

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

# Executive Committee Meeting Friday, February 3, 2023 12:00 P.M.

This Meeting will be conducted via teleconference pursuant to the requirements of <u>Assembly Bill No. 361</u>. By using teleconference for this meeting, MCE continues to promote social distancing measures recommended by local officials.

Members of the public who wish to observe the Meeting and/or offer public comment may do so telephonically via the following teleconference call-in number and meeting ID:

For Viewing Access Join Zoom Meeting:

https://us02web.zoom.us/j/83485920504?pwd=ak5XMmpkc0N4bmN3aGllaTkyNnNLUT09

Dial: 1-669-900-9128 Webinar ID: 834 8592 0504 Passcode: 368129

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- 1. Roll Call/Quorum
- 2. Board Announcements (Discussion)
- 3. Public Open Time (Discussion)
- 4. Resolution No. 2023-02 Authorizing Continued Remote Teleconference Meetings for the Board of Directors and Every Committee of the Board of Directors Pursuant to Government Code Section 54953(e) (Discussion/Action)
- 5. Report from Chief Executive Officer (Discussion)

# 6. Consent Calendar (Discussion/Action)

- C.1 Approval of 12.2.22 Meeting Minutes
- C.2 Second Agreement with Energy Solutions

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- C.3 Schedule A.3 to Master Services Agreement with CLEAResult Consulting Inc.
- 7. Seventh Agreement with The Energy Alliance Association (Discussion/Action)
- 8. In-Person Meetings and Teleconferencing Options Under the Brown Act and AB 2449 (Discussion/Action)
- 9. MCE Formation Documents and Voting Rules Discussion (Discussion)
- 10. Review Draft 2.16.23 Board Agenda (Discussion)
- 11. Committee Matters & Staff Matters (Discussion)
- 12. Adjourn

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

DISABLED ACCOMMODATION: If you are a person with a disability which requires an accommodation or an alternative format, please call MCE at 1 (888) 632-3674 at least 72 hours before the meeting start time to ensure arrangements for accommodation.



February 3, 2023

TO:	MCE Executive Committee
FROM:	Catalina Murphy, Associate General Counsel
RE:	Resolution No. 2023-02 Authorizing Continued Remote Teleconference Meetings for the Board of Directors and Every Committee of the Board of Directors Pursuant to Government Code Section 54953(e) (Agenda Item #04)
ATTACHMENTS:	<ul> <li>A. Proposed Resolution No. 2023-02 Authorizing Remote Teleconference Meetings for the Board of Directors and Every Committee of the Board of Directors Pursuant to Government Code Section 54953(e)</li> <li>B. Resolution No. 2021-08 Delegating Authority to Executive Committee to Adopt Findings Pursuant to Government Code Section 54953(e)</li> </ul>

Dear Executive Committee Members:

# Summary:

Assembly Bill (AB) No. 361 (Rivas), signed by Governor Gavin Newsom on September 16, 2021, amends the Brown Act<sup>1</sup> to allow a local agency to continue using teleconferencing during a state-proclaimed state of emergency without meeting certain Brown Act teleconference requirements.

On October 7, 2021, your Board delegated the authority to the Executive Committee to consider whether the Governor-designated state of emergency continues to directly impact the ability of the MCE Board or Directors, MCE Executive Committee, and MCE Technical Committee to meet safely in person, and to make the required AB 361 findings for authorizing remote teleconference meetings under California Government Code section 54953(e).

Given the current emergency-state of the Covid-19 pandemic, there is an ongoing need

<sup>&</sup>lt;sup>1</sup> Gov. Code, §§ 54950 et seq.

for holding teleconference meetings for the MCE Board of Directors, MCE Executive Committee, and MCE Technical Committee. Therefore, in order to hold teleconference meetings, the Executive Committee must make the following findings by majority vote:

- 1. The Executive Committee has reconsidered the circumstances of the state of emergency, as designated by the Governor.
- 2. The Executive Committee finds that one or both of the following circumstances still exists:
  - a. The state of emergency continues to directly impact the ability of members to meet safely in person; or
  - b. State or local officials continue to impose or recommend measures to promote social distancing.

Staff recommends adopting proposed Resolution No. 2023-02 Authorizing Remote Teleconference Meetings for the Board of Directors and Every Committee of the Board of Directors Pursuant to Government Code Section 54953(e), which makes the initial required AB 361 findings for authorizing remote teleconference meetings.

# Fiscal Impacts:

None.

# Recommendation:

Adopt proposed Resolution No. 2023-02 Authorizing Remote Teleconference Meetings for the Board of Directors and Every Committee of the Board of Directors Pursuant to Government Code Section 54953(e).

# **RESOLUTION NO. 2023-02**

# A RESOLUTION OF THE EXECUTIVE COMMITTEE OF MARIN CLEAN ENERGY AUTHORIZING REMOTE TELECONFERENCE MEETINGS FOR THE BOARD OF DIRECTORS AND EVERY COMMITTEE OF THE BOARD OF DIRECTORS PURSUANT TO GOVERNMENT CODE SECTION 54953(e)

**WHEREAS**, Marin Clean Energy ("MCE") is a joint powers authority established on December 19, 2008, and organized under the Joint Exercise of Powers Act, constituting Chapter 5 of Division 7 of Title 1 (commencing with Section 6500) of the California Government Code, as amended and supplemented (the "Act"); and

WHEREAS, MCE members include the following communities: the County of Marin, the County of Contra Costa, the County of Napa, the County of Solano, the City of American Canyon, the City of Belvedere, the City of Benicia, the City of Calistoga, the City of Concord, the Town of Corte Madera, the Town of Danville, the City of El Cerrito, the Town of Fairfax, the City of Fairfield, the City of Lafayette, the City of Larkspur, the City of Martinez, the City of Mill Valley, the Town of Moraga, the City of Napa, the City of Novato, the City of Oakley, the City of Pinole, the City of Pittsburg, the City of Pleasant Hill, the City of San Ramon, the City of Richmond, the Town of Ross, the Town of San Anselmo, the City of San Pablo, the City of San Rafael, the City of Sausalito, the City of St. Helena, the Town of Tiburon, the City of Vallejo, the City of Walnut Creek, and the Town of Yountville; and

**WHEREAS**, MCE is subject to various provisions of the California Government Code; and

**WHEREAS**, Government Code section 54953(e), as amended by Assembly Bill No. 361, allows legislative bodies to hold open meetings by teleconference without reference to otherwise applicable requirements in Government Code section 54953(b)(3), so long as the legislative body complies with certain requirements, there exists a declared state of emergency, and one of the following circumstances is met:

- 1. State or local officials have imposed or recommended measures to promote social distancing.
- 2. The legislative body is holding the meeting for the purpose of determining whether as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.
- 3. The legislative body has determined that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

**WHEREAS**, the Governor of California proclaimed a state of emergency pursuant to Government Code section 8625 on March 4, 2020; and

**WHEREAS**, the MCE Board of Directors previously adopted Resolution No. 2021-08 delegating authority to the MCE Executive Committee to adopt certain findings in accordance with Government Code section 54953(e), for remote teleconference meetings for the Board of Directors and any committee of the Board of Directors;

**WHEREAS**, the MCE Executive Committee desires to hold the MCE public meetings by teleconference consistent with Government Code section 54953(e);

NOW, THEREFORE, BE IT RESOLVED by the MCE Executive Committee:

- A. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.
- B. The Executive Committee hereby finds and declares the following, as required by Government Code section 54953(e)(3):
  - 1. The Governor of California proclaimed a state of emergency on March 4, 2020, pursuant to Government Code section 8625, which remains in effect.
  - 2. State and local officials have imposed or recommended measures to promote social distancing.
  - 3. The legislative body has determined that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

**PASSED AND ADOPTED** by the MCE Executive Committee on this 3rd day of February 2023, by the following vote:

	AYES	NOES	ABSTAIN	ABSENT
City of Belvedere				
City of Concord				
City of El Cerrito				
Town of Fairfax				
City of Larkspur				
City of Mill Valley				
City of Pinole				
City of Pittsburg				
Town of Tiburon				
City of Walnut Creek				

CHAIR, MCE

Attest:

SECRETARY, MCE

# **RESOLUTION NO. 2021-08**

# A RESOLUTION OF THE BOARD OF DIRECTORS OF MARIN CLEAN ENERGY DELEGATING AUTHORITY TO EXECUTIVE COMMITTEE TO ADOPT FINDINGS PURSUANT TO GOVERNMENT CODE SECTION 54953(e)

WHEREAS, Marin Clean Energy ("MCE") is a joint powers authority established on December 19, 2008, and organized under the Joint Exercise of Powers Act, constituting Chapter 5 of Division 7 of Title 1 (commencing with Section 6500) of the California Government Code, as amended and supplemented (the "Act"); and

WHEREAS, MCE members include the following communities: the County of Marin, the County of Contra Costa, the County of Napa, the County of Solano, the City of American Canyon, the City of Belvedere, the City of Benicia, the City of Calistoga, the City of Concord, the Town of Corte Madera, the Town of Danville, the City of El Cerrito, the Town of Fairfax, the City of Lafayette, the City of Larkspur, the City of Martinez, the City of Mill Valley, the Town of Moraga, the City of Napa, the City of Novato, the City of Oakley, the City of Pinole, the City of Pittsburg, the City of Pleasant Hill, the City of San Ramon, the City of Richmond, the Town of Ross, the Town of San Anselmo, the City of San Rafael, the City of Sausalito, the City of St. Helena, the Town of Tiburon, the City of Vallejo, the City of Walnut Creek, and the Town of Yountville; and

WHEREAS, MCE is subject to various provisions of the California Government Code; and

WHEREAS, Government Code section 54953, as amended by Assembly Bill No. 361, allows legislative bodies to continue to hold open meetings by teleconference without reference to otherwise applicable requirements in Government Code section 54953(b)(3), so long as certain findings are adopted by the legislative body every 30 days under Government Code Section 5493(e); and

**WHEREAS**, from time to time, the Board of Directors delegates certain rights and responsibilities to the Executive Committee; and

WHEREAS, the Executive Committee meets more frequently than the Board of Directors and will be better able to adopt certain findings every 30 days in accordance with Government Code section 54953(e) to allow the Board of Directors and any Committee of the Board of Directors to continue holding open meetings by teleconference; and

**WHEREAS**, the Board of Directors shall not be divested of any such authority as described herein, but shall retain and may exercise such authority at such times as it may deem necessary and proper, at its sole discretion.

NOW, THEREFORE, BE IT RESOLVED by the MCE Board of Directors:

- A. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.
- B. The Board of Directors hereby delegates the following authority:
  - 1. The Executive Committee is hereby authorized to adopt certain findings every 30 days in accordance with Government Code section 54953(e), for continued remote teleconference meetings for the Board of Directors and any committee of the Board of Directors.

**PASSED AND ADOPTED** by the MCE Board of Directors on this 7th day of October, 2021, by the following vote:

	AYES	NOES	ABSTAIN	ABSENT
County of Marin	Х			
Contra Costa County	Х			
County of Napa	Х			
County of Solano				Х
City of American Canyon	Х			
City of Belvedere				Х
City of Benicia	Х			
City of Calistoga	Х			
City of Concord	Х			
Town of Corte Madera	Х			
Town of Danville	Х			
City of El Cerrito	Х			
Town of Fairfax	Х			
City of Lafayette	Х			
City of Larkspur	Х			
City of Martinez	Х			
City of Mill Valley				Х
Town of Moraga				Х
City of Napa	Х			
City of Novato	Х			
City of Oakley				Х
City of Pinole	Х			
City of Pittsburg	Х			

City of Pleasant Hill		Х
City of San Ramon		Х
City of Richmond	X	
Town of Ross	X	
Town of San Anselmo	X	
City of San Pablo		Х
City of San Rafael	X	
City of Sausalito	X	
City of St. Helena	X	
Town of Tiburon	X	
City of Vallejo	X	
City of Walnut Creek		Х
Town of Yountville	X	

DocuSigned by:

+1But CHAIR, MCE

# Attest:

DocuSigned by:

Dawn Weisz

SECRETARY, MCE

# DRAFT MCE EXECUTIVE COMMITTEE MEETING MINUTES Friday, December 2, 2022 12:15 P.M.

The Executive Committee Meeting was conducted pursuant to the requirements of <u>Assembly</u> <u>Bill No. 361</u> (September 16, 2021) which allows a public agency to use teleconferencing during a Governor-proclaimed state of emergency without meeting usual <u>Ralph M. Brown</u> <u>Act</u> teleconference requirements. Committee Members, staff and members of the public were able to participate in the Committee Meeting via teleconference.

Present:	Denise Athas, City of Novato Edi Birsan, City of Concord Tom Butt, City of Richmond Barbara Coler, Town of Fairfax Cindy Darling, City of Walnut Creek Kevin Haroff, City of Larkspur, Chair Max Perrey, City of Mill Valley Shanelle Scales-Preston Gabriel Quinto, City of El Cerrito Brad Wagenknecht, County of Napa and All Five Napa Cities Sally Wilkinson, City of Belvedere
Absent:	Ford Greene, Town of San Anselmo Devin Murphy, City of Pinole Holli Thier, Town of Tiburon
Staff & Others:	Jean Bonander, Facilitator from Finesse the Future Jesica Brooks, Assistant Board Clerk Stephanie Chen, Director of Legislative Affairs Sebastian Conn, Community Development Manager Vicken Kasarjian, Chief Operating Officer Shaheen Khan, Director of Human Resources, Diversity & Inclusion Tanya Lomas, Internal Operations Assistant Catalina Murphy, Associate General Counsel Dawn Weisz, Chief Executive Officer
1. <u>Roll Call/Qu</u> Chair Haroff	<b>orum</b> called the Executive Committee meeting to order at 12:16 p.m. with

quorum established by roll call.

2. Public Open Time (Discussion)

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

# CLOSED SESSION Conference with Labor Negotiator

# DRAFT

# Agency Designated Representative: Board Chair Unrepresented Employee: Chief Executive Officer

The Committee adjourned to Closed Session at 12:20 p.m.

The Committee reconvened in open session at 1:30 p.m.

Report out by Chair Haroff from the Closed Session: No reportable action taken. Staff were given direction to finalize the materials for Agenda Item #06 for the Committee to vote on in the Open Session.

# 1. <u>Roll Call</u>

Quorum was established by roll call.

2. <u>Board Announcements (Discussion)</u> There were none.

# 3. <u>Public Open Time (Discussion)</u> Chair Haroff opened the public comment period and there were no comments.

# 4. <u>Report from Chief Executive Officer (Discussion)</u>

CEO, Dawn Weisz, reported the following:

- Marin County Supervisor and MCE founding Board Member Damon Connolly will be sworn in to his new seat in the California State Assembly on Monday. We look forward to working with Assemblymember Connolly in his new role.
- A couple of events for MCE since our last Executive Committee meeting:
  - CAISO Symposium: Attendees learned about plans for increasing coordination among western states, and the results of the September heatwave
  - CFEE Conference: Attendees learned a lot about hydrogen energy use in Japan.
  - PANC presentation with Karen Douglas, representing the Governor's office.
- We are completing our transition from Calpine to SMUD for our data management services. Official transfer date is December 16th. Our call center and internal data warehouse are functioning well.
- MCE submitted a grant request to the CEC for a green hydrogen project, and another proposal is in the works to the Department of Energy.
- A reminder that we will be holding our Virtual Holiday party on Friday, December 9th at 6:30pm. We will start with opening remarks and then an opportunity to join many different break-out rooms with jeopardy, cooking demos, and the all-time favorite, moth radio hour.
- An important reminder that we will be starting our December Board meeting at 7:30 (not 7pm) to accommodate a few Board members who have a competing event that evening. But it will be an important meeting

# DRAFT

where we can pay tribute to our Board Chair, and a few other long-time Board members as they wrap up their time at MCE and move on to other adventures.

# 5. <u>Consent Calendar (Discussion/Action)</u>

- C.1 Approval of 11.4.22 Meeting Minutes
- C.2 Second Agreement with Thorn Run Partners, LLC

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

Action: It was M/S/C (Wagenknecht/Darling) to **approve Consent Calendar item C.1 – C.2.** Motion carried by unanimous roll call vote. (Absent: Directors, Murphy, Greene, and Thier).

6. <u>Resolution 2022-15 Establishing the Annual Compensation for the Chief</u> <u>Executive Officer (Discussion/Action)</u>

Catalina Murphy, Associate General Counsel, and Jean Bonander, Facilitator from Finesse the Future presented this item and addressed questions from Committee members.

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

Action: It was M/S/C (Coler/Scales-Preston) to **approve Resolution No. 2022-15 Establishing the Annual Compensation for the Chief Executive Officer.** Motion carried by unanimous roll call vote. (Absent: Directors, Murphy, Greene, and Thier).

# 7. 2022 Charles F. McGlashan Advocacy Award (Discussion/Action)

Sebastian Conn, Community Development Manager, presented this item and addressed questions from Committee members.

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

Action: It was M/S/C (Coler/Athas) to select the 2022 recipient(s) of the Charles F. McGlashan Advocacy Award to be presented at a future meeting of the MCE Board of Directors. Matt Belasco with Pittsburg Unified School District, Contra Costa County, Sara Bellafronte with City of Pittsburg, Contra Costa County, and Napa Green, Napa County were selected. Motion carried by unanimous roll call vote. (Absent: Directors, Birsan, Murphy, Greene, Thier, and Wilkinson).

8. <u>2022 MCE Climate Action Leadership Award Nomination (Discussion/Action)</u> Stephanie Chen, Director of Legislative Affairs, presented this item and addressed questions from Committee members.

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

Action: It was M/S/C (Athas/Darling) to present 2022 Climate Action Leadership Awards to Senator Dianne Feinstein, Congressman John Garamendi, and Congressman Jared Huffman at an upcoming Board meeting. Motion carried by unanimous roll call vote. (Absent: Directors, Birsan, Murphy, Greene, Thier, and Wilkinson).

9. <u>Consider Adjusting Time of Executive Committee Meeting (Discussion)</u> CEO Weisz, presented this item and addressed questions from Committee members.

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

Action: No action required.

# 10. Review Draft 12.15.22 Board Agenda (Discussion)

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

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

Action: No action required.

## 11. <u>Committee Matters & Staff Matters (Discussion)</u> There were none.

## 12. Adjournment

Chair Haroff adjourned the meeting at 2:22 p.m. to the next scheduled Executive Committee Meeting on January 5, 2023.

Kevin Haroff, Chair

Attest:

Dawn Weisz, Secretary



February 3, 2023

TO:	MCE Executive Committee
FROM:	Joey Lande, Manager of Customer Programs
RE:	Second Agreement with Energy Solutions (Agenda Item #06 C.2)
ATTACHMENT:	Proposed Second Agreement with Energy Solutions

Dear Executive Committee Members:

# Summary:

The proposed Second Agreement with Energy Solutions ("Agreement") would provide MCE the ability to scale up adoption of electric vehicles ("EV") and increase access to new and used EV ownership by providing income qualified customers with educational resources and incentives.

# Background:

Since Fall 2019, MCE has offered an EV incentive program ("Program"), which educates customers about EVs and charging, and provides a \$3,500 rebate for the purchase of an EV by income qualified customers. This Program has been managed largely in-house by MCE staff with a vendor supporting financial verification and application processing. This Program has helped nearly 300 MCE customers purchase an EV for the first time.

MCE has received feedback from customers about the need to address three barriers for further expanding EV access:

- Add incentives at point-of-sale rather than post-purchase to reduce the upfront costs and need for financing;
- Offer an incentive for used EVs in addition to new EVs as used EVs are more affordable than a new EV; and
- Ensure the Program exists beyond a fiscal year ("FY") as funding was always subject to a new annual budget but purchasing decisions spanned years.

Currently, MCE has provided 296 post-purchase rebates to income qualified customers over 3 fiscal years. The goals for the proposed Agreement would be to add 556 grants at

point-of-sale for income qualified customers from April 2023 to March 2026, nearly doubling our rate of impact.

The proposed Agreement would continue MCE's work on EVs for income-qualified customers, while directly addressing some of the largest barriers for those customers to participate in the Program by:

- Changing the post-purchase rebate processed by MCE into a point-of-sale grant processed by dealers and approved by MCE to reduce the upfront financial burden;
- Adding a \$2,000 incentive for used EVs in addition to maintaining a \$3,500 incentive for new EVs to support customers interested in either;
- Committing to the Program for 3 fiscal years to provide confidence and consistency;
- Managing marketing, education, & outreach of MCE customers and local dealers & automakers to boost Program participation; and
- Preparing and analyzing data in reports for use by MCE to monitor and evaluate the success of the Program.

The proposed Agreement is the result of demonstrated value from the Program, and addresses the need to add capacity, overcome market barriers, and expand the Program's impacts.

**Fiscal Impact:** The entire proposed budget of \$2,399,410 would span 3 Fiscal Years and would be accounted for in each year's approved Operating Budget. These funds derive from the Local Renewable Energy & Program Development Fund, which is generated from a portion of Deep Green customer revenue.

**Recommendation**: Approve the Proposed Second Agreement with Energy Solutions.

#### MARIN CLEAN ENERGY STANDARD SHORT FORM CONTRACT SECOND AGREEMENT BY AND BETWEEN MARIN CLEAN ENERGY AND ENERGY SOLUTIONS

**THIS SECOND AGREEMENT** ("Agreement") is made and entered into onby and between MARIN CLEANENERGY (hereinafter referred to as "MCE") and COHEN VENTURES, INC., DBA Energy Solutions, a California corporation with<br/>principal address at: 449 15th Street, Oakland, California 94612 (hereinafter referred to as "Contractor") (each, a "Party," and, together,<br/>the "Parties").

#### **RECITALS:**

WHEREAS, MCE desires to retain Contractor to provide the services described in Exhibit A attached hereto and by this reference made a part hereof ("Services");

WHEREAS, Contractor desires to provide the Services to MCE;

**NOW, THEREFORE,** in consideration of the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

### 1. SCOPE OF SERVICES:

Contractor agrees to provide all of the Services in accordance with the terms and conditions of this Agreement. "Services" shall also include any other work performed by Contractor pursuant to this Agreement.

#### 2. FEES AND PAYMENT SCHEDULE; INVOICING:

The fees and payment schedule for furnishing Services under this Agreement shall be based on the rate schedule which is attached hereto as **Exhibit B** and by this reference incorporated herein. Said fees shall remain in effect for the entire term of the Agreement ("Term"). Contractor shall provide MCE with Contractor's Federal Tax I.D. number prior to submitting the first invoice. Contractor is responsible for billing MCE in a timely and accurate manner. Contractor shall email invoices to MCE by the fifteenth (15<sup>th</sup>) calendar day of each month, on a monthly basis for any Services rendered or expenses incurred hereunder. Fees and expenses invoiced beyond ninety (90) days will not be reimbursable. The final invoice must be submitted within thirty (30) days of completion of the stated scope of services or termination of this Agreement. MCE will process payment for undisputed invoiced amounts within thirty (30) days of receipt of such invoice.

### 3. MAXIMUM COST TO MCE:

In no event will the cost to MCE for the Services to be provided herein exceed the maximum sum of \$2,399,410.

### 4. TERM OF AGREEMENT:

This Agreement shall commence on **February 4, 2023** ("Effective Date") and shall terminate on **March 31, 2026**, unless earlier terminated pursuant to the terms and conditions set forth in Section 12.

### 5. <u>REPRESENTATIONS; WARRANTIES; COVENANTS</u>:

- 5.1. CONTRACTOR REPRESENTATIONS AND WARRANTIES. Contractor represents, warrants and covenants that (a) it is a corporation duly organized, validly existing and in good standing under the laws of the State of California, (b) it has full power and authority and all regulatory authorizations required to execute, deliver and perform its obligations under this Agreement and all exhibits and addenda and to engage in the business it presently conducts and contemplates conducting, (c) it is and will be duly licensed or qualified to do business and in good standing under the laws of the State of California and each other jurisdiction wherein the nature of its business transacted by it makes such licensing or qualification necessary and where the failure to be licensed or qualified would have a material adverse effect on its ability to perform its obligations hereunder, (d) it is qualified and competent to render the Services and possesses the requisite expertise to perform its obligations hereunder, (e) the execution, delivery and performance of this Agreement and all exhibits and addenda hereto are within its powers and do not violate the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it, (f) this Agreement and each exhibit and addendum constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, and (g) it is not bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt.
- 5.2. COMPLIANCE WITH APPLICABLE LAW. At all times during the Term and the performance of the Services, Contractor shall comply with all applicable federal, state and local laws, regulations, ordinances and resolutions ("Applicable Law")
   MCE Standard Form 002 (Updated 2/3/2021)

- **5.3.** LICENSING. At all times during the performance of the Services, Contractor represents, warrants and covenants that it has and shall obtain and maintain, at its sole cost and expense, all required permits, licenses, certificates and registrations required for the operation of its business and the performance of the Services. Contractor shall promptly provide copies of such licenses and registrations to MCE at the request of MCE.
- **5.4. NONDISCRIMINATORY EMPLOYMENT.** Contractor shall not unlawfully discriminate against any individual based on race, color, religion, nationality, sex, sexual orientation, gender identity, age or condition of disability. Contractor understands and agrees that Contractor is bound by and shall comply with the nondiscrimination mandates of all federal, state, and local statutes, regulations, and ordinances.
- **5.5. PERFORMANCE ASSURANCE; BONDING.** At all times during the performance of the Services, Contractor represents, warrants and covenants that it has and shall obtain and maintain, at its sole cost and expense, all bonding requirements of the California Contractors State License Board ("CSLB"), as may be applicable. Regardless of the specific Services provided, Contractor shall also maintain any payment and/or performance assurances as may be requested by MCE during the performance of the Services.
- 5.6. SAFETY. At all times during the performance of the Services, Contractor represents, warrants and covenants that it shall:
  - a) abide by all applicable federal and state Occupational Safety and Health Administration requirements and other applicable federal, state, and local rules, regulations, codes and ordinances to safeguard persons and property from injury or damage;
  - b) abide by all applicable MCE security procedures, rules and regulations and cooperate with MCE security personnel whenever on MCE's property;
  - c) abide by MCE's standard safety program contract requirements as may be provided by MCE to Contractor from time to time;
  - d) provide all necessary training to its employees, and require Subcontractors to provide training to their employees, about the safety and health rules and standards required under this Agreement;
  - e) have in place an effective Injury and Illness Prevention Program that meets the requirements all applicable laws and regulations, including but not limited to Section 6401.7 of the California Labor Code. Additional safety requirements (including MCE's standard safety program contract requirements) are set forth elsewhere in the Agreement, as applicable, and in MCE's safety handbooks as may be provided by MCE to Contractor from time to time;
  - f) be responsible for initiating, maintaining, monitoring and supervising all safety precautions and programs in connection with the performance of the Agreement; and
  - g) monitor the safety of the job site(s), if applicable, during the performance of all Services to comply with all applicable federal, state, and local laws and to follow safe work practices.

## 5.7. BACKGROUND CHECKS.

- a) Contractor hereby represents, warrants and covenants that any employees, members, officers, contractors, Subcontractors and agents of Contractor (each, a "Contractor Party," and, collectively, the "Contractor Parties") having or requiring access to MCE's assets, premises, customer property ("Covered Personnel") shall have successfully passed background screening on each such individual, prior to receiving access, which screening may include, among other things to the extent applicable to the Services, a screening of the individual's educational background, employment history, valid driver's license, and court record for the seven (7) year period prior to hiring.
- b) Notwithstanding the foregoing and to the extent permitted by applicable law, in no event shall Contractor permit any Covered Personnel to have one or more convictions during the seven (7) year period immediately preceding the individual's date of assignment to perform the Services, or at any time after the individual's date of, assignment to perform the Services, for any of the following ("Serious Offense"): (i) a "serious felony," similar to those defined in California Penal Code Sections 1192.7(c) and 1192.8(a), or a successor statute, or (ii) any crime involving fraud (such as, but not limited to, crimes covered by California Penal Code Sections 476, 530.5, 550, and 2945, California Corporations Code 25540), embezzlement (such as, but not limited to, crimes covered by California Penal Code Sections 484 and 503 et seq.), or racketeering (such as, but not limited to, crimes covered by California Penal Code Section 186 or the Racketeer Influenced and Corrupt Organizations("RICO") Statute (18 U.S.C. Sections 1961-1968)).
- c) To the maximum extent permitted by applicable law, Contractor shall maintain documentation related to such background and drug screening for all Covered Personnel and make it available to MCE for audit if required pursuant to the audit provisions of this Agreement.
- d) To the extent permitted by applicable law, Contractor shall notify MCE if any of its Covered Personnel is charged with or convicted of a Serious Offense during the term of this Agreement. Contractor shall also immediately prevent that employee, representative, or agent from performing any Services.

- **5.8. FITNESS FOR DUTY**. Contractor shall ensure that all Covered Personnel report to work fit for their job. Covered Personnel may not consume alcohol while on duty and/or be under the influence of drugs or controlled substances that impair their ability to perform the Services properly and safely. Contractor shall, and shall cause its Subcontractors to, have policies in place that require their employees, contractors, subcontractors and agents to report to work in a condition that allows them to perform the work safely. For example, employees should not be operating equipment under medication that creates drowsiness.
- **5.9. QUALITY ASSURANCE PROCEDURES**. Contractor shall comply with the Quality Assurance Procedures identified in Exhibit A (if any) (the "Quality Assurance Procedures"). Additionally, Quality Assurance Procedures must include, but are not limited to: (i) industry standard best practices; (ii) procedures that ensure customer satisfaction; and (iii) any additional written direction from MCE.
- **5.10. ASSIGNMENT OF PERSONNEL**. The Contractor shall not substitute any personnel for those specifically named in its proposal, if applicable, unless personnel with substantially equal or better qualifications and experience are provided, acceptable to MCE, as is evidenced in writing.
- **5.11. ACCESS TO CUSTOMER SITES.** Contractor shall be responsible for obtaining any and all access rights for Contractor Parties, from customers and other third parties to the extent necessary to perform the Services. Contractor shall also procure any and all access rights from Contractor Parties, customers and other third parties in order for MCE and CPUC employees, representatives, agents, designees and contractors to inspect the Services.

### 6. INSURANCE:

At all times during the Term and the performance of the Services, Contractor shall maintain the insurance coverages set forth below. All such insurance coverage shall be substantiated with a certificate of insurance and must be signed by the insurer or its representative evidencing such insurance to MCE. The general liability policy shall be endorsed naming Marin Clean Energy and its employees, directors, officers, and agents as additional insureds. The certificate(s) of insurance and required endorsement shall be furnished to MCE prior to commencement of Services. Certificate(s) of insurance must be current as of the Effective Date, and shall remain in full force and effect through the Term. If scheduled to lapse prior to termination date, certificate(s) of insurance must be automatically updated before final payment may be made to Contractor. Each certificate of insurance shall provide for thirty (30) days' advance written notice to MCE of any cancellation or reduction in coverage. Insurance coverages shall be payable on a per occurrence basis only.

Nothing in this Section 6 shall be construed as a limitation on Contractor's indemnification obligations in Section 17 of this Agreement.

Should Contractor fail to provide and maintain the insurance required by this Agreement, in addition to any other available remedies at law or in equity, MCE may suspend payment to the Contractor for any Services provided during any period of time that insurance was not in effect and until such time as the Contractor provides adequate evidence that Contractor has obtained the required insurance coverage.

- 6.1. GENERAL LIABILITY. The Contractor shall maintain a commercial general liability insurance policy in an amount of no less than one million dollars (\$1,000,000) with a two million dollar (\$2,000,000) aggregate limit. "Marin Clean Energy" shall be named as an additional insured on the commercial general liability policy and the certificate of insurance shall include an additional endorsement page (see sample form: ISO CG 20 10 11 85).
- **6.2. AUTO LIABILITY.** Where the Services to be provided under this Agreement involve or require the use of any type of vehicle by Contractor in order to perform said Services, Contractor shall also provide comprehensive business or commercial automobile liability coverage including non-owned and hired automobile liability in the amount of one million dollars combined single limit (\$1,000,000).
- 6.3. WORKERS' COMPENSATION. The Contractor acknowledges that the State of California requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code. If Contractor has employees, it shall comply with this requirement and a copy of the certificate evidencing such insurance or a copy of the Certificate of Consent to Self-Insure shall be provided to MCE prior to commencement of Services.

### 6.4. INTENTIONALLY OMITTED

### 7. FINANCIAL STATEMENTS:

Contractor shall deliver financial statements as may be reasonably requested by MCE within seven (7) days of MCE's request for the financial statements. Such financial statements or documents shall be for the most recently available audited or reviewed period and prepared in accordance with generally-accepted accounting principles.

#### 8. SUBCONTRACTING:

The Contractor shall not subcontract nor assign any portion of the work required by this Agreement without prior, written approval of MCE, except for any subcontract work expressly identified herein in Exhibit A. If Contractor hires a subcontractor under this Agreement (a "Subcontractor"), Subcontractor shall be bound by all applicable terms and conditions of this Agreement, and Contractor shall ensure the following:

- 8.1. Subcontractor shall comply with the following terms of this Agreement: Sections 9, 10, Exhibit A.
- **8.2.** Subcontractor shall provide, maintain and be bound by the representations, warranties and covenants of Contractor contained in Section 5 hereof (as may be modified to be applicable to Subcontractor with respect to Section 5.1(a) hereof) at all times during the Term of such subcontract and its provision of Services.
- **8.3.** Subcontractor shall comply with the terms of Section 6 above, including, but not limited to providing and maintaining insurance coverage(s) identical to what is required of Contractor under this Agreement, and shall name MCE as an additional insured under such policies. Contractor shall collect, maintain, and promptly forward to MCE current evidence of such insurance provided by its Subcontractor. Such evidence of insurance shall be included in the records and is therefore subject to audit as described in Section 9 hereof.
- **8.4.** Subcontractor shall be contractually obligated to indemnify the MCE Parties (as defined in Section 17 hereof) pursuant to the terms and conditions of Section 17 hereof.
- **8.5.** Subcontractors shall not be permitted to further subcontract any obligations under this Agreement.

Contractor shall be solely responsible for ensuring its Subcontractors' compliance with the terms and conditions of this Agreement made applicable above and to collect and maintain all documentation and current evidence of such compliance. Upon request by MCE, Contractor shall promptly forward to MCE evidence of same. Nothing contained in this Agreement or otherwise stated between the Parties shall create any legal or contractual relationship between MCE and any Subcontractor, and no subcontract shall relieve Contractor of any of its duties or obligations under this Agreement. Contractor's obligation to pay its Subcontractors is an independent obligation from MCE's obligation to make payments to Contractor. As a result, MCE shall have no obligation to pay or to enforce the payment of any monies to any Subcontractor.

### 9. <u>RETENTION OF RECORDS AND AUDIT PROVISION</u>:

Contractor shall keep and maintain on a current basis full and complete records and documentation pertaining to this Agreement and the Services, whether stored electronically or otherwise, including, but not limited to, valuation records, accounting records, documents supporting all invoices, employees' time sheets, receipts and expenses, and all customer documentation and correspondence (the "Records"). MCE shall have the right, during regular business hours, to review and audit all Records during the Term and for at least five (5) years from the date of the completion or termination of this Agreement. Any review or audit may be conducted on Contractor's premises or, at MCE's option, Contractor shall provide all records within a maximum of fifteen (15) days upon receipt of written request from MCE. Contractor shall refund any monies erroneously charged. Contractor shall have an opportunity to review and respond to or refute any report or summary of audit findings, and shall promptly refund any overpayments made by MCE based on undisputed audit findings.

### 10. DATA, CONFIDENTIALITY AND INTELLECTUAL PROPERTY:

10.1. DEFINITION OF "MCE DATA". "MCE Data" shall mean all data or information provided by or on behalf of MCE, including but not limited to, customer Personal Information; energy usage data relating to, of, or concerning, provided by or on behalf of any customers; all data or information input, information systems and technology, software, methods, forms, manuals, and designs, transferred, uploaded, migrated, or otherwise sent by or on behalf of MCE to Contractor as MCE may approve of in advance and in writing (in each instance); account numbers, forecasts, and other similar information disclosed to or otherwise made available to Contractor. MCE Data shall also include all data and materials provided by or made available to Contractor by MCE's licensors, including but not limited to, any and all survey responses, feedback, and reports subject to any limitations or restrictions set forth in the agreements between MCE and their licensors.

"Confidential Information" under this Agreement shall have the same meaning as defined in the Marin Clean Energy Non-Disclosure Agreement between the Parties dated **January 20, 2023**.

- **10.2. DEFINITION OF CONTRACTOR'S "IRIS PLATFORM".** "Iris Platform" is defined as the Iris online software and associated data, owned and maintained by Contractor and provided as a part of the services to MCE under this Agreement, that functions as an incentive processing and program reporting platform for MCE's customers and other third parties.
- **10.3. DEFINITION OF "PERSONAL INFORMATION".** "Personal Information" includes but is not limited to the following: personal and entity names, e-mail addresses, addresses, phone numbers, any other public or privately-issued identification numbers, IP addresses, MAC addresses, and any other digital identifiers associated with entities, geographic locations, users, persons, machines or networks. Contractor shall comply with all applicable federal, state and local laws, rules, and regulations related to the use, collection, storage, and transmission of Personal Information.
- 10.4. MCE DATA SECURITY MEASURES. Prior to Contractor receiving any MCE Data, Contractor shall comply, and at all times thereafter continue to comply, in compliance with MCE's Data security policies set forth in MCE Policy 009 (available upon request) and MCE's Advanced Metering Infrastructure (AMI) Data Security and Privacy Policy ("Security Measures") and pursuant to MCE's Confidentiality provisions in Section 5 of the Marin Clean Energy Non-Disclosure Agreement between the parties dated January 20, 2023, and as set forth in MCE Policy 001 Confidentiality. MCE's Security Measures and Confidentiality provisions require Contractor to adhere to reasonable administrative, technical, and physical safeguard protocols to protect the MCE's Data from unauthorized handling, access, destruction, use, modification or disclosure.
- **10.5. CONTRACTOR DATA SECURITY MEASURES**. Additionally, Contractor shall, at its own expense, adopt and continuously implement, maintain and enforce reasonable technical and organizational measures consistent with the sensitivity of Personal Information and Confidential Information including, but not limited to, measures designed to (1) prevent unauthorized access to, and otherwise physically and electronically protect, the Personal Information and Confidential Information, and (2) protect MCE content and MCE Data against unauthorized or unlawful access, disclosure, alteration, loss, or destruction.
- **10.6. RETURN OF MCE DATA**. Promptly after this Agreement terminates, (i) Contractor shall securely destroy all MCE Data in its possession and certify the secure destruction in writing to MCE, and (ii) each Party shall return (or if requested by the disclosing Party, destroy) all other Confidential Information and property of the other (if any), provided that Contractor's attorney shall be permitted to retain a copy of such records or materials solely for legal purposes.

#### 10.7. OWNERSHIP AND USE RIGHTS.

- a) MCE Data. Unless otherwise expressly agreed to in writing by the Parties, MCE shall retain all of its rights, title and interest in MCE's Data.
- b) Intellectual Property. Unless otherwise expressly agreed to in writing by the Parties, any and all materials, information, or other intellectual property created, prepared, accumulated or developed by Contractor or any Contractor Party under this Agreement ("Intellectual Property"), including finished and unfinished inventions, processes, templates, documents, drawings, computer programs, designs, calculations, valuations, maps, plans, workplans, text, filings, estimates, manifests, certificates, books, specifications, sketches, notes, reports, summaries, analyses, manuals, visual materials, data models and samples, including summaries, extracts, analyses and preliminary or draft materials developed in connection therewith, shall be owned by MCE. MCE shall have the exclusive right to use Intellectual Property in its sole discretion and without further compensation to Contractor or to any other party. Contractor shall, at MCE's expense, provide Intellectual Property to MCE or to any party MCE may designate upon written request. Contractor may keep one file reference copy of Intellectual Property prepared for MCE solely for legal purposes and if otherwise agreed to in writing by MCE. In addition, Contractor may keep one copy of Intellectual Property if otherwise agreed to in writing by MCE.
- c) Intellectual Property Rights to the Iris Platform. All right, title, and interest in and to the Iris Platform (including without limitation all intellectual property rights therein) and all modifications, improvements, extensions, customizations, scripts or other definitive works of the Iris Platform provided or developed by the Contractor, whether prior to or during the Term of this Agreement, are and shall remain at all times solely vested in the Contractor. The Iris Platform was developed in its entirety by Contractor prior to the term of this Agreement, is the sole and exclusive property of Contractor, and Contractor retains all intellectual property rights thereto, including but not limited to copyrights (including all registrations and applications therefor), trade secrets, service marks, trademarks, trade names, trade dress, trademark applications and registrations, internet domain names, and all other proprietary and intellectual property rights, including moral rights. Use of the Iris Platform by MCE, its customers or any third party as part of these Services shall not convey any rights of ownership to the Iris Platform, express or implied, including any intellectual property rights thereto, to any such party. During the term of this Agreement, Contractor grants to MCE a non-exclusive, non-assignable, royalty-free, worldwide limited right to access and use the Iris Platform in connection with the Services. Except as expressly provided herein, MCE agrees not to assign, sublicense, transfer, copy,

reproduce, distribute, republish, display, post or transmit in any form or by any means, any part of the Iris Platform to any third party. MCE agrees not to access the Iris Platform by any means other than through the interfaces that are provided by Contractor. The Iris Platform and any and all works, expressions, inventions, ideas, discoveries, improvements and developments made to the Iris Platform by any person during the term of this Agreement, are explicitly excluded as "Intellectual Property" pursuant to this Agreement. Any MCE Data provided by MCE to Contractor on the Iris Platform remains the property of MCE and, upon request, shall be exported and/or deleted from the Iris Platform.

- d) Iris Platform Terms of Use. All users of the Iris Platform shall be required to comply with the Iris Platform's standard Terms of Use, including MCE's employees who accesses the Iris Platform in connection with the Services; provided, however, that if any Terms of Use applicable to MCE's employees conflict with any provisions of this Agreement, with respect to MCE employee's use of the Iris Platform in connection with the Services, the provision of this Agreement shall control.
- e) Intellectual Property shall be owned by MCE upon its creation. Contractor agrees to execute any such other documents or take other actions as MCE may reasonably request to perfect MCE's ownership in the Intellectual Property.
- f) Contractor's Pre-Existing Materials Contractor is, and shall remain the sole and exclusive owner of all right, title and interest in and to all documents, works, codebases, software, data, know-how, methodologies, and materials provided, developed, acquired or used by Contractor prior to the Effective Date ("Contractor's Pre-Existing Materials"). To the extent any of Contractor's Pre-Existing Materials are used to create, develop, and prepare the Intellectual Property, Contractor hereby grants MCE on behalf of its customers and the CPUC for governmental and regulatory purposes an irrevocable, assignable, non-exclusive, perpetual, fully paid up, worldwide, royalty-free, unrestricted license to use and sublicense others to use, reproduce, display, prepare and develop derivative works, perform, distribute copies of any intellectual or proprietary property right of Contractor or any Contractor Party for the sole purpose of using such Intellectual Property for the conduct of MCE's business and for disclosure to the CPUC for governmental and regulatory purposes related thereto. Any and all claims to Contractor's Pre-Existing Materials to be furnished or used to prepare, create, develop or otherwise manifest the Intellectual Property must be expressly disclosed to MCE prior to performing any Services under this Agreement. Any such Pre-Existing Material that is modified by work under this Agreement is owned by Contractor and licensed to MCE.
- 10.8. EQUITABLE RELIEF. Each Party acknowledges that a breach of this Section 10 would cause irreparable harm and significant damages to the other Party, the degree of which may be difficult to ascertain. Accordingly, each Party agrees that MCE shall have the right to obtain immediate equitable relief to enjoin any unauthorized use or disclosure of MCE Data or Personal Information, in addition to any other rights and remedies that it may have at law or otherwise; and Contractor shall have the right to obtain immediate equitable relief to enjoin any unauthorized use or disclosure of Contractor's Pre-Existing Materials, in addition to any other rights and remedies that it may have at law or otherwise.

#### 11. FORCE MAJEURE:

A Party shall be excused for failure to perform its obligations under this Agreement if such obligations are prevented by an event of Force Majeure (as defined below), but only for so long as and to the extent that the Party claiming Force Majeure ("Claiming Party") is actually so prevented from performing and provided that (a) the Claiming Party gives written notice and full particulars of such Force Majeure to the other Party (the "Affected Party") promptly after the occurrence of the event relied on, (b) such notice includes an estimate of the expected duration and probable impact on the performance of the Claiming Party's obligations under this Agreement, (c) the Claiming Party furnishes timely regular reports regarding the status of the Force Majeure, including updates with respect to the data included in Section 10 above during the continuation of the delay in the Claiming Party's performance, (d) the suspension of such obligations sought by Claiming Party is of no greater scope and of no longer duration than is required by the Force Majeure, (e) no obligation or liability of either Party which became due or arose before the occurrence of the event causing the suspension of performance shall be excused as a result of the Force Majeure; (f) the Claiming Party shall exercise commercially reasonable efforts to mitigate or limit the interference, impairment and losses to the Affected Party; (g) when the Claiming Party is able to resume performance of the affected obligations under this Agreement, the Claiming Party shall give the Affected Party written notice to that effect and promptly shall resume performance under this Agreement. "Force Majeure" shall mean acts of God such as floods, earthquakes, fires, orders or decrees by a governmental authority, civil or military disturbances, wars, riots, terrorism or threats of terrorism, utility power shutoffs, strikes, labor disputes, pandemic, or other forces over which the responsible Party has no control and which are not caused by an act or omission of such Party.

#### 12. TERMINATION:

12.1. Either Party may terminate this contract, in whole or in part, immediately upon notice to the other Party if: (a) the non-breaching Party determines that the actions or inactions of the breaching Party, its agents, employees or subcontractors have caused, or reasonably could cause, jeopardy to health, safety, or property, or (b) If either party fails to fulfill any material MCE Standard Form 002 (Updated 2/3/2021)

requirement of this contract, is in violation of a material provision of this contract, or either party determines that the other party lacks the financial resources to perform the contract, The non-breaching party shall give the breaching party fifteen (15) days prior written notice of the non-breaching party's intent to terminate, and the grounds therefor. Termination shall occur if the parties fail to agree on a plan for the breaching party to cure within fifteen (15) days of the breaching party's receipt of such notice.

- **12.2.** Either Party hereto may terminate this Agreement for any reason by giving thirty (30) calendar days' written notice to the other Party. Notice of termination shall be by written notice to the other Party and be sent by registered mail or by email to the email address listed in Section 19.
- 12.3. In the event of termination not the fault of the Contractor, the Contractor shall be paid for Services performed up to the date of termination in accordance with the terms of this Agreement so long as proof of required insurance is provided for the periods covered in the Agreement or Amendment(s). Notwithstanding anything contained in this Section 12, in no event shall MCE be liable for lost or anticipated profits or overhead on uncompleted portions of the Agreement. Contractor shall not enter into any agreement, commitments or subcontracts that would incur significant cancelation or termination costs without prior written approval of MCE, and such written approval shall be a condition precedent to the payment of any cancellation or termination charges by MCE under this Section 12. Also, as a condition precedent to the payment of any cancellation or termination charges by MCE under this Section 12, Contractor shall have delivered to MCE any and all Intellectual Property (as defined in Section 10.6(b)) prepared for MCE before the effective date of such termination.
- 12.4. MCE may terminate this Agreement if funding for this Agreement is reduced or eliminated by a third-party funding source.
- **12.5.** Without limiting the foregoing, if either Party's activities hereunder become subject to law or regulation of any kind, which renders the activity illegal, unenforceable, or which imposes additional costs on such Party for which the parties cannot mutually agree upon an acceptable price modification, then such Party shall at such time have the right to terminate this Agreement upon written notice to the other Party with respect to the illegal, unenforceable, or uneconomic provisions only, and the remaining provisions will remain in full force and effect.
- **12.6.** Upon termination of this Agreement for any reason, Contractor shall and shall cause each Contractor Party to bring the Services to an orderly conclusion as directed by MCE and shall return all MCE Data (as defined in Section 10.1 above) and Intellectual Property to MCE.
- 12.7. Notwithstanding the foregoing, this Agreement shall be subject to changes, modifications, or termination by order or directive of the California Public Utilities Commission ("CPUC"). The CPUC may from time to time issue an order or directive relating to or affecting any aspect of this Agreement, in which case MCE shall have the right to change, modify or terminate this Agreement in any manner to be consistent with such order or directive.
- **12.8.** Notwithstanding any provision herein to the contrary, Sections 2, 3, 8.4, 9, 10, 12, 15, 16, 17, 18, 19, 20, 21, 22, 24 and Exhibit B of this Agreement shall survive the termination or expiration of this Agreement.

### 13. ASSIGNMENT:

The rights, responsibilities, and duties under this Agreement are personal to the Contractor and may not be transferred or assigned without the express prior written consent of MCE.

### 14. AMENDMENT; NO WAIVER:

This Agreement may be amended or modified only by written agreement of the Parties. Failure of either Party to enforce any provision or provisions of this Agreement will not waive any enforcement of any continuing breach of the same provision or provisions or any breach of any provision or provisions of this Agreement.

### 15. DISPUTES:

Either Party may give the other Party written notice of any dispute which has not been resolved at a working level. Any dispute that cannot be resolved between Contractor's contract representative and MCE's contract representative by good faith negotiation efforts shall be referred to Legal Counsel of MCE and an officer of Contractor for resolution. Within 20 calendar days after delivery of such notice, such persons shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary to exchange information and to attempt to resolve the dispute. If MCE and Contractor cannot reach an agreement within a reasonable period of time (but in no event more than 30 calendar days), MCE and Contractor shall have the right to pursue all rights and remedies that may be available at law or in equity. All negotiations and any mediation agreed to by the Parties are confidential and shall be treated as compromise and settlement negotiations, to which Section 1119 of the California Evidence Code shall apply, and Section 1119 is incorporated herein by reference.

#### 16. JURISDICTION AND VENUE:

This Agreement shall be construed in accordance with the laws of the State of California and the Parties hereto agree that venue shall be in Marin County, California.

#### 17. INDEMNIFICATION:

To the fullest extent permitted by Applicable Law, Contractor shall indemnify, defend, and hold MCE and its employees, officers, directors, representatives, and agents ("MCE Parties"), harmless from and against any and all actions, claims, liabilities, losses, costs, damages, and expenses (including, but not limited to, litigation costs, attorney's fees and costs, physical damage to or loss of tangible property, and injury or death of any person) (collectively, the "Losses") arising out of, resulting from, or caused by: a) the negligence, recklessness, intentional misconduct, fraud of all Contractor Parties; b) the failure of a Contractor Party to comply with the provisions of this Agreement or Applicable Law; or c) any defect in design, workmanship, or materials carried out or employed by any Contractor Party. The foregoing indemnity obligation does not apply to the extent such Losses are attributable to the gross negligence or willful misconduct of any MCE parties.

#### 18. NO RECOURSE AGAINST CONSTITUENT MEMBERS OF MCE:

MCE is organized as a Joint Powers Authority in accordance with the Joint Exercise of Powers Act of the State of California (Government Code Section 6500, et seq.). Pursuant to MCE's Joint Powers Agreement, MCE is a public entity separate from its constituent members. MCE shall solely be responsible for all debts, obligations, and liabilities accruing and arising out of this Agreement. No Contractor Party shall have rights and nor shall any Contractor Party make any claims, take any actions, or assert any remedies against any of MCE's constituent members in connection with this Agreement.

#### 19. INVOICES; NOTICES:

This Agreement shall be managed and administered on MCE's behalf by the Contract Manager named below. All invoices shall be submitted by email to:

Email Address: invoices@mcecleanenergy.org

All other notices shall be given to MCE at the following location:

Contract Manager:	Troy Nordquist
MCE Address:	1125 Tamalpais Avenue San Rafael, CA 94901
Email Address:	contracts@mcecleanenergy.org
Telephone No.:	(925) 378-6767

Notices shall be given to Contractor at the following address:

Contractor:	Ryan Bird
Address:	449 15th Street
	Oakland, California 94612
Email Address:	rbird@energy-solution.com
Telephone No.:	510.482.4420 ext. 269

#### 20. ENTIRE AGREEMENT; ACKNOWLEDGMENT OF EXHIBITS:

This Agreement along with the attached Exhibits marked below constitutes the entire Agreement between the Parties. In the event of a conflict between the terms of this Agreement and the terms in any of the following Exhibits, the terms in this Agreement shall govern.

	$\boxtimes$	Check applicable Exhibits	CONTRACTOR'S INITIALS	MCE'S INITIALS
<u>EXHIBIT A.</u>	x	Scope of Services		
<u>exhibit B.</u>	x	Fees and Payment		
<u>EXHIBIT C.</u>	x	CRM Access Protocols		
<u>exhibit d.</u>	x	Key Performance Indicators		
<u>exhibit e.</u>	x	Service Level Agreement		

#### 21. <u>SEVERABILITY</u>:

Should any provision of this Agreement be held invalid or unenforceable by a court of competent jurisdiction, such invalidity will not invalidate the whole of this Agreement, but rather, the remainder of the Agreement which can be given effect without the invalid provision, will continue in full force and effect and will in no way be impaired or invalidated.

#### 22. INDEPENDENT CONTRACTOR:

Contractor is an independent contractor to MCE hereunder. Nothing in this Agreement shall establish any relationship of partnership, joint venture, employment or franchise between MCE and any Contractor Party. Neither MCE nor any Contractor Party will have the power to bind the other or incur obligations on the other's behalf without the other's prior written consent, except as otherwise expressly provided for herein.

#### 23. <u>TIME</u>:

Time is of the essence in this Agreement and each and all of its provisions.

#### 24. THIRD PARTY BENEFICIARIES:

The Parties agree that there are no third-party beneficiaries to this Agreement either express or implied.

#### 25. FURTHER ACTIONS:

The Parties agree to take all such further actions and to execute such additional documents as may be reasonably necessary to effectuate the purposes of this Agreement.

#### 26. PREPARATION OF AGREEMENT:

This Agreement was prepared jointly by the Parties, each Party having had access to advice of its own counsel, and not by either Party to the exclusion of the other Party, and this Agreement shall not be construed against either Party as a result of the manner in which this Agreement was prepared, negotiated or executed.

#### 27. DIVERSITY SURVEY:

Pursuant to Senate Bill 255 which amends Section 366.2 of the California Public Utilities Code, MCE is required to submit to the California Public Utilities Commission an annual report regarding its procurement from women-owned, minority-owned, disabled veteran-owned and LGBT-owned business enterprises ("WMDVLGBTBE"). Consistent with these requirements, Contractor agrees to provide information to MCE regarding Contractor's status as a WMDVLGBTBE and any engagement of WMDVLGBTBEs in its provision of Services under this Agreement. Concurrently with the execution of this Agreement, Contractor agrees to complete and deliver MCE's Supplier Diversity Survey, found at the following link: <a href="https://form.asana.com/?k=jSGYk4x3sf2dHfSzywc2fg&d=163567039999692">https://form.asana.com/?k=jSGYk4x3sf2dHfSzywc2fg&d=163567039999692</a> (the "Diversity Survey"). Because MCE is required to submit annual reports and/or because the Diversity Survey may be updated or revised during the term of this Agreement, Contractor agrees to complete and deliver the Diversity Survey, an updated or revised version of the Diversity Survey or

a similar survey at the reasonable request of MCE and to otherwise reasonably cooperate with MCE to provide the information described above. Contractor shall provide all such information in the timeframe reasonably requested by MCE.

### 28. COUNTERPARTS:

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which shall be deemed one and the same Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date first above written.

APPROVED BY MARIN CLEAN ENERGY:	CONTRACTOR:
By:	By:
Name:	Name:
Title:	Title:
Date:	Date:

By: Chairperson

Date:

#### MODIFICATIONS TO STANDARD SHORT FORM

□ Standard Short Form Content Has Been Modified

List sections affected: <u>2 (modified), 5.7 (modified), 7 (modified), 10.2 (added), 10.7(c) (added), 10.7(d) (added), 10.7(f)</u> (modified), 12.1 (modified), 17 (modified)

Approved by MCE Counsel: \_\_\_\_\_

Date: \_\_\_\_\_

### EXHIBIT A SCOPE OF SERVICES

Contractor shall provide the following Services under the Agreement as requested and directed by MCE Customer Programs staff, up to the maximum time/fees allowed under this Agreement:

#### Task 1: Startup & Administration

#### 1.1: Program Kickoff

Contractor will schedule an on-site or virtual kickoff within two weeks of contract execution and include all relevant MCE stakeholders. Attendees at this meeting will discuss the MCE Electric Vehicle ("EV") Incentive Program ("Program") objectives and success metrics, MCE goals, roles and responsibilities, and specific Program design elements. Based on collaboration with MCE in the Program Kickoff Meeting, Contractor will create:

- A Program Implementation Plan ("PIP"), which will include the scope and schedule of activities, MCE reporting requirements, Data & Integration Requirements, Quality Assurance/Quality Control procedures and risk mitigation strategies, communication protocols for internal and external stakeholders, and project roles & responsibilities.
- A Marketing, Education & Outreach ("ME&O") Plan, subject to MCE Public Affairs team approval, which will
  include a recommended outreach strategy with messaging, marketing tools (such as digital materials and
  collateral), and timing. The ME&O Plan will include details about recruiting and enrolling Program
  participants. The ME&O Plan will leverage existing MCE collateral and establish a marketing tool kit for EV
  dealers. Deliverables to include, but not be limited to:
  - Email and direct mail<sup>1</sup> campaign to eligible MCE customers
    - At Program Kick-off
    - Throughout Program, frequency of which will be determined in ME&O Plan
  - Customer testimonials
    - A signed Customer Testimonial Waiver is required to be signed before a customer's testimonial can be used in marketing materials
  - Informational blog posts (top of funnel marketing to improve searchability)
  - Fliers (three types of fliers include: customer facing, dealer and partner/Community Based Organization ("CBO") facing, and referral materials)
    - The number of fliers required will be identified in the ME&O Plan
  - Frequently Asked Questions ("FAQs") handout available in print and on MCE's website.

### 1.2: MCE Support

Contractor will collaborate with MCE throughout the Program and meet MCE's goals. This collaboration will include:

- Regular virtual meetings with MCE Customer Programs staff to discuss Program status and action items. Check-in meetings will take place every other week during Program launch and then transition to monthly upon agreement by Contractor and MCE.
- Monthly Status Reports to MCE with relevant Program and participation data. The data elements, visualizations, and narrative for this report will be determined in the Program Kickoff Meeting.

#### 1.3: Annual Reporting

Contractor will create an Annual Program Report for MCE each year of Program implementation which will include, but not be limited to, information on: Annual Highlights, Year Overview, Marketshare Report, Marketing Initiatives, Customer Equity based on information in KPIs, Dealer Outreach, and Program Influence (to be defined in PIP).

#### 1.4: Systems Configuration

<sup>&</sup>lt;sup>1</sup> If MCE stakeholders decide that a direct mail campaign should be utilized, the direct mail campaigns would be developed and designed by Contractor. MCE will pay an additional cost for this marketing tactic.
MCE Standard Form 002 (Updated 2/3/2021)
Page 1

Contractor will configure its application processing software platform, Iris, to serve as a portal for Program participants. Contractor will:

- Create an MCE-branded landing page allowing dealers to log in with a username and password
- Configure an online incentive application (claim) form that allows participants to submit claims individually or in bulk, monitor the status of their claims, and view payment details
- Deploy reports for MCE to track Key Performance Indicators (preferences on format, graphic depictions, charts, and key data points for these dashboards will be determined at the Project Kickoff) and based on Exhibit D
- Import MCE customer data via flat file to Iris and set a recurring cadence for data import during Program Kickoff Meeting
- Establish Web-services based application programming interface ("API") between Iris and MCE's CRM system to share MCE Program participation data and establish a mechanism to push the relevant Program participation data continuously into the MCE CRM
- Utilize MCE's CRM continuously to log Customer and Dealer/Original Equipment Manufacturer ("OEM") Interaction Data
- Establish a Program Qualified Product List ("QPL") of all vehicles that are eligible for Program rebates

### Task 1 Deliverables:

- Project Kickoff Meeting
- Program Implementation Plan
- Regular Meetings
- ME&O Plan
- Email and direct mail<sup>2</sup> campaigns, to be determined in the ME&O Plan
- Customer testimonials
- Informational blog posts
- Fliers, to be determined in the ME&O Plan
- Frequently Asked Questions ("FAQs")
- Status Reports
- Annual Program Report
- MCE branded customer portal
- Transfer of MCE customer data via flat file to Contractor
- Establish an API for transfer of Program Participation data into MCE CRM
- Access MCE's CRM to log Customer and Dealer/OEM Data upon Program launch
- Establish a Program QPL

Contractor will work with MCE to finalize the data requirements and API specifications. Contractor will integrate with MCE CRM to publish the Program participation and customer related activities in real time using web services-based APIs, maintaining the MCE CRM data integrity. Contractor will import the ongoing Program participation data into Contractor's applications and provide the updates on these imports to MCE as soon as the API is implemented.

### Task 2: Implementation

### Task 2.1: Program Marketing

In collaboration with MCE Customer Programs and Public Affairs staff and EV dealer participants, Contractor will develop new marketing materials for the Program. Contractor will develop drafts and coordinate approval with relevant MCE programmatic, marketing, branding, and communications staff on all marketing initiatives, including the development of campaigns or materials. Contractor will provide content to update the MCE website with Program information and links for customer and dealer resources, ensuring resources are up-to-date as the market changes during implementation, and will plan adequate time for MCE approvals.

• Contractor will develop Program marketing materials including, but not limited to, point-of-purchase ("POP") collateral, EV dealer-facing materials, and congratulatory post-purchase customer-facing.

 Contractor will engage CBOs and other groups that serve traditionally underserved, low-income, and disadvantaged populations to drive Program participation.

Contractor will collaborate with the implementers of complementary EV and EV Supply Equipment ("EVSE") programs to include promotional material for the Program in with their existing ME&O efforts while also clearly noting in the promotional materials that the Program is independent of the complementary programs. These programs may include the MCE EV Charging Program, forthcoming PG&E Multifamily EVSE Direct Install Program, Clean Vehicle Assistance Program, Drive Clean Assistance Program, Clean Cars for All, Consumer Assistance Program Vehicle Retirement, and other EV, low-income, or multifamily Programs as appropriate.

### Task 2.2: Dealer Outreach & Enrollment

Contractor will engage a variety of sales channels, including franchised dealers, online dealers, and OEMs that sell directly to customers, with the goal of reaching Program enrollment and participation targets. The primary engagement strategy will be via calls and in-person visits from the Contractor team at dealer locations.

- Contractor will provide MCE standard Dealer Participation Agreement ("DPA") language and will work with MCE to determine specific dealer eligibility requirements, customer data requirements, participant compliance, and the impacts to non-compliant participants.
- Contractor will recruit dealers to the Program. In these visits and conversations, Contractor will promote the Program and its benefits, collect all required information for participation, and ensure all potential participants meet "Participating Dealer" criteria and are approved for enrollment prior to collecting signed DPAs.
- Once new dealer participants enroll, Contractor will train salespeople, management, and administrative staff on Program participation. These trainings will include how to submit claims to the online system and what is expected of staff during the sales process.

#### Task 2.3: Ongoing Dealer Engagement

Contractor will provide ongoing in-person and virtual outreach and support to dealers as needed to ensure they are promoting EV sales and applying rebates to eligible customers. The level of continuing outreach with individual EV dealer participants will depend on a variety of factors, including MCE priorities, participant capacity to deliver EV sales, participant level of engagement, and location, and will continue to be discussed between MCE and Contractor at regular meetings.

- Contractor will perform regular outreach to all enrolled dealers with the goal of increasing Program participation and increasing adoption of EVs.
- Contractor will distribute Program marketing materials and maintain POP collateral at dealer locations.
- Contractor will distribute a quarterly newsletter to dealers to alert them of Program updates, newly eligible vehicles, other MCE Programs, and additional customer incentive opportunities.
- On an annual basis, Contractor will create and distribute dealer performance reports which show each dealer how they are performing in the Program compared to their prior year's performance and to other anonymized participants.

#### Task 2.4: Quality Assurance/Quality Control Procedures

Contractor will work with MCE to determine the data to be collected by the Program upon rebate claim submission. Claim processing will occur daily on weekdays and Contractor will reach out to dealers to follow up on any claims that need edits or clarification.

- Contractor will develop a Quality Assurance/Quality Control Claim Processing Guide that will define Program claim processing requirements that confirm that the rebate recipient is an eligible MCE customer, the vehicle is on the QPL, the claim is not a duplicate, and that the rebate was provided to the customer via a line item discount on the customer's purchase or lease agreement.
- Contractor will process all submitted rebate claims on the following schedule. If claims require further action
  or revision from dealer participants, Contractor will reach out to the appropriate dealer contact to make any
  necessary edits or clarifications.

- Claims submitted between Mondays at 8:00 am and Fridays at 12:00 pm that do not require revisions will be reviewed and approved within 48 hours of claim submittal or by Fridays at 5:00 pm, whichever comes first. For claims that require revisions, Program participants will be contacted via email within 48 hours of claim submittal or by Fridays at 5:00 pm, whichever comes first.
- Claims submitted between Fridays at 12:00 pm and Mondays at 8:00 am that do not require revisions will be reviewed and approved by the following Tuesday at 5:00 pm. For claims that require revisions, Program participants will be contacted via email by the following Tuesday at 5:00 pm.

Contractor will track participants' rejected and flagged claims and will contact participants regularly to discuss the errors or omissions, request updates or edits to flagged claims, provide additional training if needed, and work with participants to identify potential solutions to improve claim approval rates. Contractor will review with MCE the specific metrics used for flagging data discrepancies, possible errors, or unusual sales activity during the Project Kickoff and ongoing check-ins. Additional flags can be programmed, and metrics can be modified as needed to meet MCE's preferences.

#### Task 2.5: Rebate Processing

Once a participating dealer's claims have been reviewed and approved, Contractor will provide secondary review to approve claims for payment.

- Contractor will approve claims for payment weekly, on Mondays, which will include all claims that have been reviewed and approved the week prior.
- Contractor will deliver rebate reimbursement payments and spiffs to Program participants according to payee information provided during enrollment weekly, on Thursdays, within 2 weeks of claim approval.

Contractor will work with MCE during Program kickoff to determine the best way to collaborate with the other relevant post-sale vehicle rebate Programs available to MCE customers. Through this collaboration, Contractor will collect submitted customer information and transmit that information securely to the implementers of the other Programs. It will be the responsibility of those Programs to follow up directly with customers for any additional income verification or documentation needed and pay the downstream rebate.

 Contractor will engage the implementation teams of the other EV rebate programs available to MCE customers to develop a collaboration plan. The collaboration plan will provide guidance on how the Program will transmit information to the other Programs and explore the potential for future Program modifications that would integrate those rebates at the point-of-sale.

#### Task 2.6: Customer Support

#### Contractor will

- Establish a Program support hotline and email to provide support to dealers and customers. The support
  number and email will answering questions on Program policies, claim submissions, customer and vehicle
  eligibility, additional incentives, access to Program materials, and general EV and EV charging topics.
  Phone and email contact information for the hotline will be listed prominently on the Program website and
  marketing materials.
- Provide MCE Customer Operations Team with ongoing and updated FAQs
- Operate the Program support hotline seven days a week from 8 AM to 9 PM Pacific Time. Contractor will respond to most inquiries immediately, but all inquiries will receive a response within 24 hours.
- Follow the MCE Service Level Agreements (SLAs) outlined in Attachment X

If a complaint is made regarding a participating dealer or the Program, Contractor will respond within 24 hours with a resolution plan and a timeline. MCE will be informed of any complaints and be kept informed of progress towards resolution.

#### Task 2.7 Software Management

Contractor's information systems maintain a SOC Type 2 Certification for data security, software development and hosting, and data management. This certification is audited annually by an accredited SOC2 auditor, Moss Adams. Contractor's SOC2 certification explicitly includes our systems and processes which support the transfer, storage, and handling of sensitive customer and market data.

Contractor will operate and maintain the Program online system and will store all sales data and supporting
documents collected from dealers in claims, as well as all data documenting completed validation checks,
eligible vehicle specifications, and payments to dealers, for at least three years. Data stored in Iris will be
available to support all automated and manual QA/QC and Evaluation, Measurement and Verification
(EM&V) processes.

Contractor releases new code to the Iris production server on a bi-weekly basis on Tuesdays after business hours Pacific Time. This release process will not impact users' ability to access or use the system; if maintenance activities need to be scheduled, Contractor will notify MCE at least 48 hours in advance. Similarly, MCE will be promptly notified in the event of an emergency outage. The Iris team has a dedicated Quality Assurance and support team trained to respond quickly to unforeseen software problems, allowing Contractor to uphold the integrity of Iris and minimize the impacts such events may have on users.

### Task 2 Deliverables:

- MCE branded Program Marketing Materials
- Program DPA
- Recruit and Enroll Program Participants
- In-person and/or virtual dealer trainings
- Regular Program outreach to enrolled dealers
- Distribute Program materials and maintain POP collateral
- Program Newsletter
- Delivery of Dealer Performance Reports
- Claim Processing Guide
- Rebate claim processing
- Approve claims for payment
- Rebate reimbursement and spiff payments
- Additional incentive Program collaboration plan
- Maintain and Provide support through the Program hotline and email address
- Hosting and maintenance of online claims portal

### Schedule

Tasks	Description	Timeline
Task 1 — Startup & Adminis	stration	
1.1 Program Kickoff	Attend Program Kickoff Meeting to finalize Program design and implementation	2/6/2023 – 2/17/2023
	Draft and Finalize PIP 1. PIP draft 2. PIP semifinal	<ol> <li>By 3/1/23 (MCE reviews by 3/10)</li> <li>By 3/17 (MCE reviews by 3/24)</li> </ol>

	3. Final PIP	3. By 3/31 (MCE approves by 4/7)
	Draft and Finalize ME&O Plan 1. ME&O Plan draft 2. ME&O Plan semifinal 3. Final ME&O Plan	<ol> <li>By 3/1/23 (MCE reviews by 3/10)</li> <li>By 3/17 (MCE reviews by 3/24)</li> <li>By 3/31 (MCE approves by 4/7)</li> </ol>
1.2 MCE Support	Regular check-ins	Every two weeks during Program launch, Monthly once agreed to by MCE and Contractor
	Status Reports	Monthly, by the 10th of the following month
1.3 Annual Reporting	Create and deliver Annual Program Report	Yearly, by January 31 each year
1.4 Systems Configuration	Launch of MCE branded Claim Portal	4/30/2023
	Transfer of MCE customer data via flat file to Contractor	3/31/2023, followed by a regular cadence set during Project Kickoff Meeting
	Establish an API for transfer of Program Participation data into MCE CRM	4/28/2023
	Utilize MCE's CRM for Customer and Dealer/OEM Data	4/28/2023
	Establish a Program QPL	4/28/2023
Task 2 — Implementation		

2.1 Program Marketing	<ul> <li>Develop MCE branded Program Marketing Materials</li> <li>1. Draft launch materials</li> <li>2. Semifinal launch materials</li> <li>3. Final launch materials</li> <li>4. Draft supporting materials</li> <li>5. Semifinal supporting materials</li> <li>6. Final supporting materials</li> </ul>	<ol> <li>By 3/1/23 (MCE reviews by 3/10)</li> <li>By 3/17/23 (MCE reviews by 3/24)</li> <li>By 3/31/23 (MCE approves by 4/7)</li> <li>By 5/5/23 (MCE reviews by 5/12)</li> <li>By 5/19/23 (MCE reviews by 5/26)</li> <li>By 6/2/23 (MCE reviews by 6/9)</li> </ol>			
2.2 Dealer Outreach & Enrollment	Develop and Launch Dealer Participation Agreement (DPA) 1. Draft DPA 2. Semifinal DPA 3. Final DPA	<ol> <li>By 3/1/23 (MCE reviews by 3/10)</li> <li>By 3/17/23 (MCE reviews by 3/24)</li> <li>By 3/31/23 (MCE approves by 4/7)</li> </ol>			
	Recruit and Enroll Program Participants	March 2023, ongoing			
	In-person and/or virtual dealer trainings	April 2023, ongoing			
2.3 Ongoing Dealer Engagement	Regular Program outreach to enrolled dealers	April 2023, ongoing			
	Distribute Program materials and maintain POP collateral	April 2023, Ongoing			
	Send Program Newsletter	Quarterly, by the last day of each quarter			
	Delivery of Dealer Performance Reports	Yearly, by February 28th each year			
2.4 Rebate Processing	Develop and Launch Claim Processing Guide 1. Draft Guide 2. Semifinal Guide	1. By 3/31/23 (MCE reviews by 4/7)			

	3. Final Guide	<ol> <li>By 4/14/23 (MCE reviews by 4/21)</li> <li>By 4/28/23 (MCE approves by 5/2)</li> </ol>		
	Rebate claim processing	Daily, on weekdays		
2.5 Rebate Processing	Approve claims for payment	Weekly, on Mondays		
	Rebate reimbursement and spiff payments	Weekly, on Thursdays		
	Additional incentive program collaboration plan	July 28, 2023		
2.6 Customer Support	Maintain and Provide support through the Program hotline and email address	5/1/2023 – ongoing (Daily)		
2.7 Software Management	Hosting and maintenance of online claims portal	4/30/2023 - ongoing		

All dates included in the above Schedule are estimates based on likely contract execution date and are subject to change upon mutual agreement of the Parties.

