



**AGRICULTURE AND INDUSTRIAL ENERGY EFFICIENCY PROGRAM  
PROGRAM MANUAL**

**Agricultural and Industrial Resource (AIR) Program  
MCE10 & MCE11**

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# Program Manual Revision Log

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## Table of Contents

<b>Program Manual Summary .....</b>	<b>4</b>
1. Eligible Measures or measure eligibility .....	4
2. Customer Eligibility Requirements .....	4
3. Contractor Eligibility Requirements .....	6
5. Additional Services .....	7
6. Audits .....	9
7. Program payments and financing.....	9
8. Sub-Program Quality Assurance Provisions.....	12

## Program Manual Summary

This program manual provides an overview of MCE's Agricultural and Industrial energy efficiency programs. The manual describes the program's policies and procedures and provides a framework for managing and implementing the programs. The manual describes eligibility requirements, additional services, audit requirements, payment and financing options, as well as quality assurance provisions.

The MCE Agricultural and Industrial Resource Program (The MCE AIR Program, or the Program) is a comprehensive third-party program which will deliver reliable and persistent electric and gas savings for customers within MCE's service area. The program will include multiple participation pathways, including prescriptive, calculated, meter-based, and Strategic Energy Management (SEM). Customers will benefit from a comprehensive approach to energy efficiency, combining MCE's strong customer relationships and community presence, and ongoing communication with innovative methods, data-driven outreach and rigorous technical review of projects to move customers forward on their energy efficiency journey.

### 1. ELIGIBLE MEASURES OR MEASURE ELIGIBILITY

*Provide requirements for measure eligibility or a list of eligible measures.*

Through custom and prescriptive measures, SEM participation and meter-based savings, the Program will process applications for all energy savings projects claimed through the program duration. The Program will offer energy savings driven by cash incentives and project support services to customers that meet eligibility criteria and associated project qualification requirements. Sample measures included in The Program are listed below:

#### Process

- Heat Recovery
- Process Controls
- Process Optimization
- VFD on Process Fan
- VFD on Glycol Pump

#### Pumping

- VFDs on Well Pump
- VFDs on Booster Pump
- Irrigation Controls
- Pump Upgrades

#### Refrigeration

- Refrigeration Controls
- Evaporator Upgrade
- VFD on Condenser

#### Steam Systems

- Boiler Controls
- Economizer
- Blow Down Heat Recovery
- Insulation
- Boiler Upgrade

#### Compressed Air

- Pressure Drop Reduction
- Compressor Sequencing

#### Lighting

- Lighting Upgrades
- Lighting Controls

#### Other

- High efficiency ventilation fans and controls
- Low pressure Irrigation System
- Wastewater upgrades

### 2. CUSTOMER ELIGIBILITY REQUIREMENTS

*Provide requirements for program participation (e.g., annual energy use, peak kW demand)*

The Program intends comply with the California Public Utility Commission's (CPUC) Statewide Customized Offering Procedures Manual for Business on customer eligibility.

Projects are subject to all applicable federal, state and local laws, and California Public Utilities Commission (CPUC) rulings. MCE reserves the right to approve or reject project applications for the Program.”

**Facilities with the following characteristics are eligible to participate in The Program:**

- The facility where the project is being completed shall be located in MCE’s service territory.
  - MCE service territory includes all of Marin County and Napa County, unincorporated Contra Costa County and Solano County, and the cities of Benicia, Concord, Danville, El Cerrito, Lafayette, Martinez, Moraga, Oakley, Pinole, Pittsburg, Richmond, San Pablo, San Ramon, and Walnut Creek.
- Customer shall be a non-residential customer engaged in industrial or agricultural business or operations.
- Customer facility eligibility will be determined by MCE Programs staff and informed by NAICS codes, rate schedule, business profile, or other customer site characteristics.

The customer eligibility requirements as outlined in the Statewide Energy Efficiency Policy Manual are summarized below:

**Public Purpose Program (PPP) Surcharge**

Eligible customers must receive electrical or gas service from MCE or PG&E and pay the Public Purpose Program (PPP) surcharge on the gas or electric meter for which the energy efficiency equipment is proposed. The PPP surcharge information can be found on the utility bill.

