Application: 22-03-
Exhibit No.:
Date: March 4, 2022
Witness (es): Various

FILED
03/04/22
04:59 PM
A2203012

MARIN CLEAN ENERGY

TESTIMONY REGARDING 2024-2031 BUSINESS & PORTFOLIO PLAN

EXHIBIT 1

ENERGY EFFICIENCY BUSINESS PLAN 2024-2031

MCE | My community. My choice.

MARIN CLEAN ENERGY
TESTIMONY REGARDING 2024-2031 BUSINESS & PORTFOLIO PLAN
EXHIBIT 1
ENERGY EFFICIENCY BUSINESS PLAN 2024-2031

TABLE OF CONTENTS

Chapter	Title	Witness
Exhibit 1	**Energy Efficiency Business Plan 2024-2031**	
Chapter 1	MCE's Vision for Energy Efficiency in California: 2024-2031	Alice Havenar-Daughton
Attachment A	Alice Havenar-Daughton Resume	
Attachment B	MCE Resolution 2021-04 Committing to Advance Racial Equity	
Chapter 2	Portfolio Budgets: 2024-2031	Alice Havenar-Daughton
Chapter 3	Policy Recommendations	Alice Havenar-Daughton

MARIN CLEAN ENERGY

TESTIMONY REGARDING 2024-2031 BUSINESS & PORTFOLIO PLAN

EXHIBIT 1

CHAPTER 1

MCE'S VISION FOR ENERGY EFFICIENCY IN CALIFORNIA: 2024-2031

MARIN CLEAN ENERGY
TESTIMONY REGARDING 2024-2031 BUSINESS & PORTFOLIO PLAN
EXHIBIT 1
CHAPTER 1
MCE'S VISION FOR ENERGY EFFICIENCY IN CALIFORNIA: 2024-2031

TABLE OF CONTENTS

1. Executive Summary 1-1

2. Portfolio Principles and Outcomes 1-2

2.1. Resource Acquisition Segment Principles and Outcomes 1-2

2.2. Market Support Segment Principles and Outcomes 1-3

2.3. Equity Segment Principles and Outcomes 1-3

3. Service Territory Description 1-4

3.1. Diversity in MCE's Service Area 1-4

3.2. Customer Types and Energy Consumption Patterns 1-6

3.3. Unique Characteristics of MCE's Service Area 1-7

3.4. Climate Trends and Impacts 1-8

4. MCE's Energy Efficiency Strategies 1-12

4.1. MCE's Overarching Portfolio Strategies 1-12

4.1.1. Maximize TSB 1-13

4.1.2. Develop Meaningful Equity Programs 1-13

4.1.3. Support Electrification and Building Decarbonization Efforts 1-14

4.1.4. Incorporate Demand Management Elements 1-15

4.1.5. Optimize Delivery Channels 1-16

4.2. New Methods for Savings Forecasting and Quantification 1-17

4.3. Strategies for Market Intervention and Energy Efficiency Adoption 1-18

4.4. New Strategies for Spurring Innovation 1-19

4.5. Incorporating Low Global Warming Potential Refrigerants 1-20

4.6. Portfolio Management Strategies 1-21

4.6.1. Segmentation Strategy Summary 1-21

4.6.2. Sector Strategy Summary 1-22

4.6.3. Strategies Driving Distribution of Budget Among Sectors and Segments 1-27

4.6.4. Outsourcing/Third-Party Programs 1-29

4.6.5. Portfolio Coordination 1-31
4.6.5.1. Coordination With Other Demand-side Programs 1-31
4.6.5.2. Coordination with other Energy Efficiency Program Administrators 1-35
4.7. Evaluation, Measurement and Verification 1-36
4.8. Alignment with Policy and Regulatory Requirements 1-37
4.8.1. Compliance with Regulatory Requirements 1-38
4.8.2. Alignment with Relevant Action Plans 1-49
4.8.2.1. Commission's DER Action Plan 2.0 1-49
4.8.2.2. CPUC's Environmental & Social Justice Action Plan 2.0 1-51
4.8.2.3. California Energy Commission 2019 California Energy Efficiency Action Plan 1-53
4.8.2.4. Marin Clean Energy's Operational Integrated Resource Plan 2021-2030 1-55
4.8.2.5. MCE Board Racial Equity Resolution 1-55
Attachment A: Alice Havenar-Daughton Resume
Attachment B: MCE Resolution 2021-04 Committing to Advance Racial Equity

INDEX OF FIGURES AND TABLES

Figure 1-1: Climate Zones in MCE's Service Area 1-9
Figure 1-2: High-Fire Threat Districts in MCE's 1-11

Table 1-1: MCE 8-year Business Plan Budget by Sector 1-1
Table 1-2: Household Incomes in MCE's Service Area 1-5
Table 1-3: Income Disparity in MCE's Service Territory 1-6
Table 1-4: Business Plan Budget Distribution Across Segments 1-28
Table 1-5: Business Plan Budget Distribution Across Sectors 1-29

1. Executive Summary

In this Application, Marin Clean Energy (MCE) requests California Public Utilities Commission (CPUC or Commission) approval of its four-year energy efficiency (EE) Portfolio Plan for program years (PYs) 2024-2027, as well as its eight-year Strategic Business Plan (Business Plan) covering PYs 2024-2031. Exhibit 2 of MCE's testimony describes the four-year Portfolio Plan in detail. This Exhibit 1 describes MCE's eight-year Business Plan, which is philosophically consistent with and underpinned by the same core principles, goals and strategies driving MCE's four-year Portfolio Plan. Exhibit 1 details MCE's strategic vision for energy efficiency in California (Chapter 1), provides annual budgets for PYs 2024-2031 (Chapter 2), and recommends new and modified EE policies for the Commission's consideration (Chapter 3). Over the eight-year Business Plan period, MCE's requests a total budget of $158,280,762 for its EE programming, broken out by sector in the table below (and detailed in Chapter 2 of this Exhibit 1).

Table 1-1: MCE 8-year Business Plan Budget by Sector

Primary Sector	Total Spending Budget Request		Percent of Portfolio
Agricultural	$	5,981,061	4%
Commercial	$	65,148,914	41%
Industrial	$	8,846,820	6%
Residential	$	63,852,720	40%
Cross-Cutting	$	14,451,246	9%
Total	$	158,280,762	100%

MCE's 2024-2031 strategic Business Plan builds on the foundation of MCE's robust track record of designing and implementing innovative and cost-effective EE programming since 2012. The Business Plan will also remain flexible to ensure that MCE is serving the evolving needs of its customers and of the state. MCE's long-term vision for EE prioritizes cost-effectiveness, flexibility, equity, resilience and innovation. More concretely, over the eight-year Business Plan period, MCE will aim to maximize Total System Benefits (TSB) through the implementation of

cost-effective EE (and demand management)[1] programs, while also supporting the sustained growth of the EE market in its service area and ensuring that all customers, especially those historically underserved by EE, enjoy the benefits of EE.

2. Portfolio Principles and Outcomes

MCE projects the outcomes of its portfolio over PYs 2024 – 2031 as follows, categorized according to the three segments in MCE's EE portfolio: Resource Acquisition, Market Support and Equity.[2]

2.1. Resource Acquisition Segment Principles and Outcomes

Within the Resource Acquisition segment, MCE strives towards maximizing TSB. Prioritizing TSB is critical because it maximizes the value of the efficiency delivered for both the customer and the electric grid. MCE achieves this by: (1) leveraging advanced data analytics to identify participants with the greatest opportunity to save energy and to quantify savings delivered; (2) linking program costs to *measured* savings delivered (known as "pay for performance" or "P4P" programming); (3) low- and no-cost savings opportunities through Strategic Energy Management (SEM) and behavioral approaches; and (4) leveraging financing solutions for customers and program implementation partners.

MCE seeks to manage risk in the Resource Acquisition segment by diversifying and expanding its pool of implementation partners through standard program participation agreements instead of one-off implementation contracts. MCE also ensures programs can adapt and respond

[1] MCE defines "demand management" as the umbrella term for customer responsiveness to price, behavior or equipment-driven signals which enable load shifting, load shedding, load shaping, and demand response (DR).

[2] Rulemaking (R.) 13-11-005, Decision (D.) 21-05-031, *Assessment of Energy Efficiency Potential and Goals and Modification of Portfolio Approval and Oversight Process* (May 20, 2021) requires that all EE Program Administrators segment their portfolios into Resource Acquisition, Market Support and Equity segments. D.21-05-031, OP 2 at 81.

quickly to successes and challenges by designing those participation agreements to maximize flexibility in program delivery strategy and measure selection.

MCE's Resource Acquisition programs aim to create a robust and active environment for energy efficiency in its service area, where programs integrate efficiency and demand management measures to reduce peak demand and improve grid reliability. As a result, customer and industry partners will view MCE's service area as a good opportunity to invest in energy efficiency. Throughout the Business Plan period, MCE will continue to explore tailored and innovative approaches to maximizing the TSB delivered from its Resource Acquisition segment.

2.2. Market Support Segment Principles and Outcomes

MCE's Market Support segment programming focuses on developing a workforce equipped to advance the emerging electrification industry and meeting California's decarbonization goals. MCE aims to (1) increase the capacity of the electrification workforce to install and maintain emerging electrification measures; and (2) to create opportunities for sustainable and long-term employment in the electrification industry. By educating customers, training contractors and job-seekers, building partnerships and moving beneficial technologies towards greater cost-effectiveness, MCE's Market Support segment will foster the long-term success and growth of the EE and electrification markets.

2.3. Equity Segment Principles and Outcomes

MCE advances equitable outcomes under its EE portfolio by (1) minimizing the cost and effort for eligible customers to participate in MCE programs; (2) conducting community engagement and networking; and (3) filling gaps in the services provided by other programs. MCE also implements programs specifically geared at residential and non-residential "Equity customers". MCE defines "Equity customers" as residential customers and businesses in

Environmental and Social Justice (ESJ) communities as defined by the Commission's ESJ Action Plan, but modified to include households at or below 400% of the Federal Poverty Level (FPL) or 80% of area median income (AMI).[3] MCE's Equity programs also provide additional technical support and funding to residential and non-residential Equity customers to facilitate access to EE programming, which will not only help them save energy but also generate non-energy benefits (NEBs) such as increased health, comfort and safety, improved air quality, and more affordable utility bills. Collectively, MCE's Equity segment programs will improve equitable access to EE and electrification benefits within MCE's increasingly diverse and growing customer base, consistent with MCE's mission and vision.[4]

3. Service Territory Description

The MCE service area has grown from its founding years in Marin County to an area that now includes communities in four Bay Area Counties – Marin County, Napa County, most of Contra Costa County, and portions of Solano County including Benicia, Vallejo, Fairfield and unincorporated areas. As MCE's geographic footprint has grown, it has extended its reach to nearly 800,000[5] service accounts covering all major customer types – residential (single-family and multifamily), agricultural, industrial and commercial.

3.1. Diversity in MCE's Service Area

MCE's expanding service area features a diverse population, illustrated by various demographic measures. Nearly a quarter of the residents in MCE's service area were born outside

[3] See full discussion in Exhibit 2, Chapter 3, Section 4 (the Equity segment description).
[4] *See* Marin Clean Energy, About Us, available at: https://www.mcecleanenergy.org/about-us/.
[5] Per MCE account data as of December 31. 2020. A "service account" is defined as a single service account identification (SAID).

the United States.[6] In addition, nearly one-third of the MCE population base speaks a language other than English, with Contra Costa and Napa Counties having a higher concentration of non-English speakers. The predominant non-English language spoken in MCE's service area is Spanish (18 percent). Napa County includes the highest concentration of Spanish speakers followed by Contra Costa County. Household incomes in MCE's service area also vary widely, as Table 1-1 below illustrates.[7] Whereas household incomes are higher in Marin and Contra Costa counties, household incomes are comparatively lower in Napa and Solano counties.

Table 1-2: Household Incomes in MCE's Service Area

Household Income	MCE Service area total	Marin	Napa	Contra Costa	Solano
Under $50K	22%	24%	25%	20%	29%
$50K to $100K	25%	22%	28%	25%	32%
$100K to $200K	30%	26%	29%	31%	30%
Above $200K	23%	29%	18%	24%	10%

Income disparity also varies across MCE's service area as Table 1-2 below illustrates. Whereas income disparity is high in Contra Costa County, it is far lower in the other three counties in MCE's service area.[8]

[6] United States Census Bureau, Quick Facts (accessed Feb. 4, 2022), available at: https://www.census.gov/quickfacts/fact/table/CA,solanocountycalifornia,napacountycalifornia,marincountycalifornia,contracostacountycalifornia/POP815219?#qf-headnote-b.
[7] Census Reporter (accessed Feb. 4, 2022), available at: https://censusreporter.org/profiles/05000US06041-marin-county-ca/; https://censusreporter.org/profiles/05000US06055-napa-county-ca/; https://censusreporter.org/profiles/05000US06013-contra-costa-county-ca/; https://censusreporter.org/profiles/05000US06095-solano-county-ca/.
[8] Data USA (accessed Feb. 4, 2022), available at: https://datausa.io/profile/geo/marin-county-ca; https://datausa.io/profile/geo/contra-costa-county-ca; https://datausa.io/profile/geo/napa-county-ca; https://datausa.io/profile/geo/solano-county-ca.

Table 1-3: Income Disparity in MCE's Service Territory

Income Metric	Marin	Napa	Contra Costa	Solano
Median Household Income	$115,246	$ 88,596	$ 99,716	$ 81,472
Top 5 census tracts mean median income	$222,574	$147,590	$ 247,530	$124,118
Bottom 5 census tracts mean median income	$ 68,358	$ 65,517	$ 39,199	$ 46,526
Median income ratio	3.3	2.3	6.3	2.7

3.2. Customer Types and Energy Consumption Patterns

As mentioned above, MCE's service area includes all major customer sectors – residential (single-family and multifamily), agricultural, industrial and commercial. Nearly half of the electricity consumption in MCE's service area is attributable to residential accounts. In contrast, on average, residential customers account for only approximately one-third of the electricity consumption in other utility Program Administrators'[9] (PAs') service areas.[10] Given the relatively higher proportion of residential energy consumption in MCE's service area, MCE's customer programs must obtain a larger portion of savings from the residential sector. This presents a challenge to MCE's comprehensive programming efforts because residential programs are historically less cost-effective than non-residential programs.

MCE's service area is characterized by a relatively high rate of home ownership (blended average of 64%, as compared to the state average of 55%).[11] This larger proportion of home ownership indicates good opportunities for single-family programs within MCE's service area.

[9] Program administrator in this context means Pacific Gas and Electric Company (PG&E), San Diego Gas and Electric Company (SDG&E), and Southern California Edison Company (SCE).
[10] Cal. Energy Comm'n, Electricity Consumption by Entity (accessed Feb. 4, 2022), available at: http://www.ecdms.energy.ca.gov/elecbyutil.aspx.
[11] US Census Bureau, Quick Facts (accessed Feb. 4, 2022), available at: https://www.census.gov/quickfacts/fact/table/CA,solanocountycalifornia,napacountycalifornia,marincountycalifornia,contracostacountycalifornia/HSG010219.

Within the non-residential sectors in MCE's service area, the commercial sector is the largest in terms of energy usage (68% of non-residential MCE load) and number of customers (72% of non-residential accounts). Customers in the industrial sector have the highest energy consumption per account, three times higher than the non-residential sector overall. Although a relatively small energy consumer (3% of non-residential MCE load), the agricultural sector is experiencing the highest growth with a 19% increase in electricity usage from 2019 to 2020. With additional parts of agricultural-rich Solano County joining MCE, the agricultural sector is poised to make up a greater portion of MCE's non-residential energy consumption in the future.

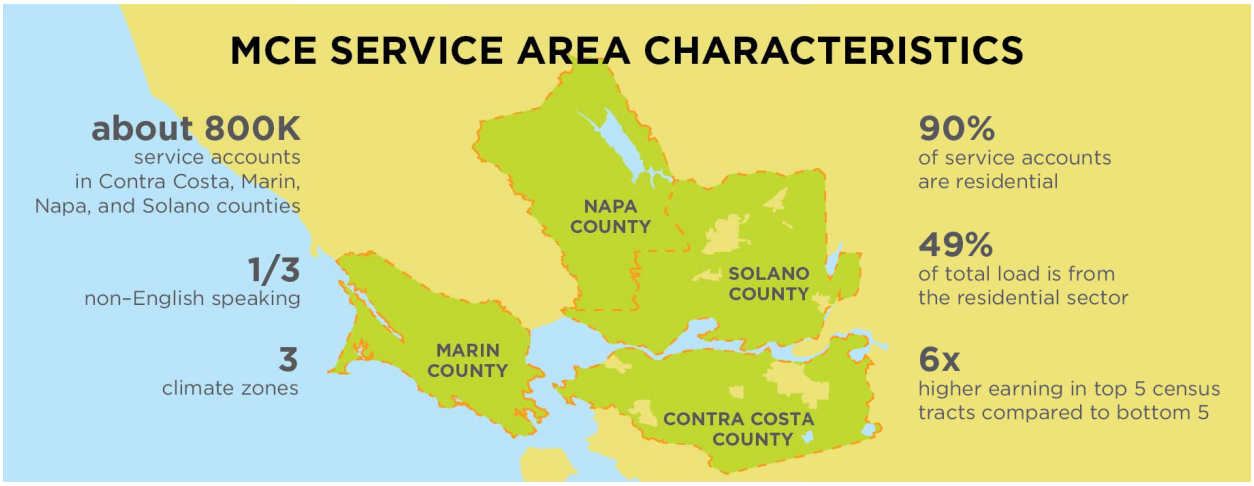
3.3. Unique Characteristics of MCE's Service Area

MCE's service area is relatively small compared to the other PAs' service areas. This means MCE must achieve a similarly balanced portfolio with a smaller pool of customers. An additional challenge associated with MCE's service area is that the population and employment centers in MCE's service area are predominantly located in several dispersed, small and medium-sized cities, rather than being concentrated in a large urban core. This characteristic is important for MCE to consider and may influence the selection of program implementers to ensure programs are available throughout MCE's entire service area. This may also influence the strategies MCE will deploy to bring in new projects to manage customer acquisition costs. These service area characteristics are important for MCE to consider so that its programs and portfolio are designed to remain cost effective.