### EXHIBIT B FEES AND PAYMENT SCHEDULE

For Services provided under this Agreement, MCE shall pay Contractor in accordance with the amount(s) and the payment schedule as specified below:

Task	Category	Units	Amount/Unit	Total Budget, Not to Exceed by Categories	Invoice Schedule
1	Startup Fee	1	\$66,250	\$66,250	Upon 4/30/23 Program Launch
2	Implementation Fees	556	\$1,210	\$672,760	Per claim paid, invoiced monthly
2	Dealer Spiffs*	556	\$200 new \$100 used	\$86,400***	Per claim paid, invoiced monthly
2	Vehicle Rebates**	556	\$3,500 new \$2,000 used	\$1,574,000***	Per claim paid, invoiced monthly
Total				\$2,399,410	

\*This amount will be passed through to the dealer to incentivize the stocking and upselling of EVs.

\*\*This amount will be passed through to the dealer as a reimbursement for applying a discount in the amount of the rebate at the point of sale.

\*\*\*Assuming 308 new EVs and 248 used EVs receiving incentives through the Program

Contractor shall bill for the deliverables in task 1, included within the Startup Fee, on 4/30/23. After the initial payment of the Start Up Fee, Contractor shall bill monthly for Services rendered the month prior. In no event shall the total cost to MCE for the services provided herein exceed the **maximum sum of \$2,399,410** for the term of the Agreement.

#### EXHIBIT C MCE CRM ACCESS PROTOCOLS

Contractor shall provide the following protective measures under the Agreement in order to access the MCE Customer Relationship Management software ("MCE CRM") according to program needs up to the time/fees allowed under this Agreement.

In order for Contractor to access MCE CRM, Contractor must first agree to and comply with the following protocols:

- 1. MCE CRM access is subject to the NDA between the Parties dated January 20, 2023.
- 2. <u>MCE CRM login information, passwords, and any information retrieved from MCE CRM shall be treated as Confidential</u> <u>Information</u>.
  - Confidential Information shall have the same meaning as defined in the MCE NDA between the Parties dated January 20, 2023.
  - No Contractor employee is to give, tell, or hint at their login information or password to another person under any circumstance.
  - o MCE CRM passwords are required to be changed every 90 days.
  - MCE encourages strong passwords (such as minimum character length, and use of special characters) that are not reused for other logins.
  - o MCE CRM shall only be accessed from an Internet Protocol (IP) address in the United States.
- 3. <u>MCE CRM access shall be provided through MCE's selected Single Sign-On (SSO) provider, Okta, Inc. or any MCE-designated SSO provider.</u>
- 4. MCE CRM access shall be restricted.
  - MCE CRM access shall only be provided to those employees of Contractor who have a "need to access" such information in the course of their duties with respect to Contractor's Services.
    - Contractor employees who access MCE CRM shall only update or view fields related to the tasks assigned.
       Contractor shall maintain a list of Contractor employees that have been authorized to access MCE CRM.
      - The list shall be updated and verified by Contractor quarterly, upon Contractor employee turnover, and upon MCE's request.
  - Contractor employees who access MCE CRM shall first review and agree to be bound by these MCE CRM Access Protocols.
  - o Contractor's use of the CRM is restricted to that which is necessary to provide the Services described in Exhibit A.
  - o Contractor shall not copy, download, record or reproduce in any way any data existing within MCE's CRM.
- 5. <u>In the event of an employment status change for a Contractor employee who had been granted access to MCE CRM.</u> Contractor shall provide the following information to MCE:
  - Name and email of pertinent Contractor employee.
  - Notification to MCE within 3 days of employment status change.
- 6. Contractor having any interaction with an MCE customer shall do the following:
  - Contractor shall comply at all times during the Term with any MCE-provided MCE co-branding and/or customer engagement protocol that provides MCE's expectations for customer interactions by Contractor. Failure of Contractor to comply at all times with this section will constitute a material breach pursuant to Agreement section 12, and may result in the discontinuation of work with MCE at MCE's request.
  - Contractor and any approved subcontractors responding to, or engaging directly with, MCE customers shall respond to direct customer inquiries within 3 business days after the inquiry is received. Unless otherwise agreed to, Contractor and subcontractors are to provide two options for customer contact (email and phone). Contractor shall provide MCE with a process to document any customer issues, escalations and resolutions.
#### EXHIBIT D Key Performance Indicators (KPIs)

	EV Grant Goals
Objective	How It's Measured
Expanding educational reach of EVs	Number of residents engaged by zip code
	Number of dealer employees engaged by zip code
	Percent of residents engaged by ME&O tactic
	Percent of dealers engaged by ME&O tactic
	Number of applications submitted and approved
Reducing administrative burden	Avg days between application submitted and approved/rejected
	Total additional funding that applicants are automatically qualified for and how much was received with a single application
	Percent of incentive dollars spent by zip code, with a break out among low- income census tracts or Disadvantaged Communities (DACs)
Equitable attainment of incentive funds	Avg household size and avg household income of applicants
	Percent of incentive dollars spent based on race of participants*



\* This metric is used for data gathering only and is not a basis for incentive dollar distribution.

#### EXHIBIT E Service Level Agreement (SLA)

Both Parties shall comply at all times during the Term with the following MCE SLA that provides MCE's expectations for customer interactions by Contractor:

- Contractor shall keep a 99% platform uptime.
- Contractor and all subcontractors responding to, or engaging directly with, MCE customers shall respond to direct customer
  inquiries no later than within 3 business days after the inquiry is received. Unless otherwise agreed to, Contractor and
  subcontractors are to provide two options for customer contact (email and phone). Unless otherwise agreed to, the Contractor
  shall provide MCE with a process to document customer issues, escalations and resolutions.
- MCE to review and approve the Outreach Plan.
- MCE to review and approve all branded customer facing materials (digital and physical content) before Contractor and/or subcontractor uses and distributes them.
- Contractor will provide the following customer information ("Customer Information") to MCE: when and how the Pilot
  participants and potential Pilot participants will be contacted, what data will be collected, how that information will be stored,
  how that information will be shared with MCE, the process for handling customer complaint escalation, and identification of key
  individuals associated with Contractor or subcontractor who have been specifically assigned to work with MCE customers and
  the key individuals' subsequent outreach and response activities throughout the X Phases.
- Contractor to provide to MCE monthly reports which will include lead generation, outreach status, Customer Information
  updates and any customer complaints, feedback and escalations.

a) Availability Service Level.

1) Definitions.

(a) "Maintenance Window" shall mean the total minutes in the reporting month represented by the mutually agreed day(s) and time(s) during which Service Provider shall maintain the Services.

(b) "Scheduled Downtime" shall mean the total minutes in the reporting months represented by the Maintenance Window.

(c) "Scheduled Uptime" shall mean the total minutes in the reporting month less the total minutes represented by the Scheduled Downtime.

2) Service Level Standard. Services will be available to Authorized Users for normal use 99% of the Scheduled Uptime.

b) Technical Support Problem Response and Resolution Service Level.

1) Service Level Standard. The Service Provider will respond to two categories of problems associated with delivery of the Services:

i) Problems that shall be investigated and resolved within 3 working days if the problem prevents >25% of Authorized Users from accessing the Services to MCE residential customers as required; and

ii) Problems that shall be investigated and resolved within 15 working days if >25% of Authorized Users are able to access the Services to MCE residential customers as required but are unable to access a specific functionality delivered by the Service Provider.



# February 3, 2023

TO:	MCE Executive Committee
FROM:	Alice Havenar-Daughton, Director of Customer Programs
RE:	Schedule A.3 to Master Services Agreement (MSA) with CLEAResult Consulting Inc. (Agenda Item #06 C.3)
ATTACHMENTS:	A. Proposed Schedule A.3 to MSA with CLEAResult Consulting Inc. B. MSA with CLEAResult Consulting Inc. C. First Amendment to MSA with CLEAResult Consulting Inc.

Dear Executive Committee Members:

# Summary:

The proposed Schedule A.3 to the MSA with CLEAResult Consulting Inc. ("Schedule") would allow MCE to scale up and expand the deployment of electric vehicle ("EV") charging stations at workplaces, multi-family properties, and public rights of way throughout MCE's service area.

# Background:

Since Summer 2018, MCE has offered an EV charging program ("Program") which provides incentives and technical assistance to our customers to help them install EV charging equipment. The Program has also been effective at communicating additional funding and services offered by partner agencies. This Program has been managed inhouse by MCE staff with only the technical assistance component supported by a vendor. This Program has helped our customers install over 1,000 EV charging ports across our service area with another 1,000 EV charging ports under planning or construction.

For the last two fiscal years, MCE's staffing for electric transportation has remained the same while Program participation nearly tripled, causing bandwidth and capacity constraints. Furthermore, in 2022, MCE won 4 new grants totaling close to \$3M to support further expansion of our EV programs. A cross-departmental working group was formed to make a recommendation on how to best increase capacity. After considering the options of hiring additional MCE staff or bringing on an outside implementer, the working

group recommended that hiring an implementer would be the most efficient and effective way to further the growth of this Program and the EV market.

To date, MCE has provided support, technical assistance, and rebates to help our customers install over 1,000 EV charging ports over 4 fiscal years. The goals for the proposed Schedule are to have CLEAResult Consulting Inc. manage the EV charging ports currently under planning and construction while also engaging and supporting our customers to install an additional 1,715 EV charging ports over the next 3 fiscal years.

The proposed Schedule would continue expanding MCE's work on EV charging, while directly addressing technical and capacity constraints of the current Program by:

- Deepening the level and capacity of site-specific technical assistance;
- Expanding support for enrolled customers while scaling up enrollments to address growing demand;
- Providing confidence and consistency for our customers and EV charging vendors with a 3 year commitment to the Program;
- Managing the marketing, education, & outreach of MCE customers to boost Program participation and storytelling; and
- Preparing and analyzing data in reports for use by MCE to monitor and evaluate the Program.

The proposed Schedule demonstrates the value of the Program and addresses the need to add capacity, manage an influx of MCE and grant-funded projects, overcome market barriers, and scale up by engaging an implementer.

**Fiscal Impacts:** The proposed Schedule's budget of \$1,769,086 would span 3 fiscal years and would be accounted for in each year's approved Operating Budget. These funds derive from the Local Renewable Energy & Program Development Fund, which is generated from a portion of Deep Green customer revenue.

**Recommendation**: Approve the Proposed Schedule A.3 to MSA with CLEAResult Consulting Inc.

#### STATEMENT OF WORK

#### Schedule A.3

#### Statement of Work for MCE EV Charging Program

This Schedule A.3 ("Agreement") is entered into on February 3<sup>rd</sup>, 2023 ("Effective Date") pursuant to the Master Services Agreement between MARIN CLEAN ENERGY, hereinafter referred to as "MCE", and CLEARESULT CONSULTING INC., hereinafter referred to as "Implementer", dated September 3, 2021 ("MSA").

Implementer shall provide the following Services under the Agreement as requested and directed by MCE staff, up to the maximum time/fees allowed under this Agreement.

For work on the Electric Vehicle ("EV") Charging Program ("Program"), Implementer will provide the following tasks to serve the workplace and multifamily property customer base in MCE's service territory:

#### TASK 1: PROGRAM PLANNING AND REPORTING

- Develop and deliver to MCE a Program implementation Plan ("PIP") that includes Program operating policies and procedures and key performance indicators ("KPIs") as included in Attachment A.3.1 (below).
- Develop a separate, external-facing Program manual and participation agreement that contains Program rules and requirements for customers, vendors, and other third-party participants.
- Track all Program budgets and spending through Implementer's data management and financial systems and provide MCE with accruals and forecasts.
- Establish reporting formats with KPIs to measure progress of Program.
- Prepare and deliver:
  - Web-based Program data view and weekly data transfer to MCE customer relationship management ("CRM") system.
  - Monthly Program reports that track performance against KPIs, milestone activities, and describe any risks/issues/resolutions.
  - Annual Program reports that summarize Program results and accomplishments in narrative, graphical and numerical formats.
- Meetings
  - Meet with MCE every other week. Agenda and meeting materials to be prepared by the Implementer.
  - Meet with MCE quarterly to provide business reviews and discuss performance against KPIs, milestone activities, and any risks/issues/resolutions.

#### TASK 2: DATA ACCESS AND TRACKING

- Configure Implementer's project tracking database.
  - Meet with MCE staff to identify required and optional data collection needs and confirm Program workflow.
  - Update rules and automated processes for application intake and review.
  - Update communication templates with messaging and branding, approved by MCE Public Affairs team.
- Integrate with MCE Customer Relationship Management ("CRM") platform by:
  - Defining data file structure and frequency in consultation with MCE staff.
  - Providing access to secure file transfer protocol (sFTP) site.
  - Receiving monthly transfers of MCE customer account data via sFTP for the customer segments that will be eligible to participate in the Program.
  - Deploy an integration using a web services Application Programming Interface ("API") that will update MCE's CRM with Program data on projects and customer interactions by:
    - Defining the data requirements for ongoing data exchange.
    - Jointly developing and mutually agreeing on the API specifications to map and sync desired data.
    - Building, testing, and integrating with MCE CRM.
    - Receive and integrate historical Program data & active projects.
- Perform support and maintenance.

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- Maintain the project tracking database in compliance with service level agreements ("SLAs", attached hereto as Exhibit A.3.2).
- Provide support to address MCE's questions and resolve issues with deployed functionality.

#### TASK 3: MARKETING, EDUCATION AND OUTREACH

- Host a discovery session with MCE's marketing, education, and outreach personnel (as determined by MCE) to understand and discuss the overall approach, define team member roles and responsibilities, determine scheduled meeting times, align on reporting requirements, and review timelines and decisionmaking processes.
  - At this point, MCE will share brand and writing guidelines as well as review processes for drafting, reviewing, and approving relevant marketing materials.
- Complete a market analysis to identify and prioritize customers for marketing and outreach in segments targeted by the Program, incorporating MCE customer data if provided.
- Develop marketing strategy and implementation plan, review with MCE Customer Programs and Public Affairs staff, and incorporate feedback to finalize.
- Recruit and develop partnerships with community-based organizations ("CBO") to extend Program reach to affordable housing properties within low income and disadvantaged communities ("DAC").
- Execute the marketing strategy and implementation plan, as approved by MCE Public Affairs team, with: Website content, awareness and lead generation emails, direct mailers, digital ads, industry and CBO event collateral, sales enablement collateral, and earned media content.

#### TASK 4: APPLICATION PROCESSING AND REVIEW

- Create MCE-branded online application that captures contact, project, and account information.
- Review submitted online applications by performing an initial check of customer eligibility and communicating with customer about the application once received.
- Review project scope and connect with the customer to address any gaps in information.
- Offer technical assistance to qualified customers who need additional support with their EV charging project.
- Provide customer a notice to proceed and incentive reservation forms for their eligible project scope and request MCE reserve the corresponding funding amount in the Program incentive budget.
- Notify customers who submit ineligible applications of the reason for their ineligibility and refer them to other relevant opportunities, if known and as applicable.

#### TASK 5: TECHNICAL ASSISTANCE

- Conduct a virtual pre-evaluation meeting or phone call with each customer to discuss customer's needs and complete a site assessment form (approved template of site assessment form will be created during Task 1 efforts).
- Determine the appropriate tier of technical assistance, Standard or Complex, for each customer site. Determination criteria for each tier is listed below.
  - Standard: Customer site that has a single parking area, single electric service entrance, and one system voltage.
  - Complex: Anything other than Standard.
- Schedule a site visit within five (5) business days after the pre-evaluation meeting or at the customer's earliest convenience.
- Gather the following data at all customer sites:
  - Location, condition, and rated capacity of relevant electrical equipment (including transformer, main service panel, and electrical subpanels that may be useful)
  - Location, quantity, and dimension of parking areas and stalls including grade
  - Surrounding surface conditions that may be impacted by the project
  - Lighting conditions
  - Accessible dimensions and path of travel for proposed EV charging
  - Opportunities for participation in other MCE programs
- Offer data logging capabilities to sites that do not have as-built electrical plans or metered electric usage peak data. Some customers will be required to pay a fee for setting up data logging capabilities. See Table A below for details. Data logging will include the following:
  - Conduct 30-days of electric demand data logging at the main service panel
  - Calculate available panel capacity using one of the acceptable methods defined in the 2022 California Electrical Code, based on the 2020 National Electrical Code
- Create EV Charging Planning Report ("Planning Report") containing type of EV charging, recommended quantities, and supporting documentation for permitting, with:

- Standard (one solution) or Complex (up to two solutions) with site layouts
- Current electrical infrastructure
- Existing available load capacity
- Americans with Disabilities Act ("ADA") compliance
- Approach to maximizing power efficiency by using either existing or new capacity, or a combination of the two
- Estimated project and infrastructure upgrade costs
- Estimated operational financial model, including low carbon fuel standard ("LCFS") capture
- Provide a draft of the Planning Report to MCE for review and approval; if approval is not provided by MCE within three (3) business days, then Implementer is allowed to proceed with delivery to customer.
- Deliver approved Planning Report to customer in PDF format.
- Single line drawings will be provided to customers that request it for a fee. See Table A below for details.
  - Note: If the customer wishes to obtain a stamped version of the drawing, the customer may separately contract with the preparing engineer.
- Schedule and conduct a meeting with the customer to review the Planning Report.
  - Customer site receives a solution design (as part of the Planning report) which encourages maximizing EV charging station and/or make ready quantities for greater future coverage within current available capacity.
- Respond to customer questions, request for bid review, and requested support for troubleshooting issues during project implementation.

#### TASK 6: QUALIFYING VENDORS

- Create vendor requirements specification, incorporating any MCE existing criteria from previous solicitations and other MCE input.
- Annually review EV supply equipment ("EVSE") vendor submittals and identify qualifying hardware and software.
- Upon completion of the annual review in this Task 6, publish updated qualified vendor list.

#### TASK 7: PROVIDING CUSTOMER SUPPORT

- Tier 1 support for inbound inquiries
  - Respond to inbound inquiries as applicable, copy key MCE account manager about Program offerings and applications during normal business hours (Monday – Friday, 9am – 5pm local time, excluding recognized California State and Federal holidays).
    - Conduct outbound calling campaigns to targeted customers at least two times per year.
- Tier 2 support for key accounts and qualified customers
  - Join MCE key accounts staff to meet with interested customers.
  - Engage identified Program customer candidates and present the eligible Program offering (as well as other applicable program offerings, including the Pacific Gas and Electric Company ("PG&E") Multifamily EVSE Direct Install Program, Clean Vehicle Assistance Program, Drive Clean Assistance Program, Clean Cars for All, Consumer Assistance Program Vehicle Retirement, and other EV, low-income, or multifamily Programs as appropriate) through webinars and one-on-one meetings.
- Cross-Program coordination
  - Identify additional incentive opportunities that may be applicable to customers' EV charging projects and provide customers information about application requirements, procedures, and important deadlines.
  - Coordinate with other MCE program teams to provide customers with information about other MCE programs that may provide additional benefits and, where applicable, provide application materials and a warm hand-off to the other MCE program team(s).

#### TASK 8: PROJECT VERIFICATION

- Receive and review payment requests from customers with incentive reservation forms.
- Verify completeness of project documentation and that the installed scope is consistent with that approved in the application.
- Link project data with the correct electric service point and account.
- Communicate with customer regarding any corrections needed and adjustments to the incentive amount based on the finalized project scope.

### **TASK 9: REBATE PROCESSING**

- •
- Submit a summary of approved projects to MCE for MCE payment to customer. Notify customer of payment approval and respond to customer questions about payment status. •

#### **PROGRAM SCHEDULE**

Program Launch	
Milestone	Target Date Days from Effective Date
Program documents > Create outline of PIP, 10 days > Program strategy meeting with MCE Customer Programs staff, 5 days > Draft implementation plan and participation agreement, 20 days > MCE review of drafts, 10 days > Finalize PIP and participation agreement based on MCE feedback, 15 days	60
Online application and Program database > Define requirements (data fields and workflow), 30 days > Configure database, 15 days > Draft customer-facing page(s) and communications, 15 days > Build online application, 15 days > Complete testing, revisions and launch, 15 days	90
Web Services based real time publishing of Program participation and customer interaction data into MCE CRM > Define data requirements and agree on API specification, 45 days > Build integration, 30 days > Complete testing, revisions and launch, 15 days	90
Marketing Plan	60
Revised qualified vendor list > Notify current and interested vendors, 30 days > Request for Qualification launch, 15 days > Receive vendor responses, 21 days > Complete reviews and publish updated list, 24 days	90
Program launch	100
Implementation	
Monthly Program reports	10th day of each month
Quarterly business reviews	First month of each quarter
Annual Program reports	First month of each calendar year
Annual EVSE vendor qualification	June of each year

#### SERVICE LEVEL AGREEMENTS

Task	Measure	Target
4: APPLICATION PROCESSING AND REVIEW	Initial review	3 business days
	Rebate reservation for complete and correct application	10 business days
5: TECHNICAL ASSISTANCE*	Pre-evaluation meeting	5 business days from initial application review
	Data collection - Standard	10 business days from pre- evaluation
	Data collection - Complex	40 days from pre-evaluation
	Report preparation	15 business days from data collection
8: PROJECT VERIFICATION	Approval of a complete and correct payment request	10 business days
9: REBATE PROCESSING	Submission of completed project incentive payment request	5 business days from project verification
7: PROVIDING CUSTOMER SUPPORT	Response time	2 business days

\*Technical assistance durations are contingent upon customer responsiveness to scheduling and data requests

#### Assumptions and Understandings

MCE agrees to provide the following in support of Implementer's performance of the work:

- Share historical Program documents within three (3) business days of contract execution.
- Provide historical and active Program data for integration into Implementer's CRM (subject to MCE's CRM access protocols as provided in the MSA), one-time before Program launch and ongoing as needed.
- Access to customer data to support outreach and validate applicant eligibility.
- Timely review of draft materials, generally within one (1) week.
- Monthly updates on availability of incentive funds.

Attached as **Attachment A.3.1 and A.3.2**, respectively, is the Key Performance Indicators (KPIs) and Service Level Agreement (SLA) for this request.

#### **Billing:**

Implementer shall bill monthly and according to the following payment structure. In no event shall the total cost to MCE for the services provided under this Statement of Work exceed the maximum sum of **\$1,769,086** for the term of the Agreement.

**Payment Structure** Implementer shall bill based on the fees in the table below plus any applicable expenses.

#### Table A. Implementer Fees

Service	MCE Amount	Customer Amount
Startup fixed fee for Program launch including kickoff meetings, Program documents, marketing plans, IT set up, data integration, and staff training.	\$95,000	\$0
Monthly fixed fee for core Program implementation tasks including marketing, outreach, portal application intake, incentive reservations and customer support	\$11,500	\$0
Standard EV planning reports (per report/site)	\$3,200	\$0
Complex EV planning reports (per report/site)	\$5,000	\$0
Load studies with data logging and single line drawings for affordable housing, disadvantaged community and low-income sites (per site)	\$6,500	\$0
Load studies with data logging and single line drawings for all other sites	\$0	\$6,500
Incentive processing, per completed application and verified payment request	\$50	\$0

Note: All fees will escalate year over year at the lesser of the Federal Cost of Living Adjustment rate or 6%.

#### Table B. Project Forecast

	April 1, 2023 - March 31, 2024	April 1, 2024 - March 31, 2025	April 1, 2025 - March 31, 2026	Total
Technical Assistance Pro	ojects			
Standard planning report	47	50	48	145
Complex planning report	21	25	24	70
Total planning reports	68	75	67	215
Share of planning reports to affordable housing, DAC and low income properties	10	20	20	50
Load study & single line drawings for affordable housing, DAC and low- income sites	10	20	20	50

Incentive Projects				
MCE-reserved incentive projects installed*	74	50	0	124
MCE-reserved ports installed*	476	317	0	793
Implementer-reserved incentive projects installed**	10	85	150	245
Implementer-reserved ports installed**	70	595	1,050	1,715
Total incentive projects	84	135	150	369
Total ports installed	546	912	1,050	2,508

\*The "MCE-reserved" category refers to Projects that have already been processed and developed by MCE. Funds have been already reserved by MCE and would carry over as commitments to those customers even if managed by Implementer moving forward. These figures are based on estimated amounts from MCE, as of December 20, 2022 and are subject to change due to a consistently open pipeline between now and when the contract is executed. . \*\*The "Implementer-reserved" category refers to Projects newly developed and processed by Implementer under the Agreement. Estimated at 40% Level 1 and 60% Level 2 installed.

#### Table C. Customer Incentive Budget

	April 1, 2023 - March 31, 2024	April 1, 2024 - March 31, 2025	April 1, 2025 - March 31, 2026	Total
MCE-reserved projects*	\$1,549,983	\$1,033,322	\$0	\$2,583,305
Implementer-reserved projects**	\$147,000	\$1,249,500	\$2,205,000	\$3,601,500
Total incentives	\$1,696,983	\$2,282,822	\$2,205,000	\$6,184,805

\*Based on estimates from MCE on December 20, 2022 and are subject to change based on completed projects. Customer Incentives are paid by MCE directly to the customer.

\*\*Estimated at 40% Level 1 and 60% Level 2 installed.

Customer incentives shall start at the following rates, which may be updated annually by Implementer, subject to MCE's approval, after presenting the proposed changes to MCE but not to exceed total incentive budget category listed in Table C above, unless the Agreement is amended.

#### Table D. MCE Incentive Levels\*

Type of EVSE	Baseline incentive	Added incentive for MCE 100% renewable generation opt-in	Added incentive for affordable housing, disadvantaged community or low income property
Level 1 (120 volt)*	\$750/port	+\$125/port	+\$0/port
Level 2 (208-240 volt)*	\$3,000/port	+\$500/port	+\$2,000/port

\*Subject to change upon annual reporting & approval by MCE

Funds outlined in the below table may be shifted from one period to another with mutual written agreement of MCE and Implementer.

	Startup (February 2023 - May 2023)	April 1, 2023 - March 31, 2024 (Excludes Start Up Fixed Fee)	April 1, 2024 - March 31, 2025	April 1, 2025 - March 31, 2026	Total Budget, Not to Exceed by Category
Fixed Fee	\$95,000	\$117,070	\$148,473	\$157,377	\$517,920
Performance (Reports & Load Studies)	-	\$329,475	\$446,503	\$456,333	\$1,232,311
Incentive Processing	-	\$3,590	\$6,730	\$8,535	\$18,855
Total	\$95,000	\$450,135	\$601,706	\$622,245	\$1,769,086

#### Table E. Implementation Budget

Implementer will bill MCE \$47,500 on March 31, 2023, and again on May 31, 2023 for the Startup Fixed Fee (see above) totaling \$95,000. For all other Services, Implementer will bill MCE monthly and provide an itemized invoice for all Services rendered the month prior to MCE Customer Programs staff, referencing this Schedule A.3 on the face of the invoice. All invoices shall be e-mailed to: invoices@mcecleanenergy.org.

#### Term of Statement of Work:

This Statement of Work shall commence on February 3, 2023, and shall terminate on March 31, 2026.

**IN WITNESS WHEREOF**, the parties have executed this Statement of Work – Schedule A.1 as of the last signature date below and made effective on the date first above written.

APPROVED BY Marin Clean Energy:	Implementer:
Ву:	Ву:
Name:	Name:
Date:	Date:
Ву:	
Chairperson	

Date: \_\_\_\_\_

# Attachment A.3.1 Key Performance Indicators (KPIs)

	EV Charging Goals
Objective	How It's Measured
Expanding customer educations on EV charging	Number of workplaces and multi-family customers engaged by zip code
	Percent of customers engaged by ME&O tactic
	Percent of customers engaged by workplace sector
	Number of applications submitted and approved
Reducing administrative burden	Avg days between application submitted and approved/rejected
	Avg days between project verified and rebates dispersed
	Total additional funding that applicants are automatically qualified for and received with a single application
	Percent of ports and incentive dollars spent by zip code, with a break out among low-income census tracts or Disadvantaged Communities (DACs)
Equitable attainment of incentive funds and enrollment in layered Programs	Percent of ports and incentive dollars spent between workplace (broken down by sector) and multi-family properties (broken down between affordable and market rate properties)
	Percent of ports opted into MCE's 100% renewable electricity service
	Percent of ports enrolled in MCE's LCFS Program

#### Attachment A.3.2

#### Service Level Agreement (SLA)

Both Parties shall comply at all times during the Term with the following MCE SLA that provides MCE's expectations for customer interactions by Contractor:

- Contractor shall keep a 99% platform uptime.
- Contractor and all subcontractors responding to, or engaging directly with, MCE customers shall respond to direct customer inquiries no later than within 3 business days after the inquiry is received. Unless otherwise agreed to, Contractor and subcontractors are to provide two options for customer contact (email and phone). Unless otherwise agreed to, the Contractor shall provide MCE with a process to document customer issues, escalations and resolutions.
- MCE to review and approve the Outreach Plan.
- MCE to review and approve all branded customer facing materials (digital and physical content) before Contractor and/or subcontractor uses and distributes them.
- Contractor will provide the following customer information ("Customer Information") to MCE: when and how
  the Pilot participants and potential Pilot participants will be contacted, what data will be collected, how that
  information will be stored, how that information will be shared with MCE, the process for handling customer
  complaint escalation, and identification of key individuals associated with Contractor or subcontractor who
  have been specifically assigned to work with MCE customers and the key individuals' subsequent outreach
  and response activities throughout the X Phases.
- Contractor to provide to MCE monthly reports which will include lead generation, outreach status, Customer Information updates and any customer complaints, feedback and escalations.
- a) Availability Service Level.
- 1) Definitions.

(a) "Maintenance Window" shall mean the total minutes in the reporting month represented by the mutually agreed day(s) and time(s) during which Service Provider shall maintain the Services.

(b) "Scheduled Downtime" shall mean the total minutes in the reporting months represented by the Maintenance Window.

(c) "Scheduled Uptime" shall mean the total minutes in the reporting month less the total minutes represented by the Scheduled Downtime.

2) Service Level Standard. Services will be available to Authorized Users for normal use 99% of the Scheduled Uptime.

a) Technical Support Problem Response and Resolution Service Level.

3) Service Level Standard. The Service Provider will respond to two categories of problems associated with delivery of the Services:

a) Problems that shall be investigated and resolved within 3 working days if the problem prevents >25% of Authorized Users from accessing the Services to EV charging technical assistance, project verification, or rebate processing as required; and

b) Problems that shall be investigated and resolved within 15 working days if >25% of Authorized Users are able to access the Services to EV charging technical assistance, project verification, or rebate processing as required but are unable to access a specific functionality delivered by the Service Provider.

#### MARIN CLEAN ENERGY ENERGY EFFICIENCY PROGRAMS

# MASTER SERVICES AGREEMENT BY AND BETWEEN MARIN CLEAN ENERGY AND CLEARESULT CONSULTING INC.

THIS MASTER SERVICES AGREEMENT ("Agreement") is made and entered into on September 3, 2021 by and between MARIN CLEAN ENERGY (hereinafter referred to as "MCE") and CLEAResult Consulting Inc., a Texas corporation with a principal address at: 6504 Bridge Point Parkway, Suite 425, Austin, Texas, 78730 (hereinafter referred to as "Implementer" or "Contractor") (each, a "Party," and, together, the "Parties").

#### **RECITALS:**

WHEREAS, MCE desires to retain Implementer to provide the services described in statements of work ("Statement of Work") to be agreed by the Parties, in form and substance as set forth on **Exhibit A** attached hereto, and which shall be considered Schedules hereto;

Each Statement of Work executed by and between the Parties are made a part hereof ("Services");

WHEREAS, Implementer desires to provide the Services to MCE;

**NOW, THEREFORE,** in consideration of the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

#### 1. SCOPE OF SERVICES:

Implementer agrees to provide all of the Services in accordance with the terms and conditions of this Agreement. "Services" shall also include any other work performed by Implementer pursuant to this Agreement.

#### 2. TRANSACTION TAXES, FEES AND PAYMENT SCHEDULE; INVOICING:

The fees and payment schedule for furnishing Services under this Agreement shall be based on the rate schedule which is attached hereto as **Exhibit B** and by this reference incorporated herein. Said fees shall remain in effect for the entire term of the Agreement ("Term"). Implementer shall provide MCE with Implementer's Federal Tax I.D. number prior to submitting the first invoice. Implementer is responsible for billing MCE in a timely and accurate manner. Implementer shall email invoices to MCE on a monthly basis for any Services rendered or expenses incurred hereunder. Fees and expenses invoiced beyond ninety (90) days will not be reimbursable. The final invoice must be submitted within thirty (30) days of completion of the stated scope of services or termination of this Agreement. MCE will process payment for undisputed invoiced amounts and provide written notice of any amount in dispute within thirty (30) days.

Notwithstanding anything to the contrary in this Agreement, MCE agrees, for purposes of any sales tax, use tax, excise tax, valued-added tax, gross receipts tax, or any other transaction tax (collectively, "Sales Taxes"), that MCE is solely responsible for all Sales Taxes that arise under this Agreement. Notwithstanding anything to the contrary in this Agreement, the prices under this agreement do not include Sales Taxes, and MCE shall pay all Sales Taxes, if any, charged by Implementer under this Agreement. MCE shall agree to indemnify, defend, and hold harmless Implementer for any damages imposed on or suffered by Implementer arising from MCE's failure to timely and properly remit Sales Taxes to the appropriate tax jurisdiction, or properly complete and provide any purchase order, exemption certificate, certificate of entitlement, or other form or document required by a tax jurisdiction.

#### 3. MAXIMUM COST TO MCE:

In no event will the cost to MCE for the Services to be provided herein exceed the maximum sum identified in each Statement of Work.

#### 4. TERM OF AGREEMENT:

This Agreement shall commence on **September 3, 2021** ("Effective Data") and shall terminate on **December 31, 2024**, unless earlier terminated pursuant to the terms and conditions set forth in Section 12.

#### 5. REPRESENTATIONS; WARRANTIES; COVENANTS:

5.1. IMPLEMENTER REPRESENTATIONS AND WARRANTIES. Implementer represents, warrants and covenants that (a) it is a corporation duly organized, validly existing and in good standing under the laws of the State of **Texas**, (b) it has full power and authority and all regulatory authorizations required to execute, deliver and perform its obligations under this Agreement and all exhibits and addenda and to engage in the business it presently conducts and contemplates conducting, (c) it is and will be duly licensed or qualified to do business and in good standing under the laws of the State of California and each other jurisdiction

wherein the nature of its business transacted by it makes such licensing or qualification necessary and where the failure to be licensed or qualified would have a material adverse effect on its ability to perform its obligations hereunder, (d) it is qualified and competent to render the Services and possesses the requisite expertise to perform its obligations hereunder, (e) the execution, delivery and performance of this Agreement and all exhibits and addenda hereto are within its powers and do not violate the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it, (f) this Agreement and each exhibit and addendum constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, and (g) it is not bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt.

- **5.2. COMPLIANCE WITH APPLICABLE LAW:** At all times during the Term and the performance of the Services, Implementer shall comply with all applicable federal, state and local laws, regulations, ordinances and resolutions ("Applicable Law")
- **5.3.** LICENSING. At all times during the performance of the Services, Implementer represents, warrants and covenants that it has and shall obtain and maintain, at its sole cost and expense, all required permits, licenses, certificates and registrations required for the operation of its business and the performance of the Services. Implementer shall promptly provide copies of such licenses and registrations to MCE at the request of MCE.
- **5.4. NONDISCRIMINATORY EMPLOYMENT:** Implementer shall not unlawfully discriminate against any individual based on race, color, religion, nationality, sex, sexual orientation, gender identity, age or condition of disability. Implementer understands and agrees that Implementer is bound by and shall comply with the nondiscrimination mandates of all federal, state, and local statutes, regulations, and ordinances.
- 5.5. PERFORMANCE ASSURANCE; BONDING (REQUIRED IF CHECKED □). At all times during the performance of the Services, Implementer represents, warrants and covenants that it has and shall obtain and maintain, at its sole cost and expense, all bonding requirements of the California Contractors State License Board ("CSLB"), as may be applicable. Regardless of the specific Services provided, Implementer shall also maintain any payment and/or performance assurances as may be requested by MCE during the performance of the Services.
- 5.6. SAFETY (REQUIRED IF CHECKED ⊠). At all times during the performance of the Services, Implementer represents, warrants and covenants that it shall:

(a) abide by all applicable federal and state Occupational Safety and Health Administration requirements and other applicable federal, state, and local rules, regulations, codes and ordinances to safeguard persons and property from injury or damage;

(b) abide by all applicable MCE security procedures, rules and regulations that have been provided to Implementer and cooperate with MCE security personnel whenever on MCE's property;

(c) abide by MCE's standard safety program contract requirements as may be provided by MCE to Implementer from time to time;

(d) provide all necessary training to its employees, and require Subcontractors to provide training to their employees, about the safety and health rules and standards required under this Agreement;

(e) have in place an effective Injury and Illness Prevention Program that meets the requirements all applicable laws and regulations, including but not limited to Section 6401.7 of the California Labor Code. Additional safety

requirements (including MCE's standard safety program contract requirements) are set forth elsewhere in the Agreement, as applicable, and in MCE's safety handbooks as may be provided by MCE to Implementer from time to time;

(f) be responsible for initiating, maintaining, monitoring and supervising all safety precautions and programs in connection with the performance of the Agreement; and

(g) monitor the safety of the job site(s), if applicable, during the performance of all Services to comply with all applicable federal, state, and local laws and to follow safe work practices.

### 5.7. BACKGROUND CHECKS (REQUIRED IF CHECKED $\boxtimes$ ).

(a) Implementer hereby represents, warrants and covenants that any employees, members, officers, contractors, Subcontractors and agents of Implementer (each, a "Implementer Party," and, collectively, the "Implementer Parties") having or requiring access to MCE's assets, premises, customer property, data or systems ("Covered Personnel") shall have successfully passed background screening on each such individual, prior to receiving access, which screening may include, among other things to the extent applicable to the Services, a screening of the individual's educational background, employment history, valid driver's license, and court record for the seven (7) year period immediately preceding the individual's date of assignment to perform the Services.

(b) Notwithstanding the foregoing and to the extent permitted by applicable law, in no event shall Implementer permit any Covered Personnel to have one or more convictions during the seven (7) year period immediately preceding the

individual's date of assignment to perform the Services, or at any time after the individual's date of, assignment to perform the Services, for any of the following ("Serious Offense"): (i) a "serious felony," similar to those defined in California Penal Code Sections 1192.7(c) and 1192.8(a), or a successor statute, or (ii) any crime involving fraud (such as, but not limited to, crimes covered by California Penal Code Sections 476, 530.5, 550, and 2945, California Corporations Code 25540), embezzlement (such as, but not limited to, crimes covered by California Penal Code Sections 484 and 503 et seq.), or racketeering (such as, but not limited to, crimes covered by California Penal Code Section 186 or the Racketeer Influenced and Corrupt Organizations ("RICO") Statute (18 U.S.C. Sections 1961-1968)).

(c) To the maximum extent permitted by applicable law, Implementer shall maintain documentation related to such background for all Covered Personnel and make it available to MCE for audit if required pursuant to the audit provisions of this Agreement.

(d) To the extent permitted by applicable law, Implementer shall notify MCE if any of its Covered Personnel is charged with or convicted of a Serious Offense during the term of this Agreement. Implementer shall also immediately prevent that employee, representative, or agent from performing any Services.

- 5.8. FITNESS FOR DUTY (REQUIRED IF CHECKED ⊠). Implementer shall ensure that all Covered Personnel report to work fit for their job. Covered Personnel may not consume alcohol while on duty and/or be under the influence of drugs or controlled substances that impair their ability to perform the Services properly and safely. Implementer shall, and shall cause its Subcontractors to, have policies in place that require their employees, contractors, subcontractors and agents to report to work in a condition that allows them to perform the work safely. For example, employees should not be operating equipment under medication that creates drowsiness.
- **5.9. QUALITY ASSURANCE PROCEDURES** (REQUIRED IF CHECKED ⊠). Implementer shall comply with "Quality Assurance Procedures" identified by Implementer in the implementation plan as required in Exhibit A. Additionally, Quality Assurance Procedures must include, but are not limited to: (i) industry standard best practices; (ii) procedures that ensure customer satisfaction; and (iii) any additional written direction from MCE.
- **5.10. ASSIGNMENT OF PERSONNEL**. The Implementer shall not substitute any personnel for those specifically named in its proposal, if applicable, unless personnel with substantially equal or better qualifications and experience are provided, acceptable to MCE, as is evidenced in writing.
- 5.11. ACCESS TO CUSTOMER SITES (REQUIRED IF CHECKED ⊠). Implementer shall be responsible for obtaining any and all access rights for Implementer Parties, from customers and other third parties to the extent necessary to perform the Services. Implementer shall also procure any and all access rights from Implementer Parties, customers and other third parties in order for MCE and CPUC employees, representatives, agents, designees and contractors to inspect the Services.

### 6. INSURANCE:

At all times during the Term and the performance of Services, Implementer shall maintain the insurance coverages set forth below. All such insurance coverage shall be substantiated with a certificate of insurance and must be signed by the insurer or its representative evidencing such insurance to MCE. The general liability policy shall be endorsed naming Marin Clean Energy and its employees, officers and agents as additional insureds. The certificate(s) of insurance and required endorsement shall be furnished to MCE prior to commencement of Services. Implementer shall provide for thirty (30) days advance written notice to MCE of any cancellation or reduction in coverage. Said policies shall remain in force through the life of this Agreement and shall be payable on a per occurrence basis only, except those required by paragraph 7.4 which may be provided on a claims-made basis consistent with the criteria noted therein.

Nothing in this Section 7 shall be construed as a limitation on Implementer's obligations in Section 18 of this Agreement.

Should Implementer fail to provide and maintain the insurance required by this Agreement, in addition to any other available remedies ta law or in equity, MCE may suspend payment to the Implementer for any services provided during any time that insurance was not in effect and until such time as the Implementer provides adequate evidence that Implementer has obtained the required coverage.

#### 6.1 GENERAL LIABILITY

The Implementer shall maintain a commercial general liability insurance policy in an amount of no less than one million dollars (\$1,000,000) with a two million dollar (\$2,000,000) aggregate limit. MCE shall be named as an additional insured on the commercial general liability policy and the Certificate of Insurance shall include an additional endorsement page. (see sample form: ISO - CG 20 10 11 85).

#### 6.2 AUTO LIABILITY (REQUIRED IF CHECKED ⊠).

Where the Services to be provided under this Agreement involve or require the use of any type of vehicle by Implementer in order to perform said Services, Implementer shall also provide comprehensive business or commercial automobile liability coverage including non-owned and hired automobile liability in the amount of one million dollars combined single limit (\$1,000,000.00).

#### 6.3 WORKERS' COMPENSATION

The Implementer acknowledges the State of California requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code. If Implementer has employees, a copy of the certificate evidencing such insurance or a copy of the Certificate of Consent to Self-Insure shall be provided to MCE prior to commencement of Services.

#### 6.4 PROFESSIONAL LIABILITY INSURANCE (REQUIRED IF CHECKED ⊠ )

Implementer shall maintain professional liability insurance with a policy limit of not less than \$1,000,000 per incident. If the deductible or self-insured retention amount exceeds \$100,000, MCE may ask for evidence that Implementer has segregated amounts in a special insurance reserve fund or Implementer's general insurance reserves are adequate to provide the necessary coverage and MCE may conclusively rely thereon. Coverages required by this subsection may be provided on a claims-made basis with a "Retroactive Date" prior to the Effective Date. If the policy is on a claims-made basis, coverage must extend to a minimum of twelve (12) months beyond termination of this Agreement. If coverage is cancelled or non-renewed, and not replaced with another claims made policy form with a "retroactive date" prior to the Effective Date, the Implementer must purchase "extended reporting" coverage for a minimum of twelve (12) months after termination of this Agreement.

**6.5 PRIVACY AND CYBERSECURITY LIABILITY** (REQUIRED IF CHECKED  $\boxtimes$ ). Implementer shall maintain privacy and cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs) of at least \$1,000,000 US per occurrence.

#### 7. FINANCIAL STATEMENTS:

Implementer shall deliver financial statements on an annual basis or as may be reasonably requested by MCE from time to time. Such financial statements or documents shall be for the most recently available audited or reviewed period and prepared in accordance with generally-accepted accounting principles. MCE shall keep such information confidential pursuant to the Confidentiality Agreement between the parties, March 20, 2019, except as provided by law and to provision to the CPUC may be required from time to time under confidentiality procedures, where applicable.

#### 8. SUBCONTRACTING:

Implementer shall not subcontract nor assign any portion of the work required by this Agreement without prior written approval of MCE except for any subcontract work identified in Exhibit A. If Implementer hires a subcontractor under this Agreement (a "Subcontractor"), Subcontractor shall be bound by all applicable terms and conditions of this Agreement, and Implementer shall ensure the following:

- **8.1.** Subcontractor shall comply with the following terms of this Agreement: Sections 9, 10, each Statement of Work and any attachments thereto.
- **8.2.** Subcontractor shall provide, maintain and be bound by the representations, warranties and covenants of Implementer contained in Section 5 hereof (as may be modified to be applicable to Subcontractor with respect to Section 5.1(a) hereof) at all times during the Term of such subcontract and its provision of Services.
- 8.3. Subcontractor shall comply with the terms of Section 6 above, including, but not limited to providing and maintaining insurance coverage(s) identical to what is required of Implementer under this Agreement, and shall name MCE as an additional insured under such policies. Implementer shall collect, maintain, and promptly forward to MCE current evidence of such insurance provided by its Subcontractor. Such evidence of insurance shall be included in the records and is therefore subject to audit as described in Section 9 hereof.
- **8.4.** Subcontractor shall be contractually obligated to indemnify the MCE Parties (as defined in Section 17 hereof) pursuant to the terms and conditions of Section 17 hereof.
- 8.5. Subcontractors shall not be permitted to further subcontract any obligations under this Agreement.

Implementer shall be solely responsible for ensuring its Subcontractors' compliance with the terms and conditions of this Agreement made applicable above and to collect and maintain all documentation and current evidence of such compliance. Upon request by MCE,

Implementer shall promptly forward to MCE evidence of same. Nothing contained in this Agreement or otherwise stated between the Parties shall create any legal or contractual relationship between MCE and any Subcontractor, and no subcontract shall relieve Implementer of any of its duties or obligations under this Agreement. Implementer's obligation to pay its Subcontractors is an independent obligation from MCE's obligation to make payments to Implementer. As a result, MCE shall have no obligation to pay or to enforce the payment of any monies to any Subcontractor.

#### 9. <u>RETENTION OF RECORDS AND AUDIT PROVISION</u>:

Implementer shall keep and maintain on a current basis full and complete documentation pertaining to this Agreement and the Services, whether stored electronically or otherwise, including, but not limited to, valuation records, accounting records, documents supporting all invoices, employee' time sheets, receipts and expenses, and all customer documentation and correspondence (the "Records"). MCE shall have the right, during regular business hours and upon providing reasonable advance notice, to review and audit all records relating to this Agreement during the Term and for at least five (5) years from the date of the completion or termination of this Agreement. Any review or audit may be conducted with an escort on Implementer's premises or, at MCE's option, Implementer shall provide all records within a maximum of fifteen (15) days upon receipt of written notice from MCE. Implementer shall refund any monies erroneously charged. Implementer shall have an opportunity to review and respond to or refute any report or summary of audit findings, and shall promptly refund any overpayments made by MCE based on undisputed audit findings.

#### 10. DATA, CONFIDENTIALITY AND INTELLECTUAL PROPERTY:

10.1. DEFINITION OF "MCE DATA". "MCE Data" shall mean all data or information provided by or on behalf of MCE, including but not limited to, customer Personal Information; energy usage data relating to, of, or concerning, provided by or on behalf of any customers; all data or information input, information systems and technology, software, methods, forms, manuals, and designs, transferred, uploaded, migrated, or otherwise sent by or on behalf of MCE to Implementer as MCE may approve of in advance and in writing (in each instance); account numbers, forecasts, and other similar information disclosed to or otherwise made available to Implementer. MCE Data shall also include all data and materials provided by or made available to Implementer by MCE's licensors, including but not limited to, any and all survey responses, feedback, and reports subject to any limitations or restrictions set forth in the agreements between MCE and their licensors.

"Confidential Information" under this Agreement shall have the same meaning as defined in the Marin Clean Energy Non-Disclosure Agreement between the parties dated **March 20, 2019**.

- **10.2. DEFINITION OF "PERSONAL INFORMATION".** "Personal Information" includes but is not limited to the following: personal and entity names, e-mail addresses, addresses, phone numbers, any other public or privately-issued identification numbers, IP addresses, MAC addresses, and any other digital identifiers associated with entities, geographic locations, users, persons, machines or networks. Implementer shall comply with all applicable laws, rules, and regulations related to the use, collection, storage, and transmission of Personal Information.
- 10.3. MCE DATA SECURITY MEASURES. Prior to Implementer receiving any MCE Data, Implementer shall comply, and at all times thereafter continue to comply, in compliance with MCE's Data security policies set forth in MCE Policy 009 and MCE's Advanced Metering Infrastructure (AMI) Data Security and Privacy Policy ("Security Measures") and pursuant to MCE's Confidentiality provisions in Section 5 of the Marin Clean Energy Non-Disclosure Agreement between the parties dated March 20, 2019 and as set forth in MCE Policy 001 Confidentiality. MCE's Security Measures and Confidentiality provisions require Implementer to adhere to reasonable administrative, technical, and physical safeguard protocols to protect the MCE's Data from unauthorized handling, access, destruction, use, modification or disclosure.
- 10.4. IMPLEMENTER DATA SECURITY MEASURES. Additionally, Implementer shall, at its own expense, adopt and continuously implement, maintain and enforce reasonable technical and organizational measures, consistent with the sensitivity of Personal Information and Confidential Information including, but not limited to, measures designed to (1) prevent unauthorized access to, and otherwise physically and electronically protect, the Personal Information and Confidential Information data against unauthorized or unlawful access, disclosure, alteration, loss, or destruction.
- 10.5. RETURN OF MCE DATA. Promptly after this Agreement or a Statement of Work terminates or expires, and for each completed Statement of Work (i) Implementer will securely destroy all MCE Data in its possession with respect to each terminated or expired Statement of Work and if requested, certify the secure destruction in writing to MCE, and (ii) each party will return (or if requested by the disclosing party, destroy) all other Confidential Information and property of the other (if any) with respect to each terminated or expired Statement of Work, provided that Implementer's attorney shall be permitted to retain a copy of such records or materials solely for legal purposes. Consistent with provisions in Section 5 of the Marin Clean Energy Non-Disclosure Agreement between the parties dated March 20, 2019, and to the extent permitted by law, parties

shall not be obligated to return, destroy or delete Confidential Information or MCE Data to the extent that the Confidential Information or MCE Data is stored by electronic back-up systems.

#### 10.6. OWNERSHIP AND USE RIGHTS.

- a) MCE Data. Unless otherwise expressly agreed to by the Parties, MCE shall retain all of its rights, title and interest in MCE's Data.
- b) Program Intellectual Property. Unless otherwise expressly agreed to by the Parties, any and all finished or unfinished materials, information, or other intellectual property created, prepared, accumulated or developed by Implementer or any Implementer Party under this Agreement with Program funds ("Program Intellectual Property"), including finished and unfinished inventions, processes, templates, documents, other writings, drawings, computer programs, designs, calculations, valuations, maps, plans, workplans, text, filings, estimates, manifests, certificates, books, specifications, sketches, notes, reports, summaries, analyses, studies, manuals, visual materials, data models and samples, including summaries, extracts, analyses and preliminary or draft materials developed in connection therewith, shall be owned solely by MCE upon its creation on behalf and for the benefit of MCE's respective customers.
- c) Program Intellectual Property will be owned by MCE upon its creation. Implementer agrees to execute any such other documents or take other actions as MCE may reasonably request to perfect MCE's ownership in the Program Intellectual Property. MCE shall have the exclusive right to use such Program Intellectual Property in its sole discretion and without further compensation to Implementer (beyond the compensation set forth in this Agreement) or to any other party. Implementer shall, at MCE's expense, provide such Program Intellectual Property to MCE or to any party MCE may designate upon written request. Implementer may keep file reference copies of all documents prepared for MCE.
- d) Implementer's Pre-Existing Materials. If, and to the extent Implementer retains any preexisting ownership rights ("Implementer's Pre-Existing Materials") in any of the materials furnished to be used to create, develop, and prepare the Program Intellectual Property, Implementer hereby grants MCE and the Program Participants on behalf of their respective customers and the CPUC for governmental and regulatory purposes an irrevocable, assignable, non-exclusive, perpetual, fully paid up, worldwide, royalty-free, unrestricted license to use and sublicense others to use, reproduce, display, prepare and develop derivative works, perform, distribute copies of any intellectual or proprietary property right of Implementer or any Implementer Party for the sole purpose of using such Program Intellectual Property for the conduct of MCE's business and for disclosure to the CPUC for governmental and regulatory purposes related thereto (the "MCE License"). Unless otherwise expressly agreed to by the Parties. Implementer shall retain all of its rights, title and interest in Implementer's Pre-Existing Materials. Any and all claims to Implementer's Pre-Existing Materials to be furnished or used to prepare, create, develop or otherwise manifest the Program Intellectual Property must be expressly disclosed to MCE prior to performing any Services under this Agreement. Any such Pre-Existing Material that is modified by work under this Agreement is owned by MCE with the exception of process changes to Implementer's software systems, workflows and templates associated with its DSMT and Quickbase Platforms and SharePoint infrastructure or revisions to Implementer's pre-existing SEM templates, customer training materials, NMEC calculator tools, engineering models, energy assessment reports and Joint Energy Efficiency Plan templates that are modified in a general manner so as to apply to work product for other clients of Implementer ("Generally-Applicable Modifications to Pre-Existing Materials"). Generally-Applicable Modifications to Pre-Existing Materials do not include modifications that are customized for MCE or its customers. For the avoidance of doubt, the MCE License shall also apply to Generally-Applicable Modifications to Pre-Existing Materials.
- **10.7. EQUITABLE RELIEF.** Each Party acknowledges that a breach of this Section 10 would cause irreparable harm and significant damages to the other Party, the degree of which may be difficult to ascertain. Accordingly, each Party agrees that MCE shall have the right to obtain immediate equitable relief to enjoin any unauthorized use or disclosure of MCE Data or Personal Information, in addition to any other rights and remedies that it may have at law or otherwise; and Implementer shall have the right to obtain immediate equitable relief to enjoin any unauthorized use or disclosure of Implementer shall have the right to obtain immediate equitable relief to enjoin any unauthorized use or disclosure of Implementer's Pre-Existing Materials, in addition to any other rights and remedies that it may have at law or otherwise.

#### 11. FORCE MAJEURE:

A Party shall be excused for failure to perform its obligations under this Agreement if such obligations are prevented by an event of Force Majeure (as defined below), but only for so long as and to the extent that the Party claiming Force Majeure ("Claiming Party") is actually so prevented from performing and provided that (a) the Claiming Party gives written notice and full particulars of such Force Majeure to the other Party (the "Affected Party") promptly after the occurrence of the event relied on, (b) such notice includes an estimate of the expected duration and probable impact on the performance of the Claiming Party's obligations under this Agreement, (c) the Claiming Party furnishes timely regular reports regarding the status of the Force Majeure, including updates with respect to the data included in Section 10 above during the continuation of the delay in the Claiming Party's performance, (d) the suspension of such obligations sought by Claiming Party is of no greater scope and of no longer duration than is required by the Force Majeure, (e) no obligation or liability of

either Party which became due or arose before the occurrence of the event causing the suspension of performance shall be excused as a result of the Force Majeure; (f) the Claiming Party shall exercise commercially reasonable efforts to mitigate or limit the interference, impairment and losses to the Affected Party; (g) when the Claiming Party is able to resume performance of the affected obligations under this Agreement, the Claiming Party shall give the Affected Party written notice to that effect and promptly shall resume performance under this Agreement. "Force Majeure" shall mean acts of God such as floods, earthquakes, fires, orders or decrees by a governmental authority, civil or military disturbances, wars, riots, terrorism or threats of terrorism, utility power shutoffs, strikes, labor disputes, pandemic, or other forces over which the responsible Party has no control and which are not caused by an act or omission of such Party.

#### 12. TERMINATION:

- 12.1. If Implementer fails to provide in any manner the Services required under this Agreement or otherwise fails to comply with the terms of this Agreement or violates any Applicable Law, makes an assignment of any general arrangement for the benefit of creditors, files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause under any bankruptcy or similar law for the protection of creditors, or has such petition filed against it, otherwise becomes bankrupt or insolvent (however evidenced), or becomes unable to pay its debts as they fall due, then MCE may terminate this Agreement by giving ten (10) business days' written notice to Implementer.
- **12.2.** Either Party hereto may terminate this Agreement for any reason by giving thirty (30) calendar days' written notice to the other Party. Notice of termination shall be by written notice to the other parties and be sent by registered mail or by email to the email address listed in Section 19 Invoices; Notices.
- 12.3. In the event of termination not the fault of Implementer, Implementer shall be paid for Services performed to the date of termination in accordance with the terms of this Agreement so long as proof of required insurance is provided for the periods covered in the Agreement or Amendment(s). Notwithstanding anything contained in this Section 12, in no event shall MCE be liable for lost or anticipated profits or overhead on uncompleted portions of the Services. Implementer shall not enter into any agreement, commitments or subcontracts that would incur significant cancelation or termination costs without prior written approval of MCE, and such written approval shall be a condition precedent to the payment of any cancellation or termination charges by MCE under this Section 12. Also, as a condition precedent to the payment of any cancellation or termination charges by MCE under this Section 12, Implementer shall have delivered to MCE any and all reports, drawings, documents and deliverables prepared for MCE before the effective date of such termination.
- **12.4.** Without limiting the foregoing, if either Party's activities hereunder become subject to law or regulation of any kind, which renders the activity illegal, unenforceable, or which imposes additional costs on such Party for which the parties cannot mutually agree upon an acceptable price modification, then such Party shall at such time have the right to terminate this Agreement upon written notice to the other Party with respect to the illegal, unenforceable, or uneconomic provisions only, and the remaining provisions will remain in full force and effect.
- 12.5. Notwithstanding the foregoing, this Agreement shall be subject to changes, modifications, or termination by order or directive of the California Public Utilities Commission ("CPUC"). The CPUC may from time to time issue an order or directive relating to or affecting any aspect of this Agreement, in which case MCE shall have the right to change, modify or terminate this Agreement in any manner to be consistent with such CPUC order or directive by providing written notice to Implementer at least ten (10) business days before such change takes effect, unless an order or directive issued by the CPUC requires changes take effect earlier than this notice and at such time MCE will provide notice as early as possible. MCE may also terminate this Agreement if funding for this Agreement is reduced or eliminated by a third-party funding source.
- 12.6. Upon MCE's termination of this Agreement for any reason, Implementer shall, and shall cause Implementer or each of its employees, agents, representatives, and subcontractors and all other persons performing the Services on behalf of Implementer (each, an Implementer Party), to bring the Services to an orderly conclusion as directed by MCE. Implementer and each Implementer Party shall vacate the worksite but shall not remove any material, plant or equipment thereon without the approval of MCE. MCE, at its option, may take possession of any portion of the Services paid for by MCE.
- **12.7.** Notwithstanding any provision herein to the contrary, Sections 2, 3, 8.4, 9, 10, 12, 15, 16, 17, 18, 19, 20, 21, 22, 24, Exhibit B of this Agreement shall survive the termination or expiration of this Agreement.

#### 13. ASSIGNMENT:

The rights, responsibilities and duties under this Agreement are personal to the Implementer and may not be transferred or assigned without the express prior written consent of MCE, which shall not be unreasonably withheld.

#### 14. AMENDMENT; NO WAIVER:

This Agreement may be amended or modified only by written agreement of the Parties. Failure of either Party to enforce any provision or provisions of this Agreement will not waive any enforcement of any continuing breach of the same provision or provisions or any breach of any provision or provisions of this Agreement.

#### 15. DISPUTES:

Either Party may give the other Party written notice of any dispute which has not been resolved at a working level. Any dispute that cannot be resolved between Implementer's contract representative and MCE's contract representative by good faith negotiation efforts

shall be referred to Legal Counsel of MCE and an officer of Implementer for resolution. Within 20 calendar days after delivery of such notice, such persons shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary to exchange information and to attempt to resolve the dispute. If MCE and Implementer cannot reach an agreement within a reasonable period of time (but in no event more than 30 calendar days), MCE and Implementer shall have the right to pursue all rights and remedies that may be available at law or in equity. In particular, Implementer shall have right to request arbitration or mediation to resolve the dispute and MCE shall be required to participate in arbitration or mediation in good faith. All negotiations and any mediation agreed to by the Parties are confidential and shall be treated as compromise and settlement negotiations, to which Section 1119 of the California Evidence Code shall apply, and Section 1119 is incorporated herein by reference.

#### 16. JURISDICTION AND VENUE:

This Agreement shall be construed in accordance with the laws of the State of California and the Parties hereto agree that venue shall be in Marin County, California.

#### 17. INDEMNIFICATION:

To the fullest extent permitted by Applicable Law, Implementer shall indemnify, defend, and hold MCE, its employees, officers, and agents ("MCE Parties"), harmless from any and all actions, claims, liabilities, losses, costs, damages and expenses (including, but not limited to, litigation costs, attorney's fees and costs, physical damage to or loss of tangible property, and injury or death of any person) arising out of, resulting from, or caused by: a) the negligence, recklessness, intentional misconduct, fraud of all Implementer Parties; b) the failure of an Implementer Party to comply with the provisions of this Agreement or Applicable Law; or c) any defect in design, workmanship, or materials carried out or employed by any Implementer Party.

#### 18. NO RECOURSE AGAINST CONSTITUENT MEMBERS OF MCE:

MCE is organized as a Joint Powers Authority in accordance with the Joint Exercise of Powers Act of the State of California (Government Code Section 6500, et seq.). Pursuant to MCE's Joint Powers Agreement, MCE is a public entity separate from its constituent members. MCE shall solely be responsible for all debts, obligations and liabilities accruing and arising out of this Agreement. Implementer shall have no rights and shall not make any claims, take any actions or assert any remedies against any of MCE's constituent members in connection with this Agreement.

#### 19. INVOICES; NOTICES:

This Agreement shall be managed and administered on MCE's behalf by the Contract Manager named below. All invoices shall be submitted by email to:

Email Address: invoices@mcecleanenergy.org

All other notices shall be given to MCE at the following location:

Contract Manager:	Troy Nordquist
MCE Address:	1125 Tamalpais Avenue
	San Rafael, CA 94901
Email Address:	contracts@mcecleanenergy.org
Telephone No.:	(415) 464-6027

Notices shall be given to Implementer at the following address:

Implementer:	CLEAResult Consulting Inc.
	Attn: Legal Department
Address:	100 SW Main Street, Suite 1500
	Portland, OR 97204

Email Address	
---------------	--

Telephone No.: 503-248-4636

#### 20. ACKNOWLEDGEMENT OF EXHIBITS:

In the event of a conflict between the Terms of this Agreement and the terms in any of the following Exhibits, the terms in this Agreement will govern.

	$\square$	Check applicable Exhibits	<b>IMPLEMENTER'S INITIALS</b>
EXHIBIT A.	$\boxtimes$	Form of Statement or Work	
<u>EXHIBIT B.</u>	$\boxtimes$	Fees and Payment	
<u>EXHIBIT C.</u>	$\boxtimes$	Energy Efficiency Program Terms	μ <sub>Ds</sub>
Schedule A.1	$\boxtimes$	Statement of Work for MCE's Industrial, Agricultural and Commercial Sectors	
Schedule A.2	$\boxtimes$	Statement of Work for MCE Multifamily Residential Sector	
Appendix A.	$\boxtimes$	Implementation Plan Template	
Appendix B.	$\boxtimes$	California Industrial SEM M&V Guide	α β U

#### 21. SEVERABILITY:

Should any provision of this Agreement be held invalid or unenforceable by a court of competent jurisdiction, such invalidity will not invalidate the whole of this Agreement, but rather, the remainder of the Agreement which can be given effect without the invalid provision, will continue in full force and effect and will in no way be impaired or invalidated.

#### 22. INDEPENDENT CONTRACTOR:

Implementer is an independent contractor to MCE hereunder. Nothing in this Agreement shall establish any relationship of partnership, joint venture, employment or franchise between MCE and any Implementer Party. Neither MCE nor any Implementer Party will have the power to bind the other or incur obligations on the other's behalf without the other's prior written consent, except as otherwise expressly provided for herein.

#### 23. TIME:

Time is of the essence in this Agreement and each and all of its provisions.

#### 24. THIRD PARTY BENEFICIARIES:

The Parties agree that there are no third-party beneficiaries to this Agreement either express or implied.

#### 25. FURTHER ACTIONS:

The Parties agree to take all such further actions and to execute such additional documents as may be reasonably necessary to effectuate the purposes of this Agreement.

#### 26. PREPARATION OF AGREEMENT:

This Agreement was prepared jointly by the Parties, each Party having had access to advice of its own counsel, and not by either Party to the exclusion of the other Party, and this Agreement shall not be construed against either Party as a result of the manner in which this Agreement was prepared, negotiated or executed.

#### 27. <u>COMPLETE AGREEMENT:</u>

This Agreement along with any attached Exhibits and Statements of work constitutes the entire Agreement between the parties. No modification or amendment shall be valid unless made in writing and signed by each party. Failure of either party to enforce any provision

or provisions of this Agreement will not waive any enforcement of any continuing breach of the same provision or provisions or any breach of any provision or provisions of this Agreement.

#### 28. COUNTERPARTS:

This Agreement may be executed in one or more counterparts each of which shall be deemed an original and all of which shall be deemed one and the same Agreement.

# IN WITNESS WHEREOF, the parties have executed this Agreement on the date first above written.

APPF	ROVED BY		
Marin	Clean Energy:	Impler	nenter:
By:	-DocuSigned by: Dawn Weisg -A59878416EBC4F8	By:	DocuSigned by: Multiple White 8E542A5E4B6F4EA
Name	Dawn Weisz ::	Name:	Andrea White
Title:	CEO	Title: _	Vice President, West & Lakes
Date:	9/20/2021	Date:	9/21/2021
By:	DecuSigned by: DEUN TRE MURPHY 7FFB8D80838A4FB person	-	
Date:	9/17/2021		
М	DDIFICATIONS TO ENERGY EFFICIENCY STAND ⊠ Standard Short Form Content Has Been Mo	ARD SH	HORT FORM
	List sections affected: Sections 2, 5.6(t	o), 5.7	(a) and (c), 6, 7, 9, 10.5 10.6(b), (c), and (d), 12, 15, 27

	DocuSigned by:	
Approved by MCE Counsel:	Catalina Murphy	Date:
	0CC3FD724F79482	

#### Exhibit A Form of Statement of Work

#### Schedule A.\_\_ Statement of Work for [Describe Work]

This Schedule A.\_\_\_\_ is entered into on **[Date]** pursuant to the Master Services Agreement between MARIN CLEAN ENERGY, hereinafter referred to as "MCE", and CLEARESULT CONSULTING INC., hereinafter referred to as "Implementer", dated **September 3, 2021** ("MSA").

The First Agreement between MCE and Implementer dated March 21, 2019 is terminated as of September 3, 2021.

Implementer shall provide the following Services under the Agreement as requested and directed by MCE staff, up to the maximum time/fees allowed under this Agreement:

[List scope of services]

Attached as Attachment \_\_\_\_ is the technical scope of work for this request.

#### Billing:

Implementer shall bill monthly and according to the rate schedule listed in Exhibit B of the Master Services Agreement dated **DATE**. In no event shall the total cost to MCE for the services provided under this Statement of Work exceed the maximum sum of **\$0,000** for the term of the Agreement.

#### Term of Statement of Work:

This Statement of Work shall commence on September 3, 2021 and shall terminate on December 31, 2021.

**IN WITNESS WHEREOF,** the parties have executed this Statement of Work – Schedule A.1 on the date first above written.

APPROVED BY Marin Clean Energy:	Implementer:
Ву:	Ву:
Name:	Name:
Date:	Date:
By: Chairperson	
Date:	

#### EXHIBIT B FEES AND PAYMENT

For services provided under this Agreement, MCE shall pay Implementer in accordance with the rate schedule as specified below and in accordance with the payment structure listed in a Statement of Work:

- Performance Rates and Customer Incentives are determined by the payment structure listed in a Statement of Work
- Marketing support services will be charged at the personnel hourly rates listed below:

Title:	Rate:
Marketing Account Manager	\$137
Creative Director	\$202
Graphic Designer	\$98
Copywriter	\$112
Web Developer	\$159
Senior Program Manager	\$181
Account Manager	\$109

#### EXHIBIT C Energy Efficiency Program Terms

The terms below are additional terms and conditions for programs under this Agreement.

#### 1. BILLING, ENERGY USE, AND PROGRAM TRACKING DATA (REQUIRED IF CHECKED ID).

- a) Contractor shall comply with and timely cooperate with all CPUC directives, activities, and requests regarding the Program and Project evaluation, measurement, and verification ("EM&V"). For the avoidance of doubt, it is the responsibility of Contractor to be aware of all CPUC requirements applicable to the Services of this Agreement.
- b) Contractor shall make available to MCE upon demand, detailed descriptions of the program, data tracking systems, baseline conditions, and participant data, including financial assistance amounts.
- c) Contractor shall make available to MCE any revisions to Contractor's program theory and logic model ("PTLM") and results from its quality assurance procedures, and comply with all MCE EM&V requirements, including reporting of progress and evaluation metrics.

#### 2. WORKFORCE STANDARDS (REQUIRED IF CHECKED ⊠).

At all times during the Term of the Agreement, Contractor shall comply with, and shall cause all Contractor Parties to comply with, the workforce qualifications, certifications, standards and requirements set forth in this Exhibit D, Section 2 ("Workforce Standards"). The Workforce Standards shall be included in their entirety in MCE's Final Implementation Plan. If applicable, "Final Implementation Plan" is defined in the deliverables for the Services listed in Exhibit A. Prior to commencement of any Services, once per calendar year, and at any other time as may be requested by MCE, Contractor shall provide all documentation necessary to demonstrate to MCE's reasonable satisfaction that Contractor has complied with the Workforce Standards.

- 2.1. HVAC STANDARDS (REQUIRED IF CHECKED ⊠). For any non-residential project pursuant to this Agreement installing, modifying or maintaining a Heating Ventilation and Air Conditioning ("HVAC") system or component with incentives valued at \$3,000 or more, Contractor shall ensure that each worker or technician involved in the project, including all employees and agents of its Subcontractors, meets at least one of the following workforce criteria:
  - a) Completed an accredited HVAC apprenticeship;
  - b) Is enrolled in an accredited HVAC apprenticeship;
  - c) Completed at least five years of work experience at the journey level as defined by the California Department of Industrial Relations, Title 8, Section 205, of the California Code of Regulations, passed a practical and written HVAC system installation competency test, and received credentialed training specific to the installation of the technology being installed; or
  - d) Has a C-20 HVAC contractor license issued by the California Contractor's State Licensing Board.

This standard shall not apply where the incentive is paid to any manufacturer, distributor, or retailer of HVAC equipment, unless the manufacturer, distributor, or retailer installs or contracts for the installation of the equipment.

2.2. ADVANCED LIGHTING CONTROLS STANDARDS (*REQUIRED IF CHECKED* ⊠). For any non-residential project pursuant to this Agreement involving installation, modification, or maintenance of lighting controls with incentives valued at \$2,000 or more, Contractor shall ensure that all workers or technicians involved in the project, including those of its Subcontractors are certified by the California Advanced Lighting Controls Training Program ("CALTP"). This requirement shall not apply where the incentive is paid to a manufacturer, distributor, or retailer of lighting controls unless the manufacturer, distributor, or retailer installs or contracts for installation of the equipment.

#### 3. COORDINATION WITH OTHER PROGRAM ADMINISTRATORS (REQUIRED IF CHECKED ).

Contractor shall coordinate with other Program Administrators, including investor-owned utilities and local government agencies authorized by the CPUC to implement CPUC-directed energy efficient programs, administering energy efficiency programs in the same geographic area as MCE. These other Program Administrators include: Pacific Gas and Electric Company and Bay Area Regional Energy Network. The CPUC may develop further rules related to coordination between Program Administrators in the same geographic area, and any Contractor is required to comply with such rules.

