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February 23, 2010

ADVICE 2139-E-A/1921-G-A
(San Diego Gas & Electric Company ID U 902-M)

ADVICE 4066-A
(Southern California Gas Company ID U 904-G)

ADVICE 2426-E-A
(Southern California Edison Company ID U 338-E)

ADVICE 3079-G-A/3595-E-A
(Pacific Gas & Electric Company ID U 39-M)

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

SUBJECT: Supplemental Filing: Implementation of Statewide Integrated Demand Side Management (IDSMS) Program in Compliance with D.09-09-047

Consistent with Ordering Paragraph (OP) 33 of California Public Utilities Commission (Commission) Decision (D.) 09-09-047, San Diego Gas & Electric Company (SDG&E), Southern California Gas Company (SoCalGas), Southern California Edison Company (SCE) and Pacific Gas & Electric Company (PG&E)¹ submit this joint supplemental advice filing to implement its revised IDSMS program along with all necessary supporting documentation as shown in Attachment A. This supplemental advice letter is being filed at the request of Energy Division and replaces in its entirety the Joint IOU Advice Letters of SDG&E 2139-E/1921-G, SoCalGas 4066, SCE 2426-E and PG&E's 3079-G/3595-E. Included as Attachment B to this supplemental advice filing is a revised version of the IDSMS program with proposed revisions in redline format.

¹ SoCalGas, SCE, PG&E and SDG&E are hereinafter sometimes referred to collectively as the "Joint IOU's."

PURPOSE

This filing complies with the Commissions directive to submit collectively the Joint IOUs program implementation plan (Attachment 1) for its statewide IDSM Program and the "Universal Energy Audit Tool," within 120 days of the effective date of D.09-09-047.

BACKGROUND

In D.09-09-047, approved on September 24 2009, the Commission approved the 2010-2012 energy efficiency portfolios and budgets. D.09-09-047 directs the utilities to submit compliance advice letters to provide additional details on several issues. This advice letter addresses the Commission's directive in Ordering Paragraph 33b to jointly submit a revised program implementation plan for the statewide IDSM Program within 120 days of the effective date of the D.09-09-047.

Specifically D.09-09-047, OP 33 parts a, b and c and Section 5.9, directs the Joint IOUs to establish a utility statewide IDSM task force to coordinate the implementation of the Joint IOU's revised plan for the statewide IDSM Program. The program shall include a detailed explanation of the tasks, timelines and role of the Utility Task Force to address the following integration tasks:

- 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.
- Development of proposed measurement and evaluation protocols for IDSM programs and projects.
- Review IDSM enabling emerging technologies for potential inclusion in integrated programs.
- Development of cross-utility standardized integrated audit tools using PG&E's developed audits as a starting point.
- Track integration pilot programs to estimate energy savings, develop best practices 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).
- Develop regular reports on IDSM progress and recommendations to the Commission.
- Organize and oversee internal utility IDSM strategies by establishing internal Integration Teams with staff from EE, DR, DG, marketing, and delivery channels.

- 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.

The timelines set forth in Attachment A Table 2 for the various activities are predicated on the timely approval of this advice letter. This advice filing will not increase any rate or charge, cause the withdrawal of service, or conflict with any other schedule or rule.

EFFECTIVE DATE

The Joint Utilities are filing this supplemental advice letter to be effective March 2, 2010, which is 7 days from the filing date. IOUs are requesting this shortened review period due to the fact that there were no protests of SDG&E 2139-E/1921-G, SoCalGas 4066, SCE 2426-E and PG&E 3079-G/3595-E that sought to delay its implementation. Further, the supplemental information IOUs have provided here does not change the scope or intent of the program approved in D.09-09-047. This supplemental advice letter clarifies certain program information per the Energy Division's request.

PROTEST

Anyone may protest this advice letter to the Commission. The protest must state the grounds upon which it is based, including such items as financial and service impacts, and should be submitted expeditiously. Protests will pertain exclusively to the revised portions of the program implementation plan attached herein and must be made in writing and received by March 1, 2010, 6 days of the date this advice letter was filed with the CPUC. IOUs are requesting this shortened protest period consistent with guidance from the Energy Division. There is no restriction on who may file a protest. The address for mailing or delivering a protest to the Commission is:

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

Copies of the protest should also be sent via e-mail to the attention of Honesto Gatchalian (inj@cpuc.ca.gov) and Maria Salinas (mas@cpuc.ca.gov) of the Energy Division. It is also requested that a copy of the protest also be sent via both e-mail and facsimile to the address shown below on the same date it is mailed or delivered to the Commission.

San Diego Gas & Electric Company
Attn: Megan Caulson

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Pacific Gas and Electric Company
Attention: Brian Cherry
Vice President, Regulatory Relations
77 Beale Street, Mail Code B10C
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San Francisco, California 94177
Facsimile: (415) 973-7226
E-Mail: PGETariffs@pge.com

NOTICE

A copy of this filing has been served on the utilities and interested parties shown on the attached list, including interested parties to service lists Application (A.) 08-07-021, A.08-07-022, A.08-07-023 and A.08-07-031, by either providing them a copy electronically or by mailing them a copy hereof, properly stamped and addressed.

Address changes should be directed to SDG&E Tariffs by facsimile at (858) 654-1788 or by e-mail at SDG&ETariffs@semprautilities.com.