On the other hand, MCE's size is an advantage—it allows MCE to be nimble and responsive to customer needs, which is necessary to adapt programs to changing rules and meet the evolving needs of a diverse customer base. Moreover, MCE has the latitude to be a flexible and innovative partner in delivering customer-oriented services because it is mission driven.

The following graphic summarizes the key characteristics of MCE's service area.

Graphic 1-1: MCE Service Area Characteristics



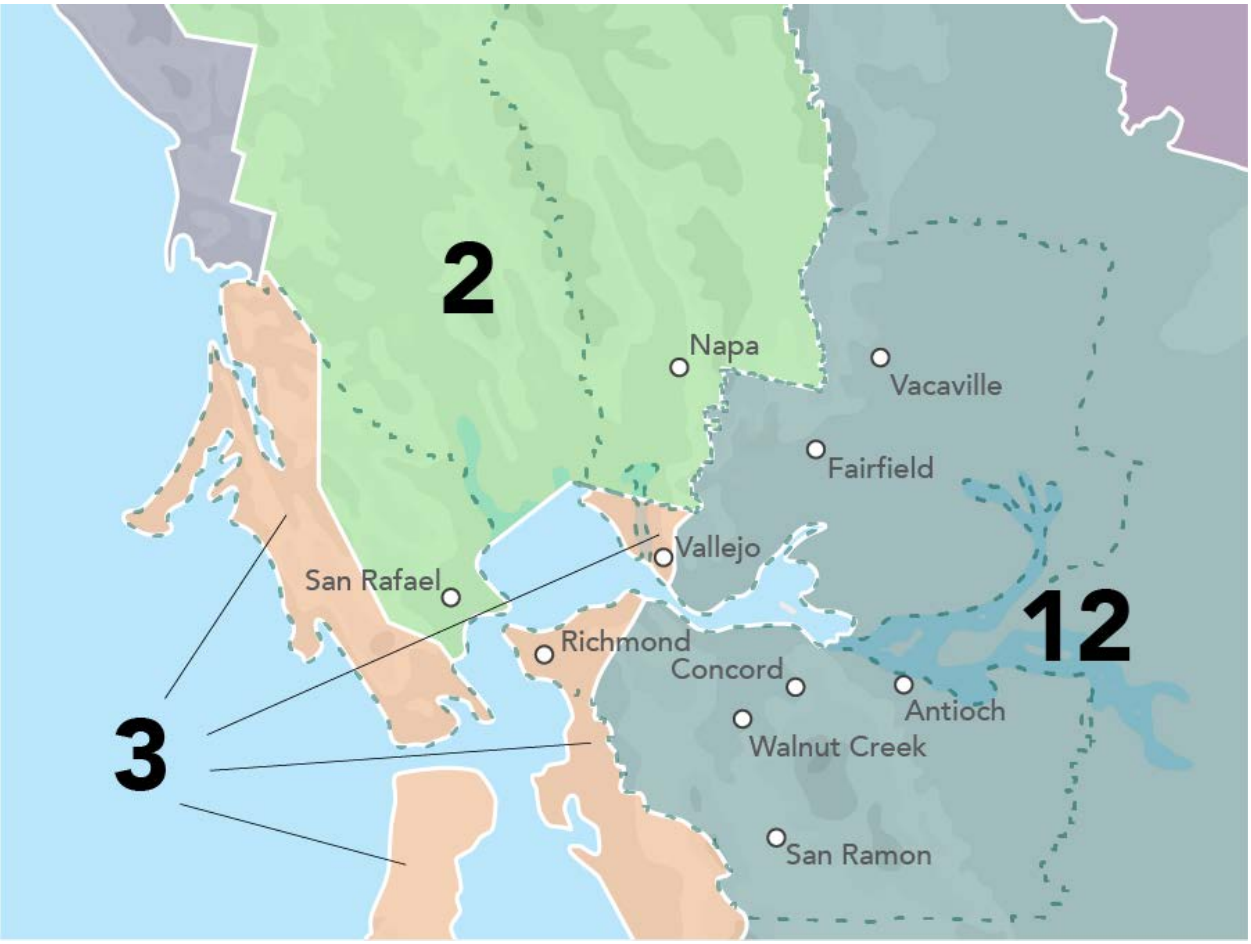
3.4. Climate Trends and Impacts

MCE's service area spans three different climate zones (CZ) which dictate building design, equipment specification, and the effectiveness of various efficiency measures. The CZs include:

- CZ2 – Coastal Marin County: heating degree day (HDD) dominated, where temperatures are cooler than standard;
- CZ3 – Inland Marin County, Napa County, Western Contra Costa: HDD is the design concern but is relatively mild; and
- CZ12 – Eastern Contra Costa and Solano County: while still HDD dominated, there are significantly more cooling degree days (CDD) than in CZ2 or CZ3. Temperatures are warmer than standard with highs reaching 100 degrees Fahrenheit.[12]

[12] PG&E Pacific Energy Center, Guide to California Climate Zones, available at: https://www.pge.com/includes/docs/pdfs/about/edusafety/training/pec/toolbox/arch/climate/california_climate_zones_01-16.pdf.

Figure 1-1: Climate Zones in MCE's Service Area



Over the past century, the climate in MCE's service area and California as a whole has trended warmer, leading to an increase in CDD with a corresponding decline in HDD. Furthermore, the counties in MCE's service area fall within the "climate divisions"[13] that have experienced the largest percentage increase in CDD in California over the last century based on the Climate Divisions dataset of the National Oceanic and Atmospheric Administration (NOAA). Whereas the number of CDD in California as a whole has increased by 71% since the beginning

[13] NOAA's Climate Division Dataset divides each state into six to ten climate divisions and then averages all daily temperature and precipitation observations in each climate division into areal and monthly averages. This is the only long-term temporally and spatially complete dataset from which to generate historical climate analyses (1895-2013) for the contiguous United States. It was originally developed for climate division, statewide, regional, national, and population-weighted monitoring of drought, temperature, precipitation, and heating/cooling degree day values.

of the 20th century,[14] the number of CDD in California Climate Division 1 (the "North Coast Drainage" which includes Marin and portions of Napa and Solano Counties) increased by 93% over the same time frame. In addition, the number of CDD in California Climate Division 4 (the "Central Coast Drainage," which includes portions of Contra Costa County) increased by 112% over the same time frame. Moreover, the trend of increasing CDD has accelerated over the past decade.[15] Adapting to this hotter climate will lead to more energy consumption directed at space cooling from both existing and newly installed equipment. The increase in energy consumption for space cooling will likely be accompanied by a corresponding but smaller reduction in energy consumption from space heating.

The changing climate has also ushered in heightened fire risk in the wildland-urban interface (WUI) areas[16] of MCE's service area. Recognizing this and the potential for overhead utility power lines to spark fires, the Commission developed fire threat maps to outline areas of higher fire risk and where stricter fire-safety regulations should apply.[17] These maps indicate that most of Marin and Napa counties, and nearly half of Contra Costa County are located in Commission-designated High Fire Threat Districts (HFTDs) – Tier 2 (elevated – displayed in yellow in the graphic below) and Tier 3 (extreme – displayed as red in the graphic below).

---

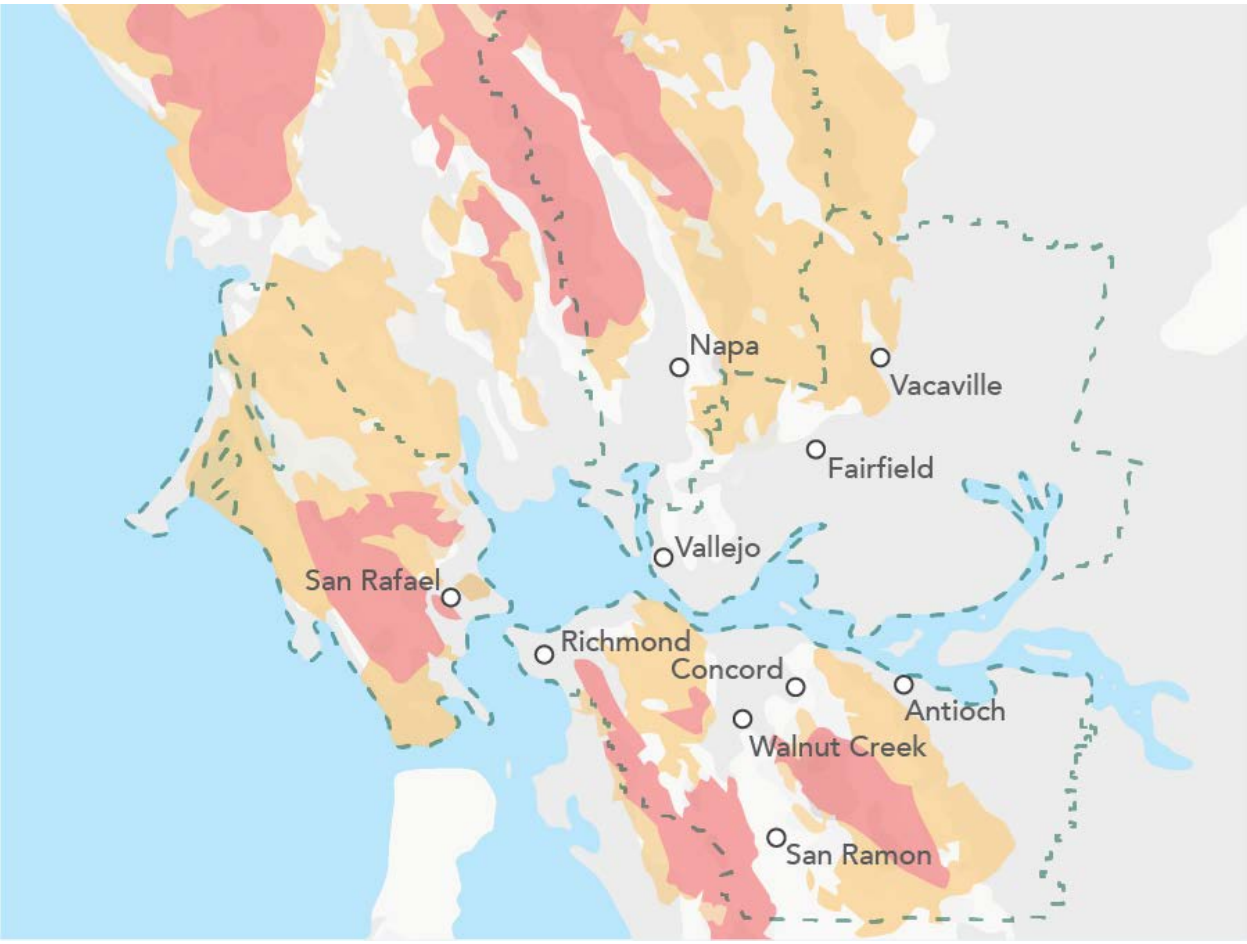
[14] Nat'l Oceanic and Atmospheric Administration, Climate at a Glance, Statewide Time Series, available at: https://www.ncdc.noaa.gov/cag/statewide/time-series. The baseline used is the mean annual number of cooling degree days between 1896 and 1910.

[15] Nat'l Oceanic and Atmospheric Administration, Climate at a Glance, Divisional Time Series, available at: https://www.ncdc.noaa.gov/cag/divisional/time-series.

[16] Per the U.S. Fire Administration, WUI is defined as "the one of transition between unoccupied land and human development. It is the line, area or zone where structures and other human development meet or intermingle with undeveloped wildland or vegetative fuels." *See* U.S. Fire Administration, "What is the WUI", available at: https://www.usfa.fema.gov/wui/what-is-the-wui.html.

[17] *See* Cal. Pub. Util. Comm'n, PUC Fire Safety Rulemaking Background, available at: https://www.cpuc.ca.gov/industries-and-topics/wildfires/fire-threat-maps-and-fire-safety-rulemaking.

Figure 1-2: High-Fire Threat Districts in MCE's[18]



The increased risk of power lines and other electrical transmission and distribution (T&D) equipment igniting fires has required the California investor-owned utilities (IOUs) to introduce enhanced measures to mitigate these hazards. The Public Safety Power Shutoff (PSPS) is one of those measures, in which the utility de-energizes specific T&D lines during periods of high winds and low humidity, resulting in customers losing power for up to several days. MCE's service area has been significantly impacted by PSPS with 14 out of 19 PSPS events called by Pacific Gas & Electric (PG&E) to date leading to outages for MCE customers.[19] These PSPS outages have

[18] *See* Cal. Pub. Util. Comm'n, HFTD map, available at: https://www.arcgis.com/apps/webappviewer/index.html?id=5bdb921d747a46929d9f00dbdb6d0fa2.
[19] PG&E called the first PSPS events in 2018. They called one event in 2018, seven events in 2019, six events in 2020 and five events in 2021 (data through January 2022). *See* Pacific Gas and Electric

prompted a significant number of MCE customers to seek resiliency solutions. This presents MCE a timely opportunity to offer EE and resiliency solutions (such as energy storage systems (ESS)) together. Combining these program offerings maximizes the beneficial impact of MCE's engagement with customers.

Overall, several aspects of MCE's service area present both challenges and opportunities to effectively administer EE programs. MCE has consistently overcome those challenges by implementing a tailored, flexible program design and deployment strategy that evolves to meet its customers' needs. For the 2024-2031 program cycle, MCE is proposing to deploy a suite of strategies that will help it continue to overcome the implementation barriers associated with MCE's unique service area and provide solutions that maximize system benefits and optimize customer outcomes. Those strategies are described in Section 4 of this chapter, below.

4. MCE's Energy Efficiency Strategies

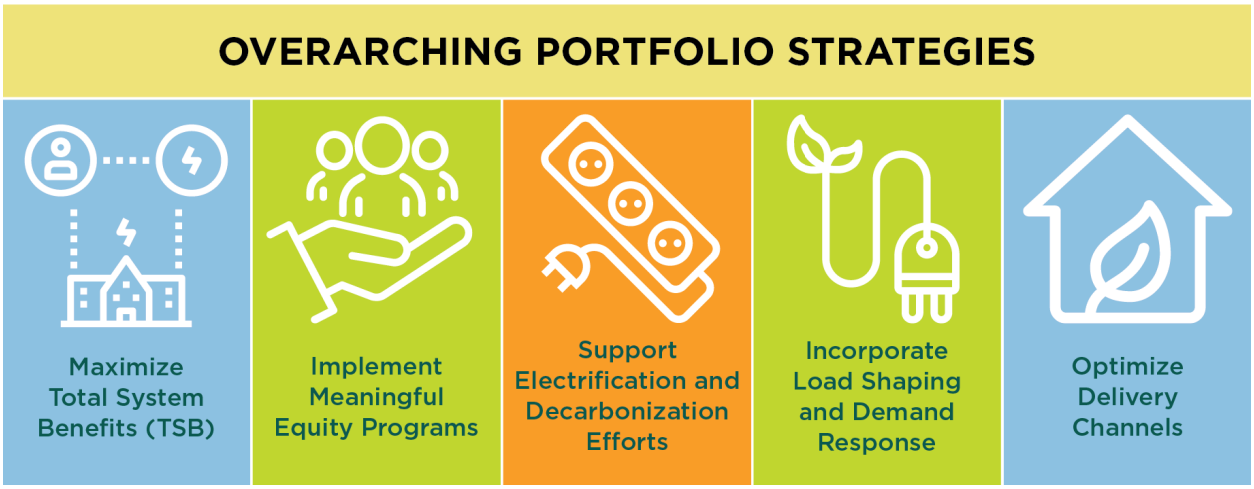
MCE's unique service area and customer base require MCE to implement a diverse set of strategies in order to achieve the portfolio outcomes it strives for. Those include a set of overarching strategies that pervade MCE's portfolio (across its several segments and sectors). MCE also deploys a number of innovative strategies specific to certain segments, sectors and programs. MCE describes a few of its innovative implementation strategies in more detail following its summary of its overarching portfolio strategies.

4.1. MCE's Overarching Portfolio Strategies

MCE's overarching portfolio strategies are summarized in Graphic 1-2 below.

Company, PSPS Reports, available at: https://www.pge.com/en_US/residential/outages/public-safety-power-shuttoff/psps-reports.page.

Graphic 1-2: MCE's Overarching Portfolio Strategies



4.1.1. Maximize TSB

Maximizing TSB is the primary objective of the Resource Acquisition segment, and MCE expects that this will remain a key overarching strategy over the Business Plan period. MCE's primary strategy to maximize TSB is to align program payments with TSB, wherever possible. This strategy suggests an increasingly important role for normalized metered energy consumption (NMEC) programs which can generate "custom" or blended savings load shapes. Additional strategies to achieve this objective include delivery mechanisms that allow for flexibility in contracting to diversify and expand MCE's network of partners and create programs that can scale. Furthermore, MCE will use advanced data analytics to target participants with the greatest opportunity to save energy. Finally, to improve cost effectiveness, MCE will help participating customers identify low to no-cost EE opportunities.

4.1.2. Develop Meaningful Equity Programs

Equity has always been a driving force behind program development at MCE and will remain a key objective over the 2024-2031 Business Plan period. One of the defining

characteristics of MCE's service area is the diversity found across its four member counties.[20] MCE's Equity programs will help ensure that customers across the range of household incomes, ethnic backgrounds, and primary language in MCE's service area have access to the benefits of EE. MCE's Equity strategies include filling gaps in services provided by other programs, networking within communities to reach customers, and minimizing the cost and effort for eligible customers to participate in MCE programs, as further detailed in Exhibit 2, Chapter 3, Section 4 of MCE's testimony.

