

Res/ Nonres/ CC	Pgm/ Pgm Group	Study Name	Xref #	Project Description	Project Status	Source for Project Documentation	2010-2012 EM&V Project Budget	Funding Source	Pre 2010-2012 Budget	Study Manager
CC	ME&O	ME&O Process Evaluation	(part of xref#25)	ME&O Program Process Evaluation. This evaluation will focus on examining the processes relevant to (1) the initial brand creation and overall program strategy (2) the program delivery including implementation strategy, campaign tactics, and relevant marketing activities. Moreover it will assess specific AKA-B and adoption effectiveness outcomes resulting from of specific messaging and channel selection. Another component of this study will focus on furthering development of evaluation methods that provide consistent and reliable measurement of program effects. As an extension of such research, this study component will identify related evaluation data requirements and program tracking best practices.	SOW development (Feb 2011)	PDA	\$400,000	2010-2012	\$0	IOU
Res	ARP	ARP/Retailer Trial	(part of xref#10)	To assess the effectiveness of the ARP trial program and to determine if it should be mainstreamed. This program is supports Strategy-2 of CLTEESP 2020 plan. The pilot M&E study can be initiated only after the pilot program has been operational for a minimal of 30 days. Assess the following researchable questions: 1) Did the ARP trial program operate as designed? Is it effective? How can it be improved? Did the ARP pilot change the standard ARP program theory? 2) Did the ARP trial generate the same level of savings as described in the ARP program assumptions? Use best engineering estimates to accomplish this task, with 90% confidence in the data. 3) Did the ARP trial program improve ARP market share among disposers without increasing the level of free-riders? 4) Did the program improve participant satisfaction as compared to the standard ARP program? 5) Did the ARP trial improve sales for the participating retailers? 6) What was the baseline for retailer's recycling pick-up prior to the ARP/Retailer program intervention?	SOW development (Mar 2011)	PDA	\$100,000	2010-2012	\$0	IOU
Res	NC	Residential New Construction Measure Optimization Tool Update	(part of xref#16)	The RNC Measure Optimization Tool was created in early 2008 prior to the finalization of 2008 Title24, and therefore requires updating. Since this tool is currently used for ongoing single family RNC program planning adjustments, program implementation, design assistance, and ex ante reporting (IMCs) to the Commission updating is necessary. Minor revisions to some measure parameters and baseline conditions may also be necessary. In 2008 the statewide IOUs completed a research project to create the RNC Measure Optimization Tool. The Tool uses Monte Carlo methods to simultaneously consider combinations of energy efficiency measures with incremental construction costs to answer a key question: what are the least cost measure combinations to achieve the highest levels of energy efficiency in single family new construction in each of California's sixteen climate zones? (And to provide the specific measures, costs, and percentages better than Title24.) The Tool was created in early 2008 prior to the finalization of 2008 Title24, and therefore requires updating.	SOW development	PDA	\$30,000	2010-2012	\$0	IOU
CC	ZNE	Roadmap to ZNE	(part of xref#31)	ZNE Market and Process Assessment. This study will define an optimal pathway for the achievement of the CA Strategic Plan ZNE goals. This study will span all relevant sectors, including new construction and existing buildings. This study will focus on defining the required acceleration of codes and standards stringency, as well as supplemental programs, policies or procedural strategies to ensure successful implementation. In particular, the study will consider expanding Title 20 and 24 to address all significant end uses and determine required improvements in the coordination of code development across local, state, and federal jurisdictions. This study will also provide the timely address of near term concerns, including but not limited to the appropriate treatment cost-effectiveness and compliance in the context of ZNE Standards. This study also includes a program delivery and implementation assessment component that has an early EM&V planning component. The IOUs will develop a plan to create and utilize ongoing and timely evaluation results to continuously improve integrated program offerings of the ZNE pilot programs. The early planning component will also detail the process evaluation component.	ED approved, RFP pending	PDA	\$1,400,000	2010-2012		IOU
