

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Application of Southern California Edison
Company (U 338 E) for adoption of its Energy
Efficiency Rolling Portfolio Business Plan and
related relief.

And Related Matters

Application 17-01-013
(Filed January 17, 2017)

Application 17-01-014
Application 17-01-015
Application 17-01-016
Application 17-01-017
(CONSOLIDATED)

**COMPLIANCE FILING OF ATTACHMENT A METRICS
OF THE COUNTY OF VENTURA ON BEHALF OF 3C-REN**

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For the 3C-REN

Date: August 6, 2018

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Pursuant to the May 31, 2018 California Public Utilities Commission's (CPUC or Commission) decision D.08.05.041, the County of Ventura for itself and on behalf of the 3C-REN, respectfully submits the requested sector-level data for the Attachment A - Adopted Common Metrics for Energy Efficiency Business Plans.

I. 3C-REN Business Plan Metrics

3C-REN appreciates the opportunity to submit this updated set of metrics, targets, and indicators, included herein as Attachment A. 3C-REN endeavored to develop targets that are accurate and reflective of available data. 3C-REN Plan Metrics provides information on how the targets were developed and what assumptions were used. 3C-REN sees this filing as a non-static document, that all PAs, and Commission staff will continually strive to improve over the long-term course of the rolling portfolio.

II. Conclusion

3C-REN appreciates the opportunity to provide its Metrics, as required by the Decision.

Dated: August 6, 2018

Respectfully submitted,

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Tri-County Regional Energy Network (3C-REN) - Energy Efficiency Sector Metrics with Targets

Attachment A

Tri-County Regional Energy Network (3C-REN) - Energy Efficiency Sector Metrics with Targets

Attachment A - Table of Contents

	<u>Page #</u>
A. Metrics/Indicators in Energy Division Defined Template	3
B. Template Column Index	28
C. Definitions	30

Energy Division Template

eet Index	3C-REN	A02	PL4	LC	Units of Measurement		Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominat	Baseline Number	Short Term Target			Mid Term Target (2021-2023)	Long Term Target (2024-2025)	Methodology	Key Definitions	Proxy Explanation	
					Measurement	Metric Type									2018	2019	2020						
39	3C-REN	A02	PL4	LC	PAC Levelized Cost (\$/therm)	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 (\$/therm)	Portfolio Level (PL)– All Sectors	2019	N/A	N/A	N/A	N/A	\$2.18	\$1.64	\$0.92	\$0.59	Per CEDARS	None		
40	3C-REN	A02	PL4	LC	TRC 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)••	TRC Levelized Cost (\$/kW)	Portfolio Level (PL)– All Sectors	2019	N/A	N/A	N/A	N/A	\$30.55	\$32.10	\$40.68	\$44.27	Per CEDARS	None		
41	3C-REN	A02	PL4	LC	TRC Levelized Cost (\$/kWh)	Cost per unit saved	Metric	PL4-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)••	TRC Levelized Cost (\$/kWh)	Portfolio Level (PL)– All Sectors	2019	N/A	N/A	N/A	N/A	\$0.27	\$0.20	\$0.12	\$0.08	Per CEDARS	None		
42	3C-REN	A02	PL4	LC	TRC Levelized Cost (\$/therm)	Cost per unit saved	Metric	PL4-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)••	TRC Levelized Cost (\$/therm)	Portfolio Level (PL)– All Sectors	2019	N/A	N/A	N/A	N/A	\$1.28	\$1.04	\$0.72	\$0.55	Per CEDARS	None		
43	3C-REN	A02	RSF1	S1	First year annual kW gross	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	First year annual kW gross	Residential (RSF)	2019	N/A	N/A	N/A	N/A	367	499	1,071	1,647	Per CEDARS	None		
44	3C-REN	A02	RSF1	S1	First year annual kW net	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	First year annual kW net	Residential (RSF)	2019	N/A	N/A	N/A	N/A	331	449	964	1,482	Per CEDARS	None		
45	3C-REN	A02	RSF1	S1	First year annual kWh gross	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	First year annual kWh gross	Residential (RSF)	2019	N/A	N/A	N/A	N/A	522,016	709,338	1,441,967	2,116,485	Per CEDARS	None		
46	3C-REN	A02	RSF1	S1	First year annual kWh net	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	First year annual kWh net	Residential (RSF)	2019	N/A	N/A	N/A	N/A	469,815	638,404	1,297,770	1,904,836	Per CEDARS	None		
47	3C-REN	A02	RSF1	S1	First year annual Therm gross	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	First year annual Therm gross	Residential (RSF)	2019	N/A	N/A	N/A	N/A	46,891	63,656	136,812	210,488	Per CEDARS	None		
48	3C-REN	A02	RSF1	S1	First year annual Therm net	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	First year annual Therm net	Residential (RSF)	2019	N/A	N/A	N/A	N/A	42,202	57,290	123,131	189,439	Per CEDARS	None		
49	3C-REN	A02	RSF1	S1	Lifecycle ex-ante kW gross	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	Lifecycle ex-ante kW gross	Residential (RSF)	2019	N/A	N/A	N/A	N/A	5,059	6,867	14,890	30,304	Per CEDARS	None		
50	3C-REN	A02	RSF1	S1	Lifecycle ex-ante kW net	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	Lifecycle ex-ante kW net	Residential (RSF)	2019	N/A	N/A	N/A	N/A	4,300	5,837	12,656	25,758	Per CEDARS	None		
51	3C-REN	A02	RSF1	S1	Lifecycle ex-ante kWh gross	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	Lifecycle ex-ante kWh gross	Residential (RSF)	2019	N/A	N/A	N/A	N/A	6,723,410	9,134,642	18,739,375	27,727,001	Per CEDARS	None		
52	3C-REN	A02	RSF1	S1	Lifecycle ex-ante kWh net	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	Lifecycle ex-ante kWh net	Residential (RSF)	2019	N/A	N/A	N/A	N/A	6,051,069	8,221,178	16,865,438	24,954,301	Per CEDARS	None		
53	3C-REN	A02	RSF1	S1	Lifecycle ex-ante Therm gross	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	Lifecycle ex-ante Therm gross	Residential (RSF)	2019	N/A	N/A	N/A	N/A	646,434	877,403	1,903,564	2,950,591	Per CEDARS	None		
54	3C-REN	A02	RSF1	S1	Lifecycle ex-ante Therm net	S1: Energy Savings	Metric	RSF1-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross and net) for Single Family Customers••	Lifecycle ex-ante Therm net	Residential (RSF)	2019	N/A	N/A	N/A	N/A	581,791	789,663	1,713,208	2,655,532	Per CEDARS	None		
55	3C-REN	A03	RSF2	G	MT CO2eq	GHG	Metric	RSF2-G••Greenhouse gasses (MT CO2eq) Net kWh savings, reported on an annual basis••	CO2-equivalent of net annual kWh savings	Residential (RSF)	2019	N/A	N/A	N/A	N/A	17	180	324	450	Per CEDARS	Definition: Single family are defined as Service account on residential rates, with dwelling code of single family home or single family dwelling.		
56	3C-REN	A03	RSF3	D1-D	Lifecycle NET kW	D1: Depth of interventions••Per downstream participant	Metric	RSF3-D1D - 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 participant - Opt-in - Downstream	Residential (RSF)	2019	N/A	N/A	N/A	N/A	6.91	6.90	7.79	11.30	D1D: Downstream methodology- ••Numerator: Total downstream savings claimed••Denominator: Total number of downstream participants	Per ED: "Energy savings" = lifecycle NET savings.		
57	3C-REN	A03	RSF3	D1-D	Lifecycle NET kWh	D1: Depth of interventions••Per downstream participant	Metric	RSF3-D1D - 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 - Downstream	Residential (RSF)	2019	N/A	N/A	N/A	N/A	9,728.41	9,717.70	10,381.13	11,041.75	D1D: Downstream methodology- ••Numerator: Total downstream savings claimed••Denominator: Total number of downstream participants	Per ED: "Energy savings" = lifecycle NET savings.		
58	3C-REN	A03	RSF3	D1-D	Lifecycle NET Therms	D1: Depth of interventions••Per downstream participant	Metric	RSF3-D1D - 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 Therm net savings per participant - Opt-in - Downstream	Residential (RSF)	2019	N/A	N/A	N/A	N/A	935.35	933.41	1,054.54	1,175.02	D1D: Downstream methodology- ••Numerator: Total downstream savings claimed••Denominator: Total number of downstream participants	Per ED: "Energy savings" = lifecycle NET savings.		
59	3C-REN	A03	RSF3	D1-M	Lifecycle NET kW	D1: Depth of interventions••Per midstream participant	Metric	RSF3-D1M - 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 participant - Opt-in - Midstream	Residential (RSF)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	D1M: Midstream methodology –NOT FEASIBLE••••Numerator: Total midstream savings claimed ••Denominator: (not available) number or sector of midstream participants	Per discussion with ED, metric not feasible; PAs instead will report total upstream and midstream savings. Per ED: "Energy savings" = lifecycle NET savings.		
60	3C-REN	A03	RSF3	D1-M	Lifecycle NET kWh	D1: Depth of interventions••Per midstream participant	Metric	RSF3-D1M - 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 - Midstream	Residential (RSF)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	D1M: Midstream methodology –NOT FEASIBLE••••Numerator: Total midstream savings claimed ••Denominator: (not available) number or sector of midstream participants	Per discussion with ED, metric not feasible; PAs instead will report total upstream and midstream savings. Per ED: "Energy savings" = lifecycle NET savings.		
61	3C-REN	A03	RSF3	D1-M	Lifecycle NET Therms	D1: Depth of interventions••Per midstream participant	Metric	RSF3-D1M - 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 Therm net savings per participant - Opt-in - Midstream	Residential (RSF)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	D1M: Midstream methodology –NOT FEASIBLE••••Numerator: Total midstream savings claimed ••Denominator: (not available) number or sector of midstream participants	Per discussion with ED, metric not feasible; PAs instead will report total upstream and midstream savings. Per ED: "Energy savings" = lifecycle NET savings.		
62	3C-REN	A03	RSF3	D1-O	Lifecycle NET kW	D1: Depth of interventions••Per opt out participant	Metric	RSF3-D1O - 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 participant - Opt-out	Residential (RSF)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	D1O Methodology: Only ex post savings can be claimed. Per participant savings will be calculated in the EM&V study.	D1O Key Definitions: 1) The only opt-out program is the Home Energy Report using social norming through neighborhood comparisons 2) Per ED: "Energy savings" = lifecycle NET savings.		
63	3C-REN	A03	RSF3	D1-O	Lifecycle NET kWh	D1: Depth of interventions••Per opt out participant	Metric	RSF3-D1O - 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-out	Residential (RSF)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	D1O Methodology: Only ex post savings can be claimed. Per participant savings will be calculated in the EM&V study.	D1O Key Definitions: 1) The only opt-out program is the Home Energy Report using social norming through neighborhood comparisons 2) Per ED: "Energy savings" = lifecycle NET savings.		
64	3C-REN	A03	RSF3	D1-O	Lifecycle NET Therms	D1: Depth of interventions••Per opt out participant	Metric	RSF3-D1O - 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 Therm net savings per participant - Opt-out	Residential (RSF)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	D1O Methodology: Only ex post savings can be claimed. Per participant savings will be calculated in the EM&V study.	D1O Key Definitions: 1) The only opt-out program is the Home Energy Report using social norming through neighborhood comparisons 2) Per ED: "Energy savings" = lifecycle NET savings.		
65	3C-REN	A03	RSF3	D1-U	Lifecycle NET kW	D1: Depth of interventions••Per upstream participant	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 kW net savings per participant - Opt-in - Upstream	Residential (RSF)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	D1U: Upstream methodology– NOT FEASIBLE••Numerator: Total upstream savings claimed••Denominator: (not available) number or sector of of upstream participants	Per discussion with ED, metric not feasible; PAs instead will report total upstream and midstream savings. Per ED: "Energy savings" = lifecycle NET savings.		
66	3C-REN	A03	RSF3	D1-U	Lifecycle NET kWh	D1: Depth of interventions••Per upstream participant	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)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	D1U: Upstream methodology– NOT FEASIBLE••Numerator: Total upstream savings claimed••Denominator: (not available) number or sector of of upstream participants	Per discussion with ED, metric not feasible; PAs instead will report total upstream and midstream savings. Per ED: "Energy savings" = lifecycle NET savings.		
67	3C-REN	A03	RSF3	D1-U	Lifecycle NET Therms	D1: Depth of interventions••Per upstream participant	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 Therm net savings per participant - Opt-in - Upstream	Residential (RSF)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	D1U: Upstream methodology– NOT FEASIBLE••Numerator: Total upstream savings claimed••Denominator: (not available) number or sector of of upstream participants	Per discussion with ED, metric not feasible; PAs instead will report total upstream and midstream savings. Per ED: "Energy savings" = lifecycle NET savings.		
68	3C-REN	A03	RSF4	P1	Percent	P1: Penetration of energy efficiency programs in the eligible market ••Percent of Participation	Metric	RSF-P1••Percent of participation relative to eligible population••	Percent of participation relative to eligible population	Residential (RSF)	2019	N/A	N/A	N/A	N/A	0.16%	0.21%	0.41%	0.57%	P1 Methodology: ••Numerator: Number of downstream participants) ••Denominator: total number of service accounts in the sector	Definition: "Eligible population" refers to Total number of service accounts in sector/segment, excluding CARE. "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. ••		
69	3C-REN	A03	RSF4	P3	Percent	P3: Penetration of energy efficiency programs in the eligible	Metric	RSF-P3 - Percent of participation in disadvantaged communities••	Percent of participation in disadvantaged communities	Residential (RSF)	2019	N/A	N/A	N/A	N/A	0.49%	0.53%	2.27%	2.05%	Numerator: Number of participants in disadvantaged communities. ••••Denominator: Total number of customers in disadvantaged communities.	D.18-05-041: DAC = Service accounts in zip codes corresponding to census tracts in the top quartile of CalEnviroScreen 3.0 scores.		
70	3C-REN	A03	RSF4	P4	Percent	P4: Penetration of energy efficiency programs in the HTR	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)	2019	N/A	N/A	N/A	N/A	0.26%	0.37%	0.76%	1.05%	P4 Methodology:••Numerator: number of participants in HTR geographic area••Denominator: Total number of service accounts in HTR geographic area	D.18-05-041 p. 43 - HTR as defined in Resolution G-3497, modified to "include disadvantaged communities (as designated by CalEPA) in the geographic criteria for hard to reach		
71	3C-REN	A03	RSF5	LC	PAC Levelized Cost (\$/kW)	Cost per unit saved	Metric	RSF-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)••	PAC Levelized Cost (\$/kW)	Residential (RSF)	2019	N/A	N/A	N/A	N/A	\$31.45	\$32.00	\$33.75	\$32.34	Per CEDARS	None		
72	3C-REN	A03	RSF5	LC	PAC Levelized Cost (\$/kWh)	Cost per unit saved	Metric	RSF-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)••	PAC Levelized Cost (\$/kWh)	Residential (RSF)	2019	N/A	N/A	N/A	N/A	\$0.17	\$0.12	\$0.07	\$0.04	Per CEDARS	None		
73	3C-REN	A03	RSF5	LC	PAC Levelized Cost (\$/therm)	Cost per unit saved	Metric	RSF-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)••	PAC Levelized Cost (\$/therm)	Residential (RSF)	2019	N/A	N/A	N/A	N/A	\$1.57	\$1.20	\$0.69	\$0.45	Per CEDARS	None		
74	3C-REN	A03	RSF5	LC	TRC Levelized Cost (\$/kW)	Cost per unit saved	Metric	RSF-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)••	TRC Levelized Cost (\$/kW)	Residential (RSF)	2019	N/A	N/A	N/A	N/A	\$45.22	\$49.45	\$65.87	\$73.54	Per CEDARS	None		
75	3C-REN	A03	RSF5	LC	TRC Levelized Cost (\$/kWh)	Cost per unit saved	Metric	RSF-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)••	TRC Levelized Cost (\$/kWh)	Residential (RSF)	2019	N/A	N/A	N/A	N/A	\$0.24	\$0.19	\$0.13	\$0.09	Per CEDARS	None		
76	3C-REN	A03	RSF5	LC	TRC Levelized Cost (\$/therm)	Cost per unit saved	Metric	RSF-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)••	TRC Levelized Cost (\$/therm)	Residential (RSF)	2019	N/A	N/A	N/A	N/A	\$2.25	\$1.86	\$1.32	\$1.02	Per CEDARS	None		
77	3C-REN	A03	RSF6	E1	BTU	Energy intensity per SF household	Indicator	RSF-E1(Indicator) - Average energy use intensity of single family homes (average usage per household – not adjusted)••	Average first year annual kWh gross per household	Residential (RSF)	2019	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Total energy used in sector••Denominator: number of service accounts	Definition: Household refers to a service account	

