File No	19021	Committee Board Item		14
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	COMMITTEE/BOA	KET CONTENTS		K3
	AGENDA PAC	KET CONTENT	S LIST	
Committee	Budget & Finance Sub	-Committee	Date/\ldota	arch 13,2019 arch 19,2019
Board of Su	upervisors Meeting		DateM	arch 19, 2019
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	Motion Resolution Ordinance Legislative Digest Budget and Legislativ Youth Commission R Introduction Form Department/Agency C MOU Grant Information Form Grant Budget Subcontract Budget Contract/Agreement	eport Cover Letter and		
	Form 126 – Ethics Co	mmission		
	Award Letter Application			
	Public Corresponden	ice		
OTHER	(Use back side if add	itional space is	needed)	•
				,
•	l by: Linda Wong l by: Linda Wong	Date		-8,2019 19,2019

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Resolution retroactively authorizing the Department of the Environment to accept and expend grant funds from the Association of Bay Area Governments in the amount of \$2,948,331 to perform energy efficiency program implementation, as part of the Bay Area Regional Energy Network Program, an energy efficiency program, for the term of

[Accept and Expend Grant - Retroactive - Association of Bay Area Governments - Bay Area

Regional Network - Energy Efficiency Program Implementation - \$2,948,3311

January 1, 2019, to December 31, 2019.

WHEREAS, The City and County of San Francisco (City) is a member of the Association of Bay Area Governments (ABAG); and

WHEREAS, The California Public Utilities Commission (CPUC) ruled in Decision ("D") D.18-05-041 (05/2018) to approve the Bay Area Regional Energy Network's (BayREN) "2018-2025 Energy Efficiency Business Plan," thereby continuing its "Program Administrator" status so it may continue to administer ratepayer-funded energy efficiency programs in all nine (9) Member Counties; and

WHEREAS, BayREN submitted its 2018 Compliance Filing (October 29, 2018) to the Energy-Division (ED) of the CPUC, requesting a total budget of \$23,950,000, with energy savings goals of 2,559,124-kWh and 230,000 therms of natural gas; and

WHEREAS, The CPUC recognized that the BayREN program can provide greater opportunities for the participating counties to develop more innovative programs that better serve the ratepayers; and

WHEREAS, The CPUC stated in Advice Letter 9-E, amongst other things, approval of its 2019 BayREN Program Implementation Plan (PIP) and the budget to fund implementation of the PIP; and

WHEREAS, In 2013, the CPUC ruled in D.13-11-005 (November 14, 2013) that Pacific Gas & Electric (PG&E) will serve as the fiscal agent for BayREN and the CPUC provides oversight of the program content; and

WHEREAS, In 2013, ABAG and PG&E entered into a Master Services Agreement (MSA); and

WHEREAS, In 2018, ABAG received the ratepayer funds of \$19,205,617 through the MSA with PG&E; and

WHEREAS, BayREN will continue implementing programs to provide technical assistance and financing to the commercial and residential sectors and education and training to construction contractors and building code officials; and

WHEREAS, The San Francisco Board of Supervisors adopted goals for reductions in greenhouse gas emissions; and

WHEREAS, The Department of the Environment continues to play a key role in the development of the concepts and plans for all the elements of the BayREN program; and

WHEREAS, The Department of Environment is already performing energy efficiency programs for greenhouse gas reductions, providing technical assistance to the commercial and residential sectors and creating local jobs; and

WHEREAS, The Department of the Environment has built upon its extensive experience with commercial and multifamily building energy efficiency retrofits, playing a key role in the development of the BayREN Multifamily Subprogram; and

WHEREAS, The Department of the Environment is the Lead Agency of the BayREN Commercial Subprogram; and

WHEREAS, A successful BayREN program from 2013 to present has led to continued funding in future years; and

WHEREAS, ABAG awarded grant funds of \$511,017 to the City for the 2018 BayREN programs and that grant was approved by the Board of Supervisors under Resolution No. 0056-18 (enacted 02/10/18); and

WHEREAS, The term of the grant is from January 01, 2019 to December 31, 2019; and WHEREAS, A request for retroactive approval is being sought because the Department did not receive final approval from the funder until December 17, 2018; and

WHEREAS, The grant allows for Indirect costs in the additional award of \$199,098, included in the budget; and

WHEREAS, The Department of Environment will utilize existing staff hired under the American Reinvestment and Recovery Act that continued working under the 2013-18 BayREN contract; and

WHEREAS, The grant does not require an Annual Salary Ordinance (ASO) amendment; now therefore, be it

RESOLVED, That the Board of Supervisors authorizes the Director of the Department of the Environment to retroactively accept and expend a grant in the amount of \$2,948,331 from ABAG to for continuation of the BayREN program implementation activities in San Francisco.

Recommended:

Deborah V. Reghard

Department Head

Approved:

iviayui

Approved:

Controller Grant Division

Mayor Breed BOARD OF SUPERVISORS

Page 3

File Number:	
(Provided by Clerk of Board of Supervisors)	

BayREN FY19 PS10029300 - 0002

# **Grant Resolution Information Form**

(Effective July 2011)

Purpose: Accompanies proposed Board of Supervisors resolutions authorizing a Department to accept and expend grant funds.

The following describes the grant referred to in the accompanying resolution:

1. Grant Title: BayREN

2. Department: Department of the Environment

3. Contact Person: Lloyd Arcega

Telephone: 415-355-3716

4. Grant Approval Status (check one):

[X] Approved by funding agency

[ ] Not yet approved

- 5. Amount of Grant Funding Approved or Applied for: \$2,948,331
- 6a. Matching Funds Required: \$0
- b. Source(s) of matching funds (if applicable):
- 7a. Grant Source Agency: California Public Utilities Commission (CPUC)
- b. Grant Pass-Through Agency (if applicable): PG&E and Association of Bay Area Governments (ABAG)
- 8. Proposed Grant Project Summary: The Bay Area Regional Network (BayREN) is funded under Decision 18-05-041 of the California Public Utilities Commission (CPUC) to continue to engage local governments in meeting the goals of California's Energy Efficiency Strategic Plan. The CPUC provides oversight of the program content, PG&E acts as fiscal agent, and ABAG has a contract of \$23,950,000 with PG&E in 2019, out of which this grant is funded. BayREN is funded to provide an energy efficiency incentives and technical assistance program in single family, multifamily and small & medium commercial buildings, provide financing, and raise the level of energy code compliance in new construction and renovation.
- 9. Grant Project Schedule, as allowed in approval documents, or as proposed:

Start-Date: 01/01/19 End-Date: 12/31/2019

10a. Amount budgeted for contractual services: \$1,138,466

- b. Will contractual services be put out to bid? Yes, and will also use existing services
- c. If so, will contract services help to further the goals of the Department's Local Business Enterprise (LBE) requirements? Yes
- d. Is this likely to be a one-time or ongoing request for contracting out? On-going

11a. Does the budget include indirect costs?

[X] Yes

[ ] No

- b1. If yes, how much? \$199,098
- b2. How was the amount calculated? Based on Department of Environment's overhead and indirect.

c1. If no, why are indirect of [ ] Not allowed by grain [ ] Other (please expl	anting agency [] To m	aximiz	e use of grant funds on direct servi	ces
c2. If no indirect costs are in	cluded, what would have been	the inc	direct costs? N.A.	
12. Any other significant gra	nt requirements or comments:	No.		
**Disability Access Checkli Forms to the Mayor's Office	• •	ırd a cı	opy of all completed Grant Infor	nation
13. This Grant is intended for	activities at (check all that app	oly):		
<ul><li>[X] Existing Site(s)</li><li>[X] Rehabilitated Site(s)</li><li>[X] New Site(s)</li></ul>	[X] Existing Structure(s) [X] Rehabilitated Structure(s) [X] New Structure(s)		[X] Existing Program(s) or Service [X] New Program(s) or Service(s)	(s)
concluded that the project as other Federal, State and loca	proposed will be in compliance	e with t Ilations	Disability have reviewed the propos the Americans with Disabilities Act and will allow the full inclusion of o:	and all
1. Having staff trained in h	ow to provide reasonable mod	ificatior	ns in policies, practices and proced	lures;
2. Having auxiliary aids an	d services available in a timely	mann	er in order to ensure communication	n access;
	pproved by the DPW Access (		the public are architecturally acces ance Officer or the Mayor's Office o	
If such access would be tech	nically infeasible, this is descri	bed in	the comments section below:	
	ed are privately owned, consis		various types of buildings, in both rgy efficiency assessments.	residential
Departmental ADA Coordina	tor or Mayor's Office of Disabil	ity Rev	iewer:	
Claudia Molina, Departmenta	al ADA Coordinator, Payroll Pe	rsonne	1 Clerk	
			A 0	
Date Reviewed:	1-29-2019		(Signature Required)	
				**************************************
			•	•
Department Head or Desig	nee Approval of Grant Inform	nation	Form:	
Deborah O. Raphael, Directo	or, Department of the Environm	<u>ient</u>		
Date Reviewed: 1/31//	9	~	(Signature Required)	)

### City and County of San Francisco, - Department of the Environment Energy Efficiency Program - ABAG / BayREN Contract ABAG Personnel 5644 Principal Environmental Specialist (0.05 FTE); \$650,227 Administration, 5642 Sr. Enviornmental Specialist (0.75 FTE); Program Implementation & 5640 Environmental Specialists (1.30 FTE); Strategic Planning 5638 Envioronmental Assistant (0,10 FTE); 1822 Administrative Analyst (0.10 FTE) Sub-Total Personnel \$650,227 Non Personnel Services Financial incentives paid to program \$950,640 Incentives participants to reduce upfront costs to install energy efficiency equipment Other Professional Program Design & Implementation \$1,138,466 Field Expense \$3,000 Printing \$1,000 Other Materials & Supplies \$2,900 Sub-Total Contract/ Other \$2,096,006 Interdepartmental Transfers Legal Review \$3,000 \$199,098 Indirect \$2,948,331 **Grand Total**



# **N**等列動 生。California Public Urlifies Commission

# ADVICE LETTER





ENERGY UTILITY	200 CADY
MUST BE COMPLETED BY UTIL	JTY (Altach additional pages as needed)
Company name/CPUC Utility No.: BayREN #94	į
Utility type:  ☑ ELC ☑ GAS ☐ WATER □ ☐ PLC ☐ HEAT	Contact Person: Tennifer Berg Phone #: 414-820-7947 E-mail: There@bayareametro.gov E-mail Disposition Notice to: There@bayareametro.gov.
EXPLANATION OF UTLITY TYPE ELC, = Electric GAS = Gas WATER = Water PLC = Pipeline HEAT = Heat	(Date Submitted / Received Stamp by CPUC) September 4, 2018
Advice Letter (AL) #;-9E	Tier Designation: 2
Subject of Al. 2019 Annual Energy Efficiency Prop Regional Energy Network (BayREN	gam and Portfolio Budget Request for the San Francisco Bay Area )
Keywords (choose from CPUC listing); <sub>Energy</sub> Er ALType: ☐ Monthly ☐ Quarterly ☑ Amud	il □ One-Time □ Other:
If All submitted in compliance with a Commission D.15-10-028; D.18-05-041.	on order, indicate relevant Decision/Resolution#
Does AL replace a withdrawn or rejected AL? I	(so, identify the prior AL; N/A
Summarize differences between the AL and th	e prior withdrawn or rejected AL N/A
Confidential treatment requested?	✓ No
	ation: allable to appropriate parties who execute a intact information to request nondisclosure agreement/
Resolution required? Tyes V No	
Requested effective date: 10/4/18	No. of tariff sheets: 0
Estimated system annual revenue effect (%): 1/2	[ <b>/</b> A:
Estimated system average rate effect (%): N/A	
When rates are affected by AL include affact (residential, small commercial, large C/L agricu	ment in Al. showing average rate effects on customer classes ultural, lighting).
Tailff schedules affected:	· · · · · · · · · · · · · · · · · · ·
The second control of	
Service affected and changes proposed N/A	
Pending advice letters that revise the same tar	· i

Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division Attention: Tariff Unit 505 Yan Ness Avenue San Francisco, CA 94102 Email: EDTariffUnit@couc.ca.dov Name: Gerald Lahr

Title: Assistant Director - Energy Programs, MTC

Utility Name:

Address: 375 Beal Street, 7th Floor

State: California

Cffy San Francisco St Telephone (xxx) xxx-xxxx; 415-820-7908

Facsimile (xxx) xxx-xxxx:

Email: jlahr@bayareametro.gov

Name:

Title:

**Utility Name:** 

Address:

City:

State: Wyoming

Telephone (xxx) xxx-xxxx: Facsimile (xxx) xxx-xxxx;

Email:



September 4, 2018

California Public Utilities Commission Energy Division Tariff Unit 505 Van Ness Ave. Fourth Floor San Francisco, CA 94102-3298 Advice Letter 9-E

(BayREN ID #941)

#### Subject:

BayREN 2019 Annual Energy Efficiency Program and Portfolio Budget Request

#### Purpose

The purpose of this advice filing is to seek approval for the 2019 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<sup>1</sup>, 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." In addition, funding for various financing programs, including BayREN's Multifamily Capital Advance Program ("BAMCAP"), was previously approved in D.13-09-044. 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." Recently, in D.18-05-041, BayREN's Business Plan and Budgets for the term of the Rolling Portfolio was approved with slight modifications.

<sup>&</sup>lt;sup>1</sup> 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.

<sup>&</sup>lt;sup>2</sup> D.14-10-046 at page 31.

<sup>&</sup>lt;sup>3</sup> D.13-09-044, Ordering Paragraph 22.

<sup>&</sup>lt;sup>4</sup> D.16-08-019 at page 10.

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. D.18-05-041 provided the required components of the Annual Budget Advice Letter (ABAL) and directed Program Administrators to file the 2019 ABAL by September 4, 2018.

As directed by D.18-05-041 and additional guidance provided by Commission staff, BayREN has submitted via CEDARS-FM the 2019 BayREN Budget Filing Detail Report; the confirmation receipt is attached hereto as Attachment A.

#### Discussion

#### 1. BayREN 2019 Budget Request

BayREN requests a total portfolio and Evaluation, Measurement and Verification ("EM&V") budget of 23,336,847. The budget breakdown by sector and the energy savings is provided in Table 1.

Table 1: BayREN 2019 Budget and Savings<sup>7</sup>

# BayREN FORECAST ENERGY SAVINGS (Nef)

	•	Forecast	Forecast	Forecast
Sector	2019 Program Year Budget	kWh	kW	therms (MM)
Residential	\$18,591,913	1,738,594	384	0.22
Commercial	\$2,713,832	820,530	. 656	0.01
Industrial			*******************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Agriculture		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Emerging Tech				
Public			*************************************	
Codes and Standards	\$1,766,730	N/A	N/A.	N/A
WE&T	part   1,000 part		***	
Finance			-1** }},,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
OBF Loan Pool				
Subtotal	\$23,072,475	2,559,124	1,041	0.23
PA EM&V <sup>1</sup>	\$264,372			
Total PA PY Spending Budget <sup>2</sup>	\$23,336,847			
Uncommitted and Unspent Carryover balance <sup>3</sup>	TBD			
Total PA PY Budget Recovery Request <sup>4</sup>	\$23,336,847			
Authorized PY Budget Cap (D.18-05-041)	\$23,950,000			
	1			
Forecast PY TRC	0.22			
Forecast PY PAC	0.25			•

<sup>&</sup>lt;sup>5</sup> D.15-10-028, at pages 59-60.

<sup>&</sup>lt;sup>6</sup> D.18-04-041, pp 123-129.

<sup>&</sup>lt;sup>7</sup> Program Administrators received guidance from Energy Division to not update the ABAL tables. The Residential sector includes BayREN's Water/Energy Nexus program, which is a cross-cutting program, only because of this guidance. The Water/Energy Nexus program is defined as a cross-cutting program in CEDARS.

### Table 1 Notes:

- <sup>1</sup> BayREN's portion of the total EM&V budget amount of \$961,353, which is the 27.5 percent split.
- <sup>2</sup> Total proposed program year budget spending, including uncommitted unspent carryover.
- <sup>3</sup> The balance of unspent uncommitted must reflect the total unspent uncommitted starting January 1, 2018 through December 31 of current year (PY-1). Because each ABAL is filed in Q3, this unspent uncommitted amount will be an estimate for the year in which the ABAL is filed.
- <sup>4</sup> Amount of funds to be collected for the Program Year Line 18 less Line 19.

Table 2: BayREN's Annual Rolling Portfolio Budget Forecast True-Up

		Ta	ble 2: BayRI	N Annual R	lling Portfoli	o Budget For	ecast True l	J <b>p</b>	
Sector	2018 1	2019	2020	2021	2022	2023	2024	2025	Total
Residential	\$14,771,780	\$18,591,913	\$18,487,479	\$17,020,547	\$16,904,743	\$16,500,387	\$17,834,401	\$17,713,181	\$137,824,431
Commercial		\$2,713,832	\$3,246,473	\$3,572,306	\$3,980,158	\$4,525,331	\$4,665,108	\$5,104,067	\$27,807,276
Industrial									
Agriculture									
Emerging Tech				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Public							agan prayon Neffour spiros mada baran sanasana w		
Codes and Standards	\$1,660,370	\$1,766,730	\$1,928,700	\$2,103,700	\$2,283,200	\$2,461,700	\$2,641,100	\$2,820,400	\$17,665,900
WE&T		****		rtenjighteispeel H. Worm (William Manadalana)		44-14-14-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-			**************************************
Finance	\$2,515,712			aa baa'agaaaga maaddaramaad aan aadaanaa ga saa				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	\$2,515,712
OBF Loan Pool									
Subtotal	\$18,947,862	\$23,072,475	\$23,662,652	\$22,696,553	\$23,168,101	\$23,487,418	\$25,140,609	\$25,637,648	\$185,813,319
EM&V	\$257,755	\$264,372	\$271,135	\$260,065	\$265,468	\$269,127	\$288,069	\$293,765	\$2,169,755
Total Portfolio Program Year BayREN Budget	\$19,205,617	\$23,336,847	\$23,933,787	\$22,956_618	\$23,433,569	\$23,756,545	\$25,428,679	\$25,931,413	\$187,983,074
Total Authorized Portfolio PY Budget Cap	\$22,738,000	\$23,950,000	\$24,615,000	\$23,216,000	\$23,720,000	\$24,605,000	\$24,629,000	\$25,503,000	\$192,976,000
	·	process		,		·		·	
Forecast Portfolio PY TRC	0.25	0.22	0.28	0.31	0.34	0_38	0.47	0.49	0.35
Forecast Portfolio PY PAC	0.43	0.25	0.31	0.33	. 0.37	0.43	0.55	0.57	0.39

<sup>&</sup>lt;sup>1</sup> "Reset" 2018 budget at or below 2018 annual budget approved in Business plan Decision. "True-up" years 2019-2025.

BayREN's portfolio savings forecast true-up is provided in Tables 3, 4 and 5 below.

Table 3: Annual Rolling Portfolio Savings Forecast True-Up (Net kWh)

			34.		aris necessario de la compansión de la comp		NEW SERVICE	30000000000000000000000000000000000000
	Lable	3: Annual b	Colling Portion	lio Savings	Forecast - 1	ue-up (iNet l	cwh)	
Sector	2018	2019	2020	2021	2022	2023	2024	2025
Residential	2,687,839	1,738,594	1,937,532	1,690,107	1,802,022	1,914,702	2,399,505	2,399,505
Commercial ·	N/A	820,530	1,322,385	1,512,230	1,863,897	2,124,296	2,342,852	2,600,805
Industrial								
Agriculture								
Emerging Tech		.,,,,,,,	,			(hairingan, p. 2000-2007, 2010-1011)	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Public				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Codes and Standards	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WE&T							,	
Finance	N/A				-			•
OBF Loan Pool								
Total Forecast Portfolio Savings	2,687,839	2,559,124	3,259,917	3,202,337	3,665,919	4,038,997	4,742,357	5,000,310
CPUC Goal*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
% of Goal*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

<sup>\*</sup> Not applicable to CCA/REN as of 2018, in template for future ABAL when applicable

Table 4: Annual Rolling Portfolio Savings Forecast True-Up (Net kW)

	Table 4:	Annual Ro	lling Portfo	lio Savings	Forecast	True-up (Y	(et kW)	
Sector	2018	2019	2020	2021	2022	2023	2024	2025
Residential	1,172	384	365	312	346	380	595	595
Commercial	N/A	656	529	605	746	850	937	1,040
Industrial				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2-43,8035334888888888888888888888888888888888		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Agriculture				.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	********************************		***************************************	
Emerging Tech				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Public			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*********************			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Codes and Standards	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
WE&T		***************************************	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		***************************************	***************************************		······
Finance	N/A		•	************			***************************************	
OBF Loan Pool								
Total Forecast Portfolio Savings	1,172	1,041	894	917	1,091	1,229	1,533	1,636
CPUC Goal*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
% of Goal*	N/A	· N/A	N/A	N/A	N/A	N/A	N/A	N/A

<sup>\*</sup> Not applicable to CCA/REN as of 2018, in template for future ABAL when applicable

Table 5: Annual Rolling Portfolio Savings Forecast True-Up (Net therms)

				- '	-			
	Table 5: A	nnual Roll	ing Portfoli	o Savings F	orecast - T	rue-up (Ne	t therms)	
Sector	2018	2019	2020	2021	2022	2023	2024	2025
Residential	304,917	218,663	242,202	228,035	247,029	287,468	443,345	443,345
Commercial.	N/A	11,801	23,631	25,964	30,613	33,731	35,050	35,874
Industrial			(),,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Agriculture						.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		*****************************
Emerging Tech					,			****************************
Public	,,,,,,			~~				
Codes and Standards	N/A	N/A	N/A	N/A	N/A	- N/A	N/A	N/A
WE&T						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		***************************************
Finance	N/A							·····
OBF Loan Pool								
Total Forecast Portfolio Savings	304,917	230,464	265,833	253,999	277,642	321,199	478,395	479,219
CPUC Goal*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
% of Goal*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

<sup>\*</sup> Not applicable to CCA/REN as of 2018, in template for future ABAL when applicable

#### 2. Discussion of Proposed Program and Portfolio Changes

Except as discussed below, the BayREN portfolio of programs will remain primarily the same as 2018 offerings with an increase in current activities consistent with the slight increase in program budgets. Two programs, Single Family and Commercial, will be revised to more closely align with the criteria established in D.12-11-005.

# Single Family

BayREN will redesign the Single Family program by offering holistic solutions to both homeowners and renters to save energy, while also improving comfort and occupant health. The new program will focus on lower to middle income<sup>8</sup> homeowners and renters in the Bay Area, a population that is consistently underrepresented in ratepayer energy efficiency programs in our territory as well as across the state. We will phase out implementation of Home Upgrade starting in Q1 2019. While Home Upgrade has allowed for deeper savings, the average project cost of approximately \$15,000 is cost prohibitive for many in our targeted income group. Home Upgrade also does not address the 32% of the Bay Area renter population within the middle income group. The program design will rely on the findings of the BayREN Single Family Moderate Income Market Characterization Study (scheduled to be complete by September 2018), so that the barriers of entry and the identified priorities of this market will be adequately addressed in the revised program.

The key approach to the offering is to fill the gap and to meet the lower to middle-income customer where they are. This will be done by offering incremental and affordable energy efficiency measures that are better aligned with their needs than are current energy efficiency programs. BayREN will offer a wide range of measures to its customers (both homeowners and renters) to achieve deep savings over the multiyear life of the program. The measures will range from low cost/no cost self-install measures to expensive professionally installed measures, allowing customers more flexibility and control over the project. Meter-based performance incentives will also be offered to the customer to facilitate implementation of energy management type measures. These proposed changes will allow for more realized savings with smaller entry-point improvements while also continuing to promote deeper savings through a whole-house approach.

Contractors and Community Based Organizations (CBOs) partnerships will be developed and/or enhanced to scale customer participation. BayREN will offer trainings to contractors on workforce standards (in conjunction with and coordination with the statewide Workforce Education and Training activities). BayREN will also help to expand specialty contractors' services to full building performance and/or partner with other firms to achieve a better business model that supports deeper whole house upgrades. One key program objective is to get the homeowner on an incremental path to achieve Zero Net Energy by phasing in new measures as they are feasible and providing education along the way.

An integral part of the implementation of the current and new single family program is the Home Energy Advisor service. Advisors assist both homeowners and renters and maintain contact with the customers after they have assisted with the initial contact in order to see the customer through a full energy-efficiency journey until the customer has reached ZNE. The Advisors also assist contractors with understanding program requirements and when needed, help mediate issues that may arise with the property owners. Advisors will refer customers to complementary programs offered by utilities and other organizations and help customers understand their financing options.

<sup>&</sup>lt;sup>8</sup> Households with annual income range of \$48,000 - 125,000.

Like all of BayREN programs, outreach will continue to be done primarily by local governments, who are seen as trusted messengers. This also allows for the seamless layering of other climate programs and activities. Local governments will also reach out to local CBOs to better understand specific target audience and provide custom solutions to the community.

# Commercial

The BayREN SMB Commercial program is designed to empower building owners to take a holistic and longer-term approach in incorporating energy efficiency within their buildings. Applicants in the nine county area will receive whole building technical analysis, attractive financing options, and ongoing project support from a network of qualified industry partners and trusted local government partnerships.

BayREN recognizes that whole-building retrofit projects can be complex and costly, so we intend to meet SMB owners where they are and break down market barriers when possible:

- Our dual pathway approach will assure that each customer receives the level of support that suits their needs. Each project will be resourced with a Building Performance Advisor, who can offer a range of advisory services to busy customers, their contractors, and service providers.
- The program will first identify "low-hanging fruit," by leveraging existing, complementary energy efficiency and financing program opportunities. Next, it will identify custom measures, with a focus on HVAC improvements, and provide "Pay-for-Performance" incentives based on actual, metered savings.
- Prospective partners will be vetted and selected by the program via a non-competitive Request for Qualifications. Preference will be given to partners who can absorb some or all of the project performance risk on the customer's behalf.

Financial incentives will be available, with 50% of the incentive paid up front based on modeled savings, and the remaining 50% tied to actual metered performance after one year. Other financing options that will be promoted will be Commercial PACE, and the current Microloan product offered in three of the BayREN counties will expanded throughout our territory.

A fundamental feature of the Subprogram is "program layering" via referrals to complimentary EE and financing programs (e.g. PG&E's offerings) 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 in D.18-05-014.

#### 3. 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 will utilize new strategies in 2019 to help our savings. BayREN has three resource programs. Strategies for increasing the cost effectiveness of these programs in 2019 are:

# 1. Single Family.

New innovative tools and approaches will be introduced to scale up participation while improving cost effectiveness. New measures and methods for savings calculations will used, as well as a meter based performance incentive. Customer participation will be scaled by leveraging existing customer relationships and partnerships with community-based organizations, rather than starting from scratch. These new approaches will result in greater realized savings for smaller entry-point improvements while continuing to promote a whole-house approach. BayREN will continue to support a long-term customer

journey that will effectively reduce the cost of customer acquisition while driving deeper energy savings over time.

There is a drop in the energy savings for this program from 2018 to 2019, in large part due to the change in program with 2019 being the beginning of the ramp up. Under the new program design, most new participants will be undertaking simpler, lower cost measures at the outset of their energy efficiency journey. We thus forecast only 450 Home Upgrade type projects in 2019, amounting to 167 net kW. The other measures forecasted to be implemented in 2019, while numerous, have a much lower average kW-savings/measure. In fact, the weighted average of the other measures is <0.001 net kW per unit and 102 kW overall.

Some of the new program measures will produce substantial kW savings, notably high performance windows and efficient AC/heat pump. However, the number of such measures expected to be implemented in the early years of the new program is relatively small. It is also worth noting, that those measures still claim less than ½ of the kW savings as the typical Home Upgrade package. However, we have seen in the Home Upgrade impact evaluations that the realization rate on kW savings is very low. So, as savings ramp up with the new program measures based on their different savings estimation methodologies, we anticipate more kW over time, with better realization rates.

