September 1, 2020

CA Public Utilities Commission

Energy Division

Attention: Tariff Unit

505 Van Ness Avenue, 4th Floor

San Francisco, CA 94102-3298

**MCE Advice Letter XX-E**

**Re: Marin Clean Energy’s 2021 Energy Efficiency Annual Budget Advice Letter**

Pursuant to Decision (“D.”) 15-10-028, *Decision Re Energy Efficiency Goals for 2016 and Beyond and Energy Efficiency Rolling Portfolio Mechanics*,[[1]](#footnote-1) and D.18-05-041, *Decision Addressing Energy Efficiency Business Plans*,[[2]](#footnote-2) Marin Clean Energy (“MCE”) submits it Annual Budget Advice Letter (“ABAL”) for Program Year (“PY”) 2021 as MCE Advice Letter (“AL”) XX-E.

**Tier Designation:** This AL has a Tier 2 designation pursuant to Ordering Paragraph (“OP”) 4 of D.15-10-028.

**Effective Date:** Pursuant to G.O. 96-B, MCE requests that this Tier 2 AL become effective on October 14, 2020, which is 30 calendar days from the date of this filing.

# **Purpose**

The purpose of this advice filing is to request approval of MCE’s proposed energy efficiency (“EE”) budget for Program Year 2021. This AL complies with D.15-10-028 and D.18-05-041, which requires MCE to file an ABAL by September 1, 2020. The ABAL provides information about MCE’s approved EE portfolio, including (1) cost effectiveness; (2) budgets; (3) energy savings; and (4) portfolio and program changes.

# **Background**

MCE has been administering EE funds under California Public Utilities Code (“Code”) Section 381.1(a)-(d) since 2013.[[3]](#footnote-3) The California Public Utilities Commission (“Commission”) originally restricted MCE’s energy EE programs to serving gaps in Investor Owned Utility (“IOU”) programs and hard to reach markets.[[4]](#footnote-4) At the time, the Commission acknowledged that these restrictions may cause MCE’s portfolio to fail the Total Resource Cost (“TRC”) test and thus did not initially impose a minimum cost effectiveness requirement on MCE.[[5]](#footnote-5) In 2014, however, the Commission lifted the restrictions and imposed the same cost effectiveness requirements on CCAs as IOUs.[[6]](#footnote-6)

Program Administrators (“PA”) were invited to submit business plans in 2017. On January 17, 2017, MCE filed a Business Plan with the Commission that requested authorization to expand MCE’s EE portfolio to include additional sectors and programmatic offerings.[[7]](#footnote-7) MCE proposed to offer programs in the following sectors: (1) Residential; (2) Commercial; (3) Industrial; (4) Agricultural; and (5) Workforce Education and Training. On June 5, 2018, the Commission approved MCE’s Business Plan in D.18-05-041.[[8]](#footnote-8)

# Discussion

## Budget and Energy Savings

In approving PAs’ business plans in D.18-05-041, the Commission required ABALs to address both energy savings and budget forecasts. In the Decision, the Commission approved annual and total funding levels for MCE’s EE portfolio for PYs 2018-2025 for each of MCE’s proposed sectors.[[9]](#footnote-9) Even though, the Commission approved annual and total budgets in the Business Plan Decision, the Commission directed PAs to use the ABAL as an opportunity to adjust their annual budgets “to reflect the 2018-2030 goals adopted in Decision 17-08-025 and the interim greenhouse gas adder adopted in Decision 17-08-022 and other relevant factors to provide a more accurate forecast of expected annual funding levels.”[[10]](#footnote-10) The revisions, however, “must not exceed the overall funding amount” authorized in D.18-05-041, which caps PAs’ total spending for the period 2018-2025.[[11]](#footnote-11)

