



## Agenda Page 1 of 2

### Executive Committee Meeting Friday July 6, 2018 12:00 P.M.

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

#### CLOSED SESSION

Conference with Labor Negotiator  
Agency Designated Representative: Board Chair  
Unrepresented Employee: Chief Executive Officer

#### OPEN SESSION

1. ROLL CALL/QUORUM
2. Announcements (Discussion)
3. Public Open Time (Discussion)
4. Report from Chief Executive Officer (Discussion)
5. Consent Calendar (Discussion/Action)
  - C.1 Approval of 5.4.18 Meeting Minutes
  - C.2 1st Agreement with Cohen Ventures, Inc.
  - C.3 Monthly Budget Update
  - C.4 CalCCA Membership Dues
6. CPUC Integrated Resource Plan Standard Load Serving Entity Template Submission (Discussion/Action)



Agenda material can be inspected at 1125 Tamalpais Avenue, San Rafael, CA 94901 on the Mission Avenue side of the building and One Concord Center, 2300 Clayton Road, CA 94520 at the main 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.



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

## Agenda Page 2 of 2

7. Adjustment to Scope of Work for Technical Committee (Discussion/Action)
8. Land Use and Powers under the Joint Powers Authority (Discussion)
9. New MCE Staff Position (Discussion/Action)
10. Discuss Topics for Board Retreat in September (Discussion)
11. Committee Member & Staff Matters (Discussion)
12. Adjourn



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**DRAFT**  
**MCE**  
**EXECUTIVE COMMITTEE MEETING**  
**Friday, May 4, 2018**  
**12:00 P.M.**

**One Concord Center**, 2300 Clayton Road, Room 1150, Concord, CA 94520  
**The Barbara George Conference Room**, 1125 Tamalpais Avenue, San Rafael, CA 94901

**Roll Call**

**Present:** Denise Athas, City of Novato (*San Rafael*)  
Sloan Bailey, Town of Corte Madera (*San Rafael*)  
Lisa Blackwell, Town of Danville (*Concord*)  
Barbara Coler, Town of Fairfax (*San Rafael*)  
Ford Greene, Town of San Anselmo (*San Rafael*)  
Kevin Haroff, City of Larkspur (*San Rafael*)  
Kate Sears, County of Marin (*San Rafael*)  
Dave Trotter, Town of Moraga (*Concord*)

**Absent:** Tom Butt, City of Richmond  
Federal Glover, Contra Costa County  
Bob McCaskill, City of Belvedere

**Staff:** Jessica Brooks, Board Assistant (San Rafael)  
Meaghan Doran, Manager of Customer Programs (San Rafael)  
Sarah Estes-Smith, Director of Internal Operations (San Rafael)  
Katie Gaier, Manager of Human Resources (San Rafael)  
Darlene Jackson, Board Clerk/Executive Assistant to CEO (Concord)  
Greg Stepanicich, Special Counsel (San Rafael)  
Dawn Weisz, CEO (Concord)

Quorum was established and the regular Executive Committee meeting was called to order by Chair Kate Sears.

**Agenda Item #03 – Report from Chief Executive Officer (Discussion)**

- Ms. Weisz reported that San Rafael staff has transitioned to the new Concord office, and the first official meeting, Technical Committee was held at the new location. A tour of the new office will be planned within the next few months.

- MCE has requested and been provided with a grant from BAAQMD to provide \$1M to fire-affected homes in Napa.
- New development announcement – The CPUC has issued a white paper regarding customer choice. They are calling it the “Green Book.” A summary of the “Draft Green Book: Exploring Customer Choice in California will be circulated to the entire Board soon.
- A few CCAs will be launching in June 2018 (Valley Clean Energy, East Bay Clean Energy, Solana Beach and King City). Due to the Resolution attempting to limit CCA startup in California, a few have withdrawn their 2018 startup plans.
- Thank you to the Board members who completed the 2018 Board Survey. The information gathered is included in MCE’s Strategic Plan and reviewed to determine how we might better serve your Board.
- We are likely not to hold a Board meeting in June.

**Agenda Item #04 – Consent Calendar (Discussion/Action)**

C.1 Approval of 4.6.18 Meeting minutes

Chair Sears asked for public comment and there was none.

Action: It was M/S/C (Bailey/Greene) to **approve Consent Calendar Items C.1.** approval of 4.6.18 Meeting Minutes. Motion carried by unanimous roll call vote. (Absent: Directors Butt, Glover, and McCaskill)

**Agenda #05 - FY 2017/18 Budget Update (Discussion)**

Action: This item was deferred to the June Board meeting.

**Agenda #06 - MCE Electric Vehicle Program Update (Discussion)**

Action: This item was deferred to the June Board meeting.

**Agenda #07 - Green and Healthy Homes Initiative (GHHI) Marin Program Update (Discussion)**

Action: This item was deferred to the June Board meeting.

**Agenda #08 - MCE Job Description: Chief Executive Officer (Discussion/Action)**

Action: This item was deferred to the June Board meeting.

**Agenda #09 - Compensation Studies for Director of Power Resources and Community Affairs Coordinator (Discussion/Action)**

Katie Gaier, Manager of Human Resources, presented this item and addressed questions from the Committee.

Chair Sears asked for public comment and there was none.

Action: It was M/S/C (Coler/Athas) to **approve compensation studies for Director of Power Resources and Community Affairs Coordinator**. Motion carried by unanimous roll call vote. (Absent: Directors Butt, Glover, and McCaskill)

**The meeting was adjourned at 2:04 P.M. to the next scheduled Executive Committee Meeting on June 1, 2018.**

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**Kate Sears, Executive Committee Chair**

**ATTEST:**

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**Dawn Weisz, Chief Executive Officer**



July 6, 2018

TO: MCE Executive Committee

FROM: Joey Lande, Customer Programs Manager

RE: Proposed First Agreement with Cohen Ventures, Inc. (Agenda Item #05 – C.2)

ATTACHMENT: Proposed First Agreement with Cohen Ventures, Inc.

Dear Executive Committee Members:

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**SUMMARY:**

The proposed First Agreement with Cohen Ventures, Inc. is a contract for commercial energy efficiency program implementation, which will be a core element in MCE's broader commercial program offer. The program - Manage Your Power - includes customer-facing project assessment tools, an online application system, bulk purchasing discounts, technical specification and engineering support, as well program management services.

Manage Your Power is designed to serve the vast majority of nonresidential MCE customers, including small and medium sized businesses, retail properties, restaurants and office spaces. The Customer Programs team will be proposing separate contracts for the Agricultural and Industrial sectors in early 2019.

Background

MCE's Commercial energy efficiency offer is one of the core elements of the MCE Business Plan, approved by the CPUC in May, 2018. The Commercial Program was approved for \$1,522,000 in 2018 and 2019, increasing to \$3,123,000 in 2020. The 2018 budget alone is more than double the funding received in 2017, so the Program's ability to scale while delivering on measurable customer benefits is a top priority. In recent years, MCE's program was focused on small commercial customers, but the Business Plan approval enables the Program to serve all commercial customers covering all of MCE's newly expanded service area.

Manage Your Power introduces a number of elements that will support a growing program. This includes an online platform which enables "virtual" site surveys, an integrated feasibility assessment tool which summarizes cost and energy savings, and automated bid solicitation from local contractors. Manage Your Power also offers meaningful

engagement with the local contractor community by providing them with access to a Group Purchasing Organization (which provides discounted pricing), training opportunities (covering topics such as advanced lighting controls and project financing resources), and an e-library of tutorials designed for use in the field. In the interest of customer satisfaction and transparency, the platform tracks and displays a number of contractor performance metrics including responsiveness, pricing, punctuality, and customer feedback.

By participating in Manage Your Power, customers will receive financial support (in the form of rebates), project design services, and automated bidding for projects which install a broad range of energy efficient technologies, including LED lighting, HVAC equipment, water heating equipment and networked controls. Cohen Ventures is accountable for savings which accrue to the customer, and this is the basis for the majority of their compensation under this proposed contract.

Altogether, the Program offers an effective strategy for developing high quality projects through multiple channels, because project leads can be generated by customers, contractors, the implementer (Cohen Ventures, Inc.), or MCE staff. Since much of the program functionality is automated, energy savings goals can easily be expanded based on budget availability and customer engagement strategies. Through the platform, MCE's commercial customers can enlist the support of experts, but they'll also have access to new tools, such as an equipment catalog and the project feasibility calculator, to generate their own qualifying projects based on their own needs and interests.

The First Agreement with Cohen Ventures, Inc. outlines a program implementation budget of \$276,000. Of the total contract value, \$36,000 is budgeted as a fixed cost for the build out of the platform as well as some of the program architecture including product specifications, a program implementation plan, incentive and rebate structures, and contractor enrollment. The remaining \$240,000 will be paid on a performance basis, at a rate of \$0.16/kWh saved. The \$240,000 budget is based on a total savings target of 1,500,000 kWh between the date of contract execution and December 31, 2019.

**Fiscal Impacts:** Expenditures related to the proposed First Agreement with Cohen Ventures, Inc. would be funded completely from the energy efficiency program funds allocated by the CPUC.

**Recommendation:** Approve the proposed First Agreement with Cohen Ventures, Inc.

**MARIN CLEAN ENERGY  
STANDARD SHORT FORM CONTRACT**

**FIRST AGREEMENT  
BY AND BETWEEN  
MARIN CLEAN ENERGY AND COHEN VENTURES, INC.**

**THIS FIRST AGREEMENT** ("Agreement") is made and entered into this day **July 6, 2018** by and between MARIN CLEAN ENERGY, hereinafter referred to as "MCE" and COHEN VENTURES, INC. dba Energy Solutions, hereinafter referred to as "Contractor."

**RECITALS:**

**WHEREAS**, MCE desires to retain a person or firm to provide the following services: implementation of MCE's nonresidential energy efficiency program;

**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.

**2. FURNISHED SERVICES:**

MCE agrees to make available all pertinent data and records for review, subject to MCE Policy 001 - Confidentiality.

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

The fees and payment schedule for furnishing services under this Agreement shall be based on the rate schedule which is attached hereto as **Exhibit B** and by this reference incorporated herein. Said fees shall remain in effect for the entire term of the Agreement. Contractor shall provide MCE with his/her/its Federal Tax I.D. number prior to submitting the first invoice. Contractor is responsible for billing MCE in a timely and accurate manner. Contractor shall email invoices to MCE 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 of the stated scope of services or termination of this Agreement. MCE will process payment for undisputed invoiced amounts within 30 days.

**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 **\$276,000**.

**5. TIME OF AGREEMENT:**

This Agreement shall commence on **July 6, 2018**, and shall terminate on **December 31, 2019**. 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 from any and all liabilities arising from the Contractor's negligence, recklessness or willful misconduct in the performance of this Agreement. 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.

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. 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' compliance with 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.

### **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.

### **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 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 reports, plans, studies, documents and other writings prepared by and for Contractor, its officers, employees and agents in the course of implementing this Agreement shall become the sole property of MCE upon payment to Contractor for such work. MCE shall have the exclusive right to use such materials in its sole discretion without further compensation to Contractor or to any other party. Contractor shall, at MCE's expense, provide such 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.

**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 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 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. ASSIGNMENT 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. INDEMNIFICATION:**

Contractor agrees to indemnify, defend, and hold MCE, its employees, officers, and agents, 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.

**17. NO RECOURSE AGAINST CONSTITUENT MEMBERS OF MCE:**

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

**18. COMPLIANCE WITH APPLICABLE LAWS:**

The Contractor shall comply with any and all applicable federal, state and local laws and resolutions (including, but not limited to the County of Marin Nuclear Free Zone, Living Wage Ordinance, and Resolution #2005-97 of the Marin County Board of Supervisors prohibiting the off-shoring of professional services involving employee/retiree medical and financial data) affecting services covered by this Agreement.

**19. INVOICES; NOTICES**

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

\_\_\_\_\_  
 Email Address: invoices@mcecleanenergy.org  
 \_\_\_\_\_

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

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

Notices shall be given to Contractor at the following address:

\_\_\_\_\_  
 Contractor: Alex Alzugaray  
 \_\_\_\_\_  
 Address: 449 15th St #400  
 \_\_\_\_\_  
 Oakland, CA 94612  
 \_\_\_\_\_  
 Email Address: aalzugaray@energy-solution.com  
 \_\_\_\_\_  
 Telephone No.: (510) 482-4420 x 225  
 \_\_\_\_\_

**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"/>	<b><u>Check applicable Exhibits</u></b>	<b><u>CONTRACTOR'S INITIALS</u></b>
<b><u>EXHIBIT A.</u></b>	<input checked="" type="checkbox"/>	<b>Scope of Services</b>	_____
<b><u>ATTACHMENT A-1</u></b>	<input checked="" type="checkbox"/>	<b>Proposal for Manage Your Power</b>	_____
<b><u>EXHIBIT B.</u></b>	<input checked="" type="checkbox"/>	<b>Fees and Payment</b>	_____

**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. PERFORMANCE AND PAYMENT BOND** (REQUIRED IF CHECKED )

Contractor shall furnish, concurrently with signing the contract, a Performance & Payment Bond for a sum not less than 100 percent (100%) of the total amount of the contract. The bond shall be in the form of a bond and not a deposit in lieu of a bond. The bond shall be executed by an admitted surety insurer. The bond shall guarantee payment by Contractor of all materials, provisions, provender, supplies, and equipment used in, upon, for, or about the performance of said construction, and protect MCE from any liability, losses, or damages arising therefrom.

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

**APPROVED BY**

**Marin Clean Energy:**

**CONTRACTOR:**

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

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

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

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

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

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

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

**MODIFICATIONS TO STANDARD SHORT FORM**

**Standard Short Form Content Has Been Modified**

*List sections affected:* \_\_\_\_\_ Section 3 \_\_\_\_\_

\_\_\_\_\_

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

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

**EXHIBIT A**  
**SCOPE OF SERVICES (required)**

Contractor will perform the following services up to the maximum time/fees allowed under this Agreement.

**Program Overview**

Contractor will implement the Manage Your Power program (the "Program"), as outlined in Attachment A-1. The Program is an online project management, project assessment and procurement platform. Alongside various customer-facing functions, it provides approved contractors with access to a Group Purchasing Organization (GPO) which provides discounted pricing on energy efficient products and repair materials.

The Program, which is remotely hosted and linked to MCE's website, will allow customers, MCE staff members, project developers and trade allies (vendors who sell, install and/or maintain energy efficiency equipment and projects) to request and select bids, schedule services, provide feedback, and run feasibility analyses. The Program supports audits, bidding, on-demand repair and maintenance, and equipment purchases through its product directory and virtual site surveys.

**Task 1: Complete the Manage Your Power™ Platform Customization**

**Timeline for Completion: August 31, 2018**

**Deliverable to MCE: Access to completed customized Platform**

Contractor will work to customize the Program, as described in Attachment A-1 to meet the needs of MCE's nonresidential energy efficiency program. In addition, trade allies and vendors will gain access to the GPO, and create profiles within TradePro Connect, a separate contractor portal. Customers, contractors, and MCE Customer Programs staff will receive user accounts or capabilities that match their needs.

**Task 2: Program Implementation Plan Creation**

**Timeline for Completion: August 1, 2018 with end of year updates**

**Deliverable: Program Implementation Plan**

Contractor will develop a Program Implementation Plan (PIP), documenting program policies, program marketing, contractor enrollment, project documentation requirements, product eligibility, customer incentive design, savings claims methodologies (deemed, custom, and data-supported savings), measurement and verification (M&V) procedures, and reporting requirements.

**Task 3: Development of Qualifying Products List/Product Directory**

**Timeline for Completion: August 1, 2018, with ongoing and end of year updates**

**Deliverable: Qualifying Products List/Product Directory**

Contractor will develop and maintain the Program's Qualifying Product list (QPL). Through the QPL, Contractor will establish tiered incentives to drive adoption of better quality and higher efficiency products and solutions, while also supporting savings goals and MCE's cost-effectiveness requirements for the Commercial sector. Contractor is expected to update the QPL and incentive structures as work papers and the Database for Energy Efficiency Resources (DEER) are revised, and/or in response to product dispositions from the California Public Utilities Commission (CPUC) and/ or normalized metered energy consumption (NMEC) policies.

**Task 4: Development of Savings Strategy**

**Timeline for Completion: August 1, 2018 with revisions as-needed**

**Deliverable: Savings Strategy Approved by MCE Customer Programs Staff**

As part of the PIP and as part of on-going Program management, Contractor will determine how the Program will capture and claim savings for different sectors, projects and measure types. In some cases, deemed savings and dollars-per-unit incentives will be the preferred method while in others, calculated savings and incentives will be preferred. Increasingly, Contractor will seek to transition to a metered energy savings approach as a way of optimizing accuracy and cost considerations. The goal will be to advance and mature the Program toward a project-level M&V approach that uses an NMEC model that meets the CPUC's requirements, once those requirements are established.

For calculated projects where an NMEC approach will not be feasible, Contractor will work with trade allies and the customer to ensure an appropriate M&V plan is specified and executed using one of the options specified in the International Performance Measurement and Verification Protocol (IPMVP®).

### **Task 5: Development of Marketing Plan**

**Timeline for Completion: August 1, 2018**

**Deliverable: Marketing Plan Approved by MCE Customer Programs Staff**

Contractor will create a Marketing Plan and collateral that leverages multiple channels, including existing customer “touch points” such as websites, emails, customer service representatives, and community groups and events. The Marketing Plan will include a deployment strategy and will specify user groups and channels. Key Program collateral includes, but is not limited to:

- A participation agreement that specifies Program-specific rules and regulations, service provider eligibility and requirements, and any other key Program information;
- Trade ally marketing sheets, as approved by MCE, with essential information about the Program, clear next steps for enrollment, and information about upcoming classes and training;
- Customer marketing collateral, as approved by MCE, such as bill inserts, one-page flyers, and case studies that summarize the Program eligibility requirements, available technology and incentives, and next steps for participation; and
- Program overview presentation to educate prospective trade allies and customers on the benefits of participating in the Program.

### **Task 6: Trade Ally Eligibility Requirements, Recruitment, Enrollment & Training**

**Timeline for Completion: Ongoing**

**Deliverables: (Ongoing) Training of Trade Allies for Project Savings (billed as the Program Performance Fee)**

Contractor will define the necessary credentials required for approved vendors to provide before participating in the Program, and then add these requirements to TradePro Connect. The requirements will follow the guidance provided through the Responsible Contractor Policy of Senate Bill 350, the Energy Efficiency Decisions from the CPUC, and specific requests from MCE. Credentials can be applied to the business level (e.g., terms & conditions, license, insurance, etc.) or as appropriate, at the individual level (e.g., CALCTP, Journeymen status, etc.). Each of the required documents will be a specific prompt seen by the approved vendor after creating a profile, so the requirements for participation will be clearly communicated and approved vendors will be aware of each step required to get started in the Program.