With a continued focus on improving cost effectiveness, we anticipate greater energy savings following the early ramp of year of 2019.

### 2. Multifamily

As detailed in the Business Plan, steps will be taken to continue streamlining the participation process, phase out rebates over time and replacing them with other market drivers. For immediate next steps, we are creating a pathway for a market of raters to be able to provide technical assistance at a lower cost than the program-provided technical assistance. This means also introducing our simplified property assessment process and modeling tools to a broader set of users in the industry. These changes should all reduce the total cost of going through an energy upgrade.

While we are using the same kW savings per unit (0.03kW) in 2018 and 2019, there is a drop in overall net savings. This is due to there being 450 more units in 2018 than in 2019. A more significant explanation is that for 2019, we reduced the NTG ratio from 0.85 to 0.70, which impacts the net savings.

#### 3. Commercial

A significant portion of customer incentives will be tied to metered-verified savings. This will help to ensure that incentives are actually going towards energy savings. As designed, many of the traditional implementation tasks will be performed by program partners and/or contractors, thereby reducing implementation expenditures. Additionally, there will be dual enrollment pathways that will allow for program layering.

#### 4. Metrics

Per D.18-05-041, Ordering Paragraphs 9 and 11, the metrics, targets and indicators for BayREN's program portfolio, and for the specific programs, were filed and served to the service list of A.17-01-013, et. al. on August 6, 2018. Pursuant to Energy Division direction, attached hereto as Attachment B is 2017 metrics for BayREN's programs.

<sup>&</sup>lt;sup>9</sup> The reduction in Net savings is not a one-to-one ratio with the NTG values.

### 5. 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, Multifamily, and Water Bill Savings Program. The changes were minor and primarily reflect the changes in program budgets as approved in the Business Plan. BayREN will submit Implementation Plans (IPs) for the Single Family and Commercial programs during the time line prescribed in D.18-05-041. Similarly, an IP will be submitted for Green Labeling, which had previously been part of the single family program, but is now a standalone program as approved in the Business Plan.

#### **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 24, 2018. 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 <u>EDTariffUnit@cpuc.ca.gov</u>. 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.

Gerald Lahr
Assistant Director - Energy Programs
Association of Bay Area Governments
375 Beale Street
7th Floor
San Francisco, CA 94105
JLahr@bayareametro.gov

# **Effective Date**

BayREN requests that this Tier 2 advice filing become effective on regular notice, October 4, 2018, which is 30 calendar days from the date of this filing.

# Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.13-11-005. Address changes to the General Order 96-B service list should be directed to Jennifer K. Berg at jberg@bayareametro.gov or by calling 415-820-7947.

Gerald L. Lahr

Assistant Director - Energy Programs

Attachment:

A: CEDARS Filing Submission Receipt

B: BayREN 2017 Metrics

ATTACHMENT A TO BAYREN AL-9-E

# CEDARS FILING SUBMISSION RECEIPT

The BAY portfolio filing has been submitted and is now under review. A summary of the filing is provided below.

PA: Bay Area Regional Energy Network (BAY)

Filing Year: 2019

Submitted: 09:56:14 on 04 Sep 2018

By: Qua Vallery

Advice Letter Number: 9-E

- \* Portfolio Filing Summary \*
- TRC: 0.2223
- PAC: 0.254
- TRC (no admin): 0.4719
- PAC (no admin): 0.6423
- RIM: 0.254
- Budget: \$23,336,847.11
- \* Programs Included in the Filing \*
- BAYREN02: Multi Family
- BAYREN03: Codes and Standards Program
- BAYREN04: Water/Energy Nexus
- BAYREN05-A: Evaluation Measurement and Verification BAYREN
- BAYREN06: Commercial
- BAYREN07: Green Labeling
- BAYREN08: Single Family

ATTACHMENT B TO BAYREN AL-9-E

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	shee L					Units of		Metric/				Baseline	2017	2017	2017							Proxy Explan
1	dex	PA .	Page	Order	Coda	Measurement	Metric Type	Indicator	Business Plan Att A Description	Metric	Sector ·	Year	Reporting Year	Numerator	Denominator	BayREN Notes, assur	motions, methodology		Data Source CEDARS Online CET Ouput	Methodology Per CEDARS	Key Definitions None	ation
	0 8	ayren	EOA	РЦ	, G	MT COZeq	енс	Metric	RSF2-G+-Greenhouse passes (MT CO2eq)  Net kWh sovings, reported on an annual hasis++	CO2-equivalent of net annual kWh savings	Portivila Level (PL)—All Sectors	20,16	3,171	n/a	N/A							
-		·············				Host year	· · · · · · · · · · · · · · · · · · ·		PL1-S1- First year annual and lifecycle								<del></del>		CEDARS Online ŒT Ouput	Per CEDARS	None	
	1 8	ayREN	A02	PL1	51	annual kW gross	S1: Energy Savings	Metric	ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net)->	First year annual kW gross	Portfolio Level (PL)—All Sectors	2016	1,589	N/A	N/A							
t					·-···														CEDARS Online CET Ouput	Per CEDARS	None	
	2 в	IYREN	A02	PL1	51.	First year annual kW net	51: Energy Savings	Metric	Pl.1-51- First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) **	First year annual kW net	Portfolio Level (PL)—All Sectors	2016	1,311	N/A	n/a				·	•		
-																	<del></del>	•	CEDARS Online CET Ouput	Per CEDARS	None	······
	з в	уяен	ADZ	PL1	\$1	First year annual kWh gross	S1: Energy Savings	Metric	PLI-SI- First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demond savings (gross and net)++	Hist year annual kWh gross	Portfolio Level (PL)—All Sectors	2015	2,720,630	N/A	N/A				CEDARS OF THE CET SUPPLY	PET COMP	Note:	
1																			CEDARS Online CET Ouput	Per CEDARS	None	
	4 в	IYREN	AUZ	PLI	51	First year annual KWh nel	S1: Energy : Savings	Metric	PL3-S1- First year annual and lifecycle' ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net)	First year annual kWh net	Portfolio Levzi [PL]—Ali Sectors	2016	2,370,542	H/A	n/a -							
t	<del>. ,</del>																		CEDARS Online CET Duput	Per CEDARS	None	
	3 B.	yren	A02	PLI	si.	Arst year annual Tharm gross	51: Energy Savings	Metric	PLI-S2-First year annual and lifecycle ex-ante (pro-evaluation) gas, electric, and demand savings (gross and net) • •	Hist year annual Therm gross	Portfolio Level (PL)—Ali Sectors	2016	277,123	n/A	N/A							
+	:																		CEDARS Online CET Ouput	Per CEDARS	None	
	•	YREN	A02	PL1	51	Arst year annual Therm net	S1: Energy Savings	Metric	PLI-SI- First year annual and lifecycle ex-anta (pro-evaluation) gas, electric, and demand savings (pross and net)**	First year annual Therm net	Portfolio Level (PL)—Ali Sectors	2016	228,797	N/A	n/a	•						ı
-		<del>-                                    </del>																	CEDARS Online CET Ouput	Per CEDARS	None	
	7 Ba	yren	A02	PL1		Ulecycle ex- ante kW gross		Metric	FL1-51- First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) **	Ułecycle ex-ante kW grost	Portiolio Level (PL)—Ali Sectors	2016	24,321	N/A	n/a							·
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Sp. dsi	20	, At				Units of		Metric/				Basaline	2017	2017	2017				Ргож Ехрія
Inc	ex PA	Pa	n Or	der	Code	Measurement	Metric Type	Indicator	Business Plan Att A Description	Metric	Sector	Year	Reporting Year	Numerator	Denominator	BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions atlor
	Aysa	EN AC	2 р	u	51	Ulecycle ex- ante kW net	S1: Energy Savings	Metric	PLL-51- First year annual and Illecycle ex-ante (pre-evaluation) gas, electric, and demand savings (pross and net)**	Ufecycle ex-ante kW net	Portiolio Level (PL)—Ali Sectors	2015	18,786	N/A	N/A	*	CEDARS Online CET Ouput	Per CEDARS	Ment
5	ВауП	EN AO	2. PI	rī.		Ulecycle ex- nte kWh gross		Metric	PLI-SI-First year annual and lifecycle ex-ante (pre-evaluation) (as, electric, and demand savings (gross and net)++	Ulecycle ex-ante kWh gross	Portfolio Level (PL)-Ali Sectors	2016	~ 2,720,630	N/A	N/A		CEDARS Online CET Ouput	Per CEDARS	None
20	Вэуп	en ao	Z PI	L1	51	Lifecycle ex- ante kWh net	51; Energy Savings	Metric	PLI-SI- First year annual and lifecycle ex-ante (pre-evaluation) 20; electric, and demand savings (gross and net)++	Ufecycle ex-ante kWh net	Partfolio Level (PL)— All Sectors	2016	28,824,445	N/A	N/A		CEDARS Online CET Ouput	Par CEDARS	None
11	Вәуя	DA M	₹ Pi	.1		Ulecycle ex- ante Therm gross	S1: Energy Savings	Metric	PLI-\$1- First year angusi and illecycle ex-ante [pre-evaluation] gas, electric, and demand savings [gross and net] **	Ufecycle ex-ante Therm gross	Postfojia Level (PL)—Ali Sectors	2016	4,105,390	H/A	н/а		CEDARS Online CET Guput	Per CEDARS	None
12	8 syre	N AO	. PL	1	SI ar	Uśczyde ex- ste Therm net	S1: Energy Savings	Metric	PLI-53- First year annual and lifecycle. ex-ante [are-evaluation] gas, electric, and demand savings (gross and net) **	Ulecycle ex-ante Therm not	Portialio Level (PL)— All Sectors	2016	3,379,571	N/A	N/A	·	CEDARS Online CET Ouput	Per CEDARS	None
13	Зэүяг	N A02	. PL:	z	53	First year annual KW gross	S3: DAC Savings	Metric	PL2-53- First year annual and lifecycle ex-anto [pre-evaluation] 201, electric, and demand savings (gross and net) in disadvantaged communities**	First year annual kW gross in Disadvantaged Communities	Portfolio Level (PL)- All Sectors	2016	41.65	N/A	N/A	% of DAC savings for Mi + SF	CEDARS Online CET Ouput	Data pull from PA databases	D.18-05-041: DAC® Service secounts in a)p codes corresponding to census tracts to the top quartile of CaliforviroScreen 3.0 scotes.
14	BayRE	4 A02	PLI	2 !		First year musi kW net	S3: OAC Savings	Melric	PL2-53- First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand arvings (gross and net) in disadvantaged communities **	First year annual kW net in Disadvantaged Communities	Portfolio Level (PL)—All Sectors	2016	40.38	N/A	N/A	K of DAC savings for MI'+SF	CEDARS Online CET Ouput	Data pull from PA databases	0.18-05-041: OAC = Service accounts in -12p codes corresponding to census tracts in the top quartile of Californios or een 3.0 scores.
15	BayRE	₹ A02	PLZ			First year annual kWh gross	53: DAC Savings	Metric	PL2-53- First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and dennand savings (gress and net) in disadventaged communities*	First year annual kWh gross in Disadvantaged Communities	Portfallo Level (PL)-Ali Sectors	ZD16	275,058	N/A	N/A	X of DAC savings for M°+5F	CEDARS Online CET Ouput	Data pvil from PA databases	D.18-05-041: DAC = Service accounts in also codes corresponding to centrus tracts in the top quartile of Callinviroscreen 3.0 scores.

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1		AttA	AMA	Method	Units of		Metric/				Baseline	2017	2017	2017	•			
Index	DΔ				Measurement	Metric Type		Business Plan Att A Description	Metric	Sector	Year				Bay REN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions .
					First year	53: OAC		PL2-53- First year annual and illecycle exante (pre-evaluation) gas, electric, and					-		% of DAC savings for MF+SF	CEDARS Online CET Ouput	Osta pull from PA databases	D.18-05-041; DAC = Service accounts in alp codes corresponding to census tracts in the top quartile of CalenviroScreen 3,0 scores.
16 B	IYREN	A02	PLZ	S	annual KWh net	Savings	Meide	demand savings (gross and net) in disadvantaged communities**	Disadyantaged Communities	Sectors	2015	247,552	N/A	N/A .			-	
17 g	syREN	A02	PLZ	53	First year annual Therm gross	S3: DAC Savings	Metric	PL2-53- First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand-savings (gross and net) in alsowantaged communities»			2016	17,387	N/A	N/A	% of DAC savings for MI <sup>(+</sup> +SF	CEDARS Online CET Ouput	Data pull from PA databases	O.18-05-041: DAC = Service accounts in alp codes corresponding to census tracts in the top quartile of CallinviroScreen 3.0 acores.
15 B	SYREN	AO2	71.2	53	First year annual Therm net	53: DAC Savings	Metric	PL2-53- First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) in disadvantaged communities »		Portfolio Level (PL)—Ali Sectors	2016	15,649	N/A	N/A	% of DAC savings for MF+SF	CEDARS Online CET Ouput	Data pull from PA databases	D.18-05-061, DAC - Service accounts in zlp codes corresponding to certous treats to the top quartile of CalitaviroScreen 3.0 scores.
19 8:	yren	A02	PLZ	53	U/ecycle ex- ante kW gross	53: DAC Savings	Metric	PLZ-53- First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and dermand savings (gross and net) in disadvantaged communities»	Lifecycle ex-ente kW gross in Disa dvantaged Communities	Fortfolio Level (PLJ-Ali Sectors	2016	548 .	N/A	N/A	% of DAC awings for M/ + SF	CEDARS Online CET Ouput	Datz puli from PA databases	D.18-05-041: DAC = Service accounts in all rodes corresponding to census tracts in the top quartile of Calitrainsocrean 3.0 serves.
20 Bs	YREN	AD2	PL2	\$3	Ulecycle ex- ante kW pet	\$3; DAC Sayings	Metric	FL2-53- First year annual and lifecycle ex-ante [pre-evaluation] yaz, electric, and demand savings (gross and net) in, disedvantaged communities**	Ufecycle ex-ante kW net in Olsadvantaged Communities	Portfolio Lovel (PL)—All Sectors	2016	460	N/A	N/A	⅓ of DAC savings for M²+5F	CEDARS Online CET Ouput	Oziz pull from PA databases	D.18-05-04½ DAC * Service accounts in alp codes corresponding to census tracts in the top quartile of CallenviroScreen 3.0 scores.
21 82	yREN	A02	P1.2	53	Ufecycle ex- ante kWh gross	53; DAC Savings	Meiric	PL2:53- First year annual and ill ccycle ex-ante [pre-evaluation] gas, alectric, and demand savings [gross and net] in disadyantaged communities»	Ulecycle ex-ante kWh gross in Disadvantaged Communities	Portfolio Level (FL)-Ali Sectors	2016	3,484,979	N/A	N/A	% of DAC:savings for MF+SF	CEDARS Online CET Ouput	Data pull from PA databases	D.T8-US-041; DAC's Service accounts in all p codes corresponding to census treety in the top anartile of CalifmiroScreen 3.0 scores.
22 Ba	yren	AOZ	PL2	53	Ufecycle ex- ante kWh net	S3: DAC Savings	Мезліс	PL2-53- First year annual and lifecycle ex-anic [pre-evaluation] 2st, electric, and demand savings (gross and net) in disadvantaged communities •	Ufecycle ex-ante kWh net in Disadyantaged Communities	Fortfoilo Level (PL)—All Sectors	2015	3,136,481	N/A	N/A	% of OAC.savings for MF+SF	CEDARS Online CET Ouput	Dato pull from PA dotabases	0.18-05-04): DAC * Service accounts in also endes corresponding to census tracts in the top quartile of CellenviroScrain 3.0 scores.
23 82	REN	AOZ	PL2	53	Ufecycle ex- ante Therm gross	S3: DAC Savings	Metric	PL2-53- First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) in disadvantaged commonities*-		Portiolio Level (PL)—Ali Sectors	2016	250,440	N/A _	N/A	% of OAC savings for MF+SF	CEDARS Online CET Ouput	Data pull from PA databases	D.18-05-041: DAC # Service accounts in alp under corresponding to census tracts in the top quartile of CalenviroScreen 3.0 scores.

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1		AHA		Method			Metric/				Baseline	2017	2017	2017					Expla
Inde	X PA	Page	Order	Code	Measurement	Metric Type	Indicator	Business Plan Att A Description	Metric	Sector	Year	Reporting Yes	Numerator	Denominato	BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions	atle
24	Вэулс	N AG2	PL2	.53	Ulecyde ex- ante Therm ne		Metric	PL2-S3- First year annual and lifecycle. ex-ante (pre-evaluation) zas, electric, and demand savings (gross and net) in disadvantaged communities»	Ulocycle ex-ente Therm net in Disadvantaged Communities	Portfolio Level (PL)—All Sectors	2016	225,396	N/A	N/A	% of DAC savings for MF+SF	CEDARS Online CET Ouput	Data puli from PA databases	D. 18-05-041: DAC = Service recounts in zip eodes corresponding to census tracts in the top quartife of CalexviroScreen 3.0 scores.	
25	BayRE	N A02	PL3	54	First Year annusi kw gross	S4: Hard to reach markets	Metric	PL3-54 - First year annual and lifecycle , ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) in hard-to-reach markets**	First year annual kW gross in Hard-to-Reach Markets	Portfolia Level (PL)—All Sectors	2016	0	h/A	N/A		CEDARS Online CET Ouput	Data puli from PA databases	D.18-05-041 p. 43 - HTR as defined in Resolution G-3497, modified to "Include disadvantaged communities" as designated by CalEPAI in the prographic criteria for hard to reach customers."	
26	BayREM	SOA P	PL3	54	First year annual kW net	S4; Hard to reach markets	Metric	PL3-54 - First year annual and illecycle ax-ante [pre-evaluation] gas, electric, and demand savings (gross and net) in hard-to-reach markets**	First year annual KW net in Mard-to-Reach Markets	Portfolia Level (PL)—All Sectors	2015	0	N/A	N/A		CEDARS Online CET Ouput	Data pull from PA databases	0.18-05-041 p. 43 - HTR as defined in Resolution G-3497, modified to "Include dusademizage communities us designated by CaliEPAJ in the geographic criteria for hard to reach customers."	
27	BayREN	1 A02	PL3	54	First year annual kWh gross	S4: Hard to reach markets	Metric	PL3-54 - Flist year annual and lifecycle ex-ante [pre-evaluation] gas, electric, and demand savings (gnoss and net) in hard-to-reach markets*	First year annual kWh gross in Hard-to-Reach Markets	: Partifolio Level (PL)-Ali Sectors	2016	o	N/A	N/A	Ulecycle DAC# (IX of DAC Savings MF * YearX_Ulecycle Savings MF) (X of DAC Savings SF * YearX_Ulecycle Savings SF)) Ulecycle HTR = (KG of HTR Savings COM * YearX_Ulecycle Savings COM) + (K of HTR Savings SF * YearX_ulecycle Savings SF))	+ CEDARS Online CET Ouput	Data pull from PA detabases	D.18-05-041 p., 43 - HTR as defined in Resolution G-2497, modified to "include disadvantaged communities" as designated by CalEPAI in the geographic criteris for hard to reach customers."	
28	BayREN	A02	PL3	<u>.</u>	First year annual kWh net	54: Hard to reach markets	Metric	PL3-54 - First year annual and lifecycle ex-ente [pre-evaluation] zas, electric, and demand savings [gross and net] in hard-to-reach markets**	Hist year annual kWh net In Hard-to-Reach Markets	Portíolio Levei (PL)-Alí Sectors	2015	. 0	. м/а	N/A	Ulecyde DAC» ([K of DAC Swings MF * YearX_Ufecyde Savings MF) (K of DAC Swings 5* * TearX_Ufecyde Savings 57)) Ulecyde H7# ([K of + TR Swings 160* * YearX_Ufecyde Savings COM) + [K of H7# Swings 160* * YearX_Ufecyde Savings COM) + [K of H7# Savings 55 * YearX_Ufecyde Savings 55])	+ CEDARS Online CET Ouput	Data pull from PA databases	U.18-05-041 p. 43 - HTR as defined in Resolution G-3497, modified to "include dissolventaged communities" size dissolventaged communities size designated by CAIEPAJ in the geographic criteria for hard to reach customers."	
29	BayREN	A02	PL3	34	First year annual Therm gross	S4; H≥rd to reach markets	Metric	PL3-54 - First year annual and fillecycle ex-anite [pre-evaluation] gas, cleente, and demand savings (gross and net) in hard-to-reach markets**	First year annual Therm gross In Hard-to-Reach Markets	Portfolio Level (PL)-Ali Sectors	2016	0	N/A	N/A		CEDARS Online CET Ouput	Data puli from PA databases	D.18-05-041 p., 43 - HTR as defined in Resolution G-3497, modified to "include disadvantaged communities (as as designated by CalEPA) in the geographic criteria for hard to reach customers."	-
30	ваукем	A02	PL3	54	First year annual Therm net	\$4: Hard to reach markets	Metric	Pl3-54 - First year annual and lifecycle ex-ante [pre-evaluation] gas, electric, and demand savings (gross and net) in hard-to-reach markets**	First year annual Therrn net in Hard-to-Reach Markets	Fortiolio Lovei [FL]—All Sectors	7016	a	N/A	N/A	-	CEDARS Online CET Ouput	Oats pull from PA databases	0.18-05-041 p. 43 – HTA as defined in Resolution G-3497, modified to "include disadvantaged communities" (as designated by Calera I in the geographic criteria for hard to reach customers."	
31	BBYREN	A02	PL3	54	Ufecycle ex- ante kW gross	SA: Hard to reach markets	Metrle	PL3-S4 - Hirst year annual and illecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) in hard-to-reach markets**	Ufecycle ex≈nte kW gross in Hard-10-Reazh Markets	Portfolio Level (PL)- Ali Sectors	2016	q	N/A	N/A		CEDARS Online CET Ovgut	Data puli iram PA databases	D.18-05-041 p. 43 - HTR as defined in Resolution G-3497, modified to "include disadvantaged communified sis designated by CalEPA in the geographic criteria for bard to reach customers."	

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1						Units of		Metric/				Baseline	2017	2017	2017					Proxy Explai
Ind	ex P/	Pa	age	Order	Code	Measuremen	Metric Type	Indicator	Business Pian Att A Description	Metric	Sector	Year	Reporting Y	ear Numerato	r Denomin	tor BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions	atio
3:	€ BayR	EN A	:02	PL3	54	Ulegyde ex- ante kW net	S4: Hard to reach markets	Metric	PL3-54 - First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net!) in hard-to-reach markets**	Ufecycle ex-ante kW net in Hard-to-Roach Markets	Portfolio Level (PL)—All Sectors	2015	ō,	n/a	A\n	•	CEDARS Online CET Ouput	Data pull from PA databases	O.18-05-043, p. 43 - ATR as defined in Resolution G-3497, modified to "includ- disadvantaged commonlises las- designated by CalEPA) in the geographic enteria for hard to reach customers."	
33	Э Вауй	EN A	.02	PL3	' s4	Ulecycle ex- ante kWh gros:	S4: Hard to reach markets	Metric	PL3-54 - First year annual and lifecycle ex-ants: (pre-evaluation) gas, electric, and demand savings (gross and net) in hard-to-reach markets **	Ufecycle ex-ante kWh gross in Hard-to-Reach Markets	Partiollo Level [PL}- All Sectors	2016	0	N/A	N/A	•	CEDARS Online CET Ouput	Data pull from PA distabases	D.18-05-041 p. 43 - HTR as defined in Resulution G-3497, modified to "include disadvantaged communities (gaz designated by CaIEPA) in the geographic criteria for hard to reach customers."	
34	Ryss 4	EN AI	02	PL3	54	Ulecycla ex- ante kWh net	S4: Hard to reach markets	Metric	PL3-54 - First year annual and lifecycle ex-ante [pre-evaluation] gas, electric, and demand savings (gross and net) in hard-to-reach markets**	Ulecycle ex-ante kWh net in Hard-to-Reach Markets	Portfolio Level (PL)—All Sectors	2016	a	N/A	N/A		CEDARS Online CET Ouput	Data pull from PA databases	D.18-05-041 p. 43 - HTR as defined in Resolution G-3497, modified to "include disadvantaged communities (agraphic designated by CalEPA) in the geographic criteria for hard to reach customers."	
35	SayA	EN AC	. 02	PL3	×	Ufecycla ex- ante Therm gross	S4: Hard to reach markets	Metric	PL3-56 - First year annual and lifecycle ex-ante (pir-evaluation) gas, electric, and demand rawings (gross and net) in hard-to-reach markets • •	Ufecycle ex-ante Therm gross in Hard-to-Reach Markets	Portiolio Level (PL)—Ali Sectors	2016	a	N/A	n/a		CEDARS Online CET Duput	Data puli from PA databases	D.18-05-041 p. 43 - HTR as defined in Resolution G-3497, modified to "include diladvantaged communities and designated by CalEPA) in the geographic criteria for hard to reach customers."	
36	: ВэуЯ!	en ac	D2	PL3	54	Ufecycle ex- ante Therm net	S4: Hard to reach markets	Metric	PL3-S4 - First year annual and lifecyde ex-anite (pre-evaluation) gas, electric, and demand savings (gross and net) in hard-to-reach markets **	Ufecycle ex-ante Therm net in Hard-to-Reach Markets	Portfolio Level (PL) All Sectors	2015	o	N/A	n/a		CEDARS Online CET Ouput	Data pull from PA databases	D.18-05-041 p. 43-HTR as defined in Resultion G-3497, modified to "include disadvantaged communities as disadvantaged communities as designated by CalEPA) in the geographic criteria for hard to reach customers."	
-																Calculated from CET Outputs (PAC Cost x Electric Benefits/Total	CEDARS Online CET Duput	Per CEDARS	None	
37	Вэүлг	in ad	)Z	PL4	ια	PAC Levelized Cost (\$/kW)	Cost per unit saved	Metric	PL4-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC) • •	PAC Levelized Cost (\$/kW)	Portíolio Level (PL)—All Sectors	2016	\$415.57	N/A	n/a	Benefits)/Lifecycle Net kW				
										, , , , , , , , , , , , , , , , , , ,						Using CET Outputs and formula (PAC Cost x Electric Benefits/Total	CEDARS Online CET Ouput	Per CEDARS	None .	
38	Ваукв	PA M	12	PL4		PAC Levellaed Cost (\$/kWh)		Metric	PL4-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)>>	PAC Levelized Cost (5/kWh)	Portfolio Lavel (PL)—Ali Sectors	2016	\$0.35	N/A	N/A	Benefits)/Lifecycle Net KWh				
39	BayRE	OA M	12	PL4		PAC Levelized East (S/therm)		Metric	PL4-LC - Levelized cost of energy efficiency per kWh, therm and kW (use fieth TRC and PAC)**	PAC Levelized Cost (\$/therm)	Partiolio Level (PL)—Ali Sectors	2016	\$1.31	N/A	N/A	Using CET Outputs and formula (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm	CEDARS Online CET Ouput	Per CEDARS	None	
L	<u>.                                    </u>			***************************************																