Ron van der Leendon
Director – Rates, Revenues & Tariffs

Attachments

CALIFORNIA PUBLIC UTILITIES COMMISSION

ADVICE LETTER FILING SUMMARY ENERGY UTILITY

MUST BE COMPLETED BY UTILITY (Attach additional pages as needed)

Company name/CPUC Utility No. **SAN DIEGO GAS & ELECTRIC (U 902)**

Utility type:

ELC

GAS

PLC

HEAT

WATER

Contact Person: Aurora Carrillo

Phone #: (858) 654-1542

E-mail: acarrillo@semprautilities.com

EXPLANATION OF UTILITY TYPE

ELC = Electric

GAS = Gas

PLC = Pipeline

HEAT = Heat

WATER = Water

(Date Filed/ Received Stamp by CPUC)

Advice Letter (AL) #: 2139-E-A/1921-G-A

Subject of AL: Supplemental Filing: Implementation of Statewide Integrated Demand Side Management (IDSM) Program in Compliance with D.09-09-047

Keywords (choose from CPUC listing): Energy Efficiency, Compliance

AL filing type: Monthly Quarterly Annual One-Time Other _____

If AL filed in compliance with a Commission order, indicate relevant Decision/Resolution #:

D.09-09-047

Does AL replace a withdrawn or rejected AL? If so, identify the prior AL N/A

Summarize differences between the AL and the prior withdrawn or rejected AL¹: N/A

Does AL request confidential treatment? If so, provide explanation: _____

Resolution Required? Yes No

Tier Designation: 1 2 3

Requested effective date: 3/02/10

No. of tariff sheets: 0

Estimated system annual revenue effect (%): N/A

Estimated system average rate effect (%): N/A

When rates are affected by AL, include attachment in AL showing average rate effects on customer classes (residential, small commercial, large C/I, agricultural, lighting).

Tariff schedules affected: NA

Service affected and changes proposed¹: N/A

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

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

CPUC, Energy Division

Attention: Tariff Unit

505 Van Ness Ave.,

San Francisco, CA 94102

mas@cpuc.ca.gov and jnj@cpuc.ca.gov

San Diego Gas & Electric

Attention: Megan Caulson

8330 Century Park Ct, Room 32C

San Diego, CA 92123

mcaulson@semprautilities.com

¹ Discuss in AL if more space is needed.

General Order No. 96-B
ADVICE LETTER FILING MAILING LIST

cc: (w/enclosures)

Public Utilities Commission

DRA

D. Appling
S. Cauchois
J. Greig
R. Pocta
W. Scott

Energy Division

P. Clanon
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CA. Energy Commission

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American Energy Institute

C. King

APS Energy Services

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BP Energy Company

J. Zaiontz

Barkovich & Yap, Inc.

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California Energy Markets

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CCSE

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Matthew V. Brady & Associates

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OnGrid Solar

Andy Black

Pacific Gas & Electric Co.

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M. Huffman
S. Lawrie
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Pacific Utility Audit, Inc.

E. Kelly

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C. Elder

School Project for Utility Rate
Reduction

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Shute, Mihaly & Weinberger LLP

O. Armi

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UCAN

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Communities Association

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White & Case LLP

L. Cottle

Interested Parties In:

A.08-07-023

ATTACHMENT A
CALIFORNIA INVESTOR OWNED UTILITIES
2010-2012 ENERGY EFFICIENCY PORTFOLIO
PROGRAM IMPLEMENTATION PLAN
STATEWIDE PROGRAM

INTEGRATED DEMAND-SIDE MANAGEMENT

FEBRUARY 23, 2010

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Integrated Demand Side Management

- 1) **Program Name: Integrated Demand Side Management¹**
Program ID: PGE2111, SCE-SW-012, SDGE SW-IDSMS, SCG SW-IDSMS
Program Type: 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			\$1,251,238		\$1,251,238
PG&E	Integrated DSM			\$1,200,000		\$1,200,000
SDGE	Integrated DSM			\$600,122		\$600,122
SoCal Gas	Integrated DSM			\$600,122		\$600,122
	TOTAL:			\$3,651,482		\$3,651,482

3) **Projected Program Gross Impacts Table**

Non-resource program.

4) **IDSMS 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 that 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") will make to integrate those DSM options in full collaboration with the Commission's Energy Division in compliance with Decision (D.) 09-09-047 that approved the IOU Statewide IDSMS program and \$3.6 million 2010-2012 budget with modifications contained herein.

The IOUs have identified integrated DSM (IDSMS) as an important strategic DSM policy priority. In the IOUs' 2009-2011 (now 2010-2012 portfolio) EE applications (A.08-07-021, et. al.), each IOU included separate exhibits on IDSMS, as well as specific integration activities within each program implementation plan at the Statewide (SW) and local

¹ The Program Performance Metrics identified for this pilot will be developed in coordination with the broader programs metrics development effort as described in D.09-09-047.

program level as instructed by the Commission. In addition, each IOU has proposed a series of activities, pilots and other programs (Strategy 1.2)² in response to the Strategic Plan DSM Coordination and Integration Strategy. Through all these approaches, integrated DSM program implementation will be advanced in significant ways.

In addition to the IOUs' individual IDSM pilots, projects, programs, and activities, the IOUs will establish a Statewide Integration Task Force (Task Force). Responsibilities of the Task Force will encompass activities that promote, in a statewide-coordinated fashion, two specific IDSM strategies identified in the Strategic Plan. These include stakeholder coordination (Strategy 1.3)³ and new technologies (Strategy 1.4)⁴. The IOUs believe that Strategy 1.1—"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 PIP) 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.

The budget for DSM Coordination and Integration will provide cost coverage for the positions at each utility to lead internal task forces, represent the utilities at the statewide task force level, and facilitate support by subject matter experts within each utility. It will also fund and their associated expenses related to the deliverables of the Task Force and the coordination of the specific IOU integration activities.

The budget of \$3.65 million over three years will be allocated as follows:

PG&E:	\$1.2 million
SCE:	\$1.25 million
SDG&E:	\$0.6 million
SoCalGas:	\$0.6 million

The Program Performance Metrics identified for this pilot will be developed in coordination with the broader programs metrics development effort as described in D.09-09-047.

b. Statement of Problem and Solutions to Overcome the Problem

There is a policy requirement and essential need to focus on integration of DSM activities and programs on a statewide and local level by customers, utilities, regulators and legislators.

² Strategic Plan, September 2008, p. 73, Strategy 1.2: Conduct integrated DSM delivery pilots in the Residential, Commercial, Industrial and Agricultural sectors.