**Recruit Trade Allies:** Contractor will recruit and enroll trade allies, leveraging its existing outreach efforts funded through its statewide trade ally program (TradePro Connect). Through TradePro Connect, Contractor is working with numerous channels to enroll thousands of approved vendors. Key channels include, but are not limited to:

- CA Department of General Services Small Business & Disabled Veteran Business Enterprise Program;
- Contractors State License Board;
- Existing Investor-owned Utility Trade Ally networks;
- International Brotherhood of Electrical Workers/National Electrical Contractors Association;
- California Conservation Corps Energy Corps;
- Automated Demand Response workforce training project in EPIC GFO 15-302;
- National and regional distributor relationships;
- California Community Colleges Doing What Matters for Jobs and the Economy; and
- Small Business Associations.

Additional channels that will be engaged include: RichmondBUILD Academy, multi-site commercial and institutional customers, and property management firms.

To participate in the Program, approved vendors will receive a personal link to create a profile in TradePro Connect. The profile is at the business level (e.g., locations, licenses, etc.) as well as at the individual-level (photo of person, certifications, etc.). Contractor will manage approved vendor accounts, upload documentation and validation.

**Training:** Contractor will be using platform analytics to target its feedback, training, and mentoring resources to trade allies. Examples of potential training include, but are not limited to:

- Technical trainings on installation, commissioning, operations and maintenance (e.g., CALCTP classes, SMB IDSM classes, etc.);
- Sales engineering (e.g., how to market to customers and close the sale while ensuring customer satisfaction throughout the process);
- Facilitated networking events, introductions and training sessions for trade allies to engage with manufacturers and suppliers of program eligible equipment; and
- Finance topics, such as Property Accessed Clean Energy (PACE) financing, Investor Confidence Protocol trainings, California Hub for Energy Efficiency Financing (CHEEF) Pilot Programs.

Contractor will maintain an education and training events calendar for trade allies. Furthermore, all educational content will be available on demand through the Program’s Knowledge Center, an e-library of training and tutorials that are available on a tablet or smart phone to help approved vendors in the field at the point-of-service. Contractor

will build out the Knowledge Center throughout the Program, adding Program- and product-specific content to best serve the trade allies needs.

### **Task 7: Program Operations**

#### **Timeline for Completion: Ongoing**

#### **Deliverables: (Ongoing) Monthly calls, Quarterly Meetings, Monthly and Quarterly Reporting, Project Savings (billed as the Program Performance Fee)**

Contractor will manage the Program, including budgeting and tracking, maintaining policies and procedures, and representing MCE's interests with stakeholders, third parties, trade allies and vendors. Contractor will host monthly calls with MCE to review the status of goals and deliverables, and discuss potential issues and recommendations for improvement. At least quarterly, Contractor will be available for half-day, in-person meetings to examine program performance and opportunities to innovate and improve.

**Marketing and Outreach:** Contractor will work with MCE, trade allies, community organizations, and other stakeholders to implement a multi-channel marketing approach that supports numerous project origination scenarios.

**Co-marketing & Community Partnerships:** To the extent possible, Contractor will partner with community and business organizations to implement multi-channel marketing strategies that leverage existing customer touch points, including but not limited to:

- Engaging with and supporting community organizations and local governments with outreach and event facilitation (e.g., chamber of commerce, business associations, etc.);
- Working closely with MCE Account Services teams, as well as with the team implementing the Building Energy Optimization (BEO) grant; and
- Engaging with and supporting Green Business Program staff, trade allies, California Conservation Corps Energy Corps, other sources of project leads.

**Web-links:** Contractor will work with MCE to place a "Schedule an Audit" and "Find a Contractor" link on MCE's program website and in email marketing campaigns. The links will direct the customer to approved energy auditors and contractors in their area.

**Project Development Support:** Contractor will work with MCE staff, trade allies, suppliers, and other influencers to assist with project identification, development, bidding, procurement, installation, and commissioning.

**Feasibility Analysis and Bid Development:** Contractor will assist the customer and/or project developers with conducting feasibility analyses and developing, soliciting, and evaluating bids through the Program. The Program's feasibility engine, which is integrated with the product directory, allows customers and project developers to quickly and easily establish baseline conditions, select products, and calculate project savings, payback, and return on investment. The virtual site survey enables the customer or project developer to use a phone or tablet to answer a series of structured questions, take photos of facility conditions, and add notes to help scope the project. The result will be a product specification and scope document that can be used to put out to bid.

**Financing:** Contractor may help customers maximize their incentive eligibility and apply for financing. In most cases, Contractor will help capital-constrained customers connect with trade allies that can provide capital. Additionally, Contractor will assist any Program-qualified vendor to become ICP certified and establish the needed relationships to also offer financing solutions.

**Quality Assurance:** Contractor will inspect 10% percent of completed projects in each program year. Vendors with a demonstrated track record of quality performance will have a lower percentage of their projects inspected, while newly enrolled vendors will receive inspections on three of their first ten projects. If any contractor receives a poor customer satisfaction review, they may be suspended from Program participation so that Contractor (in coordination with MCE) can contact the customer, learn about the issues, and address and resolve them in the appropriate manner.

### **Project Savings**

Contractor will be tasked with determining project-level savings, which form the basis for monthly and quarterly reporting as well as the performance-based component of monthly invoicing. Project-level savings determinations will conform to CPUC standards, using deemed, custom, and/or meter-based (NMEC) methods. Initially, the Program will rely on deemed and custom savings, and transition to include NMEC savings over time. The savings methodology to be applied will depend on CPUC and/or MCE requirements for the specific project or measures.

**Processing and Reporting:** As purchases occur, the Program validates customer and product eligibility, applies incentive amounts, and bundles invoices for payment monthly (or more frequently if Program volume warrants faster payment). Monthly Program invoices will include a memorandum that details the activities undertaken, results in MCE's required format, a summary of the known project pipeline, and plans for the coming month. Reporting on a monthly, quarterly, and annual basis must conform to MCE formatting and requirements.

**Continuous Improvement:** In addition to facilitating inspections and validating project-level energy savings using the approved savings approach specified in the PIP, Contractor will also seek to quantify the benefits resulting from certifications and trainings, quality installation (QI), and timely maintenance. For example, the Program's advanced analytics identify and quantify how training and certifications help vendors (1) win work, (2) charge more for the work, and (3) deliver deeper, more persistent energy savings. The data is shared with vendors using behavioral modification strategies such as framing and loss avoidance to encourage vendors to increase their skills.



**EXHIBIT B**  
**FEES AND PAYMENT SCHEDULE**

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

One-time start-up fees and expenses for the completion of deliverables for Tasks 1-5	\$36,000
Program Performance Fees* per gross kWh saved (Tasks 6 & 7) at \$0.16 gross kWh for up to 1,500,000kWh saved	\$240,000

\*Program Performance Fees will be invoiced and paid on a monthly basis, with an annual true-up to account for revisions to final savings claims, based on MCE, EM&V and/or CPUC review. Rebates will be paid by MCE directly to Program participants at a Program average rate of \$0.25/kWh with rebate and incentives payments from MCE not to exceed \$375,000.

For deliverables associated with Tasks 1-5, Contractor shall bill upon completion of the deliverables. For all other performance tasks (Task 6 & 7), Contractor shall bill MCE monthly. In no event shall the total cost to MCE for the services provided herein exceed the maximum sum of **\$276,000** for the term of the Agreement.

Attachment A-1

# A Proposal for the Marin Clean Energy Non-residential Energy Efficiency Program: Manage Your Power™

MCE 2018-04 Non-Residential RFP | April 16, 2018

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## SUBMITTED BY

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## PREPARED FOR

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## ABOUT ENERGY SOLUTIONS

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Founded in 1995, Energy Solutions is an employee-owned clean energy consulting firm. Our mission is to create large-scale environmental impacts by providing market-based, cost-effective energy, carbon, and water management solutions. We seek to develop reliable, high-value partnerships with our clients through a strong commitment to innovation, collaboration, and industry-leading quality.

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## INTRODUCTION

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Energy Solutions, with our partner ASWB Engineering, is pleased to submit this proposal to Marin Clean Energy (MCE) for Manage Your Power™, a platform-based program design that overcomes the challenges incurred by traditional demand side management (DSM) programs. Founded in 1995, Energy Solutions is an employee-owned DSM research, engineering, and program management consulting firm with deep roots in California and a track record of pioneering innovative, award-winning program designs. Our company is best known for our successful engagement of the supply chain, use of automation to streamline program processes, and use of specifications and strategic marketing to drive adoption of comprehensive projects that install premium products. We look beyond the low-hanging fruit, seeking to encourage comprehensive projects that provide deep energy savings and a plethora of other benefits to customers and clients. This has resulted in Energy Solutions helping our clients receive eight national awards since 2010 for outstanding program achievements.

**Supply Chain Relationships** – Energy Solutions has exceptionally strong relationships with manufacturers, manufacturer reps, distributors, and contractors, helping each actor grow their business by promoting and selling premium efficiency and quality products. With two decades of experience in supply chain programs, we are launching an initiative that leverages these relationships focused on beneficial electrification, including building end uses such as ductless and ducted heat pumps, heat pump water heaters, induction cooking, and electric vehicles. This dovetails well with MCE's focus on decarbonizing power supply and beneficial load growth.

**Process Automation** – Energy Solutions pioneered the first fully automated paperless application processing system in 2004. Since that time, our systems have processed more than \$1 billion in energy efficiency incentives. Beyond automated application processing, Energy Solutions was one of the first third parties to have server-to-server data transfer with Pacific Gas and Electric (PG&E) using the GreenButton Connect standard. We have complemented our continuous access to customer interval data by becoming one of the first third parties in California to have a Normalized Metered Energy Consumption (NMEC) algorithm that satisfied the California Public Utility Commission's (CPUC) draft definition for High Opportunity Projects and Programs (HOPPS). Our NMEC algorithm was used in our LED Accelerator (LEDA) program and calculated 29% more savings than calculated methodologies prescribed by the Database for Energy Efficiency Resources (DEER) with a margin of error less than one percent. This solution will help MCE claim greater savings and ensure persistence.

**Integrated Customer Solutions** – In 2010, Energy Solutions launched the LEDA program with a three-tier product specification. The program's specification was deployed prior to ENERGY STAR or the DesignLights Consortium (DLC) having LED specifications. Over the last eight years, we have continuously maintained program requirements that encourage the deployment of best-in-class products and comprehensive projects. Through our programs, we have pioneered innovations such as coupling energy efficiency and AutoDR program incentives, requiring networked controls and data sharing, and deploying new solutions that streamline customer procurement and unlock economies of scale through group purchasing. Energy Solutions is launching Manage Your Power™ statewide in California, as well as its TradePro Connect procurement streamlining and group purchasing platform. Energy Solutions is enrolling and training hundreds of mechanical, electrical, and plumbing (MEP) contractors for participation in Manage Your Power™ and developing a robust catalog of best-in-class qualifying products. This is the ideal time for MCE to join this forward-looking program design and ensure MCE's programs lead the industry in quality, innovation, and customer satisfaction.



# MANAGEMENT PROPOSAL

This section provides an overview of the Manage Your Power™ program, as well as a summary of the Program Launch and Program Operations activities.

## PROGRAM OVERVIEW

Manage Your Power™ is not a direct install program; it is a more innovative, cost-effective, and customer-friendly approach to achieving the same end goal. Direct install programs, while effective at fixing prices, do not facilitate a competitive market. These programs tend to work with a limited number of contractors and are inherently disincentivized from targeting small customers because they are paid on a dollar per unit fee structure. As a result, small jobs often are not profitable the way large jobs can be. By unlocking a competitive market, Manage Your Power™ will benefit all MCE non-residential customers, not just those in the sweet spot of a limited direct install provider pool.

**Group Purchasing and Auto-Bidding Facilitate Healthy Competition** – Rather than fixing unit prices, Manage Your Power™ uses a secure, highly scalable contractor management and procurement streamlining platform that allows any contractor who meets the program's eligibility requirements to participate in the program. Once approved to participate in the program, contractors gain access to new work opportunities and membership in an exclusive Group Purchasing Organization (GPO) that provides bulk pricing discounts on maintenance repair and operation (MRO) materials as well as energy efficient products.

The Group Purchasing Organization (GPO) brings down costs at the manufacturer and supplier levels, and streamlined competitive bidding ensures each customer receives competitive pricing from contractors (see Figure 1 below). This allows the program to (1) promote a wider range of products than a traditional direct install program and (2) engage the entire community of trade allies serving MCE's customers, while at the same time establishing and enforcing rigorous product specifications and quality service standards. As a testament to this approach, we have included a letter of support from Rexel, the largest energy product supplier in North America, attesting to this approach and committing to participate in the program.

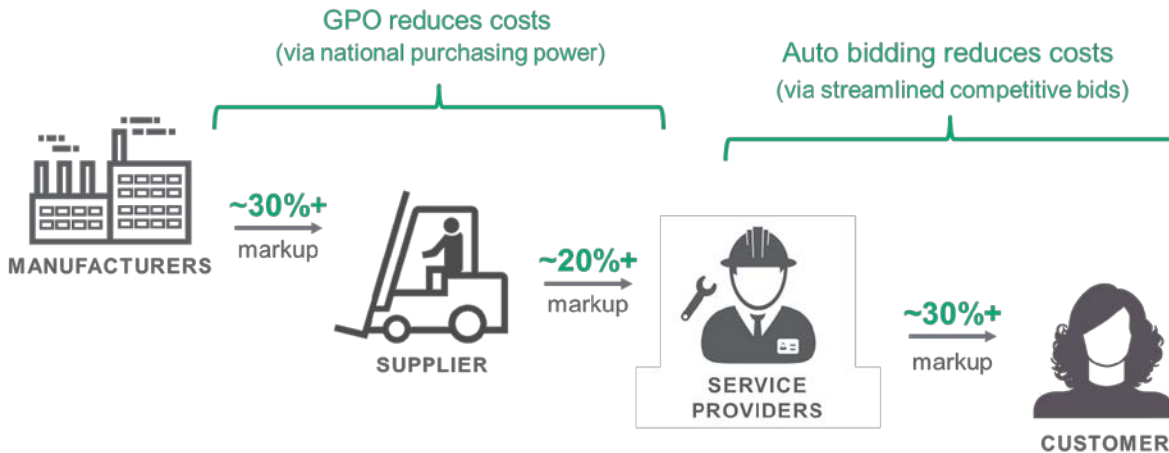


Figure 1: How the Program applies leverage at different points in the supply chain.

**Procurement Streamlining Creates a Superior Customer Experience** – Manage Your Power™ uses an online procurement platform that allows customers, MCE, Energy Solutions staff, and other project developers to search for qualified contractors serving their area, request, evaluate, and select bids, schedule services, and provide feedback on their experience via short, automated satisfaction surveys (like the way Lyft and Uber solicit feedback on their drivers). This process is illustrated in Figure 2 below.



**Figure 2: Customer Procurement Process**

By integrating this comprehensive functionality into one platform, Manage Your Power™ allows customers to take control of the procurement experience, feel empowered to make educated decisions on the products and services they are procuring, and break through the logistical barriers that often prevent customers from completing projects. The platform can support any number of customer needs, including, but not limited to:

- Energy audits;
- Retrofit project bids;
- On-demand repair and maintenance services; and
- Purchasing DIY products.

For customers calling the MCE call center or looking for something on the MCE website, Manage Your Power™ improves the customer journey by reducing the number of “hand-offs” and making the process of finding products and/or services far more convenient than current approaches, while also allowing MCE and its program implementer to remain vendor-neutral (see Figure 3 below).



**Figure 3: Example Customer Origination Scenario**

### Geo-Optimization and Virtual Audits Help Cost-Effectively Serve Small Customers –

Manage Your Power™ uses a multi-pronged strategy to cost-effectively serve small customers. First, the platform makes finding a technology and/or a qualified service provider in the area convenient and timely for the customer. Service providers lower their costs when they work on more local and convenient projects, and as a result are more likely to pass that savings on to their customer. By identifying the contractors that are closest to the customer site, Manage Your Power™ also seeks to “bundle” projects in similar locations, making smaller projects more attractive to service providers.

Beyond geo-optimization, the program offers customers and project developers tools to help assess, visualize, and sell project feasibility, conduct site assessments from a phone or tablet, create project scopes, and solicit contractor bids. The tools include:

- **Product directory with an integrated feasibility engine.** This tool allows customers and project developers to quickly and easily input key variables and establish baseline conditions, select products, and calculate project savings, payback and return on investment (ROI).
- **Virtual Site Survey.** Using a phone or tablet, the person conducting the assessment answers a series of structured questions with decision tree logic, takes photos of facility conditions, and adds notes to help scope the project for installation contractors.

Using these tools, customers and project developers systematically answer the common questions every installation contractor will need to know to provide a bid. The ultimate goal is to minimize the number of costly site visits. The multiple applications of geo-optimization in the program, combined with tools to reduce site visits, soft costs, and overall time spent by all parties, results in three groundbreaking outcomes: (1) lower project costs, (2) more convenient, timely, and comprehensive program services than direct install or job order contracting programs, and (3) reduced carbon emissions associated with the implementation of the program.

**Robust Contractor Platform Encourages Training and Enforces Quality Standards** – As the Program Manager, Energy Solutions defines program eligibility requirements, including licenses, insurance, qualifications, project application needs, certifications, and required trainings. Service providers enroll their organization and create profiles for their staff, then submit the required documentation for the program they want to enroll in. If a document is close to its expiration (e.g., a contractor’s license), the system alerts the service provider to upload new documentation. If a document does expire, the system automatically prohibits the service provider from receiving bids until the required documentation is uploaded and the Program Manager has approved it.

The platform monitors dozens of key service metrics as transactions occur, including responsiveness to customer requests, bid prices, punctuality, customer feedback, and more. The detailed data and analytics allow star performers to

“Through the proposed program, EMCOR/Mesa can provide energy products and materials at better prices compared to other retail and wholesale outlets. Moreover, the program’s focus on workforce standards and quality assurance (QA) is unprecedented—we have yet to see a more rigorous approach to education and QA. We are actively promoting the small commercial IDSM training developed and provided by ASWB to our technicians as we believe it provides the essential knowledgebase required to unlock the full value of networked, intelligent energy systems.”

Charles G. Fletcher, Jr.  
Executive Vice President,  
EMCOR/Mesa Energy Systems, Inc.



elevate their brand while helping other service providers understand how they can improve their performance. Over time, contractors that perform good work at a fair price receive more work because customers have transparency into their previous performance, trainings, and certifications. This end-to-end process automation reduces risk for buyers, facilitates competition among sellers (technology and services), provides contractors analytics on their services and access to a library of e-learning modules, and ensures MCE's program operates in compliance with SB 350's Responsible Contractor Policy. Ultimately, MCE will become a leader in serving small and medium business (SMB) customers, and pioneer a model that CCAs throughout the state can adopt.