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dsh	ee																			Proxy
. 1						Units of		Metric/				Baseline	2017	2017	2017					Explar
l jug	ex PA	P.	age	Order	Code	Measuremen	t Matric Type	indicator	Business Plan Att A Description	Metric ·	Sector	Year	Reporting Year	Numerator	Denomina to	BayREN Notes, assumptions, methodology  Calculated from CET outputs (TAC Cost x Electric Benefits/Total)	Data Source CEDARS Online CET Ouput	Methodology Per CEDARS	Key Definitions	ation
									PL4-LC - Levellzed cost of energy							Benefits//Ulecycle Net XW	CEDAIS Online CET Output	PET CEDARS	Kont	
40	BayRi	EN A	102	PL4	LC	TRC Levelized Cost (\$/kW)	Cost per unit saved	Metric	efficiency per kWh, therm and kW (use both TRC and PAC)**	-TRC Levelized Cost (\$/KW)	Portfolia Level (PL)—All Sectors	2016	\$853.70	N/A	N/A					
1																				
								, <u>-</u>								Using CET Outputs and formula (TRC Cost x Electric Benefits/Total Benefits)/Ulecycle Net kWh	CEDARS Online CET Ouput	Per CEDARS	None .	
41	вауя	EN A	02	PL4	rc	TAC Levelized Cost (\$/kWh)	Cost per unit	Metric	PL4-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both 7RC and PAC) • *	TRC Levelized Cost (\$/kWh)	Portfolio Level (PL)-All Sectors	2016	\$0.56	n/a	N/A					
				•					SOUN INC AND PALISA											
								<u> </u>							· ·	Using CET Outputs and formula (TRC Cost x Gas Benefits/Total Benefits//Ulecycle Net therm	CEDARS Online CET Ouput	Per CEDARS	None	
42	8эγR1	en A	02	PL4	ſĊ	TRC Levelized	Cost per unit	Metris	PL4-LC - Levelized cost of energy efficiency per kWh, therm and kW (use	TRC Levelized Cost (\$/therm)	Portiolio Level (PL)-Ail	2016	\$2.08	N/A	N/A					
						and the summer			both TRC and PACJ		501,013									
$\vdash$		-					,	<del></del> -								Values extracted from CEY rups for a sample measure mix and number of projects believed to be representative of future program	CEDARS Online CET Ouput	Per CEDARS	None	
.	· BayRé				_	First year annual kW	S1: Energy	Metric	ASF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and							design.				
13	. ваука	in Al	02	HOLT	21	Storr Suursi KAA	Savings	Metric	demand savings (gross and net) for Single Family Customers**	First year annual kW gross	Residendal (RSF)	2016	792	N/A	N/A					
														•		Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.	CEDARS Online CET Ouput	Per CEDARS	None	
44	BayRE	N A	02	ASF1	<b>S1</b>	First year annual kW net	S1: Energy Savings	Metric	RSF1-51-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand sayings (gross and net) for Single	First year annual kW net	Residential (RSF)	2016	594	N/A	N/A	u-agu.	•			
						PHILIPPI PAY NCE	Sittings		Family Customers**											
-																Values extracted from CET runs for a sample measure mix and	CEDARS Online CET Ouput	Per CEDARS		
									RSF1-S1-First year annual and lifecycle							number of projects believed to be representative of future program design.	CEDARS Online CET Output	PERCEGARS	None	
45	BayRE	N AO	72	RSF1	<b>S1</b>	First year annual kWh gross	51: Energy Savings	Metric	ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single	Hrst year annual kWh gross	Residential (RSF)	2016	520,164	N/A	N/A					
						-			Family Customers**											
												•				Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.	CEDARS Online CET Ouput	Per CEDARS .	None	
46	BayRE	N AO	2	RSF1	51	First year Innual kWh net	\$1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single	First year annual kWh net	Residential (RSF)	2016	390,123	N/A	N/A	•				
									Family Customets**								•			
																Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program	CEDARS Online CET Ouput	Per CEDARS	Nont	
47	BayRE	f A0.	2 1	RSF1	S1	First year annual Therm	51: Energy	Metric	RSF1-51-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single	First year annual Therm gross	Residential (RSF)	2016	136,024	N/A	N/A	design.		•		
	-					gross	Savings .		demand savings (gross and net) for Single Family Eustomers**					•						

Spre dshe		Att	A AHA	Metho	od Units of		Motric/				Bascline	2017	2017	2017				Ргоз Ехрі
Inde	PA					nt Metric Type		Business Plan Att A Description	Metric	Sector		Reporting Year			BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions 2100
48	BayRE		t RSF3		First year	£1. F		RSF1-S1-First year annual and lifecycle	st year annual Therm net	Aesidential (ASF)	2016	103,518	N/A	N/A	Values extracted from CET runs for a sample measure mix and pumber of projects believed to be representative of future program design.	CEDARS Online CET Ouput	Per CEDARS	"ex ante" refers to chimed savings
49	BayRE	N A02	RSF1	51	Ufecycle e ante kW gro	s- S1: Energy ss Savings	Metric	RSF1-53-First year annual and tilecycle ex-ante (pre-evaluation) eas, electric, and demand savings (gross and net) for Single Family Curtomers**	lecycle ex-ante kW gross	Aesidentizi (RSF)	3018	12,565	N/A	N/A	Values extracted from CET rups for a sample measure mik and number of projects believed to be representable of future program dealign.	CEDARS Online CEF Ouput	Per CEDARS	ex anto refers to claimed savings
50	BayRE	N A02	RSF1	51	Ufecycle e ante kW ni	:- \$1; Energy it Szyings	Metric	RSF3-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electile, and demand savings (grous and net) for Single Family Customers»	ifecycle gx-ante kW net	Residential (RSF)	2016	B,795	N/A	· n/a	Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.	CEDARS Online CET Ouput	Per CEDARS	°cx ante" refers to claimed savings
51	вауяе	( A02	RSF1	51	Lifecycle zi ante kWh gri	- 51: Energy oss 'Savings	Metric	RSF1-S1-First year sunusi and illecycle ex-ants (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers*	tcycle ex-ante kWh gross	Residential (RSF)	2015	4,975,796	N/A .	N/A	Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.	CEDARS Online CET Ouput	Per CEDARS	"ex ante" refers to dalmed savings
52	вауяел	1 A02	RSF1	51	Ufecycle er ante kWh n	- 51: Energy et Sayings	Metric	ASSI-SI-Hist yeer annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers*	ecycle ex-ante kWh net	Residential (RSF)	2015	3,732,597	N/A	n/a	Values extracted from CET runs for a sample measure mix and number of projects believed to be representable of future program design.	CEDARS Online CET Ouput	Per CEDATS	ex ante" refers to claimed savings
53.	BayREN	A02	RSF1	SI	Lifecycle ex anta Them gross		Metric	RSP2-S1-first year annual and lifecycle us-ante (pre-englication) gas, electric, and demand savings (gross and net) for Single Family Customers**	cycle ex-ente Tharm gross	Residential (RSF)	2016	2,101,867	N/A	N/A	Values extracted from CET runs for a zample measture mix and number of projects believed to be representable of future program design.	CEDARS Online CET Ouput	Per CEDARS	"ex.ante" refers to claimed savings
54	BayREN	AGZ	RSF1	51		- 51: Energy et Savings	Metric	RSELSI-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (pros and net) for Single Family Contomers*	cyde ex-ante Therm net	Residential (RSF)	2016	1,576,400	N/A .	N/A	Values extracted from CET runs for a sample measure mic and number of projects believed to be representative of future program design.	CEDARS Online CET Ouput	Per CEDARS	ex ante refers to claimed savings
55	BayREN	EDA	RSF2	G G	MT COZEQ	GHG	Metric	RSFR-G=*Greenhouse garses [MT COZen] Net kWh savings, reported on an annual basis=*	equivalent of net annual kWh savings	Residandəl (RSF)	2016	114	N/A .	N/A	Values extracted from CET runs for a sample measure mic and number of projects believed to be representative of Juhrne program design.	CEDARS Online CET Ouput	Per CEDARS	Definition: Single family are defined as Service account on residential rates, with dwelling code of single family home or single family dwelling.

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1	: PA			Method			Metric/	Business Plan Att A Description	Metric	Sector	Saseline -		2017 or Numerator	2017	Bayren Notes, assumptions, methodology	Data Source	Methodology	Key Definitions	Explan
Inac	PA	Page	Graer	Coos		D1: Depth of	indicator	RSF3-D1D - Average savings per	Average lifecycle ex-ante XW	3 <del>2</del> C107	LEST	Heparung Tea	r Numerator	DENOMINATOR	PAPPICABLE CET result divided by forcess participation	CEDARS Online CET Ouput	DID: Downstream methodology Numerator: Total	Per ED: "Energy savings" = Illecycle NET savings.	ation
56	BayRE	4 A03	RSF3	D1-D	U fecycle NET kW	**Per downstream participant	Metric .	participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feesible)**	and soulese mer mustelment.	Residential (RSF)	2016	6.33	6,795	1,389			downstream sayings claimed - Denominator: Total number of downstream participant		
57	BayREM	A03	RSF3	01-D	Ufecycle NET kWh	D1: Depth of interventions  >>Fer downstream participant	Metric	RSF3-D1D - Average savings per participant in both opi-tha and opi-out programs (Broken dlown by downsream, midstream and upstream, as featible)**	Average illecycle ex-ante kWh net savings per participant- Opt-in - Downstream	Residential (RSF)	2016	2,687	3,732,597	1,389	Applicable CET result divided by forecast participation  -	CEDARS Online CET Ouput	OLD: Downstream methodology Numerator Fotal downstream savings claimed - Denominator: Total number of downstream participant	Per ED: "Energy savings" will ecycle NET savings.	
58	Bayner	A03	RSF3	D1-D	Lifecycle NET Therms	D1: Depth of Interventions **Per downstream participant	Metric •	RSF3-D1D - Average savings per participant in both upl-in and op-lout program; [broken down by downstream, midstream and upstream, as feasible)*-	Average lifecycle ex-ante Therm net savings per participant - Opt-in - Downstream	Residendal (RSF)	3016	1,135	1,575,400	1,389	Applicable CET result d-vided by forecast partidipation	CEDARS Online CET Ougut	D1D: Downstream methodology - Numerator: Total downstream savings cizimed - Denominator: Total number of downstream participants	Per ED: "Energy savings" = lifetycle NET savings.	
59	BayREN	E0A	R5F3	D1-M	Ulecycle NET kW	D1: Depth of Interventions **Per midstream participant	Metric	RSF3-D2M - Average savings per participant in both op-Ln and op-Lout programs (broken down by downstream, midstream and upstream, as fessible) **	Average Illecycle ex-ante kW net savings per participant- Opt-in – Midstream	Residential (RSF)	2016	N/A	n/a	N/A	BayAEN does not have any residential midstream, upstream or opt- out programs.		D1M: Midstream methodology -Numerator: Total midstream savings claimed	Per discussion with ED, this metric not feasible and PAs agreed instead to report total upstream, and midistream savings. "Energy savings" willfecycle NET savings.	
60	BayREN	EDA	RSF3	01-M	Ułecycie NET kWh	D1: Depth of Interventions ••Per midstream participant	Metric	RSP3-01M - Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as heatible)»	Average illecycle ex-ante kWh net ravings per participant - Opt-in - Midstream	Residential (RSF)	2016	N/A	Ν/Α	N/A	BayREN das not have any replachtal midstream, upstream or opt- out programs.		methodology Numerator: Total	Per discussion with ED, this metric not leasible and PA1 agreed instead to report total upstream and midstream savings. "Energy savings" = lifecycle NET savings,	
61	BayREN	EOA	RSF3	01-M	Ufecycle NET Therms	D1: Depth of Interventions **Per midstream participant	Metric	RSF3-01M - Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as leasible) •	Average lifecycle ex-ante Therm net-savings per participant - Opt-in - Midstream	Residential (RSF)	<b>3012</b>	N/A	N/A	N/A	BayfiEN does not have any residential mids treem, upstream or opt- out programs.		methodology Numerator: Total	Per discussion with EQ, this metric not leasible and PAs agreed instead to report total upsix-eam and midstream savings. "Energy savings" » lifecycle NET savings.	-
62	вауяє <b>н</b>	A03	RSF3	Ð1-O	Ulecycle NET kW	D1: Depth of Interventions **Per opt out participant	Metric	RSF3-D10 - Average savings per participant in both opt-in and opt-out programs (Excent down by downstream, midstream and upstream, as feasible)	Average lifecycle ex-ante kW net savings per participant - Opt-out	Residential (RSF)	2015	N/A	N/A	N/A	BayAEN does not have any residential militaream, upsiteam or opt- out programs.		ex post savings can be claimed. Per participant savings will be calculated	DID Key Definitions: 3) The only opt-our program is the Home Energy Report using social norming indrusuh neighborhood comparisons 2) Per CD: "Energy savings" a lifecycle NET savings.	1
63	ВауяЕН	E0A	RSF3	D1-O	Ufecyde HET kWh	D1: Depth of interventions **Per opt out participant			Average lifecycle ex-ante kWh net savings per participant - Opt-out	Residential (RSF)	2016	N/A	n/a		BayAEN does not have any r <u>esidentlal midstream, upstream or opt</u> - out programs.		ex post savings can be claimed. Per participant	DIO Key Definitions: 1) The only opt-out program is the Home Energy Report using sealal morting through neighborhood compartions: 2) Per ED: "Energy savings" = (Identity Sealands)   Compartions   10 Per ED: "Energy savings" = (Identity Sealands)   Compartions   10 Per ED: "Energy savings" = (Identity Sealands)   Compartions   10 Per ED: "Energy savings" = (Identity Sealands)   Comparting Sealands   Comparting Seala	Į

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	Atta	AttA	Meth	od Ur	its of		Metric/				Baseline	2017	2017	2017	•			
PA	Page	Orde	r Cod	e Meas	urement	Metric Type	Indicator	Business Pian Att A Description	Metric	Sector	Ye≥r		Numerator	Denominato:	BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions
BayREN	A03	rsF3	3 D1-4		rde NET		Metric	RSFS-D1O - Average savings per participant in both opt-fin and ope-out pregrams (Sroken down by downstream, midstream and upstream, as feasible) - +	Avarage lifecycle ex-ante Therm net ravings per participant - Opt-out	Residential (RSF)	2016	N/A	n/a	N/A	BayREX docs not have any residential midstream, upstream or opt- out programs.		ex post savings can be claimed. Per participant	DLD Key Definitions: 3) The only opt-out program is the Home Energy Report using social norming through neighborhood d comparisons 2) For ED: "Energy savings" a lifecycle NET savings.
BayREN	A03	ASF3	D1-4	j Ulecy	rde NET (	nterventions ++Per upstream	Metric	RSF3-DIU- Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)**	Average lifecycle ex-ante kW net savings per perticipant- Opt-in - Upstream	Rasidential (RSF)	2015	N/A	N/A	N/A	BayREM does not have any residential midstream, upstream or opt- out programs.		01U: Upstream methodology— Numerator: Total upstream savings claimed	Per discussion with ED, this metric not featible and PAs agreed instead to report total upstream and midstream savings. "Energy savings" = Ilifecycle NET savings.
BæyREN	A03	E12.FI	<b>51-</b> 0	, Ufecy k	de NET	e Per bpstraam	Metric	RSF3-D1U-Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible)»	Average lifecycle ex-ante kWh net savings per participant - Opt-in - Upstream	Residential (RSF)	2015	N/A ,	n/a	n/a	Bayfilti does not have any residential midstream, upstream or opt- out programs.		O1U: Upstream methodology— Numerator: Total upstream savings claimed	Per discussion with ED, this metric not feasible and PAs agreed instead to report total upsize and midsters as xangs. "Energy savings" = Illecycle NET savings.
Bayren	A03	RSF3	D1-U		de KET <sup>li</sup> erms	nterventions Per upstream	Metric	RSF3-D1U-Average savings per participant in both opt-in and opt-out programs (broken down by downstream, midstream and upstream, as feasible) ••	Average illetycle ex-ante Therm net savings per participant – Opt-in – Upstream	Residential (RSF)	2016	n/A	N/A	N/A	BayAEN does not have any residendal midstream, upatream or opt- out programs.		DIU: Upstream methodology— Numerator: Total upstream savings claimed	Per discussion with ED, this melric not [easible and PAs agreed instead to report total upstream and midstream savings. "Energy savings" = lifetycle NET savings.
Bayren	A03	RSF4	PI	Per	cent , ;	of energy elficiency programs in the eligible market *Percent of	Metric	RSF-P1 • Percent of participation relative to eligible population • •	Percent of participation relative to eligible population	Residential (RSF)	2016	0.074%	1,389	1,870,311	Forecast participation divided by applicable population	Eligiole population from number of Single Family Accounts supplied by PG&E	Numerator: Number of downstream participants) - Denominator: total number of service	Oefinition: "Bigible population" refers to Total number of service accounts in sector/segment, excluding CARE, "Participation" is defined as the first instance of participation, who are the sector participate more than once or participate in multiple programs in the calendar year.
Bayren	A03	RSF4	рз	Per	cent F	P3: Penebation of energy efficiency programs in the eligible	Metric	RSF-P3 - Percent of partidipation in disadvantaged communities • •	Percent of participation in disadvantaged communities	Residential (RSF)	2016	0%	0,00	74,905	Assumed same partidipation rate as non-DAC	DAC population derived from 2017 US Census data	perticipants in disadvantaged	D.18-03-041: DAC a Service accounts in alprodes corresponding to consus tracts in the top quardle of CallervinoScreen 3.0 scores.
BZYREN	EDA	RSF4	P4	Per	cent F	of energy efficiency programs in	Metric	RSF-P4 - Percent of participation by customers defined as "hard-to-reach" ••	Percent of participation by customers defined as "hard-to-reach"	Residential (RSF)	2016	0%	<b>0.00</b>	47,212	Participation rate assumed to be half that of other groups due to HTR status	RTR population derived from 2017 US Census data	Numerator: number of participants in HTR geographic area - Denominator: Total number of service accounts in HTR	U.18-05-041 p. 43 - HTR as defined in Resolution G-3497, modified to "Include disadvantaged communible 131 designated by CalEPA) in the geographic criteria for hard to reach customers."
BayREN	EDA	RSFS	rc			ost per unit saved	Metric	RSF-LC - Levellzed cost of tinergy efficiency per KWD, therm and kW (use both TRC and PAC)**	. PAC Levelized Cost (S/kW)	Residential (RSF)	2015	\$224.53	а/и	n/a	[PAC Cast x Blactric Benefiley/Total Benefiley/Lifecycle Net kW/kWh/Therms and fTAC Cast x diextric Benefiley/Total Benefiley/Lifecycle Nat kW/kWh/Therms	CEDARS Online CET Ouput	Per CEDARS	None
	Bayren Bayren Bayren Bayren	PA         Page           Sayren         A03           Sayren         A03           Sayren         A03           Sayren         A03           Sayren         A03           Sayren         A03	PA         Page         Ord           Bayren         A03         RSF3           Bayren         A03         RSF3           Bayren         A03         RSF3           Bayren         A03         RSF4           Bayren         A03         RSF4           Bayren         A03         RSF4           Bayren         A03         RSF4           Bayren         A03         RSF4	PA         Page         Order         Cod           9ayAEN         A03         RSF3         D1-4           8ayAEN         A03         RSF3         O1-4           8ayAEN         A03         RSF3         O1-4           8ayAEN         A03         RSF3         O1-4           8ayAEN         A03         RSF3         O1-4           8ayAEN         A03         RSF4         P1           8ayAEN         A03         RSF4         P2           8ayAEN         A03         RSF4         P4	PA         Page         Order         Code         Meas           BayREN         A03         RSF3         D1-O         Ufeer           BayREN         A03         RSF3         D1-U         Ufeer           BayREN         A03         RSF3         D1-U         Ufeer           BayREN         A03         RSF3         D1-U         Ufeer           BayREN         A03         RSF4         P1         Per           BayREN         A03         RSF4         P1         Per           BayREN         A03         RSF4         P1         Per           BayREN         A03         RSF4         P4         Per	BayREN AD3 RSF3 D1-U Ufecycle NET RWY  BayREN AD3 RSF3 D1-U Ufecycle NET RWY  BayREN AD3 RSF3 D1-U Ufecycle NET RWY  BayREN AD3 RSF4 D1-U Ufecycle NET RWY  BayREN AD3 RSF4 P1 Percent BayREN AD3 RSF4 P1 Percent BayREN AD3 RSF4 P3 Percent BayREN AD3 RSF4 P4	PA         Page         Order         Code         Measurement         Metric Type           BayREN         A03         RSF3         D1-0         Ulferyde NET Therms         D1-0 etc. Therms <td< td=""><td>PA         Page         Order         Code         Measurement         Metric Type         Indicator           BayREN         A03         RSF3         D1-O         Lifecycle NET Therms         D1-Depth of Interventions - Per participant         Metric D2: Depth of Interventions - Per participant</td><td>  Page   Order   Code   Measurement   Metric Type   Indicator   Business Flan ART A Description    </td><td>## Page Order Gode Measurement Metric Type Indicator Business Flan Art A Description Metric    PayREN AGS   RSFS   D1-0   Uflecycle NET   Therms   Therms  </td><td>## PAPEN ADD RSFS DL-0 Ulseyde RET   Percent   Percent   Percent of participation   Percent of partici</td><td>### Payer   Page   Page</td><td>  PAYREN   ADS   REFS   DLO   Ullecycle NOT   DLO-pith of Dayres   DLO-p</td><td>### PAPEN AD REF OF Percent September Models Proceed to Se</td><td>  PayADA   AD   1979   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   1979   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   1979   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Di-Ju  </td><td>  Marchan   Marc</td><td>  March   Marc</td><td>  Mark   Mark  </td></td<>	PA         Page         Order         Code         Measurement         Metric Type         Indicator           BayREN         A03         RSF3         D1-O         Lifecycle NET Therms         D1-Depth of Interventions - Per participant         Metric D2: Depth of Interventions - Per participant	Page   Order   Code   Measurement   Metric Type   Indicator   Business Flan ART A Description	## Page Order Gode Measurement Metric Type Indicator Business Flan Art A Description Metric    PayREN AGS   RSFS   D1-0   Uflecycle NET   Therms   Therms	## PAPEN ADD RSFS DL-0 Ulseyde RET   Percent   Percent   Percent of participation   Percent of partici	### Payer   Page   Page	PAYREN   ADS   REFS   DLO   Ullecycle NOT   DLO-pith of Dayres   DLO-p	### PAPEN AD REF OF Percent September Models Proceed to Se	PayADA   AD   1979   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   1979   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   1979   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Ulleyde NC   Di-Spain of Percent   PayADA   AD   NF   Di-Ju   Di-Ju	Marchan   Marc	March   Marc	Mark   Mark

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1 Ind	x PA	Atta			d Units of Measuremen	nt Metric Type	Metric/ Indicator	Business Plan Att A Description	Meths	Sector	Basoline Year	Reporting Year	2017 Numerator	2017 Denominator	BayREN Notes, assumptions, methodology Data Source	Methodology	Key Definitions at
72	BayRE					d Cost per unit	Metric	ASF-LC - Levelited cost of energy efficiency per KWh, therm and KW (use both TRC and PAC)**	PAC Levelized Cost (S/kWh)	Residendai (RSF)	2015	\$0.53	n/a	N/A	CEDANS Online CET OF  [VAC Cost x Electric Benefits/Tobal Benefits/Lilecycle Net  XW/XWh/Therms and (TRC Cost x Electric Benefits/Tobal  Benefits)/Lilecycle Net XW/XWh/Therms	out Per CEDARS	None .
73	Вауне	EDA P	RSFS	te	PAC Levelize Cost (\$/thern	ત Cost per unit n) saved	Metric	RSF-LC - Levelized cost of energy efficiency per kWh, therm and kW [use both TRC and PAC]**	PAC Levelized Cast (S/therm)	Residential (RSF)	2015	\$2.34	N/A	N/A	CEDASS Online CET Ou  PAC Cost x Electric Benefits/Total Senefits)/Ulecycle Net  kW/XWN/Therms and ITRC Cost x Electric Benefits/Total  Senefits)/Lifecycle Net kW/kWh/Therms	oul Per CEDARS	None
74	BayR6	Y AU3	RSFS	rc	TRC Levelize. Cost (5/kW)	d Cost per unit saved	Metric	RSF-LC - Levelited cost of energy efficiency per AWN, sherm and AW (use both TRC and PAC)++	TRC Levelised Cost (S/KW)	Residential (RSF)	2016	\$381.21	ŊÂ	N/A	CEDARS Online CET Ou  (PAC Cost x Bisturic Burnelful/Tolal Benefits)/Ulecycle Net  kW/XWN/Therms and ITRC Cost x Bisturic Benefits/Tolal  Benefitsi/Lifecycle Net kW/XWn/Therms	ut Per CEOARS	None
75	BayRE	EOA >	RSFS	ιc	TRC Levelized Cost (\$/kWh	d Cost per unit saved	Metric	RSF-LC - Levelised cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)++	TRC Levelized Cost (\$/kWh)	Residentiał (RSF)	2016	\$0.90	N/A	N/A	CEDARS Online CET Duj  (PAC Cass x Electric Bornelits/Total Benefits/)/Ulecycle Net  kW/KWN/Therms and (TICC Cost x Electric genefits/Total  Benefits/)/Ulecycle Net kW/xwh/Therms	ut Per CEDARS	None
76	BayREN	L 403	RSFS	rc	TRC Levelized	i Cost per unit ) saved	Metric	RSF-LC - Levelited cost of energy elitelency per kWh, therm and kW (use both TRC and PAC) •	TRC Levelized Cost (\$/therm)	Residential (RSF)	2016	\$3.97	N/A	N/A	(PACCOSE & Electric Benefits/Total Benefits/Julecycle Net kW/kWh/Therms and TRC Cost & Electric Benefits/Total Benefits/Ulecycle Net kW/kWh/Therms	ut Per CEDARS	None .
77	BayREN	A03	RSF6	EII	עוש	Energy Intensity per SF household	Indicator	RSF-Eij[(Indikator) - Average energy use Intensity of single family homes (average usage per household — not adjusted) **	Average first year annual kWh gross per household	Residential (RSF)	2016	N/A - Indicator	N/A - Indicator	N/A - indicator	These are indicators and not metrics. Per the Decision (D.18-05-041) on the Business Plans, Program Administrators do not have to provide data on indicators only definitions and methodologies	Numerator: Total ene used in sector- Denominator: numbe service accounts	rgy Definition: Household refers to a service account of
78	BayREN	EDA	AMF1	S1-IU	First year annual kW gross	SI: Energy Savings	Metric	RMF-51-First year annual and lifecycle ex-ante [pre-evaluation] gas, electric, and demand saying [gross and net] for multifamily customers [in-unit, common area, and master metaced accounts] **	First year annual kW gross - In Unit	Residential Sector — Multi-family (RMF)	N/A- Indicator	197	N/A	N/A	These are indicators and not metrics. Per the Decidion (0.18-05-043) CEDARS Online CET Out on the Business Plans, Program Administrators do not have to provide PA Database data on Indicators and definitions and methodologies	CET; MF designations	
79	BOYREN	AD3	RMF1	51-IU	First year annual kW nes	51: Energy Savings	Metric	RMF-S1-Frst year annual and litecycle ex-ante (pre-evoluation) gas, electric, and demand surjust (gross and net) for multifamily customers (in-unit, common, area, and master metered accounts) **	First year annual XW net - In Unit	Residential Sector — Multi-family (RMF)	2016	211	 N/A	· N/A	inUnit % KW stwings* CET Airst Year Annual kW Net Calculated out CEDANS Online CET Out percentage of payings in-Unit Measures and Common Measures from PA Database BAYRIK MFT Goal Project Evel savings. Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.	CET; MF designations,	

