



MARIN COUNTY | NAPA COUNTY | UNINCORPORATED CONTRA COSTA COUNTY
BENICIA | CONCORD | DANVILLE | EL CERRITO | LAFAYETTE | MARTINEZ | MORAGA
OAKLEY | PINOLE | PITTSBURG | RICHMOND | SAN PABLO | SAN RAMON | WALNUT CREEK

MCE SPECIAL MEETING
Wednesday, September 18, 2019
9:00 A.M.

City of Richmond Memorial Auditorium
403 Civic Center Plaza, Richmond, CA

Agenda Page 1 of 2

1. Roll Call
 2. Public Open Time (Discussion)
 3. Opening Remarks (Discussion) – 9:10
 4. MCE Accomplishments and Goals (Discussion) – 9:15-9:45
 - *Power Resources*
 - *Public Affairs*
 - *Customer Programs*
 5. Challenges and Opportunities (Discussion)
 - a. *Becoming Greenhouse Gas-Free: New Challenges* – 9:45
 - b. *Resource Adequacy and Greenhouse Gas Phase-out* – 10:15
- Break – 10:45 - 10:55
- c. *PG&E Deenergizing and Community Resiliency* – 10:55
 - d. *Matching Demand with Supply: Time of Use Rates* – 11:30
- Lunch – 12:00 - 1:00



Agenda material can be inspected at 1125 Tamalpais Avenue, San Rafael, CA 94901 on the Mission Avenue side of the building and at One Concord Center, 2300 Clayton Road, Concord, CA 94520 at the Clayton Road entrance. The meeting facilities are in accessible locations. If you are a person with a disability and require this document in an alternate format (example: Braille, Large Print, Audiotape, CD-ROM), you may request it by using the contact information below. If you require accommodation (example: ASL Interpreter, reader, note taker) to participate in any MCE program, service or activity, you may request an accommodation by calling (415) 464-6032 (voice) or 711 for the California Relay Service or by e-mail at djackson@mceCleanEnergy.org not less than **four work days** in advance of the event.



MARIN COUNTY | NAPA COUNTY | UNINCORPORATED CONTRA COSTA COUNTY
BENICIA | CONCORD | DANVILLE | EL CERRITO | LAFAYETTE | MARTINEZ | MORAGA
OAKLEY | PINOLE | PITTSBURG | RICHMOND | SAN PABLO | SAN RAMON | WALNUT CREEK

MCE SPECIAL MEETING
Wednesday, September 18, 2019
9:00 A.M.

City of Richmond Memorial Auditorium
403 Civic Center Plaza, Richmond, CA

Agenda Page 2 of 2

6. MCE Accomplishments and Goals (Discussion) – 1:00
 - *Administrative Services*
 - *Human Resources*
 - *Finance*
 - *Legal/Policy*
7. Technology in Practice (Discussion) – 1:30
 - a. Electric Vehicle Scorecard: AB 1236 – 1:30 - 2:00
 - b. Battery Storage & Distributed Energy Resources – 2:00 - 2:30
8. Emerging Issues (Discussion) – 2:30 - 3:45
9. Board Member & Staff Matters (Discussion) – 3:45
10. Adjourn



Agenda material can be inspected at 1125 Tamalpais Avenue, San Rafael, CA 94901 on the Mission Avenue side of the building and at One Concord Center, 2300 Clayton Road, Concord, CA 94520 at the Clayton Road entrance. The meeting facilities are in accessible locations. If you are a person with a disability and require this document in an alternate format (example: Braille, Large Print, Audiotape, CD-ROM), you may request it by using the contact information below. If you require accommodation (example: ASL Interpreter, reader, note taker) to participate in any MCE program, service or activity, you may request an accommodation by calling (415) 464-6032 (voice) or 711 for the California Relay Service or by e-mail at djackson@mceCleanEnergy.org not less than **four work days** in advance of the event.



MCE Accomplishments and Goals

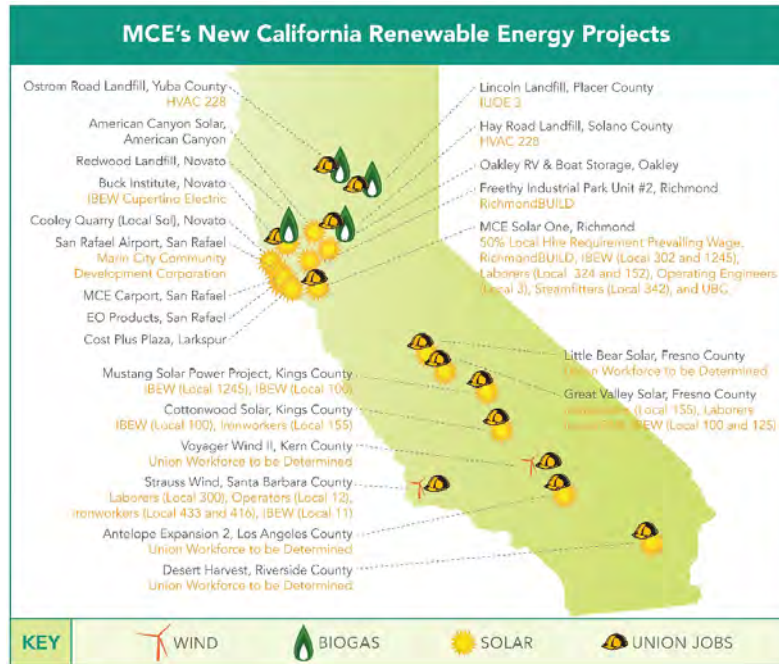
Power Resources

Lindsay Saxby, Manager of Power Resources
September 18, 2019

Agenda

- Power Resources: The Big Picture
- Contracting Report Out
- Feed-in Tariff Update
- Targets and Contract Administration
- Future Plans and Goals

Power Resources: The Big Picture



- \$1.5 billion dollars committed to build new renewable energy projects
- 678 MW of new projects developed in California
- Projects support over 5,000 California jobs
- MCE achieved Senate Bill 100 California renewable targets 11 years early

Accomplishments in Contracting

- 10 new contracts signed this year for renewable energy
- New renewable and carbon-free energy suppliers:
 - 15-year Sorenson contract for small hydroelectricity (in progress)
 - Turlock Irrigation District contract for renewable hydroelectricity
 - Bonneville Power Authority contract for carbon-free large hydroelectricity
 - Brookfield Energy contract for large hydroelectricity and Asset Controlling Supply
 - First Investor Owned Utilities (IOU) transactions with PG&E and SCE for bundled renewable energy.

New Project Online: Antelope Solar

105 MW Solar PV

Lancaster, CA

Online: Dec. 2018

20 year term

Approximate Acres:
6,000

Approximate
Number of homes
served: 31,500



New Project Online: Voyager Wind

42 MW Wind

Mojave, CA

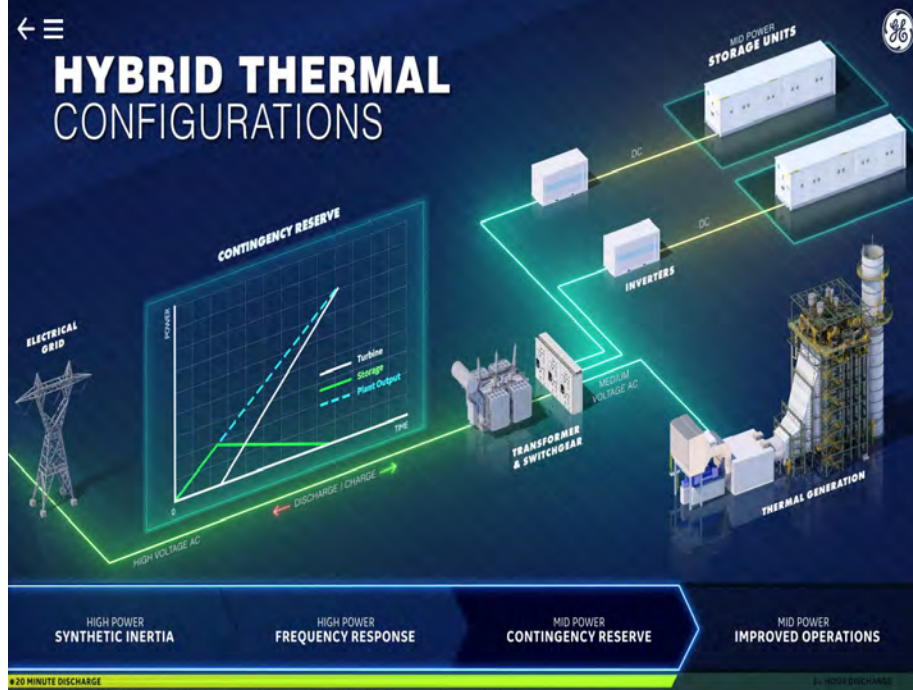
Online: Dec. 2018

12 year term

Approximate Number
of homes served: 23,000



New Contract for Resource Adequacy



- Natural gas generator converting its facility to a hybrid battery technology
- 7 to 10-year term beginning in 2021
- Product provides local and flexible resource adequacy
- Regulatory uncertainty off-ramps for MCE
- Projected GHG reduction of 60%

Feed-in Tariff Update



MCE's original 2012 Feed-in Tariff (FIT) program is now fully subscribed, with 17 projects, all within our service area:

- 12 projects (over 9 MW) online
- 5 project (5 MW) under construction

MCE's Expanded FIT and FIT Plus Program launched in 2018 attracts more local projects:

- 1 MW FIT project approved in Marin
- 2 FIT Plus projects approved:
 - 5 MW project in Benicia
 - 3 MW project in Martinez

Ribbon Cutting for American Canyon Solar

3 MW Solar PV

Ribbon Cutting on August 14

20 year term

American Canyon, adjacent
to I-80 Frwy

First utility-scale solar projects
in Napa County



New FIT Project Online: EO Products

Solar PV

.06 MW

20 year term

Online March 7, 2019

San Rafael



New FIT Project Online: Central Marin Sanitary Agency

Biogas (first biogas FIT!)

.75 MW

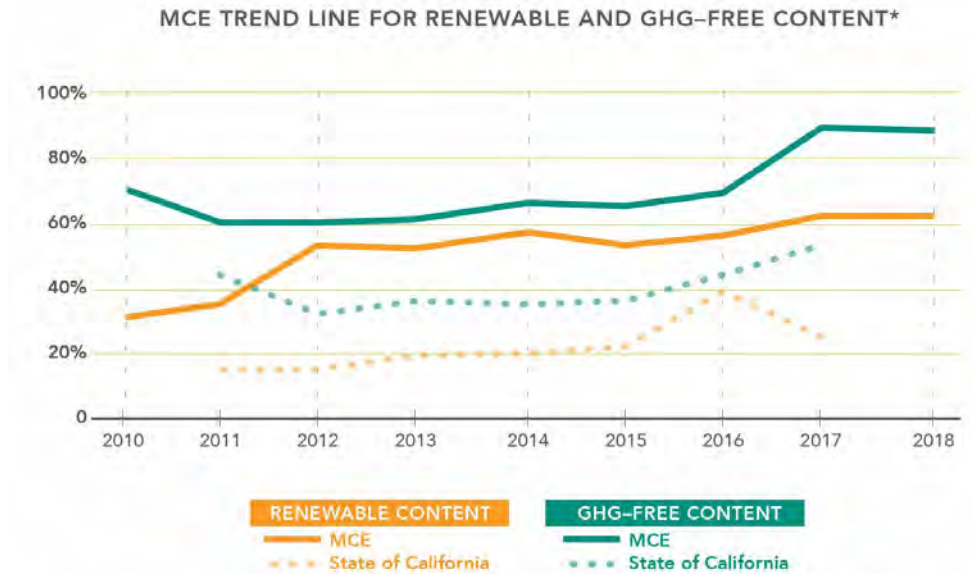
20 year term

San Rafael, adjacent to
Hwy 101

Creates a sustainable
loop by converting the
biogas produced by the
treatment process into
renewable energy.



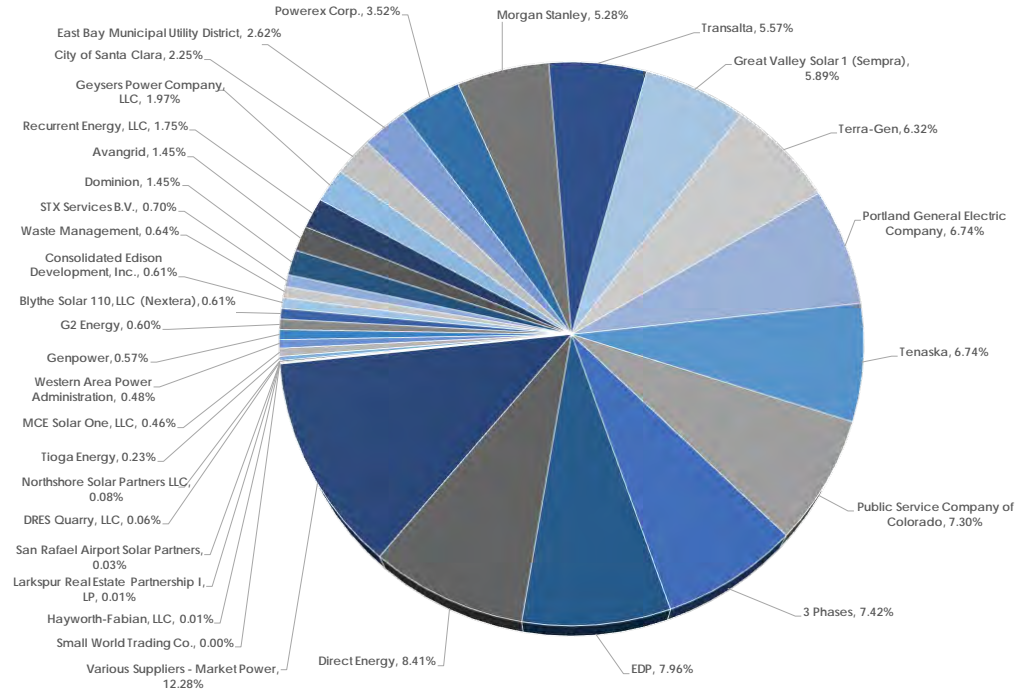
Met MCE's Renewable & Carbon-free Goals Exceeded State Performance



*As reported to the California Energy Commission's Power Source Disclosure Program. MCE's 2018 data is subject to an independent audit and verification that will not be completed until October 1, 2019.

Diversity = Strength

MCE received
energy products
from ~35 unique
suppliers in 2018





Correction of invoicing errors by
Power Resources team saved
customers over
\$3 Million



Future Plans and Goals:

- 2020 Energy Storage RFO for stand-alone and paired renewable + energy storage projects
- Phasing out PCC2 renewable product due to AB1110 changes to emissions accounting
- Reducing GHG emissions in RA procurement
- Expanding supplier base for hydroelectricity

Thank You

Lindsay Saxby
Manager of Power Resources





My community.
My choice.

Public Affairs Accomplishment & Goals – September 18, 2019

Heather Shepard, Director, Public Affairs

MCE's Public Affairs Department



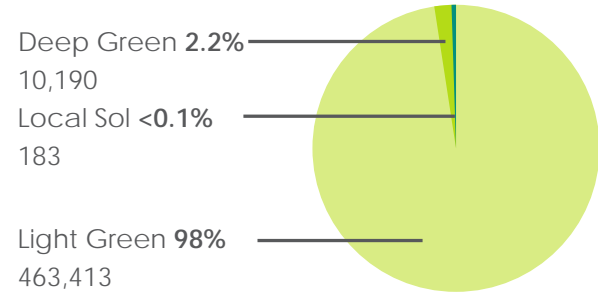
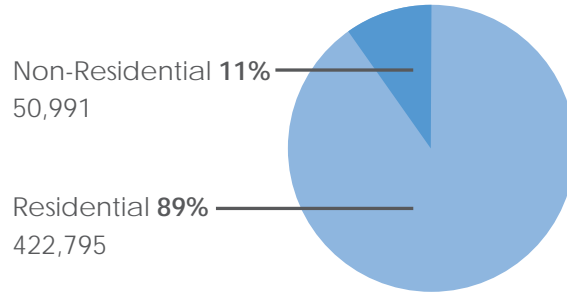
- Community and Customer Engagement
- Customer Care & Analytics
- Marketing & Communications

Customer Care & Analytics

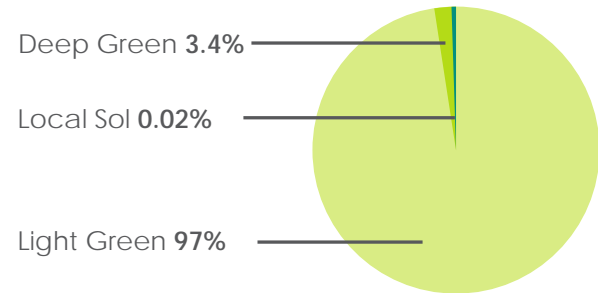
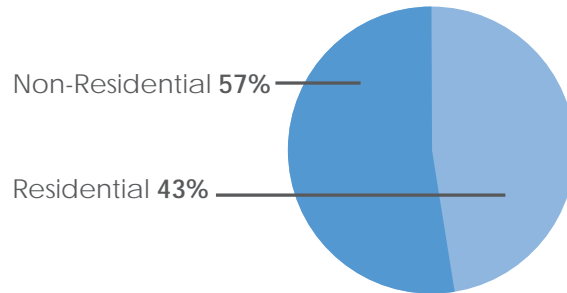
- **Contact Center 1,000-2,000 calls/month**
- **>95% of Calls answered within 60 seconds**
- **Info@ emails** - customer and community questions & requests : 24-48 hour turnaround, personal response- no auto emails.
- **Proactive Customer Notifications:** Rates changes, TOU Transitions, PSPS notifications

MCE Customers at a Glance

Accounts



Loads



Accounts as of 7/31/19. Load is 8/1/18 through 7/31/19.

MCE by County Snapshot



Contra Costa County

313,000 customers served

1.5% customers opted up to Deep Green

29% municipal accounts opted up to Deep Green



Marin County

94,000 customers served

4.5% customers opted up to Deep Green

100% municipal accounts opted up to Deep Green



Napa County

55,000 customers served

1.8% customers opted up to Deep Green

33% municipal accounts opted up to Deep Green



Solano County

10,000 customers served

1.5% customers opted up to Deep Green

100% municipal accounts opted up to Deep Green

MCE Average Participation Rate (86%)

Community & Customer Engagement

- **Focused 1:1 Engagement**
 - Top 250 Large Load Customers
- **Program Support**
 - MCEv – 300 customers directly engaged for charging and low-income rebates
 - Napa Rebuild – multi-lingual outreach
- **Community Outreach + Community Power Coalition**
 - > 200 meetings + events



Top 250 Account Engagement - Commercial & Industrial

Energy Storage for Your Workplace



POWERHOUR



- Stable + Engaged Customer Base
- 7% participating in EVSE Program
- 60% of top 250 customers have been directly engaged in last 9 months
 - Power Hour
 - Rates
 - Customer Programs
 - PSPS
 - VIP Special Events

Municipal Engagement

- 19 of top 250 accounts are municipal
- Several municipalities considering opting up some accounts
- Benicia recently opted-up to Deep Green
- Larkspur and Mill Valley received presentations on MCE & rates this summer
- Walnut Creek receiving MCE update in October



2020 Enrollment

- Solano County (11k Accounts)

2021 Enrollment – Load Analysis in process

- Vallejo (40k Accounts)
- Pleasant Hill (11k Accounts)

2022 – Under Consideration

- Vacaville
- Fairfield
- Dixon

New Community Enrollment + Inclusion

Marketing - Website Refresh



Questions?
We want to hear from you!
1 (888) 632-3674

Search ... 

