



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

**Board of Directors Meeting**  
**Thursday, October 18, 2018**  
**7:00 P.M.**

**Charles F. McGlashan Board Room, 1125 Tamalpais Avenue, San Rafael, CA 94901**  
**Mt. Diablo Room, 2300 Clayton Road, Suite 1150, Concord, CA 94920**

**Agenda Page 1 of 2**

1. Roll Call/Quorum
2. Board Announcements (Discussion)
3. Public Open Time (Discussion)
4. Report from Chief Executive Officer (Discussion)
5. Consent Calendar (Discussion/Action)
  - C.1 Approval of 7.19.18 Meeting Minutes
  - C.2 Approval of 9.28.18 Meeting Minutes
  - C.3 Approved Contracts Update
  - C.4 Withdrawal of MCE Policy 005
  - C.5 Resolution 2018-10 Amending MCE's Conflict of Interest Code
  - C.6 Third Agreement with Open Energy Efficiency
6. Resolution 2018-08 Authorizing Delegation of Authority by CEO (Discussion/Action)
7. Ordinance 2018-02 Establishing an Alternative Claims Procedure (Discussion/Action)
8. Resolution 2018-09 Delegating the Authority of Setting Compensation, Tenure, Appointment and Conditions of Employment to the Executive Committee and the Chief Executive Officer (Discussion/Action)
9. Resolution 2018-11 Affirming MCE's Commitment to Complying with the Land Use Authorities of its Member Communities (Discussion/Action)



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



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**Agenda Page 2 of 2**

- 10.** Receive Applicant Analysis and Consider 1. Resolution 2018-12 of the Board of Directors of MCE approving the County of Solano as a Member of MCE; 2. Amendment 13 to the MCE JPA Agreement; and 3. Direction to Submit Amendment No. 6 to the MCE Implementation Plan and Statement of Intent.
- 11.** Update on Integrated Resource Plan (Discussion)
- 12.** Board Member & Staff Matters (Discussion)
- 13.** Adjourn



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October 18, 2018

TO: MCE Board of Directors  
FROM: Joey Lande, Customer Programs Manager  
RE: Third Agreement with Open Energy Efficiency (Agenda Item #05 – C.6)  
ATTACHMENT: Proposed Third Agreement with Open Energy Efficiency

Dear Board Members:

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**SUMMARY:**

The proposed Third Agreement with Open Energy Efficiency (Open EE) is a contract for services in support of meter-based energy efficiency savings assessments. At the core of the service is a subscription for a web-based platform, which is used to integrate meter and weather data, monitor impacts, analyze baseline and retrofit conditions, and target customers for participation. Together, these services enable the deployment of pay-for-performance (P4P) energy efficiency programs, which are forecasted to play an increasingly important role in MCE’s customer programs portfolio.

Using meter data rather than equipment-based savings estimations, P4P programs such as those enabled by Open EE’s platform will allow for market-based solutions to drive program results, which support the Customer Program team’s goal of scalable program results. Meter-based programs require that contractors demonstrate results, providing a strong incentive to maximize impacts and absorb some of the risk in developing projects. Open EE has led the development of CalTRACK – the peer reviewed methods and algorithm used to calculate normalized metered energy consumption (NMEC). While anyone is free to use CalTRACK methods to calculate NMEC savings, Open EE is the optimal partner for ongoing support and development of NMEC programs.

Open EE will also support the development of MCE’s Single Family Energy Efficiency Program design, and the verification of savings impacts for select projects completed in 2018. The full not-to-exceed contract value is \$248,000.

**Fiscal Impacts:** Costs related to the proposed Third Agreement with Open Energy Efficiency are within the FY 2018/19 Operating Fund Budget. Costs that would occur beyond FY 2018/19 will be included in subsequent MCE budgets. Additionally, some expenditures arising from the proposed Third Agreement may be allocated to the Energy Efficiency Program Fund Budget.

**Recommendation:** Approve the proposed Third Agreement with Open Energy Efficiency.

**MARIN CLEAN ENERGY  
STANDARD SHORT FORM CONTRACT**

**THIRD AGREEMENT  
BY AND BETWEEN  
MARIN CLEAN ENERGY AND OPEN EFFICIENCY, LLC**

**THIS THIRD AGREEMENT** ("Agreement") is made and entered into this day **October 18, 2018** by and between MARIN CLEAN ENERGY, hereinafter referred to as "MCE" and OPEN ENERGY EFFICIENCY, INC, hereinafter referred to as "Contractor."

**RECITALS:**

**WHEREAS**, MCE desires to retain a person or firm to provide the following services: upgrades to and use of the Open Energy Efficiency Meter Platform and the RecurveOS Operations Platform (including any services, websites (including hosting), solutions, platforms, and products that Contractor makes available under or in relation to the foregoing, including the software, equipment, technology, and services necessary for Contractor to provide the foregoing), development of custom configuration for implementing MCE's energy savings programs, and additional services as set forth in Exhibit A;

**WHEREAS**, Contractor warrants that it is qualified and competent to render the aforesaid services;

**NOW, THEREFORE**, for and in consideration of the agreement made, and the payments to be made by MCE, the parties agree to the following:

**1. SCOPE OF SERVICES:**

Contractor agrees to provide all of the services described in **Exhibit A** attached hereto and by this reference made a part hereof. Contractor will deliver the services and Deliverables in accordance with the milestone schedule in Exhibit A. Unless otherwise mutually agreed pursuant to Milestone 1 in Exhibit A, MCE will evaluate each Deliverable (including any upgrades to the services) and accept or reject it within 15 business days after receipt. If MCE does not accept or reject or request more time to evaluate the Deliverable within that time period, the Deliverable is deemed accepted. Contractor will fix rejected Deliverable within 10 business days after receiving notice of rejection from MCE ("Correction Period"). This process shall be repeated until MCE provides Contractor with written notice of its acceptance of a Deliverable ("Acceptance"). "Deliverables" means all intellectual property or other work product developed by Contractor for MCE under this Agreement, including Exhibit A, or as part of the services. Subject to MCE's payment of applicable fees, Contractor grants MCE a non-exclusive, worldwide, unlimited, fully-paid, right to access and use of the services for its business purposes during the term stated in this Agreement.

**Business continuity.** Contractor will be responsible for establishing, implementing, testing, and maintaining an effective business continuity program, which includes disaster recovery and crisis management procedures, in order to provide continuous access to, and support for, the Services. Contractor must at all times back up, archive and maintain duplicate or redundant systems that (i) are located at a secure physical location (other than the location of primary system(s) used to provide the Services), (ii) are updated and tested at least annually, and (iii) can fully recover the Services on a daily basis. On request, Contractor will provide MCE with an overview of Contractor's business continuity program and promptly respond to MCE's inquiries in connection with that business continuity program.

**2. MCE DATA AND MATERIALS:**

MCE grants Contractor a nonexclusive, revocable license to copy and use MCE Materials provided to it as necessary to perform services. MCE retains all right, title, and interest in and to MCE Materials and related intellectual property. Contractor will not: (i) sublicense the right to use MCE Materials; (ii) modify the MCE Materials; and (iii) will not distribute the MCE Materials. "MCE Materials" means tangible or intangible materials (including related intellectual property, documentation, methodologies, know how, processes, techniques, ideas, concepts, technologies, and data) provided by or on behalf of MCE to Contractor to perform the services. MCE Materials include modifications to, or derivative works of, the foregoing materials and any data entered into any Contractor database as part of the services.

**3. FEES AND PAYMENT SCHEDULE: INVOICING:**

The fees and payment schedule for furnishing services under this Agreement shall be based on the milestone schedule which is attached hereto as Exhibit A and the rate schedule which is attached hereto as **Exhibit B** and by this reference incorporated herein. The services will be provided on a fixed fee or time and material fee basis, as specified in Exhibit A. Said fees shall remain in effect for the entire term of the Agreement. MCE will pay the applicable fees after MCE's Acceptance of the applicable Deliverable.

Contractor shall provide MCE with his/her/its Federal Tax I.D. number prior to submitting the first invoice. Unless otherwise specified in Exhibit A, Contractor shall invoice MCE monthly. Contractor is responsible for billing MCE in a timely and accurate manner. Contractor shall email invoices to MCE on a monthly basis for any services rendered or expenses incurred hereunder. Fees and expenses invoiced beyond 90 days will not be reimbursable. The final invoice must be submitted within 30 days of completion and Acceptance by MCE of the stated scope of services or termination of this Agreement.

**4. MAXIMUM COST TO MCE:**

In no event will the cost to MCE for the services to be provided herein exceed the maximum sum of **\$248,000**.

**5. TIME OF AGREEMENT:**

This Agreement shall commence on **October 18, 2018** and shall terminate on **December 31, 2019**, known as the Initial Term. Following the end of the Initial Term, this Agreement will renew for successive one-year periods provided that unit pricing does not increase by

more than 3% of the price in the current term upon renewal. If a party does not wish to renew this Agreement, a party must notify the other in writing of its intent not to renew this Agreement at least 90 days prior to the end of the then-current term. Certificate(s) of Insurance must be current on the day the Agreement commences and if scheduled to lapse prior to termination date, must be automatically updated before final payment may be made to Contractor.

## **6. INSURANCE AND SAFETY:**

All required insurance coverages 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 work. Each certificate 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 6.4 which may be provided on a claims-made basis consistent with the criteria noted therein.

Nothing herein shall be construed as a limitation on Contractor's obligations under paragraph 16 of this Agreement to indemnify, defend and hold MCE harmless. MCE agrees to timely notify the Contractor of any negligence claim.

Failure to provide and maintain the insurance required by this Agreement will constitute a material breach of the agreement. In addition to any other available remedies, MCE may suspend payment to the Contractor for any services provided during any time that insurance was not in effect and until such time as the Contractor provides adequate evidence that Contractor has obtained the required 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. 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**

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 (\$1,000,000.00).

### **6.3 WORKERS' COMPENSATION**

The Contractor 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 Contractor 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 work.

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

Coverages required by this paragraph may be provided on a claims-made basis with a "Retroactive Date" either prior to the date of the Agreement or the beginning of the contract work. If the policy is on a claims-made basis, coverage must extend to a minimum of twelve (12) months beyond completion of contract work. If coverage is cancelled or non-renewed, and not replaced with another claims made policy form with a "retroactive date" prior to the Agreement effective date, the contractor must purchase "extended reporting" coverage for a minimum of twelve (12) months after completion of contract work. Contractor shall maintain 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 contractor has segregated amounts in a special insurance reserve fund or contractor's general insurance reserves are adequate to provide the necessary coverage and MCE may conclusively rely thereon. The policy must cover infringement of third party proprietary rights (e.g., copyright, patent, trademark).

**6.5 PRIVACY AND CYBERSECURITY LIABILITY.** 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.

Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Agreement. Contractor shall monitor the safety of the job site(s) during the project to comply with all applicable federal, state, and local laws, and to follow safe work practices.

## **7. NONDISCRIMINATORY EMPLOYMENT:**

Contractor and/or any permitted subcontractor, shall not unlawfully discriminate against any individual based on race, color, religion, nationality, sex, sexual orientation, age or condition of disability. Contractor and/or any permitted subcontractor understands and agrees that Contractor and/or any permitted subcontractor is bound by and will comply with the nondiscrimination mandates of all federal, state and local statutes, regulations and ordinances.

## **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 identified herein. Except for Contractor's cloud infrastructure providers, if Contractor hires a subcontractor under this Agreement, Contractor shall require subcontractor to provide and maintain insurance coverage(s) identical to what is required of Contractor under this Agreement and shall require subcontractor to name Contractor as additional insured under this Agreement. It shall be Contractor's responsibility to collect and maintain current evidence of insurance provided by its subcontractors and shall 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 shall be solely responsible for ensuring its subcontractors', including Contractor's cloud infrastructure providers, compliance with all of the terms and conditions of 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 moneys to any subcontractor. Approved subcontractors and required insurances as of the date hereof are set forth in **Exhibit C**.

**9. 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, such consent will not be unreasonably withheld.

**10. RETENTION OF RECORDS AND AUDIT PROVISION:**

Contractor and any subcontractors authorized by the terms of this Agreement shall keep and maintain on a current basis full and complete documentation and accounting records, employees' time sheets, and correspondence pertaining to this Agreement. Such records shall include, but not be limited to, documents supporting all income and all expenditures. MCE shall have the right, during regular business hours, to review and audit annually, or as required by law, all records relating to this Agreement during the Contract period 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 notice 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.

**11. WORK PRODUCT:**

All finished and unfinished data (including performance data, metered savings calculation data and other data generated as a result of MCE's use of the services) reports, plans, studies, documents and other writings prepared by and for Contractor, its officers, employees and agents in the course of implementing this Agreement ("Work Product") shall become the sole property of MCE upon payment to Contractor for such work. MCE shall have the exclusive right to use such Work Product in its sole discretion without further compensation to Contractor or to any other party. Contractor shall, at MCE's expense, provide such data, reports, plans, studies, documents and writings to MCE or any party MCE may designate, upon written request. Contractor may keep file reference copies of all documents prepared for MCE. Except for MCE's Work Product, unless otherwise specifically agreed in writing by the parties, Contractor shall retain ownership of and all subsequent rights in its proprietary systems, software, or other intellectual property developed by Contractor and utilized in the course of this Agreement.

