September 2, 2019

California Public Utilities Commission

Energy Division Tariff Unit

505 Van Ness Ave.

Fourth Floor

San Francisco, CA 94102-3298

**Advice Letter 12-E**

(BayREN ID #941)

Subject:

BayREN 2020 Annual Energy Efficiency Program and Portfolio Budget Request

Purpose

The purpose of this advice filing is to seek approval for the 2020 Annual Energy Efficiency Program and Portfolio Budget request for the San Francisco Bay Area Regional Energy Network (“BayREN”).

The BayREN is a collaboration of the nine counties that make up the San Francisco Bay Area. Led by the Association of Bay Area Governments[[1]](#footnote-1), the BayREN implements effective energy saving programs on a regional level and draws on the expertise, experience, and proven track record of Bay Area local governments to develop and administer successful climate, resource, and sustainability programs. Since its inception, the BayREN has been addressing the three areas indicated by Decision 12-11-015 in the formation and implementation of programs: filling gaps that the investor-owned utilities (“IOUs”) are not serving; developing programs for hard-to-reach markets; and piloting new approaches to programs that have the potential to scale and offer innovative avenues to energy savings.

Background

In D. 14-10-046, the Commission approved the Rolling Portfolio funding, and provided that 2015 is “year zero” insofar as we are leaving 2015 programs and funding in place until the earlier of when we provide superseding direction, or 2025.”[[2]](#footnote-2) In addition, funding for various financing programs, including BayREN’s Multifamily Capital Advance Program (“BAMCAP”), was previously approved in D.13-09-044.[[3]](#footnote-3) REN funding for 2018 was articulated in D.16-08-019: “[E]xisting approved activities [of the RENs] may have ongoing funding that was previously approved.”[[4]](#footnote-4) In D.18-05-041, BayREN’s Business Plan and Budgets for the term of the Rolling Portfolio was approved with slight modifications.

D.15-10-028 established that on the first business day in September, each PA will file a Tier 2 advice letter for continued collection of Energy Efficiency (EE) funding from ratepayers. This filing, which envisions ministerial review, is intended to formalize the Program Administrator’s annualized budget which shall remain in place until superseded by Commission or Commission Staff action on the new budget.[[5]](#footnote-5)

As directed by D.18-05-041 and additional guidance provided by Commission staff, BayREN has submitted via CEDARS-FM the 2020 BayREN Budget Filing Detail Report; the confirmation receipt is attached hereto as Attachment A.

Discussion

1. **BayREN 2020 Budget Request**

BayREN requests a total portfolio and Evaluation, Measurement and Verification (“EM&V”) budget of $22,953,150. This represents a slight decrease in the 2019 approved budget, as some funds were shifted into future years. Budget shifts were also made between programs. The budget breakdown by sector and the energy savings is provided in Table 1 on the following page. **Note to CAEECC stakeholders**: the unspent funds amount is very preliminary and will be updated prior to submission of this Advice Letter.

**Table 1: BayREN 2020 Budget and Savings (Net)[[6]](#footnote-6)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sector** | **Program Year 2020 Budget** | Forecast MWh | Forecast kW | Forecast  MM therms |  |
| Residential | $16,705,479 | 2.50 | 547 | 0.21 |  |
| Commercial | $3,309,536 | 5.26 | 196 | 0.02 |  |
| Industrial |  |  |  |  |  |
| Agriculture |  |  |  |  |  |
| Emerging Tech |  |  |  |  |  |
| Public |  |  |  |  |  |
| Codes and Standards | $1,516,700 | n/a | n/a | n/a |  |
| WE&T |  |  |  |  |  |
| Water Energy Nexus | $1,150,300 | n/a | n/a | n/a |  |
| Finance |  |  |  |  |  |
| OBF Loan Pool |  |  |  |  |  |
| **Subtotal** | $22,682,015 | 7.76 | 743 | 0.22 |  |
| **BayREN EM&V** | $271,135 |  |  |  |  |
| **Total BayREN 2020 Spending Budget** | $22,953,150 |  |  |  |  |
| **Uncommitted and Unspent Carryover balance** | $1,000,000 |  |  |  |  |
| **Total BayREN 2020 Budget Recovery Request** | $22,953,150 |  |  |  |  |
| **Authorized 2020 Budget Cap (D.18-05-041)** | $24,615,000 |  |  |  |  |
|  |  |  |  |  |  |
| **Forecast 2020 TRC** | 0.29 |  |  |  |  |
| **Forecast 2020 PAC** | 0.43 |  |  |  |  |
| **Forecast 2020 RIM** | 0.43 |  |  |  |  |