Table 1: MCE Forecasted 2021 Budget and Savings (Net)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sector** | **Program Year Budget** | **kWh** | **kW** | **Therms (MM)** |
| Residential | $2,478,152 | 6,365,071 | 45 | 0.05 |
| Commercial | $3,365,214 | 5,966,124 | 228 | 0.09 |
| Industrial | $869,606 | 1,367,185 | 32 | 0.16 |
| Agriculture | $467,679 | 902,787 | 116 | 0.02 |
| Emerging Tech | $0 | n/a | n/a | n/a |
| Public | $0 | n/a | n/a | n/a |
| Codes and Standards | $0 | n/a | n/a | n/a |
| WE&T | $346,667 | n/a | n/a | n/a |
| Finance | $0 | n/a | n/a | n/a |
| OBF Loan Pool | $0 | n/a | n/a | n/a |
| **Subtotal** | **$7,527,318** | **14,601,167** | **421** | **0.32** |
| **PA EM&V** | $120,437 |  |  |  |
| **Total Spending Budget** | **$7,647,755** |  |  |  |
| **Uncommitted and Unspent Carryover Balance[[12]](#footnote-12)** | $4,691,076 |  |  |  |
| **Total Budget Request[[13]](#footnote-13)** | **2,956,679** |  |  |  |
| **Authorized PY Budget Cap**  **(D.18-05-041)** | $12,404,000 |  |  |  |

MCE requests Pacific Gas and Electric Company (“PG&E”) provide the 2021 budget, including electricity and natural gas energy funding to MCE via quarterly transfers as calculated in the table below.

Table : Quarterly Fund Transfer from PG&E to MCE

|  |  |  |
| --- | --- | --- |
| **Fuel Type** | **2021 Budget Request** | **Quarterly Transfer** |
| Total Electric Budget | TBD | TBD |
| Total Gas Budget[[14]](#footnote-14) | TBD | TBD |
| **Total** | **$2,956,679** | **TBD** |

## Cost-Effectiveness

Decision 18-05-041 provided guidance to Commission staff on how to evaluate PAs’ ABALs, which included guidance on portfolio cost effectiveness.[[15]](#footnote-15) For PYs 2019-2022, PAs’ portfolios must meet a forecasted TRC at or above 1.0. For PYs 2023-2025, PAs’ portfolios must meet a forecasted TRC at or above 1.25.

In the event a PA does not meet a TRC of 1.25 on a forecast basis for PYs 2019-2022, ABALs must contain additional discussion about how the PA intends to meet or exceed a 1.0 TRC on an evaluated basis.

MCE’s forecasted portfolio TRC and program administrator cost ratio (“PAC”) without market effects for 2021 are provided below.

### 2021 Program Year Cost Effectiveness

Table 3: MCE Forecasted Portfolio TRC, PAC, and RIM for PY 2021

|  |  |
| --- | --- |
| **TRC** | 1.05 |
| **PAC** | 1.14 |
| **RIM** | 1.14 |

Table 4: MCE Forecasted Sector-Level TRC and PAC for PY 2021

|  |  |  |  |
| --- | --- | --- | --- |
| **Sector** | **TRC** | **PAC** | **RIM** |
| Residential | 0.55 | 0.56 | 0.56 |
| Agricultural | 1.62 | 1.90 | 1.90 |
| Commercial | 1.29 | 1.41 | 1.41 |
| Industrial | 1.57 | 1.92 | 1.92 |
| WE&T | 0.00 | 0.00 | 0.00 |

Table 5: Forecasted Program-Level TRC and PAC for 2021

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Program ID** | **TRC** | **PAC** | **RIM** |
| Multifamily Comprehensive | MCE01 | 0.45 | 0.53 | 0.53 |
| Commercial | MCE02 | 1.29 | 1.41 | 1.41 |
| Single Family Comprehensive | MCE07 | 0.98 | 0.98 | 0.98 |
| Single Family Direct Install | MCE08 | 0.32 | 0.32 | 0.32 |
| Industrial | MCE10 | 1.57 | 1.92 | 1.92 |
| Agricultural | MCE11 | 1.62 | 1.90 | 1.90 |
| Workforce, Education and Training (WE&T) | MCE16 | 0.00 | 0.00 | 0.00 |
| MCE EM&V | MCE98 | 0.00 | 0.00 | 0.00 |