4.1.3. Support Electrification and Building Decarbonization Efforts

MCE's third objective is to support the State's decarbonization efforts by transitioning to efficient electric equipment through electrification programs. One of the greatest barriers to electrification that MCE has identified is the availability of a trained workforce. MCE's strategies to overcome this barrier are to educate and train both contractors and job seekers on advanced EE and electrification topics. Additionally, MCE will match job seekers with energy contractors who perform advanced EE and electrification installs for on-the-job training. MCE will follow best practices from industry leaders in creating pathways to high-quality employment for sustainable, long-term career paths. MCE will also provide hiring and employee management support to interested contractors to ease the burden associated with growing the EE and electrification workforce.

In addition to these workforce, education and training (WE&T) efforts, MCE will also continue to grow electrification measures under existing program offerings, as further detailed in Exhibit 2, Chapter 3, Section 3.

[20] See a detailed description of MCE's service area characteristics in Section 3 above.

4.1.4. Incorporate Demand Management Elements

Incorporating demand management in MCE's EE programs not only supports maximizing TSB but also helps MCE as a load serving entity (LSE) to promote grid reliability and increase the percentage of renewable energy in the power supply.[21] In the past, EE programs have attempted to achieve demand reductions by adding demand incentives alongside energy savings incentives, or by generating custom calculations that approximate the peak period energy impacts of projects, controls or the commissioning of buildings and equipment. Additionally, EE programs can coordinate with traditional demand response (DR) programs, which can provide another value proposition to customers and project developers. However, all of these opportunities are complex, and they may fall short when considering the need for peak load reduction. Energy efficiency measures can and should be viewed as a reliable contributor to peak demand management and load shaping but require verifiable data and seamless integration in EE programming to be successful.

MCE proposes two solutions for incorporating demand management into EE programs. First, MCE will leverage the same strategy which optimizes the delivery of TSB: by aligning program payments with savings that deliver the most value when considering the hourly avoided cost associated with demand reduction. The most value is found where avoided costs are highest – across the summer's peak and net peak hours[22] – which therefore strengthens the value proposition for demand management as a project type or intervention that will be rewarded. The signal to MCE's program partners and customers is clear: savings that are generated during peak hours can be compensated at considerably higher rates.

[21] Cal. Pub. Util. Code § 454.5(b)(9)(C) states: "[t]he electrical corporation shall first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible."

[22] Summer peak and net peak hours are defined as 4-9 p.m. and 7-9 p.m. respectively from June 1 through September 30 each year.

The second strategy for incorporating demand management is to introduce seamless opportunities to participate in demand management programs. Within MCE's Marketplace programs,[23] this is possible with the proposed extension of MCE's Peak FLEXmarket.[24] Peak FLEXmarket is a market-driven demand management program that assigns an hourly value to measured, behind-the-meter (BTM) load reduction impacts. Peak FLEXmarket incentivizes load shifting during summer peak periods in two ways: (1) daily load shifting; and (2) event-based DR. Peak FLEXmarket ensures that participants in MCE's EE programs have a demand management program available to them that they can access for additional value streams. Furthermore, the program supports grid reliability by reducing load during times of grid stress (*i.e.*, during the peak and net peak periods in summer months).

4.1.5. Optimize Delivery Channels

Lastly, MCE will optimize the delivery of all programs to improve the customer experience and reduce administrative pain points. This strategy is facilitated by MCE's strengths as a small, nimble organization. MCE offers programs that meet customers' needs, and MCE's processes are constantly evolving to minimize administrative and participant burden. MCE has a track record of strategically integrating multiple programs and funding streams behind the scenes to seamlessly support customers in addressing a range of issues including energy savings, health, safety and Equity. For example, MCE launched the Green and Healthy Homes Initiative (GHHI) in Marin County, which stacked local philanthropic funding for health and safety upgrades into EE projects to provide comprehensive assistance for low-income households. MCE's experience with the GHHI program led to the creation of the Contra Costa Asthma Project, which layers public health

[23] MCE's Marketplace programs include the Commercial Efficiency Market, the Residential Efficiency Market, as well as the Peak FLEXmarket program. More information on Marketplace programs can be found in Exhibit 2, Chapter 3 and Chapter 8.
[24] MCE's Peak FLEXmarket is described in more detail in Exhibit 2, Chapter 8.

funding into EE programs to improve the indoor air quality in homes where there is a resident with asthma.

MCE will continue to scale its programming to achieve the objectives listed above. MCE has already proven that it is well equipped to strategically employ strategies that more readily reveal customer opportunities, motivate customer participation, and allow for simple quantification of customer and system benefits, all while cultivating previously untapped or under-utilized delivery mechanisms. In the following sections, MCE describes a few of its innovative implementation strategies in more detail to complement the overarching portfolio strategies outlined above.

4.2. New Methods for Savings Forecasting and Quantification

Over the eight-year Business Plan period, MCE will expand the use of a P4P framework built on a savings quantification methodology known as "normalized metered energy consumption" (NMEC). NMEC and P4P programs are two of an emerging set of tools and approaches that are transforming savings forecasting and quantification practices. MCE regards NMEC-based approaches as one of the core pillars of its EE programming strategy.

NMEC-based programs allow MCE to incentivize and submit claims for savings based on custom load shapes that more accurately reflect program participants' energy usage and the load shape of energy savings. This unlocks the potential for weighting the value of EE savings in the same way as the Avoided Cost Calculation (ACC) does—by ascribing higher value to savings that occur during periods of peak energy use. Time-variant valuation of savings can be embedded in program designs such that programs focus squarely on the most valuable and most cost-effective savings opportunities.

MCE has been developing and using NMEC methods and P4P programs for over five years. Over this time, MCE has worked to establish reliable data flows from projects to NMEC measurement and verification (M&V) platforms on a timely basis. MCE has tested NMEC methods on existing programs by, for instance, tracking the performance of Property Assessed Clean Energy (PACE) projects[25] and validating SEM baselines using NMEC methods. Furthermore, MCE leveraged its NMEC analytics platform during the COVID-19 pandemic to help understand how it could account for the pandemic's impacts on energy use in program M&V by drawing comparison groups for participant populations based on a combination of customer attributes and load shape characteristics. MCE will continue to develop NMEC methods and P4P programs over the eight-year Business Plan period as a growing pillar of the portfolio.

4.3. Strategies for Market Intervention and Energy Efficiency Adoption

MCE will lean on a diverse set of strategies to intervene in the market and drive EE solutions in its service area. First, MCE will integrate demand management into its EE programs and portfolio to drive savings during peak hours. For instance, MCE's Peak FLEXmarket program, which offers incentives for demand management solutions, will facilitate load shifting, shaping and demand reduction during peak summer hours.[26] Second, MCE will deploy SEM approaches in multifamily buildings, replicating a strategy that MCE has successfully used to drive savings in the industrial, agricultural and commercial sectors. Third, MCE will analyze customer data to identify accounts with usage profiles that indicate high savings potential. For instance, the platform underlying MCE's Marketplace programs uses analytics which predict the customers that can achieve the greatest savings and thus maximize TSB. Fourth, MCE will carry out internal diversity,

[25] PACE is a mechanism to finance energy efficiency and renewable energy improvements which are paid back through an assessment on the property.
[26] MCE's Peak FLEXmarket program is described in more detail in Exhibit 2, Chapter 8.

equity and inclusion (DEI) initiatives and conduct stakeholder outreach with Equity Customers, which will equip MCE staff to design and offer higher quality, Equity-focused EE programs. Fifth, MCE will continue to invest in building a robust EE workforce. It will do so by continuing to work with strategic partners such as community colleges, workforce development boards, and community-based organizations (CBOs) to grow and diversify the pool of qualified EE contractors in addition to connecting those contractors to relevant employers. MCE will pursue these market intervention strategies over the eight-year Business Plan period to drive increased EE savings.

4.4. New Strategies for Spurring Innovation

MCE will spur innovation over the course of its eight-year Business Plan through two key strategies: (1) "Marketplace Programs" and (2) promoting electrification through WE&T.

MCE's Marketplace programs possess a few strategic benefits including: (1) empowering EE aggregators to recruit customers with customized offerings; (2) establishing an incentive structure that is designed to attract and deliver higher value projects and measures; (3) maximizing outcomes that benefit the grid and customers; and (4) allowing MCE to competitively source and catalyze innovative EE strategies while avoiding prescriptive implementation contracts.

MCE's WE&T efforts will cultivate a trained workforce that can scale future innovative electrification and decarbonization programming. To this end, MCE's tactics will include matching job seekers with vetted contractors who are installing home performance and electrification projects and coordinating in-person and virtual field meetings between electrification experts and contractors to spur growth in the electrification workforce.

MCE will also actively monitor the EE market and associated regulatory framework to identify additional opportunities to spur innovation over the Business Plan period. These additional opportunities may arise at any time. MCE is not limiting its strategies by what is known or possible

today. Instead, MCE will continue to pursue new strategies for innovation when promising opportunities arise and are feasible within the controlling regulatory framework.

4.5. Incorporating Low Global Warming Potential Refrigerants

MCE plans to incorporate low global warming potential (low-GWP) refrigerants into its portfolio by leveraging the P4P framework established in its Marketplace programs, to pay incentives that align with the TSB of refrigerant conversion projects. Marketplace aggregators will receive payments not only for the TSB value of energy savings delivered by their projects, but also the value of incremental ultra low-GWP refrigerants. This is enabled with the development of the Refrigerant ACC, which provides an avoided cost value for the retrofit or replacement of older generation refrigeration equipment with new ultra-low GWP refrigerants. As an overarching strategy, this brings a number of benefits which parallel the Marketplace model attributes for closer integration of EE and demand management: the value of ultra low-GWP refrigerants is presented to aggregators in a transparent way, and customers or refrigeration vendors are given maximum flexibility to complete projects that can be delivered cost-effectively.

MCE will also collaborate with other regulatory agencies such as the Bay Area Air Quality Management District (BAAQMD) and the California Air Resources Board (CARB) to promote low-GWP refrigerants, and monitor other LSEs' efforts to promote low-GWP refrigerants (i.e., the Sacramento Municipal Utility District's (SMUD) Natural Refrigerant Incentive Program).[27]

[27] The Sacramento Municipal Utility District's Natural Refrigerant Incentive Program provides incentives to commercial customers that install natural refrigeration systems or retrofit a system from a high-global warming potential (GWP) refrigerant to a natural refrigerant. Available at: https://www.smud.org/-/media/Documents/Business-Solutions-and-Rebates/Refrigerant-Pilot-Program-Summary.ashx; *See also* Fiscal Year 2022-2023 California Governor's Budget Proposal for potential additional ultra-low-global warming refrigerant incentives. https://www.ebudget.ca.gov/2022-23/pdf/BudgetSummary/ClimateChange.pdf, p. 86.

Finally, MCE will align its efforts with the statewide Technology and Equipment for Clean Heating (TECH) program[28] to promote equipment that uses low-GWP refrigerants and will evaluate the adoption of a refrigerant GWP threshold for MCE programs that provide incentive funds for qualifying water heating and space heating heat pumps.

4.6. Portfolio Management Strategies

MCE's portfolio is divided across segments (i.e., Resource Acquisition, Market Support, and Equity) as well as sectors (i.e., agricultural, commercial, cross-cutting, industrial and residential). The sections below summarize MCE's strategies for allocating resources and maximizing portfolio impact across segments and sectors, while utilizing third-party implementers and aggregators to help design and deliver programs.

4.6.1. Segmentation Strategy Summary

MCE's Resource Acquisition segment includes programs with a primary purpose of, and a near-term ability to, deliver cost-effective avoided cost benefits to the electricity and natural gas systems.[29] Resource Acquisition programs are a combination of existing programs and new programs that build on strategies that MCE has successfully developed to date (*e.g.*, expansion of NMEC programs into the residential sector). This segment is driven in large part by MCE's Marketplace, SEM and Behavioral Messaging programs, each of which are designed to maximize TSB while mitigating ratepayer risk and providing value to MCE's customers.

MCE's Equity segment includes programs with a primary purpose of providing energy efficiency to hard-to-reach (HTR) or underserved customers and disadvantaged communities (DACs) in advancement of the Commission's Environmental and Social Justice (ESJ) Action

[28] TECH is a Commission initiative designed to drive market adoption of low emissions space and water heating technologies for existing single and multifamily homes. Available at: https://energy-solution.com/tech/.
[29] D.21-05-031, p. 14.

Plan.[30] Improving access to energy efficiency for ESJ communities, as defined in the ESJ Action Plan, may provide NEBs such as increased health, comfort and safety, improved indoor air quality, and more affordable utility bills, consistent with Goals 1, 2, and 5 in the ESJ Action Plan.[31] MCE programs in this segment are designed to serve Equity customers that would otherwise be challenging to serve under the Resource Acquisition segment's cost effectiveness requirements. MCE refers to all categories of customers eligible for its proposed Equity segment programs using the umbrella term "Equity customers."[32] Consistent with D.21-05-031, MCE defines "Equity customers" as those identified as "ESJ Communities" by the Commission's ESJ Action Plan with the additional modifier of households at or below 400% of the Federal Poverty Level (FPL).[33] MCE's Equity programs offer additional technical support, reduced or no customer copays, meaningful community engagement and targeted marketing to participating customers.

MCE's Market Support segment consists of a single program, the WE&T program, which is tailored to support a workforce that can install advanced EE and electrification measures. This program does not claim savings but instead supports other programs that incentivize electrification by increasing the available contractor pool that is trained to do such work.

4.6.2. Sector Strategy Summary

MCE offers EE programs in the agricultural, commercial, industrial and residential sectors, as well as a WE&T program which is considered "cross-cutting". MCE proposes to continue

---

[30] *Id.*; *see* https://www.cpuc.ca.gov/esjactionplan/.

[31] Goals 1, 2, and 5 of the Commission's ESJ Action Plan are as follows: Goal 1 – Consistently integrate equity and access considerations throughout Commission's regulatory activities.; Goal 2 – Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health.; Goal 5 – Enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the Commission's decision-making process and benefit from Commission programs.

[32] *See* Exhibit 2, Chapter 3, Section 4.2 (defining and full discussion of "Equity customers").

[33] D.21-05-031, pp. 14-15; Draft ESJ Action Plan version 2.0, pp. 1-2 (October 2021), available at: https://www.cpuc.ca.gov/esjactionplan/.

running programs in these sectors throughout the eight-year Business Plan period. Below, MCE briefly summarizes its efforts in each sector.

Agricultural Sector

MCE has approximately 4,400 agricultural accounts within its service area, consuming over 106,000 MWh annually. This represents a relatively small portion of MCE's non-residential customer base (3% in terms of non-residential load and 1% of MCE's total electricity load). However, the agricultural sector's demand is growing statewide, and MCE expects increasingly intense fire seasons and long-duration droughts to amplify that sector's energy needs.

MCE's strategies to meet TSB goals and provide value to its agricultural customers include: (1) implementing agricultural and industrial programs under an overarching program umbrella (jointly referred to as the MCE Agricultural and Industrial Resource (AIR) Program) to improve efficiencies and address common pain points; (2) deploying SEM and custom projects which will give agricultural customers the support they need to implement measures with minimal disruption to their business; (3) scaling incentives based on TSB; (4) targeting customers with the greatest savings and TSB potential using MCE's data analytics platform; (5) marketing program benefits by engaging with local agricultural partner organizations (e.g., County farm bureaus); and (6) by promoting and encouraging customer enrollment in other sustainability and energy initiatives (referred to as the "Any Open Door" strategy). All of these strategies are described in more detail in Exhibit 2, Chapter 4, Section 4.1.

Commercial Sector

Commercial customers within MCE's footprint consists of approximately 55,000 commercial accounts, as well as an additional 4,000 non-residential customers that have no further secondary segment classification per their North American Industry Classification System

(NAICS)[34] codes. MCE's commercial sector consumes an estimated 2.7 million MWh annually, which represents roughly 68% of all MCE non-residential consumption, and 35% of MCE total electricity load. MCE does not offer a dedicated EE program for the public sector. Instead, MCE's non-residential EE programs also serve its roughly 6,800 public sector accounts, which normally participate in MCE's commercial program and occasionally in its industrial SEM program.

MCE's commercial program design is grounded in its recognition of a diverse customer base, leading to flexible strategies and a nimble program structure that can easily enlist the support of a broad network of providers and EE services. MCE uses a variety of strategies to meet or exceed TSB goals in this sector, to provide value to its commercial customers, and to ensure that commercial Equity customers have equitable access to EE program funding. Those strategies include: (1) employing varied delivery channels (including the Marketplace model and a "direct support" model to meet customer needs); (2) facilitating financing solutions by working with the National Energy Improvement Fund (NEIF) and by helping customers access PG&E's on-bill financing (OBF) program; (3) deploying SEM programming; (4) developing a commercial Equity program to provide support and services to commercial Equity customers; (5) scaling incentives based on TSB; (6) using data analytics to target customers with high savings and TSB potential; and (7) by emphasizing coordination with other programs through the "Any Open Door" strategy. All of these strategies are described in more detail in Exhibit 2, Chapter 4, Section 5.1.