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le	dex PA	L P.	age	Order	Code	Measuremen	Metric Type	Indicator	Business Plan Att A Description:	Metric	Sector	Year	Reporting Year	Numerator	Denominator	BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions	ation
	во ваун	EN A	A03	RMF1	51-IU	Hrşt year annual kWh gross	S1: Energy Sayings	Metric	RMF-S1-First year annual and Illecycle ex-ante (pre-evaluation) gas, electric, and demand as Winsa (gross and net) for multifamily customers (in-unit, common area, and master metered accounts)**	rst yeer annual kWh gross - in Unit	Residential Sector Multi-family (RMF)	2016	321,096	N/A	N/A	Induits KWN taxings "CET First Year Annual kWN giross. Calculated out percentage of savings in-fulfit Measures and Common Measures form BayAEN MF Total Project Percel savings, Values settracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.	CEDARS Online CET Output & MF PA Database	CET; MF designations,	Definition: Multi-family refers to any building or property with at least two residential housing units.	
	BayR	EN A	NO3	RMF1	\$1-IU	First year annual kWh ni	51; Energy it Savings	Metric	RMF-51-First year annual and lifecycle ex-antic pre-evaluation) gas, electric, and demand as wings (gross and nell of multilamity customers (in-unit, common area, and master metered accounts)**	irst year annual kWh net - In Unit	Rosidential Sector— Multi-family (RMF)	2015	288,986	· N/A	N/A	inUtils KWN zavings "CET First Year Annual kWN, net Calculated our, percentage of swings in-Unit Measures and Common Measures from SAVIRLM MF Crail Project level swings. Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.		CET; MF designations,	Definition: Multi-family refers to any building or property with at feast two residential housing units.	
	32. Вауж	EN A	103	RMF1	S1-IU	First year annual Therm gross	S1: Energy Savings	Meķric	RMF-52-First year annual and lifecycle ex-antic (pre-evaluation) (pst, electric, and termand saviors) (gross and neel) or multifamily customers (in-unit, common area, and master metered accounts) **	rst year annual Theirn gross - In Unit	Residential Sector— Multi-(amily (RMF)	2016	25,291	N/A	N/A	in Unit X Therms savings "CET First Year Annual Therms gross. Clicitated out personing of savings in-Unit Measures and Common Measurers from Bargist Mer Tool a Project feel and saving and extracted from CET must for a sample measure mix and number of projects believed to be representative of future program design.		CET; MF designations,	Definition: Muid-family refers to any building or property with at least two residential housing units.	
	i3 8 пуд	EN A	k03	RMF1	<b>51</b> -1U	First year annual Therm net	.51: Energy Savings	Metric	RMF-SI-Frast year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand as winsing (grass and nell) of rin williamly eastomers (in-unit, common area, and master metered accounts)*-	St year annual Thems net - In Unit	Residential Sector — Multi-family (RMF)	2015	22,762	N/A	n/a	InUnit K Thems savings * CET Rist Year Annual Them Net. Clicitated out percenage of stylings for-Unit Measures and Common Measures from BayRot MFT to all Project Evel savings. Values extracted from CET runs for a simple measure mix and number of projects believed to be representative of future program design.	CEDARS Online CET Output & MF PA Database	CET; MF designations,	Definition: Multi-family refers to any building or property with at least two residential housing units.	
	4 BayR	EN A	03	RMF1	s1-IU	Ulecycle ex- ante kW gross	SI: Energy Savings	Metric	RMF-51-First year annual and lifecycle ex-ante (pre-evaluation) gaz, electric, and demand saviong (gross and neal for multifamily customers (in-unit, common area, and moster metered accounts)	fecycle ex-ante kW gross - In Unit	Residential Sector— Multi-family (RMF)	2016	2,856	N/A	N/A	inUnit % kW savings * CET Ufecycle kW gross Calculated out perentage of savings in-Juhi Messures and Common Messures from in SavjeRM MF Total Pericel telvel savings Yuluse extracted from CET runs for a sample measure mix and number of projects believed to be representative of four-e program design.			Definition: Multi-family refers to any building or property with at least two residential housing units.	
	5 BayAl	EN AI	. 03	RMF1	\$1-jU	Ufecyde ax- ante kW net	S1; Energy Savings	Metric	RMF-SI-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand saving (gross and ned) (or multifamily customers (lo-unit, common a)es, and moster metered accounts).**		Residential Sector – Multi-Tamily (RMF)	2016	2,436	N/A	N/A	inUnit % kW savings * CET Ufecycle kW net. Calculated out percentage of savings in-Junit Measures and Common Measures from I. SavXPM MF To 18 Pripolite level savings. Yulue extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.			Definition: Multi-family refers to any building or property with at least two residential housing units.	
8	6 взуке	EN AI	03 1	RMF1	S1-IU	Ufecycle ex- inte KWh gross		Metric	RMF-52-First year annual and lifecycle ex-ante (pre-evaluation) ass, electric, and demand savings gross and neal demand savings gross and neal multifamily customers (to-unit, common area, and master metered accounts)**	ecycle ex-ante kWh gross - In Unit -	Residentla) Sector — Multi-family (RMP)	2016	4,068,272	N/A	- N/A	InUnit'x kWh savings* CET Uleoyde kWh gross. Calculated out percentage of savings In-Unit Mexaurer and Commen Measures from 1: BayKGM MFT Out Project level savings. Value cartracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.			Definition: Multi-lamily refers to any building or property with at least two residential housing units	
a	J BayRE	en ac	73 · f	RMF1	U1-12	Ufecycle ex- ante kWh net	S1: Energy Savings	Metric	RMF-53-First year annual and lifecycle ex-ante (gine-evaluation) gaz, electric, and demand advintes (gross and neaf for multifamily customers (in-unit, common area, and master metered accounts)**		Residential Sector — Multi-family (RMF)	2015	3,661,445	N/A	N/A <sub>.</sub>	inUnit % KWh savings "CET Ulecycle KWh net Calculated out percentage of savings in-Unit Measures and Common Measures from F. SAVIEM MFT Call Syrolactic Vest savings. Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.	'A Database		Definition: Muld-family refers to any building or property with at least two residential housing units.	

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Inde	K PA						Metric Type		Business Plan Att A Description	Metric	5ector	Year	Reporting Year	Numerator	Denominator	BayREN Notes, assumptions, methodology Data Source	Methodology . Key Definitions	ation
	-			F1 51-		essuement ente Therm grass	S1; Energy Savings	Metríc	RMF-51-first year annual and lifecycle ex-ante jore-evaluation) gas, electric, and demand a swinse gross and nest jor multifamily customers (in-unit, common area, and maater metered accounts).*			2016	364,274,91	N/A	N/A	inUnit X Therms savings * CET Lifecycle Therms gross. Calculated out. CEDARS Online CET Dulput & MF percentage of savings in-folial Measures and Common Measures from PA Database. BayREM MF Total Project level savings, Values savareted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.	Savings calculated using Definition Multi-family reters to any CET, Mr designations, including common areas, residential housing units, can be determined by dwelling sodes, rate codes, and/or taps in the PA databases	
89	ВзуЯЕ	E A03	ям	F1 51-4		llecyde ex- te Therm net		Metric	AMF-53-First year annual and lifecycle ex-ante (pre-evaluation) 25s, electric, and demand savings (gross and net) of until formultiamity customer (in-unit, common area, and master metered accounts) **	teyde ex-ante Therm net - in Unit	Residentisi Sector — Multi-family (RMF)	2016	327,847	N/A	N/A	InUnit's Therms savings * CET Lifecycle Therms net. Calculated out CEDARS Gniline CET Output & MF percentage of savings in-thin Measures and Gommon Measures from PA Database SayARS MF Total Projects level savings. Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.	Savings calculated using Definition: Multi-lamily refers to any CCF). Mr designations, building or property with a Least two including common areas, residential housing units. can be determined by divelling codes, rate codes, and/or traps in the PA databases	
90	8ayRE!	I A03	RM	F1 51-M		First year annual XW gross	S1: Energy Savings	Metric	RMF-53-First year annual and lifecycle ex-ante (pre-evaluation) psz, electric, and demand 54-vistos (pross and net) for multifamily customers (in-unit common area, and master metered accounts)	lrst year annual kW gross - Master Meterzed	Residential Sector — Multi-family (RMF)	2015	0	0	0	BayREN does not have access to master metered data. BayREN tracks measures for in-Junit end common areas. Moving forward in 2018 BayREN will track master metered data separate from common area. Proxy 0.	Savings calculated using Definitions Multi-family refers to any CET). Mr designations, building or property with at least two including common arear, residential housing units. can be determined by dwelling scoles, ric codes, and/or lags in the PA databases	
91	Ваулел	AUS	RMF	°1 51-M		First year qual kW net	S1: Energy Savings	Metric	RMF-53-First year annual and lifecycle ex-ante (pre-evaluation) ass, electric, and damand adving (gross and nel) for multifamily customers (in-unit, common area, and master metered accounts) **	Hrst year annual kW net - Masser Metered	Residential Sector — Multi-family (RMF)	2016	o	g .	ס	Bayefit dees not have seess to matter metered data. Sayefit Navata measures for includit and comman areas. Moving femour in 2018 BayeRM will track master metared data separate from common area. Proxy D.	Swings calculated using Definition Multi-family rates to any CRTS Medicalpanton, sulfiding or property with at least two including common areas, real-dential housing units. In the determining common areas, real-dential housing units. The description of the des	
92	BayREN	A03	ямя	-1 51-M		First year ngual kWh gross	S1; Energy Sayings	Metric	RMF-51-First year annual and lifecycle ex-ante (pre-evaluation) is as, electric, and demand savings (gross and net) for multilamily customers (in-unit. cammon area, and master metered accounts) •		Residential Sector Multi-lamily (RMF)	2016	a	σ	0	BayAEN does not have access to master metered data, BayAEN tracks measures for in-Unit and common areas. Moving forward in 2018 - BayAEN will track master metered data separate from common area, Prony O.	Savings calculated using Definitions Multi-family refers to any CED, Mr dealignstons, building or property with at least two including common areas, residential housing units, can be determined by dwelling codes, rate codes, and/or tap in the PA databases	
93	взунем	A03	RMF	1 S2-Mi		First year wai kWh net	S1: Energy Savings	Metric	RMF-51-First year annual and lifecycle as-onte [pre-evaluation] pays, electric, and demand shallon [press and not promote the promote that the	rst year annual kWh net- Master Meterad	Residential Sector – Multi-family (RMF)	2016	D		0.	BayREN does not have access to master metered data, BayREN tracks measures for in-Unit one common areas. Moving forward in 2018 BayREN will track master metered data separate from common area, Proxy C.	Savings calculated using Definitions Multi-lamily refers to any CET; MF designations, building or property with at least two including common areas, residential housing units. can be determined by wellings codes, rate codes, and/or tags in the PA distribuses.	
94	Bayren	E0A	RMF	1 51-MI	of ann	First year nual Therm gross	S1: Energy Savings	Metric	RMF-StFirst year annual and lifecycle ex-ante [pre-evaluation] gas, electric, and demand advantes [gross and net] of Plas demand standards [gross and net] multifamily cuclomers [in-unit, common area, and master metered accounts] >>	t year annual Therm gross - Master Metered	Residential Sector Multi-family (RMF)	2016	C	0	¢	BayREN does not have access to master metered data. BayREN tracks measures for in-Unit and common areas. Moving forward in 2018 BayREN will track master metered data separate from common area. Proxy 0.	Savings calculated using Definitions whith hmilty refers to any CET; Mrf designations, building or property with at least two including comman areas, residential housing units. can be determined by develings codes, rate codes, and/or taps in the PA databases	
95	BayREN	A03	RMF:	I S1-MA		First year tual Therm net	S1: Energy Savings	27704710	RMM-S3-First year annual and lifecycle ex-ante [pre-evaluation] gas, electric, and decrand 3-asing (gross and net) for multilamily customers (in-unit common area, and master metered accounts)**	it year annual Theim net - Master Metered	Residential Sector — Multi-family (RMF)	2018	0	ō	o	measures for In-Unit and domenon areas. Moving forward in 2018 BayREN will lrack marter meteored data separate from common area. Pracy G.	Savings calculated using Definitions Multi-Hamily refers to any CET; Mid designations, building or property with at least two including common reasy, residential housing units. can be determined by developed the control of the cont	

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		AttA			Units of		Metric/		Metric	Sector	Baseline	2017	2017		1017	BayREN Notes, assumptions, methodology Data Source	Expl: Methodology Key Deligitions atio
	PA BayREN			r Code	116	S1: Energy S Savings	Metric	Business Plan Att A Description  RMF-51-First year annual and lifesycle ex-ante (pre-evaluation) gas, electric, and demand cavings (press and net) for multilamity extoneres (in-unit), common area, and master metered accounts)**	Metric  Ufecycle ex-ante kW gross - Moster Metered	Residential Sector — Multi-family (RMF)	2016	neporting te	G G		o o	payter result, assumptions, methodology  BayERI does not have accests to matter matered data. BayERI track  BayERI does not have accests on matter matered data.  BayERI will have been a matter material forward in 2016  BayERI will have master metared data separate from common ares.  Proxy O.	Methodology Key Delinidians (Key Delinidians Saviga scalablated upon Delinidians Multi-family refers to any CET; MF designations, building or property with at least two including common areas, residential housing units.  can be determined by "dwelling code; rate code, ranfor rugs in the PA databases
97	Вауяєм	ξOA	RMF;	1 51-MM	Uředydle ex- ante kW nat	S1: Energy Savings	Metric	RMF-SI-First year annual and lifecycle ex-ante (pre-evaluation) as, electric, and demand savings (grass and net) or multifamily customers (h-unit, common area, and master metered accounts).	Ufecycle ex-ante kW net - Master Metered	Residential Sector ~ Multi-family (RMF)	2015	С .	D		0	BayriEN does not have access to master metered data. BayriEN Iracks measures for in-Unitar of common areas. Moving (orward in 2018 BayriEN will track master metered data separate from common area. Prony C.	Savings calculated using Definition: Multi-family releas to any CET; Mif designations, building or property with at least two including common areas, residential housing units. can be determined by develing codes, rate codes, and/or tags in the PA doublases
98	BayREN	A03	RMF1	L 51-MM	tifecycle ex- ante kWh gros:	S1: Energy s Savings	Metric	RMF-SI-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand asyming (gross and net) or multilamily customers (in-unit, common area, and master metered accounts)	Ulecyds ex-anta kWh gross- Marter Melered	Residential Sector Multi-family (RMF)	2016	0	o		0	BayAEN does not have access to master metered data. BayAEN bracks measures for in-Unit and common areas. Moving forward in 2018 BayAEN will track master melared data separate from common area. Proxy 0,	Savings calculated using Definition: Multi-family refers to any CET; MF datignations, including common areas, residential housing units. can be determined by dwelling codes, rate codes, and/or tags in the PA databases
99	BayREN	A03	RMF	L SI-MM	Ufecycle ex- ante kWh net	Si: Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante (pre-evaluation) gaz, electric, and demand savings (gross and neet) for multifamily customers (in-unit, common area, and master metered accounts).	Ufecyde ex-ante kWh net - Master Melered	Residential Sector Multi-family (RMF)	2016	C	o		0	BayriEN does not have access to master metered data. BayriEN tracks measures for in-Unit and common areas. Moving forward in 2018 BayriEN will track master metered data separate from common area, Prony G.	Savings calculated using Definition: Multi-family refers to any CET; MF designations, building or property with at least two including common areas, residential housing units. can be determined by dwelling codes, rate codes, and/or tags in the PA daubbased.
100	Вауяем	A03	RMF1	. 51-MM	Ulecycle ex- ante Therm gross	S1: Energy Savings	Metric	RMF-51-First year annual and lifecycle ex-onte (pre-evaluation) gas, electric, and demands savings (gross and net) for multifamily contomers (in-onl), common area, and matter metered accounts) **	Uleoyele ex-ante Therm gross - Master Metered	Residential Sector — Multi-family (RMF)	2016	0	đ		D	BayAEN does not have access to master metered data. BayAEN tracks measures for in-Unit and common areas. Moving forward in 2018 BayAEN will track master matered data separate from common area. Proxy D.	Savings calculated using Definitions Multi-family rulers to any CET; NF designations, building or property with at least two including common areas, residential housing units. can be determined by ewelling codes, rate codes, and/or tags in the PA desabases
101	BayREN	A03	RMF1	51-MM	Ufecyde ex- onte Therm net		Metric	RMF-51-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand arvings (gross and net) for multifamily customers (in-unit, common ares, and master metered accounts)	Ulecycle ex-ante Therm net- Master Metered	Residential Sector — Multi-family (BMF)	2016	a	D	I	o	BayREN does not have access to master metered data. BayREN tracks measures for in-Unit and common areas. Moving forward in 2018 BayREN will track master metered data separate from common area. Proxy O.	Savings calculated using Definition: Multi-Carolly refers to any CET; Mr Fedgmations, Including common areas, residential housing units. can be determined by dwelling codes, rate todes, and/or tags in the PA detabases
102	BayREN	A03	RMF1	SI-CA	Hrst year annual kW gross	S1: Energy Savings	Metric	RMG-51-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for multifamily customers (in-unit, common area, and master meterad accounts)	Hist year annual KW gross- Common Area	Residential Sector Multi-family (RMF)	2016	105	N/A	N,	/A	Common N. XW savings * CET First Year Annual XW Gross Calculated out percentage of savings in Fullit Measures and Common Measures PA Database PA Datab	Savings calculated using Definition: Multi-lamily refers to any CET; MR designations, including common areas, residential beusing units. can be determined by dwelling codes, raix codes, and/or tags in the PA databases
103	Вауяєм	A03	RMF1	51-CA	First year annual kW net	\$1: Energy Savings	Metric	RMF-31-First year annual and lifecycle ex-ente (pre-evaluation) gas, electric, and demand savings: [gass and net) for multifamily customers (in-unit, common ares, and master metared accounts) **	First year annual XW net- Common Area	Xasidentisi Sector — Multi-f≥mliy (RMF)	2016	117	N/A	N,	/A	Common N kW savings * CET First Year Annual kW Net Coloulsed out. CEDARS Online CET Output & Mf percentage of savings in-Julia Measures and Common Measures from PA Database. BAYRD MT Fold Project level asknyb. Values extracted from CET runs for a Sample measure mix and number of projects believed to be representative of Juture program design.	Savings calculated using Delintilem: Multi-family refers to any CET; MF designations, building or property with at least two including common areas, residential housing units. can be determined by dwelling codes, rate codes, and/or tags in the PA databases

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Index	PA	Pege	Order	Code	Measuremen	t Metric Type	Indicator	Business Plan Att A Description	Metric	Sector	Year	Reporting Year	Numerator	Denominator	BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions	atlon
104	BayREN			SI-CA	First year annual kWh gross		Metric	RMF-51-First year annual and lifecycle ex-ante [pre-evaluation] gas, electric, and demand saving [grass and net] for multifamily customers [n-unit common area, and master metered accounts)*	First year annual kWh grots - Common Area	Aesidential Sector — Multi-family (RMF)	2016	1,879,371	N/A	n/a	Common X kWh savings * CET Flat Year Annual kWh Gress. Chiculated out percentage of savings in-bolis Measures and Common Measures from applied MF Toal Florical level as avings. Values extracted from CET min for a sample measure mix and number of projects believed to be representative of future program design.	EEDAIS Online CET Output & MF PA Database	CET; MF designations,	Definition: Multi-lamily refers to any building or property with at least two residential housing units.	
105	BeyREN	A03	RMF1	SI-CA	First year annual kWh no	51: Energy et Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante [pre-evaluation] gas, electric, and demand alvings [gross and neil] for multilamily customers [in-unit, common ares, and master metered accounts)++	First year annual kWh net- Common Area	Residential Sector — Multi-family (RMF)	2016	1,691,433	N/A	N/A	Common X KWh savings * CET First Year Annual kWh Net, Calculated out percentage of savings in-Unit Measures and Common Measure from BayREN Me Tools Project level swings, Valuate setracted from CET runs for a sample of easure mix and number of projects believed to be representative of future program design.		CET; MF designations,	Definition: Multi-lamlly refers to any building or property with at least two residential housing units.	
105	ваупен	A03	RMF1	SI-CA	First year annual Therm gross	S1: Energy Savings	Metric	RMF-51-First year annual and lifecycle ex-onic [pro-evolvation] gas, electric, and demmed savings [gross and net] or multiflamily customers [in-unit, common area, and master metered accounts]*	First year annual Therm gross - Common Area	Aesidential Sector — Multi-family (RMF)	2016	113,808	N/A	N/A	Common % Therms savings * CET First Year Annual Therms Gross. Calculated out percentage of savings in-built Measures and Common Measures from Saytik MF Total Fordic Level savings. Yalues extracted from CET runs for a sample measure min and number of projects believed to be representative of future program design.	CEDAAS Online CET Output & MF PA Database	CET; MF designations,	Delinition: Multi-family refers to any building or property with at least two residential housing units.	Name of the last
107	Воулен	£ÜΑ	RMF1	SI-CA	First year annual Therm net	S1: Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ence (pre-evaluation) gas, electric, and demand advings (gross and net) for multifamily customers, [in-unit, common area, and maiter metered accounts)	First year annual Therm net - Common Area	Residential Sector — Multi-lamily (RMF)	2016	107,427	N/A	N/A	Common % Therms anwings "CET First year annual Therm net. Calculate out percenting of 13 wings In-Unit Measures and Common Measures from 3 saysKi MF Toals 17 postcle level as wright, "Values extracted from CET mins for a sample measure mike and number of projects believed to be representative of future program design.	CEDARS Online CET Output & MF PA Dalabase		Definition: Multi-(amily refers to any building or property with at least two residential housing units.	
108	BayREN	EGA	RMF <sub>1</sub>	S1-CA	Ufecycle ex- ante kW gross	51: Energy Savings	Metric	RMF-53-First year annual and illecycle ex-ente (pre-evaluation) gas, electric, and demands avaings (gross and next) or multifamily customers (in-unit, common area, and master mejered accounts).**	Ulecyde ex-ante kW gross - Common Area	Residential Sector — Multi-family (RMF)	2016	1,522	N/A	N/A	Common N kW savings * EET Ufecycle kW Gress, Calculated out percentage of savings In-Unit Measures and Common Measures from \$39,968 MM Foll Sylvecial Evel savings. Values extracted from CET runs for a sample, measure mix and number of projects believed to be representative of future program design.	CEDARS Online CET Output & MF PA Database		Definition: Muth-family refers to any building or property with at least two residential housing units.	
109	BayREN	A03	RMF1	SI-CA	Ufecycle ex- ante kW net	S1: Energy Savings	Metric	RMF-S1-first year annual and lifecycle ex-ante (pre-evaluation) gas, excitic, and demand savings (gross and neaf) for multifamily customers (in-unit, common area, and master metered accounts)**	Ufecyde ex-ante kW net - Common Area	Residential Sector — Multi-family (RMF)	2016	3,249	N/A	N/A	Common % kW savings * CET Ufcoyde kW Net. Calculated out percentage of savings in-Julin Measures and Common Measures from SayRMM MF Total Protect Avel savings. Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.	CEDARS Daline CET Output & MF PA Detabase		Definition: Multi-family refers to any building or property with at least two residential housing units.	
110	BYREK	EDA	RMF1	SI-CA	Lifecycle ex- inte kWh grass	\$1; Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demend savings (greas and next) for multifamily customers (in-unit, common area, and master metered accounts)**	Ufecycle ex-ante kWh gross - Common Area	Residential Sector— Multi-family (RMF)	2016	23,811,559	N/A	N/A	Common N kWh savings * CET Ulegyde kWh gross Caleolated out percentage of savings in-Julia Measures and Common Measures from SayKRM MF Teal Pripolat elvel savings. Yuluge cathoact form CET runs for a sample measure mix and number of projects believed to be representative of Juliura program design.			Delinition: Multi-lamily refers to any building or property with at least two residential housing units.	
111	iayREN	A03	RMF1	· SI+CA	Lifecycle ex- ante kWh net	S1: Energy Savings	Metric	RMF-S1-First year annual and lifecycle cx-ante (pre-evaluation) gas, electric, and demand savings (gross and next) for multifamily customers (in-unit, common area, and master metered accounts)**	Ulecycle ex⇒nte kWh net – Common Area	Residential Sector — Multi-family (RMF)	2016	21,430,403	n/a	N/A	Common % Wth savings " CET Ulegyde kWh Nei. Calculated out percentage of avoings in-Julia Measures and Common Measures from BayKRI MFT Dall Projects level avoing. Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.			Definition: Multi-lamily refers to any building or property with at least two residential housing units.	