### Forecasted, Claimed, and Evaluated Cost Effectiveness Information for Previous Years

Table : Actual Annual Expenditures for MCE Programs for 2018 and 2019

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | **2018** | | **2019** | |
| **Program ID** | **Program Name** | **Authorized Budget** | **Annual Expenditures** | **Authorized Budget** | **Annual Expenditures** |
| MCE01 | Multifamily | $728,686 | $558,107 | $1,074,957 | $585,858 |
| MCE02 | Commercial | $816,745 | $617,207 | $1,185,725 | $643,277 |
| MCE03 | Single Family Seasonal Savings | $232,250 | $137,360 | n/a | n/a |
| MCE04 | Financing | $27,031 | $18,524 | n/a | n/a |
| MCE05 | Multifamily Direct Install | n/a | n/a | $296,971 | $158,936 |
| MCE07 | SF Comprehensive | n/a | n/a | $1,965,535 | $295,218 |
| MCE08 | Single Family Direct Install | n/a | n/a | $419,501 | $190,211 |
| MCE10 | Industrial | n/a | n/a | $690,423 | $113,244 |
| MCE11 | Agricultural | n/a | n/a | $766,449 | $93,617 |
| MCE16 | WE&T | n/a | n/a | $160,000 | $0 |
| MCE98 | EM&V | $30,029 | $16,590 | $111,143 | $95,351 |
| **Portfolio Total** | **Portfolio** | **$1,831,741** | **$1,347,788** | **$6,779,704** | **$2,262,703** |

Table : Claimed TRC and PAC for MCE EE Programs for 2018 and 2019

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Program** | **TRC Ratio** | **PAC Ratio** |
| 2019 | Commercial | 0.48 | 0.49 |
| 2019 | Multifamily | 0.21 | 0.4 |
| 2019 | Single Family | 2.12 | 2.12 |
| 2019 | Multifamily DI | 0.00 | 0.00 |
| 2019 | Single Family DI | 0.09 | 0.09 |
| 2018 | Commercial | 1.04 | 1.21 |
| 2018 | Multifamily | 0.12 | 0.67 |
| 2018 | Single Family | 0.80 | 0.80 |

Table : Claimed First Year Net Savings for MCE EE Programs for 2018 and 2019

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Year** | **Program** | **Net kW** | **Net kWh** | **Net Therms** |
| 2019 | Commercial | 211 | 1,005,902 | -6,193 |
| 2019 | Multifamily | 19 | 156,391 | 10,591 |
| 2019 | Single Family | 0 | 344,212 | 112,363 |
| 2019 | Multifamily DI | 0 | 41 | 4 |
| 2019 | Single Family DI | 0 | 6,110 | 1,166 |
| 2018 | Commercial | 126 | 823,364 | -889 |
| 2018 | Multifamily | 8 | 151,217 | 16,468 |
| 2018 | Single Family | 19 | 185,010 | 54,801 |

### Cost-Effectiveness Challenges

Forecasting a portfolio TRC of 1.25 is especially challenging for 2021. MCE identified a set of factors that resulted in a TRC forecast below 1.25 in 2021.

#### COVID-19 Impacts

The COVID-19 pandemic has created major disruptions in the energy efficiency industry.