Res	Whole House	Residential Whole House EM&V Study	14	There are two parts to this comprehensive study: Part 1: Baseline Data Collection, Evaluability and Early M&V, and Part 2: Process Evaluation. Part 1: Baseline Data Collection, Evaluability and Early M&V. The part-1 study is designed to answer three researchable questions: (1) What is the baseline market condition prior to program intervention? (2) Is the program designed and implemented well enough so it can be evaluated? If not, what are the early feedbacks for corrective actions? (3) Are the program work-papers and savings assumptions accurate and valid? The data collection is to improve program performance and certainty. Part 2: Process Evaluation. This includes both rapid feedback as well as program-cycle process evaluation research. The goal here is to provide timely feedback to program team so program design and implementation could respond prior to the next program cycle. This part of the process evaluation study will start during second half of 2011 and to be completed before the end of 2012.	ED approved (Feb 2011), RFP pending	PDA	\$500,000	2010-2012	\$0	IOU
Nonres	All	Agricultural Sector Market Characterization and Potential Study	58	Agricultural Sector Market Characterization and Potential Study. This study will be designed to identify opportunities for energy efficiency, demand response and self-generation within the agricultural sector. Components of this study may include a literature review, market and energy usage characterization, a customer needs assessment, gap analysis, saturation and baseline analyses for specific technologies, and a potential study for the most promising opportunities.	ED approved, RFP released (Jan 2011)	PG&E	\$0	2009	\$400,000	IOU
Nonres	All	Process Evaluation of Semptra's Nonresidential Programs	18	Overarching process evaluation of all Semptra's nonresidential programs. Semptra has proposed to conduct independent process evaluations of the nonresidential retrofit programs included within the SDG&E and SCG portfolios. The primary goal of these studies is to assess the effectiveness of program design, program implementation and marketing activities. The studies will be designed to address process evaluation issues for all nonresidential retrofit programs, including statewide, local and third party. In addition to funding its own independent process evaluations, Semptra plans to provide a limited amount of EM&V funding for process/market studies being managed by PG&E and SCE to the extent that those studies will be collecting data/reporting on baseline metrics, PPMs, MTIs, etc.	ED approved, RFP released (Feb 2011)	PDA	\$1,200,000	2010-2012	\$0	IOU
Res	All	Process Evaluation of Semptra's Residential Programs	8	Overarching process evaluation of all Semptra's residential programs. Semptra has proposed to conduct independent process evaluations of the residential retrofit programs included within the SDG&E and SCG portfolios. The primary goal of these studies is to assess the effectiveness of program design, program implementation and marketing activities. The studies will be designed to address process evaluation issues for all residential retrofit programs, including statewide, local and third party. In addition to funding its own independent process evaluations, Semptra plans to provide a limited amount of EM&V funding for process/market studies being managed by PG&E and SCE to the extent that those studies will be collecting data/reporting on baseline metrics, PPMs, MTIs, etc.	ED approved, RFP released (Feb 2011)	PDA	\$675,000	2010-2012	\$0	IOU
CC	All	SCE's Enhanced Inspection Study	33	Building on completed process evaluations, this project develops enhancements for SCE's internal QA/QC and inspection procedures.	Ongoing	SCE	\$502,934	2010-2012	\$0	IOU