Industrial Sector

The industrial sector comprises approximately 6,000 industrial accounts, collectively consuming approximately 950,000 MWh annually, which represents 24% of MCE's non-

[34] North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

residential load and 12% of MCE's total electricity load. Characteristics of industrial customers and their energy priorities are highly variable. MCE's industrial program responds to inherent differences in industrial facilities and emphasizes integrated program offerings under a single programmatic umbrella. MCE's strategies to ensure that its industrial program delivers value to its industrial customers while also achieving or exceeding TSB goals parallel its agricultural program strategies. MCE will (1) implement a joint program that targets both agricultural and industrial customers (MCE's AIR program) to achieve cost efficiencies and address common pain points; (2) implement SEM programming; (3) scale incentives based on TSB; (4) emphasize coordination with other programs under the "Any Open Door" approach; and (5) use data analytics to target customers with high savings potential. Through its AIR program, MCE will also serve public sector facilities whose operations resemble industrial processes, including facilities such as water and wastewater treatment plants. All of these strategies are described in more detail in Exhibit 2, Chapter 4, Section 7.1.

Residential Sector

MCE's 721,000 residential accounts make up approximately 90 percent of MCE's total customer accounts. Residential customers consume approximately 3.8 million MWhs annually, which represents 48.5% of MCE's total electricity load. Approximately 26% of residential customers live in multifamily properties, whereas 74% of residential customers live in single-family properties. MCE will offer ratepayer-funded EE programs to both single-family and multifamily properties, with some programs focusing on reaching the resident (e.g., homeowner or renter), and others incorporating unique strategies that are attractive to property owners and managers in order to address split incentive challenges.[35]

[35] A "split incentive" refers to a circumstance where the benefits of a transaction (for instance, the installation of an EE measure) pass to someone other than the party paying the cost for that transaction.

MCE proposes two primary goals for its residential sector customers: (1) serve low- to moderate-income customers with comprehensive offerings that save energy and money while providing additional NEBs; and (2) serve market-rate residential customers with programs that meet or exceed TSB requirements. MCE will reach these goals by (1) offering SEM programming for multifamily properties; (2) deploying behavioral messaging including a Home Energy Report (HER) program, which provides customers with information about their energy usage behavior and identifies resources for low- to no-cost energy savings; (3) using data analytics to identify customers with greatest potential; (4) offering P4P programs; (5) filling gaps in existing programs for low- to moderate-income customers; (6) networking within key communities to identify homes that are eligible for Equity programs; and by (7) emphasizing the "Any Open Door" strategy which uses energy efficiency as a gateway to other sustainability and energy offerings. All of these strategies are described in more detail in Exhibit 2, Chapter 4, Section 8.1.

Cross-cutting Sector

"Cross-cutting" refers to those programs that provide a benefit across several sectors, programs and potentially multiple segments. Cross-cutting programs also straddle multiple MCE and state policy objectives, including decarbonization, EE goals, Distributed Energy Resource (DER) programs, and more. MCE's planned cross-cutting program during the eight-year Business Plan period is its WE&T program, which provides education and on-the-job training opportunities to grow a sustainable and advanced EE and electrification workforce. MCE will increase the capacity of the workforce to install and maintain emerging EE and electrification measures and create opportunities for sustainable employment in the emerging electrification industry by implementing several sector-specific strategies, including: (1) providing training for EE contractors and job-seekers in the sustainable energy field; (2) matching job-seekers with energy

contractors for on-the-job training; and (3) following best practices from industry leaders in creating high quality employment. All of these strategies are described in more detail in Exhibit 2, Chapter 4, Section 6.1.

4.6.3. Strategies Driving Distribution of Budget Among Sectors and Segments

MCE's strategy for distributing its portfolio budget between the Resource Acquisition, Market Support, and Equity segments is based on the defined objectives of each segment. To determine the appropriate allocation of funding across the three segments, MCE first projected the budget for the Resource Acquisition segment of the portfolio, based on a zero-based budgeting approach.[36] After determining the Resource Acquisition budget, MCE extrapolated the budget for Equity and Market Support programs by applying the 30% budget cap per D.21-05-031.[37] Next, MCE populated the Equity and Market Support segments with existing programs that were designed primarily to meet the objectives of those segments (e.g., MCE's existing WE&T (Market Support) and Home Energy Savings (Equity) programs). MCE then dedicated the remaining budget under the 30% budget cap to propose new Equity programs that will fill gaps in MCE's existing programs.

The following table shows the budget distribution for the 8-year Business Plan period among segments.

[36] MCE describes its zero-based budgeting approach for portfolio planning in more detail in Exhibit 1, Chapter 2 and Exhibit 2, Chapter 2.

[37] Per D.21-05-031, Equity and Market Support programs must be limited to a maximum of 30% of the total portfolio budget. *See* D.21-05-031, COL 9 at 75.

Table 1-4: Business Plan Budget Distribution Across Segments[38]

Portfolio Segment	Total Spending Budget Request		Percent of Portfolio
Resource	$	104,465,303	66%
Market Support	$	8,120,015	5%
Equity	$	39,364,213	25%
Total	$	151,949,531	96%

MCE determined the distribution of budgets for each sector using a bottom-up budgeting process based on each program's projected energy savings (for Resource Acquisition programs), or the program's planned activities (for Market Support and Equity programs). To develop its sector budgets, MCE first determined the potential in each sector for the programs discussed in this Business Plan, based on past experiences, feedback from implementation partners, industry stakeholders and an assessment of its service area. This potential informs MCE's estimate of the TSB that it expects each sector to achieve, which in turn determines the incentive and implementation payments for many of MCE's programs. For these types of programs, MCE uses the potential energy savings or TSB to calculate the performance-based implementation budget and the incentive. MCE then adds in the costs that are not tied to performance, such as the programs' proportional share of administrative budget associated with policy support or data tracking and reporting. For programs that are not compensated based on TSB, MCE conducted a zero-based budgeting exercise to account for all of the costs associated with program implementation activities. MCE also attributed its administrative labor costs to each program based on that program's proportional share of administrative support. Finally, MCE tallied up program costs for each sector.

[38] Total budget excludes EM&V which is not a segment and accounts for four percent of the annual portfolio budget.

Table 1-5 below shows the budget and the percentage of MCE's total portfolio budget attributable to each sector of the eight-year Business Plan period.

Table 1-5: Business Plan Budget Distribution Across Sectors[39]

Primary Sector	Total Spending Budget Request		Percent of Portfolio
Agricultural	$	5,981,061	4%
Commercial	$	65,148,914	41%
Industrial	$	8,846,820	6%
Residential	$	63,852,720	40%
Cross-Cutting	$	14,451,246	9%
Total	$	158,280,762	100%

The percentages budgeted for each sector remain fixed across the four- and eight-year planning periods because MCE does not expect a ramp up in spending in any particular sector between the periods. This budget allocates more funds to the commercial and residential sectors (around 40% each), and less to the industrial, agricultural and cross-cutting sectors (between 4-9% each). This is appropriate as both the residential and commercial sectors in MCE's service area have unique characteristics that merit a greater focus in MCE's EE programming. As noted above, the residential sector makes up the highest number of MCE customer accounts (around 90% of total customer accounts). The commercial sector, on the other hand, provides the greatest opportunities for achieving cost effective savings. The industrial and agricultural sectors are much smaller within MCE's service area, and thus have comparatively lower funding rates.

4.6.4. Outsourcing/Third-Party Programs

While MCE is not subject to third-party program requirements for its EE portfolio like the IOUs,[40] MCE still relies on third-party implementers for the majority of its EE programs. MCE

[39] Total budget includes EM&V in the cross-cutting sector. EM&V accounts for four percent of the annual portfolio budget.

[40] These third-party program requirements apply only to investor-owned utility PAs per R.13-11-005, D.16-08-019, *Decision Providing Guidance for Initial Energy Efficiency Rolling Portfolio Business Plan Filings* (Aug. 18, 2016).

considers several factors in its decision to contract with a third-party for a particular service, including staff capacity and expertise, duration of need, and availability of particular tools or resources to support program design and implementation. Generally, MCE staff do not conduct all implementation activities for programs. If MCE determines that a contract with a third-party is the optimal approach to meeting a need, MCE follows its solicitation guidelines to select an implementation partner. MCE generally requires competitive solicitations for contracts above $60,000. MCE anticipates nearly all of its EE third-party agreements will be in excess of this amount and will be completed through a competitive solicitation.

MCE also engages with multiple partners through an alternative engagement path – the Marketplace program. In short, providers who contribute to the Marketplace program do not need to invest or compete in a competitive solicitation. They must agree to the basic terms and conditions of the Marketplace program model and how performance payments are made, but MCE does not enter into direct contracts with providers. This is a key draw for providers, as it provides flexibility for them to determine how they can best respond to the Marketplace's value proposition. The Marketplace program approach (which is described in more detail in Exhibit 2, Chapter 3, Section 2) serves as an opportunity to enlist broad participation from diverse providers – not just traditional EE implementers – and allows providers to generate their own program ideas. In short, the Marketplace model encourages enrollment and innovative ideas from the broader EE industry, while minimizing barriers to participation. Under a Marketplace program, implementation partners are largely free to employ any delivery strategy or mix of measures that result in verifiable impacts.

Both the competitive solicitation process and the Marketplace model enable MCE's programs to benefit from the innovation and support of third parties. MCE will continue to prioritize these partnerships across all sectors throughout the eight-year Business Plan period.

4.6.5. Portfolio Coordination

As a part of MCE's active portfolio management strategies, MCE coordinates its EE portfolio both with other demand-side programs, as well as with other EE PAs. In doing so, MCE goes beyond cross-promoting programs. Instead, MCE strives towards integrating all available programs for a streamlined customer experience. However, MCE also recognizes that customers may not have the capacity and resources to participate in every available program. In these cases, MCE will employ "staged program leveraging." This approach allows customers and MCE to focus on the programs that offer the largest value first. After a successful project, MCE will explore opportunities for the same customer to enroll in additional complementary programs.

The following sections describe MCE's efforts to coordinate its EE offerings with other demand-side programs, as well as with EE programs offered by other PAs. Over the Business Plan period, MCE will continue to follow and engage in the development of new program offerings and will incorporate them into its "Any Open Door" model as feasible.

4.6.5.1. Coordination With Other Demand-side Programs

MCE customers have access to an array of program offerings to serve their varying needs and often require guidance to navigate those offerings. Through its "Any Open Door" approach, anytime a customer approaches MCE about a program offering, MCE will provide that customer with helpful information about the full suite of energy-related program opportunities and resources available. In addition to MCE's and other PAs' EE offerings, MCE informs customers about the following non-EE demand-side programs:

- Programs and initiatives focusing on electrification measures;

- Programs focusing on other DER activities such as demand management, solar and/or energy storage programs, or electric vehicles (EV) and electric vehicle supply equipment (EVSE);
- Programs providing financial support to Equity customers; and
- Programs focusing on health and safety improvements.

Coordination with Electrification Initiatives

MCE is focused on expanding and accelerating electrification as a way to reduce greenhouse gas (GHG) emissions from energy use. Importantly, MCE's WE&T program will educate and prepare a skilled and qualified electrification workforce (see more details in Exhibit 2, Chapter 4, Section 6). Furthermore, MCE will seek to maximize available funding for electrification measures by coordinating the layering of available offerings and incentives.

Coordination with Other DER Programs

MCE closely coordinates its EE offerings with its other DER-focused customer programs. For example, in 2020, MCE launched an Energy Storage Program[41] with the goal of increasing resiliency for customers located in HFTDs and impacted by PSPS events. MCE staffers ensure that any customer interested in MCE's EE programs is also educated on the opportunities to install solar and storage supported by MCE's Energy Storage program. Similarly, MCE's EE staff connects customers who are interested in EVs to its transportation electrification program offerings.[42]

[41] MCE's Energy Storage Program connects customers with existing or new solar to available incentives, program funding, performance payments, and financing to help install battery storage. *See* Marin Clean Energy Energy Storage Program at https://www.mcecleanenergy.org/home-energystorage/.
[42] More information about MCE's transportation electrification programming can be found at https://www.mcecleanenergy.org/ev-drivers/ and https://www.mcecleanenergy.org/ev-charging/.

Coordination on Programs for Equity Customers

When MCE engages with customers who are interested in MCE's EE offerings, MCE program staff ensures that the customer is taking advantage of all the financial support and bill relief programs that are available from MCE, the State, and other entities—including California Alternate Rates for Energy (CARE), Family Electric Rate Assistance (FERA), Low-Income Home Energy Assistance (LIHEAP) and Low-Income Weatherization Program (LIWP) programs.

MCE's own Low-Income Families and Tenants (LIFT) program is an example of successful Equity program integration. This program, which was authorized in D.16-11-022[43] and extended in D.21-06-015,[44] layers additional funding for low-income customers on top of existing rebates offered through the EE Multifamily Energy Savings (MFES) program. The process is seamless from the customer's perspective, and MCE allocates energy savings and expenses between the two programs on the back end with no double-counting.

Furthermore, one of the most encouraging developments in the regulatory sphere in California in recent years has been an increased focus on developing ratepayer-funded programs focused on Equity customers.[45] These programs include, but are not limited to, the Disadvantaged Communities (DAC) Green Tariff (DAC-GT) and Community Solar Green Tariff (CS-GT) programs, the Arrearage Management Program (AMP) and the Percent of Income Payment Plan (PIPP) programs. MCE will seek to leverage those programs to support customers participating in its EE programs, and vice versa. MCE is a program administrator for the DAC-GT/ CS-GT

[43] Application (A.) 14-11-007, *Decision on Large Investor-Owned Utilities' California Alternate Rates for Energy (CARE) and Energy Savings Assistance (ESA) Program Applications* (November 10, 2016).
[44] A.19-11-003, *Decision on Large-Investor Owned Utilities' and Marin Clean Energy's California Alternate Rates for Energy (CARE), Energy Savings Assistance (ESA), and Family Electric Rate Assistance (FERA) Program Applications for Program Years 2021-2026* (June 3, 2021).
[45] MCE defines Equity customers as all categories of customers eligible for its proposed Equity segment programs. See more in Exhibit 2, Chapter 3, Section 4.2.

programs[46] and as such can easily identify customers eligible for those programs. MCE participates in the Arrearage Management Program (AMP)[47] and will participate in the forthcoming Percentage of Income Payment Plan pilot,[48] and therefore is in a position to ensure that all customers who are enrolled in AMP or participate in its PIPP pilot are offered the opportunity to participate in EE programs.

Finally, MCE will also help eligible customers access any rate or tariff support and bill relief program that MCE itself offers. For example, "MCE Cares" is a bill relief program that MCE launched in 2020 using its own generation revenue to support residents and businesses suffering adverse financial impacts from the COVID-19 pandemic. By leveraging its own bill relief programs, ratepayer-funded programs, and State-funded programs, MCE will help ensure that Equity customers not only save energy but also receive non-energy benefits including health, safety, and comfort improvements in their homes.

Coordination with Health and Safety Programs

MCE coordinates its EE programming with related health and safety programs. For instance, customers participating in Contra Costa County's Asthma Mitigation Project—a statewide program providing funding for local grantees to offer asthma home visiting services to individuals with poorly controlled asthma, with a focus on low-income communities and communities of color—are referred into MCE's Home Energy Savings program.

---

[46] The DAC-GT/ CS-GT programs were adopted by the Commission in R.14-07-002, D.18-06-027, *Alternate Decision Adopting Alternatives to Promote Solar Distributed Generation in Disadvantaged Communities* (Jun. 21, 2018) and provide a 20% discount on the electric portion of the utility bill for eligible customers living in DACs.

[47] The AMP was authorized in R.18-07-005, D.20-06-003, *Phase I Decision Adopting Rules and Policy Changes to Reduce Residential Customer Disconnections for the Larger California-Jurisdictional Energy Utilities* (Jun. 11, 2020).

[48] The PIPP pilot was authorized in R.18-07-005, D.21-10-012, *Decision Authorizing Percentage of Income Payment Plan Pilot Programs* (Oct. 7, 2021).

In addition to these coordination efforts with other demand-side programs, MCE also coordinated with other EE PAs on the implementation of EE programs authorized in this Application.

4.6.5.2. Coordination with other Energy Efficiency Program Administrators

MCE engages in direct coordination with PG&E and the Bay Area Regional Energy Network (BayREN) to avoid duplication of effort, unnecessary spending, customer and contractor confusion and stranded opportunities in overlapping service areas. That coordination is also memorialized in a Joint Cooperation Memorandum (JCM).[49]

Coordination with PG&E

MCE and PG&E coordinate across four main areas to update each other on program developments across EE program offerings: (1) customer choice and information sharing; (2) marketing; (3) policy; and (4) double-dipping prevention. Sector- and program-level coordination occurs in monthly check-ins, as well as ad-hoc email communications. In these meetings, MCE and PG&E address new and ongoing coordination issues related to all relevant programs.

Coordination with BayREN:

MCE and BayREN have a rich relationship of coordination across similar or related EE programs, driven by MCE and BayREN's common requirement to achieve meaningful and effective programs and a strong record of trust and cooperation. Under the current portfolio cycle, three BayREN Programs (i.e., (1) BayREN Home+; (2) Bay Area Multifamily Building

[49] MCE and PG&E developed this JCM in compliance with D.18-05-041, Ordering Paragraph 38 at 190. The JCM summarizes programs that MCE intends to run, summarizes the program PG&E offers to the extent they overlap with the programs that MCE intends to run, describes how MCE and PG&E will work with each other so that customers are informed of all options, and describes how MCE and PG&E will ensure customers are aware of the others' programs, where that administrator does not have a similar offering.

Enhancements (BAMBE); and (3) BayREN Business) serve customers that are also eligible for MCE's EE program (i.e., (1) HES; (2) Multifamily Energy Savings (MFES); (3) Multifamily SEM; and (4) the Commercial Program). MCE and BayREN continue to work closely together to manage their overlap in program offerings and minimize customer confusion and potential duplication of effort. MCE's engagement with BayREN includes similar discussions as those with PG&E (including a focus on marketing, policy, double dipping prevention, and customer choice and information sharing). The BayREN and MCE program teams meet on a regular basis to discuss program coordination and will continue to do so.

