

Residential Statewide Program

	Mission	IOU Comments
SW Program: Residential	Residential Energy Efficiency Program (REEP) is designed to offer and promote specific and comprehensive energy solutions within the residential retrofit and lighting markets. The residential customer base of California IOUs constitute one of the largest and most challenging groups of electricity consumers in the nation due to its diversity, complexity and size. The residential energy efficiency portfolio has been developed to deliver a wide array of programs and services to increase awareness of energy efficiency and to provide relevant energy efficient solutions. The residential program portfolio is designed to affect up-stream manufacturers, mid-stream retailers and channels, market actors and contractors, homeowners, tenants, and property-owners and managers with the goals to influence their short-term to long-term EE awareness, knowledge, attitude and behavior.	

CA EESP Goals/Strategies Addressed by SW <u>Program</u> :	CA EESP Ref. pp. #
See subprograms.	

Short-term (2010-2012) “SMART” <u>Program</u> Objectives:	Source (SP, AL, DR,	IOU Comments

	PIP, or Staff)*	
None proposed at program level. (See subprogram level.)	1.	Starting 2010, for each program cycle to increase or maintain program targets' (defined as homeowners, renters, property owners/managers) EE awareness, knowledge and attitude (AKA) to increase program participation behavior from prior program cycle baseline. If no baseline exists for 2006-2008, a baseline for 2010-2012 will be created. For sub-program message-specific AKA-B (behavior) objectives, please refer to specific sub-programs below.
	2.	

Short-term <u>Program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU Comments
None proposed at program level. (See subprogram level.)				By targeted populations (homeowners, renters, property owners/managers): PPM-1a: % increase in level of EE awareness, PPM-1b: % increase in level of EE knowledge, PPM-1c: % increase in level of EE attitude,

				To effectively measure the above three-part PPM-1, a list of questions to discern AKA must be agreed to, statewide.

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**Metric type: 2a = reported annually, 2b = reported by end of cycle.

Long-Term (2013-2020) "SMART" <u>Program Objectives</u> :	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
<u>Objective 1</u> : Energy consumption in existing homes will be reduced by 20% by 2015 and 40% by 2020; <ul style="list-style-type: none"> ▪ 25% of existing SF homes have a 70% decrease in purchased energy from 2008 levels ▪ 75% of existing SF homes have a 30% decrease in purchased energy from 2008 levels ▪ 100% of existing multi-family homes have a 40% decrease in purchased energy from 2008 levels 	SP	OK.
		Starting 2010, for each program cycle, increase or maintain program targets' (defined as homeowners, renters, property owners/managers) AKA-B, concerning self-ascription of responsibility, green/smart-living, and environmental issues. Use 2010-2012 to create baselines.

		Starting 2012, Increase or maintain the level of California program portfolio's IDSM services by each program cycle. (directional objective)
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Long-Term MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)	IOU Comments
MT Indicator 2: Average energy use/ft2 in existing homes (kwh, therms, KW)	SP	3	Y (may already be available)	(MT-2 has no objective) This MT indicator must be clearly defined so it can be measurable. At a minimum, we need to separate single family homes from multi-dwelling complexes.
MT Indicator 3: Percentage and number of homes where the purchased energy is reduced by 20%, 40% or 70% by 2013, 2017 and 2020 from 2008 baseline	SP	3	Y (may already be available)	(For Objective-1) IOU Comment Perhaps consider establishing two types of baselines: <ul style="list-style-type: none"> Using billing analysis to discern residential accounts (single/master-

				<p>metered) that achieved 10%, 20%, 30%, 70% reduction of purchased energy by doing a comparison between 2010 and 2008.</p> <ul style="list-style-type: none"> In 2010, survey these households to find out how they were able to achieve these purchased energy reductions. This step is important so program designs for whole-house and whole-apartment programs can be better informed by data. <p>IOUs' assessment of priority – High</p>

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**Metric type: 3 = data collection, tracking, and reporting [by IOUs, CPUC staff, and/or other entities] to be determined later.

Residential – Home Energy Efficiency Survey –
Comments will be provided by IDSM Team

	Mission	IOU Comments
SW Program: Residential	<p>This program is a continuation of the existing statewide Home Energy Efficiency Survey (HEES) program within the Residential energy efficiency portfolio. The program provides customers with information to help them become familiar with ways to control and reduce energy and water usage in their homes by offering customers up to four options (mail-in survey, on-line survey, phone survey, and in-home survey) in multiple languages (English, Spanish, Vietnamese, Chinese and Korean) including an action plan for implementation. The program also provides survey results to enable participants to understand how their energy use varies throughout the year and how their household compares with similar households. This multi-language approach enhances the program's ability to reach California's diverse culture and provides efficiency recommendations based on a whole-house system approach.</p>	
SW <u>Sub-program</u> : Home Energy Efficiency Survey (HEES)		

CA EESP Goals/Strategies Addressed by SW <u>Sub-program</u> :	CA EESP Ref. pp. #	IOU Comments

<u>Goal 2.1</u> : 25% of existing homes have a 70% decrease in purchased energy from 2008 levels; 75% of existing homes have a 30% decrease in purchased energy from 2008 levels.	p. 19	
<u>CA EE SP Goal 2</u> : Home buyers, owners and renovators will implement a whole-house approach to energy consumption that will guide their purchase and use of existing and new homes, home equipment (e.g., HVAC systems), household appliances, lighting, and "plug load" amenities.	p. 11	
<u>CA EE SP Goal 8.3</u> – DSM Coordination and Implementation – Deliver integrated DSM options that include energy efficiency, demand response, energy management and self-generation measures, through coordinated marketing and regulatory integration. The HEES program will seek partnerships with local water agencies, municipalities and other key stakeholders to develop and implement a comprehensive plan to promote water conservation. Further integration strategies will also include DSM (CSI, SDP, Peak Demand, etc.), LIEE and energy efficiency programs.	p. 72	
<u>CA EE SP Goal 9.2</u> – Workforce, Education and Training. Ensure that minority, low-income and disadvantage communities fully participate in training and education programs at all levels of the DSM and energy efficiency industry. For IOUs offering in-home surveys, the HEES in-home survey team will be comprised of a contracted (and in some cases utility staff) workforce who will be trained in areas of energy conservation and technologies towards an increased knowledge base of demand-side management and energy efficiency. A comprehensive training curriculum will be implemented to formalize the knowledge base of the survey force. This strategy falls in line with a goal of the WE&T Strategic Plan intended to ensure that minority, low-income and disadvantage individuals fully participate in training and education programs at all levels of demand-side management and energy efficiency.	p. 78	

Short-term (2010-2012) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
1. Achieve annual survey targets as identified in PIPs. (If not specified in PIPs, IOUs will provide.)	Staff	

2. By 2012, increase HEES program participation among low-income and minority communities by X percent and vice versa (?). Central objective or not?	Staff	
3. By 2012, increase understanding of energy efficiency among program participants by X percent relative to 2006-2008 baseline	Staff	
4. By 2012, X% of HEES participants subsequently participate in 1 or more additional programs (e.g. Whole House Retrofit, LIEE, ARP, or CSI)	Staff	
6. By 2012, develop a comprehensive plan to promote water conservation in partnership with local water agencies, municipals and other key stakeholders	PIP (appended to SP Goal 8.3, as posted above)	

Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU Comments
1. Percentage of HEES participants with increased AKA of energy efficiency	Staff	2b	Y	
2. Percentage of HEES participants that; a) enroll in another EE program (ie, use incentives); change (IOUs requested to list programs where this could be tracked – or not). b) implement a HEES recommendation via behavior PG&E; IDSM tool the “Progressive Energy Audit Tool”, when developed, will/SHOULD track this and will REPLACE HEES (we think; EM&V study is evaluating “evalualability” of PEAT). Data to track this through HEES may be limited/unavailable. Needed data is customer account number. 3. For the 2b approach, customer interviews should parse out motivation for implementing a recommendation from the audit- was it the audit or some other input. 4. More discussion on measurement method needed.	Staff	2b Suggestion b would be 2b	N	
5. Percentage of HEES participants who are members of low-income or minority communities relative to a 2010 baseline. SCE/Sempra use HEES to identify LI/minority households and to route to LIEE/CARE. More relevant as metric for	Staff	2a	Y	

LIEE program? Consider deleting? Relevant issue is to ensure that all IOU HEES programs have functionality to route LIEE-CARE qualified customers to those programs.				
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**Metric type: 2a = reported annually, 2b = reported by end of cycle.

Long-Term (2013-2020) "SMART" Sub-program Objectives:	Source (SP, AL, DR, PIP, or Staff)*
None proposed.	

Long-Term Sub-program MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)
None proposed.			

*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

**Metric type: 3 = data collection, tracking, and reporting [by IOUs, CPUC staff, and/or other entities] to be determined later.

Residential - Basic CFL Subprogram

	Mission	IOU Comments
SW Program: Residential	The Residential Lighting Incentive Program that has run successfully for several years has been separated into two programs: the Basic CFL program, and the Advanced Consumer Lighting Products program. The basic lighting program aims to increase consumer purchase and installation of basic medium screw base (MSB) CFLs in homes (and businesses). It does this by rebating MSB bulbs sold by major manufacturers in California and enrolling retail outlets to sell the discounted bulbs.	IOUs would like to make the following clarification on the mission statement: (1) Definition of Basic CFLs: Less than 30 Watts, bare spiral, non-dimmable ONLY (1) This program will continue to offer appropriate marketing messaging to support program objectives.
SW <u>Sub-program</u> : Basic CFL subprogram		

CA EESP Goals/Strategies Addressed by SW <u>Sub-program</u> :	CA EESP Ref. pp. #
<u>Goal 4 (residential)</u> : The residential lighting industry will undergo substantial transformation through the deployment of high-efficiency and high-performance lighting technologies, supported by state and national codes and standards.	p. 11
<u>Strategy 4-1</u> : Drive continual advances in lighting technology through research programs and competitions (near-term objectives)	p. 24
	p. 24
	p. 24

<p><u>Strategy 4-3</u>: Continuously strengthen standards. (near-term objectives)"</p> <p><u>Strategy 4-4</u>: Coordinated phase out of Utility promotions for purchase of CFLs. (near-term objectives)</p> <p><u>Strategy 4-5</u>: Ensure environmental safety of CFLs and other emerging lighting solutions. (near-term objectives)</p> <p><u>Goal 3 (commercial)</u>: The commercial lighting industry will undergo substantial transformation through the deployment of high-efficiency and high-performance lighting technologies, spurred by state, national codes and standards and leading-edge incentive strategies.</p> <p><u>Strategy 3-2</u>: Create demand for improved lighting products through demonstration projects, marketing efforts, and utility programs. (near-term objectives)</p> <p><u>Strategy 3-3</u>: Coordinated phase out of Utility promotions for purchase of CFLs. (near-term objectives)</p> <p><i>Note: CA EESP Goals/Strategies section needs to be updated to final adopted Strategic Lighting Plan</i></p>	<p>p. 24</p> <p>p. 41</p> <p>p. 41</p>
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Short-term (2010-2012) "SMART" <u>Sub-program Objectives</u> :	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
<p>Objective 1: Achieve annual savings/product targets (add by IOU)</p> <p>the quantitative program targets (increase participating retailer locations 10% annually; and, increase products sold less than 30 watts 10% annually).</p>	PIP	<p>By 2012, achieve activity targets specified in the PIP as specified by each IOU.</p> <p>(1) For SCE, see table 5, page 45 of PIP,</p> <p>(2) PG&E, see PG&E activity target PIP filing ,</p> <p>(3) For SDG&E, see SDG&E activity target filing.</p>
<p>Alternate Objective 2: Taking into account NTG ratios, optimize and diversify retailer participation by channel and location in order to increase rebated basic CFL availability for the whole market (by 2012 as compared to 2008 channels/locations)</p> <p>Objective 2: Increase the number of participating retailer locations in lower-moderate</p>	PIP, Staff	<p>By 2012, Enhance distribution channel-mix while optimizing program net-to-gross ratios and desire to increase distribution channels that better serve lower-income and hard-to-reach populations.</p>

<p>income neighborhoods (excluding LIEE targets) by X% relative to 2008 levels. "Low income" from PIP- IOU to do: define. Have 2008 data by retail channel, not low-income neighborhood. 2008 census as data source. Do not target by demographics (SCE).</p> <p>Alternate Objective: Increase (optimize?) the number of participating "discount stores" (would need to be defined by IOUs)</p> <p>Consider quality of bulbs within program; add possible metric. Discussion on raising quality level of products.</p>		
		<p>During 2010-2012, demonstrate increase in proportion of advanced lighting program activities (i.e., rebate level, kW, kWh) relative to Basic CFLs while optimizing energy savings and net-to-gross goals. (IOU specific, directional goal)</p>

Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU Comments
<p>PPM 1: Basic CFL: Implement marketing campaign to "install CFLs immediately" or "shelves to sockets" campaign by (date ?) as required in D-09-09-047 (Y/N)</p> <p>IOU to do: discuss and agree on specifics; brief ED on plan at monthly meetings and/or share updated plan with ED.</p> <p>Deleted previous</p>	<p>AL</p>	<p>2b</p>	<p>N</p>	<p>During 2010-2012, implement marketing efforts and/or campaign to encourage prompt installation of CFLs as required in D-09-09-047 (Y/N metric)</p>

PPM 3: Number of retailer locations participating in program, including those in low-income neighborhoods Alternate PPM: Channel type and diversity of location of participating retailers	PIP, Staff	2a	N	% kW/kWh/Qty of incented products under the Basic CFL program as compared to the Advanced Lighting program.
PPM 4: Number of incented products less than 30 Watts sold in participant retail stores	PIP, Staff	2a	Y	IOUs propose deleting PPM-4. IOU rationale: This PPM can be rolled up into PPM-3.

