

**PACIFIC GAS AND ELECTRIC COMPANY
2013-2014 ENERGY EFFICIENCY PORTFOLIO
PROGRAM IMPLEMENTATION PLAN
STATEWIDE PROGRAM**

**INTEGRATED DEMAND-SIDE MANAGEMENT
PGE2108**

APRIL 23, 2013

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- 1) Integrated Demand Side Management¹, PGE2108, Core
- 2) Projected Program Budget Table

	Main Program Name / Sub-Program	Total Administrative Cost (Actual)	Total Marketing & Outreach (Actual)	Total Direct Implementation (Actual)	Integration Budget Allocated to other Programs (If Applicable)	Total Budget By Program (Actual)
CROSSCUTTING						
SCE	Integrated DSM					\$1,710,000
PG&E	Integrated DSM					\$1,321,668
SDGE	Integrated DSM					
SoCal Gas	Integrated DSM					
	TOTAL:					\$1,321,668

- 3) Projected Program Gross Impacts Table

Non-resource program.

- 4) IDSM Program Description

a) Description

The California Long Term Energy Efficiency Strategic Plan (Strategic Plan) encourages programs that integrate the full range of demand-side management (DSM) options, including energy efficiency (EE), demand response (DR), and distributed generation (DG), as fundamental to achieving California’s strategic energy goals. This program implementation plan (PIP) presents the coordinated effort of Pacific Gas and Electric Company (PG&E), Southern California Edison (SCE), San Diego Gas and Electric Company (SDG&E) and Southern California Gas Company (SoCalGas), (together referred to as “the IOUs”) to integrate DSM options in full collaboration with the Commission’s Energy Division. This PIP is in compliance with Decision (D.) 09-09-

¹ D.09-09-047, Ordering Paragraph (OP) 33 directs Pacific Gas and Electric, Southern California Edison, San Diego Gas and Electric, and Southern California Gas to jointly submit a revised program implementation plan for the statewide IDSM program through an Advice Letter within 120 days of the effective date of the Decision. This PIP was submitted on January 22, 2010 through Advice 3079-G/3595-E (PG&E) and again at Energy Division’s request through supplemental Advice 3079-G-B/3595-E-B (PG&E) on March 10, 2010, and approved in a disposition letter issued by Energy Division on March 12, 2010. The 2013-2014 PIP Addendum incorporates direction from D.12-05-015.

047, which approved the IOU Statewide IDSM program; the 2013-2014 Guidance Decision (D. 12-05-015) that required continuation of IDSM activities; and the 2013-2014 Final Decision (D. 12-11-015), which approved the 2013-2014 IOU budgets.

The IOUs have identified integrated DSM (IDSM) as an important strategic DSM policy priority. Each IOU has proposed activities, pilots, and other programs (Strategy 1.2)² in response to the Strategic Plan DSM Coordination and Integration Strategy. Through these approaches, IDSM program implementation will be advanced significantly.

In addition to the IOUs' individual IDSM pilots, projects, programs, and activities, the IOUs will maintain the Statewide Integration Task Force (Task Force) comprised of utility staff and third party program administrators, as needed. Energy Division staff and expert outside stakeholders can also participate in on a regular or as-needed basis. Task Force responsibilities include activities that promote, through statewide-coordination, the IDSM goals and objectives as identified in the California Energy Efficiency Strategic Plan (D.09-09-047), the 2013 -2014 Guidance Decision (D.12-05-015), and the Decision approving the 2013 – 2014 EE program portfolio (D.12-11-015). The IOUs believe that Strategy 1.1 of the Strategic Plan—"Carry out integrated marketing of DSM opportunities across all customer classes"—should be coordinated with the statewide Marketing, Education and Outreach (ME&O) efforts (*see* SW ME&O program implementation to be filed in a separate application for the 2013-2014 period) and implemented at the local level by the IOUs focused on particular segment and customer-specific strategies. The Task Force will coordinate closely with the ME&O statewide team established in the Strategic Planning process to ensure a consistent customer-focused communications approach and to gain knowledge from statewide and local marketing and outreach best practices.

In 2013-2014, the IDSM Task Force established in the 2010-12 portfolio period and consisting of IOU and ED representatives (Task Force) will continue to expand its role as a coordinating body across many proceedings, programs, and across the IOUs to identify gaps, best practices and to improve efficiencies around delivery of programs in a comprehensive manner to customers. Task Force representatives will strive to actively participate in all applicable proceedings to help develop of a record in each proceeding that will aid in developing policies, funding opportunities, and mechanisms to promote IDSM.

During the 2013-2014 period, the IOUs will explore existing project tracking and reporting systems and determine the best approach to consolidate and improve these systems across multiple programs (EE, DR, DG/CSI) and business areas to benefit customers, customer facing staff, internal planning and reporting.

The budget for DSM Coordination and Integration will provide cost coverage for positions at each utility to lead internal task forces, represent the utilities at the statewide task force level, facilitate training, and support subject matter experts. It will also fund

expenses associated with the Task Force’s deliverables and the coordination of the specific IOU integration activities. The IOUs will determine how to appropriately allocate energy efficiency funds to ensure IDSM tools provide customers with information that supports all demand-side resources, consistent with IDSM objectives, while remaining compliant with energy efficiency funding guidelines.

The Guidance Decision directs the IOUs to continue and expand integration efforts in the following areas:

- **Increased Coordination:** Increased coordination across different proceedings with the IDSM Task Force as lead
- **IDSM Funding:** Consideration of appropriate funding from the other proceedings to support IDSM efforts
- **Increased Involvement of Stakeholders:** Inclusion of stakeholders and experts in the efforts of the IDSM Task Force
- **Information on IDSM Projects:** Detailed information on the pilot programs and projects
- **Audits:** Continued development of the integrated audit tool
- **IDSM Marketing:** Increased integrated marketing efforts and improved reporting/communications with ED

b) Statement of Problem and Solutions to Overcome the Problem

The California Energy Efficiency Strategic Plan, the 2013–2014 Guidance Decision (D. 12-05-015), and the Final Decision approving the 2013–2014 EE portfolio (D. 12-11-015) require the utilities to focus on integration of DSM activities and programs on a statewide and local level through efforts with customers, utilities, regulators, and legislators. The CPUC’s Strategic Plan envisions “energy efficiency, energy conservation, demand response, advanced metering, and distributed generation technologies [as being] offered as elements of an integrated solution that supports energy and carbon reduction goals immediately, and eventually water and other resource conservation goals in the future.”

In order to ensure that the utilities’ IDSM activities meets the Strategic Plan’s vision, the Task Force will continue to meet regularly to identify and promulgate best practices, address implementation and policy issues, design effective metrics to measure IDSM progress, and report to the CPUC as described below. The utilities will work with Energy Division to identify a workable meeting/conference call and reporting schedule for 2013–2014.

This Task Force does not replace the individual IOU governance of DSM programs and is not intended to duplicate reporting or regulatory activities. Rather, the Task Force will specifically look for integration opportunities, identify integration barriers, and work through the IOU program staff to promote the advancement of integration, using lessons learned and best practices to establish a continuous improvement process.

The Task Force will focus on the eight tasks as defined in D. 09-09-047:

1. Development of a proposed method to measure cost-effectiveness for integrated projects and programs including quantification and attribution methods that includes GHG and water reductions benefits and the potential long-term economic and electric/gas hedging benefits.

a. Description:

The Commission has approved the California Standard Practice Manual, which serves as the reference document for cost-effectiveness tests and methodologies for EE programs. Rulemaking (R.) 07-01-041 is considering identifying and approving a cost-effectiveness methodology for DR programs, and R.08-03-008 is considering cost-effectiveness methodologies to measure the cost benefit of DG programs. To effectively integrate DSM program design, a set of internally consistent cost-effectiveness methodologies need to be developed for integrated projects, and for program efforts that seek to combine all of these demand side resource options within an integrated portfolio. Cost effectiveness is being considered in R.09-11-014.

b. Tasks and Timelines:

- Under contract to the IOUs, Black and Veatch completed a whitepaper on integrated cost effectiveness and presented observations and recommendations via a public workshop the first quarter of 2011. The progress of this activity is on hold pending guidance from the Energy Division.
- The IOUs and CPUC will work together on next steps for integrated cost-effectiveness efforts.