As programs evolve, MCE will intentionally explore ways to leverage and complement other PAs' programs. Below is a discussion of how MCE programs have been designed to complement existing programs to date. MCE anticipates continuing these approaches through the Business Plan period.

- Collaborating with BayREN and other local government initiatives;
- Filling gaps in resources provided by other programs;
- Referring customers to PG&E financing offerings;
- Supporting customers navigating multiple program offerings.

These strategies are described in greater detail in Exhibit 2, Chapter 5, Section 6.

4.7. Evaluation, Measurement and Verification

MCE will focus its evaluation, measurement and verification (EM&V) efforts and budget on studies that:

- Provide process improvement recommendations for program delivery strategies that are newer and/or those that may not be delivering on goals;
- Quantify the market potential for new measures and delivery strategies; and

- Describe the landscape of other programs and identify opportunities for MCE's programs to close gaps in services.

These EM&V studies are described in greater detail in Exhibit 2, Chapter 6.

4.8. Alignment with Policy and Regulatory Requirements

MCE's 8-year EE Business Plan, 4-year Portfolio Plan and associated budgets are driven primarily by legislative and regulatory requirements (see Exhibit 1, Chapter 2 for a more detailed explanation of the several drivers of MCE's budgetary planning process). Regulatory requirements—as established by Commission decisions—in particular shape MCE's budget, its technical inputs, its goals (TSB and energy savings) and its strategies over the eight-year Business Plan period. The sections below describe how MCE's Business Plan and Portfolio Plan align with both legislative and regulatory requirements.

The legislative drivers shaping MCE's EE portfolio and budget include, but are not limited to the following:

- Senate Bill (SB) 350 (De León, 2015) – Clean Energy and Pollution Reduction Act
- Assembly Bill (AB) 802 (Williams, 2015) – Benchmarking and Changes to Energy Efficiency Baselines

SB 350, the Clean Energy and Pollution Reduction Act, includes guidance to double EE savings by 2030, as well as to enhance workforce development and training opportunities for residents in DACs. The implications of this guidance on MCE's EE portfolio are two-fold. First, doubling EE will require MCE to expand its programs in general and to focus on developing innovative program models to deliver cost-effective savings in particular. Second, workforce development and training enhancement will require MCE to invest additional funding in its WE&T program to support the development of a qualified EE workforce, especially in DACs.

Another legislative policy driver is AB 802, which addresses benchmarking and changes to EE baselines. AB 802 calls for incentive programs to use NMEC as a basis for measuring energy savings and is supported by SB 350 which also emphasizes measured savings. This guidance compels MCE to focus its attention on P4P, population-level NMEC programs to incentivize vendors to find cost-effective EE projects. This program design helps de-risk the provision of ratepayer funds since MCE only pays for realized savings and benefits.

4.8.1. Compliance with Regulatory Requirements

MCE has been administering EE funds under California Public Utilities Code Section 381.1 since 2013.[50] In 2014, the Commission declared CCAs to be PAs in the same sense as IOUs and imposed the same cost effectiveness requirements on community choice aggregators (CCAs) as IOUs.[51] On January 17, 2017, MCE filed a Business Plan with the Commission that requested authorization to expand MCE's EE portfolio to include all customer sectors[52] and more comprehensive programmatic offerings.[53] On June 5, 2018, the Commission approved MCE's Business Plan in D.18-05-041, expressly allowing MCE to serve all sectors and customers within them.[54] MCE's current EE funding application is requested pursuant to California Public Utilities Code Section 381.1(a)-(d). MCE proposes a portfolio that builds on this precedent and continues to propose comprehensive program offerings to serve all customer sectors under the same cost

[50] To date, MCE is the only community choice aggregator ("CCA") to have requested energy efficiency funding under Code Section 381.1(a)-(d).
[51] R.09-11-014, D.14-01-033, *Decision Enabling Community Choice Aggregators to Administer Energy Efficiency Programs,* p. 14 (Jan. 16, 2014); *see also* R.13-11-005, D.14-10-046, *Decision Establishing Energy Efficiency Savings Goals and Approving 2015 Energy Efficiency Programs and Budgets,* p. 120 (Oct. 16, 2014).
[52] While MCE did not explicitly include a public sector, its Commercial and Industrial programs are available to serve public sector customers.
[53] *See Application of Marin Clean Energy for Approval of its Energy Efficiency Business Plan* (Application ("A.") 17-01-017) filed January 17, 2017 (the "MCE Business Plan").
[54] A.17-01-013, D.18-05-041, *Decision Addressing Energy Efficiency Business* Plans, OP 33 at 189 (May 31, 2018).

effectiveness rules as the IOUs. Against this background, MCE is describing in the following section how it is meeting regulatory requirements with its 8-year strategic Business Plan and 4-year Portfolio Plan filing, including in particular: (1) filing requirements; (2) TSB and energy savings goals; (3) segmentation and cost-effectiveness requirements; (4) budget requirements; (5) technical input requirements; (6) metrics requirements; (7) implementation plan requirements; (8) workforce standards; (9) requirements related to refrigeration projects; and (10) requirements related to incentive layering.

Filing Requirements

Under the new portfolio review and approval process adopted in D.21-05-031, EE PAs must file a new EE portfolio application by February 15, 2022.[55] This filing deadline was subsequently extended to March 4, 2022.[56] Portfolio applications must include a high-level, eight-year business plan (covering PYs 2024-2031) and a detailed four-year portfolio plan filing (covering PYs 2024-2027).[57] The "EE Business Plan and Application Template"[58] describes the basic content that the eight-year Business Plan and four-year portfolio filing must include.[59]

Consistent with the Commission's directives, MCE's eight-year Business Plan (in Exhibit 1 of this Testimony) serves as a high-level "strategic overlay" on the more detailed four-year portfolio plan filing (in Exhibit 2 of this Testimony). The Business Plan guides MCE's EE portfolio and program focus and contains high-level segment and sector goals and strategies, as well as a proposed budget for each year of the Business Plan period. MCE expects that its proposed

[55] D.21-05-031, OP 5 at 81.
[56] See Letter from Executive Director Rachel Peterson, *Granting Request for Extension of Time to Comply with Ordering Paragraph 5 of Decision 21-05-031*, (January 26, 2022)
[57] D.21-05-031, OP 5 at 81.
[58] Energy Efficiency Business Plan and Application Template, available at: https://www.caeecc.org/2022-business-plan-application-documen.
[59] D.21-05-031, Attachment A.

budget—once approved—will set the annual budget forecast and the two four-year program portfolio spending caps within the PY 2024-2031 period.

MCE's four-year portfolio filing for PYs 2024-2027 includes a more detailed description of MCE's segment and sectors goals, strategies and outcomes. It also provides high-level descriptions of each proposed MCE program, as well as sector-, portfolio- and segment-level metrics. Finally, the portfolio plan provides cost-effectiveness showings and a detailed budget request based on a zero-based budgeting approach.

TSB and Energy Savings Goals

In D.21-05-031, the Commission adopted a new metric called the "Total System Benefit" (TSB) as the new goal for ratepayer-funded EE programs.[60] TSB is an expression, in dollar terms, of the lifecycle energy, capacity and GHG reduction benefits of energy efficiency, expressed on an annual basis.[61] For PYs 2022 and 2023, the Commission ordered the PAs to continue meeting existing energy savings goals and metrics, while also reporting TSB. The Commission further ordered that TSB replace energy savings goals as the single goal metric beginning in PY 2024—the first program year covered by this Business Plan and MCE's associated four-year Portfolio Plan.[62]

MCE's energy savings and TSB goals for its EE portfolio are not set through the bi-annual Potential and Goal (P&G) study completed by the Commission to determine the EE potential and goals for the IOU PAs. Instead, D.21-09-037 determined that MCE may propose energy savings and TSB goals every four years through the portfolio application process and may propose to revise

[60] *Id.*, p. 9.
[61] *Id.*
[62] *Id.*, OP 1 at 80.

their goals and savings forecast in the true-up or mid-cycle advice letters.[63] Hence, MCE is establishing its energy savings and TSB goals for PYs 2024-2031 in this Application filing and has designed an EE portfolio to meet these TSB goals. MCE's TSB and energy savings forecasts for its 8-year strategic Business Plan are outlined in Exhibit 1, Chapter 2.

Segmentation & Cost-Effectiveness

In D.21-05-031, the Commission directed PAs to segment their EE portfolios into the following three categories in this Application filing: Resource Acquisition, Market Support, and Equity.[64] At a high level, Resource Acquisition programs deliver short-term, cost-effective avoided cost benefits to the electricity and natural gas systems, and must make up the bulk of savings to achieve TSB goals.[65] Market Support programs, in contrast, support the long-term success of the EE market.[66] Equity programs primarily provide energy efficiency to HTR or underserved customers and disadvantaged communities.[67] Equity programs are distinct from low-income EE programs (i.e., the Energy Savings Assistance (ESA) program).[68] While a single program may accomplish the objectives of more than one of the three segments (e.g. some programs may deliver short-term energy savings *and* market support), PAs may assign individual programs to only one segment at a given time for the purpose of portfolio reporting and tracking.[69]

---

[63] R.13-11-005, D.21-09-037, *Decision Adopting Energy Efficiency Goals for 2022-2032*, p. 25 (Sep. 23, 2021).
[64] D.21-05-031, OP 2 at 81.
[65] *Id*., p. 14.
[66] *Id*.
[67] *Id*.
[68] Energy Savings Assistance (ESA) Program offers income-qualified units energy-efficient measures and weatherization. The ESA Program is administered by California's four investor-owned utilities. More details on ESA can be found at: https://www.cpuc.ca.gov/consumer-support/financial-assistance-savings-and-discounts/energy-savings-assistance.
[69] D.21-05-031, p. 16.

MCE describes its portfolio segmentation approach as well as associated segment goals, strategies and outcomes in Exhibit 2, Chapter 3.

In the four-year Portfolio Plan, PAs must show the Total Resource Cost (TRC) and Program Administrator Cost (PAC) ratios for all portfolio segments, separately and combined.[70] Further, PAs must demonstrate that their Resource Acquisition segment has a forecasted TRC ratio of at least 1.0 or greater (excluding consideration of Codes and Standards programs).[71] In contrast, the Commission does not require that programs in the Market Support or Equity segments meet a cost-effectiveness threshold. Instead, the Commission limited PAs to spending no more than 30% of their overall portfolio budget on those programs.[72] Further, the Commission noted that the California Energy Efficiency Coordinating Committee (CAEECC) should develop and vet metrics for Market Support and Equity programs and stated that it would evaluate those metrics when deciding whether to approve portfolio proposals from all PAs.[73]

MCE's Resource Acquisition segment's portfolio-level cost-effectiveness results (*i.e.*, PYs 2024-2027) are described in Exhibit 2, Chapter 1 and cost effectiveness results for the 8-year Business Plan period (*i.e.*, PYs 2024-2031) are included in Exhibit 1, Chapter 2. The Resource Acquisition segment's is projected to achieve a portfolio-level TRC of 1.19 for the Business Plan period. Furthermore, MCE describes how it intends to track and report on the metrics developed for the Market Support and Equity segments in Exhibit 2, Chapter 3, Sections 3.4 and 4.4.

<u>Budget Requirements</u>

D.21-05-031 determined that EE portfolio budgets must be "zero-based," which means that PAs must justify all expenses for each year of the four-year period and provide funding proposals

[70] *Id.*, p. 22.
[71] *Id.*
[72] *Id.*, p. 23.
[73] *Id.*

for both program implementation and portfolio administration costs based on detailed budget testimony and supporting workpapers.[74] The Decision also maintained all existing budget cost caps or targets for direct-implementation, non-incentive costs, administrative costs, and marketing, education and outreach costs.[75]

MCE's 2024-2027 Portfolio budget is zero-based, and is described in more detail in Exhibit 2, Chapter 2 of its testimony. MCE's 2024-2031 projected Business Plan budget is included in Exhibit 1, Chapter 2.

EM&V Cost Cap

D.09-09-047 requires that the overall EM&V budget is set at four percent of overall EE portfolio budgets.[76] MCE's EM&V budget request is consistent with the 4 percent EM&V budget cap (as a percentage of the total portfolio budget). MCE is requesting an increase of its portion of the overall EM&V budget to 40 percent per D.16-08-019 to implement innovative and important EM&V studies.[77] MCE's proposed EM&V studies and activities are further discussed in Exhibit 2, Chapter 6.

Technical Inputs

PAs are required to use current Database for Energy Efficient Resources (DEER) values approved by the Commission, including DEER PY 2023 (Resolution E-5152) as the technical inputs for this portfolio application.[78] D.21-09-037 further directed the PAs to use the 2021

[74] *Id*., p. 33.
[75] *Id*., pp. 33-34.
[76] A.08-07-021, D.09-09-047, *Decision Approving 2010 to 2012 Energy Efficiency Portfolios and Budgets*, OP 50 at 390 (Sep. 24, 2009).
[77] D.16-08-019, OP 16 at 112.
[78] D.21-05-031, p. 41.

Avoided Cost Calculator (ACC) to evaluate cost effectiveness for the purposes of this application.[79]

As a part of the 2020 ACC update, the Commission developed a separate ACC for refrigerants, which calculates the net present dollar value of lifecycle emissions for different refrigerant and equipment-type configurations (Refrigerant ACC).[80] Beginning in PY 2022, the Commission has required PAs to use the Refrigerant ACC for portfolio forecasts and filings, and has further directed PAs to submit new and updated workpapers for low-GWP refrigerant measures.[81]

While the CET can accommodate refrigerant measures, there are no approved workpapers or sufficiently documented measures for PAs to include quantitative forecasts on low-GWP refrigerant measures in this application filing. In recognition of this, PAs were granted temporary relief to not include low-GWP measures in the quantitative portfolio forecasts and were directed to provide only qualitative explanations of low-GWP measures. PAs must include low-GWP refrigerant forecasts in their September 1, 2023 true-up advice letter.[82]

MCE has therefore not included low-GWP measures in quantitative portfolio forecasts. It has used the 2021 ACC to evaluate the cost-effectiveness of its portfolio, consistent with Commission requirements.

---

[79] D.21-09-037, COL1, p.28.
[80] Available at: ftp://ftp.cpuc.ca.gov/gopher-data/energy_division/EnergyEfficiency/CostEffectiveness/Refrigerant%20Calculator.xlsx.
[81] D.21-05-031, p. 60.
[82] Per Notice to EE Program Administrators from ED Staff (Dec. 10, 2021).

Implementation Plans

MCE has historically uploaded all new implementation plans (IPs) for EE programs to the California Energy Data and Reporting System (CEDARS) per the requirements of D.15-10-028.[83] D.21-05-031 amended this requirement—PAs must now submit their IPs with their portfolio application (or provide a link to the plans). In the case of third-party programs not yet contracted for, where an IP is not available, PAs are required to provide a general description of the program theory or approach.[84]

MCE has included links to the IPs of its existing and continuing programs in the "Program Cards" provided in Exhibit 2, Chapter 4, Attachment A. MCE is also providing general descriptions of its proposed new programs for PYs 2024-2027 in Exhibit 2, Chapter 4.

Metrics

EE metrics have been established over time by both the Commission and EE PAs. Attachment A to D.18-05-041 (i.e., the Commission's decision on the PAs' 2017 EE portfolio applications (A.17-01-013 et al.)) included a series of metrics and indicators both at the sector- and the portfolio-level. The Commission directed PAs to (1) track progress towards those metrics, targets and indicators; (2) to work with Commission staff to finalize those metrics, targets and indicators; and (3) to file an updated set of final metrics with the Commission.[85] The PAs subsequently filed an updated set of final metrics in August of 2018.[86] The Commission also gave PAs the discretion to track additional metrics and indicators, including those included in their

[83] R.13-11-005, D.15-10-028, *Decision RE Energy Efficiency Goals for 2016 and Beyond and Energy Efficiency Rolling Portfolio Mechanics*, OP6 at 124 (Oct. 22, 2015).
[84] D.21-05-031, p. 65.
[85] D.18-05-041, OP9 at 183-184.
[86] A.17-01-013 et.al., Marin Clean Energy Portfolio and Sector-level Metrics Compliance filing from August 6, 2018

business plans, and directed PAs to include progress toward all metrics and indicators in their annual reports.[87]

D.21-05-031 states that PAs "will still be held accountable to existing . . .metrics." It also confirms that "[m]etrics for programs that have already been required by the Commission in prior decisions are still required, unless and until the Commission decides to reevaluate those sector-level metrics."[88] It also directed the CAEECC to form a new working group to develop and vet new reporting metrics for the Market Support and Equity segments, and noted that those metrics "will be considered alongside the portfolio filings due from all program administrators in February 2022."[89]

MCE has included portfolio- and sector-level metrics for its EE portfolio per D.18-05-041 in Exhibit 3, Appendix A. MCE also describes how it plans on tracking and reporting on the CAEECC-developed metrics for the Market Support and Equity segments in Exhibit 2, Chapter 3 and includes these metrics in Exhibit 3, Appendix C.

Workforce Standards

The Commission articulated workforce standards applicable to EE PAs—and in particular, to non-residential projects involving heating, ventilation, and air-conditioning (HVAC) measures, as well as lighting controls—in A.17-01-013, D.18-10-008, *Decision Addressing Workforce Requirements and Third-Party Contract Terms and Conditions* (Oct. 11, 2018). PAs are required to comply with the workforce standards and must therefore only use installation technicians meeting a set of criteria defined in D.18-10-008. MCE's third-party contracts include the workforce standards for HVAC and lighting projects required by D.18-10-008.

[87] D.18-05-041, OP9 at 184.
[88] D.21-05-031, p. 23.
[89] *Id*., OP14 at 84.