#### 4. <u>MEASUREMENT AND VERIFICATION REQUIREMENTS, INCLUDING GUIDELINES ABOUT NORMALIZED</u> <u>METERED ENERGY CONSUMPTION ("NMEC") DESIGN REQUIREMENTS (REQUIRED IF CHECKED ⊠).</u>

#### Contractor shall:

1. Only enroll customers that qualify for Program services.

- 2. Comply with current policies, procedures, and other required documentation as required by MCE;
- 3. Report Customer Participation Information to MCE.
- 4. Work with MCE's evaluation team to define Program-specific data collection and evaluability requirements, and in the case of NMEC which independent variables shall be normalized.

Throughout the Term, MCE may identify new net lifecycle energy savings estimates, net-to- gross ratios, effective useful lives, or other values that may alter Program Net Lifecycle Energy Savings, as defined in Exhibit A, if applicable. Contractor shall use modified values upon MCE's request, provided MCE modifies Contractor's Program budget and/or overall Program net lifecycle Energy Savings consistent with the requested change. MCE shall determine any budget increases or decreases in its sole discretion.

For Programs claiming to-code savings: Contractor shall comply with Applicable Law and work with MCE to address elements in its Program designs and Implementation Plans, such as:

- 1. Identifying where to-code savings potential resides;
- 2. Specifying which equipment types, building types, geographic allocations, and/or customer segments promise cost-effective to-code savings;
- 3. Describing the barriers that prevent code-compliant equipment replacements;
- 4. Explaining why natural turnover is not occurring within certain markets or for certain technologies; and
- 5. Detailing the program interventions that would effectively accelerate equipment turnover.

#### STATEMENT OF WORK

#### Schedule A.1

#### Statement of Work for MCE Agricultural, Industrial and Commercial Sectors

This Schedule A.1 ("Agreement") is entered into on **September 3, 2021** pursuant to the Master Services Agreement between MARIN CLEAN ENERGY, hereinafter referred to as "MCE", and CLEARESULT CONSULTING INC., hereinafter referred to as "Implementer", dated **September 3, 2021** ("MSA").

The First Agreement between MCE and Implementer dated March 21, 2019 is terminated as of September 3, 2021.

Implementer will provide the following Energy Efficiency Program services for MCE's Agricultural and Industrial sectors as directed by MCE staff, up to the maximum time and fees allowed under this Agreement. As requested and directed by MCE staff, Implementer will also serve MCE Commercial customers, in which projects will be approved individually by MCE staff.

#### I. Overview:

Implementer will offer comprehensive solutions for delivering electric and gas energy efficiency savings, serving the Agricultural and Industrial customer base in MCE's service territory. Implementer may also serve MCE customers in the Commercial sector, with a limited scope of services described under Section IV below and at the direction of MCE staff.

Implementer will develop and implement the Agricultural and Industrial Energy Efficiency programs ("the Programs") consistent with the outlines developed in program-specific Implementation Plans (see III below, Appendix A).

#### II. Goals and Targets:

Savings goals and Implementer's operating budget (performance payments and customer incentive budgets) for each year or years will be finalized through the Bi-Annual Budget Advice Letter, or other Advice Letter requesting ratepayer funding. Implementer will adhere to the program budgets outlined by MCE following the approval of an Advice Letter for each funding cycle.

Implementer may also serve commercial customers within MCE's service area as directed by MCE. See Section IV below for details on this service.

#### III. Agricultural and Industrial Program Services:

Implementer will provide comprehensive Program design, project development and Program implementation services, including but not limited to:

#### a. Program Design and Measure Development

Implementer will work with MCE on an ongoing basis to improve Program designs. This will include, but is not limited to: identifying and vetting energy efficiency measures; setting incentive and/or rebate levels based on budgets approved by MCE; selecting savings calculation methods; and determining intervention strategies.

Implementer may utilize deemed, custom, Strategic Energy Management ("SEM"), and Normalized Metered Energy Consumption ("NMEC") savings analyses and claims. Implementer will select the savings methodology which maximizes accuracy of the savings claim and customer benefit. Implementer will adhere to the most up-to-date guidance from the California Public Utilities Commission ("CPUC") in developing the Programs and specific projects.

With support from MCE staff, Implementer will make updates (if applicable) to the Implementation Plans per CPUC requirements for the Programs. Implementer will complete initial drafts of the document, as well as inputs for the Total Resource Cost and Program Administrator Cost calculations to inform cost-effectiveness forecasts. The template for Implementation Plans is attached to the MSA as Appendix A.

Implementer will provide cost-effectiveness forecasts as needed in support of MCE's requests for ratepayer funding.

#### b. Implementation Documentation Activities

Implementer will implement the Programs to eligible customers within MCE service territory.

Implementer will lead the development and maintenance of a Program Policies Manual – a required component of the Implementation Plans – to be used by Implementer and MCE to provide guidance around common processes and procedures encountered during the course of Program implementation, including:

- Eligible Measures
- Customer Eligibility Requirements
- Contractor Eligibility Requirements
- Program services such as training, specification, installation oversight, measurement and verification ("M&V")
- Audit procedures

Implementer will maintain and utilize a document or matrix which summarizes additional customer opportunities beyond the core MCE Program. The opportunities listed in the document shall include information summarizing eligibility standards for customer financing, renewable energy, and water efficiency programs or opportunities that may be presented to customers together with MCE's energy efficiency project proposals.

#### c. Customer Recruitment and Enrollment

Implementer will use data provided by MCE along with best practice parameters to target, recruit, and enroll customers in the Programs. Recruitment may include, but is not limited to: coordination with MCE and PG&E representatives; customer marketing and outreach; vendor engagement; and industry trade association event attendance and coordination.

#### d. Project Development and Project Engineering

Implementer will perform project engineering for each applicable customer project ("Project") which may include, but is not limited to: engineering assessments; energy savings and Project financial assessments; Project data analysis and calculations; Project evaluation; Project site surveys and assessments; and M&V. Implementer will provide customers with estimated savings summaries and/or reports for each Project, to address customer-specific needs such as payback estimates, annual energy savings estimates, operational improvements, and financing resources.

#### e. Project Application Review, Validation, and Submittal

Implementer will maintain customer application documents and calculators for use throughout the Programs. Implementer will compile, review, and validate customer Project applications prior to submitting to MCE for payment. Any Project submitted for incentive payment must also be submitted as part of the monthly and quarterly energy savings claim (see below).

A subset of all deemed Projects and measures must be selected for post-installation review. Custom Projects will be audited both preinstallation and post-installation to verify accuracy of savings claims. SEM and NMEC Projects will adhere to CPUC guidance on the validation of savings claims.

#### i. Savings Claims Reporting and Invoicing

Implementer will submit net and gross monthly energy savings and year-to-date energy savings claims data on a monthly basis for each Project, following the submittal of an application for incentive payment. Monthly reporting documentation will include:

- Monthly invoice;
- Monthly reporting, including net energy savings (kWh, kW reduction, therms) and year-to-date net energy savings;
- Monthly spend-to-date on Implementer expenditures;
- Monthly spend-to-date on dollar per unit (kwh and therm) in customer incentives;
- Project paperwork as required by MCE program managers.

#### f. M&V Plan and M&V

Implementer will provide an updated M&V Plan to serve as the basis for verification of savings claims. Implementer shall conduct all M&V activities in compliance with all CPUC orders and guidance.

Implementer will ensure that NMEC projects follow the most recent CPUC Rulebook on NMEC savings claims and embedded M&V for site-specific analyses and any additional guidance provided by MCE at the time of project initiation. For the avoidance of doubt, Implementer may rely on guidance from MCE provided at the time of project initiation, however NMEC projects must always follow the most recent CPUC Rulebook regardless of calculations/methodologies in place at the time of project initiation.

Implementer will ensure that SEM projects follow the most up-to-date guidance from the CPUC on M&V, incorporating principles of the California Industrial SEM M&V Guide (included as Appendix B), The American Society of Heating, Refrigerating and Air-Conditioning Engineers Guideline 14:2014, and International Performance Measurement and Verification Protocol ("IPMVP"). The M&V Plan will include the following:

- Energy Data Collection Plan
- Energy Data Report
- Energy Savings Calculation Report

#### g. Program Enhancement Planning and Policy Coordination Activities

At the request of MCE, Implementer will participate in Program planning activities and energy efficiency policy coordination to improve Program design.

#### IV. Commercial Program Services

Implementer will serve commercial customers with energy efficiency Program services, pending approval and/or referral of Projects from MCE staff. Eligible commercial customer types will include any non-residential customer with average load of greater than 20 kW. Implementer will not engage in commercial program marketing without MCE staff approval, and must seek MCE approval for project incentive reservations, in advance of presenting project proposals to customers.

All projects submitted to MCE's Commercial Energy Efficiency Program must utilize pre-approved Project paperwork, measures/interventions, and savings claims requirements. Project savings will be reported in accordance with MCE's requirements.

#### V. Industrial and Agricultural Marketing Support Services

Implementer may, with prior written approval from MCE, perform targeted marketing and outreach to industrial and agricultural customers to increase awareness and participation in the Program. For each initiative, Implementer will submit a written plan, budget, and timeline to MCE for approval. All approved services will be billed on a time and materials basis with the rate card and budget listed in Exhibit B of the MSA.

These services include, but are not limited to:

- Digital advertising
- Case studies
- Collateral

#### VI. Deliverables

- a. Updated Implementation Plans to be completed on an as-needed basis at MCE's direction
   i. See Appendix A for required components
- b. Updated Application and enrollment forms, rebate/incentive forms, calculator tools, audit documentation as needed or directed by MCE
- c. Updated M&V Plan as needed or directed by MCE
- d. Cost Effectiveness Tests Annually in July, or as requested by MCE based on compliance requirements, in support of budget requests or Program design revisions

#### Billing:

Implementer shall invoice MCE according to the project type listed below and pursuant to the payment schedule listed in Table 1. For clarity, Marketing Services are to be billed at the hourly personnel rate listed in Exhibit B of the MSA and shall not exceed \$40,000. In no event shall the total cost to MCE for the services provided under this Statement of Work exceed the maximum sum of **\$6,898,444** for the term of the Agreement.

Table 1: Payment Schedule			
	2021-2024 P		
	\$/net kWh	\$/net therm	Total NTE
Industrial	\$0.30	\$1.76	N/A
Agricultural	\$0.30	\$1.76	N/A
Commercial	\$0.27	\$1.76	N/A
NTE Industrial	\$ 2,259,986.41	\$ 968,565.60	\$ 3,228,552.01
NTE Agricultural	\$ 1,296,005.76	\$ 228,706.90	\$ 1,524,712.66

NTE Commercial	\$ 1,684,143.10	\$ 421,035.77	\$ 2,105,178.87
		Total	\$ 6,858,443.54

The payment schedule in Table 1 defines Implementer's rates and maximum available contract value for this Statement of Work, which includes performance rates. The Program budget is determined by MCE on an annual basis through MCE's Annual, Bi-Annual or Supplemental Advice Letters which requests ratepayer funding for the Industrial, Agricultural and Commercial Programs. The funding available to Implementer is contingent upon CPUC approval of the aforementioned Advice Letters, and subject to change, pending regulatory approval to continue administering these programs. MCE will inform Implementer at the beginning of each Program year the expected funding available for performance rates and customer incentives, which may be updated from time to time as needed by MCE.

For purposes of this Agreement, "net" is defined as claimable energy savings as determined and approved by the CPUC. Implementer shall adhere to the most up to date guidance from the CPUC for all calculations of net energy savings.

Projects are paid based on claimed (deemed or custom) or metered (NMEC or SEM) energy savings reported to the CPUC.

- I. <u>Claimed Energy Savings Projects</u>. Implementer payments for Projects based on deemed or custom claimed energy savings will be made after Project completion and submission of Project energy savings documentation and claims data to MCE. Claimable energy savings will be based on the CPUC-approved policy at the time the Project is pre-approved by MCE and valid for a period of one year. Projects not completed after one year of MCE pre-approval, may require additional MCE review. Implementer shall invoice monthly for these completed Projects.
- II. <u>Metered Energy Savings Projects.</u> Implementer payments for Projects based on measured consumption data Projects (NMEC and SEM) will follow the IPMVP and CPUC guidance for NMEC and SEM analyses and measurement and according to the following schedule:
  - a. **Payments for SEM Projects not using site-level NMEC:** Implementer payments will be made based on forecasted annual energy savings and shall be paid to Implementer in quarterly installments, beginning after the initial intervention or enrollment for a Project, and subject to the True-Up Protocol listed in Section II, c. below. Forecasting methodology shall be consistent with protocols approved by the CPUC. Implementer shall invoice quarterly for these Projects.
  - b. Payments for NMEC Projects (Including whole facility SEM projects using site-level NMEC): Implementer payments will be made based on NMEC savings and shall be paid to Implementer in quarterly installments, beginning after the initial intervention or enrollment for a Project, and subject to the True-Up Protocol listed in Section II, c. below. Implementer shall provide documentation of energy savings for the prior quarter which will be reviewed and approved by MCE before issuing a payment installment. Implementer shall invoice quarterly for these Projects.
  - c. True-Up Protocol after 12 Months (applicable to both NMEC and SEM Projects). After 12 months following project enrollment, Implementer will submit the final first year annual energy savings based on documentation and true-up positive or negative variance from the quarterly claims. In the event that MCE has paid less than the amount to which Implementer was entitled based on annual energy savings documentation (as reviewed and approved by MCE), MCE shall pay any such net difference to Implementer. In the event that MCE has paid more than the amount to which Implementer was entitled, as reviewed and approved by MCE, Implementer shall refund any such amount to MCE. This process will repeat for a second year to cover variance from the first year's annual energy savings, concluding 24 months after the initial intervention.
  - d. Year 2 of a Project: MCE will pay Implementer based on the incremental savings earned above the verified savings claimed in the first year of a Project, and according to the applicable payment schedule for claimed or metered energy savings projects listed above, and subject to the True-Up Protocol listed in Section II, c. above.
  - e. Existing Participants Year 3 and 4 Program Extension: Implementer will continue to offer program participation for existing participants into Cycle 2 (Year 3 & 4). Participants wishing to continue participation will be required to re-sign participation agreements for Cycle 2.
- III. Marketing support services will be charged at the personnel hourly rates listed in Exhibit B of the MSA with a **maximum sum** of \$40,000.

#### Term of Statement of Work:

This Statement of Work shall commence on September 3, 2021 and shall terminate on December 31, 2024.

**IN WITNESS WHEREOF**, the parties have executed this Statement of Work – Schedule A.1 on the date first above written.

**APPROVED BY** Marin Clean Energy:

DocuSigned by:

'awn We

A59878416EBC4F8

CONTRACTOR:

DocuSigned by: White 10 By: SE4B6F4EA

Andrea White Name:

Date: \_\_\_\_

Date: \_ 9/20/2021

Dawn Weisz Name:

By

DocuSigned by: DEMN TRE MURPHY By: Chairperson

9/17/2021 Date:

#### STATEMENT OF WORK

#### Schedule A.2 Statement of Work for MCE Multifamily Residential Sector

This Schedule A.2 ("Agreement") is entered into on **September 3, 2021** pursuant to the Master Services Agreement between MARIN CLEAN ENERGY, hereinafter referred to as "MCE", and CLEARESULT CONSULTING INC., hereinafter referred to as "Implementer", dated **September 3, 2021** ("MSA").

Implementer will provide the following Energy Efficiency program services for MCE's multifamily residential sector as directed by MCE staff, up to the maximum time and fees allowed under this Agreement. As requested and directed by MCE staff, Implementer will also serve MCE Commercial customers with housing facilities, in which projects will be approved individually by MCE staff.

Implementer will implement a multifamily Strategic Energy Management ("SEM") program serving multifamily (defined as residential buildings with 5 or more units and alternative housing facilities) customers ("the Program"). The Program will:

- 1. Offer multifamily organizations an innovative, low- no-cost approach to saving energy in common areas and in unit.
- 2. Build lasting relationships with multifamily property managers.
- 3. Educate and promote action around energy use in multifamily residences.
- 4. Achieve persistent behavioral, retro-commissioning, and operational ("BRO") energy savings.
- 5. Identify and refer capital projects to other MCE programs.

#### Program Design

Implementer's SEM program design will use a cohort model. During the first-year, multifamily property managers will be brought together to participate in the Program. The cohort will create a community of energy efficiency, encourage peer-to-peer learning, and provide intrinsic motivation to make changes that will save energy and money.

The Program will include five main elements:

- 1. Collaborative group workshops
- 2. One-on-one events
- 3. Energy management coaching
- 4. Measurement of energy savings
- 5. Residential tenant engagement

#### TASK 1: PROGRAM START-UP AND ADMINISTRATION

Implementer will offer the Program to eligible multifamily customers within MCE service territory.

Implementer will lead the development and maintenance of a Program Implementation Plan ("IP") and a Program Manual to provide guidance around common processes and procedures encountered during the course of Program implementation, including defining and describing:

- Eligible measures
- Customer eligibility requirements
- Program services such as training, specification, installation oversight, measurement and verification (M&V)
- Audit procedures

#### **Deliverables:**

- 1. Draft IP due within 40 days of contract execution; Final IP ready for MCE submission within 60 days of contract execution. The template for the IP is attached to the MSA as Appendix A.
- 2. Updated application and enrollment forms, rebate/incentive forms, calculator tools, audit documentation within 60 days of contract execution. Recruitment is not dependent on finalizing these documents.

#### **TASK 2: RECRUITING**

MCE will provide Implementer with customer information and utility usage data. Implementer will use provided data to develop a target customer list and leverage existing MCE relationships as well as Implementer's outreach team to recruit SEM participants. Implementer will target existing multifamily customers to recruit for each cohort to meet the energy savings targets.

#### **TASK 3: COHORT DELIVERY**

Implementer will deliver cohort-based SEM program which will include:

- **Collaborative group workshops:** Implementer will facilitate discussions, activities, and workshops to introduce and teach energy management core concepts in a lively and engaging manner.
- One-on-one events: Includes an energy scan to identify energy efficiency opportunities and engage Program participants' employees in energy efficiency, energy modeling and data collection discussions, and an Energy Management Assessment ("EMA"). The EMA is interactive one-on-one activity with the participant designed to evaluate participant's energy efficiency organizational culture engagement level to gain mutually-decided upon action items that target to improve participant's participation, organization-wide engagement, and promote energy efficiency culture.
- Energy management coaching: Implementer will work closely with each participant on a one-on-one basis to help them apply the principles and concepts of continuous improvement applied to energy management within their facility. Implementer will communicate with the energy champion and the executive sponsor on a regular basis to track and assess progress. This will include conducting scheduled one-on-one events, ad-hoc remote meetings, and site visits.

In addition to common area energy savings, Implementer will provide residential tenant engagement activities which will achieve savings from the residents in the multifamily units through the following engagements:

- Seasonal Resident engagement workshops which provide training and education on energy efficiency, behavior changes, and available programs for reducing energy use.
- Virtual turndown and tune up assessments using a virtual tool to look at the equipment in unit and help tenants reduce their usage.
- Monthly communication and marketing materials kits provided to property managers to encourage energy reduction practices.

#### Illustrative Multifamily SEM Program Schedule

The Program events, activities and workshop schedule are structured on a yearly cycle, with savings determined and incentivized at the end of the year. The timing of these events may shift based on participant availability, holidays and other customer priorities to ensure the Program maximizes engagement.

#	Workshop/Event/Milestone	Timing
1	Group Property Manager Workshop – Kick-off building a foundation	Month 1
2	One-on-One Activity - Energy Scan	Month 2 - 3
3	One-on-One Activity - Review and Prioritize Opportunities SEM Plan	Month 3 - 4
4	Group Property Manager Workshop - Engaging Your Tenants in Saving Energy	Month 5
5	One-on-One Activity - Measuring Energy and Modeling Energy Performance	Month 5
6	Group Maintenance Workshop - Learning about energy efficiency - Season 1	Month 6 -7
7	Group Residential Workshop - Learning about energy efficiency - Season 1	Month 6 -7
8	One-on-One Event - Energy Management Assessment	Month 9
9	Group Maintenance Workshop - Learning about energy efficiency - Season 2	Month 9 - 10
10	Group Residential Workshop - Learning about energy efficiency - Season 2	Month 9 - 10
11	Group Property Manager Workshop - Sustaining Energy Reductions / Report Out	Month 12
12	Savings Report - Year 1 energy Reduction Reporting	Month 14

#### Table 1: SEM Program Year-One Schedule

#### TASK 4: ENERGY SAVINGS CALCULATIONS AND REPORTING

#### **Energy Savings Calculations**

Implementer will measure energy savings in the Program by creating, maintaining, and reporting energy models. Implementer will perform energy modeling to establish a statistical model for the facility that correlates energy consumption to the key energy drivers (occupancy, weather, etc.). Implementer will adhere to the most up-to-date guidance from the California Public Utilities Commission ("CPUC") in developing the Program and specific projects.

#### **SEM Report**

After the measurement period concludes, Implementer will prepare a final report for each participant that will be provided to MCE. This report will include:
- An overview of the participant's involvement in the SEM process.
- Documentation of activities completed, summary of the statistical basis and rational for the baseline models and savings calculations.
- The energy models and data.
- Any available documentation that demonstrates participant success and engagement, such as team meeting notes, energy policy, etc.

#### **Savings Claims Reporting and Invoicing**

Implementer will maintain customer application documents and calculators for use throughout the Program. Implementer will compile, review, and validate customer project applications prior to submitting to MCE for payment. Any project submitted for incentive payment must also be submitted as part of the monthly and quarterly energy savings claim (see below). SEM projects will adhere to CPUC guidance on the validation of savings claims.

Implementer will submit net and gross monthly energy savings and year-to-date energy savings claims data on an annual basis for each project, following the submittal of an application for incentive payment. Monthly reporting documentation will include:

- Monthly invoice;
- Monthly reporting, including net energy savings (kWh, kW reduction, therms) and year-to-date net energy savings;
- Monthly spend-to-date on Implementer expenditures;
- Monthly spend-to-date on dollar per unit (kwh and therm) in customer incentives;
- Project paperwork as required by MCE Program managers.

#### Billing:

Implementer shall bill according to the project type listed below and pursuant to the payment schedule listed in Table 3. In no event shall the total cost to MCE for the services provided under this Statement of Work exceed the maximum sum of **\$1,339,656** for the term of the Agreement.

#### **ENERGY SAVINGS TARGETS**

Implementer will target energy efficiency gas and electric savings and provide MCE with annual forecasts documenting annual targets.

#### Table 2: Energy Savings Targets

Drawner Casla	2022-2024 Contract	
Program Goals	net kWh	net therms
Multifamily SEM Program	3,934,000	90,600

#### FEES AND PAYMENT SCHEDULE

For services provided under this Agreement, MCE shall pay Implementer in accordance with the following payment schedule:

Table 3: Payment Schedule

	2022 - 2024 Program Years		2022 2024 NTE
Performance Rates	\$/net kWh	\$/net therm	Contract Value
Multifamily	\$.30/kWh	\$1.76/Therm	\$1,339,656

Performance rates will be invoiced and paid quarterly. Customer rebates and incentives will be proposed by Implementer in the Implementation Plan, not to exceed average rates for measures (Electric incentive budget/net kWh goal, or Gas incentive budget/net therms goal) as directed by MCE per its available incentive budget.

For purposes of this Agreement, "net" is defined as claimable energy savings as determined and approved by the CPUC. Implementer shall adhere to the most up-to-date guidance from the CPUC for all calculations of net energy savings.

"Gross Savings" is defined by counting the energy savings from installed energy efficiency measures irrespective of whether or not those savings are from free riders, i.e., those customers who would have installed the measure(s) even without the financial incentives

offered under the program. Gross savings are adjusted by a net-to-gross ratio to produce net savings, that is, to remove the savings associated with free riders.

Projects are paid based on metered (SEM) energy savings reported to the CPUC.

- I. <u>Metered Energy Savings Projects.</u> Implementer payments for Projects are based on measured consumption data. Projects will follow the CPUC guidance for SEM analyses and measurement and according to the following schedule:
  - a. **Payments for SEM Projects not using site-level NMEC:** Implementer payments will be made based on forecasted annual energy savings and shall be paid to Implementer in quarterly installments, beginning after the initial intervention or enrollment for a Project, and subject to the True-Up Protocol listed in Section II, c. below. Forecasting methodology shall be consistent with protocols approved by the CPUC. Implementer shall invoice quarterly for these projects.
  - b. Payments for NMEC Projects (Including whole facility SEM projects using site-level NMEC): Implementer payments will be made based on NMEC savings and shall be paid to Implementer in quarterly installments, beginning after the initial intervention or enrollment for a project, and subject to the True-Up Protocol listed in Section II, c. below. Implementer shall provide documentation of energy savings for the prior quarter which will be reviewed and approved by MCE before issuing a payment installment. Implementer shall invoice quarterly for these projects.
  - c. True-Up Protocol after 12 Months. After 12 months following project enrollment, Implementer will submit the final first year annual energy savings based on documentation and true-up positive or negative variance from the quarterly claims. In the event that MCE has paid less than the amount to which Implementer was entitled based on annual energy savings documentation (as reviewed and approved by MCE), MCE shall pay any such net difference to Implementer. In the event that MCE has paid more than the amount to which Implementer was entitled, as reviewed and approved by MCE), This process will repeat for a second year to cover variance from the first-year annual energy savings, concluding 24 months after the initial intervention.

#### Term of Statement of Work:

This Statement of Work shall commence on September 3, 2021 and shall terminate on December 31, 2024.

IN WITNESS WHEREOF, the parties have executed this Statement of Work - Schedule A.2 on the date first above written.

**APPROVED BY** Marin Clean Energy: DocuSigned by 'awn Weish B۱ 9878416FBC4F

Dawn Weisz Name:

9/20/2021 Date: CONTRACTOR:

OcuSigned /s/hat 10 By:

Andrea White Name:

9/21/2021 Date:

DocuSigned by TRE MURPHL Bv 7FFB8D80B38A4FE

Chairperson

9/17/2021 Date: Appendix A - Implementation Plan Template

# ALJ/TOD/sbf/dc3

Date of Issuance 10/28/2015

Decision 15-10-028 October 22, 2015

#### BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking Concerning Energy Efficiency Rolling Portfolios, Policies, Programs, Evaluation, and Related Issues.

Rulemaking 13-11-005 (Filed November 14, 2013)

# DECISION RE ENERGY EFFICIENCY GOALS FOR 2016 AND BEYOND AND ENERGY EFFICIENCY ROLLING PORTFOLIO MECHANICS

R.13-11-005 ALJ/TOD/sbf/ dc3

## **ATTACHMENT: Implementation Plan Guidance**

The following information will be uploaded to EEStats, to create a separate webpage for each program and sub-program through an online database platform.

#### Program Budget and Savings Information

EE Stats implementation plan platform will generate summary views of the following information, based on application tables that the PAs upload to EE Stats .The information will be organized at the measure and sub-program level to enable multiple cross tabulations and outputs for stakeholders review and consideration. Programs with subprograms will be displayed at subprogram level, and will roll up to a program summary page..

- 1. Program and/or Sub-Program Name
- 2. Sub-Program ID number
- 3. Sub-program Budget Table
- 4. Sub-program Gross Impacts Table
- 5. Sub-Program Cost Effectiveness (TRC)
- 6. Sub-Program Cost Effectiveness (PAC)
- 7. Type of Sub-Program Implementer (Core, third party or Partnership)
- 8. Market Sector (including multi-family, low income, etc)
- 9. Sub-program Type (Non-resource, resource acquisition, market transformation)
- 10. Intervention Strategies (Upstream, downstream, midstream, direct install, non-resource, finance, etc)

#### **Implementation Plan Narrative**

Provide the following narrative description for each program (and sub-program, if applicable):

- 1. **Program Description:** Describe the program, its rationale and objectives.
- 2. **Program Delivery and Customer Services:** Describe how the energy efficiency program will deliver savings (upstream, downstream, direct install, etc); how it will reach customers and the services that the program will provide. Describe all services and tools that are provided.
- 3. **Program Design and Best Practices:** Describe how the program meets the market barriers in the relevant market sector/end use. Describe why the program approach constitutes "best practices" or reflects "lessons learned". Provide references where available.
  - 4. **EM&V:** Describe any process evaluation or other evaluation efforts that the Program Administrator (PA) will undertake Identify the evaluation needs that the PA must build into the program. These might include:
    - a. data collection strategies embedded in the design of the program or intervention to ensure ease of reporting and near term feedback, and

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- b. internal performance analysis during deployment
- c. performance metrics
- 5. Pilots: Please describe any pilot projects that are part of this program, and explain the innovative characteristics to these pilots. The inclusion of this description should not replace the Ideation Process requirements currently agreed by Commission staff and IOUs. This process is still undergoing refinements and will be further discussed as part of Phase III of this proceeding.<sup>1</sup>
- 6. Additional information: Include here additional information as required by Commission decision or ruling (As applicable. Indicate decision or ruling and page numbers)

#### Supporting Documents

Attach the following documents in Word:

- 1. Program Manuals and Program Rules (See below)
- 2. Program Logic Model: Model should visually explain underlying theory supporting the sub-program intervention approach, referring as needed to the relevant literature (e.g., past evaluations, best practices documents, journal articles, books, etc.).
- 3. Process How Chart: Provide a sub-program process flow chart that describes the administrative and procedural components of the sub-program. For example, the flow chart might describe a customer's submittal of an application, the screening of the application, the approval/disapproval of an application, verification of purchase or installation, the processing and payment of incentives, and any quality control activities.
- Incentive Tables, Workpapers, Software Tools: (Can incentives be drawn out of the E3s?) Provide a summary table of measures and incentive levels, along with links to the associated workpapers. Templates are available at <u>http://eestats.cpuc.ca.gov/StandardTables/GuidanceDocument.aspx</u>.

<sup>&</sup>lt;sup>1</sup> The Ideation Process is a set of reporting requirements developed collaboratively to ensure adequate reporting and review of pilots and other similar projects. This process will be further deliberated as part of Phase III. The current set of guidelines can be found here: <u>http://www.cpuc.ca.gov/NR/rdonlyres/2D89F0DD-619B-4FC7-BD17-843E2993594D/0/IdeationProjectsProcess\_OUT.pdf</u>

R.13-11-005 ALJ/TOD/sbf/dc3

- 5. **Quantitative Program Targets**: Provide estimated quantitative information on number of projects, companies, non-incentive customer services and/or incentives that program aims to deliver and/or complete annually. Provide references where available.
- 6. **Diagram of Program:** Please provide a one page diagram of the program including subprograms. This should visually illustrate the program/sub-program linkages to areas such as:
  - a. Statewide and individual IOU marketing and outreach
  - b. WE&T programs
  - c. Emerging Technologies and Codes and Standards
  - d. Coordinated approaches across IOUs
  - e. Integrated efforts across DSM programs

#### **Program Manuals:**

All programs must have manuals to clarify for implementers and customers the eligibility requirements and rules of the program. Note that program rules must comply with CPUC policies and rules. Table templates are available at

<u>http://eestats.cpuc.ca.gov/StandardTables/GuidanceDocument.aspx</u>. At minimum, manuals should include:

- 1. Eligible Measures or measure eligibility: Provide requirements for measure eligibility or a list of eligible measures.
- 2. **Customer Eligibility Requirements:** Provide requirements for program participation (e.g., annual energy use, peak kW demand)
- 3. **Contractor Eligibility Requirements:** List any contractor (and/or developer, manufacturer, retailer or other "participant") eligibility requirements (e.g. specific IOU required trainings; specific contractor accreditations; and/or, specific technician certifications required).
- 4. **Participating Contractors, Manufacturers, Retailers, Distributers**: For upstream or midstream incentive and/or buy down programs indicate
- 5. Additional Services: Briefly describe any additional sub-program delivery and measure installation and/or marketing & outreach, training and/or other services provided, if not yet described above
- 6. **Audits:** Indicate whether pre and post audits are required, if there is funding or incentive levels set for audits, eligibility requirements for audit incentives
- 7. **Sub-Program Quality Assurance Provisions:** Please list quality assurance, quality control, including accreditations/certification or other credentials

R.13-11-005 ALJ/TOD/sbf/dc3

#### For Market Transformation Programs Only:

- 1. Quantitative Baseline and Market Transformation Information: Provide quantitative information describing the current energy efficiency program baseline information (and/or other relevant baseline information) for the market segment and major sub-segments as available.
- 2. Market Transformation Strategy: A market characterization and assessment of the relationships/dynamics among market actors, including identification of the key barriers and opportunities to advance demand side management technologies and strategies A description of the proposed intervention(s) and its/their intended results, and specify which barriers the intervention is intended to address.

(End of Appendix 4)

# Appendix B - California Industrial SEM M&V Guide



# California Industrial SEM M&V Guide

VERSION 2.02, SEPTEMBER 28, 2020 PREPARED BY: SERGIO DIAS CONSULTING

PREPARED FOR: PACIFIC GAS AND ELECTRIC, SAN DIEGO GAS AND ELECTRIC, SOUTHERN CALIFORNIA EDISON, AND SOUTHERN CALIFORNIA GAS COMPANY

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#### 1 Introduction

Measurement and verification (M&V) is the process of planning, measuring, collecting data, analyzing, verifying, and reporting energy performance or energy performance improvement for a defined boundary.

The purpose of this California Industrial SEM M&V Guide (M&V Guide) is to define a set of principles, guidelines, and requirements that establish a systematic M&V process which can be used by industrial facilities as part of, or irrespective of, participation in a California investor owned utility (IOU) sponsored strategic energy management (SEM) program. The requirements of this M&V Guide shall be adhered to when an industrial facility is participating in an IOU sponsored SEM program engagement. Outside of an IOU sponsored SEM program engagement the industrial facility may wish to adapt this M&V Guide to suit their own energy information needs as determined by their energy business practices.

The industrial facility participating in the SEM program (customer), the SEM implementer (implementer), and IOU are the three primary stakeholders who will be engaged in conducting the measurement and verification (M&V) of energy savings as the metric used to demonstrate and report energy performance improvement.

The California Public Utilities Commission (CPUC) has specified in decision and other documentation that this M&V Guide provides the basis by which energy savings shall be determined as part of an IOU sponsored industrial SEM program engagement. The sponsoring IOU will direct the customer and implementer as to when energy savings shall be reported to the IOU for regulatory reporting. This M&V Guide should serve as the basis of evaluation of energy savings when customers are participating in an IOU sponsored SEM program engagement.

This M&V Guide is designed to work in coordination with the California Industrial SEM Design Guides (Design Guides). The Design Guides are framed around three, two-year SEM program cycles, each with its own distinct set of objectives. A common principle of the Design Guides is that over the three two-year SEM program cycles the customer will first learn about and then lead aspects of a well-structured systematic energy management system (EnMS) that is based upon the ISO 50001:2018 standard. As part of an IOU sponsored SEM program engagement, this M&V Guide should be used to evaluate the development of the energy data collection and energy performance improvement determination portion of a customer's EnMS.

The main text of this M&V Guide contains the requirements that must be followed when a customer is participating in an IOU sponsored engagement. If exceptions to this M&V Guide are sought, or clarification is needed, the IOU program administrator shall be contacted. The annexes of this M&V Guide contain additional guidance that may be of use.

#### 1.1 Goals and Objectives of Conducting the M&V Process

The goals of conducting the M&V process are to:

- 1. Develop a deeper customer understanding of the relationship between energy uses, operations, and energy consumption.
- 2. Enable the customer to lead all or a majority of the M&V process.
- 3. Calculate energy savings as information for the customer and regulatory reporting.

The objectives of conducting the M&V process are to:

- 1. Teach the M&V process to the customer as part of their EnMS development.
- 2. Characterize the energy consumption, energy uses, and relevant variables of the facility.
- 3. Develop a plan to collect energy data.

- 4. If possible, develop and use energy consumption models for each type of energy consumed within the M&V boundaries.
- 5. Quantify energy savings for implemented energy performance improvement actions (EPIA) listed on the Opportunity Register.
- 6. Calculate energy savings realized during a Reporting Period and then annualize those energy savings so they can be reported to and accepted by the CPUC.

#### 1.2 Terminology

The Design Guides base the development of an EnMS on the ISO 50001:2018 framework, so the terminology used in this M&V Guide is consistent with the international standard. In some cases, the terminology listed in Annex A - Terminology, of this M&V Guide provides commonly understood terms along with ISO 50001 references.

The concepts of energy performance and energy performance improvement are critical to the M&V process:

- Energy performance can be thought of as a snap shot in time of how much energy is being consumed or efficient the use of energy is.
- Energy performance improvement is related to a quantifiable change in the amount of energy consumed between two time periods during which EPIAs may be implemented.

An indefinite number of methods can be used to determine and report energy performance improvement. This M&V Guide uses estimated energy savings as an indicator of energy performance improvement. Customers may use the M&V process to develop other energy performance improvement indicators such as changes in energy intensity and energy efficiency in addition to estimations of energy savings.

#### 1.3 Methods of Determining Energy Savings

This M&V Guide details two methods to determine energy savings. The methods are based upon:

- 1. One or more energy consumption adjustment models developed for each type of energy consumed within the M&V boundaries (commonly referred to as a top-down approach).
- 2. The aggregation of energy savings calculated for individual EPIAs that are listed on the Opportunity Register and implemented during the Reporting Period (commonly referred to as a bottom-up approach).

Both methods of determining energy savings are detailed in this M&V Guide. For each type of energy included in the M&V process this M&V Guide requires that a bottom-up approach be taken only when a top-down approach is not used.

Both methods provide value to the customer but the meaning and context of resulting energy savings values is different and needs to be contextualized appropriately. Reconciliation of energy savings values calculated from use of the two different methods should not be conducted as part of an IOU sponsored SEM program engagement.

As part of an IOU sponsored industrial SEM program engagement top-down derived energy savings is preferred for regulatory reporting. Energy savings from only one of the two methods shall be reported to the regulator.

#### 1.3.1 Energy Consumption Adjustment Models

The primary tool to calculate energy savings and track energy performance is one or more energy consumption adjustment models developed for each type of energy consumed within the M&V boundaries. The development and use of energy consumption adjustment models serves two primary purposes:

- Informative tool for customers to take action with. Energy consumption adjustment models developed to normalize energy consumption for relevant variables are tools that provide customers with information about the relationship of energy consumption, energy use, and operations. It is important that the customer work closely with the implementer to understand how energy consumption adjustment models are developed, can be used to track energy performance, and calculate energy savings.
- **Making energy savings values meaningful.** Energy savings are calculated by comparing the energy consumption of one time period to the energy consumption of another. Because variables that affect energy consumption are ever changing, the operational and external conditions of these time periods do not inherently reflect one another. By adjusting, via a regression model, the energy consumption of one of the two time periods such that the operational and external conditions are comparable, calculated energy savings values depict an accurate representation of the affect implemented EPIA and other actions have on energy consumption.

Both purposes for developing energy consumption adjustment models need to be equally considered throughout the M&V process.

In some instances, energy consumption adjustment models for each type of energy cannot be created based upon the full M&V boundary (typically the facility boundary). In these cases, multiple energy consumption adjustment models can be made so long as the boundaries of each model do not overlap and fit within the larger M&V boundary. When multiple energy consumption adjustment models are developed they typically focus on key processes, systems, and equipment. The creation of multiple models is not a requirement of this M&V Guide but is an option for use. The development of multiple models incurs additional time, complexity, and cost, though the customer may find greater value using multiple models which individually better relate to facility operations than one overall facility-wide model might.

Ideally facility-wide energy savings will be determined with energy consumption adjustment models, though a smaller boundary for which energy consumption models can be successfully developed may be used. The determination of energy savings with an energy consumption adjustment model does not rely on the calculation of energy savings of individual EPIAs, the energy savings of individual energy efficiency projects may be used in a limited capacity to provide confidence in calculated Facility-wide Projected Energy Savings but is not a requirement of this M&V Guide.

#### 1.3.2 Aggregation of Energy Savings from Individual EPIA

Regardless of whether energy consumption adjustment models are developed or not, energy savings values shall be calculated for select implemented EPIA as required by this M&V Guide. If for a given energy type energy consumption adjustment models are not created or used to calculated energy savings, a bottom-up approach of determining energy savings by aggregating energy savings from select individual EPIAs listed on the Opportunity Register shall be conducted. Use of aggregated energy savings from individual implemented EPIAs acknowledges that the energy savings value will most likely not capture the total energy savings resulting from behavioral, retro-commissioning, and operations (BRO) activities and other EPIAs with smaller energy savings potential.

The specificity and detail used to calculate energy savings for each EPIA should be proportional to the annualized energy savings estimated to result from implementation of the action. Energy savings for EPIA with estimated energy savings less than 1.0% of baseline energy consumption for that type of energy do not need to be calculated.

#### 1.4 Leading and Learning the M&V Process

Over the span of the three, two-year SEM program cycles as defined by the Design Guides, it is expected that the customer first learn from the implementer, then begin, and finally independently lead most or all of the M&V processes outlined in this M&V Guide with limited assistance.

This M&V Guide includes suggestions as to what parts of the M&V process the customer may begin leading during the three different SEM program cycles. In order to lead all or portions of the M&V process the customer will need to understand the activities and expected outcomes. Leading the M&V process could be accomplished by the customer themselves conducting the activities described or by the customer specifying and directing others to complete the activities then checking to ensure outcomes meet expectations.

The customer should focus on learning to lead the M&V process activities that would be of value to them beyond the conclusion of the SEM program engagement. The portions of the M&V Guide that pertain to regulatory reporting and other IOU and CPUC policies and requirements will probably have limited value to the customer beyond the SEM program engagement.

The timing and structure to transition the leadership of the M&V process is not fixed or assumed to be the same for each customer and implementer. In general, it is suggested that:

- In SEM program Cycle 1: The implementer will lead the M&V process while the customer supports and begins to learn.
- In SEM program Cycle 2: The customer learns to lead with significant implementer support. By the end of the SEM program cycle the customer is ready to lead parts of the M&V process with limited support. The customer may need greater levels of support conducting some parts of the M&V process, such as developing energy consumption adjustment models and establishing Annualization Periods used to calculate annualized energy savings values.
- In SEM program Cycle 3: The customer eventually leads the M&V process with limited implementer support. If leading the M&V process alone, the customer should be able to contact the implementer as needed for assistance. The implementer should review customer led work on a regular basis to ensure the M&V process is being followed and energy savings determined in accordance with this M&V Guide.

When managing the M&V process on their own, or with limited implementer guidance, customers may be able to use the M&V process to track progress towards established energy targets and other objectives, and forecast energy demand and carbon emissions in addition to calculating energy savings. Beyond participation in an IOU sponsored SEM program engagement, the customer should review which requirements of this M&V Guide should be altered to best fit their own needs as part of their EnMS.

#### 1.5 Relationship to Other M&V Guides

This M&V Guide (v2.0 and higher) is an update to the original version (v1.0) published February 8, 2017. This revision incorporates feedback from IOU staff, contracted SEM implementers, CPUC staff, and CPUC contracted evaluators who were engaged in the first offerings and evaluation of the California Industrial SEM Program.

As with the original, this updated M&V Guide is founded upon the key principles and specifications of well-established SEM M&V documents. Much of the technical content has been adapted from three SEM M&V documents:

• Energy Trust of Oregon Energy Production Efficiency, Energy Intensity Modeling Guideline, Version 2.2, January, 2019.

- Bonneville Power Administration Monitoring Tracking and Reporting (MT&R) Reference Guide, Revision 8.0, November 15, 2019.
- U.S. Department of Energy Superior Energy Performance 50001, SEP 50001, Measurement & Verification Protocol: 2019, October 29, 2019.

This M&V Guide is consistent with the principles and compatible with:

- ISO 50015:2014 Measurement and verification of energy performance of organizations General principles and guidance.
- ISO 50047:2016 Determination of energy savings in organizations.

In addition, efforts were taken to ensure consistency in technical direction with:

- ASHRAE Guideline 14:2014 Measurement of Energy, Demand and Water Savings.
- International Performance Measurement and Verification Protocol Option C, January 2012.

#### 1.6 Relationship to the NMEC Rulebook

The CPUC developed Rulebook for Programs and Projects Based on Normalized Meter Energy Consumption (NMEC Rulebook) summarizes requirements for NMEC programs where energy savings are based on normalized metered energy consumption (NMEC). The purpose of the NMEC Rulebook is to provide a list of the directives and policies that have been established by the CPUC for the administration and implementation of such programs.

This M&V Guide and the NMEC Rulebook are based upon the common concept of determining energy savings on a facility-wide, existing baseline, utility meter-based approach. While the concept is common, the CPUC has stated that the NMEC Rulebook and this M&V Guide are separate and not interchangeable. As stated in the January 7, 2020 version 2.0 of the NMEC Rulebook, "NMEC is not permissible for industrial operations and maintenance (O&M) or behavior, retro commissioning, and operations (BROs)-type projects except as a component of Commission defined Strategic Energy Management Programs." The NMEC Rulebook continues that in Decision 18-01-004, "We clarify that this SEM program is the only program in which NMEC currently may be used to assess savings in industrial facilities from operations and maintenance (O&M) or behavior, retro commissioning, and operations, and operations and maintenance save and the only program in which NMEC currently may be used to assess savings in industrial facilities from operations and maintenance (O&M) or behavior, retro commissioning, and operations, and operations and maintenance save and the only program in which NMEC currently may be used to assess savings in industrial facilities from operations and maintenance (O&M) or behavior, retro commissioning, and operations (BROs)-type activities."

The separation of the NMEC Rulebook and this M&V Guide reflects the CPUC understanding that while the meter-based approach of the two documents contains many similarities, the NMEC Rulebook is oriented towards the commercial sector. The NMEC Rulebook refers extensively to the LBNL Technical Guidelines which states, "the guidance [of the LBNL Technical Guidelines] has the objective of informing the M&V Plan that will support the Implementation Plan for proposed programs targeting multiples measures, and whole building gross savings approaches in the commercial sector." This M&V Guide pertains to the industrial sector.

When reasonable, consistency between the NMEC Rulebook and this M&V Guide has been considered.

### 2 The SEM M&V Process

This M&V Guide is divided into 2 non-technical and 12 technical sections. Each technical section is itself a process that fits within the larger process of M&V. The larger M&V process and section level processes should be conducted at least on an annual basis. Review and update of certain parts of the M&V process can be conducted more frequently as needed.

The overall process of M&V described in this M&V Guide includes:

- Characterizing the facility.
- Identifying and selecting relevant variables.
- Developing the Energy Data Collection Plan.
- Collecting data and assessing data quality.
- Developing energy consumption adjustment models.
- Using the Opportunity Register.
- Tracking energy performance.
- Conducting a Technical Review of the M&V process.
- Calculating energy savings with energy consumption adjustment models.
- Calculating energy savings with the Opportunity Register.
- Reporting energy savings.
- Ensuring a M&V Report is prepared throughout the M&V process.

#### 2.1 SEM Time Periods

The M&V process described in this document is assumed to be conducted on an annual basis. Specific time periods listed below are established within and outside of the annual process. Use of these time periods helps define how energy performance is monitored and energy performance improvement is determined. These time periods may or may not change as the annual M&V process is conducted.

Due to their foundational importance, the time periods are defined here as well as in Annex A - Terminology, of this M&V Guide.

#### 2.1.1 Baseline Period

A consecutive 12 or 24-month period for which energy consumption and relevant variable data are collected to create forecast energy consumption adjustment models and serves as the comparative basis by which improvements in energy performance are calculated against. Ideally, the Baseline Period will end immediately prior to the start of the SEM Program Engagement Period. The Baseline Period shall not end more than three months prior to the beginning of the SEM Program Engagement Period. The three-month allowance provides for abnormal operations not expected to be observed again. The Baseline Period shall be updated as needed based upon the requirements of this M&V Guide. The Baseline Period shall not be truncated if selected data are omitted.

#### 2.1.2 SEM Program Engagement Period

A consecutive 24-month time period after the Baseline Period during which the SEM program engagement is conducted. Energy consumption data and relevant variable data are collected continuously during the SEM Program Engagement Period.

#### 2.1.3 Reporting Period

Time period for which energy saving are calculated. All portions of the SEM Program Engagement Period shall be encompassed by one or more Reporting Periods.

Establishing a single Reporting Period so that it is the same duration as the SEM Program Engagement Period offers simplicity in understanding the energy savings resulting from a SEM program engagement and can provide a more meaningful retrospect on actions taken to improve energy performance over time. The IOU sponsoring the SEM program engagement shall be responsible for establishing the duration of the Reporting Period.

#### 2.1.4 Annualization Period

Used to annualize energy savings from energy consumption adjustment models, in most instances a time period of 90 days during the final months of the Reporting Period. The Annualization Period can be longer than 90 days depending on the variability of the facility. If the customer's operation is highly seasonal, and only has one model, a longer Annualization Period that addresses seasonal impact on varying energy savings rates should be selected.

#### 2.2 Tools, Reports, and Reviews

Throughout this M&V Guide, various tools, reports, and reviews are referred to. These tools, reports, and reviews are detailed below.

#### 2.2.1 Energy Map

The energy map is akin to an energy end-use breakdown chart. It highlights potential areas for eliminating waste and helps facility personnel visualize the relative scale of energy use for different locations and systems in their facility. The energy map produces a compelling and understandable graphic and chart of how the facility uses energy.

The energy map is intended to: Identify and show where and how much energy is used within a facility, create employee awareness of facility-wide energy use, prioritize energy-saving opportunities based on areas of high use in a facility.

An Energy Map Tool, likely Excel-based, that helps the customer build a basic energy map, and optionally a detailed energy map shall be provided to customers to help them organize and understand energy use at their facility by area or system.

#### 2.2.2 Energy Data Collection Plan

The Energy Data Collection Plan includes information describing when and how data should be collected from identified data sources. The Energy Data Collection Plan shall address the collection of energy consumption and relevant variable data.

#### 2.2.3 Opportunity Register

The Opportunity Register helps the customer prioritize and track opportunities to improve energy performance and as specified in the SEM program Cycle 1 Program Design EnMS improvement opportunities. This M&V Guide focuses on the energy savings part of the Opportunity Register.

The implementer shall provide and ensure the customer can record and track data in a no-cost, publicly available Opportunity Register. An Excel based tool is likely to be provided as the underling software is typically available to customers. Other no-cost tools are acceptable so long as the customer can maintain access to the tools at no-cost beyond the IOU sponsored SEM program engagement.

In addition the no-cost tool and with approval from the sponsoring IOU, implementers are permitted to make available to customers proprietary/for fee software tools to serve as the Opportunity Register so long as data contained with these tools can be extracted and used to populate the no-cost Opportunity Register at the conclusion of the SEM Program Engagement Period.

#### 2.2.4 Energy Consumption Adjustment Model Development Tool

The implementer shall provide and ensure the customer can use a no-cost, publicly available Energy Consumption Adjustment Model Development Tool. As part of an IOU sponsored SEM program engagement there are no specific software requirements for building energy consumption adjustment models so long as the resulting model meets all validity requirements of this M&V Guide. Consider the software's flexibility and its ability to iterate quickly on relevant variable combinations. The customer must be able to maintain access to the tools at no-cost beyond the IOU sponsored SEM program engagement.

In addition the no-cost tool and with approval from the sponsoring IOU, implementers are permitted to make available to customers proprietary/for fee software tools to serve as the Energy Consumption Adjustment Model Development Tool so long as data contained with these tools can be extracted and used to populate the no-cost Energy Consumption Adjustment Model Development Tool at the conclusion of the SEM Program Engagement Period.

#### 2.2.5 Energy Data and Performance Tracking Tool

This tracking tool shall include selected energy consumption adjustment models so that, as new energy consumption and relevant variable data are entered, the model is used to display and track the most recent energy performance value.

To ensure the customer can access their own data and continue to record and track data after an SEM program engagement, the implementer shall provide and ensure the customer can record and track data in a no-cost, publicly available Energy Data and Performance Tracking Tool. An Excel based tool is likely to be provided as the underling software is typically available to the customer. Other no-cost tools are acceptable so long as the customer can maintain access to the tools at no-cost beyond the IOU sponsored SEM program engagement.

If the customer would rather use their own data collection tool the implementer shall ensure it is configured to track all data identified in the Energy Data Collection Plan and data will be exportable to provide to the sponsoring IOU if needed.

In addition the no cost tool and with approval from the sponsoring IOU, implementers are permitted to make available to customers proprietary/for fee software tools to serve as the Energy Data and Performance Tracking Tool so long as data contained with these tools can be extracted and used to populate the no-cost Energy Data and Performance Tracking Tool at the conclusion of the SEM Program Engagement Period.

#### 2.2.6 M&V Report

A living documentation of the activities and outputs of the M&V process. The M&V Report shall be finalized once per year. The M&V Report is intended to be of use to the customer as a record of the M&V process that can be used in subsequent year continuations of the M&V process.

#### 2.2.7 Technical Review

An annual review of the M&V process conducted between the implementer and IOU sponsoring the SEM program engagement. The Technical Review should be scheduled first approximately four months after the start of an SEM Program Engagement Period and then approximately every 12 months thereafter. With the current SEM Program Design of three, two-year SEM Program Engagement Periods this would result in two Technical Reviews per SEM Program Engagement Period.

# 3 Characterizing the Facility

#### 3.1 Introduction

M&V is conducted for a defined set of boundaries. The process of establishing M&V boundaries is based upon developing an understanding of the:

- Types of energy consumed.
- Energy uses.
- Energy meters at the facility.

In many cases, establishing M&V boundaries may be relatively straightforward depending on the nature of the facility and what information is already available. If the M&V process is being conducted as part of an IOU sponsored SEM program engagement, the M&V boundaries most likely will be the same as those used to define the facility as part of the SEM program engagement. M&V boundaries should align with the location of energy meters and energy uses such as production lines, process systems, buildings, and other equipment.

Initial establishment of M&V boundaries should be led by the implementer with engaged participation of the customer.

The process of updating M&V boundaries is based upon detailed knowledge of the energy consumption, use, and operations within the facility, information the customer should have intimate knowledge of. Annual review of the M&V boundaries following the process detailed in this section of the M&V Guide should be led by the customer and supported by the implementer. Over time the customer should ever more independently lead annual reviews of M&V boundaries.

#### 3.2 Process

The process of first establishing and then reviewing M&V boundaries is to be conducted annually. Annual updates could be a simple review to confirm what, if any, changes to the types of energy consumed, energy uses, energy meters, operations, and potentially relevant variables have occurred at the facility and need to be reflected. If changes to the facility, including the addition or removal of on-site generation and facility expansions, have occurred an assessment should be made to understand how they may affect the M&V boundaries and other parts of the M&V process.

Subsequent parts of the M&V process may reveal a need to revisit M&V boundaries. Changes to the M&V boundaries shall be documented in the M&V Report.

An energy map shall be developed through the process of establishing M&V boundaries.

M&V boundaries shall be documented by one or more line drawings or aerial images of the facility with the M&V boundaries clearly marked.

#### 3.3 Types of Energy Consumed

The scope of the M&V process includes all energy types, which are delivered to, consumed within, and delivered away from the M&V boundaries. The originating source (e.g., utility, on-site generation, other organization) of the energy should be noted but does not exclude any energy types from being included in the M&V process.

Based upon the working understanding of the M&V boundaries a list of all energy types that the customer has authority of and that are delivered to, consumed within, and delivered away from the boundaries shall be created. The types of energy identified shall be recorded in the M&V Report.

#### 3.3.1 Quantifying Energy Consumption

The quantity of a particular type of energy that is consumed within the M&V boundaries is defined by the net energy flow of that energy type across the M&V boundaries. For each energy type included in the M&V process, energy consumption shall be equal to or greater than zero. If energy consumption is calculated to be a negative value, it shall be accounted for as zero. In such cases, care shall be taken to ensure energy export and energy product are correctly accounted for.



Figure 1: Generic Energy Consumption Accounting Flow Diagram.

The below equation describes how to calculate energy consumption. Figure 1 graphically illustrates this relationship.

ECD(\*) = E(\*) delivered to the facility + E(\*) onsite generation/extraction –

E(\*) delivered away as export -

- E(\*) delivered away as product + E(\*) drawn out of storage -
- E(\*) added to storage E(\*) used as feedstock

#### 3.3.2 On-site Energy Generation and Conversion

M&V boundaries are considered three-dimensional, thus energy accounting shall include energy that enters the M&V boundaries from the sky (e.g., rooftop solar PV) and ground (e.g. on-site natural gas extraction) if consumed at the facility in the form of an energy type for which energy savings are being determined.

The establishment of M&V boundaries should consider on-site energy conversion equipment such as a CHP system, natural gas fueled gas turbine engine, or biogas fueled boiler. This consideration shall include analysis of how energy converted from one type to another (e.g., natural gas to steam and electricity) are ultimately consumed by energy uses within the M&V boundary and consideration for use in the future development of energy consumption adjustment models. To aid energy consumption adjustment model development it may be useful to remove the energy conversion equipment from the M&V boundaries such that the energy the equipment produces is accounted for rather than the energy that enters is (e.g., account for the steam produced by a boiler rather than the biogas that feeds it, account for the electricity after the inverter that is generated by an on-site PV panel). See Annex C - Special Cases in Energy Accounting for examples of how to establish the delivered energy value for various M&V boundary situations.

#### 3.3.3 Types of Energy with Relatively Insignificant Consumption

A given type of energy may be omitted from the M&V process if it accounts for 5.0% or less of the facility's total prior year annual delivered energy. In calculating the percent of total consumption represented by an omitted energy type, both the energy consumption of the omitted energy type and total facility energy consumption shall be calculated on a delivered energy basis. The determination to omit energy types shall be based on measured data or calculated analysis and documented in the M&V Report.

EXAMPLE: A facility that produces and freezes large quantities of processed foods uses propane for two forklifts. The annual energy consumption of propane is calculated to be 2.5% of facility total energy consumption. As a result, propane is omitted from the M&V process.

#### 3.4 Energy Uses

M&V boundaries shall be defined to encompass important energy uses such as production lines, process systems, and buildings as appropriate.

Uses of energy that consume a significant quantity of energy or are important to the operations of the facility shall be identified. As part of the EnMS, criteria may have been developed to identify significant energy uses (SEUs). Document these energy uses and the SEUs along with any criteria developed and used to decide which energy uses to list or not.

Identified energy uses shall be indicated on the energy map. Process flow diagrams, piping and instrumentation diagrams, and value stream maps can be helpful in creating the images(s). Indicate the flow of each type of energy on this drawing. The energy flows trace the "path" energy takes from the point it is delivered to the M&V boundaries and to the energy end uses. If applicable, the energy flows will include the "path" energy may take into and out of on-site storage, delivered away from the facility as an energy product or energy flow. The energy content of the energy flows that do not terminate in energy end uses within the M&V boundaries will need to be netted out to correctly establish the amount of delivered energy.

#### 3.5 Energy Meters

Data regarding the quantity of energy delivered into or away from the M&V boundaries (delivered to the facility, delivered away as energy export, delivered away as energy product, or feedstock) may be available directly from meters (utility or submeters) or taken from a supplier invoice. Based upon the location of energy meters the M&V boundaries may need to be adjusted.

Meters (utility or submeters) may directly report energy consumption values or physical properties such as pressure, temperature, mass, volumetric flow, and heating value that can be used to calculate energy consumption by using equations and conversion factors. Equations and conversion factors shall be documented as part of the M&V Report.

Use of existing utility meters may be sufficient to quantify the delivered energy. Examples of when metering of energy consumption and generation metering is required within the M&V boundaries are presented in Annex C - Special Cases in Energy Accounting.

If utility meters serve buildings, equipment, processes or other energy using systems outside the M&V boundaries (nominally outside the SEM program boundaries if the customer is participating in an IOU sponsored SEM program engagement) for which energy performance and energy savings are being determined, submeters are required to net out the energy consumption of these energy uses.

The M&V Report shall document all utility and other relevant energy meters for all types of energy delivered to or away from the M&V boundaries as well as energy submeters. For each meter document the meter serial number, utility account number, or other unique identifiers. Document the major processes monitored by each energy meter and the metering interval.

#### 3.6 Documenting M&V Boundaries

Documentation of M&V boundaries shall include a description and one or more line drawings or aerial images of the facility with the M&V boundaries clearly marked in the M&V Report. The line drawing(s) or aerial image(s) shall include demarcation of buildings and major equipment and processes, energy meters, and energy flows within the M&V boundaries. Special note should be made regarding the location and interrelationship of energy conversion equipment (e.g., CHP, on-site generation). Process flow diagrams, energy maps, piping and instrumentation diagrams, and value stream maps can be helpful in creating the images.

# 4 Relevant Variables

#### 4.1 Introduction

Relevant variables are quantifiable factors that routinely change and have a major impact on energy performance, including operational performance. Relevant variables may or may not be in the control of the customer and which directly affect the amount of energy consumed within the M&V boundaries.

EXAMPLES: Production quantities, equivalent products, number of batches, heating degree-days, humidity, occupancy, hours worked, and raw material characteristics.

Relevant variables are an important part of understanding the relationship between relevant variables and energy consumption.

Relevant variables are used to normalize energy consumption as part of an adjustment model. Relevant variables can also be used with other methods of tracking energy performance and determining energy performance improvement. In order to develop robust and meaningful adjustment models, care shall be taken to avoid:

- Omitting relevant variables that affect energy consumption.
- Including variables that do not directly affect energy consumption.

The implementer shall lead the customer through a process of identifying relevant variables before attempting to develop energy consumption adjustment models. As needed, the implementer shall re-engage with the customer to select alternative relevant variables to facilitate model development.

Subsequent annual updates should be led by the customer with implementer support. Updates could be simple reviews to confirm that the selected relevant variables are indeed still relevant. A full review of selected relevant variables may be needed if additional or different energy consumption adjustment models are needed or if significant operational changes have occurred at the facility.

#### 4.2 Process

Data for relevant variables will be collected on an ongoing basis. It is important to select a suite of relevant variables that will fully represent the use and consumption of energy within the M&V boundaries. Equally, it is important to not collect data on variables that have no bearing on the use and consumption of energy.

To develop an appropriate and useful set of relevant variables, a list of potentially relevant variables should be assembled, criteria for selection should be established, and a final list of relevant variables for which data will be collected should be selected. Review of which variables are selected as relevant variables should be conducted annually, reflecting lessons learned from the prior year and taking into account planned changes to the facility. Relevant variables should be added and removed as needed to reflect changes to energy uses and operations as well as taking into account feedback from efforts to establish energy consumption adjustment models.

#### 4.3 Identifying Potentially Relevant Variables

Using engineering judgment, a list of potentially relevant variables that may or may not be included in the energy consumption adjustment models shall be developed. For each potentially relevant variable included on this list, the energy type and energy use (of those identified in Section 3) that the relevant variable is suspected to affect shall be noted. This list shall be included as part of the M&V Report.

Facilities with complex or diverse operations, for which there may be difficulty creating a single facility-wide energy consumption adjustment model for each type of energy, should consider assessing additional potentially relevant variables that may be more directly related to a discrete process, building, or other operation that could be modeled in isolation.

The following variables shall be considered for inclusion as relevant variables:

- Activity level (e.g., operating hours, operating mode (weekend/weekday), production level, product mix, and equivalent products, occupancy).
- Weather (e.g., heating degree-day, cooling degree-day, ambient temperature, and humidity).

Relevant variables shall be physical quantities, characteristics, or conditions. Financial metrics or metrics that include a financial component, such as product price or energy costs are not allowed as they lack a physical relationship to energy consumption.

#### 4.3.1 Production Metrics

For industrial facilities, a metric of production is often included as a relevant variable. It is important to understand how many product types are manufactured in a facility and whether there is likely to be a difference in energy consumption based on operating parameters such as product type, process flow, or batch size. Facility personnel who work closely with energy uses typically have insight into what variables should be considered. By thinking openly about which variables may affect energy consumption and how those variables relate to one another, the chances of developing a robust energy consumption adjustment model will be increased.

EXAMPLE: A facility that produces two types of products, one of which is very energy intensive to produce and the other is not, may consider including production levels from both products rather than an aggregated production value.

If multiple production variables are available, use process flow diagrams and energy maps to identify potentially interactive effects and correlations. Using multiple measurement points in the same process line may not be necessary or beneficial. See Annex D – Multicollinearity and Autocorrelation, for more details.

Measurement Points	Pros	Cons
Raw material input	Provides a mechanism for capturing the effects of different types of raw materials.	Fails to provide a mechanism for understanding energy impact of yield/productivity improvements.
In-line metric	Allows for the selection of a production variable at energy- intensive processes, thereby minimizing a time-series shift.	Fails to provide a mechanism for incentivizing the energy impact of yield/productivity improvements downstream, from point of measurement.
End-of-line metric	Provides a mechanism for incentivizing the energy impact of yield/productivity improvements.	May induce a time-series shift for long lead-time processes.
Finished product shipped	Data can be captured via accounting systems.	May not sync with production depending on dwell time in the warehouse.

**Table 1: Options for Production Relevant Variables** 

Raw material, in-line production, and finished product metrics each have pros and cons as relevant variables that shall be considered. An informed decision will take into account factors such as lead time, the desire to account for yield effects, as well as the prevalence of inventory fluctuations in-process or at the finished-product stage.

#### 4.3.2 Weather Metrics

Weather data shall be actual weather data from published government sources, such as primary National Oceanic and Atmospheric Administration (NOAA) weather stations, the National Climate Data Center (NCDC) database, or from a calibrated weather meter within close enough proximity to the facility to reflect the weather conditions at the facility. If on-site weather station data is to be used it must be calibrated per the manufacturer's specifications and confidence established that the station will be available through the SEM program cycle. The customer must be able to access the same data during and after the SEM Program Engagement Period in order to update the model themselves upon completion of the SEM program engagement.

In some cases, weather stations report in coordinated universal time (UTC) time, which means a daily average is not representative of a 12:00am-11:59pm day in local time. Proper time zone offsets shall be applied to data before averaging into a daily, weekly, or monthly interval.

In many cases heating degree day (HDD), cooling degree day (CDD), and other types of weather relevant variables will be more useful in the formation of meaningful energy consumption adjustment models than ambient temperature.

If being used in the formulation of energy consumption adjustment models that will be used to report energy savings to the CPUC, HDD and CDD shall be calculated based upon at least daily data. Ensure that all relevant weather data are identified to form a suite of weather based relevant variables for use.

#### 4.3.3 Indicator Variables and other Relevant Variables

Based on the energy map and energy uses consider which other relevant variables may affect energy consumption such as raw material properties, operational modes (weekend/weekday) occupancy, shifts, and hours.

Indicator variables can represent tangible changes to operations, facilities, and processes. Positively, the use of an indicator variable can help ensure energy consumption adjustment models are meaningfully constructed. Negatively, indicator variables can be developed semiarbitrarily to ensure a model can be created regardless of the resulting model being meaningful. Whenever an indicator variable is used in a model, define whether it is a one-time change or a reoccurring event that will also apply in the Reporting Period.

An indicator variable could be used in conjunction with production data to create an artificial offset for regular non-production data days. In this case as the indicator variables would establish a level of energy consumption for non-production days on which energy consumption would increase as production level rise.

Indicator variables may be used to represent seasonal changes, energy projects during the Baseline Period or other step-changes.

#### 4.4 Identifying Potentially Relevant Variable Data Sources

If possible, data sources for each potentially relevant variable shall be identified. If possible, data sources should be calibrated per manufacturer's recommendation.

Assess where production data is available relative to energy-intensive process steps. If a significant time offset exists between the energy-intensive process step and the measurement point, note that a time-shift in interval data is needed to align the production data with energy consumption data.

The list of potentially relevant variables shall be amended to include data sources. For each data source note the serial number or other unique identifiers for meters that would be used to collect data. Data source descriptions shall be specific so that an individual familiar with the systems and operations of the facility could understand where and how to collect relevant variable data.

#### 4.5 Selection of Relevant Variables

The list of potentially relevant variables and associated data sources shall be assessed and a list of relevant variables selected for data collection shall be developed as part of the M&V Report. The list of relevant variables most likely will include more variables than will ultimately be used in energy consumption adjustment models. The assessment shall be based upon an established selection criteria and knowledge of the facility. The selection criteria shall be reviewed and updated as part of the annual review of M&V boundaries.

# 5 Energy Data Collection Plan

#### 5.1 Introduction

The process of collecting energy consumption and relevant variable data shall be conducted in accordance with a preestablished Energy Data Collection Plan. The Energy Data Collection Plan includes information describing when and how data should be collected from identified data sources. The Energy Data Collection Plan shall address the collection of energy consumption and relevant variable data.

The Energy Data Collection Plan shall be utilized to collect data for the duration of the SEM program engagement as well as any time period prior to accommodate establishment of an energy baseline for energy consumption adjustment model development as needed (typically between a 12 and 24-month period). In cases where historic data are needed, data shall be collected from records in line with the Energy Data Collection Plan (e.g., data are collected at the same frequency and from the same meter or another source). The Energy Data Collection Plan can be used after an IOU sponsored SEM program engagement to continue collecting data in order to track energy performance and determine energy savings.

Development of the Energy Data Collection Plan will rely upon outputs of Sections 3 and 4 of this M&V Guide. The implementer shall work with the customer to develop an Energy Data Collection Plan being sure to identify who is responsible for collecting data, how often they are to collect data, and that they know how to record data in the Energy Data and Performance Tracking Tool.

The implementer shall check in with the customer on a regular basis to ensure the Energy Data Collection Plan is being updated as needed. This check in can be combined with regular confirmation of data collection.

The customer shall update the Energy Data Collection Plan as needed. When major changes occur at the facility the customer shall inform the implementer and together assess what changes are needed to the Energy Data Collection Plan.

#### 5.2 Process

The process of developing and maintaining the Energy Data Collection Plan shall be in part based upon information assembled when establishing M&V boundaries and selecting relevant variables. In addition to these considerations, the Energy Data Collection Plan shall include details identified in this section of the M&V Guide as well as by the IOU and implementer if participating in an IOU sponsored SEM program engagement. The Energy Data Collection Plan shall be checked by the implementer to ensure the data necessary to determine and report energy savings to the CPUC will be collected.

The Energy Data Collection Plan shall be reviewed and updated on at least an annual basis following review of the M&V boundaries and selection of relevant variables. The Energy Data Collection Plan may need to be additionally updated if it is found to be ineffective, identified meters are removed, additional relevant variables are identified, or other extenuating circumstances arise. Changes to the Energy Data Collection Plan shall be documented. The updated Energy Data Collection Plan shall be put into place and used to retroactively collect data for the SEM Program Engagement Period and any time prior as needed.

#### 5.3 Developing the Energy Data Collection Plan

The Energy Data Collection Plan shall list the energy meters and relevant variables data sources for which data will be collected. For each of these data sources the Energy Data Collection Plan shall indicate:

• How the data are to be collected.

- The frequency of data collection.
- Data storage method and location.
- The person(s) responsible for collecting and storing the data.
- The person(s) responsible for conducting quality control of the data.

A consistent and reliable process for acquiring and recording data shall be developed. The steps (detailed appropriately to the skills, experience, and abilities of the person collecting the data) to be followed to ensure timely acquisition and quality control of data shall be listed. A complete collection process shall include:

- Data required.
- Data location.
- Method of analysis to ensure data quality.

In some facilities, a data collection process may already in place and can be leveraged. If data that need to be collected are not already collected, then determine if the organization has the means to collect the data. If not, the customer shall acquire additional metering equipment or identify different data that will fulfill the same need. The Energy Data Collection Plan shall reflect if such considerations are needed.

#### 5.3.1 Frequency of Data Collection

Energy and relevant variable data shall be collected at least monthly if not more frequently (e.g., weekly, daily, and 15-minute interval). In general, more frequent data collection can be beneficial in the development of robust energy consumption adjustment models. Daily or weekly time interval data typically provide better insight into the process, system, or facility being modeled compared to data collected less frequently (e.g., monthly).

The frequency of data collection shall take into consideration the frequency at which energy consumption data and relevant variable data can be obtained and be meaningful. If production is a relevant variable and data can only be collected on a weekly basis, then there is limited benefit to collecting energy consumption on a 15-minute basis.

While this M&V Guide makes this conditioned allowance for a slower collection of data, it is highly encouraged that data be collected at the most frequently rate possible for possible future use. More frequently collected data can be aggregated together to match the rate at which relevant variable data can be collected when forming energy consumption adjustment models (e.g., 15-minute interval electricity consumption data can be aggregated to a weekly basis if the relevant variables associated with electricity are only available on a weekly basis.).

#### 5.3.2 Energy Types with Multiple Sources and Meters

When a particular energy type is delivered to the M&V boundary from multiple sources (e.g., IOU supplied electricity and on-site generated electricity from a PV system or chilled water delivered by another organization and water chilled by a chiller supplied with IOU delivered electricity) or multiple meters from IOU supplied energy, the quantity of energy from each originating source should be recorded separately. These values may be aggregated in the formation of energy consumption adjustment models but the disaggregated values may be needed to determine energy savings for regulatory reporting purposes.

As part of an SEM program engagement, be aware of relevant utility or CPUC policies related to data collection and the source of energy, specifically for non-IOU supplied energy and if a public purpose charge (PPP) is paid by the customer.