³ *Id.*, Strategy 1.3: Develop integrated DSM programs across resources, including energy, water, and transportation.

⁴ *Id.*, Strategy 1.4: Promote development and support of new technologies that enable or facilitate DSM Coordination and Integration.

The CPUC's Strategic Plan provides its vision that "energy efficiency, energy conservation, demand response, advanced metering, and distributed generation technologies are 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 addition, the State Legislature has proposed Assembly Bill AB51,⁵ requiring the Commission to integrate the DSM programs within its jurisdiction in order to enable offerings of integrated packages that will maximize savings and minimize costs to ratepayers.

In order to ensure that the medium and long term vision of IDSM is maintained and progresses operationally to meet the Strategic Plan, the IOUs, in collaboration with the Energy Division, propose the formation of the IDSM Statewide Task Force. The Task Force will meet regularly to identify and promulgate best practices, identify implementation and policy issues, design effective metrics to measure progress on IDSM, and report to the CPUC as described below.

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 important 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. Specific activities that the Task Force will focus on and associated timing (timelines are dependent on timely approval of this Advice Letter) include the following Eight Tasks as defined in D. 09-09-047 (see also Table 2 – "Proposed IDSM Compliance and Timeline" attached at the end of this document):

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:

At present, the Commission has approved the California Standard Practice Manual that serves as the reference document for proposed cost effectiveness tests and methodologies for EE programs. In addition, 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 proposed 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. The Task Force proposes to work with the Energy Division (ED) and to coordinate a workshop

⁵ Assembly Bill No. 51, Amended in Assembly June 1, 2009, Amended in Assembly May 5, 2009, Amended in Assembly April 14, 2009, California legislature—2009–10 regular session; An act to amend Section 399.4 of the Public Utilities Code Relating to Energy.

to gather stakeholder feedback to address the issue of cost effectiveness under an integrated delivery of EE, DR, CSI and DG programs and to establish a consensus on a framework for developing an integrated cost effectiveness methodology.

The CPUC's Energy Efficiency cost effectiveness tests as embodied in the E3 calculator algorithms serve as the basis for the EE and CSI/DG cost effectiveness. The DR methodology has some differences. Given the CPUC attention afforded Energy Efficiency cost effectiveness it is efficient to use the E3 methodology as a starting point for developing an IDSM cost effectiveness tool that can be applied to integrated projects. Using the most up-to-date CPUC-approved input assumptions, the proposed methodology can then be applied to current integrated pilots, projects and activities that each of the utilities will be implementing. This will allow for the methodology to be refined in real time with "live" programs/projects.

A workshop process would be an efficient means to present the draft methodology for public input. After public input has been incorporated, the final methodology will be submitted to the ED for review.

b. Tasks and Timelines:

- The Task Force will launch a phased approach to developing appropriate integrated cost effectiveness protocols for IDSM programs and projects.
- Phase 1 will occur in Q1 and/or Q2 of 2010 and will include coordinating the plan development of an IDSM cost effectiveness framework with a goal for collaboration within the CPUC DR and DG cost effectiveness proceedings. The timing of these two proceedings lends itself to useful and necessary collaboration, and thus the CPUC and IOUs should utilize this opportunity to develop a cost effectiveness tool (analogous to an IDSM cost effectiveness calculator) specifically for IDSM projects. Information obtained from this collaborative process will be synthesized for subsequent use in an IDSM cost effectiveness white paper, which will then be publicly vetted, through a joint IOU public workshop.
- Phase 2 will occur in Q2 or Q3 of 2010 and will involve public review of the IDSM cost effectiveness white paper. The workshop will be announced through the EE, DG, LIEE and DR service lists. The public review will include a webinar and/or workshop hosted by the joint IOU Task Force in collaboration with ED staff where questions and comments can be submitted. Post workshop written comments on the white paper will also be collected following the webinar. Public comments will be considered in revising the white paper and the revised version of the IDSM cost effectiveness white paper will be submitted to ED to help guide subsequent efforts for applying the cost effectiveness methodology to the IDSM pilot programs.
- Phase 3 will occur in the second half of 2010 and will include a progress plan for collecting necessary pilot program data for evaluating cost effectiveness and developing cost-effectiveness guidelines.

- Phase 4 will be ongoing and will focus on using the new tool to evaluate the cost effectiveness of the IDSM pilots, projects, programs and activities as identified by the IDSM Task Force, and will be tracked through regular reporting in the quarterly reports described in Item 6, below.
- Finally, the IOUs expect to establish and test a cost-effectiveness methodology for IDSM pilots, projects, programs and activities that can then be fully implemented in the next portfolio filing.

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

a. Description:

Similar to the cost effectiveness methodology, final EM&V protocols for the 2010-2012 EE program cycle are pending and awaiting final decision, and protocols for DR are established and currently in place. However, in order to effectively evaluate IDSM programs, activities and pilots, specific protocols need to be developed so that all energy savings, demand reductions and CO₂ reductions from various DSM customer activities are properly documented and appropriately attributed. The Task Force will coordinate with the 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. In addition, a public workshop will be held to solicit public input. After public input has been incorporated, the final proposed protocols will be submitted to the ED for further consideration, discussion, and adoption.

b. Tasks and Timelines:

- The Task Force will conduct a phased approach to developing appropriate EM&V protocols for IDSM programs and projects. The approach will be similar to the cost effectiveness plan described above. In close collaboration with IOUs, ED EM&V resources will be leveraged to develop a white paper that will be publicly vetted;
- Phase 1 will occur in Q2 of 2010 and will include preparation of the white paper on EM&V metrics, and will include a literature review on appropriate near-term resource and long-term market transformation metrics, attribution issues, policy concerns and other requirements, as necessary. The Task Force will determine if it is appropriate to include this white paper as part of the aforementioned cost effectiveness white paper development;
- Phase 2 will occur in Q3 of 2010 and will involve public review of the white paper. The workshop will be announced through the EE, DG, LIEE and DR service lists. The public review will include a webinar and/or workshop hosted by the joint IOU taskforce in collaboration with ED staff where

questions and comments can be submitted. Post workshop written comments on the white paper will also be collected following the webinar. Public comments will be considered in revising the white paper and the revised version of the IDSM cost effectiveness white paper will be submitted to ED to help guide subsequent efforts.