2. Development of proposed measurement and evaluation protocols for IDSM programs and projects.

a. Description:

In order to effectively evaluate IDSM programs, activities, and pilots, specific protocols need to be developed to document and attribute energy savings, demand reductions, and CO2 reductions from various DSM customer activities. The Task Force will coordinate with IOU and ED EM&V resources to develop a proposal of appropriate metrics for assessing integration.

Draft EM&V protocols will also be applied to the IOU IDSM pilot programs. This exercise will allow for immediate feedback as to the feasibility of the draft IDSM EM&V protocols.

b. Tasks and Timelines:

- The Task Force will explore a phased approach to developing appropriate EM&V protocols for IDSM programs and projects. ED EM&V resources will collaborate with the IOUs to develop a white paper that will be publicly vetted.

- The IOUs and CPUC will work together on next steps for integrated EM&V efforts.

3. Review IDSM enabling emerging technologies for potential inclusion in integrated programs.

a. Description:

The Commission has approved various research and development (R&D) and Emerging Technologies (ET) programs in both Energy Efficiency and Demand Response proceedings that promote IDSM. The Task Force will be the appropriate forum to discuss the applicability of these new technologies and initiatives in the context of IDSM. The ET program will undertake a coordinated effort to support innovation in EE, DR, and renewable/self-generation. ET program staff will coordinate with the IDSM Task Force to review and vet proposed emerging technologies that can be funded and integrated across DSM programs.

The ET program will focus on integrating hybrid and renewable technologies, as well as study and assess interactive effects, especially for technologies like lighting and HVAC. The program will launch demonstration showcases and scaled field placements featuring integrated energy systems for proof-of-concept, technology, and usability assessment; market exposure; and public awareness. The IDSM Task Force will track the results of the ET program's technology integration and help to chart its future course, as well as monitor the inclusion of integrated ET products into customer projects.

b. Tasks and Timelines:

- Both the IOUs and the Task Force will track emerging technologies that have some combination of EE, DR, and/or renewable self-generation capabilities, or other integrated relationships to potentially pilot integrated product offerings (in addition to marketing) to customers.
- The IOUs will leverage emerging technology efforts through various channels to offer and promote multiple integrated measures such as efficient lighting, HVAC equipment, or pumps coupled with controls that will provide both energy savings and auto-DR capabilities. The IOUs will explore leveraging existing or emerging technologies that individually or as a system combine EE, DR, DG, AMI, or water-savings potential as part of an integrated program offering.

4. Development of cross-utility standardized integrated audit tools.

a. Description:

Program evaluation studies identified energy surveys and customer site audits as powerful tools to create awareness of energy conservation potential. The IOUs

currently offer integrated audits to medium and large customers (generally with demands upwards of 200 kW) that include appropriate EE, DR, and DG/CSI project and/or program recommendations. Integrated audits are described in the Commercial, Industrial and Agricultural Statewide PIPs under the Energy Advisor sub-program.

Currently, DR and EE contribute funding to audit tool development and implementation. Generally no funding is provided by the solar/DG programs. Where appropriate, the Task Force will work with ED staff to identify opportunities for sharing costs across EE, DR, and DG in the development and implementation of integrated audits.

Standardization of Audit and Survey Tools

The IOUs continue to standardize statewide audit and survey tools, as well as customize audit recommendations based on customer profiles, operating characteristics, market sector potential, and cost-effectiveness. The IOUs will consider more meaningful ways to implement the audit and survey tools for the customer and identify choices of potential measures in various DSM programs or technologies specific to a particular customer.

b. Tasks and Timelines:

- An online tool development timeline for each utility can be found in the Commercial PIP.
- Continue statewide coordination on online and onsite audit tool efforts.

Progressive Energy Audit Tool (PEAT) Description

The PEAT is an interactive tool that enhances information provided to a customer about energy usage, behavior, and IDSM technology recommendations as customer data and household/business characteristics become more available during continuous communication and engagement. While each IOU refers to this tool by a different name, it is generally known as the online audit tool developed in the 2010-12 portfolio period.

PEAT is accessible for residential and nonresidential customers whose electricity demand is less than 200 kW. The audit tool will be the principal conduit to provide IDSM information to customers, replacing several survey/audit products and their associated software programs which currently collect data, do data entry, and generate customer reports. More specifically, the tool will be able to generate customer reports that include specific information on the costs and benefits of IDSM programs.

Projected Design and Functionality

The online tool was developed in the 2010-2012 portfolio period and will be enhanced in the 2013-14 cycle. Enhancements may be performed in phases, evolving as new internally

or externally developed tools become available for acquisition. The online tool will likely evolve based on smart grid, smart meter roll out at IOUs, building customer interfaces, and applications may extend the development beyond the 2010-2012 and 2013-2014 portfolio periods.

Where appropriate, the Task Force will continue to share best practices on a statewide basis, and will work with ED staff to identify opportunities for sharing costs across EE, DR, and DG in the development and implementation of integrated audits. It is expected that DR, EE and solar/DG programs will share costs representing their portion of the integrated audits and integrated services to customers based on measures identified. Currently DR and EE contribute funding to audit tool development and implementation, but generally no funding is provided by the solar/DG programs, unless funds are provided as carryover from the 2012 online tool development funds.

5. Track integration pilot programs to estimate energy savings and lessons learned and develop standard integration best practices that can be applied to all IOU programs based on pilot program evaluations and the results of additional integration-promoting activities (i.e., EM&V and cost-benefit results).

a. Description:

The Task Force will be the principle governance structure to track the integrated efforts of the IOUs and develop SW metrics to evaluate their success. The Task Force will identify pilots, projects, programs, and activities being conducted by individual IOUs that might be replicated in other parts of the state. The Task Force will not limit their efforts simply to integrated pilot programs or projects with special funding, the Task Force will also track integrated program offerings and integrated projects with customers.

Part of this effort will include using new integrated audit tools being developed by IOU market sector programs that provide baseline data and information regarding the appropriate combinations of DSM technologies for a site. In turn, the Task Force will coordinate with market sector efforts to provide feedback on the development of these tools to ensure they are truly integrated. Although the Task Force will not run or manage specific programs, it will offer recommendations, based on its findings, on new approaches and activities that could be added to existing programs to enhance the integrated nature of the offerings. Task Force recommendations made to IOU program managers to promote integrated programs or projects will be included (whether the other program managers accept Task Force recommendations or not) in the IDSM reports for ED. Additionally, the proposed IDSM cost-effectiveness framework, once adopted, will be applied in real-time to the pilot programs within this funding cycle.

In addition to the formal Task Force, the internal IOU teams will actively participate in discussions of pilots, perform assessments based on data collected from the pilot program managers, and return recommendations based on lessons learned to the management-level staff of the Task Force. The Task Force will establish a regular review process for pilot progress and ensure that best practices are identified in a report and shared with portfolio managers for all DSM areas and Energy Division staff. IDSM is a regular agenda item for management reviews within each IOU, and information and lessons learned can be shared with the other IOUs.

As the IOUs are conducting IDSM pilots, launching integrated programs, and implementing integrated projects with customers and the continued research is collaboratively vetted and shared, the Task Force will also look at developing best practices for IDSM for future integrated programs, activities, and projects. The Task Force will establish a formal process for sharing best practices with internal IOU staff, Energy Division staff, and interested stakeholders.

Per the Commission’s direction, the table below describes all Integrated Demand Side Management pilot programs and projects. The offerings address CPUC guidance on resource comprehensiveness, design characteristics, promotion of emerging technologies, and the testing of integrated cost-effectiveness and evaluation methodologies that support IDSM objectives.