#### 5.3.3 Meter Calibration

All data used as part of the energy accounting, including those for energy consumption and relevant variables, shall be taken from precise measurement systems, such as utility meters and

regularly calibrated submeters. Quantification of energy consumption or of a relevant variable via subtraction of readings from two or more calibrated meters is acceptable.

If energy consumption data are taken from a source other than the utility meter, calibration of that meter must follow the manufacturer's recommendations. Calibration records and records of repairs to calibrated meters shall be maintained by the customer and available for the implementer to review if requested. Calibration records for utility meters are not the responsibility of the customer or implementer and do not need to be maintained.

Proper calibration of meters alone will not ensure data are accurately collected and tracked. Care shall be taken to ensure data from meters are collected accurately as part of the data collection efforts detailed in Section 6.

#### 5.4 The Opportunity Register

#### 5.4.1 Establishing the Opportunity Register

The Opportunity Register helps the customer prioritize and track opportunities and supports the program in recording both influence and savings. An Opportunity Register shall be created and must include both EPIAs and EnMS improvement opportunities. Opportunity Register data related to the EPIAs shall include:

- **A general description**: including a name, reference number, location, system or process, equipment type, size, capacity, load, and operating conditions.
- An "identify" section: including the location, process area/system or cost center it impacts, the type of activity (operational, capital, process, maintenance, or other), and who it was submitted by.
- A "prioritize" section: including the energy impact (by category, i.e. low or high), energy saving estimate by energy type, the cost/effort required (by category, i.e. low or high), and the decision the facility is making on whether to implement the opportunity (i.e. implement now, implement later, not implement)
- A "planning" section: including a brief description of what the next steps are (or the required actions to complete), who the opportunity is assigned to, the target due date, the actual date the opportunity was completed, and the current status of the opportunity.
- An "ensure persistence" section: including the risk of backsliding (or how likely it is that the energy savings from this project will decline without regular attention paid by key personnel), a summary of the strategy for ensuring energy savings persist in the long term (this should likely be documented more fully elsewhere), whether or not the strategy was implemented, and a review date for the persistence strategy.
- An "implementation" section: including the date initiated, data completed (and if not completed a brief rationale), note if it was identified during or outside a SEM program engagement, and note if it was planned during or outside a SEM program engagement.
- A "results" section: including annualized energy savings for each type of energy affected, the method used to calculate the energy savings, notes where documentation for the energy savings can be found (Details pertaining to when energy savings shall be calculated for individual EPIAs are provided in this M&V Guide).

#### 5.4.2 Planning to Collect Data for EPIAs

Energy performance improvement actions listed on the Opportunity Register with very roughly assumed energy saving greater than 1.0% of the energy baseline value for that type of energy which are selected for implementation will need to have post implementation energy savings values determined. Consideration shall be given to how post implementation energy savings will be calculated.

Energy savings calculations for any EPIA shall not be as rigorous as those performed for IOU incentivized custom capital projects and a detailed M&V plan is not needed.

The data needed to calculate annualized energy savings for each action will be unique and consideration of necessary pre and post energy consumption and relevant variable (e.g., operating hours) data and data sources shall be identified. The specificity of the data and subsequent energy savings calculation should be proportional to the assumed energy savings potential of the action.

Energy savings do not need to be determined for EPIA with energy savings roughly estimated to be less than 1.0% of the energy baseline value for that type of energy. Energy savings for these EPIA still can be estimated as seen fit by the customer and implementer. These can be, "back of the envelope," type calculations.

# 6 Collecting Data and Assessing Data Quality

#### 6.1 Introduction

Energy data collection is conducted regardless of if an energy consumption adjustment model can or will be developed. Collected data may be used later if operations or other factors change as that data provides information about facility operations in relationship to the energy management system and captures results of implemented EPIA.

The intention is customer should be collecting all energy and relevant variable data. During the first SEM program engagement the IOU may provide energy data to both the customer and implementer directly. In subsequent SEM program engagements the customer should collect both energy and relevant variable data and either use this directly as part of the M&V process or provide it as appropriate to the implementer.

#### 6.2 Process

The Energy Data Collection Plan shall be continuously used to guide the collection of energy consumption and relevant variable data in the Energy Data and Performance Tracking Tool. The customer shall ensure that data needed to calculate energy savings for implemented EPIAs listed on the Opportunity Register are collected as needed. Data pertaining to specific EPIAs do not necessarily need to be tracked in the Energy Data and Performance Tracking Tool. The collection, recording, and maintenance of data shall be led by the customer.

#### 6.3 Collecting Data

The implementer shall ensure that data are being collected in accordance with the Energy Data Collection Plan on at least a monthly basis to ensure that data are being accurately collected and recorded.

The collection, recording, and maintenance of data shall be led by the customer. Energy data shall be recorded in the Energy Data and Performance Tracking Tool. Raw source data shall be preserved along with modifications made to data. Data continuity is critical to maintaining energy consumption adjustment model accuracy through the SEM program engagement.

As data are collected, issues that arise with implementing the Energy Data Collection Plan shall be documented and used to assess if modifications to the Energy Data Collection Plan are needed.

#### 6.4 Reviewing for Data Outliers and Missing Data Points

Data outliers and missing data points can negatively impact the accuracy of energy consumption adjustment models.

Data outliers and missing data points shall be identified and addressed. Analysis conducted to identify and address data points shall initially be led by the implementer with the customer learning. The implementer also shall be responsible for teaching the customer how to identify and address data outliers and missing data points such that in subsequent SEM program cycles the customer can lead this activity with implementer support and review.

Energy consumption and relevant variable data shall be screened for anomalous values that are not representative of typical operating conditions. If high variability is characteristic of the operation, outliers do not necessarily need to be removed. Data outliers can be an indicator of poor operational control and can be used to help identify possible energy performance improvement actions. The effect of outliers on the reliability of energy consumption adjustment models and the reason for removing them shall be maintained as a record in the M&V Report.

If an anomalous value is found, reasons for the anomaly shall be identified if possible. If the anomaly is determined to be a data error, the error shall be corrected if possible. If the anomaly

is determined to be a data error that cannot be corrected, the anomalous value shall be deleted from the data set. The effects of data errors on the reliability of the energy consumption adjustment model and the reason for making any changes to the data set shall be maintained as a record in the M&V Report. If the anomalous value is determined not to be a data error it shall be left in the data set.

An initial review for outliers and missing data can be conducted by creating time series plots of data for energy consumption and relevant variable independently in a time series format. Outliers and missing or erroneous entries shall be flagged for review, investigation, and correction (if possible) by applying a general rule for identifying data that lie outside the range of plus or minus three standard deviations from the mean.

A resolution strategy shall be developed for identified outliers. If outliers related to specific operating conditions are excluded from the Baseline Period, the intervals in the SEM Program Engagement Period corresponding to the same conditions must also be excluded from the Reporting Period. The strategy used to remove outliers shall be documented as part of the M&V Report.



#### Figure 2. Example of Graphical Methods to Identify Outliers.

Omitted data shall not be replaced with a calculated interpolation. Filling in missing data can skew energy consumption adjustment model validity.

NOTE: A particular type of outlier results from shut-down periods where production is zero. In some facilities, this may only occur for a handful of days per year. If a single energy consumption adjustment model can be created that reflects both the production and non-production days, the shut-down outliers do not need to be excluded. Alternatively, a relevant variable can be created to account for the effect of reoccurring shutdown days. If an otherwise valid adjustment model cannot be created to accommodate the shut-down periods, these periods may be excluded from the model or treated as a separate mode of operation and modeled independently. When determining a strategy, consider whether energy savings are expected to be achieved during shutdown periods.

NOTE: Outliers should not be excluded from data sets unless there is a reason to do so. For example, a facility may have outliers on major holidays. Consider

adding an indicator variable to represent those holidays, or simply exclude these holidays from the model. Note that any reoccurring periods that are excluded from the baseline model must also be excluded from the SEM Program Engagement Period.

NOTE: Be careful to distinguish between a zero-data point and a missing data. Missing data should be excluded and not treated as a zero.

NOTE: The removal of outliers, especially in the cases when data is collected on a monthly basis, can significantly affect an energy consumption model's predictive power. Careful consideration should be made regarding the removal of outliers when data is collected on a less frequent basis.

Outliers shall be reviewed by the customer and implementer so that both parties understand the cause of the anomaly. The customer shall take corrective action to reduce the potential for data outliers if possible as outliers can be an indicator of poor operational control or data collection systems. The customer shall update the Energy Data Collection Plan if appropriate. The omission of data points shall be documented in the M&V Report.

#### 6.5 Adjusting Data for Time-Series Offsets

Energy consumption and relevant variable data will frequently not be available for exact calendar months or aligned with other time intervals. For example, monthly production data may be reported on the first of the month, while utility data may be provided mid-month. Alignment of time intervals is preferred and may facilitate development of more representative adjustment models, but it is not required.

A time-series offset may exist between energy consumption and relevant variable data. Energy consumption and relevant variable data shall be reviewed to identify time-series offsets. This most commonly occurs when data are collected at high frequency levels (typically weekly or higher). Time-series offsets that negatively affect adjustment model development shall not be used.

Time-series plots shall be used to identify consistent offsets between energy consumption data and each relevant variable (**Error! Reference source not found.**). For example, if an energyintensive process has a two-day lead time from the point at which production levels are measured, a two-day time series adjustment may need to be applied to the production variable.



Figure 3. Example of a Time-series Plot (Energy Consumption and Production vs. Time). Arrows Indicate the Time-series Offset.

If such an offset is identified, the customer and implementer shall discuss if the application of a time-series adjustment, or if aggregating data such that the data frequency interval is slower
(e.g. aggregate so that all data are represented on a weekly rather than daily time interval), would improve the adjustment model. The decision to use a time-series adjustment shall be documented as part of the M&V Report.

As part of an IOU sponsored SEM program engagement, data collected on a monthly basis or irregular time intervals (such as billing cycles roughly issued on a monthly basis) should be weighted based upon the number of days in the month the data were collected. Weighting should be based upon the number of days within the month or irregular time interval. These weighted values should be recorded alongside the original values and weighting value.

# 7 Energy Consumption Adjustment Modeling

# 7.1 Introduction

The primary method for determining energy savings is to develop and use one or more energy consumption adjustment models for each type of energy identified in Section 3.3.

This M&V Guide has multiple stated goals for the development and use of energy consumption models: 1) to determine facility wide energy savings, 2) for the customers to develop a deeper understanding of their facility and operations in relationship to energy consumption and use, and 3) eventually for the customer to be able to lead the M&V process on their own, which includes the development of energy consumption adjustment models.

The development of energy consumption adjustment models can be a complicated process and the implementer shall work with the customer over multiple SEM program engagements to teach the customer how models are developed. To aid in the customer's understanding of their facility and ability to develop energy consumption adjustment models, the implementer shall strive to develop simple and easily understood models rather than complex models that may statistically be more precise. Multiple energy consumption adjustment models for a specific type of energy may be needed to achieve this simplicity principle.

While a number of energy consumption adjustment modeling methods exist, the forecast method shall be used if energy consumption adjustment models are to be developed as part of an IOU sponsored SEM program engagement. The forecast modeling method meets all of the goals and objectives identified in this M&V Guide.

The forecast energy consumption adjustment model method allows the model user to estimate what Reporting Period energy consumption would have been if the facility had not implemented any EPIAs during the Reporting Period and operated as it did during the Baseline Period.

The forecast method provides a predictive energy consumption adjustment model that once developed can be used to track energy performance and routinely determine energy savings.

The forecast model can also be used to project energy demand if future relevant variable quantities, such as production volume, are known.

Alternative modeling methods do not necessarily meet all of the objectives for energy consumption adjustment models identified in this M&V Guide and do not necessarily offer an opportunity for immediate customer education and ability to respond to unexpected model results.

This M&V Guide acknowledges that the forecast model method does have limitations, particularly if facility energy use and operating conditions change significantly during the Reporting Period. If forecast models cannot be developed for a given type of energy then the implementer may use the backcast model method for the purposes of regulatory reporting of energy savings. Only the backcast model method is provided as an alternative in this M&V Guide. This limitation is intentional as to deter excess expenditure to develop any working energy consumption adjustment model and help ensure the focus of the M&V process remains on customer education and building systems that, in the future, the customer can use on their own.

Rationale for the use of the backcast model over reporting energy savings aggregated from implemented EPIAs must be supported and accepted during the Technical Review and documented in the M&V Report. Such rationale could include assumptions that significant energy savings will be achieved from operational actions that would not be accounted for by the aggregation of energy savings for EPIA listed on the Opportunity Register.

All energy consumption adjustment model parameters (including the relevant variables, units, and associated coefficients used to make the model) shall be included in the M&V Report.

This M&V Guide acknowledges the complexities and skill needed to develop energy consumption adjustment models, especially when they will be evaluated as part of regulatory oversight and potentially used to determine performance incentive payments.

The implementer shall provide detailed instructions for energy consumption model management (e.g., energy data handling, unit conversions, time interval manipulations as well as customer provided data queries) in subsequent SEM program engagements with acknowledgement that customer staff turnover can be detrimental energy consumption adjustment model upkeep and performance.

#### 7.2 Process

Based upon the considerations above, development of one or more energy consumption adjustment models for each energy type should be considered with the following process:

- 1. Assess if development of energy consumption adjustment models should be attempted.
- 2. Establish the relationship of relevant variables to energy consumption.
- 3. Develop energy consumption adjustment models.
- 4. Review competing energy consumption adjustment models.
- 5. Select energy consumption adjustment models for use to track energy performance and calculate energy savings.

# 7.3 Assessing if Modeling Should be Attempted

As energy consumption adjustment models are intended to meaningfully represent the facility's relationship of energy consumption to relevant variables, both the Baseline Period and Reporting Period need to be reflective of relatively normal operations and free of numerous anomalous events and large structural changes to the facility.

While use of energy consumption adjustment models to calculate energy savings is the preferred method of this M&V Guide, the ability to use aggregated energy savings from individual EPIAs listed on the Opportunity Register allows for the potential to assess and decide not to create energy consumption models for one or more types of energy included in the M&V process.

The following are potential indicators that either energy consumption modeling efforts should not be made or that additional review and scrutiny should be placed on models as they may not be able to be used to calculate valid energy savings.

Before or at the beginning of the SEM program engagement:

- Estimated facility wide energy savings potential is less than 3% of annual facility energy consumption or less than 100,000 kWh of electricity per year.
- Existence of major facility, production, or schedule changes in the past year or planned in the next year.
- Facility energy consumption is increasing at a rate greater than a few percent per year.
- EPIAs with greater than 5% of facility baseline energy consumption have been planned for implementation in the Baseline Period or in the SEM Program Engagement Period.
- Highly variable production, production cycles longer than a month, or seasonal production are observed.
- On-site energy generation isn't metered.
- More than 10 energy meters for a given type of energy are identified.

During the SEM Program Engagement Period:

- Energy and relevant variable data are not being collected and facility staff are not indicating interest in correcting this issue.
- Energy and relevant variable data are recorded in a format that will require excessive time to process (e.g., PDF, manual logging sheets).
- Energy data quality is poor (e.g., missing intervals, multiple data points appear to be erroneous, interval data isn't consistent with billing data).
- Relevant variable data quality is poor (e.g., significant missing intervals, multiple data points appear to be erroneous).

The decision and rationale to not start or not continue energy consumption adjustment model development shall be approved by the IOU as part of the technical review and recorded in the M&V Report.

# 7.4 Considerations when Developing Energy Consumption Adjustment Models

The below sections shall be considered when creating energy consumption adjustment models.

# 7.4.1 Energy Data from Multiple Meters

When developing energy consumption adjustment models consider the following when energy data for a given type of energy is available from multiple meters. One of the following options shall be followed:

- Aggregate energy data. Sum the data from two or more meters to create an aggregate of facility energy data. If meter data is collected at different intervals, aggregate to the largest sampling interval. This method is appropriate when:
  - Meters have the same interval, or the meter capturing the greatest energy consumption has the largest sampling interval.
  - The same relevant variables apply to all meters.
  - The resulting energy consumption adjustment model created by using the aggregate data is simple and meaningful.
- Build separate energy consumption adjustment. Build an individual energy consumption adjustment model for each meter. Energy savings calculated for each model will be aggregated. This method is appropriate when:
  - An aggregate energy consumption adjustment model will have large a number of relevant variables.
  - Meters serve different areas or processes with different relevant variables.
  - Meters have different measurement intervals, especially if a meter with the largest energy consumption has much finer granularity than the other meter(s).
  - The customer prefers separate models for greater context of energy performance tracking and energy savings.
- Ignore meters. If the loads connected to a meter are outside the M&V boundaries or are used to meter negligible load, exclude these meters.

7.4.2 Establishing Relationships Between Energy Consumption and Relevant Variables Energy consumption adjustment models shall be created based upon an informed understanding of the characteristics of the equipment, operations, and processes present within the M&V boundaries.

Use scatter diagrams to visually confirm whether a linear relationship exists between energy consumption data for each type of energy for which energy savings are being determined and each relevant variable. These graphs shall be included as part of the M&V Report and should be available for the Technical Review.

Though not statistically tested at this point, a lack of relationship between energy consumption and a relevant variable for which a relationship was expected shall prompt a discussion between the customer and implementer. This result may be due to poor operational control or a mischaracterization of the facility.



#### Figure 4. Example of a Scatter Plot (Energy Consumption vs. Production).

Facilities that have an ambient-dependent energy profile will often exhibit a "change-point" characteristic. The presence of a "change-point" can be determined by plotting a relevant variable versus energy consumption. Modeling a facility that exhibits a change-point with a single linear model introduces unnecessary error. Consider alternative relevant variables or a Multi-Mode Model if a change-point is observed.



Figure 5. Example of a Change-point.

When two or more relevant variables exhibit correlation for the same energy type, multicollinearity is present. Adding and removing variables from the adjustment model will affect the significance of other variables. The presence of collinear variables can understate the statistical significance of individual relevant variables. Although in many cases multicollinearity

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is unavoidable, it reduces the ability of statistical tests to establish model validity. While multicollinearity does not affect the model's predictive capacity, it has the potential to add unnecessary complexity. See Annex D – Multicollinearity and Autocorrelation, for a discussion on the effect of multicollinearity on an adjustment model.

Weather can be represented in terms of average temperature for each model interval, or cooling degree days (CDD) and heating degree days (HDD). When developing energy consumption adjustment models both approaches should be examined. For weekly and monthly models, a CDD/HDD model is preferred because it better represents heating and cooling demands over an aggregate period. For daily models, a CDD/HDD model is functionally equivalent to an average temperature model with a change point.

Weather correlation often masks other seasonal changes. Judgment and knowledge about the facility and its equipment should be used to determine whether energy consumption is truly affected by ambient weather. If no justification exists for a weather correlation, identify a more appropriate relevant variables to characterize the seasonal changes.

#### 7.4.3 Factoring for Seasonality

Many facilities experience seasonal swings in operation. Swings can occur because of seasonal changes in product type, product quantity, or correlations between ambient temperature and process loads. When operational swings cause a fundamental change in the energy consumption of a facility, consider building multiple models.

If seasonal changes are moderate and gradual, a single model will generally be sufficient to characterize the entire energy baseline.

If a facility has a short period of abnormally high or low production with a different energy signature, or a negligible number of shutdown days throughout the year, consider removing these periods in the Baseline and Reporting Period as outliers.

If seasonal changes are abrupt and extreme, consider creating a model that includes a production based relevant variable and another model that does not.

Facilities experiencing swings due to weekend shutdowns are best modeled as one model with Saturday/Sunday/weekend indicator variables for simplicity.

Strategy	Pros	Cons
Single model with assumed year-round savings	Captures savings at all intervals. Easier to maintain one model than two. Most straightforward method, if energy consumption stays consistent.	Periods with abnormally high or low production can skew the model. Seasonal production relevant variables can lead to complex models with many relevant variables.
Single model with abnormally	Improves model accuracy	Reduces number of baseline data
high or low production	during normal production	points. Unknown number of future data
penous removed	Works well if energy efficiency opportunities are minimal during excluded periods.	points due to production changes.
Dual production/non- production model	Each model has fewer variables and is easier to understand. Can improve model fitness compared to single model.	Maintenance of two models. Reduces number of baseline data points for each model.

Table 2 outlines the pros and cons for building one model versus two models.

#### Table 2: Options for Modeling for facilities with Production Swings

#### 7.4.4 Frequency of Data used to Create Models

When possible, use daily intervals to develop energy consumption adjustment models. Models based on daily data allows the customer to track energy performance frequently during the SEM Program Engagement Period and can improve overall model accuracy by increasing the number of Baseline and Reporting Period data points. Meter data can often be acquired in 15-minute intervals and summed into daily energy data. The frequency of energy data will need to match that of relevant variable data.

If a multi-day time-shift exists between energy consumption and the primary production relevant variable, consider using weekly model rather than a daily model.

If daily production or other relevant variable data is not available, weekly or monthly model intervals can be used. Weekly model intervals are preferred over monthly. Ensure that energy consumption data is accurately summed to match relevant variable intervals.

#### 7.4.5 Energy Baseline

#### 7.4.5.1 Establishing the Energy Baseline

The energy baseline shall proceed the SEM Program Engagement Period and consist of a time period that is representative of normal operations within the facility. An energy baseline shall be established for each energy consumption model being developed.

Ideally, the Baseline Period will end immediately prior to the start of the SEM Program Engagement Period. The Baseline Period shall not end more than three months prior to the beginning of the SEM Program Engagement Period. The three-month allowance provides for abnormal operations not expected to be observed again. The rationale for not ending the energy baseline immediately before the start of the SEM Program Engagement Period must be documented in the M&V Report and discussed during the Technical Review.

The Baseline Period shall be 12 or 24 consecutive months with the following considerations:

- 12 months: Appropriate for sties with weather-dependent and seasonal operations. A 12 month baseline shall be the first choice. The 12 month period could be a calendar year, fiscal year, or other designated 12 consecutive months.
- 24 months: For highly seasonal models or models with monthly intervals, a 24 month Baseline Period may be optimal.

When choosing a Baseline Period length consider the reasonable ability to identify the implementation date and energy savings of EPIA implemented during the Baseline Period.

#### 7.4.6 Accounting for Energy Projects During the Baseline Period

In order to create energy consumption adjustment models that reflect regular facility operations, customer and IOU records shall be reviewed to determine if any incentivized or non-incentivized EPIAs with sizable energy savings were implemented during the Baseline Period. In addition to reviewing customer records, interviews with customer staff shall be conducted to determine if other non-incentivized EPIAs or changes that increased energy consumption occurred. If the customer had previously participated in an IOU sponsored SEM program engagement the Opportunity Register from that engagement shall be reviewed for implemented EPIAs.

If such EPIAs were implemented during the Baseline Period, project records shall be obtained to accurately capture implementation dates and the magnitude of verified savings as needed. Ensure these EPIAs are documented on the Opportunity Register.

If EPIAs implemented during the Baseline Period are identified, consider modifying the Baseline Period to a time period when the EPIA was not implemented. If the EPIA was implemented after

the Baseline Period and prior to the start of the SEM Engagement Period remove annualized energy savings in accordance with Section 11.7.

If the Baseline Period includes implemented EPIAs confirm that the IOU does or does not have approved annualized energy savings values for the EPIA. Approved energy savings values shall be used for any adjustment made because of the EPIA. If IOU approved energy savings values are not available calculate energy savings for the EPIA following the requirements of this M&V Guide (see Section 12).

Use prorated energy savings values to adjust the energy consumption of the Energy Baseline using IOU approved energy savings values if they are available. Prorating of energy savings should be based upon the EPIA implementation date. Confirm the implementation date recorded by the IOU, if available, against the records and memory of facility staff. Use the implementation date that best connects to when energy savings resulting from the EPIA would have been realized.

EPIAs that are known to have a seasonal nature can be removed from the energy baseline accounting for known seasonality.

7.4.7 Continued use of Energy Baselines and Energy Consumption Adjustment Model(s) Over the course of one or more SEM program engagements, changes to the operations, production, or equipment can invalidate energy consumption models. If during periodic checks or the Technical Review an energy consumption adjustment model is found to not be valid per the quantitative and qualitative tests in this M&V Guide first examine if the model can be updated or if the energy baseline and energy consumption adjustment model are no longer viable.

If the energy baseline is no longer viable or current energy consumption adjustment model is now invalid, use of the energy consumption model shall be suspended. Development of a new energy baseline and energy consumption model shall be conducted. Depending upon reporting timing energy savings may need to be determined and reported via aggregation of energy savings for individual EPIAs listed on the Opportunity Register.

An energy consumption adjustment model and its associated energy baseline that was approved for use during a pervious SEM Program Engagement Period may be accepted for continued use so long as all of the following are true:

- The customer has continuously participated in an IOU sponsored SEM program engagement since the original development of the energy consumption adjustment model (with an allowance for gaps between SEM program engagements resulting from cohort launch or other timing issues).
- Annualized energy saving values that were submitted and accepted by the CPUC for all Reporting Periods that preceded the current Reporting Period are available.
- The energy consumption adjustment model and energy baseline data meet the quantitative and qualitative requirements of this M&V Guide.
- A completed Opportunity Register from prior SEM program engagements, for which the energy consumption adjustment model was used, is available.
- Relevant variables selected as part of the process detailed in Section 4 are not different than those used in the existing energy consumption adjustment model.
- More granular energy consumption and relevant variables data are not available compared to that used in the existing energy consumption adjustment model.
- The M&V boundaries have not changed.
- The customer has not requested a new model.

The above listed criteria shall be reviewed at the Technical Review meeting. If, following the Technical Review meeting, the energy consumption adjustment model is not approved for use by the IOU sponsoring the SEM program engagement the energy consumption adjustment model is not allowed for use and a new energy baseline and energy consumption adjustment model(s) shall be developed.

The IOU sponsoring the SEM program engagement may at its discretion require a new Baseline Period, energy baseline, and energy consumption adjustment model development. This may be required at the beginning of new SEM Program Engagement Periods to create a distinct basis for energy savings determination and to remove all residual effects of existing energy consumption adjustment models.

# 7.5 Developing Energy Consumption Adjustment Models

Using information gathered as part of the M&V process, for each energy type for which data are collected, develop one or more energy consumption adjustment models with the form:

$$ECD(^{*}) = b_0 + b_1 x_1 + b_2 x_2 + \dots + b_n x_n$$

where  $x_i$  is the relevant variable quantity,  $b_0$  is the base load delivered energy consumption not related to relevant variables, and  $b_i$  (when i > 0) is the incremental energy consumption per unit of that relevant variable (coefficient).

Attempts shall be made to develop one or more energy consumption adjustment models for each energy type that encompass the full M&V boundary in order to capture facility-wide energy savings. If development of models to encompass the full M&V boundary is not possible then developing multiple energy consumption models within that "fit" within the M&V boundary shall be attempted.

Depending on the list of selected relevant variables identified in the Energy Data Collection Plan for which data were collected, attempts shall be made to develop competing models that can be assessed with the quantitative and qualitative validity tests described in the energy consumption adjustment model validity section (7.6) of this M&V Guide.

#### 7.5.1 Simplicity principal

The desire to create the most descriptive or "perfect" model can lead to a disproportionate use of resources. The objectives of creating energy consumption models extend beyond creating tools to estimate facility-wide energy savings.

Simple energy consumption adjustment models have multiple benefits:

- Easier data collection: In some cases, collecting production data may be a burden to the customer. Minimizing the data requirements for a customer may increase buy-in to data collection and use of the energy consumption adjustment models.
- Better understanding of the model: A model that can be easily explained will be better understood by the customer, which will increase their trust in the energy savings predicted by the final model.
- Reduced likelihood of outliers and errors: A model with fewer variables is less likely to suffer from data-entry errors and/or outliers during the Reporting Period. A simple model is more "durable" and therefore more useful to a customer long-term.

Customers need to be able to understand the modeling process and outputs so they can track energy performance and determine energy performance improvement using the model. Teaching the customer to make simple, meaningful models and when to stop modeling efforts in favor of aggregated energy savings from individual energy performance improvement actions will benefit the customer in the long run.

As guidance, if five or more relevant variables are being used in a single energy consumption adjustment model, the model should be split if possible by using data from multiple meters. Alternatively, remove relevant variables from the model to see if the loss of some statistical validity creates a simpler, more understandable model.

However, also consider that an energy consumption adjustment model which is too simple and does not include sufficient relevant variables can provide poor predictive capability. Weigh the pros and cons of each combination of variables to determine a minimal level of model complexity while providing adequate energy savings estimations.

# 7.6 Reviewing Competing Energy Consumption Adjustment Models

The selection of energy consumption adjustment models that will be used to track energy performance and determine energy performance improvement shall be made based upon quantitative and qualitative model validity testing described in this M&V Guide.

While acknowledging that this M&V Guide states an objective for the customer to increasingly lead the process of model development, the implementer shall be responsible for ensuring the validity of energy consumption adjustment models that will be used to calculate energy savings used for regulatory reporting. Model validity will be reviewed as part of the Technical Review.

If leading the M&V process outside of an SEM program engagement, the customer may not wish to stringently apply these validity tests. A customer can make meaningful use of energy consumption adjustment models that have lower statistical validity than would be acceptable for regulatory reporting.

#### 7.6.1 Assessing Statistical Significance of Relevant Variables

To establish quantitative validity, each relevant variable used in an energy consumption adjustment model shall meet all of the following statistical tests:

Statistical Tests	Statistical Test Threshold Values
T-stat	Absolute value > 2.00
p-value	< 0.05

#### **Table 3: Relevant Variable Statistical Tests**

Adding and removing relevant variables will affect the significance of other relevant variables. In many cases, multicollinearity is unavoidable; however, it should be taken into consideration when validating the statistical significance of each relevant variable. While multicollinearity does not affect the model's predictive capacity, it has the potential to add unnecessary complexity. See Annex D – Multicollinearity and Autocorrelation, for more information.

#### 7.6.2 Validating Models with Statistical Tests

The following statistical tests shall be applied to all energy consumption adjustment models:

Statistical Tests	Statistical Test Threshold Values		
Number of Relevant Variables	< 5		
Model R <sup>2</sup>	> 0.75		
Net Determination Bias	< 0.005%		
Coefficient of Variation	< 20% for daily models		
	< 10% for weekly models		
	< 5% for monthly models		
Durbin-Watson	~ 2		
Fractional Savings Uncertainty (predictive)	< 50%		
	Apply anticipated energy savings and Reporting		
	Period interval frequency.		
Table 4: Energy Consumption Statistical Tests			

The selection of energy consumption adjustment models should not be narrowly driven by evaluating which model "best" meets statistical tests as meaningful models may not meet all listed statistical tests. For example, a low R<sup>2</sup> value may be the result for a facility with low variation in energy consumption. In cases where all of the tests cannot be met but a model passes a majority of the statistical tests and meets the qualitative requirements of Section 7.6.3, the customer and implementer together shall select which models to use moving forward. The selection rationale shall be documented in the M&V Report and will be reviewed during the Technical Review.

#### 7.6.3 Validating Models with Qualitative Considerations

Equal to the statistical validity tests, the selection of energy consumption models shall be based upon assessment of qualitative considerations including that:

- The selection of relevant variables in the adjustment model and the subsequently determined relevant variable coefficients are consistent with a logical understanding of the energy use and energy consumption of the facility.
- No substantial difference between the two periods in product types.
- Meters used were functioning, calibrated, and maintained as appropriate.

Additionally, considerations including the simplicity of the energy consumption adjustment model, meaning of the model to the customer, and the ability to continue collecting data required for use of the model shall be considered.

#### 7.6.4 Table of Competing Models and Selecting Models for Use

A table of competing models shall be created for each energy consumption adjustment model development effort and provided in the M&V Report. While many variations of model may be developed, ideally around 5 with a maximum of 10 of the most meaningful of the competing models should be listed on the table of competing models. The table shall include a row for each competing model a column for each of the following:

- Model reference number.
- Data interval (frequency).
- Baseline Period start and end dates.
- Upcoming Reporting Period start and end dates.
- R<sup>2</sup>.
- Net determination bias.
- Coefficient of variation.
- Durbin Watson.
- Projected fractional savings uncertainty.
- Comments about the model.

Four columns of each row should be subdivided to provided information about the relevant variables that are used to form the model. The four columns should include:

- Name of the relevant variable.
- Relevant variable coefficient value.
- T-stat.
- P-value.

The table of competing models shall be filled out as the energy consumption adjustment modeling development effort proceeds. The table of competing models should be used along with qualitative assessments to select energy consumption adjustment models that will be used to track energy performance and calculate energy savings.

# 7.7 Ongoing Confirmation of Model Validity

On a monthly basis, confirmation of model validity shall be conducted. This review shall be led by the customer when their skills and abilities relative to the M&V process improve to an appropriate level. The implementer shall confirm model validity prior to the customer assuming this responsibility.

Ongoing confirmation of model validity shall include answering the following questions:

- Have operating characteristic remained similar?
- Has production stayed within the range as recorded during the Baseline Period?
- Has any major energy uses been installed?
- Does the level of energy savings achieved so far align with energy savings from implemented EPIAs listed on the Opportunity Register?
- Has the facility or M&V boundaries changed?

Analysis of data collected for use with the selected energy consumption adjustment model shall be conducted as well. Individual data intervals in the Reporting Period should be flagged if a relevant variable data point is  $\pm 10\%$  beyond the bounds of the energy baseline data set. These points may be handled in one of three ways:

- Include the point without alteration.
  - This is appropriate if the residual for the point is not an outlier compared to the overall population of residuals.
- Exclude the point.
  - This is appropriate if the residual of the outlier point is an outlier compared to the overall population of residuals. In this case the energy savings from this outlier point would have an outsized effect on the energy savings measurement.
- Develop a new energy consumption adjustment model.
  - This is appropriate if the outlier interval data points are caused by an issued that will fundamentally result in an energy consumption adjustment model that does not have a meaningful relationship to the energy consumption, uses, and operations of the facility.

In preparation for the Technical Review the above questions shall be answered in addition to confirmation that the selected energy consumption models still pass the quantitative and qualitative validity requirements of this M&V Guide.

# 7.8 Options when a Valid Energy Consumption Adjustment Model Cannot be Created

Energy consumption adjustment models that do not meet the quantitative and qualitative validity requirements of this M&V Guide cannot be used in the calculation of energy savings as part of an IOU sponsored SEM program engagement and may potentially mislead customers.

If such a case occurs, the party responsible for developing energy consumption adjustment models shall first attempt to modify the forecast adjustment model. This process might include modifications to the assumed relevant variables and frequency of data collection. Any changes that result in a successful energy consumption adjustment model shall be noted in the Energy Data Collection Plan to ensure ongoing collection of data needed to use the model.

Changes to the Baseline Period are allowed for as detailed in Section 7.4.5 but should be cautioned against. The objective of the M&V process is not to hunt for a valid model but to collect data and assess if a model can be made to meaningfully represent the relationship of energy consumption to relevant variables.

If the M&V boundary is supplied by multiple meters, disaggregating the meters may result in better model resolution.

7.8.1.1 Non-Routine Adjustments to the Baseline Energy Consumption

Non-routine adjustments are made to the observed (actual) energy consumption in the baseline and/or Reporting Periods if one or both of the following have occurred:

- 1. If static factors have changed during the SEM Program Engagement Period.
- 2. If relevant variables have been subject to unusual changes.

Examples of events that might require a non-routine adjustment include the following:

- A supplier goes out of business, and an equivalent raw material is not available. A process modification is needed to use a different type of raw material. No data exist for Baseline Period operating conditions with the new type of raw material.
- Processes are outsourced, enhancing profitability and decreasing energy consumption.
- Business acquisition occurs which results in data not being available or limits on the data availability for the period prior to the acquisition.

Any numeric inputs to non-routine adjustment calculations shall be based on observed, measured, or metered data.

Non-routine adjustments are typically based on an engineering analysis to calculate energy consumption in the baseline and Reporting Periods as if static factors were at the same condition in both periods. In this case, the adjustment will be to calculate Baseline Period energy consumption as if the Reporting Period condition of the static factors had been the same as in the Baseline Period.

The effort expended to calculate the amount of energy the non-routine adjustment will result in should be less than that of incentivized custom capital project and proportional to the level of expected energy adjustment.

The method for making the non-routine adjustment and the rationale for that method shall be maintained, including the general reasonableness of the methodology and calculations, the adequacy of the metering and monitoring methodologies, and conformance of the calculations applied. Non-routine adjustments may be used, but only after review and approval from the IOU. The method for making the non-routine adjustment and the rationale for that method must be documented in the M&V Report.

#### 7.8.1.2 Backcast Energy Consumption Adjustment Model Development Method

If forecast energy consumption adjustment models still cannot be created, use of the backcast method to develop energy consumption adjustment models can be considered. The development of a backcast energy consumption model is optional.

Backcast normalization results in a model of the Reporting Period energy consumption that is applied to the Baseline Period and Reporting Period-relevant variable values to calculate adjusted Reporting Period energy consumption for comparison with observed (actual) Baseline Period energy consumption. The adjusted Reporting Period energy consumption is an estimate of the energy consumption that would have been expected at Baseline Period relevant variable values, if the Reporting Period operating systems and practices were in place during the Baseline Period.

The backcast normalization method is applicable in instances where:

• One or more relevant variables has significantly increased or decreased from the Baseline Period through the Reporting Period.

- The resolution of the energy signature for the Baseline Period was relatively poor and the resolution of the energy signature during the Reporting Period has significantly improved.
- No major operational or structural changes have occurred during the SEM Program Engagement Period.

The backcast modeling method may be used so long as the validity requirements of Section 7.6 are taken into account. The justification and use of a backcast modeling method shall be documented in the M&V Report and presented during the Technical Review.

# 8 The Opportunity Register and EPIA Energy Savings

#### 8.1 Introduction

In addition to the development of energy consumption adjustment models, annualized energy savings for each EPIA listed on the Opportunity Register that is estimated to result in energy savings greater than 1.0% of the energy baseline value for that type of energy shall be calculated when the action is implemented.

The implementer shall ensure that annualized energy savings for all implemented EPIA listed in the Opportunity Register that are estimated to result in energy savings greater than 1.0% of the energy baseline value for that type of energy, are calculated and recorded in the Opportunity Register.

Following the implementer's lead, the customer should begin to lead the calculation of energy savings for EPIAs.

#### 8.2 Process

If the EPIA is to apply for a custom capital or deemed incentive the M&V practices governing those programs shall be followed. The energy savings value claimed as part of an incentivized project shall be recorded in the Opportunity Register.

If the EPIA listed on the Opportunity Register will not be used to apply for a custom capital or deemed incentive, the effort expended to calculate energy savings for the EPIA should be less than that of incentivized custom capital project and proportional to the level of expected energy savings. M&V plans for each EPIA are not required. Energy savings calculations for EPIA shall be documented and defendable.

If a rough order of magnitude estimate indicates that implementation of the EPIA will result in energy savings less than 1.0% of baseline energy consumption for that type of energy, "back of the envelope," calculations can be used to estimate energy savings if so desired by the customer and implementer.

On a project by project basis the implementer and customer shall work together to identify who will lead the calculation of annualized energy savings from implemented EPIA. Alternatively, for each SEM program engagement the implementer and customer may come to a common understanding of who will lead the calculation of annualized energy savings for implemented EPIA, so long as there is movement towards the customer having a growing role in this process over the course of multiple SEM program engagements.

The customer shall regularly update and maintain the Opportunity Register. The implementer shall verify, at least quarterly, that the Opportunity Register is updated and maintained.

# 9 Tracking Energy Performance

#### 9.1 Introduction

Energy performance calculated with the selected energy consumption adjustment models and the Opportunity Register shall be conducted on a regular basis.

The customer shall track energy performance on a regular basis with implementer support and consultation.

### 9.2 Process

#### 9.2.1 Tracking Energy Performance with Energy Consumption Adjustment Models

The customer shall collect energy consumption and relevant variable data per the Energy Data Collection Plan and track energy performance using the Energy Performance Tracking Tool.

The customer shall update the Energy Performance Tracking Tool on at least a monthly basis. The customer and implementer shall review the Energy Performance Tracking Tool on a regular basis to ensure data are being collected, energy performance is being calculated correctly, detect anomalous values, and account for situations that did not happen in the Baseline Period and may need to be corrected for. This high-level review should be used to identify changes in trends and decide if corrective actions need to be taken. This review is not intended to be a detailed evaluation of energy performance.

A time-series plot of actual and predicted energy consumption for each energy consumption model in use, shall be created while tracking Energy Performance.

Backsliding refers to worsening energy performance compared to a previous achieved benchmark. Energy consumption adjustment models can be used to provide a feedback loop to identify and correct backsliding. As new energy performance values are reviewed, the implementer and customer shall together assess if energy performance is backsliding. When backsliding is identified, corrective action shall be taken as soon as possible.

#### 9.2.2 Tracking Energy Performance with the Opportunity Register

On a regular basis, the customer and implementer shall together review the Opportunity Register to ensure that EPIAs are being implemented, resulting energy savings are calculated with appropriate effort relative to the expected energy savings, and that within reason energy savings are similar to what was expected.

By reviewing if EPIAs are being implemented, the customer can ensure they are taking action to improve energy performance. If no EPIAs are being implemented an assessment of why they are not being implemented should be conducted.

The review provides the implementer and customer a chance to ensure energy savings from implemented EPIAs are calculated with appropriate relative effort compared to an expected energy savings potential. If the EPIA was incentivized by a different IOU program the energy savings value determined by that program for the EPIA shall be used and recorded in the Opportunity Register.

If calculated energy savings for EPIAs are significantly different than expected, an analysis of why this is the case shall be conducted.

During the energy performance review, energy savings from implemented EPIA listed on the Opportunity Register should be aggregated and compared to established energy targets. This analysis will help the customer and implementer know if adequate progress is being made towards achieving the energy target.

# 10 Technical Review of the M&V Process and Results

An annual Technical Review of the M&V process shall be conducted between the implementer and IOU sponsoring the SEM program engagement. The purpose of the Technical Review is to ensure that the M&V process is being followed, valid energy consumption adjustment models are being developed or assessed for continued use, and energy savings for EPIAs listed on the Opportunity Register are being appropriately calculated. The Technical Review is not designed to be part of the CPUC evaluation process.

Materials used as part of the Technical Review should be components of the M&V Report that would be developed regardless.

# 10.1 Introduction

During the review the implementer shall present to the IOU:

- A synopsis of facility characterization
- Energy Data Collection Plan
- Energy consumption adjustment models selected for use
  - The table of competing models (ideally 5 and a maximum of 10) with quantitative and qualitative test results for each new model selected for use.
  - Confirmation that previously used energy consumption models meet the requirements to re-use models per this M&V Guide.
- The Opportunity Register.

If the Technical Review is successful, the IOU will be able to:

- Confirm that the M&V process outlined in this M&V Guide is being conducted with appropriate customer engagement and leadership.
- Confirm the customer facility has been well characterized based upon the requirements of this M&V Guide.
- Approve the continued use of a previously developed energy consumption adjustment model if requested and appropriate.
- Approve the use of a newly developed energy consumption adjustment model if requested and appropriate.
- Approve requests to not pursue energy consumption adjustment modeling for a given type of energy, if such request is made and appropriate.
- Confirm that the Opportunity Register is being updated appropriately.

# 10.2 Scheduling the Technical Review

The Technical Review can be conducted in person, remotely via web meeting, or through desk audit by IOU staff. The IOU shall specify how the Technical Review will be conducted.

NOTE: This M&V Guide assumes an in person or remote presentation will be given and this section is written accordingly. Adjustment made by the IOU are permitted to accommodate how they want the Technical Review to proceed.

The Technical Review should be scheduled first approximately four months after the start of an SEM Program Engagement Period and then approximately every 12 months thereafter. With the current SEM Program Design of three, two-year SEM program cycles this would result in two Technical Reviews per SEM program cycle. It is the implementer's responsibility to schedule the Technical Review once all materials are prepared.

The Energy Data Collection Plan, Energy Performance Tracker Tool populated with model coefficients, and Opportunity Register shall be supplied to the IOU by the implementer at least five business days before the scheduled Technical Review

# 10.3 Technical Review Topics

The items below will be part of the Technical Review.

#### 10.3.1 Customer facility synopsis preparation

Keeping to a maximum of 10 minutes, the implementer shall provide a brief presentation of the customer to orient IOU staff.

- What is the customer's business?
- What energy types are being included in the M&V process?
  - Fed by how many meters each
  - % of total load
- Any special M&V boundary considerations such as on-site generation or energy conversion technology?
- What are their major energy uses?
- What relevant variables were selected?
  - Which relevant variables were rejected but may come back into play?
- Review of the energy map.

# 10.3.2 Energy Data Collection Plan

The current Energy Data Collection Plan shall be electronically provided to the IOU staff as directed. The Technical Review is not designed to detail the contents of the Energy Data Collection Plan but provide time to discuss any questions and concerns. This portion of the Technical Review should normally be kept to 5 minutes but may extend if questions are raised by the IOU staff. The implementer shall:

- Present if there have been unexpected changes to the Energy Data Collection Plan.
- Present which utility or other energy consumption meters are being used.
- Present if there have there been any delays in the customer collecting and tracking data.

#### 10.3.3 Competing Energy Consumption Adjustment Models

For each energy consumption adjustment model developed for use

- Model original development date and prior use.
- Energy Baseline Period.
- Boundaries for the model.
- Energy type model is created for.
- Number of meters feeding data for each energy consumption adjustment model.
- Boundaries of the model (whole-facility, system...).
- Model equation.
- Results of relevant variable statistical tests.
- Results of quantitative validity tests.
- Actual vs. predicted chart (to date).
- CUSUM chart (to date).
- Identification of risks.

#### 10.3.3.1 General

During the Technical Review, the implementer describes to the IOU all energy consumption adjustment models selected for use. For each energy consumption adjustment model being used the implementer shall be prepared to discuss alternative models and why they were not selected for use. Each energy consumption adjustment model shall be discussed between the implementer and IOU. Each energy consumption adjustment model should be discussed for a maximum of 30 minutes.

#### 10.3.3.2 For New Models

For new models, the implementer shall develop a competing model summary table with notes as specified in Section 7.6.4. This table will be used in the M&V Report as well. Ideally, about 5 and no more than 10 competing models would be presented.

#### 10.3.3.3 For Existing Models

For existing models, the Technical Review should focus on what was done to evaluate the model to confirm validity. This should include:

- Reviewing time series graphs & CUSUM graphs to identify changes in relationship between energy drivers and energy.
- Identifying and accounting for step changes or outliers in the data.
- The customer's success/challenges with managing their model(s).

The IOU shall confirm or reject use of existing models. The IOU can at its discretion require a new Baseline Period, energy baseline, and energy consumption adjustment model development.

#### 10.3.4 Opportunity Register Review

The focus of the Technical Review is not how energy savings values were calculated for the Opportunity Register. The focus is a check that EPIA are being identified, implemented, and energy savings are calculated. Depending upon the types of EPIA listed, discussion of the IOU providing additional or different resources to assist the customer implement the EPIA may occur.

Ensure that EPIAs that received incentives from other programs have correctly recorded IOU claimed energy savings values.

#### 10.3.5 Note Taking and Follow-up

During the session, the implementer shall be responsible for taking notes and keeping records of any follow up questions or requests. These notes and follow up questions should be sent out to all Technical Review attendees immediately after the review session. These notes should be documented in the M&V Report.

# 11 Calculating Energy Savings with Energy Consumption Adjustment Models

# 11.1 Introduction

Energy consumption adjustment models can be used to calculate energy saving realized during the Reporting Period. Energy savings of all types of energy shall be calculated and confidence established for the Reporting Period.

Energy savings calculated during the Reporting Period are not annualized values, meaning the energy savings do not represent the annual savings level that would be projected to persist beyond the Reporting Period. If an energy consumption adjustment model is used for consecutive Reporting Periods the energy savings value for each Reporting Period will reflect the cumulative change in energy consumption since the Baseline Period. Incremental energy savings can be calculated for each successive Reporting Period by subtracting the energy savings of the prior Reporting Period from the energy savings value calculated for the Reporting Period f

As part of an IOU sponsored SEM program engagement and for the purposes for regulatory reporting, annualized energy savings resulting from 1) the implementation of EPIA identified and planned outside of any SEM program engagement as well as 2) EPIA identified at any time that will receive incentive from another IOU program, and are implemented during the current Reporting Period shall be removed from the current Reporting Period annualized energy savings as determined with use of the energy consumption adjustment model.

While the intent is for the customer to learn and eventually lead the energy savings calculation process, steps specifically related to regulatory requirements shall be addressed by the implementer rather than the customer. Ideally, the customer will be able to lead the calculation of Facility-wide Projected Energy Savings but the implementer should then conduct necessary actions to meet IOU and CPUC policy requirements (e.g., non-IOU fuels) and disaggregate the overall energy savings to their component parts as described in Section 11.7.

# 11.2 Process

In order to calculate energy savings during a Reporting Period the following shall be followed:

- 1. Establish a Reporting Period.
- 2. Calculate energy savings realized during the Reporting Period.
- 3. Annualize energy savings.
- 4. Consider when energy consumption adjustment models are used for multiple Reporting Periods.
- 5. Prepare energy savings for regulatory reporting.
- 6. Establish confidence in energy savings values.

# **11.3 Establishing Reporting Periods**

The customer and implementer shall establish one or more Reporting Periods within the SEM Program Engagement Period. Reporting Periods can be established based upon customer needs and IOU specified reporting requirements. While this M&V Guide establishes the overall process based upon an annual process, the need to calculate energy savings is not required to be performed annually. Establishing a single Reporting Period so that it is the same duration as the SEM Program Engagement Period offers simplicity advantages and can provide a more meaningful retrospect on actions taken to improve energy performance over time. Tracking energy performance on a more frequent basis provides more informative information on which corrective actions can be taken.

Energy savings calculations made during the Reporting Period are by definition not annualized, that is the calculated Reporting Period energy savings value is the actual amount of energy

saved during the Reporting Period as compared to the energy baseline rather than a forward projection of expected annual energy savings following the Reporting Period.

In many cases the Reporting Period is established as a 12-month period. When a 12-month Reporting Period is used to calculate energy savings the value still is not annualized but rather the energy savings resulting during those specific 12 months.

As understood currently, there is no requirement to report energy savings to the CPUC from the SEM program on an annual basis. Use of a Reporting Period equal to the two-year SEM program engagement Period increases the time for energy management systems to be developed, energy performance improvement actions to be implemented, and data collection system to be established and accurately utilized.

Annualization of energy savings based upon a two-year Reporting Period will provide a single annualized energy savings value that directly reflects the result of the two-year SEM program engagement. This is aligned with how energy savings are reported to the CPUC for capital projects, with energy savings being reported once when the project is implemented, not during and again after implementation.

A drawback to using a Reporting Period aligned with the two year SEM Program Engagement Period is that while energy savings are not required to be reported to the CPUC every year, associated costs of operating the SEM program are. This creates a misalignment of reporting program costs and energy savings. This issue can be addressed in some way by offering multiple SEM cohorts that are started in alternating years.

Unless otherwise specified by the IOU, a Reporting Period equal in duration to the SEM Program Engagement Period shall be established and used for regulatory reporting.

# 11.4 Calculating Energy Savings During the Reporting Period

For each energy consumption adjustment model selected for use, energy savings during a specified Reporting Period shall be calculated by applying the following equation using observed (actual) and estimated (predicted) energy consumption values as appropriate.

11.4.1 Calculating Energy Savings for Each Interval of the Reporting Period

 $Energy \ Savings_{Reporting \ Period \ Interval}$ 

- = Energy Consumption<sup>Modeled</sup><sub>Reporting Period Interval</sub>
- Energy Consumption Reporting Period Interval

# 11.4.2 Aggregating Interval Energy Savings to Calculate Reporting Period Energy Savings

Energy Savings<sub>Reporting Period</sub> =  $\sum_{i=1}^{n}$  Energy Savings<sub>Reporting Period Interval i</sub>

Where

n = number of intervals in the Reporting Period

Energy savings calculated using the above equation are for the current Reporting Period as compared to the energy baseline and will be cumulative of all energy savings activities between the end of the Baseline Period and the current Reporting Period. See Section 11.7.1 to determine incremental energy savings for the current Reporting Period.

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#### 11.4.3 Visualizing Energy Savings

The cumulative sum of differences (CUSUM) calculation is an effective means of quantifying and visualizing energy savings for each type of energy during the Reporting Period.

A CUSUM graph provides an illustration of the total savings achieved as compared to the energy baseline. A CUSUM graph can be accompanied by a time-series plot of actual and predicted energy consumption. A time-series plot of actual and predicted energy consumption for each energy consumption model in use shall be created while tracking Energy Performance as described in Section 9.

The CUSUM of energy savings shall be added to this existing graph of actual and predicted energy consumption.

NOTE: A national consensus whether to display CUSUM energy savings as a positive or negative value does not exist. Some utility sponsored SEM programs mandate increasing energy savings be displayed as a positive value while other programs mandate the opposite. Implementers and customers can display CUSUM energy savings as positive or negative so long as graphical representations of CUSUM energy savings clearly indicate the direction of increased energy savings. At its discretion the sponsoring IOU may require one approach or the other.

The implementation date of EPIAs listed on the Opportunity Register for which energy savings have been calculated shall be indicated on the CUSUM graph. Confirm the implementation date recorded by the IOU, if available, against the records and memory of facility staff. Use the implementation date that best connects to when energy savings resulting from the EPIA would have been realized.

Significant changes in CUSUM slope, positive and negative, should be investigated with analysis results noted as footnotes to the CUSUM graph.

CUSUM graphs with annotation and footnotes that span all Reporting Periods (current and historic) for which the energy consumption adjustment model has been used shall be provided as part of the M&V Report.

# 11.5 Annualization of Energy Savings

Energy savings calculated for implemented EPIAs are typically annualized values. As such, EPIA energy savings values are not comparable with energy consumption adjustment model based energy savings calculated during a Reporting Period. Additionally, while it is possible to disaggregate EPIA energy savings from Reporting Period energy savings using an approach that prorates EPIA energy savings using the EPIA implementation date, the concept assumes that energy savings from the EPIA are not seasonally affected and decay or increase over time.

Reporting Period energy savings can annualized through a process sometimes referred to as, "forward projection." This annualization process uses a brief time period before the end of the Reporting Period (the Annualization Period) to annualize energy savings.

Annualization of energy savings is performed to:

- Convey the expected level of energy savings expected to be realized beyond the Reporting Period.
- Make energy savings comparable to annual energy savings calculated for implemented EPIAs.

#### 11.5.1 Annualization Period

Annualization of energy savings is dependent upon extrapolating energy savings calculated during a short time period established towards the end of the Reporting Period. This time

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period, the Annualization Period, shall be 90 consecutive days within the final 5 months of the Reporting Period.

The Annualization Period can longer than 90 days depending on the variability of the facility but shall be wholly within the final 5 months of the Reporting Period. If the customer's operation is highly seasonal, and only has one model, a longer Annualization Period that addresses seasonal impact on varying energy savings rates should be selected. The rationale for selecting a Annualization Period duration longer than 90 days shall be documented in the M&V Report. Annualization Periods shorter than 90 days shall not be used as they may result in energy savings based on short trends that may not be representative.

Ideally, the end of the Annualization Period should be established as close to the end of the Reporting Period as possible. The rationale for ending the Annualization Period prior to the end of the Reporting Period shall be documented as part of the M&V Report.

#### 11.5.2 Confirming Data Quality within the Annualization Period

Data collected during the Annualization Period should be reviewed in detail to detect anomalous values and account for situations that did not happen in the Baseline Period.

Individual data intervals in the Annualization Period should be flagged if a relevant variable data point is  $\pm 10\%$  beyond the bounds of the energy baseline data set. These points may be handled in one of three ways:

- Include the point without alteration.
  - This is appropriate if the residual for the point is not an outlier compared to the overall population of residuals.
- Exclude the point.
  - This is appropriate if the residual of the outlier point is an outlier compared to the overall population of residuals. In this case the energy savings from this outlier point would have an outsized effect on the energy savings measurement.
- Shift the Annualization Period.
  - This is appropriate if the interval in question is towards the end of the current Annualization Period and shifting the period will omit the interval in question while otherwise maintaining the integrity of the Annualization Period.
- Remodel
  - This is appropriate if no Annualization Period can be established during which a valid energy savings value can be calculated.

If an outlier is detected, qualitative justification based on visual representation of the data and quantitative justification should be provided, rationalizing the selected approach used to address the outlier. The selected approach should be documented in the M&V Report.

#### 11.5.3 Calculating annualized energy savings

Annualized energy savings shall be calculated using the following equation:

Annualized Energy Savings = 
$$\left(\sum_{i=1}^{n} (\text{Energy Savings})_i\right) \times \left(\frac{n_{\text{year}}}{n}\right)$$

Where

n = number of intervals in the Annualization Period

 $n_{\text{year}} = \text{number of intervals in a year}$ 

With energy savings being calculated using the equation in Section 11.4.1.

#### 11.5.4 Considerations for Seasonality

When the distribution of relevant variables used for a particular energy consumption adjustment model is expected to be markedly different throughout the Reporting Period, this distribution must be considered when annualizing energy savings. If the ratio of higher to lower expected production level is not anticipated to stay seasonally consistent, the Reporting Period can be divided into two or more distinct periods for a given energy consumption adjustment model. This method is generally only feasible for daily models. There must be a minimum number of intervals (normally 30 for daily models) in each period to justify the split. Use of this method shall be documented in the M&V Report.

#### 11.6 Calculating Annualized Energy Savings for Multiple Reporting Periods using the Same Energy Consumption Adjustment Model

Energy consumption adjustment models can be used for multiple consecutive Reporting Periods. Energy savings values for consecutive Reporting Periods are by nature cumulative of energy savings resulting from actions taken in the current as well as prior Reporting Periods. Incremental annualized energy savings for the current Reporting Period shall be calculated if energy consumption adjustment models are used for more than one Reporting Period as a way of "artificially re-baselining" the energy consumption model.

Incremental annualized energy savings for the current Reporting Period shall be calculated by subtracting the annualized energy savings from the prior Reporting Period from the annualized energy savings of the current Reporting Period. The prior Reporting Period energy savings must be cumulative with all other prior Reporting Periods.

If an energy consumption adjustment model is used for multiple consecutive Reporting Periods then the CUSUM value and graph shall be "artificially re-baselined" by setting the CUSUM value and graph to 0 at the start of each Reporting Period.

If an energy consumption adjustment model is re-baselined (a new energy baseline established and new model developed) any savings achieved prior to the new Baseline Period do not need to be removed from energy savings calculations made for the current Reporting Period as they will have been incorporated into the new model. Energy savings achieved during the Baseline Period must be accounted for following the guidance in Section 7.4.6.

# 11.7 Classifying Energy Savings for Regulatory Reporting

If incremental annualized energy savings for a given type of energy are calculated for the purposes of regulatory reporting, energy savings resulting from EPIA implemented during the Reporting Period that are incentivized by another IOU program or were identified and planned outside of participation in any SEM program engagement shall be removed from the energy savings value reported.

The following process of removing energy savings resulting from EPIAs implemented during the Reporting Period that are incentivized by another IOU program or were identified and planned outside of participation in any SEM program engagement shall be used and documented as part of the M&V Report.

All types of energy savings for each type of energy shall be documented in the M&V report.

#### 11.7.1 Relationship Between Different Types of Energy Savings

The below listing defines types of energy savings that will be referenced in the process of appropriately removing energy savings from annualized energy savings for each type of energy.

1. *Facility-wide Annualized Energy Savings*: Incremental, annualized energy savings for a given type of energy resulting from the aggregation of annualized energy savings from

each energy consumption adjustment model developed for the same energy type. These "modeled" savings encompass all energy saving types listed below.

- 2. **Non-SEM Program Energy Savings**: Annualized energy savings calculated for EPIAs identified and planned outside of any SEM program engagement and implemented during the current Reporting Period, whether receiving other incentives or not.
- 3. **SEM Program Energy Savings**: Facility-wide Annualized Energy Savings minus Non-SEM Program Energy Savings. This value is the annualized combination of BRO, capital, and deemed projects that were influenced by SEM. This energy savings value is used to calculate program cost-effectiveness.
- 4. **SEM Incented Project Energy Savings**: Annualized energy savings for an EPIA (project) identified during any SEM program engagement and implemented during the current Reporting Period that is to receive an incentive from another IOU program. IOU custom capital M&V requirements (ex-ante, ex-post, etc.) will apply.
- 5. **SEM BRO Energy Savings**: SEM Program Energy Savings minus SEM Incented Project Energy Savings. At the discretion of the IOU, this energy savings value can be used to pay BRO performance incentives.

Mathematically:

Savings

SEM Program Energy Savings = Facility-wide Annualized Energy Savings - Non-SEM Program Energy Savings

SEM BRO Energy Savings = SEM Program Energy Savings - SEM Incented Project Energy Savings

The figure below illustrates the relationship of the different types of energy savings.



Figure 6. Relationship Between Different Types of Energy Savings.

Savings

11.7.2 Determining if Energy Performance Improvement Actions were Identified and Planned Outside of a SEM program engagement.

The implementer shall work with the customer to identify and list, as part of the Opportunity Register, EPIAs that were identified outside of any SEM program engagement but not yet implemented. Only EPIAs with a rough order of magnitude calculation are estimated to result in annualized energy savings greater than 1.0% of the energy baseline energy consumption for that type of energy need to be listed as part of the Opportunity Register.

For each listed EPIA that was identified outside any SEM program engagement, a determination shall be made if it was not only identified but also planned for implementation outside any SEM program engagement. Energy savings resulting from EPIA that are both identified and planned outside of any SEM program engagement shall be included as part of the Non-SEM Program Energy Savings. Energy savings that ultimately result from EPIA that were identified outside of any SEM program engagement but not planned for implementation shall be included as part of future SEM Program Energy Savings when the EPIA is implemented during a Reporting Period.

The determination whether an EPIA was not only identified but also planned for implementation outside of any SEM program engagement shall be based on evidence of planning taking place within the 12 months prior to the SEM Program Engagement Period. Evidence older than 12 months indicates that while planning may have been started, EPIA implementation was stalled and the SEM program engagement influenced its implementation. A, "wish-list," or brainstorming list of EPIA ideas does not qualify as a planned EPIA. Evidence of an EPIA being planned for implementation could include the following:

- Budget allocated for the EPIA.
- Contracts signed related to EPIA implementation.
- Purchase orders issued or other indications of spending on the EPIA.
- Internal project manager assigned.
- Detailed EPIA implementation scope and schedule developed.

If an EPIA was identified and planned outside of an SEM program engagement but the implementation was abandoned or postponed, the EPIA may be considered as "planned" during an SEM Program Engagement Period if it can be demonstrated that the EPIA implementation was accelerated (e.g., from in three years to in one year).

The Opportunity Register shall be updated to indicate if each listed EPIA is determined to have been both identified and planned outside of any SEM program engagement or not. The rationale for the determination shall be recorded as part of the Opportunity Register.

Indication on the Opportunity Register or a separate list in the M&V Report of EPIAs linked to the Opportunity Register in some way for which energy savings were removed from each type of energy savings calculated should be provided.

# 11.7.3 Removing Energy Savings for EPIA Planned and Implemented during the SEM program engagement

Facility-wide Projected Energy Savings, Non-SEM Program Energy Savings, SEM Program Energy Savings, SEM Incented Project Energy Savings, and SEM BRO Energy Savings shall be calculated for each type of energy. The calculation of these values can be conducted by the implementer or led by the customer. If the energy savings values are to be reported to the IOU the implementer shall ensure they are calculated correctly and supported with documentation.

# 11.8 Establishing Confidence in Energy Savings

Fractional savings uncertainty (FSU) analysis is a method for judging the validity of energy savings based on regression modeling. An FSU calculation shall be conducted for each Facility-Wide Projected Energy Savings value calculated and used as the basis of an energy savings value to be reported.

The fractional uncertainty can be estimated with the general FSU equation as follows:

$$\frac{\Delta E_{save,m}}{E_{save,m}} = t \cdot \frac{1.26 \cdot CV((\frac{n}{n'})(1 + \frac{2}{n'}) \cdot \frac{1}{m})^{\frac{1}{2}}}{F}$$

Where:

- t= t-statistic for desired confidence level
- CV= coefficient of variation
- n= number of observations in the Baseline Period
- m = number of observations in the Reporting Period
- F= observed savings during Reporting Period
- n'= number of independent Baseline Period observations
- ρ= auto-correlation coefficient

$$n' = n \frac{(1-\rho)}{(1+\rho)}$$

According to ASHRAE Guideline 14:2014, for monthly data an assumption that autocorrelation is 0 so n' is equal to n.

When Reporting Period intervals are monthly or daily the improved FSU equation from Sun and Baltazar should be used which replaces the 1.26 coefficient in the above equation with a polynomial:

$$\frac{\Delta E_{save,m}}{E_{save,m}} = t \cdot \frac{(aM^2 + bM + c) \cdot CV((\frac{n}{n'})(1 + \frac{2}{n'}) \cdot \frac{1}{m})^{\frac{1}{2}}}{F}$$

Where:

- M = number of months of Reporting Period data
- a, b, and c are defined as follows:

Data Interval	Monthly	Daily	
а	-0.00022	-0.00024	
b	0.03306	0.03535	
С	0.94054	1.00286	
	Table F. FELL Foundtion Coofficie	unite.	

 Table 5: FSU Equation Coefficients.

ASHRAE Guideline 14-2002, Section 5.3.2.2 specifies that the level of uncertainty must be less than 50% of the annual reported savings, at a confidence level of 68%.

For an FSU value:

- Less than 50%, the reported energy savings value should be considered valid.
- Greater than or equal to 50%, energy savings aggregated from the list of implemented EPIAs on the Opportunity Register should be used to justify the energy savings calculated using the energy consumption adjustment model.
- Much greater than 50%, seen as an indicator that the energy savings are not valid.

The table in Annex F – Fractional Savings Uncertainty Scenarios, provides additional information for difference uncertainty scenarios.

# 12 Calculating Energy Savings with the Opportunity Register

### 12.1 Introduction

Energy savings may additionally be calculated from the aggregation of energy savings resulting from the implementation of selected individual EPIAs listed on the Opportunity Register. This approach is commonly referred to as a bottom-up approach.

#### 12.2 Process

If one or more energy consumption adjustment models is not developed and used to calculate energy savings for a given type of energy, then a bottom-up approach of calculating energy savings shall be used. This bottom-up approach is optional and not necessary if one or more valid energy consumption adjustment models are developed and used to calculate energy savings for a given type of energy.

Energy savings for individual implemented EPIA listed on the Opportunity Register shall be conducted in accordance with the requirements of Section 8. Not all EPIA listed on the Opportunity Register will necessarily have a calculated energy savings value.

For EPIA implemented and listed on the Opportunity Register, the implementer shall ensure that energy savings values for each EPIA listed on the Opportunity Register were calculated properly with effort proportional to the assumed energy savings value. The level of detail for calculating energy savings should be higher for more complex EPIAs and/or EPIAs that result in large energy savings values.

The implementer and customer shall identify which EPIA listed on the Opportunity Register to include in the bottom-up calculation. Not all EPIA for which energy savings have been calculated must be included in the bottom-up calculation. Reasons to not include energy savings from specific EPIA may include lack of confidence in the estimated energy savings value and uncertainty that the implemented EPIA will remain in place during the SEM Program Engagement Period.

Only energy savings for EPIA implemented during the current Reporting Period shall be included in the bottom-up calculation.

If a bottom up calculation is made in addition to development and use of a valid energy consumption adjustment model for the same type of energy, the resulting aggregated energy savings can be used as a, "gut check," in comparison to energy savings calculated with energy consumption adjustment models. This analysis is not a requirement of this M&V Guide. Energy savings calculated from the two methods should not be reconciled as the foundational assumptions of the two methods are incongruent.

# 13 Regulatory Reporting of the M&V Process and Energy Savings

# 13.1 Introduction

For the current Reporting Period, annualized energy savings values will be calculated for each type of energy included in the M&V process using one of two methods:

- Energy consumption adjustment models if the development of valid energy consumption models is attempted and possible.
- Aggregation of energy savings from individual EPIAs listed on the Opportunity Register.

For each type of energy included in the M&V process, if one or more valid energy consumption adjustment models were developed and used to calculate energy savings then energy savings for that type of energy shall be reported using this method. Development and use of energy consumption adjustment models is the preferred method to determine energy savings to be reported.

For each type of energy, if energy consumption adjustment models are not or cannot be developed, aggregated energy savings resulting from the implementation of EPIAs listed on the Opportunity Register per the requirements of this M&V Guide shall be reported for that type of energy.

If the bottom-up aggregation of energy savings approach to calculating energy savings is used to report energy savings it should be done so with the understanding that evaluation of energy savings for individual EPIA listed on the Opportunity Register may occur. This evaluation shall not be conducted to the level of rigor and specificity as is conducted for projects part of custom capital incentive programs. The evaluation shall be a check of the reasonable nature of the EPIA energy savings calculation approach, recognizing the requirements of this M&V Guide direct that a detailed M&V plan for each EPIA is not to be developed and energy savings are to be estimated with a rough order of magnitude data and calculations proportional to the expected level of energy savings.

Energy savings for different types of energy do not all have to be reported using the same energy savings determination method.

The M&V Report, Opportunity Register, and Energy Data and Performance Tracking Tool shall be provided to the CPUC as requested when reporting energy savings. The CPUC may have additional requests for data though the M&V Report should be adequate to evaluate if the energy savings reported conform to the requirements of this M&V Guide.

Program cost-effectiveness shall be based upon SEM Program Energy Savings.

This M&V Guide does not consider regulatory reporting aimed to evaluate the development of customer EnMS. As the M&V process is a component of a functional EnMS requests pertaining to the customer's understanding, activities, and leadership of parts of the M&V process may be made by the CPUC.

# 13.2 Considerations for non-IOU Supplied Energy

The implementer shall be responsible for adjusting energy savings values to account for IOU and CPUC requirements pertaining to claiming energy savings for facilities that have on-site energy generation and non-IOU supplied energy. In general, energy savings claims should only support impacts to IOU supplied energy. If a facility generates electricity on-site and exports excess electricity to the grid, those time periods shall be excluded from electricity savings claims.

The implementer shall also be responsible for ensuring the customer pays a public purpose charge for each type of energy for which energy savings will be reported and that the reported energy savings value is attributed to energy for which the public purpose charge was paid.

#### **13.3 Negative Energy Savings**

Energy consumption adjustment models may indicate that worsening energy performance (sometimes referred to as backsliding) occurred as compared to the energy baseline or relative to prior Reporting Periods when energy consumption models are used for multiple concurrent Reporting Periods.

Regardless of if and when backsliding occurs energy savings shall still be calculated per the requirements of this M&V Guide. This may result in negative energy savings. Negative energy savings shall be reported in the same way as positive energy savings values.

# 14 M&V Report Preparation Checklist

# 14.1 Introduction

The M&V Report shall be a living document compiled throughout the M&V Process that is finalized once per year and submitted as part of regulatory reporting requirements. Regulatory reporting of energy savings may not be every year, thus not requirement regulatory submission of the M&V Report for those years.

The M&V Report is intended to be of use to the customer as a record of the M&V Process that can be used in subsequent year M&V cycles.

The customer and implementer play a role in the development of the M&V Report. The customer should, over the course of multiple SEM program engagements, take a leadership in the development and continued use of the M&V Report.

It is the responsibility of the implementer to finalize the M&V Report and deliver it to the utility as requested or at the conclusion of the SEM program engagement.

#### 14.2 Process

The below M&V Report preparation checklist is intended to help the implementer and customer build the M&V Report during the annual process of conducting M&V. Items on the check list are based upon the requirements within this M&V Guide. Additional information can be included in the M&V Report if it is of value to the customer or required by the IOU sponsoring the M&V engagement.