- Phase 3 will occur in the second half of 2010 and will include a progress plan for establishing EM&V protocols and developing EM&V guidelines;
- Phase 4 will be ongoing and will focus on applying the EM&V methodology to selected IDSM pilots, projects, programs and activities as identified by the IDSM Task Force and moving the integrated offering towards a common metric and tracked through regular reporting in the quarterly reports described in Item 6, below.
- Finally, the IOUs expect to establish and test EM&V methodologies for IDSM pilots, projects, programs and activities that can be used in the next portfolio filing.

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 that review end uses and technologies that could 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 forums for the Task Force to review and vet proposed ET technologies that can be funded and integrated across DSM programs.

For example, the IOUs' ET programs all offer Technology Resource Incubator Outreach (TRIO) that pulls upstream technologies into the ET program. The TRIO program promotes technology integration and allows for prescreening to promote movement of those technologies through ET, and technology transfer groups, to mainstream DSM offerings.

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 also launch demonstration showcases and scaled field placement featuring integrated energy systems for proof-of-concept, technology and usability assessment, and market exposure, and public awareness. The IDSM Task Force will be tracking the results of the ET program's technology integration and helping to chart its future course. Working with the IOUs' ET programs' data sources, the Task Force will also track inclusion of integrated ET products into customer projects.

b. Tasks and Timelines:

- The IOUs individually and the Task Force as a group 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.
- By Q2 of 2010, the Task Force will develop a roadmap for incorporating integrated technologies into customer offerings including the identification of technology, possible plans for pilot program opportunities, and an approach to overcoming policy or program barriers that once prevented implementation.

4. Development of cross-utility standardized integrated audit tools using PG&E's developed audits as a starting point.

a. Description:

Program evaluation studies conducted for program cycles 2002, 2003, and 2004-2005 clearly identify energy surveys and customer site audits as one of the most powerful tools in creating awareness of energy conservation potential. This leads to implementation of identified EE measures and participation in rebate and incentive programs. The IOUs currently offer integrated audits to medium and large customers (generally with demands upwards of 200 kW). Integrated audits were described in the Commercial, Industrial and Agriculture Statewide PIPs as follows:

- Supports the Strategic Energy Action Plan by offering integrated audits that address full spectrum of energy solutions, including energy efficiency, demand response and distributed generation
- Shares costs and resources of energy efficiency and demand response programs to provide integrated recommendations to customers
- Incentives from both programs can help reduce payback cost and support advanced energy management decisions
- Demand response opportunities will be targeted in the larger facilities, particularly as part of monitoring-based retro-commissioning efforts, where controls to facilitate demand response efforts would be installed
- As required, utility distributed generation programs require that residential and nonresidential customers receive an energy audit before being eligible to receive solar funding

Table 3 (“IOUs’ Audit/Survey Status”) details the IOUs’ existing and proposed energy audit and survey tools. Section 4B of this PIP describes the proposed Progressive Energy Audit Tool (formerly UEAT) as required by D.09-09-047 Ordering Paragraph. These audits tools provide customers with EE and DR recommendations and will also provide general feasibility assessments for DG. IOUs’ will continue to offer the detailed integrated audits for customers with loads greater than 500 kW and integrated audits as appropriate. Similar level of

Integrated Demand Side Management

audits will continue to be offered to medium and large customers. As the tool is developed, PEAT will incorporate energy savings estimates using the most up to date values provided in the Database for Energy Efficiency Resources (DEER).

Currently DR and EE contribute funding to the audit tool development and implementation, but 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 are working to standardize a statewide audit and survey tools portfolio and customize audit recommendations based on customer profiles, operating characteristics, market sector potential and cost-effectiveness of the offering. This process will consider more meaningful ways to implement the audit and survey tools for the customer as well as identify choices of potential measures in various DSM programs or technologies specific to a particular customer.

Development of standardized energy survey and audit tools will occur in the following areas:

Integration:

- Incorporate electricity/gas, energy efficiency, demand response and self-generation analysis in all tools and single customer report for each type of audit, as appropriate
- Incorporate water conservation analysis in association with electricity and gas savings
- Incorporate green house gas reduction calculators and/or conversion tables, as applicable
- Refer to or incorporate in audit tools applicable rate analysis modules as appropriate
- Incorporate IOUs' adopted and recommended emerging technologies, as appropriate
- Coordination with the nonresidential Continuous Energy Improvement (CEI) sub-program

Compliance:

- Modify existing tools (as technically feasible) and incorporate in new tools necessary modules and analytics that meet requirements of Appendix C of the October 30, 2008 Assigned Commissioner and Administrative Judge's Ruling Requiring Supplemental Filings (Ruling) in A.08-07-021 et al, or other requirements addressed by regulatory proceedings
- Enhance existing audit tools to more explicitly demonstrate the cost benefits of energy efficiency prior to solar system installation and its sizing

Standard Resources:

IOUs will review and adopt a common set of external resources, engineering and energy management tools that provide customers with a consistent methodology of energy conservation and financial benefits, and lead customers to invest in recommended projects. Such tools may include, but are not limited to:

- DOE Best Practices Tools
- E-Quest,
- SPC Calculator,
- AirMaster,
- MotorMaster,
- Energy Star Portfolio Manager,
- DEER, and
- IOU work papers.