**Integrated Product and Service Strategy Promotes Best-in-Class Products, Ensures Persistence, and Increases the Lifetime Value of Customer Relationships** – As more and more energy savings are realized through networked systems that unlock greater operational efficiency, proper commissioning and maintenance will be essential for recognizing expected savings and ensuring persistence. This was embraced in the recent CPUC Energy Efficiency Business Plan Proposed Decision (EEDP) that stated: (1) "All downstream or midstream HVAC energy efficiency measures installed, subsidized, or paid for out of a PA's energy efficiency program portfolio shall be installed by journeymen with five or more years of experience or apprentices currently enrolled in or having completed a federal or California state apprenticeship program;" and (2) "All downstream and midstream advanced lighting control installation, modification, or maintenance measures installed, subsidized or paid for under a PA's energy efficiency portfolio shall be installed by workers that have been certified by the California Advanced Lighting Controls Training Program (CALCTP)." Manage Your Power™ has been designed to facilitate compliance with these new requirements, and encourage trade allies to invest in education and training to provide superior value to customers.

In addition to the standards required by the CPUC, Energy Solutions will deploy an integrated EE and DR training program for automated demand response (AutoDR)-capable controls, such as smart thermostats, for SMBs. This training program is being rolled out with large mechanical and electric service companies such as EMCOR/Mesa, ABM, and others, and to small, minority-owned, woman-owned, and disabled veteran-owned businesses (SDVMWBE). MCE will benefit greatly from this training, as the current level of awareness and capabilities to educate customers about, sell, install, and commission these devices is low.

The focus on quality services allows the program to promote advanced technologies that enable benefits such as AutoDR, beneficial electrification, decarbonization, quality maintenance (QM), and a variety of non-energy benefits (NEB) promised by networked, intelligent devices. It also creates opportunities for MCE to provide lifecycle services such as QM and demand management, as well as shift toward performance-based incentives that align and unify the interests of each actor in the supply chain.

## PROGRAM LAUNCH

Energy Solutions will launch the program in 60 days. Startup activities will be overseen by Alex Alzugaray, Senior Manager of Implementation at Energy Solutions. Alex will be MCE's primary point of contact, overseeing the rollout of training and onboarding of staff to the project, and will coordinate the project team. During program launch, Product Manager Ryan Bird will lead the development of the Program Implementation Plan (PIP), and Technical Director Greg Barker will lead the development of the Qualifying Products List (QPL). These individuals will be supported by a team of project managers and subject matter experts (SME) to finalize the program design, recruit, enroll, and train trade allies throughout MCE's service territory, and launch the program.

Energy Solutions proposes a day-long kickoff meeting, either at Energy Solutions' Oakland Office or MCE headquarters. The kickoff meeting will be attended by the entire Program Team shown in Figure 4 below, allowing MCE to meet the entire Team and ensuring all of the key parties have a common vision and understanding of the timeline and program logistics. Energy Solutions will provide a draft meeting agenda as well as PIP and QPL outlines at least one week in advance of the meeting. Following the kickoff meeting, Energy Solutions will circulate the meeting minutes and schedule recurring bi-weekly meetings with MCE.

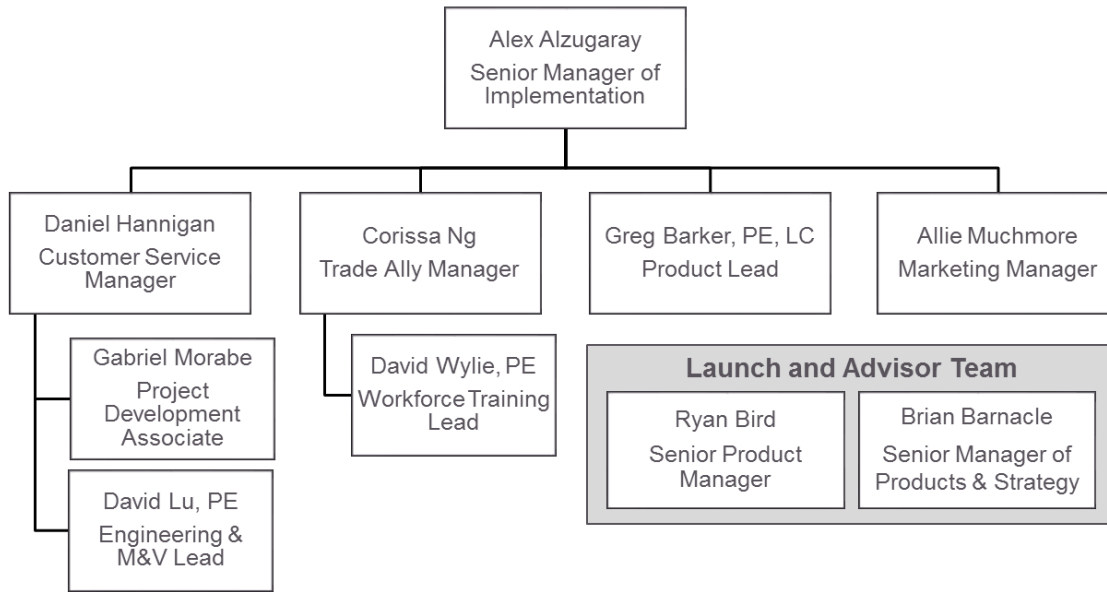


Figure 4: Program Team Organization Chart

**Program Implementation Plan** – Immediately following the kickoff meeting, Energy Solutions will develop the PIP documenting the policies and processes, program marketing, contractor enrollment, customer enrollment, project documentation requirements, product eligibility, customer incentive design, savings claims methodologies (deemed, custom, and data-supported savings), measurement and verification (M&V) procedures, and reporting requirements.

**Qualifying Products List** – Wherever possible, measures will enable multiple benefits (EE, DR, NEBs, etc.) and offer opportunities for ongoing engagement through QM, DR, and demand management. Example measures include smart thermostats, networked lighting controls, and advanced rooftop controllers. Additionally, the program will promote beneficial electrification and decarbonization measures, including all electric HVAC systems (mini/multi-split systems, VRFs, etc.), Heat Pump Water Heaters (HPWH), induction cooking equipment, and as the market matures, early retirement of refrigerants. See Table 1 for example measures. As the technologies mature and integrated controls on HVAC and HPWH equipment become commonplace, the program will promote dual enrollment in energy efficiency and DR programs.

The program will establish tiered incentives to drive adoption of better quality and higher efficiency products and solutions. Developing tiered or dynamic incentives is a core competency of Energy Solutions that has been demonstrated in numerous instances with great success. Energy Solutions looks forward to working with MCE to align the program's product strategy and incentive structure to achieve savings goals and cost-effectiveness requirements, while also advancing ancillary organizational goals pertaining to decarbonization, load growth, load control,

customer satisfaction, and brand loyalty. Specific tiering may be used to promote networked systems with remote commissioning, products that enable DR and demand management, manufacturers that are willing to provide data to ensure savings persistence, and projects that are installed with better warranties and maintenance contracts.

**Table 1: Example Measures that are likely to be included in the program**

MEASURES	MEASURE COST	INSTALL COST	INCENTIVE LEVEL	NOTES
LED Exterior Fixture	\$140	\$41	Tiered by efficacy level; \$2.50 - \$5 per klm	
LED Interior Fixture	\$110	\$29	Tiered by efficacy level; \$4 - \$6 per klm	
LED Tubular LED Type C	\$11/lamp \$18/driver	\$5-\$15	\$4 per lamp	Requirement to utilize Dimming control
LED Highbay/Lowbay	\$220	\$38	Tiered by efficacy; \$2.50 - \$5 per klm	
LED Lamp	\$18	\$15	\$4	Avoids LED lamps required under T20
Networked Lighting Controls (embedded in luminaire)	\$58 (ranges \$39-\$92)	\$10	\$/kWh saved via NMEC or NLC system	Requires CALCTP. Applicable to SMBs, capability to easily meet or exceed T24 requirements
Networked Lighting Controls (granular and networked)	\$82 (ranges \$70-\$174)	\$25	\$/kWh saved via NMEC or NLC system	Requires CALCTP. Provides, energy monitoring, enterprise software, deep energy savings for larger facilities
Connected Thermostat	\$150-\$300 per unit	\$200-\$400 per unit	\$100-\$150 per unit tiered by cloud or local network control	Installation cost includes connection with utility DR server and DR-mode programming by contractor. Could include \$25-\$50/yr for DR participation
Advanced Rooftop Controller	\$305/ton	\$78/ton	\$155/ton	518 kWh/ton Office 639 kWh/ton Retail
Ductless Heat Pumps	\$1,450/ton	\$3,000-\$5,000 for single-zone	\$200	Install costs vary widely depending on refrigerant line-set length, installation difficulty, labor rates, number of zones, etc.
Heat Pump Water Heaters	~\$1,300	\$700-\$900	\$500/unit	Install costs vary widely depending on refrigerant line-set length, installation difficulty, labor rates, number of zones, etc.

Each approved measure will be coupled with service requirements, ensuring both that customers receive outstanding service and that MCE is complying with the CPUC's mandates for installation of HVAC and advanced lighting. Energy Solutions will also bring in other trainings and certifications, such as the SMB IDSM thermostat training ASWB is launching statewide, Investor Confidence Project's Project Developer Certification, and others.

**Savings Strategy** – A key aspect of creating the PIP will be determining how the program will capture savings for different sectors and project types. In some cases, deemed savings and dollars-per-unit incentives will be the preferred method while in others, calculated savings and incentives will be preferred. Increasingly, Energy Solutions will seek to transition to a metered energy savings approach as a way of optimizing accuracy and cost considerations. The goal will be to advance and mature the program toward a project-level M&V approach that uses an NMEC model that meets the CPUC's requirements for HOPPS.

**Real-Time Normalized Metered Energy Consumption (NMEC) Baseline Approach:**

Customers grant Energy Solutions access to their interval meter data for analysis and M&V using PG&E's ShareMyData platform. Energy Solutions' model uses a year worth of pre-retrofit 15-minute interval data from the project site's Advanced Metering Infrastructure (AMI) Smart Interval Meter to build a regression model that describes energy use of the building as a function of the temperature at the nearest weather station, the time of day and day of week of each interval reading, and the occupancy state of the building, for example, whether the site is "open", "partially open", or "closed." Using mathematical regression modeling, a model is created that matches the energy readings over the one-year baseline period to within less than 1% error. Occupancy state of the site is determined directly from the whole building energy savings – energy consumption clusters in to different distinct levels for the building, identifying the operation states of the building. This model is then used in the post retrofit period to determine what the energy consumption would have been on any given day had the retrofit never occurred. By taking the difference between the baseline counterfactual and the actual readings, the energy savings are measured. By making the occupancy status part of the input parameters, the model accounts for non-routine events: unexpected closures are treated the same way as expected closures. With this data, the model calculates savings against a baseline of a counterfactual—what would have happened without a retrofit—using an industry-standard statistical modeling approach.

In a current lighting program run by Energy Solutions, the NMEC approach measured 29% greater savings than a calculated approach using DEER values over a portfolio of 35 buildings. Additional savings were due to factoring actual operating hours, synergistic effects, and stranded to code savings. In addition to claiming greater savings, the NMEC approach allows the detection of when additional retrofits were implemented and even that a customer started participating in a DR program. The algorithm meets the current draft CPUC guidelines and procedures and, per draft guidelines, is intended for use in retail settings. This means that if MCE desires and the CPUC final rules allow, Energy Solutions can use this approved NMEC approach to calculate savings for retail sites.

**Expanding NMEC Capabilities:** Energy Solutions continues to develop this algorithm and would welcome the opportunity to define, demonstrate, and refine the model for addition sectors and use cases, and work with MCE to expand the approvals with the CPUC. It may also be useful to explore the utility of using third-party reviewed and validated cloud-based NMEC solutions.

**Traditional M&V for Calculated Projects:** For calculated projects where an NMEC approach will not be feasible, ASWB will work with the project implementer and the customer to ensure an appropriate M&V plan is specified and executed using one of the options specified in the International Performance Measurement and Verification Protocol (IPMVP®). Over ASWB's 40 years in business, they have developed a five-step M&V process:

1. Develop an appropriate M&V/Instrumentation plan to collect robust and defensible information at the test site. This includes identifying key data sets, selecting appropriate sensors and monitoring equipment, and verifying data can be collected with an acceptable level of accuracy.
2. Provide instruction to technology implementers regarding development of project files and M&V documentation guidelines. Implementers may include contractors, manufacturers, building operators, or trade allies.
3. Review each assigned project file for completeness and accuracy. This includes checking equipment inventory, data collection methodology, file content, and required M&V documentation.

4. Provide independent engineering review of project preconditions, calculated impacts, and measured results:
  - o Pre-Implementation: ASWB will work with technology implementers and evaluators to create criteria for pre-qualifying project plans and establishing baseline conditions. These criteria may include visual observations, photo documentation, control algorithm print-outs, trend and other data logging, or spot measurements (amperage, voltage, pressure, or temperature).
  - o Impact calculation: Using collected baseline data, ASWB will calculate probable energy savings and other metrics. As appropriate, ASWB will compare calculations with implementer energy savings projections.
5. Post-implementation: After project impletion, ASWB will provide measure-level review of claimed savings and results on a case-by-case basis.

**Marketing Plan and Collateral Development** – Energy Solutions will create Marketing Plan and collateral that leverages multiple channels, including existing customer “touch points” such as websites, emails, customer service representatives, and community groups and events. The Marketing Plan will include the deployment strategy and will specify user groups and channels. Key program collateral includes, but is not limited to:

- A participation agreement that specifies program-specific rules and regulations, service provider eligibility and requirements, and any other key program information;
- Trade ally marketing sheets with essential information about the program, clear next steps for enrollment, and information about upcoming classes and training;
- Customer marketing collateral, such as bill inserts, one-page flyers, and case studies that summarize the program eligibility requirements, available technology and incentives, and next steps for participation; and
- Program overview presentation to educate prospective contractors and customers on the benefits of participating in the program.

**Trade Ally Eligibility, Recruitment, Enrollment & Training** – Going forward, workforce standards will be increasingly important. This was made clear in SB 350’s Responsible Contractor Policy, and was confirmed in the recent EE PD. Manage Your Power™ defines and enforces rigorous eligibility requirements and quality service standards for contractors to a greater extent than possible through a traditional list of service providers. At the same time, the program remains scalable enough to manage QA/QC and compliance across an exceptionally large network of trade allies.

**Define Program Requirements:** Energy Solutions will define the necessary credentials for Approved Vendors to prove before participating in the Program, and then add these requirements to the trade ally platform. These will follow the guidance provided through SB 350’s Responsible Contractor Policy, the CPUC’s Energy Efficiency PD, and specific requests from MCE. Credentials can be applied to the business level (e.g., terms & conditions, license, insurance, etc.) or as appropriate, at the individual level (e.g., CALCTP, Journeymen status, etc.). Each of the required documents will be a specific prompt seen by the Approved Vendor after creating a profile, so the requirements for participation will be clearly communicated and Approved Vendors will be aware of each step they need to take to get started in the Program.

**Recruit Trade Allies:** Energy Solutions will recruit and enroll trade allies, leveraging its existing outreach efforts funded through its statewide trade ally program (TradePro Connect). Through TradePro Connect, Energy Solutions is working with numerous channels to enroll thousands of contractors. Key channels being worked with include, but are not limited to:

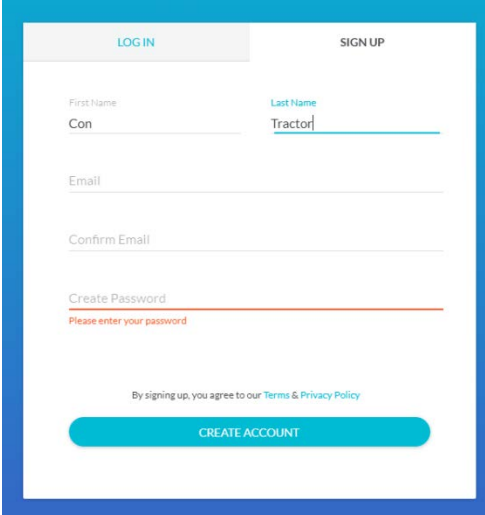


- CA Department of General Services Small Business & Disabled Veteran Business Enterprise Program;
- Contractors State License Board;
- Existing IOU Trade Ally networks;
- International Brotherhood of Electrical Workers/National Electrical Contractors Association;
- California Conservation Corps Energy Corps;
- Automated Demand Response workforce training project in EPIC GFO 15-302;
- National and regional distributor relationships;
- California Community Colleges Doing What Matters for Jobs and the Economy; and
- Small Business Associations.

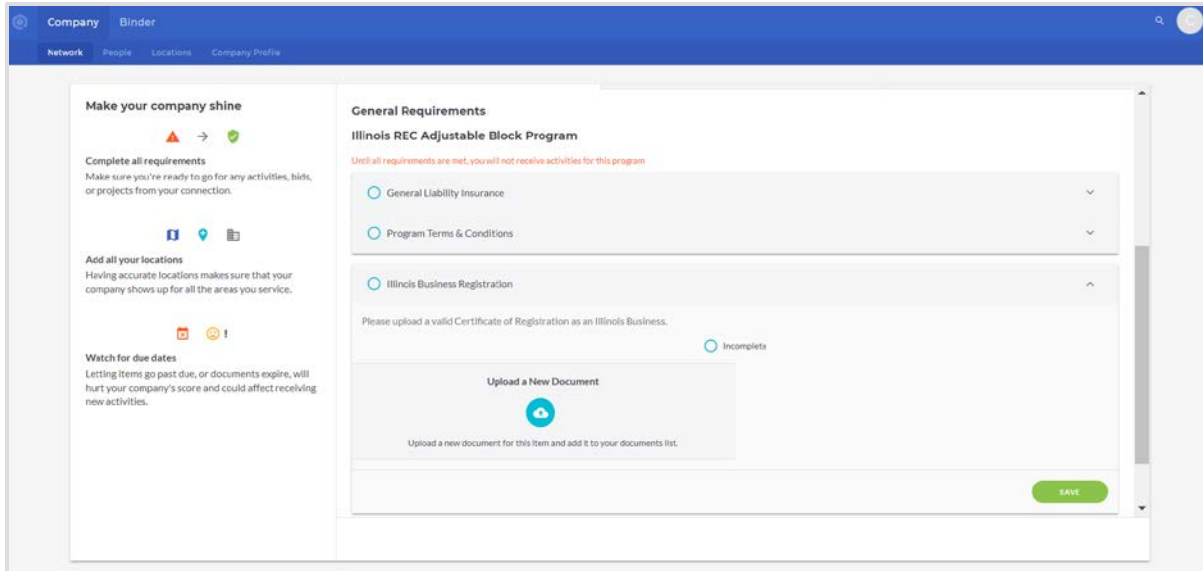
Additional channels that will be engaged include: RichmondBUILD Academy, multi-site commercial and institutional customers, and property management firms.

To participate in the program, vendors will receive a personal link to inviting them to create a profile in TradePro Connect. The profile is at the business level (e.g., locations, licenses, etc.) as well as at the individual-level (photo of person, certifications, etc.). Figure 5 shows the trade ally login.

**Upload Documentation:** Once registered, trade allies will be asked to upload documentation proving they satisfy the program eligibility requirements. When uploading documentation, trade allies will be walked step-by-step through the process of becoming an Approved Vendor. They are also required to enter an expiration date where appropriate for certain credentials. This allows Energy Solutions to monitor compliance at any time and verify that neither unapproved vendors nor Approved Vendors with expired credentials are participating in the program. Figure 6 below shows a screenshot of the vendor requirements upload page. Applicants can upload credentials at their convenience, and Energy Solutions will regularly review pending credentials.