Table 1 – Integrated Pilots

Pilot Program	Demand Side Resources Included (1)	Enabling Technologies Included (2)	Emerging Technologies Included (3)	Existing or New Construction (4)	% of ZNE Anticipated (program / avg project)		Anticipated Savings kWh (program / avg project)		Anticipated Savings KW (program / avg project)		Anticipated Savings Therms (program / avg project)		Program Cycle Budget Allocation (6)	Estimated Avg Cost Per Building	Accounts Included in the Pilot (7)	Notes
					Program	Avg	Program	Avg	Program	Avg	Program	Avg				
SCE- Zero Net Energy	EE, DR, DG	AMI, Battery Storage	X	NC	75	80	4000	200	10	0.5	3000	150	400,000	20,000	30	Have looked at AMI; including any enabling or emerging technologies that make sense for a specific project
SCE- Sustainable Communities	EE, DR, DG	AMI, Battery Storage	X	NC	10	1	N/A	N/A	N/A	N/A	N/A	N/A	1,100,000	55,000	8	Have looked at AMI; including any enabling or emerging technologies that make sense for a specific project
SDG&E Behavioral Pilot	EE	AMI Data	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2,900,000	\$10/year	at least 100K	Comparative usage pilot continuation
SCG - Sustainable Communities	EE, DG	AMI, Fuel Cells	X	NC	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	650,000	N/A	N/A	Other Enabling Technologies as appropriate based on project characteristics

b. Tasks and Timelines:

- During the 2013-2014 portfolio cycle, the IOUs will work with Commission Staff to ensure that an adequate level of detail is provided in their reports on Integrated Demand Side Management pilots, programs, projects and activities.
- The Task Force will work with other statewide teams to identify opportunities and projects to target where there are integrated offerings available and projects underway.
- The Task Force will work across the IOUs to identify and share best practices and lessons learned associated with the integrated programs, projects, pilots and activities identified and tracked.

6. Develop regular reports on progress and recommendations to the Commission.³

a. Description:

The Task Force will communicate regularly with Energy Division through meetings and reports. .

Consistent with IOU reporting requirements, each utility will provide a written report that will include updates on the status/progress on the eight IDSM activities.

b. Tasks and Timelines:

- Since Q1 2010, the IOUs have provided quarterly reports accessible through EEGA; discussions are ongoing to determine the appropriate reporting requirements for 2013-2014
- The Task Force (including IOU and Energy Division representatives) meets in person, as needed, for a deep dive discussion on some of the key area of interest in the report and will continue in 2013-2014.
- The Task Force, including subcommittees, holds regular planning and coordination conference calls to discuss progress on integrated activities and will continue in 2013-2014.

7. Organize and oversee internal utility IDSM strategies by establishing internal Integration Teams with staff from EE, DR, DG, marketing, and delivery channels.

a. Description:

The Task Force will facilitate IDSM planning and be the primary source of assistance to help inform internal IOU staff of integrated program activities, oversight, and coordination. The Task Force will not oversee the individual IOU Integration Teams, but will coordinate with these groups. The IOUs will establish internal integration teams with representatives from EE, DR, Energy Savings Assistance Program (ESAP), distributed generation (DG/Solar), green programs, marketing and delivery channels.

³ Heading remains consistent with CPUC directive in D. 09-09-047.

Deliverables of the Integration Team:

- Facilitate and communicate to promote inclusion of EE, DR, solar and other offerings (e.g., DG, Rates) into comprehensive energy cost reduction offerings to customers
- Coordinate with the marketing teams to promote integrated offerings including a centralized marketing function and consistent messaging
- Develop and implement sales and program training for integrated offerings including a targeted customers approach and sales training plan with a consideration of lessons learned from other IOU training efforts. Elements will include:
 - Training sales representatives from all appropriate delivery channels and program staff on IDSM integration to improve the sales effectiveness of programs
 - Incorporating IDSM into external events and internal training of customer-facing sales staff, as appropriate
- Coordinate responses to Commission directives, inquiries and data requests
- Coordinate development and delivery of integrated programs to create seamless market-segment-based customer solutions
- Coordinate/track delivery and progress of integrated pilots and activities
- Participate in regulatory proceedings and filings to maintain consistent, coordinated message
- Review and provide comments on regulatory filings

SCE will develop and begin implementation of an IDSM Action Plan that sets goals, strategies, and tactics across the organization to facilitate and optimize efficiencies gained through the utilization of integrated approaches. In order to educate and share best practices and experience with integrated products, marketing and sales, integrated sales training will be developed, or in some cases continued, for IOU customer facing, marketing and program teams.

b. Tasks and Timelines:

These tasks are ongoing within each utility.

- 8. Provide feedback and recommendations for the utilities' integrated marketing campaigns, including how the working group will ensure that demand response marketing programs approved as category 9 programs are coordinated with EE integrated marketing efforts.**

a. Description:

Regular coordination meetings currently exist to review EE, DR, DG and ESAP results with internal marketing management and discuss course changes that might be needed. Integrated marketing is defined as marketing efforts that seek to integrate demand side energy management options to the greatest extent possible (DR, DG, and EE/ESAP) and in a way that make sense for each customer. The Task Force will enhance this process to promote program integration across the DSM campaigns. A specific feedback process will be designed, but the Task Force may also forward its recommendations to EE, DR, ESAP and DG program management responsible for developing marketing IDSM strategies for use in regular reviews and reports in addition to ad hoc contacts to plan and modify programs. Any Task Force recommendations made to other IOU program managers to promote integrated programs or projects will also be included, whether the other program managers accept Task Force recommendations or not, in the regular reports on IDSM activities to ED. At the meetings, the Task Force will also use the opportunity to educate and train management and portfolio managers on best practices for increased integration of DSM programs and offerings to customers. Integrated marketing campaigns will also ensure that DR marketing programs approved as category 9 programs are coordinated with EE integrated marketing efforts.

All IOUs are conducting residential and non-residential outreach events, developing and delivering collateral, and utilizing website updates and campaigns to cross market programs. Research on customer approach has also been conducted on the effectiveness and appropriate order, timing, and combination of bundling of programs to customers. In addition, the utilities held a statewide coordination and communication meeting in May 2011 to discuss integrated efforts and best practices and identify opportunities to coordinate and collaborate. Additional statewide coordination meetings were held in 2012.

Integrated Local Marketing Education and Outreach Strategy

The IOUs' integrated marketing plans are designed to generate ongoing customer engagement in EE, DR, and other DSM programs and services by providing residential and non-residential customers with the right message, through the right channel, at the right time. The plans will leverage and complement the statewide ME&O activities, which will be designed to provide general energy education and demand side management program information, while prompting residential and small business customers to immediately take action.

In 2013-2014, a new statewide ME&O campaign will focus on creating awareness and educating customers about energy management and integrated DSM. The IOUs expect to leverage the increased interest generated by the statewide ME&O campaign and use that point of contact and education as a step towards deeper EE engagement. PG&E's local integrated marketing strategy will focus on helping customers understand the relevance of EE programs and services and enabling customers to take actions that are appropriate to their needs -- including one-time measures, such as rebates, as well as deeper whole-house retrofits. This local EE

marketing strategy will be coordinated through a variety of channels and tactics, with the intent of reaching customers at the right place and at the right time, to drive increased participation and ongoing engagement.

Integrated Local Marketing Education and Outreach Messaging

In order to provide customers with relevant messages, the IOUs will use segmentation and internal data analysis to help refine our current understanding of customers' IDSM needs, by appropriate customer segment and target offerings. By cross-selling DSM programs and services that are meaningful to the customer, the IOUs will encourage customers to take action.

When appropriate, integrated messaging will deliver information to customers in a way that bundles relevant EE, DR and other DSM programs and services. For example, the IOUs will develop print and electronic case studies that feature customers who have implemented integrated solutions in order to address their energy management needs.

In addition to cross-selling DSM programs and promoting bundled solutions through integrated campaigns, integrated messaging will be designed to motivate customers to enroll in web-based billing and analysis tools. This action will enable and encourage customers to better understand and manage their energy usage by taking advantage of the online tools. It will also provide the utilities with additional opportunities to continue to cross-sell DSM programs and services.

Integrated Local Marketing Education and Outreach Tactics

Local integrated marketing campaigns leverage multiple tactics and multiple communications to present customers with a holistic view of programs and service offerings, and clearly present the actions customers can take to participate. To reach California's diverse customers, the IOUs will use a mix of communication channels and languages. When possible, the IOUs will utilize the customer's preferred method for receiving communications. Marketing channels may include, but are not limited to: customer call centers, business account representatives, direct mail, email, IOU and 3rd Party websites, bill inserts, outreach events, partnership activities, social media, and ethnic advertising.