CC	All	Calmac Database Management (Caulfield Consulting)	(part of xref#63)	Support maintenance of on-line library of EM&V studies. ED and IOUs agreed to continue to fund for 2010-2011.	Ongoing	N/A	\$70,000	2010-2012	\$0	IOU
CC	All	Energy Efficiency Groupware (EEGA) (Integrity Corporation)	New ("IOU 2")	Energy Efficiency Groupware (EEGA)	Ongoing	N/A	\$0	2006-2008	\$885,480	IOU
CC	All	EE Web Portal (Ascentium)	New ("IOU 15")	Engage 360 - ME&O	Ongoing	SCE	\$0	2009	\$1,000,000	IOU

Res/ Nonres/ CC	Pgm/ Pgm Group	Study Name	Xref #	Project Description	Project Status	Source for Project Documentation	2010-2012 EM&V Project Budget	Funding Source	Pre 2010-2012 Budget	Study Manager
CC	C&S	C&S M&E White Paper for two newly approved sub-programs (reach codes and code compliance enhancement)	New ("IOU 5")	The purpose of the white paper will be to prepare recommendations for addressing the outstanding M&E related policy and interpretation questions that need to be addressed for these two sub-programs to support the implementation planning process for the 2010-2012 program cycle.	Ongoing	SCE	\$0	2006-2008	\$64,310	IOU
CC	C&S	Codes and Standards Code Change Theory Reports Title 24 (HMG/Energy Solutions)	New ("IOU 13")	Code Change Theory Reports are Early EM&V work created solely to support CPUC's evaluators when they perform Impact Evaluations on the statewide C&S program.	Ongoing	SCE	\$0	2009	\$400,624	IOU
CC	C&S	Codes and Standards Code Change Theory Reports Title 20/Federal Rulemaking (Energy Solutions)	New ("IOU 14")	Code Change Theory Reports are Early EM&V work created solely to support CPUC's evaluators when they perform Impact Evaluations on the statewide C&S program.	Ongoing	SCE	\$0	2009	\$414,491	IOU
CC	Lighting	CFL Laboratory Testing	7	The CPUC and SCE have co-funded laboratory study to look at CFL lamp life as a function of usage and switching patterns. A sample of 3,600 CFLs, designed to be representative of mix of CFL products in the California market and promoted through California IOU programs, was acquired from retail outlets across the state that was 72 models are represented in this test. 66 of which are Energy Star qualified models. In September 2010, a two-year "cycle test" was initiated where the 3,600 CFLs were placed on 10 different timing cycles (360 identical batches in each of the 10 cycles) to look at life characteristics vs switching patterns. The 10 timing cycles ranged from as short as 2 minutes on to as long as 12 hours on. Five samples from each of the 72 models are on each of the 10 cycles, yielding 360 CFLs per cycle. One project objective is to combine results of the laboratory cycle test with logger data from real world applications to get better estimates of actual expected CFL life (as opposed to rated life, which is based on 3 hr cycles). The laboratory study will also be conducting a number of other	Ongoing	DMQC	\$0	2009	\$760,000	ED/SCE
CC	ZNE	Technical Potential for Achieving ZNE	(originally part of xref#73, now part of xref#31)	This study will focus on improving estimation of the costs, savings, feasibility, and potential adoption of ZNE homes and buildings. This research will coordinate with and integrate results from related ZNE market characterization and roadmap studies. ZNE data and results will be prepared for inclusion in the EE Goals Integration Study.	Ongoing	PDA	\$250,000	2010-2012		IOU
Nonres	All	Industrial End Use Saturation Study (IEUS, pre 2010-2012)	50	The Industrial End Use Saturation Study (IEUS) was initiated several years ago by the IOUs. The project is currently on hold pending resolution of several issues. It is intended to provide data needed for California Energy Commission industrial demand forecasting and data useful for industrial demand-side management program design.	Ongoing	PG&E	\$0	2004-2005	\$2,685,925	IOU
Nonres	All	Industrial Market Segments - (KEMA)	New ("IOU 18")	The goal of this study is to characterize energy use and energy efficiency in the CA industrial sector. The study will develop and present data on the CA industrial sector, including end use consumption estimates, load shapes, key end uses and measure to target for energy efficiency, and a gap analysis between potential and recent program accomplishments.	Ongoing	PG&E, SCE	\$0	2009	\$364,003	IOU
