

January 1, 2016

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



Advice Letter LCE 001-E

**RE: LANCASTER CHOICE ENERGY'S BIENNIAL ENERGY STORAGE
PROCUREMENT COMPLIANCE REPORT**

EFFECTIVE DATE

The City of Lancaster requests that this Tier 2 Advice Letter become effective on January 31, 2016, which is 30 days after the date of this filing.

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* (the "Decision"), establishes an energy storage procurement goal of 1% of 2020 annual peak load for Community Choice Aggregation ("CCA") programs. The City of Lancaster ("Lancaster") submits this Tier 2 Advice Letter on behalf of Lancaster Choice Energy ("LCE") to inform the Commission about the status of its energy storage procurement activities and its progress toward meeting the goal. Lancaster has already secured 30 kW of energy storage, and expects to procure additional energy storage resources by 2020, serving at least 1% of its projected 2020 annual peak load of approximately 138.90 MW.

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.¹ While this goal does not have to be met until 2020, the Commission stated 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, 2016.²

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,”³ or “online and delivering,” by December 31, 2024.⁴
- 3. Distributed storage qualifies:** The Commission “shall allow customer sited or customer-owned energy storage to count toward the 1% target” for CCA programs.⁵
- 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.⁶
- 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.”⁷
- 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.⁸
- 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.”⁹

¹ Decision at 43, 47.

² Decision at 47.

³ Decision at 43.

⁴ Decision at 48.

⁵ Decision at 59.

⁶ Decision at 32; Appendix A, at 5.

⁷ Decision at 48.

⁸ Decision at 32; Appendix A at 3.

⁹ Decision at 63.

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

COST-EFFECTIVENESS

Cost is an important consideration in Lancaster’s procurement of energy storage. To date, Lancaster’s energy storage procurement efforts have been primarily focused on leveraging grant opportunities. As part of the project evaluation process, Lancaster examines the overall cost of an energy storage project that can be funded with an available grant and then compares it to the overall cost of alternative projects that may be also be funded with grants. Cost is then considered along with other criteria to determine which projects should be pursued.

Lancaster also plans to conduct competitive procurement for energy storage that involves the issuance of Requests for Qualifications (“RFQs”) or Requests for Proposals (“RFPs”). Solicitations will require project bidders to provide detailed information about the proposed energy storage system, including charging and output characteristics, maintenance requirements and the lifespan of the system. In addition to information about the system itself, solicitations will also require the submission of detailed pricing information.

Proposals will then be evaluated based on detailed criteria. An important criterion in the evaluation of energy storage projects will be the overall cost of the project, including labor and equipment. The track record of the generator in keeping costs within project budgets and estimates will also be considered and evaluated. Energy storage projects will also be selected based upon the knowledge and experience of the bidder, ability to perform the services in the time allowed, record of success on similar work, and ability to communicate about issues related to the project.

ENERGY STORAGE PROJECTS

Lancaster plans to procure a total of at least 1.4 MW of eligible energy storage by 2020, in compliance with D.13-10-040. By that time, energy storage procurement will be equal to or greater than 1% of the program’s 138.90 MW projected annual peak load. Lancaster’s current and planned energy storage projects are discussed below. Additional details about the energy storage contracts that Lancaster has entered into can be found in Appendix A: 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.

Museum of Art & History Electric Vehicle Charging and Energy Storage System

On February 3, 2014, Lancaster contracted with Green Charge Networks, LLC (“Green Charge Networks”) for the development and installation of electric vehicle charging and energy storage systems at the Museum of Art & History located in Lancaster, California. The maximum storage

¹⁰ Decision, OP 5 at 77.

and constant discharge capabilities of this storage system are 30 kWh and 30 kW, respectively. The charging and storage system began operation on October 23, 2014, for its initial term of 5 years. Assuming the agreement between Lancaster and Green Charge Works is renewed in 2019 for an additional 5-year term, this storage system will contribute to Lancaster's energy storage goal of 1% of 2020 annual peak load. The added energy storage will help to facilitate grid reliability and the city's renewable energy goals. Moreover, the electric vehicle charging component of the system will encourage the local use of electric vehicles, resulting in lower greenhouse gas emissions compared to the use of traditionally fueled vehicles.