Advanced Technologies:

- Research and incorporate analytics that address customer behavior changes as a greater potential for overall energy usage reduction in certain markets. The analytics may include traditional benchmarking tools, such as ENERGY STAR®, as well as a new generation of tools and databases available on the market.
- Research and incorporate analytics that address economic benefits for IDSM implementation. Such tools may include calculation of lost opportunities if recommended measures are not implemented in a timely manner.
- Implementation of these technologies may become available as infrastructure is built at each IOU.

b. Tasks and Timelines:

- Q1 to Q2 2010, the IOUs will begin assessing tools that meet customer requirements and the requirements defined in Appendix C.⁶ This process will occur in several stages starting with identifying system and software requirements (which may include solicitation of a third party energy audit systems designer). Next, the IOUs will need to identify the specific detail requirements of the tool, necessitating extensive collaboration among the IOUs and various stakeholders. Each of the IOUs will have a detail audit tool development plan ready for initiation (including but not limited to contracting with a system designer) by end of Q2 2010.
- In Q2 2010 the IOUs will develop a detailed plan for initiating developments of the Progressive Energy Audit Tool (e.g., vendor solicitation, scope of audit, etc.). PEAT development will be underway in Q3 2010 (see Section 4B of this PIP for more on PEAT).
- IOUs expect to have a beta integrated tool for Residential and Small Business that meets the needs of Appendix C by Q4 2011

⁶ Appendix C requires the following audit characteristics –Verifiable, Site-Specific, User-friendly, Comprehensive, Accessible, Compatible with CSI program

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- In 2010, enhancements will be made to existing audit tools that will include solar requirements or be a useful tool for customers pursuing solar who need to size their solar equipment appropriately based on the EE/DR potential of the building or residence to minimize service gaps while the new tool is under development.
- Timeline for these enhancements are shown for each utility in Table 3.

Progressive Energy Audit Tool (PEAT) Description

a. Description:

Currently, PG&E, in collaboration with SCE, SDG&E, SCG and the IDSM Task Force, is developing an enhanced Web-based audit tool called the Progressive Energy Audit Tool (PEAT formerly UEAT). See Table 3 for timeline.

The PEAT will be 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.

PEAT will be accessible for residential and nonresidential customers with demand of less than 200 kW. The audit tool will be the principal conduit to provide IDSM information to customers and will replace several survey/audit products and associated software programs that currently provide data collection, data entry, and customer report generation.^[7] Additionally, the tool will be capable of generating customer reports that include specific information on the costs and benefits of IDSM programs.

Projected Design and Functionality

Evolution of new technologies and analytics available on the market and being developed by various firms and organizations provide great opportunity for developing new energy analysis applications. Utilization of these applications and data based on these technologies provides much greater opportunity for developing energy audit modules and generate more accurate information than traditional energy audit tools available on the market. The traditional approach has been a backbone concept for building PEAT as well. At the statewide IDSM Audit Tool and IDSM Task Force meetings on November 5, 2009 parties agreed that traditional audit tools may become obsolete when advanced technologies utilizing interval data from smart meters and Smart Grid applications are developed and become available.

PEAT will be developed within continuous customer engagement strategy and concept concentrating first on behavioral changes that may be quantified and recommended using customer energy usage profile, available baseline data (RASS, CEUS, etc.) along with publicly available information and internal/external databases. Such module may

[7] The CSI program is currently using these various audit tools for residential and small commercial applications.

be developed using no or very minimal customer input. Customers will be presented with individual energy usage reports for various periods addressing trends and potential behavior changes and no/low cost improvements. The tool creates individual customer profiles and compares this profile data with similar buildings' energy usage and patterns. Rebate and incentive offerings and information on EE, DR and solar/distributed generation opportunities will also be presented to the customer via utility websites or mail.

As more information becomes available during ongoing communication with the customer, the tool will update the customer profile based on enhanced data analysis. The tool will also determine customer interest and implementation criteria, and will provide the top 2-4 specific customized and quantitative IDSM measure recommendations.

As interaction with the IOU continues, a number of residential and nonresidential customers may request more detailed and comprehensive analysis of their energy usage and potential improvements that they can make to reduce their energy costs and contribute to sustainable green environment. These customers are likely to be completely engaged and provide complete information on their usage patterns, including the type of appliances and equipment installed within their respective home or building. For such customers, the PEAT will complete their customer profile, generate energy balance opportunities, and provide a full spectrum of energy efficiency, demand response and solar/distributed generation recommendations.

Development and implementation of the PEAT will require utilization of a new generation of software engines and analytics – essentially a new approach to energy audit development. The IOUs will seek to engage industry/ market stakeholder research aiming investigation of such analytics available on the market including those that are being developed by nationwide organizations. Preliminary research performed by PG&E in 2009 indicated that there are many firms and institutions working on development of such tools but no tools are available for immediate deployment. Therefore, the entire development of PEAT should be performed in phases, evolving as new internally or externally developed tools become available for acquisition. Future timeline roll out of PEAT based on smart grid, smart meter roll out at IOUs, building customer interfaces and applications may extend the development beyond the three year program cycle.

The IOUs plan to make technically feasible modifications to their current survey and audit tools as an interim solution until the launch of the new enhanced tools. These short term modifications will be designed to meet the requirements of audits in conjunction with solar projects under SB 1 and integrated program offerings.

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 the audit tool development and implementation, but no funding is provided by the Solar / DG programs.

b. Tasks and Timelines:

- IOUs expect to have an integrated tool for Residential and Small Business that meets the needs of the October 2008 Ruling, Appendix C built and tested by Q4 2011 and ready for full implementation by 2012
- See Table 3 for PEAT implementation plan
- As part of the quarterly reporting of IDSM activities, the IOUs will provide detailed status updates on the progress of the development and the respective budget detail.

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, but will track integrated program offerings and integrated projects with customers.

Part of this effort will include utilizing new integrated audit tools being developed by IOU market sector programs that provide baseline data and information regarding 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 the 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 these offerings. 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 quarterly reports on IDSM activities to ED. Additionally, the proposed IDSM cost effectiveness framework will be applied in real-time to the pilot programs within this funding cycle.