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Long-Term (2013-2020) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
Objective 1: Work with retailers to achieve y% reduction in non-discounted basic CFLs price above 2008-09 levels by 2015.	Staff	
Objective 2: Achieve 60% saturation of the eligible medium screw base (MSB) market in California by the end of Relocate to Advanced Lighting Program/combine with objectives there. Modify to "increasing" saturation? Should be "efficient lighting," not specific to MSB	PIP, Staff	By 2020 60% of "general service" lighting in California will be high-efficiency lighting

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Long-Term Sub-program MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)	IOU Comments
MT Indicator 1: Number of basic CFLs sold annually in California (note: for entire market, not IOU-rebated CFLs)	Staff	3	N	
MT Indicator 2: Market share of efficient and inefficient lighting (needs defining- align now with advanced lighting definition and revise over time?) Challenge getting data; could also look into collaboration with CEE to get data). Efficacy of lamps and sales data as considerations.	Staff	3	Y	Market share of "general service" lighting is X% high efficiency lighting
MT Indicator 3: Price of non-discounted MSB CFLs	Staff	3	N	IOUs recommend deleting MT-3.
MT Indicator 4: Saturation of eligible sockets (MSB, non-dimming, interior) with CFLs or better	Staff	3	N	

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Residential – Advanced Consumer Lighting Subprogram

	Mission	IOU Comments
SW Program: Residential	The Advanced Consumer Lighting Program: The Residential Lighting Incentive Program that has run successfully for several years has been separated into two programs: the Basic CFL program, and the Advanced Consumer Lighting Products program. The Advanced Consumer Lighting program also provides participating retailers with up-stream incentives in the form of buy-downs that reduce the cost of energy-efficient lighting products. The program introduces new and advanced energy-efficient lighting products to the market and strives to influence future purchasing behaviors of customers. The definition of advanced lighting is all lighting products excluding bare spiral bulbs of 30 watts or less bare spiral CFLs, non-dimmable.	
SW <u>Sub-program</u> : Advanced Consumer Lighting Program		

CA EESP Goals/Strategies Addressed by SW <u>Sub-program</u> :	CA EESP Ref. pp. #
<u>Goal 4 (residential)</u> : The residential lighting industry will undergo substantial transformation through the deployment of high-efficiency and high-performance lighting technologies, supported by state and national codes and standards. <u>Strategy 4-1</u> : Drive continual advances in lighting technology through research programs and competitions (near-term objectives)	p. 11 p. 24
<u>Strategy 4-2</u> : Create demand for improved lighting products through demonstration projects, marketing efforts, and utility programs. (near-term objectives)	p. 24
<u>Strategy 4-3</u> : Continuously strengthen standards. (near-term objectives)"	
<u>Strategy 4-4</u> : Coordinated phase out of Utility promotions for purchase of CFLs. (near-term objectives)	p. 24
<u>Strategy 4-5</u> : Ensure environmental safety of CFLs and other emerging lighting solutions. (near-term objectives)	p. 24
<u>Goal 3 (commercial)</u> : The commercial lighting industry will undergo substantial transformation through the deployment of high-efficiency and high-performance lighting technologies, spurred by state, national codes and standards and leading-edge incentive strategies.	p. 24
<u>Strategy 3-1</u> : Drive continual advances in lighting technology through research programs and competitions (near-term objectives)	p. 31

Strategy 3-2: Create demand for improved lighting products through demonstration projects, marketing efforts, and utility programs. (near-term objectives)	p. 41
Strategy 3-3: Coordinated phase out of Utility promotions for purchase of CFLs. (near-term objectives)	p. 41
<i>Note: CA EESP Goals/Strategies section needs to be updated to final adopted Strategic Lighting Plan</i>	

Short-term (2010-2012) "SMART" Sub-program Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
Objective 1: Increase percentage of advanced lighting fixtures (see list in PIP) incented by IOUs as compared to all lighting products incented by IOUs from yy% in 2010 to xx% in 2012 (Note: Don, this seems to be the main objective that the program is trying to achieve, maybe focus on the metrics for this).	PIP, D0909047	During 2010-2012, increase lighting program results that are attributed to advanced lighting program activities (i.e., rebate level, kW, kWh) as compared to 2006-2008, while optimizing energy savings.
Objective 2: Increase participation in advanced lighting incentive program among retailers and manufacturers by XX% and YY% by 2012 respectively as compared to 2010 participation levels. Taking into account the need to maintain high NGT ratios, optimize the availability of incented advanced lighting products in retail outlets across the state (IOU service territories). IOUs to do: identify "buckets" of types of retail outlets for which to track participation in program. Reflect in PPM.	AL, PIP	By 2012, Enhance distribution channel mix while optimizing between program net-to-gross ratios and increasing distribution channels that better serve lower-income and hard-to-reach populations.
Objective 3: Increase annually via the Plug-in Lamp Exchange Program the number (by location) of customer exchange events of incandescent table, desk and floor lamps for efficient lamps (IOU-incented), for LED light strings during holiday season	PIP	IOUs propose deleting Objective-3.
Objective 4: Via the Lighting Showroom Store Outreach program, increase customer purchase of efficient lighting products over 1,100 lumens by xx% by 2012 against 2009 baseline.	PIP	IOUs recommend deleting Objective-4.

Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU Comments
PPM 1: Number/percentage of advanced lamps/products incented under IOU programs as compared to basic CFLs incented by IOUs (3 buckets of IOU incented lighting: basic, advanced, and through other programs such as t8s, Hid, etc.) (Note, Nate, PG&E: advanced fixtures are less cost-effective to incent than basics, so incenting more of them will lower the program's cost-effectiveness)	PIP, D0909047	2a	N	% kW/kWh/Qty of incented products under the Advanced Lighting program as compared to the Basic Lighting program.
PPM 2: Number and percentage of retailers (broken out by retailer "buckets") located in IOU service territories participating in the program; PPM 2a) Percentage of Big Box retail locations of participating Big Box retailers offering incented products	PIP, Staff	2a	N	% of products incented under the Advanced Lighting Program by distribution channel
	PIP, Staff	2a	N	
PPM 3: Number of manufacturers/percentage of manufacturers selling to California market participating in upstream portion of program	PIP, Staff	2a	N	IOUs propose deleting PPM-3.
PPM 4: Number of products per exchange event for lamps and LED holiday lights held as a result of the Plug-in Lamp Exchange Program (Note, Rich, SCE: concern about growing market share of LED holiday lights growing during the cycle so IOU participation would decline)	PIP, Staff	2a	N	IOUs propose deleting PPM-4.
IOUs concur best to remove since not a significant PPM	PIP, Staff	2a	N	IOUs propose deleting PPM-5.
PPM 6: List of new measures/technologies adopted by the program, as a result of LMT & ETP's efforts (Combine this with LMT PPMs and remove from advanced)	PIPs, Staff, DR (?)	2a	N	IOUs propose moving PPM-6 to LMT.