Incorporation of Refrigeration Projects

Recognizing that Senate Bill 1013 (Lara, 2018) directs the Commission to consider developing a strategy for including low-GWP refrigerants in the EE portfolios it oversees, D.21-05-031 concluded that PAs must start accounting for low-GWP refrigerant measures in their portfolio forecasts, filing and Business Plan strategies.[90] The Commission observed that PAs can begin encouraging the use of more low-GWP refrigerants in EE equipment and determined that PAs must consider and incorporate strategies to support the use of low-GWP refrigerants in their Business Plan filings.[91] More specifically, the Commission directed PAs to use the Refrigerant ACC for low-GWP refrigerant measures in portfolio forecasts and filings.[92] The Commission however also noted that refrigeration programs may be best developed under the Market Transformation Framework adopted in R.13-11-005, D.19-12-021, *Decision Regarding Frameworks for Energy Efficiency Regional Energy Networks and Market Transformation* (Dec. 5, 2019).[93]

As discussed above in the discussion of technical inputs, PAs cannot include quantitative forecasts of low-GWP refrigerant measures. This is due to a lack of approved workpapers or other documentation supporting quantitative forecasts. MCE will include low-GWP refrigerant forecasts in its September 1, 2023 true-up advice letter as feasible. MCE describes its strategies to incorporate refrigeration projects in its EE portfolio during PYs 2024-2027 in Exhibit 2, Chapter 1, Section 2.2.

[90] *Id*., COL 41 at 80.
[91] *Id*., p. 60.
[92] *Id*., OP16 at. 85.
[93] *Id*., p. 60.

Incentive Layering

The Commission's Decision 21-11-002 in its Rulemaking regarding building decarbonization (R.19-01-011) encourages specific reporting approaches for EE programs and other incentive programs including the Self-Generation Incentive Program (SGIP), the Building Initiative for Low-Emissions Development (BUILD) program, and the Technology and Equipment for Clean Heating (TECH) initiative.[94] Specifically, the Commission adopted four overarching guiding principles for incentive layering: (1) ease of participation; (2) complementary incentives; (3) non-duplicative attribution of program benefits; and (4) ongoing coordination between program administrators and implementers.[95] Consistent with those principles, the Commission encouraged PAs to follow a set of guidelines for any EE programs addressing building decarbonization technologies:

- Program evaluations should acknowledge the overlapping nature of building decarbonization incentives and the fact that multiple programs may be influencing uptake and market share increases;
- Attribute all credit for energy savings to energy efficiency programs alone, unless and until the Commission adopts a different approach in this proceeding or in another relevant proceeding; and
- For programs in which specific metrics are required to be reported, acknowledge the fact that these metrics are also being tracked and reported in more than one program.[96]

[94] R.19-01-011, D.21-11-002, *Decision on Incentive Layering, the Wildfire and Natural Disaster Resiliency Rebuild Program, Data Sharing, Rate Adjustments for Electric Heat Pump Water Heaters, and Propane Usage*, p. 7 (Nov. 4, 2021).
[95] D.21-11-002, p. 24.
[96] *Id*., p. 34.

MCE customers have access to an array of energy-related offerings to serve their varying needs, including EE but also other demand management and DER programs that in many cases address building decarbonization. MCE coordinates the layering of available offerings and incentives (both among MCE programs as well as external programs) and will follow the Commission's recommended guidance on reporting approaches as articulated in D.21-11-002.

4.8.2. Alignment with Relevant Action Plans

In recent years, California energy and utility regulators, local governments, and MCE itself have engaged in a variety of planning processes related to providing clean, safe, reliable and affordable energy to all electricity users. Those processes have delivered several landmark plans that establish principles, goals and concrete action items to inform a range of electricity stakeholders including LSEs such as MCE. The section below summarizes a number of the "action plans" relevant to MCE's EE portfolio and explains how MCE's portfolio aligns with key aspects of those plans.

4.8.2.1. Commission's DER Action Plan 2.0

The DER Action Plan is a roadmap that helps to coordinate the Commission's activities across multiple proceedings aimed at advancing DER policy and reforming utility distribution planning, investment and operations.[97] DERs include EE, flexible load management, energy storage and other technologies. The Commission approved the first iteration of its DER Action Plan in 2016 (covering the 2016-2020 period) and has now published a "version 2.0" (currently in draft form) to guide the next phase of DER advancement in California.[98] The DER Action Plan

[97] California Public Utilities Commission Draft Distributed Energy Resource (DER) Action Plan 2.0 (Jul. 23, 2021) available at: cpuc.ca.gov/about-cpuc/divisions/energy-division/der-action-plan ("DER Action Plan 2.0").
[98] *Id*.

2.0 is aimed at ensuring that DER policy implementation in support of Senate Bill 100[99] and California's energy and climate goals is "coordinated across proceedings related to grid planning, affordability, load flexibility, market integration, and customer programs."[100] Importantly, the DER Action Plan 2.0 aims to maximize ratepayer and societal value of an anticipated high-DER future, while ensuring affordable and equitable rates.[101] Overall, the DER Action Plan 2.0 is structured as a set of four distinct tracks that advance the Commission's vision for a high DER future including: (1) load flexibility and rates; (2) grid infrastructure; (3) market integration; and (4) DER customer programs.[102] Each track includes "Vision Elements" and "Action Elements." The Action Elements reflect ongoing and future efforts that can be undertaken to achieve the Vision Element.

MCE's EE portfolio aligns with the DER Action Plan 2.0. At a high level, MCE's EE programs will promote load flexibility and thereby promote and enable increasing penetration of DERs. A key expected outcome of MCE's Resource Acquisition segment, for instance, is that energy efficiency and demand management solutions are seamlessly integrated. MCE's EE offerings enable customers to incorporate demand response and other demand management measures. More concretely, MCE will leverage data analytics from its NMEC platform to identify customers with load profiles that are conducive for delivering both EE and demand management solutions.

---

[99] The California legislature enacted Senate Bill 100 in 2018. SB 100 sets a 2045 goal of powering all retail electricity sold in California and state agency electricity needs with renewable and zero-carbon resources; and requires the California Energy Commission (CEC), California Public Utilities commission and California Air Resources Board (CARB) to use programs under existing laws to achieve 100 percent clean electricity.
[100] DER Action Plan 2.0 at 3.
[101] *Id*. at 3-4.
[102] *Id*. at 5.

Another key expected outcome of MCE's EE portfolio is improved grid reliability. MCE expects to achieve this outcome by aligning energy savings with peak demand hours. MCE will lean on data analytics to quantify energy savings and demand reductions that occur during peak periods. It will use this data to understand the impact of its programs on grid reliability. This aligns closely with the vision of the DER Action Plan 2.0, which—under "Track 3"—focuses on addressing the reliability of the grid through the integration of DERs into wholesale markets.[103] While MCE's EE programs are currently not integrated into wholesale markets, MCE's demand management programs under the Marketplace model open up new opportunities for market-based engagement that MCE will analyze further during the Business Plan period.

4.8.2.2. CPUC's Environmental & Social Justice Action Plan 2.0

The ESJ Action Plan serves as the Commission's "operating framework" to guide its integration of ESJ considerations throughout its work.[104] The Commission adopted Version 1.0 of its ESJ Action Plan in February 2019, and it published version 2.0 of that plan (in draft form) in October of 2021. The ESJ Action Plan is structured as a set of nine overarching goals, clear objectives associated with each goal, and 95 concrete action items to "ensure agency-wide collaboration, accountability, and forward movement in meeting ESJ principles."[105] Those top-line goals, in version 2.0 of the ESJ Action Plan, are as follows:

- Consistently integrate equity and access considerations throughout Commission regulatory objectives;

[103] *Id*. at 6.
[104] California Public Utilities Commission Environmental & Social Justice Action Plan, version 2.0 at 1 (Oct. 26, 2021) available at: cpuc.ca.gov/news-and-updates/newsroom/environmental-and-social-justice-action-plan ("ESJ Action Plan 2.0").
[105] *Id*. at 9.

- Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health;
- Strive to improve access to high-quality water, communications and transportation services for ESJ communities;
- Increase climate resiliency in ESJ communities;
- Enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the Commission's decision-making process and benefit from Commission programs;
- Enhance enforcement to ensure safety and consumer protection for all, especially for ESJ communities;
- Promote high road career paths and economic opportunity for residents of ESJ communities;
- Improve training and staff development related to environmental and social justice issues within the Commission's jurisdiction; and
- Monitor the Commission's environmental and social justice efforts to evaluate how they are achieving their objectives.[106]

Creating more equitable communities is a core tenet of MCE's mission and is central to how MCE approaches program design and delivery for its large and diverse customer base. MCE's Equity segment in particular—which represents 25% of MCE's annual budget for PYs 2024-2027 totaling $19.4 million in investments—aligns closely with the Commission's ESJ Action Plan. Programs in that segment generally focus on filling the gap in services for low- to moderate-income households, multifamily properties and businesses in underserved communities, and

[106] *Id*. at 1.

deliver energy efficiency to ESJ communities, consistent with the ESJ Action Plan and with the requirements of D.21-05-031.[107] The goals of MCE's Equity programs are to provide EE and electrification opportunities to residents and businesses in ESJ communities while also generating NEBs such as increased comfort and safety, improved air quality, and more affordable utility bills. These closely track the ESJ Action Plan's top-line goal of "increasing investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health."[108] MCE also includes meaningful community engagement as a key Equity segment strategy consistent with "Goal 5: Enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in the CPUC's decision-making process and benefit from CPUC programs."[109]

4.8.2.3. California Energy Commission 2019 California Energy Efficiency Action Plan

Assembly Bill 758 (Skinner, 2009) and Senate Bill 350 require the California Energy Commission (CEC) to provide regular updates on the State's progress toward increasing energy efficiency in existing buildings and doubling EE savings from electricity and natural gas end uses by 2030, relative to a 2015 base year. In compliance with those laws, the CEC developed the "Existing Buildings Energy Efficiency Action Plan" in 2015, followed by the "Senate Bill 350 Doubling of Energy Efficiency by 2030" report in 2017.[110] More recently, the CEC consolidated the Existing Building Energy Efficiency Action Plan, the Senate Bill 350 Doubling of Energy Efficiency by 2030 report, and other EE Equity efforts to form a comprehensive roadmap to

[107] D.21-05-031, p. 14.
[108] ESJ Action Plan at 1.
[109] *Id*. at 7.
[110] Kenney, Michael, Heather Bird, and Heriberto Rosales. *2019 California Energy Efficiency Action Plan* at 10. California Energy Commission. Publication Number: CEC-400-2019-010-SF ("2019 California EE Action Plan").

achieving California's energy efficiency and building decarbonization goals in the "2019 California Energy Efficiency Action Plan" (EE Action Plan).[111]

The EE Action Plan applies EE principles to California's energy vision and climate goals to support the development of "efficiency marketplaces" that deliver EE savings and GHG reductions consistent with California's targets. The EE Action Plan is organized around three goals: (1) doubling EE savings by 2030; (2) removing barriers to EE participation within low-income households, disadvantaged communities and rural regions; and (3) reducing the GHG emissions from buildings. The EE Action Plan makes a series of concrete recommendations to further its goals. Those recommendations are broadly organized in five categories: (1) funding sources beyond ratepayer portfolio; (2) energy efficiency data; (3) program designs and energy efficiency as a resource; (4) workforce development and standards compliance; and (5) demand flexibility and building decarbonization.[112]

MCE's EE portfolio contributes to, and aligns with, the goals in the 2019 California Energy Efficiency Action Plan.[113] As described above, MCE's Equity programs focus on filling the gap in services for low to moderate-income households, multifamily properties and businesses in underserved communities, and deliver energy efficiency to customers in ESJ communities. And MCE's EE portfolio, taken as a whole, will help California double energy efficiency savings by 2030—MCE will continue to grow its EE portfolio and forecasts that it will save over 24 million kWh on an annual basis between 2024 and 2031.

---

[111] *Id*. at 10.
[112] *Id*. at 7-9.
[113] While not controlling at the time of this Application filing and directed at new construction of buildings, MCE reviewed and designed its portfolio in conceptual alignment with CEC's upcoming 2022 Building Energy Efficiency Standards to encourage beneficial building electrification. CEC, 2021, available at: https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/2022-building-energy-efficiency.

4.8.2.4. Marin Clean Energy's Operational Integrated Resource Plan 2021-2030

Marin Clean Energy has prepared an annual "Operational Integrated Resource Plan" (OIRP) since 2014. The OIRP quantifies MCE's resource needs, prioritizes resource preferences, provides guidance to energy procurement processes, and communicates MCE's resource planning objectives, for the upcoming ten-year OIRP planning period (2022-2031).[114] MCE's OIRP aligns with its biennial Integrated Resource Plan (IRP), which it submits to the California Public Utilities Commission for certification pursuant to Cal. Pub. Util. Code Section 454.52(b)(3).[115]

MCE's EE portfolio outcomes are integrated into, and aligned with, its OIRP. The 2022 OIRP describes MCE's portfolio of EE programs at a high level,[116] and illustrates the impacts of MCE's EE programs on its adjusted load forecast.[117] The 2022 OIRP also describes MCE's efforts to prepare the local workforce for careers in energy efficiency.[118] Fundamentally, MCE's EE portfolio is a key resource planning element that drives MCE's energy procurement strategy.

4.8.2.5. MCE Board Racial Equity Resolution

In 2021, MCE's Board of Directors passed and adopted Resolution 2021-04,[119] committing to advance racial equity. Through that resolution, MCE resolved to work towards more equitable outcomes in the areas of energy services, customer programs, community engagement, workforce development, power procurement, policy and human resources. MCE committed to continue engaging with racial equity, community-based and advocacy organizations to solicit community

---

[114] Marin Clean Energy Operational Integrated Resource Plan 2021-2030 (Nov. 4, 2021) (MCE 2022 OIRP), available at: https://www.mcecleanenergy.org/energy-procurement/.
[115] *Id*. at 6.
[116] *Id*. at 13.
[117] *Id*. at 7.
[118] *Id*. at 17.
[119] Resolution 2021-04, A Resolution of the Board of Directors of Marin Clean Energy Committing to Advance Racial Equity, available at: https://www.mcecleanenergy.org/wp-content/uploads/2021/05/MCE-Resolution-2021-04-Committing-to-Advance-Racial-Equity.pdf.

input and feedback on the development, objectives and impacts of new MCE programs and policy in order to identify, center, and prioritize the needs of ESJ communities. MCE also committed to provide agency-wide training to educate its employees on implicit bias and racial equity; to educate staff on most effective racial equity practices; and to engage in open and honest dialogue with experts on the subject of racial equity.

MCE's EE programming for the Business Plan period reflects these commitments. MCE's Equity segment in particular, but also its Resource Acquisition and Market Support segments, will more effectively deliver benefits to Equity populations as a result of MCE's efforts to embed Equity into its internal practices *and* its engagement with racial Equity, community-based and Equity advocacy organizations on the design and implementation of its programs.

MARIN CLEAN ENERGY

TESTIMONY REGARDING 2024-2031 BUSINESS & PORTFOLIO PLAN

EXHIBIT 1

CHAPTER 1

ATTACHMENT A

ALICE HAVENAR-DAUGHTON RESUME

Alice Havenar-Daughton
Director of Customer Programs, MCE
1125 Tamalpais Ave, San Rafael, 94901

RELEVANT SKILLS AND EXPERIENCE

- Strong background in energy efficiency, with experience in program design, implementation, and evaluation.
- Oversees implementation of energy programs with over $10 million annually in the Marin Clean Energy service territory.
- Oversaw program launch of MCE's first low-income multifamily energy efficiency program, the Low-Income Family and Tenants (LIFT) Pilot Program.

EDUCATION

American University, Washington DC, *2010*
M.A. Natural Resources and Sustainable Development
McGill University, Montreal, Canada, *2005*
B.SC. Architecture

WORK EXPERIENCE

MCE San Rafael, CA, *May 2018 – Present*

Director of Customer Programs

- Oversees MCE's portfolio of customer programs, including energy efficiency, transportation electrification, low-income solar.
- Represents MCE externally in stakeholder forums such as California Energy Efficiency Coordinating Committee (CAEECC) and CalTF, and through speaking engagements.
- Lead the development of a new program data tracking tool for program performance and streamline reporting.

MCE San Rafael, CA, *June 2017 – April 2018*

Manager of Policy and Planning, Customer Programs

- Oversees planning for Demand Side Resource Pilot Programs, including, electric vehicles, fuel switching and low-income solar.
- Works collaboratively with MCE's Regulatory Team to develop the strategy for MCE's engagement with the California Public Utilities Commission (CPUC) in the Business Plan Application process, including developing content for filings, drafting talking points, engaging with partners and 1 serving as MCE's representative to the CAEECC.
- Manages MCE's EM&V budget for Energy Efficiency Programs and LIFT.
- Oversees all Energy Efficiency and LIFT program reporting to the CPUC.
- Manages MCE's SF Seasonal Savings Program, the California Energy Commission (CEC) BEO Grant and grant compliance for the electric vehicle charges owned by MCE.

MCE San Rafael, CA, *October 2015 – June 2017*

Energy Efficiency Program Manager

- Managed MCE's Single-Family Energy Efficiency Program.
- Managed all energy efficiency programs reporting to the California Public Utilities Commission.
- Supported MCE's Business Plan Application through sector chapter development, managing cost effectiveness work done by consultants and leading the internal program logic model and metrics development.
- Represented MCE through engagement and comments on several CPUC-funded EM&V studies of MCE's programs.

MCE San Rafael, CA, *July 2014 – October 2015*

Energy Efficiency Specialist

- Developed tracking systems for MCE's Energy Efficiency program expenditures and savings.
- Represented MCE at the Reporting Program Coordination Group at the CPUC.
- Tracked data and prepared monthly, quarterly and annual reports for the CPUC. Provided data necessary for other compliance requirements.

Opinion Dynamics Corporation Oakland, CA, *November 2010 – July 2015*

Senior Analyst

- Served as a lead analyst on process and impact evaluations of energy efficiency and demand response programs in California and across the county.