**Table 2: BayREN’s Annual Rolling Portfolio Budget Forecast[[7]](#footnote-7)**

**Table 3: Annual Rolling Portfolio Savings Forecast True-Up (Net kWh)[[8]](#footnote-8)**



**Table 4: Annual Rolling Portfolio Savings Forecast True-Up (Net kW)[[9]](#footnote-9)**

**Table 5: Annual Rolling Portfolio Savings Forecast True-Up (Net therms)[[10]](#footnote-10)**

1. **Discussion of Proposed Program and Portfolio Changes**

Except as discussed below, the BayREN portfolio of programs will remain primarily the same as 2019 offerings with no changes in current program design. However, pending approval of the [Proposed] *Decision Modifying the Energy Efficiency Three-Prong Test Related to Fuel Substitution* and the approval of relevant work papers, the BayREN will consider introducing fuel switching measures into both residential offerings. BayREN’s 2020 total budget request is slightly less than last year for reasons discussed below.

Multifamily (BAMBE)

BayREN has worked closely with PG&E and MCE (the other PAs in our shared territory) to streamline cross-referrals and maintain a positive participant experience. To increase compatibility with PG&E’s Multifamily Upgrade Program (MUP), BayREN created a pathway for rater-guided projects to participate in BAMBE. Whereas Raters previously did not have a role in BAMBE, they now are able to conduct the upfront site visit and perform energy modeling; Rater projects are now eligible to receive an assessment incentive. BayREN is working with PG&E to enable MUP Raters to use EnergyPro Lite for BAMBE projects and for initial screening in MUP if they choose.  This alignment of modeling software and program delivery simplifies participation for Raters and customers within the Bay Area. BayREN is also collaborating with MCE to further align the multifamily programs. This alignment is intended to reduce confusion in the market and help ensure that property owners are getting the type of service and incentive level most appropriate for their business model, thereby expanding the volume and quality of projects in the shared territory.

Single Family (Home+)

BayREN closed its Home Upgrade Program in December 2018, and launched the newly designed Single Family program ‘Home+’ in January 2019. The new program focuses on lower-to-middle income[[11]](#footnote-11)[1] homeowners and renters in the Bay Area, a population that is consistently underserved in ratepayer energy efficiency programs throughout the state. Prior to launching Home+, BayREN conducted a Single Family Moderate Income Market Characterization study; the findings informed much of the new program design.

The key elements of the new program include rebates for single measure upgrades with bonus rebates offered for bundled measures. Customers have been able to undertake upgrades that best fit their needs. The new program also expanded its reach, and unlike Home Upgrade, allows renters (representing one third of the target market) to participate. Additionally, up to four unit single family homes are now eligible. The program also offers energy efficiency kits that are mailed to customers that complete an online home energy evaluation.

Another important offering of the program includes direct install of basic energy efficiency measures. The direct install measures are targeted specifically at households that have historically low program participation. These measures are installed with youth trained through our partner Rising Sun Energy, via the “Green House Calls” offering.

Compared to 2018’s Home Upgrade Program, Home+ has been able to serve a higher number of program participants within a lower incentive budget because of the new increased flexibility of measures available to different households. This high participation rate is expected to continue in 2020.