Spreadsheet Index	PA	AttA Page	AttA Order	Method Code	Units of Measurement	Metric Type	Metric/Indicator	Business Plan Att A Description	Metric	Sector	Baseline	Baseline	Baseline	Baseline	Short Term Target			Mid Term Target	Long Term Target	Methodology	Key Definitions	Proxy Explanation
											Year	Numerator	Denominator	Number	2018	2019	2020	(2021-2023)	(2024-2025)			
106	3C-REN	A03	RMF1	SI-CA	First year annual Therm gross	S1: Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross area and net) for multifamily customers (in-unit, common area , and master metered accounts)••	First year annual Therm gross - Common Area	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0	0	0	0	Savings calculated using CET; MF designation depends on PA database	Definition: Multi-family refers to any building or property with at least two residential housing units.	
107	3C-REN	A03	RMF1	SI-CA	First year annual Therm net	S1: Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross area and net) for multifamily customers (in-unit, common area , and master metered accounts)••	First year annual Therm net - Common Area	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0	0	0	0	Savings calculated using CET; MF designation depends on PA database	Definition: Multi-family refers to any building or property with at least two residential housing units.	
108	3C-REN	A03	RMF1	SI-CA	Lifecycle ex-ante kW gross	S1: Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross area and net) for multifamily customers (in-unit, common area , and master metered accounts)••	Lifecycle ex-ante kW gross - Common Area	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0	0	0	0	Savings calculated using CET; MF designation depends on PA database	Definition: Multi-family refers to any building or property with at least two residential housing units.	
109	3C-REN	A03	RMF1	SI-CA	Lifecycle ex-ante kW net	S1: Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross area and net) for multifamily customers (in-unit, common area , and master metered accounts)••	Lifecycle ex-ante kW net - Common Area	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0	0	0	0	Savings calculated using CET; MF designation depends on PA database	Definition: Multi-family refers to any building or property with at least two residential housing units.	
110	3C-REN	A03	RMF1	SI-CA	Lifecycle ex-ante kWh gross	S1: Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross area and net) for multifamily customers (in-unit, common area , and master metered accounts)••	Lifecycle ex-ante kWh gross - Common Area	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0	0	0	0	Savings calculated using CET; MF designation depends on PA database	Definition: Multi-family refers to any building or property with at least two residential housing units.	
111	3C-REN	A03	RMF1	SI-CA	Lifecycle ex-ante kWh net	S1: Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross area and net) for multifamily customers (in-unit, common area , and master metered accounts)••	Lifecycle ex-ante kWh net - Common Area	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0	0	0	0	Savings calculated using CET; MF designation depends on PA database	Definition: Multi-family refers to any building or property with at least two residential housing units.	
112	3C-REN	A03	RMF1	SI-CA	Lifecycle ex-ante Therm gross	S1: Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross area and net) for multifamily customers (in-unit, common area , and master metered accounts)••	Lifecycle ex-ante Therm gross - Common Area	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0	0	0	0	Savings calculated using CET; MF designation depends on PA database	Definition: Multi-family refers to any building or property with at least two residential housing units.	
113	3C-REN	A03	RMF1	SI-CA	Lifecycle ex-ante Therm net	S1: Energy Savings	Metric	RMF-S1-First year annual and lifecycle ex-ante (pre-evaluation) gas, electric, and demand savings (gross area and net) for multifamily customers (in-unit, common area , and master metered accounts)••	Lifecycle ex-ante Therm net - Common Area	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0	0	0	0	Savings calculated using CET; MF designation depends on PA database	Definition: Multi-family refers to any building or property with at least two residential housing units.	
114	3C-REN	A03	RMF2	G	MT CO2eq	GHG	Metric	RMF-G•• Greenhouse gasses (MT CO2eq) Net kWh savings, reported on an annual basis••	CO2-equivalent of net annual kWh savings	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	5.1	51.0	97.7	138.3	Per CEDARS	Definition: Multi-family refers to any building or property with at least two residential housing units.	
115	3C-REN	A04	RMF3	D3a	Lifecycle NET kW	D3: Depth of interventions per building	Metric	RMF-D3 - Energy savings (kWh, kw, therms) per project (building)••••	Lifecycle ex-ante kW net per project (building)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	2.1	2.1	2.1	2.1	••D3 Methodology:••Numerator: Total Savings claimed for MF building retrofits••Denominator: Number of buildings that have been retrofitted, per application (assumed 7.4 units per building (CALMAC http://www.calmac.org/publications/MFEER_Process_Evaluation_FINAL_130415.pdf))	D3 Key Definitions: Project applications are made at the property level (premise ID and service account number) not the building level; building information will be used as is available on project applications••“Energy savings” = Lifecycle NET savings	
116	3C-REN	A04	RMF3	D3a	Lifecycle NET kWh	D3: Depth of interventions per building	Metric	RMF-D3 - Energy savings (kWh, kw, therms) per project (building)••••	Lifecycle ex-ante kWh net per project (building)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	5,474.8	5,476.7	5,477.2	5,479.5	••D3 Methodology:••Numerator: Total Savings claimed for MF building retrofits••Denominator: Number of buildings that have been retrofitted, per application (assumed 7.4 units per building (CALMAC http://www.calmac.org/publications/MFEER_Process_Evaluation_FINAL_130415.pdf))	D3 Key Definitions: Project applications are made at the property level (premise ID and service account number) not the building level; building information will be used as is available on project applications••“Energy savings” = Lifecycle NET savings	
117	3C-REN	A04	RMF3	D3a	Lifecycle NET Therms	D3: Depth of interventions per building	Metric	RMF-D3 - Energy savings (kWh, kw, therms) per project (building)••••	Lifecycle ex-ante Therm net per project (building)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	273.2	273.2	273.2	273.1	••D3 Methodology:••Numerator: Total Savings claimed for MF building retrofits••Denominator: Number of buildings that have been retrofitted, per application (assumed 7.4 units per building (CALMAC http://www.calmac.org/publications/MFEER_Process_Evaluation_FINAL_130415.pdf))	D3 Key Definitions: Project applications are made at the property level (premise ID and service account number) not the building level; building information will be used as is available on project applications••“Energy savings” = Lifecycle NET savings	
118	3C-REN	A04	RMF3	D4	Lifecycle NET kW	D4: Depth of interventions per property	Metric	RMF-D4 - Average savings per participant Savings per project (property)••	Lifecycle ex-ante kW net per project (property)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	2.1	2.1	2.1	2.1	••D4 Methodology:••Numerator - Total downstream savings ••••Denominator - number of participating properties (i.e., premise ID x service account)••	D4 Definition: “Project (property)” is defined by a unique project ID. “Energy savings” = Lifecycle NET savings	
119	3C-REN	A04	RMF3	D4	Lifecycle NET kWh	D4: Depth of interventions per property	Metric	RMF-D4 - Average savings per participant Savings per project (property)••	Lifecycle ex-ante kWh net per project (property)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	5,474.8	5,476.7	5,477.2	5,479.5	••D4 Methodology:••Numerator - Total downstream savings ••••Denominator - number of participating properties (i.e., premise ID x service account)••	D4 Definition: “Project (property)” is defined by a unique project ID. “Energy savings” = Lifecycle NET savings	
120	3C-REN	A04	RMF3	D4	Lifecycle NET Therms	D4: Depth of interventions per property	Metric	RMF-D4 - Average savings per participant Savings per project (property)••	Lifecycle ex-ante Therm net per project (property)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	273.2	273.2	273.2	273.1	••D4 Methodology:••Numerator - Total downstream savings ••••Denominator - number of participating properties (i.e., premise ID x service account)••	D4 Definition: “Project (property)” is defined by a unique project ID. “Energy savings” = Lifecycle NET savings	
121	3C-REN	A04	RMF3	D5	Lifecycle NET kW	D5: Depth of interventions••Per square foot	Metric	RMF-D5•• Energy savings (kWh, kw, therms) per square foot••	Lifecycle ex-ante kW net per square foot	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0.003	0.003	0.003	0.003	D5 Methodology: ••[Numerator] Total downstream savings ••••[Denominator] Total MF square foot per Assessor data	Per ED: “Energy savings” = lifecycle NET savings.	C-REN does not have any values for Avg. Square Feet of multifamily units and are using the value developed by BayREN as a proxy (800 sqft/unit). After 3C-REN is approved to administer the multifamily program, it will collect square footage for all participants and update the value for the 2019 Annual report based on our database and/or we will can CoStar data to determine the average square footage of units in our service territory.
122	3C-REN	A04	RMF3	D5	Lifecycle NET kWh	D5: Depth of interventions••Per square foot	Metric	RMF-D5•• Energy savings (kWh, kw, therms) per square foot••	Lifecycle ex-ante kWh net per square foot	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	6.843	6.846	6.846	6.849	D5 Methodology: ••[Numerator] Total downstream savings ••••[Denominator] Total MF square foot per Assessor data	Per ED: “Energy savings” = lifecycle NET savings.	C-REN does not have any values for Avg. Square Feet of multifamily units and are using the value developed by BayREN as a proxy (800 sqft/unit). After 3C-REN is approved to administer the multifamily program, it will collect square footage for all participants and update the value for the 2019 Annual report based on our database and/or we will can CoStar data to determine the average square footage of units in our service territory.