Integrated Local Marketing Education and Outreach Reporting

To increase and showcase marketing integration, IOUs will continue to conduct regular coordination meetings to share integration results, review best practices, and identify potential areas for improvement. For example, in May 2012, the IOUs presented an overview of their marketing integration efforts at the Quarterly IDSM Task Force meeting. Additionally, IOUs will continue to submit updates of their integrated marketing activities in reports as necessary.

b. Tasks and Timelines:

- The Task Force will continue to work in 2013-2014 with the statewide ME&O effort to ensure integrated messaging and coordination at a statewide level and will identify areas of integration with other demand-side programs by identifying and developing a product planning/review process that involves ME&O members of the IDSM Task Force.
- In 2013-2014, the Task Force will conduct internal review of local utility marketing efforts where there are opportunities to integrate messages and campaign, resource, and program offerings that promote demand side integration of DR, EE, and DG resources.
- The IOUs will continue to share information with the Task Force on local IOU integrated marketing, training, and education efforts. The IOUs will report all integrated marketing activities in the regular reports and will highlight integrated marketing efforts at the regular IDSM Task Force meetings.

c) Program Goals, Strategies and Measurable Objectives

The primary purpose of the Task Force is to facilitate the integration of the full range of IOU DSM program options for California. To achieve this purpose the Task Force will pursue several objectives:

1. Determine membership and identify key liaisons and stakeholders

Initial Task Force membership will include representatives from each of the utilities, non-utility representatives as appropriate, and from the Commission's Energy Division. Utility membership will include representation from strategic planning, EE, LIEE, DR and DG programs as well as emerging technologies, marketing, delivery channels and regulatory coordination, and possibly advanced metering. Statewide membership may be expanded to include representatives from the municipal utilities, the California Energy Commission (CEC) and other stakeholders. The Task Force may have regular representation from each of the leads of the other SW Program working groups, such as Industrial, Agricultural, Commercial, Residential, ME&O, WE&T, and New Construction.

The Task Force will coordinate and work with Energy Division staff through regularly scheduled phone calls, reports and in person meetings, as needed. As issues come up related to best practices and approaches with particular market segments and projects, the Task Force members will agree on subject matter experts to share with and educate the team.

In the 2013-2014 period, the IDSM Task Force will include subject matter experts and other external stakeholders in the discussions of the eight specific directives in order to get perspective and additional feedback on the various topics and subjects. As directed, the IOUs will work in collaboration with the CPUC to identify and invite stakeholders to participate where and when appropriate.

The Task Force will coordinate and communicate with teams associated with other programs and proceedings. Included in this effort are the ESA Integration Working Group; the Task Force and the ESA Integration Working Group /subcommittee work together to maintain directional alignment and to identify and report on best practices across the EE, ESAP and other proceedings.

2. Continue to identify and describe progress of:
 - Existing utility activities, efforts, programs and pilots,
 - IDSM best practices, and
 - IDSM metrics (as appropriate) and cost effectiveness methodologies

Identify key issues affecting successful integration cost-effectiveness, enhancing progress on technical innovations and regulatory jurisdictional issues. The Task Force will work with ET and program planning staff to develop potential solutions to the issues raised, and then follow through to see that the solutions are represented in future program modifications.

3. Develop metrics and reporting mechanism for tracking success of integrated efforts (EM&V protocols) consistent with the EM&V development plan described earlier in section 4.A.2.
4. Develop proposals for policy and program initiatives necessary to forward IDSM.
5. Establish program-funding protocols.
6. Identify and recommend adoption of enabling/supporting policies for inclusion in appropriate DSM programs and reports consistent with descriptions in prior sections of this PIP.
7. Identify and propose changes to inhibiting policies, metrics and reports consistent with descriptions in prior sections of this PIP.

Tasks and Timelines

Goals defined above will involve ongoing efforts of the Task Force.

d) Target Audience(s)

The target audience for this statewide IDSM program effort is IDSM stakeholders including, but not limited to, the IOUs, CPUC, CEC, DSM solutions providers (e.g., EE service providers, DR aggregators, CSI installers) and utility customers.

e) Identify If and How this Program will Provide any Elements of Workforce Education and Training (WE&T)

The Task Force can be utilized as a repository of experts and best practices that promote IDSM for IDSM related WE&T efforts. Similar to its efforts with the SW ME&O Task Force, the IDSM Task Force will take the following actions related to WE&T:

- The Task Force will work with the larger Statewide WE&T effort to ensure integrated coordination at a Statewide level.
- The Task Force will conduct internal review of local utility education and training efforts to identify opportunities to integrate these activities.
- The Task Force will share information on local IOU integrated training and education efforts.

To date, the Task Force has collaborated with the statewide WE&T team to develop the acceptable protocol for integrated training at the training centers. This includes a definition of “integrated training” identified in coordination with the IOU statewide WE&T Task Force that is included in the SW WE&T PIP.⁴ The Task Force will continue to identify and report best practices. Any IOU budgets associated with Integrated WE&T are included in the WE&T PIP.

Tasks and Timelines

The Task Force will work with the WE&T team on these efforts on an ongoing basis. Specific timelines are not known at this time, but will be developed in collaboration with ED once the WE&T Needs Assessment Study is available.

5) Program Rationale and Expected Outcome

The Strategic Plan calls for an ongoing task force to establish a blueprint for integration. A statewide non-resource program is an effective means of coordinating such a blueprint.

⁴ The IOU ECs propose two ways that educational program can be identified as “integrated”.

1. Integration through a balance of building systems content
Course content includes material on at least two building systems (i.e. mechanical, building envelope, lighting, solar, water, etc.) their relevance to one another, and how an integrated systems approach optimizes overall demand management with impacts that address energy efficiency, demand response, and smaller renewable energy systems.

2. Integration through technology content
Technologies discussed can be used to fulfill at least two of the three subjects of Integrated Demand Side Management (EE, DR, and DG). IDSM technology examples would include dimming ballasts, energy management systems, controls, or any technology with a work paper that includes both kW and kWh savings. Energy efficiency technologies result in permanent load reduction. Demand response technologies have the ability to respond to a demand response event for temporary load reduction. Distributed generation technologies deliver power to an individual building or set of buildings.

a) Quantitative Baseline and Market Transformation Information

Program Performance Metrics (PPMs)

The IOUs have evaluated (or will evaluate) 2010-2012 PPMs in Resolution E-4385 for applicability to the 2013-2014 program cycle and propose to work collaboratively with Energy Division to develop revised program targets and PPMs as appropriate for the 2013-2014 program cycle. The IOUs' will propose revisions in an advice letter, per additional guidance from Energy Division.

Table 3.1 Short-Term PPMs

On December 2, 2010, the Commission issued Resolution E-4385, approving short-term Program Performance Metrics (PPMs) for Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and San Diego Gas and Electric Company for 2010-2012 statewide energy efficiency programs and subprograms. The Commission gave each PPM a metric type which indicated the reporting frequency: Metric type 2a indicates that the IOUs should report on the metric on an annual basis (unless indicated otherwise). Metric type 2b indicates the IOUs should report on the metric at the end of the program cycle.

SHORT-TERM PROGRAM PERFORMANCE METRIC (PPM)	Metric Type
1. Awareness and knowledge among relevant IOU program staff (to be specified – e.g. account reps, engineers that administer the audit (3 rd party); program designers and managers) regarding how IDSM relates to and impacts their efforts and programs	2b
2. Complete and make available integrated audit or survey tools (on line and on-site) to residential and non-residential customers in all IOU programs that provide audits / surveys (and include EE, Demand Response (DR), and Distributed Generation (DG) recommendations). (Y/N)	2b
3. Number and percentage of integrated audits provided to each customer class and NAICS code.	2b
4. A status report that identifies how well “integrated” (EE, DR, DG) all IOU demand-side energy program offerings and components are (e.g., Commercial, Agricultural, Industrial, Residential, Audits) including lessons learned, best practices, improvement plans, and how the program portfolio is addressing strategic planning goals / objectives and D.09-09-047 directives regarding integration, as well as the IDSM program objectives specified in the PPM Worksheet. The report will review how the IOUs have developed internal and external frameworks that support integration of IDSM programs and technologies. (Y/N)	2b
5. Number and percent of integrated audit participants (identify NRA participants) in all customer classes (Residential, Commercial, Industrial, Agriculture) that implement recommended DSM measures / participate in other DSM programs (EE, DR, DG – Track which categories implemented / participated in) or other recommended technical process and practice improvements. (If possible, identify whether participants received incentives or not.)*	2b

*Data sources for reporting will come from (a) program tracking databases and (b) process evaluation to refine estimates.	
6. Program participant awareness of IDSM practices in each of the market sector subprograms.	2b

Table 3.2 Long Term PPMs

PG&E includes long term PPMs⁵ per Energy Division guidance received in December 2012. As stated in the Joint Utilities’ comments to the Commission in R. 09-11-014 dated November 21, 2011, and discussed between IOUs and ED on January 9, 2013, IOUs plan to finalize long term PPMs in further discussions with involved stakeholders and propose updates to Energy Division at a later date.