Residential ▾

Commercial ▾

Member Communities ▾

Energy Sources ▾

About Us ▾

FAQ

**YOUR LOCAL
ELECTRICITY PROVIDER**
serving 34 communities
in 4 Bay Area counties.



>200 Press
Mentions

Sept, 2018-July, 2019



**Electric vehicle charging
network expands to help
Marin, Napa, Solano,
Contra Costa commuters**

May 17, 2019

Solar
Power World

**MCE completes 3-MW
solar project in Napa
County, California**

August 27, 2019



Marin Independent Journal

**Marin-based utility pays
\$2.8M for customers'
surplus solar power**

August 5, 2019

MCE Thought Leadership

2019-2020 Goals

- ☐ Community Equity – Vulnerable Customers
- ☐ Deep Green Campaign
- ☐ Small-Medium Business/ Chamber Engagement
- ☐ Deepen Large Load Customer Partnerships

Deep Green

2019-2020



Community Engagement

- Encouraging Opting up - MCE's 14 remaining municipalities
- Chambers of Commerce/SMB Outreach
- Employer Referral Campaign/CalCCA

Customer Programs

- "Drive Deep Green" EV Driver Campaign

PR/Marketing

- Press Releases/Earned Media Articles
- Deep Green Advocates Toolkit
- Digital Ad Campaign

Questions?

Heather Shepard
Director of Public Affairs,
MCE
(415) 464-6024
hshepard@mcecleanenergy.org

Thank you
for your
partnership!



Customer Programs Accomplishments and Goals

Alice Havenar-Daughton
September 18, 2019

Overview

- ✓ Energy Efficiency Programs
- ✓ Income Qualified Programs
- ✓ Transportation Electrification
- ✓ Building Energy Optimization Grant

Energy Efficiency Programs



Energy Efficiency Program Accomplishments

2018 Annual Savings

	Electric (MWh)	Gas (therm)
Multifamily	151.22	16,468
Commercial	823.36	-889
Single Family	185.01	54,801
Total	1,159.59	70,381

Energy Efficiency Program Accomplishments

Residential

Single Family

- 10,000+ customers opted-in to remote thermostat controls
- 180,000 kWh & 50,000 therms saved
- Launched Residential Direct Install Program (*new*)

Multifamily

- 13 projects completed in 2018
 - 6 initiated in 2018
 - 7 initiated in previous years
- 6 projects with rebates currently in reservation

Energy Efficiency Program Accomplishments

Non-Residential

Small Commercial

- 140 small businesses audited
- 52 completed energy efficiency projects (37%)

Commercial/Agricultural/Industrial (*new*)

- Launched program for larger energy users

Energy Efficiency Program Goals

- More than double our energy savings
 - New programs
 - Expanding existing programs
- Increase program impact on GHG reduction through fuel substitution

Income Qualified Programs



Low Income Families and Tenants (LIFT) Program

Blended with MF Program

- Layered rebates
- Energy Efficiency and Heat Pump incentives

\$3.5 million

3 year Pilot

Results to date:

- 22 properties audited
- 6 properties completed projects
- 57 heat pumps installed

Green and Healthy Homes Initiative (GHHI)



- Serving:
 - Low income residents (up to 80% AMI, HUD)
 - Single family, multi family, mobile homes and floating homes
 - Owners and renters
- Funded by:
 - Leveraging partner programs and resources
 - Marin Community Foundation grant funding
 - \$5,000 per single family unit
 - \$2,250 per multifamily unit



GHHI Case Study

Program Resources

- Marin County Low Income Home Energy Assistance Program
- Bob Roberts Client Assistance Program
- GHHI Marin
- Wood Smoke Program (County of Marin)

Single Family Home

- 2 senior residents
- Mobility issues
- Respiratory health needs

Green & Healthy Measures

- ADA accessible bathroom
- Removal and replacement of wood burning fireplace
- Weather stripping
- LED light bulbs
- Low flow faucets
- Smoke alarm

- \$345,000 solar rebates allocated
- 98 solar installations funded
- 207 kW of new, local solar
- \$2M+ in expected energy savings
- Expanded program to serve multifamily properties (2 projects currently funded)



Low-income solar rebates (2012-2019)

Income Qualified Program Goals

Receive funding from the
CPUC for LIFT 2.0 for 2021-2026

Expand GHHI to Contra Costa
County

Transportation Electrification



MCEv Transportation Electrification

- Funded 776 ports at 66 sites
 - 207 of those have completed construction
- \$3,500 vehicle rebate for low income customers available in September 2019

MCEv Upcoming Activities

- Drive Deep Green – Increase adoption of Deep Green for EV drivers
- Identify Multifamily Sites for Car Sharing Pilot
- Drive Clean – Behavior Change Campaign
- AB 1236: Streamlining EV charger permitting

Building Energy Optimization Grant

The California Energy Commission awarded a \$1.7M grant to MCE to explore energy savings opportunities through distributed energy resources (DERs) from Nov. 2017 – Dec. 2020.

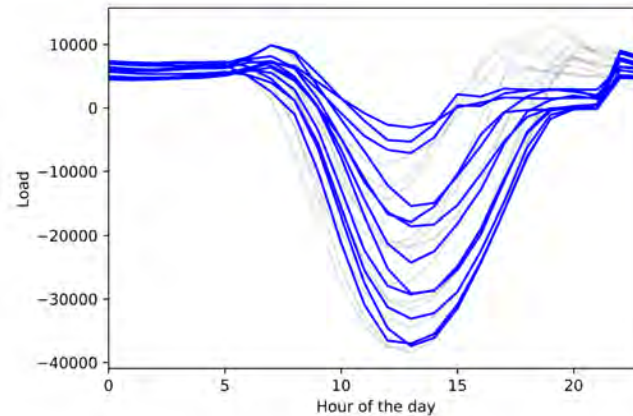
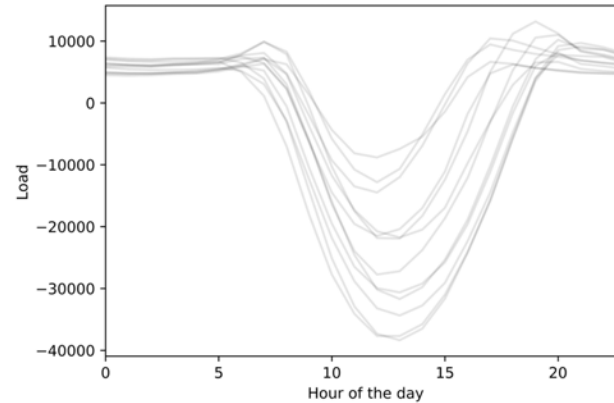
The Goals:

Deliver an innovative and **replicable CCA program solution** that enables targeted and optimized **DER portfolios to be deployed rapidly across CCA service territories**, to accelerate state & local GHG reduction goals.

MCE BEO Grant: Overview

Simple Question to a Complex Problem

"What is the Benefit or Cost
to promote a Quantity of
DERs to Customer Segment
in a CCA's Territory/Location
over the span of Time
Frame?"



Thank You!

Alice Havenar-Daughton
Director of Customer Programs
Ahavenar-daughton@mcecleanenergy.org





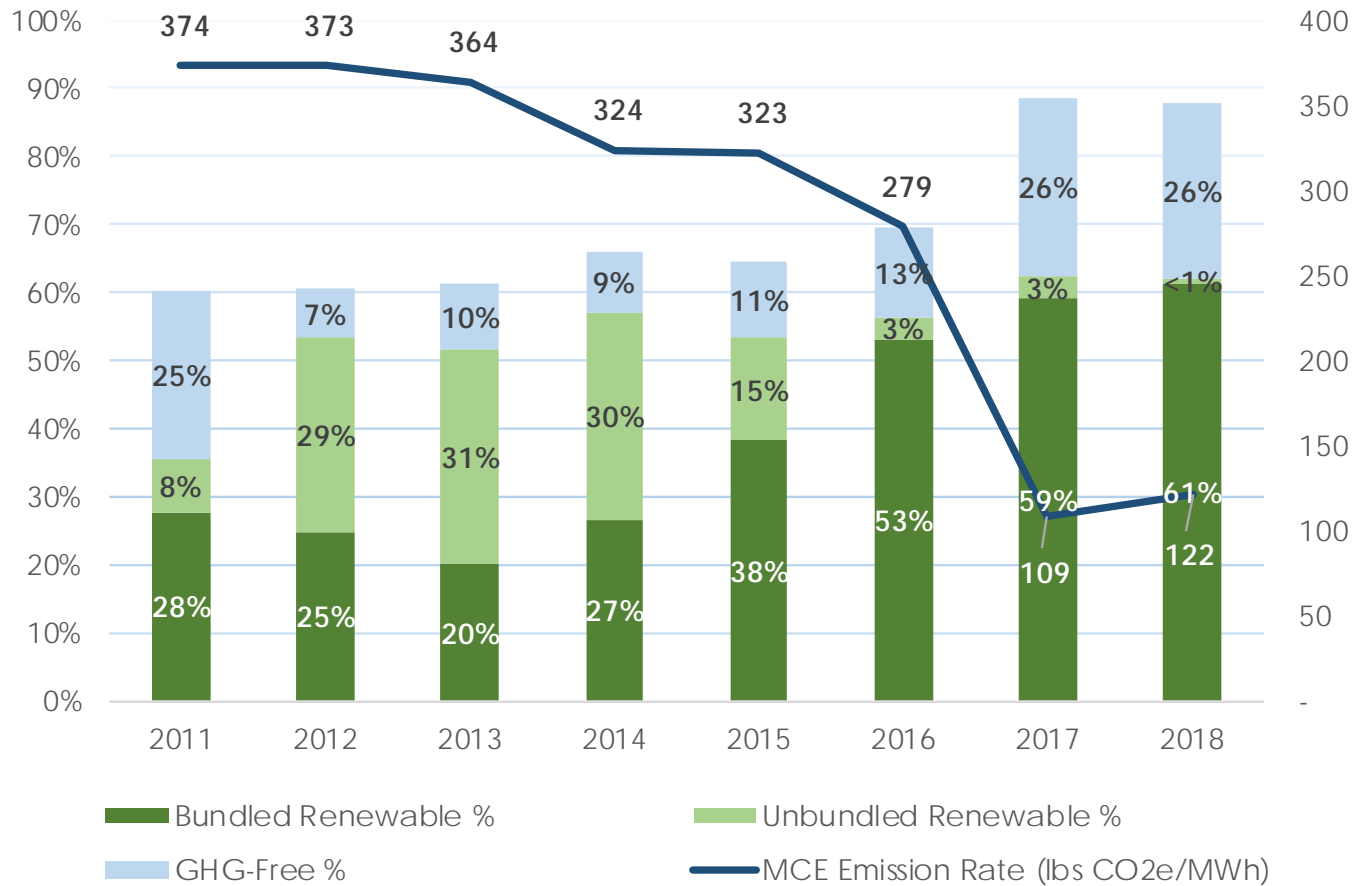
Becoming Greenhouse Gas-Free:

An Evolving Landscape & New Challenges

MCE Board Retreat | September 18, 2019

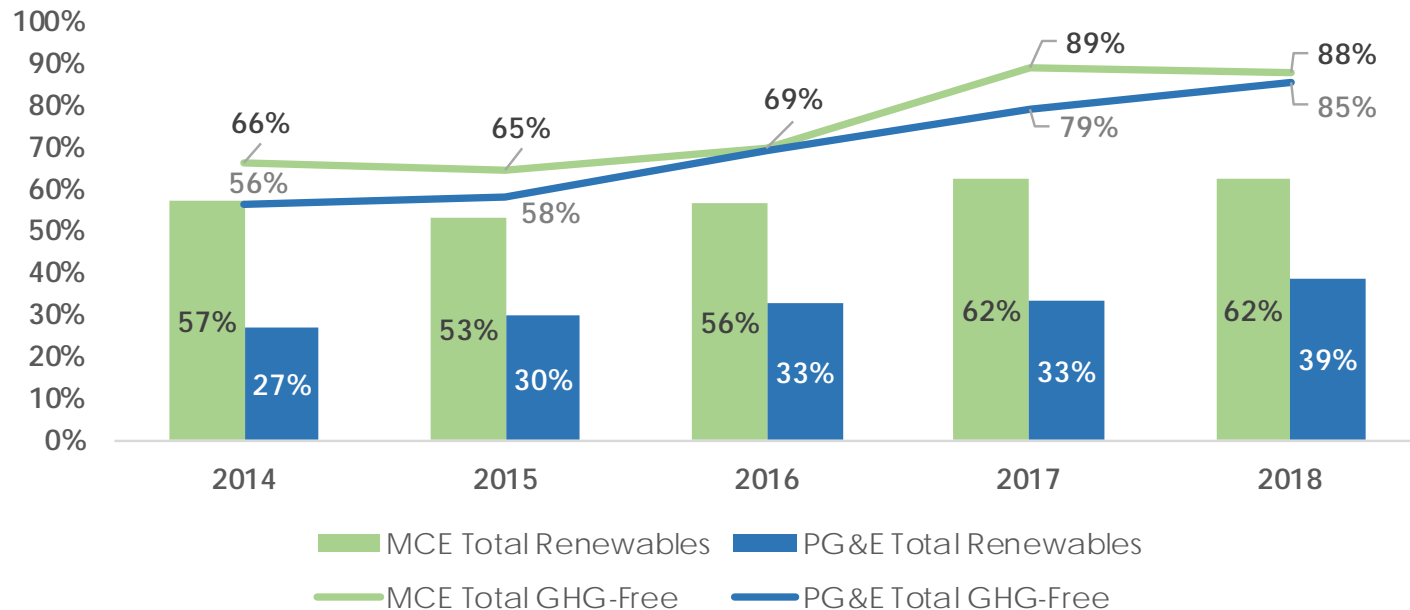


MCE Historical Power Content (2011-2018)



MCE & PG&E: Five-Year Portfolio Summary

Clean Energy Comparison: MCE vs. PG&E



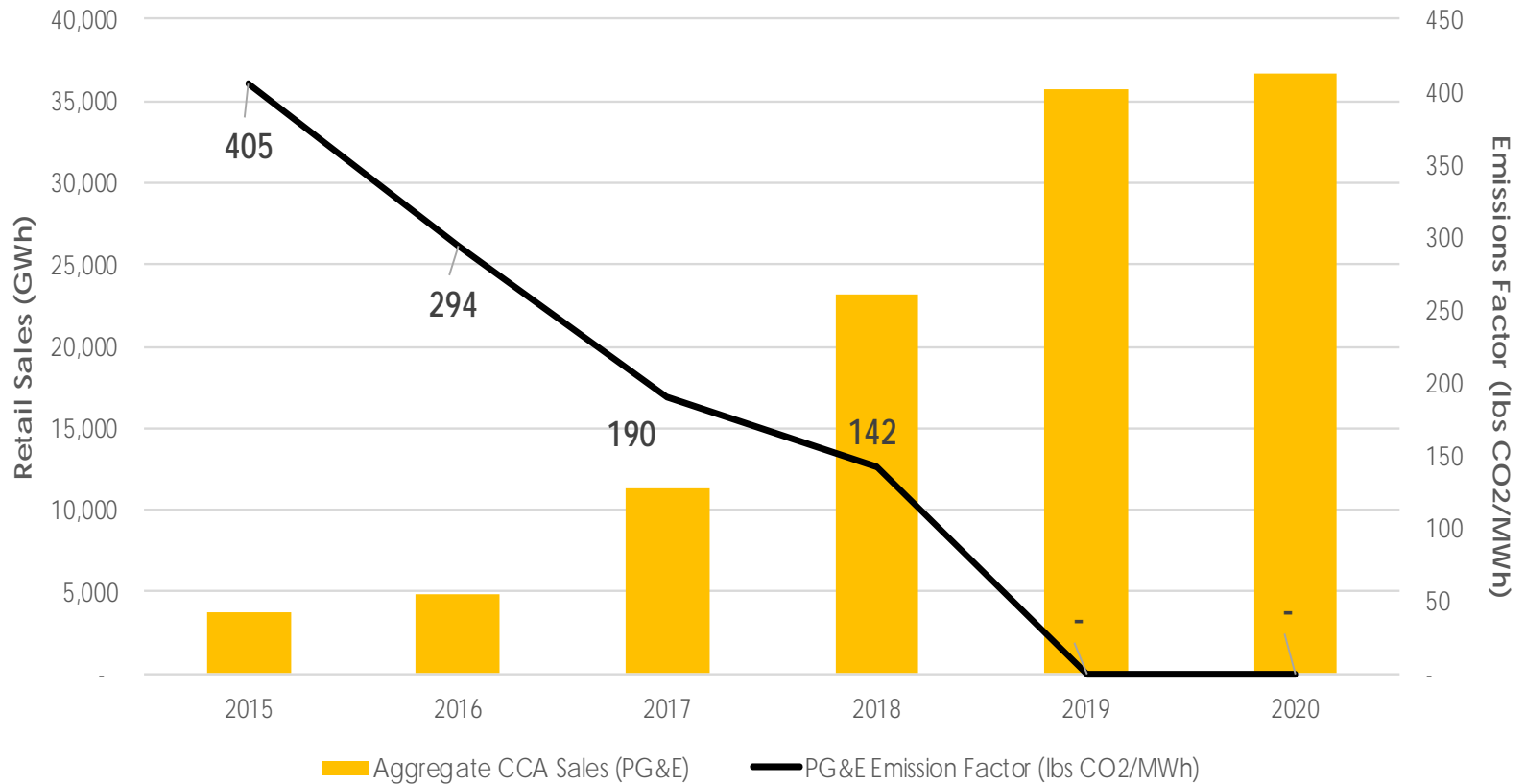
2014-2017 Source Data: Annual Power Source Disclosure Reports and Power Content Labels

PG&E 2018 Source: Power Source Disclosure Annual Report, as provided by the CEC

Key Observations

- CCA growth is lowering GHG emissions rate for IOUs
- IOUs are not selling off their GHG-free supply
- Reporting requirements are changing
 - Implementation of AB1110 will impose emissions on MCE's existing GHG-free purchases
 - Emissions will be double-counted due to "stranding" of emission attributes
 - Annual vs. hourly emissions accounting does not conform to existing contracts or practice
 - CA reporting & compliance programs are not aligned
- GHG-free energy is in high demand while IOUs have market power, driving up price
- Nascent energy storage market

Direct Impacts of CCA Growth



Changes to GHG Emissions Accounting Practices

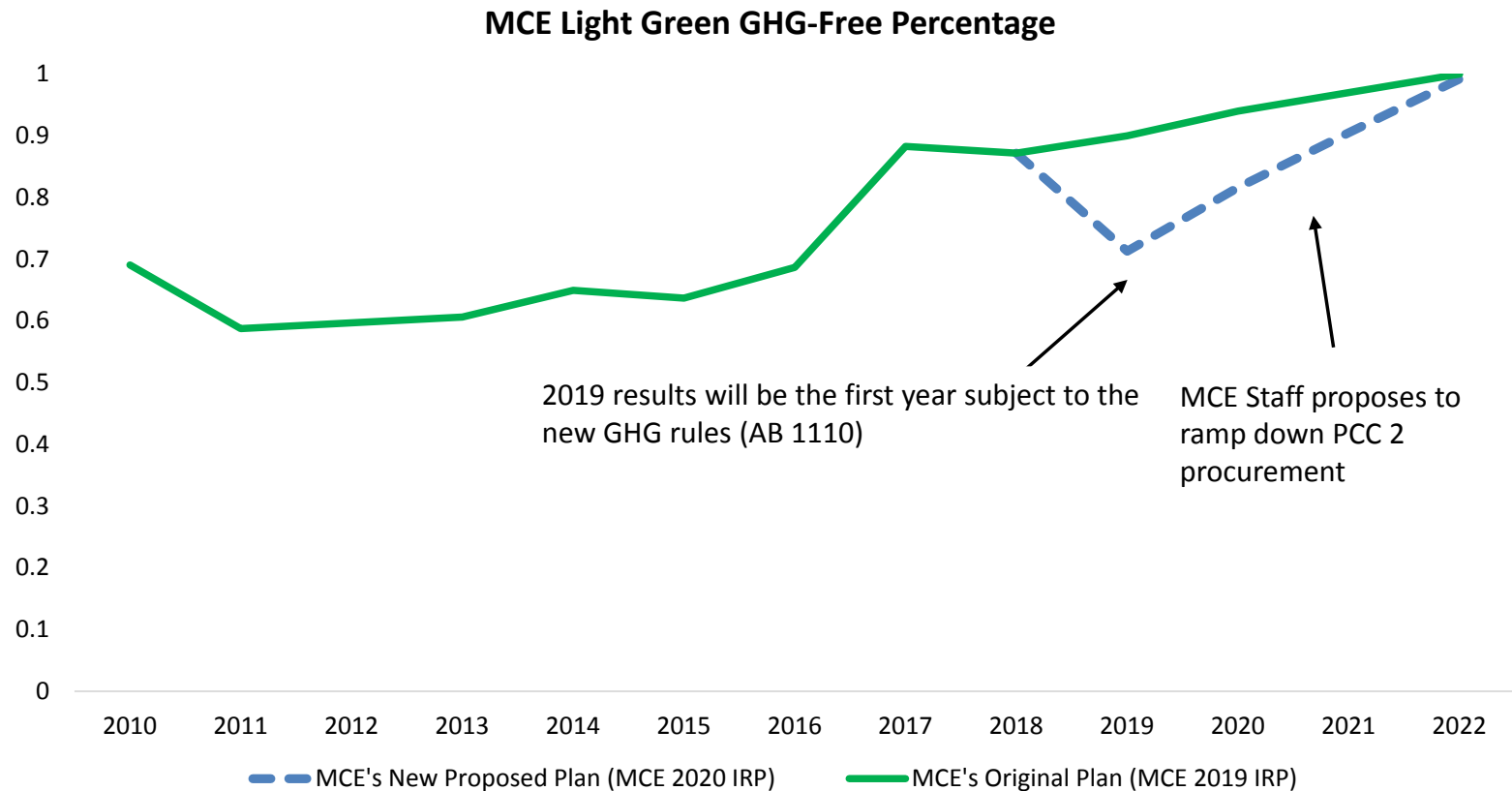
The Climate Change Registry Accounting

1 MWh of renewable energy = 1 Renewable Energy Credit = Zero Emissions

GHG emissions were previously calculated using standards from The Climate Registry (TCR)

- TCR is a non-profit formed in 2007 to carry out California's 2001 Climate Action Registry activities through a standardized reporting tool.
- PG&E was a founding member; MCE reporting provided 'apples-to-apples' results to customers.
- 2018 results (reported in 2019) will be the last year of this process due to California Energy Commission methodology for implementing AB1110.