**12. TERMINATION:**

- A. If the Contractor 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 ordinance, regulation or other law which applies to its performance herein, MCE may terminate this Agreement by giving five (5) business days' written notice to the party involved.
- B. The Contractor shall be excused for failure to perform services herein if such services are prevented by acts of God, strikes, labor disputes or other forces over which the Contractor has no control.
- C. 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.
- D. In the event of termination not the fault of the Contractor, the Contractor 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).
- E. MCE may terminate this Agreement if funding for this Agreement is reduced or eliminated by a third-party funding source.

**13. AMENDMENT:**

This Agreement may be amended or modified only by written agreement of all parties.

**14. NO SUBSTITUTION OF PERSONNEL:**

The Contractor shall not substitute any personnel for those specifically named in its proposal unless personnel with substantially equal or better qualifications and experience are provided, acceptable to MCE, as is evidenced in writing.

**15. 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.

**16. REPRESENTATIONS; WARRANTIES; INDEMNIFICATION:**

**16.1 Contractor continuously represents and warrants**

- (a) it has full rights and authority to enter into, perform under, and grant the rights in, this Agreement,
- (b) its performance will not violate any agreement or obligation between it and any third party,
- (c) Deliverables and Work Product (including any data generated as a result of the services) will be true and accurate and conform to their documentation and specifications in Exhibit A,
- (d) Services will be performed professionally and be of high grade, nature, and quality,

- (e) Services, Work Product, and Deliverables will not: (i) infringe any third party patent, copyright, trademark, trade secret, or other proprietary right, or (ii) contain viruses or other malicious code that will degrade or infect any Deliverables, products, services, software, or MCE's network or systems, and
- (f) Contractor will comply with all applicable laws, including data protection laws.

Further, Contractor continuously represents and warrants that the Deliverables will not require, as a condition of use, modification, or distribution by MCE: (1) disclosure or distribution of the Deliverables in source code form, (2) a license to a third party to make derivative works of the Deliverables, or (3) redistribution of the Deliverables at no charge.

**16.2** If Contractor fails to meet its warranty obligations in Sections 16.1(b), (c) or (d), Contractor will correct such deficiency within thirty (30) days to MCE's reasonable satisfaction. If Contractor is unable to cure such deficiency within such time, MCE may terminate all or a portion of this Agreement by giving thirty (30) calendar days' written notice to Contractor. Such notice shall be sent by registered mail or by email to the email address listed in Section 19 Invoices; Notices.

**16.3 Indemnification.** Contractor agrees to indemnify, defend, and hold MCE, its employees, officers, and agents (each a "MCE Indemnified Party"), harmless from any and all liabilities including, but not limited to, litigation costs and attorney's fees arising from any and all claims and losses to anyone who may be injured or damaged by reason of Contractor's negligence, recklessness or willful misconduct in the performance of this Agreement. Additionally, Contractor will defend, indemnify, and hold MCE Indemnified Parties harmless from and against all Claims to the extent such Claims arise out of or relate to:

- (1) Contractor's breach of Section 16.1, 16.4 and Section 24,
- (2) Contractor's infringement, misuse, or misappropriation of third-party intellectual property or proprietary rights, or
- (3) Contractor's non-compliance with applicable laws, rules, or regulations.

"Claim(s)" means any and all (1) third-party claims, actions, demands, lawsuits, or proceedings and (2) damages, costs (including reasonable fees of attorneys and other professionals), or liabilities of any kind (including any fine, penalty, judgement or order issued by a governmental, regulatory or judicial body), in each case arising out of that third party claim, action, demand, lawsuit, or proceeding.

Contractor will have no liability under this Agreement or otherwise to the extent a Claim is based upon (a) use of the Application in combination with software, hardware or technology not provided by Contractor, if infringement would have been avoided in the absence of the combination, (b) modifications to the Application not made by Contractor, if infringement would have been avoided by the absence of the modifications, or (c) use of any version other than a current release of the Application, if infringement would have been avoided by use of a current release and provided that Contractor notifies MCE that the new release is available and necessary to avoid an infringement claim.

**16.4** Contractor shall, at its expense, adopt and continuously implement, maintain and enforce reasonable technical and organizational measures, consistent with the sensitivity of Personal Information (as defined below), including, but not limited to, measures designed to (1) prevent unauthorized access to, and otherwise physically and electronically protect, the Services and Personal Information, and (2) protect Customer content and data against accidental, unauthorized or unlawful access, disclosure, alteration, loss, or destruction. At Contractor's cost, Contractor will maintain a valid certification under the International Organization for Standardization standard ISO 27001 or similar audit as may be approved or required by Customer ("Contractor Certification"). Contractor will promptly provide to Customer upon Customer's request and at least annually (i) a full copy of the Contractor Certification and report on which the Contractor Certification is based, and (ii) a current certification and report applicable to each cloud infrastructure provider(s) identified on the cover page ("CIP") under Service Organization Controls (SOC) 2 Type 2 or the International Organization for Standardization standard ISO 27001. The Contractor Certification will cover all Services, except cloud infrastructure services provided by CIP(s) other than Contractor. Contractor will only use cloud infrastructure providers that are approved subcontractors via the approval process in Section 8 of this Agreement, in providing Services and will notify Customer at least 90 days before it changes, or undertakes any plan to change, the cloud infrastructure provider and at least 30 days before any change in location of any Customer content or data. Contractor warrants that its software is tested against OWASP Top 10 Most Critical Web Application Security Risks at least semiannually and will provide confirmation of such testing upon request and at least annually. Without limiting Contractor's obligations under this Agreement, with respect to Personal Data, on becoming aware of any Security Incident (as defined below), Contractor will: (1) immediately notify MCE of the Security Incident (in any case no later than forty-eight (48) hours after becoming aware of the Security Incident, (2) promptly investigate or perform required assistance in the investigation of the Security Incident and provide MCE with detailed information about the Security Incident, and (3) promptly take all commercially reasonable steps to mitigate the effects of the Security Incident, at Contractor's cost. "Personal Information" has the meaning set forth under applicable law. "Security Incident" means any (1) accidental or unlawful destruction, loss, alteration, unauthorized disclosure of, or access to Personal Information transmitted, stored, or otherwise processed by Contractor or its Subcontractors, or (2) security vulnerability related to Contractor's handling of Personal Information.

**16.5** In addition to all other remedies available to MCE,

- (1) if use of services or Deliverables under this Agreement is enjoined or injunction is threatened, Contractor, at its expense, will notify MCE and immediately
  - (i) procure for MCE the right to continue using such services and Deliverables, or
  - (ii) replace or modify such services and Deliverables so that they are noninfringing and useable to MCE's satisfaction.

If Contractor does not comply with this Section 16.4, then in addition to any amounts reimbursed under this Section 16, Contractor will refund all amounts paid by MCE for infringing services and Deliverables and pay reasonable costs to transition Services to a new supplier.





Email Address: matt@efficiency.org

Telephone No.: (415) 902-4546

**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.

	<input checked="" type="checkbox"/>	<u>Check applicable Exhibits</u>	<u>CONTRACTOR'S INITIALS</u>
<u>EXHIBIT A.</u>	<input checked="" type="checkbox"/>	Scope of Services	
<u>EXHIBIT B.</u>	<input checked="" type="checkbox"/>	Fees and Payment	
<u>EXHIBIT C.</u>	<input checked="" type="checkbox"/>	Approved Subcontractors	

**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. COMPLETE AGREEMENT**

This Agreement along with any attached Exhibits 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.

**23. 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.

**24. CONFIDENTIALITY AND DATA PROTECTION**

Information shared under this Agreement is confidential information subject to the Marin Clean Energy Confidentiality Agreement between the parties dated October 5, 2018 and the Non-Disclosure Agreement between the parties dated October 5, 2018.

**25. Limitation on Liability.** EXCEPT FOR CONTRACTOR'S INDEMNIFICATION OBLIGATIONS HEREIN OR A BREACH OF CONFIDENTIALITY AND PRIVACY INCLUDING FINES IMPOSED BY REGULATORS AS A RESULT OF SUCH BREACH, IN NO EVENT SHALL THE AGGREGATE LIABILITY OF EITHER PARTY ARISING OUT OF OR RELATED TO THIS AGREEMENT, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR UNDER ANY OTHER THEORY OF LIABILITY, EXCEED THE AMOUNT PAID BY MCE HEREUNDER IN THE 12 MONTHS PRECEDING THE INCIDENT, NOTWITHSTANDING ANY FAILURE OF THE ESSENTIAL PURPOSE OF THIS AGREEMENT OR ANY LIMITED REMEDY HEREUNDER.

**26. Exclusion of Consequential and Related Damages.** EXCEPT FOR CONTRACTOR'S INDEMNIFICATION OBLIGATIONS HEREIN OR A BREACH OF CONFIDENTIALITY AND PRIVACY INCLUDING FINES IMPOSED BY REGULATORS AS A RESULT OF SUCH BREACH, IN NO EVENT SHALL EITHER PARTY HAVE ANY LIABILITY TO THE OTHER FOR ANY LOST PROFITS OR REVENUES OR FOR ANY INDIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL, COVER OR PUNITIVE DAMAGES HOWEVER CAUSED, WHETHER IN CONTRACT, TORT (INCLUDING NEGLIGENCE) OR UNDER ANY OTHER THEORY OF LIABILITY, AND WHETHER OR NOT CONTRACTOR HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND NOTWITHSTANDING ANY FAILURE OF THE ESSENTIAL PURPOSE OF THIS AGREEMENT OR ANY LIMITED REMEDY HEREUNDER.

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

**APPROVED BY**  
**Marin Clean Energy:**

By: \_\_\_\_\_  
CEO

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

By: \_\_\_\_\_  
Chairperson

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

**CONTRACTOR:**

By: \_\_\_\_\_

Name: \_\_\_\_\_

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

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**MODIFICATIONS TO STANDARD SHORT FORM**

**Standard Short Form Content Has Been Modified**

*List sections affected:* Sections 1, 2, 3, 5, 6, 11, 14, 16, added Sections 24, 25, & 26

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

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

## EXHIBIT A

### SCOPE OF SERVICES (required)

The OpenEE Platform will assist MCE with evaluating and reporting site-based, normalized meter energy consumption (“NMEC”) from an existing conditions baseline in accordance with CalTRACK 2.0 Set of Methods, incorporated herein by this reference.

#### The OpenEE Platform and RecurveOS Operations Platform

The OpenEE Platform consists of two complementary main systems: The OpenEEmeter M&V Platform (“OpenEEmeter Platform”) and the RecurveOS Operations Platform (“RecurveOS Platform”). The OpenEEmeter Platform provides the infrastructure necessary to conduct automated savings calculations associated with energy efficiency projects and energy management solutions. This platform includes infrastructure required to implement methodological requirements specified by the CalTRACK 2.0 methods. The RecurveOS Platform provides data warehousing, data security monitoring, data management tools, dashboards for tracking program performance, a secure portal with SSO and user management tools, and add-ons for third party organizational access, comparison group tracking, and custom data analytics.

Within an organization, the OpenEE Platform is configured in a hub and spoke pattern, with the OpenEEmeter Platform at the center of the configuration and individual deployments of the RecurveOS Platform managing the metering outputs for specific programs within the organization. Each individual RecurveOS program management platform can be served by the organization’s OpenEEmeter Platform and related infrastructure.

The OpenEEmeter Platform is supported by a datastore application that manages the infrastructure required for automated M&V. The datastore application merges consumption data with project data to create the dataframes necessary to calculate energy efficiency savings. The OpenEEmeter weather application fetches hourly NOAA weather data to complete the required inputs for a savings calculation. The raw consumption data and the metering input and output files are stored in an encrypted cloud storage bucket that is accessible to permissioned users as well as the RecurveOS Platform.

The RecurveOS Platform consumes a set of inputs that are generated as outputs by the OpenEEmeter Platform. Through a series of data warehousing scripts, the RecurveOS Platform generates the calculations required for energy efficiency M&V. For example, where the OpenEEmeter generates a series of metering derivatives, the RecurveOS Platform transforms those derivatives into values like gross kWh and Therms saved, percentage reduction, and baseline versus actual consumption values. These values are stored in a collection of data warehouses, which are derived from the metering outputs stored in the OpenEEmeter Platform cloud storage bucket. The RecurveOS Platform features a user portal where metering outputs are viewed in a variety of dashboards.

The RecurveOS Platform also facilitates data access and sharing with third parties. Authorized third parties are able to access records associated with their portfolios of projects without exposing the underlying consumer protected data. These third parties are also able to submit projects through their portal tools.