* There is a great deal of uncertainty around COVID-related impacts on energy consumption and therefore energy savings potential, which vary significantly by customer sector, programs, and individual customers. Overall, Residential energy consumption has increased while Commercial energy consumption has decreased dramatically. This is especially challenging for NMEC or pay-for-performance programs.
* COVID-19 is placing additional administrative work on Program Administrators to be able to assess the impacts it will have on our programs and to best continue serving our customers and work with our implementers. MCE has spent many hours over the last 4 months working both the assessment of the impacts of Covid-19 as well as to develop mitigation strategies. This includes, but is not limited to, (1) developing new models and methodologies to assess the impacts of COVID on MCE’s operations and programs; (2) working with implementers to assess impacts on their operations and our program participants, and identifying new and innovative approaches to make our programs accessible to customers; and (3) identifying EM&V impacts and modifications. These activities will continue beyond 2020. Therefore, the time spent on these efforts must be considered when evaluating the 2021 ABAL.
* It is difficult to predict customers’ willingness and motivation to participate in energy efficiency programs during the pandemic.

#### Cost-Effectiveness Framework

The Total Resource Cost (“TRC”) test as currently implemented does not appropriately value energy efficiency. Non-energy costs, such as the net participant cost or costs from non-resource/ equity programs are included in the TRC while their non-energy benefits (“NEBs”) are not considered. The asymmetry between costs and benefits shrinks the pool of available cost-effective savings to the point where it is difficult to be both cost effective and achieve aggressive energy savings goals.

Furthermore, pursuing a 1.25 TRC at a portfolio level requires making cuts to services that help our most disadvantaged customers, for example a multifamily energy efficiency program that serves affordable properties, or a residential direct install program that provides no cost upgrades to middle income customers who cannot afford to invest in efficiency.

#### Avoided Cost Calculator (ACC) Update

The timing and uncertainty of the avoided costs calculator (ACC) updates do not allow PAs the opportunity to perform proper portfolio planning to ensure a cost-effective filing. The ACC was adopted on June 25 and subsequently incorporated into CEDARS production on July 16. MCE was already well into the portfolio planning process by the time and had to rely on the previously avoided cost version to forecast its portfolio for the 2021 program year. It can be difficult to predict the magnitude or direction of the annual ACC update. Many programs require more than one year to plan, launch, develop a pipeline and see projects through to completion. Annual avoided cost updates create uncertainty that undermines long term program planning.

### Portfolio Strategies to Increase Cost-Effectiveness in 2021

While no one can predict the extent of the COVID-19 situation and its impact as they are still unfolding, we are continuing to adapt and committed to serving our customers well during this uncertain time. MCE is more confident in meeting the evaluated TRC requirement of 1.0 due to the following reasons.

#### Program Launches and Ramp Up

* MCE has launched and ramped up five new programs since Business Plan approval and expects to generate savings in 2020 and 2021. Additionally, MCE’s agricultural, industrial, and commercial programs are expected to deliver cost-effective savings to help offset some of the less cost-effective programs in MCE’s portfolio.
* MCE is preparing to roll out energy efficiency programs to MCE’s two newest communities Pleasant Hill and Vallejo.

#### New Implementation Strategies

* The modifications to the former three-prong-test have paved a way for the inclusion of fuel substitution measures in energy efficiency portfolios. MCE is incorporating fuel substitution measures into its 2021 portfolio as a viable long-term strategy for California to meet its carbon reduction goal.
* Most custom and deemed energy efficiency programs focus on above code savings, using code and industry-standard practice (ISP) as baselines to determine savings. By using NMEC, MCE can focus on increasing the energy efficiency of existing buildings in its Commercial sector to unlock to-code savings that are often left stranded. Additionally, this population-level NMEC component will align energy efficiency procurement with the program’s delivered net benefits, by incentivizing time-dependent savings, thoughtful measure selection, and customer targeting focused on load shape and demand profiles.
* MCE deployed Strategic Energy Management (SEM) and Behavioral Retro commissioning, and Operational (BROs) participation pathways in its energy efficiency programs. MCE designed these participation pathways to help large Industrial, Agricultural, and Commercial customers overcome the multiple barriers associated with cost-effective energy efficiency investments.
* MCE improved program coordination and referral systems with other partner programs to improve cost-effectiveness without limiting opportunities for customers.