#### 14.2.1 SEM Time Periods (2)

1. All time periods are provided. (2.1)

#### 14.2.2 Characterizing the Facility (3)

- 1. The energy types that are consumed within the M&V boundaries are listed. (3.3)
- 2. The analysis based omission of energy types is provided. (3.3.3)
- 3. All utility and other energy meters for all types of energy are provided. (3.5)
- 4. Equation and conversion factors used to measure energy consumption are provided. (3.5)
- 5. The M&V boundaries are described. (3.6)
- 6. One or more line drawings or aerial images of the facility with the M&V boundaries is provided. (3.6)

#### 14.2.3 Relevant Variables (4)

- 1. The list of potential relevant variables is provided. (4.3)
- 2. The list of potential relevant variables includes associated data sources. (4.5)
- 3. The relevant variables selected for data collection are identified. (4.5)
- 4. Relevant variable selection criteria is provided. (4.5)

#### 14.2.4 Collecting Data and Assessing Data Quality (6)

- 1. The effect of outliers on the reliability of energy consumption adjustment models and the reason for removal is provided. (6.4)
- 2. The reason for making any changes to the data set is provided. (6.4)
- 3. The strategy used to remove outliers is provided. (6.4)
- 4. The omission of data points is documented and rationale provided. (6.4)
- 5. The decision to use a time-series adjustment is provided. (6.5)

#### 14.2.5 Energy Consumption Model Development (7)

1. The decision and rationale to not start or not continue energy consumption adjustment model development is provided and has been approved by the IOU. (7.3)

- 2. Scatter diagrams of energy consumption for each type of energy and each relevant variable are provided. (7.4.2)
- 3. If pertinent, the rationale for not ending the energy baseline immediately before the start of the SEM Program Engagement Period is provided. (7.4.5.1)
- 4. The table of competing models is provided. (7.6.4)
- 5. The selection rationale for each energy consumption adjustment model is provided. (7.6.2)
- 6. The method for making non-routine adjustments and the rationale for that method are provided. (7.8.1.1)
- 7. Rationale for the use of the backcast model over aggregated EPIA energy savings is provided and has been accepted by the IOU. (7.1 and 7.8.1.2)
- 14.2.6 Results of Technical Review
  - 1. Notes and results of the Technical Review are provided. (10.3.5)
- 14.2.7 Annualization of Energy Savings
  - 1. CUSUM graphs with annotation and footnotes that span all Reporting Periods (current and historic) for which the energy consumption adjustment model has been used are provided. (11.4.3)
  - 2. If pertinent, for each type of energy, the rationale for selecting an Annualization Period duration longer than 90 days is provided. (11.5.1)
  - 3. If pertinent, for each type of energy, the rationale for ending the Annualization Period prior to the end of the Reporting Period is provided. (11.5.1)
  - 4. If pertinent, the selected approach to handle outliers in the Annualization Period is provided. (11.5.2)
  - 5. If pertinent, the method used to split the Reporting Period to accommodate seasonality is provided. (11.5.4)
  - 6. The process of removing energy savings resulting from EPIAs implemented during the Reporting Period is provided. (11.7)
  - 7. All types of energy savings are provided for each type of energy. (11.7)
  - A table similar to that presented in Annex E Example of Energy Savings Annualization and Disaggregation of Energy Savings Types, is provided for each energy consumption adjustment model. (11.8)

# References

- Andrew Bernath and Maggie Buffum, Estimating Energy Savings Resulting from Strategic Energy Management Programs: Methodology Comparison, 2017 International Energy Program Evaluation Conference, Baltimore, MD
- ASHRAE Guideline 14:2014 Measurement of Energy, Demand and Water Savings
- Bonneville Power Administration Monitoring Tracking and Reporting (MT&R) Reference Guide, Revision 8.0, November 15, 2019
- Energy Trust of Oregon Energy Production Efficiency, Energy Intensity Modeling Guideline, Version 2.2, January, 2019
- International Performance Measurement and Verification Protocol Option C, January 2012.
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- ISO 50015:2014 Measurement and verification of energy performance of organizations – General principles and guidance
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- NW SEM Collaborative, SEM Energy Modeling Method Selection Guide, 2019
- Philipp Degens and Anna Kelly, Strategic Energy Management Modeling: What's good enough?, 2017 International Energy Program Evaluation Conference, Baltimore, MD
- SBW Consulting Inc., Uncertainty Approaches and Analyses for Regression Models and ECAM, 2017
- U.S. Department of Energy Superior Energy Performance 50001, SEP 50001, Measurement & Verification Protocol: 2019, October 29, 2019

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# Annex A - Terminology

For the purposes of this M&V Guide, the following terms and definitions apply.

This terminology guide is focused on providing clarity to assist the establishment of the M&V process. Statistical tests are not defined as detailed understanding of the meaning of these test is not required of the customer and competent implementers should already be familiar with these terms. Additionally, these terms are well established in authoritative and easily obtained statistics reference manuals.

**SEM Program Engagement Period:** interval between the end of the Baseline Period and the end of the Reporting Period

Additional specifications provided in Section 2.1.2

**Baseline Period:** specific period of time before the implementation of an energy performance improvement action selected for comparison with the Reporting Period and the calculation of the energy performance and of energy performance improvement

Source: ISO 50015:2014, 3.1

Additional specifications provided in Section 2.1.1

**Behavioral**: Behavioral activities provide energy savings from interventions that result in changes in actions by customers with respect to energy usage in a building. Behavioral activities consist of actions such as manually turning off lights and equipment, adjusting blinds, reducing water use and so on.

Source: CPUC NMEC Rulebook version 2.0

Boundary: physical or organizational limits

Example: A process; a group of processes; a site; multiple sites under the control of an organization, or an entire organization

Source: ISO 50001:2018, 3.1.3 - modified (removed Note 1)

BRO: The combination of behavioral, retrocommissioning, and operational activities

Energy: electricity, fuels, steam, heat, compressed air, and other like media

Note 1: for the purposes of this Guide, energy refers to the various types of energy, which can be purchased, stored, treated, used in equipment or in a process, or recovered.

Source: ISO 50001:2018, 3.5.1 - modified (replaced "International Standard" with "this Guide", and removed "including renewable" in Note 1)

**Energy baseline**: quantitative reference(s) providing a basis for comparison of energy performance

Note 1: An energy baseline is based on data from a specified period of time and/or conditions, as defined by the organization

Note 2: Energy baselines are used for determination of energy performance improvement, as a reference before and after, or with and without implementation of energy performance improvement actions.

Source: ISO 50001:2018, 3.4.7

#### Energy consumption: quantity of energy applied

Source: ISO 50001:2018, 3.5.2

**Energy efficiency:** ratio or other quantitative relationship between an output of performance, service, goods, commodities, or energy, and an input of energy

Source: ISO 50001:2018, 3.5.3 – modified (removed examples and Note 1)

**Energy export**: The quantity of energy delivered away from the M&V boundary such that the facility is not be counted as a net negative consumer of energy

Source: Modified from SEP 50001 M&V Protocol, 2019

**Energy management system:** management system to establish an energy policy, objectives, energy targets, action plans and process(es) to achieve the objectives and energy targets

Source: ISO 50001:2018, 3.2.2

**Energy performance**: measurable result(s) related to energy efficiency, energy use, and energy consumption

Note 1: Energy performance can be measured against the organization's objectives, energy targets and other energy performance requirements.

Note 2: Energy performance is one component of the performance of the energy management system

Source: ISO 50001:2018, 3.4.3

**Energy performance improvement**: improvement in measurable results of energy efficiency, or energy consumption related to energy use, compared to the energy baseline

Note 1: This M&V Guide uses energy savings as the indicator of energy performance improvement.

Source 50001:2018, 3.4.6 – modified (added note)

**Energy performance improvement action**: action or measure or group of action or measures implemented or planned within an organization intended to achieve energy performance improvement through technological, managerial or operational, behavioral, economical, or other changes

Note 1: Energy performance improvement actions includes both BRO and capital projects. Source: ISO 50015:2014, 3.3 – modified (added note)

**Energy product**: Any excess energy delivered away from the M&V boundaries after a net zero level of energy consumption is reached

Source: Modified from SEP 50001 M&V Protocol, 2019

**Energy target**: quantifiable objective of energy performance improvement Source: ISO 50001:2018, 3.4.15

Energy use: application of energy

Examples: ventilation; lighting; heating; cooling; transportation; data storage; production process

Note 1: Energy use is sometimes referred to as "energy end-use"

Source: ISO 50001:2011, 3.5.4

**Facility-wide Projected Energy Savings**: Incremental, annualized energy savings for a given type of energy resulting from the aggregation of annualized energy savings from each energy consumption adjustment model developed for the same energy type.

Additional specification provided in Section 11.7.1.

**Feedstock:** raw or unprocessed material used as an input to a manufacturing process to be converted to a product

Example: crude oil used to produce petroleum products

**Annualization Period:** defined period of time selected for the annualization of energy savings Additional specification provided in Section 2.1.4

**Measurement and verification (M&V):** process of planning, measuring, collecting data, analyzing, verifying, and reporting energy performance or energy performance improvement for defined M&V boundaries

Source: ISO 50015:2014, 3.11

**M&V boundary**: organizational, physical, site, facility, equipment, systems, process or activity limits within which energy performance or energy performance improvement is measured and verified

Source: ISO 50015:2014, 3.12
**Natural resources**: Energy delivered to the M&V boundaries that is not supplied by an organization

Examples: sunlight, natural gas from an on-site well, geothermal

Source: Modified from SEP 50001 M&V Protocol, 2019

**Non-routine adjustment:** adjustment made to the energy baseline or Reporting Period energy consumption to account for unusual changes in relevant variables or static factors, outside the changes accounted for by normalization

Note 1: non-routine adjustments may apply where the energy baseline or Reporting Period no longer reflects energy use or energy consumption patterns, or there have been major changes to the process, operational patterns, or energy using systems

Source: ISO 50015:2014, 3.16 – modified (added, "or Reporting Period energy consumption")

**Non-SEM Program Energy Savings**: Annualized energy savings calculated for EPIAs identified and planned outside of any SEM program engagement and implemented during the current Reporting Period, whether receiving other incentives or not.

Definition also provided in Section 11.7.1.

**Normalization:** modification of data to account for changes to enable comparison of energy performance under equivalent conditions

Source: ISO 50001:2018, 3.4.10

**Operational Activities**: Control-based; they improve or adjust existing controls to optimize equipment performance. Operational activities include maintaining room temperature set points, revising equipment operating schedules consistent with current building occupancy schedule, and changing equipment set points in response to current weather conditions.

Source: CPUC NMEC Rulebook version 2.0

**Relevant variable:** quantifiable factor that affects energy performance and routinely changes

Note 1: Significance criteria are determined by the organization

Note 2: Other commonly terms for relevant variables include independent variable and energy driver

Examples: Weather conditions, operating conditions (indoor temperature, light level), working hours, production output

Source: ISO 50001:2018, 3.4.9 - modified (added Note 2)

**Reporting Period:** defined period of time selected for calculation and reporting of energy performance

Source: ISO 50001:3.17, 3.17

Additional specifications provided in Section 2.1.3

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**Retrocommissioning**: A systematic process of identifying and implementing operational and maintenance improvements to achieve the design intentions consistent with the current usage of a building. The process is designed to improve the performance of building subsystems as well as optimize the performance of the overall system. Retrocommissioning focuses on operations and maintenance improvements and diagnostic testing, although major repairs and equipment upgrades may be identified and recommended through the process. Minor repairs required to conduct diagnostic testing may also be implemented.

Behavioral, Operational, Maintenance and Repair measures may be identified and carried out during a retrocommissioning project. Behavioral, operational and maintenance activities may also be implemented separately as "operations and maintenance" projects in existing buildings.

Source: CPUC NMEC Rulebook version 2.0

**Strategic Energy Management (SEM):** A holistic approach to managing energy consumption in order to continuously improve energy performance, by achieving persistent energy and cost savings over the long term. SEM focuses on business practice change from senior management through shop floor staff, affecting organizational culture to reduce energy waste and improve energy intensity. SEM emphasizes equipping and enabling plant management and staff to impact energy consumption through behavioral and operational change. While SEM does not emphasize a technical or project centric approach, SEM principles and objectives may support capital project implementation.

Source: CEE SEM Minimum Element – modified (replaced energy use with consumption)

**SEM BRO Energy Savings**: SEM Program Energy Savings minus SEM Incented Project Energy Savings.

Additional specification provided in Section 11.7.1.

**SEM Incented Project Energy Savings**: Annualized energy savings for an EPIA (project) identified during any SEM program engagement and implemented during the current Reporting Period that is to receive an incentive from another IOU program.

Additional specification provided in Section 11.7.1.

**SEM Program Energy Savings**: Facility-wide Projected Energy Savings minus Non-SEM Program Energy Savings

Additional specification provided in Section 11.7.1.

Static factor: Identified factor that impacts energy performance and does not routinely change

Example 1 Examples of static factors may include facility size, design of installed equipment, the number of weekly production shifts, the number or type of occupants, range of products

Example 2 An example of a change in a static factor could be a change in a manufacturing process raw material from aluminum to plastic may lead to a non-routine adjustment.

Source: ISO 50015, 3.20

# Annex B - Reference Notation

This section describes the notation used in this Guide. The energy consumption and savings notation is designed to distinguish quantities in the format shown below.



- **1. Base Notation:** Describes if the energy consumption or savings is for delivered energy and provides the base for energy performance improvement notation.
- **2. Energy Types:** Describes the type of energy that is quantified. The asterisk (\*) notation is used as a placeholder for a generic or unknown energy type.
- **3. Modeled Period:** Indicated in subscripts and defines the time period for which the model is built.
- **4. Period/Conditions of Interest:** Indicates the time period or conditions of interest for which the model is being applied to.
- 5. Adjustment Indicator: Indicated in superscripts and describes if the quantity of energy is observed (actual) or adjusted.

# 1. Base Notation

ECD(*)	Delivered energy consumption of an unspecified energy type
E(*)	Quantity of energy of an unspecified type
ESD(*)	Delivered energy savings of an unspecified energy type
EnPI	Energy Performance Indicator

# 2. Energy Types

Individual energy type notation replaces the asterisk (\*) in parentheses from the base notation above. The following are recommended for clarity of communication.

*	Unspecified energy type
е	Electricity
ge	Grid delivered electricity
pve	On-site generated electricity from on-site photovoltaic panels
ng	Natural gas
st	Steam
са	Compressed air
d	Diesel
С	Coal
hw	Hot water
Σ	The sigma notation is used to represent summation of all energy types.
	$ECD(\Sigma) = \sum_{*} ECD(*)$
	Example: if observed baseline delivered energy types are "ge" and "ng", then $ECD(\Sigma) = ECD(ge) + ECD(ng)$

# 3. Modeled Period and 4. Period/Conditions of Interest – (Subscript)

b	Baseline Period
r	Reporting Period
ар	Annualization Period

# 5. Adjustment Indicator – (Superscript)

0	Observed (actual) value for the indicated time period of condition of interest
а	Adjusted value for the indicated time period or condition of interest

# Annex C - Special Cases in Energy Accounting

The below scenarios are provided as examples and are not requirements of this M&V Guide. Current IOU and CPUC policies should be reviewed and used throughout the M&V process.

# **Energy Accounting of Energy Export and Energy Product**

Energy delivered away from the M&V boundaries shall be accounted for as either an energy export or energy product.

# Energy Export

The maximum allowable amount of energy export is equal to the quantity of energy delivered into the facility boundary of the same energy type such that a net zero level is reached on a delivered energy basis. A facility may not be counted as a net negative consumer of any energy type.

EXAMPLE: A facility purchases 30 GWh of grid electricity and produces 25 GWh of electricity with on-site photovoltaic (PV) panels. The facility consumes 45 GWh and delivers 10 GWh away from the M&V boundaries. The 10 GWh delivered away from the M&V boundaries is treated as energy export. See figure below.



ECD(e) = 30 GWh + 25 GWh - 10 GWh = 45 GWh

# Energy Product

For each energy type, if a net zero level is reached on a delivered energy basis, any excess energy delivered away from the M&V boundaries is accounted for as an energy product. This may result from a facility producing large quantities of on-site energy. Energy product shall be considered as a relevant variable for adjustment models.

EXAMPLE: A facility purchases 30 GWh of grid electricity and generates 100 GWh of electricity with on-site wind turbines. The facility consumes 55 GWh and delivers 75 GWh away from the M&V boundaries. A maximum quantity of 30 GWh is treated as energy export. The remaining 45 GWh is treated as energy product. See figure below.



ECD(e) = 30 GWh + 100 GWh - 30 GWh - 45 GWh = 55 GWh

# **On-site Extraction or Generation of Energy from Natural Resources**

Energy from natural resources that are delivered into and consumed within or delivered away from the M&V boundaries shall be included in the energy accounting. The point at which on-site extracted or generated energy is metered and accounted for may be selected by the organization so long as it is at a reasonable point along the extraction or generation process flow (e.g., a facility may choose to meter biogas flow and energy content or the resulting electricity and hot water generated from the utilization of the same biogas). This measurement point shall be consistent between the baseline and Reporting Periods. This allowance is made recognizing that the quantity of energy of some natural resources (e.g., photons or wind) or the energy derived thereof (e.g., biogas) may be difficult to meter. In such cases, the quantity of energy generated within the M&V boundaries from the natural resource (e.g., AC electricity from the inverter of a PV panel system) may be metered and included in the energy accounting.

NOTE: While metering energy at a point along the extraction or generation process flow downstream of the M&V boundaries may be simpler and more cost effective (e.g. metering hot water produced from a biogas fired boiler, rather than the biogas produced from a sewage fed digester), the effect of energy performance improvement actions implemented upstream of the point of metering may not be reflected in the calculated facility-wide energy performance improvement.

EXAMPLE: A wastewater treatment facility uses sewage to generate biogas, which is used to generate electricity and steam in a CHP system. The facility also purchases grid electricity, and generates on-site electricity with an array of PV panels. As the facility cannot cost-effectively install meters to measure biogas flow and energy content, the facility decides to meter the electricity and steam coming out of the CHP system for energy accounting purposes. In one month, the biogas CHP system produces 60 GWh of electricity and 100 MMBTU of steam. The facility purchases 50 GWh of grid electricity and generates 40 GWh of on-site electricity with the PV panels. The facility consumes 85 GWh of electricity and delivers 65 GWh of electricity away from the M&V boundaries. The facility consumes 80 MMBTU of steam and delivers 20 MMBTU away from the M&V boundaries. See figure below.



Electricity: ECD(e) = 50 GWh + 60 GWh + 40 GWh - 50 GWh - 15 GWh = 85 GWh

Steam: ECD(st) = 100 MMBtu - 20 MMBtu = 80 MMBtu

# Feedstock and Resulting Energy Types

In some instances, energy delivered to the M&V boundaries may be used as a feedstock rather than consumed as energy. The portion of an energy type used as a feedstock shall be

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subtracted from the delivered energy. The commodity that is being produced from the feedstock shall be considered as a relevant variable in the energy consumption adjustment model.

Any energy types resulting from the processing of feedstock (e.g., process gas produced during the refining process, heat generated by an exothermic reaction, biogas generated from sewage) that are consumed within or delivered away from the M&V boundaries shall be included in the energy accounting.

EXAMPLE: A facility purchases 1000 Therms of natural gas and uses 750 Therms to produce hydrogen, which is sold as a commodity, while consuming the other 250 Therms within the facility boundary in a boiler. The energy accounting shall include 250 Therms. The production quantity of hydrogen shall be considered as a relevant variable in the energy consumption adjustment model.

# Annex D – Multicollinearity and Autocorrelation

# Multicollinearity

Multicollinearity is present when two or more relevant variables in a regression model are correlated between themselves. When two relevant variables are correlated, including both variables, instead of just one, may not add appreciably to the model's explanatory power.

Keep the following points in mind when validating an adjustment model:

- The presence of correlated variables should serve as a warning that the statistical significance of a variable in a particular regression does not, by itself, indicate how closely that variable is correlated with energy consumption. The modeler should use caution in excluding any variables that may actually be relevant variables, but are masked by correlated variables.
- Multicollinearity has limited influence on the predictive capability of the final model if operating conditions stay relatively consistent. However, if the relationship between the correlated relevant variables changes during the Reporting Period, the model will lose predictive power.
- Multicollinearity can be identified by using XY scatterplots to view the relationship between two relevant variables. Additionally, the coefficients in a model will swing drastically if a variable with multicollinearity is added or removed.
- Perform a general assessment of multicollinearity by regressing each variable against the other hypothesis variables and examine the R<sup>2</sup> of each relationship. As a rule of thumb, any bivariate correlation with R<sup>2</sup> > 0.7 is an indication that multicollinearity needs to be carefully considered in the variable selection process.
- Multicollinearity can also be identified by calculating the variance inflation factor (VIF), which describes the increase in standard error compared to the standard error if the variable were uncorrelated with the other predictor variables.
- The simplest solution to addressing multicollinearity is to drop one of the variables from the regression analysis. However, this approach may negatively affect the model's predictive capability. The modeler should use his/her best engineering judgment along with an understanding of how the customer's facility uses energy to include or exclude variables, while considering factors such as data availability and model complexity.

EXAMPLE: At a soft drink bottling facility, energy consumption and production increase in the summer, due to higher seasonal sales. Both energy and production show a strong correlation with ambient, dry bulb temperature. The modeler includes the production variable in the adjustment model, but is unsure whether to include the ambient temperature variable. In this example, plot the production variable against the temperature variable to determine the correlation. If the R<sup>2</sup> is greater than 0.7, consider removing the temperature variable from the model. Justify the decision using engineering knowledge about the temperature dependency of equipment and loads at the facility.

# **Autocorrelation**

Autocorrelation is present when the error term in a time period is related to the error term in a prior time period. In other words, autocorrelation is characterized by a correlation in the residuals.

Calculate the autocorrelation coefficient and plot model residuals over the Baseline Period. If autocorrelation is detected, the number of independent baseline points is effectively reduced. The typical remedy involves increasing the sample size, or selecting a different data interval. For annual models with daily baseline intervals, moderate autocorrelation may not be a concern.

According to ASHRAE Guideline 14:2014, for monthly data an assumption that autocorrelation is 0 so n' is equal to n.

Typically, regression-based energy models exhibit positive autocorrelation. Positive autocorrelation occurs when the sign change of the residuals is infrequent. Conversely, too frequent sign changes in the residual pattern results in negative autocorrelation.

There is no defined threshold for the autocorrelation coefficient in the model development phase. Autocorrelation becomes a factor in the fractional savings uncertainty analysis when it has the mathematical effect of reducing performance period energy data samples.

The Durbin-Watson test can also be used to determine if autocorrelation is statistically significant. For uncorrelated errors, the Durbin-Watson number, d, should be approximately 2. The upper and lower bounds for the Durbin-Watson statistic are a function of sample size, the number of predictor variables and desired confidence level.

# Annex E – Example of Energy Savings Annualization and Disaggregation of Energy Savings Types

The below example assumes a monthly energy consumption adjustment model was created for electricity consumption at a facility. For each Reporting Period the Annualization Period is based upon months 10, 11, and 12.

Annualiza	ation of Energy Saving	gs					1 1 1				
		Reportir	ng Period 1	Reportin	ng Period 2	Reportir	g Period 3	Reportir	ng Period 4	Reportir	ng Period 5
	Predicted Energy	Energy		Energy		Energy	8	Energy		Energy	
Month	Consumption	Consumption	Energy Savings	Consumption	Energy Savings	Consumption	Energy Savings	Consumption	Energy Savings	Consumption	Energy Savings
1	1,000,000	1,000,000	-	950,000	50,000	900,000	100,000	870,000	130,000	800,000	200,000
2	1,000,000	1,000,000	-	960,000	40,000	850,000	150,000	860,000	140,000	760,000	240,000
3	1,000,000	900,000	100,000	970,000	30,000	860,000	140,000	880,000	120,000	740,000	260,000
4	1,000,000	1,000,000	-	980,000	20,000	850,000	150,000	900,000	100,000	745,000	255,000
5	1,000,000	1,100,000	(100,000)	970,000	30,000	840,000	160,000	925,000	75,000	740,000	260,000
6	1,000,000	1,150,000	(150,000)	900,000	100,000	870,000	130,000	920,000	80,000	735,000	265,000
7	1,000,000	950,000	50,000	900,000	100,000	880,000	120,000	900,000	100,000	730,000	270,000
8	1,000,000	950,000	50,000	850,000	150,000	890,000	110,000	910,000	90,000	735,000	265,000
9	1,000,000	900,000	100,000	835,000	165,000	900,000	100,000	900,000	100,000	735,000	265,000
10	1,000,000	925,000	75,000	800,000	200,000	850,000	150,000	850,000	150,000	735,000	265,000
11	1,000,000	900,000	100,000	850,000	150,000	900,000	100,000	850,000	150,000	740,000	260,000
12	1,000,000	950,000	50,000	900,000	100,000	875,000	125,000	825,000	175,000	745,000	255,000
	Annualized Energy Savings		900,000		1,800,000		1,500,000		1,900,000		3,120,000
Disaggreg	gating of Energy Savin	gs Types					- - 				
		Reportir	ng Period 1	Reportin	ng Period 2	Reportir	g Period 3	Reportir	ng Period 4	Reportir	ng Period 5
Annualized I	Energy Savings Calculated Aga	ainst the Baseli	ne Period (all in	kWh)							
Facility-wide	Annualized Energy Savings		900,000		1,800,000		1,500,000		1,900,000		3,120,000
							1 1 1				
Annualized I	ncremental Energy Savings (a	all in kWh)									
Facility-wide	e Annualized Energy Savings		900,000		900,000		(300,000)		400,000		1,220,000
Types of Ann	ualized Energy Savings - Calco	ulations Based	on Incremental /	 Annualized Ene	ergy Savings (all in	kWh)					
Non-SEM Pro	ogram Energy Savings		600,000		-	-	-		-		-
SEM Program	m Energy Savings		300,000		900,000		(300,000)		400,000		1,220,000
SEM Incente	d Project Energy Savings		-		300,000		600,000		360,000		240,000
SEM BRO Ene	ergy Savings		300,000		600,000		(900,000)		40,000		980,000

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# Annex F – Fractional Savings Uncertainty Scenarios

# Daily Model

68% confidence, 365 baseline intervals, 90 reporting intervals

	F (% s	avings)			
CV	2.5%	5.0%	10.0%	15.0%	20.0%
0.03	23%	12%	6%	4%	3%
0.05	46%	23%	12%	8%	6%
0.10	92%	46%	23%	15%	12%
0.15	139%	69%	35%	23%	17%
0.20	185%	92%	46%	31%	23%
0.30	277%	139%	69%	46%	35%

confidence

baseline intervals

0.5 autocorrelation coefficient

90 reporting intervals

68%

365

1.00 T-stat

121.67 | n-prime

# Weekly Model

68% confidence, 52 baseline intervals, 13 reporting intervals

	F (% s	avings)			
с٧	2.5%	5.0%	10.0%	15.0%	20.0%
0.03	47%	23%	12%	8%	6%
0.05	93%	47%	23%	16%	12%
0.10	187%	93%	47%	31%	23%
0.15	280%	140%	70%	47%	35%
0.20	374%	187%	93%	62%	47%
0.30	561%	280%	140%	93%	70%



31.20 n-prime

# Monthly Model

68% confidence, 12 baseline intervals, 3 reporting intervals

		F (	% savir	ngs)	
CV	2.5%	5.0%	10.0%	15.0%	20.0%
0.03	82%	41%	20%	14%	10%
0.05	164%	82%	41%	27%	20%
0.10	327%	164%	82%	55%	41%
0.15	491%	246%	123%	82%	61%
0.20	655%	327%	164%	109%	82%
0.30	982%	491%	246%	164%	123%

68%	confidence
1.04	T-stat
12	baseline intervals
3	reporting intervals
0	autocorrelation coefficient
12.00	n-prime

Notes: ASHRAE guidelines specify 50% uncertainty at 68% confidence.

100% uncertainty means that the savings are not negative.

Uncertainty higher than 100% means there is a chance that savings are negative.

Monthly models will generally not show autocorrelation.

Daily and weekly models will generally show autocorrelation. Usually the addition of production data lowers the autocorrelation.

# Annex G – Revision History

Version and Date	Section	Change
2.0, September 12, 2020	Document	Structural and technical update from version 1.0 originally published February 8, 2017.
2.01, September 12, 2020	All tables	Corrected table formatting
2.02, September 28, 2020	11.5.3	Corrected equation to annualize correctly for non 12 month reporting periods. Last term change from $\left(\frac{rp}{n}\right)$ to $\left(\frac{n_{year}}{n}\right)$ where rp = number of intervals in the Reporting Period, n = number of intervals in the Annualization Period, and n <sub>year</sub> = number of intervals in a year.
		Table 6: Revision History.

The below table documents changes made to this M&V Guide.

# FIRST AMENDMENT TO MASTER SERVICES AGREEMENT BY AND BETWEEN MARIN CLEAN ENERGY AND CLEARESULT CONSULTING, INC.

This FIRST AMENDMENT is made and entered into on , by and between MARIN CLEAN ENERGY (hereinafter referred to as "MCE") and CLEAResult Consulting, Inc. (hereinafter referred to as "Implementer").

## RECITALS

WHEREAS, MCE and Implementer entered into a master services agreement on September 3, 2021, to provide various scopes of services ("Agreement"); and

WHEREAS, Section 4 of the Agreement stated the Agreement shall terminate on December 31, 2024; and

WHEREAS, the parties desire to amend the Agreement to extend the time of the Agreement; and

WHEREAS, Implementer and MCE entered into a non-disclosure agreement on March 20, 2019 which states Implementer's purposes in Schedule A ("NDA"); and

WHEREAS, Implementer and MCE have updated Implementer's stated purposes in Schedule A of the NDA; and

WHEREAS, MCE requires Implementer to comply with certain protocols in order to access MCE's Customer Relationship Management software ("CRM Access Protocols"); and

WHEREAS, the parties desire to add the CRM Access Protocols as an exhibit to the Agreement;

NOW, THEREFORE, the parties agree to modify Section 4, update the date of Marin Clean Energy Non-Disclosure Agreement between the parties referenced in sections 10.1, 10.3 and 10.5, and add Exhibit D, as set forth below.

#### Agreement

1. Section 4 is hereby amended to read as follows:

#### TERM OF AGREEMENT:

This Agreement shall commence on **September 3, 2021** (Effective Date"), and shall terminate on **March 31, 2026**, unless earlier terminated pursuant the terms and conditions set forth in Section 12.

- 2. The date of the Marin Clean Energy Non-Disclosure Agreement between the parties referenced in sections 10.1, 10.3, and 10.5, is changed from **March 20, 2019** to **January 20, 2023**.
- 3. The following Exhibit D is hereby added to the Agreement to follow Exhibit C:

### EXHIBIT D MCE CRM ACCESS PROTOCOLS

Implementer shall provide the following protective measures under the Agreement in order to access the MCE Customer Relationship Management software ("MCE CRM") according to program needs up to the time/fees allowed under this Agreement.

This Exhibit D is applicable to all existing and any future schedules under this Agreement.

In order for Implementer to access MCE CRM, Implementer must first agree to and comply with the following protocols:

1. MCE CRM access is subject to the NDA between the Parties dated January 20, 2023.

- 2. <u>MCE CRM login information, passwords, and any information retrieved from MCE CRM shall be</u> treated as Confidential Information.
  - Confidential Information shall have the same meaning as defined in the MCE NDA between the Parties dated January 20, 2023.
  - No Implementer employee is to give, tell, or hint at their login information or password to another person under any circumstance.
  - MCE CRM passwords are required to be changed every 90 days.
  - MCE encourages strong passwords (such as minimum character length, and use of special characters) that are not reused for other logins.
  - MCE CRM shall only be accessed from an Internet Protocol (IP) address in the United States.
- 3. <u>MCE CRM access shall be provided through MCE's selected Single Sign-On (SSO) provider, Okta,</u> <u>Inc. or any MCE-designated SSO provider.</u>
- 4. MCE CRM access shall be restricted.
  - MCE CRM access shall only be provided to those employees of Implementer who have a "need to access" such information in the course of their duties with respect to Implementer's Services.
    - Implementer employees who access MCE CRM shall only update or view fields related to the tasks assigned.
    - Implementer shall maintain a list of Implementer employees that have been authorized to access MCE CRM.
      - The list shall be updated and verified by Implementer quarterly, upon Implementer employee turnover, and upon MCE's request.
  - Implementer employees who access MCE CRM shall first review and agree to be bound by these MCE CRM Access Protocols.
  - Implementer's use of the CRM and any data obtained from MCE's CRM is restricted to that which is necessary to provide the Services described in all existing and any future Schedules under this Agreement.
  - Except for data obtained by Implementer from MCE's CRM via an MCE-authorized application programming interface, Implementer shall not copy, download, record or reproduce in any way any data from MCE's CRM.
- 5. In the event of an employment status change for an Implementer employee who had been granted access to MCE CRM, Implementer shall provide the following information to MCE:
  - Name and email of pertinent Implementer employee.
  - Notification to MCE within 3 days of employment status change.
- 6. Implementer having any interaction with an MCE customer shall do the following:
  - Implementer shall comply at all times during the Term with any MCE-provided MCE cobranding and/or customer engagement protocol that provides MCE's expectations for customer interactions by Implementer. Failure of Implementer to comply at all times with this section will constitute a material breach pursuant to Agreement section 12, and may result in the discontinuation of work with MCE at MCE's request.
  - Implementer and any approved subcontractors responding to, or engaging directly with, MCE customers shall respond to direct customer inquiries within 3 business days after the inquiry is received. Unless otherwise agreed to, Implementer and subcontractors are to provide two options for customer contact (email and phone). Implementer shall provide MCE with a process to document any customer issues, escalations and resolutions.

4. Except as otherwise provided herein all terms and conditions of the Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed this FIRST AMENDMENT on the day first written above.

MARIN CLEAN ENERGY:

IMPLEMENTER:

-DocuSigned by: By:

Date: 1/24/2023

DocuSigned by: kecia Davison By: 26765C432D1741E.

Date: 1/24/2023



February 3, 2023

TO:	MCE Executive Committee
FROM:	Alex Valenti, Senior Customer Programs Manager
RE:	Seventh Agreement with The Energy Alliance Association (TEAA) (Agenda Item #07)
ATTACHMENT:	Proposed Seventh Agreement with The Energy Alliance Association

Dear Executive Committee Members:

**Summary:** The proposed contract with The Energy Alliance Association ("TEAA") would support a new equity-focused commercial energy efficiency program ("Program"). The Program secured funding from the California Public Utilities Commission ("CPUC") through the end of 2023 and a funding request has been included in the current 2024-2027 Energy Efficiency Business Plan Application, which is awaiting CPUC approval.

This Program would be focused on commercial businesses that are in disadvantaged communities and low-income census tracts. The Program would include stakeholder engagement to guide Program design and marketing, recruitment of local contractors, with a focus on quantifying the non-energy benefits of the services provided.

MCE issued a request for proposals in August 2022 to identify a vendor to develop and implement the new Program. Five vendors provided proposals and three vendors participated in the interview process. A panel of reviewers scored all vendors and TEAA proposal and interview resulted in the highest score.

TEAA has a long track record of successful program implementation with MCE, delivering core elements of the Commercial Energy Efficiency program since 2017.

If approved, the services provided by TEAA through the proposed 7th Agreement with TEAA would include stakeholder engagement, Program development, marketing and management throughout the proposed contract term (February 3, 2023 - January 30, 2025). Staff recommends approving the proposed 7th Agreement with TEAA in the amount of \$577,000, effective through January 30, 2025.

**Fiscal Impacts:** Expenditures related to the proposed 7th Agreement with TEAA would be funded completely from energy efficiency program funds allocated by the CPUC.

**Recommendation:** Approve the proposed Seventh Agreement with The Energy Alliance Association.

# MARIN CLEAN ENERGY STANDARD SHORT FORM CONTRACT SEVENTH AGREEMENT BY AND BETWEEN MARIN CLEAN ENERGY AND THE ENERGY ALLIANCE ASSOCIATION (TEAA)

 THIS SEVENTH AGREEMENT ("Agreement") is made and entered into on
 by and between MARIN

 CLEAN ENERGY (hereinafter referred to as "MCE") and THE ENERGY ALLIANCE ASSOCIATION, INC. (TEAA), a California s 

 corporation with principal address at: 1415 Fulton Road #476, Santa Rosa, California 95403 (hereinafter referred to as "Implementer")

 (each, a "Party," and, together, the "Parties").

### **RECITALS:**

WHEREAS, MCE desires to retain Implementer to provide the services described in Exhibit A attached hereto and by this reference made a part hereof ("Services");

WHEREAS, Implementer desires to provide the Services to MCE;

**NOW**, **THEREFORE**, in consideration of the mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

## 1. <u>SCOPE OF SERVICES</u>:

Implementer agrees to provide all of the Services in accordance with the terms and conditions of this Agreement. "Services" shall also include any other work performed by Implementer pursuant to this Agreement.

## 2. FEES AND PAYMENT SCHEDULE; INVOICING:

The fees and payment schedule for furnishing Services under this Agreement shall be based on the rate schedule which is attached hereto as **Exhibit B** and by this reference incorporated herein. Said fees shall remain in effect for the entire term of the Agreement ("Term"). Implementer shall provide MCE with Implementer's Federal Tax I.D. number prior to submitting the first invoice. Implementer is responsible for billing MCE in a timely and accurate manner. Implementer shall email invoices to MCE on a monthly basis for any Services rendered or expenses incurred hereunder. Fees and expenses invoiced beyond ninety (90) days will not be reimbursable. The final invoice must be submitted within thirty (30) days of completion of the stated scope of services or termination of this Agreement. MCE will process payment for undisputed invoiced amounts within thirty (30) days.

## 3. MAXIMUM COST TO MCE:

In no event will the cost to MCE for the Services to be provided herein exceed the maximum sum of \$572,000.

## 4. <u>TERM OF AGREEMENT</u>:

This Agreement shall commence on **February 3, 2023** ("Effective Date") and shall terminate on **January 30, 2025**, unless earlier terminated pursuant to the terms and conditions set forth in Section 12.

## 5. <u>REPRESENTATIONS; WARRANTIES; COVENANTS</u>:

- 5.1. CONTRACTOR REPRESENTATIONS AND WARRANTIES. Implementer represents, warrants and covenants that (a) it is a s-corporation duly organized, validly existing and in good standing under the laws of the State of California, (b) it has full power and authority and all regulatory authorizations required to execute, deliver and perform its obligations under this Agreement and all exhibits and addenda and to engage in the business it presently conducts and contemplates conducting, (c) it is and will be duly licensed or qualified to do business and in good standing under the laws of the State of California and each other jurisdiction wherein the nature of its business transacted by it makes such licensing or qualification necessary and where the failure to be licensed or qualified would have a material adverse effect on its ability to perform its obligations hereunder, (d) it is qualified and competent to render the Services and possesses the requisite expertise to perform its obligations hereunder, (e) the execution, delivery and performance of this Agreement and all exhibits and addenda hereto are within its powers and do not violate the terms and conditions in its governing documents, any contracts to which it is a party or any law, rule, regulation, order or the like applicable to it, (f) this Agreement and each exhibit and addendum constitutes its legally valid and binding obligation enforceable against it in accordance with its terms, and (g) it is not bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming bankrupt.
- **5.2. COMPLIANCE WITH APPLICABLE LAW.** At all times during the Term and the performance of the Services, Implementer shall comply with all applicable federal, state and local laws, regulations, ordinances and resolutions ("Applicable Law")

- **5.3.** LICENSING. At all times during the performance of the Services, Implementer represents, warrants and covenants that it has and shall obtain and maintain, at its sole cost and expense, all required permits, licenses, certificates and registrations required for the operation of its business and the performance of the Services. Implementer shall promptly provide copies of such licenses and registrations to MCE at the request of MCE.
- **5.4. NONDISCRIMINATORY EMPLOYMENT.** Implementer shall not unlawfully discriminate against any individual based on race, color, religion, nationality, sex, sexual orientation, gender identity, age or condition of disability. Implementer understands and agrees that Implementer is bound by and shall comply with the nondiscrimination mandates of all federal, state, and local statutes, regulations, and ordinances.
- 5.5. PERFORMANCE ASSURANCE; BONDING. At all times during the performance of the Services, Implementer represents, warrants and covenants that it has and shall obtain and maintain, at its sole cost and expense, all bonding requirements of the California Implementers State License Board ("CSLB"), as may be applicable. Regardless of the specific Services provided, Implementer shall also maintain any payment and/or performance assurances as may be requested by MCE during the performance of the Services.
- 5.6. SAFETY. At all times during the performance of the Services, Implementer represents, warrants and covenants that it shall:
  - a) abide by all applicable federal and state Occupational Safety and Health Administration requirements and other applicable federal, state, and local rules, regulations, codes and ordinances to safeguard persons and property from injury or damage;
  - b) abide by all applicable MCE security procedures, rules and regulations and cooperate with MCE security personnel whenever on MCE's property;
  - c) abide by MCE's standard safety program contract requirements as may be provided by MCE to Implementer from time to time;
  - d) provide all necessary training to its employees, and require Subcontractors to provide training to their employees, about the safety and health rules and standards required under this Agreement;
  - e) have in place an effective Injury and Illness Prevention Program that meets the requirements all applicable laws and regulations, including but not limited to Section 6401.7 of the California Labor Code. Additional safety requirements (including MCE's standard safety program contract requirements) are set forth elsewhere in the Agreement, as applicable, and in MCE's safety handbooks as may be provided by MCE to Implementer from time to time;
  - f) be responsible for initiating, maintaining, monitoring and supervising all safety precautions and programs in connection with the performance of the Agreement; and
  - g) monitor the safety of the job site(s), if applicable, during the performance of all Services to comply with all applicable federal, state, and local laws and to follow safe work practices.

## 5.7. BACKGROUND CHECKS.

- a) Implementer hereby represents, warrants and covenants that any employees, members, officers, contractors, Subcontractors and agents of Implementer (each, a "Implementer Party," and, collectively, the "Implementer Parties") having or requiring access to MCE's assets, premises, customer property ("Covered Personnel") shall have successfully passed background screening on each such individual, prior to receiving access, which screening may include, among other things to the extent applicable to the Services, a screening of the individual's educational background, employment history, valid driver's license, and court record for the seven (7) year period immediately preceding the individual's date of assignment to perform the Services.
- b) Notwithstanding the foregoing and to the extent permitted by applicable law, in no event shall Implementer permit any Covered Personnel to have one or more convictions during the seven (7) year period immediately preceding the individual's date of assignment to perform the Services, or at any time after the individual's date of, assignment to perform the Services, for any of the following ("Serious Offense"): (i) a "serious felony," similar to those defined in California Penal Code Sections 1192.7(c) and 1192.8(a), or a successor statute, or (ii) any crime involving fraud (such as, but not limited to, crimes covered by California Penal Code Sections 476, 530.5, 550, and 2945, California Corporations Code 25540), embezzlement (such as, but not limited to, crimes covered by California Penal Code Sections 484 and 503 et seq.), or racketeering (such as, but not limited to, crimes covered by California Penal Code Section 186 or the Racketeer Influenced and Corrupt Organizations("RICO") Statute (18 U.S.C. Sections 1961-1968)).
- c) To the maximum extent permitted by applicable law, Implementer shall maintain documentation related to such background and drug screening for all Covered Personnel and make it available to MCE for audit if required pursuant to the audit provisions of this Agreement.
- d) To the extent permitted by applicable law, Implementer shall notify MCE if any of its Covered Personnel is charged with or convicted of a Serious Offense during the term of this Agreement. Implementer shall also immediately prevent that employee, representative, or agent from performing any Services.

- **5.8. FITNESS FOR DUTY**. Implementer shall ensure that all Covered Personnel report to work fit for their job. Covered Personnel may not consume alcohol while on duty and/or be under the influence of drugs or controlled substances that impair their ability to perform the Services properly and safely. Implementer shall, and shall cause its Subcontractors to, have policies in place that require their employees, contractors, subcontractors and agents to report to work in a condition that allows them to perform the work safely. For example, employees should not be operating equipment under medication that creates drowsiness.
- **5.9. QUALITY ASSURANCE PROCEDURES**. Implementer shall comply with the Quality Assurance Procedures identified in Exhibit A (if any) (the "Quality Assurance Procedures"). Additionally, Quality Assurance Procedures must include, but are not limited to: (i) industry standard best practices; (ii) procedures that ensure customer satisfaction; and (iii) any additional written direction from MCE.
- **5.10. ASSIGNMENT OF PERSONNEL**. The Implementer shall not substitute any personnel for those specifically named in its proposal, if applicable, unless personnel with substantially equal or better qualifications and experience are provided, acceptable to MCE, as is evidenced in writing.
- 5.11. ACCESS TO CUSTOMER SITES. Implementer shall be responsible for obtaining any and all access rights for Implementer Parties, from customers and other third parties to the extent necessary to perform the Services. Implementer shall also procure any and all access rights from Implementer Parties, customers and other third parties in order for MCE and California Public Utilities Commission ("CPUC") employees, representatives, agents, designees and contractors to inspect the Services.

## 6. INSURANCE:

At all times during the Term and the performance of the Services, Implementer shall maintain the insurance coverages set forth below. All such insurance coverage shall be substantiated with a certificate of insurance and must be signed by the insurer or its representative evidencing such insurance to MCE. The general liability policy shall be endorsed naming Marin Clean Energy and its employees, directors, officers, and agents as additional insureds. The certificate(s) of insurance and required endorsement shall be furnished to MCE prior to commencement of Services. Certificate(s) of insurance must be current as of the Effective Date, and shall remain in full force and effect through the Term. If scheduled to lapse prior to termination date, certificate(s) of insurance must be automatically updated before final payment may be made to Implementer. Each certificate of insurance shall provide for thirty (30) days' advance written notice to MCE of any cancellation or reduction in coverage. Insurance coverages shall be payable on a per occurrence basis only.

Nothing in this Section 6 shall be construed as a limitation on Implementer's indemnification obligations in Section 17 of this Agreement.

Should Implementer fail to provide and maintain the insurance required by this Agreement, in addition to any other available remedies at law or in equity, MCE may suspend payment to the Implementer for any Services provided during any period of time that insurance was not in effect and until such time as the Implementer provides adequate evidence that Implementer has obtained the required insurance coverage.

- 6.1. GENERAL LIABILITY. The Implementer shall maintain a commercial general liability insurance policy in an amount of no less than two million dollars (\$2,000,000) with a four-million-dollar (\$4,000,000) aggregate limit. "Marin Clean Energy" shall be named as an additional insured on the commercial general liability policy and the certificate of insurance shall include an additional endorsement page (see sample form: ISO CG 20 10 11 85).
- **6.2. AUTO LIABILITY.** Where the Services to be provided under this Agreement involve or require the use of any type of vehicle by Implementer in order to perform said Services, Implementer shall also provide comprehensive business or commercial automobile liability coverage including non-owned and hired automobile liability in the amount of one million dollars combined single limit (\$1,000,000).
- 6.3. WORKERS' COMPENSATION. The Implementer acknowledges that the State of California requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code. If Implementer has employees, it shall comply with this requirement and a copy of the certificate evidencing such insurance or a copy of the Certificate of Consent to Self-Insure shall be provided to MCE prior to commencement of Services.

## 6.4. INTENTIONALLY OMITTED

**6.5. PRIVACY AND CYBERSECURITY LIABILITY.** Implementer shall maintain privacy and cybersecurity liability (including costs arising from data destruction, hacking or intentional breaches, crisis management activity related to data breaches, and legal claims for security breach, privacy violations, and notification costs) of at least \$1,000,000 US per occurrence.

## 7. FINANCIAL STATEMENTS:

Implementer shall deliver financial statements on an annual basis or as may be reasonably requested by MCE from time to time. Such financial statements or documents shall be for the most recently available audited or reviewed period and prepared in accordance with generally-accepted accounting principles.

## 8. SUBCONTRACTING:

The Implementer shall not subcontract nor assign any portion of the work required by this Agreement without prior, written approval of MCE, except for any subcontract work expressly identified herein in Exhibit A. If Implementer hires a subcontractor under this Agreement (a "Subcontractor"), Subcontractor shall be bound by all applicable terms and conditions of this Agreement, and Implementer shall ensure the following:

- 8.1. Subcontractor shall comply with the following terms of this Agreement: Sections 9, 10, Exhibit A.
- **8.2.** Subcontractor shall provide, maintain and be bound by the representations, warranties and covenants of Implementer contained in Section 5 hereof (as may be modified to be applicable to Subcontractor with respect to Section 5.1(a) hereof) at all times during the Term of such subcontract and its provision of Services.
- **8.3.** Subcontractor shall comply with the terms of Section 6 above, including, but not limited to providing and maintaining insurance coverage(s) identical to what is required of Implementer under this Agreement, and shall name MCE as an additional insured under such policies. Implementer shall collect, maintain, and promptly forward to MCE current evidence of such insurance provided by its Subcontractor. Such evidence of insurance shall be included in the records and is therefore subject to audit as described in Section 9 hereof.
- **8.4.** Subcontractor shall be contractually obligated to indemnify the MCE Parties (as defined in Section 17 hereof) pursuant to the terms and conditions of Section 17 hereof.
- **8.5.** Subcontractors shall not be permitted to further subcontract any obligations under this Agreement.

Implementer shall be solely responsible for ensuring its Subcontractors' compliance with the terms and conditions of this Agreement made applicable above and to collect and maintain all documentation and current evidence of such compliance. Upon request by MCE, Implementer shall promptly forward to MCE evidence of same. Nothing contained in this Agreement or otherwise stated between the Parties shall create any legal or contractual relationship between MCE and any Subcontractor, and no subcontract shall relieve Implementer of any of its duties or obligations under this Agreement. Implementer's obligation to pay its Subcontractors is an independent obligation from MCE's obligation to make payments to Implementer. As a result, MCE shall have no obligation to pay or to enforce the payment of any monies to any Subcontractor.

## 9. <u>RETENTION OF RECORDS AND AUDIT PROVISION:</u>

Implementer shall keep and maintain on a current basis full and complete records and documentation pertaining to this Agreement and the Services, whether stored electronically or otherwise, including, but not limited to, valuation records, accounting records, documents supporting all invoices, employees' time sheets, receipts and expenses, and all customer documentation and correspondence (the "Records"). MCE shall have the right, during regular business hours, to review and audit all Records during the Term and for at least five (5) years from the date of the completion or termination of this Agreement. Any review or audit may be conducted on Implementer's premises or, at MCE's option, Implementer shall provide all records within a maximum of fifteen (15) days upon receipt of written request from MCE. Implementer shall refund any monies erroneously charged. Implementer shall have an opportunity to review and respond to or refute any report or summary of audit findings, and shall promptly refund any overpayments made by MCE based on undisputed audit findings.

### 10. DATA, CONFIDENTIALITY AND INTELLECTUAL PROPERTY:

**10.1. DEFINITION OF "MCE DATA"**. "MCE Data" shall mean all data or information provided by or on behalf of MCE, including but not limited to, customer Personal Information; energy usage data relating to, of, or concerning, provided by or on behalf of any customers; all data or information input, information systems and technology, software, methods, forms, manuals, and designs, transferred, uploaded, migrated, or otherwise sent by or on behalf of MCE to Implementer as MCE may approve of in advance and in writing (in each instance); account numbers, forecasts, and other similar information disclosed to or otherwise made available to Implementer. MCE Data shall also include all data and materials provided by or made available to Implementer by MCE's licensors, including but not limited to, any and all survey responses, feedback, and reports subject to any limitations or restrictions set forth in the agreements between MCE and their licensors.

"Confidential Information" under this Agreement shall have the same meaning as defined in the Marin Clean Energy Non-Disclosure Agreement between the Parties dated **January 19, 2023**.

- **10.2. DEFINITION OF "PERSONAL INFORMATION".** "Personal Information" includes but is not limited to the following: personal and entity names, e-mail addresses, addresses, phone numbers, any other public or privately-issued identification numbers, IP addresses, MAC addresses, and any other digital identifiers associated with entities, geographic locations, users, persons, machines or networks. Implementer shall comply with all applicable federal, state and local laws, rules, and regulations related to the use, collection, storage, and transmission of Personal Information.
- 10.3. MCE DATA SECURITY MEASURES. Prior to Implementer receiving any MCE Data, Implementer shall comply, and at all times thereafter continue to comply, in compliance with MCE's Data security policies set forth in MCE Policy 009 (available upon request) and MCE's Advanced Metering Infrastructure (AMI) Data Security and Privacy Policy ("Security Measures") and pursuant to MCE's Confidentiality provisions in Section 5 of the Marin Clean Energy Non-Disclosure Agreement between the parties dated January 19, 2023, and as set forth in MCE Policy 001 Confidentiality. MCE's Security Measures and Confidentiality provisions require Implementer to adhere to reasonable administrative, technical, and physical safeguard protocols to protect the MCE's Data from unauthorized handling, access, destruction, use, modification or disclosure.
- 10.4. CONTRACTOR DATA SECURITY MEASURES. Additionally, Implementer shall, at its own expense, adopt and continuously implement, maintain and enforce reasonable technical and organizational measures consistent with the sensitivity of Personal Information and Confidential Information including, but not limited to, measures designed to (1) prevent unauthorized access to, and otherwise physically and electronically protect, the Personal Information and Confidential Information, and (2) protect MCE content and MCE Data against unauthorized or unlawful access, disclosure, alteration, loss, or destruction.
- **10.5. RETURN OF MCE DATA**. Promptly after this Agreement terminates, (i) Implementer shall securely destroy all MCE Data in its possession and certify the secure destruction in writing to MCE, and (ii) each Party shall return (or if requested by the disclosing Party, destroy) all other Confidential Information and property of the other (if any), provided that Implementer's attorney shall be permitted to retain a copy of such records or materials solely for legal purposes.

### 10.6. OWNERSHIP AND USE RIGHTS.

- a) MCE Data. Unless otherwise expressly agreed to in writing by the Parties, MCE shall retain all of its rights, title and interest in MCE's Data.
- b) Intellectual Property. Unless otherwise expressly agreed to in writing by the Parties, any and all materials, information, or other intellectual property created, prepared, accumulated or developed by Implementer or any Implementer Party under this Agreement ("Intellectual Property"), including finished and unfinished inventions, processes, templates, documents, drawings, computer programs, designs, calculations, valuations, maps, plans, workplans, text, filings, estimates, manifests, certificates, books, specifications, sketches, notes, reports, summaries, analyses, manuals, visual materials, data models and samples, including summaries, extracts, analyses and preliminary or draft materials developed in connection therewith, shall be owned by MCE. MCE shall have the exclusive right to use Intellectual Property in its sole discretion and without further compensation to Implementer or to any other party. Implementer shall, at MCE's expense, provide Intellectual Property to MCE or to any party MCE may designate upon written request. Implementer may keep one file reference copy of Intellectual Property prepared for MCE solely for legal purposes and if otherwise agreed to in writing by MCE. In addition, Implementer may keep one copy of Intellectual Property if otherwise agreed to in writing by MCE.
- c) Intellectual Property shall be owned by MCE upon its creation. Implementer agrees to execute any such other documents or take other actions as MCE may reasonably request to perfect MCE's ownership in the Intellectual Property.
- d) Implementer's Pre-Existing Materials. If, and to the extent Implementer retains any preexisting ownership rights ("Implementer's Pre-Existing Materials") in any of the materials furnished to be used to create, develop, and prepare the Intellectual Property, Implementer hereby grants MCE on behalf of its customers and the CPUC for governmental and regulatory purposes an irrevocable, assignable, non-exclusive, perpetual, fully paid up, worldwide, royalty-free, unrestricted license to use and sublicense others to use, reproduce, display, prepare and develop derivative works, perform, distribute copies of any intellectual or proprietary property right of Implementer or any Implementer Party for the sole purpose of using such Intellectual Property for the conduct of MCE's business and for disclosure to the CPUC for governmental and regulatory purposes related thereto. Unless otherwise expressly agreed to by the Parties, Implementer's Pre-Existing Materials to be furnished or used to prepare, create, develop or otherwise manifest the Intellectual Property must be expressly disclosed to MCE prior to performing any Services under this Agreement. Any such Pre-Existing Material that is modified by work under this Agreement is owned by MCE.
- **10.7. EQUITABLE RELIEF.** Each Party acknowledges that a breach of this Section 10 would cause irreparable harm and significant damages to the other Party, the degree of which may be difficult to ascertain. Accordingly, each Party agrees that MCE shall

have the right to obtain immediate equitable relief to enjoin any unauthorized use or disclosure of MCE Data or Personal Information, in addition to any other rights and remedies that it may have at law or otherwise; and Implementer shall have the right to obtain immediate equitable relief to enjoin any unauthorized use or disclosure of Implementer's Pre-Existing Materials, in addition to any other rights and remedies that it may have at law or otherwise.

## 11. FORCE MAJEURE:

A Party shall be excused for failure to perform its obligations under this Agreement if such obligations are prevented by an event of Force Majeure (as defined below), but only for so long as and to the extent that the Party claiming Force Majeure ("Claiming Party") is actually so prevented from performing and provided that (a) the Claiming Party gives written notice and full particulars of such Force Majeure to the other Party (the "Affected Party") promptly after the occurrence of the event relied on, (b) such notice includes an estimate of the expected duration and probable impact on the performance of the Claiming Party's obligations under this Agreement, (c) the Claiming Party furnishes timely regular reports regarding the status of the Force Majeure, including updates with respect to the data included in Section 10 above during the continuation of the delay in the Claiming Party's performance, (d) the suspension of such obligations sought by Claiming Party is of no greater scope and of no longer duration than is required by the Force Majeure, (e) no obligation or liability of either Party which became due or arose before the occurrence of the event causing the suspension of performance shall be excused as a result of the Force Majeure; (f) the Claiming Party shall exercise commercially reasonable efforts to mitigate or limit the interference, impairment and losses to the Affected Party; (g) when the Claiming Party is able to resume performance of the affected obligations under this Agreement, the Claiming Party shall give the Affected Party written notice to that effect and promptly shall resume performance under this Agreement. "Force Majeure" shall mean acts of God such as floods, earthquakes, fires, orders or decrees by a governmental authority, civil or military disturbances, wars, riots, terrorism or threats of terrorism, utility power shutoffs, strikes, labor disputes, pandemic, or other forces over which the responsible Party has no control and which are not caused by an act or omission of such Party.

## 12. TERMINATION:

- 12.1. If the Implementer fails to provide in any manner the Services required under this Agreement, otherwise fails to comply with the terms of this Agreement, violates any Applicable Law, makes an assignment of any general arrangement for the benefit of creditors, files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause under any bankruptcy or similar law for the protection of creditors, or has such petition filed against it, otherwise becomes bankrupt or insolvent (however evidenced), or becomes unable to pay its debts as they fall due, then MCE may terminate this Agreement by giving five (5) business days' written notice to Implementer.
- **12.2.** Either Party hereto may terminate this Agreement for any reason by giving thirty (30) calendar days' written notice to the other Party. Notice of termination shall be by written notice to the other Party and be sent by registered mail or by email to the email address listed in Section 19.
- 12.3. In the event of termination not the fault of the Implementer, the Implementer shall be paid for Services performed up to the date of termination in accordance with the terms of this Agreement so long as proof of required insurance is provided for the periods covered in the Agreement or Amendment(s). Notwithstanding anything contained in this Section 12, in no event shall MCE be liable for lost or anticipated profits or overhead on uncompleted portions of the Agreement. Implementer shall not enter into any agreement, commitments or subcontracts that would incur significant cancelation or termination costs without prior written approval of MCE, and such written approval shall be a condition precedent to the payment of any cancellation or termination charges by MCE under this Section 12. Also, as a condition precedent to the payment of any cancellation or termination charges by MCE under this Section 12, Implementer shall have delivered to MCE any and all Intellectual Property (as defined in Section 10.6(b)) prepared for MCE before the effective date of such termination.
- **12.4.** MCE may terminate this Agreement if funding for this Agreement is reduced or eliminated by a third-party funding source.
- **12.5.** Without limiting the foregoing, if either Party's activities hereunder become subject to law or regulation of any kind, which renders the activity illegal, unenforceable, or which imposes additional costs on such Party for which the parties cannot mutually agree upon an acceptable price modification, then such Party shall at such time have the right to terminate this Agreement upon written notice to the other Party with respect to the illegal, unenforceable, or uneconomic provisions only, and the remaining provisions will remain in full force and effect.
- **12.6.** Upon termination of this Agreement for any reason, Implementer shall and shall cause each Implementer Party to bring the Services to an orderly conclusion as directed by MCE and shall return all MCE Data (as defined in Section 10.1 above) and Intellectual Property to MCE.
- **12.7.** Notwithstanding the foregoing, this Agreement shall be subject to changes, modifications, or termination by order or directive of the CPUC. The CPUC may from time to time issue an order or directive relating to or affecting any aspect of this Agreement,

in which case MCE shall have the right to change, modify or terminate this Agreement in any manner to be consistent with such order or directive.

**12.8.** Notwithstanding any provision herein to the contrary, Sections 2, 3, 8.4, 9, 10, 12, 15, 16, 17, 18, 19, 20, 21, 22, 24 and Exhibit B of this Agreement shall survive the termination or expiration of this Agreement.

### 13. ASSIGNMENT:

The rights, responsibilities, and duties under this Agreement are personal to the Implementer and may not be transferred or assigned without the express prior written consent of MCE.

## 14. AMENDMENT; NO WAIVER:

This Agreement may be amended or modified only by written agreement of the Parties. Failure of either Party to enforce any provision or provisions of this Agreement will not waive any enforcement of any continuing breach of the same provision or provisions or any breach of any provision or provisions of this Agreement.

## 15. DISPUTES:

Either Party may give the other Party written notice of any dispute which has not been resolved at a working level. Any dispute that cannot be resolved between Implementer's contract representative and MCE's contract representative by good faith negotiation efforts shall be referred to Legal Counsel of MCE and an officer of Implementer for resolution. Within 20 calendar days after delivery of such notice, such persons shall meet at a mutually acceptable time and place, and thereafter as often as they reasonably deem necessary to exchange information and to attempt to resolve the dispute. If MCE and Implementer shall have the right to pursue all rights and remedies that may be available at law or in equity. All negotiations and any mediation agreed to by the Parties are confidential and shall be treated as compromise and settlement negotiations, to which Section 1119 of the California Evidence Code shall apply, and Section 1119 is incorporated herein by reference.

## 16. JURISDICTION AND VENUE:

This Agreement shall be construed in accordance with the laws of the State of California and the Parties hereto agree that venue shall be in Marin County, California.

### 17. INDEMNIFICATION:

To the fullest extent permitted by Applicable Law, Implementer shall indemnify, defend, and hold MCE and its employees, officers, directors, representatives, and agents ("MCE Parties"), harmless from and against any and all actions, claims, liabilities, losses, costs, damages, and expenses (including, but not limited to, litigation costs, attorney's fees and costs, physical damage to or loss of tangible property, and injury or death of any person) arising out of, resulting from, or caused by: a) the negligence, recklessness, intentional misconduct, fraud of all Implementer Parties; b) the failure of a Implementer Party to comply with the provisions of this Agreement or Applicable Law; or c) any defect in design, workmanship, or materials carried out or employed by any Implementer Party.

## 18. NO RECOURSE AGAINST CONSTITUENT MEMBERS OF MCE:

MCE is organized as a Joint Powers Authority in accordance with the Joint Exercise of Powers Act of the State of California (Government Code Section 6500, et seq.). Pursuant to MCE's Joint Powers Agreement, MCE is a public entity separate from its constituent members. MCE shall solely be responsible for all debts, obligations, and liabilities accruing and arising out of this Agreement. No Implementer Party shall have rights and nor shall any Implementer Party make any claims, take any actions, or assert any remedies against any of MCE's constituent members in connection with this Agreement.

#### 19. INVOICES; NOTICES:

This Agreement shall be managed and administered on MCE's behalf by the Contract Manager named below. All invoices shall be submitted by email to:

Email Address:	invoices@mcecleanenergy.org

All other notices shall be given to MCE at the following location:

Contract Manager:	Troy Nordquist
MCE Address:	1125 Tamalpais Avenue San Rafael, CA 94901
Email Address:	contracts@mcecleanenergy.org
Telephone No.:	(925) 378-6767

#### Notices shall be given to Implementer at the following address:

Implementer:	Katie Moore
Address:	1415 Fulton Road Suite 476
	Santa Rosa, California 95403
Email Address:	katie@teaa.net
Telephone No.:	(707) 322-0171

#### 20. ENTIRE AGREEMENT; ACKNOWLEDGMENT OF EXHIBITS:

This Agreement along with the attached Exhibits marked below constitutes the entire Agreement between the Parties. In the event of a conflict between the terms of this Agreement and the terms in any of the following Exhibits, the terms in this Agreement shall govern.

	$\boxtimes$	Check applicable Exhibits	CONTRACTOR'S INITIALS	MCE'S INITIALS
<u>EXHIBIT A.</u>	x	Scope of Services		
<u>exhibit B.</u>	x	Fees and Payment		
<u>EXHIBIT C.</u>	x	Energy Efficiency Program Terms		

#### 21. <u>SEVERABILITY</u>:

Should any provision of this Agreement be held invalid or unenforceable by a court of competent jurisdiction, such invalidity will not invalidate the whole of this Agreement, but rather, the remainder of the Agreement which can be given effect without the invalid provision, will continue in full force and effect and will in no way be impaired or invalidated.

#### 22. INDEPENDENT CONTRACTOR:

Implementer is an independent contractor to MCE hereunder. Nothing in this Agreement shall establish any relationship of partnership, joint venture, employment or franchise between MCE and any Implementer Party. Neither MCE nor any Implementer Party will have the

power to bind the other or incur obligations on the other's behalf without the other's prior written consent, except as otherwise expressly provided for herein.

## 23. TIME:

Time is of the essence in this Agreement and each and all of its provisions.

### 24. THIRD PARTY BENEFICIARIES:

The Parties agree that there are no third-party beneficiaries to this Agreement either express or implied.

### 25. FURTHER ACTIONS:

The Parties agree to take all such further actions and to execute such additional documents as may be reasonably necessary to effectuate the purposes of this Agreement.

## 26. PREPARATION OF AGREEMENT:

This Agreement was prepared jointly by the Parties, each Party having had access to advice of its own counsel, and not by either Party to the exclusion of the other Party, and this Agreement shall not be construed against either Party as a result of the manner in which this Agreement was prepared, negotiated or executed.

## 27. DIVERSITY SURVEY:

Pursuant to Senate Bill 255 which amends Section 366.2 of the California Public Utilities Code, MCE is required to submit to the California Public Utilities Commission an annual report regarding its procurement from women-owned, minority-owned, disabled veteran-owned and LGBT-owned business enterprises ("WMDVLGBTBE"). Consistent with these requirements, Implementer agrees to provide information to MCE regarding Implementer's status as a WMDVLGBTBE and any engagement of WMDVLGBTBEs in its provision of Services under this Agreement. Concurrently with the execution of this Agreement, Implementer agrees to complete and deliver MCE's Supplier Diversity Survey, found at the following link: <a href="https://form.asana.com/?k=jSGYk4x3sf2dHfSzywc2fg&d=163567039999692">https://form.asana.com/?k=jSGYk4x3sf2dHfSzywc2fg&d=163567039999692</a> (the "Diversity Survey"). Because MCE is required to submit annual reports and/or because the Diversity Survey may be updated or revised during the term of this Agreement, Implementer agrees to complete and deliver the Diversity Survey or a similar survey at the reasonable request of MCE and to otherwise reasonably cooperate with MCE to provide the information described above. Implementer shall provide all such information in the timeframe reasonably requested by MCE.

### 28. COUNTERPARTS:

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which shall be deemed one and the same Agreement.

### IN WITNESS WHEREOF, the parties have executed this Agreement on the date first above written. APPROVED BY

MARIN CLEAN ENERGY:	CONTRACTOR:
By:	By:
Name:	Name:
Title:	Title:
Date:	Date:
By: Chairperson	

Date:

# EXHIBIT A SCOPE OF SERVICES

Implementer will provide the following implementation services as requested and directed by MCE Customer Programs staff for MCE's Commercial Equity Program ("Program"), up to the maximum time/fees allowed under this Agreement.

The goal of the Program is to provide energy efficiency services to MCE Commercial Equity Customers. MCE Commercial Equity Customers ("Equity Customers") are MCE commercial customers with places of business that operate in: Disadvantaged Communities ("DAC"), defined as census tracts that score in the top 25% of the most current CalEnviroScreen, along with those that score within the highest 5% of CalEnviroScreen Pollution Burden but do not receive an overall CalEnviroScreen score; tribal lands; and/or low-income census tracts. Further definition of Program eligibility will be defined in the Program Implementation Plan ("PIP"). The following scope includes inclusive outreach efforts so that Equity Customers may have equal opportunity to seek energy efficiency services.

### Task 1: Stakeholder Outreach Campaign

#### Estimated time for completion: 30 business days

#### Estimated hours for completion: 240

In order to gain insights into market conditions and elicit feedback on how the Program can be most impactful, Implementer will conduct stakeholder outreach. This includes, but is not limited to, the following:

- Engage with Community Based Organizations ("CBO"), economic development organizations, MCE commercial customers, contractors, and vendors serving Equity Customers. Conduct online surveys and/or phone interviews with twenty (20) relevant CBOs across the four counties within MCE's service area to solicit feedback on the needs of Equity Customers as well as proposed Program elements.
- Conduct four (4) virtual CBO workshops (one for each county within MCE's service area) to introduce the Program.
- Create a survey of approximately 10 questions, agreed upon by both MCE and Implementer, for Equity Customers. Implementer will select survey recipients who represent a cross-section of MCE's commercial customers and facility types, ranging from small to large businesses. The survey will be available in both English and Spanish.
- Conduct surveys, by phone, email, online or in person, of forty (40) Equity Customers across the four counties
  within MCE's service area, distributed to reflect the estimated number of targeted Equity Customers in each
  county. Implementer will be available to work with Equity Customers to complete the standard survey by
  explaining the purpose for the outreach, Program parameters, and answering questions. Customers may also
  complete the survey online if they prefer.
- Work with MCE staff to analyze results of Task 1.

### **Deliverables:**

- 20 completed CBO surveys
- 4 virtual CBO workshops.
- Goal of 40 completed Equity Customer surveys.

# Task 2: Program Implementation Plan

### Estimated time for completion: 45 business days

#### Estimated hours for completion: 300

Implementer will develop and execute a PIP, subject to MCE's approval, based on input and feedback collected during Task 1. The PIP will be based on the current CPUC program templates provided by MCE. MCE staff will work with Implementer to refine and create a Program framework. The PIP will include, but not be limited to, the following:

- Program description and narrative;
- Marketing and outreach plan, subject to MCE Public Affairs team approval;
- Customer incentive details and delivery;
- Customer technical support description;
- Customer qualifying questionnaire;

- Program quality assurance plan (as referenced in section 5.9, "Quality Assurance Procedures"), including how Program will provide on-going technical support as needed to Equity Customers enrolled in the Program;
- Details surrounding the stakeholder feedback meetings which will occur twice per year;
- Program performance metrics, including energy and non-energy benefits; and
- Evaluation, Measurement & Verification ("EM&V") plan.

The Program will include HVAC Tune Up, Emporia Vue device distribution, and additional customer incentives developed as a result of stakeholder feedback received during Task 1. MCE will review and approve all measures and customer incentives prior to finalization of the PIP.

Implementer will assist MCE in developing materials for, and hosting, a public CPUC webinar prior to finalizing the PIP. MCE will invite energy efficiency stakeholders to provide feedback and input on the draft PIP, which will be reviewed during the webinar. Once the PIP is filed, the Program is considered launched.

### Deliverables:

- PIP.
- EM&V Plan, and associated program documents, completed within 45 days of commencement of Task 2.

### Task 3: Marketing and Outreach

### Estimated time for completion: Ongoing

Implementer will develop dedicated Program marketing materials, in coordination with MCE Customer Programs and MCE Public Affairs staff. All content related to the Program will utilize MCE branding and will be subject to MCE's Public Affairs staff approval. Contractor will develop a Program website and bilingual (English/Spanish) Program flyers. Throughout the Program, Implementer will utilize marketing efforts, including social media posts, additional flyers, and direct text/phone communications to targeted customers.

### Deliverables:

- Initial Program marketing materials, prepared within 90 days of contract execution.
- Ongoing marketing support throughout the term of the Agreement.
- At least one social media post per week beginning with Program launch.
- Sufficient customer outreach to meet Equity Customer enrollment goals outlined in Estimated Schedule for Program Year 1 outlined below.
- Send out monthly text/email communication to Equity Customers participating in the Program.

### Task 4: Program Management

### Estimated time for completion: Ongoing

Implementer will facilitate HVAC tune up and Emporia Vue device delivery services (as detailed below) to Equity Customers' business sites, provide all Program management tasks as defined in the PIP, and provide administrative support. This includes, but is not limited to, the following:

- Develop and periodically update MCE's PIP, Program M&V plans, and Annual Budget Advice Letter(s);
   Periodic updates will occur if there are any updates to the Program methods or qualifications;
- Periodically report on Program progress and forecast energy savings, cost effectiveness, etc. The frequency of reporting will vary depending on MCE and CPUC needs;
- Report on EM&V as defined in the PIP;
- Submit MCE's Savings Claims to CPUC and/or MCE's select contractor; and
- Provide ongoing quality assurance by evaluating the Program, all work performed by Contractor at Equity Customer sites, and soliciting customer feedback.

In addition, Implementer will manage the Program, using collaborative and effective community engagement strategies including:

- Engaging with CBOs and Equity Customers to assist in the design and promotion of the Program;
- Soliciting feedback and incorporating stakeholder input into the Program;
- Screening and selecting vendors who can and will perform energy efficiency services for Equity Customers;

- Participating in annual meetings to receive feedback from stakeholders. Details of the meetings are as follows:
   Program Year 2023
  - One virtual stakeholder feedback meeting in either Q3 or Q4 of 2023.
  - Both CBO contacts and Equity Customers will participate.
  - CBO participants will include those who completed the initial surveys and/or have worked with the Program.
  - Implementer will ask Equity Customers who have either completed surveys OR participated in the Program to participate.
  - Program Year 2024:
    - Stakeholder survey in May/June.
    - Stakeholder survey in November/December.
      - One stakeholder feedback meeting in either Q3 or Q4 of 2024.
        - Meeting will be virtual.
        - Both CBO participants and Equity Customers will participate.
    - CBO participants will include those who completed the initial surveys.
    - Implementer will ask Equity Customers who have either completed surveys or participated in the Program with energy efficiency installation services to participate in the stakeholder feedback meeting.