**Figure 5: Vendor Login & Registration**



**Figure 6: Screenshot of Vendor Requirements Upload Page**

**Review and Validate Documentation:** Energy Solutions reviews and validates that contractor documentation is accurate and complete. Once activated, contractors are eligible to receive solicitations and submit bids. Documentation that meets the requirements for each credential will be approved, while insufficient documentation will result in an email to the applicant with further instructions or requests. Applicants may be required to complete online training before becoming an Approved Vendor, which will also be available via the online platform. Once all required documentation is uploaded, Energy Solutions is automatically flagged to review the documentation and approve the participating Vendor's standing in the program. Once all requirements are met and verified, the applicant will be notified of their status as an Approved Vendor and will be eligible for participation in the program.

**Train & Mentor Trade Allies:** Once approved, trade allies receive training on the program on Program Policies and Procedures. Whereas other programs do little to help contractors develop their skills once they are enrolled in a program, Energy Solutions will be using platform analytics to target its feedback, training, and mentoring resources to trade allies. Examples of potential training include, but are not limited to:

- Technical trainings on installation, commissioning, operations and maintenance (e.g., CALCTP classes, SMB IDSM classes, etc.);
- Sales engineering (e.g., how to market to customers and close the sale while ensuring customer satisfaction throughout the process);
- Facilitated networking events, introductions and training sessions for trade allies to engage with manufacturers and suppliers of program eligible equipment; and
- Finance topics, such as Property Accessed Clean Energy (PACE) financing, ICP classes, California Hub for Energy Efficiency Financing (CHEEF) Pilot Programs.

Energy Solutions will maintain an education and training events calendar for trade allies. Furthermore, all educational content will be available on demand through the program's Knowledge Center, an e-library of training and tutorials that are available on a tablet or smart phone to help contractors when they need it most, in the field at the point-of-service. Energy Solutions will build out the Knowledge Center throughout the program, adding program- and product-specific content to best serve the trade allies needs. A screen capture of the platform's knowledge center is in Figure 7 below.

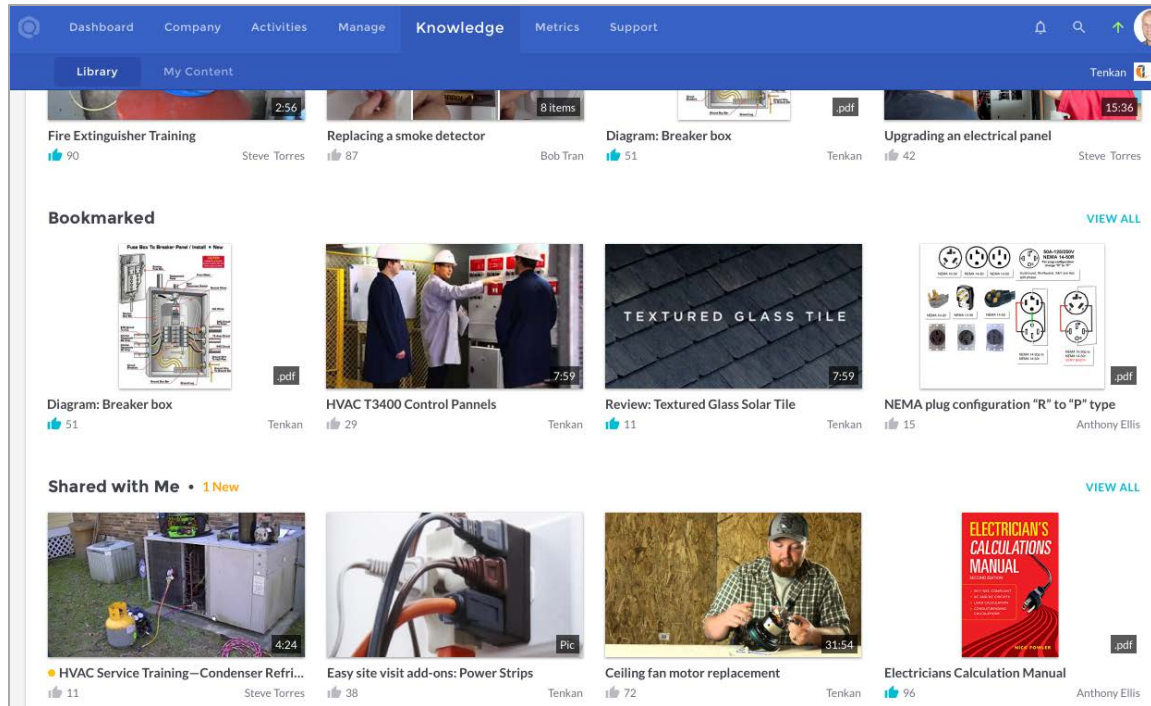


Figure 7: Screenshot of Program Knowledge Center

## PROGRAM OPERATIONS

Energy Solutions will manage the program, including budgeting and tracking, maintaining policies and procedures, and representing MCE's interests with stakeholders, third parties, and vendors. Energy Solutions will host monthly calls with MCE to review the status of goals, and discuss potential issues and recommendations for improvement. At least quarterly, Energy Solutions proposes to hold half-day in-person meetings to examine program performance and opportunities to innovate and improve.

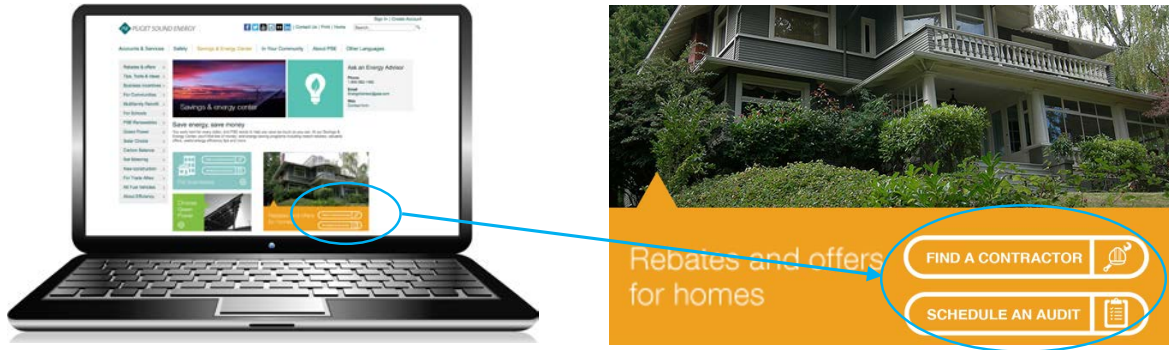
**Marketing and Outreach** – Energy Solutions will work with MCE, trade allies, community organizations, and other stakeholders to implement a multi-channel marketing approach that supports numerous project origination scenarios.

**Co-marketing & Community Partnerships:** To the extent possible, Manage Your Power™ will partner with community and business organizations to implement multi-channel marketing strategies that leverage existing customer touch points, including but not limited to:

- Engaging with and supporting community organizations and local governments with outreach and event facilitation (e.g., chamber of commerce, business associations, etc.);
- Working closely with MCE Account Services teams, as well as with the team implementing the Building Energy Optimization (BEO) grant; and
- Engaging with and supporting Green Business Program staff, trade allies, California Conservation Corps Energy Corps, other sources of project leads.

**Web-links:** Additionally, Energy Solutions proposes to place a “Schedule an Audit” and “Find a Contractor” link on MCE's program website (Figure 8) and in email marketing campaigns, so customers can act while they are thinking about their energy consumption. The links would direct the customer to approved energy auditors and contractors in their area.





**Figure 8: Sample Placement of Buttons on Program Webpage**

**Customer Benchmarking and Targeting:** During program launch, Energy Solutions will review any existing customer segmentation and benchmarking that has been completed to date, and as warranted, conduct additional benchmarking activities. In alignment with the bundling approach discussed in the Program Overview, Energy Solutions will seek to identify areas where customers can be grouped and served more cost-effectively.

**Behavioral Challenge:** One of Energy Solutions' proven methodologies for driving program participation is to create participation challenges with participating trade allies. Energy Solutions shows trade allies how their participation compares to other program participants, and helps them understand the metrics and how they can increase their participation. This is discussed in greater detail in the Continuous Improvement section below.

**Project Development Support** – Energy Solutions will work closely with MCE account managers, trade allies, suppliers, and other influencers to assist with project identification, development, bidding, procurement, installation, and commissioning.

**Feasibility Analysis and Bid Development:** Energy Solutions staff will assist the customer and/or project developers with conducting feasibility analyses and developing, soliciting, and evaluating bids through the platform. While customers can grant Energy Solutions secure, server-to-server access to their interval data using PG&E's ShareMyData platform for initial analysis, we do not envision promoting this to avoid brand confusion between MCE and PG&E. Rather, Energy Solutions would prefer to establish an efficient process with MCE directly to gain access to customer data. Beyond remote analytics, the program's feasibility engine, which is integrated with the product directory, allows customers and project developers to quickly and easily establish baseline conditions, select products, and calculate project savings, payback, and ROI. Moreover, the virtual site survey enables the customer or project developer to use a phone or tablet to answer a series of structured questions, take photos of facility conditions, and add notes to help scope the project. The result will be a product specification and scope document can be put out to bid.

**Financing:** As a certified ICP Project Developer, Energy Solutions can help customers maximize their incentive eligibility and apply for financing. In most cases, Energy Solutions will help capital-constrained customers connect with trade allies that can provide capital. Additionally, Energy Solutions will assist any program-qualified contractor to also become ICP certified and establish the needed relationships to also offer financing solutions.

**Quality Assurance:** Energy Solutions will inspect a percentage of the projects. Contractors with a demonstrated track record of good performance will have a lower percentage of their projects inspected. If any contractor receives a poor customer satisfaction review, they will be

automatically paused so that Energy Solutions can contact the customer, learn about the issues, and address and resolve them in the appropriate manner.

**Processing and Reporting** – As purchases occur, the platform validates customer and product eligibility, applies incentive amounts, and bundles invoices for payment monthly (or more frequently if program volume warrants faster payment). Monthly program invoices will include a memorandum that details the activities undertaken, results, and plans for the coming month.

**Continuous Improvement**– In addition to facilitating inspections and validating project-level energy savings using the approved savings approach specified in the PIP, Energy Solutions will also seek to quantify the benefits resulting from certifications and trainings, quality installation (QI), and timely maintenance. For example, the platform’s advanced analytics identify and quantify how training and certifications help contractors (1) win work, (2) charge more for the work, and (3) deliver deeper, more persistent energy savings. The data is shared with contractors using behavioral modification strategies such as framing and loss avoidance to encourage contractors to increase their skills.

## QUALIFICATIONS OF KEY PERSONNEL

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**Energy Solutions** has extensive experience with leading diverse teams, designing and implementing successful programs, and highly relevant experience with product specifications and procurement. We have operated and supported more than 80 distinct energy efficiency programs, as well as other industry-leading clean energy programs such as the California Solar Initiative (CSI), Self Generation Incentive Program (SGIP), and PG&E’s AutoDR Program. Through these programs, Energy Solutions has grown a database of more than 10,000 supply-chain actors, including manufacturers, manufacturer reps, distributors, designers and contractors, and helped clients receive eight national program awards since 2010 from the ACEEE, AESP, and United States DOE.

**ASWB** has a strong background in energy efficiency and DR M&V, workforce education and training (WE&T), and instructional design. Their organization has deep relationships with trade allies and trade groups such as IBEW-NECA, SMACNA, and others. WE&T is critical to successful adoption of any technology, particularly for connected devices which may require new skillsets that contractors traditionally have not had to possess. ASWB’s technical subject matter expertise and foundation of education and knowledge sharing provides an outstanding base for a collaborative and mentoring relationship with the program’s trade allies.

Professional summaries for the key staff found in the Organizational Chart (Figure 4) are provided below, as well as one program summary for Energy Solutions LED Accelerator program.

**Alex Alzugaray** has 17 years of experience designing, managing, and directing implementation of various utility program models. He has implemented and overseen efforts targeting small commercial, retail, commercial office, multifamily, public sector, and institutional sectors and applied program delivery models that include prescriptive, direct install, and midstream. He specializes in designing and deploying targeted marketing campaigns for interior and exterior advanced lighting technologies, lighting and HVAC controls, and rooftop unit cooling technologies. For each of these efforts, Mr. Alzugaray works closely with internal teams and market actors to understand their perspectives and ensure the best program result.

**Greg Barker, PE, LC**, Technical Director at Energy Solutions, will serve as Product Lead. Mr. Barker manages Energy Solutions' Technical Services Teams, bringing deep technical expertise in LED systems, commercial and industrial controls, large facility auditing, building energy modeling, and energy data gathering and reporting. Mr. Barker has led Energy Solutions' Wireless Controls Team since 2010, where he has managed technical staff that serve the entire state of California. Mr. Barker is a TRM expert; he has developed new methodologies for calculating savings, is a member of the CalTF Technical Working Group, is an advisor on the development of the CalTF eTRM, and is the technical lead for the Technology to Utilities Pipeline Project. Mr. Barker's experience with TRMs and managing technical service teams will ensure that projects deliver outstanding technical services and are structured to provide immediate benefits to ComEd's programs and TRM.

**Dan Hannigan**, Project Manager at Energy Solutions, will serve as Customer Service Manager for MCE's program. Since joining Energy Solutions' Program Implementation team in September of 2015, Mr. Hannigan has led and supported all aspects of Incentive Programs in HVAC, water heaters/boilers, lighting, and controls. Dan has excellent communication skills, which have been demonstrated and confirmed by market actors and customers alike. Prior to joining Energy Solutions, Mr. Hannigan worked with the Goleta Water District in their development of a strategic approach to water conservation in one of California's most drought-stricken regions. While obtaining his Master's degree from the Bren School of Science & Management, Mr. Hannigan was the project manager of an Eco-Entrepreneurship project turned start-up, and volunteered with non-profit Strategic Energy Innovations to develop K-12 sustainability curriculum for schools throughout California.

**Ryan Bird**, Product Manager for Energy Solutions' TradePro Connect Platform, will be responsible for PIP and platform configuration. Mr. Bird has been working with several California agencies to streamline data collection using Green Button Connect, analyze interval data for hundreds of facilities to identify feasible retrofit opportunities, launch Manage Your Power™ to streamline procurement of EMT and installation services, and qualify and encumber funds through PG&E OBF-Alternative Pathways program. Mr. Bird is also Energy Solutions' DER Platform Operations Manager, where he works with all end-use technologies, including battery storage and EVs/VGI, to assist with integrating their products to enable load control for DR, Smart Charging, and tariff mitigation. In this role, Mr. Bird oversees DR event operations and reporting, troubleshooting, and DER operations support teams.

**Brian Barnacle**, Senior Manager of Products and Strategy at Energy Solutions, will advise and support the program launch and ongoing operations. Mr. Barnacle manages strategic partnerships and new product development at Energy Solutions. He focuses on the intersection of technology, policy, and supply chain strategy, working closely with Energy Solutions' SMEs to innovate existing offerings, expand into new markets, and develop new programs, partnerships, and business services in the clean energy and zero emissions vehicle space. Mr. Barnacle championed the development and is directing the Statewide program launch, which would be occurring in parallel with MCE's program launch.

**Allie Muchmore** supports the breadth of the Energy Solutions' marketing needs, including marketing campaigns, corporate brochures and presentations, and brand strategy. Ms. Muchmore joined Energy Solutions following ten years of experience in marketing and branding at agencies where most of her work was for environmental advocacy groups throughout the Midwest and Northeast.

**Corissa Ng** works on Energy Solutions' Trade Ally team, which focuses on the development, enhancement, and maintenance of trade ally and market actor relationships. Ms. Ng engages

with market actors, mostly distributors and contractors, to educate them on Energy Solutions' programs, assist them to maximize their participation, and collect and synthesize feedback to enhance Energy Solutions' program designs and product strategy.

**Gabriel Morabe** is a Project Associate in Energy Solutions' Intelligent Energy Services group, supporting the logistical and tactical aspects of projects in IoT control technologies, workforce and process optimization. Prior to joining Energy Solutions, he worked at PG&E Business Energy Solutions specialist where he developed a system to market energy efficiency to customers for multiple programs.

**David Wylie, PE, MBA** is a co-founder of ASWB and currently oversees the company's Workforce Education and Development Practice. Mr. Wylie has been and remains California's preeminent EE instructor, with 40 years of experience developing and delivering trainings for all the California IOU EE training centers, as well as across United States. Mr. Wylie has worked extensively with EM&V firms in support of statewide data collection surveys, technical analysis, and instrumentation, and has overseen thousands of project-level M&V efforts. As the former President of the local Southern California Board of APEM (Association of Professional Energy Managers), Mr. Wylie published numerous pieces on energy management and established deep relationships with the unions and vocational training centers. His expertise in instructional design and M&V, combined with his deep experience practicing energy management, will provide an essential element of pragmatism to the Energy Solutions Team.

**David Lu, PE** is a Senior Engineer at ASWB where he is the Lead Engineer for multiple energy efficiency and DR programs. Mr. Lu provides broad expertise in measurement, verification, instrumentation, and data analysis, and has field-tested and commissioned over a thousand specialized control systems throughout California.

**Program Example: LED Accelerator:** In 2010, Pacific Gas and Electric (PG&E) Company sponsored the launch of the LED Accelerator Program (LEDA), a market development program that promotes the highest performing and best quality LED lighting products. Using tiered incentives and engaging strategically with the market, LEDA leveraged the buying power of large commercial customers to stimulate manufacturers to produce and sell best-in-class LED products. At the same time, LEDA built the capacity of the supply chain to accelerate adoption beyond the program's direct reach. The program's LED Qualifying Product List (QPL) used ENERGY STAR® and Design Lights Consortium (DLC) standards for quality and efficacy as the lowest tier, meaning customers, designers, and manufacturers were all seeking to deploy better performing technologies to access more lucrative incentives. In 2016, LEDA aligned its program design requirements with DLC's premium tier and started requiring networked controls to lead the market towards deeper energy savings and harmonize LED specifications across the country. In 2017, the program launched a new measurement and verification (M&V) approach, normalized metered energy consumption (NMEC), which is a regression analysis of the customer 15-minute interval data correlated with data from the lighting controls systems. Across the 35 customer sites in the pilot, the results provided 29% more savings than was prescribed by the workpaper in the Database for Energy Efficiency Resources (DEER). In 2012, the LEDA program was one of three programs recognized by the ACEEE as an Exemplary Market Transformation Program.

## PROGRAM TIMELINE

As illustrated in Figure 9 below, Energy Solutions will launch the program in 60 days. We will continue to qualify products throughout the program and conduct comprehensive updates to the QPL and PIP on an annual basis. Trade Ally recruitment will also be an ongoing activity; our goal is to build a network that provides outstanding service at competitive prices throughout MCE territory. Energy Solutions will implement active marketing campaigns for periods and allow the program team to focus and follow-up on leads. As needed, the program will increase marketing activity to ensure the team has a healthy project pipeline and the program is on track to achieve its goals. Should MCE increase the program savings goals, Energy Solutions will maintain a consistent marketing push; however, given the initial budgetary constraints we anticipate needing to throttle marketing at times to ensure we do not overcommit program resources.