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Long-Term (2013-2020) "SMART" Sub-program Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
Objective 1: Increase sales of LED products xx% by 2015 against 2010 baseline based on number of fixtures	PIP, Staff	By 2015, double the sales of LED products in the state of California, over 2010 baseline.
Objective 2: California Super-CFL program- Increase sales of small, tapered and dimmable CFLs over 2010 baseline by ZZ% by 2015	PIP, Staff	By 2015, double the sales of small, tapered and dimmable CFLs over 2010 baseline.
Objective 3: Decrease the lighting power density of all residential and commercial lighting applications by XX% and YY% respectively by 2015 over 2010 baseline (enhanced RASS survey needed to get at multiple measures over multiple years, since CLASS and RASS studies don't include these measures would need to start a baseline for this)	SP- Strategic Lighting Plan	By 2015, reduce the lighting power density for the average commercial application from the 2010 level to meet the Strategic Plan Lighting Chapter.

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Long-Term Sub-program MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)	IOU Comments
MT Indicator 1: The average lighting power density of residential and commercial lighting applications	SP, Strategic Lighting Plan, Staff	3	Y (RASS?)	The average lighting power density of commercial lighting

				applications.
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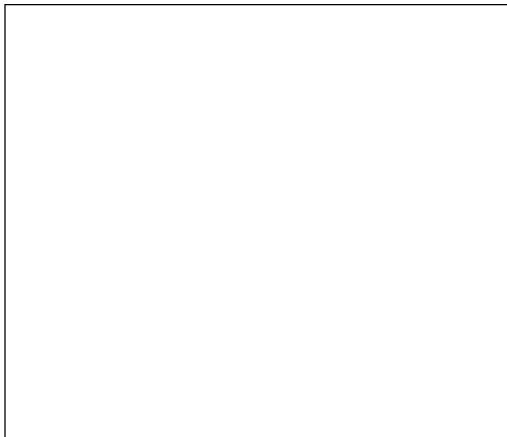
Residential – Appliance Recycling Subprogram

	Mission	IOU Comments
SW Program: Residential	The Appliance Recycling program is well established, having been offered to SCE customers since 1994. Customers are offered a \$50 cash incentive for recycling their operating refrigerators or freezers. Recycled appliances are picked up by a 3rd party. The overall goal of this program is to reduce the number of inefficient, older fridges, room ACs and freezers in Californian homes.	
SW <u>Sub</u> -program: Appliance Recycling		<p>IOU Comment: During our joint IOU/ED discussion of this program on 9/20/2010, Mikhail Haramati (MKH) of ED requested definitions for “older” appliances and “inefficient” appliances since these are key terms in the mission statement. The following background information should clarify the IOU position on providing such definitions:</p> <ol style="list-style-type: none"> (1) We believe ARP is part of the strategy to reduce long-term net energy purchase for the state of California as part of the Whole House and Whole Apartment strategy. In addition, ARP complements the strategy to support appliance early replacement. (2) ARP is designed to remove older and less efficient

refrigerators and freezers from use. The program is designed and justified based on energy savings derived from appliances collected from the program (see the latest HIM study results) and is very cost effective with a positive TRC, calculated using standard procedures. The precise definition of “older” and “inefficient” is not imperative since the program is justified under standard energy efficiency policy.

- (3) Appliance degradation is a real phenomenon. The refrigerator sealing materials are subject to deterioration such as hardening and becoming less pliable thus reducing the efficiency level through time, despite appliance efficiency rating improvements year after year. This is also demonstrated by the DOE efficiency testing procedure (source: *EM&V Study of 2004-05 Statewide Residential Appliance Recycling Program, Final Report*).

In conclusion, IOUS would like to



continue operating this statewide program for the following reasons:

- It is a required action to meet deep energy reduction goals in CALTEESP,
- It is complementary to the appliance early replacement strategy,
- The program is cost-effective.

CA EESP Goals/Strategies Addressed by SW <u>Sub-program</u> :	CA EESP Ref. pp. #
<u>Goal 2 (residential)</u> : Home buyers, owners and renovators will implement a whole-house approach to energy consumption that will guide their purchase and use of existing and new homes, home equipment (e.g., HVAC systems), household appliances, lighting, and "plug load" amenities.	p. 11
<u>Strategy 2-2</u> : Promote effective decision-making to create widespread demand for energy efficiency measures	p. 20
<u>Strategy 2-3</u> : Manage research into new/advanced cost-effective innovations to reduce energy use in existing homes	p. 20

Short-term (2010-2012) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
Objective 1: Capture cost-effective energy savings and demand response opportunities for the benefit of all Californians. MKH: #1, 2 and 3 are not quantifiable/SMART.	AL	IOUs recommend moving this overarching Objective-1 to the statewide residential EE portfolio (REEP)

Objective 2: Promote support of and compliance with more stringent appliance and building standards.	AL	IOUs recommend moving this overarching Objective-2 to the statewide residential EE portfolio (REEP)
Objective 3: Develop public awareness and promote effective decision-making to create widespread demand for high efficiency measures.	AL	IOUs recommend moving this Objective-3 to the REEP portfolio.
Objective 4: Increase consumer awareness and knowledge of and attitudes towards the need to recycle old appliances by X% (from 2008 levels) by 2012 CC: will need baseline. Proposes that we use 2010 as baseline year. Two issues: general EE knowledge across all programs and need to recycle. Some people might not see the need, IOUs will at least educate them of the benefits of doing so. LM: is this two separate metrics: education/awareness component and a metric that measures action among educated customers?	Staff	By 2012, the program will increase and/or maintain AKA towards the need to recycle refrigerators/freezers among homeowners and renters by 5% from 2010 baseline levels. (2b type)
Objective 5: By 2012, decrease by X% saturation levels of “inefficient, older refrigerators and freezers” (as defined by the program) in IOU customer homes from 2008 levels MKH: IOU feedback requested on definition of “inefficiency, older refrigerators and freezers”, which is used in the PIPs. IOUs will do this. CC: will need baseline. Propose using 2010 as baseline year.	Staff	By 2012, meet program activity targets specified in the PIP. For SCE, the three-year expected program volume is 210,000 units (refrigerators and freezers only). This data will be reported annually and sorted by appliance type, age, and size. (For SDG&E the volume is 47,166 units for three years, For PG&E, 2010 volume is 33,000 units)

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Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU Comments
PPM 1: Consumer awareness and knowledge of and attitudes towards the need to recycle old appliances in IOU service territories using 2010 baseline	Staff	2b	Y	Level of program participants' AKA toward the appliance recycling subprogram.
PPM 2: Average age, size and efficiency of removed units. CC: we don't have eff. Data. But with age/size we can determine it. Eff. Can be reported now. (Proposal to track # of participants.)	Staff	2a	Y	# of program appliance units by year, appliance type, age, and size.

*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

**Metric type: 2a = reported annually, 2b = reported by end of cycle.

Long-Term (2013-2020) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
Objective 1: Move the residential market towards coordinated demand-side management, including self-generation and a "smart meter" initiative. MKH: #1, #2, and # are not SMART.	PIP	IOUs recommend moving this objective to the Residential EE Program (REEP).
Objective 2: Promote the adoption of comprehensive residential retrofits	PIP	IOUs recommend

		moving this objective to the Residential EE Program (REEP).
Objective 3: Contribute to the ultimate transformation of energy consumption patterns.	PIP	IOUs recommend moving this objective to the Residential EE Program (REEP).
Objective 4: Eliminate the stock of “older, inefficient refrigerators and freezers” in IOU customer homes as defined by age, size and efficiency standards MKH: “older, inefficient refrigerators and freezers” needs to be defined/ revised. Issue: “Reduce” the stock, as opposed to “eliminate”.	Staff	IOUs recommend deleting Objective-4.

**SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]*

Long-Term Sub-program MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)	IOU Comments
MT Indicator 1: Saturation levels of “inefficient, older refrigerators and freezers” in California homes as demonstrated through appliance: age, size and efficiency. MKH: “inefficient, older refrigerators and freezers” needs to be defined/ revised.	Staff	3	Y	IOUs recommend deleting MT-1, and focus on net energy purchase reduction and using ARP as part of appliance early replacement strategy.

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***Metric type: 3 = data collection, tracking, and reporting [by IOUs, CPUC staff, and/or other entities] to be determined later.*

Residential – Business and Consumer Electronics Subprogram

	Mission	IOU Comments
SW Program: Residential	The BCE program is a new addition to the residential EE portfolio for 2009 -2011. The BCE provides midstream incentives to retailers to increase the stocking level and promotion activities for high- efficiency (ENERGY STAR®) electronic products including computers and monitors, cable and satellite set-top boxes, televisions, and additional business and consumer electronics as they become available in the market. The BCE will also provide incentives to manufacturers that sell directly to consumers or key accounts. Although the IOUs share similar program theory, each may implement its program differently. The program will leverage POS rebates and provide retailer support and a web-based information service to help consumers choose the most energy-efficient products.	
SW <u>Sub-program</u>: Business and Consumer Electronics Subprogram		

CA EESP Goals/Strategies Addressed by SW <u>Sub-program</u>:	CA EESP Ref. pp. #	IOU Comments
<u>Goal 3 (residential)</u> : Develop comprehensive, innovative initiatives to reverse the growth of plug load energy consumption through technological and behavior solutions.	p. 21	OK
<u>Strategy 3-1</u> : Drive continual advances in residential energy usage, including plug loads home energy management systems, and appliances.	p. 21	OK
<u>Milestone 3-1</u> : 10% reduction in plug loads by 2012-2015; 25% reduction in plug loads by 2016-2020	p. 21	OK
<u>Strategy 3-2</u> : In coordination with Strategy 2-2 above, develop public awareness of and demand for highly efficient products	p. 22	OK
<u>Strategy 3-3</u> : Create demand for such products through market transformation activities	p. 22	OK

Strategy 3-4: <u>Continuously strengthen standards, including the expansion of both Title 24 and 20 to codify advances in plug load management</u>	p. 22	OK
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Short-term (2010-2012) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
Objective 1: 80% of participating retailer stores receiving training and detailing by 2012	DR	Objective-1a: By 2012, 80% of participating retailer stores receive training Objective-1b: By 2012, 80% of participating retailer stores receive detailing
Objective 2: Increase by XX the number of retailers participating in mid-stream program by 2012 as compared to 2010, including by (a): installing POS capacity; and/or (b) offering upstream rebated products. Modify to match PPM below.	AL, Staff-modified	Increase number of retailers and/or other market actors participating in the mid-stream program by 2012, as compared to 2010: <ol style="list-style-type: none"> 1. SCE: sign up 5 additional retailers and 5 manufacturers. 2. PG&E: sign up 3 additional market actors. 3. SDG&E: sign up 1 additional retailer. Definition of market actor: a business entity engaged in some aspect of the supply chain for

		electronics. Market actors include manufacturers, distributors, and resellers of various types.
Objective 3: By 2012, increase the number of manufacturers participating in upstream CBE rebate program and selling to key accounts or directly to California consumers as compared to 2010	AL	IOUs recommend deleting Objective-3

Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU Comments
PPM 1: Percent of participating retailer stores receiving training and detailing annually Detailing: people visit stores to make sure point of purchase materials properly identify qualifying products.	DR	2a	N	PPM 1a: Number of participating retailers and other resellers receiving training. PPM 1b: Number of participating retailers receiving detailing.
PPM 2a): The number of retailers participating in the BCE mid-stream program by offering mid-stream rebated products look at mission statement for accuracy here. PPM 2b): The percentage of all Big Box retailers located in IOU service territories that this number is estimated to represent BAS: In PG&E territory, we're reaching saturation of participant retailers. DW: funding is limiting the level to which we may increase participant retailers. Recommendation: suggest IOU-specific targets. CC: SCE PIP has goal of signing up 5 new manufacturers (may sell direct to end-users)	AL, Staff-modified Staff	2a 2a	N N	The numbers and names of specific types of market actors (retailers, buying groups, manufacturers, and distributors) participating in the program.

and 5 new retailers. Issue: "Big Box" needs to be defined. SCE has list and will circulate for consideration. PPM 2c): number of "big box" retail locations offering rebated products.				
PPM 3: The number of manufacturers participating in upstream CBE rebate program and selling to key accounts or directly to California consumers as compared to 2010. IOUs will define "manufacturers". PG&E: will look expanding to at VAR's. PPM 3a) The percent of manufacturers selling to key accounts or directly to California that this number is estimated to represent	AL AL, Staff-modified	2a 2a	N N	IOUs recommend deleting PPM 3.

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***Metric type: 2a = reported annually, 2b = reported by end of cycle.*

Proposed Reporting Matrix of Market Actors Participating in the Business and Consumer Electronics Program (each IOU to complete individual

Category of Market Actors (business entities engaged in some aspect of the supply chain for electronics)	Market Actor Category Definition	Market Actor Business Entity	Number of stores within Service Territory	Number of stores detailed	Training materials distributed (yes/no)*	Television		Desktop Computers		Computer Monitors		How double dipping is avoided
						Business	Consumers	Business	Consumers	Business	Consumers	
Retailers	An entity which sells goods to the consumer. Retailers include large businesses such as Wal-Mart, and also smaller, non-chain locations run independently.					x	x	x	x	x	x	Only incent products sold direct to the end-customers
Buying Groups	An entity that is created to leverage the purchasing power of a group of businesses to obtain discounts from vendors based on the collective buying power of the members. This is a sub-set of Retailers.						x					Do not incent products sold by Buying Group to any retailer participating in another portion of program.
Manufacturers	An entity that makes a good through a process involving raw materials, components, or assemblies, usually on a large scale. Manufacturers (e.g., H-P, Dell, Sony) sell through many channels, including: direct to end customers (business and consumer), to Di		n/a	n/a		x	x	x	x	x	x	Only incent on products sold to end customer online, through sales or in-person sales (disallow any sales to retailers, distributors or other market actors)
			n/a	n/a						x	x	
Distributors	An entity that buys non-competing products or product-lines, warehouses them, and resells them to retailers, value added resellers (VARs) or direct to the end user. Examples include Ingram Micro, SYNEX and Comcast.											Only incent on products sold to VARs or end customers. Currently there are no VARs targeted for participation in the program. If VARs are ever included in the incentive program, then sales to VARs should be disallowed.

Note: This matrix will be constantly evolving. New products will be added, some may be taken off once market transformation has occurred. Additionally, the Market Actor categories identified may be expanded. For example, when new top boxes are added to the program.