Ramping down PCC 2 procurement will mitigate the projected impacts of AB 1110 implementation



Planning Considerations

- California's changing GHG accounting & reporting methodologies create business challenges for MCE, especially when applied to past purchases.
- IOU market power exacerbates these challenges.
- MCE will continue to pursue a near-GHG-Free supply portfolio
 - ✓ MCE's future procurement targets reflect a transition towards 99% GHG-free supply portfolio within the next 3 years
 - ✓ Ability to achieve such metrics will be dependent upon:
 - Stability in statewide accounting methodologies and product definitions
 - Impacts to regional grid reliability
 - Budgetary feasibility
 - Product availability

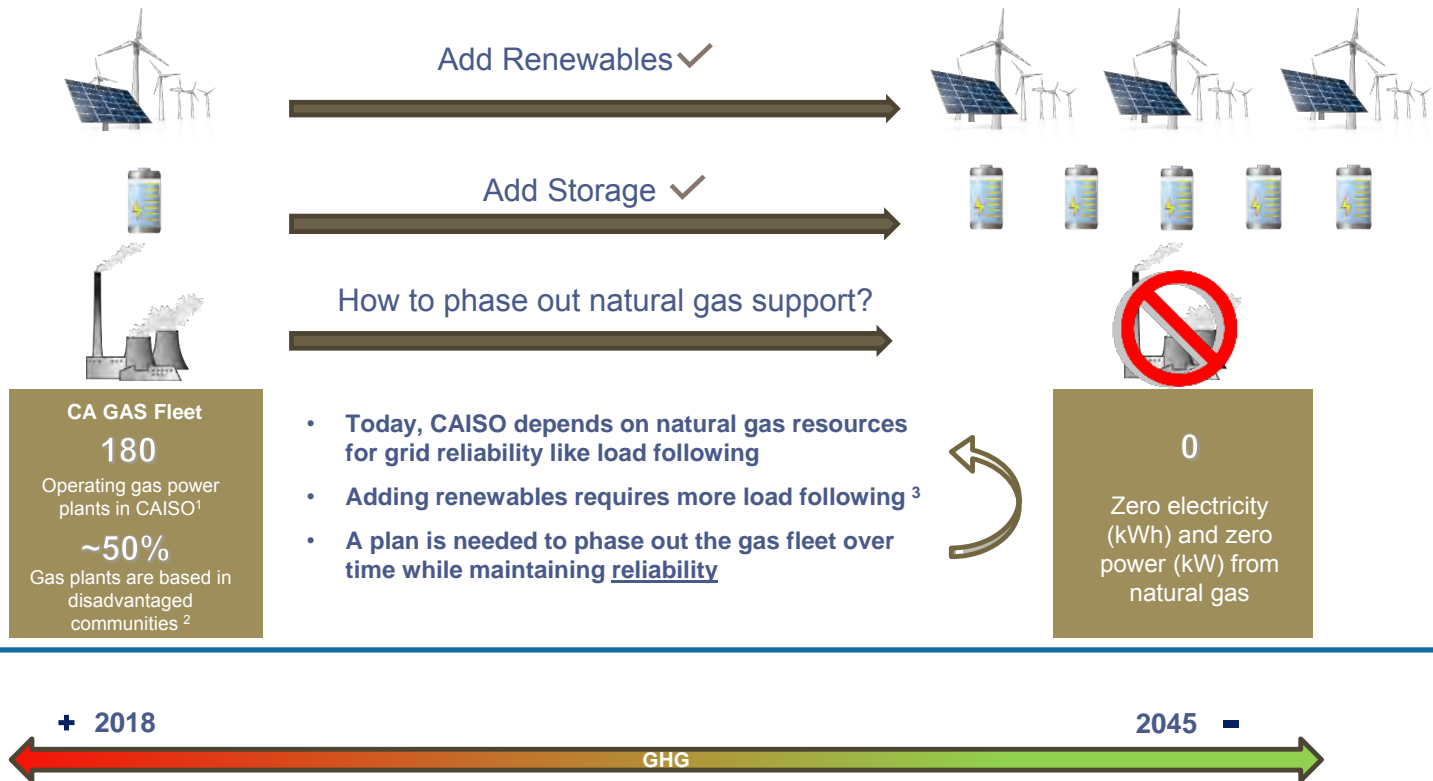
Future Issues and Decision Points

- How should regulatory bodies address market power of IOUs and devaluing of existing MCE contracts?
- How can MCE preserve value of GHG-free & renewable purchases in the future?
- How can MCE plan long-term renewable & GHG-free purchases in consideration of California's continually evolving energy landscape?
- How might RPS and emission-focused policies within adjacent states further limit GHG-free supply?

GHG-Free Goals & Resource Adequacy

- MCE is targeting a 99% GHG-free supply portfolio for customers by 2022.
- MCE's resource adequacy (RA) purchases are required by the state for grid reliability, and remain on stand-by to be used if needed by the California Independent System Operator (CAISO).
- RA is neither “delivered” to MCE's customers nor is it part of MCE's power content, but MCE still seeks low-carbon RA resources to help the state reduce fossil emissions.
- Purchasing GHG-free RA is difficult due to:
 - Most renewable resource are variable, and have limited reliability value to CAISO
 - Frequent regulatory changes & uncertainty; including changes after purchasing
 - Costs are high and technology availability is limited
- MCE's priority is achieving compliance with the state-imposed RA requirements while growing GHG-free RA resources in the state.

How can California Transition Away from Natural Gas-based Resource Adequacy?

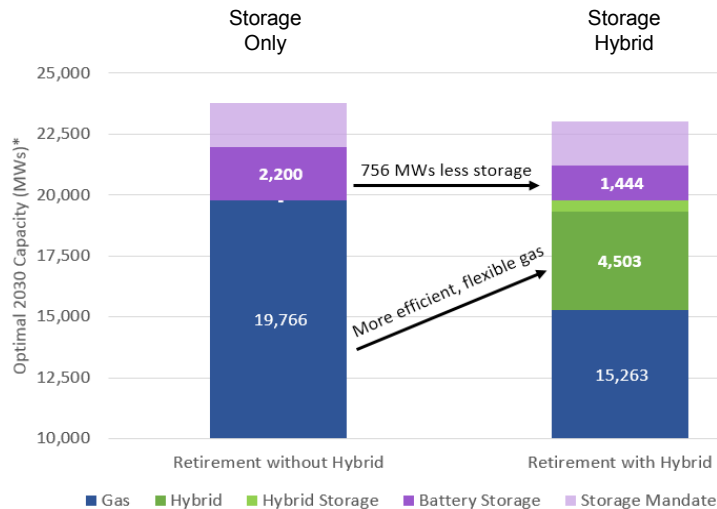


[1]: Based on plants included in the CAISO NQC List as of August 2018.

[2]: Approximate based on count of plants located in areas with a CalEnviroScreen within the top 30th percentile.

[3]: NREL WWSIS 2 ~28% of wind and 20% of solar PV. Current CAISO min = 15% of IFOM Solar PV

Storage-only vs. Storage-hybrid Case Study



(Example cases from 2018 Gridwell study of hybrid value using the RESOLVE capacity expansion model.)

Storage-only required 2,200 MW of 4 hour storage (total 8,800 MWh)

Storage-hybrid required 464 MW of 30 min storage & 1,444 MW of 4 hour storage (total 6,008 MWh)

Benefits of storage-hybrid over storage-only

- Reduced daily starts of gas fleet by 50% = immediate reduction in criteria pollutants
- Lower cost due to smaller storage system
- Lower permitting and development risk

Storage-hybrid reduced GHG emissions from remaining gas fleet by 350,000 metric tons a year.

Storage-hybrid would allow retirement of the least efficient natural gas facilities in the CAISO fleet (12,055 MW).

Low-GHG RA Contracting Opportunities

- MCE RA contracts for GHG-free & low-carbon resources include:
 - Solar
 - Wind
 - Hydroelectric
 - Landfill gas
- However, the RA value of solar & wind resources have been reduced by CAISO (after contracts signed).
- MCE is now exploring RA opportunities with battery storage systems, pumped hydroelectric systems and demand response products.
- MCE recently contracted with a storage-hybrid natural gas facility with a 10 year term.

MCE's Storage-Hybrid RA Contract

The conversion to storage-hybrid technology will result in:

- GHG emissions reduced by 60%
- Particulate emissions reduced by 75%
- Water usage reduced by 80%

This long-term contract allows the natural gas facility to secure financing to convert the facility to a much cleaner and more efficient resource.

Storage-hybrid conversion in gas fleet technology is a step towards fully decarbonizing resource adequacy in the state.



Future Decision Points

- Should MCE continue to help the state's decarbonization efforts through RA purchases that reduce GHG emissions?
- How can MCE retain value of RA contract amidst changing regulatory requirements?
- Would it be feasible for MCE to phase out GHG emissions in RA contracting over a 10 year period?



A Tradition of Stewardship
A Commitment to Service

Public Safety Power Shutoff (PSPS)

Kerry Whitney
Risk/Emergency Manager
Napa County OES
Kerry.Whitney@countyofnapa.org





A Tradition of Stewardship
A Commitment to Service

Agenda (PSPS)



Historical Events



Current Actions



Road Forward

@countyofnapa

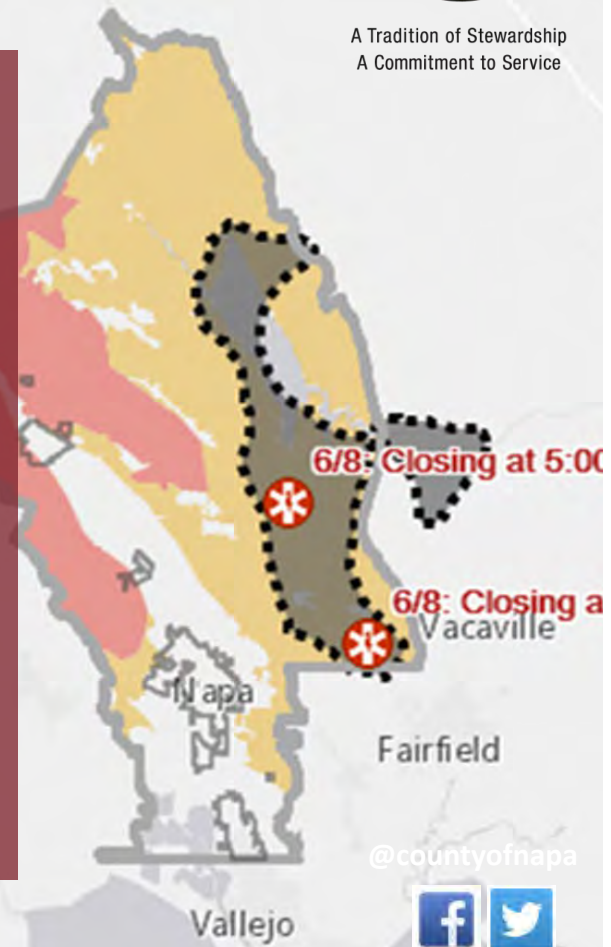




A Tradition of Stewardship
A Commitment to Service

Historical Events

- CA utility companies reported 2,009 fire incidents within 4 years
 - (2014 – 2017)
- Napa Complex Fire & Camp Fire caused by utility lines
- 2 PSPS events within Napa County
 - Oct 2018
 - Jun 2019





A Tradition of Stewardship
A Commitment to Service

Current Actions

- Litigation
- CPUC Rulemaking
- PSPS Response Planning
- Business Continuity Planning
- Facility De-energization Assessments
- Public Preparedness/Outreach
- Enhanced Alert & Warning
- Plan/Equipment Community Resource Centers

@countyofnapa





A Tradition of Stewardship
A Commitment to Service

Road Forward

- CPUC Rulemaking
 - Phase II –
 - Potential cost-sharing or reimbursement for local governments
 - Outreach and education for vulnerable populations
 - Continued improvements to information-sharing
 - Coordination with local governments
 - Potential changes to de-energization protocols
 - Evaluate utilities actions in reducing the need for future PSPS events

@countyofnapa



Questions?



A Tradition of Stewardship
A Commitment to Service


@countyofnapa



MCE Board Retreat



Jeffrey Hebel
Emergency Service
Manager
September 18, 2019



Public Safety Power Shutoff Challenges and Concerns

- Medically Fragile Population
- Water Distribution
- Business Disruption/POS Transactions
- Refrigeration/AC
- Public Safety/Crime/Traffic Accidents
- Communications

Who Is Most Vulnerable?

- Medically Fragile
- Seniors
- Very Young



What “*Critical Services*” are Vulnerable?
Depends How You Identify “*Critical Services*”...

- Public Safety Communications
- Care Facilities
- Water Distribution
- Commercial Kitchens, Restaurants, Super Markets, etc.
- Small Businesses



ESRB 8 Compliance Report June 2019 PSPS Comments

- Documentation –Comprehensive
- EOC Established in Timely Manner
- Command and Control - OIC making decisions
- Who is OIC?
- What is his/her position in PG&E?
- What does the decision making matrix look like?
- How much authority does he/she have?
- Public Safety Incidents as a result of PSPS?
- Liability Issues as a result of PSPS?



**California Public
Utilities Commission**

What Do We Need From PG&E and the CPUC?

- Partnership
- Transparency
- Communication
- Trust

We recognize that this is difficult at best in this climate



*Pacific Gas and
Electric Company®*

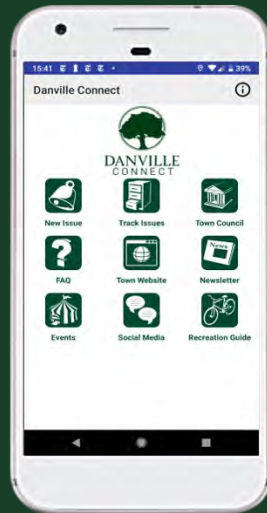
Questions/Comments

Jeffrey Hebel

Town of Danville Emergency Services Manager

jhebel@Danville.ca.gov

Office 925-314-3368





MCE Resiliency Efforts September 18, 2019

MCE Approach

Increased diesel use
from PSPS creates
safety & climate risks

Storage is a key
component of
climate resilience

1. Pursue grants, CEC & CPUC funds and financing to provide solar+storage for our most vulnerable customers (CARE, medical baseline, high risk of PSPS)
2. Pursue grants, CPUC funds & other partnerships to enable community resiliency centers & critical facilities to be less dependent on diesel generators.
3. Explore partnerships with vendors & develop rate design & MCE/ customer benefit sharing programs to enable storage for current solar customers

1. Vulnerable Customers

Potential Collaboration with Green and Healthy Home Initiative (GHHI)

GHHI funds and delivers services and education to create healthy, safe and energy efficient homes.

MCE could leverage GHHI partnerships and SGIP funds to provide storage systems to customers with medical needs at very low or no cost.

2. Critical Facilities

Proposal for a Resiliency Pilot under the Self-Generation Incentive Program (SGIP)

The CPUC recently proposed using \$100 million of SGIP funding for additional energy storage project **incentives for vulnerable households and critical facilities** in Tier 3 high fire threat districts.

MCE is partnering with other CCAs to help our vulnerable customers & critical facilities get access to these funds.

3. Solar Customers

**MCE has ~33,000
NEM customers
(about 7% of
total accounts)**

MCE is exploring opportunities to develop a self-funded storage program for solar customers:

- Benefit-sharing program where MCE can control the customers battery in return for additional incentive payment
- Develop storage tariff to unlock full financial benefits for customers and allow MCE control over storage system
- Develop a list of pre-qualified storage technologies and service providers to facilitate customers' access to storage technologies

Next Steps

Assessment of MCE Energy Storage Strategies & Opportunities

MCE will:

- Identify opportunities and barriers to promote energy storage for MCE customers.
- Explore funding & financing options.
- Create a set of actionable recommendations for developing a cohesive behind-the-meter energy storage strategy that leverages MCE's existing resources.

Next Steps

Hiring Senior Manager for Distributed Energy Resources (DER)

- Newly created Manager of Customer Programs position will oversee MCE's behind the meter DER Strategy
- Will continue developing internal programs as well as coordinate with the policy team on regulatory & legislative initiatives

Future Decision Points

Should MCE dedicate funding in the next fiscal year to support resiliency efforts?

What program elements should MCE prioritize?

Are there any needs or opportunities that we are missing?