#### 1. Platform Upgrade and Licensing

##### Task 1: OpenEE Platform Upgrade

Description: OpenEE Platform Upgrade, setup and configuration for MCE.

Contractor will upgrade MCE’s existing OpenEE Platform to support CalTRACK 2.0 specifications and add the RecurveOS Platform. CalTRACK 2.0 specifications include guidance for calculating savings at hourly intervals, taking advantage of the availability of smart meter data. The RecurveOS Platform provides a portal for administrators to monitor program performance and support third-party program implementers.

***Deliverable:*** *Upgraded MCE’s existing OpenEE Platform with CalTRACK 2.0 compliance and RecurveOS deployment with third party support enabled.*

##### Task 2: Metered Savings Platform Operations

Description: OpenEE will calculate metered savings for MCE for designated buildings on a monthly basis through the OpenEEmeter platform. Metered savings calculations will follow methodological guidance specified in CalTRACK 2.0 methods guidance ([www.CalTRACK.org](http://www.CalTRACK.org)). OpenEE will work with aggregators and MCE to match buildings to their meters to ensure that efficiency calculations properly reflect implemented projects. OpenEE will calculate the metered savings and charge MCE on a per-meter basis as described in Exhibit B.

Three types of savings calculations are possible under this Metered Savings Platform:

1) Metered savings for program tracking is the real-time NMEC calculation used as the basis for payment in Pay for Performance (P4P) programs because it provides up-to-date feedback on site-, project-, and meter-level performance which reflects changes in energy consumption occurring at the meter, normalized to the actual weather conditions in that period.

2) Annualized weather normal savings analysis is the retroactive NMEC calculation used to learn from historical project performance data which has been joined with metadata about the project or site and normalized to an average weather year (weather normal). It requires exactly a year of data on either side of a project, i.e., in both the baseline and reporting periods, and temperature normal data from a typical weather year to create predictable and predictive analyses of site level project performance.

3) Baseline-only analysis is the forward-looking NMEC analysis used to analyze non-treated or pre-treated sites. Baseline-only analysis uses information about meters where projects have not (yet) been performed. Comparison groups are typically measured using baseline-only analyses and subsequently used to estimate savings that are net of exogenous effects on metered savings.

**Deliverable(s):** Savings calculations outputted from OpenEEmeter Platform. Updated on monthly basis upon transfer of project and consumption data from MCE and aggregators.

### Task 3: Program Management Platform Operations

**Description:** The RecurveOS Platform provides utilities and aggregators the tools needed to track the performance of projects in their program portfolios. When enabled for third-party access, the portal can be configured to share sensitive performance data without disclosing private customer or other proprietary information.

**Deliverable(s):** Data warehousing of metered savings outputs, user access to data outputs through web-based portal, dashboards configured for program management needs.

### Task 4: Third-Party support module

**Description:** Third party aggregators must be able to submit projects (and portfolios of projects) that meet the criteria established by MCE. The OpenEE third party support module allows aggregators to submit projects with the appropriate metadata that will be needed to calculate payable savings (e.g., project dates and locations, customer account numbers). In addition, Third-party aggregators value visibility into the performance of their portfolios of projects. The Third-party support module will provide portfolio-aggregated savings results to aggregators upon approval by MCE. An optional Reporting-only module can be made available to third parties who need access to limited savings reporting data, such as contractors or regulators.

**Deliverable:** Aggregator portal and dashboard views of savings results.

### Licensing Fees and Payment Schedule for Tasks 1-4\*

Task	Completion Timeline (Estimates)	Fees	Invoice Timing
Task 1: Platform Upgrade	2 months following Task 1 commencement	\$2,500 (fixed) (one-time fee)	Upon Acceptance of Task 1: Platform Upgrade Deliverables
Task 2: Metered Savings Platform	On-going activities	Metered Savings Tracking NTE \$3,000 Normal Year Analytics (one-time fee per meter) NTE \$60,000 Baseline Analytics (one-time fee per meter) NTE \$60,000 See Rate Schedules in Exhibit B	Monthly upon Acceptance of Task 1
Task 3: Program Management Platform	On-going activities	\$5,000 (fixed) (monthly)	Monthly upon Acceptance of Task 1
Task 4: Third Party Support Module	On-going activities	\$1,000 (fixed) for each Aggregator \$100 (fixed) for each contractor/regulator under the Reporting-only module option of Task 4 (monthly per third party registered)	Monthly upon each third-party registering
Total First Year Licensing Fees		Not to Exceed \$195,500	

\*For clarity, no platform licensing fees under Tasks 2-4 shall be due to Contractor until after the Upgrades in Task 1 are completed and MCE has begun using the applicable platform in a production mode.

## 2. Additional Services

Contractor will provide the following services as requested and directed by MCE staff, up to the maximum time/fees allowed under this Scope of Services:

### Task 5: Data Analysis and Integration

- A. Description: Backcasting and Targeting.** Contractor will work with MCE program staff to support analysis of past programs and targeting for future solicitations. Where possible, Contractor will work with prospective bidders to support the development of competitive bids by measuring the metered savings of past projects.
- Deliverable:** Analysis of up to 3,000 past projects (MCE or third party) and create a baseline analysis of key sectors in support of upcoming program solicitations.
- Budget:** \$15,000 (paid on a per meter basis at \$5.00 per meter) due upon MCE written Acceptance of Platform deployment
- B. Description: Data Integration.** Contractor will develop additional data pipeline infrastructure to support automated data analytics, including integrations with current MCE data vendors. In support of MCE's desire to improve the cost-effectiveness

of its programs and to support emerging use cases that require ongoing access to interval meter data, Contractor will work with Calpine to set up an automated request infrastructure to securely access interval data.

**Deliverable:** *Data pipeline that connects to meter data and project data allowing automated data transfers between MCE and OpenEE platform.*

**Budget:** *billed at the hourly rate (time and materials) up to \$10,000 due upon MCE written approval of Data Pipeline integration*

#### **Task 6: Reporting and Measurement and Verification (M&V) Strategies**

Contractor will support MCE in navigating the regulatory landscape for deploying performance-oriented programs, embedded measurement and verification strategies, and compliant reporting structures. This will include but may not be limited to:

- A. **Description: Guidelines for NMEC.** Contractor will work with MCE staff to identify all applicable guidelines for normalized metered energy consumption, and requirements for program design. This task would include Commission direction and decisions, Energy Division staff guidance, other program administrator guidelines (as a point of comparison) and enabling legislation.

**Deliverable:** *Compliance checklist for MCE to use in preparing solicitations, demonstrating compliance of program proposals (to CPUC), and ensuring consistent compliance in execution.*

**Budget:** *Billed at an hourly rate (time and materials), not-to-exceed \$5,000*

- B. **Description: Meter-Based Savings Method.** Contractor will develop a savings claims approach that meets CPUC reporting requirements for monthly, quarterly and annual claims for meter-based savings. Savings claims for meter-based programs are not yet clearly defined by the CPUC. The methods, cadence, and coverage of all cost effectiveness fields required in the submission will need to be defined by Contractor. An automated approach for claiming savings will also aid in consistency and clarity in the reporting process.

**Deliverable:** *Meter-based savings method (payable, gross, and net); assumptions for cost effectiveness tool inputs (that are not energy savings); and automated output for reporting.*

**Budget:** *Billed at an hourly rate (time and materials), not-to-exceed \$5,000*

- C. **Description: Other Energy Efficiency Issues.** Contractor will support MCE in navigating a range of other issues, as directed and requested by MCE staff, as new guidelines, regulations and approaches emerge to tackle normalized metered energy consumption for energy efficiency and application in other distributed energy resources.

**Deliverable:** *Deliverables will be mutually defined and requested and directed by MCE staff.*

**Budget:** *Billed at an hourly rate (time and materials), not-to-exceed \$5,000*

#### **Task 7: Support for MCE's new Single Family Residential Program**

Contractor will support the development of MCE's new Single Family Residential Program. This support will include providing guidance in the development of a Request for Qualifications (RFQ), evaluating prospective bidders, through contract implementation. Contractor and or any subcontractor is prohibited from bidding on the RFQ. Contractor will also support the development of an implementation plan to be submitted to the CPUC.

- A. **Description: Program design support.** Contractor will support preliminary program design with analysis to inform MCE and PG&E's negotiation of a Joint Cooperation Memo. Contractor will identify areas of potential overlap of MCE and PG&E's programs and develop recommendations for minimizing duplication, whether through modifications to the MCE approach or the PG&E approach. Any recommendations for modifications to the PG&E approach shall include an assessment of any unique attributes or advantages MCE possesses that would logically favor the MCE approach in offering the greater prospects of success.

**Deliverable:** *Memo analyzing areas of potential overlap with PG&E residential sector offerings and offering potential program design solutions for minimizing duplication.*

**Budget:** *Billed at an hourly rate (time and materials), not-to-exceed \$4,000*

- B. **Description: Program development assistance.** Contractor will support MCE's development of a Single Family Residential program and help communicate the requirements and rules of the program, with emphasis on M&V expectations, to implementers and customers. Program rules shall be consistent with the Implementation Plan and shall comply with CPUC policies and rules. Potential rules include:

- a. Eligible Measures or measure eligibility
- b. Customer Eligibility Requirements
- c. Implementer Eligibility Requirements
- d. Participating Vendors, Manufacturers, Retailers, or Distributors
- e. Additional Services
- f. Audits
- g. Quality Assurance Provisions

**Deliverable:** Contractor will provide consulting services to MCE Staff on development of an RFQ (including assistance in drafting the RFQ), evaluating potential bidders, and assistance with implementation of the program with a contracted vendor. Contractor will consult with MCE staff, and conduct implementer and customer outreach to inform the program development and solicitation process. This task will be considered complete when one or more implementers have been selected and brought under contract for the 2019 program year.

**Budget: Billed at an hourly rate (time and materials), not-to-exceed \$3,500**

- C. **Description: Implementation Plan M&V.** Contractor will support the development of an Implementation Plan for the Single Family Residential Program, consistent with CPUC guidance in Decision D.15-10-028, to be submitted via EESStats. Contractor will focus on articulation of an M&V plan, consistent with International Performance Measurement and Verification Protocol (IPMVP) Option C and CPUC guidance for population approaches using Normalized Metered Energy Consumption (NMEC) protocols (under development). Contractor will coordinate with MCE staff and other consultants as needed to facilitate preparation of workpapers, CET calculations, and the Annual Budget Advice Letter (ABAL).

**Deliverables:** Up to two Drafts, allowing MCE opportunity to revise draft plan, and Final Implementation Plans.

**Budget: \$5,000 due upon MCE written approval of the Final Implementation Plan.**

### 3. Additional Terms

Contractor will maintain and support the Deliverables and services to ensure solid and reliable connectivity and access by MCE and their users and that the Deliverables and services perform and operate with in accordance with the specifications and as set forth in this Exhibit and the other terms and conditions of this Agreement. Contractor will promptly repair or replace, without any additional charge, the Deliverables or any portion thereof, that have any bugs, defects or errors (collectively, “**Errors**”).

#### Availability:

Contractor will provide the services on a 24 x 7 x 365 basis with an uptime guarantee of 98%, excluding a Maintenance Window (defined below) of up to 120 minutes. Contractor will schedule any service upgrades or maintenance between 12:00 am and 4:00 am Pacific Standard Time on Saturday (“Maintenance Window”).

If Contractor fails to meet the availability obligations above, then MCE will receive the credits specified below:

Service Availability	Credit (against monthly fee for affected Cloud Service)
98% or greater	0%
97% – 97.9%	5%
96% – 96.9%	10%
95% – 95.9%	15%
94% – 94.9%	30%
Less than 94%	100%

#### Error Correction:

In the event that MCE reports to Contractor any Error (the Severity Level to be reasonably determined by MCE), Contractor will respond to such reports as follows:

“**Severity Level 1**” is an emergency condition which makes the use or continued use of any one or more functions of the Deliverables impossible or significantly impaired. The condition requires an immediate solution that is not already available to MCE.

“**Severity Level 2**” is, other than any Severity Level 1 problem, any condition which makes the use or continued use of any one or more functions of the Deliverables difficult and which MCE cannot reasonably circumvent or avoid on a temporary basis without the expenditure of significant time or effort.

“**Severity Level 3**” is, other than any Severity Level 1 Problem or Severity Level 2 Problem, any limited problem condition which is not critical in that no loss of MCE data occurs and which MCE can reasonably circumvent or avoid on a temporary basis without the expenditure of significant time or effort.

“**Severity Level 4**” is, other than any Severity Level 1 Problem, Severity Level 2 Problem or Severity Level 3 Problem, a minor problem condition or Documentation error which MCE can easily circumvent or avoid. Additional requests for new feature suggestions, which are defined as new functionality in existing Deliverables, are also classified as Severity Level 4.

Response Times:

Contractor will respond to and resolve an Error, depending on the Severity Level, within the time frames set forth in the chart below, starting from the time MCE notifies Contractor of the Error.