In addition to the formal Task Force, the IOUs may establish internal teams who will serve as the liaisons between the Task Force and the various, sector-specific integrated pilots, projects, programs, and activities. The internal teams will actively participate in discussions of the 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 of 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.

b. Tasks and Timelines:

- In 2010 and ongoing, the Task Force will develop tracking systems for integrated pilots, programs and activities, in concert with the established pilot program performance metrics
- In 2010 and ongoing, the Task Force will work with other statewide teams to identify opportunities and projects to target where there are integrated offerings and projects underway.
- Results of these efforts will be included in quarterly tracking reports described in section 6, below.
- The Task Force will regularly review various pilots, programs and activities.

6. Develop Regular Reports on progress and recommendations to the Commission.⁸

a. Description:

The Task Force will develop a communications strategy that will include regular meetings, reports, following an agreed upon template, on efforts to provide the tracking activities and plans going forward to the ED.

b. Tasks and Timelines:

- The Task Force will report out, as needed, in meetings and discussions with the Energy Division
- Consistent with the IOU quarterly reporting requirements, each utility will provide a written report that will include updates on the status/progress on the eight IDSM activities.

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

⁸ Heading remains consistent with CPUC directive in D. 09-09-047.

coordination. The Task Force will not oversee the individual IOU Integration Teams, but will coordinate with these groups. At present the IOUs have all established internal DSM integration teams within EE, and have established or will be establishing internal Integrated Teams with representatives from staff of different groups across the companies, including EE, DR, Low Income Energy Efficiency (LIEE), distributed generation (DG)/Solar, green programs, marketing and delivery channels. A roster of all IOU Task Force members, including internal integration teams, will be provided to ED and resubmitted as members change. This strategic planning function will work across all EE and other DSM areas to ensure consistency and integration, and that the short and mid-term actions of the IOUs meet the long term goals of the Strategic Plan. The Task Force may be staffed by people who are familiar with strategic planning efforts and leading the internal integration teams.

b. Tasks and Timelines:

The IOUs will set up internal Integration teams that meet at least monthly with IOU staff from EE, DR, DG, LIEE, Marketing and Delivery channels such as Service and Sales (account reps.) and Third Party / Government Partnerships. A roster of all IOU Task Force members, including internal integration teams, will be provided to ED and resubmitted as members change.

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 LIEE 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/LIEE) 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, LIEE 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 quarterly 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.

b. Tasks and Timelines:

- The Task Force will work in 2010 and on an ongoing basis with the larger 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 2010 and on an ongoing basis, the Task Force will conduct internal review of local utility marketing efforts where there are opportunities to integrate messages and campaigns, resources, and program offerings that promote demand side integration of DR, EE, and DG resources.
- Beginning no later than Q2 2010, the IOUs will share information with the Task Force on local IOU integrated marketing, training, and education efforts.

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 people 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. Depending on each utility's internal integration coordination process, statewide utility Task Force members are more likely to represent larger internal utility integrated teams. 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 develop a roster of IOU representatives on the statewide IOU IDSM Task Force in Q1 of 2010.

The intent of the governance of the Task Force is not to be exclusive, but effective for the IOUs to integrate their approved programs in accordance with Commission's guidelines. To the extent that it is appropriate and effective, the IDSM Task Force will expand participation to all potential stakeholders through at least one workshop per year to solicit input from the broader group of participants in a fair and equitable manner.

The Task Force will coordinate and work with Energy Division staff through monthly phone calls and quarterly reports and in person meetings, as needed. As issues come up related to best practices and approaches with particular market

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segments and projects, the Task Force members will agree on subject matter experts to share with and educate the team.

2. Identify and describe progress through regular meetings and quarterly reports (described in prior sections of this PIP) to date and current programs related to:
 - Existing utility activities, efforts, programs and pilots,
 - IDSM best practices, and
 - IDSM metrics (including pilots) and cost effectiveness methodologies
3. Identify key issues affecting successful integration and develop a timeline and structure for prioritizing identified action items and reports consistent with descriptions in prior sections of this PIP.

The Task Force will identify key issues that affect the successful integration of DSM measures in utility programs. At a minimum, key issues include cost-effectiveness, both internal and external barriers to integration, 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. Task Force meetings can include a specific timeline and structure to track progress on identifying and deploying solutions.

4. 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.
5. Develop proposals for policy and program initiatives necessary to forward IDSM.
6. Establish program-funding protocols.
7. Identify and recommend adoption of enabling/supporting policies for inclusion in appropriate DSM programs and report consistent with descriptions in prior sections of this PIP.
8. Identify and propose changes to inhibiting policies and metrics and report consistent with descriptions in prior sections of this PIP.

Tasks and Timelines

Most of the goals defined above will involve ongoing efforts of the Task Force. Timelines associated with the discrete tasks are described in earlier sections of this PIP and in Table 2.

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.

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.

a) Quantitative Baseline and Market Transformation Information

The IOU Integration Task Force will track integrated projects and activities and will begin to identify areas where integrated projects are beginning to be part of a successful customer approach. An IOU-sponsored process evaluation will be designed and initiated in order to formalize tracking efforts and establish a basis for determining the efficacy of various integration approaches as well as provide feedback for cost effectiveness and EM&V protocol development proposals (based on the adopted EM&V plans for this program cycle).