* Training materials will be compiled into a portfolio. Materials range from presentations, one-pagers handed to sales associates, on-line training modules, etc.

Long-Term (2013-2020) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
Objective 1: Increase the number of BCE-qualifying units sold as a percentage of total business and consumer electronics product sales. (candidate for quantitative target)	PIP, Staff	By 2020, increase the efficiency in average plug load attributable to the use of electronic products that are in the BCE program.
Objective 2: ENERGY STAR®-qualifying BCE appliances comprise XX% of purchases annually. DW: ES is in process of expanding product list. CE is limited list currently. Very few products to track right now. Getting sales data for #1 and #2 could be expensive. But we could work with other agencies to acquire data.	PIP, SP, Staff	

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Long-Term Sub-program MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)	IOU Comments
MT Indicator 1: BCE-qualifying units sold as a percentage of total business and consumer electronics product sales 6 month product cycle. Will be difficult to capture because of numerous measurement issues. From ex-ante point of view, we want to drive volume. On ex-post basis, these metrics present different challenges. Not contemplating FR issues. Need to come up with method to measure and track. MT will not be looking at FR. Purpose is to make sure stock is more efficient as time passes.	SP, Staff	3	Y	% increase in efficiency level of average plug load attributable to electronic products that are in the BCE program.
MT Indicator 2: ENERGY STAR®-qualifying BCE appliances as a percent of total business and consumer electronics product sales	SP, Staff	3	N	

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***Metric type: 3 = data collection, tracking, and reporting [by IOUs, CPUC staff, and/or other entities] to be determined later.*

Residential – Home Energy Efficiency Rebate Subprogram

	Mission	IOU Comments
SW Program: Residential	The program encourages energy efficient choices when purchasing and installing household appliances and equipment by offering education, rebates, and other incentives, and expands the saturation of efficient equipment faster than would be case in the absence of the program. In addition to POS, on-line and mail-in rebates to the customer, the program will offer mid-stream incentives to retailers to increase the stocking of energy efficient appliances. The program also offers customers information on how to use household equipment efficiently. Rebates will be available to customers, depending on the measure, POS, online, and through the mail.	
SW <u>Sub</u>-program: Home Energy Efficiency Rebate (HEER)		

CA EESP Goals/Strategies Addressed by SW <u>Sub</u>-program:	CA EESP Ref. pp. #
<ul style="list-style-type: none"> • <i>CA EE SP Goal (2): Home buyers, owners and renovators will implement a whole-house approach to energy consumption that will guide their purchase and use of existing and new homes, home equipment (e.g., HVAC systems), household appliances, lighting, and "plug load" amenities.</i> 	p. 11
<ul style="list-style-type: none"> • <i>CA EE SP 2-1.3: Energy consumption in existing homes will be reduced by 20% by 2015 and 40% by 2020</i> 	p. 11
<ul style="list-style-type: none"> • <i>CA EE SP 2-2: Promote effective decision-making to create widespread demand for energy efficiency measures</i> 	p. 20
<ul style="list-style-type: none"> • <i>CA EE SP 2-3: Manage research into new/advanced cost-effective innovations to reduce energy use in existing homes</i> 	p. 20

- The goal of the program is to influence purchase behavior and improve and increase awareness, knowledge and attitude concerning benefits of Energy Star and Energy Efficiency.

Short-term (2010-2012) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
1) Define by 2010 and achieve by 2012 targets for collaborations (definition?) with manufacturers, retailers, distributors, etc.	Staff	By 2012, increase and/or maintain optimal level of collaboration with manufacturers and retailers to support program, using 2010 results as baseline. ("Optimal" is not measureable but reportable). Definition of collaboration: Working with manufacturers and retailers to participate in the program
2) By 2012, X% of HEER participants subsequently participate in 1 or more additional programs (e.g. Whole House Retrofit, ARP, or BCE). Delete and move any missing programs to similar objective in HEES program	Staff	IOUs agree to delete this objective and move it to HEES.
Participant "mom-and-pop" retailers as a percentage of all participant retailers shall increase (X%) from a 2006-2008 baseline. Objective: maximize market penetration- BROADNESS of availability of rebates; b) minimize delivery costs; C) diversifying into markets serving ethnicities is an additional metric (see notes in short term PPM section and clarify objective as needed)	Staff	By 2012, increase and/or maintain optimal level of retail store participation located in the lower income and/or hard-to-reach zip-codes.

Participant "big-box" retailers as a percentage of all participant retailers shall increase (X%) from a 2006-2008 baseline (see PPM notes and clarify objective as needed)	Staff	IOUs recommend deleting Objective-4.
Increase number of participant retail locations using POS system relative to 2006-2008 baseline (SDG&E- this is costly for this IOU, so has problem with "increase").	Staff	By end of 2012, increase POS # of rebates by 10% from 2010 baseline

Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU Comments
1) Percentage of HEER participants who subsequently participate in additional HEER measures; 1a) and 1 or more additional programs (e.g. Whole House Retrofit, ARP). Is this solely a HEES metric? Consider deleting, and move to HEES programs any missing there.	Staff	2a (2b- lag time)	N	IOUs recommend deleting PPM-3(For Objective-2)
2) Number of participating retailers using POS system (SDG&E- 45% of customers doing POS, so tracking on #1 hard). (SCE- 50% customers purchasing via POS) (PG&E- ~5% retailers POS). Is a better metric: Percent of HEER applications coming through as POS; or, percentage of incentives paid to customers participating via POS.	Staff	2b	N	% of program rebates made through the POS mode relative to all rebates
3) Participant "mom-and-pop"(define; provide list of agreed "Big Box;" retailers not on list considered "mom & pop" – and/or "mid-size") stores as a percentage of all participant retailers; is this a proxy for increasing sales? Hard-to-reach locations? Should this metric be: number of participating "mom and pop" stores and percentage of total mom and pop stores this represents. 3b) Participation of retailers in ethnically diverse/lower income (?)/hard-to-reach (?) locations ("mom and pop" does not necessarily equate to "lower income". SCE- suggests standardizing definitions of "Mom and Pop" "low income" and "Hard to reach"	Staff	2a	Y	% of stores located in the lower-income and/or hard-to-reach zip-codes relative to all program participating locations
4) Number of "big box" participants and percentage of "big box" stores	Staff	2a	Y	

<p>within IOU service territories that this represents. Comment that for CFL program NTG was low for Big Box customers, so this should be considered when establishing objectives. Is Energy Star shipment data relevant here; Answer is that haven't typically been able to track this to state level.</p>				
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*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

**Metric type: 2a = reported annually, 2b = reported by end of cycle.

To do's::

IOUs to include in red-lined version revised objectives and metrics, including all definitions of terms as agreed on SW basis as much as possible. Please also provide justification for where IOUs land.

Long-Term (2013-2020) "SMART" Sub-program Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
Increase saturation of ENERGY STAR-rated appliance to represent X% of the CA market by 2020 (needs to take into account ES updates; see shift downward of penetration whenever standards rise).	Staff	OK.