Severity Level	Assignment Time	Initial Response Time	Workaround Time	Resolution Time
Severity Level 1 Problem	Immediate	Within 30 minutes	4 hours	24 hours
Severity Level 2 Problem	Immediate	Within 30 minutes	1 day	4 days
Severity Level 3 Problem	One Hour	Within 1 day	3 days	One week
Severity Level 4 Problem	One Hour	Within 1 day		One week

Maintenance Services:

Contractor will provide MCE with maintenance services to maintain:

- (a) the functionality of the services, as described in herein and Documentation;
- (b) the functionality of the services in accordance with the warranties set forth herein, including but not limited to, the Services conforming in all material respects to the specifications, functions, descriptions, standards, and criteria set forth herein and the Documentation;
- (c) the access availability of the services to Authorized Users, where such availability is equal to or greater than the Service Level set forth herein; and,
- (d) the compatibility of the services with the then-current version and the three prior versions of Internet Explorer, Mozilla Firefox, Google Chrome, and any other internet browser described herein.

The Services Fees shall be inclusive of the fees for maintenance services.

"Documentation" means all user manuals, handbooks, training material, requirements, and other written or electronic materials Contractor makes available for, or that result from use of, the services.

Required Notice of Upgrades and Maintenance:

Unless otherwise provided for herein, Contractor shall provide no less than thirty (30) calendar day's prior written notice to MCE of all Major Platform Upgrades, including but not limited to new versions that will provide a staging environment to MCE, such written notice including a detailed description of all upgrades to be performed. For Emergency Maintenance, Contractor shall provide as much prior notice as commercially practicable to Company and shall provide a detailed description of all maintenance performed no greater than one (1) calendar day following the implementation of the Emergency Maintenance.

Option to Revert Services:

Notwithstanding MCE's acceptance of the upgrades, Contractor shall revert services back to a prior release or version where MCE: (i) discovers that the upgrades adversely affect MCE's ability to use the services; and, (ii) provides Contractor with written notice requesting Contractor revert services to a prior build or version. Contractor shall reintroduce the prior release or version of services into production within one (1) business day of its receipt of MCE's notice.

Option to Upgrade to New Version:

Should Contractor supply to any other customer a new version of the services, MCE shall have the option to upgrade to the new version of the services at no cost provided that MCE is current in payment of Services Fees. As used herein, services shall consider a "New Version" if it utilizes similar functionality for similar applications, regardless of whether there is a code, language or platform change.

**EXHIBIT B  
FEES SCHEDULE**

For services provided under this Agreement, MCE shall pay Contractor in accordance with the rates specified below:

**Platform Upgrade and Licensing:**

- Task 1: Platform Upgrade \$2,500
- Task 2: Metered Savings Platform Not to exceed \$123,000 based on Rate Schedules below
- Task 3: Program Management Platform \$5,000 (fixed monthly)
- Task 4: Third Party Support Module \$1,000 for Aggregators/\$100 for contractors/regulators (fixed, monthly per third party registered – estimated not to exceed \$10,000 annually)

**Additional Services:**

- Task 5: Data Analysis and Integration
  - A. Backcasting and Targeting Not to exceed \$15,000 paid on a per meter basis at \$5.00 per meter
  - B. Data Integration Hourly rate based on the table below, not to exceed \$10,000
- Task 6: Reporting and M&V Strategies
  - A. Guidelines for NMEC Hourly rate based on the table below, not to exceed \$5,000
  - B. Meter-based Savings Method Hourly rate based on the table below, not to exceed \$5,000
  - C. Other Energy Efficiency Issues Hourly rate based on the table below, not to exceed \$5,000
- Task 7: Support for MCE's new Single-Family Residential program
  - A. Program Design Support Hourly rate based on the table below, not to exceed \$4,000
  - B. Program Development Assistance Hourly rate based on the table below, not to exceed \$3,500
  - C. Implementation Plan M&V \$5,000

Rate Schedule for Savings Calculations under the Metered Savings Platform (Task 2):

Analysis Type	Unit Price	Term
Metered Savings Tracking	See Rate Schedule below	Monthly
Normal Year Analytics	\$5/meter	One Time
Baseline Analytics	\$5/meter	One Time

Rate Schedule for Metered Savings Tracking:

Tier (starts after meter #)	Price Per Meter	Minimum Monthly Cost
1	\$0	\$0.00
100	\$0.50	\$50
1,000	\$0.25	\$250
10,000	\$0.20	\$2,000

Rate schedule for all hourly work performed:

Title	Personnel	Hourly Rate
Lead Project Consultant	McGee Young	\$220
Senior Policy Consultant	Carmen Best	\$220
Product Manager	Alyssa Byers	\$200
Senior Data Scientist	Hassan Shaban	\$200
Data Scientist	Vikhyati Singh	\$180
Senior Software Engineer	Dave Yeager	\$200
Senior Software Engineer	Phil Ngo	\$200
Senior Software Engineer	Arpan Kotecha	\$200
Software Engineer	Steve Suffian	\$180

Contractor shall invoice MCE upon receiving MCE's written Acceptance of the completed Deliverable in a given task. For Deliverables that are billed at an hourly rate, Contractor shall bill on a monthly basis for the hours performed on the applicable Deliverable after Acceptance. In no event shall the total cost to MCE for the services provided herein exceed the maximum sum of **\$248,000** for the term of the Agreement.



**EXHIBIT C**  
**APPROVED SUBCONTRACTORS**

The following list of subcontractors are approved by MCE as of the date hereof and includes the insurances required for each approved subcontractor:

<b>Subcontractor</b>	<b>Provide and Maintain the following insurances to Contractor</b>
Ardenna Energy	Professional Responsibility and General Liability with Contractor listed as an additional insured.
Salesforce and Google	Insurance not required but subject to Section 8 indicating that Contractor shall be solely responsible for ensuring its subcontractors' compliance with all of the terms and conditions of this Agreement.



October 18, 2018

TO: MCE Board of Directors

FROM: Alex DiGiorgio, Deputy Director of Community Development  
John Dalessi, Operations and Development

RE: Receive Applicant Analysis and Consider:

1. Proposed Resolution 2018-12 of the Board of Directors of MCE approving the County of Solano as member of MCE.
2. Proposed Amendment 13 to the MCE JPA Agreement.
3. Directing Staff to Create and Submit to the CPUC Amendment No. 6 to the MCE Implementation Plan and Statement of Intent.

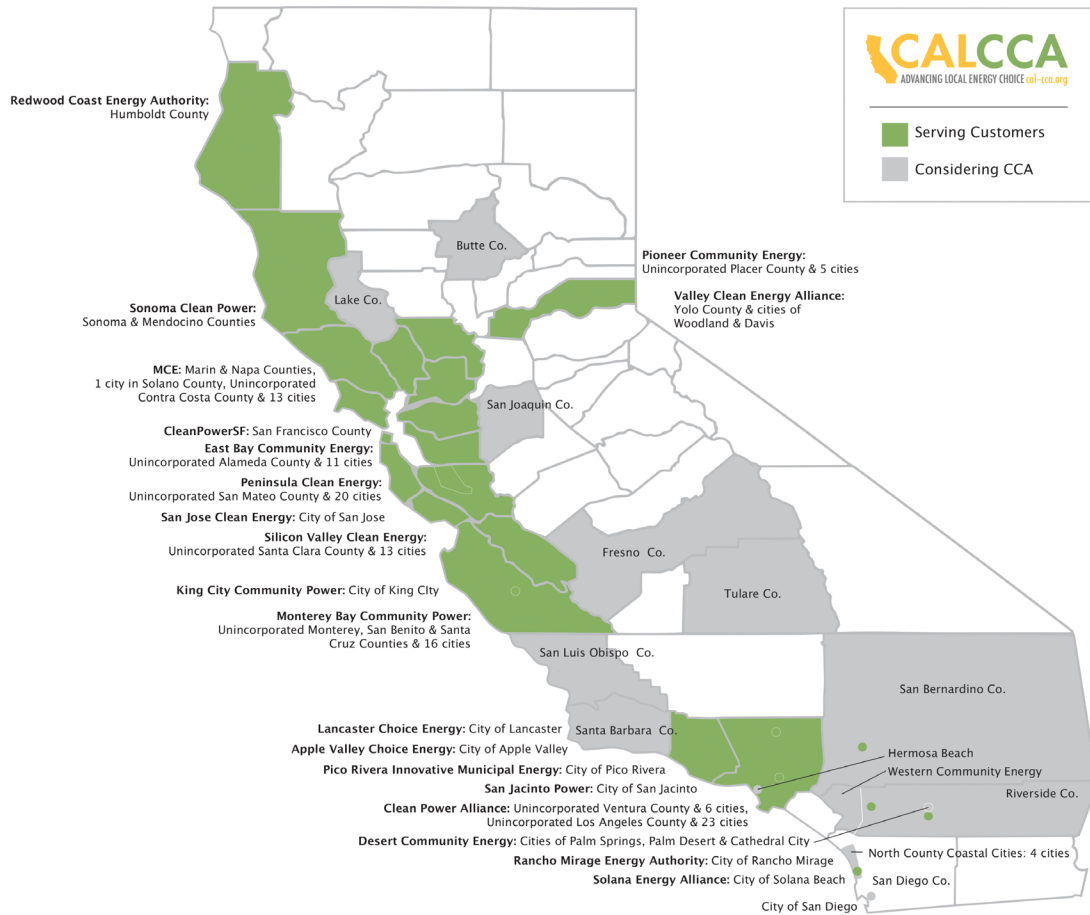
ATTACHMENTS:

- A. MCE Applicant Analysis for 2020
- B. Proposed Resolution No. 2018-12 of the Board of Directors of MCE approving the County of Solano as a member of MCE
- C. Proposed Amendment 13 to the MCE JPA Agreement
- D. Addendum No. 5 to MCE Implementation Plan and Statement of Intent
- E. Policy 007 – New Customer Communities
- F. MCE Membership Application Checklist

**Background on CCA in California**

Community choice aggregation (CCA) programs have continued to emerge throughout California, including well over 80 different jurisdictions. In 2016 CCA service was launched by San Francisco's CleanPowerSF and San Mateo County's Peninsula Clean Energy. In Q2 2017 three new CCA programs launched including Apple Valley Choice Energy, Santa Clara County's Silicon Valley Clean Energy Authority, and Humboldt County's Redwood Coast Energy Authority. This year, Valley Clean Energy (Yolo County), East Bay Community Energy (Alameda County), Monterey Bay Community Power (Monterey, Santa Cruz and San Benito Counties), San Jose Community Energy, and Southern California's Clean Power Alliance (Los Angeles and Ventura Counties) have launched initial service.

## CALIFORNIA CCAs



### Background on MCE Inclusion Process

On September 29, 2016, your Board authorized an “inclusion period” for interested Contra Costa communities to complete the steps required to join MCE as a member. The inclusion period was established to create efficiencies in workflow, achieve economies of scale, and streamline procurement procedures.

Following the successful inclusion of nine new Contra Costa jurisdictions in 2017, and their successful enrollment in 2018, MCE opened an inclusion period from May 2018 to September 2018. As before, eligibility for inclusion was limited to jurisdictions within counties where MCE service was already available to some communities.

Solano County (unincorporated) completed all membership steps to join MCE on September 25, 2018, subject to MCE Board approval. The County Board of Supervisors voted unanimously to join MCE, and the decision was supported by the County’s Farm Bureau and considered by other key agricultural groups in the area (e.g., the Solano Agricultural Advisory Committee and the Solano Resource Conservation District Board of Directors).

### New MCE Member Community Overview: Solano County (unincorporated)

Solano County was one of California’s original 27 counties and is bordered by Napa, Contra Costa, Yolo, and Sacramento counties. It covers more than 900 square miles, of which more than 675 is rural land area. The County has a population of approximately

19,350 in the unincorporated areas, which is smaller than the population of all but two of its seven cities. These cities include the following: Benicia, Dixon, Fairfield (County seat), Vacaville, Vallejo, Rio Vista and Suisun City. Nevertheless, unincorporated Solano County has more electric accounts than is typical for a population of its size, possibly due to the high number of water pumps in the area.

The City of Benicia joined MCE in 2014 and was the first in the County to do so. Since that time, several other Solano cities have expressed an interest in exploring MCE membership. These include Vallejo, Fairfield, Vacaville and Suisun City. At this time, only the County Board of Supervisors has voted to join MCE, which is why only service to the County's unincorporated areas may be considered at this time.



The next step required to complete membership is MCE Board approval subject to positive results from the quantitative applicant analysis. The quantitative analysis is completed for the purpose of determining projected environmental benefits (e.g. incremental increases in renewable energy deliveries and expected reductions in greenhouse gases (GHGs) related to electric energy consumption) as well as potential financial impacts related to the addition of customers located within the aforementioned jurisdictions. This analysis has been completed, and is attached hereto.