MTI Index#	RE-CATEGORIZED Metric (LTPPM - or SPI) [E-4385 Appendix B original text except for noted edits]	Unresolved Issues
IDSMS-1	MT Indicator 1: Percent of customers who are aware of online and onsite integrated audits Percent of CA residents who know where they can get an integrated online audit. Percent of CA residents who know where they can obtain an integrated on site audit. Percent of CA businesses who know where they can get an integrated online audit. Percent of CA businesses that know where they can get an integrated on site audit	
IDSMS-2	MT Indicator 2: Percent of customers in each customer class who have received an integrated audit and percent of these customers (by audit type) who have implemented one or more of the audit recommendations (indicate how many incentivized vs. non-incentivized) 1. Percent of customers in sectors A, B, and C who have received an integrated audit. 2. Percent of integrated audit customers who have adopted one or more audit recommendations.	

b) Market Transformation Information

Per Resolution E-4385 a subset of market transformation indicators (MTIs) for statewide energy efficiency programs and subprograms were presented at a public workshop on November 7, 2011, to allow for public comments and discussion before being finalized. Per guidance from Energy Division received in December 2012, the approved Market Transformation Indicators for 2013-2014 were filed in a Joint IOU matrix as an appendix in PG&E’s January 14, 2013 compliance filing.

c) Program Design to Overcome Barriers

⁵ From the Energy Division’s file “Revised MTIs_10 27 11-formal-release-ED-May-2012.xlsx”

As stated in the Strategic Plan, “Historically, demand side management (DSM) options for energy consumers have been “siloe” activities within regulatory bodies, utilities, environmental organizations, and among private sector service providers. The current narrow focus on a single product offering does not maximize energy savings nor minimize the costs of program delivery.” The Task Force and associated integration efforts within each utility is working to overcome this and other barriers to maximize benefits for customers and reduce costs for ratepayers.

d) Quantitative Program Targets

Not applicable for this non-resource program.

e) Advancing Strategic Plan goals and objectives

In support of the Strategic Plan,⁶ the IOUs will evaluate the DSM pilot programs and determine what components will lead to successful DSM integration, consistent with the strategies in the Strategic Plan. The Task Force will discuss the applicability of these Emerging Technologies and initiatives in the context of IDSM. The ET program will undertake a coordinated effort to support innovation in EE, DR, and renewable / self-generation. ET forums will be used by the Task Force to review and vet proposed ET technologies that can be funded and integrated across DSM programs. Lastly, through coordinated DSM marketing, the Task Force will promote program integration across the DSM campaigns in order to maximize EE, DR and DG opportunities.

6) Program Implementation

a) Statewide IOU Coordination

This is a statewide program.

- i. Integrated Demand Side Management
- ii. All program delivery mechanisms

As described earlier in this document, the Task Force does not replace the individual IOU governance of DSM programs and is not intended to duplicate reporting or regulatory activities. Rather, the Task Force will work with different programs and delivery channels and will specifically look for IDSM opportunities, identify barriers, and work through the IOU program staff to promote the advancement of IDSM, using lessons learned and best practices to establish a continuous improvement process.

- iii. Marketing materials and message

⁶ California Long Term Energy Efficiency Strategic Plan, Section 8.4 pp. 72-73.

The Task Force will work with the Statewide Marketing and Outreach and internal IOU M&O teams to leverage statewide awareness and coordinated program messaging, and explore utilizing educational efforts that direct customers to local utility integration efforts and offerings.

- iv. IOU program interactions with CEC, air resources boards, air quality management districts, local government programs, other government programs, community-based organizations, non-governmental organizations, manufacturers, retailers, trade and business associations, as applicable.

The IDSM Task Force will explore opportunities to interact with other programs/ organizations that could include municipal utilities, local and state government, water districts and DSM solutions providers to offer integrated services, obtain input/feedback, share knowledge/best practices, and generally promote IDSM efforts and activities. Expansion of Task Force participation may be in the form of periodic expert input and ad hoc workshops as needed to solicit input from the broader group of participants in a fair and equitable manner. Future program milestones, lessons learned, and best practices can be shared with outside stakeholders to further IDSM activity outside of IOU programs.

- v. Similar IOU and POU programs

The IDSM Task Force will coordinate with all IOU SW programs and will interact with other programs/ organizations, municipalities and DSM solutions providers to offer integrated services. Future program milestones, lessons learned, and best practices can be shared with outside stakeholders to further IDSM activity outside of IOU programs.

b) Program Delivery Mechanisms

The Task Force will not be involved in direct implementation but will develop and provide the knowledge necessary to promote integrated program delivery mechanisms.

c) Marketing Plan

The Task Force will not be providing direct marketing services, but the coordination of marketing will be an integral part of integrated approaches and will be included in each individual program's approach where applicable. In addition, as described in Task 8, above, the Task Force will work with the Statewide and internal Marketing and Outreach teams to leverage statewide awareness and coordinated program messaging; and explore utilizing educational efforts that direct customers to local utility integration efforts and offerings.

d) Best Practices

The Task Force's involvement in reviewing utility integration activities, pilots and practices (e.g., Zero Net Energy, Food Processing) will lead to the establishment of Integrated Best Practices.

e) Innovation

Individual utilities are working on integrated approaches locally to meet customer needs on a comprehensive, solutions-based level and coordinating and tracking of these integrated pilots and activities.

f) Integrated/coordinated Demand Side Management

The basis of this program is entirely integrated and coordinated demand side management on a statewide basis with local efforts feeding into the overall strategy.

g) Integration Across Resource Types

Where possible, the Task Force will identify opportunities for integrating across non-energy areas, such as water conservation, electric vehicle infrastructure, and gas saving technologies. Most likely, this information will come from pilots and other customer-focused activities and will be considered future pilots and best practice recommendations.

h) Pilots

The Task Force will be the principal governance structure to track the integrated efforts of the IOUs and develop statewide metrics to evaluate their success. The Task Force will identify pilots, projects, programs and activities being conducted by individual IOUs that might be replicated in other parts of the state. As described in section 4.b.5, above, integrated pilots and activities will continue to be identified and tracked by the Task Force in reports as necessary. A critical component of evaluating these pilots, projects, and program activities is identifying what data should be captured to optimally evaluate the ongoing success of these pilots and IDSM activities. The Task Force will coordinate with ED staff to ensure that an adequate level of data is collected. Currently several integrated pilot program Advice Letters have been submitted to Energy Division for review and approval. Once the programs that will be going forward are identified, the IDSM Task Force will identify which pilot programs will be monitored to provide the data and information needed to address the integration promoting tasks to potentially be included in the Statewide IDSM Program. The IDSM Task Force will also play a role in helping the IOUs identify Program Performance Metrics (PPMs) for integrated pilot programs which will help achieve IDSM strategic planning goals identified in the Strategic Plan, subsequent decision directives, and this PIP. The PPMs are currently being developed as part of a statewide effort, including metrics for the Statewide IDSM Program, and will play a key role in assessing the ongoing success of these programs. The IDSM Task Force will clearly identify the integrated pilot programs to be monitored in efforts to inform the implementation of the IDSM programs when PPMs are submitted for the IDSM Program on May 23, 2010. Being mindful of the PPMs, the Task Force will

determine how best to monitor and evaluate the pilots and various IDSM activities. Informed by the key eight activities identified in this PIP, the Task Force will include a detailed description for how the integrated pilot programs will be utilized for data gathering and developing the recommendations required from the Task Force in a detailed EM&V plan as described below. However, final EM&V plans for the 2010 – 2012 have not been finalized; therefore, all EM&V plans will be consistent with those plans once adopted for this program cycle.