Implementer will coordinate the installation of the HVAC tune up, distribution of the Emporia Vue Utility Connect device,, and will provide additional incentives and services to Equity Customers as identified in the PIP. These services will be performed by vendors or directly by the Equity Customer.

For Equity Customers who opt to use vendors to perform the HVAC tune up and Emporia Vue installation services, Implementer will perform qualification, training, and management using existing processes, detailed below, of vendors who will be performing the deliverables below ("Vendors"). Implementer's screening of Vendors will include an application, verification of California contractor's license, and verification of insurance (general liability, automobile liability, workers' compensation) coverage. Vendors who are selected by Implementer to perform the HVAC and Emporia Vue services will receive support and training, including an initial one-on-one training with Implementer as well as ongoing support. Vendors may be assigned individual projects, and/or they may bring in their own project leads. Implementer is tasked with Vendor relationship management, communicating MCE Program expectations and requirements, as well as the assignment of projects within the Program.

Implementer will provide support to customers or facilities managers who opt to self-install a project or otherwise complete a project without a Vendor's involvement.

Implementer will inspect completed projects for quality assurance. Program-approved HVAC Vendors will verify HVAC tune up(s). MCE and Implementer will agree upon the details of inspection protocols during PIP development. If any Vendor receives a negative satisfaction review from an Equity Customer or if the Vendor's HVAC tune up or Emporia Vue installation receives unsatisfactory inspection results, that Vendor may be suspended from Program participation.

### **Deliverables:**

- Ongoing Program implementation and management, as described in the scope and further defined by the PIP.
- HVAC Tune Up.
  - Implementer will provide Equity Customers with HVAC tune up services. This task will be managed by Implementer and executed by subcontractors. The Program will utilize HVAC contractors based or operating within the targeted areas served by the Program. The scope of the HVAC tune up will include but is not limited to:
    - AC tune up (Based on ACCA 180 Standards);
    - HVAC tech measures load at actual unit, before and after tune up;
    - Refrigerant test and adjustment;
    - Economizer test and adjustment;
    - Indoor and outdoor coil washing;
    - Air filter replacement and adjustment;
    - Belt replacement to grip notch belts;
    - Drain line cleaning;
    - Indoor thermostat programming and/or reprogramming; and
    - Overall motor and electrical evaluation.
- Distribute Emporia Vue devices.

- The Emporia Vue Utility Connect device reads SmartMeter data and presents the owner of the SmartMeter the energy consumption data directly. The purpose of the device is to provide the Equity Customer with greater insight into facility operations and lead to better energy management.
- Implementer will distribute the Emporia Vue device to relevant Equity Customer after the Equity Customer enrolls in the Program. Implementer will provide the necessary training and support to help the Equity Customer successfully utilize the functionality of the Emporia Vue equipment. Implementer will provide technical support for the setup through a customer service phone and/or email through Emporia Vue. Additional customer support for the Emporia Vue device will be available through the Implementer's designated Program manager, who will be available Monday Friday 8:00am to 5:00 pm via cell phone and email. A third line of customer technical support will be available through Implementer's senior administrative staff, and can be accessed by calling Implementer's main phone number or sending an email to Implementer's general administrative email account, which is checked seven days per week.

At the direction of MCE Customer Programs staff, Implementer will coordinate and cooperate with other energy efficiency programs and/or other Program contractors to streamline Program delivery, reduce customer confusion, and align measures and customer incentives as directed by MCE Customer Programs staff. This may result in a request by MCE to limit scope of services (by geographic area served, or targeted measures) or to focus services in specific areas.

### **Estimated Schedule for Program Year 1:**

- PIP Filing to Day 60
  - Conduct initial outreach and engagement focused on a single targeted geographical area. Outreach geared toward identifying and enrolling Equity Customers.
  - Enroll 75 Equity Customers.
  - Distribute 75 Emporia Vue devices to applicable Equity Customers.
  - o Send out monthly text/email communications to Equity Customers participating in the Program.
  - Launch HVAC Tune Up portion of the Program by lining up local HVAC contractors for tune up.
  - o Identify potential Equity Customers to participate in HVAC tune up.
  - Launch additional incentive portion of Program.
- Program Day 61 to Day 151
  - o Review Program results from first 60 days. Make adjustments to Program as necessary.
  - Continue outreach and engagement. Identify and enroll Equity Customers.
  - Enroll 200 Equity Customers.
  - o Distribute 200 Emporia Vue devices to applicable Equity Customers.
  - o Send out monthly text/email communication to Equity Customers participating in the Program.
  - Continue providing assistance with HVAC tune up services. Continue to line up local HVAC contractors for HVAC tune up. Schedule and complete HVAC tune ups for 125 HVAC units.
  - Complete 40% of 2023 Program goals.
- Program Day 152 though end of Program Year 2023
  - Review Program results from first 90 days. Make adjustments to Program as necessary.
  - Continue outreach and engagement. Identify and enroll Equity Customers.
  - Enroll 225 Equity Customers.
  - o Distribute 225 Emporia Vue devices to applicable Equity Customers.
  - Send out monthly text/email communication to Equity Customers participating in the Program.
  - Continue providing assistance with HVAC tune up services. Schedule and complete tune ups for 125 HVAC units.
  - Complete 50% of Program goals.

# EXHIBIT B FEES AND PAYMENT SCHEDULE

For Services provided under this Agreement, MCE shall pay Implementer compensation in accordance with the amounts and payment schedules below. For time and material related scope items, MCE will compensate Implementer based on the schedule of rates indicated in Table 1 below.

#### Table 1: Hourly Rates

Personnel Type	Hourly Rate
Senior Staff	\$125
Dedicated Equity Program Manager	\$85
Project Manager	\$75
Marketing	\$65

## Table 2: Program Implementation Budget

Task Item	Description	Payment Method	Feb 2023 - 2024	Feb 2024 - 2025
1	Stakeholder Outreach	Time and Materials	\$30,000	\$10,000
2	Program Implementation Plan	Time and Materials	\$30,000	\$10,000
3	Marketing and Outreach	Time and Materials	\$20,000	\$30,000
4	Program Management	Time and Materials	\$142,000	\$300,000
	Total		\$222,000	\$350,000

Program incentive budget and incentive rates are indicated in Tables 3 and 4 below. Additional incentive rates will be developed and included in the PIP.

### Table 3 Program Incentive Budget

Program Year	2023	2024
HVAC Tune Up	\$100,000	\$140,000
Emporia View	\$30,000	\$45,000
Additional Customer Incentive	\$302,000	\$437,000
Total	\$432,000	\$622,000

# Table 4 Incentive Fees

Incentive Service	Rate
HVAC Tune Up	\$400.00/ HVAC unit
Emporia Vue	\$60.00/Device

Implementer will provide itemized invoices to MCE Customer Programs staff each month for services provided the month prior. Itemized invoices must be clearly marked with "7<sup>th</sup> Agreement". Invoices will not be paid until MCE Customer Programs staff gives written approval of each itemized invoice. Implementer will bill MCE monthly for services provided the month prior. In no event shall the total cost to MCE for the services provided herein exceed the **maximum sum of \$572,000** for the term of the Agreement.

# EXHIBIT C Energy Efficiency Program Terms

The terms below shall apply to all Implementer Parties providing Services under the Commercial Equity Program.

## 1. BILLING, ENERGY USE, AND PROGRAM TRACKING DATA:

- a) Implementer shall comply with and timely cooperate with all CPUC directives, activities, and requests regarding the Program and Project evaluation, measurement, and verification ("EM&V"). For the avoidance of doubt, it is the responsibility of Implementer to be aware of all CPUC requirements applicable to the Services of this Agreement.
- b) Implementer shall make available to MCE upon demand, detailed descriptions of the program, data tracking systems, baseline conditions, and participant data, including financial assistance amounts.
- c) Implementer shall make available to MCE any revisions to Implementer's program theory and logic model ("PTLM") and results from its quality assurance procedures, and comply with all MCE EM&V requirements, including reporting of progress and evaluation metrics.

# 2. WORKFORCE STANDARDS:

At all times during the Term of the Agreement, Implementer shall comply with, and shall cause all Implementer Parties to comply with, the workforce qualifications, certifications, standards and requirements set forth in this Exhibit D, Section 2 ("Workforce Standards"). The Workforce Standards shall be included in their entirety in MCE's Final Implementation Plan. If applicable, "Final Implementation Plan" is defined in the deliverables for the Services listed in Exhibit A. Prior to commencement of any Services, once per calendar year, and at any other time as may be requested by MCE, Implementer shall provide all documentation necessary to demonstrate to MCE's reasonable satisfaction that Implementer has complied with the Workforce Standards.

- 2.1. HVAC STANDARDS. For any non-residential project pursuant to this Agreement installing, modifying or maintaining a Heating Ventilation and Air Conditioning ("HVAC") system or component with incentives valued at \$3,000 or more, Implementer shall ensure that each worker or technician involved in the project, including all employees and agents of its Subcontractors, meets at least one of the following workforce criteria:
  - a) Completed an accredited HVAC apprenticeship;
  - b) Is enrolled in an accredited HVAC apprenticeship;
  - c) Completed at least five years of work experience at the journey level as defined by the California Department of Industrial Relations, Title 8, Section 205, of the California Code of Regulations, passed a practical and written HVAC system installation competency test, and received credentialed training specific to the installation of the technology being installed; or
  - d) Has a C-20 HVAC contractor license issued by the California Implementer's State Licensing Board.

This standard shall not apply where the incentive is paid to any manufacturer, distributor, or retailer of HVAC equipment, unless the manufacturer, distributor, or retailer installs or contracts for the installation of the equipment.

2.2. ADVANCED LIGHTING CONTROLS STANDARDS. For any non-residential project pursuant to this Agreement involving installation, modification, or maintenance of lighting controls with incentives valued at \$2,000 or more, Implementer shall ensure that all workers or technicians involved in the project, including those of its Subcontractors are certified by the California Advanced Lighting Controls Training Program ("CALTP"). This requirement shall not apply where the incentive is paid to a manufacturer, distributor, or retailer of lighting controls unless the manufacturer, distributor, or retailer installs or contracts for installation of the equipment.

## 3. COORDINATION WITH OTHER PROGRAM ADMINISTRATORS:

Implementer shall coordinate with other Program Administrators, including investor-owned utilities and local government agencies authorized by the CPUC to implement CPUC-directed energy efficient programs, administering energy efficiency programs in the same geographic area as MCE. These other Program Administrators include: Pacific Gas and Electric Company and Bay Area Regional Energy Network. The CPUC may develop further rules related to coordination between Program Administrators in the same geographic area, and any Implementer is required to comply with such rules.

# 4. <u>MEASUREMENT AND VERIFICATION REQUIREMENTS, INCLUDING GUIDELINES ABOUT NORMALIZED METERED</u> ENERGY CONSUMPTION ("NMEC") DESIGN REQUIREMENTS:

Implementer shall:

- 1. Only enroll customers that qualify for Program services.
- 2. Comply with current policies, procedures, and other required documentation as required by MCE;
- 3. Report Customer Participation Information to MCE.
- 4. Work with MCE's evaluation team to define Program-specific data collection and evaluability requirements, and in the case of NMEC which independent variables shall be normalized.

Throughout the Term, MCE may identify new net lifecycle energy savings estimates, net-to- gross ratios, effective useful lives, or other values that may alter Program Net Lifecycle Energy Savings, as defined in Exhibit A, if applicable. Implementer shall use modified values upon MCE's request, provided MCE modifies Implementer's Program budget and/or overall Program net lifecycle Energy Savings consistent with the requested change. MCE shall determine any budget increases or decreases in its sole discretion.

For Programs claiming to-code savings: Implementer shall comply with Applicable Law and work with MCE to address elements in its Program designs and Implementation Plans, such as:

- 1. Identifying where to-code savings potential resides;
- 2. Specifying which equipment types, building types, geographic allocations, and/or customer segments promise costeffective to-code savings;
- 3. Describing the barriers that prevent code-compliant equipment replacements;
- 4. Explaining why natural turnover is not occurring within certain markets or for certain technologies; and
- 5. Detailing the program interventions that would effectively accelerate equipment turnover.



February 3, 2023

TO:	MCE Executive Committee
FROM:	Catalina Murphy, Associate General Counsel
RE:	In-Person Meetings and Teleconferencing Options Under the Brown Act and AB 2449 (Agenda Item #08)

Dear Executive Committee Members:

# Summary:

Before the COVID-19 Pandemic, MCE Board and Committee meetings were held inperson, pursuant to the open and public meeting requirements of the Brown Act<sup>1</sup> and teleconferencing was allowed under the following conditions: (i) the teleconferencing location was noticed on the agenda; (ii) an agenda was posted at the teleconferenced location; (iii) the teleconferencing location was accessible to the public; and (iv) a quorum of members participated from locations within MCE's service area ("Default Teleconferencing Rules"). Under these Default Teleconferencing Rules your Board was able to attend Board and/or Committee meetings at either MCE Office (San Rafael or Concord) as the Default Teleconferencing Rules were met.

When Governor Gavin Newsom signed Assembly Bill No. 361 (Rivas) ("AB 361") on September 16, 2021, the Brown Act was amended to allow all local agency members to meet remotely via teleconference, during a state-proclaimed State of Emergency, without meeting the conditions of the Default Teleconferencing Rules.

With the State of Emergency set to end February 28, 2023, teleconferencing under AB 361 will no longer be available and Board and Committee meetings will return to inperson, subject to the Default Teleconferencing Rules, beginning March 1, 2023. As of January 1, 2023, Assembly Bill No. 2449 (Rubio) ("AB 2449") is in effect which further amends the Brown Act to authorize certain teleconferencing options, different from the Default Teleconferencing Rules, when a Board member can demonstrate a 'just cause' or

<sup>&</sup>lt;sup>1</sup> Government Code, §§ 54950 et seq.

'emergency circumstance.' To use the teleconferencing options of AB 2449, the following conditions must be met:

- A quorum of Board members must participate in-person from a singular, physical location identified on the agenda;
- The reason for needing to attend via teleconference due to 'just cause' or 'emergency circumstance' must be disclosed to the Board at the earliest opportunity, which may mean disclosing at the beginning of a meeting;
- The Board and/or Committee would have to take action at the start of a meeting to approve any request to attend via teleconference for 'emergency circumstance' reasons;
- Board members attending via teleconference must have audio and visual capabilities (calling in by phone is not permitted);
- Each Board member would be restricted on the number of times 'just cause' and 'emergency circumstance' is used for teleconferencing.<sup>3</sup>

Teleconferencing under AB 2449 would prevent using both MCE offices for meetings, since a quorum of a meeting would need to be present at one location. It would also increase administrative tasks for staff, requiring them to ensure a quorum arrives at one office location, ensuring appropriate action is taken at the beginning of the meeting to approve the teleconference reason, and assist Board members in tracking how many meetings they have attended via teleconference so as not to go beyond the restricted amount.

Staff recommend the MCE Board and Committee meetings that would begin in-person in March 2023, follow the Default Teleconferencing Rules, rather than teleconferencing under AB 2449. This would allow your Board the flexibility of continuing to attend Board and Committee meetings from either MCE office location (San Rafael or Concord) or even attend via teleconference from a Board member's local city/county office, and minimize administrative burdens.

# Fiscal Impacts:

None.

# Recommendation:

Recommend to the Board of Directors, when a state-proclaimed State of Emergency is not in place, to hold Board and Committee meetings beginning March 1, 2023 under the Default Teleconferencing Rules.

<sup>&</sup>lt;sup>2</sup> Government Code, § 54953, subd. (f)(2).

<sup>&</sup>lt;sup>3</sup> No more than two (2) meetings via teleconference per calendar year due to 'just cause' and a Board member cannot use a combination of 'just cause' and 'emergency circumstance' for more than three (3) consecutive months or 20 percent of the regular meetings of the calendar year.



February 3, 2023

TO:	MCE Executive Committee
FROM:	Catalina Murphy, Associate General Counsel Caroline Lavenue, Legal Counsel
RE:	MCE Formation Documents and Voting Rules Discussion (Agenda Item #09)
ATTACHMENTS:	<ul> <li>A. MCE (formerly Marin Energy Authority) Joint Powers</li> <li>Agreement</li> <li>B. MCE (formerly Marin Energy Authority) Operating Rules and</li> <li>Regulations</li> <li>C. MCE Revised Community Choice Aggregation</li> <li>Implementation Plan</li> </ul>

Dear Executive Committee Members:

# Summary:

Background Information on MCE's Key Formation Documents

The key documents that formed MCE (formerly known as Marin Energy Authority) include the Joint Powers Agreement, Operating Rules and Regulations, and the Community Choice Aggregation Implementation Plan. These formation documents established the governance structure of MCE and set the stage for how your Board uses its authority on MCE matters.

The Joint Powers Agreement ("JPA"), effective December 19, 2008, is the document that established MCE as a public agency, separate from its member communities, under the provisions of the California Joint Exercise of Powers Act.<sup>1</sup> Through the JPA, MCE was established to collectively study, promote, develop, conduct, operate, and manage energy programs in the 37 communities that have joined MCE (collectively "MCE Member Communities" and each an "MCE Member Community"). The JPA grants MCE and your Board the authority to function as an independent agency and do all acts

<sup>&</sup>lt;sup>1</sup> Government Code Section 6500 et seq.
necessary and proper to carry out the provisions of the JPA.

The Operating Rules and Regulations ("Operating Rules"), adopted in March 2009, consist of rules, regulations, policies, bylaws and procedures governing the operation of MCE.

The Community Choice Aggregation Implementation Plan ("Implementation Plan") is a requirement of the California Public Utilities Commission.<sup>2</sup> It details MCE's process of aggregation and plans for how to bring the benefits of competition and choice to residents and businesses that exist within MCE Member Communities.

## Appointment of Officers

The JPA established that certain Board Officers must be appointed: Chair, Vice Chair, Secretary, and Treasurer/Auditor. The terms of these positions are for one year and there is no limit on the number of terms an individual may hold.

## Voting by MCE Member Communities

The JPA and Operating Rules identify and define the process for how voting occurs by MCE Member Communities depending on the type of MCE matter. Below is a summary to showcase the varying voting rules and requirements:

- Majority Vote of Quorum. A majority vote of the MCE Member Communities present at a Board or Committee meeting is sufficient to vote on the following matters:
  - o General administrative matters not related to the CCA program
  - Energy efficiency and other customer-based, non-CCA programs
- Voting Shares. For non-administrative matters related to the CCA program your Board is attributed voting shares based on current MCE Member Communities and the respective retail electric loads of each MCE Member Community. Such voting shares are determined via a process, which considers the following two factors, each with 50% of the vote weight: 1) the current number of MCE Member Communities (1/total number of members); and 2) the annual retail electric load within each MCE Member Community relative to the total retail electric load served by MCE (member's annual energy use/MCE's total energy use). The voting shares set forth in the JPA apply to the following matters:
  - o All matters specifically related to the CCA Program
  - o Amendment of the JPA
  - Addition of MCE Member Communities
  - o Approval of an Implementation Plan of the CCA Program
  - o Involuntary Termination of an MCE Member Community

<sup>&</sup>lt;sup>2</sup> Public Utilities Code Section 366.2

- **Majority Vote of the Full Board**. A majority vote (currently 19) of all MCE Member Communities (currently 37) is necessary to vote on the following matters:
  - Issuance of bonds or any other financing, even if program revenues pay for such financing
  - Hiring of an Executive Director and General Counsel<sup>3</sup>
  - Appointment or removal of an officer
  - Adoption of the annual budget
  - o Adoption of an ordinance
  - Initiation of litigation where MCE will be the plaintiff, petitioner, cross complainant, or cross petitioner
  - Adoption and/or amendment of the Operating Rules
  - Approval of any program or other activity requiring financial contributions by individual MCE Member Communities subject to the right of any MCE Member Community who votes against the program or activity to opt-out of such program or activity pursuant to Section 4 of the Operating Rules
- Two-Thirds Vote of the Full Board. A vote of 67 percent (2/3) of all MCE Member Communities is necessary to vote on the following matters:
  - Involuntary termination of a MCE Member Community (also requires the use of Voting Shares as detailed above)
  - Removal of a Board Member

# Fiscal Impacts:

None.

# Recommendation:

Discussion item; no action required.

<sup>&</sup>lt;sup>3</sup> Resolution No. 2018-09 Delegating Authority of Setting Compensation, Tenure, Appointment and Conditions of Employment to the Executive Committee and the Chief Executive Officer delegates the authority of Executive Director/Chief Executive Officer hiring to the Executive Committee and General Counsel hiring to the Chief Executive Officer.

Marin Energy Authority - Joint Powers Agreement -

Effective December 19, 2008

As amended by Amendment No. 1 dated December 3, 2009 As further amended by Amendment No. 2 dated March 4, 2010 As further amended by Amendment No. 3 dated May 6, 2010 As further amended by Amendment No. 4 dated December 1, 2011 As further amended by Amendment No. 5 dated July 5, 2012 As further amended by Amendment No. 6 dated September 5, 2013 As further amended by Amendment No. 7 dated December 5, 2013 As further amended by Amendment No. 7 dated December 5, 2013 As further amended by Amendment No. 8 dated September 4, 2014 As further amended by Amendment No. 9 dated December 4, 2014 As further amended by Amendment No. 10 dated April 21, 2016 As further amended by Amendment No. 11 dated May 19, 2016 As further amended by Amendment No. 12 dated July 20, 2017 As further amended by Amendment No. 13 dated October 18, 2018 As further amended by Amendment No. 14 dated November 21, 2019 As further amended by Amendment No. 15 dated November 19, 2020

> **Among the Following Parties: City of American Canyon City of Belvedere City of Benicia City of Calistoga City of Concord Town of Corte Madera Town of Danville City of El Cerrito Town of Fairfax City of Fairfield City of Lafayette City of Larkspur City of Martinez Town of Moraga City of Mill Valley City of Napa City of Novato City of Oakley City of Pinole**

**City of Pittsburg City of Pleasant Hill City of Richmond Town of Ross Town of San Anselmo City of San Pablo** City of San Rafael **City of San Ramon City of Sausalito** City of St. Helena **Town of Tiburon City of Vallejo** City of Walnut Creek **Town of Yountville County of Contra Costa County of Marin County of Napa County of Solano** 

## MARIN ENERGY AUTHORITY JOINT POWERS AGREEMENT

This **Joint Powers Agreement** ("Agreement"), effective as of December 19, 2008, is made and entered into pursuant to the provisions of Title 1, Division 7, Chapter 5, Article 1 (Section 6500 et seq.) of the California Government Code relating to the joint exercise of powers among the parties set forth in Exhibit B ("Parties"). The term "Parties" shall also include an incorporated municipality or county added to this Agreement in accordance with Section 3.1.

## RECITALS

- 1. The Parties are either incorporated municipalities or counties sharing various powers under California law, including but not limited to the power to purchase, supply, and aggregate electricity for themselves and their inhabitants.
- In 2006, the State Legislature adopted AB 32, the Global Warming Solutions Act, which mandates a reduction in greenhouse gas emissions in 2020 to 1990 levels. The California Air Resources Board is promulgating regulations to implement AB 32 which will require local government to develop programs to reduce greenhouse emissions.
- 3. The purposes for the Initial Participants (as such term is defined in Section 2.2 below) entering into this Agreement include addressing climate change by reducing energy related greenhouse gas emissions and securing energy supply and price stability, energy efficiencies and local economic benefits. It is the intent of this Agreement to promote the development and use of a wide range of renewable energy sources and energy efficiency programs, including but not limited to solar and wind energy production.
- 4. The Parties desire to establish a separate public agency, known as the Marin Energy Authority ("Authority"), under the provisions of the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 et seq.) ("Act") in order to collectively study, promote, develop, conduct, operate, and manage energy programs.
- 5. The Initial Participants have each adopted an ordinance electing to implement through the Authority Community Choice Aggregation, an electric service enterprise agency available to cities and counties pursuant to California Public Utilities Code Section 366.2 ("CCA Program"). The first priority of the Authority will be the consideration of those actions necessary to implement the CCA Program. Regardless of whether or not Program Agreement 1 is approved and the CCA Program becomes operational, the parties intend for the Authority to continue to study, promote, develop, conduct, operate and manage other energy programs.

## AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises, covenants, and conditions hereinafter set forth, it is agreed by and among the Parties as follows:

## ARTICLE 1 CONTRACT DOCUMENTS

- **1.1 Definitions**. Capitalized terms used in the Agreement shall have the meanings specified in Exhibit A, unless the context requires otherwise.
- **1.2 Documents Included**. This Agreement consists of this document and the following exhibits, all of which are hereby incorporated into this Agreement.

Exhibit A:	Definitions
Exhibit B:	List of the Parties
Exhibit C:	Annual Energy Use
Exhibit D:	Voting Shares

**1.3** <u>**Revision of Exhibits**</u>. The Parties agree that Exhibits B, C and D to this Agreement describe certain administrative matters that may be revised upon the approval of the Board, without such revision constituting an amendment to this Agreement, as described in Section 8.4. The Authority shall provide written notice to the Parties of the revision of any such exhibit.

## ARTICLE 2 FORMATION OF MARIN ENERGY AUTHORITY

- 2.1 <u>Effective Date and Term</u>. This Agreement shall become effective and Marin Energy Authority shall exist as a separate public agency on the date this Agreement is executed by at least two Initial Participants after the adoption of the ordinances required by Public Utilities Code Section 366.2(c)(10). The Authority shall provide notice to the Parties of the Effective Date. The Authority shall continue to exist, and this Agreement shall be effective, until this Agreement is terminated in accordance with Section 7.4, subject to the rights of the Parties to withdraw from the Authority.
- 2.2 <u>Initial Participants</u>. During the first 180 days after the Effective Date, all other Initial Participants may become a Party by executing this Agreement and delivering an executed copy of this Agreement and a copy of the adopted ordinance required by Public Utilities Code Section 366.2(c)(10) to the Authority. Additional conditions, described in Section 3.1, may apply (i) to either an incorporated municipality or county desiring to become a Party and is not an Initial Participant and (ii) to Initial Participants that have not executed and delivered this Agreement within the time period described above.

- 2.3 <u>Formation</u>. There is formed as of the Effective Date a public agency named the Marin Energy Authority. Pursuant to Sections 6506 and 6507 of the Act, the Authority is a public agency separate from the Parties. The debts, liabilities or obligations of the Authority shall not be debts, liabilities or obligations of the individual Parties unless the governing board of a Party agrees in writing to assume any of the debts, liabilities or obligations of the Authority debt, liability or obligation shall not be responsible in any way for such debt, liability or obligation even if a majority of the Parties agree to assume the debt, liability or obligation of the Authority. Notwithstanding Section 8.4 of this Agreement, this Section 2.3 may not be amended unless such amendment is approved by the governing board of each Party.
- 2.4 <u>Purpose</u>. The purpose of this Agreement is to establish an independent public agency in order to exercise powers common to each Party to study, promote, develop, conduct, operate, and manage energy and energy-related climate change programs, and to exercise all other powers necessary and incidental to accomplishing this purpose. Without limiting the generality of the foregoing, the Parties intend for this Agreement to be used as a contractual mechanism by which the Parties are authorized to participate as a group in the CCA Program, as further described in Section 5.1. The Parties intend that subsequent agreements shall define the terms and conditions associated with the actual implementation of the CCA Program and any other energy programs approved by the Authority.
- **2.5** <u>**Powers.**</u> The Authority shall have all powers common to the Parties and such additional powers accorded to it by law. The Authority is authorized, in its own name, to exercise all powers and do all acts necessary and proper to carry out the provisions of this Agreement and fulfill its purposes, including, but not limited to, each of the following:
  - **2.5.1** make and enter into contracts;
  - **2.5.2** employ agents and employees, including but not limited to an Executive Director;
  - **2.5.3** acquire, contract, manage, maintain, and operate any buildings, works or improvements;
  - **2.5.4** acquire by eminent domain, or otherwise, except as limited under Section 6508 of the Act, and to hold or dispose of any property;
  - **2.5.5** lease any property;
  - **2.5.6** sue and be sued in its own name;
  - 2.5.7 incur debts, liabilities, and obligations, including but not limited to loans from private lending sources pursuant to its temporary borrowing powers such as Government Code Section 53850 et seq. and authority under the Act;
  - **2.5.8** issue revenue bonds and other forms of indebtedness;
  - **2.5.9** apply for, accept, and receive all licenses, permits, grants, loans or other aids from any federal, state or local public agency;

- **2.5.10** submit documentation and notices, register, and comply with orders, tariffs and agreements for the establishment and implementation of the CCA Program and other energy programs;
- **2.5.11** adopt rules, regulations, policies, bylaws and procedures governing the operation of the Authority ("Operating Rules and Regulations"); and
- **2.5.12** make and enter into service agreements relating to the provision of services necessary to plan, implement, operate and administer the CCA Program and other energy programs, including the acquisition of electric power supply and the provision of retail and regulatory support services.
- **2.6** <u>Limitation on Powers.</u> As required by Government Code Section 6509, the power of the Authority is subject to the restrictions upon the manner of exercising power possessed by the County of Marin.
- 2.7 <u>Compliance with Local Zoning and Building Laws.</u> Notwithstanding any other provisions of this Agreement or state law, any facilities, buildings or structures located, constructed or caused to be constructed by the Authority within the territory of the Authority shall comply with the General Plan, zoning and building laws of the local jurisdiction within which the facilities, buildings or structures are constructed.

## ARTICLE 3 AUTHORITY PARTICIPATION

Addition of Parties. Subject to Section 2.2, relating to certain rights of Initial 3.1 Participants, other incorporated municipalities and counties may become Parties upon (a) the adoption of a resolution by the governing body of such incorporated municipality or such county requesting that the incorporated municipality or county, as the case may be, become a member of the Authority, (b) the adoption, by an affirmative vote of the Board satisfying the requirements described in Section 4.9.1, of a resolution authorizing membership of the additional incorporated municipality or county, specifying the membership payment, if any, to be made by the additional incorporated municipality or county to reflect its pro rata share of organizational, planning and other pre-existing expenditures, and describing additional conditions, if any, associated with membership, (c) the adoption of an ordinance required by Public Utilities Code Section 366.2(c)(10) and execution of this Agreement and other necessary program agreements by the incorporated municipality or county, (d) payment of the membership payment, if any, and (e) satisfaction of any conditions established by the Board. Notwithstanding the foregoing, in the event the Authority decides to not implement a CCA Program, the requirement that an additional party adopt the ordinance required by Public Utilities Code Section 366.2(c)(10) shall not apply. Under such circumstance, the Board resolution authorizing membership of an additional incorporated municipality or county shall be adopted in accordance with the voting requirements of Section 4.10.

**3.2** <u>Continuing Participation</u>. The Parties acknowledge that membership in the Authority may change by the addition and/or withdrawal or termination of Parties. The Parties agree to participate with such other Parties as may later be added, as described in Section 3.1. The Parties also agree that the withdrawal or termination of a Party shall not affect this Agreement or the remaining Parties' continuing obligations under this Agreement.

## ARTICLE 4 GOVERNANCE AND INTERNAL ORGANIZATION

- **4.1** <u>**Board of Directors.**</u> The governing body of the Authority shall be a Board of Directors ("Board") consisting of one director for each Party appointed in accordance with Section 4.2.
- **4.2** <u>Appointment and Removal of Directors</u>. The Directors shall be appointed and may be removed as follows:
  - 4.2.1 The governing body of each Party shall appoint and designate in writing one regular Director who shall be authorized to act for and on behalf of the Party on matters within the powers of the Authority. The governing body of each Party also shall appoint and designate in writing one alternate Director who may vote on matters when the regular Director is absent from a Board meeting. The person appointed and designated as the Director or the alternate Director shall be a member of the governing body of the Party. As an alternative to appointing its own Director and alternate Director, the governing body of any Party may elect to designate another Party within the same county (the "designated Party") to represent it on the Board with the Director and alternate Director from the designated Party (the "consolidated Parties"). Notwithstanding any provision in this Agreement to the contrary, in the case of such an election by one or more Parties in the same county, the designated Party shall have the combined votes and voting shares of the consolidated Parties and shall vote on behalf of the consolidated Parties. The governing body of a Party may revoke its designation of another Party to vote on its behalf at any time. Neither an election by a Party to designate another Party to vote on its behalf or a revocation of this election shall be effective unless provided in a written notice to the Authority.
  - **4.2.2** The Operating Rules and Regulations, to be developed and approved by the Board in accordance with Section 2.5.11, shall specify the reasons for and process associated with the removal of an individual Director for cause. Notwithstanding the foregoing, no Party shall be deprived of its right to seat a Director on the Board and any such Party for which its

Director and/or alternate Director has been removed may appoint a replacement.

- **4.3** <u>**Terms of Office**</u>. Each Director shall serve at the pleasure of the governing body of the Party that the Director represents, and may be removed as Director by such governing body at any time. If at any time a vacancy occurs on the Board, a replacement shall be appointed to fill the position of the previous Director in accordance with the provisions of Section 4.2 within 90 days of the date that such position becomes vacant.
- **4.4 <u><b>Quorum**</u>. A majority of the Directors shall constitute a quorum, except that less than a quorum may adjourn from time to time in accordance with law.</u>
- **4.5** <u>**Powers and Function of the Board**</u>. The Board shall conduct or authorize to be conducted all business and activities of the Authority, consistent with this Agreement, the Authority Documents, the Operating Rules and Regulations, and applicable law.
- **4.6** Executive Committee. The Board may establish an executive committee consisting of a smaller number of Directors. The Board may delegate to the executive committee such authority as the Board might otherwise exercise, subject to limitations placed on the Board's authority to delegate certain essential functions, as described in the Operating Rules and Regulations. The Board may not delegate to the Executive Committee or any other committee its authority under Section 2.5.11 to adopt and amend the Operating Rules and Regulations.
- **4.7** <u>**Commissions, Boards and Committees**</u>. The Board may establish any advisory commissions, boards and committees as the Board deems appropriate to assist the Board in carrying out its functions and implementing the CCA Program, other energy programs and the provisions of this Agreement.
- **4.8** <u>Director Compensation</u>. Compensation for work performed by Directors on behalf of the Authority shall be borne by the Party that appointed the Director. The Board, however, may adopt by resolution a policy relating to the reimbursement of expenses incurred by Directors.

## 4.9 Board Voting Related to the CCA Program.

**4.9.1.** To be effective, on all matters specifically related to the CCA Program, a vote of the Board shall consist of the following: (1) a majority of all Directors shall vote in the affirmative or such higher voting percentage expressly set forth in Sections 7.2 and 8.4 (the "percentage vote") and (2) the corresponding voting shares (as described in Section 4.9.2 and Exhibit D) of all such Directors voting in the affirmative shall exceed 50%, or such other higher voting shares percentage expressly set forth in Sections 7.2 and 8.4 (the "percentage voting shares"), provided that, in instances in which such other higher voting share percentage would result in any one

Director having a voting share that equals or exceeds that which is necessary to disapprove the matter being voted on by the Board, at least one other Director shall be required to vote in the negative in order to disapprove such matter.

- **4.9.2.** Unless otherwise stated herein, voting shares of the Directors shall be determined by combining the following: (1) an equal voting share for each Director determined in accordance with the formula detailed in Section 4.9.2.1, below; and (2) an additional voting share determined in accordance with the formula detailed in Section 4.9.2.2, below.
  - **4.9.2.1** <u>Pro Rata Voting Share</u>. Each Director shall have an equal voting share as determined by the following formula: (1/total number of Directors) multiplied by 50, and
  - **4.9.2.2** <u>Annual Energy Use Voting Share</u>. Each Director shall have an additional voting share as determined by the following formula: (Annual Energy Use/Total Annual Energy) multiplied by 50, where (a) "Annual Energy Use" means, (i) with respect to the first 5 years following the Effective Date, the annual electricity usage, expressed in kilowatt hours ("kWhs"), within the Party's respective jurisdiction and (ii) with respect to the period after the fifth anniversary of the Effective Date, the annual electricity usage, expressed in kWhs, of accounts within a Party's respective jurisdiction, and any additional jurisdictions which they represent, that are served by the Authority and (b) "Total Annual Energy" means the sum of all Parties' Annual Energy Use. The initial values for Annual Energy use are designated in Exhibit C, and shall be adjusted annually as soon as reasonably practicable after January 1, but no later than March 1 of each year
  - **4.9.2.3** The voting shares are set forth in Exhibit D. Exhibit D may be updated to reflect revised annual energy use amounts and any changes in the parties to the Agreement without amending the Agreement provided that the Board is provided a copy of the updated Exhibit D.
- **4.10** Board Voting on General Administrative Matters and Programs Not Involving CCA. Except as otherwise provided by this Agreement or the Operating Rules and Regulations, each member shall have one vote on general administrative matters, including but not limited to the adoption and amendment of the Operating Rules and Regulations, and energy programs not involving CCA. Action on these items shall be determined by a majority vote of the quorum present and voting on the item or such higher voting percentage expressly set forth in Sections 7.2 and 8.4.

- 4.11 **Board Voting on CCA Programs Not Involving CCA That Require Financial Contributions.** The approval of any program or other activity not involving CCA that requires financial contributions by individual Parties shall be approved only by a majority vote of the full membership of the Board subject to the right of any Party who votes against the program or activity to opt-out of such program or activity pursuant to this section. The Board shall provide at least 45 days prior written notice to each Party before it considers the program or activity for adoption at a Board meeting. Such notice shall be provided to the governing body and the chief administrative officer, city manager or town manager of each Party. The Board also shall provide written notice of such program or activity adoption to the above-described officials of each Party within 5 days after the Board adopts the program or activity. Any Party voting against the approval of a program or other activity of the Authority requiring financial contributions by individual Parties may elect to opt-out of participation in such program or activity by providing written notice of this election to the Board within 30 days after the program or activity is approved by the Board. Upon timely exercising its opt-out election, a Party shall not have any financial obligation or any liability whatsoever for the conduct or operation of such program or activity.
- **4.12** <u>Meetings and Special Meetings of the Board</u>. The Board shall hold at least four regular meetings per year, but the Board may provide for the holding of regular meetings at more frequent intervals. The date, hour and place of each regular meeting shall be fixed by resolution or ordinance of the Board. Regular meetings may be adjourned to another meeting time. Special meetings of the Board may be called in accordance with the provisions of California Government Code Section 54956. Directors may participate in meetings telephonically, with full voting rights, only to the extent permitted by law. All meetings of the Board shall be conducted in accordance with the provisions of the Ralph M. Brown Act (California Government Code Section 54950 et seq.).

## 4.13 <u>Selection of Board Officers</u>.

- **4.13.1 Chair and Vice Chair**. The Directors shall select, from among themselves, a Chair, who shall be the presiding officer of all Board meetings, and a Vice Chair, who shall serve in the absence of the Chair. The term of office of the Chair and Vice Chair shall continue for one year, but there shall be no limit on the number of terms held by either the Chair or Vice Chair. The office of either the Chair or Vice Chair shall be declared vacant and a new selection shall be made if: (a) the person serving dies, resigns, or the Party that the person represents removes the person as its representative on the Board or (b) the Party that he or she represents withdraws form the Authority pursuant to the provisions of this Agreement.
- **4.13.2** Secretary. The Board shall appoint a Secretary, who need not be a member of the Board, who shall be responsible for keeping the minutes of

all meetings of the Board and all other official records of the Authority.

- **4.13.3 Treasurer and Auditor**. The Board shall appoint a qualified person to act as the Treasurer and a qualified person to act as the Auditor, neither of whom needs to be a member of the Board. If the Board so designates, and in accordance with the provisions of applicable law, a qualified person may hold both the office of Treasurer and the office of Auditor of the Authority. Unless otherwise exempted from such requirement, the Authority shall cause an independent audit to be made by a certified public accountant, or public accountant, in compliance with Section 6505 of the Act. The Treasurer shall act as the depositary of the Authority and have custody of all the money of the Authority, from whatever source, and as such, shall have all of the duties and responsibilities specified in Section 6505.5 of the Act. The Board may require the Treasurer and/or Auditor to file with the Authority an official bond in an amount to be fixed by the Board, and if so requested the Authority shall pay the cost of premiums associated with the bond. The Treasurer shall report directly to the Board and shall comply with the requirements of treasurers of incorporated municipalities. The Board may transfer the responsibilities of Treasurer to any person or entity as the law may provide at the time. The duties and obligations of the Treasurer are further specified in Article 6.
- 4.14 Administrative Services Provider. The Board may appoint one or more administrative services providers to serve as the Authority's agent for planning, implementing, operating and administering the CCA Program, and any other program approved by the Board, in accordance with the provisions of a written agreement between the Authority and the appointed administrative services provider or providers that will be known as an Administrative Services Agreement. The Administrative Services Agreement shall set forth the terms and conditions by which the appointed administrative services provider shall perform or cause to be performed all tasks necessary for planning, implementing, operating and administering the CCA Program and other approved programs. The Administrative Services Agreement shall set forth the term of the Agreement and the circumstances under which the Administrative Services Agreement may be terminated by the Authority. This section shall not in any way be construed to limit the discretion of the Authority to hire its own employees to administer the CCA Program or any other program.

## ARTICLE 5 IMPLEMENTATION ACTION AND AUTHORITY DOCUMENTS

5.1 <u>Preliminary Implementation of the CCA Program.</u>

- **5.1.1 Enabling Ordinance**. Except as otherwise provided by Section 3.1, prior to the execution of this Agreement, each Party shall adopt an ordinance in accordance with Public Utilities Code Section 366.2(c)(10) for the purpose of specifying that the Party intends to implement a CCA Program by and through its participation in the Authority.
- **5.1.2 Implementation Plan**. The Authority shall cause to be prepared an Implementation Plan meeting the requirements of Public Utilities Code Section 366.2 and any applicable Public Utilities Commission regulations as soon after the Effective Date as reasonably practicable. The Implementation Plan shall not be filed with the Public Utilities Commission until it is approved by the Board in the manner provided by Section 4.9.
- **5.1.3 Effect of Vote On Required Implementation Action**. In the event that two or more Parties vote to approve Program Agreement 1 or any earlier action required for the implementation of the CCA Program ("Required Implementation Action"), but such vote is insufficient to approve the Required Implementation Action under Section 4.9, the following will occur:
  - **5.1.3.1** The Parties voting against the Required Implementation Action shall no longer be a Party to this Agreement and this Agreement shall be terminated, without further notice, with respect to each of the Parties voting against the Required Implementation Action at the time this vote is final. The Board may take a provisional vote on a Required Implementation Action in order to initially determine the position of the Parties on the Required Implementation Action. A vote, specifically stated in the record of the Board meeting to be a provisional vote, shall not be considered a final vote with the consequences stated above. A Party who is terminated from this Agreement pursuant to this section shall be considered the same as a Party that voluntarily withdrew from the Agreement under Section 7.1.1.1.
  - **5.1.3.2** After the termination of any Parties pursuant to Section 5.1.3.1, the remaining Parties to this Agreement shall be only the Parties who voted in favor of the Required Implementation Action.
- **5.1.4 Termination of CCA Program**. Nothing contained in this Article or this Agreement shall be construed to limit the discretion of the Authority to terminate the implementation or operation of the CCA Program at any

time in accordance with any applicable requirements of state law.

**5.2** <u>Authority Documents</u>. The Parties acknowledge and agree that the affairs of the Authority will be implemented through various documents duly adopted by the Board through Board resolution, including but not necessarily limited to the Operating Rules and Regulations, the annual budget, and specified plans and policies defined as the Authority Documents by this Agreement. The Parties agree to abide by and comply with the terms and conditions of all such Authority Documents that may be adopted by the Board, subject to the Parties' right to withdraw from the Authority as described in Article 7.

## ARTICLE 6 FINANCIAL PROVISIONS

6.1 <u>Fiscal Year</u>. The Authority's fiscal year shall be 12 months commencing April 1 and ending March 31. The fiscal year may be changed by Board resolution.

## 6.2 <u>Depository</u>.

- **6.2.1** All funds of the Authority shall be held in separate accounts in the name of the Authority and not commingled with funds of any Party or any other person or entity.
- **6.2.2** All funds of the Authority shall be strictly and separately accounted for, and regular reports shall be rendered of all receipts and disbursements, at least quarterly during the fiscal year. The books and records of the Authority shall be open to inspection by the Parties at all reasonable times. The Board shall contract with a certified public accountant or public accountant to make an annual audit of the accounts and records of the Authority, which shall be conducted in accordance with the requirements of Section 6505 of the Act.
- **6.2.3** All expenditures shall be made in accordance with the approved budget and upon the approval of any officer so authorized by the Board in accordance with its Operating Rules and Regulations. The Treasurer shall draw checks or warrants or make payments by other means for claims or disbursements not within an applicable budget only upon the prior approval of the Board.

## 6.3 <u>Budget and Recovery Costs</u>.

**6.3.1 Budget**. The initial budget shall be approved by the Board. The Board may revise the budget from time to time through an Authority Document as may be reasonably necessary to address contingencies and unexpected

expenses. All subsequent budgets of the Authority shall be prepared and approved by the Board in accordance with the Operating Rules and Regulations.

- 6.3.2 County Funding of Initial Costs. The County of Marin shall fund the Initial Costs of the Authority in implementing the CCA Program in an amount not to exceed \$500,000 unless a larger amount of funding is approved by the Board of Supervisors of the County. This funding shall be paid by the County at the times and in the amounts required by the Authority. In the event that the CCA Program becomes operational, these Initial Costs paid by the County of Marin shall be included in the customer charges for electric services as provided by Section 6.3.4 to the extent permitted by law, and the County of Marin shall be reimbursed from the payment of such charges by customers of the Authority. The Authority may establish a reasonable time period over which such costs are recovered. In the event that the CCA Program does not become operational, the County of Marin shall not be entitled to any reimbursement of the Initial Costs it has paid from the Authority or any Party.
- **6.3.3 CCA Program Costs**. The Parties desire that, to the extent reasonably practicable, all costs incurred by the Authority that are directly or indirectly attributable to the provision of electric services under the CCA Program, including the establishment and maintenance of various reserve and performance funds, shall be recovered through charges to CCA customers receiving such electric services.
- **6.3.4** General Costs. Costs that are not directly or indirectly attributable to the provision of electric services under the CCA Program, as determined by the Board, shall be defined as general costs. General costs shall be shared among the Parties on such basis as the Board shall determine pursuant to an Authority Document.
- **6.3.5** Other Energy Program Costs. Costs that are directly or indirectly attributable to energy programs approved by the Authority other than the CCA Program shall be shared among the Parties on such basis as the Board shall determine pursuant to an Authority Document.

## ARTICLE 7 WITHDRAWAL AND TERMINATION

7.1 <u>Withdrawal</u>.

## 7.1.1 General.

- 7.1.1.1 Prior to the Authority's execution of Program Agreement 1, any Party may withdraw its membership in the Authority by giving no less than 30 days advance written notice of its election to do so, which notice shall be given to the Authority and each Party. To permit consideration by the governing body of each Party, the Authority shall provide a copy of the proposed Program Agreement 1 to each Party at least 90 days prior to the consideration of such agreement by the Board.
- **7.1.1.2** Subsequent to the Authority's execution of Program Agreement 1, a Party may withdraw its membership in the Authority, effective as of the beginning of the Authority's fiscal year, by giving no less than 6 months advance written notice of its election to do so, which notice shall be given to the Authority and each Party, and upon such other conditions as may be prescribed in Program Agreement 1.
- **7.1.2 Amendment**. Notwithstanding Section 7.1.1, a Party may withdraw its membership in the Authority following an amendment to this Agreement in the manner provided by Section 8.4.
- 7.1.3 Continuing Liability; Further Assurances. A Party that withdraws its membership in the Authority may be subject to certain continuing liabilities, as described in Section 7.3. The withdrawing Party and the Authority shall execute and deliver all further instruments and documents, and take any further action that may be reasonably necessary, as determined by the Board, to effectuate the orderly withdrawal of such Party from membership in the Authority. The Operating Rules and Regulations shall prescribe the rights if any of a withdrawn Party to continue to participate in those Board discussions and decisions affecting customers of the CCA Program that reside or do business within the jurisdiction of the Party.
- 7.2 <u>Involuntary Termination of a Party</u>. This Agreement may be terminated with respect to a Party for material non-compliance with provisions of this Agreement or the Authority Documents upon an affirmative vote of the Board in which the minimum percentage vote and percentage voting shares, as described in Section 4.9.1, shall be no less than 67%, excluding the vote and voting shares of the Party subject to possible termination. Prior to any vote to terminate this Agreement with respect to a Party, written notice of the proposed termination and the reason(s) for such termination shall be delivered to the Party whose termination is proposed at least 30 days prior to the regular Board meeting at which such matter shall first be discussed as an agenda item. The written notice of proposed termination shall specify the particular provisions of this Agreement or the Authority Documents that the Party has allegedly violated. The Party subject to possible termination

shall have the opportunity at the next regular Board meeting to respond to any reasons and allegations that may be cited as a basis for termination prior to a vote regarding termination. A Party that has had its membership in the Authority terminated may be subject to certain continuing liabilities, as described in Section 7.3. In the event that the Authority decides to not implement the CCA Program, the minimum percentage vote of 67% shall be conducted in accordance with Section 4.10 rather than Section 4.9.1.

- 7.3 Continuing Liability; Refund. Upon a withdrawal or involuntary termination of a Party, the Party shall remain responsible for any claims, demands, damages, or liabilities arising from the Party's membership in the Authority through the date of its withdrawal or involuntary termination, it being agreed that the Party shall not be responsible for any claims, demands, damages, or liabilities arising after the date of the Party's withdrawal or involuntary termination. In addition, such Party also shall be responsible for any costs or obligations associated with the Party's participation in any program in accordance with the provisions of any agreements relating to such program provided such costs or obligations were incurred prior to the withdrawal of the Party. The Authority may withhold funds otherwise owing to the Party or may require the Party to deposit sufficient funds with the Authority, as reasonably determined by the Authority, to cover the Party's liability for the costs described above. Any amount of the Party's funds held on deposit with the Authority above that which is required to pay any liabilities or obligations shall be returned to the Party.
- 7.4 <u>Mutual Termination</u>. This Agreement may be terminated by mutual agreement of all the Parties; provided, however, the foregoing shall not be construed as limiting the rights of a Party to withdraw its membership in the Authority, and thus terminate this Agreement with respect to such withdrawing Party, as described in Section 7.1.
- 7.5 <u>Disposition of Property upon Termination of Authority</u>. Upon termination of this Agreement as to all Parties, any surplus money or assets in possession of the Authority for use under this Agreement, after payment of all liabilities, costs, expenses, and charges incurred under this Agreement and under any program documents, shall be returned to the then-existing Parties in proportion to the contributions made by each.

## ARTICLE 8 MISCELLANEOUS PROVISIONS

8.1 <u>**Dispute Resolution**</u>. The Parties and the Authority shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. Should

such efforts to settle a dispute, after reasonable efforts, fail, the dispute shall be settled by binding arbitration in accordance with policies and procedures established by the Board.

- **8.2** <u>Liability of Directors, Officers, and Employees</u>. The Directors, officers, and employees of the Authority shall use ordinary care and reasonable diligence in the exercise of their powers and in the performance of their duties pursuant to this Agreement. No current or former Director, officer, or employee will be responsible for any act or omission by another Director, officer, or employee. The Authority shall defend, indemnify and hold harmless the individual current and former Directors, officers, and employees for any acts or omissions in the scope of their employment or duties in the manner provided by Government Code Section 995 et seq. Nothing in this section shall be construed to limit the defenses available under the law, to the Parties, the Authority, or its Directors, officers, or employees.</u>
- **8.3** Indemnification of Parties. The Authority shall acquire such insurance coverage as is necessary to protect the interests of the Authority, the Parties and the public. The Authority shall defend, indemnify and hold harmless the Parties and each of their respective Board or Council members, officers, agents and employees, from any and all claims, losses, damages, costs, injuries and liabilities of every kind arising directly or indirectly from the conduct, activities, operations, acts, and omissions of the Authority under this Agreement.
- Amendment of this Agreement. This Agreement may be amended by an 8.4 affirmative vote of the Board in which the minimum percentage vote and percentage voting shares, as described in Section 4.9.1, shall be no less than 67%. The Authority shall provide written notice to all Parties of amendments to this Agreement, including the effective date of such amendments. A Party shall be deemed to have withdrawn its membership in the Authority effective immediately upon the vote of the Board approving an amendment to this Agreement if the Director representing such Party has provided notice to the other Directors immediately preceding the Board's vote of the Party's intention to withdraw its membership in the Authority should the amendment be approved by the Board. As described in Section 7.3, a Party that withdraws its membership in the Authority in accordance with the above-described procedure may be subject to continuing liabilities incurred prior to the Party's withdrawal. In the event that the Authority decides to not implement the CCA Program, the minimum percentage vote of 67% shall be conducted in accordance with Section 4.10 rather than Section 4.9.1.
- **8.5** <u>Assignment</u>. Except as otherwise expressly provided in this Agreement, the rights and duties of the Parties may not be assigned or delegated without the advance written consent of all of the other Parties, and any attempt to assign or delegate such rights or duties in contravention of this Section 8.5 shall be null and void. This Agreement shall inure to the benefit of, and be binding upon, the

successors and assigns of the Parties. This Section 8.5 does not prohibit a Party from entering into an independent agreement with another agency, person, or entity regarding the financing of that Party's contributions to the Authority, or the disposition of proceeds which that Party receives under this Agreement, so long as such independent agreement does not affect, or purport to affect, the rights and duties of the Authority or the Parties under this Agreement.

- **8.6** <u>Severability</u>. If one or more clauses, sentences, paragraphs or provisions of this Agreement shall be held to be unlawful, invalid or unenforceable, it is hereby agreed by the Parties, that the remainder of the Agreement shall not be affected thereby. Such clauses, sentences, paragraphs or provision shall be deemed reformed so as to be lawful, valid and enforced to the maximum extent possible.
- **8.7** <u>**Further Assurances**</u>. Each Party agrees to execute and deliver all further instruments and documents, and take any further action that may be reasonably necessary, to effectuate the purposes and intent of this Agreement.
- **8.8** Execution by Counterparts. This Agreement may be executed in any number of counterparts, and upon execution by all Parties, each executed counterpart shall have the same force and effect as an original instrument and as if all Parties had signed the same instrument. Any signature page of this Agreement may be detached from any counterpart of this Agreement without impairing the legal effect of any signatures thereon, and may be attached to another counterpart of this Agreement identical in form hereto but having attached to it one or more signature pages.
- **8.9** Parties to be Served Notice. Any notice authorized or required to be given pursuant to this Agreement shall be validly given if served in writing either personally, by deposit in the United States mail, first class postage prepaid with return receipt requested, or by a recognized courier service. Notices given (a) personally or by courier service shall be conclusively deemed received at the time of delivery and receipt and (b) by mail shall be conclusively deemed given 48 hours after the deposit thereof (excluding Saturdays, Sundays and holidays) if the sender receives the return receipt. All notices shall be addressed to the office of the clerk or secretary of the Authority or Party, as the case may be, or such other person designated in writing by the Authority or Party. Notices given to one Party shall be copied to all other Parties. Notices given to the Authority shall be copied to all Parties.

#### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By: <u>Leon Garcia</u> Name: <u>Leon</u> Garcia Tale: <u>Mayor</u> Date: <u>4.7.16</u>

Party: City of American Canyon

#### ARTICLE 9 SIGNATURE

IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the Marin Energy Authority.

meel By: anne

Name: Thomas Cromweil

Litle: Mayor

.

Date: December 8, 3008

Party: City of Relvedore

### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By: Estappatt
Name: Elizabetz Patterson
Tille: Mayor
Date: 12.29.14
Party: Cuty of Benicia

PROVED AS TO FORM AI TURNE

### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

	$\leq \cap$
By;	-XX
Name:	Dytan Fait
Ticle:	City Manager
Date: _	April 7,2016

Pariy: City of Calistoga

### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By:

Name: Valerie J. Barone

Title: City Manager

Date: July 24, 2017

Party: City of Concord

#### ARTICLE 9 SIGNATURE

IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the Marin Energy Authority.

By:	Antonia
Name:	Alexandra Cock
Title:	Mayor
Date:	December 6, 2011

Party: \_\_\_\_\_\_ Town of Corte Madera \_\_\_\_\_

ATTEST

Christine Green, Town Clerk

#### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Murin Clean Energy (formerly, Marin Energy Authority)

By: Name: Joseph A Calabri Title: Town Manager

Date: July 17, 2017

Party: Town of Danville

#### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

 $\mathbf{B}\mathbf{y}$ : Ð

Name: Scott Hanin

City Manager Title:

Date:

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.

Party: City of El Cerrito

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#### ARTICLE 9 SIGNATURE

IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the Marin Energy Authority.

David being By:

Name: David Weinsoff

Title: Mayor

Date: 2. 12. 09

Party: Town of Fairfax

Exhibit A - Page 17

## **SIGNATURE**

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

		1,
	By:	her
Pr	Name:	Sean P. Quinn
	Title:	Interim City Manager
	Date:	12/17/19
	Party:	City of Fairfield

# **SIGNATURE**

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

Theato By:

Name: Mark Mitchell

Title: Mayor

Date: <u>3-14-16</u>

Party: City of Lafayette

Attest: an Joanne Robbins, City Clerk

### ARTICLE 9 SIGNATURE

IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the Marin Energy Authority.

	1
Ву:	dych
Name: _	Larry Chu
Title:	Mayor Lartspor
Date:	November 16,20/1
Party:	CITY OF LARKSPUR

# **SIGNATURE**

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By Brad Kilger Name: City Manager Title: Date: City of Martinez Party:

# **SIGNATURE**

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

at Prake By:

Name: Robert Priebe

Title: Town Manager

Date: July 24, 2017

Party: Town of Moraga

### ARTICLE 9 SIGNATURE

IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the Marin Energy Authority.

By:	Marshall	

Name: Shawn E. Marshall

Title: Mayor

Date: December 2, 2008

Party: \_\_\_\_\_\_ of Mill Valley

#### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By: Milce Parmess Title: City manager

Date: 4-11-16

Party: City of Napa
IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the Marin Energy Authority.

Madelene 7 Kellne. By: Madeline R. Kellner Name: Mayor Title: October 7, 2011 Date: City of Novato Party:

**6**3

# **ARTICLE 9**

# SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

-		burl.	/
By:	Bupr	HU Bitzeneen	
Name:	Bryan	H. Montgunery	
Title:	City	Monager	
Date: _	8/1/17	5	

	CI. 00 11
Party	('ity of ()aller
raity.	City of Oakicy
-	5 5

IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the
Marin Energy Authority.
By: Michelle Steen
Name:Michelle Fitzer
Title:City Manager
Date:
Party:City of Pinole
Approved as to form:
By:
Name:Eric Casher
Title:City Attorney
Date: 7/5/17

# **SIGNATURE**

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By:	
Name:	Joe Sbranti
Title: _	City manager
Date: _	7/24/2017
Party:	City of Pittsburg

#### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By: up

Name://June Catalano

Title: \_City Manager

Date: June 19, 2019

Party: City of Pleasant Hill

# **SIGNATURE**

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing the Marin Energy Authority

By: Llin Name: Gau Title: Date: Party:

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IN WITNESS WHERPOF, the Parties hereto have executed this Joint Powers Agreement establishing the Marin gnergy Authority.

.

By: Carla Small Name:

.....

Tirle: 1 Marvor Date: Town of Pers Party:

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. . . .

ARTICLE 9
SIGNATURE
IN WITNESS-WHEREOF, the Partics hereto have executed this Joint Powers Agreement establishing the Marja Energy Authority.
By: Jetu Men
Name:Peter Breen
Title: Mayor
Date:January 9, 2009
Party:Town of San Anselmo

#### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Macin Clean Energy (formerly, Marin Energy Authority)

ю By: Name: Paul V. Morris

Title: Mayor, City of San Pablo

Date: SEPT. 16, 2014

Party: City of San Pablo

IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the Marin Energy Authority,

By: Cyr D. Miller Name: Cyr N. Miller Litte: Ville Mayor 20008 <u>CENEER</u> İ Date: Party: CLERY OF

. .

#### SIGNATURE

IN WITNESS WIII/REOF, the parties hereto have executed this Joint Powers Agreement establishing Magin Glean Energy (formerly, Marin Energy Authority)

Bya SOLTON Name:/ OΚ MANAGER Title: \_C Date: 31

Party: City of San Ramon

IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the Marin Energy Authority.

any Belser By: Name: Almy Below Mayor Title: #r 18. 2008 Novemb Date: City of Sausalito Party:

Attest:

	Item:	5A	
Meeting	Date:	11-18-08	_
	Page #:	24	_

#### SIGNATURE.

IN WITNESS WHERBOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By: Name: Title: Date:

Party: City of St. Helena

IN WITNESS WHERBOF, the Parties hereto have executed this Joint establishing the Marin Energy Authority.

By: Muie rec Kuch

Name: ALICE FREDERICKS

Title: MAYOR

Date: 2/10/09

Party: TOWN OF TIBURON

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By:

Name:

Title<u>: - ---#Gtty-M=**==ag**=</u>re\_\_\_\_\_

Party: City of Vallejo

#### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

aspen By: LOELLA HASKEN Name: MAYOR Title:

Date: 4/13/16

Party: City of Walnut Creek

.

#### SIGNATURE

IN WITNESS WHEREOF, the parties herew have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

and a By: Name: Steven R. Rogers Town Manager 4/12/16 Title: Date: . .

Party: Town of Yountville

#### SIGNATURE

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By: al.

Name: Federal D. Glover

Title: Chair, Board of Supervisors

Date: August 1, 2017

Party: Contru Costa County

IN WITNESS WHEREOF, the Parties hereto have executed this Joint Powers Agreement establishing the Marin Energy Authority.

	(MA)
By:	CAL
Name:	CMARLES F. MEGLASTIAN
Title:	PRESIDENT, BD OF SUPERVISORS
Date:	November 18 2008
Party:	COUNTY OF MARIN

#### Maria Clean Energy JPA Agreement

#### SIGNATURE

#### Amendment No. 8

IN WITNESS WHERDOF, he parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

By:

Name: Mark Luce,

Title: Chairman, Napa County Board of Supervisors

7/02/14 Date:

Party: Napa County

Approved as to four: . Date\_ <u>7/21/1</u>4 Æ 

Minh Tran,

County Counsel

# **SIGNATURE**

IN WITNESS WHEREOF, the parties hereto have executed this Joint Powers Agreement establishing Marin Clean Energy (formerly, Marin Energy Authority)

Sign El millo By:

Name: Birgitta E. Corsello

Title: County Administrator

Date: <u>9/26/18</u>

Party: County of Solano

APPROVED AS TO FORM:

Solano County Counsel

# <u>Exhibit A</u>

# To the Joint Powers Agreement Marin Energy Authority

#### -Definitions-

"AB 117" means Assembly Bill 117 (Stat. 2002, ch. 838, codified at Public Utilities Code Section 366.2), which created CCA.

"Act" means the Joint Exercise of Powers Act of the State of California (Government Code Section 6500 *et seq.*)

"Administrative Services Agreement" means an agreement or agreements entered into after the Effective Date by the Authority with an entity that will perform tasks necessary for planning, implementing, operating and administering the CCA Program or any other energy programs adopted by the Authority.

"Agreement" means this Joint Powers Agreement.

"Annual Energy Use" has the meaning given in Section 4.9.2.2.

"Authority" means the Marin Energy Authority.

"Authority Document(s)" means document(s) duly adopted by the Board by resolution or motion implementing the powers, functions and activities of the Authority, including but not limited to the Operating Rules and Regulations, the annual budget, and plans and policies.

"Board" means the Board of Directors of the Authority.

"CCA" or "Community Choice Aggregation" means an electric service option available to cities and counties pursuant to Public Utilities Code Section 366.2.

"CCA Program" means the Authority's program relating to CCA that is principally described in Sections 2.4 and 5.1.

"Director" means a member of the Board of Directors representing a Party.

"Effective Date" means the date on which this Agreement shall become effective and the Marin Energy Authority shall exist as a separate public agency, as further described in Section 2.1.

"Implementation Plan" means the plan generally described in Section 5.1.2 of this Agreement that is required under Public Utilities Code Section 366.2 to be filed with the

California Public Utilities Commission for the purpose of describing a proposed CCA Program.

"Initial Costs" means all costs incurred by the Authority relating to the establishment and initial operation of the Authority, such as the hiring of an Executive Director and any administrative staff, any required accounting, administrative, technical and legal services in support of the Authority's initial activities or in support of the negotiation, preparation and approval of one or more Administrative Services Provider Agreements and Program Agreement 1. Administrative and operational costs incurred after the approval of Program Agreement 1 shall not be considered Initial Costs.

"Initial Participants" means, for the purpose of this Agreement, the signatories to this JPA as of May 5, 2010 including City of Belvedere, Town of Fairfax, City of Mill Valley, Town of San Anselmo, City of San Rafael, City of Sausalito, Town of Tiburon and County of Marin.

"Operating Rules and Regulations" means the rules, regulations, policies, bylaws and procedures governing the operation of the Authority.

"Parties" means, collectively, the signatories to this Agreement that have satisfied the conditions in Sections 2.2 or 3.2 such that it is considered a member of the Authority.

"Party" means, singularly, a signatory to this Agreement that has satisfied the conditions in Sections 2.2 or 3.2 such that it is considered a member of the Authority.

"Program Agreement 1" means the agreement that the Authority will enter into with an energy service provider that will provide the electricity to be distributed to customers participating in the CCA Program.

"Total Annual Energy" has the meaning given in Section 4.9.2.2.

## <u>Exhibit B</u>

## To the Joint Powers Agreement Marin Energy Authority

#### -List of the Parties-

City of American Canyon City of Belvedere City of Benicia City of Calistoga City of Concord Town of Corte Madera Town of Danville City of El Cerrito Town of Fairfax City of Fairfield City of Lafayette City of Larkspur City of Martinez Town of Moraga City of Mill Valley City of Napa City of Novato City of Oakley City of Pinole City of Pittsburg City of Pleasant Hill City of Richmond Town of Ross Town of San Anselmo City of San Pablo City of San Rafael City of San Ramon City of Sausalito St. Helena Town of Tiburon City of Vallejo City of Walnut Creek Town of Yountville County of Contra Costa County of Marin County of Napa County of Solano

# <u>Exhibit C</u>

# Marin Clean Energy

This Exhibit C is effective as of November 19, 2020.

	- Annual Energy
<b>MCE Member Communities</b>	Use -
This Exhibit C is effective as of November 19, 2020.	
MCE Member Community	kWh (2019)
City of American Canyon	/6,695,933
City of Belvedere	7,577,958
City of Benicia	113,063,212
City of Calistoga	25 994 261
	23,774,201
City of Concord	498,162,604
Town of Corte Madera	46,419,358
County of Contra Costa	673.004.355
······································	
Town of Danville	159,347,837
City of El Comito	57 017 506
	57,017,500
Town of Fairfax	17,969,915
City of Fairfield*	452,596,498
City of Lafavette	94.682.154
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
City of Larkspur	42,611,547
C'ha e Martin	151 000 000
	151,009,009
City of Mill Valley	44,571,991
······································	
County of Marin	231,346,718
Town of Morogo	13 004 065
	43,774,903

City of Napa	306,136,179
County of Napa	299,606,262
City of Novato	184,366,404
City of Oakley	105,972,646
City of Pinole	64,070,289
City of Pittsburg	404,506,338
City of Pleasant Hill*	125,951,493
City of Richmond	374,022,160
Town of Ross	9,855,768
Town of San Anselmo	32,381,273
City of San Ramon	301,946,012
City of Saint Helena	48,784,002
City of San Pablo	63,337,637
City of San Rafael	218,232,540
City of Sausalito	32,001,734
County of Solano*	176,902,587
Town of Tiburon	29,057,049
City of Vallejo*	332,927,602
City of Walnut Creek	344,139,693
Town of Yountville	30,941,216
MCE Total Energy Use	6,222,004,783

\*2019 usage data as provided by PG&E. All other usage data reflects MCE customer billing records for 2019.

# <u>Exhibit D</u>

# Marin Clean Energy

- Voting Shares -

This Exhibit D is effective as of November 19, 2020.

MCE Member Community	kWh (2019)	Section 4.9.2.1	Section 4.9.2.2	Voting Share
City of American Canyon	76.695.933	1.35%	0.62%	1.97%
City of Belvedere	7,577,958	1.35%	0.06%	1.41%
City of Benicia	113,063,212	1.35%	0.91%	2.26%
City of Calistoga	25,994,261	1.35%	0.21%	1.56%
City of Concord	498,162,604	1.35%	4.00%	5.35%
Town of Corte Madera	46,419,358	1.35%	0.37%	1.72%
County of Contra Costa	673,004,355	1.35%	5.41%	6.76%
Town of Danville	159,347,837	1.35%	1.28%	2.63%
City of El Cerrito	57,817,586	1.35%	0.46%	1.82%
Town of Fairfax	17,969,915	1.35%	0.14%	1.50%
City of Fairfield*	452,596,498	1.35%	3.64%	4.99%
City of Lafayette	94,682,154	1.35%	0.76%	2.11%
City of Larkspur	42,611,547	1.35%	0.34%	1.69%
City of Martinez	151,009,009	1.35%	1.21%	2.56%
City of Mill Valley	44,571,991	1.35%	0.36%	1.71%
County of Marin	231,346,718	1.35%	1.86%	3.21%
Town of Moraga	43,994,965	1.35%	0.35%	1.70%
City of Napa	306,136,179	1.35%	2.46%	3.81%
County of Napa	299,606,262	1.35%	2.41%	3.76%
City of Novato	184,366,404	1.35%	1.48%	2.83%
City of Oakley	105,972,646	1.35%	0.85%	2.20%
City of Pinole	64,070,289	1.35%	0.51%	1.87%
City of Pittsburg	404,506,338	1.35%	3.25%	4.60%
City of Pleasant Hill*	125,951,493	1.35%	1.01%	2.36%
City of Richmond	374,022,160	1.35%	3.01%	4.36%
Town of Ross	9,855,768	1.35%	0.08%	1.43%
Town of San Anselmo	32,381,273	1.35%	0.26%	1.61%
City of San Ramon	301,946,012	1.35%	2.43%	3.78%
City of Saint Helena	48,784,002	1.35%	0.39%	1.74%
City of San Pablo	63,337,637	1.35%	0.51%	1.86%
City of San Rafael	218,232,540	1.35%	1.75%	3.11%
City of Sausalito	32,001,734	1.35%	0.26%	1.61%

County of Solano*	176,902,587	1.35%	1.42%	2.77%
Town of Tiburon	29,057,049	1.35%	0.23%	1.58%
City of Vallejo*	332,927,602	1.35%	2.68%	4.03%
City of Walnut Creek	344,139,693	1.35%	2.77%	4.12%
Town of Yountville	30,941,216	1.35%	0.25%	1.60%
MCE Total Energy Use	6,222,004,783	50.00%	50.00%	100.00%

\*2019 usage data as provided by PG&E. All other usage data reflects MCE customer billing records for 2019.

# MARIN ENERGY AUTHORITY

## **OPERATING RULES AND REGULATIONS**

## (As Amended)

## **ARTICLE I**

#### **FORMATION**

The Marin Energy Authority (the "Authority") was established on December 19, 2008 pursuant to the execution of the Marin Energy Authority Joint Powers Agreement (the "Agreement") by the County of Marin, the Town of Fairfax and the Town of Tiburon. The Initial Participants in the Authority who executed the Agreement within 180 days of the establishment of the Authority are the following:

The members of the Authority are referred to as Party or Parties in these Operating Rules and Regulations. As defined by the Agreement, these Operating Rules and Regulations consist of rules, regulations, policies, bylaws and procedures governing the operation of the Authority.

# **ARTICLE II**

# PURPOSES

The Authority is formed to study, promote, develop, conduct, operate, and manage energy and energy-related climate change programs, and to exercise all other powers necessary and incidental to accomplishing this purpose. These programs include but are not limited to the establishment of a Community Choice Aggregation Program known as Marin Clean Energy in accordance with the terms of the Agreement.

# ARTICLE III

# BOARD OF DIRECTORS

<u>Section 1</u>. The Authority shall be governed by a Board of Directors composed of one representative of each of the Parties. The Board may delegate specified functions or actions to the Executive Committee or other committees that may be established by the Board. The governing body of each Party shall appoint and designate in writing to the Authority one regular Director who shall be authorized to act for and on behalf of the Party on all matters within the power of the Authority. The governing body of each Party also shall appoint and designate in writing to the Authority one alternate Director who may vote on all matters when the regular Director is absent for a Board meeting. Both the Director and the Alternate Director shall be members of the governing body of the Party.

<u>Section 2</u>. Each Director and Alternate Director shall serve at the pleasure of the governing body of the Party that the Director represents and may be removed as Director or Alternate Director by such governing body at any time.