### **Quantitative Analysis of Potential MCE Member Communities**

The impacts of this prospective membership expansion are entirely positive, demonstrating increases in renewable energy sales, expected reductions in GHG emissions, and positive fiscal impacts for MCE and its customers.<sup>1</sup> The quantitative applicant analysis indicates that the additional customer base is expected to yield annual net revenues of \$1.5 million resulting in a positive fiscal impact on MCE and the existing customer base. These benefits could supplement MCE reserves, expand funding for clean energy or local energy programs, or help reduce MCE rates. The analysis also indicates that service to the new customers would increase the amount of renewable energy being used in California's energy market by approximately 48,533 MWh per year while reducing GHG emissions by an estimated 14 million pounds of carbon dioxide equivalent per year.

The positive result of the applicant analysis is the final step required for the unincorporated County of Solano to be added to MCE's service territory, and Board action to finalize membership is recommended at this time. The attached Resolution and updated JPA Agreement will comply with the statutory requirements of AB 117, the legislation enabling CCA service in California.

### **Addendum to MCE Implementation Plan**

On February 8th of 2017, the California Public Utilities Commission (CPUC) passed Resolution E-4907, which delays the timeline by which a city or county may begin service with a community choice aggregator. As a result, unincorporated Solano County accounts would not be permitted to begin service until 2020, and service would only be permitted at that time if MCE submits an Addendum adding unincorporated Solano County to its service area in the MCE Implementation Plan and Statement of Intent, and files this Addendum with the CPUC by the end of calendar year 2018. This Addendum would be similar in structure to Addendum No. 5 which was submitted in 2017, prior to MCE's most recent expansion, and which is included here for reference as Attachment D. Staff is prepared to create and submit Addendum No. 6 following Board direction.

### **Fiscal Impact**

General budgetary impacts of the recommended actions will be positive as increases in revenues will more than compensate for increased expenses after enrollment occurs. Specific budgetary impacts will be reflected in the FY 2019/20 budget.

### **Recommendations**

1. Approve the following:
  - a) Resolution No. 2018-12 of the Board of Directors of MCE approving the County of Solano as member of MCE.
  - b) Amendment 13 to the MCE JPA Agreement.
2. Direct staff to create and file Amendment No. 6 to the MCE Implementation Plan and Statement of Intent with the California Public Utilities Commission reflecting the addition of the County of Solano to MCE's service area.

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<sup>1</sup> Note that any rate/financial impacts were based on wholesale electricity pricing at the time the quantitative analysis was completed. Such pricing is subject to change. Actual rate/financial impacts will be based on wholesale electricity pricing that is offered to MCE at the time of power supply contract execution.

# Marin Clean Energy Applicant Analysis for 2020

October 2018

## SUMMARY

MCE's currently effective policy regarding new membership requires the completion of a quantitative analysis as part of the preliminary evaluative process. The primary focus of the quantitative analysis is to determine the anticipated fiscal impacts that would affect MCE's existing customer base following the addition of the prospective new community. The quantitative analysis must demonstrate that the addition of the prospective new community is projected to result in a neutral or positive fiscal impact for MCE and the existing customer base; this is a threshold requirement that must be met before proceeding with further membership activities. In addition, the quantitative analysis addresses the projected environmental impacts that would result from offering MCE service to the prospective new community. More specifically, the analysis prospectively determines whether or not the new community will accelerate greenhouse gas (GHG) reductions (beyond those reductions already achieved by MCE's existing membership) while increasing the amount of renewable energy being used within California's energy market.

MCE has received a membership request from Solano County (unincorporated areas), which has taken the requisite steps to be considered for membership in MCE. Membership would entail expansion of MCE service to customers within unincorporated Solano County. The results of the quantitative analysis are summarized in this report.

In general, the quantitative analysis indicates a modestly positive effect for existing MCE customers following the addition of prospective customers located within the applicant jurisdiction. **It is estimated that the additional customer base would yield annual net revenues of \$ 1.5 million resulting in a positive fiscal impact on MCE and the existing customer base. These benefits could supplement MCE reserves, expand funding for clean energy or local energy programs, or help to reduce MCE rates. The analysis also indicates that service to the new customers would increase the amount of renewable energy being used in California's energy market by approximately 48,533 MWh per year while reducing GHG emissions by an estimated 14 million pounds of carbon dioxide equivalent per year.**

## BACKGROUND

Since its inception in 2010, MCE has successfully undergone several expansions with the most recent occurring in April 2018. Initially serving approximately 8,000 customers in May 2010, MCE has grown over the years to its current customer base of nearly 475,000 electric customers. Past expansions have been beneficial in reducing MCE's average costs and contributing to MCE's ability to achieve its environmental goals while maintaining competitive rates. MCE's expansion phases are summarized in Table 1.

Table 1: MCE Expansion History

MCE Phase No.	Status & Description of Phase	Implementation Date
<b>Phase 1: 8,000 Accounts</b>	<b>Complete:</b> MCE Member (municipal) accounts & a subset of residential, commercial and/or industrial accounts, comprising approximately 20 percent of total customer load within MCE's original Member Agencies.	May 7, 2010
<b>Phase 2A: 5,700 Accounts</b>	<b>Complete:</b> Additional commercial and residential accounts, comprising approximately 20 percent of total customer load within MCE's original Member Agencies (incremental addition to Phase 1).	August 2011
<b>Phase 2B: 74,000 Accounts</b>	<b>Complete:</b> Remaining accounts within Marin County.	July 2012
<b>Phase 3: 33,000 Accounts</b>	<b>Complete:</b> Residential, commercial, agricultural, and street lighting accounts within the City of Richmond.	July 2013
<b>Phase 4A: 18,000 Accounts</b>	<b>Complete:</b> Residential, commercial, agricultural, and street lighting accounts within the unincorporated areas of Napa County, subject to economic and operational constraints.	February 2015
<b>Phase 4B: 34,000 Accounts</b>	<b>Complete:</b> Residential, commercial, agricultural, and 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.	May 2015
<b>Phase 5: 84,000 Accounts</b>	<b>Complete:</b> Residential, commercial, agricultural, and street lighting accounts within the Cities of American Canyon, Calistoga, Lafayette, Napa, Saint Helena, Walnut Creek and the Town of Yountville.	September 2016
<b>Phase 6: 218,000 Accounts</b>	<b>Complete:</b> Residential, commercial, agricultural, and street lighting accounts within Contra Costa County (unincorporated areas); the cities of Concord, Martinez, Oakley, Pinole, Pittsburg and San Ramon; and the towns of Danville and Moraga.	April 2018

In evaluating requests for membership, MCE uses qualitative and quantitative criteria listed below. The focus of the present analysis is to address criteria A, B, and C.

Membership Criteria:

- A. Including new community is projected to result in a neutral or positive fiscal impact for MCE and the existing customer base.
- B. Including new community will enhance strength of local programs, including an increase in distributed generation, and will accelerate greenhouse gas reductions on a larger scale.
- C. Including new community will increase the amount of renewable energy being used in California's energy market.
- D. There will be an increase in opportunities to launch and operate MCE energy efficiency programs to reduce energy consumption and reliance on fossil fuels.
- E. New opportunities are available to deploy local solar and other distributed renewable generation through the MCE Net Energy Metering Tariff and Feed in Tariff.
- F. Greater demand for jobs and economic activity is likely to result from service in new community.
- G. Inclusion of new community is likely to create stronger voice for MCE at the State and regulatory level.



## ANALYSIS

MCE conducted an analysis of the potential new electric customers to estimate the revenues and costs associated with extending MCE service to the applicant jurisdiction. The analysis incorporated historical monthly electric usage data provided by PG&E for all current electric customers located within the service boundaries of unincorporated Solano County.

Table 2 summarizes the aggregate account and electricity usage data for the major customer classifications. The electric data indicates the potential for over 10,000 new MCE customers with a potential increase in annual electricity sales approximating 185,000 MWh per year. The aggregate peak demand of these customers is estimated at 42 MW.<sup>1</sup>

**Table 2: 2017 Applicant Electric Data**

Classification	Accounts	Annual Energy (MWh)	Monthly Per Account (KWh)
<b>Residential</b>	7,846	70,847	752
<b>Small Commercial</b>	1,297	17,747	1,140
<b>Medium Commercial</b>	70	11,166	13,293
<b>Large Commercial and Industrial</b>	71	36,739	43,121
<b>Agricultural and Pumping</b>	1,348	49,890	3,084
<b>Street Lighting</b>	316	448	118
<b>Total</b>	10,948	186,837	1,422
<b>*Peak Demand (MW)</b>			42

\*Estimate based on PG&E customer usage profiles

As compared to the current MCE customer base, summarized in Table 3 below, the applicant county includes a similar mix of customer service classifications, with a slightly lower proportion of residential customers and proportionately more agricultural and pumping customers. Aggregate per capita electricity consumption is higher in the new Community by approximately 53% overall. The agricultural and pumping sector in the applicant community includes significantly larger electric loads, with per capita consumption in this sector being more than three times the current MCE industrial customer base.

<sup>1</sup> These figures are for bundled electric customers of PG&E and exclude customers taking service from non-utility energy service providers through the state's direct access program as well as certain accounts on generation service contracts. These figures are unadjusted for expected customer participation rates.

**Table 3: Estimated Annual MCE Electricity Data (Current Customers)**

Classification	Accounts	Annual Energy (MWh)	Monthly Per Account (KWh)
Residential	421,325	2,490,048	493
Small Commercial	39,387	712,662	1,508
Medium Commercial	3,480	664,975	15,924
Large Commercial	1,796	788,861	36,603
Industrial	45	553,655	1,025,287
Agricultural and Pumping	2,051	34,146	1,387
Street Lighting	3,670	30,255	687
<b>Total</b>	<b>471,754</b>	<b>5,276,602</b>	<b>932</b>
<b>Peak Demand (MW)</b>			<b>902</b>

In regard to seasonal consumption patterns, electricity usage in the applicant Community exhibits a more pronounced summer peak than does the current MCE customer base. These differences can be seen in comparing Figure 1 and Figure 2 below

**Figure 1: Applicant Community Projected 12-Month Hourly Load Profile (KW)**

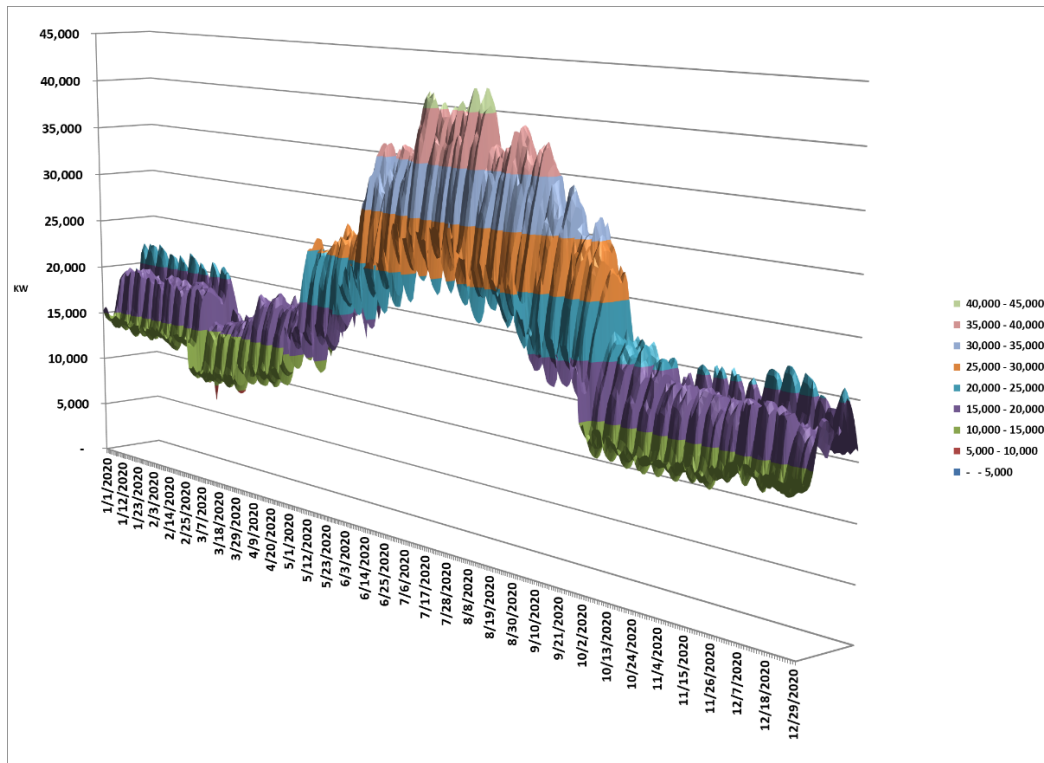


Figure 2: MCE Current Customer Base Projected 12-Month Hourly Load Profile (KW)