	2018												2019											
	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec				
<b>Program Launch</b>																								
<i>Program Implementation Plan</i>																								
<i>Qualifying Products List &amp; Savings Strategy</i>																								
<i>Marketing Plan &amp; Collateral</i>																								
<i>Trade Ally Recruitment, Enrollment &amp; Training</i>																								
<b>Program Operations</b>																								
<i>Program Management</i>																								
<i>Marketing &amp; Outreach</i>																								
<i>Project Development &amp; Implementation Support</i>																								
<i>Processing &amp; Reporting</i>																								
<i>Continuous Improvement</i>																								

Figure 9: Program Launch and Operations Timeline

## REFERENCES

Provided below in Table 2 are three references that have direct experience working with Energy Solutions on DSM programs. Mr. Kissel's experience with Energy Solutions has been through our implementation of LEDA, customer-facing program focused on promoting best-in-class LED and controls products. Mr. Lopez has worked with Energy Solutions in many capacities to educate, develop DSM projects, and serve the large and small facilities in his key account's portfolio (the State of California's 10,000 meters). Mr. Spickard works with Energy Solutions on our midstream cooling program and can attest to our ability to maximize participation and cost-effectiveness through our keen understanding of supply chains, strong relationships with market actors, and engineering approach that optimizes program tiers and incentive levels. In addition to our references, we have also provided letters of support from market actors.



**Table 2: Energy Solutions' References**

PERSON 1	PERSON 2	PERSON 3
Mel Johnson Vice President of Utility Programs, National Comfort Institute (714) 771-9089 <a href="mailto:melj@ncihvac.com">melj@ncihvac.com</a>	Felix Lopez Sr. Account Manager for State of California, PG&E (415) 973-1387 <a href="mailto:FAL1@PGE.COM">FAL1@PGE.COM</a>	Kim Spickard Product Portfolio Manager, Xcel Energy Colorado (303) 294-2069 <a href="mailto:Kim.a.spickard@xcelenergy.com">Kim.a.spickard@xcelenergy.com</a>
<u>Experience Summary:</u> Former Program Manager for SCE Emerging HVAC Program implemented by Energy Solutions	<u>Experience Summary:</u> Coordinated customer service to key accounts and their small/hard-to-serve facilities	<u>Experience Summary:</u> Program Manager for Xcel Colorado Midstream Cooling Program

## INFORMATION AND RESOURCES FROM MCE

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Energy Solutions would like to work collaboratively with MCE to implement this program. There are three key areas we would like to work closely with MCE on:

1. **Past Program Information:** At the start of the program, Energy Solutions would like to have a list of customers that have already participated in MCE's programs, and if available, a list of trade allies that have participated in the program.
2. **Customer Data:** While the program can make use of Energy Solutions being an authorized ShareMyData vendor with PG&E, to the extent possible we would also like to have the ability to apply our analytical tools—both for benchmarking and for NMEC M&V—across MCE's customers.
3. **Marketing Campaigns:** Energy Solutions would like to work with MCE's Marketing Team to design and execute marketing campaigns. Examples include, but are not limited to: bill inserts, email campaigns, integration into the MCE website, coordinated outreach to community groups, linked to from other MCE program sites, having materials available at MCE conferences, and having MCE provide a press release.

## ATTACHMENT A: FINANCIAL STATEMENTS

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Energy Solutions does not have audited financial statements. We have provided a letter from our bank attesting to our strong financial health.

## ATTACHMENT B: CERTIFICATES OF INSURANCE

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Energy Solutions has included our certificates of Commercial General Liability and Worker's Compensation and Employer's Liability insurance as an attachment to our proposal. Energy Solutions does not own automobiles; therefore, we do not carry Automobile Insurance. Personal vehicles are covered by the owner's insurance as the primary insurance. If an accident is an Energy Solutions' employee's fault and the personal injury liability claims exhaust the staff person's claims, the other party could then make claims against Energy Solutions' liability insurance.

## PRICING

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Energy Solutions proposes a \$0.16/kWh performance fee, calculated using gross kWh energy savings. We believe this is an exceptional value for MCE and its customers because of our forward-looking product strategy, focus on trade ally training, mentoring and QA, and highly-scalable platform that connects customers to trade allies and helps them find the products and services they need. Table 3 below details our proposed fee structure for the program.

**Table 3: Proposed Fee Structure**

COST ITEM	UNIT COST	UNIT	QUANTITY	TOTAL COST
<b>Start-up Costs</b>				
Fixed Start-up Labor	\$ 155	Hours	200	\$ 31,000
Fixed Start-up Expenses	\$ 5,000	NA	1	\$ 5,000
<b>Total Not to Exceed Start-up Cost</b>				<b>\$ 36,000</b>
<b>Operating Costs</b>				
Performance Fees	\$ 0.16	kWh	1,500,000	\$ 240,000
Average Customer Incentive	\$ 0.25	kWh	1,500,000	\$ 375,000

## ATTACHMENT C: LETTERS OF SUPPORT

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Our proposal includes letters of support from:

- ABM
- EMCOR/Mesa
- Rexel
- Xcel Energy Colorado



MAHER ACCOUNTANCY 1101 FIFTH AVENUE • SUITE 200 • SAN RAFAEL, CA 94901

Financial Plumblne

**ACCOUNTANTS' COMPILATION REPORT**

Board of Directors  
Marin Clean Energy

Management is responsible for the accompanying special purpose statement of Marin Clean Energy (a California Joint Powers Authority) which comprise the budgetary comparison schedule for the period ended May 31, 2018, and for determining that the budgetary basis of accounting is an acceptable financial reporting framework. We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the accompanying statement nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any assurance on this special purpose budgetary comparison statement.

The special purpose statement is prepared in accordance with the budgetary basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America. This report is intended for the information of the Board of Directors of Marin Clean Energy.

Management has elected to omit substantially all of the disclosures required by accounting principles generally accepted in the United States of America. If the omitted disclosures were included in the special purpose budgetary comparison statement, they might influence the user's conclusions about the Authority's results of operations. Accordingly, this special purpose budgetary comparison statement is not designed for those who are not informed about such matters.

The supplementary information contained on page 4 is presented for purposes of additional analysis. The supplementary information has been compiled from information that is the representation of management. We have not audited or reviewed the supplementary information and, accordingly, do not express an opinion or provide any assurance on such supplementary information.

We are not independent with respect to the Authority because we performed certain accounting services that impaired our independence.

*Maher Accountancy*

San Rafael, CA  
June 28, 2018





**MARIN CLEAN ENERGY  
OPERATING FUND  
BUDGETARY COMPARISON SCHEDULE  
April 1, 2018 through May 31, 2018**

	Actual - from April 1 through May 31		YTD Budget	YTD Budget Variance (Under) Over	YTD Budget Variance (Under)Over %	Annual Budget	Budget Remaining
	2017/18	2018/19	2018/19	2018/19	2018/19	2018/19	2018/19
<b>ENERGY REVENUE</b>							
Retail (net of allowance)	\$ 32,385,742	\$ 50,385,078	\$ 52,975,921	\$ (2,590,843)	(4.9%)	\$ 384,583,000	\$ 334,197,922
Wholesale	-	31,500	-	31,500		-	(31,500)
Other	-	61,973	1,667	60,306		10,000	(51,973)
<b>TOTAL ENERGY REVENUE</b>	<u>32,385,742</u>	<u>50,478,551</u>	<u>52,977,588</u>	<u>(2,499,037)</u>	(4.7%)	<u>384,593,000</u>	<u>334,114,449</u>
<b>ENERGY EXPENSES</b>							
Cost of energy	26,756,147	39,144,430	40,426,144	(1,281,714)	(3.2%)	303,259,000	264,114,570
<b>TOTAL ENERGY EXPENSES</b>	<u>26,756,147</u>	<u>39,144,430</u>	<u>40,426,144</u>	<u>(1,281,714)</u>	(3.2%)	<u>303,259,000</u>	<u>264,114,570</u>
<b>NET ENERGY REVENUE</b>	<u>5,629,595</u>	<u>11,334,121</u>	<u>12,551,444</u>	<u>(1,217,323)</u>	(9.7%)	<u>81,334,000</u>	
<b>OPERATING EXPENSES</b>							
Personnel	859,217	1,139,159	1,481,833	(342,674)	(23.1%)	8,891,000	7,751,841
Data manager	600,264	1,040,191	1,166,744	(126,553)	(10.8%)	7,005,000	5,964,809
Technical and scheduling services	112,156	151,115	224,333	(73,218)	(32.6%)	1,346,000	1,194,885
Service fees- PG&E	228,629	283,191	235,500	47,691	20.3%	1,413,000	1,129,809
Legal and regulatory services	65,792	66,652	139,000	(72,348)	(52.0%)	834,000	767,348
Communications and related services	70,632	253,940	313,500	(59,560)	(19.0%)	1,881,000	1,627,060
Other services	68,476	87,831	275,500	(187,669)	(68.1%)	1,653,000	1,565,169
General and administration	88,553	195,947	218,167	(22,220)	(10.2%)	1,309,000	1,113,053
Occupancy	77,793	104,516	145,500	(40,984)	(28.2%)	873,000	768,484
Local pilot programs	8,961	1,500	250,000	(248,500)	(99.4%)	1,500,000	1,498,500
Low income solar programs	-	4,500	31,667	(27,167)	(85.8%)	190,000	185,500
<b>TOTAL OPERATING EXPENSES</b>	<u>2,180,473</u>	<u>3,328,542</u>	<u>4,481,744</u>	<u>(1,153,202)</u>	(25.7%)	<u>26,895,000</u>	<u>23,566,458</u>
<b>OPERATING INCOME (LOSS)</b>	<u>3,449,122</u>	<u>8,005,579</u>	<u>8,069,700</u>	<u>(64,121)</u>	(0.8%)	<u>54,439,000</u>	
<b>NONOPERATING REVENUES</b>							
Grant and other income	40,524	37,200	-	37,200		980,000	942,800
Interest income	35,602	95,173	123,833	(28,660)	(23.1%)	743,000	647,827
<b>TOTAL NONOPERATING REVENUES</b>	<u>76,126</u>	<u>132,373</u>	<u>123,833</u>	<u>8,540</u>	6.9%	<u>1,723,000</u>	<u>1,590,627</u>
<b>NONOPERATING EXPENSES</b>							
Banking fees and financing costs	-	-	-	-	0.00%	243,000	243,000
Depreciation (supplemental)	17,701	28,180	30,000	(1,820)	(6.1%)	180,000	151,820
<b>TOTAL NONOPERATING EXPENSES</b>	<u>17,701</u>	<u>28,180</u>	<u>30,000</u>	<u>(1,820)</u>	(6.1%)	<u>423,000</u>	<u>394,820</u>
<b>TOTAL NONOPERATING INCOME (EXPENSES)</b>	<u>58,425</u>	<u>104,193</u>	<u>93,833</u>	<u>10,360</u>	11.0%	<u>1,300,000</u>	
<b>CHANGE IN NET POSITION</b>	<u>3,507,547</u>	<u>8,109,772</u>	<u>8,163,533</u>	<u>(53,761)</u>	(0.7%)	<u>55,739,000</u>	
<b>CAPITAL EXPENDITURES, INTERFUND TRANSFERS &amp; OTHER</b>							
Capital outlay	83,058	237,348	157,833	79,515	50.4%	947,000	709,652
Depreciation (supplemental)	(17,701)	(28,180)	(30,000)	1,820	(6.1%)	(180,000)	(151,820)
Transfer to Local Renewable Development Fund	186,000	428,000	428,000	-	0.0%	428,000	-
<b>TOTAL CAPITAL EXPENDITURES, INTERFUND TRANSFERS &amp; OTHER</b>	<u>251,357</u>	<u>637,168</u>	<u>555,833</u>	<u>81,335</u>	14.6%	<u>1,195,000</u>	<u>557,832</u>
Net increase (decrease) in available fund balance	<u>\$ 3,256,190</u>	<u>\$ 7,472,604</u>	<u>\$ 7,607,700</u>	<u>\$ (135,096)</u>		<u>\$ 54,544,000</u>	

**MARIN CLEAN ENERGY  
ENERGY EFFICIENCY PROGRAM FUND**

**BUDGETARY COMPARISON SCHEDULE  
April 1, 2018 through May 31, 2018**

	<u>Budget</u>	<u>Actual</u>	<u>Budget Remaining</u>	<u>Actual/ Budget</u>
<b>REVENUE AND OTHER SOURCES:</b>				
Public purpose energy efficiency program	\$ 2,383,000	\$ 159,068	\$ 2,223,932	6.68%
Public purpose Low Income Families and Tenants pilot program	<u>1,750,000</u>	<u>32,056</u>	<u>1,717,944</u>	1.83%
<b>TOTAL REVENUE AND OTHER SOURCES:</b>	<u>4,133,000</u>	<u>191,124</u>	<u>3,941,876</u>	
<b>EXPENDITURES AND OTHER USES:</b>				
Public purpose energy efficiency program	2,383,000	159,068	2,223,932	6.68%
Public purpose Low Income Families and Tenants pilot program	<u>1,750,000</u>	<u>32,056</u>	<u>1,717,944</u>	1.83%
<b>TOTAL EXPENDITURES AND OTHER USES:</b>	<u>4,133,000</u>	<u>191,124</u>	<u>3,941,876</u>	
Net increase (decrease) in fund balance	<u>\$ -</u>	<u>\$ -</u>		

**LOCAL RENEWABLE ENERGY DEVELOPMENT FUND  
BUDGETARY COMPARISON SCHEDULE  
April 1, 2018 through May 31, 2018**

	<u>Budget</u>	<u>Actual</u>	<u>Budget Remaining</u>	<u>Actual/ Budget</u>
<b>REVENUE AND OTHER SOURCES:</b>				
Transfer from Operating Fund	\$ 428,000	\$ 428,000	\$ -	100.00%
<b>EXPENDITURES AND OTHER USES:</b>				
Capital Outlay and related	<u>200,000</u>	<u>-</u>	<u>200,000</u>	0.00%
Net increase (decrease) in fund balance	<u>\$ 228,000</u>	428,000		
Fund balance at beginning of period		<u>124,033</u>		
Fund balance at end of period		<u>552,033</u>		

**MARIN CLEAN ENERGY**  
**BUDGETARY SUPPLEMENTAL SCHEDULE**  
**April 1, 2017 through May 31, 2018**

	<u>Actual</u>
<b>Other services</b>	
Audit	\$ -
Accounting	29,000
IT Consulting	21,175
Human resources & payroll fees	3,500
Miscellaneous professional fees	34,156
	<u>          </u>
<b>Other services</b>	<u>\$ 87,831</u>
<b>General and administration</b>	
Data and telephone service	\$ 7,853
Meeting room rentals	6,253
Office equipment lease	1,330
Dues and subscriptions	116,362
Conferences and professional education	17,657
Travel	14,027
Business meals	2,080
Interest and late fees	-
Miscellaneous administration	5,259
Office supplies and postage	25,126
	<u>          </u>
<b>General and administration</b>	<u>\$ 195,947</u>



July 6, 2018

TO: MCE Executive Committee  
FROM: Dawn Weisz, CEO  
RE: CalCCA Membership Dues (Agenda Item #05 – C.4)  
ATTACHMENT: CalCCA FY 2018-19 Membership Dues Methodology

Dear Executive Committee Members:

**SUMMARY:**

The California Community Choice Association (CalCCA), launched in 2016, is a trade association that represents the interests of California's community choice electricity providers in the legislature and at the relevant regulatory agencies, including the California Public Utilities Commission, California Energy Commission and California Air Resources Board. CalCCA's members include all operating CCA programs in California. Local governments interested in community choice also participate in CalCCA as affiliate members.

MCE has been an active and engaged participant in CalCCA since 2016 and has benefited from the organizations ability to provide coordination among CCAs, facilitate collaborative efforts, promote uniform best practices across the state, and provide a stronger and more consistent voice in the regulatory and legislative arena in line with MCE's strategic plan goals.

As CalCCA has grown since 2016 new CCAs have joined and new CCAs have begun to serve load and bring in revenue. There are currently 19 operational members, and most of these have begun to serve load in communities across California. Several operational members are small CCAs and have chosen to not have a seat on the board, or have combined their seat on the board with other small CCAs.

As it has grown, CalCCA has increased its capacity to provide support to its members and has greatly increased its activity in many areas including regulatory, public relations, legislative and public relations. CalCCA member dues are based on the operational, legal and regulatory costs of the agency, and are allocated based on each members' annual budget. As demonstrated in the attachment, a cap is applied to operational dues and to legal and regulatory dues to limit the impact on larger CCAs.

It is beneficial for MCE to continue participation in CalCCA an operational member with a voting

seat on the CalCCA board. MCE's CalCCA operational dues are \$150,000, and the legal and regulatory dues for MCE are \$150,000. Continued participation in CalCCA will result in payments during MCE's current fiscal year totaling \$225,000, and \$75,000 in MCE's 2019/20 fiscal year.

**Fiscal Impact**

Proposed CalCCA dues that accrue to MCE's 2018/19 fiscal year (\$225,000) are included in the FY 2018/19 Operating Fund Budget. Proposed dues that accrue to the period April 1, 2019 to June 30, 2019 (\$75,000) will be included in the FY 2019/20 Operating Fund Budget that will be presented to your Board in February, 2019.

**Recommendation**

Authorize payment of dues to CalCCA in an amount not to exceed \$300,000.



### ***FY18-19 Dues Methodology***

#### **Board Approval of New Dues Methodology**

At the CalCCA Board Meeting on 5-23-2018, the Board agreed to a new dues methodology for fiscal year 2018-19 (July 1, 2018 through June 30, 2019) that revises the calculations for both the operations fund and the legal & regulatory fund, as described below.<sup>1</sup>

#### **Operations Fund and Regulatory Fund Methodologies**

The fixed portion of both the operations fund and the regulatory fund is based on a tiered level of contributions related to total revenue. This results in a more equitable allocation across CCAs of different revenue sizes.

The variable portion of the calculation for both the operations fund and the regulatory fund is the same: 0.08% of revenue with the cap for both funds being \$150,000.

The new methodologies are stated below:

#### **1. Operations Fund Calculation:**

##### **Fixed:**

Revenue \$0 - \$100M = \$5,000

Revenue \$101M - \$200M = \$10,000

Revenue >\$200M = \$15,000

##### **Variable:**

Plus 0.08% of operating revenue

Operations Fund capped at \$150,000

#### **2. Legal and Regulatory Fund Calculation:**

##### **Fixed:**

Revenue \$0 - \$100M = \$10,000

Revenue \$101M - \$200M = \$20,000

Revenue >\$200M = \$30,000

##### **Variable:**

Plus 0.08% of operating revenue

Regulatory Case Fund capped at \$150,000

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<sup>1</sup> Refer 5-23-2018 Board Meeting Packet, Agenda Item #8, Proposed Budget for FY 2018/19.