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	2 BayAE	W. W-P		. SI-CA	Ulecycle ex- ante Therm gross	S1: Energy Savings		RMF-51-First year annual and lifecycle ex-anic (pre-evaluation) gas, electric, and demand carvings (gross and note) for multifamily customers (h-unit, common area, and matter metered accounts) **			2016	1,639,248.29		N/A	Common X Therms savings * CET Lifecycle Therms Gross, Calculated out presentalse of savings in-Linkt Measures and Common Measures from BayARDA MFORal Projective Javings, Values extracted from CET runs (or a sample measure mils and number of projects believed to be representative of vitures program distign.	CEDARS Online CET Output & MF	Savings calculated using CET; MF designations,	Definition: Multi-family refers to any building or property with at least two residential housing units.	
-																			
13	3 ВауЯЕ	EDA N	rmf1	5I-CA	Uferycle ex- ante Therm ne	51: Energy ct Savings	Metric	RMF-51-First year sensual and ill recycle ex-anta (pre-evaluation) gas, electric, and demand savings (grous and net) for multiflamily customers (in-unit, common area, and master metered accounts).	Ulesyde ex-ante Therm net- Common Area	Residential Sector Multi-family (RMF)	2016	1,475,323	N/A	N/A	Common % Thems savings "CET Ulexyde Thems Net. Calculated with prescribed schwings In-Unit Neutral and Common Measures from BayREN MF Total Project level savings. Values extracted from CET runs for a sample measure mix and number of projects believed to be representative of future program design.		CET; MF designations,	Definition: Multi-family refers to any building of property with at least two residential housing units.	
-								···							CET NetElecCO2	CEDARS Online CET Output & MF	Per CEDARS	Definition: Multi-family refers to any	
11	4 BayRE	E0A N	RMFZ	G	MT COZeq	GHG	Metric	RMF-G++ Greenhouse gasses (MT COZeq) Net kWh savings, reported on an annual basis++	CO2-equivalent of net annual kWh savings	Residential Sector — Multi-family (RMF)	2016	1,057	N/A	N/A		PA Database		building or property with at least two residential housing units.	
11	5 Bayrei	N A04	RMF3	D3a	Ulecyde NET kW	D3: Depth of interventions per building	Metric	RMF-D3 - Energy zavings (KWh, kw, therms) per project (building)	Ulecycle ex-anta kW net per project (building)	Residential Sector — Multi-family (RMF)	2016	46	9,993	217		Per CEDARS CET Input Total Number Units and BayREN MF Program data.	Numerator: Total Savings claimed for MF building retrofits – Denominator: Number of buildings that have	D3 Key Delinitions: Project applications are made at the property level (premise IO and service account number) not the UD and service account number) not the UD and Service account number in out of the UD and Service account number in out of the UD and Service applications - "Energy savings" = Ulecycles and Service applications - "Energy savings" = Ulecycles and Service applications - "Energy savings" = Ulecycles and Service and Serv	be
ıı	5 Bayrer	N A04	RMF3	03#	Ufecycle NET kWh	D3: Depth of interventions per building	Metric <sub>.</sub>	RMF-03 - Energy savings (kWh, kw, therms) per project (building)	Lifecyde ex-ante kWh net per project (building)	Residential Sector — Multi-family (RMF)	2016	. 115,691	Z5,091,84B	217		Per CEDARS CET Input Total Number Units and BayREN MF Program data,	Numerator: Total Savings claimed for MF building retrofits - Denominator: Number of buildings that have	D3 Key Definitions: Project applications are made at the property level (premise 10 and service account number) not the building level; building Information will used as is available on project applications - "Energy savings" = Lifecyon NET savings	be
11:	F BayREA	N A04	RMF3	D3a	Ufecycle NET Tharms	D3: Depth of interventions per building	Metric	RMF-D3 - Energy savings [kWh, kw, Ltterms] per project (building)	ilesyde ex-ante Therm net per project (building)	Residentia) Sector— Multi-family (RMF)	2016	8,310	1,803,171	-217	Determined average # of buildings/project and Hunits/project from	Per CEDARS CET Output Lifecycle Net XWh and BayREN MF Program data.	Numerator: Total Savings claimed for MF building retrofits - Denominator: Number of buildings that have	D3 Key Definitions: Project applications are made at the property level (premise ID and service account number) not the building level; building information will i used as is available on project applications—"Energy savings" = Ufecycl NET savings	be
111	в ваупел	∛ A04	RMF3	D4	Ufecycle NET kW	D4: Depth of Interventions per property	Metric	RMF-D4 - Average Eavings per participant Savings per project [property]**	Ulecycle ex-ante KW net per project (property)	Residential Sector Multi-family (RMF)	2016	156	5,933	54	average # of buildings/project and #units/project from 2014-2017	Per CEDARS CET Output Lilacycle Net Therms and BayREN MF Program data.	Numerator - Total downstream savings	DA Definition: "Project (property)" is defined by a unique combination of premise 10 and service account. "Energy sawings" = Ulecycle NET sawings	
115	BayREN	I A04	RMF3	D4	Ulecycle NET kWh	O4: Depth of Interventions per property	Metric	RMF-D4 - Average savings per participant Savings per project (property)**	Ufecycle ex-ante kWh net per project (property)	Residential Sector Multi-family [RMF]	2016	392,050	25,091,848				Numerator - Total downstream savings	DA Definition: "Project (property)" is defined by a unique combination of premise ID and service account. "Energy awings" « Ufecycle NET savings	

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1	A11A	AHA	Method	Units of		Metric/				Baseline	2017	2017	2017			•		Expl
Index PA					nt Metric Type		Business Plan Att A Description	Metric	Sector		Reporting Year		Denominator	BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions	əti
120 BayRE				Ufecycle NE Therms	DAr Orath of	Metric	RMF-D4 - Average savings per participant Savings per project (property) • •	Ulecycle ex-onle Therm nel per project (property)	Residential Sector — Multi-Tamily (RMF)	2015	28,175	1,803,171	54	CET Ulscycle NET Therrss/ Average is of Buildings per year Determined average a of buildings/project and funity/project from 2014-2027 Baylon Mer program data. For future year projections dWided CET Total Num Units by Avgs of Projects.	Per CEDARS Ulecyde NET Therms and BayREN MF Program data.	- D4 Methodology: - Numerator - Total downstream savings Denominator - number of participating properties (i.e., premise 10 x service account) -	Definition: "Project (property)" is steffined by a unique combination of premise ID and service account. "Energy premise ID and service account." Energy audings." — Lifecycle NET savings.	3.enet
121 Baykê	N A04	RMF3	05	Ułecycie NEI kW	D5: Depth of Interventions ++Per square foot	Metric	RMF-05** Energy savings (kWh. kw. therms) per squerg foot**	Ufecycle exanta kW net per square foot	Residentisi Sector — Multi-(amily (RMF)	2016	0.G024	9,993	4,156,000	CET Uncycle NET NW/ Average square feet per year of participating accounts. Detormined average square feet per unit by motibying a average units' Average acquire feet per unit, 800 sq.11 (2014-2027 MF BayNEN program data)	BayREN MF Program data. Average		Per ED: "Energy savings" = lifecycle NET savings.	-
122 BayAEI	* A04	RMF3	O5	Ufecycle NEI kWh	D5: Depth of Interventions **Per square foot	Metric	RMF-D5 ** Energy savings (kWh, kw, therms) per square foot**	Ulecyde exante kWh net per square loot	Residential Sector — Multi-Family (RMF)	2016	<b>5.04</b>	25,091,848	4,156,000	CET Ulccyde NET kyin/ Average square feet per year of participating accounts. Determined average square feet per unit by multiplying # average units* Average cours* (eet per unit, 200 sq.ft (2014-2017 MF Bay/REN program data)	BayREN MF Program data. Average square feet per unit from 2014-		Per EO: "Energy savings" • Illecycle NET savings.	
123 BayRER	l A04	RMF3	DS	Ufecyde NET Therms	D5: Depth of interventions **Per square foot	Metric	RMF-DS-* Energy savings (kWh, kw, therms) per square foot-*	Ufecycla ex-tote Therm net per square foot	Residential Sector Multi-family (RMF)	2016	0,4339	1,803,171	4,156,000	CET Lifecyde NET Thermal Average square feet per year of participating accounts, Determined average square feet per unit by multiplying a Yearga unital Yverage square feet per unit, 800 sq.11 (2014-2027 MF BayAEN program data)	and BayREN MF Program data, Average square feet per unit from	D5 Methodology: - [Numerator] Total downstream savings [Oenominator] Total number of MF service accounts participating. x average square footage of MF service account.	Per ED: "Energy savings" = lifecycle NET savings.	
124 BayREN	I A04	RMF4	P]-P	Percent	P1: Penebudon of energy efficiency programs in the eligible marketPercent of Participation	Metric	RMF-P1P **Percent of participation relative to eligible population (by unit, and property)**	Percent of partidipation relative to eligible population by property	Aesidantial Sector — Multi-family (RIMF)	2015	0.004 <b>%</b>	54	1,431,478	Average 60 Projects[Propertles]/ PGEE Total RF Units in BayREN Territory, The derroymator represent the number of Multi Armilly Accounts, data provided by PGEE This number describes the number of Multi-Armilly units not properties, which is why the percentage it is small. We do not know access to number of Multi-Armilly properties available in BayREN territory	data provided by PG&E, Average # of projects calculated from BayREN MF Program data 2014-2017	Numerator: Number of downstream participating properties (service accounts x premise IO) - Denominator: total	"Bilgible Pepulation" to bit number of service accounts in acctival/segment, excluding CARL—"Participation" is defined as the first instance of participation, should a customer participate more than once or participate in multiple programs in the calendar year. PAs also need to have enough information about a customer to determine if the customer is in the eligible population and service territory. "Service account" for households are tracted as in PA detabases than "service accounts" for MF properties themselves.	
125 BayREN	AD4	RMF4	P1-U	Percent	P1: Penetration of energy efficiency programs in the eligible market **Percent of Perficipation	Metric	RMG-P1U **Percent of participation relative to eligible population (by unit, and property)**	Percent of partidipation reclaisive to digible population by unit	Residential Sector — Multi-family (RMF)	2016	0.363%	5195	1,431,478	Territory .	number of Mulli Family Accounts data provided by PG&E in the BayREN territory. This number describes the number of Mulli-Family units. Per CEDARS Input Total Number of Units	downstream participating MF units (tithis may be self-reported on application for building-level interfelts). Denominator, total number of units (residential service accounts x premitse lips) in the sector.	"Eligible Population" Total number of service accounts in acctor/segment, excluding CARe. "Paridopation" is defined as the first instance of participation, include a customer participate more than once or participate, in multiple programs in the calendar year. PAs also need to have enough information about a customer to determine if the customer is in the eligible populsion and service territory. "Service account" for households are tagged, coded, angler have a silferent rate class in PA databases than "service accounts" for MF properties themselves.	

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t t		AttA	AtlA	Method	Units of		Metric/				Baseline	2017	2017	2017					Proxy
Inde	PA	Page	Order	Code	Measuremen	Metric Type	Indicator	Business Plan Att A Description	Metric	Sector	Year	Reporting Year	Numerator	Denominator	BayREN Notes, assumptions, methodology	Data Source	Methodology	Key De linktions	atlon
126	Вауяєх	A04	RMF4	PZ .	Percent	P2: Penetration of energy efficiency programs in terms of square feet of cligible population	Metric	RMF-P2 - Percent of square feet of eligible population participating (by property)**	Percent of square feet of eligible population particlpating (by property)	Residential Sector — Multi-family (RMF)	2016	0.363%	4,156,000	1,145,182,400	who have participated in the MF BayNEN program is 800 square feet. This was used to calculate the expected number of square feet of eatimated for PGBE Total MF Units in BayNEN Territory.	BayREN tentiory. This number describes the number of Multi- family units. BayREN MF Program data, 2014-2017.	P2 Methodology: Numerator: square Jootage of participating service accounts (x Premise IDs) Denominator: Square Jootage of all eligible accounts (x Premise IDs)		
127	BayREN	A04	RMF4	P3; DAC	Percent	P3: Penetration of energy efficiency programs in the eligible market-DAC	Metric	RMF-P3 - Percent of participation in disadvantaged communities**	Percent of participation in disadvantaged communities	Residential Sector Multi-family (RMF)	2015	12.5 <b>%</b>	8	. 54	CET Input Yotal Number Units' Average DAC Participation (units) BayAEN MF / PG&E Total MF Units in estimated DAC BayAEN Territory	The denominator represents the number of Multi Family Accounts data provided by PG&E in the BayRRN territory. This number describes the number of Multi-Family units. Data from CaliforinaScreen 3.0 census tracts shows that T% of Bay Area.	participants in disadvantaged communities Denominator: Total	D.18-05-041: DAC = Service accounts in lip codes corresponding to census tracts in the top quartile of Calibra/ro-Sorven 3.0 scores Participant is defined as a unique person or entity identilis through a combination of zervice account and premise in and who participants in ratepayer funded energy efficiency interventifyn	
128	BZYREN	A04	RMF4	P4: HTR	Percent	P4: Penetration of energy elficiency programs in the HTR market	Metric	RMF-P4++ Percent of participation by customers defined as "hard-to-reach"++	Percent of participation by customers defined as "hard-to-reath"	Residential Sector — Multi-family (RMF)	5076	0%	0	. a	BayREN does not have hard to reach based on 0.13-05-041. With definition of Narto to Reach BayREN is excluded and we are not targeting Hard to Reach.	,	P4 Methodology: - Numerator, number of participants in NTR geographic area - Denominator; Total number of service accounts in NTR geographic area	D.15-03-041 p. 43 - HTR at defined in Resolution G-397, modified to "include disadvantaged communities (as designated by Caliera) in the geographic criteria for hard to reach customers." "Participant" is defined as a unique person or entity identified through a combination of service account and permiss (19 and who participant in a	
129	BayREN	A04	RMFS	. 81	Percent	S1: MF Benchmarkin S Penetration	Metric	RMF-81 - Percent of benchmarked multi-family properties relative to the eligible population****	Fercent of benchmarked multi-family properties relative to the eligible population	Residential Sector Multi-family (RMF)	2016	O96	ō	ū		number of Multi Family Accounts, data provided by PG&E and BayREs			
130	BeyREN	A04	RMFS	86	Percent	86: Benchmarkin g of HTR Properties	Metric	85(AMF) - Percent of benchmarking by properties defined as "hard-to-reach"****	Percent of behchmarking by proporties defined as ' "hard-to-reach"	Residential Sector — Multi-family (RMF)	2016	0%	D	. 0	SayfiEN does not have hard to reach based on D.18-05-041. With definition of Hard to Reach BayfiEN is excluded and we are not targeting Hard to Reach.			"Benchmarking" is defined as benchmarked by Fortfolio Manager. Participants are defined as those with Service accounts x premise IDs in HTR market	
131	BayREN	A04	RMF6	ις	PAC Levelized Cost (\$/kW)	Cost per unit	Metric	RMF-LC - Levellized cost of energy elficiency per kWh, therm and kW (use both TRC and PAC)**	PAC Levelized Cost (\$/kW)	Residential Sector — Multi-family (RMF)	2016	\$497.23	N/A	n/a	Levellate dosts formidas provided by Metrits Working Group [PAC Cost Richert Invention] to Been Ently/Lincycle Net EW/Kwh/Therms and (TRC Cost x Bearin Benefits/Total Benefits//Urcycle Nist KW/kwh/Therms	CEDARS Online CET Dutput	Par CEDARS	None	
137	ВауяЕМ	A04	AMF6		PAC Levelized Cost (\$/kWh)	Cost per unit saved	Metric	RMF-LC - Levellized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC) - +	PAC Levelited Cost (S/KWh)	Residential Sector — Multi-family (RMF)	2016	\$0,20	n/a	N/A	Levellard coasts formulas provided by Metrics Working Group (PAC Costx Blestric lieneflat/fotal) Boseflat/Jul/Geycle Ret WW/MW/T/Merra and (TRC Costx Beaching Beneflat/Total) Beneflat/Jul/Geycle Not KW/KWh/Therms	CEPARS Online CET Output	Per CEDARS	None	
133	BayREN	A04	RMF6		PAC Levelized ost (\$/therm)	Cost per unit saved	Metric	RMF-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)**	PAC Levelized Cost (\$/therm)	Residential Sector — Multi-Pamily (RMF)	2016	\$0.70	n/a		Levelized costs formulas provided by Metrics Working Group (PAC Costs Bleatel lenellar) Foot Beneficial Group (PAC Costs Bleatel) (WWW/MY/Therms and TPAC Costs Educate Benefits) Footal Benefits)/Ulesyde Nat KW/KWh/Therms	CEDARS Online CET Output	Per CEDARS	None	

Spre											,									
dshe																				Pr
. 1						Units of		Matric/	No. 10 Mars 444 Mars 19 Mars	*4	Sector	Baseline		2017	2017	BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definition	Ex s at
Inde	PA	Page	Urac	er Co	de N	Acasurement	Metric Type	(Halestor	Business Plan Att A Description	Metric	Sector	Tear	Reporting 1ear	Munterator	Deliginator	Levelized costs formulas provided by Metrics Working Group	CEDARS Online CET Output	Per CEDARS	None	
134	МЭЯУКВ	1 A04	RMF	:6 U		IRC Levelized Cost (S/kW)	Cost per unit saved	Metric	RMF-LC - Levellzed cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)**	TRC Levelized Cost (S/kW)	Residential Sector — Multi-family (RMF)	2016	\$863.40	N/A	N/A	(PAC cast x Electric Benefits/Total Benefits)/Ufecycle Nat kW/kWh/Therms and ("InC Cost x Dectric Benefits/Total Benefits)/\lifecycle Net \W/XWh/Therms				
135	BayREN	AC4	RMF	:6 L(		RC Lovelized Cast (S/kWh)	Cost per unit xaved	Metric	RMF-LC - Levelited cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)+*	TRC Levelized Cost (\$/kWh)	Residential Sector — Multi-family (RMF)	2016	\$0.34	N/A	N/A	Levellged coats formulas provided by Metrics Working Group (PAC coats Electric Benefits/Total Benefits/Lifecyle Net WW/WW/Therms and (PRC Coats Electric Benefits/Total Benefits/J/Lifecycle Net \W/kwh/Therms	CEDARS Online CET Output	Per CEOARS	None	
_	~																			
136	8ayrén	A04	RMF	e rc		RC Levellzed ost (\$/therm)	Cost per unit saved	Motric	RMF-LC - Levellized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)**	 TAC Levelized Cost (\$/therm)	Residential Sector— Multi-family (RMF)	2016	\$1.71	n/a	n/a	Levelitzed costs formular provided by Metries Working Group (PAC costs Veterite penelity/Clied Penelity/Llied/e) Not W/W/W/h/Therms and (TRC Costs Dectrie Benefits/Total Benefits/L/Lliecycle Net IW/AWM/Therms	CEDARS Online CET OUTput	Per CEDARS	None	
-																These are Indicators and not metrics. Per the Decision (D.18-05-041)		Numerator: Total usage		
137	BayREN	A04	RMF	71 E3:	ì	BTU/unit	Energy Intensity per MF unit	Indicator	RMF-E12[Indicator] - and Average energy use intensity of multifamily units. Including in-unit accounts)	Average IIrst year ex-ante kWh gross per unit	Residential Sector — Multi-(emily (RMF)	2016	N/A - Indicator	N/A - In dicator	N/A - Indicator	on the Business Plans, Program Administrators do not have to provide data on Indicates, only Admillions and methodologies, which can be found in the EU Templere.	•	of Res MF sector Denominator: total unit in Res MF sector		
138	B2YREN	A04	RMF7	n 'es	ı	BTU/sqlt	Energy Intensity per MF unit square foot	Indicator	RMF-E13]indicator] Average energy use intensity of multifamily buildings (average usage per square foot—not adjusted **	Average first year ex-ente kWh gross per square foot	Residential Sector — Multi-family (RMF)	N/A ~ Indicator	N/A - indicator	N/A - indicator	N/A - Indicator	These are Indicators and not mainties. Per the Decidion (0.184-054-01) on the Business Planp, regoram Andinbastors for not have to provide data on indicators only admitted as and methodologies, which can be found in the ED Templaio.		Numerator: Total-urage of Res MF sector — Denominators (total units in the Res MF Sector times the average square footage per unit) — Awg as footage is taken from either 1) PA databases, Each PA is dedding which data source is most representative of their		
<u> </u>																BayREN did not have a commercial program in 2017, so no data to		per CEDARS	None -	
139	взукен	A05	. E1	51		First year annual kW gross	S1: Energy Savings	Metric .	C-S1** - First year annual and lifecycle ex-ente (pre-evaluation) gas, electric, and demand savings (gross and net)**	First year annual kW gross	Commercial Sector (C)	N/A- indicator	N/A	R/A	N/A	report on				;
1																BayREN did not have a commercial program in 2017, so no date to		per CEDARS	None .	
140	BayRÉN	A05	а	51		First year nual kW net	S1: Energy Savings	Metric	C-S1** - First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and not) **	First year annual kW net	Commercial Sector (C)	2019	n/a	N/A	N/A	report on	• .•			· .
<u> </u>			-			<del></del>										BayREN did not have a commercial program in 2017, so no data to		per CEDARS	None	
141	BayREN	A05	cı.	51		First year noual kWh gross	SI: Energy Savings	Metric	C-S1** - Hist year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net)**	Rist year angual kWh gross	Commercial Sector (C)	2019	N/A	н/а	N/A	report on			•	
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ec ec														*				
	AttA	AttA	Method	Units of		Metric/				Baseline	2017	2017	2017					
C PA	Page	Order	Code	Measuremen	Motric Type	Indicator	Business Plan Att A Description	Metric	Sector	Year	Reporting Year	Numerator	Denominator	BayREN Notes, assumptions, methodology Data S		Methodology	Key Definitions	
Contraction of the last														BayREN did not have a commericial program in 2017, so no data to	F	er CEDARS	None	
							. •							report on				
							C-S1 Hist year annual and lifecycle											
Rauge	204	C1	<b>S1</b>	First year	S1: Energy	Metric	ex-ante (pre-evaluation) gas, electric, and	First year annual kWh net	Commercial Sector (C)	2019	N/A	N/A	N/A	•				
	1 700		31	annual kWh ne	t Savings	17101112	emand savings (gnuss and net).					***						
							.,,							BayREN did not have a commercial program in 2017, so no data to		er CEDARS	None	
														report on	r		110115	
				First year	S1: Energy		C-S1** - First year annual and lifecycle	et	e	2019	1175	****	N/A					
ваулы	4 ADS	C1	51	annual Therm econg	Savings	Metric	ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net)**	mist year annual Interm gross	Commercial Sector (C)	2019	N/A	N/A	N/A					
				B. 0.52			actions serings (Bross arts 144)											
														BayREN did not have a commercial program in 2017, so no data to		er CEDARS	None	
							•							sebout ou	P	IF CEDARS	NORE .	
				First year	S1: Energy		C-S1 First year annual and lifecycle								•			
BayRE	1 702	C1	21	annual Therm	Savings	Metric	ex-ante (pre-evaluation) gas, electric, and	First year annual Therm net	Commercial Sector (C)	2019	Ņ/A	N/A	N/A	i e				
				rjat			demand savings (gross and not) **											
														BayREN did not have a commercial program in 2017, so no data to report on	P	er CEDARS	None	
														report on				
							C-S1 ** - First year annual and illecycle							-				
BayAE	A05	C7	51	ante kW gross	S1: Energy	Melric	ex-onte (pre-avaluation) gas, electric, and	Ufecycle ex-ante kW gross	Commercial Sector (C)	2019	N/A	N/A	N/A					
							gswang savings (flost and ver)											
														•				
														<u> </u>				
														BayREN did not have a commercial program in 2017, so no data to	pi	er CEDARS	Nane	
														report on				•
				Illamela au	F4 . F		C-S1 First year annual and lifetycle											
BayREA	A05	, C1	51	ante kW not	S1: Energy Savings	Metric	ex-ante (pre-evaluation) gas, electric, and	Ulecyde ex-ante kW net	Commercial Sector (C)	2019	N/A	N/A	N/A	· · · · · · · · · · · · · · · · · · ·				
							demand savings (gross and net) **											
														BayREN did not have a commercial program in 2017, so no data to	pı	er CEDARS	None	
														report on				
							C-51** - First year annual and illocycle	•										
BayREN	A05	CI	51	Elfecycle ex- ante kWh gross		Metric	ex-ante (pre-evaluation) gas, electric, and	Uřecycle ex-ante KWh gross	Commercial Sector (C)	2019	N/A	N/A	N/A					
				ance with gross	. Savings		demand savings (gross and net)**	_						•				
							•											
														SayREN did not have a commercial program in 2017, so no data to	pt	CEDARS	Nane	
														report on				
							C-51 First year annual and lifecycle											
BayREN	A05	cz.	51	Ufecyde ex-	Siz Energy	Metric	ex-ante (pre-evaluation) gas, electric, and	Ufecycle ex-ante kWh net	Commercial Sector (C)	2019	N/A	N/A	N/A					
				ante kWh net	Savings		demand savings (gross and net) **		• •		-							
														BayREN did not have a commercial program in 2017, so no data to	pt	r CEOARS	None	
										•				report on				
				Ofemale														
BauRFM	A05	<b>C1</b>	51	Ufecycle ex- ante Tharm	S1: Eriergy	Metric	C-51** - Hrst year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and 1	Manuela example Therm	Commercial Sector (*)	2019	N/A	N/A	N/A					
-uyesi1	~~3		31	gross	Savings	MEDIC	demand savings (gross and net) **	errelan exame during \$1077	contribution officer (c)	2013	.,,,	170	.40					
				•			3 .				-	•						

Spres dshoo 1	:	AIIA	AttA	Method	Units of		Metric/				Besellng	2017	2017	2017				Pro Expl
Inde	PA	Page	Order	Code	Measurement	Metric Type	Indicator	Business Plan Att A Description	Metric	Sector	Year	Reporting Year	Numerator	Denominator	BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions atle
150	BayAEN	AOS	cı	51	Diecycle ex- ante Therm net		Metric	C-51** - Arstycer annual and likercie ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net)*-	Ufecycle ex-ante Therm Net	Commercial Sector (C)	2019	n/a	N/A	N/A	BayRRX did not have a commercial program in 2017, so no data to report on		per CEDARS	None .
151	BoyREN	AUS	а	52	Percent first year annual kw gross	52: Percent Overall Sectoral Sayings	Metric	C-SZ - First year annual and lifecyde ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) as a parcentage of overall sectoral usage*	Percent first year annual kW gross	Commercial Sector (C)	2019	n/a	N/A	N/A	BayAEM did not have a commercial program in 2017, so no data to report on		S2 Methodology; - Numerator = Metric C1 - Denominator = Total sectoral usage, from PA billing database	None
152	Ваулен	A05	C3.	52	Percent first year annual kW net	S2: Percent Overall Sectoral Savings	Metric	C-52 - First year annual and lifecycle ex-onte (pre-evaluation) gas, electric, and demand savings (grass and net) as a percentage of overall sectoral usage:*	Percent first year annual kW . net	Commercial Sector (C)	2019	N/A	N/A	N/A	BeyAEN did not have, a commercial program in 2017, so no data to report on		52 Methodology: - Numerator = Metric C1 - Denominator = Total sectoral usage, from PA billing database	None .
153	BayREN	AUS	CI	52	Percent first year annual kWh gross	52: Percent Overall Sectoral Savings	Metric	C-52 - First year annual and lifecycle ex-anic [pre-evaluation] gas, electric, and domand savings (gross and net) as a percentage of overall sectors) usage**	, , Percent first year annual kWh gross	Commercial Sector (C)	2019	n/a	N/A	N/A	BayAEN did not have a commendal program in 2017, so no data to report on		S2 Methodology; - Numerator = Metric C1 - Denominator = Total sectoral usage, from PA billing database	None
154	Bayren	AOS	cı	<b>S</b> 2	Percent first year annual kWh net	52; Persent Overall Sectoral Savings	Metric	C-52 - First year annual and lifecycle ex-anite [pre-evaluation] gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage**	Percent first year annual kWh net	Commercial Sector (C)	2019	N/A	N/A	N/A	SayREN did not have a commericial program in 2017, so no deta to report on	•	S2 Methodology: - Numerator = Metric C1 - Denominator = Total Jectoral usage, from PA billing database	None.
155	BayREN	A05	C1	52	Percent first year annual Therm gross	S2: Parcent Overall Sectoral Savings	Metric	C-52 - First year annual and lilecyde ex-ante [pre-evaluation] zes, electric, and demand savings (gross and net) as a percentage of overall sectoral usoger*	Percent first your annual Therm gross	Commercial Sector (C)	2019	n/a	N/A	Ν/А	BayNEN did not have a commercial program in 2017, so no data to report on		52 Methodology:- Numerator = Metric C1 - Denominator = Total sectoral usage, from PA billing database	None .
156	BayREN	AOS	CI	52	Percent Brst year annual Therm net	52: Percent Overall Sectoral Savings	Metric	C-52 - First year annual and lifecycle ex-ante [pre-evaluation] gas, electric, and i demand savings [gross and net) as a percentage of overall sectoral usage-	ercent first year annual Therm net	Commercial Sector (C)	2019	n/A	n/a	N/A	BayREN did not have a commercial program in 2017, so no data to report on		52 Methodology: - Numerator = Metho C1 - Denombator = Total sectoral usage, from PA billing database	None
157	BayREN	A05	a		Percent lifecycle ex- ante kW gross	S2: Percent Overall Sectoral Savings	Metric	C-57 - First year annual and lifecycle ex-ante [pre-evaluation] gas, electric, and demand savings [gross and net) as a percentage of overall sectoral usage**	Percent lifecycle ex-ante kw gross	Commercial Sector (C)	2019	N/A -	n/A	N/A	BayREX did not heve a commodelel program in 2017, so no data to report on		52 Methodology:- Numerator = Metric C1 - Denominator = Total sectoral usage, from PA billing database	None