#### AMI Analytics

* MCE is leveraging new AMI data flows and analytics tools to understand COVID impacts. With AMI data available from across our service area, and an effective project “start” date (when shelter in place orders took effect), MCE now has insights into the highly variable load shape and demand impacts that COVID has had on our nonresidential customers - in aggregate and by sector. Insights from the COVID analytics work will be applied to program implementation and planning.

## Proposed Portfolio and Program Changes

### New Program to be Launched in 2021

MCE is not proposing new programs for 2021.

### Program Cancellation

**Multifamily Direct Install Program:**

The Multifamily Direct Install program provided no-cost EE measures to eligible homeowners and tenants in multifamily dwellings in MCE’s service area. This program targeted (but is not limited to) customers in Disadvantaged Communities (DACs) whose household income exceeds 200% of the Federal Poverty Guidelines (FPG). The targeted group’s income exceeds the limit to receive services through programs like PG&E’s Energy Savings Assistance Program (ESA) and MCE’s Low-Income Families and Tenants (LIFT) Program, yet customers are still income constrained (lower middle-income). While there is no income cap to participate in the program, the program targets renters in particular neighborhoods to ensure that lower middle-income customers are reached. The goal is to introduce this market sector to the concepts of energy efficiency, provide upgrades that reduce household energy consumption and encourage a pathway toward deeper energy retrofits offered through existing and emerging market rate programs and technologies. EE measures included low-flow showerheads (with and without thermostat), shower restriction valve (TSV), kitchen faucet aerators, and 11W screw-in LEDs. The program also offered a limited number of electric heat pump replacement for electric water heaters. MCE ended this program as it was not found to be cost effective as a result low participation, limited deemed measure offerings due to workpapers expiring, and COVID impacts.

**Single Family Seasonal Savings:**

This program offered customers the opportunity to make their cooling and heating schedules more efficient through a series of small adjustments to scheduled temperatures by a software algorithm. Customers were offered the program on their thermostat and/or through a phone app and must opt-in to participate. MCE decided to end this program in 2019 after the ABAL was filed due to not being able to get a new contract in place.

### Programs with Changes

**MCE02: Commercial Upgrade Program**

The Commercial Upgrade Program targets commercial customers in MCE's service area. Its primary objectives are to facilitate the uptake of high-quality EE projects, and to improve the technical capability, pricing and program experience of both customers and the local contractor community. The program aims to achieve these objectives by supporting customers and contractors in the development of their projects – including equipment specification, incentives and technical assessments – but also by providing a number of participation pathways that streamline the program experience and maximize customer benefit. The program is not restricted to a deemed measure list, or program-mandated business size or load requirements. Instead, the program is open to nearly any non-residential customer and provides varied participation pathways which include deemed, custom, Normalized-Metered Energy Consumption (NMEC) and Strategic Energy Management (SEM). The program contracts with multiple implementation partners in the delivery of this program. Common measures include interior and exterior LED luminaires and lamps, networked lighting controls, connected thermostats, HVAC equipment, advanced rooftop controllers, ductless heat pumps, heat pump water heaters and other measures which may apply to customers in retail, office, and other non-residential building types.

MCE expects an expansion of the Commercial Upgrade Program in 2020 and 2021, primarily rooted in the development of population-level NMEC portfolios.

**MCE07: Single-Family Comprehensive**

In May 2020, MCE launched a downstream program for selected eligible customers to receive Home Energy Reports (HERs) at regular intervals to encourage energy- and money-saving behavioral changes. The program’s treatment group will receive a series of HERs and, if enrolled in the digital platform, digital energy budget reports and alerts, as well as access to a web portal where they can learn about additional savings potential. Customers have been enrolled into the program in compliance with the measurement and verification (M&V) plan filed with the California Public Utilities Commission (CPUC) and all current CPUC behavioral NMEC program rules and requirements. The program will monitor participant eligibility on an ongoing basis, removing participants who no longer wish to participate or otherwise become ineligible to participate.