Commercial

The BayREN Small and Medium Business (SMB) Commercial program consists of two subprograms: Pay-for-Performance and Microloan. The Pay-for-Performance subprogram is designed to empower building and business owners to take a holistic and longer-term approach in incorporating energy efficiency. Applicants will receive whole-building technical analysis, learn about attractive financing options, and receive ongoing project support from a network of qualified industry partners and trusted local government partnerships. The Microloan subprogram is designed to provide micro and small business owners with access to attractive, flexible, hassle-free financing to install energy efficiency upgrades.

BayREN recognizes that whole-building retrofit projects can be complex and costly. BayREN also recognizes the need to transition from traditional (deemed and customer) to meter-based program designs. As such, the Pay-for-Performance subprogram breaks down SMB market barriers and initiates the transition from traditional to meter-based programs.

* The Pay-for-Performance subprogram takes a hybrid approach. First, it identifies the “low-hanging fruits,” such as deemed measures. Next, it will identify custom measures, with a focus on HVAC, refrigeration and equipment-control improvements.
* 50% of the eligible rebates will be paid after installation completion; the balance will be paid over 24 months. The amounts paid are dependent on third-party verified savings from the utility meters.
* All available financing options will be explored.
* Each project will be resourced with a Building Performance Advisor: a program implementer who offers a range of advisory services to busy customers, their contractors, and service providers.
* The subprogram will contract and partner with an energy service company (ESCO). Via a competitive Request for Proposal, this ESCO has demonstrated the financial capacity to absorb all of the project performance risk as well as experience with working pay-for-performance, meter-based programs.

The Pay-for-Performance subprogram will leverage financing with incentives. Again, 50% of the eligible incentive is paid up front based on deemed, modeled and/or calculated savings, and the remaining 50% tied to actual metered performance after Years 1 and 2. Financing options will be fully explored, including PG&E’s On-Bill Financing, the ESCO’s private lending services, and the BayREN Microloan.

Another notable feature of the Pay-for-Performance subprogram is “program layering” via referrals to complimentary energy efficiency (e.g. CCA programs and PG&E’s third-party programs and local government partnerships) to harvest deeper energy savings. Program layering serves not only to amplify the subprogram’s ability to develop comprehensive projects with a small budget, but also helps other utility programs achieve the 5% small commercial penetration target directive from D.18-05-014.

The Microloan subprogram is available in all nine Bay Area Counties. BayREN is partnering with San Francisco lender, Mission Asset Fund (MAF), to market and implement the subprogram. The Microloan is a no-interest, small-dollar loan made to individual and businesses with the intent to purchase and install energy-efficient equipment. MAF will deploy a high-impact marketing strategy to the Bay Area’s SMB sector. MAF has also designed a fully automated intake system to reduce participant-acquisition costs and streamline the application process.

WBSP

The Water Bill Savings Program (WBSP) is a collaboration of BayREN and Association of Bay Area Governments (ABAG) to help Bay Area residents and businesses upgrade their properties to be more water efficient using an on-bill financing offer through their local water utility. This financing Program is based on the Pay-As-You Save® (PAYS®) model: Water utility customers install eligible efficiency improvements with no up-front cost ― and repay project costs with a monthly on-bill surcharge that is significantly lower than the estimated savings. As indicated in BayREN’s Business Plan, general program design components address:

* Eligible improvements for residential customers. Indoor improvements include ultra-low-flow toilets, showerheads, and aerators. Outdoor improvements include drought tolerant landscaping, weather-based irrigation controllers, and irrigation system repairs. Energy-only measures may be permitted at water utility’s discretion.
* Tariff structure. The program’s project financing uses a voluntary surcharge established by the water utility using its regulatory authority for origination, contracting, servicing, and repayment. Participating water customers agree to pay the tariff surcharge assigned to their meter location; the utility can resolve non-payment through existing collection practices.
* Utility portfolio. The WBSP financing mechanism uses ABAG-secured capital to facilitate utility investment for public benefit, while leveraging water utility rate-setting authority to recover the investment. ABAG pays for services rendered to participating customers who join the utility’s portfolio of WBSP projects. The utility collects the tariff surcharge at participating meter locations to make full repayment of invested capital.