Sheet Index	PA	AttA Page	AttA Order	Method Code	Units of Measurement		Metric/ Indicator	Business Plan Att A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominat	Baseline Number	Short Term Target			Mid Term Target (2021-2023)	Long Term Target (2024-2025)	Methodology	Key Definitions	Proxy Explanation
															2018	2019	2020					
123	3C-REN	A04	RMF3	D5	Lifecycle NET Therms	D5: Depth of interventions**Per square foot	Metric	RMF-D5** Energy savings (kWh, kw, therms) per square foot**	Lifecycle ex-ante Therm net per square foot	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0.341	0.341	0.341	0.341	D5 Methodology: **[Numerator] Total downstream savings ***[Denominator] Total MF square foot per Assessor data	Per ED: "Energy savings" = lifecycle NET savings.	C-REN does not have any values for Avg. Square Feet of multifamily units and are using the value developed by BayREN as a proxy (800 sqft/unit). After 3C-REN is approved to administer the multifamily program, it will collect square footage for all participants and update the value for the 2019 Annual report based on our database and/or we will can CoStar data to determine the average square footage of units in our service territory.
124	3C-REN	A04	RMF4	P1-P	Percent	P1: Penetration of energy efficiency programs in the eligible market **Percent of Participation	Metric	RMF-P1P **Percent of participation relative to eligible population (by unit, and property)**	Percent of participation relative to eligible population by property	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0.28%	0.36%	0.72%	1.21%	P1 Methodology: **Numerator: Number of downstream participating properties (unique project ID) **Denominator: total number of properties (unique service account) in the sector.	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.**	
125	3C-REN	A04	RMF4	P1-U	Percent	P1: Penetration of energy efficiency programs in the eligible market **Percent of Participation	Metric	RMF-P1U **Percent of participation relative to eligible population (by unit, and property)**	Percent of participation relative to eligible population by unit	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0.28%	0.36%	0.72%	1.21%	P1 Methodology: **Numerator: Number of downstream participating MF units (unique service account = "unit") **Denominator: total number of units (service accounts) in the sector.	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.**	
126	3C-REN	A04	RMF4	P2	Percent	P2: Penetration of energy efficiency programs in terms of square feet of eligible	Metric	RMF-P2 - Percent of square feet of eligible population participating (by property)**	Percent of square feet of eligible population participating (by property)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0.24%	0.30%	0.66%	0.99%	P2 Methodology: ****Numerator: # service accounts participating X average sqft/service account)****Denominator: Square footage of all eligible accounts (per Assessor)		
127	3C-REN	A04	RMF4	P3: DAC	Percent	P3: Penetration of energy efficiency programs in the eligible	Metric	RMF-P3 - Percent of participation in disadvantaged communities**	Percent of participation in disadvantaged communities	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	2.08%	2.29%	3.15%	4.21%	Numerator: Number of participants (service accounts) in disadvantaged communities. ****Denominator: Total number of customers (service accounts) in disadvantaged communities.	D.18-05-041: DAC = Service accounts in zip codes corresponding to census tracts in the top quartile of CalEnviroScreen 3.0 scores.	
128	3C-REN	A04	RMF4	P4: HTR	Percent	P4: Penetration of energy efficiency programs in the HTR	Metric	RMF-P4** Percent of participation by customers defined as "hard-to-reach" **	Percent of participation by customers defined as "hard-to-reach"	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0.60%	0.86%	2.10%	3.84%	P4 Methodology: **Numerator: number of participants in HTR geographic area**Denominator: Total number of service accounts in HTR geographic area	D.18-05-041 p. 43 - HTR as defined in Resolution G-3497, modified to "include disadvantaged communities (as designated by CalEPA) in the geographic criteria for hard to reach	
129	3C-REN	A04	RMF5	B1	Percent	B1: MF Benchmarking Penetration	Metric	RMF-B1 - Percent of benchmarked multi-family properties relative to the eligible population****	Percent of benchmarked multi-family properties relative to the eligible population	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0.0%	0.0%	0.0%	0.0%	Total benchmarked units in RMF sector**Total number of service account in RMF sector****Benchmarked via Portfolio Manager****2019 MF with 17 or units MUST Benchmark**** Benchmarking per Portfolio Manager. Service accounts in HTR market		
130	3C-REN	A04	RMF5	B6	Percent	B6: Benchmarking of HTR Properties	Metric	B6(RMF) - Percent of benchmarking by properties defined as "hard-to-reach"****	Percent of benchmarking by properties defined as "hard-to-reach"	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	0.0%	0.0%	0.0%	0.0%			
131	3C-REN	A04	RMF6	LC	PAC Levelized Cost (\$/kW)	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 (\$/kW)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	\$15.70	\$14.53	\$15.11	\$14.53	Per CEDARS	None	
132	3C-REN	A04	RMF6	LC	PAC Levelized Cost (\$/kWh)	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 (\$/kWh)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	\$0.30	\$0.21	\$0.11	\$0.07	Per CEDARS	None	
133	3C-REN	A04	RMF6	LC	PAC Levelized Cost (\$/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-family (RMF)	2019	N/A	N/A	N/A	N/A	\$2.80	\$2.08	\$1.16	\$0.73	Per CEDARS	None	
134	3C-REN	A04	RMF6	LC	TRC Levelized Cost (\$/kW)	Cost per unit saved	Metric	RMF-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)**	TRC Levelized Cost (\$/kW)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	\$15.87	\$14.74	\$15.49	\$14.99	Per CEDARS	None	
135	3C-REN	A04	RMF6	LC	TRC Levelized Cost (\$/kWh)	Cost per unit saved	Metric	RMF-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)**	TRC Levelized Cost (\$/kWh)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	\$0.30	\$0.22	\$0.12	\$0.07	Per CEDARS	None	
136	3C-REN	A04	RMF6	LC	TRC Levelized Cost (\$/therm)	Cost per unit saved	Metric	RMF-LC - Levelized cost of energy efficiency per kWh, therm and kW (use both TRC and PAC)**	TRC Levelized Cost (\$/therm)	Residential Sector – Multi-family (RMF)	2019	N/A	N/A	N/A	N/A	\$0.30	\$0.22	\$0.12	\$0.07	Per CEDARS	None	
137	3C-REN	A04	RMF7i	E12	BTU/unit	Energy Intensity per MF unit	Indicator	RMF-E12[Indicator] - and Average energy use intensity of multifamily units. including in-unit accounts)	Average first year ex-ante kWh gross per unit	Residential Sector – Multi-family (RMF)	2019	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Total usage of Res MF sector****Denominator: total units (service accounts) in Res MF sector		
138	3C-REN	A04	RMF7i	E13	BTU/sqft	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-ante kWh gross per square foot	Residential Sector – Multi-family (RMF)	2019	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	Numerator: Total usage of Res MF sector****Denominator: average number of units in MF building times average square footage of MF units		
282	3C-REN	A10	CS1	S1	Net GWh	S1: Energy Savings	Metric	Net Energy Savings: GWH, M Therms and MW (demand)	Net GWh savings	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EM&V study	2018-2025 consistent with adopted goals from D.17-09-025, Tables 1, 2, and 3, p. 37-39; 2016 from CEDARS (spillover not included). Values summed across all four IOUs. "Savings" is defined as Net First year savings.	
283	3C-REN	A10	CS1	S1	Net MMTherms	S1: Energy Savings	Metric	Net Energy Savings: GWH, M Therms and MW (demand)	Net MMTherms savings	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EM&V study	2018-2025 consistent with adopted goals from D.17-09-025, Tables 1, 2, and 3, p. 37-39; 2016 from CEDARS (spillover not included). Values summed across all four IOUs. "Savings" is defined as Net First year savings.	
284	3C-REN	A10	CS1	S1	Net MW	S1: Energy Savings	Metric	Net Energy Savings: GWH, M Therms and MW (demand)	Net MW savings	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	EM&V study	2018-2025 consistent with adopted goals from D.17-09-025, Tables 1, 2, and 3, p. 37-39; 2016 from CEDARS (spillover not included). Values summed across all four IOUs. "Savings" is defined as Net First year savings.	
285	3C-REN	A10	CS2	1	Count	Advocacy-Building	Metric	Number of measures supported by CASE studies in rulemaking cycle (current work)	Number of measures supported by CASE studies in rulemaking cycle (current work)	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	12 total	12 total	TBD	TBD	Measures supported by CASE	Baseline and targets for measures supported are for 3 year cycle rather than annual.	
286	3C-REN	A10	CS2	2	Count	Advocacy-Building	Metric	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)	2019	N/A	N/A	N/A	N/A	12 total	12 total	TBD	TBD	Measures adopted by CEC	Baseline and targets for measures supported are for 3 year cycle rather than annual.	
287	3C-REN	A10	CS3	1	Count	Advocacy-Appliance	Metric	Number of T-20 measures supported by CASE studies in rulemaking cycle (current work)	Number of T-20 measures supported by CASE studies in rulemaking cycle (current work)	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	10 total	10 total	TBD	TBD	T-20 measures supported by CASE	Baseline is annual. Targets for measures supported are for 3 year cycle rather than annual. 2017 chosen as baseline since 2016 was zero.	
288	3C-REN	A10	CS3	2	Count	Advocacy-Appliance	Metric	Number of measures adopted by CEC in current year	Number of measures adopted by CEC in current year	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	10 total	10 total	TBD	TBD	Measures adopted by CEC	Baseline is annual. Targets for measures adopted are for 3 year cycle rather than annual.	
289	3C-REN	A10	CS4	1	Count	Advocacy-Federal	Metric	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 list advocated activities)	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	100%	100%	TBD	TBD	Standards adopted	Baselines and targets are annual. Any federal standards based upon Title 20 that were adopted will still be included in the federal count.	
290	3C-REN	A10	CS4	2	Count	Advocacy-Federal	Metric	Percent of federal standards adopted for which a utility advocated (#IOU supported / # DOE adopted)	Percent of federal standards adopted for which a utility advocated (#IOU supported / # DOE adopted)	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	100%	100%	TBD	TBD	# IOUs supported ÷ # DOE adopted	Baselines and targets are annual.	
291	3C-REN	A10	CS5	1	Count	Reach Codes	Metric	The number of local government Reach Codes implemented (this is a joint IOU and REN effort)	The number of local government Reach Codes implemented (this is a joint IOU and REN effort)	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	25 total	25 total	TBD	TBD	Reach Code ordinances implemented	Targets are total for a three-year Title 24 code cycle. Jurisdictions having multiple reach codes will be counted by reach code rather than by jurisdiction. Accomplishments will be reported from the CEC Reach Codes website (http://www.energy.ca.gov/title24/2013standards/ordinances/).	
292	3C-REN	A11	CS6	1	Count	Compliance Improvement	Metric	Number of training activities (classes, webinars) held, number of market actors participants by segment (e.g. building officials, builders, architects, etc.) and the the total size (number of the target audience) by sector. (M) Number of training activities	Number of training activities (classes, webinars) held, number of market actors participants by segment (e.g. building officials, builders, architects, etc.) and the the total size (number of the target audience) by sector. (M) Number of training activities	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	138	138	TBD	TBD	Number of training activities	118 live training sessions and 20 webinars in 2017; short, mid, and long-term targets are annual	
293	3C-REN	A11	CS6	2	Count	Compliance Improvement	Metric	Number of training activities (classes, webinars) held, number of market actors participants by segment (e.g. building officials, builders, architects, etc.) and the 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 participants by segment (e.g. building officials, builders, architects, etc.) and the the total size (number of the target audience) by sector. (M) Number of participants	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	3,600	3,600	TBD	TBD	Number of participants	3000 attendees for live training and 600 attendees for webinars in 2017; short, mid, and long-term targets are annual. Attendees will be shown by major segment (i.e., building officials, builders, architects, HERS raters) and target size of each segment will be provided during first metrics reporting.	
294	3C-REN	A11	CS6	3	Score	Compliance Improvement	Metric	Increase in code compliance knowledge pre/post training	Increase in code compliance knowledge pre/post training	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	20%	20%	TBD	TBD	Knowledge score	Code compliance knowledge increase will be tested via pre and post training questionnaires. Surveys will be conducted for training that lasts longer than three hours (in order to preserve time for instruction in shorter training sessions). Questionnaires will be made available during the first metrics reporting.	
295	3C-REN	A11	CS6R	1	Percent	Compliance Improvement	Metric	The percentage increase in closed permits for building projects triggering energy code compliance within participating jurisdictions	The percentage increase in closed permits for building projects triggering energy code compliance within participating jurisdictions	Codes & Standards (CS)	2019	N/A	N/A	N/A	N/A	TBD	TBD	TBD	TBD			