**Non-IOU Supply**

Evaluation requires assessment of “coincident savings”, which are savings associated with an energy efficiency measure that coincide with the period(s) the customer is purchasing energy from PG&E or MCE, thus reducing the grid/system impact. The time period is hourly for electricity and monthly for natural gas.

Eligibility is determined based on two factors:

1. Does the customer pay the non-bypassable Public Purpose Program (PPP) surcharge on the electricity or gas subject to energy efficiency savings?
2. Are there electric grid/gas system coincident savings?

To qualify for energy efficiency incentives, the customer’s reduction in energy usage due to the energy efficiency measure, must always occur on the grid/system at times when the energy efficiency measure is operational, and its energy resource requirement is being met.

**Minimum Customer or Project Size**

Currently, there are no customer or project size limitations or usage threshold requirements to qualify for Program participation.

**Double Dipping**

The Program team will work with the customer to validate that it has not received incentives or services for the same energy efficiency technologies and measures that it is applying for with the program. MCE and PG&E collaborate via a separate Joint Cooperation Memorandum to ensure that double dipping does not from each PA.

The customer Program Application provides the following statements that each participating Customer will validate:

- Customer understands that Customer cannot receive incentives for the same product, equipment or service from more than one California investor-owned utility or third-party Energy Efficiency program offering incentives for the same product, equipment, or service funded by the CPUC.
- Customer understands this prohibition applies three years prior to and three years after receiving the incentives for the same product, equipment or service.

### **Application Must be Complete**

A program application must be signed and dated. In addition to customer and site information, a completed application package must include a savings summary that identifies the following for each proposed measure for all custom and SEM project enrollments:

- A) Code/ISP baseline
- B) For Early Retirement claims: Documentation to support a preponderance of evidence for the use of existing equipment baselines
- C) Estimated full measure cost and incremental measure cost
- D) Preliminary savings calculations
- E) Preliminary incentive payment estimates
- F) A proposed M&V plan

## **3. CONTRACTOR ELIGIBILITY REQUIREMENTS**

*List any contractor (and/or developer, manufacturer, retailer or other “participant”) eligibility requirements (e.g. specific IOU required trainings; specific contractor accreditations; and/or, specific technician certifications required).*

The Program will operate in compliance with the workforce qualifications, certifications, standards and requirements set forth by the Workforce Standards as required by Decision 18-10-008. Customers will be notified of the workforce standard during initial engagement in the program. Customers will be required to accept understanding of the workforce standards on the enrollment agreement prior to ordering and installation of equipment. Customer will also verify that workforce standards were met as part of the project completion certificate that will be signed upon project completion. The workforce standards are described below.

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

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

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

## **4. PARTICIPATING CONTRACTORS, MANUFACTURERS, RETAILERS, DISTRIBUTERS**

Not applicable: *For upstream or midstream incentive and/or buy down programs.*

## **5. ADDITIONAL SERVICES**

*Briefly describe any additional sub-program delivery and measure installation and/or marketing & outreach, training and/or other services provided, if not yet described above*

### **Single Point of Contact (SPOC) and Other Customer Resources**

MCE and CLEAResult will maintain an up-to-date summary of customer resources and programs, including but not limited to energy efficiency information. Anticipated resources include financing opportunities, grant opportunities, local government initiatives and coordination with other community or business sector groups. MCE’s SPOC model will provide personalized attention, follow-through, and assistance in identifying solutions that meet customers’ needs, budget, and levels of readiness for change (thereby minimizing the barriers that often plague projects during the initial phases). Customer needs and goals may sometimes fall outside of the core focus of the energy efficiency offering, however, MCE views the SPOC role as critically important in achieving broader customer sustainability goals and maintaining excellent standards in customer service.