Thank You

Vicken Kasarjian
Chief Operating Officer
VKasarjian@mcecleanenergy.org



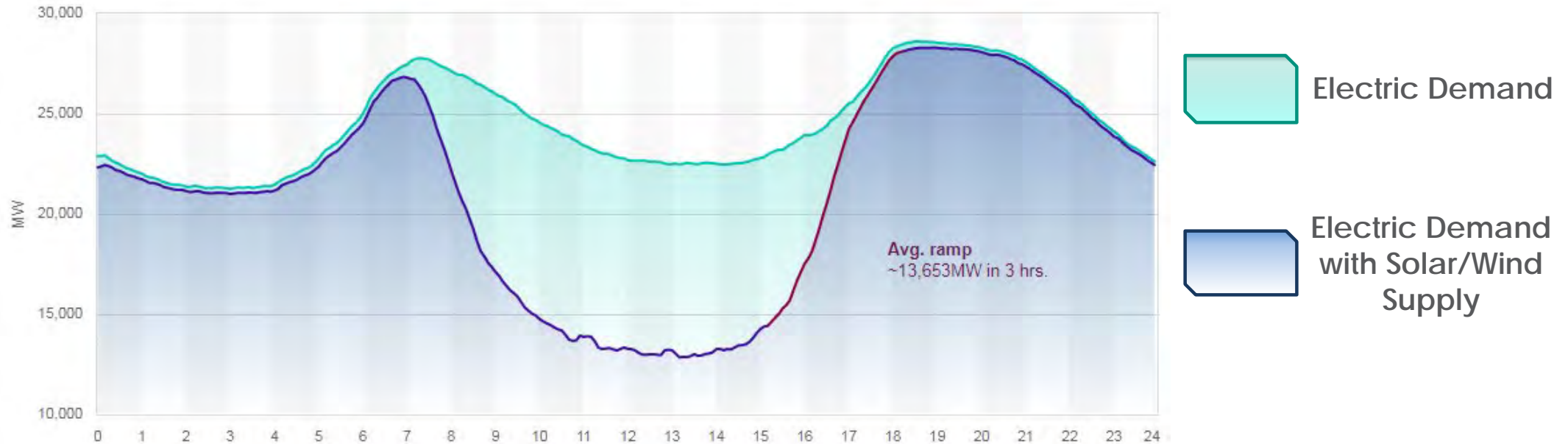


Matching Demand with Supply:

Time of Use Rates for Greater Renewable Integration

September 2019

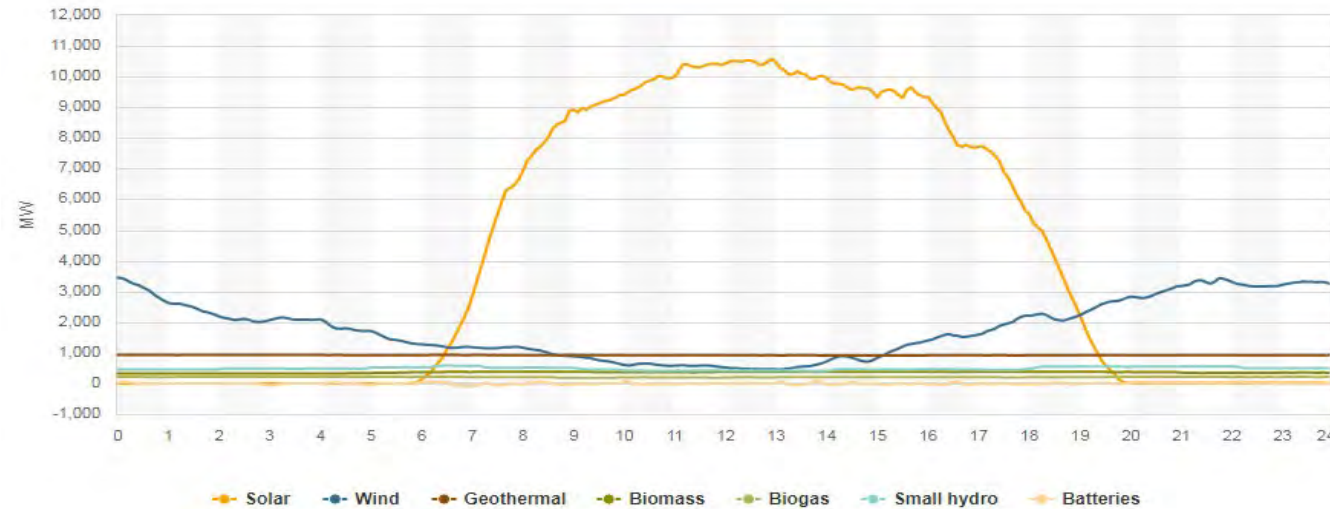
Demand and Supply “Duck Curve”



CAISO system-wide net demand, February 7th 2019 (Source: CAISO Daily Outlook)

- Demand peaks between 4pm-9pm year-round
- Peak demand often must be met through fossil fuel supply
- Reducing peak demand reduces emissions, power costs, & better integrates renewable supply

Supply Curve of Renewables



- MCE's supply is 61% renewable.
- Most of MCE's renewable contracts are long-term: 10-20 years
- Most solar is offline by 5-7pm, depending on the month.
- MCE's high renewable content makes the duck curve even more challenging for MCE's service area.

MCE Response to the Duck Curve

MCE is shifting **supply** shapes through:

- Purchasing hydroelectric power blocks during peak hours
- Balancing solar with wind & biogas purchases

MCE is shifting **demand** shapes through:

- EV workplace charging
- Thermostat-tied demand-shifting program
- 4-9pm time-of-use (TOU) rate changes

New Default Time-Of-Use (TOU) Rates

Under TOU, rates vary based on the current time, day, and/or month

TOU is tied to a statewide effort to move energy away from 4-9pm

89% of MCE residential customers are not currently on TOU

Most MCE households are scheduled for TOU in April 2021

EVERY DAY

MORNING TO MID-DAY:
LOWER PRICE (OFF-PEAK)

5 a.m. to 4 p.m. \$

LATE AFTERNOON TO EVENING:
HIGHER PRICE (PEAK)

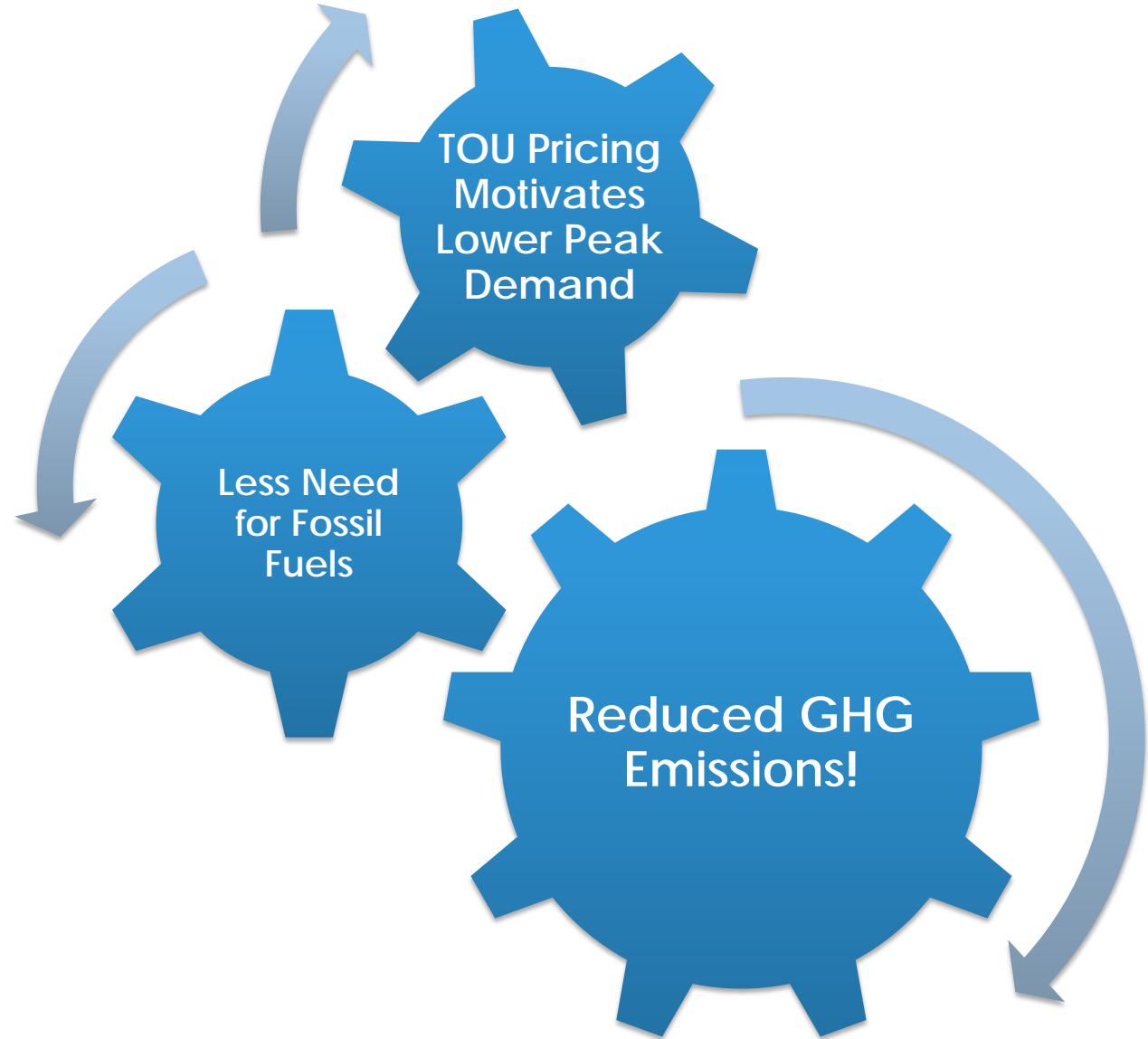
4 p.m. to 9 p.m. \$\$

LATE NIGHT:
LOWER PRICE (OFF-PEAK)

9 p.m. to 5 a.m. \$

Environmental Benefits

Estimated 5,000-10,000 tons of CO₂ reduction annually across PG&E territory from demand shifting



MCE Customer Transition

MCE pilot transition in March 2018 moved 3% of Marin/Napa households to TOU

No increase to opt-outs; transitioned customers were less likely to opt-out

MCE Participation

Current Status	Customer Count	% of Total
Initial Population	9,921	100%
Ineligible	460	4.64%
Declined Transition	1,913	19.28%
Transitioned	7,548	76.08%

PG&E Participation

Current Status	Customer Count	% of Total
Initial Population	106,292	100%
Ineligible	3,319	4.16%
Declined Transition	18,061	22.66%
Transitioned	58,327	73.18%

EVERY DAY

MORNING TO MID-DAY:
LOWER PRICE (OFF-PEAK)

5 a.m. to 4 p.m. \$

LATE AFTERNOON TO EVENING:
HIGHER PRICE (PEAK)

4 p.m. to 9 p.m. \$\$

LATE NIGHT:
LOWER PRICE (OFF-PEAK)

9 p.m. to 5 a.m. \$

What is “Bill Protection”?

- Allows transitioned customers to try TOU “risk-free” for just one year.
- MCE has provided Bill Protection through pilot & will provide for full transition.
- If a customer pays more on TOU, they’re refunded up to 12-months as if they’d stayed on their old rate.

Bill Protection
Example

Old Rate: \$1,500/yr

TOU Rate: \$1,525/yr

\$25 Bill Protection refund
at end of first year

Transition Notifications

TRY TIME-OF-USE RISK-FREE

Notifications designed to highlight “Risk-Free” trial period

Provides comparison of Rate Plans to highlight options

Tells customers how to choose another rate

Starting in March 2018, California's electric customers will begin moving to a Time-of-Use rate plan risk-free to support our ongoing commitment to clean energy.

In March 2018, your electric account is scheduled to transition to the Time-of-Use (Peak Pricing 4-9 p.m. Every Day) rate plan from your current rate plan.

- Receive lower electricity pricing during most of the day.
- Electricity prices will be higher for five hours in the late afternoon and early evening (4-9 p.m.), when demand for electricity is generally higher and the cost is greater, called peak times. Small shifts in energy usage can help you save.
- Try this plan risk-free with automatic Bill Protection for 12 months.
- You can also stay on your current rate plan or choose another rate plan that's right for you at any time if you are not satisfied. Bill Protection will still apply for the time that you were on the Time-of-Use (Peak Pricing 4-9 p.m. Every Day) rate plan.
- See reverse to learn more about this and other rate plans.

Your Personalized Electric Rate Plan Comparison

This report is based on your last 12 months of electricity usage and assumes no change to how you use energy. Estimates do not include gas.

Your Rate Plan Options	Current Rate Plan Tiered (E-1)	Transition Rate Plan Time-of-Use (Peak Pricing 4-9 p.m. Every Day)	Optional Rate Plan Time-of-Use (Peak Pricing 4-9 p.m. Weekdays)
Total Electricity Costs*	\$3,064/year	\$3,164/year	\$3,217/year

* Your lowest cost rate plan is: [NAME]

Make your rate plan choice by March 1, 2018.

Option 1: Take action to stay on your current rate plan or choose a different rate plan. Visit pge.com/TOUchoice or call 1-800-xxx-xxxx.

Option 2: Take no action and automatically transition to the Time-of-Use (Peak Pricing 4-9 p.m. Every Day) rate plan in March 2018.

What the Time-of-Use (Peak Pricing 4-9 p.m. Every Day) rate plan means for you

When you use electricity is as important as **how much** you use.

- Your electric account is scheduled to transition to the Time-of-Use (Peak Pricing 4-9 p.m. Every Day) rate plan, **risk-free**, in March 2018 from your current rate plan.
- You will receive lower electricity pricing during most of the day, when energy demand is lower.
- Electricity prices will be higher for five hours every day in the late afternoon and evening (4-9 p.m.) when demand for electricity is generally higher.
- If you can make small energy use changes, like running the dishwasher or doing laundry during lower-priced times of day, you may be able to benefit from a Time-of-Use rate plan. Learn more ways to save energy at pge.com/saveenergy.

YOU CHOOSE ANOTHER RATE PLAN (AT ANY TIME)

Future Decision Points

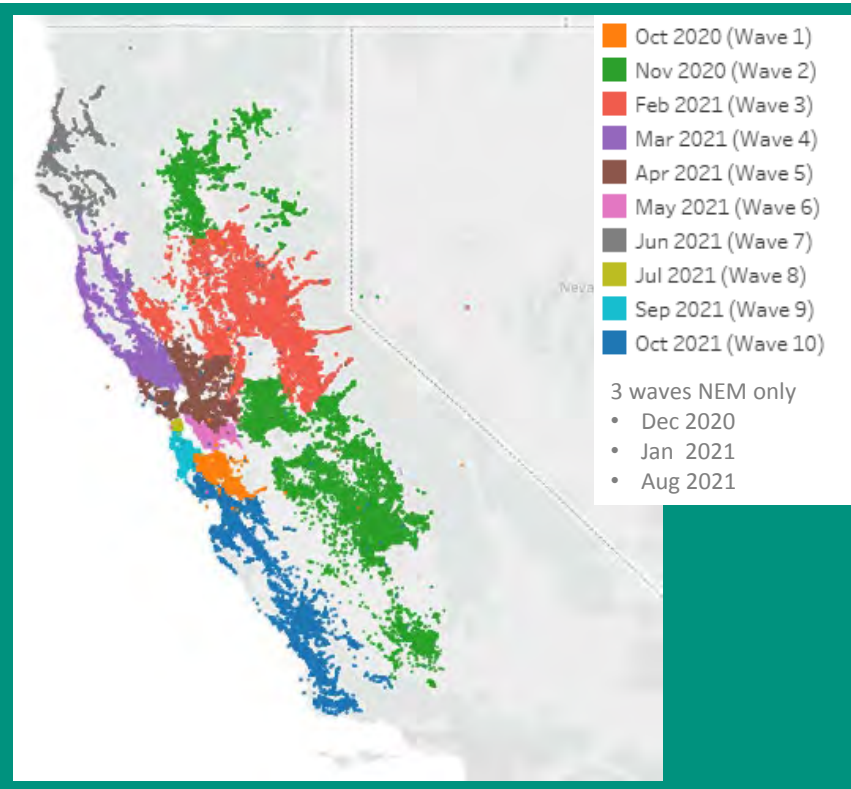
- What other strategies should MCE use to better align supply and demand?
- Do time of use rates effectively shift load?
- Should MCE's future budget incorporate new supply products and/or new demand shifting programs?

Thank You!



Additional Slides

PG&E's Regional TOU Transition Plan



Counties	Service Provider Territory Included	Totals
Oct 2020 (Wave 1)		394,836
Santa Clara	San Jose Clean Energy (SJCE)	227,998
	Silicon Valley Clean Energy (SVCE)	166,838
Nov 2020 (Wave 2)		200,876
Fresno, San Joaquin, Kern, Tuolumne, Shasta, Madera, Merced, Tehama, Plumas, Stanislaus, Mariposa, Kings, Tulare, Lassen	PG&E Bundled	200,876
Feb 2021 (Wave 3)		181,459
Placer, El Dorado, Yolo, Butte, Nevada, Calaveras, Lake, Amador, Sutter, Yuba, Glenn, Colusa, Sacramento, Sierra, Alpine	PG&E Bundled	118,183
	Pioneer Community Energy (PIO)	43,125
	Valley Clean Energy (VCE)	20,151
Mar 2021 (Wave 4)		136,031
Sonoma, Mendocino	Sonoma Clean Power	136,031
Apr 2021 (Wave 5)		409,382
Contra Costa, Solano, Marin, Napa	MCE	307,341
	PG&E Bundled	102,041
May 2021 (Wave 6)		398,624
Alameda	East Bay Community Energy (EBCE)	369,913
	PG&E Bundled	28,711
Jun 2021 (Wave 7)		38,695
Humboldt, Trinity, Siskiyou	Redwood Coast Energy Authority (RCEA)	37,842
	PG&E Bundled	853
Jul 2021 (Wave 8)		261,529
San Francisco	CleanPowerSF (CPSF)	261,529
Sept 2021 (Wave 9)		200,182
San Mateo	Peninsula Clean Energy (PCE)	200,182
Oct 2021 (Wave 10)		262,936
Monterey, Santa Cruz, San Luis Obispo, Santa Barbara, San Benito	Monterey Bay Community Power (MBCP)	169,088
	PG&E Bundled	91,578
	King City Community Power	2,270

“A statewide campaign that will be high-level, emotion-based, and provide Californians with the context for the changing rate structure and a vision to rally around.”