*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

Long-Term Sub-program MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)	IOU Comments
Statewide market penetration of ENERGY STAR appliances sold at retail level across various store sizes (saturation?).	Staff	3	Y	OK
Median age of in-home appliances statewide in single-family and multi-family homes	Staff	3	Y	OK.

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**Metric type: 3 = data collection, tracking, and reporting [by IOUs, CPUC staff, and/or other entities] to be determined later.

Residential – Multifamily Energy Efficiency Rebate Subprogram

	Mission	IOU Comments
SW Program: Residential	<p>"Multifamily property owners and managers are a historically unresponsive market to energy efficiency efforts. As one of California's largest industries, this unique customer segment warrants additional attention and effort to motivate property owners and managers to actively participate in energy efficiency programs. After some recent years of concerted energy efficiency efforts to target this sector, there are still areas with large concentrations of multifamily households that have not yet received energy efficiency installations as noted in the 2003 EM&V report for this sector. Market studies have noted that there are over 1.0 million multifamily units in Southern California Edison's service territory contained in approximately 145,000 multifamily buildings. Having experienced only modest participation in utility programs to date, the multifamily segment holds tremendous savings potential. In SCE's service area, the multifamily market sector has a consumption base well over 2 billion annual kilowatt hours generated by roughly 682,000 multifamily (tenant) service accounts (five or more units). Although participation levels have depleted program funding over several years, market penetration remains only about 12%. This program targets property owners and managers of multifamily complexes of 2 or more dwelling units, including mobile home parks and condominium complexes with common areas.</p>	
SW <u>Sub-program</u> : Multi-Family Energy Efficiency Rebate (MFEER)		

CA EESP Goals/Strategies Addressed by SW <u>Sub-program</u> :	CA EESP	IOU

	Ref. pp. #	
<i>CA EE SP Goal (2): Home buyers, owners and renovators will implement a whole-house approach to energy consumption that will guide their purchase and use of existing and new homes, home equipment (e.g., HVAC systems), household appliances, lighting, and "plug load" amenities.</i>	p. 11	
<i>CA EE SP 2-1: By 2020, 100% of existing multi-family homes have a 40% decrease in purchased energy from 2008 levels</i>	p. 19	
<i>CA EE SP 2-2: Promote effective decision-making to create widespread demand for energy efficiency measures</i>	p. 20	
<i>CA EE SP 2-3: Manage research into new/advanced cost-effective innovations to reduce energy use in existing homes</i>	p. 20	Not a program strategy

Short-term (2010-2012) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
1) Diversify energy efficiency measures such that non-lighting measures represent X% of program savings (BTUs? KW/Kwh?) by 2012	Staff	By 2012, diversify energy efficiency measures such that non-lighting measures represent at least 5% of program BTU savings. (2a type)
2) Increase participation in LIEE, CARE and ARP programs subsequent to MFEER participation to represent X% of programs by 2012	Staff	IOUs recommend moving Objective-2 to the LIEE program
3) Increase energy efficiency understanding among MF property owners	Staff	Improve program participants' AKA level as compared to program targets' AKA level.

4) Increase participation in MFEER program from xx% of MF complexes in IOU services territories in 2010 to yy% in 2012	Staff	IOUs recommend deleting Objective-4 from the MFEER program and rolling it into the Whole Apartment Program.
		By 2012, maintain and/or improve customer satisfaction of program participants (i.e., property owners/managers) from 2010 baseline.

Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU Comments
1) Percentage increase in energy efficiency awareness/knowledge (attitude?) among MFEER participants (defined at subprogram level as property managers/owners, not renters) (move all res subprogram "awareness" PPMs up to res program level) (need to define and operationalize survey questions jointly) by 2012 as compared to 2010	Staff	2b	Y	% of improvement in AKA level between program targets and program
2) Percentage of MFEER unit dwellers participants who subsequently enroll in an additional IOU program (e.g. LIEE, ARP, and CARE) (SCE- tracking	Staff	2a	N	IOUs recommend deleting PPM-2

capability for this does not currently exist; could be tested for future consideration) (SDGE: Is OK with PPM, so can transfer any leads to LIEE and track. Low income database has this capacity (?). LIEE targets customers by zip code whereas MFEER is open to all; MFEER program should review LIEE targeting approach to see if replicable. LIEE database is used in MFEER program). (SCE: consider tracking this under LIEE program; MFEER is a "leave behind" of brochures). PG&E –similar tracking challenges as SCE.				
3) Non-lighting measures (BTUs) as a percentage of total energy efficiency measures adopted under MFEER (# units; BTUs). Track lighting as percentage of Kwh/ estimate non-lighting measure savings based on ex-ante deemed savings (evaluation will give additional data) This allows both to be "2a". (Most IOUs prefer Kwh/KW as metric)	Staff	2a	N	% of non-lighting measures as compared to % of total EE measures adopted in the MFEER program. KWh for single commodity IOU and BTU for mixed commodity IOU.
4) Number of workshops (IOUs will define) for participating property owners/managers to understand program requirements and procedures (tie-in to EE loading order). Track by # of units that participating property owner/manager owns/manages. Attendance in person. Target should be smaller property owners because larger ones are already well aware of program (?). Intent of this PPM is to address survey's suggesting dissatisfaction of participating property owner/managers. PPM was designed to make sure that participants understand requirements. Contractors are also participant	DR/IOU	1	N	Delete
5) Total number of MFEER participants (property managers/owners) in IOU service territories, and estimated percent of all MF units/complexes in IOU service territories that this represents. Track cumulatively? Operationalize definitions to break out repeat participants.	Staff	2a or 2b	Y –establish baseline using existing data	IOUs recommend deleting PPM-5 (For Objective 4)

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**Metric type: 2a = reported annually, 2b = reported by end of cycle.

Long-Term (2013-2020) "SMART" Sub-program Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
1) By 2020, 100% of existing multi-family homes have a 40% decrease in purchased energy from 2008 levels Note: Attribution is difficult	SP (p. 19)	OK.
2) Increase penetration of ENERGY STAR rated appliances in MF properties (note: not all ES appliances are rebated)	Staff	OK.
3) Increase average efficiency of fixtures (non-ES appliances, controllers, etc., central building water heaters; need to identify specific appliances) in MF properties. Replicate SF baseline study for MF.	Staff	Ok

*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

Long-Term Sub-program MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)	IOU Comments
1) Percentage of MF Homes having a 40% decrease in purchased energy from 2008 levels	SP (p. 19)	3	Y	% of multi-family buildings achieving purchased energy reduction by 10%, or 20% or 30% or 40% and above.

2) Average efficiency of common area fixtures in MF properties	Staff	3	Y	area appliances and fixtures for MF properties
3) Penetration levels of ENERGY STAR rated appliances in MF properties (only those within control of property owner/managers- need to define); couldn't track ES appliances that fall off list. Note that this is a MT indicator, so not only caused by IOU programs.	Staff	3	Y	IOUs recommend deleting MT-3.