### **Safety**

MCE’s program implementer, CLEAResult has a comprehensive safety program that employees are responsible for participating in as a condition of employment. The CLEAResult safety program includes required safety training for all employees, dedicated office and regional safety teams, policies and procedures for identifying safety hazards, and reporting incidents and maintaining a safe and healthy workplace. Specific guidance is established for program staff conducting on-site visits. All CLEAResult employees working on the MCE program will adhere to these policies and procedures during the implementation of the program.

Established practices include, but are not limited to:

- a. Office safety
- b. Safe driving
- c. On-site inspection protocols

## Marketing

### Customer Outreach:

Direct customer outreach will be the key tactic to drive customer participation. Program staff's outreach and account management team will focus on face-to-face meetings, email and phone calls to create and sustain relationships and drive market transformation. The strategies outlined below will be continuously built upon by the outreach team as the Account Managers continue to engage more deeply in the market. Regular review should be conducted of these resources to assess relevance, and to make sure there are adequate resources to drive the desired results.

Lead generation will come from a variety of sources including:

- Market research conducted through online searches.
- Coordination with MCE to identify customers, optimize opportunities, and improve the outreach process.
- MCE Account Managers will develop, and document leads through correspondence with key accounts, Deep Green customers and Deep Green enrollments, community groups, etc.
- MCE "Power Hour" workshops targeting specific customer groups.
- Leveraging manufactures and distributors to increase pipeline opportunities using a "push/pull" approach:
  - Find customers and through vendor leads.
  - Help customers identify potential vendors as applicable.
- Targeting of Industry potential through quick win measures, NAICS industry codes, and regional segmentation.
- Engage with industry organizations to gain customer leads, market intelligence, and exposure to potential new technologies.

SEM Recruitment includes the following steps:

- Determine prospective companies
- Touch base with existing contacts
- Pitch the program
  - Flyer (paper or electronic)
  - Talk to past participant(s)
  - Trade Forums
  - Individual presentations etc.
- Participants execute an enrollment agreement
- Set up meeting with SEM coach for site kick off activities

### Support Tactics:

Other marketing tactics that will support customer lead generation and account management include:

- Collateral: Educational materials that convey the energy and non-energy benefits associated with custom projects and other offerings. These materials will educate customers about the long-term benefits of energy efficiency, available incentives, and other programs that may help. Program collateral will include:
  - Program overview
  - Industry specific info sheets
  - Measure specific info sheets
- Case Studies: Descriptions of specific projects that have been implemented by customers in California will be a key tool for account managers to use in encouraging customers to participate. Case studies will

be developed for a wide variety of measures and industry types in order to equip the outreach team with specific examples of completed projects to use for customer education.

- **Web Content:** The program will use the MCE site to promote the program and provide valuable information to potential customers and other stakeholders. Initial content includes incentive details, FAQs, and high-level program information and will be supplemented by case studies and other collateral as developed. Customers visiting the website will be able to access the customer portal as well as contact information for our account management team.
- **Customer Portal:** The online portal can offer customers a one-stop-shop with projects updates and info, including a registration portal and access to project tracking.
- **Trade Associations and Community Organizations:** Trade associations are trusted partners in the business community and provide another avenue for reaching target sectors. Program staff will connect with local trade associations, chambers of commerce, and business leader groups to raise program awareness.

## 6. AUDITS

Pre and post audits are required for all projects leveraging custom, SEM and NMEC savings claims. Projects that rely solely on deemed measures will receive post-audits on a random selection basis. There is no specific funding, incentive, or eligibility requirement to receive audits.

### Access to Customer Sites

The Program Implementer shall be responsible for obtaining any and all access rights from customers and other third parties to the extent necessary to perform the Services. Implementer shall also procure any and all access rights from Implementer Parties, customers and other third parties in order for MCE and CPUC employees, representatives, designees and contractors to inspect the Services.

For all energy efficiency projects, MCE reserves the right to perform pre and/or post audits to verify information pertinent to the energy efficiency projects. Project audit selection may include consideration of incentive size and/or measure eligibility or other factors at the discretion of MCE.