Statewide Campaign – Keep It Golden

MCE Accomplishments and Goals

Administrative Services



Justine Parmelee, Manager of Administrative Services
September 18, 2019



Gold Standard Service

Providing **quality**
and **responsive**
support to teams,
staff, and members
of the public



Streamlining Processes

Implemented the Expensify platform across the agency

- **Saves 8 hours** of administrative staff time per month
- Staff are reimbursed on average **one week faster**

Project and task management streamlined with Asana

- Over 16,000 tasks generated by staff since January

Improved emergency communications

- Instantaneous notification with CrisisGo
- Two-way messaging for safety and security



Cohesive Conferencing

- 360° cameras
- Hangouts
- Calendar integration



Sustainability in the Office

- Over **90%** of internal purchases meet environmental purchasing standards
- Bay Area Green Business Certified
 - Greater than 80% of measures met
- Preliminary Energy Star rating of **93/100**

First Agency-Owned Vehicle



MCE: Leading the (Solar) Charge



Future Plans and Goals

- Increase public charging at MCE Solar Charge
- Pursue Energy Star rating for San Rafael office
- Promote responsible stewardship of office resources
- Maintain gold standard administrative service & support

Thank You

Justine Parmelee
Manager of Administrative Services





MCE Accomplishments and Goals

Human Resources

Shaheen Khan, Director of Human Resources, Diversity and Inclusion
September 18, 2019

Key Accomplishments – Overview

Director of
Human
Resources,
Diversity, and
Inclusion

- Deepen expertise
- Create HR strategy for agency

Human Resources
Information
System (HRIS)

- Software that supports HR efficiency and increases accuracy
- Streamlines key HR functions

Employee
Benefits

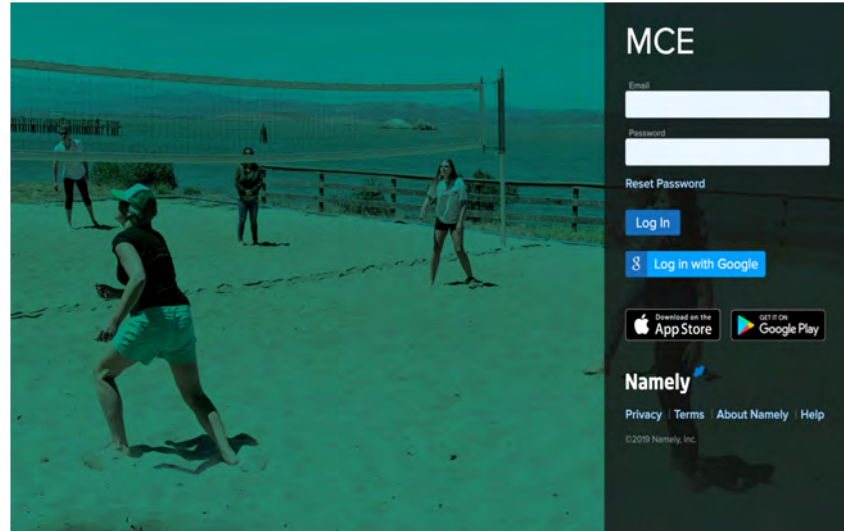
- 100% coverage of medical, dental, and vision for employees and their dependents
- Increased commuter benefits

Human Resources at MCE

- HR strategic support and employee relations
- Recruiting, onboarding, and retention
- Talent development and coaching
- Performance management
- Payroll and benefits administration
- Compensation

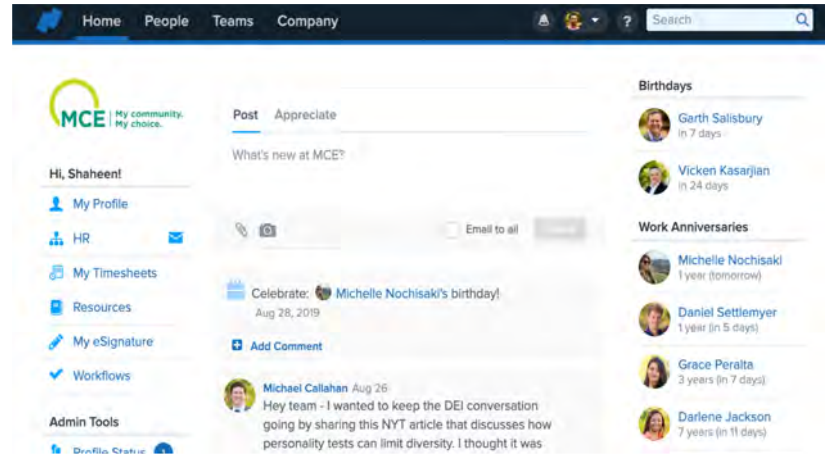
Namely – Creating Efficiency and Accuracy

- Cloud-based HRIS system
 - Access it anywhere
- Employee self-service
 - Request time off, enter timesheet information, managers approve time requests, view vacation/sick balances, view pay stubs, etc.
- Onboarding
 - New hires complete all onboarding information online: personal information, W2, I9, direct deposit information, complete benefits enrollment, etc.
- Payroll
 - Hours collected on timesheets through Namely directly integrate into payroll
 - HR changes made in Namely, ex. salary changes, directly integrate into payroll creating **efficiency, consistency and accuracy.**



Namely – Creating Efficiency and Accuracy

- Benefits Administration
 - View benefits elections online at any time
- Benefits Open Enrollment
 - Automated and streamlined process of making benefit elections online and those elections are then processed with carriers electronically
- Reporting and Analytics
 - Advanced reporting and analytics on tenure, salary, EEOC, etc. as all staff information is in one information system



Enhancing MCE's Benefits Structure

Commuter Benefit

- Increased benefit to the IRS max of \$265 per month for public transport or EV charging; or \$20 per month bicycle reimbursement for the purchase of a new bicycle or bicycle improvements, repair, and storage.



Benefits:

- Created efficiency through self-administration and increased flexibility of the reimbursement to be used towards multiple commuting options (ex. bart, carpool/vanpool, EV charging, etc.)



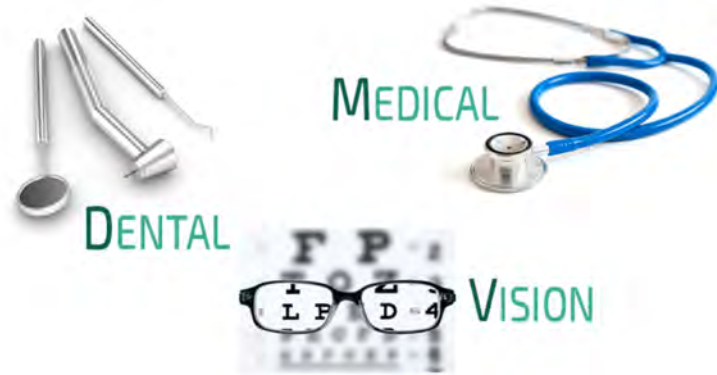
Enhancing MCE's Benefits Structure

100% employer paid medical, dental and vision

- Replaced employer stipend with 100% employer paid medical, dental and vision for staff and their dependents
- Created efficiency with elimination of manual calculation of the stipend

Enhancement of MCE's Benefits

- Great retention tool for existing staff and these enhancements make MCE a more competitive employer to attract talent.



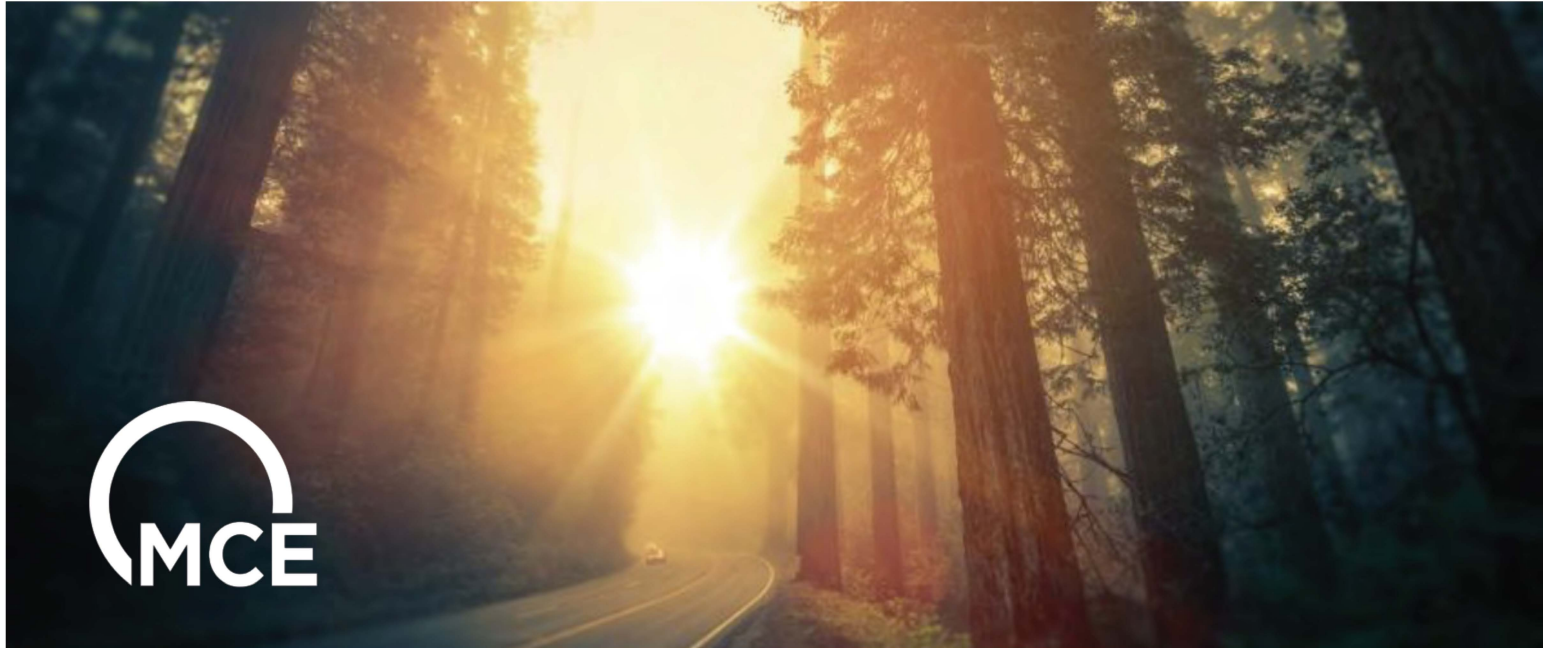
Future Plans and Goals:

- **Diversity, Equity and Inclusion (DEI)**
 - Introduced DEI at MCE with four workshops reflecting on our internal functioning and our external work in relation to DEI.
 - These workshops provided “awareness” training to support future pathways to embed DEI within our internal and external agency work with the communities we serve.
- **Performance Management System**
 - Implement adjustments to a new cloud-based performance management system, Lattice, to automate and streamline annual reviews based on industry practices.
- **Compensation: Salary Levels and Ranges**
 - Implement adjustments to a new compensation structure focusing on broad banded salary levels and ranges which better reflect industry practices.



Thank You

Shaheen Khan
Director of Human Resources, Diversity
and Inclusion





FINANCIAL STATEMENTS

Years Ended March 31, 2019 & 2018
with Report of Independent Auditors



MCECLEANENERGY.ORG

MARIN CLEAN ENERGY
YEARS ENDED MARCH 31, 2019 AND 2018

TABLE OF CONTENTS

Independent Auditors' Report	1
Management's Discussion and Analysis	3
Basic Financial Statements:	
Statements of Net Position	10
Statements of Revenues, Expenses and Changes in Net Position	11
Statements of Cash Flows	12
Notes to the Basic Financial Statements	14



INDEPENDENT AUDITORS' REPORT

To the Board of Directors
Marin Clean Energy
San Rafael, California

We have audited the accompanying financial statements of Marin Clean Energy, as of and for the years ended March 31, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the Marin Clean Energy's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Marin Clean Energy's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Marin Clean Energy's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Marin Clean Energy as of March 31, 2019, and 2018, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis as listed in the table of contents be presented to supplement the financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Baker Tilly Virchow Krause, LLP

Madison, Wisconsin
August 1, 2019

MARIN CLEAN ENERGY

MANAGEMENT'S DISCUSSION AND ANALYSIS YEARS ENDED MARCH 31, 2019 AND 2018

The Management's Discussion and Analysis provides an overview of Marin Clean Energy's (MCE) financial activities as of and for the years ended March 31, 2019 and 2018. The information presented here should be considered in conjunction with the audited financial statements.

BACKGROUND

The formation of MCE was made possible by the passage, in 2002, of California Assembly Bill 117, enabling communities to purchase power on behalf of their residents and businesses and creating competition in power generation.

MCE was created as a California Joint Powers Authority (JPA) on December 19, 2008. MCE was established to provide electric power and related benefits within MCE's service area, including developing a wide range of renewable energy sources and energy efficiency programs. Governed by an appointed board of directors, MCE has the rights and powers to set rates and charges for electricity and services it furnishes, incur indebtedness, and issue bonds or other obligations. MCE is responsible for the acquisition of electric power for its service area.

Financial Reporting

MCE presents its financial statements as enterprise fund under the economic resources measurement focus and accrual basis of accounting, in accordance with Generally Accepted Accounting Principles (GAAP) for proprietary funds, as prescribed by the Governmental Accounting Standards Board (GASB).

**MARIN CLEAN ENERGY
MANAGEMENT'S DISCUSSION AND ANALYSIS
YEARS ENDED MARCH 31, 2019 AND 2018**

(Continued)

Contents of this Report

This report is divided into the following sections:

- Management discussion and analysis.
- The Basic Financial Statements:
 - The *Statements of Net Position* include all of MCE's assets, liabilities, and net position and provides information about the nature and amount of resources and obligations at a specific point in time.
 - The *Statements of Revenues, Expenses, and Changes in Net Position* report all of MCE's revenue and expenses for the years shown.
 - The *Statements of Cash Flows* report the cash provided and used by operating activities, as well as other sources and uses, such as capital asset acquisitions and investments.
 - Notes to the Basic Financial Statements, which provide additional details and information related to the basic financial statements.

MARIN CLEAN ENERGY
MANAGEMENT'S DISCUSSION AND ANALYSIS
YEARS ENDED MARCH 31, 2019 AND 2018

(Continued)

FINANCIAL HIGHLIGHTS

The following table is a summary of MCE's assets, liabilities, and net position as of March 31:

	2019	2018	2017
Current assets	\$ 127,633,995	\$ 64,627,008	\$ 64,768,633
Noncurrent assets			
Capital assets, net	1,127,966	667,482	571,666
Other noncurrent assets	2,840,511	2,804,092	3,032,573
Total noncurrent assets	3,968,477	3,471,574	3,604,239
Total assets	131,602,472	68,098,582	68,372,872
Current liabilities	39,994,907	17,367,279	23,713,155
Noncurrent liabilities	30,950	-	-
Total liabilities	40,025,857	17,367,279	23,713,155
Net position:			
Investment in capital assets	1,127,966	667,482	571,666
Restricted	2,500,000	2,500,000	2,759,721
Unrestricted	87,948,649	47,563,821	41,328,330
Total net position	\$ 91,576,615	\$ 50,731,303	\$ 44,659,717

Current assets

2019 compared to 2018 Current assets were approximately \$127,600,000 at the end of 2019 and are mostly comprised of \$60,789,000 in cash, \$27,525,000 in accounts receivable, \$11,961,000 in accrued revenue, and \$10,000,000 in investments, each of which mark an increase from 2018 to 2019. The most notable increase was in cash, the result of operating surpluses. Accounts receivable and accrued revenue experienced moderate increases mostly attributable to territory expansion. Accrued revenue differs from accounts receivable in that it is the result of electricity use by MCE customers before invoicing to those customers has occurred.

MARIN CLEAN ENERGY
MANAGEMENT'S DISCUSSION AND ANALYSIS
YEARS ENDED MARCH 31, 2019 AND 2018

(Continued)

Capital assets

2019 compared to 2018 Capital assets are reported net of depreciation. From 2018 to 2019 the increase is mostly due to leasehold improvements at MCE's offices. Capital assets held by MCE are comprised of leasehold improvements, furniture and equipment. MCE does not own assets used for electric generation or distribution.

Current liabilities

2019 compared to 2018 Current liabilities consist mostly of the cost of electricity delivered to customers that is not yet due to be paid by MCE. Current liabilities increased from \$17,367,000 in 2018 to \$39,995,000 in 2019, mostly due to cost of energy related to territory expansions. Other components include trade accounts payable, taxes and surcharges due to governments, advance from grantors, and various other accrued liabilities.

2018 compared to 2017 The most notable change related to a reduction in accrued cost of electricity which decreased from \$18,500,000 to \$9,700,000. Accrued cost of electricity decreased due to a shortening of payment terms with certain energy suppliers.

The following table is a summary of MCE's results of operations:

	2019	2018	2017
Operating revenues	\$ 362,292,027	\$ 205,752,830	\$ 181,166,489
Interest income	943,712	325,492	105,271
Total income	<u>363,235,739</u>	<u>206,078,322</u>	<u>181,271,760</u>
Operating expenses	322,343,205	199,966,736	166,110,598
Interest and related expenses	47,222	40,000	32,515
Total expenses	<u>322,390,427</u>	<u>200,006,736</u>	<u>166,143,113</u>
Change in net position	<u>\$ 40,845,312</u>	<u>\$ 6,071,586</u>	<u>\$ 15,128,647</u>

**MARIN CLEAN ENERGY
MANAGEMENT'S DISCUSSION AND ANALYSIS
YEARS ENDED MARCH 31, 2019 AND 2018**

(Continued)

Operating revenues

2019 compared to 2018 Operating revenues increased \$156,539,000 from 2018 to 2019. This increase was primarily driven by electricity sales from the inclusion of new communities beginning in April 2018. This expansion covered unincorporated Contra Costa county, as well as several cities and towns of Concord, Martinez, Oakley, Pinole, Pittsburg, San Ramon, Danville and Moraga. This expansion resulted in an approximate 80% increase in the number of customers across various rate types. Wholesale resource sales also increased from 2018 as MCE sold excess energy products that were not needed to provide for its retail customer base.

2018 compared to 2017 Operating revenues increased as a result of the full year impact of the inclusion of new communities in September 2016.

Operating expenses

2019 compared to 2018 Operating expenses increased \$122,376,000 from 2018 to 2019. The expansion in April 2018 resulted in increased energy purchases to provide for the new customer base. As in the past, energy costs greatly exceed all other operating expenses, accounting for approximately 93% of total operating expenses. In addition to procuring for more customers, energy costs were affected by increased pricing for certain products in the energy market. MCE procures energy from a variety of sources to minimize this risk and maintain a balanced renewable energy portfolio.

2018 compared to 2017 Operating expenses increased as a result of the full year impact of the inclusion of new communities in September 2016.

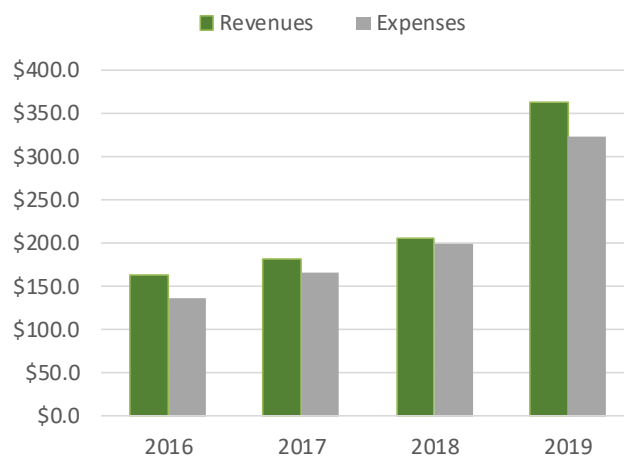
MARIN CLEAN ENERGY
MANAGEMENT'S DISCUSSION AND ANALYSIS
YEARS ENDED MARCH 31, 2019 AND 2018

(Continued)

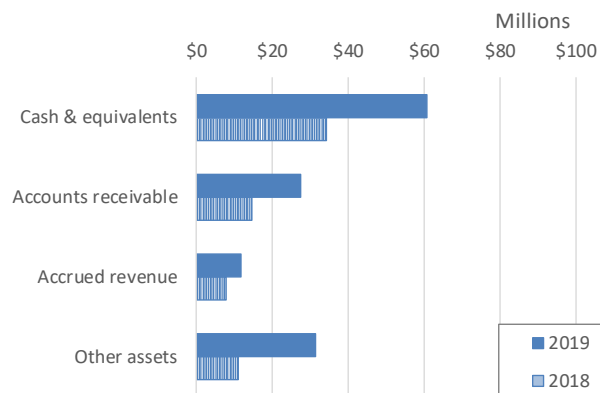
FINANCIAL SUMMARY

REVENUE & EXPENSE TREND

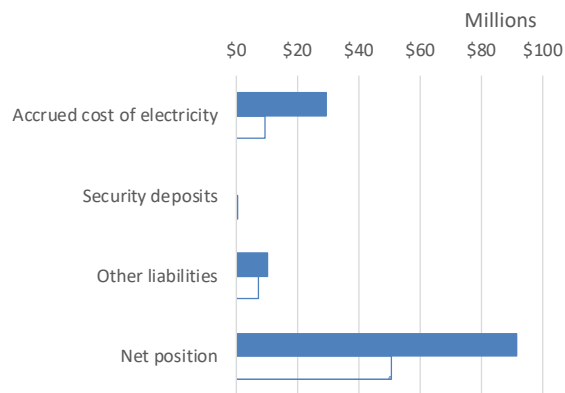
FISCAL YEARS ENDED MARCH 31



ASSETS



LIABILITIES AND NET POSITION



Assets	2019	2018
Cash & equivalents	\$60.8	\$34.4
Accounts receivable	27.5	14.8
Accrued revenue	12.0	7.8
Other assets	31.3	11.0
Total Assets	\$131.6	\$68.1

Liabilities & net position	2019	2018
Accrued cost of electricity	\$29.7	\$9.7
Security deposits	0.0	0.2
Other liabilities	10.3	7.5
Net position	91.6	50.7
Total liabilities & net position	\$131.6	\$68.1

**MARIN CLEAN ENERGY
MANAGEMENT'S DISCUSSION AND ANALYSIS
YEARS ENDED MARCH 31, 2019 AND 2018**

(Continued)

ECONOMIC OUTLOOK

In the normal course of business, MCE enters into various agreements, including renewable energy agreements and other power purchase agreements to purchase power and electric capacity. MCE enters into power purchase agreements in order to comply with state law and elevated voluntary targets for renewable and greenhouse gas (GHG) free products as described in its Integrated Resource Plans. California law established a Renewable Portfolio Standard (RPS) that requires load-serving entities, such as MCE, to gradually increase the amount of renewable energy they deliver to their customers. In October 2015, the California Governor signed SB 350, the Clean Energy and Pollution Reduction Act of 2015 into law. SB 350 became effective January 1, 2016, and increases the amount of renewable energy that must be delivered by most load-serving entities, including MCE, to their customers from 33% of their total annual retail sales by the end of the 2017-2020 compliance period, to 50% of their total annual retail sales by the end of the 2028-2030 compliance period, and in each three-year compliance period thereafter, unless changed by legislative action. SB 350 provides compliance flexibility and waiver mechanisms, including increased flexibility to apply excess renewable energy procurement in one compliance period to future compliance periods. Beginning January 1, 2021, at least 65 percent of the procurement a retail seller, such as MCE, counts toward the Renewables Portfolio Standard requirement of each compliance period shall be from its contracts of ten years or more in duration. As of March 31, 2019, MCE was in compliance with the 2030 requirements of SB 350.