<u>Section 3</u>. A Director may be removed by the Board for cause. Cause shall be defined for the purposes of this section as follows:

- a. Unexcused absences from three consecutive Board meetings.
- b. Unauthorized disclosure of confidential information or documents from a closed session or the unauthorized disclosure of information or documents provided to the Director on a confidential basis and whose public disclosure may be harmful to the interests of the Authority.

Written notice shall be provided to the Director proposed for removal and the governing body that appointed such Director at least thirty days prior to the meeting at which the proposed removal will be considered by the Board. The notice shall state the grounds for removal, a brief summary of the supporting facts, and the date of the scheduled hearing on the removal. The Director proposed for removal shall be given an opportunity to be heard at the removal hearing and to submit any supporting oral or written evidence. A Director shall not be removed for cause from the Board unless two-thirds of all Directors (excluding the Director subject to removal) vote in favor of the removal.

<u>Section 4</u>. If at any time a vacancy occurs on the Board, for whatever reason, a replacement shall be appointed by the governing body of the subject Party to fill the position of the previous Director within ninety days of the date that such position becomes vacant.

# **ARTICLE IV**

# OFFICERS AND TERMS OF OFFICE

Section 1. There shall be a Chairperson, a Vice-Chairperson, a Secretary and a Treasurer.

- a. <u>Chairperson</u>. The Chairperson of the Authority shall be a Director. Duties of the Chairperson are to supervise the preparation of the business agenda, preside over Authority meetings, and sign all ordinances, resolutions, contracts and correspondence adopted or authorized by the Board. The term of office of the Chairperson shall be for one year.
- b. <u>Vice-Chairperson</u>. The Vice-Chairperson shall be a Director. The Vice-Chairperson shall perform the duties of Chairperson in the absence of such officer. The term of office of the Vice-Chairperson shall be for one year.
- c. <u>Secretary</u>. The Secretary will supervise the preparation of the meeting minutes and the maintenance of the records of the Authority. The term of the Secretary shall be for one year. The Secretary does not need to be a Director.
- d. <u>Treasurer and Auditor</u>. The Treasurer shall have custody of all the money of the Authority and shall have all of the duties and responsibilities specified in Government Code Section 6505.5. The Treasurer shall report directly to the Board and shall comply with the requirements of treasurers of incorporated municipalities. The positions of Treasurer and Auditor may be combined into one position known as the

Treasurer/Auditor of the Authority. Neither the Treasurer nor the Auditor needs to be a Director. The term of the Treasurer and Auditor shall be for one year. The Board may transfer the responsibilities of the Treasurer and Auditor to any person or entity permitted by law.

- e. <u>Initial Terms of Office</u>. Notwithstanding the one-year term generally established for officers above, the terms of the initial officers elected by the Board shall not expire until the annual meeting of the Board held in June 2010.
- f. <u>No Term Limits</u>. There are no limits on the numbers of terms that an officer of the Authority may serve.
- g. <u>Removal</u>. An officer of the Board shall be subject to removal with or without cause at any time by a majority vote of the full Board.
- h. <u>Committees</u>. The Executive Committee and all other Committees of the Board shall be selected as provided by Sections 4.6 and 4.7 of the Agreement. Each duly established Committee may establish any Standing or Ad Hoc Committees determined to be appropriate or necessary. The duties and authority of all Committees shall be subject to the approval and direction of the Board.
- i. <u>Committee of the Whole</u>. To allow full participation by Board members at meetings of Standing Committees, each Standing Committee meeting except the Executive Committee also shall be noticed as a "Committee of the Whole" meeting. In the event that a quorum of Board members are present at a Standing Committee meeting, the Standing Committee will automatically convert into a Committee of the Whole. Likewise, if there is no longer a quorum of the Board present, then the Committee of the Whole will automatically convert back into a Standing Committee. The chair of the Standing Committee will serve as Chair of the Committee of the Whole. Any item acted upon by the Committee of the Whole will be considered advisory to the Board of Directors and require consideration and action by the Board of Directors at a noticed Board meeting before adoption or approval of the item.

The agenda for each Standing Committee, other than the Executive Committee, shall include the following statement:

"This Committee may be attended by Board Members who do not serve on this Committee. In the event that a quorum of the entire Board is present, this Committee shall act as a Committee of the Whole. Any item acted upon by the Committee of the Whole will be considered advisory to the Board of Directors and require consideration and action by the Board of Directors at a noticed Board meeting before adoption or approval of the item."

#### **ARTICLE V**

#### **MEETINGS**

<u>Section 1</u>. Commencing in 2010, an annual meeting of the Board shall be held in June of each year to elect the officers of the Authority. The Board by resolution shall establish the date, time and meeting location of all regular meetings of the Board. Special meetings may be called upon the request of a majority of the members of the Board or by the Chairperson.

<u>Section 2</u>. The meetings of the Board, the Executive Committee and all other committees established by the Board shall be governed by the provisions of the Ralph M. Brown Act (Government Code Section 54950 et seq.).

## **ARTICLE VII**

#### VOTING

<u>Section 1</u>. Voting on Authority matters shall be held in accordance with the requirements of Sections 4.9 and 4.10 of the Agreement.

<u>Section 2</u>. Under Section 4.10 of the Agreement, each member of the Board shall have one vote on general administrative matters and energy programs not involving Community Choice Aggregation unless otherwise provided by the Agreement or these Operating Rules and Regulations. Unless the Agreement or these Operating Rules and Regulations require a two-thirds vote, action on these items shall be determined by a majority vote of the quorum present and voting on the item except for the following matters which shall be approved only by a majority vote of the full membership of the Board:

- a. The approval of the issuance of bonds or any other financing even if program revenues pay for such financing.
- b. The hiring of an Executive Director and General Counsel.
- c. The appointment or removal of an officer.
- d. The adoption of the Annual Budget.
- e. The adoption of an ordinance.
- f. The initiation of litigation where the Authority will be the plaintiff, petitioner or cross complainant or cross petitioner.
- g. The adoption and amendment of the Operating Rules and Regulations.
- h. The approval of any program or other activity requiring financial contributions by individual Parties subject to the right of any Party who votes

against the program or activity to opt-out of such program or activity pursuant to Section 4 of this Article.

<u>Section 3</u>. The approval of an Administrative Services Agreement under Section 4.13 of the Agreement for planning, implementing, operating and administering the CCA Program shall be subject to the voting requirements of Section 4.9 of the Agreement.

<u>Section 4</u>. The Board shall provide at least 45 days prior written notice to each Party before it considers a program or activity for adoption at a Board meeting not involving CCA that requires financial contributions by individual Parties. Such notice shall be provided to the governing body and the chief administrative officer, city manager or town manager of each Party. The Board also shall provide written notice of such program or activity adoption to the above-described officials of each Party within 5 days after the Board adopts the program or activity. Any Party voting against the approval of such program or activity may elect to opt-out of participation in the program or activity by providing written notice of this election to the Board within 30 days after the program or activity is approved by the Board. Upon timely exercising its opt-out election, a Party shall not have any financial obligation or any liability whatsoever for the conduct or operation of such program or activity.

# **ARTICLE VIII**

# DEBTS, LIABILITIES AND OBLIGATIONS

As provided by Section 2.3 of the Agreement, the debts, liabilities and obligations of the Authority shall not be debts, liabilities or obligations of the individual Parties unless the governing board of a Party agrees in writing to assume any of the debts, liabilities or obligations of the Authority. A Party who has not agreed to assume an Authority debt, liability or obligation shall not be responsible in any way for such debt, liability or obligation even if a majority of the Parties agree to assume the debt, liability or obligation of the Authority.

# **ARTICLE IX**

# AMENDMENTS

These Operating Rules and Regulations may be amended by a majority vote of the full membership of the Board but only after such amendment has been proposed at a regular meeting and acted upon at the next or later regular meeting of the Board for final adoption. The proposed amendment shall not be finally acted upon unless each member of the Board has received written notice of the amendment at least 10 days prior to the date of the meeting at which final action on the amendment is to be taken. The notice shall include the full text of the proposed amendment.

# MARIN CLEAN ENERGY

# ADDENDUM NO. 8 TO THE REVISED COMMUNITY CHOICE AGGREGATION IMPLEMENTATION PLAN AND STATEMENT OF INTENT

# TO ADDRESS MCE EXPANSION TO THE CITY OF FAIRFIELD



November 19, 2020

For copies of this document contact Marin Clean Energy in San Rafael, California or visit <u>www.mcecleanenergy.org</u>

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## **CHAPTER 1 – INTRODUCTION**

The purpose of this document is to make certain revisions to the Marin Clean Energy Implementation Plan and Statement of Intent to address the expansion of Marin Clean Energy ("MCE") to the City of Fairfield. MCE is a public agency that was formed in December 2008 for purposes of implementing a community choice aggregation ("CCA") program and other energyrelated programs targeting significant greenhouse gas emissions ("GHG") reductions. At that time, the Member Agencies of MCE included eight of the twelve municipalities located within the geographic boundaries of Marin County: the cities/towns of Belvedere, Fairfax, Mill Valley, San Anselmo, San Rafael, Sausalito and Tiburon and the County of Marin (together the "Members" or "Member Agencies"). In anticipation of CCA program implementation and in compliance with state law, MCE submitted the Marin Energy Authority Community Choice Aggregation Implementation Plan and Statement of Intent ("Implementation Plan") to the California Public Utilities Commission ("CPUC" or "Commission") on December 9, 2009. Consistent with its expressed intent, MCE successfully launched the Marin Clean Energy CCA program ("MCE" or "Program") on May 7, 2010 and has been serving customers since that time.

During the second half of 2011, four additional municipalities within Marin County, the cities of Novato and Larkspur and the towns of Ross and Corte Madera, joined MCE, and a revised Implementation Plan reflecting updates related to that expansion was filed with the CPUC on December 3, 2011.

Subsequently, the City of Richmond, located in Contra Costa County, joined MCE, and a revised Implementation Plan reflecting updates related to that expansion was filed with the CPUC on July 6, 2012.

A revision to MCE's Implementation Plan was then filed with the Commission on November 6, 2012 to ensure compliance with Commission Decision 12-08-045, which was issued on August 31, 2012. In Decision 12-08-045, the Commission directed existing CCA programs to file revised Implementation Plans to conform to the privacy rules in Attachment B of the aforementioned Decision.

During 2015, the County of Napa and the Cities of Benicia, El Cerrito, and San Pablo joined MCE; service was extended to customers in unincorporated Napa County during February 2015 and to customers in Benicia, El Cerrito and San Pablo during May 2015. To address the anticipated effects of these expansions, MCE filed with the Commission a revision to its Implementation Plan on July 18, 2014 to address expansion to the County of Napa (the Commission subsequently certified this revision on September 15, 2014). Following the Commission's certification of this revision, MCE submitted Addendum No. 1 to the Revised Community Choice Aggregation Implementation Plan and Statement of Intent to Address MCE Expansion to the City of San Pablo ("Addendum No. 1") on September 25, 2014 (and the Commission subsequently certified Addendum No. 1 on October 29, 2014); and Addendum No. 2 to the Revised Community Choice Aggregation Implementation Plan and Statement of Intent to Address MCE Expansion to the City of San Pablo ("Addendum No. 1 on October 29, 2014); and Addendum No. 2 to the Revised Community Choice Aggregation Implementation Plan and Statement of Intent to Address MCE Expansion to the City of Benicia ("Addendum No. 2") on November 21, 2014 (the Commission subsequently certified
Addendum No. 2 on December 1, 2014); and Addendum No. 3 to the Revised Community Choice Aggregation Implementation Plan and Statement of Intent to Address MCE Expansion to the City of El Cerrito ("Addendum No. 3") on January 7, 2015 (the Commission subsequently certified Addendum No. 3 on January 16, 2015).

On April 21, 2016, MCE's Board of Directors (the "Board" or "Governing Board") unanimously adopted Resolution No. 2016-01, which approved the cities of American Canyon, Calistoga, Lafayette, Napa, St. Helena and Walnut Creek as well as the Town of Yountville as members of MCE. On this date, MCE's Board also approved the related Addendum No. 4 to its Revised Community Choice Aggregation Implementation Plan and Statement of Intent ("Addendum No. 4"), which addressed expansion to such Communities. Addendum No. 4 was submitted to the Commission on April 22, 2016; Addendum No. 4 was certified by the Commission thereafter on May 6, 2016.

On July 20, 2017, MCE's Board adopted Resolution No. 2017-06, which approved Contra Costa County (unincorporated areas); the cities of Concord, Martinez, Oakley, Pinole, Pittsburg and San Ramon; and the towns of Danville and Moraga as members of MCE. On this date, MCE's Board also approved the related Addendum No. 5 to its Revised Community Choice Aggregation Implementation Plan and Statement of Intent ("Addendum No. 5"), which addressed expansion to such Communities. Addendum No. 5 was submitted to the Commission on September 25, 2017; Addendum No. 5 was certified by the Commission thereafter on December 21, 2017.

MCE's Board approved the membership request of Solano County (unincorporated areas) on October 18, 2018 via Resolution No. 2018-12, which also approved the related Addendum No. 6 to MCE's Revised Community Choice Aggregation Implementation Plan and Statement of Intent ("Addendum No. 6"), addressing service delivery within the unincorporated areas of Solano County. Addendum No. 6 was submitted to the Commission on November 20, 2018; Addendum No. 6 was certified by the Commission thereafter on February 19, 2019.

Following the aforementioned expansions, MCE's Board approved the membership requests of the cities of Pleasant Hill and Vallejo on November 21, 2019 via Resolution No. 2019-05, which also approved the related Addendum No. 7 to MCE's Revised Community Choice Aggregation Implementation Plan and Statement of Intent ("Addendum No. 7"), which addressed service delivery within the cities of Pleasant Hill and Vallejo. Addendum No. 7 was submitted to the Commission on December 6, 2019; Addendum No. 7 was certified by the Commission thereafter on March 9, 2020.

More recently, MCE's Board approved the membership request of the City of Fairfield on November 19, 2020 via Resolution No. 2020-03 (attached hereto as Appendix A), and similarly approved this Addendum No. 8 to MCE's Revised Community Choice Aggregation Implementation Plan and Statement of Intent ("Addendum No. 8"), which addresses service delivery within the City of Fairfield.

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The MCE program currently provides electric generation service to approximately 484,000 customers, including a cross section of residential and commercial accounts. During its more than ten-year operating history, non-member municipalities have monitored MCE's progress and operational success, evaluating the potential opportunity for membership, which would enable customer choice with respect to electric generation service. In response to such inquiries, MCE's Board adopted Policy 007, which established a formal process and specific criteria for new member additions. In particular, this policy identifies several threshold requirements, including the specification that any prospective member evaluation demonstrate financial benefits to MCE's existing customer base (based on prevailing market prices for requisite energy products at the time of each analysis) as well as environmental benefits (as measured by anticipated reductions in greenhouse gas emissions and increased renewable energy sales to CCA customers) before proceeding with expansion activities, including the filing of related revisions/addenda to this Implementation Plan. As MCE receives new membership requests, staff will follow the prescribed evaluative process of Policy 007 and will present related results at future public meetings, similar to the manner in which the results of prospective expansion to the City of Fairfield were recently presented at the duly noticed public meetings of MCE's Executive Committee and Governing Board. To the extent that membership evaluations demonstrate favorable results and any new community completes the prescribed process of joining MCE, this Implementation Plan will be revised through a related addendum, highlighting key impacts and consequences associated with the addition of such new community/communities.

In response to public interest and MCE's successful operational track record, the City of Fairfield requested MCE membership, consistent with MCE Policy 007, and subsequently adopted the requisite ordinance for offering CCA service within the City, which is attached hereto as Appendix C. As previously noted, MCE's Board approved such membership request at a duly noticed public meeting on November 19, 2020 through the adoption of Resolution No. 2020-03.

This Addendum No. 8 describes MCE's expansion plans to include the City of Fairfield. MCE intends to enroll such customers in its CCA Program during the month of April 2022, consistent with the Commission's requirements described in Resolution E-4907, which define relevant timing for Implementation Plan filing in advance of service commencement. According to the Commission, the Energy Division is required to receive and review a revised MCE implementation plan reflecting changes/consequences of additional members. With this in mind, MCE has reviewed its revised Implementation Plan, which was filed with the Commission on July 18, 2014, as well as previously filed and certified Addendums, and has identified certain information that requires updating to reflect the changes and consequences of adding the City of Fairfield as well as other forecast modifications, which reflect the most recent historical electric energy use within MCE's existing service territory. This Addendum No. 8 reflects pertinent changes that are expected to result from the new member addition as well as updated projections that are considerate of recent operations. This document format, including references to MCE's most recent Implementation Plan revision (filed with the Commission on July 18, 2014 and certified by the Commission on September 15, 2014), which is incorporated by reference and attached hereto as Appendix D, addresses all requirements identified in Public Utilities Code Section 366.2(c)(4), including universal access, reliability, equitable treatment of all customer classes and any requirements established by state law or by the CPUC concerning aggregated service, while streamlining public review of pertinent changes related to MCE's anticipated expansion.

#### CHAPTER 2 – CHANGES TO ADDRESS MCE EXPANSION TO THE CITY OF FAIRFIELD

As previously noted, this Addendum No. 8 addresses the anticipated impacts of MCE's planned expansion to the City of Fairfield, as well as other forecast modifications reflecting recent historical electric energy use within MCE's existing service territory. As a result of this member addition, certain assumptions regarding MCE's future operations have changed, including customer energy requirements, peak demand, renewable energy purchases, revenues, expenses and various other items. The following section highlights pertinent changes related to this planned expansion. To the extent that certain details related to membership expansion are not specifically discussed within this Addendum No. 8, MCE represents that such information shall remain unchanged relative to the July 18, 2014 Implementation Plan revision.

With regard to the defined terms Members and Member Agencies, the following Communities are now signatories to the MCE Joint Powers Agreement and represent MCE's current membership:

Membe	er Agencies
City of American Canyon	City of Novato
City of Belvedere	City of Oakley
City of Benicia	City of Pinole
City of Calistoga	City of Pittsburg
City of Concord	City of Pleasant Hill
County of Contra Costa	City of Richmond
Town of Corte Madera	Town of Ross
Town of Danville	Town of San Anselmo
City of El Cerrito	City of Saint Helena
Town of Fairfax	City of San Pablo
City of Fairfield	City of San Rafael
City of Lafayette	City of San Ramon
City of Larkspur	City of Sausalito
County of Marin	County of Solano
City of Martinez	Town of Tiburon
City of Mill Valley	City of Vallejo
Town of Moraga	City of Walnut Creek
City of Napa	Town of Yountville
County of Napa	

Throughout this document, use of the terms Members and Member Agencies refer to the aforementioned Communities. To the extent that the discussion herein addresses the process of aggregation and MCE organization, each of these communities is now an MCE Member and the electric customers of such jurisdictions have been or will be offered CCA service consistent with the noted phase-in schedule.

#### Aggregation Process

MCE's aggregation process was discussed in Chapter 2 of MCE's July 18, 2014 Revised Implementation Plan. This first paragraph of Chapter 2 is replaced in its entirety with the following verbiage:

As previously noted, MCE successfully launched its CCA Program, MCE, on May 7, 2010 after meeting applicable statutory requirements and in consideration of planning elements described in its initial Implementation Plan. At this point in time, MCE plans to expand agency membership to include the City of Fairfield, which has requested MCE membership, and MCE's Board of Directors subsequently approved this membership request at a duly noticed public meeting on November 19, 2020.

#### Program Phase-In

Program phase-in was discussed in Chapter 5 of MCE's July 18, 2014 Revised Implementation Plan. Chapter 5 is replaced in its entirety with the following verbiage:

MCE will continue to phase-in the customers of its CCA Program as communicated in this Implementation Plan. To date, seven complete phases have been successfully implemented. An eighth phase will commence in April 2021 (including service commencement to customers located within the cities of Pleasant Hill and Vallejo), and a ninth phase will commence in April 2022 (including service commencement to customers located within the City of Fairfield), as reflected in the following table.

MCE Phase No.	Status & Description of Phase	Implementation
		Date
Phase 1:	Complete: MCE Member (municipal) accounts & a	May 7, 2010
8,500 Accounts	subset of residential, commercial and/or industrial	
	accounts, comprising approximately 20 percent of total	
	customer load within MCE's original Member Agencies.	
Phase 2A:	Complete: Additional commercial and residential	August 2011
6,100 Accounts	accounts, comprising approximately 20 percent of total	
	customer load within MCE's original Member Agencies	
	(incremental addition to Phase 1).	
Phase 2B:	Complete: Remaining accounts within Marin County.	July 2012
79,000 Accounts		
Phase 3:	Complete: Residential, commercial, agricultural, and	July 2013
35,000 Accounts	street lighting accounts within the City of Richmond.	
Phase 4A:	Complete: Residential, commercial, agricultural, and	February 2015
14,000 Accounts	street lighting accounts within the unincorporated areas	
	of Napa County, subject to economic and operational	
	constraints.	

MCE Phase No.	Status & Description of Phase	Implementation
		Date
Phase 4B:	<b>Complete</b> : Residential, commercial, agricultural, and	May 2015
30,000 Accounts	street lighting accounts within the City of San Pablo, the	
	City of Benicia and the City of El Cerrito, subject to	
	economic and operational constraints.	
Phase 5:	Complete: Residential, commercial, agricultural, and	September 2016
83,000 Accounts	street lighting accounts within the Cities of American	
	Canyon, Calistoga, Lafayette, Napa, Saint Helena,	
	Walnut Creek and the Town of Yountville.	
Phase 6:	Complete: Residential, commercial, agricultural, and	April 2018
216,000	street lighting accounts within Contra Costa County	
Accounts	(unincorporated areas); the cities of Concord, Martinez,	
	Oakley, Pinole, Pittsburg and San Ramon; and the	
	towns of Danville and Moraga.	
Phase 7:	<b>Complete:</b> Residential, commercial, agricultural, and	April 2020
11,000 Accounts	street lighting accounts within Solano County	
	(unincorporated areas).	
Phase 8:	Pending Customer Enrollment: Residential,	April 2021
58,000 Accounts	commercial, agricultural, and street lighting accounts	(planned)
	within the cities of Pleasant Hill and Vallejo.	
Phase 9:	Pending Implementation Plan Certification:	April 2022
38,000 Accounts	Residential, commercial, agricultural, and street lighting	(planned,
	accounts within the City of Fairfield.	pending
		Implementation
		Plan
		Certification)

This approach has provided MCE with the ability to start slow, addressing problems and unforeseen challenges associated with a small, manageable CCA program before offering service to successively larger groups of customers. Following completion of Phase 9 customer enrollments, MCE expects to serve a customer base of approximately 585,000 accounts. This approach has also allowed MCE and its energy suppliers to address all system requirements (billing, collections and payments) under a phase-in approach that was designed to minimize potential exposure to uncertainty and financial risk by "walking" (when serving relatively small account totals) prior to "running" (when serving much larger account totals). The Board may evaluate other phase-in options based on future market conditions, statutory requirements and regulatory considerations as well as other factors potentially affecting the integration of additional customer accounts.

#### Resource Plan Overview

With regard to MCE's resource plan overview, which is addressed in Chapter 6, Load Forecast and Resource Plan, MCE adds the following paragraphs within the sub-section titled "Resource Plan Overview":

SB 255 (2019) added Section 366.2(c)(3)(H), which requires community choice aggregators to include in their implementation plans "[t]he methods for ensuring procurement from small, local, and diverse business enterprises in all categories, including, but not limited to, renewable energy, energy storage system [sic], and smart grid projects." As a public agency, MCE is prohibited by Article 1, Section 31 of the California Constitution from granting any preferential treatment to "any individual group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting." While these restrictions prevent MCE from "ensuring" procurement from certain diverse businesses, MCE remains committed to local economic development, and has taken several steps to diversify its procurement to the extent possible. MCE will continue to build its strategy and consider new methods for diversifying its procurement as appropriate.

MCE will continue to engage with the diverse business community in its service area and statewide, to inform businesses of the benefits of certification as a diverse business, as well as upcoming Requests for Proposals and other solicitations. While MCE cannot give any preference in the selection process to any business on the basis of race, sex, color, ethnicity, or national origin, MCE can ensure that diverse businesses are aware of upcoming contract opportunities.

MCE will, to the extent possible and reasonable, consider preferences for procurement from diverse business categories that are not prohibited, including but not limited to small and/or local businesses and businesses owned by disabled veterans or lesbian, gay, bisexual and/or transgender individuals ("LGBT"). MCE will consider parallel preferences for prime contractors that demonstrate an intent to contract with diverse subcontractors, as permitted by law.

#### Sales Forecast

With regard to MCE's sales forecast, which is addressed in Chapter 6, Load Forecast and Resource Plan, MCE assumes that total annual retail sales will increase to approximately 5,990 GWh following Phase 9 expansion. The following tables have been updated to reflect the impacts of planned expansion to MCE's new membership.

#### Chapter 6, Resource Plan Overview

Marin Clean Energy Proposed Resource Plan (GWH) 2010 to 2023														
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MCE Demand (GWh)														
Retail Demand	-91	-187	-574	-1,116	-1,265	-1,712	-2,241	-2,901	-4,545	-5,543	-5,679	-5,765	-6,253	-6,399
Distributed Generation	0	2	4	5	9	14	135	121	139	472	565	719	827	909
Energy Efficiency	0	0	0	0	1	3	3	5	7	10	16	19	26	33
EV Demand	0	0	0	0	0	0	-22	-29	-38	-75	-95	-357	-445	-534
Losses and UFE	-5	-11	-34	-67	-75	-102	-128	-168	-266	-308	-312	-323	-351	-359
Total Demand	-97	-197	-604	-1,177	-1,330	-1,797	-2,253	-2,973	-4,703	-5,444	-5,504	-5,707	-6,197	-6,350
MCE Supply (GWh)														
Renewable Resources														
Generation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Power Purchase Contracts	23	50	291	566	652	927	1,165	1,631	2,582	3,148	3,199	3,325	3,620	3,725
Total Renewable Resources	23	50	291	566	652	927	1,165	1,631	2,582	3,148	3,199	3,325	3,620	3,725
Conventional/Hydro Resources														
Generation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Power Purchase Contracts	74	147	314	611	678	870	1,088	1,342	2,121	2,296	2,305	2,382	2,576	2,625
Total Conventional/Hydro Resources	74	147	314	611	678	870	1,088	1,342	2,121	2,296	2,305	2,382	2,576	2,625
Total Supply	97	197	604	1,177	1,330	1,797	2,253	2,973	4,703	5,444	5,504	5,707	6,197	6,350
Energy Open Position (GWh)	0	0	0	0	0	0	0	0	0	0	0	0	0	0

### Chapter 6, Customer Forecast

#### Marin Clean Energy Enrolled Retail Service Accounts Phase-In Period (End of Month)

_	May-10	Aug-11	Jul-12	Jul-13	Feb-15	May-15	Sep-16	Apr-18	Apr-20	Apr-21	Apr-22
MCE Customers											
Residential	7,354	12,503	77,345	106,510	120,204	145,874	225,128	421,325	430,493	485,540	522,629
Commercial & Industrial	579	1,114	9,913	13,098	15,316	17,884	27,274	44,708	46,226	50,627	54,085
Street Lighting & Traffic	138	141	443	748	1,014	1,156	1,866	3,670	3,973	4,470	4,741
Ag & Pumping	-	<15	113	109	1,467	1,467	1,700	2,051	3,274	3,292	3,314
Total	8,071	13,759	87,814	120,465	138,001	166,381	255,968	471,754	483,966	543,929	584,769

#### Marin Clean Energy Retail Service Accounts (End of Year) 2010 to 2023

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MCE Customers														
Residential	7 354	12 503	77 345	106 510	106 510	145 874	225 128	226 254	421 325	423 432	430 493	485 540	522 629	525 242
Commercial & Industrial	579	1,114	9,913	13,098	13,098	17,884	27,274	27,410	44,708	44,932	46,226	50,627	54,085	54,356
Street Lighting & Traffic	138	141	443	748	748	1,156	1,866	1,875	3,670	3,688	3,973	4,470	4,741	4,765
Ag & Pumping	-	<15	113	109	109	1,467	1,700	1,709	2,051	2,061	3,274	3,292	3,314	3,330
Total	8,071	13,759	87,814	120,465	120,465	166,381	255,968	257,248	471,754	474,113	483,966	543,929	584,769	587,693

### Chapter 6, Sales Forecast

	Marin Clean Energy Energy Requirements (GWH) 2010 to 2023														
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	
MCE Energy Requirements (GWh)															
Retail Demand	91	187	574	1,116	1,265	1,712	2,241	2,901	4,545	5,543	5,679	5,765	6,253	6,399	
Distributed Generation	0	-2	-4	-5	-9	-14	-135	-121	-139	-472	-565	-719	-827	-909	
Energy Efficiency	0	0	0	0	-1	-3	-3	-5	-7	-10	-16	-19	-26	-33	
EV Demand	0	0	0	0	0	0	22	29	38	75	95	357	445	534	
Losses and UFE	5	11	34	67	75	102	128	168	266	308	312	323	351	359	
Total Load Requirement	97	197	604	1,177	1,330	1,797	2,253	2,973	4,703	5,444	5,504	5,707	6,197	6,350	

### Chapter 6, Capacity Requirements

Marin Clean Energy Capacity Requirements (MW) 2010 to 2023														
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Demand (MW)														
Retail Demand	28	46	182	233	234	318	441	682	1,068	1,293	1,445	1,564	1,731	1,835
Distributed Generation	-	(1)	(2)	(3)	(5)	(8)	(77)	(81)	(94)	(337)	(394)	(483)	(555)	(611)
Energy Efficiency	-	-	-	-	-	-	(1)	(1)	(2)	(2)	(16)	(47)	(47)	(47)
EV Load	-	-	-	-	-	-	10	13	18	34	43	92	115	138
Losses and UFE	2	3	11	14	14	19	22	37	59	59	65	68	75	79
Total Net Peak Demand	30	47	191	244	243	328	396	650	1,050	1,048	1,143	1,194	1,319	1,395
Reserve Requirement (%)	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Capacity Reserve Requirement	4	7	29	37	36	49	59	97	157	157	171	179	198	209
Capacity Requirement Including Reserve	34	55	220	281	279	378	455	747	1,207	1,205	1,314	1,373	1,517	1,604

#### Chapter 6, Renewables Portfolio Standards Energy Requirements

Marin Clean Energy RPS Requirements (MWH) 2010 to 2023														
_	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Retail Sales (MWh)	91,219	185,493	570,144	1,110,487	1,254,794	1,695,274	2,125,091	2,804,277	4,436,963	5,136,159	5,192,548	5,383,821	5,845,801	5,990,644
RPS Procurement Quantity Requirement (%)	20%	20%	20%	20%	22%	23%	25%	27%	29%	31%	33%	36%	39%	41%
Gross RPS Procurement Quantity Requirement (MWh)	18,244	37,099	114,029	222,097	272,290	394,999	531,273	757,155	1,286,719	1,592,209	1,713,541	1,927,408	2,250,633	2,474,136

Marin Clean Energy RPS Requirements and Program Renewable Energy Targets (MWH) 2010 to 2023														
_	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total Retail Sales (MWh)	91,219	185,493	570,144	1,110,487	1,254,794	1,695,274	2,125,091	2,804,277	4,436,963	5,136,159	5,192,548	5,383,821	5,845,801	5,990,644
Gross RPS Procurement Quantity Requirement (MWh)	18,244	37,099	114,029	222,097	272,290	394,999	531,273	757,155	1,286,719	1,592,209	1,713,541	1,927,408	2,250,633	2,474,136
65% L/T Requirement (2021 Forward)	-	-	-	-	-	-	-	-	-	-	-	1,252,815	1,462,912	1,608,188
Program Renewable Target (MWh)	24,543	51,525	166,522	364,363	646,619	866,365	1,160,620	1,671,167	2,756,266	3,168,446	3,199,378	3,325,126	3,620,499	3,724,666
Program Target (% of Retail Sales)	27%	28%	29%	33%	52%	51%	55%	60%	62%	62%	62%	62%	62%	62%
Voluntary Margin of Overprocurement (MWh)	6,299	14,426	52,493	142,266	374,329	471,366	629,347	914,012	1,469,547	1,576,237	1,485,837	1,397,718	1,369,865	1,250,530
Annual Increase (MWh)	24,543	26,982	114,997	197,841	282,256	219,746	294,255	510,547	1,085,099	412,180	30,932	125,748	295,373	104,167

#### Chapter 6, Energy Efficiency

				N Energy	Marin Clear Efficiency (GWI 2010 to 2	n Energy Savings Go H) 2023	oals							
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
MCE Retail Demand	91	187	574	1,116	1,265	1,712	2,241	2,901	4,545	5,543	5,679	5,765	6,253	6,399
MCE Energy Efficiency Goal	0	0	0	0	-1	-3	-3	-5	-7	-10	-16	-19	-26	-33

#### Chapter 6, Demand Response

The "Demand Response" sub-section of Chapter 6 is replaced in its entirety by the following:

Demand response programs provide incentives to customers to reduce demand upon request by the load serving entity (i.e., MCE), reducing the amount of generation capacity that must be maintained as infrequently used reserves. Demand response programs can be cost effective alternatives to capacity otherwise needed to comply with the resource adequacy requirements. Like energy efficiency, demand response can be a win/win proposition, providing economic benefits to the electric supplier and customer service benefits to the customer.

In an increasingly constrained capacity market, DR programs may assist in suppressing the need for incremental reserve capacity when extreme peak events occur or when capacity is in short supply. MCE continues to explore prospective DR program opportunities, in addition to those currently offered by PG&E, for select customers that may benefit from and are willing to participate in such programs.

#### Chapter 6, Distributed Generation

				Dis	Marin tributed ( 20	n Clean E Generatio (MW) 010 to 202	nergy n Projecti 23	ions						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
DG Capacity	-	1	2	3	5	8	77	81	94	337	394	483	555	611

#### Financial Plan

With regard to MCE's financial plan, which is addressed in Chapter 7, Financial Plan, MCE has updated its expected operating results, which now include projected impacts related to service expansion within the City of Fairfield. The following table reflects updated operating projections in consideration of this planned expansion.

#### Chapter 7, CCA Program Operating Results

					Maine									
					Marin C	lean Energy								
				Sur	nmary of CCA	A Program Ph	ase-In							
				(Jani	ary 2010 thro	ough Decembe	er 2023)							
CATEGORY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
I. REVENUES FROM OPERATIONS (\$)														
ELECTRIC SALES REVENUE	10,610,804	16,454,790	44,052,111	78,782,938	96,577,968	134,474,212	165,289,480	212,418,679	329,232,524	379,396,284	449,235,474	487,861,677	507,195,482	509,251,867
LESS UNCOLLECTIBLE ACCOUNTS	(29,176)	(140,371)	(299,942)	(540,077)	(662,078)	(921,934)	(1,126,363)	(1,442,225)	(2,351,872)	(2,642,638)	(5,837,119)	(6,210,547)	(6,747,052)	(6,897,804)
TOTAL REVENUES	10,581,628	16,314,419	43,752,169	78,242,861	95,915,890	133,552,278	164,163,116	210,976,455	326,880,652	376,753,646	443,398,355	481,651,130	500,448,430	502,354,063
II. COST OF OPERATIONS (\$)														
(A) ADMINISTRATIVE AND GENERAL (A&G)														
STAFFING	321,117	430,659	1,077,759	1,386,303	1,825,000	2,710,500	4,728,650	6,151,600	6,920,156	7,571,804	11,111,500	12,152,413	12,516,985	12,892,494
CONTRACT SERVICES	1,035,333	848,063	3,131,840	4,457,964	4,572,751	4,838,757	6,326,457	7,370,528	9,017,602	9,244,578	14,242,983	15,251,193	16,193,528	16,474,988
IOU FEES (INCLUDING BILLING)	19,548	60,794	287,618	584,729	660,114	877,953	1,124,270	1,261,350	1,775,059	1,873,962	2,117,967	2,364,322	2,641,454	2,766,705
OTHER A&G	191,261	189,204	249,729	302,806	373,125	610,500	791,750	1,284,784	1,398,107	2,057,959	2,201,000	2,433,550	2,506,557	2,581,753
SUBTOTAL A&G	1,567,259	1,528,720	4,746,946	6,731,802	7,430,990	9,037,711	12,971,126	16,068,262	19,110,924	20,748,303	29,673,450	32,201,477	33,858,523	34,715,941
(B) COST OF ENERGY	7.418.662	11.881.494	35.805.704	68.624.319	84.358.061	118.264.445	144.457.641	190.345.081	264.842.182	297.178.130	370.318.597	419.276.178	433,955,787	426.194.534
	, .,	,,		,. ,		., . , .	, . ,.		. ,. , .	. , .,	,,	., ., .		., . ,
(C) DEBT SERVICE	654,595	394,777	747,729	1,195,162	1,195,162	2,451,457	458,000	228,875	21,945	82,833	218,000	218,000	218,000	218,000
TOT AL COST OF OPERATION	0 ( 40 51 (	12 004 001	41 200 200	7/ 551 000	02 00 4 212	100 752 (12	155 00/ 5/5	20/ / /2 210	202.075.051	218 000 277	400 010 047	451 (05 (54	4/0 022 210	4/1 100 474
TOTAL COST OF OPERATION	9,040,516	13,804,991	41,300,380	76,551,283	92,984,212	129,/53,613	157,886,767	206,642,218	283,975,051	318,009,266	400,210,047	451,695,654	400,032,310	461,128,474
CCA PROGRAM SURPLUS/(DEFICIT)	941,112	2,509,428	2,451,789	1,691,578	2,931,677	3,798,665	6,276,350	4,334,236	42,905,601	58,744,380	43,188,308	29,955,476	32,416,120	41,225,589

#### **Expansion Addendum Appendices**

Appendix A: Marin Clean Energy Resolution No. 2020-03

Appendix B: MCE Joint Powers Agreement

Appendix C: City of Fairfield CCA Ordinance

Appendix D: Marin Clean Energy Revised Implementation Plan and Statement of Intent (July 18, 2014)

APPENDIX A

#### **RESOLUTION NO. 2020-03**

#### A RESOLUTION OF THE BOARD OF DIRECTORS OF MCE APPROVING THE CITY OF FAIRFIELD AS A MEMBER OF MCE

WHEREAS, on September 24, 2002, the Governor signed into law Assembly Bill 117 (Stat. 2002, Ch. 838; see California Public Utilities Code section 366.2; hereinafter referred to as the "Act"), which authorizes any California city or county, whose governing body so elects, to combine the electricity load of its residents and businesses in a community-wide electricity aggregation program known as Community Choice Aggregation ("CCA"); and,

**WHEREAS**, the Act expressly authorizes participation in a CCA program through a joint powers agency, and on December 19, 2008, Marin Clean Energy ("MCE"), (formerly the Marin Energy Authority) was established as a joint power authority pursuant to a Joint Powers Agreement, as amended from time to time ("MCE Joint Powers Agreement"); and,

**WHEREAS**, on February 2, 2010, the California Public Utilities Commission certified the "Implementation Plan" of MCE, confirming MCE's compliance with the requirements of the Act; and,

WHEREAS, MCE members include the following communities: the County of Contra Costa, the County of Marin, the County of Napa, the County of Solano, the City of American Canyon, the City of Belvedere, the City of Benicia, the City of Calistoga, the City of Concord, the Town of Corte Madera, the Town of Danville, the City of El Cerrito, the Town of Fairfax, the City of Lafayette, the City of Larkspur, the City of Martinez, the City of Mill Valley, the City of Moraga, the City of Napa, the City of Novato, the City of Oakley, the City of Pinole, the City of Pittsburg, the City of Pleasant Hill, the City of Richmond, the Town of Ross, the Town of San Anselmo, the City of San Pablo, the City of San Rafael, the City of Vallejo, the City of Walnut Creek, and the Town of Yountville; and

**WHEREAS**, requested membership in MCE was made by the City of Fairfield, December 17, 2019; and,

**WHEREAS**, the ordinance approving membership in MCE was approved by the City of Fairfield; and,

**WHEREAS**, the applicant analysis for the City of Fairfield was completed on October 22, 2020, and yielded a positive result;

**NOW, THEREFORE, BE IT RESOLVED AND ORDERED**, by the Board of Directors of MCE that the City of Fairfield is approved as a member of MCE.

**PASSED AND ADOPTED** at a regular meeting of the MCE Board of Directors on the nineteenth day of November, 2020 by the following vote:

	AYES	NOES	ABSTAIN	ABSENT
County of Marin	Х			
Contra Costa County				Х
County of Napa	Х			
County of Solano				Х
City of American Canyon	Х			
City of Belvedere	Х			
City of Benicia	Х			
City of Calistoga	Х			
City of Concord	Х			
Town of Corte Madera	Х			
Town of Danville	Х			
City of El Cerrito	Х			
Town of Fairfax	Х			
City of Lafayette	Х			
City of Larkspur	Х			
City of Martinez				Х
City of Mill Valley	Х			
Town of Moraga				Х
City of Napa	Х			
City of Novato	Х			
City of Oakley	Х			
City of Pinole	Х			
City of Pittsburg	Х			
City of Pleasant Hill	Х			
City of San Ramon	Х			
City of Richmond	Х			
Town of Ross	Х			
Town of San Anselmo	Х			
City of San Pablo	Х			
City of San Rafael	Х			
City of Sausalito	Х			
City of St. Helena	Х			
Town of Tiburon	Х			
City of Vallejo	Х			

APPENDIX A

City of Walnut Creek			Х
Town of Yountville	Х		

-DocuSigned by:

kathrin Sears

KATE2SEARS; CHAIR

ATTEST:

-DocuSigned by:

Dawn Wuisz DAWNWEISZ, SECRETARY

Appendix B: MCE Joint Powers Agreement

Omitted for this February 3, 2023 Executive Committee Packet due to the JPA being provided as a standalone attachment.

APPENDIX C

#### **CITY OF FAIRFIELD**

#### ORDINANCE NO. 2019-11

#### ORDINANCE OF THE CITY COUNCIL OF THE CITY OF FAIRFIELD AUTHORIZING THE IMPLEMENTATION OF A COMMUNITY CHOICE AGGREGATION PROGRAM IN THE CITY OF FAIRFIELD AND AUTHORIZING THE CITY MANAGER TO EXECUTE THE MARIN CLEAN ENERGY JOINT POWERS AGREEMENT

WHEREAS, on September 24, 2002, the Governor of California signed into law Assembly Bill 117 (Statute 2002, Chapter 838; see California Public Utilities Code section 366.2; hereinafter referred to as the "Act"), which authorizes any California city or county, whose governing body so elects, to combine electricity load of its residents and businesses in a Community Choice Aggregation program (CCA); and

WHEREAS, on September 27, 2006, Assembly Bill 32 (AB 32), the Global Warming Solutions Act, was signed into law establishing the goal of reducing California's greenhouse gas (GHG) emissions to 1990 levels by 2020; and

**WHEREAS**, the Act expressly authorizes participation in a CCA through a joint powers agency, and on December 19, 2008, Marin Clean Energy (MCE) was established as a joint powers authority pursuant to a Joint Powers Agreement, as amended from time to time; and

**WHEREAS**, on February 2, 2010, the California Public Utilities Commission certified the "Implementation Plan" of MCE, confirming MCE's compliance with the requirements of the Act; and

**WHEREAS**, currently electricity is generated and provided to the residents of the City of Fairfield by Pacific Gas and Electric Company (PG&E) with no alternative provider for the City of Fairfield; and

WHEREAS, although PG&E is currently meeting the 33% renewable portfolio standard in its power mix as required by Executive Order-S-14-08, the City of Fairfield is committed to the development of renewable energy generation and energy efficiency improvements, reduction of GHG's, and protection of the environment in supporting MCE's electricity procurement plan that offers customers a minimum energy content of 60% renewable to up to 100% renewable; and

**WHEREAS**, MCE primarily sources its electrical energy from non-polluting renewables such as solar, wind, geothermal, bioenergy and hydroelectric; and

**WHEREAS**, the City of Fairfield finds it important that its residents, businesses and public facilities have alternative choices to energy procurement beyond PG&E; and

ORD. NO. 2019–11 Page 2

**WHEREAS**, the City of Fairfield finds that joining MCE will offer customers choice in their provider of electric generation and help meet the GHG emission reduction goals of AB 32; and

WHEREAS, the City of Fairfield finds that joining a CCA does not constitute a "project" within the meaning of the Public Resources Code Section 21065, 14 California Code of Regulations Section 15060(c)(3), or 14 California Code of Regulations Section 15378 because it has no potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and involves administrative activities that will not result in direct or indirect physical changes in the environment; and

**WHEREAS**, the MCE Joint Powers Agreement requires the City of Fairfield to individually adopt a resolution requesting membership in the MCE Joint Powers Authority and adopt an ordinance electing to implement a CCA within its jurisdiction.

## NOW THEREFORE, THE COUNCIL OF THE CITY OF FAIRFIELD DOES ORDAIN AS FOLLOWS:

Section 1. The recitals above are true and correct and are incorporated by this reference and constitute findings in this matter.

Section 2. Joining a CCA does not constitute a "project" within the meaning of Public Resources Code Section 21065, 14 California Code of Regulations Section 15060(c)(3), or 14 California Code of Regulations Section 15378.

Section 3. The City Council of the City of Fairfield authorizes the implementation of a Community Choice Aggregation Program in the City of Fairfield and authorizes the City Manager to execute the MCE Joint Powers Agreement.

Section 4. Any portion of this ordinance deemed invalid or unenforceable shall be severed from the remainder, which shall remain in full force and effect.

Section 5. This ordinance shall take effect 30 days after its adoption.

Section 6. A summary of this ordinance will be published within 15 days after its adoption in the Fairfield Daily Republic, a newspaper of general circulation in the City of Fairfield.

ORD. NO. 2019–11 Page 3

**INTRODUCED** at a regular meeting of the City Council of the City of Fairfield on the 3<sup>rd</sup> day of December, 2019, and

**PASSED AND ADOPTED** this 17<sup>th</sup> day of December, 2019, by the following vote:

AYES: COUNCILMEMBERS: PRICE / BERTANI-/ MOY / TIMM / VACCARO

NOES: COUNCILMEMBERS:

ABSENT: COUNCILMEMBERS:

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# MARIN CLEAN ENERGY

## REVISED COMMUNITY CHOICE AGGREGATION IMPLEMENTATION PLAN AND STATEMENT OF INTENT



July 18, 2014

For copies of this document contact Marin Clean Energy in San Rafael, California or visit <u>www.mcecleanenergy.org</u>

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#### CHAPTER 1 – Introduction

Marin Clean Energy ("MCE"; MCE was formerly known as the "Marin Energy Authority" or "MEA"), a public agency, was formed in December 2008 for the purposes of implementing a community choice aggregation ("CCA") program and other energy-related programs targeting significant greenhouse gas emissions ("GHG") reductions. At that time, the Member Agencies of MCE included eight of the twelve municipalities located within the geographic boundaries of Marin County: the cities/towns of Belvedere, Fairfax, Mill Valley, San Anselmo, San Rafael, Sausalito and Tiburon and the County of Marin (together the "Members" or "Member Agencies"). In anticipation of CCA program implementation and in compliance with state law, MCE submitted the Marin Energy Authority Community Choice Aggregation Implementation Plan and Statement of Intent ("Implementation Plan") to the California Public Utilities Commission ("CPUC" or "Commission") on December 9, 2009. Consistent with its expressed intent, MCE successfully launched its CCA program, Marin Clean Energy ("MCE" or "Program"), on May 7, 2010 and has been successfully serving customers since that time.

During the second half of 2011, four additional municipalities within Marin County, the cities of Novato and Larkspur and the towns of Ross and Corte Madera, joined MCE, and a revised Implementation Plan reflecting updates related to said expansion was filed with the CPUC on December 3, 2011.

Subsequently, the City of Richmond, located in Contra Costa County, joined MCE, and a revised Implementation Plan reflecting updates related to this expansion was filed with the CPUC on July 6, 2012.

A revision to MCE's Implementation Plan was then filed with the Commission on November 6, 2012 to ensure compliance with Commission Decision 12-08-045, which was issued on August 31, 2012. In Decision 12-08-045, the Commission directed existing CCA programs to file revised Implementation Plans to conform to the privacy rules in Attachment B of this Decision.

Since its expansion to the City of Richmond, numerous communities have contacted MCE regarding membership opportunities, including specific requests to join MCE and initiate related CCA service within these respective jurisdictions. In response to these inquiries, MCE's governing board adopted Policy 007, which establishes a formal process and specific criteria for new member additions. In particular, this policy identifies several threshold requirements, including the specification that any prospective member evaluation demonstrate rate-related savings (based on prevailing market prices for requisite energy products at the time of each analysis) as well as environmental benefits (as measured by anticipated reductions in greenhouse gas emissions and increased renewable energy sales to CCA customers) before proceeding with expansion activities, including the filing of related revisions to this Implementation Plan. As MCE receives new membership requests, staff will follow the prescribed evaluative process of Policy 007 and will present related results at future public meetings. To the extent that membership evaluations demonstrate favorable results and any new community completes the process of joining MCE, this Implementation Plan will be

revised through an amendment to highlight key impacts and consequences related to the addition of the new community/communities.

Also, consistent with MCE's mission statement, MCE launched its first energy efficiency portfolio in late 2012, initially providing multi-family energy efficiency services to MCE customers only. In early 2013, MCE launched a portfolio of energy efficiency programs available to all ratepayers in its service territory, not just MCE customers. Energy efficiency and other local programs continue to be a robust and growing portion of MCE's operating activities.

MCE gives electric customers of the Member Agencies an opportunity to procure electricity from competitive suppliers, with such electricity being delivered over PG&E's transmission and distribution system. To date, the electricity delivered to MCE customers has included over 27 percent Renewables Portfolio Standard ("RPS") qualifying renewable energy, an amount which has surpassed all reporting entities, including the incumbent utility. Over the course of MCE's phased implementation schedule, all current PG&E customers within MCE's service area will receive information describing the Program and will have multiple opportunities to express their desire to remain bundled customers of PG&E, in which case they will not be enrolled in the Program. Thus, participation in the CCA Program is completely voluntary; however, customers, as provided by law, will be automatically enrolled unless they affirmatively elect to opt-out of the CCA Program.

The MCE program has received considerable interest from other communities in response to its innovative, environmentally-focused energy service alternative, which now provides electric generation service to approximately 120,000 customers, including a cross section of residential and commercial accounts. During its four-year operating history, non-member municipalities have monitored MCE progress, evaluating the potential opportunity for membership, which would enable customer choice with respect to electric generation service. In response to public interest and MCE's successful operational track record, the County of Napa has requested MCE membership, consistent with MCE Policy 007, and adopted the requisite ordinances for joining MCE. MCE's Board of Directors approved the County of Napa's membership request at a duly noticed public meeting on June 5, 2014 (through the approval of Resolution No. 2014-03) and the County of Napa's Board of Supervisors completed its final reading of the requisite CCA ordinance (Ordinance No. 1391) on July 15, 2014.

This revision of the Marin Clean Energy Community Choice Aggregation Implementation Plan and Statement of Intent ("Revised Implementation Plan") describes MCE's expansion plans to include the County of Napa. According to the Commission, the Energy Division is required to receive and review a revised MCE implementation plan reflecting changes/consequences of additional members. With this in mind, MCE has reviewed its revised Implementation Plan, which was filed with the Commission on November 6, 2012, and has identified certain information that requires updating to reflect the changes and consequences of adding the new member and to address MCE's name change (from MEA to MCE), which occurred via Resolution No. 2013-11 of MCE's Governing Board on December 5, 2013. This Revised Implementation Plan reflects such changes and includes related projections that account for MCE's planned expansion. Implementation of MCE has enabled customers within MCEs service area to take advantage of the opportunities granted by Assembly Bill 117 ("AB 117"), the Community Choice Aggregation Law. MCE's primary objective in implementing this Program continues to focus on increased utilization of renewable energy supplies for the purpose of promoting significant GHG emissions reductions. To date, MCE has achieved this objective by offering customers two energy supply options: 1) a minimum 50 percent renewable content, which will be the default service option for participating customers<sup>1</sup>; or 2) 100 percent renewable energy supply, stable and competitive electric rates, public participation in determining which technologies are utilized to meet local electricity needs, and local/regional economic benefits.

To ensure successful operation of the MCE program, MCE has received assistance from experienced energy suppliers and contractors in providing energy services to Program customers. As a result of a competitive solicitation process and subsequent contract negotiations, a highly qualified firm, Shell Energy North America ("SENA") was selected as MCE's initial energy services provider and scheduling coordinator. Since this initial solicitation, MCE has completed numerous procurement activities in an effort to accommodate the increasing electric energy requirements of a growing customer base, including the execution of various power purchase agreements with new and existing renewable energy projects. Such purchases have served to diversify MCE's energy supply portfolio, reflecting the use of multiple fuel sources, contract term lengths and resource locations, among other considerations. To serve the increasing energy requirements resulting from expanded membership MCE anticipates that its existing supply agreement with SENA may be amended and/or supplemented with additional purchases from other qualified suppliers of requisite energy products to reflect the Program's increased future needs. Information regarding SENA is contained in Chapter 10.

MCE's Implementation Plan reflects a collaborative effort among MCE, its Members, and the private sector to bring the benefits of competition and choice to Member residents and businesses. By exercising its legal right to form a CCA Program, MCE has enabled its Members' constituents to access the competitive market for energy services and obtain access to increased renewable energy supplies and resultant reductions in GHG emissions. Absent action by MCE or its individual Members, most customers would have no ability to choose an electric supplier and would remain captive customers of their incumbent utility.

The California Public Utilities Code provides the relevant legal authority for MCE to become a Community Choice Aggregator and invests the California Public Utilities Commission ("CPUC" or "Commission") with the responsibility for establishing the cost recovery mechanism that must be in place before customers can begin receiving electrical service through MCE's CCA Program. The CPUC has also registered MCE as a Community Choice Aggregator and continues to ensure compliance with basic consumer protection rules. The Public Utilities Code requires that an Implementation Plan be adopted at a duly noticed public hearing and

<sup>&</sup>lt;sup>1</sup> MCE customers received nearly 29 percent RPS-qualifying renewable energy in 2013. The default renewable energy content, which includes RPS-qualifying renewable energy and supplemental renewable energy credit purchases, was voluntarily increased from 25% to 50% beginning in January, 2012.

that it be filed with the Commission in order for the Commission to determine the cost recovery mechanism to be paid by customers of the Program in order to prevent shifting of costs. Each of these milestones has been accomplished. The Commission has established the methodology that will be used to determine the cost recovery mechanism, and PG&E now has approved tariffs for imposition of the cost recovery mechanism. Finally, each of MCE's Members has adopted an ordinance to implement a CCA program through its participation in MCE (copies of the ordinance adopted by MCE's newest member, the County of Napa, is included as Appendix D). Following the CPUC's certification of its receipt of this Revised Implementation Plan and resolution of any outstanding issues, MCE will take the final steps needed to expand CCA service to MCE's new member, including customer notification and enrollment.

#### Organization of this Implementation Plan

The content of this Revised Implementation Plan complies with the statutory requirements of AB 117. Because MCE has already successfully implemented its CCA program, this Revised Implementation Plan includes narrative discussion, updates and projections focused on ongoing operation and expansion of the MCE program rather than previously completed implementation efforts. As a result, certain sections of this document are now substantially abbreviated. Consistent with requirements identified in PU Code Section 366.2(c)(4), this Revised Implementation Plan addresses:

- Universal access;
- ➢ Reliability;
- > Equitable treatment of all customer classes; and
- Any requirements established by state law or by the CPUC concerning aggregated service.

To promote consistency with MCE's original January 25, 2010 Implementation Plan, the remainder of this Revised Implementation Plan is organized as follows:

Chapter 2: Aggregation Process Chapter 3: Organizational Structure Chapter 4: CCA Startup Chapter 5: Program Phase-In Chapter 5: Load Forecast and Resource Plan Chapter 6: Load Forecast and Resource Plan Chapter 7: Financial Plan Chapter 8: Ratesetting Chapter 8: Ratesetting Chapter 9: Customer Rights and Responsibilities Chapter 10: Procurement Process Chapter 10: Procurement Process Chapter 11: Contingency Plan for Program Termination Appendix A: Marin Clean Energy Resolution 2014-03 Appendix B: County of Napa, Resolution 2014-59 Appendix C: Joint Powers Agreement Appendix D: County of Napa, CCA Ordinance – Ordinance No. 1391

The requirements of AB 117 are cross-referenced to Chapters of this Implementation Plan in the following table.

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July 2014

#### AB 117 Cross References

AB 117 REQUIREMENT	IMPLEMENTATION PLAN CHAPTER
Process and consequences of aggregation	Chapter 2: Aggregation Process
Organizational structure of the program,	Chapter 3: Organizational Structure
its operations and funding	Chapter 4: Startup Plan and Funding
	Chapter 7: Financial Plan
Ratesetting and other costs to participants	Chapter 8: Ratesetting
	Chapter 9: Customer Rights and
	Responsibilities
Disclosure and due process in setting rates	Chapter 8: Ratesetting
and allocating costs among participants	
Methods for entering and terminating	Chapter 10: Procurement Process
agreements with other entities	
Participant rights and responsibilities	Chapter 9: Customer Rights and
	Responsibilities
Termination of the program	Chapter 11: Contingency Plan for Program
	Termination
Description of third parties that will be	Chapter 10: Procurement Process
supplying electricity under the program,	
including information about financial,	
technical and operational capabilities	
Statement of Intent	Chapter 1: Introduction

#### **CHAPTER 2 – Aggregation Process**

#### Introduction

As previously noted, MCE successfully launched its CCA Program, MCE, on May 7, 2010 after meeting applicable statutory requirements and in consideration of planning elements described in its January 25, 2010 Implementation Plan. At this point in time, MCE plans to expand agency membership to include the County of Napa. This community has requested MCE membership, and MCE's Board of Directors subsequently approved the membership request at a duly noticed public meeting.

As planned, the residents and businesses within MCE's expanded service territory will be offered electric generation service from MCE's currently operating CCA program, MCE, which represents a culmination of planning efforts that are responsive to the expressed needs and priorities of the citizenry and business community within the region. Through the MCE program eligible customers have received expanded energy choices, including the creation of a 100% renewable energy product and 100% local solar product. In effect, MCE provides Marin residents and businesses with four electric service options, which include: 1) the default 50% (minimum) renewable energy service option – Light Green; 2) a 100% renewable energy service option – Deep Green – which can be chosen on a voluntary basis; 3) a 100% local solar energy service option – Sol Shares – in which customers can enroll on a voluntary basis<sup>2</sup>; or 4) bundled energy service from the incumbent utility. It remains MCE's long-term goal to supply its customers entirely with clean, renewable energy, subject to economic and operational constraints.

Each of the Member Agencies has adopted an ordinance to implement a CCA program through its participation in MCE. A Revised Implementation Plan was adopted at a duly noticed public hearing of MCE on June 5, 2014.

#### Process of Aggregation

All customers currently enrolled in the MCE program were appropriately noticed. Before additional phases of customers are enrolled in the Program, MCE will mail at least two written notices to customers, beginning at least two calendar months, or sixty days, in advance of the date of commencing automatic enrollment, that will provide information needed to understand the Program's terms and conditions of service and explain how these customers can opt-out of the Program, if desired. All customers that do not follow the opt-out process specified in the customer notices will be automatically enrolled, and service will begin at their next regularly scheduled meter read date at least one calendar month, or thirty days following the date of automatic enrollment, subject to the service phase-in plan described in Chapter 5. At least two follow-up opt-out notices will be mailed to these customers within the first two calendar months, or sixty days, of service.

<sup>&</sup>lt;sup>2</sup> The Sol Shares program is currently accepting customer enrollments but will not begin delivering electric power to participating customers until the 2015 calendar year. In the meantime, Sol Shares enrollees may continue taking MCE service under the Light Green or Deep Green service options.

Customers enrolled in the Program will continue to have their electric meters read and be billed for electric service by the distribution utility (PG&E). The electric bill for Program customers will show separate charges for generation procured by the Program and all other charges related to delivery of the electricity and other utility charges that will continue to be assessed by PG&E.

After service cutover, customers will be given two additional opportunities to opt-out of the Program and return to the distribution utility (PG&E) following receipt of their first and second bills. Customers that opt-out between the initial cutover date and the close of the post enrollment opt-out period will be responsible for program charges for the time they were served by MCE but will not otherwise be subject to any penalty for leaving the program. Customers that have not opted-out within thirty days of the fourth opt-out notice will be deemed to have elected to become a participant in the Program and to have agreed to the Program's terms and conditions, including those pertaining to requests for termination of service, as further described in Chapter 8.

#### Consequences of Aggregation

#### **Rate Impacts**

Customers will pay the generation charges set by MCE and no longer pay the costs of PG&E generation. Customers enrolled in the Program will be subject to the Program's terms and conditions, including responsibility for payment of all Program charges as described in Chapter 9. MCE's rate setting policies are described in Chapter 7. MCE will establish rates sufficient to recover all costs related to operation of the Program, and actual rates will be adopted by MCE's governing board.

Information regarding current Program rates will be disclosed along with other terms and conditions of service in the pre-enrollment opt-out notices sent to potential customers.

Program customers are not expected to be responsible in any way for costs associated with the utilities' future electricity procurement contracts or power plant investments that are made on behalf of utility bundled service customers. Certain pre-existing generation costs will continue to be charged by PG&E to CCA customers through a separate rate component, called the Cost Responsibility Surcharge or CRS. This charge is shown in PG&E's tariff, which can be accessed from the utility's website.

#### **Renewable Energy Impacts**

The MCE program has substantially increased the proportion of energy generated and supplied to its customers by renewable resources. The resource plan includes procurement of renewable energy sufficient to meet a minimum of 50 percent of the Program's electricity needs. Customers of MCE may voluntarily participate in a 100 percent renewable supply option. To the extent that customers choose to participate in this voluntary program, the renewable content of MCE's power supply would increase. The renewable energy requirements of MCE customers are being supplied through contractual arrangements, but may be delivered, at an indeterminate point in the future, by new renewable generation resources developed by or for

MCE subject to then-current considerations (such as development costs, regulatory requirements and other concerns).

#### **Energy Efficiency Impacts**

Energy efficiency is an important component of the MCE mission statement. MCE currently administers over \$4 million in ratepayer funded energy efficiency programs under the purview of the California Public Utilities Commission. MCE launched energy efficiency programs in late 2012 under the authority of Public Utilities Code section 381.1 (e-f). This 2012 plan focused specifically on providing multi-family energy efficiency services to MCE customers only. In early 2013, MCE launched a full portfolio of energy efficiency services, available to all ratepayers in MCE service territory, under the authority in PUC 381.1 (a-d). Energy efficiency is included in the MCE Integrated Resources Plan, and both local energy efficiency potential and energy efficiency accomplishments are utilized to inform future estimates of procurement needs. This relationship is described further in Chapter 6.

#### CHAPTER 3 – Organizational Structure

This section provides an overview of the organizational structure of MCE

#### Organizational Overview

The MCE program is governed by MCE's Board of Directors ("Board"), appointed by the Members. MCE is a joint powers agency created in December 2008 and formed under California law. Originally, the County of Marin and eight municipalities within the geographic boundaries of the County became Members of MCE and elected to offer the Program to their constituents. Since that time, the remaining four municipalities within Marin, which include the cities of Novato and Larkspur and the towns of Ross and Corte Madera, have requested and received approval for MCE membership as has the City of Richmond and, most recently, the County of Napa. MCE (formerly known as "The Marin Energy Authority") is the CCA entity that has registered with the CPUC and has been responsible for implementing and managing the program pursuant to MCE's Joint Powers Agreement ("JPA Agreement" or "Agreement"). The Program is operated under the direction of an Executive Officer, who has been appointed by the Board. The Executive Officer reports to the Board comprised of one representative from each participating Member of MCE. Those who are eligible to serve as representatives on the Board include elected officials from the then-current County Board of Supervisors representing Marin County as well as the County of Napa (one Board representative has been selected from the Marin County Board of Supervisors; another Board representative, who will soon begin serving on MCE's governing board, has been selected by the County of Napa's Board of Supervisors) and the City and Town Councils (one representative has been selected from each of the City and Town Councils) of the Members.

The Board's primary duties are to establish program policies, set rates and provide policy direction to the Executive Officer, who has general responsibility for program operations, consistent with the policies established by the Board. The Board has also determined necessary staffing levels, individual titles and related compensation ranges for the organization. The Board may also adjust staffing levels and compensation over time in response to varying workloads, specific programs and/or general responsibilities of MCE.

The Executive Officer is an employee of MCE, and the Board is responsible for evaluating the Executive Officer's performance.

The Board has established a Chairman and other officers from among its membership and has established an Executive Committee and Technical Committee and may establish other committees and sub-committees as needed to address issues that require greater expertise in particular areas (e.g., finance or contracts). MCE may also establish an "Energy Commission" formed of Board-selected designees. The Energy Commission would have responsibility for evaluating various issues that may affect MCE and its customers, including rate setting, and would provide analytical support and recommendations to the Board in these regards.

The Executive Officer has responsibilities over the functional areas of Finance, Regulatory Affairs, and Operations. In performing these responsibilities, the Executive Officer utilizes a combination of internal staff and contractors. Certain specialized functions needed for program operations, namely the electric supply and customer account management functions described below, are performed by experienced third-party contractors.

#### Governance

MCE has a Board of Directors consisting of one representative from each Member. Following satisfaction of certain administrative conditions, the Board will soon add an additional representative from the County of Napa. The Board meets at regular intervals to provide the overall management and guidance for MCE. All Board meetings are public and held in accordance with the Ralph M. Brown Act.

Decisions by MCE are under voting procedures defined in the JPA Agreement, attached hereto as Appendix C. All votes on a particular matter are subject to the two-tiered approval process described in the JPA Agreement.

#### Officers

MCE has a Chair and Vice-Chair elected to one-year terms by the Board of Directors. Both the Chair and Vice-Chair must be members of the Board. In addition, MCE has a Board Clerk and Auditor; neither of which will be members of the Board of Directors. The JPA Agreement provides further detail with respect to each of these positions.

#### Committees

MCE may form various committees comprised of Board designees from the Member communities. Appointments would be made based on various skill sets and expertise that will be useful in evaluating matters affecting MCE and its customers, specifically issues related to rate setting, procurement of energy products and other technical matters. These committees would provide the Board with recommendations and related analysis to support policy-level decisions of the Board. MCE may elect to have additional committees or working groups to address various topics. Any additional committees and their functions will be determined by the Board of Directors at the time each committee is created. At present, MCE has formed the following standing committees: 1) the Executive Committee; and 2) the Technical Committee. MCE also utilizes Ad Hoc Committees from time to time on an as-needed basis.

#### Addition/Termination of Participation

The JPA Agreement provides for the addition of new participants subject to the affirmative vote of MCE's Board of Directors pursuant to the voting structure described in the Agreement. The Board has determined the specific terms and conditions under which new Members can be admitted and has recently approved the membership request received from the County of Napa. Following the satisfaction of certain administrative requirements determined by the Board, a representative from the new Member will be added to the Board and will begin participating in governance activities.

A JPA Member can withdraw itself from the JPA subject to the specific terms and conditions contained in the JPA Agreement.

#### Agreements Overview

There are two principal agreements that govern MCE and the initial operation of its CCA Program: the JPA Agreement and Program Agreement No. 1 (PA-1). Each of these agreements and its functions are discussed below.

#### Joint Powers Agreement

The JPA Agreement created MCE and delineates a broad set of powers related to the study, promotion, development, and conduct of electricity-related projects and programs. The JPA Agreement describes MCE as having broad powers, but a very limited role without implementing agreements ("program agreements") to carry out specific programs. This structure is intended to provide flexibility for MCE to undertake other programs in the future that may be unrelated to CCA on behalf of all or a subset of MCE's Members. The Board has limited decision making authority regarding land use within the Member communities. Any issues involving land use within Member communities will be raised with the potentially affected Member. The land use and building regulations of each Member shall apply to any JPA facilities located within the jurisdiction of that Member. Any amendments to the JPA Agreement will be subject to prior approval by the Board.

The first program agreement or PA-1, discussed in greater detail below, provides for electric generation service to customers of the CCA Program. At MCE's Members' discretion, future program agreements could provide for other energy related programs or subsequent energy transactions.

#### Program Agreement No. 1

PA-1 consists of three components: 1) the Edison Electric Institute ("EEI") Master Power Purchase & Sale Agreement ("Master EEI Agreement"), which is a standard industry contract used by public and private utilities across the United States; 2) the EEI Master Power Purchase & Sale Agreement Cover Sheet, which provides additional detail related to MCE's specific transaction, identifying exceptions, clarifications and areas of applicability that modify the standard terms and conditions of the Master EEI Agreement; and 3) one or more Confirmations, inclusive of any amendments thereto, which is referenced in the Master EEI Agreement and defines the commercial terms of MCE's transaction. PA-1 is the agreement under which MCE currently procures a significant portion of the electric supply services for MCE customers. PA-1 specifies a five year delivery period, which commenced on May 7, 2010 and ends on May 6, 2015. PA-1 specifies a full requirements energy product, including electric energy, renewable energy, capacity, ancillary services and scheduling coordination services. Based on contract negotiations, PA-1 specifies fixed annual prices for each year of the delivery period and

insulates municipal funds/budgets of the Member Agencies before, during and after the delivery period. PA-1 was executed by MCE and its energy supplier, SENA, on February 5, 2010 and has since incorporated a series of amendments to accommodate Program expansion. It is MCE's intent to provide for the additional energy requirements of future MCE customers by negotiating other contracts for requisite energy products and/or subsequent amendments to PA-1, which will be completed prior to commencement of service to CCA customers located within the unincorporated areas of the County of Napa. MCE anticipates that SENA will continue in its role as MCE's primary energy supplier and scheduling coordinator over the near-term (through December 31, 2016) but will also pursue supply arrangements with renewable energy generators to supplement planned renewable energy deliveries from SENA.

#### Agency Operations

MCE conducts program operations through its own internal staff and through contracts for services with third parties. MCE has its own General Counsel to manage its legal affairs. MCE's Executive Officer will have responsibility for day-to-day operations of the Program. To assist the Executive Officer, MCE has hired a full-time Administrative Assistant and a Clerk. Other staff positions may be added as necessary to include positions in finance, customer services, energy efficiency and other local energy programs, and operations.

Major MCE functions that are performed and managed by the Executive Officer are summarized below.

#### **Resource** Planning

MCE is charged with developing both short (one and two-year) and long-term resource plans for the program. The Executive Officer manages staff and contractors to develop the resource plan under the guidance provided by the Board and in compliance with California Law, and other requirements of California regulatory bodies (CPUC and CEC).

Long-term resource planning includes load forecasting and supply planning on a ten- to twenty-year time horizon. MCE's technical team develops integrated resource plans that meet program supply objectives and balance cost, risk and environmental considerations. Integrated resource planning considers demand side energy efficiency and demand response programs as well as traditional supply options. The CCA Program requires an independent planning function despite day-to-day supply operations being contracted to a third party energy supplier. Plans are updated and adopted by the Board on an annual basis.

#### Portfolio Operations

Portfolio operations encompass the activities necessary for wholesale procurement of electricity to serve end use customers. These highly specialized activities include the following:

Electricity Procurement – assemble a portfolio of electricity resources to supply the electric needs of program customers.

- *Risk Management* standard industry techniques are employed to reduce exposure to the volatility of energy markets and insulate customer rates from sudden changes in wholesale market prices.
- Load Forecasting develop accurate load forecasts, both long-term for resource planning and short-term for the electricity purchases and sales needed to maintain a balance between hourly resources and loads.
- Scheduling Coordination scheduling and settling electric supply transactions with the CAISO.

MCE has initially contracted with an experienced and financially sound third party, SENA, to perform most of the portfolio operation requirements for the CCA Program. These requirements include the procurement of energy and ancillary services, scheduling coordinator services, and day-ahead and real-time trading. PA-1 is the contractual instrument that has been developed for this purpose; additional detail related to PA-1 is provided in the preceding discussion.

MCE will approve and adopt a set of <u>*Program Controls*</u> that will serve as the risk management tools for the Executive Officer and any third party involved in the program's portfolio operations. Program Controls will define risk management policies and procedures and a process for ensuring compliance throughout the organization. During initial operations, SENA will bear the majority of program operational risks, pursuant to the terms and conditions of PA-1.

#### **Operations & Local Energy Programs**

A key focus of the CCA Program will be the development and implementation of local energy programs for its Members, including energy efficiency programs, net energy metering, distributed generation programs and other energy programs responsive to Member interests. The Executive Officer is responsible for further development of these Programs. To assist the Executive Officer in this regard, MCE has hired additional staff to oversee program operations and local energy program administration as well as develop energy efficiency marketing strategies, perform customer outreach and conduct related analyses to support chosen courses of action. As experience is gained from the retail energy side of the CCA Program, MCE will continue enhancing its local energy programs to achieve MCE's desired goals and objectives.