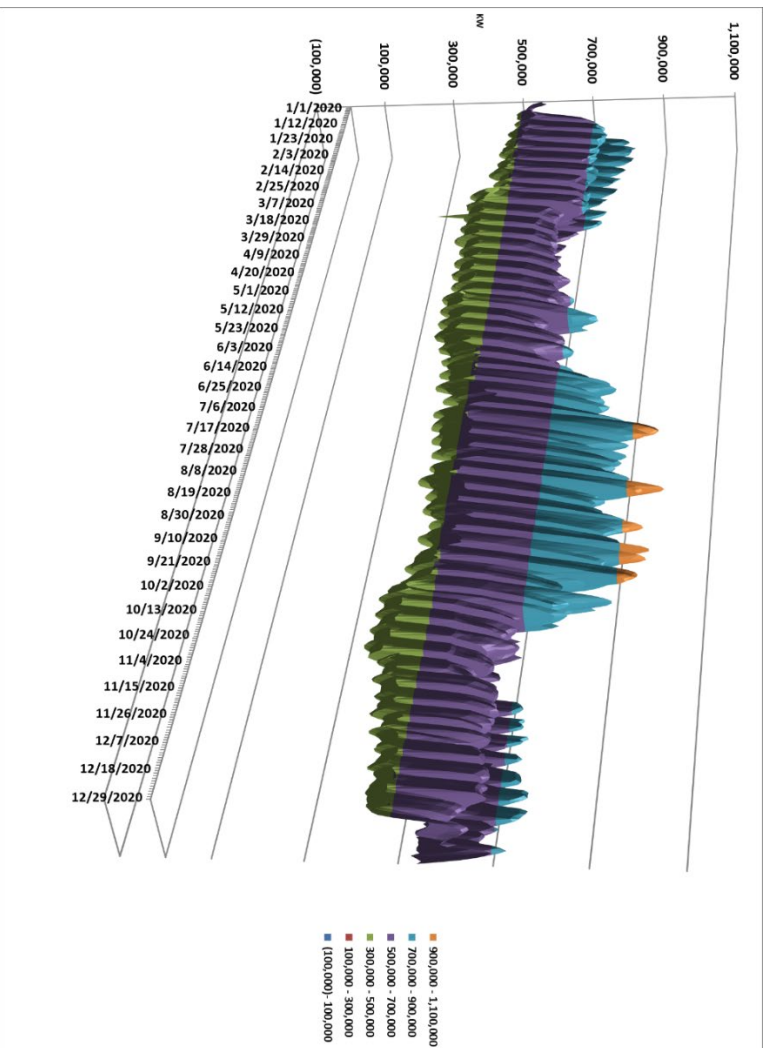
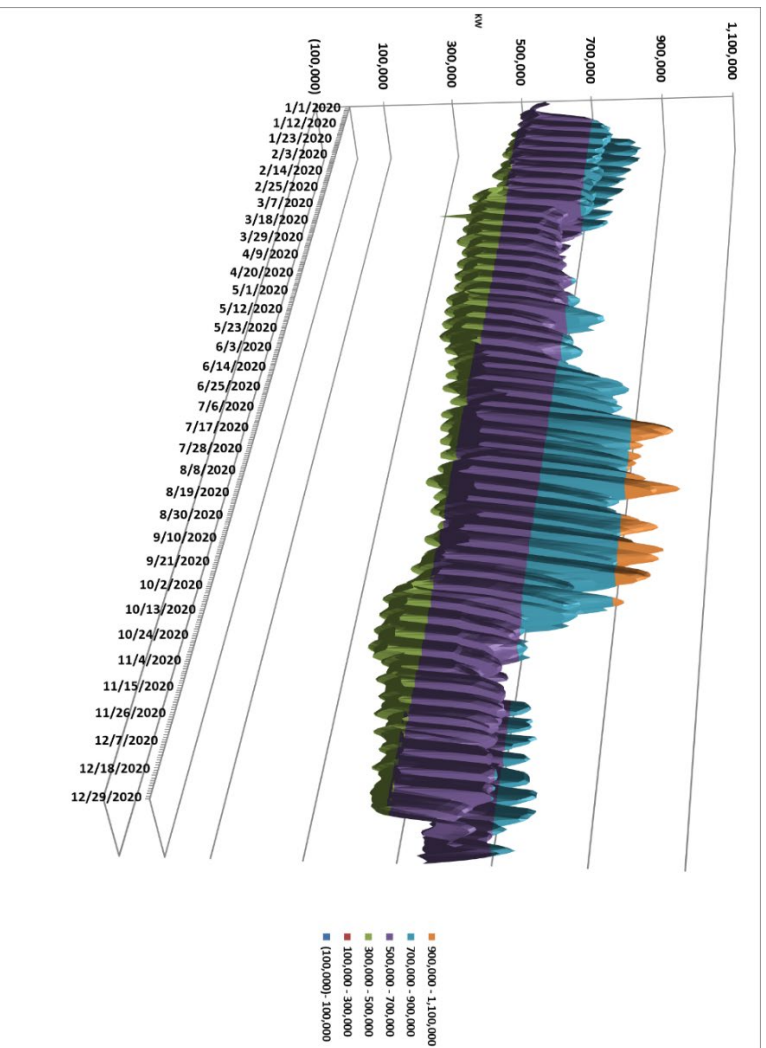


Figure 3: MCE Projected Hourly Load Profile Including Applicant Community



## FISCAL IMPACTS

For purposes of the fiscal impact analysis, it was assumed that service would be initiated to the new Community in April 2020 and that 90% of customers who would be offered MCE service would elect to participate. This would equate to an increase in annual MCE electricity sales of 167,854 MWh or approximately 3%. In order to quantify rate impacts, the incremental revenues and costs were examined for the first two complete fiscal years beginning April 1, 2020 and continuing through March 31, 2022.

The incremental revenue surplus, based on the difference between projected revenues and costs directly related to the addition of these customers, represents the fiscal benefit related to expansion. Incremental revenues were projected based on forecast sales by customer type and current MCE rates. The incremental cost analysis accounts for ongoing costs related to additional power supplies, customer billing, customer service support (call center), PG&E service fees, incremental staffing and legal costs, communications and ongoing customer notices associated with serving the additional customers.

Table 4 presents the estimated potential fiscal impacts for the next two fiscal years.

**Table 4: MCE Fiscal Impact from Applicant Community**

	<b>FY 2020/2021</b>	<b>FY 2021/2022</b>
<b>Volume (MWh)</b>	159,528	167,854
<b>Revenue</b>	\$11,673,236	\$12,148,826
<b>Costs</b>		
<b>Power Supply Cost</b>	\$9,534,009	\$10,437,699
<b>Billing and Other Costs</b>	\$238,330	\$206,039
<b>Total Cost</b>	\$9,772,339	\$10,643,489
<b>Targeted Reserve (@4%)</b>	\$466,929	\$485,953
<b>Fiscal Benefit</b>	\$1,433,968	\$1,019,384
<b>% Benefit</b>	<1%	<1%

The fiscal impact analysis indicates that the addition of the applicant Community's customers to MCE's total customer base would provide benefits to MCE and its existing ratepayers at current market and policy conditions; it is estimated that expanding MCE service to the applicant Community would provide a financial benefit of approximately 0.5% to annual revenues. This benefit accrues due to the margins generated by a higher sales volume; economies of scale as fixed administrative costs can be spread over a larger sales base; and a reduction in MCE's average power supply costs, as the cost of marginal power purchases is below MCE's average cost of power.

## CAPITAL AND LIQUIDITY IMPACTS

Although minimal, additional costs related to the expansion would be incurred during the fiscal year preceding the first described in this study (attributed to initiation of service to the new customers). These costs would be incurred for marketing and outreach, customer noticing, regulatory, legal, internal operations, resource planning and electric procurement activities that would be necessary to incorporate

the new member Community and its customers into MCE and provide outreach to the new customers. MCE has sufficient cash liquidity to fund the growth in customers and energy sales related to the expansion.

### FISCAL IMPACT SENSITIVITIES

The fiscal impact estimate is based on current power supply pricing and rates, which could change prior to the time service for the new member community commences. Additionally, actual customer participation may vary from the currently projected 90% participation rate. A sensitivity analysis was performed to evaluate the risk associated with these variables. The sensitivity results, shown in Table 5, indicate that fiscal impacts will be positive under a reasonable range of possible scenarios.

**Table 5: Fiscal Impact Sensitivities (FY 2021/2022)**

Scenario	Fiscal Impact (Net of Reserve Contribution)
	<u>FY 2020/21</u>
Base Projection	\$1,019,384
Power Costs + 20%	\$780,735
75% Participation Rate	\$848,230

### RENEWABLE ENERGY IMPACTS

Renewable energy requirements were calculated for the applicant Community to ensure compliance with the statewide Renewables Portfolio Standard (RPS) as well as the more aggressive MCE renewable energy content standards adopted by MCE. The total renewable energy requirement associated with prospective expansion to the applicant municipalities would be approximately 115,635 MWh annually.

**Table 6: Incremental Renewable Energy Requirements (CY 2021)**

Renewable Energy Product Content Category	Annual MWh
PCC1	80,945
PCC2	34,690
<b>Total Renewable Energy</b>	<b>115,635</b>

Enrolling the applicant Community's electric customers in MCE service will increase the amount of renewable energy being used in California's energy market by approximately 48,533 MWh annually, based on the increased renewable energy procurement targets voluntarily adopted by MCE's governing Board relative to California's then-current RPS mandate (which must be met by PG&E).

**Table 7: Renewable Energy Impacts (CY 2021)**

	Annual MWh
Retail Sales	187,437
MCE Renewable Energy Standard	115,635
State Renewable Portfolio Standard	67,102
<b>Increase in Renewable Energy</b>	<b>48,533</b>

## GREENHOUSE GAS EMISSIONS IMPACTS

With regard to projected GHG emission reductions that would result from the expansion of MCE service to the applicant Community, estimates were derived by comparing the most current, validated emission statistics related to the MCE and PG&E electric supply portfolios. With regard to these statistics, PG&E and MCE both recently reported their respective emission statistics for the 2017 calendar year. Due to typical timelines affecting the availability of such information, PG&E's current statistics (focused on the 2017 calendar year) will generally reference data related to utility operations occurring twelve to twenty-four months prior to the current calendar year. This waiting period is necessary to facilitate the compilation of final electric energy statistics (e.g., customer energy use and renewable energy deliveries) and to allow sufficient time for data computation, review and third-party audit before releasing such information to the public. As noted by PG&E, its 2017 emission factor was determined to be 190 lbs. CO<sub>2</sub>/MWh. By comparison, MCE's aggregate portfolio emission factor for the 2017 calendar year for the default Light Green product was determined to be 114 lbs. CO<sub>2</sub>e/MWh, a difference of 40%.

To estimate the projected GHG emissions reductions that would likely result from the addition of prospective CCA customers located within the applicant Community, MCE calculated the difference between its own emission factor and the related metric reported by PG&E: 76 lbs. CO<sub>2</sub>/MWh. This difference was multiplied by the projected increase in annual electricity sales that would result from the addition of the applicant community's CCA customers, resulting in a projected GHG emissions savings related to the transition of these customers to MCE's cleaner electricity supply. The projected emissions savings/reduction related to this service transition (from PG&E to MCE) was determined to be approximately 14 million pounds of carbon dioxide equivalent per year.

It is noteworthy that the future emission factors reported by MCE and PG&E will likely differ from the statistics applied in this analysis – this is due to a variety of factors, including planned/unplanned changes in renewable energy procurement (including planned increases in California's RPS procurement requirements), variations in hydroelectric power production (which may change substantially from year to year based on prevailing regional hydrological conditions) and changes/adjustments in the general procurement policies of each service provider as well as many other factors. Also note that MCE has committed to assembling a power supply portfolio that not only exceeds the renewable energy content offered by PG&E but also provides customers with a "cleaner" energy alternative, as measured by a comparison of the portfolio GHG emission rate (or emission factor) published by each organization. As such, MCE plans to continue procuring electricity from non-GHG emitting resources in sufficient quantities to maintain an emission rate that is continually lower than PG&E's.

**RESOLUTION NO. 2018-12**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF MCE APPROVING THE COUNTY OF SOLANO 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,

MCE members include the following communities: the County of Marin, the County of Contra Costa, the County of Napa, 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 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 Walnut Creek, and the Town of Yountville; and

**WHEREAS**, requested membership in MCE was made by the County of Solano on September 11, 2018; and,

**WHEREAS**, the ordinance approving membership in MCE was made by the County of Solano September 25, 2018, and,

**WHEREAS**, the applicant analysis for the County of Solano was completed on October 15, 2018, and yielded a positive result;

**NOW, THEREFORE, BE IT RESOLVED AND ORDERED**, by the Board of Directors of MCE that the County of Solano is approved as a member of MCE.