MCE enters into long term purchase agreements to bring new solar, wind and other renewable energy generating facilities on-line, to meet its regulatory and voluntary RPS and GHG free targets and to accomplish its mission of providing renewable energy and reducing greenhouse gas emissions while ensuring retail rate stability by managing exposure to wholesale spot market prices.

MCE manages risks associated with these commitments by aligning purchase commitments with expected demand for electricity and by securing a diversity of technologies, geographical locations, and suppliers. Expected obligations under power purchase agreements totaled approximately \$2.27 billion as of March 31, 2018 and \$2.23 billion as of March 31, 2019.

Management intends to continue its conservative use of financial resources and expects ongoing operating surpluses.

REQUEST FOR INFORMATION

This financial report is designed to provide MCE's board members, stakeholders, customers and creditors with a general overview of the MCE's finances and to demonstrate MCE's accountability for the funds under its stewardship.

Please address any questions about this report or requests for additional financial information to the Director of Finance, 1125 Tamalpais Avenue, San Rafael, CA 94901.

BASIC FINANCIAL STATEMENTS

MARIN CLEAN ENERGY

STATEMENTS OF NET POSITION

MARCH 31, 2019 AND 2018

	<u>2019</u>	<u>2018</u>
ASSETS		
Current assets		
Cash and cash equivalents	\$ 60,789,071	\$ 34,384,786
Accounts receivable, net of allowance	27,525,151	14,832,001
Market settlements receivable	5,828,255	537,886
Other receivables	3,422,518	2,694,054
Accrued revenue	11,960,984	7,843,219
Prepaid expenses	1,465,199	1,560,486
Investments	10,000,000	-
Deposits and other current assets	6,642,817	2,774,576
Total current assets	<u>127,633,995</u>	<u>64,627,008</u>
Noncurrent assets		
Restricted cash	2,500,000	2,500,000
Capital assets, net of depreciation	1,127,966	667,482
Deposits and other noncurrent assets	340,511	304,092
Total noncurrent assets	<u>3,968,477</u>	<u>3,471,574</u>
Total assets	<u>131,602,472</u>	<u>68,098,582</u>
LIABILITIES		
Current liabilities		
Accounts payable	1,807,129	966,325
Accrued cost of electricity	29,693,302	9,671,410
Other accrued liabilities	894,468	499,074
Security deposits - energy suppliers	-	240,000
User taxes and energy surcharges due to other governments	1,237,879	959,150
Advances from grantors	6,362,129	5,031,320
Total current liabilities	<u>39,994,907</u>	<u>17,367,279</u>
Noncurrent liabilities		
Contract retention	30,950	-
Total liabilities	<u>40,025,857</u>	<u>17,367,279</u>
NET POSITION		
Net position		
Investment in capital assets	1,127,966	667,482
Restricted for line of credit collateral	2,500,000	2,500,000
Unrestricted	87,948,649	47,563,821
Total net position	<u>\$ 91,576,615</u>	<u>\$ 50,731,303</u>

MARIN CLEAN ENERGY**STATEMENTS OF REVENUES, EXPENSES
AND CHANGES IN NET POSITION****YEARS ENDED MARCH 31, 2019 AND 2018**

	2019	2018
OPERATING REVENUES		
Electricity sales, net	\$ 353,959,271	\$ 201,504,304
Wholesale resource sales	5,399,080	2,502,500
Grant revenue	2,285,626	1,596,484
Other revenue	648,050	149,542
Total operating revenues	<u>362,292,027</u>	<u>205,752,830</u>
OPERATING EXPENSES		
Cost of electricity	299,406,063	183,685,864
Contract services	12,126,677	8,109,126
Staff compensation	7,904,309	5,922,510
General and administration	2,716,666	2,135,567
Depreciation	189,490	113,669
Total operating expenses	<u>322,343,205</u>	<u>199,966,736</u>
Operating income	<u>39,948,822</u>	<u>5,786,094</u>
NONOPERATING REVENUES (EXPENSES)		
Interest income	943,712	325,492
Loan fee expense	(47,222)	(40,000)
Total nonoperating revenues (expenses)	<u>896,490</u>	<u>285,492</u>
CHANGE IN NET POSITION	40,845,312	6,071,586
Net position at beginning of year	<u>50,731,303</u>	<u>44,659,717</u>
Net position at end of year	<u><u>\$ 91,576,615</u></u>	<u><u>\$ 50,731,303</u></u>

MARIN CLEAN ENERGY**STATEMENTS OF CASH FLOWS****YEARS ENDED MARCH 31, 2019 AND 2018**

	2019	2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from customers	\$ 346,828,777	\$ 206,698,303
Receipts from market settlements	12,977,257	28,235,692
Receipts from grantors	3,881,097	3,590,609
Other operating receipts	604,144	541,222
Payments to suppliers for electricity	(301,509,357)	(222,088,934)
Payments to suppliers for other goods and services	(13,966,296)	(10,163,163)
Payments to employees for services	(7,706,516)	(5,880,190)
Other operating payments	(4,969,458)	(4,175,609)
Net cash provided (used) by operating activities	<u>36,139,648</u>	<u>(3,242,070)</u>
CASH FLOWS FROM NON-CAPITAL FINANCING ACTIVITIES		
Loan fee expense	<u>(34,722)</u>	<u>(40,000)</u>
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES		
Receipts from sale of nondepreciable assets	-	688,031
Payments to acquire nondepreciable assets	-	(22,066)
Payments to acquire capital assets	(544,123)	(241,460)
Net cash provided (used) by capital and related financing activities	<u>(544,123)</u>	<u>424,505</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Payments for certificates of deposit	(10,000,000)	-
Interest received	843,482	326,635
Net cash provided (used) by investing activities	<u>(9,156,518)</u>	<u>326,635</u>
Net change in cash and cash equivalents	26,404,285	(2,530,930)
Cash and cash equivalents at beginning of year	36,884,786	39,415,716
Cash and cash equivalents at end of year	<u><u>\$ 63,289,071</u></u>	<u><u>\$ 36,884,786</u></u>
Reconciliation to the Statement of Net Position		
Cash and cash equivalents (unrestricted)	\$ 60,789,071	\$ 34,384,786
Restricted cash	2,500,000	2,500,000
Cash and cash equivalents	<u><u>\$ 63,289,071</u></u>	<u><u>\$ 36,884,786</u></u>

MARIN CLEAN ENERGY**STATEMENTS OF CASH FLOWS
(CONTINUED)****YEARS ENDED MARCH 31, 2019 AND 2018****RECONCILIATION OF OPERATING INCOME TO NET
CASH PROVIDED (USED) BY OPERATING ACTIVITIES**

	2019	2018
Operating income	\$ 39,948,822	\$ 5,786,094
Adjustments to reconcile operating income to net cash provided (used) by operating activities		
Depreciation expense	189,490	113,669
Revenue adjusted for allowance for uncollectible accounts	2,477,987	(2,122,000)
(Increase) decrease in:		
Accounts receivable	(15,171,137)	3,030,297
Energy market settlements receivable	(5,290,369)	1,156,863
Other receivables	(628,234)	(2,448,434)
Accrued revenue	(4,117,765)	95,621
Prepaid expenses	95,286	(620,145)
Other assets and deposits	(3,956,190)	(1,973,604)
Damages	(240,000)	-
Increase (decrease) in:		
Accounts payable	773,984	345,970
Accrued cost of electricity	20,021,892	(8,805,949)
Other accrued liabilities	426,344	(46,974)
Security deposits from energy suppliers	-	240,000
User taxes due to other governments	278,729	(942)
Advances from grantor	1,330,809	2,007,464
Net cash provided (used) by operating activities	<u>\$ 36,139,648</u>	<u>\$ (3,242,070)</u>

MARIN CLEAN ENERGY**NOTES TO THE BASIC FINANCIAL STATEMENTS****YEARS ENDED MARCH 31, 2019 AND 2018****1. REPORTING ENTITY**

Marin Clean Energy (MCE) is a California joint powers authority created on December 19, 2008. As of March 31, 2019, parties to its Joint Powers Agreement consist of the following local governments:

Counties		Cities	Towns
Contra Costa	Belvedere	Oakley	Corte Madera
Marin	Benicia	Pinole	Danville
Napa	Concord	Pittsburg	Fairfax
Solano	El Cerrito	Richmond	Moraga
	Lafayette	San Pablo	Ross
	Larkspur	San Rafael	San Anselmo
	Martinez	San Ramon	Tiburon
	Mill Valley	Sausalito	
	Novato	Walnut Creek	

MCE is separate from and derives no financial support from its members. MCE is governed by a Board of Directors whose membership is composed of elected officials representing one or more of the parties.

MCE's mission is to address climate change by reducing energy related greenhouse gas emissions through renewable energy supply and energy efficiency at stable and competitive rates for customers while providing local economic and workforce benefits. MCE provides electric service to retail customers as a Community Choice Aggregation Program under the California Public Utilities Code Section 366.2.

Electricity is acquired from commercial suppliers and delivered through existing physical infrastructure and equipment managed by Pacific Gas and Electric Company. MCE administers energy efficiency programs which supports the development, coordination and implementation of energy efficiency programs in and around MCE's service area. The energy efficiency programs are supported by rate-payer funds regulated by the California Public Utilities Commission.

MARIN CLEAN ENERGY

NOTES TO THE BASIC FINANCIAL STATEMENTS

YEARS ENDED MARCH 31, 2019 AND 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

BASIS OF ACCOUNTING

MCE's financial statements are prepared in accordance with generally accepted accounting principles (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements.

MCE's operations are accounted for as a governmental enterprise fund and are reported using the economic resources measurement focus and the accrual basis of accounting – similar to business enterprises. Accordingly, revenues are recognized when they are earned, and expenses are recognized at the time liabilities are incurred. Enterprise fund type operating statements present increases (revenues) and decreases (expenses) in total net position. Reported net position is segregated into three categories – investment in capital assets, restricted, and unrestricted.

When both restricted and unrestricted resources are available for use, it is MCE's policy to use restricted resources first, then unrestricted resources as they are needed.

CASH AND CASH EQUIVALENTS

For purpose of the Statements of Cash Flows, MCE defines cash and cash equivalents to include cash on hand, demand deposits, and short-term investments with an original maturity of three months or less. For the purpose of the Statement of Net Position, restricted cash balances are presented separately.

CAPITAL ASSETS AND DEPRECIATION

MCE's policy is to capitalize furniture and equipment valued over \$500 that is expected to be in service for over one year. Depreciation is computed according to the straight-line method over estimated useful lives of three years for electronic equipment and seven years for furniture. Leasehold improvements are depreciated over 10 years.

MARIN CLEAN ENERGY

NOTES TO THE BASIC FINANCIAL STATEMENTS

YEARS ENDED MARCH 31, 2019 AND 2018

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

NET POSITION

Net position is presented in the following components:

Investment in capital assets: This component of net position consists of capital assets, net of accumulated depreciation and reduced by outstanding borrowings that are attributable to the acquisition, construction, or improvement of those assets. MCE did not have any outstanding borrowings as of March 31, 2019 and 2018

Restricted: This component of net position consists of constraints placed on net asset use through external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.

Unrestricted: This component of net position consists of net position that does not meet the definition of “investment in capital assets” or “restricted”.

OPERATING AND NON-OPERATING REVENUE

Operating revenues include revenue derived from the provision of energy to retail and wholesale customers, grant revenue earned from the delivery of program activities, and penalties from suppliers that fail to meet delivery commitments.

Interest income is considered “non-operating revenue”.

MARIN CLEAN ENERGY**NOTES TO THE BASIC FINANCIAL STATEMENTS****YEARS ENDED MARCH 31, 2019 AND 2018****2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)****REVENUE RECOGNITION**

MCE recognizes revenue on the accrual basis. This includes invoices issued to customers during the reporting period and electricity estimated to have been delivered but not yet billed. Management estimates that a portion of the billed amounts will be uncollectible. Accordingly, an allowance for uncollectible accounts has been recorded.

ELECTRICAL POWER PURCHASED

During the normal course of business MCE purchases electrical power from numerous suppliers. Electricity costs include the cost of energy and capacity arising from bilateral contracts with energy suppliers as well as generation credits, and load and other charges arising from MCE's participation in the California Independent System Operator's centralized market. The cost of electricity and capacity is recognized as "Cost of Electricity" in the Statements of Revenues, Expenses and Changes in Net Position.

To comply with the State of California's Renewable Portfolio Standards (RPS) and self-imposed benchmarks, MCE acquires RPS eligible renewable energy evidenced by Renewable Energy Certificates (Certificates) recognized by the Western Renewable Energy Generation Information System (WREGIS). MCE obtains Certificates with the intent to retire them and does not sell or build surpluses of Certificates with a profit motive. An expense is recognized at the point that the cost of the Certificate is due and payable to the supplier. MCE purchases capacity commitments from qualifying generators to comply with the California Energy Commission's Resource Adequacy Program. The goals of the Resource Adequacy Program are to provide sufficient resources to the California Independent System Operator to ensure the safe and reliable operation of the grid in real time and to provide appropriate incentives for the siting and construction of new resources needed for reliability in the future. MCE is in compliance with external mandates and self-imposed benchmarks.

MARIN CLEAN ENERGY**NOTES TO THE BASIC FINANCIAL STATEMENTS****YEARS ENDED MARCH 31, 2019 AND 2018****2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)****STAFFING COSTS**

MCE pays employees semi-monthly and fully pays its obligation for health benefits and contributions to its defined contribution retirement plan each month. MCE is not obligated to provide post-employment healthcare or other fringe benefits and, accordingly, no related liability is recorded in these financial statements. MCE provides compensated time off, and the related liability is recorded in these financial statements.

INCOME TAXES

MCE is a joint powers authority under the provision of the California Government Code and is not subject to federal or state income or franchise taxes.

ESTIMATES

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

RECLASSIFICATIONS

Certain amounts in the prior-year financial statements have been reclassified for comparative purposes to conform to the presentation of the current-year financial statements.

3. CASH AND CASH EQUIVALENTS

MCE maintains its cash in both interest-bearing and non-interest-bearing demand and term deposit accounts at River City Bank of Sacramento, California. MCE's deposits with River City Bank are subject to California Government Code Section 16521 which requires that River City Bank collateralize public funds in excess of the Federal Deposit Insurance Corporation limit of \$250,000 by 110%. MCE monitors its risk exposure to River City Bank on an ongoing basis. MCE's Investment Policy permits the investment of funds in depository accounts, certificates of deposit, the Local Agency Investment Fund (LAIF) program operated by the California State Treasury, United States Treasury obligations, Federal Agency Securities, Bankers' Acceptances, Placement Service Deposits, Money Market Funds and Commercial Paper.

MARIN CLEAN ENERGY**NOTES TO THE BASIC FINANCIAL STATEMENTS****YEARS ENDED MARCH 31, 2019 AND 2018****4. ACCOUNTS RECEIVABLE**

Accounts receivable were as follows:

	2019	2018
Accounts receivable from customers	\$ 32,093,138	\$ 16,922,001
Allowance for uncollectible accounts	(4,567,987)	(2,090,000)
Net accounts receivable	<u>\$ 27,525,151</u>	<u>\$ 14,832,001</u>

The majority of account collections occur within the first few months following customer invoicing. MCE estimates that a portion of the billed accounts will not be collected. MCE continues collection efforts on accounts in excess of *de minimis* balances regardless of the age of the account. Although collection success generally decreases with the age of the receivable, MCE continues to have success collecting older accounts. The allowance for uncollectible accounts at the end of a period includes amounts billed during the current and prior fiscal years.

5. MARKET SETTLEMENTS RECEIVABLE

MCE receives generation scheduling and other services from a registered, California Independent System Operator (CAISO) scheduling coordinator. Market settlements due from the scheduling coordinator were \$5,828,000 and \$538,000 as of March 31, 2019 and 2018, respectively.

6. INVESTMENTS

During 2018-19 MCE purchased Certificates of Deposits (CDs) utilizing a Certificate of Deposit Account Registry Service (CDARS). The purpose of CDARS is for institutions, such as MCE, to invest in CDs in order to stay below the Federal Deposit Insurance Corporation (FDIC) insurance limits at any given bank.

Below is a summary of accounts reflecting placements through CDARS at River City Bank as of March 31, 2019.

Effective date	Maturity date	Interest rate	Amount
11/1/2018	5/2/2019	2.32289%	\$ 4,000,000
11/1/2018	10/31/2019	2.46936%	<u>6,000,000</u>
Total investments			<u>\$ 10,000,000</u>

MARIN CLEAN ENERGY**NOTES TO THE BASIC FINANCIAL STATEMENTS****YEARS ENDED MARCH 31, 2019 AND 2018****7. DEPOSITS AND OTHER CURRENT ASSETS**

Deposits and other current assets are comprised of security deposits paid by MCE for general and energy supply collateral, as well as collateral held by CAISO for MCE's market participation.

8. CAPITAL ASSETS

Capital asset activity for the years ended March 31, 2018 and 2019 was as follows:

	Furniture & Equipment	Leasehold Improvements	Construction in Progress	Accumulated Depreciation	Total
Balances at March 31, 2017	\$ 334,826	\$ 482,111	\$ -	\$ (245,271)	\$ 571,666
Additions	98,139	54,942	56,404	(113,669)	95,816
Balances at March 31, 2018	432,965	537,053	56,404	(358,940)	667,482
Additions	399,993	230,702	19,279	(189,490)	460,484
Dispositions	(54,146)	(5,881)	-	60,027	-
Balances at March 31, 2019	<u>\$ 778,812</u>	<u>\$ 761,874</u>	<u>\$ 75,683</u>	<u>\$ (488,403)</u>	<u>\$ 1,127,966</u>

Construction in progress includes costs to build a solar carport at MCE's San Rafael office. Depreciation expense will be recorded when construction is complete.

9. GRANTS

MCE administers ratepayer-funded energy efficiency programs regulated by the Public Utilities Commission of the State of California (CPUC). The CPUC also allocated funds to MCE to conduct a Low-Income Family and Tenants (LIFT) pilot program to better serve income-qualified multifamily communities with energy efficiency programs. These grant revenues are recognized when a corresponding eligible expense is incurred, not when funds are received. Amounts earned for 2019 and 2018 under these programs were approximately \$1,922,000 and \$1,526,000.