Spreadsheet Index	PA	AttA Page	AttA Order	Method Code	Units of Measurement	Metric/Indicator	Business Plan Att A Description	Metric	Sector	Baseline Year	Baseline Numerator	Baseline Denominator	Baseline Number	Short Term Target			Mid Term Target (2021-2023)	Long Term Target (2024-2025)	Methodology	Key Definitions	Proxy Explanation
296	3C-REN	A11	CS6Ri	1	Count	Compliance Improvement	Indicator	Number and percent of jurisdictions with staff 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 - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
297	3C-REN	A11	CS6Ri	1	Percent	Compliance Improvement	Indicator	Number and percent of jurisdictions with staff 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 - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
298	3C-REN	A11	CS6Ri	2	Count	Compliance Improvement	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	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
299	3C-REN	A11	CS6Ri	2	Percent	Compliance Improvement	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	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
300	3C-REN	A11	CS6Ri	3	Count	Compliance Improvement	Indicator	Buildings receiving enhanced code compliance support and delivering compliance data to program evaluators	Buildings receiving enhanced code compliance support and delivering compliance data to program evaluators	Codes & Standards (CS)	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator	N/A - Indicator			
301	3C-REN	A12	WET-1	1	Count	Collaborations	Metric	Number of collaborations by Business Plan sector to jointly develop or share training materials or resources.	Number of collaborations by Business Plan sector to jointly develop or share training materials or resources.	Workforce Education and Training (WET)	N/A	N/A	N/A	N/A	N/A	TBD	TBD	TBD	TBD	Collaboration agreements are not required.	"Collaborations" mean sharing mutually-beneficial resources such as training materials, expertise, and marketing/outreach tactics that help achieve WE&T goals and outcomes and that support the collaborating organizations' goals and objectives.
302	3C-REN	A12	WET-2	1	Count	Penetration	Metric	Number of participants by sector	Number of participants by sector	Workforce Education and Training (WET)	N/A	N/A	N/A	N/A	N/A	110	120	160	230	Report from class registration database.	"Sector" refers to: a. Residential versus non-residential b. Energy efficiency training topic area (e.g., Lighting, HVAC, Agriculture) "Participants" means aggregate class attendance, meaning that one person attending two classes throughout the year would qualify as two participants. This is an accurate measurement of audience interest per topic / sector. Please note that the IOUs will begin using a standard categorization of training topic areas in 2018.
303	3C-REN	A12	WET-2	1	Percentage	Penetration	Metric	Percent of participation relative to eligible target population for curriculum	Percent of participation relative to eligible target population for curriculum	Workforce Education and Training (WET)	N/A	N/A	N/A	N/A	N/A	2.0%	2.1%	2.9%	4.1%	Numerator: Report from class registration database. Denominator: Advanced Energy Economy Institute (AEEI) report finding: "Energy Efficiency accounts for the largest share of advanced energy jobs in California. About six in 10 advanced energy workers are employed in the Energy Efficiency sector; these firms support over 321,000 jobs." Assume advanced Energy Efficiency jobs are commiserate with population for each PA territory. PG&E's share of 321,000 jobs is approximately 132,380.	"Participation" means unique participants, meaning that one person attending two classes throughout the year would be counted as one participant. "Curriculum" refers to the portfolio of training programs and training materials offered by WE&T "Eligible target population" refers to the energy efficiency labor workforce within each PA's service territory based on the proportion of the IOU's territory population compared to that of California's population.
304	3C-REN	A12	WET-3	1	Percentage	Diversity	Metric	Percent of total WE&T training program participants that meet the definition of disadvantaged worker.	Percent of total WE&T training program participants that meet the definition of disadvantaged worker.	Workforce Education and Training (WET)	N/A	N/A	N/A	N/A	N/A	TBD	TBD	TBD	TBD	Report of provided zip codes from class registration database cross-referenced with the list of "disadvantaged worker" zip codes. Please note that these zip codes are a mixture of home and work addresses. By the end of 2018, IOUs will specifically request participants' home zip codes.	"Disadvantaged Worker" means a worker that (1) has a referral from a collaborating community-based organization (CBO), state agency, or workforce investment board; or (2) lives in a ZIP code that is in the top 25% in one or more of the five socioeconomic indicators as defined in the California Office of Environmental Health Hazard Assessment's CalEnviroScreen Tool. These socioeconomic indicators are educational attainment, housing burden, linguistic isolation, poverty, and unemployment. "Participant" means a unique participant, meaning that one person attending two classes throughout the year would be counted as one attendee.
305	3C-REN	A12	WET-3	1	Percentage	Diversity	Metric	Percent of incentive dollars spent on contracts* with a demonstrated commitment to provide career pathways to disadvantaged workers	Percent of incentive dollars spent on contracts* with a demonstrated commitment to provide career pathways to disadvantaged workers	Workforce Education and Training (WET)	N/A	N/A	N/A	N/A	N/A	TBD	TBD	TBD	TBD	Disadvantaged worker tracking is currently not required by PA contract terms and conditions.	*Applies only to programs that install, modify, repair, or maintain EE equipment where the incentive is paid to an entity other than a manufacturer, distributor, or retailer of equipment. This applicability standard is adopted from the language the July 9th ruling on workforce standards. It excludes contracts such as those for upstream incentives, Codes and Standards, and mid-stream distributor programs. "Demonstrated commitment" means that the vendor submits a plan describing how the program will provide disadvantaged workers with improved access to career opportunities in the energy efficiency industry, that they regularly report the percentage of their workforce qualifying as "disadvantaged", and that they have long-term targets for the percentage of their workforce qualifying as "disadvantaged".
306	3C-REN	A12	WET-3	1	Count	Diversity	Indicator	Number Career & Workforce Readiness (CWR) participants who have been employed for 12 months after receiving the training	Number Career & Workforce Readiness (CWR) participants who have been employed for 12 months after receiving the training	Workforce Education and Training (WET)	N/A	N/A	N/A	N/A	N/A	TBD	TBD	TBD	TBD	CWR program does not yet exist.	See "Disadvantaged worker" above. N/A