Alliance for Climate Protection Washington, DC, *May 2010 – September 2010*

Solutions/Policy Team Fellowship

- Analyzed national climate and energy legislation to support renewable energy advocacy effort.

American Council for an Energy Efficient Economy (ACEEE) Washington, DC, *January 2010 – April 2010*

Buildings Team Intern

- Conducted research on barriers to energy efficiency in building codes.

Energetica Cochabamba, Bolivia, *August 2008 – May 2009*

Research Assistant

- Conducted a study on the potential for solar water heaters in urban areas of Bolivia which supported the initiation of a new solar water heater project, Proyecto ElSol.
- Assisted in rural educational workshops for subsidized solar panel recipients.

MARIN CLEAN ENERGY

TESTIMONY REGARDING 2024-2031 BUSINESS & PORTFOLIO PLAN

EXHIBIT 1

CHAPTER 1

ATTACHMENT B

MCE RESOLUTION 2021-04 COMMITTING TO ADVANCE RACIAL EQUITY

RESOLUTION 2021-04

A RESOLUTION OF THE BOARD OF DIRECTORS OF MARIN CLEAN ENERGY COMMITTING TO ADVANCE RACIAL EQUITY

WHEREAS, Marin Clean Energy (MCE) is a joint powers authority established on December 19, 2008, and organized under the Joint Exercise of Powers Act (Government Code Section 6500 et seq.); and

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

WHEREAS, MCE embraces and celebrates the rich diversity in our service area; and

WHEREAS, MCE recognizes the history of racism in our country, state, and the counties we serve, and that it has led to intersecting current day disparities in environment, education, employment, housing, and public health for people of color; and

WHEREAS, equitable outcomes and racial equity are defined as fair and equal opportunities to succeed for all people regardless of race, color, religion, sex, sexual orientation, gender identity or expression, pregnancy, age, national origin, disability status, genetic information, protected veteran status, or any other characteristic protected by law; and fair opportunities to all people regardless of race, respectively; and

WHEREAS, MCE recognizes that racial inequities have become institutionalized in the policies and practices of many agencies, governmental and otherwise, and that these policies and practices must be examined and where needed, changed or eliminated; and

WHEREAS, MCE recognizes these inequities can aggregate into systemic, intersecting impacts which lead to discrepancies in public health impacts, collectively known as “Environmental Racism” or “Environmental Injustice”; and

WHEREAS, MCE’s mission is to address climate change by reducing energy related greenhouse gases with renewable energy and energy efficiency at cost-competitive rates while offering economic and workforce benefits, and creating more equitable communities; and

WHEREAS, MCE's mission is committed to a transition to a regenerative clean energy future that is equitable and just by implementing policies and programs aligned with our Environmental Justice values; and

WHEREAS, MCE affirms that issues of racial equity must be addressed proactively, collectively, and deliberately in the course of decision-making to contribute to equitable outcomes in our communities; and

WHEREAS, MCE's previous and ongoing initiatives related to addressing historical inequities include efforts such as MCE's Workforce Policy 011, our local green-collar workforce development initiatives, our ongoing relationship with members of the Community Power Coalition including local community-based organizations involved in the environmental and environmental justice movement; and

WHEREAS, in order to further commit to the values enshrined in celebrating diversity, equity, and inclusion, MCE formed an internal team comprised of staff members representing each department in December of 2019; and

WHEREAS, MCE has proactively attempted to promote and institutionalize these values in the Community Choice Aggregation movement through the creation of the CalCCA Environmental Justice and Equity Working Group and has facilitated this working group since its inception in 2018; and

WHEREAS, MCE acknowledges our agency has not comprehensively addressed racial equity considerations in every way possible with all past work, and understands that present and future work will need to continuously be re-evaluated and improved on an ongoing basis; and

WHEREAS, while MCE acknowledges the difficulty of assessing the impact of decisions on racial equity in communities, MCE is committed to intentionally adjusting its decision-making process to meet our mission's goal to build more equitable communities; and

WHEREAS, many MCE Member Communities have taken recent actions such as issuing statements or resolutions committing to improving racial equity in our communities, including Fairfax, Mill Valley, Novato, San Rafael, Sausalito, and the unincorporated county in Marin; Martinez, Pleasant Hill, Richmond, San Pablo, and the unincorporated county in Contra Costa; Napa, St. Helena, and the unincorporated county in Napa; Benicia, Vallejo, and the unincorporated county in Solano; and

WHEREAS, CleanPowerSF, East Bay Community Energy, Pico Rivera Innovative Municipal Energy, Redwood Coast Energy Authority, Sonoma Clean Power, and Valley Clean Energy are fellow Community Choice agencies which have recently issued statements or passed racial equity resolutions; and

WHEREAS, MCE requested the feedback of trusted local leaders focused on serving hidden and underrepresented constituents in our communities and incorporated the feedback we received into this Resolution including Asian Pacific Environmental Network (APEN), Greenlining Institute, Puertas Abiertas, Canal Alliance, Marin City Community Development Corp, Richmond Build; and

WHEREAS, MCE is aligned and encouraged by this recent local and industry upswell in momentum to institutionalize commitments to racial equity

NOW, THEREFORE, BE IT RESOLVED, by MCE's Board of Directors that MCE hereby commits itself to the following actions henceforth:

1. MCE will work toward more equitable outcomes in the areas of energy services, customer programs, community engagement, workforce development, power procurement, policy, and human resources; and
2. To reach these outcomes, MCE will continue to recruit racial equity organizations and engage with these community-based and advocacy organizations through the Community Power Coalition to solicit community input and feedback on the development, objectives, and impacts of new MCE programs and policy early in the process in order to identify, center, and prioritize the needs of Environmental and Social Justice communities; and
3. To increase staff awareness and education, MCE will continue to provide agency-wide training to educate employees on implicit bias and racial equity since each department offers services which impact agency efforts to provide equitable outcomes for the community; and
4. To educate staff on the most effective racial equity practices for local government entities and build relationships with agencies such as ours pursuing similar work, MCE will join the Government Alliance on Race and Equity (GARE); and
5. MCE's Board of Directors will strive to engage in open and honest dialogue with experts on the subject of racial equity and with each other during forums such as Board retreats, community forums or other appropriate MCE sessions; and
6. MCE will braid all of these efforts to continue to thoughtfully and effectively update, eliminate, or create internal and external policies, practices and programs that dismantle existing racial disparities with the understanding that these methods will need to be updated and improved over time.

PASSED AND ADOPTED at a regular meeting of the MCE Board of Directors on this 20th day of May, 2021, by the following vote:

	AYES	**NOES**	**ABSTAIN**	**ABSENT**
County of Marin	X			
Contra Costa County				X
County of Napa	X			
County of Solano				X
City of American Canyon	X			
City of Belvedere	X			
City of Benicia				X
City of Calistoga	X			
City of Concord	X			
Town of Corte Madera	X			

Town of Danville	X			
City of El Cerrito	X			
Town of Fairfax	X			
City of Lafayette				X
City of Larkspur	X			
City of Martinez	X			
City of Mill Valley	X			
Town of Moraga	X			
City of Napa	X			
City of Novato	X			
City of Oakley	X			
City of Pinole	X			
City of Pittsburg	X			
City of Pleasant Hill	X			
City of San Ramon	X			
City of Richmond	X			
Town of Ross	X			
Town of San Anselmo				X
City of San Pablo	X			
City of San Rafael	X			
City of Sausalito	X			
City of St. Helena	X			
Town of Tiburon				X
City of Vallejo	X			
City of Walnut Creek	X			
Town of Yountville	X			

_____

CHAIR, MCE

Attest:

_____

SECRETARY, MCE

MARIN CLEAN ENERGY

TESTIMONY REGARDING 2024-2031 BUSINESS & PORTFOLIO PLAN

EXHIBIT 1

CHAPTER 2

PORTFOLIO BUDGETS: 2024-2031

MARIN CLEAN ENERGY
TESTIMONY REGARDING 2024-2031 BUSINESS & PORTFOLIO PLAN
EXHIBIT 1
CHAPTER 2
PORTFOLIO BUDGETS: 2024-2031

TABLE OF CONTENTS

1. Business Plan Portfolio Budget 2-1

1.1 Annual Portfolio Budgets, Goals and Cost-Effectiveness 2-1

1.2 Summary of MCE's Forecasting Methodology 2-3

2. Budget Request for MCE's Peak FLEXmarket Program 2-5

INDEX OF FIGURES AND TABLES

Table 2-1: MCE's Portfolio-Level Budget, Goals and Cost-Effectiveness for PYs 2024-2031 2-2

Table 2-2: Proposed Program Budget for Peak FLEXmarket Continuation in PYs 2024-2027 2-5

1. Business Plan Portfolio Budget

Marin Clean Energy (MCE) provides the 8-year projected budget, cost-effectiveness ratios and goals for the energy efficiency (EE) Business Plan period below, as well as a summary of MCE's budget forecasting methodology.

1.1 Annual Portfolio Budgets, Goals and Cost-Effectiveness

MCE annual portfolio budget outlined in the table below provides an overview of the expected level of annual spending for MCE's EE portfolio for program years (PYs) 2024-2031. Once approved, the annual portfolio budget also establishes the 8-year authorized budget cap for MCE's EE portfolio for PYs 2024-2031. MCE's budget represents its best estimates of spending for the life of the Business Plan period that will provide robust EE programming to diverse customer types and meets the goals and expected outcomes for MCE's EE portfolio as established in this Application.

In addition to the 8-year portfolio budget, the table below also provides cost-effectiveness ratios and goals (both energy savings and Total System Benefit (TSB)) for MCE's EE portfolio for PYs 2024-2031.

Table 2-1: MCE's Portfolio-Level Budget, Goals and Cost-Effectiveness for PYs 2024-2031

Year	Annual Spending Budget Request	TSB	TRC	PAC	Net KWh	Net kW	Net Therms
2024	$ 19,273,639	$ 15,540,846	0.73	0.81	24,059,067	3,255	494,710
2025	$ 19,522,249	$ 16,230,191	0.75	0.84	24,059,067	3,255	494,710
2026	$ 19,584,021	$ 17,098,384	0.79	0.88	24,059,067	3,255	494,710
2027	$ 19,837,407	$ 17,994,718	0.83	0.92	24,059,067	3,255	494,710
2028	$ 19,905,308	$ 18,891,597	0.86	0.96	24,059,067	3,255	494,710
2029	$ 19,976,604	$ 19,826,995	0.90	1.00	24,059,067	3,255	494,710
2030	$ 20,051,465	$ 20,774,384	0.94	1.04	24,059,067	3,255	494,710
2031	$ 20,130,069	$ 21,849,369	0.99	1.09	24,059,067	3,255	494,710
Total	$ 158,280,762	$ 148,206,484	0.85	0.94	192,472,534	26,042	3,957,677

1.2 Summary of MCE's Forecasting Methodology

The following framework guided MCE's approach for determining the proposed annual spending budgets on MCE's EE portfolio: (1) legislative and regulatory drivers; (2) MCE agency goals; (3) assessment of activities and emerging opportunities; and (4) analysis of cost drivers, including staffing, implementation contracts and incentive costs.

The most important legislative drivers for MCE's EE portfolio in PYs 2024-2031 are Senate Bill 350 (De León, 2015) and Assembly Bill 802 (Williams, 2015), which require a doubling of energy efficiency by 2023 and the introduction of normalized metered energy consumption (NMEC) under EE programming, respectively. In regards to regulatory drivers, the Commission's recent Decision on EE portfolio approval and oversight processes (D.21-05-031) reformed ratepayer-funded EE programs in California and provided guidance for the EE program administrators (PAs) for the filing of this Application.[1] See Exhibit 2, Chapter 2, Section 1 for more discussion on these legislative and regulatory drivers.

Layered on top of these policy drivers, MCE considered its agency mission and vision in the development of its EE portfolio. MCE's EE programs are central to achieving its mission by reducing load and making it easier to meet renewable energy targets, but also by supporting the local economy and advancing equity goals through equity programs and supporting the local workforce through training programs.[2] As such, MCE's objective is to invest as much as possible in energy efficiency while following the rules and regulations for ratepayer-funded EE programs established by the California Public Utilities Commission (CPUC or Commission).

---

[1] *See* Decision (D.) 21-05-031, Assessment of Energy Efficiency Potential and Goals and Modification of Portfolio Approval and Oversight Process, from May 20, 2021

[2] *See* Marin Clean Energy, About Us, available at: https://www.mcecleanenergy.org/about-us/.

As a next step in its budgeting process, MCE assessed both existing activities and emerging opportunities for EE programming. First and foremost, much of MCE's portfolio planning relied on its experience providing EE programming to its customers since 2012. The majority of MCE's proposed EE programming for PYs 2024-2031 is based on the EE portfolio developed and implemented during the PY 2018-2021 timeframe. MCE will continue to grow and fine tune the EE programming from the previous portfolio cycle during the PY 2024–2031 timeframe. For example, MCE expects that in the later years of the eight-year program cycle, electrification measures will become more prevalent and eventually phase out gas measures.[3] Because MCE has focused on creating flexible programs that can accommodate changing priorities, it doesn't anticipate the need to change program delivery strategies. Instead, it will adjust incentives and measures offerings to achieve updated goals. Additionally, MCE analyzed the 2021 Potential and Goals (P&G) study,[4] as well as the 2021 Avoided Cost Calculator (ACC),[5] to identify existing and emerging opportunities and EE potential. Finally, MCE engaged in detailed conversations with its implementation partners regarding the future of the energy efficiency market in general, as well as opportunities and challenges to offer EE programming to customers, to inform portfolio planning for the PY 2024-2031 timeframe.

The main cost drivers for MCE's EE programs include staffing and operational costs, implementation costs, marketing costs and incentives. Staffing and operational costs include MCE

[3] *See* Rulemaking (R.) 13-01-005, *Administrative Law Judge's Amended Scoping Ruling December 23, 2021*, p. 5; Sierra Club Motion to Prohibit EE Funding for Non-Cost-Effective Gas Appliance Incentive Measures, January 13, 2022; CARB, 2022 Scoping Plan Update – Building Decarbonization Workshop Notice, December 2021, available at: https://ww2.arb.ca.gov/resources/documents/sp22-buildings-ws.
[4] Cal. Pub. Util. Comm'n, 2021 Potential and Goals Study, available at: https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/energy-efficiency/energy-efficiency-potential-and-goals-studies/2021-potential-and-goals-study.
[5] Avoided Cost Calculator for Distributed Energy Resources, available at: https://www.ethree.com/public_proceedings/energy-efficiency-calculator/.

labor, as well as functions that support the whole portfolio such as data tracking and reporting. Implementation costs are associated with implementation contracts for third-party program implementers. Separate marketing budgets are only included for programs that do not include marketing in a pay for performance implementation rate. Incentive budgets are based on the savings forecasts for each program according to the program design. Each of these costs were justified for the first four years of the application period (i.e., PYs 2024-2027) through a zero-based budget exercise described in detail in Exhibit 2, Chapter 2. These costs were then extrapolated out for PYs 2028-2031 based on a continuation of the programs proposed in PYs 2024-2027.

2. Budget Request for MCE's Peak FLEXmarket Program

In addition to MCE's EE annual portfolio budget request outlined above, MCE proposes a separate, standalone budget of $26.28M for its PeakFLEX market program for PYs 2024-2027.[6] MCE will re-assess the continuation of this program under MCE's EE portfolio during PYs 2028-2031 in the next Portfolio Plan filing in 2027 and does therefore not include a budget forecast for the Peak FLEXmarket for PYs 2028-2031 in this filing.

Table 2-2: Proposed Program Budget for Peak FLEXmarket Continuation in PYs 2024-2027

	Annualized Budget	Total 2024-2027 Budget
General and Administrative Overhead	$262,800.00	$1,051,200.00
Direct Implementation Non-Incentive	$197,100.00	$788,400.00
M&V	$985,500.00	$3,942,000.00
ME&0	$197,100.00	$788,400.00
Subtotal Non-Incentive Budget	**$1,642,500.00**	**$6,570,000.00**
Maximum Load Shifting Budget	$2,227,500.00	$8,910,000.00
Maximum DR Budget	$2,700,000.00	$10,800,000.00
Subtotal Incentive Budget	**$4,927,500.00**	**$19,710,000.00**
Total Program Budget	**$6,570,000.00**	**$26,280,000.00**

[6] MCE discusses the reasons for a separate budget request in Exhibit 2, Chapter 8, Sections 4-5.

MCE provides more details on the budgeting process for the Peak FLEXmarket program in Exhibit 2, Chapter 8, Sections 4-5. In summary, MCE finds that it is most important to signal an intent to continue the Peak FLEXmarket beyond PY 2023 and establish a budget basis to inspire equal confidence in the market among participating MCE customers and aggregators. It is also important to emphasize that the vast majority of the proposed program budget would be paid only on a performance basis, using the most advanced measurement and verification (M&V) standards available to determine if participation is dependable and reliable.