MCE also administers grants from the Bay Area Air Quality Management District, California Energy Commission and Marin Community Foundation.

MARIN CLEAN ENERGY**NOTES TO THE BASIC FINANCIAL STATEMENTS****YEARS ENDED MARCH 31, 2019 AND 2018****10. DEBT****LINE OF CREDIT AND LETTERS OF CREDIT**

MCE entered into a non-revolving credit agreement with River City Bank (RCB) in August 2015 that may be used for short term borrowing and to issue standby Letters of Credit used for performance security. In July 2017 the agreement was amended to increase the limit to \$25 million, reduce borrowing rates and fees and allow cash advances for working capital needs. RCB requires collateral for the line of credit of \$2.5 million which is reported as restricted cash and restricted net position. The current agreement in place at the end of 2018-19 expires on August 31, 2019.

MCE had no standby Letters of Credit or amounts outstanding under its line of credit agreement as of March 31, 2019.

Fees related to opening and renewal of the line of credit and posting the letters of credit are reported as interest and related expenses.

11. DEFINED CONTRIBUTION RETIREMENT PLAN

The Marin Clean Energy Plan (Plan) is a defined contribution retirement plan established by MCE to provide benefits at retirement to its employees. The Plan is administered by Nationwide Retirement Solutions. As of March 31, 2019, there were 61 plan members. MCE is required to contribute 10% of annual covered payroll to the Plan and contributed \$604,000 and \$476,000 during the years ended March 31, 2019 and 2018, respectively. The Plan includes vesting provisions intended to encourage employee retention. Plan provisions and contribution requirements are established and may be amended by the Board of Directors.

12. RISK MANAGEMENT

MCE is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; and errors and omissions. During the year, MCE purchased insurance policies from investment grade commercial carriers to mitigate risks that include those associated with earthquakes, theft, general liability, errors and omissions, and property damage.

MCE maintains risk management policies, procedures and systems that help mitigate credit, liquidity, market, operating, regulatory and other risks that arise from participation in the California energy market.

MARIN CLEAN ENERGY**NOTES TO THE BASIC FINANCIAL STATEMENTS****YEARS ENDED MARCH 31, 2019 AND 2018****12. RISK MANAGEMENT (continued)**

Credit guidelines include a preference for transacting with investment grade counterparties, evaluating counterparties' financial condition and assigning credit limits as applicable. These credit limits are established based on risk and return considerations under terms customarily available in the industry. In addition, MCE enters into netting arrangements whenever possible and where appropriate obtains collateral and other performance assurances from counter parties.

13. PURCHASE COMMITMENTS**POWER AND ELECTRIC CAPACITY**

In the ordinary course of business, MCE enters into various power purchase agreements in order to acquire renewable and other energy and electric capacity. The price and volume of purchased power may be fixed or variable. Variable pricing is generally based on the market price of either natural gas or electricity at the date of delivery. Variable volume is generally associated with contracts to purchase energy from as-available resources such as solar, wind and hydro-electric facilities.

MCE enters into power purchase agreements in order to comply with state law and voluntary targets for renewable and greenhouse gas (GHG) free products and to ensure stable and competitive electric rates for its customers.

The following table represents the expected, undiscounted, contractual obligations outstanding as of March 31, 2019:

Year ended March 31,	
2020	\$ 246,000,000
2021	200,000,000
2022	187,000,000
2023	154,000,000
2024	116,000,000
2025-41	1,323,000,000
	<u>\$ 2,226,000,000</u>

As of March 31, 2019, MCE had noncancelable contractual commitments to professional service providers through April 30, 2020 for services yet to be performed. Fees associated with these contracts are based on volumetric activity and are expected to be \$6.6 million.

MARIN CLEAN ENERGY**NOTES TO THE BASIC FINANCIAL STATEMENTS****YEARS ENDED MARCH 31, 2019 AND 2018****14. OPERATING LEASE**

Rental expense for MCE's office space was \$541,000 and \$417,000 for the years ended March 31, 2019 and 2018, respectively. On March 9, 2015, MCE entered into a ten-year non-cancelable lease for its San Rafael office premise. The rental agreement includes an option to renew the lease for five additional years. On December 12, 2017, MCE entered into a 68-month non-cancelable lease for its Concord office premise.

Future minimum lease payments under these leases are as follows:

Year ended March 31,	
2020	\$ 779,000
2021	807,000
2022	836,000
2023	866,000
2024	799,000
2025	539,000
	<u>\$ 4,626,000</u>

15. FUTURE GASB PRONOUNCEMENTS

The requirements of the following GASB Statements are effective for future fiscal years ending after March 31, 2019:

GASB Statement No. 87, *Leases*, is effective for fiscal years beginning after December 15, 2019. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, thereby enhancing the relevance and consistency of information about governments' leasing activities.

MARIN CLEAN ENERGY

NOTES TO THE BASIC FINANCIAL STATEMENTS

YEARS ENDED MARCH 31, 2019 AND 2018

16. PG&E BANKRUPTCY

PG&E provides transmission and distribution services to MCE customers and serves as billing agent for MCE. PG&E is responsible to collect payments on behalf of MCE. In January 2019, PG&E filed for Chapter 11 bankruptcy protection. MCE expects the utility will continue to operate in a business-as-usual fashion and the MCE's revenues collected by PG&E will continue to flow through to MCE with no material interruption.

MCE Annual Board Retreat

Finance Department: Accomplishments & Goals
September 18, 2019



MCE Finance Department Goals

- Maximize investment results within Policy framework
- Minimize costs by proactively managing risks
- Leverage MCE's credit strength
- Apply best-in-class finance practices
- Ensure fiscal strength through effective rate setting and program evaluation
- Ensure MCE can cost effectively deliver on its commitments.



Delivering on Goals and Metrics

Financial “Gold Standard”



- ✓ Contributed \$40.8 million to Net Position in FY 2018/19
- ✓ Investment Portfolio Results
 - Reached targeted yield of 2.5%
 - Liquid investments (LAIF + 0.1%)
- ✓ Investment Earnings on target to be > \$2.1 million



Delivering on Goals and Metrics

Financial “Gold Standard”

FitchRatings

MOODY'S

- ✓ Updated and Revised Investment Policy
 - ✓ Full Compliance with all Statutory Reporting Requirements
- ✓ Two Investment Grade Ratings
 - **Fitch BBB (Stable)**
 - **Moody's: Baa2 (Stable)**
- ✓ On Track to Meet Liquidity Goals



Delivering on Goals and Metrics

Financial “Gold Standard”



- ✓ Minimizing collateral posting by MCE
 - ✓ ...While requiring it of counterparties
- ✓ Led CCA efforts for participation in TOU rates, including regulatory support and testimony
- ✓ Established MCE's FY 2019/20 rates while keeping rates below PG&E



Financial Highlights



Financial Highlights (in \$000s)	FY 2018/19 (Audited)	FY 2017/18 (Audited)	FY 2016/17 (Audited)	FY 2015/16 (Audited)
Assets	131,600	68,098	68,373	44,142
Net Position	91,577	50,731	44,660	29,531
Revenue	362,292	205,752	181,166	151,667
Change in Net Position	40,845	6,071	15,128	16,274
Available Line of Credit	25,000	25,000	20,000	7,700
Cash and Equivalents	60,789	34,384	36,656	21,696

Financial Highlights

Reserve Targets



Financial Highlights (in \$000s)	FY 2019/20 (Estimated)	FY 2018/19 (Audited)	FY 2017/18 (Audited)	FY 2016/17 (Audited)
Reserves	146,117	91,577	50,731	44,660
Reserve Target	144,438	128,093	134,000	79,987
% of Reserve Target	101%	72%	38%	56%
Days Liquidity on Hand	139	99	65	103
Target Days Liquidity on Hand	140	140	-	-

MCE Finance Department

Programmatic Goals For 2020-21



- Review the efficacy and costs of Net Energy Metering policies
- Enact new rates in support of 4-9pm TOU transitions
- Support MCE resiliency efforts through the development of storage programs

MCE Finance Department



Strategic Goals For 2020-21

- Increase Financial Strength Targets
- Targeted Goals of Increasing Credit Strength and Higher Credit Ratings
- Be Prepared to Purchase/Ownership Interests in Physical Assets
- Have MCE Ready to Enter the Capital Markets (if necessary)



MCE Legal and Policy Accomplishments and Goals

Shalini Swaroop, General Counsel
September 18, 2019

Legal & Compliance Accomplishments

Key Focus Areas



- Acted quickly to avoid direct impacts of PG&E Bankruptcy
- Completed trainings for staff
 - 4 Confidentiality and Ethics
 - 2 Harassment Prevention
 - Contracts Process
- Legal review & finalization of over 150 contracts for projects, customer programs & professional services
- Conducted 8 solicitations for services
- Support for Human Resources

Optimized Processes

- Implemented new software: Asana, Velocity, DocuSign
- Streamlined CalCCA Data Requests
- Used new tools to track/report on:
 - Executed contracts
 - Investments
 - Vendor insurance
 - Trademark renewals
 - Grant evaluation
- Implemented internal systems:
 - Contract Request Form
 - Scope Cost Worksheet
 - Contracts Process One-Pager

Created/Updated Internal Policies and Guidelines

- Investment Policy
- Information Security Policy
- Delegation of Signing Authority Policy
- Privacy Policy
- Hiring Interview Guidelines
- MCE Vehicle Use Guidelines



Managed Grant Compliance Obligations and Agreements

- \$1,000,000 Napa Fire Rebuild Grant from BAAQMD
- \$60,000 PV/EV Parking Lot Grant from BAAQMD
- \$10,000 PV/EV Parking Lot Grant from TAM
- \$164,000 GHFI Grant from Marin Community Foundation



Completed Compliance Obligations



- Renewable Portfolio Standard (annual) - CPUC
- Resource Adequacy (annual & monthly) – CPUC
- Emissions Performance Standard (annual) – CPUC
- Mandatory Reporting Regulation – CA Air Resources Board
- Integrated Energy Policy Report – CA Energy Commission
- Form 635 (quarterly) – California Secretary of State
- QFER (quarterly) – California Energy Commission
- EIA-861A (annual) – US Energy Information Administration
- Form 700 (annual) – California Fair Political Practices Commission
- Officer Certification Form (annual)- CAISO
- AMI Privacy Audit (annual) - CPUC
- AMI Privacy Report (triennial) - CPUC

Policy Advocacy Guidelines

- Support California community choice aggregation (*Includes protecting decision-making autonomy*)
- Reduce greenhouse gas emissions (*Includes support for GHG-reducing programs*)
- Promote local economic and workforce benefits
- Advocate on behalf of CCA customers (*Includes cost-shifting issues*)

Legislative Victories



- AB 1362 (O'Donnell) – Amended
- SB 676 (Bradford) – Amended
- SB 155(Bradford) – Amended
- SB 774 (Stern) – Two Year Bill
- AB 56 (Garcia) – Two Year Bill
- SB 772 (Bradford) – Two Year Bill
- SB 350 (Hertzberg) – Two Year Bill

Regulatory Achievements

With CalCCA

- PG&E PCIA reduced by ~ \$270 Million
- RA Settlement to address Central Buyer issue

With Joint CCAs

- Consistent rules for Direct Access departing load
- Disadvantaged community solar programs
- PG&E's rate comparison tool

Regulatory Accomplishments

- Workshop on disconnection programs
- Relationship building
- 12 new proceedings



Regulatory Accomplishments Cont'd

- Joint CPUC and CEC *en banc* on future of utility market
- MCE's Compliance IRP Certified
- Reported on the Low-Income Family and Tenant (LIFT) pilot to bolster the forthcoming LIFT application
- AB 1110 Implementation
- PSPS & wildfire non-bypassable charges proceedings

Policy Challenges

- Local governance being challenged
 - Integrated Resource Plan
 - Resource Adequacy
- Market structure in flux
 - PG&E bankruptcy
 - SDG&E exit from retail generation
 - Reduction in RA resources
- Regulators out of alignment with market
 - AB 1110 Implementation
 - Resource Adequacy import regulations

The Year Ahead

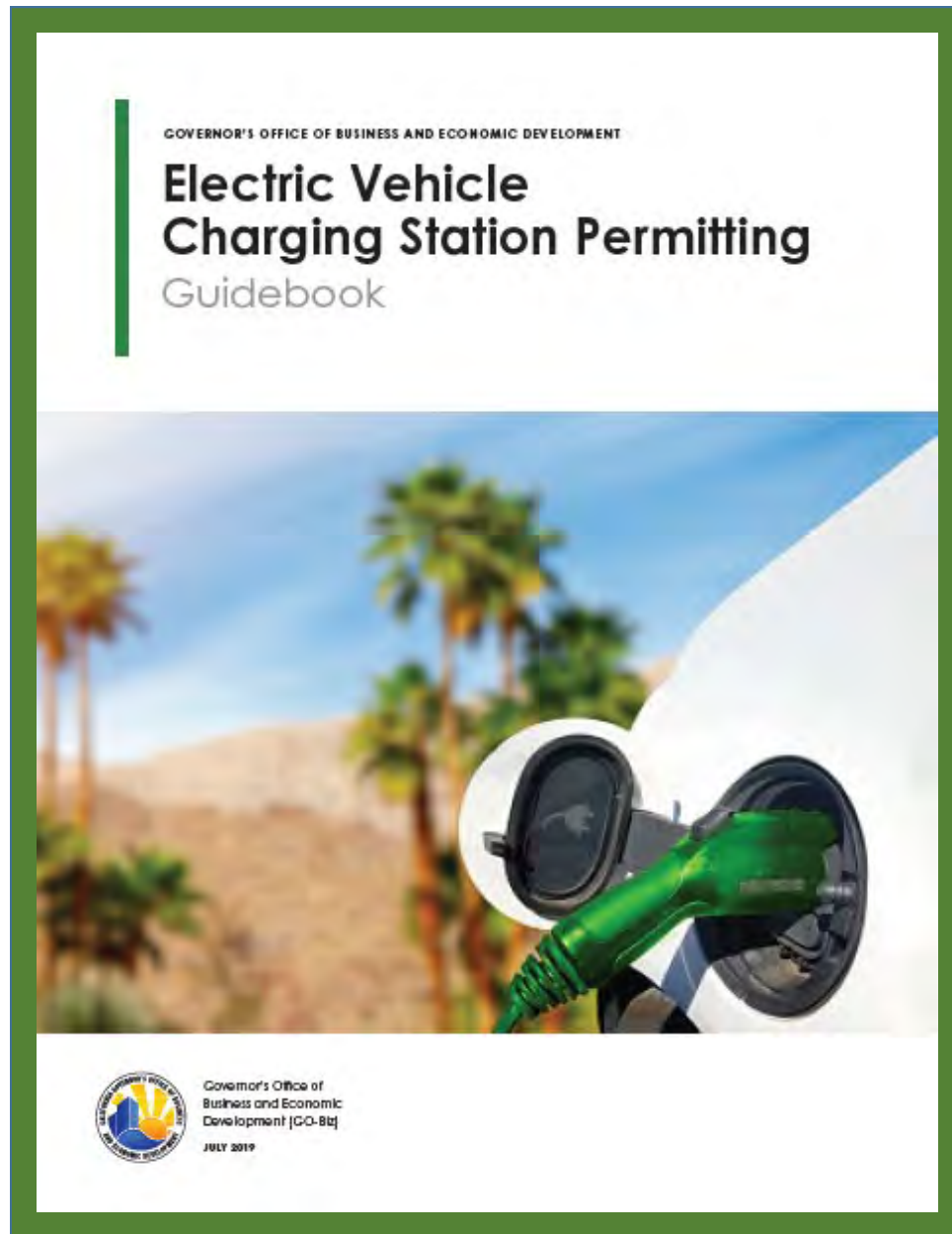


- How should Load Serving Entities balance decarbonization goals and grid reliability?
- Will the CPUC's IRP process undermine local decision-making?
- What company structure and responsibilities will PG&E retain post-bankruptcy?
- How can we balance California's energy rules with affordable rates?

Thank You

Shalini Swaroop
General Counsel & Director of Policy





Electric Vehicle Charging Station Permitting Guidebook



MCE Board Meeting
- September 18, 2019 -

Key Sections

- 1. Planning and Site Selection
- 2. Permitting
 - AB 1236 Streamlining Map
- 3. Accessibility
- 4. Connecting to the Grid
- 5. Construction, Commissioning, and Operation



Planning and Site Selection

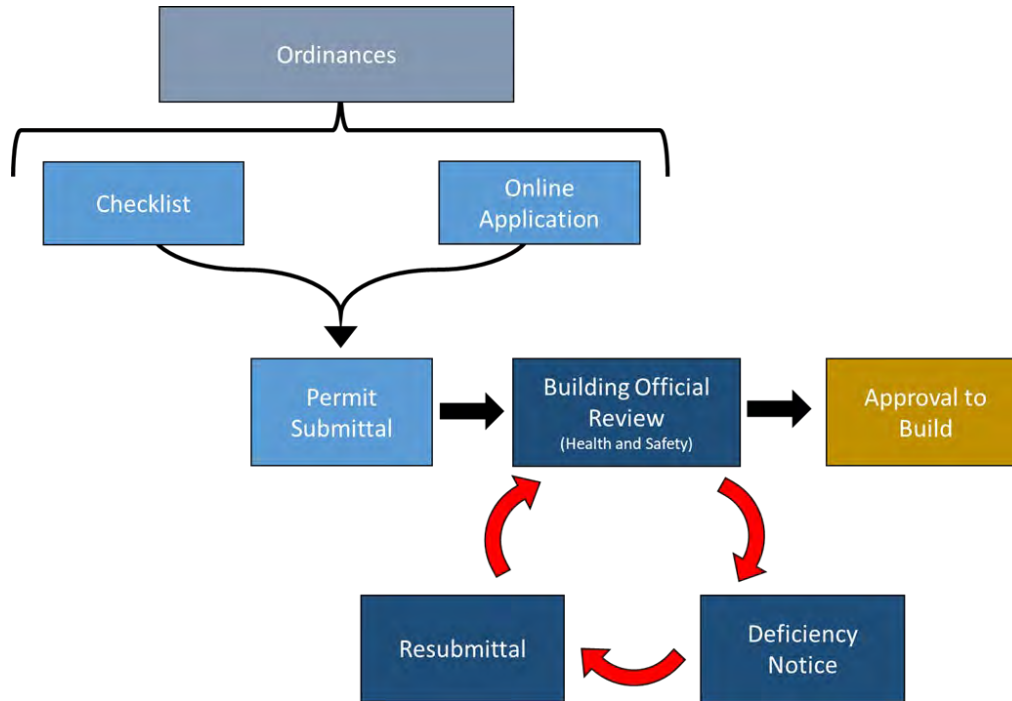
- Voluntary Building Codes
- Parking/Charging Clarification
- Climate Action Plans