- a. For Custom and Deemed measures, this includes confirming nameplate information, counts of installed equipment, confirmation that equipment is functional, confirmation of pre/post operating parameters of equipment or systems, review of processes and/or process documentation, etc. Sub-metering, building automation system access, or other additional data acquisition may be necessary.
- b. For NMEC and SEM measures, this includes verification of modeling assumptions and calculations, including but not limited to production data, operating hours, weather data.

## 7. PROGRAM PAYMENTS AND FINANCING

The Program is funded by California utility ratepayers under the auspices of the California Public Utilities Commission. Customers are not obligated to purchase any full fee service not funded by this program.

## Program Incentives

Program funds are available on a first-come, first-served basis until depleted. Incentives will be paid based on verified energy savings.

Incentive levels have been determined based on the expected market potential for cost effective measures. The increased incentive amount of the programs “Targeted” measures is designed to encourage the penetration of the most cost-effective measures as established by the Total Resource Costs Test. The incentive levels prescribed for SEM participants has been set such that The Program is consistent with the other Program Administrators. An Early Adopter bonus is additionally proposed to encourage new program participants to complete projects by December 31, 2019. The bonus is designed to reward eligible customers for the increased risk perceived by a new energy efficiency market program. While the Program’s intent is to maintain consistent incentive rates throughout the duration of the program, incentive rates are subject to change at any time based on budget availability for new participants.

### Custom and NMEC:

Table 1 – Custom and NMEC Incentive Rates

Incentive Rates	\$/kWh	\$/therm
Targeted Measure	\$0.20	\$1.50
Standard Measure	\$0.15	\$1.50
Early Adopter Multiplier	20%	20%

Table 2 – Custom, Deemed and NMEC Incentive Payment Timeline

Measure Platform	Payment Timeline
Custom	100% of the incentive will be paid upon project completion and verification of energy savings
Deemed	100% of the incentive will be paid upon project completion and verification of energy savings
NMEC	20% of the Year 1 estimated incentive will be paid upon full execution of the NMEC Enrollment Agreement
	100% of the Year 1 incentive minus the progress payment will be paid upon MCE approval of Year 1 savings model
	100% of the Year 2 incentive will be paid upon MCE approval of Year 2 savings model

**SEM:**

Table 3 – SEM Milestone Incentive Payments

Milestone	Quantity	Rate
Initial: Energy and Relevant variable Data and Workshop Attendance	1 per participant	\$2,000 per participant
Subsequent: Updated Data and Opportunity Register	4 per participant	\$1,000 per participant

Table 4 – SEM Measure Savings Incentive Rates

Category	\$ / kWh	\$ / Therm
BRO Measure Savings	\$0.03	\$0.25
Custom Targeted Measure Savings	\$0.20	\$1.50
Custom Standard Measure Savings	\$0.15	\$1.50

Table 5 – SEM Incentive Payment Timeline

Incentive	Deliverable
Payment #1 (Milestone)	<ol style="list-style-type: none"> <li>1. Provide Program with one year of approved historical energy data</li> <li>2. Attend workshop #1</li> </ol>
Payment #2 (Milestone)	<ol style="list-style-type: none"> <li>1. Provide Program with at least six months of approved post baseline energy data and relevant variable data</li> <li>2. Provide updated opportunity register to SEM Coach</li> <li>3. Attend workshops #2 and #3</li> </ol>
Payment #3 (Measure Savings)	Verified savings from SEM Model for year 1
Payment #4 (Milestone)	<ol style="list-style-type: none"> <li>1. Provide program with approved 12-mnth post baseline energy data and relevant variable data</li> <li>2. Provide updated opportunity register to SEM Coach</li> <li>3. Attend workshops #4 and #5</li> <li>4. Implement at least one O&amp;M project in year 1</li> </ol>
Payment #5 (Milestone)	<ol style="list-style-type: none"> <li>1. Provide program at least four months of approved energy and relevant variable data</li> <li>2. Provide updated opportunity register to SEM Coach</li> <li>3. Attend workshop #6</li> </ol>
Payment #6 (Milestone)	<ol style="list-style-type: none"> <li>1. Provide program with final 24 months of energy and production data</li> <li>2. Provide updated opportunity register to SEM Coach</li> <li>3. Attend workshops #7 and #8</li> </ol>

	4. Implement at least one O&M project in year 2
Payment #7 (Measure Savings)	Verified savings from SEM Model for year 2

## Financing

The Program will maintain a comprehensive list of financing resources (e.g. loan programs, grant programs, utility financing, PACE, ESCO opportunities, etc.) available to participating customers, updated on an on-going basis as opportunities change.