Since the WBSP Program was approved in 2013, BayREN has worked with three water utility partners: Town of Windsor, City of Hayward, and East Bay Municipal Utility District. Starting in 2020, BayREN will operate the Program regionally throughout the Bay Area providing turn-key program financing and administration services under a single program framework to participating local governments and their water utilities. The Program currently serves multifamily and single family customers and will expand to small and medium commercial customers in 2020. The Program is set to begin enrolling water utilities in Q1 2020. The slight increase in the budget request for 2020 is to support:

* Water utility enrollment in the regional Program: BayREN is initially targeting Windsor and Hayward as well as other well positioned water utilities to opt into the Program.
* Design and deployment of a digital platform to support: Program administration including contractor communications; customer enrollment, customer relationship management (CRM), and customer support; ABAG financing service tracking/payment/reporting, and; Program tracking/reporting.
* Establishment of value-add program services, including: A bulk purchasing strategy to drive down program costs; geographically targeted marketing services, and the commercial expansion.

Originally the program design called for the establishment of a joint powers authority (JPA) to provide the financing service; however, program partners later determined that ABAG was well positioned to fill that role. An action item to formally establish the ABAG financing service will be presented to the ABAG Executive Board in November 2019.

Codes & Standards

BayREN will continue its Codes offerings and expand them in a few areas: trainings, reach code impacts and tracking, and improving permit closure rates.

Training will continue to be offered to local government staff, with BayREN offering reach code enforcement training for the first time. In addition, we anticipate expanding a pilot program to provide training for contractors at local building department venues. This will engage contractors, who are difficult to reach but also very important for improving code compliance. Having the trainings occur on site at the building departments is designed to make attendance easier for contractors. Outreach and trainings will be done jointly with the BayREN single family program.

BayREN has been working over the past year to support and encourage local government reach code adoption. Building on those efforts, BayREN has started examining reach code enforcement and is planning to expand that effort to look at estimated impacts of reach codes as well as ways to improve reach code compliance.

A new effort that will be rolling out in 2020 will be focused on improving permit closure rates. BayREN has researched this area and is now working to design the activities needed.

Green Labeling

Since program launch in 2018, the number of Home Energy Scores in the region has continued to increase. To accommodate this uptake in interest and to ensure equitable distribution throughout the region, BayREN has placed a cap on the number of Home Energy Scores per county. We are questing a slight increase in the program budget ($140,000) to continue to support city and county data requests for Climate Action Planning; updating the program forms and databases; and, increase support for Assessors, Raters and Contractors.

1. **Strategies for increased cost-effectiveness**

Given BayREN’s directive to focus on filling gaps, piloting different or unique approaches that have the potential to scale and/or targeting hard-to-reach customers, we are not held to a particular cost-effectiveness threshold. However, we do strive to be more cost-effective and the strategies employed in 2019 have increased the forecasted Portfolio level TRC for 2020 and beyond. BayREN has three resource programs. Strategies for increasing the cost effectiveness of these programs in 2020 are:

1. Single Family

The new program offers deemed measures that have a range of cost-effectiveness. The most cost-effective measures are offered through the mail-in kits and the direct install Green House Call activity. In 2020, efforts will be focused on promoting these offerings while also marketing the most efficient home upgrade measures s which include water heaters and smart thermostats.

1. Multifamily

As detailed in the Business Plan, steps will be taken to continue streamlining the participation process, phasing out rebates over time and replacing them with scalable market drivers. This includes also introducing our simplified property assessment process and modeling tools to a broader set of users in the industry. These changes should collectively reduce the total cost of going through an energy upgrade. We will leverage resources such as the CEC Local Government Challenge grant received by program lead agency StopWaste, and strong local government relationships to facilitate scaling. Our long-term strategy will be to communicate marketability and non-energy benefits to participants in order build market awareness around energy efficiency as we prepare to transition away from rebates. Additionally, ongoing coordination with other Bay Area Multifamily Program Administrators is designed to support the efficient use of ratepayer funds.