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***Metric type: 3 = data collection, tracking, and reporting [by IOUs, CPUC staff, and/or other entities] to be determined later.*

Residential - Whole House Retrofit Subprogram

	Mission	IOU Comments
SW Program: Residential	The Whole House Prescriptive Sub Program is a new addition to the 2010-2012 statewide residential portfolio. The Whole House Performance Program is a third party local program for each of the IOUs. Both Whole House programs are designed to offer customers and contractors an easy entry point on the path to home performance. The prescriptive program will allow customers to reduce energy usage while increasing the energy performance and comfort of their existing homes and minimizing lost opportunities for future comprehensive retrofit options. The programs will also educate contractors and customers on the benefits of implementing comprehensive whole house retrofits on existing buildings that will provide systematic reductions in energy use. Both of these programs will leverage and contribute to the pool of qualifying contractors, provide linkage to the local government programs to support financing (i.e., AB811 financing options, etc.) and support a cohesive integrated marketing and outreach efforts. An important goal for both programs (as adopted in D0909047) is to achieve 20% energy reduction for all treated homes.	
SW <u>Sub-program</u> : Whole House “ Energy Upgrade California-Advanced and Basic Programs ”		

CA EESP Goals/Strategies Addressed by SW <u>Sub-program</u>:	CA EESP Ref. pp. #
<u>Goal 2:</u> Home buyers, owners and renovators will implement a whole-house approach to energy consumption that will guide their purchase and use of existing and new homes, home equipment (e.g., HVAC systems), household appliances, lighting, and "plug load" amenities.	p. 11
<u>Strategy 2-1:</u> Deploy full scale whole house programs.	p. 19

Milestone 2-1: By 2020: <ul style="list-style-type: none"> ▪ 25% of existing homes have a 70% decrease in purchased energy from 2008 levels ▪ 75% of existing homes have a 30% decrease in purchased energy from 2008 levels ▪ 100% of existing multi-family homes have a 40% decrease in purchased energy from 2008 levels 	p. 19
Goal Result 2: Energy consumption in existing homes will be reduced by 20% by 2015 and 40% by 2020 through universal demand for highly efficiency homes and products	p. 11
Strategy 2-2: Promote effective decision-making to create widespread demand for energy efficiency measures	p. 20
Strategy 2-3: Manage research into new/advanced cost-effective innovations to reduce energy use in existing homes	p. 20
Strategy 2-4: Develop financial products and programs such as on-bill financing to encourage demand for energy efficiency building products, home systems, and appliances	p. 20

Short-term (2010-2012) "SMART" <u>Sub-program</u> Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
Objective 1: Enroll and complete upgrade work on the following number of homes by 2012: SCE - 11,820; SCG - 10,644; PG&E - 15,500; SDG&E's - 3,606. (Goals will be adjusted based on the actual program roll-out date) Rolled-up performance and prescriptive.	DR, PIP	OK.
Objective 2: Enroll an increasing number contractor firms to participate in program each year (Targets for 2012 are: PG&E- 73; SCE- 63; SCG- 57; SDG&E- 17)	DR, PIP	Enroll an increasing number of contractor firms that are eligible to participate in either prescriptive and/or performance programs each year. (Targets for 2012 are: PG&E- 73; SCE- 63; SCG- 57; SDG&E- 17)
Objective 3: Increase contractors' and customers' awareness and knowledge of benefits of comprehensive whole house retrofits and the "house as a system"	PIP	Leverage ARRA funding for promotion of the whole house program, increase contractors' and homeowners' awareness of benefits of comprehensive whole house retrofits 25% over existing 2010 baseline.

Objective 4: Decrease percentage of participating homes not passing QA/QC review	PIP	By 2012, optimize the proportion of homes inspected that pass QA/QC review.
Objective 5: Energy savings per home for prescriptive and performance program participants achieve adopted target savings levels	PIP, D0909047	Energy savings per home for prescriptive and performance program participants achieve adopted target savings levels (an average of 10% for prescriptive programs and an average of 10%-20% for performance programs).
Objective 6: By 2012, incorporate radiant cooling, ductless systems, ground source heat pumps, etc into 5% of participating "performance" program homes	SP, p. 63 (also applies to new construction)	IOUs recommend deleting Objective-6.

Short-term <u>Sub-program</u> PPMs:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (2a or 2b)**	Baseline Study Required (Y/N)	IOU Comments
PPM 1: Number of homes treated in the program for 2010-2012 (prescriptive and performance participation indicated distinctly)	AL, DR, PIP	2a	N	OK.
PPM 2: Number of enrolled contracting firms participating in the program	AL, DR, PIP	2a	N	OK
PPM 3: Average Ex-ante savings per home as reported (average, kwh, therms, KW) Most likely prescriptive. Will need to be tracked by CZ. Performance tracked by test-in/test-out.	D0909047; Staff	2a	N	Average Ex-ante savings per home as reported (average, kWh, therms, kW) for both performance and prescriptive programs by climate zone.

PPM 4: Average and range of evaluated energy savings per home (prescriptive and performance programs)	D0909047, Staff	2b	Y, Recommended- 2010	OK.
PPM 5: Number/percentage of homes not passing QA/QC review, by IOU stick with percentage. But useful to know number/no targets.	Staff	2a	N	OK.

*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

**Metric type: 2a = reported annually, 2b = reported by end of cycle.

Long-Term (2013-2020) "SMART" Sub-program Objectives:	Source (SP, AL, DR, PIP, or Staff)*	IOU Comments
Objective 2: By 2013, 2017 and 2020, costs to customers of whole house retrofits are decreased as compared to 2010 levels issue: yes we want to track, but don't want to force ourselves to drive costs lower. Want to track if they are going down/up. CF: just a measure of how market is changing over time. JC: cost per unit of energy to be saved? Normalized method to be determined.	Staff	By 2013, 2017 and 2020, costs to customers of whole house retrofits are decreased as compared to 2010 levels for identical measures, when controlling for measures implemented and economic factors, including costs of goods and labor.
Objective 3: Customers have increasing financing options for whole house retrofits, including options leveraged by and coordinated with IOU programs and those offered by other entities. Comment: if costs go down, financing would also decrease. Let's not have 2 and 3 at cross-purposes. JC: metric could be # of participants not able to proceed due to unavailable financing. ED gap analysis will identify which options exist or are lacking.	SP, Staff	IOUs recommend deleting this as a utility goal.

*SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]

Long-Term <u>Sub-program</u> MT Indicators:	Source (SP, AL, DR, PIP, or Staff)*	Metric Type (3)**	Baseline Study Required (Y/N)	IOU Comments
MT Indicator 1: Increased consumer awareness and knowledge of and attitudes towards levels of home as a system by consumers and contractors	SP	3	Y	Increased consumer and contractor AKA towards the marketing concept of "home as a system."
MT Indicator 4: Average total cost of whole house energy efficiency retrofit to consumers (sorted by level of energy savings or type of job)	Staff	3	Y	IOUs recommend deleting MT-4 (For
MT Indicator 5: Average amount of financing used for whole house retrofits and types of sources	Staff	3	Y	The proportion (%) of households that elect not to perform comprehensive energy upgrades due to lack of available financing.

**SP=Strategic Plan, AL=Advice Letter, DR=Data Request Response, PIP=program plans, Staff=ED proposed. [Include page reference when applicable.]*