Column Index

3C-REN**EE Sector Metrics with Targets - ED Template Column Index**

Each metric in this workbook can be mapped to the Final Business Plan Decision Attachment A metric using page number (AttA Page) and the order of the metric within the table of sector-level metrics (AttA Order). Because there are some collinear metrics in Attachment A and some multi-part metrics, we have further coded the metric with Metric Type (Method Code is a shorthand for Metric Type) to make distinctions between the multiple parts of the metric. Note that (net vs gross), (kW vs kWh vs Therm) and (PAC vs TRC) have not been coded separately, but instead can be distinguished by looking at the "Units of Measurement" column.

Each unique metric, including each part of a multi-part metric, is a separate row. Baselines, 2018, 2019, 2020, Mid-, and Long-Term targets for each metric is reported on the same row.

Column Name	Column Description
PA	Program Administrator
AttA Page	Attachment A Page
AttA Order	Attachment A order of metric in the sector metrics table in Attachment A
Method Code	(PA use) Code indicating a unique metric calculation methodology or definition was used
Metric Type	(PA Use) Metric type
Metric Language	Language of the metric from D.18-05-041 Attachment A
Sector	Sector
Baseline Year	Baseline year is 2016, unless there was no activity in 2016, in which case the baseline was set for a year in which there was activity
Baseline Number	Data from PA
2018 Target	Data from PA
2019 Target	Data from PA
2020 Target	Data from PA
Mid Term Target (2021-2023)	Data from PA
Long Term Target (2024-2025)	Data from PA
Units of Measurement	Units of measurement
Methodology	Short description of metric calculation
Key Definitions	Key definitions for metric
Was Proxy Used? Y/N	Flag for use of proxy in calculation of metric
Proxy Explanation	Explanation of how proxy was calculated, what secondary data sources were used, and when PA plans to be able to use primary data for metric.

Definitions

Tri-County Regional Energy Network (3C-REN)

EE Sector Metrics with Targets - Definitions

	Term	Definition
1	Service Account	A service account is a system generated number that uniquely identifies a billable entity
2	Eligible Population	Total number of service accounts in sector/segment
3	Disadvantaged Communities	Service account address located in zip codes that contain CalEnviroScreen 3.0 census tracts.
4	Hard-to-Reach	D p. 43 - Resolution G-3497, modified to "include disadvantaged communities (as designated by CalEPA) in the geographic criteria for hard to reach customers." Hard-to-reach zipcodes determined by 2014 Aspen Research study.
5	MT CO ₂ eq	Conversion of kWh and Therms to MTCO ₂ eq as reported by CEDARS
6	Levelized Cost	PAC and TRC cost (excluding C&S), as output from the CET Tool
7	Residential Single Family	Service account on residential rates, with dwelling code of single family home or single family dwelling.
8	Participant	A unique person or entity identified through a combination of service account and premise ID and who participates in a ratepayer funded energy efficiency intervention
9	Household	Residential service account
10	Opt-In/Opt-Out Program	Opt-in programs are voluntary and participation is at the discretion of the individual and/or entity. Opt-out programs are those where individuals and/or entities are defaulted into with their option to opt-out. Opower/HER is the only Opt-Out program.
11	Residential Multifamily	MF/SF designation based on dwelling codes in service accounts. Number of units = 2 or more.
12	Project	Energy efficiency efforts where the customer financial incentives and energy savings are determined using a site-specific analysis of the customer's existing and proposed equipment and/or building components
13	Building	Any structure used or intended to support or shelter any use or occupancy, that receives energy from a utility
14	Property	A property is a collection of buildings and/or structures within a defined proximity and is intended to support or shelter any use or occupancy, that receives energy from a utility
15	Energy Savings per Square Foot (depth of intervention)	Sq footage of EE-addressed space, as defined by individual implementation plans
16	Square feet of eligible population participating (by property)	Sq footage of participating properties captured when provided.
17	In Unit	Living space as designated by a unique service account and/or dwelling codes.
18	Common Area	Shared space within a property, designated by dwelling codes, a "common area" flag, and/or by use of a commercial meter.
19	Master Metered	Define using rate class, or rate class and/or by dwelling code. Non-overlapping with in-unit
20	Unit	Service accounts within MF property. Non-overlapping with Master Metered.
21	Square Feet of Eligible Population	Sq footage of defined space per metric definition.

22	Public Sector	Per SDG&E BP application (p. 102), "the public sector came to be defined as the group of customers that are tax-payer funded, have political mandates, and that must go through a public budgeting and decision-making process." Local Gov't: Cities, Counties, Special Districts, Solid Waste Facilities, Water / Wastewater Facilities, Hospitals, Correctional Facilities. State: State Buildings, State Park Facilities, Hospitals, Correctional Facilities. Federal: Federal Buildings, US Postal Service, Hospitals, Ports, Military Bases. Native American Tribes Public Education (double check): K-12 Schools (Schools, Admin Buildings), Higher Education (e.g., UC/CSU), community colleges Special exceptions on a case by case basis, determined by PAs based on customer of record.
23	Facility	A structure or collection of structures, covered or uncovered, that typically encompass processing or production capabilities
24	Project Building Floor Plan Area	Sq footage of EE-addressed space, as defined by individual implementation plans
25	Program-Backed Financing	Loan amount
26	Water/Waste Water Facility	A structure or collection of structures, covered or uncovered, that encompass water/waste water treatment processes. EE savings are intended to be captured at the facility level.
27	Annual Flow	Flow (in millions of gallons per day) of water/wastewater as reported by the water/waste water facility
28	Current Benchmark	Benchmarked via Portfolio Manager in the calendar year
29	Investments made by ratepayers and private capital	Project incentive vs project cost
30	Customer Satisfaction	Per consistent survey, to be developed
31	Trade Ally Satisfaction	Per consistent survey, to be developed
32	Customer Size - Small	A service account with <50 kW demand
33	Customer Size - Medium	A service account with 50 - 250 kW demand
34	Customer Size - Large	A service account with >250 kW demand

Tri-County Regional Energy Network (3C-REN) - Energy Efficiency Sector Metrics with Targets

Attachment B

Tri-County Regional Energy Network (3C-REN) - Energy Efficiency Sector Metrics with Targets

Attachment B - Table of Contents

	<u>Page #</u>
A. Portfolio Metrics	35
B. Sector-Level Metrics	
1. Residential - Single Family	39
2. Residential - Multi-Family	42
7. Codes and Standards	47
8. Workforce, Education, and Training	50

Portfolio-Level Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Greenhouse Gas Emissions	Greenhouse gasses (MT CO2eq) Net kWh savings, reported on annual basis	MT CO2eq Net kWh Savings	N/A			N/A	22	231	127	422	588	CEDARS CET Output
3C-REN Notes/Methodology: • 3C-REN baseline year will be 2019 for all programs.												