# ATTACHMENT A

## Standard LSE Plan

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Marin Clean Energy

2018 INTEGRATED RESOURCE PLAN

August 1, 2018

DRAFT

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## 1. Executive Summary

As California's first Community Choice Aggregation ("CCA") program, MCE provides retail electric generation services and complementary energy programs to customers within the municipal boundaries of its member communities (collectively, the "service area"), which include:

- Marin County;
- Napa County;
- Contra Costa County, only the cities of El Cerrito, Lafayette, Richmond, San Pablo, and Walnut Creek; and
- Solano County, only the city of Benicia.

In July 2017, MCE's Board of Directors ("Board") approved inclusion (i.e., membership) of the following Contra Costa County communities, which MCE expects to begin serving in April 2018:

- The cities of Concord, Martinez, Oakley, Pinole, Pittsburg and San Ramon;
- The towns of Danville and Moraga; and
- The unincorporated areas of Contra Costa County.

MCE Service Area, including expansion anticipated in 2018



MCE provides service to more than eighty percent of electricity customers within its service area and is the default electric generation provider for any new or relocated customers therein.

As a mission-driven organization, MCE works to reduce greenhouse gas ("GHG") emissions and to expand access to competitively priced renewable energy and energy efficiency ("EE") programs for all customers. With these objectives in mind, MCE plans for and secures commitments from a diverse portfolio of generating resources to reliably serve the electric energy requirements of its customers over the near-, mid-, and long-term planning horizons. This Integrated Resource Plan ("IRP") documents MCE's resource planning policies and objectives over the upcoming ten-year planning period from 2018 through 2027 (the "Planning Period").

Every year, MCE staff updates its **public IRP** and submits it for approval to MCE's Board or Technical Committee, which includes a subset of MCE Board members. Such approval is made in consideration of applicable regulatory requirements, MCE's resource planning policies, energy market conditions, anticipated changes in electricity sales, planned inclusion of new member communities, ongoing procurement activities, and any other considerations that may affect the manner in which MCE carries out its resource planning activities. **This 2018 CPUC IRP reflects information from MCE's 2018 board approved public IRP which was published in November of 2017, and will be included as an attachment in MCE's 2019 public IRP.**

In practical terms, this IRP specifies the energy procurement strategy adopted by MCE's Board and serves as a guideline to MCE staff regarding day-to-day energy planning and procurement activities. Highlights of this IRP include the following:

- MCE will manage a portfolio of power resources to supply a minimum renewable energy content of 57 percent for its Light Green customers. MCE plans to increase its renewable energy content, subject to product availability and rate-related considerations, to 80 percent for Light Green customers by 2025. MCE has a long-term goal of supplying 100 percent renewable energy to all of its customers.
- MCE continues to provide its customers with voluntary 100 percent renewable energy service options: Deep Green, which is wholly sourced from various renewable energy projects located in California; and Local Sol, which began supplying participating customers with 100 percent locally sourced (i.e., the supplying generating facilities are located entirely within MCE's service area) solar photovoltaic ("PV") energy in July 2017.
- MCE's energy supply portfolio now includes over ninety contracts with more than thirty-five energy product suppliers. Through the Planning Period, MCE anticipates continued diversification of its supply portfolio.
- MCE's existing and planned supply commitments throughout the Planning Period will enable MCE to fulfill applicable regulatory mandates and voluntary procurement targets related to renewable, greenhouse gas-free ("GHG-free" or "carbon-free"), and conventional (non-renewable) energy. In particular, MCE has taken important steps to ensure delivery of a reliable, environmentally responsible power supply portfolio, including:
  - Contracting for all projected, state-mandated Renewable Portfolio Standard ("RPS") compliance requirements through 2025;
  - Addressing open renewable energy positions throughout the Planning Period related to MCE's voluntary renewable energy targets (which significantly exceed state-mandated procurement requirements);
  - Addressing conventional energy requirements per MCE's adopted planning guidelines via shorter term contractual commitments that are in place through 2020;
  - Addressing required reserve capacity ("Resource Adequacy" or "RA") and flexible capacity procurement obligations, consistent with applicable compliance mandates, via short-, mid-, and long-term contracts per its contracting guidelines;
  - Increasing energy purchases from new, California-based renewable energy resources throughout the Planning Period.
- **All potential contracts are evaluated based upon load hedge effectiveness, grid congestion impacts, exposure to negative Locational Marginal Prices ("LMPs"), RA capacity contribution, and Day Ahead vs. Real Time scheduling protocols in order to ensure MCE customers are not subject to any adverse rate impacts. Finally, in order for MCE rates to be competitive with the**

incumbent utility, PG&E, any contract under consideration must be ~ 30% below MCE's portfolio average cost of generation.

- MCE continues to provide direct support for the development of local renewable energy projects through the ongoing administration of its Net Energy Metering ("NEM") and Feed-In tariff ("FIT") programs. Notable achievements in this area include the following:
  - In 2017, MCE served approximately 14,700 NEM customers; the smaller-scale renewable generating projects that have been installed by such customers represent more than 128,000 kW (128 MW) of local renewable generating capacity; upon expansion of its service area in 2018, MCE expects to serve nearly 25,000 NEM customers with approximately 200,000 kW (200 MW) of installed, behind-the-meter capacity; **MCE is currently considering incentives for NEM customers to install energy storage devices to shift excess generation from customer sited solar installation to super-peak hours of 5PM to 10PM in order to mitigate the steep evening ramp periods.**
  - Via partnership with Grid Alternatives, MCE has contributed \$155,000 to low-income residential solar installations since 2012; benefiting customers have saved an estimated \$1,018,000;
  - In addition to rooftop generating capacity, MCE is planning to develop or purchase energy from 25 MW of locally constructed (within MCE's service area), utility-scale renewable generating capacity by 2021. To this end, MCE has invested staff time and financial resources in various development activities within its service area. For example, Solar One is a 10.5 MW solar PV project that is currently under construction in the City of Richmond and **achieved commercial operation in** December 2017;
  - MCE continues to administer one of California's most generous FIT programs for locally situated, smaller-scale renewable generating resources that supply wholesale electricity to MCE. This program utilizes a standard offer (i.e. non-negotiable) contract that is available on a first-come, first-served basis for up to **20** MW of qualifying renewable energy projects within MCE's service area. Specific terms and conditions for the FIT program, of which approximately **10 MW** remain, are available on MCE's website.

MCE is working toward a long-term goal of offsetting 2 percent of its annual energy and capacity requirements with EE and distributed energy resource ("DER") programs. MCE **has received the approval** of the California Public Utilities Commission ("CPUC") to significantly increase the EE budget for MCE-administered programs while also exploring a number of innovative DER strategies aimed at reducing customer costs and associated GHG emissions. Specific to capacity requirements, MCE's goal is to provide 5 percent of its annual RA capacity via demand response ("DR") programs by the end of the Planning Period.

- During the Planning Period, MCE will procure requisite energy products through various mechanisms, including public solicitations, standard offer contracts, and bilateral engagements as procurement opportunities present themselves outside of the aforementioned processes.

## 2. Study Design

### Load Assignments for Each LSE

**On May 11, 2018, MCE filed a motion to change its 2030 load forecast. Due to the recent expansion of MCE's electricity generation service on April 1, 2018 to include unincorporated Contra Costa County and**

the cities of Concord, Danville, Martinez, Moraga, Oakley, Pinole, Pittsburg, Richmond, and San Ramon, MCE adjusted its load forecast to reflect the increase of its total energy requirements. In addition, MCE's updated load forecast also reflected its intention to increase transportation electrification and fuel switching.

In the *Administrative Law Judge's Ruling Finalizing Greenhouse Gas Emissions Accounting Methods, Load Forecasts, and Greenhouse Gas Benchmarks for Individual Integrated Resource Plan Filings* (ALJ Ruling), MCE's load forecast in 2030 was adjusted to 6,793 GWh, consistent with the motion filed by MCE. MCE's 2030 GHG Emissions Benchmark is also adjusted to 1.207 MMT based on its proportion of 2030 load within PG&E's territory.

### **Required and Optional Portfolios**

MCE has produced one conforming portfolio and one alternative/preferred portfolio for the 2018-2019 IRP cycle. Both portfolios use the assigned load forecast in the Administrative Law Judge's ruling. MCE uses the LSE-specific 2030 GHG Emissions Benchmark assigned in the ALJ ruling, as well as the inputs and assumptions used to develop the Reference System Portfolio for modeling the conforming portfolio. The alternative portfolio is based on actual historic meter data, which accounts for net energy metered behind-the-meter PV and existing EV charging load.

### **GHG Emissions Benchmark**

MCE's assigned emissions benchmark, based on the most recent ALJ ruling, is 1.207 MMT. The total emissions attributable to MCE's conforming portfolio is 0.8 MMT, below MCE's assigned benchmark. MCE's alternative portfolio, which utilizes MCE's load shape, yields -1.0 MMT.

MCE notes that this benchmark is calculated using the Clean Net Short methodology, which is different from the California Energy Commission's Power Content Label ("PCL") emissions calculation methodology. The difference in these two emissions benchmarks is due to the two methodologies' different treatments of emissions associated with each contracted resource.

### **GHG Accounting in IRP Planning**

#### **a. Objectives**

MCE's IRP has four primary purposes:

1. quantify resource needs over the Planning Period;
2. prioritize resource preferences and articulate relevant energy procurement policies;
3. provide guidance to the energy procurement processes undertaken by MCE staff; and
4. communicate MCE's resource planning objectives and framework to the public and key stakeholder groups.

The IRP specifies the energy procurement strategy adopted by MCE's Board and serves as a guideline to MCE staff regarding day-to-day energy planning and procurement activities. The strategy adopted by MCE's Board took into consideration of California's mandates for all LSEs, such as the RPS and RA requirements, as well as additional requirements established by SB 350.

MCE policy, established by MCE's founding documents and directed on an ongoing basis by MCE's Board, guides development of this IRP and related procurement activities. MCE's key resource planning policies are as follows:

1. Reduce GHG emissions and other pollutants associated with the electric power sector through increased use of renewable, GHG-free, and low-GHG energy resources.
2. Maintain competitive electric rates and increase control over energy costs through management of a diversified resource portfolio.
3. Benefit the local economy through investments in infrastructure, energy, and workforce development programs within MCE's service area.
4. Help customers reduce energy consumption and electric bills through investment in and administration of enhanced customer EE, cost-effective distributed generation, and other demand-side programs.
5. Enhance system reliability through investment in supply- and demand-side resources.
6. Actively monitor and manage operating and market risks to promote MCE's continued financial strength and stability.
7. Support supplier diversity as permitted by law.

The IRP translates these broad policy objectives into a more specific energy procurement strategy, taking into consideration MCE's projected customer needs and existing resource commitments over the Planning Period.

## **b. Methodology**

### **i. Modeling Tool(s)**

MCE uses multiple proprietary modeling and portfolio management tools. These tools include:

- Load and resource balance model
- Pro-forma financial model
- Load and supply visualizer
- Load forecast model

MCE staff has reviewed the RESOLVE model and finds the baseline assumptions to be incompatible with MCE's underlying goals of voluntarily exceeding California's Renewable Portfolio Standard, California Air Resources Board emissions, and the Clean Net Short methodology. MCE's preferred portfolio planning has included the goal of matching hourly deliveries of renewable and carbon free generation to MCE's hourly load shape. The Clean Net Short methodology forces unknowable hourly greenhouse gas emissions from unspecified imbalance energy into MCE's GHG accounting and makes future GHG planning impossible.

The primary difference between MCE's modeling approach and the RESOLVE model is that MCE prefers to select supply options based on its view of prices offered in the competitive marketplace rather than as determined by a simplified optimization model populated with administratively determined planning assumptions. Further, MCE's renewable energy and GHG emissions goals are more stringent than those established by the CPUC.

## ii. Modeling Approach

The resource planning approach employed by MCE is outlined as follows:

1. MCE prepares a forecast of enrolled customers for its Light Green, Deep Green, and Local Sol programs and projects corresponding aggregate electricity consumption and peak capacity requirements;
2. Projections of load modifying impacts such as incremental energy efficiency, behind the meter distributed generation (NEM), and vehicle electrification are added to the baseline electricity and capacity forecast;
3. Based on Board adopted portfolio targets relating to key policy metrics (e.g., renewable energy content, GHG-free energy content, local renewable generation, etc.), MCE quantifies its aggregate requirements for the various energy products, consistent with Board policy and the load forecast;
4. Anticipated energy production and capacity for resources under contract are projected forward for the planning period;
5. Open positions for the various energy and capacity products are quantified.

MCE examines its load and resource balance on various time scales including calendar year, month, and hourly.

MCE's electricity demand forecast starts with a forecast of customers by end-use classification (residential, commercial, etc.). Class-typical monthly energy consumption estimates, derived from historical data, are applied to yield a monthly energy forecast by customer class. Hourly class-specific load profiles are then used to break down the monthly energy forecast into more granular time-of-use and peak demand values. Certain adjustments are incorporated in the base forecast to account for factors not reflected in the historical data. MCE also makes explicit adjustments to this forecast to account for the load impacts of its DER programs and emerging market factors such as growing electricity demand related to electric vehicle ("EV") charging.

Procurement targets and open positions are examined on relevant time-scales. For MCE's Board-adopted renewable energy and carbon free energy content goals, achievement is measured on a calendar year basis, while hourly time-scales are used to address hedge effectiveness of MCE's supply portfolio.

In evaluating supply options to meet identified resource needs, MCE considers the relative costs and value (e.g., location and portfolio fit) of resources at the time of procurement. MCE makes certain planning assumptions regarding the generating technologies that will be utilized to meet open renewable and carbon free positions, but maintains flexibility to adapt to rapidly changing market dynamics.

The IRP planning scenario selected by MCE is a result of action by MCE's Board of Directors to establish MCE's resource planning goals and objectives. MCE did not evaluate alternative scenarios for purposes of this IRP submission.

### iii. Assumptions

MCE's conforming portfolio utilizes the assigned GHG emissions benchmark and the assumptions used to develop the Reference System Portfolio. MCE's alternative portfolio uses the same load forecast and GHG emissions target as specified for the Reference System Plan. While MCE maintains its own unique view of future prices for renewable energy and other resource technologies which may differ from the Commission's assumptions, these assumptions were not directly used in the development of MCE's IRP.

## 3. Study Results

### a. Portfolio Results

MCE has developed two portfolios:

- **Conforming Portfolio-** This portfolio utilizes the assigned GHG emissions benchmark, as well as the input assumptions used in developing the Reference System Portfolio, and consistent with the 2017 IEPR forecast. However, the 2017 IEPR forecast is outdated as it does not contain MCE's 2030 load forecast that has been adopted by the ALJ. Using the assumptions in the 2017 IEPR would force MCE to procure approximately 750 MW more than it would have in 2030, based on MCE's own modeling that uses its own historic load profile, generated using historic metered data.
- **Alternative/Preferred Portfolio-** This portfolio utilizes MCE's actual historic meter data, which accounts for net energy metered behind-the-meter PV and existing EV charging load. MCE will provide the load analysis in a separate Excel workbook.

### b. Preferred and Conforming Portfolios

MCE's preferred portfolio is described as follows. MCE seeks Commission certification of the Preferred Portfolio, as it has been developed with MCE's actual historical meter data, which provides higher accuracy for resource planning than the default load shape used to develop the Reference System Portfolio. For additional detail, please see Section 2a and the Data Template Excel workbooks.

#### GHG-Free by 2025

Reducing electric utility-sector GHG emissions is one of MCE's charter objectives. With this in mind, MCE will commence the Planning Period with a 78 percent GHG-free supply portfolio in 2018. The GHG-free proportion of MCE's resource mix will be comprised of both RPS-eligible renewable energy and additional GHG-free electricity. In subsequent years of the Planning Period, MCE will steadily increase its use of GHG-free energy supply with the goal of achieving a 100 percent GHG-free supply portfolio by 2025, subject to operational practicalities and product availability.

Note that not all renewable energy is GHG-free, as certain generating technologies, particularly those using geothermal and biofuel sources, are known to produce carbon dioxide and other GHGs during electric power generation. That noted, the majority of RPS-eligible renewable generating technologies



are understood to be carbon-neutral, meaning that the net environmental impacts associated with the processes required to produce electric power are no worse than the environmental impacts associated with activities that would otherwise occur. Moreover, MCE ensures that any contracts confer to MCE all environmental attributes associated with purchased renewable electricity.

MCE understands that implementation of AB 1110 will further clarify emissions intensity reporting for all generating technologies. MCE will apply pertinent emissions calculation methodologies, once finalized, when performing emissions accounting related to its electric supply portfolio.

### **80 Percent Renewable Energy by 2025**

In pursuit of its goal to increase the Light Green product content to 80 percent renewable by 2025, MCE intends to gradually replace the conventional energy resources in its supply portfolio with renewable resources. Actual annual renewable content percentages may differ from projections, which are outlined in the table below, if resource availability or market conditions preclude cost-effective procurement, but the primary goal is to achieve an 80 percent Light Green renewable supply no later than 2025.

### **Limited Use of Unbundled Renewable Energy Certificates**

MCE pursues a diversified renewable energy supply portfolio, which reflects broad use of various RPS-eligible fuel sources and products, resource locations, project configurations and other considerations. However, MCE has committed to limit the use of unbundled renewable energy certificates (otherwise known as “Portfolio Content Category 3,” “PCC 3,” or “Bucket 3”) to no more than 3 percent of its total resource mix. This limitation generally aligns with specifications reflected in California’s RPS program, which impose restricted use of PCC 3 products approximating 3 percent of annual retail sales during the third Compliance Period, which includes 2017 through 2020. To maintain progress toward its 80 percent renewable energy target, MCE has substantially focused on the procurement of bundled renewable energy supply throughout the Planning Period, as reflected in the table below.

<b>10 Year Portfolio Mix (%)</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>
<b>PCC 1 Renewable</b>	40%	43%	45%	48%	50%	53%	55%	58%	58%	58%
<b>PCC 2 Renewable</b>	14%	14%	15%	16%	17%	17%	18%	19%	19%	19%
<b>PCC 3 Renewable</b>	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
<b>Large Hydro</b>	21%	21%	21%	21%	20%	20%	20%	20%	20%	20%
<b>Conventional Energy</b>	22%	19%	16%	13%	10%	6%	3%	0%	0%	0%
<b>Total Renewable</b>	<b>57%</b>	<b>60%</b>	<b>63%</b>	<b>67%</b>	<b>70%</b>	<b>73%</b>	<b>77%</b>	<b>80%</b>	<b>80%</b>	<b>80%</b>
<b>Total Carbon Free</b>	<b>78%</b>	<b>81%</b>	<b>84%</b>	<b>87%</b>	<b>90%</b>	<b>94%</b>	<b>97%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

### **i. Local Air Pollutant Minimization**

MCE serves 127,357 customers in disadvantaged communities, 9.3 percent of 1,373,185 total MCE customers served. MCE Feed-in Tariff and Local projects that are sited in disadvantaged communities and online deliver renewable energy and minimize localized air pollutants and other GHG emissions to around 5,000 impacted residential customers. MCE has proposed several projects that exceed 100 MW, also in a disadvantaged community, will serve approximately 45,000 impacted residential customers while minimizing localized air pollutants and other GHG emissions and replace retired conventional

generation resources in the area. In addition to these projects sited in disadvantaged communities, MCE has another 11 MW of local landfill waste to energy projects in its portfolio that minimize localized air pollutants like methane and GHG emissions while delivering renewable energy to an additional 10,000 customers.

