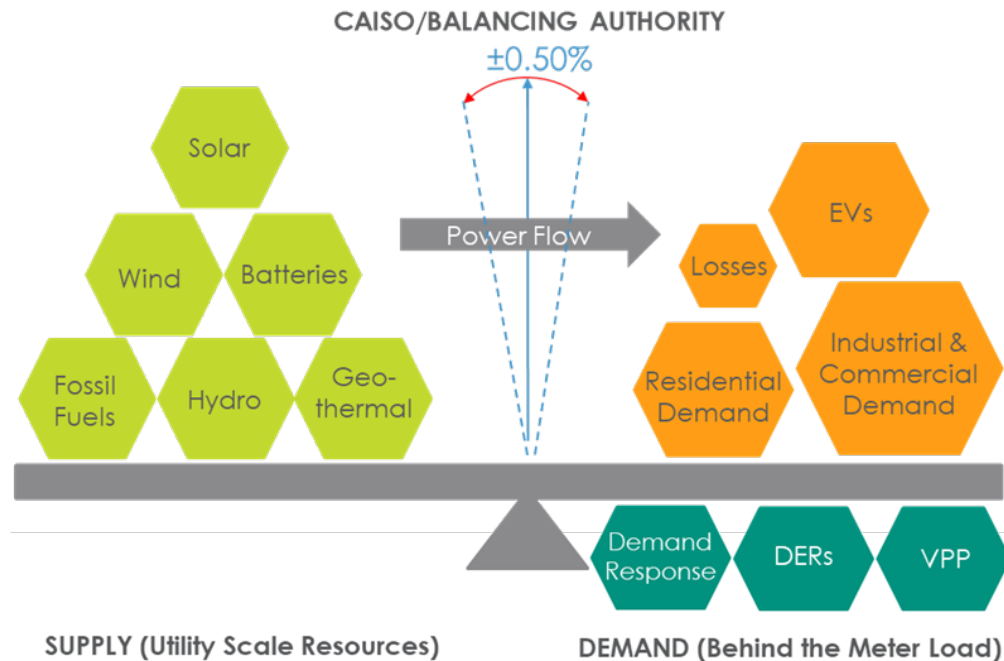
- New purchasing rules, or **procurement mandates**, mean that suppliers can keep their prices artificially high since they know we're required to buy it. Without a limit on what they can charge, prices can go up significantly for securing reliable energy sources.
- We face **increased expenses** for maintaining energy reliability (resource adequacy) while **intense competition** for green energy sources is intensifying.
- The process to connect to the energy network (**interconnection**) is becoming longer, impacting our ability to bring new sources online efficiently.

What is a Virtual Power Plant

Instead of an industrial power plant taking up a lot of land, this connects many smaller **physical assets** throughout a community.

A VPP taps into **existing distributed energy resources** - solar, smart thermostats, smart plugs, batteries, electric vehicles - and sends them **digital signals** to charge up or release power to the grid at strategic times.

It quietly and invisibly creates **pockets of power** to support and decarbonize the grid.



Keeping the Balance

All inclusive Solution

Virtual Power Plant



PeakFlex

Demand
Response

Energy
Efficiency
(non-dispatchable)

Dispatchable
Resources

In 10 years, build a new paradigm of
⚡ People Power ⚡

Weave together MCE's incredible programs to create a "spectrum of controllability."

Community members engage at various levels to optimize value through controllable devices and behavior change.

Share value of a suite of DERs with MCE customers while competing against for-profit 3rd parties to:

- alleviating pressure on MCE power procurement
- creating bill savings for customers
- creating value for MCE
- promoting local grid health with smart devices



Direct MCE Benefits

Cost benefits:

- Smaller up front investment than large power plants
- Allows for distributed and incremental solutions to closely match demand growth
- Mitigates the risk of transmission or distribution (T&D) bottlenecks where significant power is locked behind congested T&D corridors
- Use power where it's needed - tap into inherent benefits of co-location of demand and supply
- Closed loop of value - customer generates and shares value with MCE which then returns to the customer



Direct MCE Benefits

Settlement benefits:

- Access real-time device data
- Facilitates time-sensitive peak load reductions
- Reduces associated procurement & resource adequacy obligations

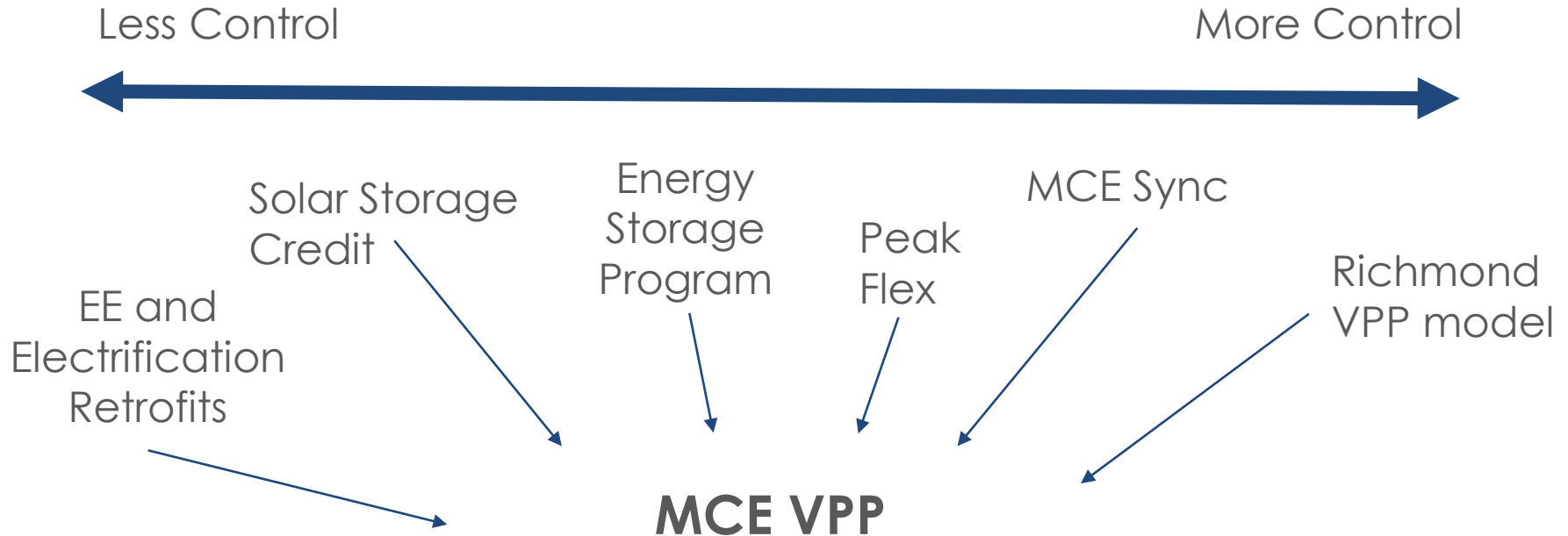


Direct Community Benefits

- **A decade of MCE programs** means our communities have years of upgrades that can be integrated into the VPP to generate additional value for the customer
- **Lots of install jobs**, especially important in Disadvantaged Communities (DAC)
- **Modernized building stock**, including with energy **resilience**
- Reduce demand for polluting peaker plants
- **Reduce emissions** of entire system due to localized usage of power
- Value sharing tariff transforms passive consumers into a **active agents of grid health**
- Increased customer awareness and participation in the energy system
- **Cost savings** from more efficient usage as well as from bill credits

Implementation

“No customer left behind” - Multiple strategies - Meet people where they are



Next Steps (part 1)

Richmond VPP:

- 1.5MW Flex Load + 1 MW Solar + 2MWh batteries
- Use OpenADR DERMS to monitor and dispatch
- Bid Capacity and Energy into Day Ahead Markets

MCE Sync:

- 7,000 Vehicles by June 2025
- Shift 95% of EV Charging Load out of Peak Hours
- Bid into Day Ahead Market
- Incorporate Dynamic Pricing Signals

Peak Flex:

- Build on the 3MW of demand reduction achieved in 2022
- Focus on storage, building control systems, EV chargers