MARIN CLEAN ENERGY

TESTIMONY REGARDING 2024-2031 BUSINESS & PORTFOLIO PLAN

EXHIBIT 1

CHAPTER 3

POLICY RECOMMENDATIONS

MARIN CLEAN ENERGY
TESTIMONY REGARDING 2024-2031 BUSINESS & PORTFOLIO PLAN
EXHIBIT 1
CHAPTER 3
POLICY RECOMMENDATIONS

TABLE OF CONTENTS

1. Recommendations for New or Modified Energy Efficiency Policies 3-1

1.1. The Commission Should Bolster the Cost Effectiveness Tool and the California Energy Data and Reporting System. 3-1

1.2. The Cost Effectiveness Tool Should be Modified to Appropriately Calculate the Impacts of Demand Reduction Measures. 3-2

1.3. The Commission Should Establish Clear Deadlines for Updating Technical Tools and Templates. 3-4

1.4 The Commission Should Direct MCE and PG&E to Exchange Demand Response Program Participation Data on a Quarterly Basis. 3-5

1.5 The Commission Should Continue to Evaluate the Future Use of the Program Administrator Cost Test Instead of the Total Resource Cost Test to Evaluate the Cost-Effectiveness of the Resource Acquisition Segment. 3-6

1.6 MCE Supports the Development of Non-Energy Benefit Metrics within the Equity Segment of the EE Portfolio. 3-7

1. Recommendations for New or Modified Energy Efficiency Policies

1.1. The Commission Should Bolster the Cost Effectiveness Tool and the California Energy Data and Reporting System.

The California Public Utilities Commission's (CPUC's or Commission's) Cost Effectiveness Tool (CET) is housed within the California Energy Data and Reporting System (CEDARS) and is used to calculate Total System Benefits (TSB) and cost-effectiveness associated with energy efficiency (EE) programs. The CET is a critical tool on which all EE program administrators (PAs) rely to develop their portfolios—including budgets, savings targets and cost-effectiveness ratios. CEDARS additionally serves a vital transparency function by providing significant EE programmatic and performance information to the public. Despite the central role that the CET and CEDARS play in helping PAs advance innovative and cost-effective EE programming, those systems have traditionally received limited funding. CEDARS and CET require both additional resources and functionality to allow ongoing maintenance and to improve the efficiency of program and portfolio development. To this end, MCE offers the following policy recommendations.

First, the Commission should direct additional funding to CEDARS. Increased funding would help ensure that CEDARS and the CET are upgraded in a timely manner such that those tools advance, rather than hamper, PAs' portfolio planning efforts.

Second, MCE recommends that the Commission engage PAs and other stakeholders in the oversight and maintenance of CEDARS and the CET. More specifically, MCE recommends that the Commission facilitate the establishment of a "governance committee" for both the CET and CEDARS. A governance committee would offer a forum in which PAs and Energy Division staff could discuss when and how improvements could be made; resolve key technical issues; oversee budget; and promote greater transparency. The CEDARS governance committee could be modeled

on the California Technical Forum's (CalTF) implementation of the Electronic Technical Resource Manual (eTRM) database of EE ex-ante savings values.

Third, MCE recommends the addition of an application programming interface (API) to the CET and CEDARS to allow system-to-system communication between PAs' and implementers' data systems and the CET and CEDARS. This communication would decrease the administrative burden of portfolio management and streamline reporting by allowing faster and easier data migration and improved data quality.

Fourth, MCE recommends that the Commission direct the creation of a more transparent, accessible and robust set of documentation and trainings for CET users. This will help ensure that stakeholders beyond PAs are equipped to use and understand this critical tool.

Fifth, MCE recommends additional functionality in the CET that would allow evaluators contracted by the Commission to view and access more detailed program tracking data than is available for public download. This would ensure that evaluators are able to efficiently obtain data necessary for impact evaluations (the publicly available program tracking data is not detailed enough for evaluators, and as such, PAs are often required to gather the necessary data, which is administratively burdensome).

Collectively, these improvements would make the CET and CEDARS more robust—and in turn make EE portfolio and program development and evaluation significantly more efficient.

1.2. The Cost Effectiveness Tool Should be Modified to Appropriately Calculate the Impacts of Demand Reduction Measures.

The CET, as it is currently designed, is focused on calculating the cost-effectiveness and TSB of EE measures. The CET is not designed to calculate the impacts of peak demand management measures that do not necessarily decrease total energy consumption; specifically, the CET does not calculate avoided costs and thus TSB for demand response (DR) events. The CET

requires PAs to choose a prescriptive load shape and provide an effective useful life (EUL) of at least one year. However, many peak demand management measures are heavily—and sometimes entirely—geared towards achieving energy savings and peak demand reductions during peak hours of summer months.

In its recent Decision (D.) 21-12-011 regarding summer 2022 and 2023 electric reliability, the Commission approved a "Market Access Program" (MAP) which incentivizes implementers to find EE projects that deliver measurable peak and net peak demand savings.[1] As part of that program, incentives will be adjusted to include a "kicker" payment for peak and net peak[2] savings delivered between June 1 and September 30 of 2022 and 2023. Unfortunately, the CET, as it is currently designed, cannot appropriately calculate peak and net peak savings, which makes it difficult to appropriately calculate cost-effectiveness ratios and TSB for MAPs.

Like the MAP, MCE's Peak FLEXmarket program (described in detail in Exhibit 2, Chapter 8) offers incentives for daily load shifting delivered in summer peak and net peak hours. It also incentivizes demand reduction during periods of high grid congestion, power shortages, or high prices (*i.e.*, DR events). The CET's limitations described above make it difficult for MCE to calculate cost-effectiveness ratios and TSB for the Peak FLEXmarket program.

To implement the Commission's direction on new MAPs and to enable MCE's Peak FLEXmarket program and other similar innovative programs that integrate EE with demand management solutions, the Commission should modify the CET to allow for the use of custom load shapes and the calculation of TSB for partial months of the year. This will enable PAs to

[1] As the Commission noted, the MAP is modeled on MCE's Efficiency Market and Peak FLEXmarket programs, described in more detail in Exhibit 2, Chapter 3 and Exhibit 2, Chapter 8. *See* Rulemaking (R.) 13-11-005, D.21-12-011, *Energy Efficiency Action to Enhance Summer 2022 and 2023 Electric Reliability*, p. 24 (Dec. 2, 2021).

[2] Peak and net peak hours are defined as 4-9 p.m. and 7-9 p.m. respectively.

accurately calculate the impact of demand reduction measures and incorporate these measures into the Resource Acquisition segment of their respective portfolios on equal footing with EE measures.

1.3. The Commission Should Establish Clear Deadlines for Updating Technical Tools and Templates.

As described above, the CET is a tool that serves as the basis on which PAs build their portfolios. Without simple and consistent access to that tool during portfolio planning, PAs cannot develop their portfolio plan or budget, develop TSB and energy savings targets, and determine which programs are cost-effective. Currently, however, PAs' portfolio planning efforts are frequently hamstrung by unavailability or late updating of the CET before a filing deadline—a challenge which is particularly acute for MCE given its smaller size as a PA.

The Commission should implement process changes such that PAs have sufficient time to adapt to changes in cost effectiveness results before a CET showing is required. This would help avoid situations where PAs are forced to rework portfolios on timelines that are significantly shorter than the original timelines provided to develop cost effectiveness showings. To this end, MCE recommends that the Commission direct Energy Division staff to have all technical tools necessary for portfolio planning ready at last 90 days before the submission of any future Advice Letter (AL) filing (*e.g.*, the true-up or mid-cycle AL) or at least 120 days before any future portfolio plan application (*i.e.*, the Application for PYs 2028-2031). Further, if the technical tools are not ready on that timeline, the Commission should automatically extend the filing deadline to ensure that all technical tools are finalized at least 90 days before an AL submission and 120 days before a Portfolio Plan filing. This will allow PAs enough time, generally, to revise their filings more efficiently and without deprioritizing core implementation work.

1.4 The Commission Should Direct MCE and PG&E to Exchange Demand Response Program Participation Data on a Quarterly Basis.

EE program coordination and data sharing practices have significantly improved between Pacific Gas and Electric Company (PG&E) and MCE in recent years. However, with the closer integration of EE and DR programs, and the potential continuation of the MAP beyond 2023 (as described above), PG&E and MCE must also work more closely on coordinating enrollment of customers in DR programs offered by community choice aggregators (CCAs) and investor-owned utilities (IOUs).

Unfortunately, under existing practice, pertinent customer participation data under DR programs is difficult to obtain. Even where some information is provided, it is inadequate or incomplete. For example, PG&E's program data sharing is currently limited to its Rule 24 report,[3] which includes only a fraction of customers who are enrolled in various IOU DR programs, pilots, and initiatives. To date, PG&E has not shared customer participation data on all DR programs with MCE on a voluntary basis.

This results in an incomplete snapshot of program participation data and is therefore insufficient to inform MCE which customers are already enrolled in an IOU DR programs. This lack of data limits MCE's ability to enforce eligibility rules and increases the likelihood of dual enrollment in both MCE's and PG&E's demand management programs. This is neither a good use of public funds, nor in alignment with the State's goal to reduce peak demand through customer-sited demand reductions.

When MCE has previously raised its concerns regarding customer participation data, PG&E cited a lack of direction from the Commission and concerns regarding customer data

[3] Under Electric Rule 24, third-party demand response providers (DRPs) are allowed to solicit PG&E customers to participate in their demand response programs and then "bid in" the electricity reduction into the wholesale electricity market administered by the California Independent System Operator (CAISO).

confidentiality. However, MCE is a load-serving entity with special rights to customer data and has long-standing non-disclosure agreements (NDAs) in place with PG&E to receive customer data. MCE thus recommends that the Commission direct IOUs and CCAs to share customer program participation data for all DR programs, tariffs, and pilots on a quarterly basis to allow for the prevention of dual enrollment and to minimize customer confusion.

1.5 The Commission Should Continue to Evaluate the Future Use of the Program Administrator Cost Test Instead of the Total Resource Cost Test to Evaluate the Cost-Effectiveness of the Resource Acquisition Segment.

Per D.21-05-031, PAs must demonstrate that the Resource Acquisition segment of their respective portfolios are cost-effective on an ex-ante basis (*i.e.*, the Resource Acquisition segment must meet or exceed a Total Resource Cost (TRC) ratio of 1.0 or higher).[4]

MCE conceptually agrees that—for the Resource Acquisition segment of EE portfolios—benefits should be equal to, or greater than, costs. However, as MCE has previously explained,[5] the TRC test is not the appropriate ratio to use to accurately and meaningfully compare the costs and benefits of current EE programs. That is because the TRC test is fundamentally asymmetric: it includes participant *costs* but fails to include important participant *benefits* such as non-energy benefits (NEBs).[6] This results in an "apples to oranges" comparison that skews cost-effectiveness results. In contrast, the Program Administrator Cost (PAC) test considers only those costs and benefits the PA incurs, and not those the customer incurs. The PAC test therefore provides a much better "apples to apples" comparison of the benefits and costs of EE programs.

---

[4] R.13-11-005, D.21-05-031, *Assessment of Energy Efficiency Potential and Goals and Modification of Portfolio Approval and Oversight Process*, OP3 at 81 (May 20, 2021).

[5] R.13-11-005, *MCE Comments on Proposed Decision Regarding Assessment of Energy Efficiency Potential and Modification of Portfolio Approval and Oversight Process* (May 6, 2021); *Opening Comments of Marin Clean Energy to Address Governor Newsom's July 30, 2021 Proclamation*, pp. 18-19 (Aug. 30, 2021).

[6] NEBs exclusion also discourages participation of Equity customers in EE programs. *See* Exhibit 1, Chapter 3, Section 1.6.

The Commission has recognized the potential merits of the PAC test, but has on more than one occasion declined to depart from the TRC test.[7] In its recent Decision on emergency reliability for summers of 2022 and 2023, the Commission noted that it was not closed to the possibility of a move from the TRC to the PAC test, but concluded that it would not order this change in response to an emergency proclamation.[8] In D.21-05-031, the Commission stated that while it recognized the merits of the PAC test, it would test out its new approach to portfolio segmentation (in which only programs in the Resource Acquisition segment are subject to cost effectiveness requirements) before making any changes to threshold cost-effectiveness assessment requirements.[9]

MCE continues to encourage the Commission to consider a future transition from the TRC to the PAC test, while acknowledging that, for the purposes of the PY 2024-2027 cycle, the Commission would like to test its new segmentation approach before making any changes to threshold requirements. MCE suggests that the Commission establish cost effectiveness workshops starting in 2024 to explore this issue in time to implement a shift to the PAC in the following four-year portfolio cycle (*i.e.*, PYs 2028-2031).

1.6 MCE Supports the Development of Non-Energy Benefit Metrics within the Equity Segment of the EE Portfolio.

MCE strongly supports the vital development of non-energy benefits (NEBs) metrics in EE programs and within the Equity segment of this application. MCE aligns its vision with the Commission's recognition in D.21-05-031 that it "may consider whether or how to transition to an evaluation of non-energy benefits when considering the reasonableness of costs related to market support and equity programs."[10] MCE supports the Commission's conclusion that new metrics

[7] D.21-05-031, pp. 67-68.
[8] D.21-12-011, p. 41.
[9] D.21-05-031, pp. 67-68.
[10] *Id.*, pp. 23-24.

must be developed to meet existing and evolving EE policy requirements - "All parties seem to agree that the current focus on first-year energy savings only, in the form of kWh, kW, and therm savings, does not capture all of the policy goals and benefits of energy efficiency. We agree."[11] NEBs like health, safety, comfort and reduced energy burdens are often the primary motivation and justification for EE investments in ESJ communities.[12] Consistent with the Commission's Environmental and Social Justice (ESJ) goal to promote investment in clean energy resources that benefit Equity customers,[13] MCE supports expanding existing EE metrics to better promote equitable outcomes through NEBs.

The absence of NEBs valuation and consideration is a key barrier to EE investments benefitting Equity customers.[14] Equity customers experience many structural, market and policy barriers to EE programs with associated costs to redress. For example, EE projects in older buildings within ESJ communities often require more retrofits and treatments than newer buildings, resulting in higher comparative costs.[15] Current evaluation without NEBs functionally

---

[11] *Id*., p. 8.

[12] CEC, Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities, p. 3 (2016), available at: https://assets.ctfassets.net/ntcn17ss1ow9/3SqKkJoNIvts2nYVPAOmGH/fe590149c3e39e51593231dc60eeeeff/TN214830_20161215T184655_SB_350_LowIncome_Barriers_Study_Part_A__Commission_Final_Report.pdf, ("Unrecognized non-energy benefits. Non-energy benefits are often not considered in cost-effectiveness tests, which devalues some of the most important factors that motivate investment in clean energy upgrades, such as family health and safety, comfort, and tenant retention.").

[13] CPUC, ESJ Action Plan, p. 6 (2019) (Goal 2: Increase investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health.).

[14] CEC, Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities, p. 43 (2016), available at: https://assets.ctfassets.net/ntcn17ss1ow9/3SqKkJoNIvts2nYVPAOmGH/fe590149c3e39e51593231dc60eeeeff/TN214830_20161215T184655_SB_350_LowIncome_Barriers_Study_Part_A__Commission_Final_Report.pdf.

[15] CEC, Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities, p. 3 (2016).

discourage projects in the households, business and communities that need them the most, because they ignore many of the key benefits that the projects will deliver to participants.[16] These same households, businesses and communities are simultaneously disproportionately experiencing higher energy burdens, greater pollution from California's energy system, higher disconnection risks and wildfire impacts.[17] Any prolonged absence of NEBs development risks widening the already existing "climate gap" of environmental and social inequalities for Equity customers across California.[18] That absence runs counter to the visionary goals of the Equity segment's "primary purpose of providing energy efficiency to hard-to-reach or underserved customers and disadvantaged communities in advancement of the Commission's Environmental and Social Justice (ESJ) Action Plan."[19]

MCE urges the Commission to adopt the California Energy Efficiency Coordinating Committee (CAEECC) Equity Working Group's recommendation to use NEBs as an indicator for the Equity Segment.[20] We agree that including NEBs offers a more holistic analysis of the total value of EE projects and administration decisions. A deeper understanding of the climate, health, comfort, safety and economic impacts of EE projects will allow the Commission and PAs to make

---

[16] D.21-05-031, p. 11; CPUC, ESJ Action Plan Version 2.0- Draft, p. 58 (2021), available at: https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/draft-cpuc-esj-2010262021c.pdf.

[17] CEC, Barriers Study, p. 13; OEHHA, CalEnviroScreenReport 4.0, pp. 40-42 (2021), available at: https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf; PSE Healthy Energy, Natural Gas Power Plants in California's Disadvantaged Communities (2017), available at: https://www.psehealthyenergy.org/wp-content/uploads/2017/04/CA.EJ_.Gas_.Plants.pdf.

[18] Rachel Morello Frosch, Manuel Pastor, James Sadd, Seth Shonkoff, The Climate Gap: Inequalities in How Climate Change Hurts Americans & How to Close the Gap (2009), available at: https://dornsife.usc.edu/assets/sites/242/docs/ClimateGapReport_full_report_web.pdf.

[19] D.21-05-031, p. 14.

[20] CAEECC-Hosted Equity Metrics Working Group, Report and Recommendations to the California Public Utilities Commission and the Energy Efficiency Program Administrators Equity Working Group Final Report, pp. 19-20 (October 2021), available at: https://4930400d-24b5-474c-9a16-0109dd2d06d3.filesusr.com/ugd/849f65_422f2a5a35bb4bcbbabe50e7ecccf6f2.docx?dn=Final%20EMWG%20Report_10.20.2021.docx.

more informed programmatic decisions in the future to the benefit of all ratepayers. Further, this approach complements the Commission's existing approaches in the Energy Savings Assistant (ESA) Program and the joint implementation of Senate Bill 100 with the California Energy Commission.[21]

[21] Application (A.) 19-11-003, D.21-06-015 , *Decision on Large Investor-owned Utilities' and Marin Clean Energy's California Alternate Rates for Energy (CARE), Energy Savings Assistance (ESA), and Family Electric Rate Assistance (FERA) Program Applications for Program Years 2021-2026*, p. 4 (Jun. 3, 2021) ("Establishes non-energy benefit targets, with additional metrics to be tracked."); CEC, Notice: Joint Agency Workshop on Planning for SB 100 Analysis of Non-Energy Benefits, Social Costs and Reliability (November 2021), available at: https://www.cpuc.ca.gov/events-and-meetings/sb-100-implementation-non-energy-benefits-and-reliability-workshop ("The first session will focus on how non-energy benefits and social costs can be incorporated into the SB 100 analysis.").