MCE is also planning to develop tariffs for price-responsive demand resources located in disadvantaged communities to ensure that MCE can meaningfully improve air quality. These tariffs will be applicable to existing cogeneration facilities and will allow them to submit price sensitive bids in the day ahead CAISO market, incentivize generation curtailment, deliver 100% renewable generation to customer load, and allow for greater absorption of excess renewable generation by the CAISO controlled grid.

Disadvantaged communities served by MCE, as identified by CalEnviro 3.0, are listed below. MCE has also listed local renewable feed-in tariff projects that are located in the most impacted census tracts.

### **Napa County**

- **City of Napa - Census Tract: 6055200503 & 6055200301**, Percentile: 71-75%, Population: 7,150 PM 2.5: 18 This tract contains 16% Children under 10 and 8% Elderly over 65.

### **West Contra Costa County**

- **Crockett. Rodeo - Census Tract: 6013358000**, Percentile: 81-85%, Population: 5,298 PM 2.5: 18 This tract contains 14% Children under 10 and 11% Elderly over 65.
- **Point Pinole - Census Tract: 6013392200 & 6013364002**, Percentile: 76-80%, Population: 16,123, PM 2.5: 18 This tract contains 13% Children under 10 and 3% Elderly over 65. MCE's **Freethy Industrial Park Feed-in Tariff ground-mounted solar projects** are located in this census tract. Sunstall Inc. and the City of Richmond's RichmondBUILD program provided labor to construct the solar panel installation, which supported 23 jobs. Three permanent jobs were created for Energy Systems Development to maintain the system for ten years.
- **Wildcat Creek - Census Tract: 6013365002**, Percentile: 91-95%, Population: 5,462 PM 2.5: 18 This tract contains 19% Children under 10 and 5% Elderly over 65.
- **West Richmond - Census Tract: 6013378000**, Percentile: 66-70%, Population: 3,435 This tract contains 8% Children under 10 and 20% Elderly over 65. MCE's **Solar One**, the Bay Area's largest public-private solar partnership, is located within this census tract. MCE Solar One was conceived by the Richmond community to integrate renewable energy and solar facilities in the Chevron Modernization Project. MCE teamed up with RichmondBUILD to train and hire its skilled, local graduates for the project.
- **Richmond Barret Ave. - Census Tract: 6013376000**, Percentile: 86-90%, Population: 5,962 PM 2.5: 20 This tract contains 18% Children under 10 and 7% Elderly over 65.
- **Richmond N. of Cutting Rd - Census Tract: 6013377000 & 6013379000**, Percentile: 91-95%, Population: 13,079, PM 2.5: 31 This tract contains 18% Children under 10 and 9% Elderly over 65.

- **Richmond S. of Cutting Rd - Census Tract: 6013380000**, Percentile: 81-85%, Population: 5,706, PM 2.5: 31 This tract contains 13% Children under 10 and 8% Elderly over 65.
- **Richmond Annex - Census Tract: 6013392200**, Percentile: 76-80%, Population: 3,521 Percentile: 86-90%, Population: 6,964, PM 2.5: 31 This tract contains 16% Children under 10 and 11% Elderly over 65.

### East Contra Costa County

- **Martinez - Census Tract: 6013320001**, Percentile: 76-80%, Population: 3,615 PM 2.5: 18 This tract contains 14% Children under 10 and 9% Elderly over 65.
- **Martinez E. of Pacheco Creek - Census Tract: 6013315000**, Percentile: 71-75%, Population: 3,281 PM 2.5: 18 This tract contains 13% Children under 10 and 6% Elderly over 65.
- **Pleasant Hill - Census Tract: 6013327000**, Percentile: 76-80%, Population: 6,695 PM 2.5: 18 This tract contains 11% Children under 10 and 14% Elderly over 65.
- **Concord NWS Seal Beach del Concord - Census Tract: 6013355200**, Percentile: 71-75%, Population: 7,444 PM 2.5: 18 This tract contains 16% Children under 10 and 6% Elderly over 65.
- **Bay Point - Census Tract: 6013314102**, Percentile: 71-75%, Population: 5,923 PM 2.5: 18 This tract contains 16% Children under 10 and 7% Elderly over 65.
- **Pittsburg - Census Tract: 6013312000**, Percentile: 91-95%, Population: 2,292 PM 2.5: 18 This tract contains 15% Children under 10 and 12% Elderly over 65.
- **Pittsburg West - Census Tract: 6013310000 & 6013311000** Percentile: 86-90%, Population: 10,642 PM 2.5: 18 This tract contains 18% Children under 10 and 7% Elderly over 65.
- **Antioch - Census Tract: 6013305000**, Percentile: 81-85%, Population: 6,620 PM 2.5: 18 This tract contains 17% Children under 10 and 8% Elderly over 65.
- **Antioch East - Census Tract: 6013306002**, Percentile: 71-75%, Population: 2,985 PM 2.5: 18 This tract contains 12% Children under 10 and 14% Elderly over 65.
- **Oakley - Census Tract: 6013305000**, Percentile: 76-80%, Population: 6,592 PM 2.5: 18 This tract contains 16% Children under 10 and 10% Elderly over 65. MCE is currently considering several Feed-in Tariff projects in this census tract.
- **Brentwood - Census Tract: 6013303103**, Percentile: 71-75%, Population: 10,812 PM 2.5: 18 This tract contains 17% Children under 10 and 8% Elderly over 65. MCE is currently considering the development of 100 MW of local aggregated renewable projects in this census tract.

### ii. Cost and Rate Analysis

MCE has modeled the anticipated cost of its planned resources based on known contract costs and forward price assumptions for open positions of the various energy and capacity products specified in the plan. The results indicate that average power supply costs are expected to decline (inflation adjusted), in real terms increasing at a nominal compound annual growth rate 2.3% between 2018 and 2030. Numerous market factors could change the projected cost trajectory, including but not limited to the following:

- Wholesale energy prices

- Locational marginal prices
- Resource adequacy costs
- Costs for services provided by the CAISO (e.g., ancillary services)
- Production from MCE contracted resources and potential curtailment costs
- Costs associated with allocated resources procured by other entities (e.g., CAM, RMR, etc.)

MCE rates are set by MCE's Board of Directors annually, and while rates are influenced by power supply costs, customer rates will not necessarily change in lock-step with the projected change in power supply costs over time, as financial reserves are available to help provide rate stability. MCE rates are below those of the incumbent utility, despite MCE's higher renewable energy content and the imposition of various PG&E surcharges. MCE expects to meet its objective of maintaining competitive rates over time. However, while MCE's costs are expected to be relatively stable due to its forward procurement and price hedging practices, considerable uncertainty exists in the PCIA and the incumbent utility's generation rates, both of which are relevant to MCE's competitive rates assessment.

**c. Deviations from Current Resource Plans**

MCE's IRP does not deviate from its 2018 IRP, approved by its governing board in November, 2017.

**d. Local Needs Analysis**

MCE meets California's RA standards by procuring qualifying capacity sufficient to meet MCE's projected peak demand plus a 15 percent reserve margin. In addition to this general requirement, MCE must ensure that mandated proportions of such capacity resources are procured from local reliability areas defined by the CAISO. MCE has a need for capacity purchases to meet RA obligations beginning in 2018. RA purchases are typically conducted via shorter-terms transactions without a great deal of lead time, which mirrors the obligations under California's RA program. MCE is actively engaged in procurement processes related to open positions for the balance of 2018 and may also address future years through multi-year RA contracts. In addition, MCE has long-term capacity rights under several of its PPAs, which will provide a portion of MCE's local RA needs during the Planning Period.

	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>
<b>Load</b>										
Peak Demand	1,095	1,100	1,105	1,111	1,116	1,121	1,126	1,131	1,137	1,142
New DG and Efficiency	(28)	(36)	(44)	(51)	(59)	(67)	(74)	(82)	(87)	(92)
Net Peak Demand	1,067	1,065	1,062	1,059	1,057	1,054	1,052	1,049	1,050	1,050
<b>RA Requirements (Net of Offsets)</b>										
Greater Bay Area	76	144	144	144	144	144	144	144	144	144
Other PG&E Area	118	220	219	218	217	216	215	214	214	214
System	751	454	453	452	451	450	449	448	448	448
Flexible Attribute	95	183	183	183	183	183	183	183	183	183
<b>RA Contracted</b>										
Greater Bay Area	84	7	7	7	7	7	7	7	7	7
Other PG&E Area	120	33	74	90	140	140	140	140	140	140
System	635	73	73	168	168	168	168	168	168	168
Flexible Attribute	122	-	-	-	-	-	-	-	-	-
<b>Net Short/(Long)</b>										
Greater Bay Area	(8)	137	137	137	137	137	137	137	137	137
Other PG&E Area	(2)	187	145	128	77	76	75	74	74	74
System	116	381	380	284	283	282	281	280	280	280
Flexible Attribute	(27)	183	183	183	183	183	183	183	183	183

## 4. Action Plan

### a. Proposed Activities

In order to effectively plan and manage its portfolio, MCE differentiates contracts by their term length as follows:

- Short-term: up to twelve months;
- Medium-term: longer than twelve months, up to five years;
- Intermediate-term: longer than five years, up to ten years;
- Long-term: longer than ten years.

Based upon the expected contract tenor, MCE may use a variety of methods – including competitive solicitations, standard contract offerings, and bilaterally negotiated agreements – throughout the Planning Period.

### Procurement Authorities

MCE's energy procurement throughout the Planning Period will be consistent with the delegation of authorities of the Board, including Resolution 2017-02, Resolution 2017-07, and/or any subsequent delegation of authorities or relevant Resolution of the Board.

### Procurement Methods

For long-, intermediate-, and medium-term purchase commitments, MCE typically uses competitive solicitations, like its annual Open Season solicitation, or standard offer contracts, like its FIT. Through a competitive solicitation, MCE issues a request for offers and concurrently evaluates multiple proposals in the context of market conditions before entering negotiations with those respondents that provide the most compelling offers. Occasionally, MCE will issue ad hoc competitive solicitations or engage in independent bilateral negotiations to meet specific resource needs for which inclusion in an annual solicitation is not appropriate.

With regard to short-term power purchases, MCE may negotiate bilateral agreements directly, especially for unique or urgent transactions that do not lend themselves to inclusion in a competitive solicitation. Alternatively, particularly in markets with sufficient transparency to ensure competitive outcomes, MCE may negotiate short-term transactions via its scheduling coordinator or independent energy brokers or marketers.

### **Energy Storage**

The California Energy Storage Bill, Assembly Bill (“AB”) 2514, was signed into law in September of 2010, and, as a result, the CPUC established energy storage targets for investor-owned utilities (“IOUs”), CCAs, and other load-serving entities (“LSEs”) in September 2013. The applicable CPUC decision established an energy storage procurement target for CCAs and electric service providers equal to 1 percent of their forecasted 2020 peak load. Based upon current load forecasts, the decision will require MCE to install 11 MW of energy storage no later than 2024. Beginning on January 1, 2016, and every two years thereafter, MCE must file an advice letter demonstrating compliance with this requirement, progress toward meeting this target, and a description of the methodologies for insuring projects are cost-effective.

In 2018, MCE’s Power Resources team issued its first standalone energy storage Request for Offers as part of its annual Open Season procurement process. The products being sought included Behind-the-Meter peak demand management systems to serve MCE’s commercial and industrial customers, aggregated community energy storage systems capable of scheduling into the CAISO market, and grid asset systems to shape load and to provide grid services. Other benefits that MCE seeks from its energy storage offers include additional Resource Adequacy capacity, generation shifting to cover MCE’s Super Peak demand (typically HE 17 to HE 22), energy arbitrage savings to MCE, reduced congestion costs, and potentially supplying Ancillary Services and Proxy Demand Response to the CAISO market.

### **Renewable Portfolio Standards (RPS) and Senate Bill (SB) 350**

Through 2016, the CPUC has been overseeing implementation of Senate Bill (“SB”) 350, which Governor Brown signed in October 2015. Among other GHG-reduction provisions, SB 350 calls for California’s RPS targets to increase to 50 percent by 2030. SB 350 includes certain procedural changes that will also impact MCE. With respect to CCAs, SB 350 requires that:

- CCAs must have at least 65 percent of their RPS compliance procurement under contracts of 10 years or longer beginning in 2021;
- CCA EE programs will be eligible to count toward statewide EE targets; and
- while maintaining independent governing authority, CCAs will submit IRPs to the CPUC for certification.

MCE will comply with the applicable planning and procurement requirements reflected in SB 350. Given its existing and planned commitments to long-term renewable energy procurement and EE program

administration, MCE does not anticipate the need for significant modifications to its planning or procurement practices to achieve SB 350 compliance.

### **Resource Adequacy (RA)**

The CPUC Decision (D.) 17-06-027 adopted local and flexible capacity obligations for 2018 for electric LSEs and made several changes to the RA program. Two changes impact MCE's procurement and reporting.

First, the CPUC adopted a proposal for an Effective Load Carrying Capacity ("ELCC") for wind and solar energy resources, directed by Public Utilities Code Section 399.26(d). ELCC is a modeling approach that determines the capacity value of different resources relative to "perfect capacity." Monthly ELCC of wind or solar resources in the California Independent System Operator ("CAISO") balancing area are established by the CPUC's Energy Division based on studies of monthly Loss of Load Expectation ("LOLE") or Loss of Load Hours ("LOLH") and a monthly Portfolio ELCC study. As a result of the ELCC methodology, the RA value of solar PV resources has been reduced by approximately 50 percent relative to previous ratings, forcing MCE to increase its RA purchases and incur additional costs. The impact on wind capacity ratings is less dramatic.

Second, the CPUC modified the annual load update that LSEs submit every August. Previously, this filing has been optional, but it is now mandatory for all LSEs. Due to the growing load served by non-IOU LSEs, the CPUC determined that the August load update is necessary to accurately reflect load migration and improve the accuracy of load forecasts used for RA purposes.

### **Supplier Diversity**

MCE is committed to supporting the economic health and sustainability of communities in its service area, and seeks opportunities to contract with businesses that are historically underrepresented in utilities' procurement of energy resources, goods, and services. MCE's guidelines for diversity in procurement support MCE's efforts to procure energy resources, goods, and services from historically underrepresented and/or economically disadvantaged businesses and communities as allowed by law.

### **Reduce Air Pollution in Disadvantaged Communities**

As described above in the Study Results section, MCE plans to site several renewable and GHG-free resources in disadvantaged communities within MCE's service territory. MCE Feed-in Tariff and Local projects that are sited in disadvantaged communities and online deliver renewable energy and minimize localized air pollutants and other GHG emissions to around 5,000 impacted residential customers. MCE's proposed 100 MW Delta Ranch project also in a disadvantaged community will serve approximately 45,000 impacted residential customers while minimizing localized air pollutants and other GHG emissions and replace retired conventional generation resources in the area.

## **b. Barrier Analysis**

MCE has identified some regulatory and market risks associated with acquiring resources to meet the GHG-free and renewable procurement goals established by its local governing board, and the goals set forth by SB 350. The risks and the associated impact analysis are below:

### Inconsistent Methodologies for Calculating GHG Emissions



As California's policies shift from a renewable resource focus to GHG emissions reduction, accounting for GHG emissions is creating inconsistencies between various agencies' accounting methodologies and the RPS program. These inconsistencies will have an impact on resources preferences as well as rates. For instance, if Bucket 2 RPS products are assigned a system emissions factor, then an LSE will likely reduce the amount of Bucket 2 resource procurement to ensure that its total portfolio meets the state's assigned emissions benchmark. In a CCA's case, there can potentially be another set of emissions target established by its governing board, and Bucket 2 RPS resources will no longer be used as a tool to achieve that goal.

Furthermore, inconsistent methodologies administered by different energy agencies will create complications in MCE's procurement. It will be challenging for MCE to determine which methodology it should use to help guide its procurement to meet the GHG emissions goal set by its governing board, and to disclose to consumers.

#### Outcome of the Power Charge Indifference Adjustment (PCIA) Proceeding

The uncertainty surrounding the PCIA reform impacts MCE's resource procurement and planning efforts. Depending on the outcome, MCE may need to adjust its procurement and planning to ensure that its rates and procurement will continue to be competitive against PG&E's offerings based on both pricing and GHG-free content.

#### Resource Adequacy

Mandated, "on behalf of" procurement of capacity resources can undermine CCAs' ability to procure RA resources that can both provide reliability to the grid and satisfy local clean energy preferences and goals. An on behalf of procurement can impact MCE's acquisition of identified resources in a few specific ways:

- **Cost:** MCE's planning effort assumes that MCE is fully compliant with the CPUC's and the CAISO's RA requirements, and is investing significant financial resources in RA resources to achieve those requirements. The on behalf of procurement allocates resources to MCE on top of a fully procured portfolio, but does not provide MCE with the flexibility to sell resources that have already been contracted.
- **Preferences for clean capacity resources:** Many CCAs, including MCE, are exploring new capacity resources that can mitigate the use of fossil fuel resources while meeting RA obligations. On behalf of procurement eliminates the need and procurement incentives for those resources.

A 100% multi-year RA requirement that is being considered by the Commission may further exacerbate the problems and risks identified above. Currently, CCAs have the flexibility to hedge against the risk of receiving credits for on behalf of capacity procurement that could subject CCAs to unanticipated costs. By requiring CCAs to procure 100% of their RA obligations two years out, CCAs will lose the flexibility to adjust their forward RA portfolio to account for the allocations of on behalf of resources.

### **c. Proposed Commission Direction**

This section is not applicable to MCE as MCE's governing board oversees and directs MCE's planning and procurement activities, unless otherwise directed by the legislature.

## 5. Data

### a. Baseline Resource Data Template

MCE will fill out and submit the baseline resource data template provided by Commission staff.

### b. New Resource Data Template

MCE will fill out and submit the baseline resource data template provided by Commission staff.

### c. Other Data Reporting Guidelines

## 6. Lessons Learned

MCE appreciates the time the IRP staff has dedicated to working with LSEs refine the filing templates during this test cycle. MCE provides the suggested changes below to the IRP process for consideration by the Commission.

### Communication and coordination with local governing boards of CCAs

MCE encourages the Commission to engage the local governing boards of CCAs during the certification process after all LSEs file their IRPs. All of the IRPs filed by CCAs reflect their compliance with the state environment mandates, as well as environmental and economic mandates established by their local governing boards. While local mandates have been set to complement or to accelerate the achievement of state policy goals, implementing a large and complex state policy, such as SB 350, can potentially reveal where local and state mandates may not be in harmony.