Portfolio-Level Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Capturing Energy Savings	First year annual and lifecycle ex-ante (pre-eval) gas, electric and demand savings (gross and net)	First Year Gross kW Savings	N/A			N/A	157,514	201,312	179,413	436,572	652,340	CEDARS CET Outputs
		First Year Net kW Savings	N/A			N/A	141,762	181,181	161,472	392,915	587,106	CEDARS CET Outputs
		First Year Gross kWh Savings	N/A			N/A	522,080	709,420	615,750	1,442,144	2,116,750	CEDARS CET Outputs
		First Year Net kWh Savings	N/A			N/A	611,247	819,137	715,192	1,689,721	2,490,460	CEDARS CET Outputs
		First Year Gross Therms Savings	N/A			N/A	54,732	73,672	64,202	158,529	242,923	CEDARS CET Outputs
		First Year Net Therms Savings	N/A			N/A	49,259	66,305	57,782	142,676	218,630	CEDARS CET Outputs
		Lifecycle Gross kW Savings	N/A			N/A	5,826	7,847	6,836	17,015	33,479	Calculated from CEDARS CET Inputs
		Lifecycle Net kW Savings	N/A			N/A	4,952	6,670	5,811	14,463	28,457	Calculated from CEDARS CET Inputs
		Lifecycle Gross kWh Savings	N/A			N/A	8,609,169	11,544,408	10,076,788	23,965,392	35,535,316	CEDARS CET Outputs
		Lifecycle Net kWh Savings	N/A			N/A	7,748,252	10,389,967	9,069,109	21,568,852	31,981,784	CEDARS CET Outputs
		Lifecycle Gross Therms Savings	N/A			N/A	740,527	997,592	869,059	2,164,168	3,339,803	CEDARS CET Outputs
		Lifecycle Net Therms Savings	N/A			N/A	666,474	897,832	782,153	1,947,751	3,005,823	CEDARS CET Outputs
3C-REN Notes/Methodology: • 3C-REN baseline year will be 2019 for all programs.												

Portfolio-Level Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
		First Year Gross kW Savings	N/A			N/A	24,645	31,495	28,070	68,303	102,055	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		First Year Net kW Savings	N/A			N/A	22,181	28,346	25,263	61,473	91,850	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		First Year Gross kWh Savings	N/A			N/A	29,139	39,594	34,366	80,489	118,141	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets

Disadvantaged Communities	First year annual and lifecycle ex-ante (pre-eval) gas, electric and demand savings (gross and net)	First Year Net kWh Savings	N/A			N/A	48,378	63,944	56,161	133,834	198,057	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		First Year Gross Therms Savings	N/A			N/A	3,845	5,121	4,483	11,037	16,828	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		First Year Net Therms Savings	N/A			N/A	3,461	4,609	4,035	9,933	15,145	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Gross kW Savings	N/A			N/A	402	537	470	1,164	2,188	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Net kW Savings	N/A			N/A	342	456	399	989	1,860	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Gross kWh Savings	N/A			N/A	670,665	887,323	778,994	1,864,574	2,770,730	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Net kWh Savings	N/A			N/A	603,598	798,591	701,095	1,678,117	2,493,657	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Gross Therms Savings	N/A			N/A	50,815	67,793	59,304	147,055	225,633	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Net Therms Savings	N/A			N/A	45,734	61,013	53,374	132,350	203,069	CalEnviroScreen 3.0, US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		3C-REN Notes/Methodology: • 3C-REN baseline year will be 2019 for all programs.										

Portfolio-Level Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
		First Year Gross kW Savings	N/A			N/A	132,868	169,817	151,343	368,270	550,284	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		First Year Net kW Savings	N/A			N/A	119,582	152,835	136,208	331,443	495,256	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		First Year Gross kWh Savings	N/A			N/A	492,942	669,826	581,384	1,361,654	1,998,608	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		First Year Net kWh Savings	N/A			N/A	562,869	755,193	659,031	1,555,887	2,292,403	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		First Year Gross Therms Savings	N/A			N/A	50,887	68,550	59,719	147,492	226,095	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets

Hard-to-Reach	First year annual and lifecycle ex-ante (pre-eval) gas, electric and demand savings (gross and net)	First Year Net Therms Savings	N/A			N/A	45,798	61,695	53,747	132,743	203,485	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Gross kW Savings	N/A			N/A	5,423	7,310	6,367	15,851	31,290	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Net kW Savings	N/A			N/A	4,610	6,213	5,412	13,473	26,597	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Gross kWh Savings	N/A			N/A	7,938,504	10,657,084	9,297,794	22,100,818	32,764,586	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Net kWh Savings	N/A			N/A	7,144,654	9,591,376	8,368,015	19,890,736	29,488,128	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Gross Therms Savings	N/A			N/A	689,712	929,799	809,755	2,017,112	3,114,171	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
		Lifecycle Net Therms Savings	N/A			N/A	620,740	836,819	728,780	1,815,401	2,802,754	US Census Bureau American Community Survey, CEDARS CET Outputs & 3C-REN Targets
3C-REN Notes/Methodology: 3C-REN baseline year will be 2019 for all programs.												

Portfolio-Level Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Cost per Unit Saved	Levelized cost of energy efficiency per kWh, therms and kW (use both TRC and PAC)	PAC Levelized Cost (\$/kW)	N/A			N/A	\$ 23.58	\$ 23.27	\$ 23.42	\$ 24.43	\$ 23.43	CEDARS CET Outputs
		PAC Levelized Cost (\$/kWh)	N/A			N/A	\$ 0.23	\$ 0.17	\$ 0.20	\$ 0.09	\$ 0.05	CEDARS CET Outputs
		PAC Levelized Cost (\$/therms)	N/A			N/A	\$ 2.18	\$ 1.64	\$ 1.91	\$ 0.92	\$ 0.59	CEDARS CET Outputs
		TRC Levelized Cost (\$/kW)	N/A			N/A	\$ 30.55	\$ 32.10	\$ 31.32	\$ 40.68	\$ 44.27	CEDARS CET Outputs
		TRC Levelized Cost (\$/kWh)	N/A			N/A	\$ 0.27	\$ 0.20	\$ 0.24	\$ 0.12	\$ 0.08	CEDARS CET Outputs
		TRC Levelized Cost (\$/therm)	N/A			N/A	\$ 1.28	\$ 1.04	\$ 1.16	\$ 0.72	\$ 0.55	CEDARS CET Outputs
3C-REN Notes/Methodology: • 3C-REN baseline year will be 2019 for all programs.												

Single Family Metrics 3C-REN													
Common Problem	Common Metric/Indicator		2016 Baseline		Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Capturing Energy Savings	First year annual and lifecycle ex-ante (pre-eval) gas, electric and demand savings (gross and net)	First Year Gross kW Savings	N/A			N/A	367	499	433	1,071	1,647	CEDARS CET Outputs	
		First Year Net kW Savings	N/A			N/A	331	449	390	964	1,482	CEDARS CET Outputs	
		First Year Gross kWh Savings	N/A			N/A	522,016	709,338	615,677	1,441,967	2,116,485	CEDARS CET Outputs	
		First Year Net kWh Savings	N/A			N/A	469,815	638,404	554,109	1,297,770	1,904,836	CEDARS CET Outputs	
		First Year Gross Therms Savings	N/A			N/A	46,891	63,656	55,274	136,812	210,488	CEDARS CET Outputs	
		First Year Net Therms Savings	N/A			N/A	42,202	57,290	49,746	123,131	189,439	CEDARS CET Outputs	
		Lifecycle Gross kW Savings	N/A			N/A	5,059	6,867	5,963	14,890	30,304	Calculated from CEDARS CET Inputs	
		Lifecycle Net kW Savings	N/A			N/A	4,300	5,837	5,068	12,656	25,758	Calculated from CEDARS CET Inputs	
		Lifecycle Gross kWh Savings	N/A			N/A	6,723,410	9,134,642	7,929,026	18,739,375	27,727,001	CEDARS CET Outputs	
		Lifecycle Net kWh Savings	N/A			N/A	6,051,069	8,221,178	7,136,124	16,865,438	24,954,301	CEDARS CET Outputs	
		Lifecycle Gross Therms Savings	N/A			N/A	646,434	877,403	761,919	1,903,564	2,950,591	CEDARS CET Outputs	
		Lifecycle Net Therms Savings	N/A			N/A	581,791	789,663	685,727	1,713,208	2,655,532	CEDARS CET Outputs	
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. • All values are subject to change pending CPUC approval of 3C-REN's 2019 ABAL as directed in D.18.05.041. 3C-REN does not currently administer any programs with ratepayer funding.													

Single Family Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Greenhouse Gas Emissions	Greenhouse gasses (MT CO2eq) Net kWh savings, reported on annual basis	MT CO2eq Net kWh Savings	N/A			N/A	17	180	99	324	450	CEDARS CET Output
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. • All values are subject to change pending CPUC approval of 3C-REN's 2019 ABAL as directed in D.18.05.041. 3C-REN does not currently administer any programs with ratepayer funding.												

Single Family Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Depth of Interventions	Average Savings per Participant (Downstream)	Lifecycle New kW	N/A			N/A	6.91	6.90	6.91	7.79	11.30	3C-REN CET Output File & 3C-REN Targets
		Lifecycle Net kWh	N/A			N/A	9,728.41	9,717.70	9,723.06	10,381.13	11,041.75	3C-REN CET Output File & 3C-REN Targets
		Lifecycle Net Therms	N/A			N/A	935.35	933.41	934.38	1,054.54	1,175.02	3C-REN CET Output File & 3C-REN Targets
	Average Savings per Participant (Midstream)	Lifecycle New kW	N/A			N/A	N/A	N/A	N/A	N/A	N/A	
		Lifecycle Net kWh	N/A			N/A	N/A	N/A	N/A	N/A	N/A	
		Lifecycle Net Therms	N/A			N/A	N/A	N/A	N/A	N/A	N/A	
	Average Savings per Participant (Opt-out)	Lifecycle New kW	N/A			N/A	N/A	N/A	N/A	N/A	N/A	
		Lifecycle Net kWh	N/A			N/A	N/A	N/A	N/A	N/A	N/A	

		Lifecycle Net Therms	N/A			N/A	N/A	N/A	N/A	N/A	N/A	
	Average Savings per Participant (Upstream)	Lifecycle New kW	N/A			N/A	N/A	N/A	N/A	N/A	N/A	
		Lifecycle Net kWh	N/A			N/A	N/A	N/A	N/A	N/A	N/A	
		Lifecycle Net Therms	N/A			N/A	N/A	N/A	N/A	N/A	N/A	
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. • All values are subject to change pending CPUC approval of 3C-REN's 2019 ABAL as directed in D.18.05.041. 3C-REN does not currently administer any programs with ratepayer funding. • N/A for midstream, opt-out and upstream interventions since 3C-REN is not planning to operate any of these types of programs.												