i) EM&V

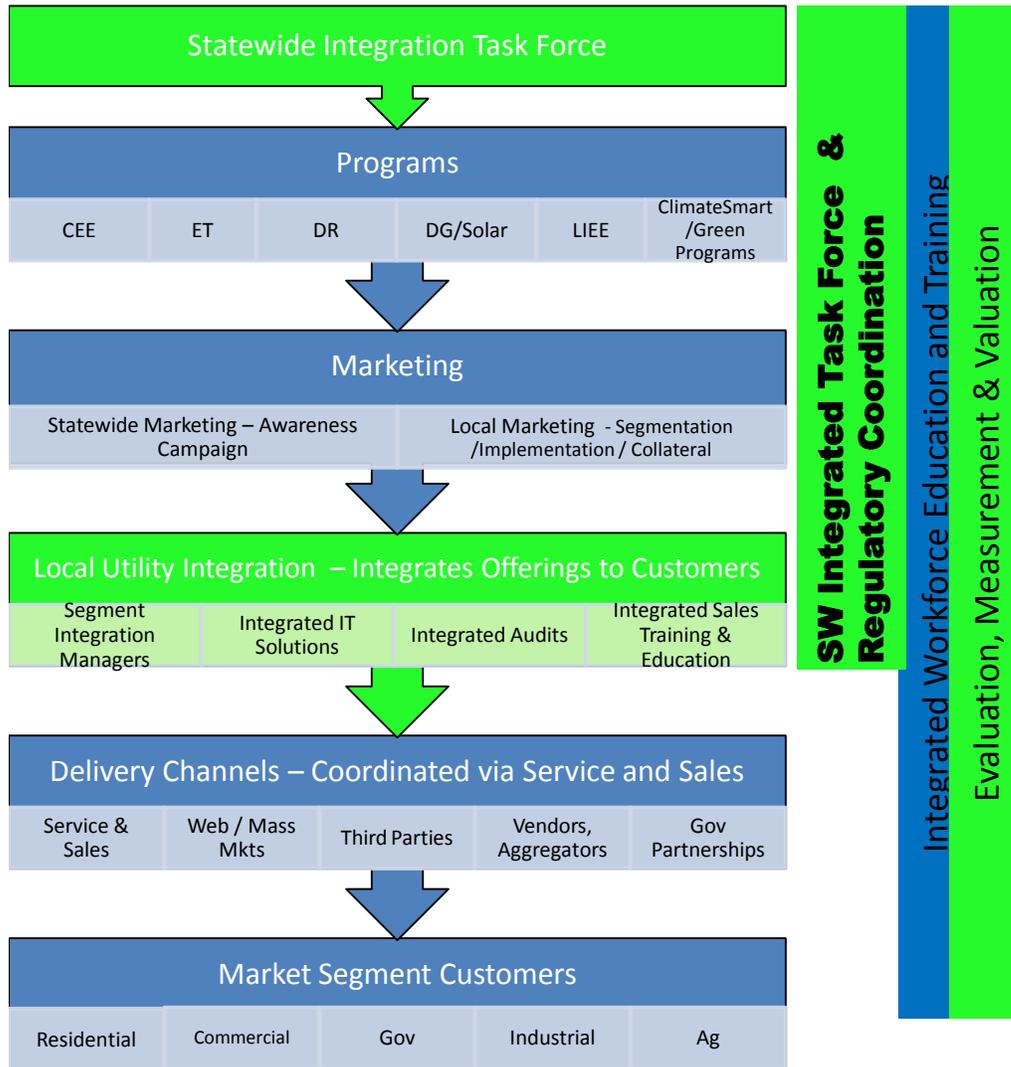
The Task Force will continue tracking and measuring the metrics described in Section 5 of this PIP, leveraging evaluation studies and resources where appropriate. The IDSM Omnibus Process Evaluation is being reviewed and the IOUs will consider recommendations contained in the report for improving future IDSM offerings. Subsequent evaluation needs will be determined at the conclusion of the Omnibus Evaluation.

The IOUs are pursuing activities identified in the December 2012 version of the Omnibus Evaluation. These activities, summarized below, are also described in earlier sections of this PIP:

- Coordination among utilities to review our integrated training programs and leverage lessons learned to improve our integrated training offerings.
- Incorporating subject matter experts on AMI in integration-related teams and meetings.

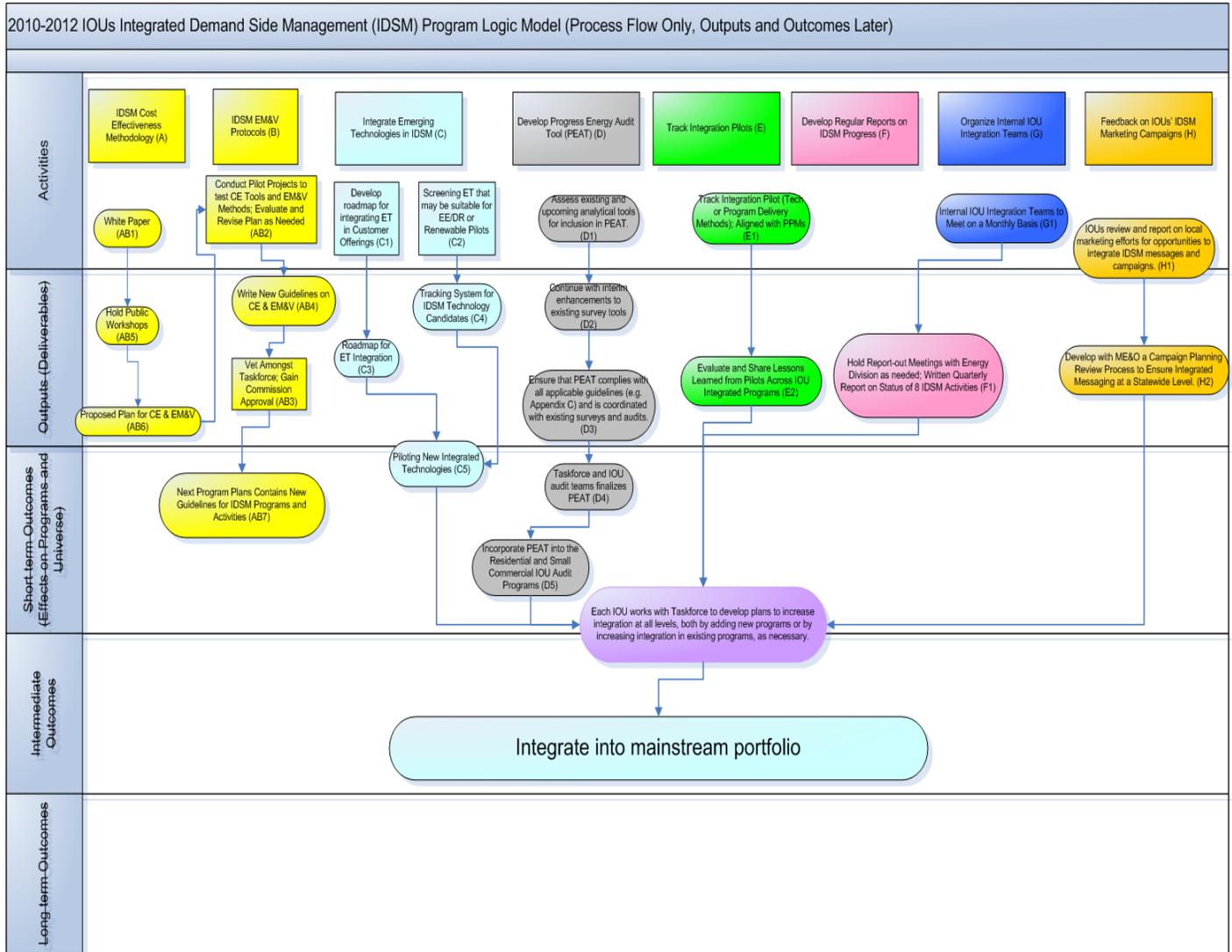
7) Diagram of Program

Program Diagram – IDSM Task Force



8) Program Logic Model

Note: On December 2, 2010, the Commission issued Resolution E-4385, approving Program Performance Metrics (PPMs) for Pacific Gas and Electric Company, Southern California Edison Company, Southern California Gas Company and San Diego Gas and Electric Company for 2010-2012 statewide energy efficiency programs and subprograms. In addition, this Resolution approved updated logic models for the statewide programs. Below is the approved logic model for the Integrated Demand Side Management Program.