If the Commission staff finds that certain local mandates may be in conflict with certain state policies after all LSEs' conforming and preferred portfolios have been aggregated and analyzed, such instances should be communicated at the decision maker level to respect the jurisdictional authority of local governments. MCE suggests that the process of creating dialogues with local governments can start with informal joint agency workshops with CPUC Commissioners and boards of directors of CCAs to examine the frictions between two sets of policies, and provide paths to resolve the differences. Such solutions should be informed by further studies conducted by the CCA staff and the CPUC staff, and staff from both agencies should work together to put forth recommendations for policy changes either at the Commission level, or at the local government level.

### Defining the certification and self-procurement process for CCA IRPs

Along with the California Community Choice Association ("CalCCA"), MCE has repeatedly asked the Commission to provide a process for certifying CCA IRPs, and define criteria and metrics that each CCA's

IRP should meet in order to be certified. CCAs have also expressed that in the case where the Commission finds there are system or local resource deficiencies in meeting the state's GHG emissions reduction and reliability goals, the CCA governing boards and staff should be informed and provided with the opportunity to procure to address the deficiencies, before the Commission directs the investor owned utilities to procure on behalf of all customers.

MCE understands that it was difficult for the Commission and staff to define a certification process and criteria before all LSEs' portfolios are aggregated to inform any system or local grid reliability and emission reduction needs. MCE looks forward to working with the Commission staff to define certification criteria and process for CCA IRPs after all LSEs' IRPs have been aggregated and analyzed.

MCE also looks forward to refining the self-procurement process with the Commission, and sees this as an opportunity for both the Commission and CCAs to creatively collaborate in a decentralized regulatory landscape. The communication and coordination needed to allow CCAs to exercise self-procurement can be done through the process MCE recommended above in the communication and coordination section.

DRAFT

## **Glossary of Terms**

**Alternative Portfolio** – LSEs are permitted to submit “Alternative Portfolios” developed from scenarios using different assumptions from those used in the Reference System Plan. Any deviations from the Conforming Portfolio must be explained and justified.

**Conforming Portfolio** – Each LSE must produce a “Conforming Portfolio” that is demonstrated to be consistent with the Reference System Portfolio according to the following criteria: (1) use of either the GHG Planning Prices or the LSE-Specific 2030 GHG Emissions Benchmark, (2) use of input assumptions matching those used in developing the Reference System Portfolio, and (3) consistent with the 2017 IEPR “mid Baseline mid AAEE mid AAPV” forecast, unless superseded by Administrative Law Judge ruling.

**Data Template** – Data provided by the LSE should be reported in the “Baseline Resource Data Template” and the “New Resource Data Template” provided by the Commission. “Baseline” means existing resources and costs. “Existing” includes resources on the 3/15/2018 NQC List, or projects not yet online but that have secured a contract and may therefore be identified in the Commission’s RPS Contracts Database or an Application filed at the Commission, as of January 1, 2018. “New” means any new (incremental to the baseline) resources and costs associated with a particular LSE portfolio.

**Disadvantaged Communities** – For the purposes of IRP, and consistent with the results of the California Communities Environmental Health Screening Tool Version 3 (CalEnviroScreen 3.0), “disadvantaged communities” refer to the 25% highest scoring census tracts in the state along with the 22 census tracts that score in the highest 5% of CalEnviroScreen’s pollution burden, but which do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data.

**GHG Emissions Benchmark** – Each LSE filing a Standard LSE Plan must use either the GHG Emissions Benchmark or GHG Planning Price in developing its Conforming Portfolio. The LSE-specific benchmarks have been provided in an ALJ ruling. If the total emissions attributable to the LSE’s preferred portfolio exceed its GHG Emissions Benchmark for 2030, the LSE must explain the difference and describe additional measures it would take over the following 1 - 3 years to close the gap, along with the cost of those measures.

**GHG Planning Price** –The GHG Planning Price is equivalent to the marginal cost of GHG abatement associated with the 42 MMT Scenario for the years 2018 to 2026 (i.e., a curve that slopes upward from ~\$15/ton to ~\$23/ton), followed by a straight-line increase from ~\$23/ton in 2026 to \$150/ton in 2030, as shown in Table A. Each LSE must use either the GHG Planning Price or GHG Emissions Benchmark in developing its Conforming Portfolio.

**IRP Planning Horizon** – The IRP Planning Horizon will typically cover 20 years. However, for the purposes of this IRP 2017-18 cycle, the IRP Planning Horizon will cover only up to the year 2030.

**Long term** – 10 or more years (unless otherwise specified)

**Portfolio** – A portfolio is a set of supply and/or demand resources with certain attributes that together serve a particular level of load.

**Preferred Portfolio** – Among all the portfolios developed by the LSE, the LSE will identify one as the most suitable to its own needs, deemed its “Preferred Portfolio.” Any deviations from the Conforming Portfolio must be justified and explained.

**Reference System Plan** – The Reference System Plan refers to the Commission-approved integrated resource plan that includes an optimal portfolio (Reference System Portfolio) of future resources for serving load in the CAISO balancing authority area and meeting multiple state goals, including meeting GHG reduction and reliability targets at least cost.

**Reference System Portfolio** – The Reference System Plan refers to the Commission-approved portfolio that is responsive to statutory requirements per Pub. Util. Code 454.51; it is part of the Reference System Plan.

**Scenario** – A scenario is a portfolio together with a set of assumptions about future conditions.

**Short term** – 1 to 3 years (unless otherwise specified)

**Standard LSE Plan** – A Standard LSE Plan is the type of integrated resource plan that an LSE is required to file if its assigned load forecast is  $\geq 700$  GWh in any of the first five years of the IRP planning horizon.

**Standard LSE Plan Template** – Each LSE required to file a Standard LSE Plan must use the Standard LSE Plan Template according to the instructions provided herein.

(End of Attachment A)



July 6, 2018

TO: MCE Executive Committee

FROM: Elizabeth Kelly, General Counsel

RE: Adjustment to Scope of Work for Technical Committee  
(Discussion/Action) (Agenda Item #07)

ATTACHMENTS: A. Draft Technical Committee Scope (Clean)  
B. Draft Technical Committee Scope (Blackline)

Dear Executive Committee Members:

**SUMMARY:**

On April 19, 2018, your Board of Directors adopted MCE Policy 015 - Energy Risk Management Policy (ERMP). The attached revisions to the scope of MCE's Technical Committee reflect the responsibilities set forth under the Energy Risk Management Policy.

The revisions to the Technical Committee Scope also makes direct reference to Resolution 2018-03 in order to directly reference, not restate, the delegations of the Board to the Technical Committee.

**Recommendation**

Approve adjustments to the Scope of Work for Technical Committee.



## MCE Technical Committee Overview and Scope

**Approved: [DATE]**

Maximum Membership: 8

Current Members: Kate Sears, County of Marin (Chair)  
Ford Greene, Town of San Anselmo  
Kevin Haroff, City of Larkspur  
Greg Lyman, City of El Cerrito  
Scott Perkins, City of San Ramon  
Rob Schroder, City of Martinez  
Don Tatzin, City of Lafayette  
Ray Withy, City of Sausalito

Membership Process: MCE strives to assemble a Technical Committee comprised of at least one county representative and one city/town representative from each county in the MCE service area. Available seats on the Technical Committee are therefore first offered to any interested and applicable Board member whose county is not yet represented by one county and one city member. Interested members can be added at a meeting of the Board when "New Committee Members" is on the Agenda.

Current meeting date: First Thursday of each month at 9:00 am

### **Scope**

The scope of the MCE Technical Committee is to explore, discuss and provide direction or approval on issues related to electricity supply, distributed generation, greenhouse gas emissions, energy efficiency, procurement risk management and other topics of a technical nature.

Frequent topics include electricity generation technology and procurement, greenhouse gas accounting and reporting, energy efficiency programs and technology, energy storage technology, net energy metering tariff, local solar rebates, electric vehicle programs and technology, Feed-in Tariff activity and other local development, Light Green, Deep Green and Local Sol power content planning, long term integrated resource planning, regulatory compliance, MCE's Energy Risk Management Policy (ERMP), procurement risk oversight, and other activity related to the energy sector.



### **Authority of Technical Committee**

- Approval of and changes to MCE's Net Energy Metering Tariff
- Approval of and changes to MCE's Feed in Tariff
- Approval of annual GHG emissions level and related reporting
- Approval of MCE procurement pursuant to Resolution 2018-03 or its successor
- Approval of contracts with vendors for technical programs or services, energy efficiency program or services and procurement functions or services Approval of power purchase agreements
- Approval of adjustments to power supply product offerings
- Approval of the Integrated Resource Plan
- Approval of substantive changes to MCE's Energy Risk Management Policy (ERMP), including periodic review of the ERMP and periodic review of ERMP implementation
- Initiation of and oversight of a review of the implementation of the ERMP as necessary
- Receipt of reports from the Risk Oversight Committee (ROC) on at least a quarterly basis regarding the ROC's meetings, deliberations, and any other areas of concern



## MCE Technical Committee Overview and Scope

Approved: [DATE]

Maximum Membership: 8

Current Members: Kate Sears, County of Marin (Chair)  
Ford Greene, Town of San Anselmo  
Kevin Haroff, City of Larkspur  
Greg Lyman, City of El Cerrito  
Scott Perkins, City of San Ramon  
Rob Schroder, City of Martinez  
Don Tatzin, City of Lafayette  
Ray Withy, City of Sausalito

Membership Process: MCE strives to assemble a Technical Committee comprised of at least one county representative and one city/town representative from each county in the MCE service area. Available seats on the Technical Committee are therefore first offered to any interested and applicable Board member whose county is not yet represented by one county and one city member. Interested members can be added at a meeting of the Board when "New Committee Members" is on the Agenda.

Current meeting date: First Thursday of each month at 9:00 am

### Scope

The scope of the MCE Technical Committee is to explore, discuss and provide direction or approval on issues related to electricity supply, distributed generation, greenhouse gas emissions, energy efficiency, [procurement risk management](#) and other topics of a technical nature.

Frequent topics include electricity generation technology and procurement, greenhouse gas accounting and reporting, energy efficiency programs and technology, energy storage technology, net energy metering tariff, local solar rebates, electric vehicle programs and technology, Feed-in Tariff activity and other local development, Light Green, Deep Green and Local Sol power content planning, long term integrated resource planning, regulatory compliance, [MCE's Energy Risk Management Policy \(ERMP\)](#), [procurement risk oversight](#), and other activity related to the energy sector.

### Authority of Technical Committee

- ~~Review and discuss new technologies and potential application within MCE~~
- Approval of and changes to MCE's Net Energy Metering Tariff
- Approval of and changes to MCE's Feed in Tariff
- Approval of annual GHG emissions level and related reporting
- Approval of MCE procurement pursuant to Resolution 2018-03 or its successor
- Approval of contracts with vendors for technical programs or services, energy efficiency program or services and procurement functions or services Approval of power purchase agreements
- Approval of adjustments to power supply product offerings
- Approval of the Integrated Resource Plan
- Receipt of reports from the Risk Oversight Committee (ROC) on at least a quarterly basis regarding the ROC's meetings, deliberations, and any other areas of concern
- Initiation of and oversight of a review of the implementation of the ERMP as necessary
- Approval of substantive changes to MCE's Energy Risk Management Policy (ERMP), including periodic review of the ERPM and periodic review of ERPM implementation



July 6, 2018

TO: MCE Executive Committee

FROM: David McNeil, Manager of Finance  
Katie Gaier, Manager of Human Resources

RE: New MCE Staff Position (Agenda Item #09)

ATTACHMENTS: A. Job Description – Finance Analyst  
B. Salary Analysis for Finance Analyst

Dear Executive Committee Members:

**SUMMARY:**

Due to the growth of the Agency, MCE requires additional inhouse resources to manage the finance area and support the work of the Manager of Finance. The responsibilities of the Finance Analyst would include assistance with; the preparation and management of budgets; cash, investments and accounts payable management; data and financial analysis; and the preparation of various reports. The responsibilities of the Finance Analyst are detailed in the attached Job Description.

Based on the salary analysis for the role set forth in Attachment B, it is recommended that the salary range for the position be set at \$72,509 - \$106,732. This range is based on consideration of similar positions in the labor market in the public sector.

**Fiscal Impact:** Approval of the proposed job description and salary range would not have a fiscal impact. Expenses associated with filling the proposed position are included in the FY 2018/19 budget.

**Recommendation:** Approve the proposed Finance Analyst job description and salary range.

CC: Vicken Kasarjian, Chief Operations Officer  
Sarah Estes-Smith, Director of Operations



## **Job Description Finance Analyst**

### **Summary**

The Finance Analyst works under the general supervision of the Manager of Finance and has responsibility for a wide range of matters to support MCE's finance efforts, including budgeting, treasury and cash management, strategic planning, risk management, data analysis, and financial controls.

The position requires general knowledge of business, budget and accounting principles and strong organizational, inter-personal and data analysis skills.

### **Class Characteristics**

A member of MCE's Finance team, the Finance Analyst performs assignments under the general supervision of Manager of Finance and also works closely with MCE's external consultants and insurance, banking and broker/dealer services providers. The Finance Analyst works closely with members of MCE's departments to support the budget, finance and other strategic objectives of the agency.

**Essential Duties and Responsibilities (Illustrative Only)** Conducts and summarizes comprehensive analytical studies of complex administrative, operational, financial and/or other organizational issues and performs statistical and other research as assigned

- Prepares and delivers oral and written reports based on information obtained through research and analysis
- Drafts recommended administrative procedures and/or operational policies in the assigned area of responsibility
- Coordinates and assembles a variety of administrative/financial/statistical information for manager's review
- Prepares a variety of professional reports, presentations, and correspondence
- Analyzes and initiates recommendations to improve and facilitate Agency programs, departmental procedures and outcomes
- Provides operational support for the Finance area

### **Budgeting**

- Update and maintain the accuracy of department Staffing Budgets and process approval of staffing change requests
- Assist with the development and regular maintenance of Departmental Budgets and other financial reports

- Monitor monthly budgets updates and work with Directors to identify potential variations from budget projections
- Implement procedures and coordinate with Staff and external consultants to update and maintain the accuracy of master budget worksheets and assist manager in preparing agency budgets and budget amendments
- Assist with developing systems to receive feedback to improve budget management
- Prepare staff reports and other presentation material for the Board and its Committees as needed under the direction of manager

#### Treasury and Cash Management

- Release payments via bill.com and complete wire transfers and ACH payments as needed
- Oversee bank balances to implement procedures to optimize liquidity and interest revenue
- Facilitate transfers to/from accounts with LAIF and/or broker dealer and custodian of MCE investments
- Provide periodic reporting for MCE investments
- Monitor EAL deposit requirements and make weekly payments to the CAISO for EAL deposits and regular invoices.

#### Strategic Planning

- Support strategic planning activities as directed by manager

#### Risk Management

- Under the direction of manager, implement a process for reviewing and updating the Draft Enterprise Risk Management, Risk Identification and Assessment
- Provide administrative support to Risk Oversight Committee as needed
- Under the direction of the manager, develop and implement systems to track and manage credit risks and collateral requirements
- Undertake review of insurance coverage requirements as directed and process insurance claims as needed

#### Data Analysis and Financial Controls

- Under direction of manager, develop and implement systems that ensure that operating activities are accounted for in a timely and accurate manner including but not limited to invoicing and payment processing
- Provide periodic compliance, financial and other reports to third parties as needed
- Assist with the development and implementation of annual financial audit plans
- Participate in and/or manage special projects, as assigned

#### **Supervisory Responsibilities**

This position may have lead worker or supervisory responsibility for administrative support staff and interns.

#### **Minimum Qualifications**

##### **Education/experience**

Education and experience equivalent to a bachelor's degree from an accredited university and a minimum of 3 years of progressively responsible experience in business operations, finance or accounting. Experience in the electric utility industry and working on or for a board of

directors is preferred though not required.

**Knowledge of**

- MCE's mission, vision, and goals
- Data and statistical analyses methodologies
- Budgets and budgeting
- Investing and investments and treasury management and fixed income instruments in particular
- Supervision or lead work in a public agency
- Microsoft Office Suite, with emphasis on advanced Excel skills, Adobe software, and project management programs such as SmartSheets.

**Ability to:**

- Manage multiple priorities and quickly adapt to changing priorities in a fast-paced dynamic environment.
- Take responsibility and work independently, as well as coordinate team efforts.
- Be thorough and detail-oriented.
- Work accurately and swiftly under pressure.
- Demonstrate patience, tact, and courtesy.
- Establish and maintain effective working relationships with persons encountering during the performance of duties.

**Language and Reasoning Skills:**

- Exercise sound judgment, creative problem solving, and commercial awareness.
- Develop high-quality writing, research and communication work products.
- Deliver clear oral communications.
- Interact professionally and effectively with developers and power brokers, commercial partners, MCE staff, and Board of Directors and its committees.
- Apply strong analytical and problem-solving skills.
- Manage projects and time efficiently

**Mathematical Skills**

Ability to add, subtract, multiply, and divide in all units of measure, using whole numbers, common fractions, and decimals. Ability to compute rate, ratio, and percent and to create and interpret bar graphs.

**Physical Demands**

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. While performing the duties of this job, the employee is frequently required to use hands to finger, handle, or feel and reach with hands and arms.

The employee must occasionally lift and/or move up to 20 pounds.

**Work Environment**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

The noise level in the work environment is usually moderate.

The incumbent must be able to travel between and work at any MCE office and to occasionally attend evening meetings.

**ADA Compliance**

MCE will make reasonable accommodations of the known physical or mental limitations of a qualified person with a disability upon request.



## Attachment B – Salary Analysis for Finance Analyst

<b>Finance Analyst</b>			
<b>Comparators at Government Agencies:</b>			
<b>Agency</b>	<b>Job Class Title</b>	<b>Bottom of Range (\$)</b>	<b>Top of Range (\$)</b>
Sacramento Municipal Utility District	Financial Analyst I	66,216	85,162
County of Sonoma	Department Analyst	67,330	81,835
Marin Municipal Water District	Finance Analyst	80,184	98,172
Modesto Irrigation District	Financial Analyst II	72,509	92,810
San Jose Clean Energy	Financial Analyst	85,229	104,208
Median of Comparable Positions:		72,509	92,810
		Median plus 15%	106,732
<b>Salary Range Recommendation:</b>			
<b>Agency</b>	<b>Job Class Title</b>	<b>Bottom of Range (\$)</b>	<b>Top of Range (\$)</b>
MCE	Finance Analyst	72,509	106,732
<b>Summary of MCE Methodology for Determining Salary Ranges:</b>			
Bottom of the Range: Median of Comparable Positions			
Top of the Range: Median of Comparable Positions plus 15%			
<b>Other jurisdictions reviewed:</b>			
City of Palo Alto	No Comparable Class		
County of Marin	No Comparable Class		
City of San Rafael	No Comparable Class		
Sonoma Clean Power	No Comparable Class		
Peninsula Clean Energy	No Comparable Class		
East Bay Community Energy	No Comparable Class		
Monterey Bay Community Energy	No Comparable Class		
Clean Power SF	No Comparable Class		