GreenStation Network

Lancaster's partnership with Green Charge Networks also includes plans for a "GreenStation Network" that will assist the city in reaching its goal of becoming the world's first zero net energy city by 2020.¹¹ To support a 100% renewable energy system, the GreenStation Network will repurpose electric vehicle batteries to allow Lancaster to utilize system-wide energy storage, and lower demand charges by up to 50%. Lancaster and Green Charge Networks are currently planning for a GreenStation Network that includes a substantial energy storage component, but the exact size and capacity of the system have not yet been determined.

Currently, the city is seeking funding to help launch the GreenStation Network. Lancaster submitted an application for the United States Department of Energy's ("DOE") Sustainable Integration of Energy Storage and Solar PV ("SHINES") program to help fund the GreenStation Network. Unfortunately, on August 7, 2015, DOE informed Lancaster that it will not receive any funding from the SHINES program at this point in time.

Lancaster is currently preparing another grant proposal for the California Energy Commission's ("CEC") Electric Program Investment Charge ("EPIC") program's EPIC Challenge: Accelerating the Deployment of Advanced Energy Communities. The grant offering is designed to support projects that minimize energy infrastructure costs, generate energy cost savings, and provide access to renewable generation and energy efficiency upgrades.

With or without this grant funding, Lancaster is confident that the GreenStation Network will be launched before 2020 and will persist long after that date. When the GreenStation Network becomes functional, it will help to optimize grid functionality, lower the cost of renewable energy to CCA customers, and assist the city in realizing its goal of eliminating greenhouse gas emissions associated with energy generation.

APPENDIX: Appendix A: Energy Storage Projects

¹¹ Lancaster has already reached 50% of its renewable energy goal. Part of this achievement has been reached by deploying distributed generation on municipal buildings. As of June 2015, 97% of Lancaster's city-run buildings were powered by solar voltaics—1.45 MW on five city buildings and 7.5 MW on 25 school sites. Energy storage will help advance the realization of Lancaster's 100% renewable goal, and will make doing so cheaper for consumers than it otherwise would be.

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

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:

Cathy DeFalco, EJD, CPM
Energy Manager – Regulatory
Lancaster Choice Energy
City of Lancaster
Telephone: (661) 723-6185
E-mail: cdefalco@cityoflancasterca.org

Ty Tosdal
Of Counsel
Braun Blaising McLaughlin & Smith, P.C.
915 L Street, Suite 1270
Sacramento, California 95814
Telephone: (858) 704-4711
E-mail: ty@tosdallaw.com

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.

Lancaster is serving copies of this advice filing to the relevant parties shown on the R.10-12-007 service lists, and 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 Cathy DeFalco at (661) 723-6185 or by electronic mail at cdefalco@cityoflancasterca.org, or Ty Tosdal at (858) 704-4711 or by electronic mail at ty@tosdallaw.com.

/s/ Ty Tosdal _____

Ty Tosdal
Counsel for the City of Lancaster

cc: Service List R.10-12-007

Service List R.15-03-011

APPENDIX A: ENERGY STORAGE PROJECTS

Project	Technology	MW	MWh	Duration
EV Storage at Museum of Art & History	Repurposed EV batteries integrated with photovoltaic generation	30 kW	30 kW	1 hour

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. Lancaster Choice Energy

Utility type:

ELC GAS
 PLC HEAT WATER

Contact Person for questions and approval letters: Ty Tosdal

Phone #: (858) 704-4711

E-mail: ty@tosdallaw.com

EXPLANATION OF UTILITY TYPE

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

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: LCE 001-E

Subject of AL: Lancaster Choice Energy's Biennial 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 __Biennial__

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: January 31, 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

CCA Info (including e-mail)

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

Lancaster Choice Energy
44933 Fern Avenue
Lancaster, CA 93534
ty@tosdallaw.com