**PASSED AND ADOPTED** at a regular meeting of the MCE Board of Directors on the eighteenth day of October 2018 by the following vote:

	<b>AYES</b>	<b>NOES</b>	<b>ABSTAIN</b>	<b>ABSENT</b>
County of Marin				
Contra Costa County				
County of Napa				
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 Lafayette				
City of Larkspur				
City of Martinez				
City of Mill Valley				
Town of Moraga				
City of Napa				
City of Novato				
City of Oakley				
City of Pinole				
City of Pittsburg				
City of San Ramon				
City of Richmond				
Town of Ross				
Town of San Anselmo				
City of San Pablo				
City of San Rafael				
City of Sausalito				
City of St. Helena				
Town of Tiburon				
City of Walnut Creek				
Town of Yountville				



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KATE SEARS, CHAIR

ATTEST:

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DAWN WEISZ, SECRETARY

**AMENDMENT NO. 13 TO MARIN ENERGY AUTHORITY  
JOINT POWERS AUTHORITY AGREEMENT**

1. Exhibit B to the Agreement, which includes a “List of the Parties” to the Agreement, is hereby amended to reflect the Marin Clean Energy (formerly the Marin Energy Authority) current membership, which includes the following local public entities:

County of Marin  
Contra Costa County  
County of Napa  
County of Solano  
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 Lafayette  
City of Larkspur  
City of Martinez  
City of Mill Valley  
Town of Moraga  
City of Napa  
City of Novato  
City of Oakley  
City of Pinole  
City of Pittsburg  
City of San Ramon  
City of Richmond  
Town of Ross  
Town of San Anselmo  
City of San Pablo  
City of San Rafael  
City of Sausalito  
City of St. Helena  
Town of Tiburon  
City of Walnut Creek  
Town of Yountville

2. Exhibit C to the Agreement, which specifies “Annual Energy Use” for each party to the Agreement, is hereby amended to reflect annual energy use within each member’s jurisdiction inclusive of the County of Solano.

3. Exhibit D to the Agreement, which specifies “Voting Shares” for each party to the Agreement, is hereby amended to reflect the current voting shares of each member in accordance with the provisions of Section 4.9.2 of the Agreement.

4. This Amendment No. 13 does not limit the authority of the Board to update Exhibits B, C and D in the future without further amending the Agreement as provided by Sections 1.3 and 4.9.2.3 of the Agreement.

This Amendment No. 13 to the Marin Energy Authority Joint Powers Authority Agreement was duly adopted by the Board of Directors in accordance with Article 8.4 of this Agreement on October 18, 2018.

**Exhibit C****Marin Energy Authority****- Annual Energy Use -**

This Exhibit C is effective as of October 18, 2018.

<b>Party</b>	<b>kWh (2017)</b>
<b>City of American Canyon</b>	<b>68,955,413</b>
<b>City of Belvedere</b>	<b>7,650,037</b>
<b>City of Benicia</b>	<b>113,473,495</b>
<b>City of Calistoga</b>	<b>26,787,693</b>
<b>City of Concord*</b>	<b>535,484,388</b>
<b>Town of Corte Madera</b>	<b>44,135,831</b>
<b>County of Contra Costa*</b>	<b>846,712,037</b>
<b>Town of Danville*</b>	<b>179,825,522</b>
<b>City of El Cerrito</b>	<b>57,917,571</b>
<b>Town of Fairfax</b>	<b>18,182,921</b>
<b>City of Lafayette</b>	<b>98,004,380</b>
<b>City of Larkspur</b>	<b>42,991,627</b>
<b>City of Martinez*</b>	<b>148,593,742</b>
<b>City of Mill Valley</b>	<b>44,395,650</b>
<b>County of Marin</b>	<b>227,286,301</b>
<b>Town of Moraga*</b>	<b>46,999,113</b>
<b>City of Napa</b>	<b>329,813,779</b>
<b>County of Napa</b>	<b>310,572,948</b>
<b>City of Novato</b>	<b>186,270,302</b>
<b>City of Oakley*</b>	<b>111,425,259</b>
<b>City of Pinole*</b>	<b>65,770,486</b>
<b>City of Pittsburg*</b>	<b>413,969,922</b>
<b>City of Richmond</b>	<b>390,351,942</b>
<b>Town of Ross</b>	<b>9,772,866</b>
<b>Town of San Anselmo</b>	<b>32,862,447</b>
<b>City of San Ramon*</b>	<b>325,049,470</b>
<b>City of Saint Helena</b>	<b>48,963,808</b>
<b>City of San Pablo</b>	<b>66,311,864</b>
<b>City of San Rafael</b>	<b>227,948,054</b>
<b>City of Sausalito</b>	<b>31,538,040</b>
<b>County of Solano*</b>	<b>186,837,283</b>
<b>Town of Tiburon</b>	<b>29,290,586</b>
<b>City of Walnut Creek</b>	<b>357,691,687</b>
<b>Town of Yountville</b>	<b>33,328,188</b>
<b>MCE Total Energy Use</b>	<b>5,665,164,653</b>

\*2017 usage data as provided by PG&E. All other usage data reflects MCE customer billing records for 2017.

**Exhibit D**

<b>Marin Energy Authority</b>	
<b>- Annual Energy Use -</b>	
This Exhibit C is effective as of October 18, 2018.	
<b>Party</b>	<b>kWh (2017)</b>
<b>City of American Canyon</b>	<b>68,955,413</b>
<b>City of Belvedere</b>	<b>7,650,037</b>
<b>City of Benicia</b>	<b>113,473,495</b>
<b>City of Calistoga</b>	<b>26,787,693</b>
<b>City of Concord*</b>	<b>535,484,388</b>
<b>Town of Corte Madera</b>	<b>44,135,831</b>
<b>County of Contra Costa*</b>	<b>846,712,037</b>
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<b>Town of Yountville</b>	<b>33,328,188</b>
<b>MCE Total Energy Use</b>	<b>5,665,164,653</b>

\*2017 usage data as provided by PG&E. All other usage data reflects MCE customer billing records for 2017.

**MARIN CLEAN ENERGY  
ADDENDUM NO. 5 TO THE REVISED  
COMMUNITY CHOICE AGGREGATION  
IMPLEMENTATION PLAN AND  
STATEMENT OF INTENT**

**TO ADDRESS MCE EXPANSION TO CONTRA  
COSTA COUNTY; THE CITIES OF CONCORD,  
MARTINEZ, OAKLEY, PINOLE, PITTSBURG  
AND SAN RAMON; AND THE TOWNS OF  
DANVILLE AND MORAGA**



**September 25, 2017**

For copies of this document contact Marin Clean Energy in San Rafael, California or visit [www.mcecleanenergy.org](http://www.mcecleanenergy.org)

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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 in order to address the expansion of Marin Clean Energy (“MCE”) to the unincorporated areas of Contra Costa County; the cities of Concord, Martinez, Oakley, Pinole, Pittsburg and San Ramon; and the towns of Danville and Moraga (the nine communities together, the “Expansion Communities”). MCE is a public agency that was formed in December 2008 for 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 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 this 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 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 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 ("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.

More recently, MCE's Governing Board approved the membership requests of the Expansion Communities on July 20, 2017 via Resolution No. 2017-06. Staff subsequently prepared this Addendum No. 5 to its Revised Community Choice Aggregation Implementation Plan and Statement of Intent ("Addendum No. 5"), which addressed expansion to the aforementioned communities. MCE's Board approved this Addendum No. 5 on September 22, 2017.

Over time many communities have contacted MCE regarding membership opportunities. In response to such inquiries, MCE's Governing 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 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/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. 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 a related addendum, highlighting key impacts and consequences associated with the addition of such new community/communities.

The MCE program now provides electric generation service to approximately 255,000 customers, including a cross section of residential and commercial accounts. During its more than seven-year operating history, non-member municipalities have monitored MCE's 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 Expansion Communities requested MCE membership, consistent with MCE Policy 007, each adopting the requisite ordinance for joining MCE. As previously noted, MCE's Board of Directors approved such membership requests at a duly noticed public meeting on July 20, 2017 through the adoption of Resolution No. 2017-06.

This Addendum No. 5 describes MCE's expansion plans to include the Expansion Communities. 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 previous Addendums, and has identified certain information that requires updating to reflect the changes and consequences of adding the new municipalities as well as other forecast modifications reflecting the most recent historical electric energy use within MCE's existing service territory. This Addendum No. 5 reflects pertinent changes related to the new member additions as well as projections that account for MCE's planned expansion and 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 expansion.

## **CHAPTER 2 – CHANGES TO ADDRESS MCE EXPANSION TO THE EXPANSION COMMUNITIES**

This Addendum No. 5 addresses the anticipated impacts of MCE's planned expansion to the Expansion Communities, as well as other forecast modifications reflecting the most recent historical electric energy use within MCE's existing service territory. As a result of these member additions, 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. 5, MCE represents that such information shall remain unchanged relative to the July 18, 2014 Implementation Plan revision, which was certified by the Commission on September 15, 2014.

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:

<b>Member Agencies</b>
City of American Canyon
City of Belvedere
City of Benicia
City of Calistoga
City of Concord
County of Contra Costa
Town of Corte Madera
Town of Danville
City of El Cerrito
Town of Fairfax
City of Lafayette
City of Larkspur
County of Marin
City of Martinez
City of Mill Valley
Town of Moraga
City of Napa
County of Napa
City of Novato
City of Oakley
City of Pinole
City of Pittsburg
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 Saint Helena
Town of Tiburon
City of Walnut Creek
Town of Yountville

Throughout this document, use of the terms Members and Member Agencies shall now include the aforementioned communities. To the extent that discussion addresses the process of aggregation and MCE organization, each of these communities is now an MCE Member and the electric customers of such jurisdictions 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 Expansion Communities. These communities have requested MCE membership, and MCE's Board of Directors subsequently approved the membership requests at a duly noticed public meeting on July 20, 2017.

***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 phases have been successfully implemented, and an eighth phase will commence in April 2018. The eighth phase will now include service commencement to customers located within Contra Costa County (unincorporated areas); the cities of Concord, Martinez, Oakley, Pinole, Pittsburg and San Ramon; and the towns of Danville and Moraga, as reflected in the following table.

<b>MCE Phase No.</b>	<b>Status &amp; Description of Phase</b>	<b>Implementation Date</b>
<b>Phase 1</b>	<b>Complete:</b> MCE Member (municipal) accounts & a subset of residential, commercial and/or industrial accounts, comprising approximately 20 percent of total customer load within MCE's original Member Agencies.	May 7, 2010
<b>Phase 2</b>	<b>Complete:</b> Additional commercial and residential accounts, comprising approximately 20 percent of total customer load within MCE's original Member Agencies (incremental addition to Phase 1).	August 2011
<b>Phase 3</b>	<b>Complete:</b> Remaining accounts within Marin County.	July 2012
<b>Phase 4</b>	<b>Complete:</b> Residential, commercial, agricultural, and street lighting accounts within the City of Richmond.	July 2013

MCE Phase No.	Status & Description of Phase	Implementation Date
<b>Phase 5</b>	<b>Complete:</b> Residential, commercial, agricultural, and street lighting accounts within the unincorporated areas of Napa County.	February 2015
<b>Phase 6</b>	<b>Complete:</b> Residential, commercial, agricultural, and street lighting accounts within the City of San Pablo, the City of Benicia and the City of El Cerrito.	May 2015
<b>Phase 7</b>	<b>Complete:</b> Residential, commercial, agricultural, and street lighting accounts within the Cities of American Canyon, Calistoga, Lafayette, Napa, Saint Helena, Walnut Creek and the Town of Yountville.	September 2016
<b>Phase 8</b>	<b>April 2018:</b> Residential, commercial, agricultural, and street lighting accounts within Contra Costa County (unincorporated areas); the cities of Concord, Martinez, Oakley, Pinole, Pittsburg and San Ramon; and the towns of Danville and Moraga, subject to economic and operational constraints.	April 2018

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 470,000 accounts, following completion of Phase 8 customer enrollments. This approach has also allowed MCE and its energy suppliers 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”. 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.

### *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 5,500 GWh following Phase 8 expansion. The following tables have also been updated to reflect the impacts of planned expansion to MCE’s new membership.