1. Commercial

The Commercial program was slower to launch in 2019 than had been anticipated. However, the strategies for greater cost effectiveness in this program remain. In the Pay-for-Performance subprogram, a significant portion of the eligible incentives is tied to metered-verified savings. This ensures that incentives are going towards actual energy savings and the savings are sustained. As designed, many of the traditional implementation tasks, including customer-acquisition and project development, will be performed by the ESCO thereby reducing implementation expenditures. Financing and program-layering remain fundamental features of the Pay-for-Performance subprogram. As for the Microloan subprogram, many of the marketing and implementation functions will be digital and automated. To ensure equitable access, customers without access to the Internet will receive in-person assistance from BayREN.

1. **Metrics**

Per D.18-05-041 Ordering Paragraph 10, the metrics, targets and indicators for BayREN’s 2019 portfolio, and for the specific programs, were filed on May 1, 2019 along with BayREN’s 2019 Annual Energy Efficiency Report. 2020 Program Metrics will be filed on May 1, 2020 along with the Annual Report.

1. **Program Implementation Plans/Implementation Plans**

BayREN has uploaded to CEDARS revised redlined and clean versions of the Program Implementation Plans (PIPs) for Codes and Standards, Commercial, Green Labeling, Multifamily, Single Family and Water Bill Savings Program. The changes were minor and primarily reflect the 2020 program budgets.

# Protest

Anyone may protest this Advice Letter. The Protest must state the grounds upon which it is based. The Protest must be made in writing and received by the Commission within 20 days of the date this Advice Letter was filed with the Commission, or September 23, 2019. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

Public Utilities Commission

CPUC Energy Division

Attention: Tariff Unit

505 Van Ness Avenue

San Francisco, CA 94102

Copies of the protest should also be sent via e-mail to the attention of the Energy Division at [EDTariffUnit@cpuc.ca.gov](mailto:EDTariffUnit@cpuc.ca.gov). It is also requested that a copy of the protest be sent by email to address shown below on the same date it is mailed or delivered to the Commission.

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| --- |
| Jennifer K. Berg  Assistant Director - Energy Programs  Association of Bay Area Governments  375 Beale Street  7th Floor  San Francisco, CA 94105  JBerg@bayareametro.gov |

1. On July 1, 2017 ABAG underwent a staff consolidation with the Metropolitan Transportation Commission (MTC). ABAG and its Executive Board continue to exist and to implement programs, such as BayREN. [↑](#footnote-ref-1)
2. D.14-10-046 at page 31. [↑](#footnote-ref-2)
3. D.13-09-044, Ordering Paragraph 22. [↑](#footnote-ref-3)
4. D.16-08-019 at page 10. [↑](#footnote-ref-4)
5. D.15-10-028, at pages 59-60. [↑](#footnote-ref-5)
6. Values provided in Table 1 (and all subsequent Tables) are without the 5% market effects. [↑](#footnote-ref-6)
7. Budget forecasts for 2018 and 2019 are the same as the approved funding levels submitted in the 2019 ABAL Filing. [↑](#footnote-ref-7)
8. kWh savings forecasts for 2018 and 2019 are the same as what was filed in the 2019 ABAL Filing. [↑](#footnote-ref-8)
9. kW savings forecasts for 2018 and 2019 are the same as what was filed in the 2019 ABAL Filing. [↑](#footnote-ref-9)
10. Therm savings forecasts for 2018 and 2019 are the same as what was filed in the 2019 ABAL Filing. [↑](#footnote-ref-10)
11. [1] Households with annual income range of $48,000 – 125,000. [↑](#footnote-ref-11)