b) Market Transformation Information

The Strategic Plan recognizes that the process of transformation is harder to define than its end state, and that new programs are needed to support the continuous transformation

of markets around successive generations of new technologies⁹. The Task Force will work closely with the DSM program leads, Emerging Technologies group, marketing team, WE&T and EM&V team to identify projects and approaches and to develop models, outreach, and training that will contribute to the transformation of the market. The IOUs commit to supporting progress toward achieving market transformation in the areas affected by IOU DSM programs/presence. An objective of the Task Force will be to begin collecting a small set of DSM market transformation (MT) metrics that could serve as a starting point for a broader DSM market transformation assessment in the future. Over time, the baseline metrics will likely be expanded and refined as a result of program assessment studies, improved evaluation tools, increased market intelligence, etc. MT data the Task Force will collect should be decided upon by the Task Force, but examples of prospective data include reporting on increased DSM training initiatives (WE&T) offered in secondary or post-secondary education, and ET efforts aimed at increasing the adoption of EE measures in California or nationwide (and adoption rates where applicable). The PEAT will provide valuable MT baseline information. The Task Force will determine what types of metrics should be tracked relative to the triggers of the integrated audit tool.

c) Program Design to Overcome Barriers

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

Statewide Program Performance Metrics (PPM) are being developed and will be submitted in a separate joint utility Advice Letter requiring PPMs for all statewide programs.

e) Advancing Strategic Plan goals and objectives

In support of the Strategic Plan’s,¹⁰ the DSM Pilot programs the IOUs will be evaluating a number of components that will lead to successful DSM integration, consistent with the Strategic Plan strategies. For example, the IDSM Task Force will be working on adopting an integrated cost effectiveness tool, as well as EM&V protocols for integrated programs. These initiatives will help inform future program development and policy for targeting optimal integration opportunities. Additionally, the Task Force will establish both SW and internal IOU integration plans intended to develop a long-term, coordinated

⁹ California Public Utilities Commission (2008) *California Long Term Energy Efficiency Strategic Plan*, p.5 Available at <http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf>

¹⁰ California Long Term Energy Efficiency Strategic Plan, Section 8,4 pp. 72-73.

approach to effective DSM utilization. The Commission has approved various Emerging Technologies (ET) programs in both Energy Efficiency and Demand Response that review end uses and technologies that could promote IDSM. In support of the Strategic Plan, 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 forums for 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 energy savings 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 important 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

The Task Force will not be providing direct marketing services, but the coordination of marketing will be an integral part of integrated offerings included in each individual approach. In addition, as described in Task 8, above, 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 education efforts directing customers to utility local 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,

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water districts 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.

v. Similar IOU and POU programs

Similar to item iv., above, 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 included in each individual approach. In addition, as described in Task 8, above, 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 education efforts directing customers to utility local 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 an establishment of Integrated Best Practices.

e) Innovation

The context of this PIP and effort is entirely innovative in that this statewide effort has not been undertaken before by the IOUs. Innovative aspects of this program include coordination with the development of integrated audit tools, integrated cost effectiveness and EM&V approaches that cross over multiple proceedings. In addition, the 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. 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

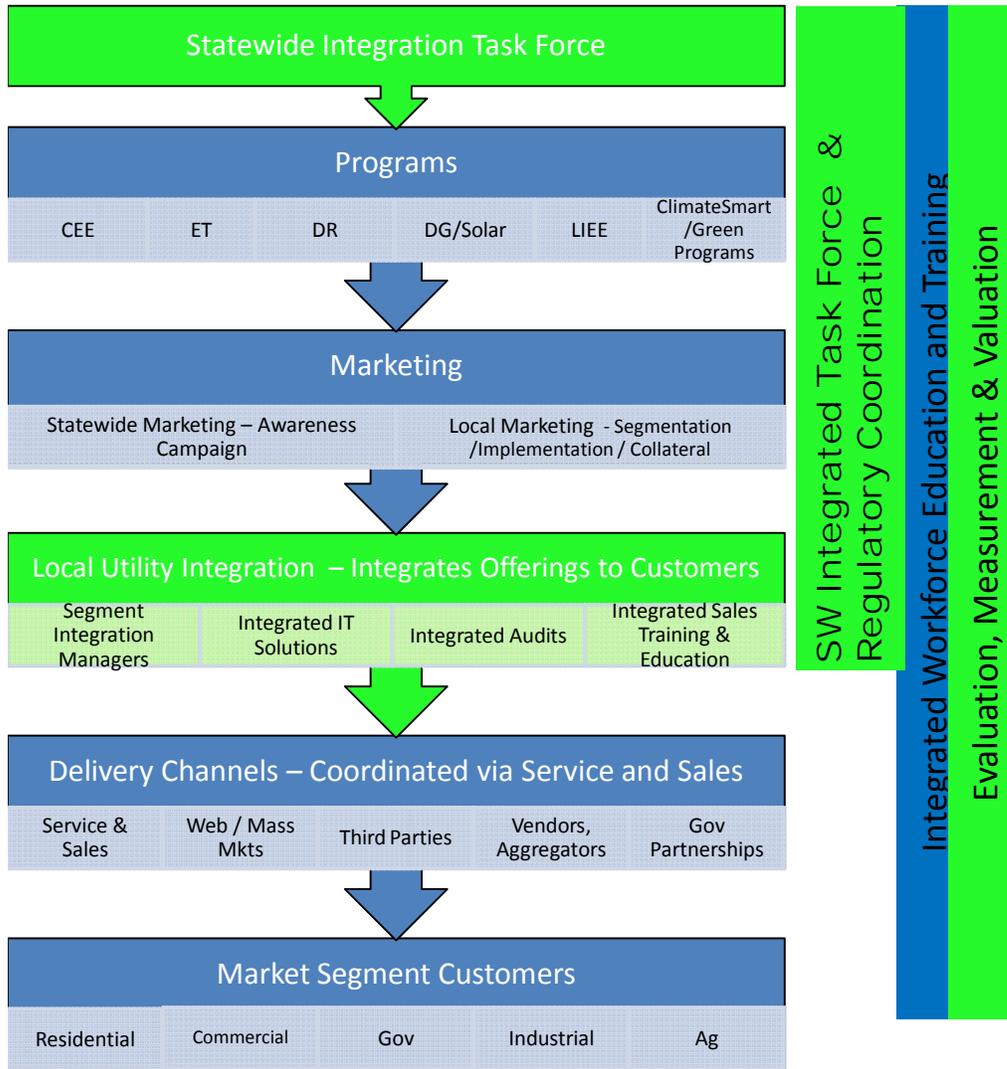
Integrated pilots that the utilities will be reviewing as part of this process are included in individual utility applications in their Integration PIPs and Chapters. As described in section 4.b.5, above and in Table 2, integrated pilots and activities will be identified and tracked beginning in Q1 of 2010 with timely approval of this and other Advice Letter filings, including the pilot Advice Letters.

i) EM&V

As described in prior sections of this PIP and in Table 2, the Task Force will coordinate with the IOU and ED EM&V resources to develop a proposal of appropriate metrics for assessing integration. 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. In addition, a public workshop will be held to solicit public input. After input has been incorporated, the final proposed protocols will be submitted to the ED for further consideration.