## Chapter 6, Resource Plan Overview

<b>Marin Clean Energy Proposed Resource Plan (GWh) 2010 to 2019</b>										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>MCE Demand (GWh)</b>										
Retail Demand	-91	-185	-570	-1,110	-1,252	-1,710	-2,103	-2,889	-4,772	-5,515
Distributed Generation	0	2	4	5	9	14	19	24	46	63
Energy Efficiency	0	0	0	0	1	3	3	5	7	10
Losses and UFE	-5	-11	-34	-66	-74	-102	-125	-172	-283	-327
<b>Total Demand</b>	<b>-97</b>	<b>-195</b>	<b>-601</b>	<b>-1,172</b>	<b>-1,316</b>	<b>-1,795</b>	<b>-2,205</b>	<b>-3,032</b>	<b>-5,002</b>	<b>-5,768</b>
<b>MCE Supply (GWh)</b>										
<u>Renewable Resources</u>										
Generation	0	0	0	0	0	0	0	0	0	0
Power Purchase Contracts	23	50	289	564	645	926	1,140	1,664	3,051	3,673
<b>Total Renewable Resources</b>	<b>23</b>	<b>50</b>	<b>289</b>	<b>564</b>	<b>645</b>	<b>926</b>	<b>1,140</b>	<b>1,664</b>	<b>3,051</b>	<b>3,673</b>
<u>Conventional Resources</u>										
Generation	0	0	0	0	0	0	0	0	0	0
Power Purchase Contracts	74	145	312	608	670	869	1,065	1,368	1,951	2,095
<b>Total Conventional Resources</b>	<b>74</b>	<b>145</b>	<b>312</b>	<b>608</b>	<b>670</b>	<b>869</b>	<b>1,065</b>	<b>1,368</b>	<b>1,951</b>	<b>2,095</b>
<b>Total Supply</b>	<b>97</b>	<b>195</b>	<b>601</b>	<b>1,172</b>	<b>1,316</b>	<b>1,795</b>	<b>2,205</b>	<b>3,032</b>	<b>5,002</b>	<b>5,768</b>
<b>Energy Open Position (GWh)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

## Chapter 6, Customer Forecast

<b>Marin Clean Energy Enrolled Retail Service Accounts Phase-In Period (End of Month)</b>								
	May-10	Aug-11	Jul-12	Jul-13	Feb-15	May-15	Sep-16	Apr-18
<b>MCE Customers</b>								
Residential	7,354	12,503	77,345	106,510	120,204	149,610	225,128	419,682
Commercial & Industrial	579	1,114	9,913	13,098	15,316	19,147	27,274	43,722
Street Lighting & Traffic	138	141	443	748	1,014	1,219	1,866	3,528
Agricultural & Pumping	-	<15	113	109	1,467	1,625	1,700	2,102
<b>Total</b>	<b>8,071</b>	<b>13,759</b>	<b>87,814</b>	<b>120,465</b>	<b>138,001</b>	<b>171,601</b>	<b>255,968</b>	<b>469,035</b>

<b>Marin Clean Energy Retail Service Accounts (End of Year) 2010 to 2019</b>										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>MCE Customers</b>										
Residential	7,354	12,503	77,345	106,510	106,510	149,610	225,128	223,140	419,682	421,780
Commercial & Industrial	579	1,114	9,913	13,098	13,098	19,147	27,274	27,432	43,722	43,941
Street Lighting & Traffic	138	141	443	748	748	1,219	1,866	1,178	3,528	3,546
Agricultural & Pumping	-	<15	113	109	109	1,625	1,700	1,705	2,102	2,113
<b>Total</b>	<b>8,071</b>	<b>13,759</b>	<b>87,814</b>	<b>120,465</b>	<b>120,465</b>	<b>171,601</b>	<b>255,968</b>	<b>253,455</b>	<b>469,035</b>	<b>471,380</b>

## Chapter 6, Sales Forecast

<b>Marin Clean Energy Energy Requirements (GWh) 2010 to 2019</b>										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>MCE Energy Requirements (GWh)</b>										
Retail Demand	91	185	570	1,110	1,252	1,710	2,103	2,889	4,772	5,515
Distributed Generation	0	-2	-4	-5	-9	-14	-19	-24	-46	-63
Energy Efficiency	0	0	0	0	-1	-3	-3	-5	-7	-10
Losses and UFE	5	11	34	66	74	102	125	172	283	327
Total Load Requirement	97	195	601	1,172	1,316	1,795	2,205	3,032	5,002	5,768

## Chapter 6, Capacity Requirements

<b>Marin Clean Energy Capacity Requirements (MW) 2010 to 2019</b>										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Demand (MW)</b>										
Retail Demand	28	46	182	233	234	318	447	544	1,034	1,039
Distributed Generation	-	(1)	(2)	(3)	(5)	(8)	(11)	(14)	(26)	(36)
Energy Efficiency	-	-	-	(0)	(0)	(1)	(1)	(1)	(2)	(2)
Losses and UFE	2	3	11	14	14	19	26	32	60	60
Total Net Peak Demand	30	47	191	244	243	328	462	561	1,067	1,061
Reserve Requirement (%)	15%	15%	15%	15%	15%	15%	15%	15%	15%	15%
Capacity Reserve Requirement	4	7	29	37	36	49	69	84	160	159
Capacity Requirement Including Reserve	34	55	220	281	279	377	531	645	1,227	1,220

## Chapter 6, Renewables Portfolio Standards Energy Requirements

<b>Marin Clean Energy RPS Requirements (MWh) 2010 to 2019</b>										
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Retail Sales	91,219	183,741	566,640	1,105,310	1,241,233	1,693,246	2,080,477	2,860,315	4,719,180	5,441,798
Baseline	-	18,244	36,748	113,328	221,062	269,348	394,526	520,119	772,285	1,368,562
Incremental Procurement Target	18,244	18,504	76,580	107,734	48,286	125,179	125,593	252,166	596,277	318,395
Annual Procurement Target	18,244	36,748	113,328	221,062	269,348	394,526	520,119	772,285	1,368,562	1,686,957
% of Current Year Retail Sales	20%	20%	20%	20%	22%	23%	25%	27%	29%	31%

**Marin Clean Energy**  
**RPS Requirements and Program Renewable Energy Targets**  
**(MWh)**  
**2010 to 2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Retail Sales (MWh)	91,219	183,741	566,640	1,105,310	1,241,233	1,693,246	2,080,477	2,860,315	4,719,180	5,441,798
Annual RPS Target (Minimum MWh)	18,244	36,748	113,328	221,062	269,348	394,526	520,119	772,285	1,368,562	1,686,957
Program Target (% of Retail Sales)	25%	27%	51%	51%	52%	55%	55%	58%	65%	67%
Program Renewable Target (MWh)	22,805	49,610	288,986	563,708	645,441	926,138	1,140,143	1,663,571	3,051,244	3,673,029
Surplus In Excess of RPS (MWh)	4,561	12,862	175,658	342,646	376,094	531,612	620,024	891,286	1,682,682	1,986,072
Annual Increase (MWh)	22,805	26,805	239,376	274,722	81,733	280,697	214,005	523,429	1,387,673	621,785

## Chapter 6, Energy Efficiency

**Marin Clean Energy**  
**Energy Efficiency Savings Goals**  
**(GWh)**  
**2010 to 2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
MCE Retail Demand	91	185	570	1,110	1,252	1,710	2,103	2,889	4,772	5,515
MCE Energy Efficiency Goal	0	0	0	0	-1	-3	-3	-5	-7	-10

## Chapter 6, Demand Response

**Marin Clean Energy**  
**Demand Response Goals**  
**(MW)**  
**2010 to 2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Total Capacity Requirement (MW)	34	55	220	281	279	377	531	645	1,227	1,220
Greater Bay Area Capacity Requirement (MW)	5	9	35	44	44	40	56	69	131	130
Demand Response Target	-	-	-	-	-	-	-	-	15	31
Percentage of Local Capacity Requirement	0%	0%	0%	0%	0%	0%	0%	0%	12%	23%

## Chapter 6, Distributed Generation

**Marin Clean Energy**  
**Distributed Generation Projections**  
**(MW)**  
**2010 to 2019**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
DG Capacity	-	1	2	3	5	8	11	14	26	36

### *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 MCE's new member communities. The following table reflects updated operating projections in consideration of these planned expansions.

## Chapter 7, CCA Program Implementation Feasibility Analysis

Marin Clean Energy  
Summary of CCA Program Phase-In  
(January 2010 through December 2019)

CATEGORY	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
I. REVENUES FROM OPERATIONS (\$)										
ELECTRIC SALES & OTHER REVENUE	10,529,582	20,457,577	43,687,317	81,279,541	98,031,511	142,656,873	171,398,844	211,347,206	316,864,919	352,622,851
LESS UNCOLLECTIBLE ACCOUNTS	-	(309,659)	(61,992)	(950,674)	(484,404)	(1,432,948)	(893,645)	(1,442,225)	(2,164,417)	(2,409,085)
PLUS NET ENERGY METERING REV. ADJ.	-	-	-	-	-	-	-	1,071,474	1,632,208	1,648,852
TOTAL REVENUES	10,529,582	20,147,918	43,625,325	80,328,867	97,547,107	141,223,925	170,505,199	210,976,455	316,332,711	351,862,618
II. COST OF OPERATIONS (\$)										
(A) ADMINISTRATIVE AND GENERAL (A&G)										
STAFFING	433,250	605,855	923,190	1,376,429	1,953,241	2,778,126	4,199,088	6,151,600	7,652,648	8,268,477
CONTRACT SERVICES	1,711,537	1,394,953	2,920,222	4,081,277	4,360,839	4,821,343	5,762,064	7,370,528	11,669,049	10,815,431
IOU FEES (INCLUDING BILLING)	20,468	60,780	214,113	547,806	669,037	865,764	1,025,141	1,467,230	2,431,556	2,806,461
OTHER A&G	140,427	316,671	437,596	1,374,738	1,581,589	2,393,573	2,285,284	1,513,659	2,103,928	2,294,702
SUBTOTAL A&G	2,305,682	2,378,259	4,495,121	7,380,250	8,564,705	10,858,806	13,271,577	16,503,017	23,857,180	24,185,071
(B) COST OF ENERGY										
TOTAL COST OF OPERATION	7,418,662	15,167,808	33,340,133	71,137,536	83,028,734	118,194,567	140,527,541	186,992,524	263,491,899	307,497,028
CCA PROGRAM SURPLUS/(DEFICIT)	805,239	2,601,851	5,790,071	1,811,081	5,953,667	12,170,552	16,706,082	7,480,914	28,983,632	20,180,519
REPAYMENT OF LOAN PRINCIPAL	578,566	2,473,134	567,938	920,147	1,142,408	2,296,675	-	-	-	-

### Expansion Addendum Appendices

Appendix A: Marin Clean Energy Resolution 2017-06

Appendix B: Joint Powers Agreement

Appendix C: Member Ordinances

Appendix D: Marin Clean Energy Revised Implementation Plan and Statement of Intent  
(July 18, 2014)



## **POLICY NO. 007 – NEW CUSTOMER COMMUNITIES**

Whereas MCE’s founding mission is to address climate change by using a wide range of renewable energy sources, reducing energy related greenhouse gas emissions and promoting the development of energy efficiency programs; and

Whereas creating opportunities for customer electric service in new communities may allow MCE to further progress towards its founding mission; and

Whereas MCE currently provides a minimum 50% renewable energy supply to all MCE customers (through its default Light Green retail service option), which substantially exceeds similar renewable energy supply percentages provided by California’s investor-owned utilities (IOUs); and

Whereas the inclusion of new communities to MCE’s membership will increase state-wide renewable energy percentages due to 1) MCE’s specified minimum renewable energy supply percentage of 50%, and 2) access to its 100% renewable option; and

Whereas the inclusion of new communities to MCE’s membership will also decrease greenhouse gas emissions within the Western United States as a result of minimum renewable energy supply percentages exceeding such percentages provided by California’s IOUs; and

Whereas the inclusion of new communities reaffirms the viability of community choice aggregation, and provides an incentive for other cities and counties to pursue more renewable energy options within their own jurisdictions.

Therefore, it is MCE’s policy to explore and support customer electric service in new communities to further agency goals.

In consideration of the above MCE may allow access to service in new communities through two channels, affiliate membership or special-consideration membership, as applicable.

Affiliate membership considered if:

1. All applicable membership criteria are satisfied,
2. New community is located in a county that is not more than 30 miles from MCE existing county jurisdiction, and
3. Customer base in new community is 40,000 or less or is within a County already served by MCE.

Special-consideration membership considered if:

1. All applicable membership criteria are satisfied,
2. New community is located in a county that is more than 30 miles from MCE existing jurisdiction and/or the customer-base in the new community is greater than 40,000.

## MCE Membership Application Checklist

- ✓ Request for load data for PG&E signed by Mayor, City Manager, Board president or Chief County Administrator
- ✓ County assessor data for all building stock in jurisdiction
- ✓ Adoption of a resolution requesting membership in MCE
- ✓ Adoption of the ordinance required by the Public Utilities Code Section 366.2(c) (10) to join MCE's CCA program, adopted governing Board, subject to MCE Board approval
- ✓ Executed 'Agreement for Services' or 'Memorandum of Understanding' (if during inclusion period) to cover:
  - Community agrees to publicize and share information about MCE with community during the 6 month enrollment period. Options to publicize include but are not limited to website, social media, public events, community workshops, and newsletter announcements (where feasible), as well as distribution of flyers and handouts provided by MCE at community offices.
  - Community agrees to provide desk space for up to 2 MCE staff during the 6 month enrollment period, and agrees to consider ongoing desk space availability if needed for effective and efficient outreach.
  - Community agrees to assign staff member as primary point of contact with MCE. Assigned staff member will support and facilitate communication with other community staff and officials, as well as provide input and high-level assistance on community outreach.
  - Community agrees to cover of quantitative analysis cost, not to exceed \$10,000; waived under inclusion period.