MCE is expanding the SF Comprehensive program to include behavioral messaging to an additional 100 thousand customers.

**MCE16: Workforce, Education, and Training (“WE&T”):**

In May 2020, MCE’s WE&T program was launched. The scope of work includes three elements: workforce engagement, MCE program-participating contractor engagement, and new workforce development.

Regarding workforce engagement, MCE and its program implementer will leverage existing relationships with industry groups to facilitate roundtable events that can increase the interest, and subsequent participation of residential contractor companies and their staff in high-performance building training. Outreach efforts will include participating contractors from disadvantaged communities and minority-focused groups to ensure diversity, equity, and inclusion. MCE will also leverage relationships with participating contractors and other vendors to gain insight into the barriers to electrification and high-performance building work.

Furthermore, MCE aims to provide contractors who participate in MCE programs with the fundamental building performance knowledge they need to understand how to deliver maximum value and performance within their trade and how their work can impact on the building systems or trades that they do not work on. MCE will provide participating contractors with field mentorships. Based on industry roundtables and field mentoring, MCE will establish a priority list of electrification topics for which there is an additional training need and will develop and deliver workshops for each of the identified topics.

Finally, MCE will prepare an internship program to provide job seekers home performance, energy efficiency, and safety with on-the-job training in their desired specialty. This program component will be based on feedback from industry roundtables, participating contractor field mentorships, and direct contractor outreach. The internship component is expected launch in 2021

## Metrics

Pursuant to D.18-05-041, measured progress through 2019 for sector-level metrics can be found in MCE’s 2019 Annual Report Excel file.[[16]](#footnote-16)

1. D.15-10-028, Ordering Paragraph (“OP”) 4 at p.123. [↑](#footnote-ref-1)
2. D.18-05-041, OP 37, 40, 41, 44 at p. 190ff. [↑](#footnote-ref-2)
3. To date, MCE is the only community choice aggregator (“CCA”) to have requested energy efficiency funding under Code Section 381.1(a)-(d). [↑](#footnote-ref-3)
4. D.12-11-015 at pp.45-6. [↑](#footnote-ref-4)
5. D.12-11-015 at p. 46. [↑](#footnote-ref-5)
6. D.14-01-033 at p. 14; *see also* D.14-10-046 at p. 120. [↑](#footnote-ref-6)
7. *See* Application of Marin Clean Energy for Approval of its Energy Efficiency Business Plan (Application (“A.”) 17-01-017) filed January 17, 2017. [↑](#footnote-ref-7)
8. D.18-05-041, OP 33 at p. 189. [↑](#footnote-ref-8)
9. D.18-05-041 at p. 112. The Commission approved a total budget for MCE of $85,736,000 for PYs 2018-2025. This budget includes allocations for Evaluation Measurement and Verification (“EM &V”). [↑](#footnote-ref-9)
10. D.18-05-041, OP 43 at pp. 191-92. [↑](#footnote-ref-10)
11. D.18-05-041, OP 43 at pp. 191-92. [↑](#footnote-ref-11)
12. The uncommitted and unspent carryover balance reflects the total unspent and uncommitted funds from all previous program years that will be used to offset the 2021 fund transfers. More detail on this number can be found in MCE’s CEDARS filing. Because each ABAL is filed in Q3, this unspent uncommitted amount is an estimate for the year in which the ABAL is filed. [↑](#footnote-ref-12)
13. The amount of funds to be collected (budget recovery) for the Program Year. [↑](#footnote-ref-13)
14. Pursuant to OP 36 of D.18-05-041, gas budgets will be transferred to MCE on a quarterly basis. [↑](#footnote-ref-14)
15. D.18-05-041 at pp. 132-37. [↑](#footnote-ref-15)
16. See MCE’s 2019 Annual Report Narrative and Excel at: https://eestats.cpuc.ca.gov/Views/Documents.aspx [↑](#footnote-ref-16)