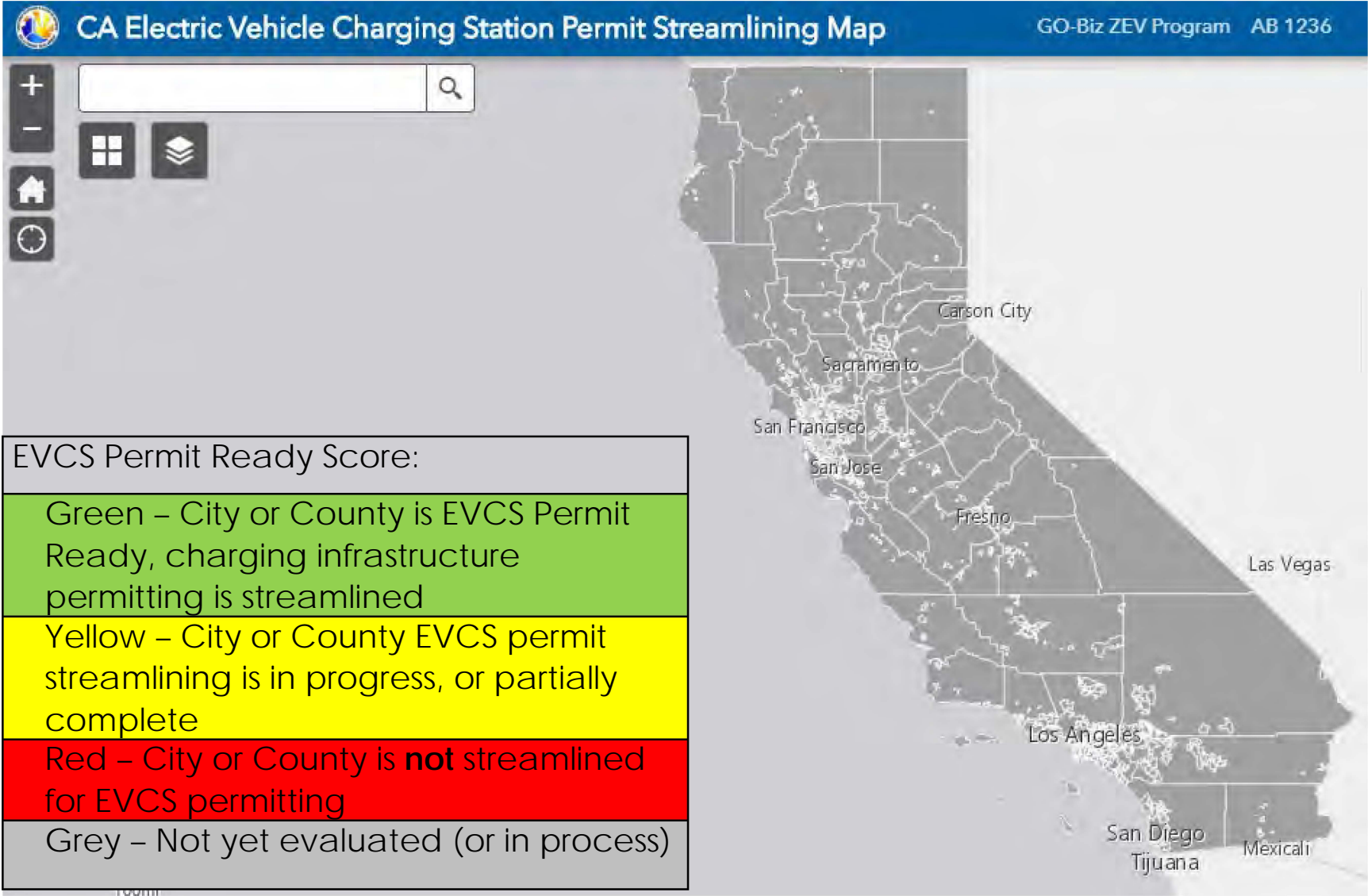
Authority Having Jurisdiction (AHJ)	Policy
Sacramento County	EVCS spaces count as two spaces
Los Angeles County	EVCS spaces count as one space
City of Pleasanton	EVCS spaces count as one space
City of Santa Barbara	EVCS spaces count as one space
City of West Hollywood	EVCS spaces count as one space
City of Stockton	EVCS spaces count as two spaces, for up to 10% reduction of parking requirements

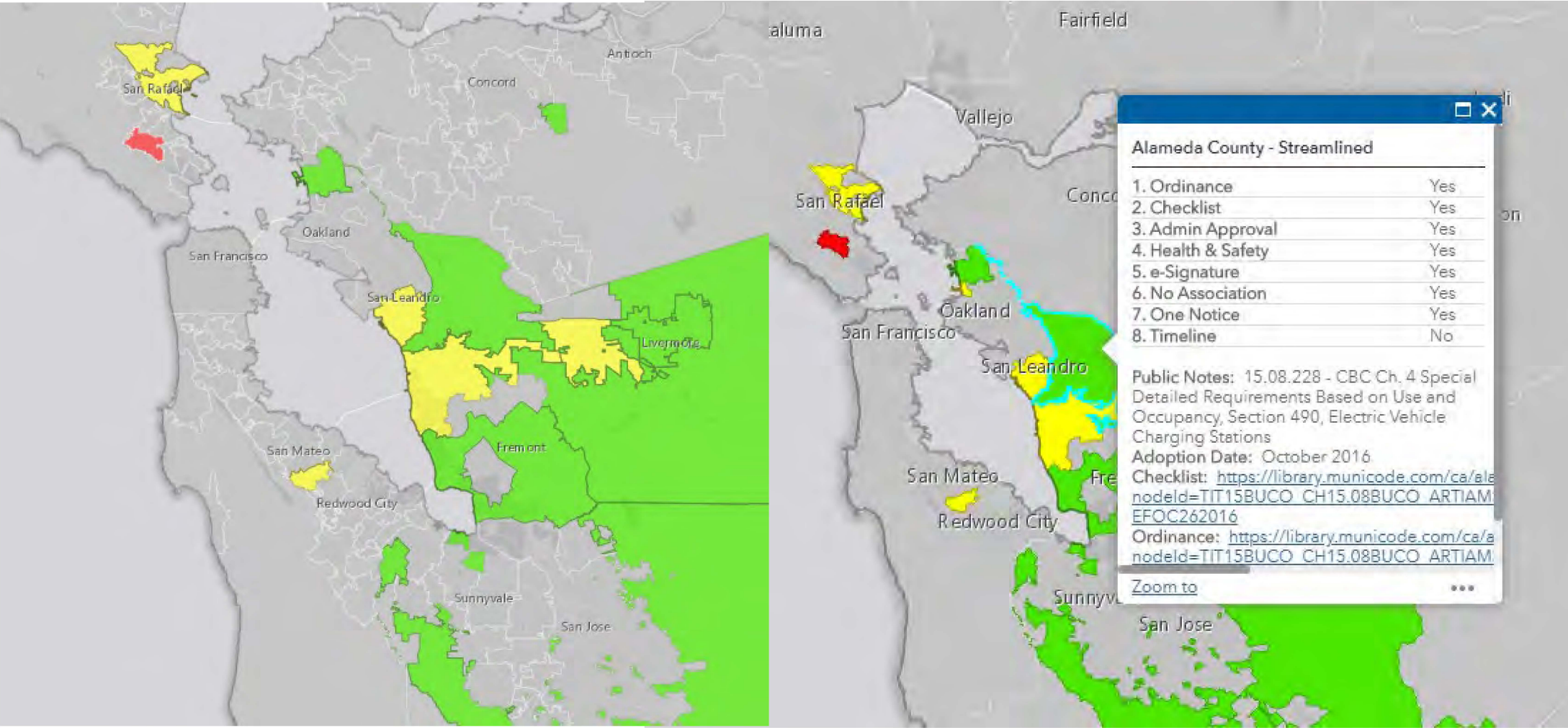


Permitting

- Assembly Bill 1236 Permit Streamlining Law







*See <http://www.business.ca.gov/ZEVReadiness> for updated map

	Scoring Criteria:	Complete if:
<input type="checkbox"/>	1. Streamlining Ordinance Ordinance creating an expedited, streamlined permitting process for electric vehicle charging stations (EVCS) including level 2 and direct current fast chargers (DCFC) has been adopted.	<ul style="list-style-type: none"> – Streamlining ordinance has been adopted
<input type="checkbox"/>	2. Permitting checklists covering Level 2 and DCFC Checklist of all requirements needed for expedited review posted on city or county website.	<ul style="list-style-type: none"> – Permitting checklist is available and easily found on city or county website
<input type="checkbox"/>	3. Administrative approval of EVCS EVCS projects that meet expedited checklist are administratively approved through building or similar non-discretionary permit.	<ul style="list-style-type: none"> – The streamlining ordinance states that permit applications that meet checklist requirements will be approved through non-discretionary permit (or similar)
<input type="checkbox"/>	4. Approval limited to health and safety review EVCS project review limited to health and safety requirements found under local, state, and federal law.	<ul style="list-style-type: none"> – The streamlining ordinance states that no discretionary use permit is required and permit approval will be limited to health and safety review

□	5. Electric signatures accepted AHJ accepts electronic signatures on permit applications.*	– Electronic signatures accepted on City or County website (usually specified in the ordinance)
□	6. EVCS not subject to association approval EVCS permit approval not subject to approval of an association (as defined in Section 4080 of the Civil Code).	– The streamlining ordinance states that EVCS permits do not require association approval
□	7. One complete deficiency notice AHJ commits to issuing one complete written correction notice detailing all deficiencies in an incomplete application and any additional information needed to be eligible for expedited permit issuance.	– The streamlining ordinance dictates that a written correction notices must detail all deficiencies
□	8. Bonus: Expedited timeline for approval Consistent with the intent of AB 1236, AHJ establishes expedited timelines for EVSE permit approval compared to standard project approval procedures.	– The streamlining ordinance (or other policy mechanism) outlines expedited approval timelines for EVSE permits

Application Submittal » Complete Response		
Type of Charger	Within Best Practice	Optimal
L2 – Single Family	1 day	Same Day
Multi L2 – Shared (Multi Family/Workplace/Public)	5 days	
DCFC	5 days	

Best Practice Permitting Timelines

Complete package » Approval to Build		
Type of Charger	Within Best Practice	Optimal
L2 – Single Family	1 day	Same Day
Multi L2 – Shared (Multi Family/Workplace/Public)	15 days*	
DCFC	15 days*	

Construction Complete Notice » Inspection		
Type of Charger	Within Best Practice	Optimal
L2 – Single Family	5 days	Same Day
Multi L2 – Shared (Multi Family/Workplace/Public)	5 days	
DCFC	5 days	

Accessibility

- California is first in the nation to provide ADA compliance specificity



Total Number of EVCS at a Facility ¹	Minimum Number (by type of EVCS Required to Comply with Section 11B-812: ¹ Van Accessible	Minimum Number (by type of EVCS Required to Comply with Section 11B-812: ¹ Standard Accessible	Minimum Number (by type of EVCS Required to Comply with Section 11B-812: ¹ Ambulatory
1 to 4	1	0	0
5 to 25	1	1	0
26 to 50	1	1	1
51 to 75	1	2	2
76 to 100	1	3	3
101 and over	1, plus 1 for each 200, or fraction thereof, over 100	3, plus 1 for each 60, or fraction thereof, over 100	3, plus 1 for each 50, or fraction thereof, over 100

Connecting to the Grid

- Working with Utilities



Construction, Commissioning, and Operation

- Weight and Measures Certification
- Signage



Contact us with your questions:



Tyson Eckerle

tyson.eckerle@gobiz.ca.gov

(916) 322-0563

Kielan Rathjen

kielan.rathjen@gobiz.ca.gov

(916) 447-7936



Agenda Item 7.b.

Battery Storage & Distributed Energy Resources

September 18, 2019

Tom Williard

Principal

Sage Renewable Energy Consulting

(415) 847-9066

tom@sagerenew.com

www.sagerenew.com



Technology in Practice

Battery Storage & Distributed Energy Resources



- Presentation is MCE customer focused, not power procurement
- DER - for this discussion I will focus on customer-sited, behind the meter solar PV, battery storage, and EVs.

Technology in Practice

Today's discussion

1. DER Market Trends/Value Streams
2. Adoption Rates, Technology Interactions, Rate-based Policy
3. MCE customer adoption of DER – some ideas

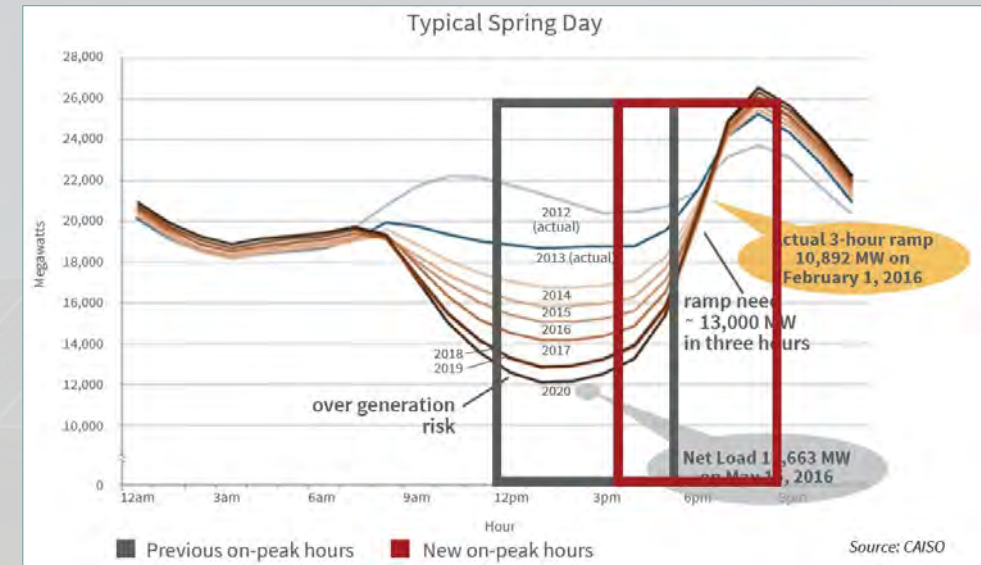


DER Market Trends/Value Streams

Short Term (next 5 years)

- Solar PV

- + High energy costs
- + Low cost financing – loans, leases, rental (residential), Federal Investment Tax Credit (ITC)
- + Title 24
- The “Duck Curve”
 - Time of Use (TOU) changes, rate flattening = lower value of energy
- ITC Stepdown – extension unlikely



DER Market Trends/Value Streams

Short Term (next 5 years)

- **Battery Energy Storage Systems (BESS)**

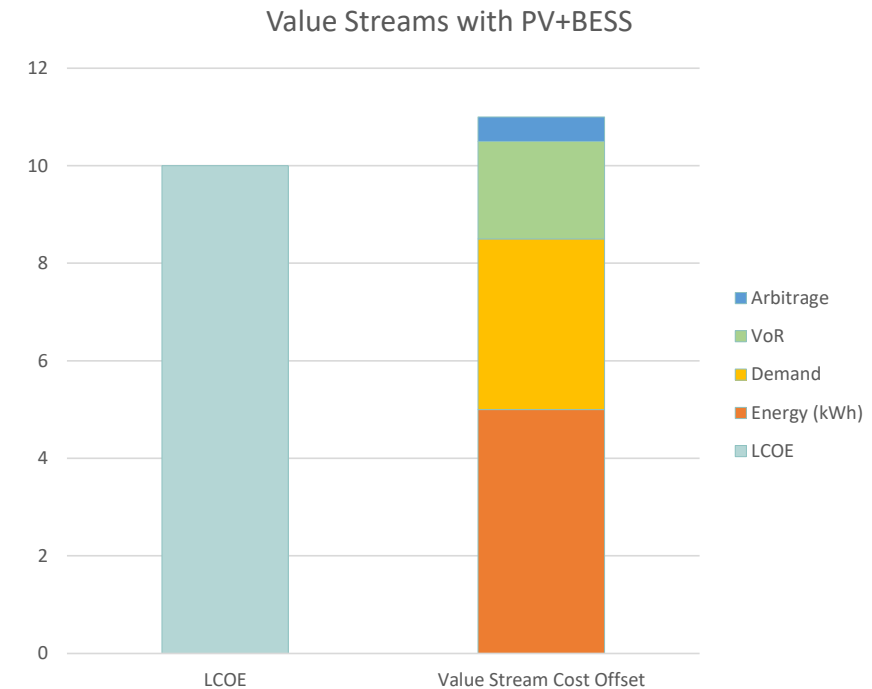
almost exclusively Li-Ion for residential grid connected systems

- + Resiliency – PG&E PSPS
- + Some incentives left (SGIP), decreasing installed costs
- + Storage friendly tariffs – Option S, AI-STORE
- + Title 24
- CPUC SGIP cycling and GHG offset requirements
- Lacking tariff support – highly dependent on tariffs for primary economic value
- Not compelling economic performance in PG&E territory based on grid energy cost offset
- Financing still developing
- Essentially invisible operation – how do you know it's working?

DER Market Trends/Value Streams

Short Term (next 5 years)

- Value Streams
 - Solar PV
 - + Energy cost offset
 - BESS
 - + Demand Cost Reduction
 - + Arbitrage
 - + Value of Resiliency (VoR)



DER Market Trends/Value Streams

Longer Term (5-10 years)

- CPUC Distribution Planning

- + PG&E Grid Modernization Plan (GMP) in GRC filings
- + 5-10 year rollout
- + Huge investment for IOUs

- Solar PV

- + Only minor slowing in solar market due to ITC expiry
- + Aggressive financing pushes market forward (rental)
- + Requirements for combination with storage
- + Title 24 beginning to have big impact



Source: Bridge Energy Group

DER Market Trends/Value Streams

Longer Term (5-10 years)

- EV Adoption
 - + CA is 50% of U.S. EV sales currently
 - + Higher than national average
 - Equity issues
- Local Smart Grid Pilots
 - + Ancillary Services
 - + EV to Grid (V2G)
- Emerging Value Streams
 - + Resource Adequacy (RA) and Demand Response (DR) shared savings
 - + V2G
 - + Transactional energy



Source: ASCE.org

Adoption Rates, Technology, Rate-based Policy

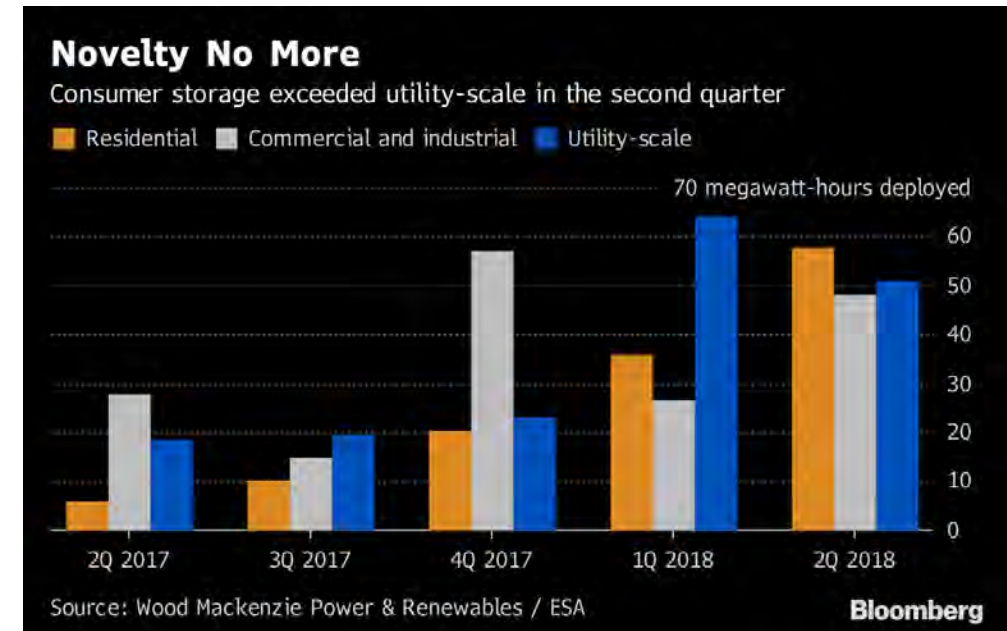
How can MCE bend the curve on customer DER adoption?

- Teaming with PV/Storage promotion

- Bay Area SunShares
- Community/regional battery network capacity contracts
- EBCE Oakland Clean Energy Initiative

- Market drivers

- PG&E PSPS
- Regulations – Title 24
- Financial incentives
- Decreased risk
- Community acceptance





Tom Williard
Co-Founder & Principal
C: (415) 847-9066
tom@sagerenew.com