Res	Lighting	Advanced Lighting Baseline Study - Phase 2	(part of xref#22)	The purpose of the Advanced Lighting Baseline Study is to provide baseline data for key advanced lighting market indicators. These data will enable tracking of market progress during the 2010-2012 energy-efficiency program period and beyond. The study involves two phases: Phase 1, which involves mining and analyzing available data from recent evaluation studies to yield information on retail store stocking and pricing of advanced lamps as well as the proportion of installed and stored lamps in California households comprised by advanced lamps; and Phase 2, which involves research into advanced lamp sales and non-residential installations in California as well as a literature review of advanced lamp market from outside of California. Phase 1 are expected during Q1 2011 and Phase 2 results are expected during Q3 2011.	Ongoing	PDA	\$138,600	2010-2012	\$0	IOU
Res	Lighting	CFL Scoping Study (KEMA)	New ("IOU 11")	This research project was initiated by PG&E to explore the market potential for CFLs with enhanced features.	Ongoing	PG&E	\$0	2006-2008	\$306,995	IOU
Res	OPOWER	Evaluation of PG&E's OPOWER Pilot Program	(part of xref#32)	Evaluation of PG&E's OPOWER Pilot Program. The goals of this study are to validate the methods being used to determine energy savings impacts from comparative energy use programs, including experimental design, sample frames, control group characteristics, random assignment and multivariate data analysis. In addition, the ex-post impact evaluation should be designed to determine energy savings for groups and sub-groups of the samples, as well as assess persistence of energy savings overtime. Cost-effectiveness analyses should also be conducted for different customer groups to inform future program design. [Note: this study is not the ED-managed impact evaluation of this pilot program; ED and its contractors are providing input and oversight to PG&E's initial effort to design the experiment and select the samples. The full-scale evaluation of comparative use programs will be included in the custom impact evaluation scope.]	Ongoing	PDA	\$330,000	2010-2012	\$0	IOU
Res	All	AKA-B White Paper	(part of xref#11)	AKA-B White Paper	Nearly complete	PDA	\$34,700	2010-2012	0	IOU
CC	ME&O	ME&O Baseline Study	(part of xref#25)	ME&O Baseline Research (syndicated research with custom added) (ABT SRBI / Research Into Action) This study provides a baseline for California residential customer awareness, attitudes, knowledge, and behaviors related to ee understanding and practices. The study will assist in gauging the effectiveness of the marketing strategy and specified campaigns. This work leveraged the National 2010 Energy Conservation, Efficiency, and Demand Response Survey (ECEDR).	Draft results expected Q1 2011	SCE	\$0	2009	\$76,962	IOU
Res	Lighting	Advanced Lighting Baseline Study - Phase 1	(part of xref#22)	The purpose of the Advanced Lighting Baseline Study is to provide baseline data for key advanced lighting market indicators. These data will enable tracking of market progress during the 2010-2012 energy-efficiency program period and beyond. The study involves two phases: Phase 1, which involves mining and analyzing available data from recent evaluation studies to yield information on retail store stocking and pricing of advanced lamps as well as the proportion of installed and stored lamps in California households comprised by advanced lamps; and Phase 2, which involves research into advanced lamp sales and non-residential installations in California as well as a literature review of advanced lamp market from outside of California. Phase 1 are expected during Q1 2011 and Phase 2 results are expected during Q3 2011.	Draft results expected Q1 2011	PDA	\$80,821	2010-2012	\$0	IOU
Res	Lighting	Consumer Preference Research to Support Lighting Programs	60	Consumer Preference Research to Support Lighting Programs (or "Next Generation Lightbulb Optimization"). This study is being managed by PG&E using 2010-2012 program funds. ED will continue to provide input in the study design, analysis and results reporting. It is expected that the study will provide guidance for key program design considerations including product mix, incentive levels and allocation among distribution channels.	Completed (Feb 2011)	PG&E	\$0	2010-2012 (program \$\$, not EM&V)	\$75,000	IOU