Sprea deher					Units of		Metric/				Baseline	2017	2017	2017	•	Prox. Expla
Index	PA	Page	Order	Code	Мехсигетел	t Metric Type	Indicator	Business Plan Att A Description	Metric	Sector	Year	Reporting Yea	r Numerator	Denominator	BayREN Notes, assumptions, methodology Data Source	Methodology Key Definitions atton
158	взуяей	AGS	cr	<b>52</b>	Percent lifecycle ex- ante kW net	52: Percent Overali Sectoral Savings	Metric	C-52 - First year annuxi and lifecycle ex-ante (pre-evaluation) gas, electric, and demand avvira (gross and neit) as a percentage of overall sectoral Usage-	Percent lifecydd ex-ante kW net	Commercial Sector (C)	2019	N/A	N/A	N/A	BayARX (ild not have a commercial program in 2017, so no data to report on	52 Methodology: None Numerator = Methot CI = Denominator = Total sectoral usage, from PA billing database
159	BayREN	. A05	æ	52	Percent lifecycle ex- ante kWh gros	52: Percent Overall Sectoral Savings	Metric	C-S2 - First year annual and lifecycle ex-anic [pre-evaluation] gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage*	Percent lifecycle ex-zate kWh gross	Commercial Sector (C)	2019	n/A	N/A	N/A	BayRRY did not have a commencial program in 2017, so no data to report on	SI Methodology: None Numerator = Metric CI - Denominator = Total sectoral targe, from PA billing database
150	. BayREN	AOS	а	S2	Percent lifecycle ex- ante kWh net	SZ: Percent Overali Sectoral Savings	Metric	C-S2 - First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) as a percentage of overall sectoral usage*	Percent lifesyde ex-ante kWn net	Commercial Sector (C)	2019	n/a	n/a	N/A	BayKEM did not have a commercial program in 2017, so no data to report on	SZ Methadology: None Numerator # Metric CL - Denominator = Total sectoral usage, from PA billing database
161	BayREN	A05	C1	52	Percent lifecycle ex- ante Therm gross	S2: Percent Overall Sectoral Savings	Metric	C-S2 - Birst year annual and lifecycle ex-antic (pre-evaluation) gas, electric, and i demand savings (gross and net) as a percentage of overall sectoral usages»	Percent lifecycle ex-ante Therm gross	Commercial Sector (C)	2019	N/A	N/A	N/A	BayARN did not have a commercial program in 2017, so no data to report on	SZ Methodology:- None Numerator = Motif CLI- Denominator = "Yotal sectoral usage, from PA billing database
152	Bayren	AOS	C1	52	Percent lifecycle ex- ante Therm nes	52: Percent Overail Sectoral Sovings	Metric	C-S2 - First year annual and Illecycle ex-ante (pre-evaluation) gas, electric, and it demand savings (gross and net) as a percentage of overall sectoral usage.	ercent lifecycle ex-ante Therm net	Commercial Sector (C)	2019	N/A	n/a	n/a	BayREN did not have a commercial program in 2017, so no data to report on	SZ Methodology:- None Numerator = Matric CL- Denominator = Total sectoral utage, from PA billing database
163	вауяєм	A05	æ	G	MT CO2eq	GНG	Metric	C-G++Greenhouse gassas (MT CO2eq) Net XWh savings, reported on an annual basis	CO2-equivalent of net annual XWh savings	Commercial Sector (C)	2019	N/A	N/A	N/A	8-yAEN did not have a commercial program in 2017, so no data to report on	
164	BayREN	A05	а	DZ		D2: Depth of interventions by project	Metric	Energy savings (gross kWh, therms) as a fraction of total project consumption.	Percent lifecycle grass kW	Commercial Sector (C)	2019	N/A	N/A	N/A	BayREN did not have a commerficial program in 2017, so no data to report on	N/A - Please disregard N/A - Please disregard this unit of this unit of measurement, kW was not required by the Attachment A metric.  Attachment A metric.
165	BayREN	A05	G	DZ		D2: Depth of interventions by project	Metric	Energy savings (gross kWh, therms) as a fraction of total project consumption.	Perzent Klecycle gross kWh	Commercial Sector (C)	2019	N/A	n/a	n/A	BayAEN did not have a commerficial program in 2017, so no data to report on	D2 Methodology (ED Definition: "Project" is defined as "per OM" "Numerator: Energy application savings defined for project "Denominator: Energy Vage Basiline on application

Sprea dshee					,				•				•					Proxy
1		AHA	AHA	Method	Units of		Metric/				Baseline	2017	2017	2017				Explan
Index	PA	Page	Order	Code	Measuremen	t Metric Type	Indicator	Business Plan Att A Description	Metric	Sector	Year	Reporting Year	Numerator	Denominator	BayREN Notes, assumptions, methodology	Data Source Methodolog	Y Key Definitions	ation
166	Bayren	A05	G	DZ	Percent lifecycle gross Therms	pz: Depth of Interventions by project	Metric	Energy savings Igross XVVh, therms) as a Iracilon of total project consumption.	Percent lifecycle gross Therms	Commercial Sector (C)	2019	N/A	N/A	N/A	BayKEH (Id not have a commercial program in 2017, so no data to report on	Ok)* Numet savlags dalin project* voe Energy Usag on applicatio	nomínator: - Baseline in	
167	BayREN	AOS	C4	P1L	Percent	P1: Penetration of energy elikitency programs in the eligible market **Percent of Participation	Metric	***CP3M***Percent of participation relative to eligiblepopulation for small, medium, and large customers**	Percent of participation relative to eligible population for large customers	Commercial Sector (C)	2019	n/a	N/A	N/A 	BayAEX did not have a commercial program in 2017, so no data to report on	Denominator number of 1 accounts in 1	Number of Instance of participation, should ustomer participate more than (service - participate in multiple programs remise 10) - calendar year, PAs also need to late to total envice determine if the customer is in the eligible population and service to eligible population and service to eligible population and service to the sector.	a once or in the have to he erritory
168	Bayren	AOS	C4	PIM	Percent	P1: Penetration of energy efficiency programs in the eligible marketParcent of Participation	Metric	**CPIM***Pritent of participation reliative to eligible population for small, medium, and large customers**	Percent of participation relative to eligible population for medium customers	Commercial Sector (C)	2019	n/a	N/A	N/A	BayREX did not have a commercial program in 2017, so no data to report on	. In the sector,	Aumber of Instance of participation, should (savice more than (sparker more than participate in multiple programs in total enough information about a cus emisse total enough information about a cus emisse total emisse total enough information about a cus emisse total emisse total emisse total enough information about a cus emisse total emisse total	a once or in the save te
169	BayREN	AOS	C4	PIS	Percent	P1: Penetration of energy efficiency programs in the tilgible market >>Perexet of Participation	Metric	C-P1L-+Percent of participation relative to eligible population for small, medium,     and large customers-+	Percent of participation relative to diligible population for small customers	Commercial Sector (C)	2019	n/a	N/A	N/A	BayARX did not have a commercial program in 2017, so no data to report on	Denominator number of (s	(service service) Instance of participation, should customer participate more than participate to more than participate in mollogic programs of the customer is a calender year, PAs also need to it enough information about a customic emitse IDs. Eligible population and service to emitse IDs.	a once or once or once or
170	BayREN	A05	C4	P2	, Percent	P2: Penetration of energy efficiency programs in terms of square feet of eligible population	Metric	C-P2 - Percent of square feet of eligible population**	Percent of square (set of eligible population	Commercial Sector (C)	2019	N/A	n/a	N/A	BayREX did not have a commercial program in 2017, Jo no data to report on	If needed to a	defined in Energy Siar Portfolio à and will be taken (in order of pre- termise (ics. pro-) Ports de tables, seemise (ics. pro-) est application forms. Service il stringuistic number and premise (it number: articlipant) be used to determine Unique par . Square	Manager, ference) or 2) saccount may both
171	SayREN	AGS	C4	P4	Percent	P4: Penetration of energy • efficiency programs in the HTR market	Metric	C-P4- Percent of participation by customers defined as "bard-to-reach" • •	Percent of participation by customers defined as "hard-to-reach"	Commercial Sector (C)	7019	N/A	N/A	N/A	BayREN did not have a commercial program in 2017, so no data to report on	P4 Methodoli Numerator, n partidpants is geographic ar Denomisator, number of se accounts in M geographic ar	umber of Resolution G-3497, modified to " i MTR disadvantaged communities (as es - designated by CalEPA) in the geo; Total enteria for hard to reach customi vice TR	include graphic
172	ISPREN	ADS	CS.	82	Percent	Square Footage of Commercial Benchmarkin Benchmarkin Benchmarkin	Metric	C-BZ - Percent of benchmarked square feet of eligible population++	Percent of benchmarked aquare feet of eligible population	Cammerdal Sector (C)	2019	N/A	N/A	N/A	SeyNEX did not have a commercial program in 2017, so no date to report on	Total square ( benchmarked	ulklings in the California Saturation Survey), publicly available sources. Total e of sctor re footage sector here of here of her	ation of sh as

Spi	na e																
dsl		Atta	AHA	Mathed	Units of		Metric/	•			Baseline	2017	2017	2017			Proxy Explan
	ex PA					t Matric Type		Business Plan Att A Description	Metric	Sector					BayREN Nales, assumptions, methodology Data Source	Mathodology , Key Definitions	atlen
			•												BayREN did not have a commercial program in 2017, so no data to report on	Methodology; Numerator: Number of large commercial	
						Benchmarkin 8		B5(C)L Percent of benchmarked	Percent of benchmarked					•		customers that have	
1	3 BayRE	N A05	CS	85L	Percent	Penetration for	Metric	customers relative to eligible population	customers relative to eligible	Commercial Sector (C)	2019	N/A	N/A	N/A		been benchmarked on Portfollo Manager	
						Commercial Sector		for large customers	population for large customers						•	Denominator: Total number of S, M, and L	į
1						Sestor										commercial customer	
-					<u> </u>										BayREN did not have a commercial program in 2017, so no data to	accovits.	
															report on	Numerator: Number of Medium commercial	ì
Ì						Benchmarkin E			Percent of benchmarked							customers that have	·
n	4 BayRE	N A05	CS	BSM	Percent	Penetration for	Metric	B5(C)M Percent of benchmarked customers relative to eligible population	erert and an advantage of talking	Commercial Sector (C)	2019	N/A	N/A	N/A		been benchmarked on Portfolio Manager	ļ
						Commercial		for medium existemers	constomers hobotraposi tot meginus	i						Denominator: Total	
						Sector										number of S, M, and L commercial customer	
L					,,											accounts.	
1															BayREN did not have a commercial program in 2017, so no data to report on	Methodology: Numerator: Number of	
						8enchmarkin										Small commercial customers that have	
١,,	S BøyREI	d ADE	cs	855	Percent	g Penetration	Metric	BS(C)S++Percent of benchmarked customers relative to eligible population	Percent of benchmarked customers relative to eligible	Commercial Sector ICL	2019	N/A	N/A	N/A	•	been benchmarked on	
^	. Deynzi		~	u33	refreit	for Commercial	Menic		population for small customers	Continencial Sector (c)	2013	. 11/1	17/0	.,,,,		Portfolio Manager Denominator: Total	
						Sector										number of 5, M, and L commercial customer.	
1	_								_							accounts.	
								•		•					BayREN did not have a commericial program in 2017, so no data to report on	Benchmarking per Portfolio Manager.	
															7-7-1	Service accounts x	
						B5:			Percent of benchmarking by							premise IDs in HTR market Proxy, if	
15	6 BayRE	E A05	CS	86		Benchmarkin g of HTR	Metric	B6(C) - Percent of benchmarking by customers defined as "hard-to-reach" > >		Commercial Sector (C)	2019	H/A	N/A	-N/A		characteristics other than size and geo	
-						Properties			tiet n-rb-leacu							location aren't known,	
1																develop proxy using just size and geo location	
-															BayREN did not have a commercial program in 2017, so no data to	Per CEDARS None	
															report on	rei crovia itolic	
								C-LC - Leveltred cost of energy efficiency									1
17	BayRE#	1 A05	CS	rc	Cost (\$/kW)	Cast per unit saved	Metric	per kWh, therm and kW (use both TRC and PAC) >=	PAC Levelized Cost (S/kW)	Commercial Sector (C)	2019	N/A	N/A	N/A			- 1
1								-14 //4									
															BayREN did not have a commercial program in 2017, so no data to report on	Per CEDARS - None	
								C-LC - Levelized cost of energy efficiency							•		Į
17	BayREN	A05	C6	ιc	PAC tevelized Cost (\$/kWh)	Cost per unit	Metric	per kWh, therm and kW (use both TRC	PAC Levelized Cost (\$/kWh)	Commercial Sector (C)	2019	N/A	N/A	N/A			}
					Cost (o) Hilly	32105		and PAC}									{
																. *	1
															BayREN did not have a commercial program in 2017, so no data to	Per CEDARS None	·
										•					report on .		ŀ
179	BayREN	A05	C6	LC.	PAC Levelized	Cost per unit		E-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC	PAC   evelland Cost (5/therm)	Tommerrial Sector IC1	2019	N/A	N/A	N/A			.
1"	2-1,000				Cost (\$/therm)	saved	(+ 1904) PM	and PAC)**	carentee cost pyrisenn)	Land Sector (b)		1710	140	.,,,			
1	•																
-															BayREN did not have a commercial program in 2017, so no data to	Per CEDARS None	
1	•														report on		
					TRE Levelland	Cost per unit		C-LC - Levelized cost of energy afficiency					•				
18	BayREN	A05	CG	rc	Cost (\$/kW)	saved	Metric	per kWh, therm and kW (use both TRC and PAC) ••	TRC Levelized Cost (S/kW)	Commercial Sector (C)	2019	N/A	N/A	N/A			. {
															•		
L																	

5pr dsh	36					lo zinu		Metric/			•	paseline		2017	2017			Proxy Explai
Ind	x PA	Pa	ge C	Order	Code	Measurement	Metric Type	Indicator	Business Plan Att A Description	Metric	Sector	Year	Reporting Year	Numerator	Denominator	BayREN Notes, assumptions, methodology Data Source	Methodology	Key Definitions atlan
28	1 взуя	EN A	os	C6	ic	TRC Levelized Cost (5/kWh)	Cost per unit sayed	Metric	C-LC - Levelited cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)++	TRC Levelized Cost (S/kWh)	Commercial Sector (C)	2019	N/A	N/A	N/A	Bayacti did not have a commercial program in 2017, so no data to report on	Per CEDARS	None
18	Bayk	EN A	05	C6		TRC Levelized Cost (\$/therm)	Cost per unit	Metric	C-LC - Levalized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)**	TRC Levelized Cost (\$/therm)	Commercial Sector (C)	2019	n/A	n/a	n/a	BayEEM did not have a commercial program in 2017, so no data to report on	Per CEDARS	None .
18	і вауяз	DA N	)¢	C71	N3.	Percent	NMEC	Indicator	C-N1[indicator] Fraction of total projects utiliting Normalized Metered Energy Consumption (MMEC) to estimate savings	Percent of total projects utilizing Normalized Metered Energy Consumption (INNEC) to estimate savings	Commercial Sector (C)	2019	N/A	N/A	N/A	SayyEN did not have a commercial program in 2017, so no data to report on	utilizing NMEC to estimate swings. Denominator: Total number of projects (n the CMPA. See Key Definitions	"Projects" for this metric refers to custom projects. Data will be collected from the CMFA (CMFA) (C
184	- BayRE	n Ac	16	C71	NZ	Percent	NMEC	Indicator	C-N2[Indicator] Fraction of total savings (gross kWh and therm) derived from NMEC shalysis**	Percent of total savings (gross kWh and therm) derived from NMEC analysis	Commercial Sector (C)	N/A - Indicator	N/A - indicator	N/A - Indicator	N/A - Indicator	BeyKEN did not have a commericial program in 2017, so no data to report on	Per CAESCC Meeting: "Fraction of local custon savings derived from NMSC analysis", Data from CMPA Mona to check	
185	ВЭРКЕ	N AO	ıs (	cai	G	Percent	Satisfaction	indicator	C-CS[Indicator] Improvement in customer sättsfaction**	Percent Improvement in customer satisfaction	Commercial Sector (C)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	BayREN did not have a commercial program in 2017, so no data to report on	M&E will develop and field a consistent survey Instrument annually.	Survey development process his not bean determined but could be led by PA Measurement & Schwaldon staff, with ED oversight once developed, survey could be fielded confluencular as part of PA program implementation. Survey could be ready as 30 ma 2 cd of 2018 for implementation during 2019, metrics data could be a wallable for the 2019 reporting years.
186	Язуя	0A P	6 C	CSI .	75	Percent	Satisfaction	Indicator	C-TS[Indicator] Improvement in trade-ally satisfaction**	Percent improvement in trade ally satisfaction	Commercial Sector (C)	N/A - Indicator	N/A - Indicator	N/A- Indicator	N/A - indicator	BayREN did not have a commerical program in 2017, so no data to report on	M&E will develop and field a consistent survey instrument annually.	Survey development process has not been determined but could be led by PA Measurement, Edvatation staff, with ED oversight ones developed, survey could be helided continuously as part of PA program implementation. Survey could be ready as soon as Cel of 2018 for many as the could be available for the 2015, metrics data could be available for the 2015 reporting year.
187	Веупсі	N AG	5 C	<b>291</b>	F1	Percent	investment in energy elficiency	Indicator	C-F - (Indicator) Fraction of total Investments made by ratepayers and private capital**	Percent of total investments made by ratepayers and private capital	Commercial Sector (C)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A Indicator	BayRE4 did not have a commercial program in 2017, so no data to report on	Numerator: Dollars Invasted in Et through raterpayer/Union of the floome programs (influs other Ineating programs) Denominate; Total dollars Invested in Et (sourn of both private	·
282	BayRE	oza i	) C	51	51	Net GWb	51: Energy Savings	Metric .	Net Energy Savings: GWH, M Therms and MW (Jemand)	Net GWh savings	Codes & Standards (ロ)	N/A - Indicator	N/A	н/а		N/A BayAEM does not cislm any savings for Codes and Standards Program		2018-2025 Consistent with adopted goals from 0.1-70-9-5; Tables 1, 2, 1 and 3, p. 37-39; 2016 from CEDARS (spillover not included). Values summed a cross all four IOUS. "Savings" is defined as Net Hint Year savings.

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dshee											•					•	Pi
1		AttA		Mathod			Mot				Baselino	2017	2017	2017	<b>X</b>		Ex
Index	PA	Page	Order	Code	Measure	nent Metric	ype India	for Business Plan Att A Description	Metric	Sector	Year	Reporting Year	Numerator	Denominator		sta Source Methodolo	
283 E	Вауя <b>є</b> м	A10	CS1	51	Net MMTI	erins - Savin		ic Net Energy Savings: GWH, M Therms and MW (demand)	Net MMTherms sevings	- Codes & Standards (CS)	2016	n/a	n/a	N/a:	N/A BayARK does not tizlim any savings for Codes and Standards Program	EM&V stud	y  2018-2015 consistent with adopted goils  from 0.17-09-025, Tables 1.2, and 3.p.  37-39; 2016 from CEDARS (pillower not included), Values aumented across all four  10Us. "Savings" is defined as Net First year sevings.
ZB4 8	BayREN	A10	csı	51	Net M	W Savin		Net Energy Savings: GWH, M Therms and MW (demand)	Net MW savings	Codes & Standards (CS)	2016	N/A	N/A	N/A	N/A BayREN does not claim any savings for Codes and Standards Program	EM&V stud	by 2018-2025 consistent with adopted goals from 0.17-09-2025, Tables 1, 2, and 3, p. 37-09; 2016 from CEDARS (spillover not Included), Values summed scress all four 100s. "Savings" is defined as Net Hist year savings.
285 8	BayREN	A10	CSZ	1	Coun	Advoca Buildi		Number of measures supported by CASE ic studies in rulemaking cycle (current world)	Number of measures supported by CASE studies in rulemaking cycle (current work)	Codes & Standards (CS)	2016	n/a	n/a	н/д	BayREN does not perform an Advocacy work and this metric is for SW codes	Measures s CASE	supported by Basiline and Burgats for measures supported at 6 or 3 year cycle rather than annual.
		•							•						BayREN does not perform an Advocacy work and this metric is for SW codes	Measures a CEC	adopted by Baseline and targets for measures supported are for 3 year cycle rather than annual.
286 B	BayREN	A10	csz	2	Count	Advaca Bulldi		Number of measures adopted by CEC in rulemaking cycle [Indicator of past work]	Number of measures adopted by CEC in rulemaking cycle (Indicator of past work)	Codes & Standards (CS)	2016	N/A	n/a	N/A			
287 B	ayren	A10	CS3	Ţ,	Count	Advoca Appilar		Number of T-20 measures supported by c CASE studies in rulemaking cycle (current work)	rulemaking cycle (current	Codes & Standards (CS)	2016	N/A	N/A	N/A	BayAEM does not perform an Advocacy work and this metric is for SW codes	T-20 meast supported b	
								work	work)								
							<del></del>				-				BayAEA does not perform an Advocacy work and this metric is for SW codes	Measures a CEC	sdopted by Baseline is annual. Targets for measures adopted are for 3 year cycle rather than annual.
285 B:	ayREN	A10	CS3	Z	Count	Advoca Applier		c Number of measures adopted by CECIn current year	Number of measures adopted by CEC in current year	Codes & Standards (CS)	2017	N/A	N/A	n/a			
289 Br	BYREN	A10	CS4	1	Count	Advoca Feder		Number of Federal standards adopted for which a utility advocated (IOUs to list advocated activities)	Number of federal standards adopted for which a utility advocated (IOUs to flist advocated activites)	Codes & Standards (CS)	2016	N/A	N/A	. , N/A	BayAEN does not perform an Advocacy work and this metric is for SW codes	Standards a	edopted Baselines and targets are annual. Any Federal standards based upon TiUe 20 that were adopted will still be included in the federal count.
								•	•								•
			<del></del>		,		·····	-							BayREN does not perform an Advocacy work and this metric is for SW codes	∦ iOUs supp # DOE adopt	
290 Ba	zyREN	A10	CS4	2	Count	Advoca Federa		Percent of federal standards adopted for which a utility advocated (#IOU supported / #IDOE adopted)	Percent of Jederal standards adopted for which a utility advocated [#10U supported / #	Codes & Standards (CS)	2016	n/a	N/A	N/A	•		
								Subference of the American Sept.	DOE adopted)								

Spr dsh	ee					Units of		Metric/				Baselina	2017	2027	2017			•		Proxy
Ind	EX PA	Pag	e Ori	der	Code !	Measureme	nt Metric Type	Indicator	Business Plan Att A Description	Metric	Sector	Year	Reporting Ye	r Numerati	or Denomina	or BayREN Notes, assuraptions, methodology	Data Source	Methodology	Key Definitions	atlo
29	1 Вауке	N A1	j c	55	1	Count	Reach Codes	, Metric	The number of local government Reach Codes Implemented (this is a Joint 10U and REN effort)	The number of local government Reach Codes Implemented (this is a Joint 10U and REN effort)	Codes & Standards (CS)	2016	n/a	N/A	N/A	BayriEN does not track resolt codes, as the IOUs track and report in SW metrics	·	Reach Code ardinances Implemented	Targets are total for a three-year Title 2 code sycle, Jurisdictions having multiple reach codes will be counted by reach code ather than by jurisdiction. Accomplishments will be reported from the CEC Reach Codes website [http://www.energy.ca.gov/dide24/20]; tandards/ordinances/).	
25	2 BayRE	N A3		s <del>6</del>	1	Count	Compliance Improvemen L	Metric	Number of training activities (dasses, weblinars) held, number of market actors participants by segment (e.g., building officials, builders, architects, etc.) and the the total site (number of the barget audience) by sector. [M] Number of training activities	Number of training activities (classes, wabinars) held, number of market actors participants by segment (e.g. building officials, buildiers, architects, etc.) and the the total size (number of the target, audience) by sector. (M) Number of training activities	Cordes & Standards (CS)	5016	N/A	N/A	N/A	Nat applicable to Guy REN	·	Number of training activities	128 live training sessions and 20 webina in 2012; short, mid, and long-term targe are annual	ets
29	3 бауяЕ	N AS:	ı cs	56	2	Count	Compliance Improvemen t	Metric ,	Number of training activities (classes, webhiars) held, number of market actors participant by segment (e.g., building officials, builders, straintects, etc.) his the total size (number of the target audience) by sector, (M) Number of participants	Number of training activities (classes, webinars) held, number of market actors pacticipants by segment (e.g. building officials, builders, architects, etc.] and the the total size (number of the target audience) by sector. (Number of participants	Codes & Standards (ES)	2017	A/K	н/а	· N/A	Not applicable to SayA;3N			3000 attenders for live Varinog and 800 attenders for webinars in 2017; short, mid, and long-term targets are annual. Attenders will be shown by major segment (i.e., building officials, builders, architects, KERS raters) and target size o each segment will be provided during lirmetries reporting.	, of rst
29	I ЗәүяЕі	N A11	. (5	56	3	Score	Compliance Improvemen t	Metric	increase in code compilance knowledge pre/post training	increase in code compliance knowledge pre/post training	Codes & Standards (CS) '	2017	n/a	N/A	N/A	Not applicable to Bay 45%		Knowledge score	Code compliance knowledge Indrease wide tested via pre and post training questionnaires, Surveys will be conducte for braining that lasts longer than three hours fill order to preserve time for instruction in aborier training sessions). Questionnaires will be made available during the first metrics reporting.	ed
295	вэуяел		CSS6	Ą	1	Percent	Compliance Improvemen t	Metric		The perceptage increase in close of permits for building to permit size for building to permit size for energy code compliance within participating jurisdictions	Codes & Standards (CS)	2015	N/A	N/A	N/A	For this meatrs, Seynitis thands to develop a projectine pannership with one or You jurisdiction to Increase the precensing of closed permits for a particular type of building project triggering energy code compliance. At this time, we have not feelforthed either ble participating jurisdictions on the type(a) of project that will be addressed. SayNik stainmate a cost of approximately \$515,000 in 2018 and 2019 to concertal literature review, stesse data availability carry out feelfort data collection and analysis, analyse; jurisdiction-specific data once the participating jurisdictions have been identified eavley the project, attability the seasch cost is still to be determine develop the project, attability the seasch cost is still to be determine additional costs would likely be incurred to implement an internative even and seascent collections of building primit data, and benefits in the swell between the consolidation of the project. The initial phase of this study will be to conduct all internative even and seasons of the seasons of the project in the seasons of the seasons of the seasons of the project in the seasons of the project in the seasons of the seasons of the seasons of the seasons of the project in the seasons of the	2014-16 HVAC Fermil and Code Complinen Martet Assessment, September 2017" "55% of Immace replacements in the state are completed without permits" — Missubbil Electric Gomments on HVAC System compliance, referenting the Collifornia Contractor State Diense Sound, 71/21/34, CET Dockst 13-EBP 3-104, 30% of Work is permitted; 2013 estimate from Insultous of Heating and Air Conditioning, quoted in DWY GL report Less than 30% of in Secarament refine —2012. Proctor Engineering Group estimate, quoted in DWY GL report to the contract of the conditioning will are permitted in Secaraments refine —2012. Proctor Engineering Group estimate, quoted in DWY GL report			٠
296	BayREN	A11	CZ61	P.I	1	Count	Compliance Improvemen t	Indicator	Number and parcent of jurisdictions with stall participating in an Energy Policy Forum	Number and percent of jurisdictions with staff participating in an Energy Policy Forum	Codes & Standards (CS)	N/A • Indicator	N/A - Indicator	N/A - Indicator	N/A-indicat	Number of City of Ceusty local government jurisdictions participating These are indicators and not metrics. Per the Decision (0.18-05-041) on the Business Plans, Prepram Administrators do not have to provide data on indicators only definitions and methodologies, which can be found in the EO Template.			Energy Polley Forum": a BayAEN hosted event addressing energy use, energy elficlency, and or 11tle 24 compliance	

Sprea dshee											•								Proxy
distinct 4	À1	tA.	4114	Method	Units of		Metric/				Baseline	2017	2017	2017					Explan
Index PA						Metric Type		Business Plan Att A Description	Metric	Sector		Reporting Year			BayREN Notes, assumptions, methodology	Data Source	Methodology	Key Definitions	ation
297 BayR			CSGRI	1	Percent	Compliance Improvemen t		Number and percent of jurisdictions with staff participating in an Energy Policy Forum	Number and percent of jurisdictions with stall participating in an Energy Policy Forum	Codes & Standards (CS)		N/A - Indicator	N/A -		Numerators Number of 13 yer County local government jurisdictions participating: Denominator Number of City of County local government jurisdictions in BayRelf senting v(130). These are indicators and not merica. Per the Decidion (D.18-05-041) on the Business Plans, Program Andrinisbaters do not have to provide data on Indicators only definitions and methodologies, which can be found in the ED Yemplate.			*Energy Policy Forum*: a BayAEN hosted ovent addressing energy use, energy afficiency, and or Title 24 compliance	
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299 BayA	EN A	11 (	IIS6Ą	2	Percent	Compliance Improvemen t	indicator	Number and percent of jurisdictions receiving Energy Policy technical assistance.	Number and percent of Jurisdictions receiving Energy Policy technical assistance.	Codes & Standards (CS)	N/A- Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator Number of City or County local government jurisdictions participating Demonstrate Number of City or County local government jurisdictions in Supfielt servinary (110).  These are indicates and not metrics. Per the Decision (0.14-05-041) on the Business Plans, Ingerom Administrators on not have to provide date on indicators only definitions and methodologies, which can be found in the CO Templote.		•	Fenergy Policy technical assistance": BayRRV fadilitated technical assistance serviers to assist with local government activities including but not limited to implementablion of energy and energy efficiency related requirements for Title 24 or development of local policies and ordinances that meet or exceed Titla 24	
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October 29, 2018

California Public Utilities Commission Energy Division Tariff Unit 505 Van Ness Ave. Fourth Floor San Francisco, CA 94102-3298 Advice Letter 9-E-A

(BayREN ID #941)

Subject: BayREN 2019 Annual Energy Efficiency Program and Portfolio Budget Request (Supplemental)

#### Purpose

On September 4, 2019, the Association of Bay Area Governments (ABAG), on behalf of the San Francisco Bay Area Regional Energy Network ("BayREN"), submitted Advice letter 9-E, requesting approval of its 2019 budget. No protests were received to BayREN's Advice Letter. Thereafter on October 1, 2019 Energy Division staff requested clarification about items listed below.