Single Family Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Penetration of Energy Efficiency Program in the Eligible Market	Percent of participation relative to eligible population	Percent	N/A	N/A	N/A	N/A	0.16%	0.21%	0.18%	0.41%	0.57%	US Census Bureau American Community Survey, 2016 & 3C-REN Targets
	Percent of participation in disadvantaged communities	Percent	N/A	N/A	N/A	N/A	0.49%	0.53%	0.51%	2.27%	2.05%	CalEnviroScreen 3.0, US Census Bureau American Community Survey, 2016 & 3C-REN Targets
	Percent of participation by customers defined as "hard-to-reach"	Percent	N/A	N/A	N/A	N/A	0.26%	0.37%	0.32%	0.76%	1.05%	US Census Bureau American Community Survey, 2016 & 3C-REN Targets
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. • All values are subject to change pending CPUC approval of 3C-REN's 2019 ABAL as directed in D.18.05.041. 3C-REN does not currently administer any programs with ratepayer funding. • 3C-REN's residential programs are limited to hard-to-reach (HTR) and disadvantaged communities (DAC). Targets were developed using 2015 Census data for the number of eligible HTR and DAC multifamily units in 3C-REN's territory (Ventura, Santa Barbara, San Luis Obispo). Ventura County is the only area which is using DAC criteria to meet the direction provided in the Decision (D.18-05-041) that REN can duplicate IOU service if they are in HTR and/or DAC areas. Estimated targets by year were used for Ventura as the numerator and total eligible units in DAC (per CalEnviroScreen 3.0) per the Census data as the denominator. For HTR, we used the total number of targets by year for Santa Barbara and San Luis Obispo as the numerator and total eligible units in HTR per the Census data as the denominator.												

Single Family Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Cost per Unit Saved	Levelized cost of energy efficiency per kWh, therms and kW (use both TRC and PAC)	PAC Levelized Cost (\$/kW)	N/A			N/A	31.45	32.00	31.73	33.75	32.34	CEDARS CET Outputs
		PAC Levelized Cost (\$/kWh)	N/A			N/A	0.17	0.12	0.15	0.07	0.04	CEDARS CET Outputs
		PAC Levelized Cost (\$/therm)	N/A			N/A	1.57	1.20	1.38	0.69	0.45	CEDARS CET Outputs
		TRC Levelized Cost (\$/kW)	N/A			N/A	45.22	49.45	47.34	65.87	73.54	CEDARS CET Outputs
		TRC Levelized Cost (\$/kWh)	N/A			N/A	0.24	0.19	0.22	0.13	0.09	CEDARS CET Outputs
		TRC Levelized Cost (\$/therm)	N/A			N/A	2.25	1.86	2.06	1.32	1.02	CEDARS CET Outputs
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. • All values are subject to change pending CPUC approval of 3C-REN's 2019 ABAL as directed in D.18.05.041. 3C-REN does not currently administer any programs with ratepayer funding. • The current version of the CEDARS Cost-effectiveness tool (CET) only has avoided costs for 2019, so all future values are estimates. Additionally the current tool does not provide levelized cost per kW or per Therm. These values were calculated using the following equations: TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively. • PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively.												

Single Family Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Energy Intensity	Average energy use intensity of single family homes (average usage per household - not adjusted)	Energy intensity per SF household	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3C-REN Notes/Methodology: Indicator, so no data needed												

Multifamily Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018- 2020)	Mid-term average (2021- 2023)	Long-term average (2024- 2025)	Data Source
Capturing Energy Savings	First year annual and lifecycle ex-ante (pre-eval) gas, electric and demand savings (gross and net) In-unit	First Year Gross kW Savings	N/A			N/A	157,147	200,814	178,980	435,501	650,693	CEDARS CET Outputs
		First Year Net kW Savings	N/A			N/A	141,432	180,732	161,082	391,951	585,624	CEDARS CET Outputs
		First Year Gross kWh Savings	N/A			N/A	64	82	73	177	265	CEDARS CET Outputs
		First Year Net kWh Savings	N/A			N/A	141,432	180,732	161,082	391,951	585,624	CEDARS CET Outputs
		First Year Gross Therms Savings	N/A			N/A	7,841	10,016	8,928	21,717	32,434	CEDARS CET Outputs
		First Year Net Therms Savings	N/A			N/A	7,057	9,014	8,036	19,545	29,191	CEDARS CET Outputs
		Lifecycle Gross kW Savings	N/A			N/A	767	980	873	2,125	3,175	Calculated from CEDARS CET Inputs
		Lifecycle Net kW Savings	N/A			N/A	652	833	742	1,806	2,699	Calculated from CEDARS CET Inputs
		Lifecycle Gross kWh Savings	N/A			N/A	1,885,758	2,409,766	2,147,762	5,226,016	7,808,315	CEDARS CET Outputs
		Lifecycle Net kWh Savings	N/A			N/A	1,697,183	2,168,789	1,932,986	4,703,415	7,027,483	CEDARS CET Outputs
		Lifecycle Gross Therms Savings	N/A			N/A	94,093	120,188	107,141	260,604	389,212	CEDARS CET Outputs
		Lifecycle Net Therms Savings	N/A			N/A	84,683	108,170	96,426	234,543	350,291	CEDARS CET Outputs
Capturing Energy Savings	First year annual and lifecycle ex-ante (pre-eval) gas, electric and demand savings (gross and net) Common Area	First Year Gross kW Savings	N/A			N/A	-	-	-	-	-	
		First Year Net kW Savings	N/A			N/A	-	-	-	-	-	
		First Year Gross kWh Savings	N/A			N/A	-	-	-	-	-	
		First Year Net kWh Savings	N/A			N/A	-	-	-	-	-	
		First Year Gross Therms Savings	N/A			N/A	-	-	-	-	-	
		First Year Net Therms Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Gross kW Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Net kW Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Gross kWh Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Net kWh Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Gross Therms Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Net Therms Savings	N/A			N/A	-	-	-	-	-	
Capturing Energy Savings	First year annual and lifecycle ex-ante (pre-eval) gas, electric and demand savings (gross and net) Master Metered	First Year Gross kW Savings	N/A			N/A	-	-	-	-	-	
		First Year Net kW Savings	N/A			N/A	-	-	-	-	-	
		First Year Gross kWh Savings	N/A			N/A	-	-	-	-	-	
		First Year Net kWh Savings	N/A			N/A	-	-	-	-	-	
		First Year Gross Therms Savings	N/A			N/A	-	-	-	-	-	
		First Year Net Therms Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Gross kW Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Net kW Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Gross kWh Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Net kWh Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Gross Therms Savings	N/A			N/A	-	-	-	-	-	
		Lifecycle Net Therms Savings	N/A			N/A	-	-	-	-	-	
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. • All of 3C-REN's savings are in-unit since the program is targeting renters and not property owners or managers. We don't anticipate installing any common area measures or claiming any common area savings. 3C-REN does not have access to master metered accounts or data, and therefore assumes all savings will be in-unit. After 3C-REN is approved for funding in 2019, we can work with tenants to determine if their unit is master metered vs individually metered and report on that for future years.												

Multifamily Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018- 2020)	Mid-term average (2021- 2023)	Long-term average (2024- 2025)	Data Source

Greenhouse Gas Emissions	Greenhouse gasses (MT CO2eq) Net kWh savings, reported on annual basis	MT CO2eq Net kWh Savings	N/A			N/A	5.1	51.0	28.1	97.7	138.3	CEDARS CET Output
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. •												

Multifamily Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018- 2020)	Mid-term average (2021- 2023)	Long-term average (2024- 2025)	Data Source
Depth of Interventions	Energy Savings (kW, kWh, Therms) per Project (Building)	Lifecycle Net kW	N/A			N/A	2.10	2.10	2.10	2.10	2.10	CEDARS CET Output and 3C-REN targets
		Lifecycle Net kWh	N/A			N/A	5,475	5,477	5,476	5,477	5,480	CEDARS CET Output and 3C-REN targets
		Lifecycle Net Therms	N/A			N/A	273	273	273	273	273	CEDARS CET Output and 3C-REN targets
	Average Savings per Participant Savings per Project (Property)	Lifecycle Net kW	N/A			N/A	2.10	2.10	2.10	2.10	2.10	CEDARS CET Output and 3C-REN targets
		Lifecycle Net kWh	N/A			N/A	5,475	5,477	5,476	5,477	5,480	CEDARS CET Output and 3C-REN targets
		Lifecycle Net Therms	N/A			N/A	273	273	273	273	273	CEDARS CET Output and 3C-REN targets
	Energy Savings (kWh, kW, therms) per square foot	Lifecycle Net kW	N/A			N/A	0.003	0.003	0.003	0.003	0.003	CEDARS and BayREN data for avg. sqft.
		Lifecycle Net kWh	N/A			N/A	6.84	6.85	6.84	6.85	6.85	CEDARS and BayREN data for avg. sqft.
		Lifecycle Net Therms	N/A			N/A	0.34	0.34	0.34	0.34	0.34	CEDARS and BayREN data for avg. sqft.
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. • N/A for midstream, opt-out and upstream interventions. • 3C-REN's multifamily program plans to target renters and not property managers or owners. Our targets are based on individual multifamily units and we consider each unit that receives services to be a project. Energy Savings per project/property is equal the total energy savings per participant, where a participant is the same as a multifamily housing unit. • For numbers of buildings 3C-REN is using 1 building per project since we are targeting individual units and those would be located in a single building. • 3C-REN does not have any values for Avg. Square Feet of multifamily units and are using the value developed by BayREN as a proxy (800 sqft/unit). After 3C-REN is approved to administer the multifamily program, it will collect square footage for all participants and update the value for the 2019 Annual report based on our database and/or we will can CoStar data to determine the average square footage of units in our service territory.												