CC	BCE	BCE Baseline and Market Assessment (ODC)	(part of xref#11)	Update statewide baselines and existing market trends of the following products within key business-to-consumer (B2C) and business-to-business (B2B) electronics markets. This product list incorporates program requirements for 2010 and may add additional products should we identify opportunities to affect significant additional energy savings: 1) Televisions and peripherals (B2C and B2B) 2) Television set-top boxes (B2C) 3) Laptop computers (B2B and B2C) 4) Printers and multi-function devices that incorporate printer functionality (B2B and B2C) 5) Game consoles (B2C) 6) Servers (B2B)	Completed (Jan 2011)	Calmac	\$0	2009	\$261,328	IOU

Res/ Nonres/ CC	Pgm/ Pgm Group	Study Name	Xref #	Project Description	Project Status	Source for Project Documentation	2010-2012 EM&V Project Budget	Funding Source	Pre 2010-2012 Budget	Study Manager
CC	All	Water Embedded Energy Process Evaluation (ECO Northwest)	New ("IOU 3")	The CA IOUs were directed by the CPUC to "explore the potential for future programs to capture water-related embedded energy savings. PG&E conducted three pilot studies: 1) PG&E Large Commercial Customers, 2) PG&E Low Income High Efficiency Toilets, 3) PG&E Emerging Technologies. SCE conducted three pilot studies: 1) SCE Low Income High Efficiency Toilets, 2) SCE Express Water Efficiency, 3) SCE Leak Detection. SDG&E conducted three pilots 1) SDG&E Managed Landscapes, 2) SDG&E Recycled Water Retrofits, and 3) SDG&E Large Customer Audits. SCG conducted a Gas Pump Testing pilot program. The delayed approval, in conjunction with the economic downturn and drought conditions, negatively impacted almost all of the Pilots, as the compressed schedule gave little leeway for IOU staff turnover, recruitment challenges, competing water agency priorities, projects planning and installations, and M&V activities. Collecting water and energy data from the water agencies to estimate embedded energy savings was very challenging. Despite the challenges that many of the programs experienced, there was generally high satisfaction among the participating water agencies. contract	Completed (Dec 2010)	Calmac	\$0	2006-2008	\$128,000	IOU
CC	HVAC	HVAC Phase 1 Maintenance Study	(part of xref#23)	Davis Energy Group completed a secondary source/literature review study of uncertainties related to HVAC maintenance practices and EM&V measurement methods.	Completed (Dec 2010)	Calmac	\$0	2009	\$155,000	IOU
Res	All	CEE Energy Star Awareness Survey	62	CEE Energy Star Awareness Survey. An IOU-funded effort to obtain a CA over-sample from the national CEE Energy Star Awareness Survey.	Completed (Dec 2010)	SCE	\$2,500	2010-2012	\$0	IOU
Res	All	Mass Markets (Eco Northwest)	New ("IOU 6")	Mass Markets (Eco Northwest)	Completed (Dec 2010)	Calmac (pending)	\$0	2006-2008	\$164,880	IOU
CC	LGP	Analysis of management and implementation of PG&E's Local Government Partnership and Pilot Program	New (part of "IOU 7")	This project, which has provided continued support of the Local Government partnerships, is evaluating the full suite of government programs to external audiences. It will aid in identifying optimal metrics and points of measurement across programs/subprograms that may lead to indirect energy savings and will provide feedback on program best practices, along with responding to the CPU/C Strategic plan goals of the 2006-08 government program evaluation recommendations. Previous research has documented results have documented the range of government partnership services offered to both local government staff and local communities/end-use customers. Additionally, there is significant uncertainty in program offerings and program delivery. This study will integrate the synergies of existing research and data to analyze uncertainty and to assess and define the state of the knowledge to include gaining a more complete understanding of the government program service offerings, how they are delivered to customers and how the programs are implemented within PG&E.	Completed (Nov 2010)	Calmac	\$0	2006-2008	\$0	IOU