#### 1. Unspent/Uncommitted Funds.

As directed by the Commission in D.13-11-005, PG&E serves as the fiscal agent for BayREN. In 2013, ABAG and PG&E entered into a Master Services Agreement. As provided therein, for the non-incentive budget, ABAG is paid in arrears on a time and material basis. For the incentive portion of the contract, ABAG is provided four lump sum payments. If there are any incentive funds remaining at the end of the year, the following year's incentive budget is reduced accordingly. Based on these contractual terms, there are no updates to the ABAL template.

#### 2. Forecasted Savings and Workpapers.

All of BayREN resource programs are based entirely on Commission-approved workpaper values as of September 4, 2018.

#### **Protest**

Since there were no protests filed to the original Advice Letter, there is no protest allowed for this Supplemental filing.

#### **Effective Date**

BayREN requests that this Tier 2 advice filing become effective on regular notice, November 29, 2018, which is 30 calendar days from the date of this filing.

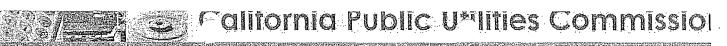
#### Notice

In accordance with General Order 96-B, Section IV, a copy of this advice letter is being sent electronically and via U.S. mail to parties shown on the attached list and the parties on the service list for R.13-11-005. Address changes to the General Order 96-B service list should be directed to Jennifer K. Berg at jberg@bayareametro.gov or by calling 415-820-7947.

ASSOCIATION OF BAY AREA GOVERNMENTS

Gerald L. Lahr

Assistant Director - Energy Programs



# ADVICE LETTER SUMMARY

Service affected and changes proposed  $^{\mbox{\tiny{11}}}$   $_{\mbox{N/A}}$ 

Pending advice letters that revise the same tariff sheets: N/A

ENERCY I DE LIBERY



	MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)				
	Company name/CPUC Utility No.: BayREN #941				
	Utility type:  Contact Person: Jennifer Berg  Phone #: 415-820-7947  E-mail: iberg@bayareametro.gov  E-mail: Disposition Notice to:::Tberg@bayareametro.gov				
	EXPLANATION OF UTILITY TYPE (Date Submitted / Received Stamp by CPUC)  ELC = Electric GAS = Gas WATER = Water  PLC = Pipeline HEAT = Heat October 29, 2018				
Hilliam (H.E., VIII. office mounts limite commence were trained by different titles.	Advice Letter (AL) #: 9E-A  Subject of AL: 2019 Annual Energy Efficiency Program and Portfolio Budget Request for the San Francisco Bay, Area  Regional Energy Network (BayREN).  Keywords (choose from CPUC listing): Energy Efficiency; Compliance.  AL Type: Monthly Quarterly // Annual One-Time Other:  If AL submitted in compliance with a Commission order, indicate relevant Decision/Resolution #:  D.15-10-028; D.18-05-041				
	Does AL replace a withdrawn or rejected AL? If so, identify the prior AL: $_{ m N/A}$				
	boes At replace a will alaw to rejected At $\epsilon$ it so, identity the prior At. $N/A$				
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	Summarize differences between the AL and the prior withdrawn or rejected AL: N/A  Confidential treatment requested?  Yes No  If yes, specification of confidential information: Confidential information will be made available to appropriate parties who execute a nondisclosure agreement. Name and contact information to request nondisclosure agreement/ access to confidential information:  Resolution required? Yes No  Requested effective date: 11/29/18 No. of tariff sheets: 0  Estimated system annual revenue effect (%): N/A  Estimated system average rate effect (%): N/A  When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).				

# Protests and all other correspondence regarding this AL are due no later than 20 days after the date of this submittal, unless otherwise authorized by the Commission, and shall be sent to:

CPUC, Energy Division Attention: Tariff Unit 505 Van Ness Avenue San Francisco, CA 94102

Email: EDTariffUnit@cpuc.ca.gov

Nome: Gerald Labr

Title!: Assistant Director—Energy Programs, MTC

**Utility Name** 

Address: 375 Beal Street; 7th Floor

City: San Brancisco Stote: California

Telephone (xxx) xxx-xxxx: 415-820-7908

Facsimile (xxx) xxx-xxxx:

Email: ilahr@bayareametro.gov

Name:

Title:

Utility Name:

Address:

City:

State: Wyoming

Telephone (xxx) xxx-xxxx:

Facsimile (xxx) xxx-xxxx:

Email:

# ENERGY Advice Letter Keywords

Affiliate	Direct Access	Preliminary Statement
Agreements	Disconnect Service	Procurement
Agriculture	ECAC / Energy Cost Adjustment	Qualifying Facility
Avoided Cost	EOR / Enhanced Oil Recovery	Rebates
Balancing Account	Energy Charge	Refunds
Baseline	Energy Efficiency	Reliability
Bilingual	Establish Service	Re-MAT/Bio-MAT
Billings	Expand Service Area	Revenue Allocation
Bioenergy	Forms	Rule 21
Brokerage Fees	Franchise Fee / User Tax	Rules
CARE	G.O. 131-D	Section 851
CPUC Reimbursement Fee	GRC / General Rate Case	Self Generation
Capacity	Hazardous Waste	Service Area Map
Cogeneration	Increase Rates	Service Outage
Compliance	Interruptible Service	Solar
Conditions of Service	Interutility Transportation	Standby Service
Connection	LIEE / Low-Income Energy Efficiency	Storage
Conservation	LIRA / Low-Income Ratepayer Assistance	Street Lights
Consolidate Tariffs	Late Payment Charge	Surcharges
Contracts	Line Extensions	Tariffs
Core	Memorandum Account	Taxes
Credit	Metered Energy Efficiency	Text Changes
Curtailable Service	Metering	Transformer
Customer Charge	Mobile Home Parks	Transition Cost
Customer Owned Generation	Name Change	Transmission Lines
Decrease Rates	Non-Core	Transportation Electrification
Demand Charge	Non-firm Service Contracts	Transportation Rates
Demand Side Fund	Nuclear	Undergrounding
Demand Side Management	Oil Pipelines	Voltage Discount
Demand Side Response	PBR / Performance Based Ratemaking	Wind Power
Deposits	Portfolio	Withdrawal of Service
Depreciation	Power Lines	

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Includes DBE review for all federally-funded contracts.

Reviews all procurements and contracts from OPS, EPS, TSS, BATA, BAHA, MTC SAFE, and BAIFA funded work.

Reviews all procurements and contracts from Planning, PAA, LPA and ADS.

Reviews all procurements and contracts from ABAG for Estuary Partnership, Energy Program, Insurance Program, and Pinance Authority.

# FUNDING AND IMPLEMENTATION AGREEMENT FOR 2019 - BAYREN PROGRAM IMPLEMENTATION PLAN-

ASSOCIATION OF BAY AREA GOVERNMENTS AND CITY AND COUNTY OF SAN FRANCISCO

- A. Parties. The paties to this Agreement (Agreement) are the Association of Bay Area Governments (ABAG), whose address is 375 Beale Street, Suite 700, San Francisco, CA 94105, and the City and County of San Francisco, whose address is City and County of San Francisco, CA 94103.
- B. BayREN. The San Francisco Bay Area Regional Energy Network (BayREN) consists of ten. (10) public entities: Association of Bay Area Governments (ABAG), City and County of San Francisco (SF). Energy Council (StopWaste), County of Contra Costa (Contra Costa). County of Marin (Marin); County of Napa (Napa), County of San Mateo (San Mateo), County of Santa Clara (Santa Clara), County of Solano, (Solano), and Regional Climate Protection Authority ("RCPA"), on behalf of Sonoma County, (referenced collectively or generically as Members) that have entered into Restated and Revised Memorandum of Understanding with regards to the San Francisco Bay Area Regional Energy Network (MOU).
- C. CPUC Decision. On October 28, 2016 the California Public Utilities Commission (CPUC) issued D.15-10-028 (2016 Decision) approving, among other things, budget to fund implementation of activities through 2025. The budget was reaffirmed by the CPUC in D.18-05-041, issued on June 5, 2018. These Decision also directed Pacific Gas & Electric Company (PG&E) to enter into an annual contract with ABAG to provide funding for the activities identified in the existing and revised BayREN Program Implementation Plans (PIP).
- Di ABAG PG&E Funding Agreement: Effective January 1, 2017, ABAG, on behalf of BayREN, and PG&E entered into an agreement denominated under PG&E's nomenclature as Contract Work Authorization No. 2501322994 and Contract Work Authorization No. 2501322995, to Contract No. 4400007460, including Master Service Agreement (MSA) No. 4400007460 (collectively, 2017 Funding Agreement); Contract Work Authorization No.C6252, CO 6 provides BayREN funding through 2019.

#### TERMS AND CONDITIONS

I. Definitions.

- (a) 'Assigned 2019 Scope of Work (SOW)' means the tasks and requirements of the PIP that are initially assigned to the City and County of San Francisco in this Agreement as it may be modified from time to time under this Agreement.
- (b) '2019 Allocated Budget' means the funds available under the Agreement that are initially allocated to the City and County of San Francisco in this Agreement for Implementing the Assigned 2019 SOW as it may be modified from time to time under this Agreement.

(c) Incentives means the funds available to pay property owners or contractors upon successful completion of an approved energy efficiency project that meets the requirements of the PIP.

- (d) Revolving Loans in cans funds available as loans to property owners to be used to pay for approved energy efficiency retrofits, and then repaid to ABAG to make subsequent loans pursuant to the PIP.
- 2. PIP implementation: All Members, including the City and County of San Francisco, agree that the primary purpose of this Agreement is to successfully implement the PIP that the coordinated and collaborative process set forth in the Restated and Revised MOU; executed by all BayREN Members in 2015, is the agreed upon means for the Members to do so and that strategic management of the implementation is a critical part of the approach.
- (a) The Members, including the City and County of San Francisco, have agreed on the initial overall assignment of tasks and requirements of the PIP, and the allocation of the associated funding, to individual Members including the City and County of San Francisco, set forth in Attachment I for 2019.
- (b) The Members, including the City and County of San Francisco, have agreed on the initial assignment of tasks and requirements for individual programs in all the 2019 SOWs, and the allocation of the associated funding, to individual Members. The City and County of San Francisco has been assigned tasks, requirements and budgets for a particular program. An attachment describing the corresponding scope of work and budget is attached to this. Agreement and numbered as follows:
  - (1) Single Family Scope of Work and Budget, Attachment 1A for 2019
  - (2) Multifamily Scope of Work and Budget, Attachment 18 for 2019
  - (3) Codes and Standards Scope of Work and Budget, Attachment IC for 2019
  - (4) Commercial Scope of Work and Budget, Attachment ID for 2019
  - (5) Water Bill Savings Program Scope of Work and Budget. Attachment 1E for 2019
  - (6) Green Labeling Program Scope of Work and Budget, Attachment 1F for 2019
- (c) The maximum hourly rates for each labor category for the City and County of San Francisco's employees performing under this Agreement are set forth in Attachment 2 for 2019. The City and County of San Francisco may invoice for the actual employee hours expended in performing under this Agreement at an hourly rate up to the maximum rate.
- (d) The City and County of San Francisco acknowledges that:

- (1) Other Members, except ABAG, are third party beneficiaries of this Agreement;
- (2) ABAG and each of the other Members will enter into an agreement comparable to this Agreement whereby each other Member, including ABAG, will accept the initial assignment of tasks and requirements of the 2019 PIP and the associated allocation of funding set forth in Attachment 1 for 2019 and 2019 and
- (e) The City and County of San Francisco is a signatory to the Restated and Revised MOU. The City and County of San Francisco intends to participate in the activities conducted under the Restated and Revised MOU throughout the term of this Agreement.

3. Maximum Budget and Allocated Budget.

- (a) The Initial Allocated 2019 Budget for the City and County of San Francisco is Two Million; Nine-Hundred Forty-Eight Thousand, Three Hundred Thirty-One Dollars (\$2,948,331) as described in Attachment 1.
- (b) Draws on Incentives, Guarantees and Revolving Loans funds are not included in the Maximum or Allocated Budget.

4. Reimbursement Process.

- (a) Pursuant to contract for services dated May 30, 2017, the Metropolitan Transportation Commission (MTC), will reimburse the City and County of San Francisco based on time expended in implementing the 2019 SOWs. The amount of the reimbursement will be based on the invoices submitted by the City and County of San Francisco. The City and County of San Francisco will not charge, and MTC will not pay, any additional sums for work performed, except for allowed reimbursable costs.
- (b) The City and County of San Francisco will be paid in arrears, based upon invoices submitted by County of San Francisco to MTC. The City and County of San Francisco will submit invoices for payment no more frequently than once monthly. MTC will promptly review the City and County of San Francisco's invoices, approve or disapprove them for payment and submit approved invoices to PG&E. MTC will pay the City and County of San Francisco within ten (10) working days after receipt of payment from PG&E. Each invoice shall specify the hourly rates for the individuals, or categories of individuals, as the case may be, that are listed in Attachment 2 for 2019. The invoice will separately itemize reimbursable costs and other allowable charges with supporting documentation attached.
- 5. Assurances and Warranties Regarding Implementation of PIP. The City and County of San Prancisco acknowledges that under the 2019 Funding Agreement, ABAG provided PG&E certain assurances and warranties regarding implementation of the PIP and that such assurance and warranties rest upon the actions of individual Members' implementation of their assigned tasks and requirements. The City and County of San Prancisco acknowledges that ABAG entered into the 2019 Funding Agreement and this Agreement and that each of the Members entered into an agreement comparable to this Agreement in reliance on the City and County of San Francisco's representations and warranties.

- (a) The City and County of San Francisco represents and warrants to each of the other Members, including ABAG, that it will implement, or cause to be implemented, the 2019 SOWs in conformity with the Decision and all applicable Federal, State (CPUC), and local statutes, regulations and administrative decisions, rulings and guidelines.
- (b) The City and County of San Francisco warrants to each of the other Members, including ABAG; that it will implement, or cause to be implemented, the 2019 SOW with the degree of skill and care that is required by current, good and sound professional procedures and practices, and in conformance with generally accepted professional standards prevailing at the time the 2019 SOW is implemented so as to ensure that the services performed are correct and appropriate for the purposes contemplated in this Agreement and related specifications.
- 6. Infringement Protection. The City and County of San Francisco represents to each of the other Members, including ABAG, that the material to be prepared under this Agreement will not infringe upon the copyright, patent or license, or otherwise violate the proprietary rights, including trade secret rights, of any person or entity. The City and County of San Francisco agrees to indemnify and hold each of the other Members, the CPUC and PG&E (for the purposes of this section only, Indemnitees) harmless from and against any and all liabilities, costs and damages arising out of any such infringement, and from any suit, demand or claim made against Indemnitees alleging any such infringement or violation. In addition to the foregoing, if there is such a suit, demand or claim, the City and County of San Francisco agrees, as soon as possible, to either procure for the affected Indemnitee(s) the right to continue using the material, replace the material with non-infringing material or modify it so it becomes noninfringing, provided, however that the replaced or modified material shall be equal to that contracted for hereunder and satisfactory to the affected Indemnitee(s). The City and County of San Francisco further agrees to pay any judgment or reasonable settlement offer resulting from a suit, demand or claim.
- 7. Indemnification, All Members, including the City and County of San Francisco, acknowledge that under the 2019 Funding Agreement ABAG has agreed, on behalf of the Members, to Indemnify, hold harmless and defend the CPUC and PG&E. In recognition of this obligation, the City and County of San Francisco shall indemnify, hold harmless and defend ABAG, the CPUC, PG&E and their respective members, affiliates, subsidiaries, parent company, commissioners, officers, managers, directors, agents, and employees (for the purposes of this section only, Indemnitees), from and against all claims, demands, losses, damages, costs, expenses, and liability (legal, contractual, or otherwise), whileharise from or are in any way connected with any;
- (a) injury to or death of persons
- (b) injury to property;
- (c) violation of local, state, or federal common law, statute or regulation, including but not limited to environmental laws or regulations;
- (d) strict liability imposed by any law or regulation;

so long as such injury, violation, or strict liability (as set forth in subsections (a) - (d) above) arises from the City and County of San Prancisco's performance of, or failure to perform, this Agreement, however caused excepting only such loss, damage, cost, expense, liability, strict liability, or violation of law or regulation that is caused by the sole negligence or willful misconduct of the Indemnitees.

- 8. Termination. This Agreement will terminate effective December 31, 2019 or the date the 2019 Funding Agreement is terminated, whichever occurs earlier.
- 9. Records/Audit: The City and County of San Francisco shall keep complete and accurate books and records of all financial aspects of its relationship with MTC in accordance with generally-accepted accounting principles. The City and County of San Francisco shall permit authorized representatives of MTC and/or PG&E or the CPUC to inspect, copy, and audit all data and records of the City and County of San Francisco relating to its performance of services under this Agreement. The City and County of San Francisco shall maintain all such data and records in accordance with the requirement of the 2019 Funding Agreement.
- 10. Headings. The descriptive headings used in this Agreement are for convenience only and shall not control or affect the meaning or construction of any of its provisions.
- 11. Governing Law. This Agreement will be construed and enforced in accordance with the laws of the State of California.
- 12. <u>Severability</u>. Should any part of this Agreement be declared unconstitutional, invalid, or beyond the authority of either party to enter into or carry out, such decision shall not affect the validity of the remainder of this Agreement, which shall continue in full force and effect; provided that, the remainder of this Agreement can, absent the excised portion, be reasonably interpreted to give effect to the intentions of the parties.

IN WITNESS WHEREOF, the City and County of San Francisco has duly executed this Agreement; or caused it to be duly executed, and ABAG has duly executed this Agreement, or caused it to be duly executed.

City and County of San Francisco

Dated:

Deborali Raphael

Director, San Francisco Department of
Environment

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Clerk of the Board of Supervisors			
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Approved as to form and legality:	·		
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Deputy County Counsel			
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Dated: Uf (O I U)	•		
	•	Steve Heminger Metropolitan Transportation Cor	nmission
		Executive Director	
		Acting pursuant to the Contract	or Services
	,	lated May 30, 2017.	
Approved as to form:			
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General Counsel			
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Page 6 of 6

Funding and implementation Agreement for 2019 City and County of San Francisco

#### ATTACHMENT IA for 2019

#### City and County of San Francisco

## Scope of Work

#### BayREN Single Family Program

Budget NTE: \$89,204

The BayREN Counties will provide services in their jurisdictions to support the BayREN Single Family program. These tasks include local outreach to single family residents (homeowners and renters); contractor recruitment, support and engagement and coordination with the BayREN Single Family Committee and Coordinating Circle. The total budget for the City and County of San Francisco is \$89,204. Tasks below are based on local budget and capacity to deliver services.

## L. Admin - Cross Link for City and County of San Francisco.

Purpose: Representing City and County of San Francisco context within BayREN Role Accountabilities:

- Removing constraints within BayREN that limit its ability to collaborate and deliver effective programs.
- Seeking to understand Tensions conveyed by any of the City and County of San Francisco's stakeholders applicable to the BayREN programs, and discerning those appropriate to channel into Coordinating Circle for processing
- Sharing the perspective of the City and County of San Francisco stakeholders to the Coordinating Circle
- Communicating with City and County of San Francisco's stakeholders about BayREN programs and activities
- Sharing progress, performance, and strategic data and information with the Coordinating Circle
- Coordinating with local Energy Watch/Local Government Partnership and other City and County of San Francisco programs
- Establishing that a member has been selected by its County to act on its behalf
- Ensuring that the member has expertise and experience in energy-related project management and implementation.
- Ensuring invoices and reporting are submitted to Program Administrator in a timely manner
- Developing and reviewing program performance, and program and pilot recommendations
- Reviewing and authorizing program changes
- Coordinating with other Regional Energy Networks, e.g., program implementation tactics, program design, program performance, mutual objective-building, etc.

 Implementing BayREN communication strategies in the City and County of San Francisco

# 2. Marketing & Outreach - Single Family Local Outreach Purpose: Support the Single Family program at the County level Role Accountabilities:

- Providing program support and information to potential and participating contractors active within the County
- Establishing five (5) partnership with a local organization to promote the Program
- Conduct two (2) direct mail campaigns and obtain one (1) mortgage, refinance, or similar mailing list
- . Conduct one (1) media buy for social, digital, and/or out of home ads
- Organize two (2) homeowner workshops to promote Home Upgrade and Participating Contractors.
- Coordinate two (2) presentations to homeowner community groups, organizations, and/or employers
- Creating and/or maintaining stakeholder partnerships such as local cities.
   Energy Watch programs, CleanPowerSF and Community Based
   Organizations to assist in outreach of the Program.
- · Printing of program collateral
- Collaborating with Home Energy Advisor by sending four (4) emails for lead generation
- Hosting program information on local website(s) and County social media platforms
- Providing Program Lead with local information, confacts and data that support and promote the Program
- Providing Program Lead information on all planned Program related events in the County
- Reporting on best and highest performing activities to the Single Family Coordinating Circle
- Reporting on any unsuccessful strategies to the Coordinating Circle
- Analyzing local Program performance to identify gaps and recommendations to Program Lead
- Coordinating with Rising Sun to identify not yet-reached communities in the County
- Sharing with the Single Family Coordinating Circle Program marketing material developed by the County
- Aid in the development of updated marketing strategies, messaging, creative,
   and collateral as needed for the new 2019 program design
- Ensure audience cultural and language needs are accommodated with appropriate translation and messaging:

# Budget

Task	Budget
Administration	\$14,000,00
Implementation	\$0.00
Marketing & Outreach	\$75,204
Total	\$89,204

# ATTACHMENT 1B for 2019

# City and County of San Francisco

#### Scope of Work

# BayREN Multifamily Program

Budget NTE: \$377,000

Each of the BayREN participating members, including the City and County of San Francisco, will provide services in their jurisdictions to support the BayREN Multifamily program. These tasks include local outreach to recruit property owners, support to the consultant providing technical assistance services to local property owners, assistance with recruiting contractors for trainings, and coordination with the BayREN Multifamily Committee and Coordinating Circle. The total budget for the City and County of San Francisco is \$377,000.

## 1. Admin - Cross Link for City and County of San Francisco

Purpose: Representing the City and County of San Francisco context within BayREN

#### Role Accountabilities:

- Removing constraints within BayREN that limit its ability to collaborate and deliver effective programs
- Seeking to understand Tensions conveyed by any of City and County of San Francisco's stakeholders applicable to the BayREN programs, and discerning those appropriate to channel into Coordinating Circle for processing
- Sharing the perspective of City and County of San Francisco's stakeholders
- Communicating with City and County of San Francisco's stakeholders about BayREN programs and activities
- Sharing progress, performance, and strategic data and information with the Coordinating Circle
- Coordinating with local Energy Watch/Local Government Partnership and officer City and County of San Francisco programs.
- · Establishing that member has been selected by its county to act on its behalf
- Ensuring that member has expertise and experience in energy-related project management and implementation.
- Ensuring invoices and reporting are submitted to Program Administrator in a timely manner
- Developing and reviewing program performance, and program and pilot recommendations
- Reviewing and authorizing program changes

- Coordinating with other Regional Energy Networks, e.g., program implementation tactics, program design, program performance, inutual objective-building, etc.
- Implementing BayREN communication strategies in the City and County of San Francisco

#### 2. Implementation - Multifamily Technical Assistance

Purpose: Provide excellent customer service and value to property owners while maximizing energy savings from projects:

#### Role Accountabilities:

- Maintaining consistency of service between technical assistance providers
- · Ensuring that program meets projected energy savings targets
- Advising and assisting property owners in developing eligible scopes of work
- Referring property owners to other programs
- · Developing and refining program software tools
- Conducting onsite surveys of potential projects and quality assurance on completed projects
- Delivering training for multifamily confractors.

#### 3. Marketing and Outreach - Local Outreach

Purpose: Support the multifamily program at the county level Role Accountabilities:

- · Recruiting property owners and contractors through local activities and events
- Ensuring outreach is done in all jurisdictions within the meniber county (towns, cities, unincorporated areas, etc.)
- Planning and organization of two local outreach activities
- Coordinating with cities within the County, Energy Watch/Local Government Partnership, and other local programs
- Hosting program information on local website(s) and suggesting local media and social media outlets for program content
- Providing Program Lead with local information, contacts and data that support and promote the Program
- Gathering information needed for assembling workable multifamily property owner contact lists
- Reporting on best and highest performing activities to the Multifamily Circle
- Coordinating with local jurisdictions on ways to recognize past multifamily program participants.
- Supporting lead link with market analysis studies by providing outreach data requested
- Working with local jurisdictions to distribute case study content through available media (press releases, websites, newsletters, social media, etc.)

#### Budget

Task	Budget
Administration	\$12,000.00
Implementation	\$350,000.00
Marketing & Outreach	\$15,000.00
Total	\$377,000.00

#### ATTACHMENT 1C for 2019

#### City and County of San Francisco

#### Scope of Work

#### BayREN Codes & Standards Program

Budget NTE: \$95,500

The BayREN Counties will provide services in their jurisdictions to support the BayREN Codes & Standards Program. These tasks include: coordination with the BayREN Codes and Standards Committee and Coordinating Circle; promotion of trainings, over the counter and electronic compliance improvement tools, regional forums, and reach code and zero net energy (ZNE) policy resources; and engagement with the Bay Area chapters of the International Code Council (ICC), City and County Board of Supervisors and other key stakeholders (local contractor and building professional groups/associations, property owner and building operator associations, etc.). The total budget for San Francisco is \$95,500. Tasks below are assigned based on local budget and capacity to deliver services.