MCE is currently administering energy efficiency and distributed (solar) generation programs that can be used as alternatives to procurement of supply-side resources. MCE may also implement demand response programs in the future. For the time being, MCE has launched various small-scale pilot projects to explore demand response opportunities within its service territory. MCE will attempt to consolidate existing demand side programs into this organization and leverage the structure to expand energy efficiency offerings to customers throughout its service territory.

#### Rate Setting

The Board of Directors has the ultimate responsibility for setting the electric generation rates for the Program's customers. The Executive Officer in cooperation with technical staff and appropriate advisors, consultants and committees of the Board is responsible for developing proposed rates and options for the Board to consider before finalization. The final approved rates must, at a minimum, meet the annual revenue requirement developed by the Executive Officer, including any reserves or coverage requirements set forth in electric supply agreements and/or bond covenants. The Board has the flexibility to consider rate adjustments within certain ranges, provided that the overall revenue requirement is achieved; this provides an opportunity for economic development rates or other rate incentives.

#### Financial Management/Accounting

The Executive Officer in cooperation with technical staff, advisors and consultants is responsible for managing the financial affairs of MCE, including the development of an annual budget and revenue requirement; managing and maintaining cash flow requirements; potential bridge loans and other financial tools; and a large volume of billing settlements. The Executive Officer uses contractors and/or staff in support of these activities, as appropriate.

The Finance function arranges financing for capital projects, prepares financial reports, and ensures sufficient cash flow for the Program. This function also plays an important role in risk management by monitoring the credit of suppliers so that credit risk is properly understood and mitigated by the Program. In the event that changes in a supplier's financial condition and/or credit rating are identified, the Program will be able to take appropriate action, as would be provided for in the electric supply agreement. The Finance function establishes credit policies that the program must follow.

The retail settlements (customer billing) is contracted out to an organization with the necessary infrastructure and capability to handle in excess of 138,000 accounts during full Program phasein and near-term expansion (to the County of Napa), which is scheduled to occur in February 2015. This function is described under Customer Services, below.

#### **Customer Services**

In addition to general program communications and marketing, a significant focus on customer service, particularly representation for key accounts, is necessary. This includes both a call center designed to field customer inquiries and routine interaction with customer accounts. The Executive Officer is responsible for the Customer Services function and uses staff and/or contractors in support of these activities as appropriate.

The Customer Account Services function performs retail settlements-related duties and manages customer account data. It processes customer service requests and administers customer enrollments and departures from the Program, maintaining a current database of customers enrolled in the Program. This function coordinates the issuance of monthly bills through the distribution utility's billing process and tracks customer payments. Activities include the electronic exchange of usage, billing, and payments data with the distribution utility and MCE, tracking of customer payments and accounts receivable, issuance of late payment and/or service termination notices, and administration of customer deposits in accordance with MCE credit policies.

The Customer Account Services function also manages billing related communications with customers, customer call centers, and routine customer notices. MCE has initially contracted with a third party, Noble Americas Energy Solutions ("Noble"), which has demonstrated the necessary experience and administers appropriate computer systems (customer information system), to perform the customer account and billing services functions.

MCE conducts Program marketing and key customer account management functions. These responsibilities will include the assignment of account representatives to key accounts, which will ensure high levels of customer service to these businesses, and implementation of a marketing strategy to promote customer satisfaction with the CCA Program. Effectively administering communications, marketing messages, and delivering information regarding the CCA Program to all customers is critical for the overall success of the CCA Program.

#### Legal and Regulatory Representation

The CCA Program requires ongoing regulatory representation to file resource plans, resource adequacy, compliance with California RPS, and overall representation on issues that will impact MCE, its Members and MCE customers. MCE maintains an active role at the CPUC, CEC, and, as necessary, FERC and the California legislature. Day-to-day analysis and reporting of pertinent legal and regulatory issues is completed by the Program's in-house legal and regulatory staff and/or qualified contractors.

MCE also retains legal services, as necessary, to administer MCE, review contracts, and provide overall legal support to the activities of MCE.

#### **Roles and Functions**

The Board performs the functions inherent in its policy-making, management and planning roles. MCE is the public face of the Program and has a direct role in marketing, communications and customer service. Other highly specialized functions, such as energy supply and data management, are contracted out to third parties with sufficient experience, technical and financial capabilities. The functions that are currently being performed by MCE's Board of Directors, the Executive Officer and third parties are specified below:
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Organization	Roles/Functions/Activities
MCE Board of Directors	Executive/Policy/Legal
Executive Officer	Finance
	Legal and Regulatory
	- Legal support
	- Participation in regulatory proceedings
	- Regulatory reporting
	Marketing/Communications
	Rates & Support
	- Rate policy
	- Rate design
	- Cost-of-service planning
	Resource Planning
	- Load research
	- Load forecasting
	- Supply-side/Demand side portfolio planning
	Supply Operations
	- Procurement
	- Contract Negotiation
	- Invoice Reconciliation
	Contract Management
	- RFP/RFQ Administration
	- Invoice Reconciliation & Issue Resolution
	- Project Development Status Monitoring
	Customer Service
	- Account representatives
	- Energy efficiency/DG program management
Energy Suppliers	Supply Operations
	- Procurement
	- Scheduling coordination
	- Settlements (ISO/Wholesale)
	- Short-term load forecasting
Customer Account Services	Account Management (Customer Information System)
Provider/Data Manager (Noble)	- Customer switching
	- New customer processing
	- Data exchange (EDI)
	- Payment processing (AR/AP)
	- Billing and retail settlements
	- Call center

## Staffing

Staffing requirements for the above MCE functions will be approximately ten full time equivalent positions, once the customer phase-in is complete and the program is fully operational. These staffing requirements are in addition to the services provided by the third party energy suppliers and the data manager. The Executive Officer will have discretion whether to internally staff these required functions or to contract for these services.

The following table shows the staffing plan for Marin Clean Energy at initial full-scale operational levels, following full phase-in. Customer service for the mass market residential and small commercial customers will be provided by the Program's third party customer account services provider.

## Current Staffing for the Marin Clean Energy Community Choice Aggregation Program

Position	Staff (Full Time Equivalents)
Executive Officer	1
Internal Operations	
Director of Internal Operations	1
Business Analyst	1
Clerk	1
Human Resources Coordinator	0.5
Administrative Associate	1
Public Affairs	
Communications Director	1
Manager of Account Services	1
Account Manager 1	2
Community Affairs Coordinator	1
Communications Associate	1
Energy Efficiency	
Energy Efficiency Director	1
Energy Efficiency Specialist	2
Legal & Regulatory	
Legal Director	1
Regulatory Counsel	1
Regulatory Analyst	1
Regulatory Assistant	1
Electric Supply	
Director of Power Resources	1
Program Specialist	1
Special Assignment Intern	0.5
Total Staffing	21

Longer-term staffing needs will include additional energy efficiency and distributed generation activities and potentially the creation of an internal organization to perform the portfolio operations and account services functions that are currently performed under contract arrangements.

## CHAPTER 4 – CCA Startup

As previously noted, MCE successfully launched the MCE program on May 7, 2010. To ensure successful operation during the implementation and start-up period, MCE utilized a mix of staff and contractors in its CCA Program implementation. The following table illustrates start-up responsibilities as well as expectations for near-term (two to five years), and long-term staffing roles.

		Near-Term	
Function	Start-Up	(2 to 5 Years)	Long-Term
Program Governance	MCE Board	MCE Board	MCE Board
Program Management	MCE EO	MCE EO	MCE EO
Outreach	MCE EO	MCE EO	MCE EO
Customer Service	MCE EO	MCE EO	MCE EO
Key Account Management	MCE EO	MCE EO	MCE EO
Regulatory	Third Party	MCE EO	MCE EO
	(MCE EO support)	(Regulatory Analyst	(Regulatory
		support)	Analyst support)
Legal	MCE EO	MCE EO	MCE EO
Finance	MCE EO	MCE EO	MCE EO
Rates: Develop & Approve	MCE EO	MCE EO	MCE EO
	(third Party support)	(third Party support)	(third party
	MCE Board	MCE Board	support)
			MCE Board
Resource Planning	Third Party	MCE EO (third	MCE EO (third
	(MCE EO support)	party support)	party support)
Energy Efficiency	MCE EM	MCE EO (Program	MCE EO (Program
	(third Party	Energy Efficiency	Energy Efficiency
	Support)	Staff)	Staff)
Resource Development	MCE EO (third	MCE EO (third	MCE EO (third
	party support)	party support)	party support)
Portfolio Operations	Third Party	Third Party	MCE EO (third
		(MCE EO support)	party support)
Scheduling Coordinator	Third Party	Third Party	Third Party
			(potentially MCE
			EO)
Data Management	Third Party	Third Party	Third Party
			(potentially MCE
			EO)

#### **Expectations for Staffing Roles**

## Staffing Requirements

Staff will be added incrementally to match workloads involved in forming the new organization, managing contracts, and initiating customer outreach/marketing during the preoperations period. Actual staff will be dependent upon several factors, including the ability to recruit and hire qualified staff and personnel policies ultimately established by the Executive Officer and the Board of Directors.

#### **CHAPTER 5 – Program Phase-In**

MCE will continue to phase-in the customers of its CCA Program as communicated in this Implementation Plan. To date, four phases have been successfully implemented, and a fifth phase will commence in February 2015.

- Phase 1. Complete: MCE Member (municipal) accounts & a subset of residential, commercial and/or industrial accounts, comprising approximately 20 percent of total customer load.
- Phase 2. Complete: Additional commercial and residential accounts, comprising an approximately 20 percent of total customer load (incremental addition to Phase 1).
- Phase 3. Complete: Remaining accounts within Marin County.
- Phase 4. Complete: Residential, commercial, agricultural, and street lighting accounts within the City of Richmond.
- Phase 5. February 2015: Residential, commercial, agricultural, and street lighting accounts within the unincorporated areas of Napa County, subject to economic and operational constraints.

This approach has provided MCE with the ability to start slow, addressing any problems or unforeseen challenges on a small manageable program before gradually building to full program integration for an expected customer base of approximately 138,000 accounts, following service commencement to customers within the unincorporated areas of the County of Napa. This approach has also allowed MCE and its energy supplier(s) to address all system requirements (billing, collections, payments) under a phase-in approach to minimize potential exposure to uncertainty and financial risk by "walking" prior to ultimately "running".

MCE will offer service to all customers on a phased basis expected to be completed within twenty four to thirty six months of initial service to Phase 1 customers, which occurred on May 7, 2010. Phase 2 was implemented in August, 2011. Phase 3 of the Program began in July, 2012. Phase 4 was implemented in July, 2013 and included all residential, commercial, agricultural, and street lighting customers within the City of Richmond. Phase 5 is planned to begin in February 2015 and will include all residential, commercial, agricultural, and street lighting customers within the unincorporated areas of Napa County. The Board may evaluate other phase-in options based on then-current market conditions, statutory requirements and regulatory considerations as well as other factors potentially affecting the integration of additional customer accounts.

## CHAPTER 6 - Load Forecast and Resource Plan

#### Introduction

This Chapter describes MCE's proposed ten-year integrated resource plan, which will create a highly renewable, diversified portfolio of electricity supplies capable of meeting the electric demands of MCE's retail customers, plus sufficient reliability reserves.

This integrated resource plan reflects a progression towards MCE's long-term, programmatic goal of 100 percent renewable energy supply. Within five years of program commencement (2015), this significant commitment to renewable resources is projected to result in MCE meeting approximately 52 percent of its total electric needs through renewable resources. As the Program moves forward, incremental renewable supply additions will be made based on resource availability as well as economic goals of the Program. MCE's aggressive commitment to renewable generation adoption may involve both direct investment in new renewable generating resources through partnerships with experienced public power developers/operators, significant purchases of renewable energy from third party suppliers and the purchase of Renewable Energy Certificates ("RECs") from the market. The resource plan also sets forth ambitious targets for improving customer side energy efficiency as well as for potential deployment of approximately 14 MW of new distributed solar capacity within the jurisdictional boundaries of MCE by 2019 (year ten of Program operations).

The plan described in this section would accomplish the following by 2019:

- Procure energy needed to offer two generation rate tariffs: 100 percent Deep Green and 50 percent (minimum) Light Green.
- Increase the aggregate RPS-eligible renewable energy supply of the Program to a minimum 33 percent by 2020.
- Continue increasing renewable energy supplies of the Program to approximately 52 percent by 2015 based on resource availability and economic goals of the program.
- Develop partnership(s) with experienced public power developer(s) to responsibly evaluate development opportunities for Program-owned/controlled renewable generating capacity.
- > Achieve significant reductions in greenhouse gas emissions within the Member Agencies.

MCE is responsible for complying with regulatory rules applicable to California load serving entities. MCE has arranged for the scheduling of sufficient electric supplies to meet the hourby-hour demands of its customers. MCE has adhered to capacity reserve requirements established by the CPUC and the CAISO designed to address uncertainty in load forecasts and potential supply disruptions caused by generator outages and/or transmission contingencies. These rules also ensure that physical generation capacity is in place to serve the Program's customers, even if there were to be a need for the Program to cease operations and return customers to PG&E. In addition, MCE is responsible for ensuring that its resource mix contains sufficient production from renewable energy resources needed to comply with the statewide renewable portfolio standards. The resource plan will meet or exceed all of the applicable regulatory requirements related to resource adequacy and the renewable portfolio standard.

## Resource Plan Overview

The criteria used to guide development of the proposed resource plan included the following:

- > Environmental responsibility and commitment to renewable resources;
- Price/rate stability;
- > Reliability and maintenance of adequate reserves; and
- ➢ Cost effectiveness.

To meet these objectives and the applicable regulatory requirements, MCE's resource plan includes a diverse mix of power purchases, renewable energy, new energy efficiency programs, demand response, and distributed generation. A diversified resource plan minimizes risk and volatility that can occur from over-reliance on a single resource type or fuel source. The ultimate goal of MCE's resource plan is to maximize use of renewable resources subject to economic and operational constraints. The result is a resource plan that will source approximately 52 percent of MCE's resource mix from renewable resources by 2015. The planned resource mix is initially comprised of power and renewable energy credit purchases from third party electric suppliers and, in the longer-term, may also include renewable generation assets owned and/or controlled by MCE.

Eventually, MCE may begin evaluating opportunities for investment in renewable generating assets, subject to then-current market conditions, statutory requirements and regulatory considerations. Any renewable generation owned by MCE or controlled under long-term power purchase agreement with a proven public power developer, could provide a portion of MCE's electricity requirements on a cost-of-service basis. Electricity purchased under a cost-of-service arrangement should be more cost-effective than purchasing renewable energy from third party developers, which will allow the Program to pass on cost savings to its customers through competitive generation rates. Any investment decisions will be made following thorough environmental reviews and in consultation with the Marin Communities' financial advisors, investment bankers, attorneys, and potentially with customer input.

As an alternative to direct investment, MCE may consider partnering with an experienced public power developer and enter into a long-term (20-to-30 year) power purchase agreement that would support the development of new renewable generating capacity. Such an arrangement could be structured to greatly reduce the Program's operational risk associated with capacity ownership while providing Program customers with all renewable energy generated by the facility under contract. This option may be preferable to MCE as it works to achieve increasing levels of renewable energy supply to its customers.

MCE's resource plan will integrate supply-side resources with programs that will help customers reduce their energy costs through improved energy efficiency and other demandside measures. As part of its integrated resource plan, MCE will actively pursue, promote and ultimately administer a variety of customer energy efficiency programs that can cost-effectively displace supply-side resources. Included in this plan is a targeted deployment of over 14 MW of distributed solar by 2019.

MCE's proposed resource plan for the years 2010 through 2019 is summarized in the following table:

Marin Clean Energy Proposed Resource Plan (GWH) 2010 to 2019										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MCE Demand (GWh)										
Retail Demand	-91	-185	-570	-1,110	-1,294	-1,545	-1,582	-1,582	-1,582	-1,582
Distributed Generation	0	1	1	5	12	16	22	23	25	25
Energy Efficiency	0	0	0	6	6	4	8	12	16	16
Losses and UFE	-5	-11	-34	-66	-77	-91	-93	-93	-92	-92
Total Demand	-96	-196	-603	-1,166	-1,353	-1,616	-1,646	-1,640	-1,634	-1,634
MCE Supply (GWh)										
Renewable Resources										
Generation	0	0	0	0	0	0	0	219	219	219
Power Purchase Contracts	23	50	291	566	673	803	838	635	651	667
Total Renewable Resources	23	50	291	566	673	803	838	854	870	886
Conventional Resources										
Generation	0	0	0	0	0	0	0	0	0	0
Power Purchase Contracts	73	146	312	599	680	813	807	786	764	748
Total Conventional Resources	73	146	312	599	680	813	807	786	764	748
Total Supply	96	196	603	1,166	1,353	1,616	1,646	1,640	1,634	1,634
Energy Open Position (GWh)	0	0	0	0	0	0	0	0	0	0

## Supply Requirements

The starting point for MCE's resource plan is a projection of participating customers and associated electric consumption. Projected electric consumption is evaluated on an hourly basis, and matched with resources best suited to serving the aggregate of hourly demands or the program's "load profile". The electric sales forecast and load profile will be affected by MCE's plan to introduce the Program to customers in phases and the degree to which customers choose to remain with PG&E during the customer enrollment and opt-out periods. It is anticipated that MCE's contracted energy supplier will bear a portion of the financial risks associated with deviations from the electric sales forecast during the initial operating period. It will be the obligation of this energy supplier to appropriately reflect these risks in the full requirements energy price. MCE's phased roll-out plan and assumptions regarding customer participation rates are discussed below.

## **Customer Participation Rates**

Customers will be automatically enrolled in MCE's electricity program unless they opt-out during the customer notification process conducted during the 60-day period prior to enrollment and continuing through the 60-day period following commencement of service. MCE anticipated an overall customer participation rate of approximately 80 percent during Phase 1, when service is being offered to the service accounts that are affiliated with MCE's participating members (municipal accounts) and a subset of residential, commercial and/or industrial customers, totaling approximately 20 percent of total customer load. The actual participation rate for Phase 1 was very similar to MCE's projection. Participation rates for Phase 2 were approximately 80 percent of bundled service customers and 0 percent of direct access customers. Participation rates for Phases 3 and 4 are projected to range from 70 percent to 80 percent, with the lower figure used as the basis for load projections contained in this plan. The participation rate is not expected to vary significantly among customer classes, in part due to the fact that MCE will offer two distinct rate tariffs that will address the needs of costsensitive customers within the Marin Communities as well as the needs of both residential and business customers that prefer a highly renewable energy product. The assumed participation rates will be refined as MCE's public outreach and market research efforts continue to develop.

#### **Customer Forecast**

Once customers enroll in each phase, they will be switched over to service by MCE on their regularly scheduled meter read date over an approximately thirty day period. The number of accounts served by MCE at the end of each phase is shown in the table below.

	Enrolled Retail Service Accounts Phase-In Period (End of Month)										
_	May-10	Aug-11	Jul-12	Jul-13	Feb-15						
MCE Customers											
Residential	7,354	12,503	77,345	106,510	120,204						
Small Commercial	522	605	8,934	11,829	13,761						
Medium And Large											
Commercial And	57	509	949	1,269	1,555						
Industrial											
Street Lighting & Traffic	138	141	443	748	1,014						
Ag & Pump.	-	< 15	113	109	1,467						
Total	8,071	13,759	87,814	120,465	138,001						

# Marin Clean Energy

MCE assumes that MCE customer growth will generally offset customer attrition (opt-outs) over time, resulting in a relatively stable customer base over the noted planning horizon. Because MCE is the first program of its kind within California, it is very difficult to anticipate with any precision the actual levels of customer participation within this CCA program. MCE believes that its assumptions regarding the offsetting effects of growth and attrition are reasonable in consideration of the limited build-out potential within a significant portion of MCE's service territory and the observed rate of customer opt-outs following mandatory customer notification periods. The forecast of service accounts (customers) served by MCE for each of the referenced ten-year planning periods is shown in the following table:

## Marin Clean Energy Retail Service Accounts (End of Year) 2010 to 2019

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MCE Customers										
Residential	7,354	12,503	77,345	106,510	106,510	120,204	120,204	120,204	120,204	120,204
Small Commercial	522	605	8,934	11,829	11,829	13,761	13,761	13,761	13,761	13,761
Medium And Large Commercial And		<b>F00</b>	070	1 2 (0	1.0(0)	1	1	1	1	1
Industrial	57	509	979	1,269	1,269	1,555	1,555	1,555	1,555	1,555
Street Lighting & Traffic	138	141	443	748	748	1,014	1,014	1,014	1,014	1,014
Ag & Pump.	-	< 15	113	109	109	1,467	1,467	1,467	1,467	1,467
Total	8,071	13,759	87,814	120,465	120,465	138,001	138,001	138,001	138,001	138,001

#### Sales Forecast

MCE's forecast of kWh sales reflects the roll-out and customer enrollment schedule shown above. The annual electricity needed to serve MCE's retail customers increases from approximately 200 GWh in 2011 to approximately 1,600 GWh at full roll-out, which includes planned expansion to the County of Napa. Annual energy requirements are shown below.

			Mari	n Clean Er	nergy					
			Energ	y Require	ments					
				(GWH)						
			2	010 to 201	9					
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MCE Energy Requirements (G	Wh)									
Retail Demand	91	185	570	1,110	1,294	1,545	1,582	1,582	1,582	1,582
Distributed Generation	0	-1	-1	-5	-12	-16	-22	-23	-25	-25
Energy Efficiency	0	0	0	-6	-6	-4	-8	-12	-16	-16
Losses and UFE	5	11	34	66	77	91	93	93	92	92
Total Load Requirement	96	196	603	1.166	1.353	1.616	1.646	1.640	1.634	1.634

## Capacity Requirements

The CPUC's resource adequacy standards applicable to MCE require a demonstration one year in advance that MCE has secured physical capacity for 90 percent of its projected peak loads for each of the five months May through September, plus a minimum 15 percent reserve margin. On a month-ahead basis, MCE must demonstrate 100 percent of the peak load plus a minimum 15 percent reserve margin.

A portion of MCE's capacity requirements must be procured locally, from the Greater Bay area as defined by the CAISO and another portion must be procured from local reliability areas outside the Greater Bay Area. MCE must also meet requirements for flexible capacity such that a portion of MCE's resource adequacy requirements are met from qualifying flexible resources. MCE is required to demonstrate its local and flexible capacity requirements for each month of the following calendar year. MCE must demonstrate compliance or request a waiver from the CPUC requirement as provided for in cases where local capacity is not available. MCE complies with the forward and monthly resource adequacy requirements administered by the state regulatory agencies.

MCE's plan ensures sufficient reserves are procured to meet its peak load at all times. MCE's annual peak capacity requirements are shown in the following table:

		M Ca	Aarin Clean pacity Requ (MW 2010 to 2	1 Energy 11 Energy 11 Energy 2019						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Demand (MW)										
Retail Demand	28	46	182	233	233	286	286	286	286	286
Distributed Generation	(0)	(1)	(4)	(8)	(11)	(15)	(15)	(17)	(17)	(17)
Energy Efficiency	-	-	-	(1)	(1)	(1)	(2)	(3)	(3)	(3)
Losses and UFE	2	3	11	13	13	16	16	16	16	16
Total Net Peak Demand	30	47	189	237	235	287	285	283	282	282
Reserve Requirement (%)	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Capacity Reserve Requirement	4	7	28	36	35	43	43	42	42	42
Capacity Requirement Including Reserve	34	55	218	273	270	330	328	325	324	324

MCE will continue to coordinate with PG&E and appropriate state agencies to manage the transition of responsibility for resource adequacy from PG&E to MCE following load migration to CCA service. For system resource adequacy requirements, MCE will make month-ahead showings for each month that MCE plans to serve load, and any load migration issues will be addressed through the CPUC's approved procedures. MCE will work with the California Energy Commission and CPUC prior to commencing service to additional customers to ensure it meets its local, system and flexible resource adequacy obligations through its agreements with its chosen electric suppliers.

## Renewable Portfolio Standards Energy Requirements

#### **Basic RPS Requirements**

As a CCA, MCE is required by law and ensuing CPUC regulations to procure a certain minimum percentage of its retail electricity sales from qualified renewable energy resources. For purposes of determining MCE's renewable energy requirements, the same standards for RPS compliance that are applicable to the distribution utilities are assumed to apply to MCE.

California's RPS program is currently undergoing reform. On April 12, 2011, Governor Jerry Brown signed SB x1 2, requiring public and private utilities as well as community choice aggregators to obtain 33 percent of their electricity from renewable energy sources by December 31, 2020. MCE is familiar with California's new RPS, including certain procurement quantity

requirements identified in D.11-12-020 (December 1, 2011). To date, MCE has significantly exceeded California's RPS, providing MCE customers with over 29 percent RPS-eligible renewable energy delivered to MCE customers in 2012. A similar renewable energy percentage, approximating 28.7 percent, was supplied to MCE customers in 2013.

#### MCE's Renewable Portfolio Standards Requirement

MCE's annual RPS requirements are shown in the table below. When reviewing this table, it is important to note that MCE projects increases in energy efficiency savings as well as increases in locally situated distributed generation capacity (an additional 14 MW by 2019), resulting in a slight downward trend in projected retail electricity sales.

Marin Clean Energy RPS Requirements (MWH) 2010 to 2019										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Retail Sales	91,219	185,493	570,144	1,110,487	1,293,681	1,544,971	1,581,999	1,581,999	1,581,999	1,581,999
Baseline	-	18,244	37,099	114,029	222,097	280,729	359,978	395,500	427,140	458,780
Incremental Procurement Target	18,244	18,855	76,930	108,069	58,631	79,249	35,522	31,640	31,640	31,640
Annual Procurement Target	18,244	37,099	114,029	222,097	280,729	359,978	395,500	427,140	458,780	490,420
% of Current Year Retail Sales	20%	20%	20%	20%	22%	23%	25%	27%	29%	31%

Based on planned renewable energy procurement objectives, MCE anticipates that it will significantly exceed the minimum RPS requirements as shown below.

	סס	C Paguinam	iviai ii	roorem Den	awahla En a	on Tanasta				
	KI S Requirements and Frogram Renewable Energy Targets									
				(MWH)						
			2	010 to 2019						
_	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Retail Sales (MWh)	91,219	185,493	570,144	1,110,487	1,293,681	1,544,971	1,581,999	1,581,999	1,581,999	1,581,999
Annual RPS Target (Minimum MWh)	18,244	37,099	114,029	222,097	280,729	359,978	395,500	427,140	458,780	490,420
Program Target (% of Retail Sales)	25%	27%	51%	51%	52%	52%	53%	54%	55%	56%
Program Renewable Target (MWh)	22,805	50,083	290,773	566,348	672,714	803,385	838,459	854,279	870,099	885,919
Surplus In Excess of RPS (MWh)	4,561	12,984	176,745	344,251	391,985	443,407	442,960	427,140	411,320	395,500
Annual Increase (MWh)	22,805	27,278	240,690	275,575	106,366	130,671	35,075	15,820	15,820	15,820

#### Resources

MCE has begun evaluating opportunities for future investment in renewable generating assets. Such opportunities will be evaluated on a case by case basis in consideration of resource location, market conditions, statutory requirements and regulatory considerations. Any renewable generation owned by MCE or controlled under long-term power purchase agreement with a proven public power developer, could provide a portion of MCE's electricity

requirements on a cost-of-service basis. Electricity purchased under a cost-of-service arrangement should be more cost-effective than purchasing renewable energy from third party developers, which will allow the Program to pass on cost savings to its customers through competitive generation rates. Any investment decisions will be made following thorough environmental reviews and in consultation with MCE's financial advisors, investment bankers, attorneys, and potentially with customer input.

As an alternative to direct investment, MCE may consider partnering with an experienced public power developer and enter into a long-term (20-to-30 year) power purchase agreement that would support the development of new renewable generating capacity. Such an arrangement could be structured to greatly reduce the Program's operational risk associated with capacity ownership while providing Program customers with all renewable energy generated by the facility under contract. This option may be preferable to MCE as it works to achieve increasing levels of renewable energy supply to its customers.

#### Purchased Power

Power purchased from utilities, power marketers, public agencies, and/or generators will likely be the predominant source of supply from 2010 to 2015 (MCE may consider the development of certain renewable energy projects, subject to Board approval, which may supply electric generation to MCE customers as soon as January 2016) and may still remain a significant source of power in the event that MCE considers the development of its own renewable generation assets. During the period from 2010 – 2016, MCE plans to contract with SENA for a substantial portion of its electricity needs under a full requirements power supply agreement, and SENA will be responsible for procuring a mix of power purchase contracts, including specified renewable energy targets, to provide a stable and cost-effective resource portfolio for the Program. Deliveries under this agreement have been supplemented with purchases of other energy products from qualified renewable project developers, asset owners and power marketers. Based on terms established in this third-party contract, MCE will continue to substitute electric energy generated by MCE-owned/controlled renewable resources for contract quantities in the event that such resources become operational during the delivery period.

#### Renewable Resources

MCE will initially secure necessary renewable power supply from SENA. MCE has supplemented the renewable energy provided under the initial full requirements contract with direct purchases of renewable energy from renewable energy facilities.

For planning purposes, MCE should anticipate procurement from the following types of large scale renewable resources in the near to midterm, which would require little or no transmission expansion to ensure deliverability:

- Local resources (solar, wind, biogas, biomass);
- Wind resources in Solano County;
- > Existing Qualifying Facilities with expiring PG&E contracts;
- > Expansion and re-powering of wind resources in Alameda County;
- Geothermal in Lake and Sonoma Counties;
- Local biomass projects; and

Renewable Energy Certificates.

#### Medium and Long-Term Renewable Potential

For mid and long term planning purposes, MCE should anticipate procurement from the following types of large scale renewable resources<sup>3</sup>:

- > Wind imports from the Tehachapi Area;
- > Wind imports from the Pacific Northwest;
- Geothermal imports from Nevada;
- > Geothermal imports from the Imperial Valley;
- > Photovoltaic solar imports from California's Central Valley; and
- > Solar CSP imports from Southern California (Riverside and San Bernardino Counties).

Although this resource plan identifies likely resource types and locations, it is not possible to predict what projects might be proposed in response to MCE's future solicitations for renewable energy or that may stem from discussions with other public agencies. Renewable projects that are located virtually anywhere in the Western Interconnection can be considered as long as the electricity is deliverable to the CAISO control area, as required to meet the Commission's RPS rules and any additional guidelines ultimately adopted by MCE's Board of Directors. The costs of transmission access and the risk of transmission congestion costs would need to be considered in the bid evaluation process if the delivery point is outside of MCE's load zone, as defined by the CAISO.

## Energy Efficiency

This section addresses the treatment of energy efficiency as a component of MCE's integrated resource plan. As described below there are opportunities for significant cost effective energy efficiency programs within the region, and MCE will seek to maximize end-use customer energy efficiency to the greatest extent practical. MCE first received funding to implement energy efficiency programs through the 'elect to administer' portion of the Public Utilities Code (section 381.1 e-f), wherein MCE has the authority to collect funds which have already been collected from MCE customers to support an energy efficiency plan that complies with the legislative intent. MCE submitted a plan for the use of 2012 program funding, focusing exclusively on multi-family customers; this plan was certified by the Commission in August, 2012.<sup>4</sup>

On a parallel track, MCE submitted an application to administer funds as an independent program administrator, an option which was clarified by SB 790 (2011) and reinforced in a recent CPUC Decision on CCA and Energy Efficiency<sup>5</sup>. This suite of programs offers energy efficiency services for multi-family, small commercial and single family sectors with financing

<sup>&</sup>lt;sup>3</sup> In the long term, new technologies such as wave or tidal energy may become economically feasible as well.

<sup>&</sup>lt;sup>4</sup> Resolution E-4815 California Public Utilities Commission. August 23, 2012.

<sup>&</sup>lt;sup>5</sup> Decision 14-01-033. Decision Enabling Community Choice Aggregators to Administer Energy Efficiency Programs. January 16, 2014.

programs available to support all programs. MCE plans to grow the energy efficiency and local program department over time.

#### **Baseline Energy Efficiency Potential Estimates**

The National Action Plan for Energy Efficiency states among its key findings "consistently funded, well-designed efficiency programs are cutting annual savings for a given program year of 0.15 to 1 percent of energy sales."<sup>6</sup> The American Council for an Energy-Efficient Economy (ACEEE) reports for states already operating substantial energy efficiency programs energy efficiency goals of one percent, as a percentage of energy sales, is a reasonable level to target.<sup>7</sup> Forecast achievable energy efficiency equal to one percent of the CCA's forecast energy sales, as indicated in the table below, appears to be a reasonable and conservative baseline for the demand-side portion of CCA's resource plan. Targeted program savings would be in addition to the savings achieved by PG&E administered programs.

			Marin	n Clean Er	nergy					
		Eı	nergy Effi	ciency Sav	ings Goals					
				(GWH)						
2010 to 2019										
_	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MCE Retail Demand	91	185	570	1,110	1,294	1,545	1,582	1,582	1,582	1,582
MCE Energy Efficiency Goal	0	0	0	-6	-6	-4	-8	-12	-16	-16

#### **CCA Program Energy Efficiency Goals**

The Program's energy efficiency goals reflect a strong commitment to increasing energy efficiency within the County and expanding beyond the savings achieved by PG&E's programs. MCE's goal is to increase annual savings through energy efficiency programs to two percent (combined MCE and PG&E programs) of annualized electric sales, as has been adopted by the State of New York, by the end of 2018. Achieving this goal would mean at least a doubling of energy savings relative to the status quo situation without the CCA program. MCE programs will focus on closing the gap between the vast economic potential of energy efficiency within MCE's service territory and what is actually achieved, while designing programs based on community input that align with MCE's mission statement.

The following table summarizes the estimated energy efficiency potential for each type of energy efficiency initiative:<sup>8</sup>

<sup>&</sup>lt;sup>6</sup> National Action Plan for Energy Efficiency, July 2006, Section 6: Energy Efficiency Program Best Practices (pages 5-6)

<sup>&</sup>lt;sup>7</sup> Energy Efficiency Resource Standards: Experience and Recommendations, Steve Nadel, March 2006, ACEEE Report E063 (pages 28 - 30).

<sup>&</sup>lt;sup>8</sup> California Energy Efficiency Potential Study Volume 1, California Measurement Advisory Council (CALMAC) Study ID: PGE0211.01, May 24, 2006, Figure 12-2: Distribution of Electric Energy Market Potential, Existing Incentive Levels through 2016.

EXISTING RESIDENTIAL	53.0%
Existing Commercial	18.0%
Existing Industrial	14.0%
Residential New Construction	1.0%
Commercial New Construction	6.0%
Industrial New Construction	1.0%
Emerging Technologies	7.0%

## **California Energy Efficiency Market Potential**

The retrofit of existing buildings represents 85 percent of the total forecast energy efficiency market potential. Studies show that the residential customer sector presents the largest untapped efficiency gains.

MCE has ramped up the Energy Efficiency department since the first funding authorization in late 2012. MCE's energy efficiency department continues to refine energy savings estimates and develop portfolios in line with customer expectations and local patterns of energy use. Additional details of MCE's energy efficiency plans are set forth in a separate planning document.<sup>9</sup>

#### Demand Response

Demand response programs provide incentives to customers to reduce demand upon request by the load serving entity (i.e., MCE), reducing the amount of generation capacity that must be maintained as infrequently used reserves. Demand response programs can be cost effective alternatives to capacity otherwise needed to comply with the resource adequacy requirements. The programs also provide rate benefits to customers who have the flexibility to reduce or shift consumption for relatively short periods of time when generation capacity is most scarce. Like energy efficiency, demand response can be a win/win proposition, providing economic benefits to the electric supplier and customer service benefits to the customer.

In its ruling on local resource adequacy, the CPUC found that dispatchable demand response resources as well as distributed generation resources should be allowed to count for local capacity requirements. MCE has launched several small scale pilots to explore the possibilities for local DR programs. This resource plan anticipates that MCE's demand response programs would partially offset its local capacity requirements beginning in 2016.

PG&E offers several demand response programs to its customers, and MCE intends to recruit those customers that have shown a willingness to participate in utility programs into MCE's demand response programs.<sup>10</sup> The goal for this resource plan is to meet 5 percent of the Program's total capacity requirements (by 2018) through dispatchable demand response

<sup>&</sup>lt;sup>9</sup> Marin Energy Authority's Proposal to Administer Energy Efficiency Programs Pursuant to Public Utilities Code 381.1(e) and (f) for 2012, June 22, 2012.

<sup>&</sup>lt;sup>10</sup> These utility programs include the Base Interruptible Program (E-BIP), the Demand Bidding Program (E-DBP), Critical Peak Pricing (E-CPP), Optional Binding Mandatory Curtailment Plan (E-OBMC), the Scheduled Load Reduction Program (E-SLRP), and the Capacity Bidding Program (E-CBP). MCE has started to develop and implement its own demand response programs on a pilot basis.

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programs that qualify to meet local resource adequacy requirements. This goal translates into approximately 13 MW of peak demand enrolled in MCE's demand response programs. Achievement of this goal would displace approximately 32 percent of MCE's local capacity requirement within the Greater Bay Area.

		M Dem	arin Clean and Respo (MW 2010 to 2	Energy onse Goals ) 2019						
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total Capacity Requirement (MW)	34	55	218	273	270	330	328	325	324	324
Demand Response Target	-	-	-	-	-	-	4	12	16	16
Percentage of Local Capacity Requirment	0%	0%	0%	0%	0%	0%	8%	24%	32%	32%

MCE's initial DR pilots offer the opportunity to explore DR programs and develop administrative capabilities related to this component of the MCE service offering. MCE plans to leverage experiences and lessons learned from these initial pilots to develop a demand response program that enables it to request customer demand reductions during times when capacity is in short supply or spot market energy costs are exceptionally high. The level of customer payments should be related to the cost of local capacity that can be avoided as a result of the customer's willingness to curtail usage upon request.

Appropriate limits on customer curtailments, both in terms of the length of individual curtailments and the total number of curtailment hours that can be called should be included in MCE's demand response program design. It will also be important to establish a reasonable measurement protocol for customer performance of its curtailment obligations. Performance measurement should include establishing a customer specific baseline of usage prior to the curtailment request from which demand reductions can be measured. MCE will likely utilize experienced third party contractors to design, implement and administer its demand response programs.

#### **Distributed Generation**

Consistent with MCE's environmental policies and the state's Energy Action Plan, clean distributed generation is a significant component of the integrated resource plan. MCE will work with state agencies and PG&E to promote deployment of photovoltaic (PV) systems within MCE's jurisdiction, with the goal of maximizing use of the available incentives that are funded through current utility distribution rates and public goods surcharges. MCE has also implemented an aggressive net energy metering program to promote local investment in distributed generation.

There are significant associated environmental benefits and strong customer interest in distributed PV systems. The economics of PV should improve over time as utility rates continue to increase and the costs of the systems decline with technological improvements and added manufacturing capacity. MCE can also promote distributed PV without providing direct financial assistance by being a source of unbiased consumer information and by facilitating customer purchases of PV systems through established networks of pre-qualified vendors. It may also provide direct financial incentives from revenues funded by customer rates to further support use of solar power within the Marin Communities. As previously noted, MCE has

provided direct incentives for PV by offering an aggressive net metering rate to customers who install PV systems so that customers are able to sell excess energy to MCE.

MCE's CCA customers will contribute funds to the California Solar Initiative (CSI) through the public goods charge collected by PG&E, and will be eligible for the incentives provided under that program for installation of PV systems. The California Solar Initiative provides \$2.2 billion of funding to target installation of 1,940 MW of solar systems within the investor owned utility service areas by 2017. All electric customers of PG&E, SCE, and SDG&E are eligible to apply for incentives. Approximately 44 percent of program funding is allocated to the PG&E service territory. Assuming solar deployment would be proportionate to funding, the program is intended to yield approximately 775 MW of solar within the PG&E service area. A minimum of 17 MW should be deployed within the service territory of MCE.

#### **California Solar Initiative Deployment**

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
IOU Territory Target (MW)	705	882	1,058	1,235	1,411	1,587	1,764	1,940	1,940	1,940
Total Funding (\$Millions)	240	240	240	160	160	160	5	0	0	0
PG&E Funding (\$Millions)	105	105	105	70	70	70	2	0	0	0
PG&E Incentives Share	44%	44%	44%	44%	44%	44%	40%	40%	40%	40%
PG&E Area Deployment (MW)	309	386	463	540	617	694	705	776	776	776
MCE Share of PG&E Load	0.1%	0.3%	0.8%	1.5%	1.8%	2.1%	2.1%	2.1%	2.1%	2.1%
MCE Solar Deployment (MW)	0	1	4	8	11	15	15	17	17	17

MCE will work to ensure that customers within its jurisdiction take full advantage of this solar incentive and will develop programs of its own with the goal of doubling the CSI deployment targets shown above.

#### CHAPTER 7 – Financial Plan

This Chapter examines the monthly cash flows expected during the phase-in period of the CCA Program and identifies the anticipated financing requirements for the overall CCA Program by MCE. It also describes the requirements for working capital and long-term financing for the potential investment in renewable generation, consistent with the resource plan contained in Chapter 6.

#### Description of Cash Flow Analysis

This cash flow analysis estimates the level of working capital that will be required during the phase-in period. In general, the components of the cash flow analysis can be summarized into two distinct categories: (1) Cost of CCA Program Operations, and (2) Revenues from CCA Program Operations. The cash flow analysis identifies and provides monthly estimates for each of these two categories. A key aspect of the cash flow analysis is to focus primarily on the monthly costs and revenues associated with the CCA Program phase-in period, and specifically account for the transition or "Phase-In" of CCA Customers from PG&E's service territory described in Chapter 5.

#### Cost of CCA Program Operations

The first category of the cash flow analysis is the Cost of CCA Program Operations. To estimate the overall costs associated with CCA Program Operations, the following components were taken into consideration:

- Electricity Procurement;
- Ancillary Service Requirements;
- ➢ Exit Fees;
- Staffing Requirements;
- Contractor Costs;
- Infrastructure Requirements;
- Billing Costs;
- Scheduling Coordination;
- Grid Management Charges;
- CCA Bond Premiums;
- Interest Expense; and
- > Franchise Fees.

The focus of this cash flow analysis is during the phase-in period.

#### **Revenues from CCA Program Operations**

The cash flow analysis also provides estimates for revenues generated from CCA operations or from electricity sales to customers. In determining the level of revenues, the cash flow analysis assumes the customer phase-in schedule noted above, and assumes that MCE's CCA Program provides a Light Green Tariff at comparable generation rates to those of the existing distribution utility for each customer class and a 100 percent Green Tariff at a premium reflective of

incremental renewable power costs. A third service option, which is planned to begin serving customers during the 2015 calendar year, is Sol Shares. The voluntary Sol Shares service option will supply participating customers with 100 percent locally generated solar electricity – MCE is currently accepting enrollments in the Sol Shares program.

Over time, MCE's preference for renewable energy will significantly reduce its exposure to volatile input costs (fuel – natural gas) associated with natural gas-fired generation, which are expected to increase steadily, and potentially significantly, for the foreseeable future. Because a significant portion of MCE's power supply will be from renewable energy sources, upward price pressures on its power supply should be significantly reduced over long-term operations.

Projected long-term cost savings can be passed on to Program customers in the form of lower generation rates or can be applied to the procurement of additional renewable energy supplies (moving the program's renewable energy supply closer to its 100 percent goal), energy efficiency programs or other energy/climate initiatives within the scope of broad-based powers established for MCE. Ultimately, MCE will have flexibility when making these decisions and can respond to the evolving needs of local residents and businesses when developing rate tariffs and energy/climate-focused programs.

## Cash Flow Analysis Results

The results of the cash flow analysis provide an estimate of the level of working capital required for MCE to move through the CCA phase-in period. This estimated level of working capital is determined by examining the monthly cumulative net cash flows (revenues from CCA operations minus cost of CCA operations) based on assumptions for payment of costs by MCE, along with an assumption for when customer payments will be received. This identifies, on a monthly basis, what level of cash flow is available in terms of a surplus or deficit.

With the assumptions regarding payment streams, the cash flow analysis identifies funding requirements while recognizing the potential lag between payments received and payments made during the phase-in period. The estimated financing requirements for the phase-in period, including working capital, based on the phase-in of customers as described above is approximately \$3 million. Working capital requirements reach this peak immediately after enrollment of the Phase 3 customers.

## CCA Program Implementation Feasibility Analysis

In addition to developing a cash flow analysis which estimates the level of working capital required to get MCE through full CCA phase-in, a summary analysis that evaluates the feasibility of the CCA program during the phase-in period has been prepared. The difference between the cash flow analysis and the CCA feasibility analysis is that the feasibility analysis does not include a lag associated with payment streams. In essence, costs and revenues are reflected in the month in which service is provided. All other items, such as costs associated with CCA Program operations and rates charged to customers remain the same.

The results of the feasibility analysis are shown in the following table. Under these assumptions, over the entire phase-in period the CCA program is projected to accrue a reserve account balance of approximately \$17 million.

#### Marin Clean Energy Summary of CCA Program Phase-In (January 2010 through December 2015)

CATEGORY	2010	2011	2012	2013	2014	2015
I. REVENUES FROM OPERATIONS (\$)						
ELECTRIC SALES REVENUE	10,610,804	16,454,790	44,052,111	79,097,747	100,075,912	125,116,985
LESS UNCOLLECTIBLE ACCOUNTS	(21,453)	(102,807)	(220,261)	(395,489)	(500,380)	(625,585)
TOTAL REVENUES	10,589,351	16,351,983	43,831,851	78,702,259	99,575,532	124,491,400
II. COST OF OPERATIONS (\$)						
(A) ADMINISTRATIVE AND GENERAL (A&G)						
STAFFING	321,117	430,659	1,077,759	1,386,303	1,825,000	1,993,875
CONTRACT SERVICES	1,035,333	848,063	3,131,840	4,457,964	4,611,420	4,898,007
IOU FEES (INCLUDING BILLING)	19,548	60,794	287,618	584,729	660,114	745,569
OTHER A&G	191,261	189,204	249,729	302,806	373,125	398,084
SUBTOTAL A&G	1,567,259	1,528,720	4,746,946	6,731,802	7,469,659	8,035,535
(B) COST OF ENERGY	7,418,662	11,881,494	35,566,066	69,037,682	85,826,553	111,605,979
(C) DEBT SERVICE	654,595	394,777	747,729	1,195,162	1,195,162	1,151,494
TOTAL COST OF OPERATION	9,640,516	13,804,991	41,060,742	76,964,646	94,491,374	120,793,009
CCA PROGRAM SURPLUS/(DEFICIT)	948,835	2,546,992	2,771,109	1,737,613	5,084,158	3,698,392

The surpluses achieved during the phase-in period serve as operating reserves for MCE in the event that operating costs (such as power purchase costs) exceed collected revenues for short periods of time.

## Marin Clean Energy Financings

It is anticipated that three financings may be necessary in support of the CCA Program. The anticipated financings are listed below and discussed in greater detail.

## CCA Program Start-up and Working Capital (Phases 1 and 2)

As previously discussed, the start-up and working capital requirements for the CCA Program were approximately \$2 million. These costs are currently being recovered from retail customers through retail rates.

## CCA Program Working Capital (Phase 3)

Working capital for Phase 3 was \$3 million financed through a short term credit agreement from a commercial bank.

#### CCA Program Working Capital (Phase 4)

MCE utilized existing, internally generated funds to cover costs associated with the Phase 4 customer expansion.

## CCA Program Working Capital (Phase 5)

MCE anticipates it will have sufficient internally generated funds to fund the Phase 5 customer expansion. If additional funds are required, a short term credit agreement would be used to support the expansion.

#### Renewable Resource Project Financing

MCE's CCA Program may consider large project financings for renewable resources (likely wind, solar, biomass or geothermal), which may total as much as \$375 million (combined). These financings would only occur after a sustained period of successful Program operation and after appropriate project opportunities are identified and subjected to appropriate environmental review. Such financing would likely occur after several successful years of operating history have been observed and following MCE's receipt of an institutional credit rating. In the event that such financing becomes necessary, funds would include any short-term financing for the renewable resource project development costs, and would extend over a 20- to 30-year term.

The security for such bonds would likely be a hybrid of the revenue from sales to the retail customers of MCE, including a Termination Fee as described in Chapter 9, and the renewable resource project itself.

Proposed Financing	<b>Estimated Total</b>	Estimated Term	Estimated Issuance	
	Amount			
Start-Up and Working	\$2 million	No longer than 7 years	Early 2010	
Capital				
Working Capital Phase 3	\$3 million	No longer than 5 years	Mid 2012	
Potential Renewable	\$375 million	20 to 30 years	Undetermined	
Resource Project Financings	(aggregate)			

The following table summarizes the potential financings in support of the CCA Program:

## CHAPTER 8 - Ratesetting and Program Terms and Conditions

#### Introduction

This Chapter describes MCE's rate setting policies for electric aggregation services. These include policies regarding rate design, objectives, and provision for due process in setting Program rates. Program rates are ultimately approved by the Board. The Board would retain authority to modify program policies from time to time at its discretion.

#### Rate Policies

MCE has established rates sufficient to recover all costs related to operation of the program, including any reserves that may be required as a condition of financing and other discretionary reserve funds that may be approved by the Board of Directors. As a general policy, rates will be uniform for all similarly situated customers enrolled in the Program throughout the service area of MCE, comprised of the jurisdictional boundaries of its members.

The primary objectives of the ratesetting plan are to set rates that achieve the following:

- > 100 percent renewable energy supply option Deep Green Tariff;
- > 100 percent local solar energy supply option Sol Shares Tariff
- Rate competitive tariff option Light Green Tariff (at 50 percent renewable energy);
- ➢ Rate stability;
- > Equity among customers in each tariff;
- Customer understanding; and
- ➢ Revenue sufficiency.

Each of these objectives is described below.

#### Rate Competitiveness

The goal is to offer competitive rates for the electric services MCE provides to participating customers. For Deep Green participants, the goal is to offer the lowest possible customer rates with an incremental monthly cost premium of approximately 10 percent. For Sol Shares customers, the goal is to offer rates that are generally reflective of local, small utility scale solar development costs, which will initially relate to prices paid under MCE's Feed-In Tariff.

Competitive rates will be critical to attracting and retaining key customers. As discussed above, the principal long-term Program goal is to achieve 100 percent renewable energy supply subject to economic and operating constraints. As previously discussed, the Program will significantly increase renewable energy supply to Program customers, relative to the incumbent utility, by offering two distinct rate tariffs. The default tariff for Program customers will be the Light Green service option, which will maximize renewable energy supply (minimum 50 percent) while maintaining competitive generation rates to those currently offered by PG&E. MCE will also offer its customers a voluntary Deep Green Tariff, which will supply participating

customers with 100 percent renewable energy supply at rates that reflect the Program's cost for procuring necessary energy supplies. As previously noted, MCE will be offering a third service option, Sol Shares, which is planned to begin serving customers during the 2015 calendar year. The voluntary Sol Shares service option will supply participating customers with 100 percent locally generated solar electricity – MCE is currently accepting enrollments in the Sol Shares program.

As previously suggested, the default tariff for Program customers will be the Light Green Tariff. Consistent with this MCE policy, participating qualified low- or fixed-income households, such as those currently enrolled in the California Alternate Rates for Energy (CARE) program, will be automatically enrolled in the Light Green Tariff and will continue to receive related discounts on monthly electricity bills. Based on projected participation in each tariff, the amount of renewable energy supplied to Program customers as a percentage of the Program's total energy requirements is projected to approximate 52 percent in 2015.

## Rate Stability

MCE will offer stable rates by hedging its supply costs over multiple time horizons. Rate stability considerations may mean that program rates relative to PG&E's may differ at any point in time from the general rate targets set for the Program. Although MCE's rates will be stabilized through execution of appropriate price hedging strategies, the distribution utility's rates can fluctuate significantly from year-to-year based on energy market conditions such as natural gas prices, the utilities' hedging strategies, and hydro-electric conditions; and from rate impacts caused by periodic additions of generation to utility rate base. MCE will have more flexibility in procurement and ratesetting than PG&E to stabilize electricity costs for customers.

## Equity among Customer Classes

MCE's policy will be to provide rate benefits to all customer classes relative to the rates that would otherwise be paid to the local distribution utility. Rate differences among customer classes will reflect the rates charged by the local distribution utility as well as differences in the costs of providing service to each class. Rate benefits may also vary among customers within the major customer class categories, depending upon the specific rate designs adopted by the Board of Directors.

## **Customer Understanding**

The goal of customer understanding involves rate designs that are relatively straightforward so that customers can readily understand how their bills are calculated. This not only minimizes customer confusion and dissatisfaction but will also result in fewer billing inquiries to MCE's customer service call center. Customer understanding also requires rate structures to make sense (i.e., there should not be differences in rates that are not justified by costs or by other policies such as providing incentives for conservation).

## Revenue Sufficiency

MCE's rates must collect sufficient revenue from participating customers to fully fund MCE's annual budget. Rates will be set to collect the adopted budget based on a forecast of electric

sales for the budget year. Rates will be adjusted as necessary to maintain the ability to fully recover all of MCE's costs, subject to the disclosure and due process policies described later in this chapter.

## Rate Design

MCE will generally match the rate structures from the utilities' standard rates to avoid the possibility that customers would see significantly different bill impacts as a result of changes in rate structures when beginning service in MCE's program. MCE may also introduce new rate options for customers, such as rates designed to encourage economic expansion or business retention within MCE's service area.

## Net Energy Metering

Customers with on-site generation eligible for net metering from PG&E will be offered a net energy metering rate from MCE. Net energy metering allows for customers with certain qualified solar or wind distributed generation to be billed on the basis of their net energy consumption. The PG&E net metering tariff (E-NEM) requires the CCA to offer a net energy metering tariff in order for the customer to continue to be eligible for service on Schedule E-NEM. The objective is that MCE's net energy metering tariff will apply to the generation component of the bill, and the PG&E net energy metering tariff will apply to the utility's portion of the bill. MCE will pay customers for excess power produced from net energy metered generation systems in accordance with the rate designs adopted by the MCE Board.

## Disclosure and Due Process in Setting Rates and Allocating Costs among Participants

The Executive Officer, with support of appropriate staff, advisors and committees, will prepare an annual budget and corresponding customer rates and submit these as an application for a change in rates to the Board of Directors. The rates will be approved at a public meeting of the Board of Directors no sooner than thirty one (31) days following public posting of the proposed rates (which shall occur on MCE's website) - during this thirty one-day review period, affected customers will be able to provide comment on the proposed rate changes.

MCE will initially adopt customer noticing requirements similar to those the CPUC requires of PG&E. These notice requirements are described as follows:

Notice of rate changes will be published at least once in a newspaper of general circulation within the respective jurisdictions of MCE's Member Agencies. This notice will be published within ten days of MCE's public posting of the subject rate change. Such notice will state that a copy of said application and related exhibits may be examined at the offices of MCE and shall include the locations of such offices

MCE will furnish notice of its application to its customers affected by the proposed increase, either by including such notice as an on-bill message with the regular bill for charges transmitted to such customers or by mailing such notice postage prepaid to such customers.

The notice will state the amount of the proposed increase expressed in percentage terms, a brief statement of the reasons the increase is required or sought, and the mailing address of MCE to which any customer inquiries relative to the proposed increase, including a request by the customer to receive notice of the date, time, and place of any hearing on the application, may be directed.

## CHAPTER 9 – Customer Rights and Responsibilities

This chapter discusses customer rights, including the right to opt-out of the CCA Program and the right to privacy of customer energy usage information, as well as obligations customers undertake upon agreement to enroll in the CCA Program. All customers that do not opt out within 30 days of the fourth opt-out notice will have agreed to become full status program participants and must adhere to the obligations set forth below, as may be modified and expanded by the MCE Board from time to time.

By adopting this Implementation Plan, the MCE Board approved the customer rights and responsibilities policies contained herein to be effective at Program initiation. The Board retains authority to modify program policies from time to time at its discretion.

#### **Customer Notices**

As part of the customer enrollment process, at least four notices will be provided to customers describing the Program, informing them of their opt-out rights to remain with utility bundled generation service, and containing a simple mechanism for exercising their opt-out rights. MCE will mail at least two written notices to customers, beginning at least two calendar months, or sixty days, in advance of the date of commencing automatic enrollment. MCE will likely use its own mailing service for requisite opt-out notices rather than including the notices in PG&E's monthly bills. This is intended to increase the likelihood that customers will read the opt-out notices, which may otherwise be ignored if included as a bill insert. Customers may opt out by notifying MCE using MCE's designated, telephone-based opt out processing service. Should customers choose to initiate an opt-out request by contacting PG&E, they will be transferred to MCE's call center to complete the opt-out request. Consistent with CPUC regulations, notices returned as undelivered mail would be treated as a failure to opt out, and the customer would be automatically enrolled.

Following automatic enrollment, at least two notices will be mailed to customers within the first two calendar months, or sixty days, of service. Opt-out requests made on or before the sixtieth day following start of MCE service would result in customer transfer to bundled utility service with no penalty. Such customers will be obligated to pay MCE's charges for electric services provided during the time the customer took service from the Program, but will otherwise not be subject to any penalty or transfer fee from MCE.

New customers who establish service within the Program service area will be automatically enrolled in the Program. Such customers will be mailed two opt-out notices within two calendar months, or sixty-days, of enrollment. MCE's Board of Directors will have the authority to implement entry fees for customers that initially opt out of the Program, but later decide to participate. Entry fees, if deemed necessary, would help prevent potential gaming, particularly by large customers, and aid in resource planning by providing additional control over the Program's customer base. Entry fees would not be practical to administer, nor would they be necessary, for residential and other small customers.

## Termination Fee

Customers that are automatically enrolled in the Program can elect to transfer back to the incumbent utility without penalty within the first two months of service. After this free opt-out period, customers will be allowed to terminate their participation subject to payment of a Termination Fee. The Termination Fee may apply to all Program customers that elect to return to bundled utility service or elect to take "direct access" service from an energy services provider. Program customers that relocate within the Program's service territory would have their CCA service continued at the new address. If a customer relocating to an address within the Program service territory elected to cancel CCA service, the Termination Fee may apply. Program customers that move out of the Program's service territory would not be subject to the Program's Termination Fee.

The Termination Fee will consist of two parts: an Administrative Fee set to recover the costs of processing the customer transfer and other administrative or termination costs and a Cost Recovery Charge ("CRC") that would apply in the event MCE is unable to recover the costs of supply commitments attributable to the customer that is terminating service. PG&E will collect the Administrative Fee from returning customers as part of the final bill to the customer from the CCA Program and will collect the CRC as a lump sum or on a monthly basis pursuant to a negotiated servicing agreement between MCE and PG&E.

The Administrative Fee would vary by customer class as set forth in the table below.

Customer Class	Fee			
Residential	\$5			
Non-Residential	\$25			

## Administrative Fee for Service Termination

The customer CRC will be equal to a pro rata share of any above market costs of MCE's actual or planned supply portfolio at the time the customer terminates service. The proposed CRC is similar in concept to the Cost Responsibility Surcharge charged by PG&E, and it is designed to prevent shifting of costs to remaining Program customers. The CRC will be set on an annual basis by MCE's Governing Board as part of the annual ratemaking process. At this time, MCE's CRC is set to zero.

If customers terminate service, MCE anticipates it will re-market the excess supply and recover all or the majority of its costs. Depending upon market conditions, the CRC may not be needed for recovery of stranded costs. However, MCE's ability to assess a Cost Recovery Charge, if necessary, can be an important condition for obtaining financing for MCE's power supply. The low cost financing will, in turn, enable MCE to charge rates that are competitive with PG&E's.

The Termination Fee will be clearly disclosed in the four opt-out notices sent to customers during the sixty-day period before automatic enrollment and following commencement of service. The fee could be changed prospectively by MCE's Board of Directors, subject to MCE's customer noticing requirements. As previously noted, customers that opt-out during the statutorily mandated notification period will not pay the Termination Fee that may be imposed by MCE.

Customers electing to terminate service after the initial notification period that provided them with at least four opt-out notices would be transferred to PG&E on their next regularly scheduled meter read date if the termination notice is received a minimum of fifteen days prior to that date. Customers who voluntarily transfer back to PG&E after the initial notification period that provided them with at least four opt-out notices would also be liable for the nominal reentry fees imposed by PG&E as set forth in the applicable utility CCA tariffs. Such customers would also be required to remain on bundled utility service for a period of one year, as described in the utility tariffs.

## Customer Confidentiality

MCE has established policies covering confidentiality of customer data. These policies are fully compliant with the California Public Utility Commission's required privacy protection rules for CCA customer energy usage information detailed within Decision D.12-08-045. MCE's policies will maintain confidentiality of individual customer data. Confidential data includes individual customers' name, service address, billing address, telephone number, account number and electricity consumption. Aggregate data may be released at MCE's discretion or as required by law or regulation.

## Responsibility for Payment

Customers will be obligated to pay MCE charges for service provided through the date of transfer including any applicable Termination Fees. Pursuant to current CPUC regulations, MCE will not be able to direct that electricity service be shut off for failure to pay MCE's bill. However, PG&E has the right to shut off electricity to customers for failure to pay electricity bills, and Rule 23 mandates that partial payments are to be allocated pro rata between PG&E and the CCA. In most circumstances, customers would be returned to utility service for failure to pay bills in full and customer deposits would be withheld in the case of unpaid bills. PG&E would attempt to collect any outstanding balance from customers in accordance with Rule 23 and the related CCA Service Agreement. The proposed process is for two late payment notices to be provided to the customer within 30 days of the original bill due date. If payment is not received within 45 days from the original due date, service would be transferred to the utility on the next regular meter read date, unless alternative payment arrangements have been made. Consistent with the CCA tariffs, Rule 23, service cannot be discontinued to a residential customer for a disputed amount if that customer has filed a complaint with the CPUC, and that customer has paid the disputed amount into an escrow account.

## **Customer Deposits**

Customers may be required to post a deposit equal to two months' estimated bills for MCE's charges to obtain service from the Program. MCE has adopted a related policy, Rule No. 002, which specifies the circumstances under which a customer deposit will be required. This policy

specifies that "An applicant who previously has been a customer of PG&E or MCE and whose electric service has been discontinued by PG&E or MCE during the last twelve months of that prior service because of nonpayment of bills, may be required to reestablish credit by depositing the amount prescribed in Rule 003 (Deposits) for that purpose." Rule No. 002 also states that, "A customer who fails to pay bills before they become past due as defined in PG&E Electric Rule 11 (Discontinuance and Restoration of Service), and who further fails to pay such bills within five days after presentation of a discontinuance of service notice for nonpayment of bills, may be required to pay said bills and reestablish credit by depositing the amount prescribed in Rule 003 (Deposits). This rule will apply regardless of whether or not service has been discontinued for such nonpayment<sup>11</sup>." Rule 003 specifies that the amount of deposit for such a customer shall be equal to two months' estimated charges for MCE service. Failure to post deposit as required would cause the account service transfer request to be rejected, and the account would remain with PG&E. To date, MCE has not collected any customer deposits.

<sup>&</sup>lt;sup>11</sup> A customer whose service is discontinued by MCE is returned to PG&E generation service.

#### CHAPTER 10 - Procurement Process

#### Introduction

This Chapter describes MCE's initial procurement policies and the key third party service agreements by which MCE has obtained operational services for the CCA Program. By adopting the original Implementation Plan, MCE's Board of Directors approved general procurement policies to be effective at Program initiation. The Board retains authority to modify Program policies from time to time at its discretion.

#### **Procurement Methods**

MCE has entered into agreements for a variety of services needed to support program development, operation and management. It is anticipated MCE will utilize Competitive Procurement, Direct Procurement or Sole Source Procurement, depending on the nature of the services to be procured. Direct Procurement is the purchase of goods or services without competition when multiple sources of supply are available. Sole Source Procurement is generally to be performed only in the case of emergency or when a competitive process would be an idle act.

MCE utilized a competitive solicitation process to enter into agreements with SENA, which provides electrical services for the program. Agreements with entities that provide professional legal or consulting services, and agreements pertaining to unique or time sensitive opportunities, may be entered into on a direct procurement or sole source basis at the discretion of MCE's Executive Officer or Board of Directors.

The Executive Officer periodically reports (e.g., quarterly) to the Board a summary of the actions taken with respect to the delegated procurement authority.

Authority for terminating agreements will generally mirror the authority for entering into the agreements.

#### Key Contracts

#### Electric Supply Contract

MCE successfully negotiated an electricity supply contract with SENA (through December 31, 2016). For the initial years of program operations (, SENA will supply a significant portion of the electricity delivered to MCE customers. For the post-2016 period, MCE will be obligated to complete additional solicitations to secure its resource requirements. In anticipation of this future obligation, MCE has initiated procurement efforts, focusing on necessary renewable energy supply and resource adequacy capacity, to facilitate the transition from full requirements service to a managed portfolio of contracts/resources. This proactive, ongoing approach will avoid dependence on market conditions existing at any single point in time. Under the initial full requirements contract, SENA has committed to serving the composite electrical loads of customers in the Program. SENA also serves as MCE's certified Scheduling

Coordinator and will schedule the loads of all customers in the Program, providing necessary electric energy, capacity/resource adequacy requirements, renewable energy and ancillary services. SENA is wholly responsible for the Program's portfolio operations functions and managing the predominant supply risks for the term of the contract. SENA must also meet the Program's renewable energy goals and comply with all applicable resource adequacy and regulatory requirements imposed by the CPUC or FERC.

Certain financial risks related to changes in Program loads during the term of the agreement are borne by SENA, within the ranges specified in the electric supply agreement. The supplier has also committed to deliver a specific quantity of RPS-eligible renewable energy, as determined by MCE, during each year of the agreement term. The supplier is also required to procure sufficient renewable energy to meet the requirements of serving customers enrolled in the Deep Green MCE service option.

#### Data Management Contract

Noble Americas Energy Solutions will provide the retail customer services of billing and other customer account services (electronic data interchange or EDI with PG&E, billing, remittance processing, and account management). Recognizing that some qualified wholesale energy suppliers do not typically conduct retail customer services whereas others (i.e., direct access providers) do, the data management contract is separate from the electric supply contract...<sup>12</sup>

The data manager is responsible for the following services:

- ➢ Data exchange with PG&E;
- Technical testing;
- Customer information system;
- Customer call center;
- > Billing administration/retail settlements; and
- Reporting and audits of utility billing.

Utilizing a third party for account services eliminates a significant expense associated with implementing a customer information system. Such systems can cost from five to ten million dollars to implement and take significant time to deploy. A longer term contract is appropriate for this service because of the time and expense that would be required to migrate data to a new system. Separation of the data management contract from the energy supply contract gives MCE greater flexibility to change energy suppliers, if desired, without facing an expensive data migration issue.

<sup>&</sup>lt;sup>12</sup> The contractor performing account services may be the same entity as the contractor supplying electricity for the program.

#### **Electric Supply Procurement Process**

As previously noted, MCE selected SENA as its energy supplier through a competitive solicitation process, which was administered in mid-2009. Additional information regarding SENA is provided below.

#### Shell Energy North America

Shell Energy North America (US), L.P. (SENA) is a leading supplier of energy and associated services in North America. SENA provides natural gas, electrical energy and capacity, scheduling and asset optimization, risk management, and renewable energy and environmental products to a wide variety of customers. SENA is 100% owned by Royal Dutch Shell Company and its subsidiaries. SENA owns and manages a variety of energy assets in the West, including generation, a portfolio of renewable energy, transmission capacity, natural gas production, liquefied natural gas capacity, natural gas storage capacity, and natural gas pipeline capacity. SENA's West Region operation includes regional offices in San Diego, Portland, Spokane, Berkeley, Salt Lake City, Denver and Mexico City, with 7 X 24 power and gas operations in San Diego and Spokane.

SENA has an extensive list of public and privately owned customers in the West, including all WECC region investor-owned utilities, twenty-five publicly owned (municipal) electric utilities/other public agencies in California, and publicly owned utilities/public agencies in neighboring states. SENA's West Region full requirements power experience includes provision of retail electric service, including provision of resource adequacy, for direct access customers in California.

Renewable energy products offered by SENA include renewable energy, bundled renewable energy, landfill gas, biogas and renewable energy credits. SENA states it is actively developing renewable portfolios and provides related services such as scheduling and shaping of intermittent energy. SENA's affiliate, Shell WindEnergy, develops and owns wind generation in California and other parts of North America. SENA also offers a variety of environmental products including emission offsets and other carbon reducing products.

SENA is rated A- by S&P and A2 by Moody's.

#### CHAPTER 11 – Contingency Plan for Program Termination

#### Introduction

This Chapter describes the process to be followed in the case of Program termination. By adopting the original Implementation Plan, MCE's Board of Directors approved the general termination process contained herein to be effective at Program initiation. In the unexpected event that MCE would terminate the Program and return its customers to PG&E service, the proposed process is designed to minimize the impacts on its customers and on PG&E. The proposed termination plan follows the requirements set forth in PG&E's tariff Rule 23 governing service to CCAs. The Board retains authority to modify program policies from time to time at its discretion.

#### Termination by Marin Clean Energy

MCE will offer services for the long term with no planned Program termination date. In the unanticipated event that the majority of the Member's governing bodies (County Board of Supervisors and/or City/Town Councils) decide to terminate the Program, each governing body would be required to adopt a termination ordinance or resolution and provide adequate notice to MCE consistent with the terms set forth in the JPA Agreement. Following such notice, MCE would vote on Program termination subject to a two-tiered vote, as described in the JPA Agreement. In the event that the Board affirmatively votes to proceed with JPA termination, the Board would disband under the provisions identified in its JPA Agreement.

After any applicable restrictions on such termination have been satisfied, notice would be provided to customers six months in advance that they will be transferred back to PG&E. A second notice would be provided during the final sixty-days in advance of the transfer. The notice would describe the applicable distribution utility bundled service requirements for returning customers then in effect, such as any transitional or bundled portfolio service rules.

At least one year advance notice would be provided to PG&E and the CPUC before transferring customers, and MCE would coordinate the customer transfer process to minimize impacts on customers and ensure no disruption in service. Once the customer notice period is complete, customers would be transferred *en masse* on the date of their regularly scheduled meter read date.

MCE will post a bond or maintain funds held in reserve to pay for potential transaction fees charged to the Program for switching customers back to distribution utility service. Reserves would be maintained against the fees imposed for processing customer transfers (CCASRs). The Public Utilities Code requires demonstration of insurance or posting of a bond sufficient to cover reentry fees imposed on customers that are involuntarily returned to distribution utility service under certain circumstances. The cost of reentry fees are the responsibility of the energy services provider or the community choice aggregator, except in the case of a customer returned for default or because its contract has expired. MCE will post financial security in the appropriate amount as part of its registration materials and will maintain the financial security in the required amount, as necessary.

#### Termination by Members

The JPA Agreement defines the terms and conditions under which Members may terminate their participation in the program.

## CHAPTER 12 – Appendices

**Appendix A: MCE Resolution 2014-03** 

Appendix B: County of Napa, Resolution 2014-59

**Appendix C: Marin Clean Energy Joint Powers Agreement** 

Appendix D: County of Napa, CCA Ordinance – Ordinance No. 1391


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

#### DRAFT

#### Board of Directors Meeting Thursday, February 16, 2023 7:00 P.M.

This Meeting will be conducted via teleconference pursuant to the requirements of <u>Assembly Bill No. 361</u>. By using teleconference for this meeting, MCE continues to promote social distancing measures recommended by local officials.

Members of the public who wish to observe the Meeting and/or offer public comment may do so telephonically via the following teleconference call-in number and meeting ID:

For Viewing Access Join Zoom Meeting:

https://us02web.zoom.us/j/86784992940?pwd=SDF1NUpjbWZVRy9BRnBTSFJYcXZpUT09 Dial: (669) 900-9128

Webinar ID: 867 8499 2940 Passcode: 314955

### Agenda Page 1 of 2

- 1. Roll Call/Quorum
- 2. Board Announcements (Discussion)
- 3. Public Open Time (Discussion)
- 4. Board Introductions (Discussion)
- 5. Report from Chief Executive Officer (Discussion)
- 6. Consent Calendar (Discussion/Action)
  - C.1 Approval of 12.15.22 Meeting Minutes
  - C.2 Approved Contracts For Energy Update
- 7. McGlashan Award Presentation (Discussion)
- 8. Climate Action Leadership Awards (Discussion)

## Agenda Page 2 of 2

- 9. Election of Vice Chair and Addition of Board Members to Committees (Discussion/Action)
- 10. Policy Update (Discussion)
- 11. In Person Meetings and Teleconferencing Options Under the Brown Act and AB 2449 (Discussion)
- 12. Next Steps for Concord Office Space (Discussion)
- 13. Form 700 Statements of Economic Interest (Discussion)
- 14. Board Matters & Staff Matters (Discussion)
- 15. Adjourn

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

DISABLED ACCOMMODATION: If you are a person with a disability which requires an accommodation or an alternative format, please call MCE at 1 (888) 632-3674 at least 72 hours before the meeting start time to ensure arrangements for accommodation.