Res	All	Mass Markets (KEMA)	New ("IOU 7")	The purpose of this evaluation was to address a variety of research needs identified by PG&E staff members who were involved in implementing PG&E's portfolio of Mass Markets energy efficiency programs. These research needs were first identified in the original RFP and then adjusted in the final research plan based on many meetings and interviews with PG&E staff. The final reports represented evaluations of various programs, including the Upstream Lighting Program (ULP), Change-a-Light CFL giveaway campaign, swimming pool rebate program, Local Government Partnership (LGP) program. Final reports were also prepared to present results from surveys of lighting distributors to identify how PG&E could influence the lighting specification process, an assessment of the 2007-2008 PG&E CFL ad campaigns, research on PG&E's HVAC rebate program and HVAC Quality Installations, an examination of ex ante savings assumptions for steam traps and Refrigerant Charge and Airflow (RCA) measures.	Completed (Nov 2010)	Calmac	\$0	2006-2008	\$587,090	IOU
CC	All	SCE's Catalina Island Program Improvement Assessment	34	SCE's Catalina Island Program Improvement Study. Study focused on gathering data for a pilot effort on how to reach this high-cost-to-serve area.	Completed	N/A	\$0	2009	\$25,000	IOU
CC	C&S	Codes & Standards Evaluability Assessment	(part of xref#29)	Codes & Standards Evaluability Assessment	Completed	SCE	\$0	2009	\$17,200	IOU
CC	WET	WE&T Needs Assessment (UCB Don Vial Center)	New ("IOU 16")	WE&T Needs Assessment (UCB Don Vial Center)	Completed	SCE	\$0	2009	\$1,364,056	IOU
Nonres	All	ACEEE Big Savers Study	35	A "best practices" study designed to identify how market actors have achieved large savings. Study completed by ACEEE with funding provided by multiple program administrators.	Completed	SCE	\$40,000	2010-2012	\$0	IOU
Nonres	All	Hospitality (ECO Northwest)	New ("IOU 8")	Hospitality (ECO Northwest)	Completed	Calmac	\$0	2006-2008	\$164,695	IOU
Nonres	All	Retail Stores (Eco Northwest)	New ("IOU 10")	Retail Stores (Eco Northwest)	Completed	Calmac	\$0	2006-2008	\$164,695	IOU
Nonres	All	Food & Beverage Benchmarking Project (Wastewater) (Kennedy/Jenks)	New ("IOU 12")	Food & Beverage Benchmarking Project (Wastewater) (Kennedy/Jenks)	Completed	Calmac	\$0	2006-2008	\$224,700	IOU
Nonres	EBCx	Energy Savings Calculation Tools Development for Existing Building Commissioning (EBCx) Program	20	Energy Savings Calculation Tools Development for Existing Building Commissioning (EBCx) Program. This study involves the review and development of energy savings calculation tools for common, low-savings EBCx (Existing Building Commissioning) measures. The tools are targeted for use on common measures with relatively low savings, which make up a significant portion of the EBCx measures identified during the 2006-2009 PECI RCx program but a small portion of the overall program savings. The tools are expected to help the program effectively target small to mid size buildings at lower cost, streamlining the participation process and still maintaining a sufficient level of program-wide rigor and consistency. All issues pertinent to the unfolding of these expectations will be investigated thoroughly. Moreover, new savings estimation procedures will be assessed for quality, consistency and effectiveness in both delivery and outcome.	Completed	PG&E	\$0	2009	\$112,000	IOU
Nonres	NC	Commercial New Construction Market Characterization Study	New ("IOU 4")	SCE recently completed a market potential study to support program marketing and outreach efforts for SCE's SBD Program. The study provided an analysis of program penetration from 2004 - 2009, as well as to characterize the energy savings market potential by owner and building type to support marketing and outreach activities for the 2010-12 program cycle.	Completed	SCE	\$0	2006-2008	\$134,940	IOU
Res	HEES+	HEES follow-up study of hispanic-in-language participants	(part of xref#12)	HEES follow-up study of hispanic-in-language participants	Completed	SCE	\$0	2009	\$44,000	IOU