

February 26, 2016

CA Public Utilities Commission
Energy Division
Attention: Tariff Unit
505 Van Ness Avenue, 4th Floor
San Francisco, CA 94102-3298



Advice Letter MCE E-14

**RE: REFILING MARIN CLEAN ENERGY'S BIENNIAL ENERGY STORAGE
PROCUREMENT COMPLIANCE REPORT**

EFFECTIVE DATE

MCE requests that this Tier 2 advice filing become effective on March 27, 2016, which is 30 days following the issuance of this letter.

TIER DESIGNATION: Tier 2 Designation

PURPOSE

California Public Utilities Commission ("Commission") Decision ("D.") D.13-10-040, *Decision Adopting Energy Storage Procurement Framework and Design Program* ("Decision"), establishes an energy storage procurement goal of 1% of 2020 annual peak load for Community Choice Aggregation ("CCA") programs. MCE submits this Tier 2 Advice Letter to inform the Commission about the status of its energy storage procurement activities and its progress toward meeting the goal. MCE has already secured 0.8 MW of energy storage, and expects to procure a total of 3.2 MW by 2020, serving 1% of its 2020 annual peak load. Since the first energy storage project that MCE has helped to bring online is partially funded by the Self-Generation Incentive Program, as directed by Decision ("D.") 16-01-032, MCE and the Pacific Gas and Electric Company ("PG&E") each receives 50% (i.e. 0.8 MW) of the projects total 1.6 MW capacity to count toward their energy storage procurement targets.¹ As such MCE has already satisfied a quarter of its projected energy storage procurement compliance obligation due to D.13-10-040.

BACKGROUND

The Commission issued D.13-10-040 on December 21, 2013, pursuant to Assembly Bill ("AB") 2514, and adopted the Energy Storage Procurement Framework and Design Program for Investor Owned Utilities ("IOUs"), Electric Service Providers ("ESPs"), and CCA programs. D.13-10-040 establishes a goal for CCA programs to procure energy storage equal to 1% of their 2020 annual peak load.² While this goal does not have to be met until 2020, the Commission stated

¹ D.16-01-032 at 61.

² D.13-10-040 at 43, 47.

that it *does not* want CCA programs “to delay procurement until that time,” so D.13-10-040 accordingly requires that each CCA program file a Tier 2 Advice Letter every two years to show progress toward the 2020 goal beginning on January 1, 2016.³

To count toward the 2020 goal, energy storage projects must meet the following eligibility requirements:

1. **Energy storage systems must be installed and operational after January 1, 2010:** As required by California Public Utility Code section 2835, subdivision (c), a “new energy storage system” is a “system that is installed and first becomes operational after January 1, 2010.”
2. **Energy storage systems must be online and delivering by the end of 2024:** All 2020 compliance target procurements must be “installed,”⁴ or “online and delivering,” by December 31, 2024.⁵
3. **Distributed storage qualifies:** The Commission “shall allow customer sited or customer-owned energy storage to count toward the 1% target” for CCA programs.⁶
4. **Electric vehicle programs qualify:** IOUs, ESPs, and CCA programs may count “[e]nergy storage that could be obtained from plug-in vehicles and programs/systems that utilize electric vehicles for grid services (Vehicle to Grid)” for their procurement goals.⁷
5. **Storage funded by departing utility customers is excluded:** The load associated with customers departing from utility bundled services for CCA participation “shall not be counted towards meeting the CCA or ESP’s 1 percent procurement target.”⁸
6. **Energy storage projects must further a relevant purpose:** Projects must demonstrate their ability to meet one or more of the following purposes: grid optimization, integration of renewable energy, or reduction of greenhouse gas emissions.⁹
7. **Government funded projects may be included:** “It is reasonable to include any PIER- or EPIC- funded projects toward the procurement targets under certain conditions.”¹⁰
8. **Energy storage procurement must be cost-effective:** AB 2514 provides that energy storage must be “viable and cost-effective,” but the Commission has not adopted a

³ D.13-10-040 at 47.