At the outset of the Program's launch, Program staff will facilitate enrollment in PG&E's On-Bill Energy Efficiency Financing (OBF) Program. Program staff will coordinate regularly with MCE and OBF Program staff to best communicate funding availability and customer and project eligibility requirements.

## 8. SUB-PROGRAM QUALITY ASSURANCE PROVISIONS

*Please list quality assurance, quality control, including accreditations/certification or other credentials*

The Program will use a comprehensive quality management process that features immediate feedback and assistance to all participants. The process includes Quality Assurance (QA) that focuses on staff training, consistent processes, and data review, as well as Quality Control (QC) that focuses program resources on those projects and participating vendors that need the most attention.

### Quality Assurance

The Program will train program staff and participants on program processes and standardized work specifications by program measure.

- The Program will proactively seek feedback from all stakeholders, MCE, customers, and vendors, to ensure that the program is continuously improving in its approach to market and provision of QA/QC.
- The Program will address any complaints regarding a specific project, or company.
- The Program will track all customer and participating vendor complaints from initiation to resolution and notify MCE where there is a pending dispute or recurring/systemic issues.

### Data Review:

Program staff will utilize program-specific checklists to verify completeness, accuracy, and eligibility of each application. The data review is composed of:

- Documentation supporting pre-implementation energy use associated with the measure(s) included in the application.
- Dated, itemized invoices and proof of payment, including:
  - Equipment quantities, model numbers, material costs and shipping address to verify purchase of equipment associated with incentive.
  - Installation, consulting and other services necessary to deliver identify, scope, plan, install and verify installation of measures.
- Manufacturers' specification sheets for each qualifying equipment type to verify the equipment meets the minimum efficiency standards necessary to deliver the energy savings estimated in the application.

- Energy savings calculations, and (as needed) pre/post-implementation data for equipment and systems affected.

## Quality Control

The Program requires on-going quality control activities to ensure that each project has been designed and installed properly and documented accurately. This is necessary in order to ensure that quality work is performed for the customer and that well documented savings are provided for the Program. The QC process helps ensure savings integrity to maintain high realization rates. This includes:

- Verification of the energy baseline created to define the savings available from the proposed measure(s). This includes confirmation of existing energy use patterns over a defined time period, facility/ process hours of operation and any weather/temperature impacts.
- Pre and post-installation field inspections based on defined sampling criteria.
- Verification of data submitted through routine checks to ensure data consistency and integrity.
- Feedback of data analysis to program participants, and feedback collected through customer surveys.

## Application Review

### Administrative Review

Program staff will perform administrative review on 100% of all applications for customer incentives to ensure eligibility and qualification.

### Technical “Desk” Review

Program staff will perform a “desk” review on 100% of all applications for customer incentives to ensure technical eligibility and qualification. Additionally, these reviews will validate energy savings estimates.

### Pre- and Post-Inspection Assignments & Rates

All funded projects will be subject to random inspection based on the sampling rate defined below.

Table 6 – Custom Projects Inspection Sampling Rates

CUSTOM PROJECTS	SAMPLING RATE	
	PRE-INSPECTION	POST-INSPECTION
Custom Large Projects (>750K kWh, or 300K therms)	100%	100%
Custom Medium Projects (250K-750K kWh or 100K-300K therms)	50%	50%
Custom Small Projects (below 250K kWh or 100K therms)	20%	20%

Table 7 – Deemed Projects Inspection Sampling Rates

DEEMED PROJECTS	SAMPLING RATE	
	PRE-INSPECTION	POST-INSPECTION
DEEMED Large Projects	10%	10%

DEEMED Medium Projects	10%	10%
DEEMED Small Projects	10%	10%