9) Appendices

Appendix A

In compliance with the 2013-2014 Final Decision, PG&E provides below a matrix of budget figures broken down by funding source (energy efficiency, demand response, distributed generation, etc.) for: IDSM marketing, IDSM pilots, IDSM Continuous Energy Improvement, IDSM online and on-site audits, IDSM training, and IDSM data tracking. IOUs have formatted these budget matrices using the template provided by Energy Division.

Statewide or Sub-Program ID if Applicable	Statewide or Sub-Program Name (Funding Sources)	Estimated \$ IDSM Marketing (1)	Estimated \$ IDSM Pilots (2)	Estimated \$ IDSM Online and Onsite Audits (3)	Estimated \$ IDSM Training (4)	Estimated \$ IDSM Data Tracking (5)	Estimated \$ Continuous Energy Improvement (6)	Narrative Description of what technologies are being promoted and how the effort supports IDSM. Include rough estimate of percent inclusion of DG in identified IDSM activities.
PGE2108	Statewide IDSM Program	\$0	\$0 (PG&E did not include any pilots in 2013-2014)	\$0	\$703,783	\$0 (Efforts are included in overall SW IDSM Program)	\$0	*Please see the footnote below.
N/A	DG Program	\$130,000	\$0	\$0	\$0	\$0	\$0	*Please see the footnote below.
N/A	DR Program	\$425,000	\$0	\$2,528,000	\$0	\$0	\$0	*Please see the footnote below.
N/A	Other EE Programs	\$2,721,249	\$0	\$6,621,000	\$500,000	\$0	\$530,000	*Please see the footnote below.
(1) - The marketing effort includes all three demand side technology program categories (EE, DR, DG) (2) - The pilot program efforts includes all three demand side technology program categories (EE, DR, DG) (3) - The program will contribute to audits that provide customers with all demand side technology potential (EE, DG, DR) including corresponding costs and energy savings associated with individual and packages of technologies. (4) - The training satisfies the definition of integrated trainings established by the IOUs in the Statewide WE&T PIP. (5) - The program will contribute funding toward tracking and monitoring of integrated projects, programs, and efforts. (6) - PG&E has reinstated funding to continue to support the Continuous Energy Improvement (CEI) pilot subprogram for the 2013-14 portfolio. The proposed 2013-14 CEI budgets will support a small number of large customer projects while focusing efforts on the mid-sized pilot offering. The goal of the mid-sized pilot will be to help customers make the organizational adjustments to incorporate CEI and sustainability practices into their corporate culture. While following a similar methodology to the large customer pilot, the offering will incorporate a lighter touch approach to ensure the engagements are cost efficient. Refer to the statewide Commercial CEI subprogram for additional details. *All of the activities listed above include DG as a key element; therefore, there is 100% inclusion of DG in all of the identified IDSM activities above. When implementing projects, however, it is up to the customer to decide whether or not to install DG and over what period of time. See Appendix B of the IDSM PIP for the narrative description of the IDSM technologies.								

Appendix B

In compliance with the 2013-2014 Final Decision, a narrative description of the technologies being promoted and how the efforts support IDSM goals is provided below.

PG&E is developing, continuing and enhancing various tools and technologies and packages of technologies that will support integration of projects and activities with customers in all segments. In addition to many of the technologies and tools described below, PG&E is focused on supporting integrated demand side management through programmatic activities, marketing, water-energy nexus efforts, increased incentives for multiple measures, training, smart meters, pge.com/web-tools, and development of an integrated tracking system. PG&E will continue to evolve these technologies and approaches based on customer response and traction of the various activities.

HAN Technologies

Starting on January 15th, 2013, PG&E will provide its customers with the ability to wirelessly connect compatible devices to their electric SmartMeters™ and view information about their energy and power consumption in near real-time. This SmartMeter™ enabled technology is called Home and Business Area Networking. With a near real-time look into their energy use,

customers can gain new insights into how their actions directly affect changes in their home or business overall energy consumption. PG&E is working with device manufacturers to validate a set of devices for use with our customers' Home and Business Area Networks. The types of HAN devices that can connect to the meters will include: displays/energy monitors, thermostats, and gateways. PG&E can support up to 5,000 customers through June 2013 and at least 25,000 by the end of 2013. PG&E will continue to help facilitate the retail adoption of HAN devices and customer and market trends will be analyzed as part of on-going management of the platform. Per D.12-04-045, PG&E plans on enabling HAN-DR integration starting in 2014. This will expand DR opportunities to residential and small business customers and help these customers manage their response to time varying rates.

Controls Technologies

Controls Technologies are generally being offered with Lighting and HVAC products that have EE and DR functionality. Lighting and HVAC controls are being offered to all non-residential segments through various channels, including Account Reps, Third Parties and Retailers. Examples of such technologies include Building Automation Systems (BAS), Energy Management Systems (EMS), Dimmable Ballasts and Advanced Lighting Controls, Enhanced Retro-commissioning (RCx), wireless web-enabled thermostats and demand control ventilation (DCV) controls using carbon dioxide (CO₂) occupancy sensors, and proprietary IDSM solutions unique to the customer's business. Although these technologies primarily promote EE and DR, they can be combined with DG installation strategies to reduce the overall energy usage of the customer prior to installing self generation.

Advanced Programmable Communicating Thermostat for SMB customers

PG&E is in the process of developing a new AutoDR program for our SMB customer. The AutoDR program was traditionally available to customers with loads larger than 200 kW. As more small business customers with loads less than 200 kW are equipped with SmartMeters™, these customers will be able to participate in DR programs and time varying rates and will need enabling technologies such as AutoDR to perform better in these programs.

PG&E is planning to roll out a communicating thermostat pilot to assess this technology in 2013. The pilot will focus on the following areas:

- Roll out ~500 customers pilot in the first quarter of 2013 in selected location
- Assess and validate DR and EE benefits for the PCT
- Host program and product trainings to HVAC contractors
- Perform field inspection to portion of the installation
- Address all potential customer concerns and feedbacks
- Curtail DR events during 2013 DR seasons
- Perform M&E on program designs and customer DR performance

Once the pilot is successfully implemented, PG&E will apply the best practices and lesson learned to develop a SMB ADR program in 2014. Based on the pilot result, PG&E may consider offering both EE and DR incentive to this technology.

Emerging Technologies (2013-14 implementation)

Emerging Technologies has been evaluating the several integrated technologies that will continue to be evaluated and launched into the portfolios in 2013-14. These technologies and their integrated characteristics are listed below.

- Food Service Tech Load Shifting Ice Machines - The demand response enabled ice machines use a timing system to produce ice off peak. Tested at restaurants in phase 1; will test at additional sites and additional models in phase 2. This technology supports EE & DR efforts.
- Contra Costa County Integrated Occupancy Sensor - Evaluation of the next generation lighting controls for linear fluorescent retrofits resulting in an additional control solution for SMB customers. This technology supports EE & DR efforts.
- ZNE Modular Classroom - Designing and building a Zero Net Energy modular classroom at the Stockton Energy Training Center to assist in ZNE, ET and Workforce Education and Training (WE&T) goals. This technology supports EE, DR, DG and WE&T efforts.
- ZNEH Retrofits @ UC Davis- Develop and test ZNEH retrofit strategies at a single-family home at Aggie Village and a student coop residence at UC Davis. Partner with UC Davis Energy Innovation Hub, EEC, and Geothermal Collaborative. This project is already underway.
- Expanded West Village Monitoring Project (Ramp-up from 24-150 units)- Expand monitoring project of UC Davis West Village from 24 to 150 housing units to validate ZNE performance claim.
- PG&E/Honda Smart Home- Partner with Honda and UC Davis on a single family ZNE model home at West Village. PG&E EE ET would contribute funds towards EE technologies for the home as well as monitoring by an M&V firm.

Distributed Generation

PG&E actively supports and promotes customer installation of distributed generation technologies through its incentive programs like the California Solar Initiative (CSI) and Self-Generation Incentive Program (SGIP). Specific subprograms of CSI include the Multifamily Affordable Solar Housing, New Solar Homes Partnership, and CSI Thermal. The technologies offered through CSI and SGIP include photovoltaics, solar water heating, wind turbines, fuel cells, combustion turbines, and advanced energy storage for residential and commercial applications. Given this suite of DG programs and technologies, customers have the opportunity to apply for incentives for any of the DG technologies listed above and can couple them with

PG&E's EE and DR program offerings to create IDSM projects, either at a single point in time or over a period of time to meet the customer's preferences or budgetary needs. DG opportunities are a standard offering in the Zero Net Energy projects.