⁴ D.13-10-040 at 43.

⁵ D.13-10-040 at 48.

⁶ D.13-10-040 at 59.

⁷ D.13-10-040 at 32; Appendix A, at 5.

⁸ D.13-10-040 at 48.

⁹ D.13-10-040 at 32; Appendix A at 3.

¹⁰ D.13-10-040 at 63.

specific cost-effectiveness methodology. D.13-10-040 requires each CCA program to “describe its methodology for measuring cost-effective projects.”¹¹

COST-EFFECTIVENESS

MCE considers an energy storage project to be “cost-effective” if the upfront and operational costs of the project can be offset fully by monetary benefits resulting from the utilization of the project. These benefits can either result in revenue return to MCE or to a specific MCE customer if there is direct customer involvement. These benefits can manifest as both short-term gains and long-term cost-savings. So long as these benefits meet or exceed the costs associated with the energy storage project, then MCE will consider this project as cost-effective. MCE will compare any proposed energy storage project costs with other proposals and publicly available information about energy storage project cost metrics to make sure that individual bids are competitive.

At this time MCE is focused on facilitating behind the meter customer-sited battery storage projects by:

- hosting workshops for battery providers and large commercial and industrial customers
- providing on bill payment of demand charge savings to simplify the billing process
- partnering with other entities on grant applications that include a storage component
- creating a pilot battery tariff that offers residential customers a monthly incentive in exchange for control over dispatching their battery
- exploring new value streams for batteries through demand response and the wholesale market

MCE’s practice at this time is to seek cost effective battery solutions that rely entirely on demand charge savings, SGIP (or other grant) funds or bidding load-shed to make the cost effectiveness of the projects pencil out. To date MCE has chosen not to leverage ratepayer funds to subsidize the costs of its energy storage procurement obligation; however, as new funding streams develop in the future, it may become cost-effective to leverage ratepayer funding to cover upfront costs provided that these costs be repaid through the controlled usage of this energy storage.

Going forward MCE hopes to leverage additional monetary streams of benefits to offset upfront and ongoing costs of energy storage. Some of these additional funding streams include pass-through of distribution grid-related benefits resulting from distributed resource deployment and control (per the Distributed Resources Plan (“DRP”) Rulemaking (“R.”) 14-08-013 and payments for participating within California Independent System Operator (“CAISO”) markets to provide transmission grid-related benefits (per the Energy Storage and Distributed Energy Resources (“ESDER”) market that is presently being implemented). However because CCAs only have an indirect role in influencing and optimizing electricity grid operations and investments, it will likely provide challenging to gain access to these additional revenue streams.

¹¹ D.13-10-040, OP 5 at 77.

ENERGY STORAGE PROJECTS

MCE helped to facilitate two Tesla battery installations on College of Marin's ("COM") campuses totaling 1.6 MW of storage capacity. The projects received SGIP funds and will not require the College of Marin to make any upfront investments. Tesla and COM will use MCE's on bill payment mechanism to split demand charge savings between Tesla and COM through COM's utility bill.

MCE and Tesla are currently considering further opportunities for collaboration on a residential battery program. In addition to co-marketing the battery systems, MCE may also assist with the installation process. Residential battery customers will also be offered a monthly incentive to sign up for MCE's pilot battery tariff which will give MCE access to controlling the dispatch of their batteries within certain parameters.

MCE plans to procure at least 3.2 MW of eligible energy storage by 2020, in compliance with D.13-10-040. This storage will serve 1% of MCE's projected annual peak load for 2020, which is projected to be 316 MW. Additional details about the energy storage contracts that MCE entered into can be found in Appendix A: MCE Energy Storage Contracts, including the technology, number of MW, number of MWh and duration of the contracts. As discussed above, these projects will be cost effective.