### 1. Admin - Cross Link for City and County of San Trancisco

Purposer Representing City and County of San Francisco context within BayREN Role Accountabilities:

- Removing constraints within BayREN that limit its ability to collaborate and deliver effective programs
- Seeking to understand Tensions conveyed by any of City and County of San Francisco stakeholders applicable to the BayREN programs, and discerning those appropriate to channel into Coordinating Circle for processing
- Sharing the perspective of City and County of San Francisco's stakeholders
- Communicating with City and County of San Francisco's stakeholders about BayREN programs and activities
- Sharing progress, performance, and strategic data and information with the Coordinating Circle
- Coordinating with local Energy Watch/Local Government Partnership and other City and County of San Francisco programs.
- Establishing that a member has been selected by a county to act on its behalf
- Ensuring that member has expertise and experience in energy-related project management and implementation
- Ensuring invoices and reporting are submitted to Program Administrator in a timely manner

- Developing and reviewing program performance, and program and pilot recommendations.
- · Reviewing and authorizing program changes
- Implementing BayRBN communication strategies in City and County of San Francisco.
- Attending and participating in BayREN Coordinating Circle and Committee calls and meetings

#### 2. Implementation - Codes Program Participation & Local Outreach

Purpose: Support the Codes & Standards program at the county level

#### Role Accountabilities:

- Communicating regularly with City and County of San Francisco stakeholders, including local Energy Watch/Local Government Partnerships, about BayREN Codes projects and activities
- Sharing the perspective of City and County of San Francisco stakeholders
  with the Codes and Standards Committee and Program Lead as appropriate
- Seeking to understand tensions conveyed by any of City and County of San Francisco stakeholders applicable to the BayREN Codes Program, and discerning those appropriate to channel into the Codes & Standards Committee or the Coordinating Circle for processing
- Promoting quarterly Forum events, including providing email, phone and other marketing assistance
- Recruiting local governments to host BayREN standard or specialty trainings, helping coordinate the provision of trainings within the County, and providing suggestions for and input on training topics
- Supporting and advocating for reach codes and other energy policies at the local government level
- Providing local coordination and assistance in follow up for jurisdictions that may benefit from or be interested in BayREN compliance improvement tools
- Providing Program Lead with local information, contacts and data that support and promote the Program
- Analyzing local program performance to identify gaps and recommendations to Program Lead:
- Sharing information with the Codes and Standards Committee regularly, including providing at least one presentation per year to the Committee on a best practice; a county project, information from a conference or workshop, or another codes-related topic

#### Implementation - Reach Code & Policy Working Group

Purpose: Assist with exploring, identifying, and supporting activities to encourage and enable adoption and implementation of local government reach codes and other local, regional and state energy policies.

#### Role Accountabilities:

- · Participating in Reach Code & Policy Working Group calls and meetings
- Providing support for local governments within City and County of San Francisco interested in adopting a reach code or energy policy
- Sharing information with the Working Group regarding local interests and activities related to reach codes and energy policies
- Contributing to the design of BayREN activities to support reach codes and energy policies

#### Implementation—Technical Advisor

Purpose: Provide technical advice to BayREN county representatives and the Program Lead, particularly related to reach codes and code development

#### Role Accountabilities:

- Provide technical information, resources, and advices to county representatives and the Program Lead as needed
- · Share technical perspective and advice on committee calls as appropriate
- · Work to increase technical knowledge

#### Implementation - Lead for Zero Energy Performance Index (ZEPI) Tool

Purpose: Support development of and expanded use of the Zero Energy Performance Index (zEPI) Tool.

#### Role Accountabilities:

- Providing review and oversight of Consultant work as necessary to accomplish other accountabilities. Budget includes approximately \$42,000 for consultant assistance.
- Updating estimates for prototypes under the 2019 California Bullding.
   Code and determining other updates that may be useful.
- Reviewing work products to date with the BayREN Reach Code committee. Existing products include: zBPI scoring methodology expansion to municipal buildings; zEPI targets for Title 24 2016 in Climate Zones 2, 3, 4, and 12; an online tool for setting energy performance targets, gauging rough feasibility of site ZNE, and verifying whether performance goals were met; research report and literature review; example reach code language, and checklists for review at design and operational reporting stages. Each of these components are prototypes sufficient for demonstration and refinement.

- Revising example reach code language based on peer input from BayREN jurisdiction staff, to provide a regional policy template.
- Identifying necessary improvements to the BayREN Energy Performance Target setting and Performance Verification tool, and implementing such improvements as both mutually agreed upon and consistent with the project budget.
- Leading/facilitating two presentations on zEPI and outcome-based reach codes, at least one of which will be aimed at Bay Area local government staff.
- Requesting technical feedback from appropriate experts and agencies; and addressing any issues identified.
- Refining and testing zEPI for the purpose of outcome based energy codes.

#### Budget

Task	Budget
Administration	\$2,500.00
Implementation	\$93,000.00
Marketing & Outreach	\$0.00
Total	\$95,500.00

#### ATTACHMENT 1D for 2019

# City and County of San Francisco

## Scope of Work

# BayREN Commercial Program

Budget NTE: \$2,374,127

City and County of San Francisco is the regional lead for the Commercial subprogram, and as such, funds have been allocated for roles that are required of a program lead. Each of the BayREN participating members, including the City and County of San Francisco, will provide services in their jurisdictions to support the Commercial subprogram. City and County of San Francisco's primary tasks include administration, implementation and marketing for Pay-for-Performance (PAP), Microloan and Commercial Properties Assessed Clean Energy (C-PACE). Additional tasks include outreach and marketing to targeted, regional small and medium business (SMB) and continuing coordination with the BayREN Commercial Committee and Coordinating Circle: The total budget for the City and County of San Francisco is \$2,374,128, which includes \$950,640 for incentives.

#### 1. Admin - Cross Link for City and County of San Francisco

Purpose: Representing City and County of San Francisco context within BayREN Role Accountabilities:

- Removing constraints within BayREN that limit its ability to collaborate and deliver effective programs:
- Seeking to understand Tensions conveyed by any of the City and County of San Francisco's stakeholders applicable to the BayREN programs, and discerning those appropriate to channel into Coordinating Circle for processing
- Sharing the perspective of City and County of San Francisco's stakeholders
- Communicating with City and County of San Francisco's stakeholders about BayREN programs and activities
- Sharing progress, performance, and strategic data and information with the Coordinating Circle
- Coordinating with local Energy Watch/Local Government Partnership and other programs.
- Establishing that member has been selected by its county to act on its behalf
- Ensuring that member has expertise and experience in energy-related project management and implementation
- Ensuring invoices and reporting are submitted to Program Administrator in a timely manner
- Developing and reviewing program performance, and program and pilot recommendations
- Reviewing and authorizing program changes

- Coordinating with other Regional Energy Networks, e.g., program implementation tactics, program design, program performance, mutual objective building, etc.
- Implementing BayREN communication strategies in the City and County of San Francisco

#### 2. Admin - Regulatory and Policy Support

Purpose: Provide regulatory and policy support to BayREN Role Accountabilities:

- Monitoring key CPUC proceedings and legislation that could affect BayREN and highlighting key decisions or opportunities for engagement
- Cultivating relationships with key stakeholders, such as CPUC staff and Commissioner aides and advisors, elected officials, to increase awareness of BayREN
- Assisting Program Administrator in shaping regulatory/legislative strategy and agenda
- Identifying potential funding sources for BayREN outside of traditional ratepayer sources

## 3. Implementation-Lead Links

Purpose: Optimize regional Commercial program performance Role Accountabilities:

- Ensuring Commercial Circle members receive finely and useful updates regarding Program budget and administrative issues, program performance, challenges, successes:
- Allocating Commercial resources incorporating the input from circle members
- Assigning Commercial roles, monitoring fit for role, providing feedback to enhance fit and removing Partners from foles incorporating the input from circle members
- Assessing and defining priorities and strategies for the Commercial Circle incorporating the input from circle members
- Defining and assigning metrics for the Commercial Circle

# 4. Implementation - Coordination

Purpose: Provide smooth day-to-day program implementation Role Accountabilities:

- Hosting Commercial Circle meetings and participating in BayREN working groups
- Pre-screening of properties and desktop review of rebate requests
- Integrating applicable financing programs with BayREN Commercial technical assistance.

- Coordinating with BayREN members, ABAG, PG&E, CPUC, and EM&V consultants
- Reporting on program progress to BayREN members and supporting Program Administrator in responding to data requests
- · Adapting and adjusting program as needed
- Monitoring regulatory activities that impact program and representing Program in relevant stakeholder groups, committees and advisory groups
- Subcontracting and/or managing technical sub-consultant teams as described below:
  - 1. Pay-for-Performance (P4P) project aggregators ("Allies") providing services to deliver projects and accept P4P incentives.
  - 2. Third-party implementer ("Building Performance Advisor," or BPA) who provides technical assistance services to small and medium businesses (SMBs) and tracking program and savings
  - 3. Third-party measurement and verification (M&V) contractor providing a M&V platform to calculate savings and Ally incentive payments
  - 4. Lender and servicing entity providing funding and marketing and technical support for the Micrologn programs.
  - 5. Technical assistance provider supporting contractors developing projects suitable for C-PACE linancing.

# 5. Implementation - Technical Assistance

**Purpose:** Provide customer service and value to small and medium businesses, commercial property owners and managers, installation contractors and other partners, while maximizing energy savings from projects.

#### Role Accountabilities:

- Maintaining consistency and high levels of service from technical assistance providers (Allies, BPA, C-PACE consultant & Microloan lender)
- Ensuring that program meets projected energy savings targets
- \* Advising and assisting eligible customers in developing scopes of work
- · Facilitating customer referrals to other programs
- Procuring and/or developing, and refining program software tools.
- Conducting onsite surveys of potential projects and quality assurance on completed projects

# 6. Implementation - Accounting

Purposes Proper handling of utility ratepayer funds Role Accountabilities:

- Monitoring and forecasting budget, expenditures, and receivables
- Conducting double-dipping prevention check
- Adhering to regulatory requirements and guidelines
- Processing property owner rebates and subconsultant involces

Submitting monthly invoices and reporting

## 7. Marketing and Outreach - Local Outreach

Purpose: Support the Commercial program at the county level Role Accountabilities:

- Recrulting eligible customers through local activities and events.
- Ensuring outreach is done in all jurisdictions within the member county (towns, cities, unincorporated areas, etc.):
- Planning and organizing of local outreach activities across BayREN counties
- Coordinating with cities within the County, Energy Watch/Local Government Partnerships, and other local programs
- Hosting program information on local website(s) and suggesting local media and social media outlets for program content.
- Requesting local information, contacts and data from BayREN Commercial Circle members that support and promote the Program
- Gathering information needed for assembling workable Commercial customer.
- Reporting on best and highest performing activities to the Commercial Circle
- Coordinating with local jurisdictions on ways to recognize past Commercial program participants.
- Requesting outreach data for market analysis studies
- Working with local jurisdictions to distribute case study content through available media (press releases, websites, newsletters, social media, etc.)

# 8. Marketing and Outreach - Regional Outreach

Purpose: Coordinate the Commercial program outreach at the regional level Role Accountabilities:

- Developing outreach plan and collateral with input of Commercial Circle, conducting regional outreach, and coordinating local outreach
- Coordinating county-level outreach scopes and activities to maximize regional effectiveness
- Procuring regional outreach and marketing resources including printed collateral, carned media, and paid web media

## 9. Incentives

The City and County of San Francisco has passed the Pacific Gas & Electric Company's (PG&E) Data Security clearance. The City and County of San Francisco will contract with a qualified third-party, who has also cleared PG&E's Data Security clearance, to process and pay incentive payments to contracted Allies and Participants. The total incentive budget is also set forth in Attachment 1 to this Funding and Implementation Agreement. City and County of San Francisco and its contractor will operate the incentive payment process in compliance with all applicable regulations, rules and protocols, including, the

requirements of the Funding Agreement (PG&B's MSA No. 4400007460 and associated document denominated as CWA No. 2501322994) as follows:

- 1. Section 10, Confidentiality of Exhibit A, Contingent Provisions
- 2. Exhibit 5, Confidentiality and Data Security
- 3. Exhibit 6, Non-Disclosure and Use of Information Agreement
- 4. Sections 2.3 (Project Permit Certification), 3.8.3 (Invoices for Incentives) and 3.8.6 (Advance Payment of Incentives) of Exhibit B, Specific Conditions, and
- 5. The double dipping procedures developed pursuant to section 2.2.2 of Exhibit B. Specific Conditions, attached as Exhibit 1D-1 (below)

City and County of San Francisco will submit a sample of all program documents to PG&E Program Manager with project permit certification language for PG&E's approval.

City and County of San Francisco will comply with all provisions of Attachment 2 to the Funding and Implementation Agreement, including any amendments or revisions.

#### Budget

Task	Budget
Administration	\$12,000.00
Implementation	\$1,235,980.00
Marketing & Outreach	\$175,507.00
Incentives:	\$950,640.00
Total.	\$2,374,127.00

#### Exhibit 1D-1

## PG&E - BayREN Commercial Programs: Double-Dipping Prevention Procedures

It is a priority of PG&E and the BayREN P4P program that participants in ratepayer funded programs do not receive multiple ratepayer incentives for the same installed measure(s). The PG&E and BayREN P4P programs will use the following procedures to prevent "double-dipping" 1) between the PG&E and BayREN programs, and 2) from other PG&E programs offered to commercial SMB properties in 2019-20.

## Summary of Procedures

Actions for preventing double-dipping in 2019-2020 program cycle:

 Inform program leads, Allies, and participants that they may not apply to multiple programs for the same measures and add explicit language to the terms and conditions of the program participation agreements.

2. Using participant's utility SAID and Account Numbers, and through PG&B's Energy Insight, conduct a double-dip check at the time of rebate reservation.

3. Per the P4P Program Manual, all Participants and Allies must complete and sign a "Declaration of Deemed and Calculated Rebates." for each project. This form clearly identifies measure descriptions, their installation locations, and resulting incentive amounts and energy savings from cancurrent or ex-post non-BayREN P4P Program participation.

4: Explore automated processes for future cross-check

In 2019-20, as the BayREN Commercial Program ramps up implementation, BayREN and PG&E program managers will hold recurring calls to review BayREN P4P progress as well as to identify projects that are leveraging PG&E incentives to ensure that the customer is not paid twice for the savings resulting from a measure.

#### ATTACHMENT 1E for 2019

#### City and County of San Francisco

#### Scope of Work

# BayREN Water Bill Sayings Program

Budget NTE: \$11,500

The City and County of San Francisco will provide local partner utility support for implementation and marketing in its capacity for Water Bill Savings Program, The City and County of San Francisco will provide administrative tasks in its capacity as a Cross Link and for participation in the Coordinating Circle. The total budget is \$11,500.

#### 1. Admin - Cross Link for City and County of San Francisco

Purposes: Representing the City and County of San Francisco context within BayREN

#### Role Accountabilities:

- Removing constraints within BayREN that limit its ability to collaborate and deliver effective programs
- Seeking to understand Tensions conveyed by any of the City and County of San Francisco's stakeholders applicable to the BayREN programs, and discerning those appropriate to channel into Goordinating Circle for processing.
- Sharing the perspective of the City and County of San Francisco's stakeholders
- Communicating with the City and County of San Francisco's stakeholders about BayREN programs and activities
- Sharing progress, performance, and strategic data and information with the Coordinating Chicle
- Coordinating with local Energy Watch/Local Government Partnership and other City and County of San Francisco programs;
- · Establishing that member has been selected by its County act on its behalf
- Ensuring that member has expertise and experience in energy-related project management and implementation
- Ensuring invoices and reporting are submitted to Program Administrator in a timely manuer
- Developing and reviewing program performance, and program and pilot recommendations
- Reviewing and authorizing program changes

- Coordinating with other Regional Energy Networks, e.g., program implementation tactics, program design, program performance, mutual objective-building, etc.
- Implementing BayREN communication strategies in the City and County of San Francisco

# 2. Implementation - Water Bill Sayings Program PAYS Local Outreach

Purpose: Support the Water Bill Savings Program (WBSP) program at the City and County of San Francisco level

# Role Accountabilities:

- Participating in WBSP planning and meetings as requested by Lead; monthly meetings anticipated; one per partner utility plus one WBSP Program Circle
- Serving as a local contact for WBSP participating utilities in the City and County of San Francisco for questions about BayREN
- Providing Program Lead with local information, contacts and data that support and promote the Program.
- Analyzing focal program performance to identify gaps and recommendations to Program Lead.
- Supporting WBSP partner utilities in outreach to elected officials, staff, customers, the general public, and other stakeholders

# Budget

Task	Budget
Administration	\$1,500.00
Implementation	\$10,000.00
Marketing & Outreach	\$0,00
Total	\$11,500.00

#### ATTACHMENT IF for 2019

#### City and County of San Francisco

# Scope of Work

#### BayREN Green Labeling Program

Budget NTE: \$1,000

Green labeling is a critical component of a comprehensive approach to achieve greater energy efficiency in California's homes, the objective of AB 758. Green labeling enables market recognition of the value of a green home during real estate transactions and complements other market transformation strategies such as incentives and financing. The total budget for the Green Labeling Program for the City and County of San Francisco is \$1,000.

#### 1. Admin - Cross Link for the City and County of San Francisco

Purpose: Representing City and County of San Francisco context within BayREN Role Accountabilities:

- Removing constraints within BayREN that limit its ability to collaborate and deliver effective programs
- Seeking to understand Tensions conveyed by any of the City and County of San Francisco's stakeholders applicable to the BayREN programs, and discerning those appropriate to channel into Coordinating Circle for processing
- Sharing the perspective of the City and County of San Francisco's stakeholders
- Communicating with the City and County of San Francisco's stakeholders about BayREN programs and activities
- Sharing progress, performance, and strategic data and information with the Coordinating Circle
- Coordinating with local Energy Watch/Local Government Partnership and other City and County of San Francisco programs.
- Establishing that member has been selected by its County to act on its behalf
- Ensuring that member has expertise and experience in energy-related project management and implementation
- Ensuring invoices and reporting are submitted to Program Administrator in a timely manner
- Developing and reviewing program performance, and program and pilot recommendations
- Reviewing and authorizing program changes.
- Coordinating with other Regional Energy Networks, e.g., program implementation factics, program design, program performance, mutual objective-building, etc.

 Implementing BayREN communication strategies in the City and County of San Francisco

# Budget

Task	Budget
Administration	\$1,000,00
Implementation	\$0.00
Marketing & Outreach	\$0.00
Total	\$1,000.00

# ATTACHMENT 2 for 2019

# City and County of San Francisco

i de la		Fis	cal Year 2018-2019	Fisc	al Year 2019-2020
Class	Job Title		FTE Hourly Rate	<del>-111111</del>	FTE Hourly Rate
0962_C	Department Head II	\$	234,63	\$	242,58
0952_S	Deputy Director II:	\$	190.89	437	197.83
5644_C	Principal Environmental Specialist	59	154.49	\$	160.74
5642_C	Senior Environmental Specialist	\$	141.91	\$	147,64
5640 C	Environmental Specialist	\$	129.05	\$	184.21
5638_C	Environmental Assistant	69	115.07	\$	119.65
1094_C	IT Operations Support Administrator IV	\$	145.22	\$	151.52
1823_C	Senior Administrative Analyst	\$	141.46	600	147.17
1543_C	Secretary, Commission on the Environment	\$	141.00	S	146:69
1822_C	Administrative Analyst	\$	128.22	\$	137.80
1222_C	Senior Payroll And Personnel Clerk	\$	117.84	\$	104,32
1632_C	Senior Account Clerk	\$	110.01	\$	122.52

TO:	Angela Calvillo, Clerk of the Board of Supervisors			
FROM:	The Department of the Environment			
DATE:	January 29, 2019			
SUBJECT:	Accept and Expend Resolution State Grant			
GRANT TITLE:	2019 ABAG Award for SF BayREN Implementation			
Attached please fin	d the original and 4 copies of each of the following:			
X Proposed gran	nt resolution; original signed by Department, Mayor, Controller			
X Grant informat	ion form, including disability checklist			
X Grant budget				
Grant applicat	ion			
X Grant award le	etter from funding agency			
Other (Explain)				
Special Timeline I	Requirements:			
Departmental rep	resentative to receive a copy of the adopted resolution:			
Name: Lloyd Arceg	ga, Administrative Analyst Phone: 415-355-3716			
Interoffice Mail Add	lress:			
Certified Copy Rec	uired: Yes No X			
	have the seal of the City/County affixed and are occasionally required by nost cases, ordinary copies without the seal are sufficient).			

# Office of the Mayor san francisco



### LONDON N. BREED MAYOR

TO:

Angela Calvillo, Clerk of the Board of Supervisors

FROM:

Kanishka Karunaratne Cheng

RE:

Accept and Expend Grant - Association of Bay Area Governments - Bay

Area Regional Network - Energy Efficiency Program Implementation -

\$2,948,331

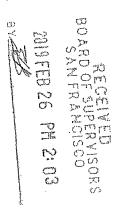
DATE:

February 26, 2019

Resolution authorizing the Department of the Environment to retroactively accept and expend grant funds from the Association of Bay Area Governments (ABAG) in the amount of \$2,948,331 to perform energy efficiency program implementation, as part of a Bay Area Regional Energy Network (BayREN) program, an energy efficiency program for the term from January 01, 2019 to December 31, 2019.

Please note that Supervisor Brown is a co-sponsor of this legislation.

Should you have any questions, please contact Kanishka Karunaratne Cheng at 415-554-6696.



# FORM SFEC-126: NOTIFICATION OF CONTRACT APPROVAL (S.F. Campaign and Governmental Conduct Code § 1.126)

City Elective Officer Information (Please print clearly.)		
Name of City elective officer(s):	City elective office(s) held	
SF Board of Supervisors	Members, SF Board of	Supervisors
· · · · · · · · · · · · · · · · · · ·		
Contractor Information (Please print clearly.)		
Name of contractor: Arup North America, Ltd.	,	
Please list the names of (1) members of the contractor's board of financial officer and chief operating officer; (3) any person who hany subcontractor listed in the bid or contract; and (5) any politic additional pages as necessary.	s an ownership of 20 percent	or more in the contractor; (4)
See Attachment		•
See Attachment		
0 4 4 4 11		A CONTRACTOR OF THE CONTRACTOR
Contractor address: 560 Mission Street, Suite 700		
San Francisco, CA 94105		
		·
Date that contract was approved:	Amount of contract: \$1,500,000	
Describe the nature of the contract that was approved: Energy Efficiency Consulting		
Comments:		
L	na-viewa a san	•
This contract was approved by (check applicable):		
the City elective officer(s) identified on this form		
☐ a board on which the City elective officer(s) serves <u>San</u>	rancisco Board of Super	VISOTS
The heard of a state account Wealth Authority Howains Asit		ial Davidonment Authority
☐ the board of a state agency (Health Authority, Housing Aut Board, Parking Authority, Redevelopment Agency Commiss	•	
Development Authority) on which an appointee of the City e		
portional radicality) on winon an appointed of the only of	out o officor(b) identified	on and total bits
Print Name of Board		
Filer Information (Please print clearly.)	, , , , , , , , , , , , , , , , , , , ,	
Name of filer:	Contact teleph	
Angela Calvillo, Clerk of the Board	(415) 554-51	84
Address:	E-mail:	
City Hall, Room 244, 1 Dr. Carlton B. Goodlett Pl., San Francisco	CA 94102   Board.of.Supe	rvisors@sfgov.org
	•	
at a control of the c		. (1)
Signature of City Elective Officer (if submitted by City elective of	cer) Dā	te Signed
Signature of Board Secretary or Clerk (if submitted by Board Secre	ary or Clerk) Do	te Signed .
premaring or positionary or clear (it enountied by positional	$ary or cross_j$ $Da$	to pignod .

## **Contractor Information (Continued)**

#### Arup North America Ltd.

#### 1. Directors

Andrew S. Howard Leo Argiris Matthew Tweedie James Quiter

#### 2. Officers

Chief Executive Officer: Andrew S. Howard

Chief Financial Officer: Alan Jennat Chief Operating Officer: Leo Argiris

# 3. Any Person who has an ownership of 20% or more in the contractor

None

#### 4. Subcontractors

**Argos Analytics** 

E3

Ember Strategies

Efficiency First CA

Frontier Resources

Future Web Studio

Green Info Network

Open Energy Efficiency

Radiant Labs

Slate Policy & Design

Strategen

Terra Verde Renewable Partners

**TRC** 

# 5. Any political committee sponsored or controlled by the contractor

None

### FORM SFEC-126: NOTIFICATION OF CONTRACT APPROVAL

(S.F. Campaign and Governmental Conduct Code § 1.126)

City Elective Officer Information (Please print clearly.)	/	
Name of City elective officer(s):	City electiv	re office(s) held:
Members, SF Board of Supervisors	Members,	SF Board of Supervisors
Contractor Information (Please print clearly.)		
Name of contractor:		
Lab Communications, Inc. (DBA Citizen Group)		
Please list the names of (1) members of the contractor's board of dire financial officer and chief operating officer; (3) any person who has a any subcontractor listed in the bid or contract; and (5) any political cadditional pages as necessary.  1) Jordan Harris – Board Member; 2) Robin Raj, Chief Executive Officer; Linda Berliant, acting as Operating Officer 3) Robin Raj (majority shareholder); 4) InterEthnica, Big Mouth Productions, Ibarra Bros. Printing, F. 5) N/A Contractor address:	m ownership ommittee sp Chief Finan	p of 20 percent or more in the contractor; (4) consored or controlled by the contractor. Use national Officer; David Cumpton, acting as Chief
465 California Street, Suite 410, San Francisco, CA 94104		
Date that contract was approved:	Amount of \$1,000,000	
Describe the nature of the contract that was approved:		
Outreach Marketing Services		•
Comments:	·	
Confinences.		
This contract was approved by (check applicable):		
☐ the City elective officer(s) identified on this form		•
☐ a board on which the City elective officer(s) serves San Fra	ncisco Ro	pard of Supervisors
	t Name of Boar	
☐ the board of a state agency (Health Authority, Housing Author	ity Commis	ssion Industrial Development Authority
Board, Parking Authority, Redevelopment Agency Commission	_	
Development Authority) on which an appointee of the City elect		**
	170 0111001	(b) Idolitica on this form site
Print Name of Board		
		•
Filer Information (Please print clearly.)		
Name of filer:	:	Contact telephone number:
Angela Calvillo, Clerk of the Board		(415) 554-5184
Address:		E-mail:
City Hall, Room 244, 1 Dr. Carlton B. Goodlett Pl., San Francisco, Ca	1	Board.of.Supervisors@sfgov.org
Signature of City Elective Officer (if submitted by City elective officer	·)	Date Signed
	ar - ·	
Signature of Board Secretary or Clerk (if submitted by Board Secretary	or Clerk)	Date Signed

# FORM SFEC-126: NOTIFICATION OF CONTRACT APPROVAL

(S.F. Campaign and Governmental Conduct Code § 1.126)

City Elective Officer Information (Please print clearly.)	·
	City elective office(s) held:
Members, SF Board of Supervisors	Members, SF Board of Supervisors
·	
Contractor Information (Please print clearly.)	
Name of contractor: Stok LLC	
Please list the names of (1) members of the contractor's board of direct financial officer and chief operating officer; (3) any person who has an any subcontractor listed in the bid or contract; and (5) any political conditional pages as necessary.	n ownership of 20 percent or more in the contractor; (4)
See Attachment	
Contractor address: 945 B Front Street, San Francisco CA 94111	
Date that contract was approved:	Amount of contract:
	\$2,500,000
Describe the nature of the contract that was approved: Green Building Consulting	
Comments:	
Comments.	
	Relocation Appeals Board, Treasure Island
portional randomly, on the ar appointed of the city electric	(vo officer(b) reduction on this form bits
Print Name of Board	•
Filer Information (Please print clearly.)	
Name of filer: Angela Calvillo, Clerk of the Board	Contact telephone number: (415) 554-5184
Address: City Hall, Room 244, 1 Dr. Carlton B. Goodlett Pl., San Francisco, CA	E-mail: Board.of.Supervisors@sfgov.org
Signature of City Elective Officer (if submitted by City elective officer	) Date Signed
Signature of Board Secretary or Clerk (if submitted by Board Secretary	or Clerk) Date Signed

#### Form 126

#### STOK, LLC

#### (1) Members of the contractor's board of directors Matt Macko

(2) The contractor's chief executive officer, chief financial officer and chief operating officer
Burke Pemberton, CEO
Jake Arlein, CFO
Jolene Goldsmith, COO

(3) Any person who has an ownership of 20 percent or more in the contractor None

#### (4) Any subcontractor listed in the bid or contract

Newcomb, Anderson, McCormick
Cadmus Group
PE International
Point Energy Innovations
Sherwood Design Engineers
BASE Energy, Inc.
Waypoint Building Group
CM Salter
Ardenna Energy

(5) Any political committee sponsored or controlled by the contractor.

None