Permanent Load Shifting (PLS)

PG&E anticipates launching its PLS Program in 2013. This program will offer incentives to customers to install thermal energy storage (TES) systems. TES systems allow customers to shift their peak load from HVAC systems to the evening, thus reducing the peak load on the grid. IDSM opportunities are also anticipated to be addressed as part of the process and coupled with TES projects where appropriate. PLS ultimately promotes EE, DR and behavior change in an integrated fashion.

Green Button Connect (GBC)

Authorized third parties can access customer energy usage data at the direction of customers, on a "point and click" electronic basis, for direct services provided by third parties to customers, such as third-party energy management applications and software tools. GBC is a trial implementation and will be replaced by a Customer Data Access (CDA) platform in 2014, which is a more long term, scalable, standards based platform to provide authorized and secure energy data access to customers and customer-authorized / registered 3rd parties. Specific end applications are determined by the vendor, however this platform has the potential to provide data that can be used by the vendors for EE, solar, and/or load shifting end applications.

Water Energy Nexus

Much of this effort continues to evolve, but PG&E will continue its efforts to integrate across other resources. In particular, to develop programs targeting the Water/Energy Nexus, PG&E has initiated four Emerging Technologies projects to lay the foundation for aligning energy and peak load savings with water conservation. These projects focus on the spatial and temporal variability of embedded energy in water and enabling irrigation system components and design strategies.

IDSM Tools

Web Tools, including integrated audits

The website **PGE.com/MyEnergy/** functions as an integrated technology by communicating hourly interval usage data, bill-to-day, bill forecast, tier position, program information and participation, audit participation, and as other EE, DR, and DG messages. PGE.com also contains many seamless web-based customer-facing tools that promote and support EE, DR, and/or DG messaging and projects. For more specific information, please see the table below (as provided in PG&E's response to Data Request 2329).

Online Customer Tool	Description	Uses for 2013-2014	How does it promote IDSM
Business Opportunity Lookup Tool (BOLT)	BOLT is an online small business customer focused analytical tool that allows PG&E’s Energy Solutions and Service reps and Marketing staff to pull account, energy management program participation, and propensity scores to help them prioritize opportunities for integrated customer engagement.	The approach described in the Description column will continue in 2013-2014.	Opportunities for engagement and promotion of EE, DR and DG
Statewide Customized Calculation Tool	Online estimation tool to calculate potential energy savings financial incentive and to support your Customized Retrofit application	Continue to serve customized retrofit program	Customers and utility employees can develop projects and applications with this tool. Supports EE, DR and DG
MyEnergy	A set of tools and online account management functionality designed to give customers greater visibility and access to AMI usage data, program offerings, and other energy management features. See Also Progressive Energy Audit Tool	Continuing enhancements and refinements	Customers can log-in to My Energy to manage their account, view usage, compare rates, apply for rebates. Promotes and informs on EE, DR and DG.
Progressive Energy Audit Tool	Available to customers through PG&E’s “My Account” (My Energy) web portal, the PEAT suite of tools allows customers to see the output of their usage, a representation of how that breaks down into key energy end-use components, and recommendations on how	PG&E plans to continue to use/offer this tool as described in the Description column in 2013-2014. Content will be updated and refined as appropriate.	Linked to a solar calculator developed the prior year which sizes a customer’s solar needs depending on whether they intend to implement EE

	to save. Residential and small business versions of the tool suite are designed to be progressive and interactive, encouraging continuing customer engagement. The survey portion of the tool suite attempts to pick out the recommendations that are most applicable based on the customer's profile and the information that a customer provides through the survey questions, as well as what the customer is most likely to use and want to participate in.		measures. Promotes and informs on EE, DR and DG.
IDSMS product catalog	An enterprise-level SQL database that is fully integrated with other key databases within Customer Energy Solutions (Work Papers, MDSS). The Catalog is the primary browser-based interface for PG&E's account representatives that screens for integrated offerings available to business customers. Other external customer-facing interfaces derive their data from the SQL database as well.	Repository for information on <i>all</i> PG&E customer products, programs, and services, including Energy Efficiency, Demand Response, Pricing Products, Third Party and Government Programs, and many others. It serves as the data source for a variety of web-based tools designed to aid customers in selecting the appropriate products for their home or business.	Allows PG&E to present IDSMS as a bundled approach in one interface to the customer. Supports implementation of EE, DR and DG.
Automated Reporting Tool (ART)	PG&E's Automated Reporting Tool (ART) provides Customer Relationship Managers (CRMs) with resources to understand the characteristics of customers in specific communities and develop	The approach described in the Description column will continue in 2013-2014	PG&E CRMs use the interactive tools to develop comprehensive strategies to meet their needs, and to provide

	localized strategies to optimize outreach.		appropriate resources for customer outreach and engagement. The tool allows PG&E personnel to view customer characteristics such as facility types, business segment, customer size, energy usage, PG&E program participation, and the impact of time-varying pricing. Supports EE, ER and DG
Home Money Saver (HMS) – formerly known as PG&E’s Online Buyers Guide	HMS is an online web experience, or “tool,” that provides an easy way for residential customers to find rebates and program information. Additionally, it is an ‘Online Buyer’s Guide’ that offers residential customers guidelines for purchasing energy efficient products.	HMS’ approach will continually enhance Residential customers’ web experience, delivering relevant programs/ products information, offerings and buying guidance.	Increased engagement in integrated projects,
Money Back Tool	Self-serve rebate/incentive recommendation engine. No log-in required. Money Back Tool was conceived to help customers, Trade Professionals and PG&E’s sales force to easily view rebate options and to make rebates accessible to users anywhere, anytime. The tool has been optimized for use on tablets, to help facilities	In 2013-2014, PG&E plans to expand IDSM content beyond EE and include: - Free services such as online self-guided energy audits, benchmarking webinar, etc. - Distributed generation such as solar PV & thermal - Demand Response	The tool, available from http://www.pge.com/mybusiness/energysavingsrebates , helps business customers; owners, facilities managers, etc., as well as Trade Professionals

	managers or utility-account managers be even more mobile (use it during a facility walk-through).		and utility account managers, find energy-efficiency rebates/incentives by conducting a very simple online search. While primarily focused on EE in 2012, plans are to expand the scope of the tool in 2013 and beyond to include DR & DG.
PowerClerk	PowerClerk is an online application system for the California Solar Initiative program. Applicants can use PowerClerk to create and submit a new incentive application or check the status of an existing application.	PowerClerk will be used in 2013-2014 as a key CSI tool.	CSI / DG
California Solar Statistics	This tool presents actual program data, exported from the CSI online application tool each Wednesday. Users of this tool can view program data summaries for the CSI programs.	California Solar Statistics will be used in 2013-2014 as a key CSI tool.	CSI/ DG
Solar Analysis Calculator	This tool provides personalized information to assess the financial feasibility of solar. A significant feature is that it allows the user to indicate the level of energy savings achieved through Energy Efficiency to determine its overall impact on the solar	The Solar Calculator will continue to be used as described in 2013-2014 with potential for additional enhancements.	Promotes EE before Solar by demonstrating potential savings for sizing solar based on optimizing EE and DR first.

	PV system (cost and size reduction). A statewide variation of this tool also exists and is operated under the name Clean Power Estimator.		
Trigger Tracker	This is a tool that shows how many CSI MW worth of rebates are available in the current incentive step level. Allows users to know when incentives are about to decline.	Trigger Tracker will be used in 2013-2014 as a key CSI tool.	CSI/DG
Energy Management Online Application Tool	This tool allows customers to apply online for incentives on qualified energy efficiency and demand response projects. A project may include the retrofit of existing equipment or systems, the installation of new equipment to accommodate new or added load, and implementing strategies to participate in demand response.	This tool includes an application wizard and energy engineering calculation tools that allow customers to electronically sign and submit a single application for SCE's core Commercial, Industrial, and Agricultural Programs (Express and Customized), Partnership programs, and the Technology Incentive (DR) programs. In addition, customers can apply for the On-Bill Financing program. The tool also includes an application library, as well as sharing, and transfer functions that allow the customer efficiently work with authorized agents as well as SCE account executives and field engineers.	Combined EE & DR applications. Future enhancements for 2013-2014 may include CSI messaging & links.