COUNTING OF SGIP-FUNDED PROJECTS

The matter of whether or not CCAs are able to count energy storage projects funded partially with SGIP funds was decided within the Commission's Energy Storage Roadmap Rulemaking ("R.") 15-03-011. On January 28, 2016, the Commission adopted Decision ("D.") 16-01-032 on this matter. The Commission determined that the credit for SGIP-funded installations should be split 50/50 between the IOU and the CCA/ESP.¹² Based on the Decision, 0.8 MW of the Tesla battery installations on the campuses of the College of Marin will count toward MCE's storage compliance obligation.

APPENDICIES: Appendix A: MCE Energy Storage Projects

NOTICE

Anyone wishing to protest this advice filing may do so by letter via U.S. Mail, facsimile, or electronically, any of which must be received no later than 20 days after the date of this advice filing. Protests should be mailed to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Avenue
San Francisco, California 94102
E-mail: EDTariffUnit@cpuc.ca.gov

¹² D. 16-01-032 at 61.

Copies should also be mailed to the attention of the Director, Energy Division, Room 4004 (same address above).

In addition, protests and all other correspondence regarding this advice letter should also be sent by letter and transmitted via facsimile or electronically to the attention of:

Jeremy Waen
Senior Regulatory Analyst
MARIN CLEAN ENERGY
1125 Tamalpais Ave.
San Rafael, CA 94901
Phone: (415) 464-6027
Facsimile: (415) 459-8095
jwaen@mceCleanEnergy.org

Martha Serianz
Regulatory Coordinator
MARIN CLEAN ENERGY
1125 Tamalpais Ave.
San Rafael, CA 94901
Phone: (415) 464-6043
Facsimile: (415) 459-8095
mserianz@mceCleanEnergy.org

There are no restrictions on who may file a protest, but the protest shall set forth specifically the grounds upon which it is based and shall be submitted expeditiously.

MCE is serving copies of this advice filing to the relevant parties shown on the R.10-10-007 service list. MCE is also serving copies of this advice filing as a courtesy to the newer energy storage roadmap proceeding R.15-03-011. For changes to these service lists, please contact the Commission's Process Office at (415) 703-2021 or by electronic mail at Process_Office@cpuc.ca.gov.

CORRESPONDENCE

For questions, please contact Jeremy Waen at (415) 464-6027 or by electronic mail at jwaen@mceCleanEnergy.org.

/s/ Jeremy Waen
Jeremy Waen
Senior Regulatory Analyst
MARIN CLEAN ENERGY

cc: Service List R.10-10-007
Service List R.15-03-011

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY LSE (Attach additional pages as needed)

Company name/CPUC Utility No. Marin Clean Energy

Utility type:

ELC GAS
 PLC HEAT WATER

Contact Person for questions and approval letters: Jeremy Waen

Phone #: (415) 464-6027

E-mail: jwaen@mcecleanenergy.org

EXPLANATION OF UTILITY TYPE

ELC = Electric GAS = Gas
PLC = Pipeline HEAT = Heat WATER =
Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: MCE 12-E

Subject of AL: Marin Clean Energy's Biannual Energy Storage Procurement Compliance Report

Tier Designation: 1 2 3

Keywords (choose from CPUC listing): Compliance

AL filing type: Monthly Quarterly Annual One-Time Other Biannual

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution: D.13-10-040

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL _____

Summarize differences between the AL and the prior withdrawn or rejected AL¹: _____

Resolution Required? Yes No

Requested effective date: March 27, 2016

No. of tariff sheets: 0

Estimated system annual revenue effect (%): n/a

Estimated system average rate effect (%): n/a

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: n/a

Service affected and changes proposed: n/a

Pending advice letters that revise the same tariff sheets: n/a

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this filing, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division
Attention: Tariff Unit
505 Van Ness Ave.
San Francisco, CA 94102
EDTariffUnit@cpuc.ca.gov

CCA Info (including e-mail)
Marin Clean Energy
1125 Tamalpais Ave.
San Rafael, CA 94901
jwaen@mcecleanenergy.org