Next Steps (part 2)

Energy Storage Program:

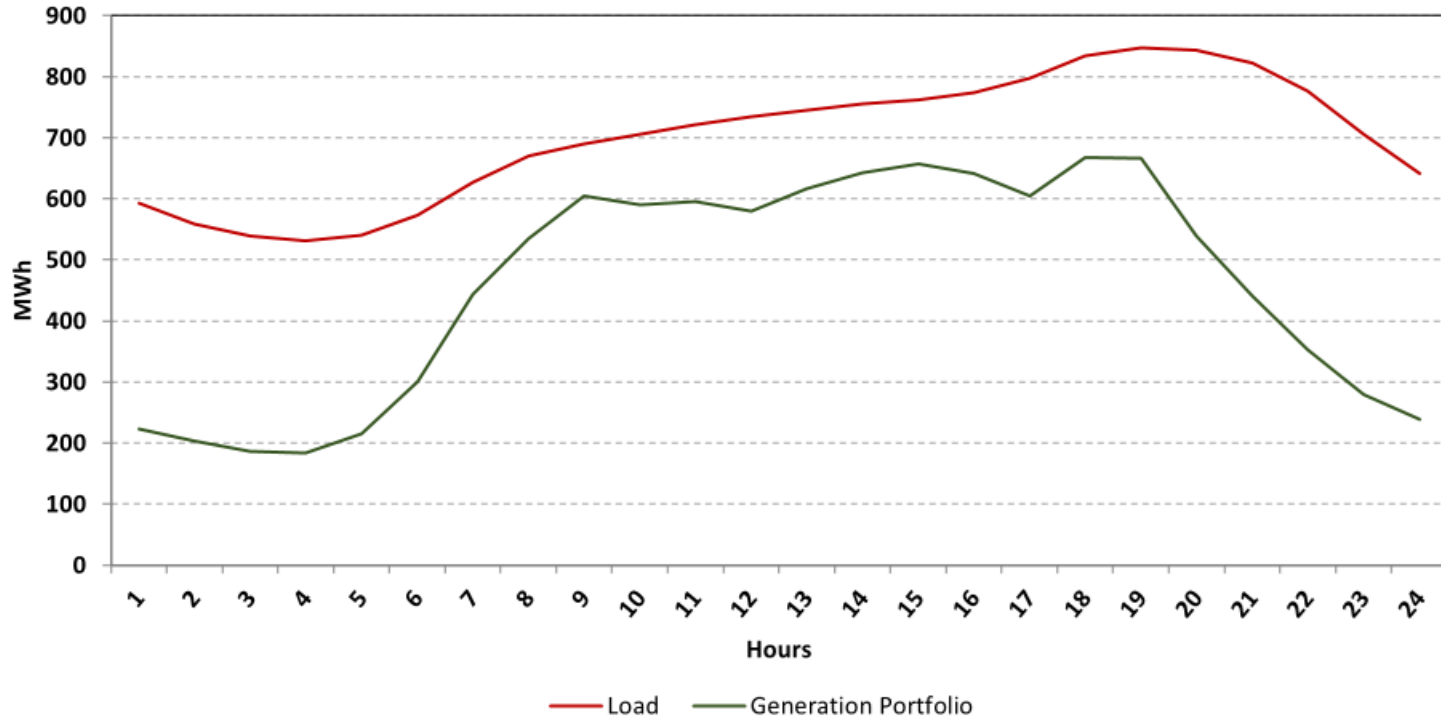
- Initial Launch: 1.2 MWh residential installs (complete) & 4.5 MWh batteries at Non-Res Critical Facilities. Collect usage data and issue performance payments
- Phase 2: 2.5 MWh batteries at C&I facilities, integrated into Open ADR DERMS to monitor and dispatch.

Energy Efficiency Programs:

- Single family homes: Install 280 heat pump water heaters (HPWH), 100 smart thermostats, 300 HAN devices
- Build local capacity for HPWH installs through workforce training programs
- Multifamily Properties: 300+ HPWHs and 200 smart thermostats

Future Portfolio Snapshot

2032 Average hourly profile



Closing Remarks