Multifamily Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Penetration of Energy Efficiency Program in the Eligible Market	Percent of participation relative to eligible population by property	Percent	N/A	N/A	N/A	N/A	0.28%	0.36%	0.32%	0.72%	1.21%	2015 US Census data
	Percent of participation relative to eligible population by unit	Percent	N/A	N/A	N/A	N/A	0.28%	0.36%	0.32%	0.72%	1.21%	2015 US Census data
	Percent of participation in disadvantaged communities	Percent	N/A	N/A	N/A	N/A	2.08%	2.29%	2.19%	3.15%	4.21%	2015 US Census data
	Percent of participation by customers defined as "hard-to-reach"	Percent	N/A	N/A	N/A	N/A	0.60%	0.86%	0.73%	2.10%	3.84%	2015 US Census data

	Penetration of energy efficiency programs in terms of square feet	Percent	N/A	N/A	N/A	N/A	0.24%	0.30%	0.27%	0.66%	0.99%	2015 US Census data
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. • 3C-REN targets individual units and not properties, therefore property and unit are the same • 3C-REN's residential programs are limited to hard-to-reach (HTR) and disadvantaged communities (DAC). Our targets (number of multifamily units) were developed using 2015 Census data for the number of eligible HTR and DAC multifamily units in 3C-REN's territory (Ventura, Santa Barbara, San Luis Obispo). Ventura County is the only area which is using DAC criteria to meet the direction provided in the Decision (D.18-05-041) that REN can duplicate IOU service if they are in HTR and/or DAC areas. We used the estimated targets by year for Ventura as the numerator and total eligible units in DAC per the Census data as the denominator. For HTR, we used the total number of targets by year for Santa Barbara and San Luis Obispo as the numerator and total eligible units in HTR per the Census data as the denominator. • 3C-REN defines eligible population as all multifamily housing units with 2 or more units located in Ventura, Santa Barbara or San Luis Obispo. Since 3C-REN is limited to only targeting HTR and DAC participants, a better representation of percent of participation would be to only look at the HTR and DAC population. • To determine the total square footage of eligible population, 3C-REN used 800 sqft/unit as a proxy (provided by BayREN) and multiplied that number times the eligible population per 2016 Census Data.												

Multifamily Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018- 2020)	Mid-term average (2021- 2023)	Long-term average (2024- 2025)	Data Source
Cost per Unit Saved	Levelized cost of energy efficiency per kWh, therms and kW (use both TRC and PAC)	PAC Levelized Cost (\$/kW)	N/A			N/A	15.70	14.53	15.11	15.11	14.53	CEDARS CET Outputs
		PAC Levelized Cost (\$/kWh)	N/A			N/A	0.30	0.21	0.25	0.11	0.07	CEDARS CET Outputs
		PAC Levelized Cost (\$/therms)	N/A			N/A	2.80	2.08	2.44	1.16	0.73	CEDARS CET Outputs
		TRC Levelized Cost (\$/kW)	N/A			N/A	15.87	14.74	15.31	15.49	14.99	CEDARS CET Outputs
		TRC Levelized Cost (\$/kWh)	N/A			N/A	0.30	0.22	0.26	0.12	0.07	CEDARS CET Outputs
		TRC Levelized Cost (\$/therms)	N/A			N/A	0.30	0.22	0.26	0.12	0.07	CEDARS CET Outputs
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. • The current version of the CEDARS Cost-effectiveness tool (CET) only has avoided costs for 2019, so all future values are estimates. Additionally the current tool does not provide levelized cost per kW or per Therm. These values were calculated using the following equations: TRC cost per kWh or per therm or per kW is (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (TRC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (TRC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively PAC cost per kWh or per therm or per kW is (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kWh or (PAC Cost x Gas Benefits/Total Benefits)/Lifecycle Net therm or (PAC Cost x Electric Benefits/Total Benefits)/Lifecycle Net kW respectively												

Multifamily Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018- 2020)	Mid-term average (2021- 2023)	Long-term average (2024- 2025)	Data Source
Energy Intensity	Average energy use intensity of single family homes (average usage per household - not adjusted)	Energy Intensity per MF unit	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		Energy Intensity per MF unit square foot	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3C-REN Notes/Methodology: 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, which can be found in the ED Template.												

Multifamily Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018- 2020)	Mid-term average (2021- 2023)	Long-term average (2024- 2025)	Data Source
Penetration of Benchmarking in the Eligible Population	Percent of benchmarked multifamily properties relative to the eligible population	Percent of benchmarked multi-family properties relative to the eligible population	N/A	N/A	N/A	N/A	0%	0%	0%	0%	0%	
		Percent of benchmarking by properties defined as “hard-to-reach”	N/A	N/A	N/A	N/A	0%	0%	0%	0%	0%	
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have any energy efficiency programs using CPUC funding. • Per the Decision (D.18-05-041) on the Business Plans, 3C-REN will target hard-to-reach and disadvantaged communities, and thus will be targeting renters and not property owners or managers. If 3C-REN is able to provide energy efficiency services and upgrades to more than 75% of the units in a property, we will consider benchmarking the property. These numbers are approximate and pending approval of our 2019 Annual Budget and Advice Letter.												

C&S Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Capturing Energy Savings	Net Energy Savings: GWH, M Therms and MW (demand)	Net GWH	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		Net M Therms	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		Net MW (demand)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3C-REN Notes/Methodology: 3C-REN does not plan to claim savings for Codes and Standards Program.												

C&S Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Building Codes (T-24) Advocacy	Activity in advocating for building codes (T-24) tied to adoption in CA	Number of measures supported by CASE studies in rulemaking cycle (current work)	N/A	N/A	N/A	N/A	12 total	12 total	12	TBD	TBD	Statewide codes metrics from IOUS
		Number of measures adopted by CEC in rulemaking cycle (indicator of past work)	N/A	N/A	N/A	N/A	12 total	12 total	12	TBD	TBD	Statewide codes metrics from IOUS
3C-REN Notes/Methodology: Future targets are TBD since the updates to Title 24 occur on a three year cycle.												

C&S Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Appliance Advocacy	Activity in advocating for appliance, lighting and equipment standards tied to adoption in CA	Number of T-20 measures supported by CASE studies in rulemaking cycle (current work)	N/A	N/A	N/A	N/A	10 total	10 total	10	TBD	TBD	Statewide codes metrics from IOUS
		Number of measures adopted by CEC in current year	N/A	N/A	N/A	N/A	10 total	10 total	10	TBD	TBD	Statewide codes metrics from IOUS
3C-REN Notes/Methodology: Future targets are TBD since the updates to Title 24 occur on a three year cycle.												

C&S Metrics 3C-REN												
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Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Federal Advocacy	Activity in advocating for codes and standards tied to the adoption at the federal level	Number of federal standards adopted for which a utility advocated (IOUs to list advocated activities)	N/A	N/A	N/A	N/A	100%	100%	100%	TBD	TBD	Statewide codes metrics from IOUS
		Percent of federal standards adopted for which a utility advocated (#IOU supported / # DOE adopted)	N/A	N/A	N/A	N/A	100%	100%	100%	TBD	TBD	Statewide codes metrics from IOUS
3C-REN Notes/Methodology: Future targets are TBD since the updates to Title 24 occur on a three year cycle.												

C&S Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Reach Code	The number of local government Reach Codes implemented	The number of local government Reach Codes implemented (this is a joint IOU and REN effort)	N/A	N/A	N/A	N/A	25 total	25 total	25 total	TBD	TBD	Statewide codes metrics from IOUS
3C-REN Notes/Methodology: Future targets are TBD since the updates to Title 24 occur on a three year cycle.												

C&S Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2016 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
		Number of training activities (classes, webinars) held, number of market actors participants by segment (e.g. building officials, builders, architects, etc.) and the total size (number of the target audience) by sector. (M) Number of training activities	N/A	N/A	N/A	N/A	138	138	138	TBD	TBD	
		Number of training activities (classes, webinars) held, number of market actors participants by segment (e.g. building officials, builders, architects, etc.) and the total size (number of the target audience) by sector. (M) Number of participants	N/A	N/A	N/A	N/A	3,600	3,600	3,600	TBD	TBD	

Compliance Improvements	The percentage increase in closed permits for building projects triggering energy code compliance within participating jurisdictions	Increase in code compliance knowledge pre/post training	N/A	N/A	N/A	N/A	20%	20%	20%	TBD	TBD	
		The percentage increase in closed permits for building projects triggering energy code compliance within participating jurisdictions	N/A	N/A	N/A	N/A	TBD	TBD	TBD	TBD	TBD	Program strategy is to work with regional jurisdictions' permit tracking. 3C-REN will establish tracking mechanisms for residential energy efficiency and new construction, Title 24 Part 6 and Part 11, built into permitting processes to allow for queries for compliance and permits for specific energy code measures.
		Number and percent of jurisdictions with staff participating in an Energy Policy Forum	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		Number and percent of jurisdictions receiving Energy Policy technical assistance.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		Number and percent of jurisdictions receiving Energy Policy technical assistance.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
		Buildings receiving enhanced code compliance support and delivering compliance data to program evaluators	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
3C-REN Notes/Methodology: Future targets are TBD since the updates to Title 24 occur on a three year cycle. • N/A for Indicators. 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, which can be found in the ED Template.												

Workforce Education & Training Metrics 3C-REN												
Common Problem	Common Metric/Indicator		2019 Baseline	Numerator	Denominator	2018	2019	2020	Short-term average (2018-2020)	Mid-term average (2021-2023)	Long-term average (2024-2025)	Data Source
Expanding WE&T Reach via Collaborations	Number of collaborations by Business Plan sector to jointly develop or share training materials or resources.	Count	N/A			N/A	TBD	TBD	TBD	TBD	TBD	JCM filed 8/1/2018 indicated that collaboration agreements would be filed if needed.
Penetration of training	Number of participants by sector	Count	N/A			N/A	110	120	115	160	230	2014 CSLB Contractor Database
	Percent of participation relative to eligible target population for curriculum	Percentage	N/A	N/A	N/A	N/A	2.0%	2.1%	2.1%	2.9%	4.1%	2014 CSLB Contractor Database
Diversity of participants	Percent of total WE&T training program participants that meet the definition of disadvantaged worker.	Percentage	N/A	N/A	N/A	N/A	TBD	TBD	TBD	TBD	TBD	Identified DAC zip codes in 3C-REN territory compared to contractor address in CSLB database at cslb.ca.gov.
	Percent of applicable incentive contract spend by vendors with a demonstrated commitment to provide career pathways to disadvantaged workers.	Percentage	N/A	N/A	N/A	N/A	TBD	TBD	TBD	TBD	TBD	Commitments by direct installer vendors/partners
	Number Career & Workforce Readiness (CWR) participants who have been employed for 12 months after receiving the training	Count	N/A			N/A	TBD	TBD	TBD	TBD	TBD	CWR program does not exist yet this will be filed as a statewide program
3C-REN Notes/Methodology: • N/A for 2016 and 2018 since 3C-REN is not currently an approved Program Administrator and does not currently have WE&T programs using CPUC funding. • To determine the eligible target population the sum of Class B, C-2, C-6, C-10, C-17, C-20, C-36 and C-46 licenses in San Luis Obispo, Santa Barbara and Ventura Counties was multiplied by a factor of 0.67 to account for contractors holding multiple licenses. • Participants by sector is 75% residential and 25% commercial contractors. • The average number of attendees per training is based on emPower and LGP trainings coordinated in the past.												