7) Diagram of Program

Program Diagram – IDSM Task Force



8) Program Logic Model

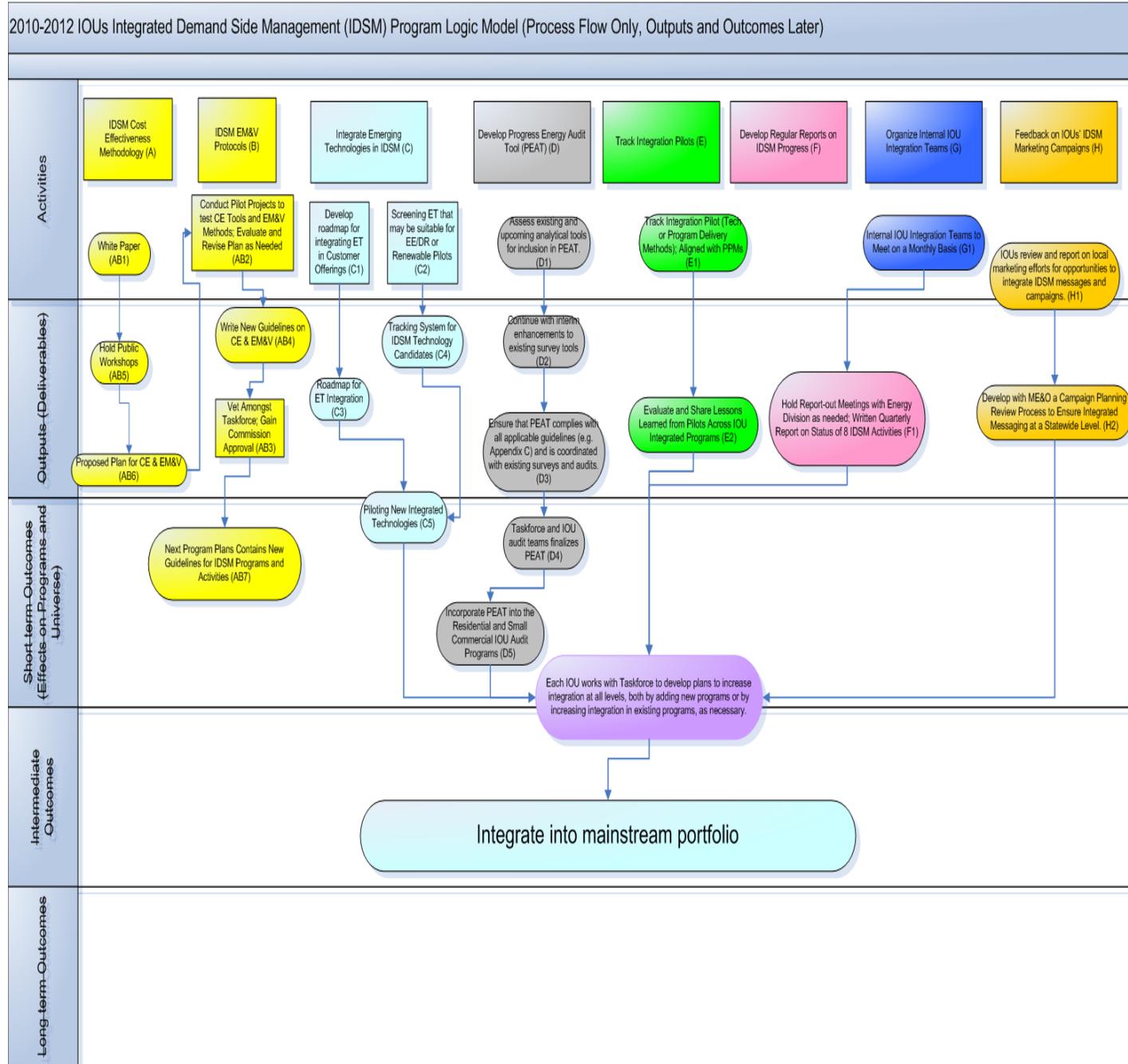


Table 2 – Proposed IDSM Compliance and Timeline

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Note: Timelines are dependent on the timely approval of this Advice Letter

Directive from CPUC Decision	IOU Strategy	Q1 2010	Q2 2010	Q3 2010	Q4 2010	2011-2012
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.	To effectively integrate DSM program design, a set of internally consistent cost-effectiveness methodologies need to be developed for integrated projects. The Task Force proposes to work with Commission approved consultants and to coordinate a workshop to gather stakeholder feedback to address the issue of cost effectiveness under an integrated delivery of EE, DR, CSI and DG programs and to establish a consensus on a framework for developing an integrated cost effectiveness methodology.	<ul style="list-style-type: none"> The Task Force will launch a phased approach to developing appropriate integrated cost effectiveness protocols for IDSM programs and projects. Phase 1 - Will include coordinating the plan development that proposes to incorporate IDSM cost effectiveness framework into the CPUC DR and DG cost effectiveness proceedings. Review filings / testimony, identify barriers 	<ul style="list-style-type: none"> Continuation of Phase 1 Phase 2 - Will involve public review of the cost effectiveness white paper. 	<ul style="list-style-type: none"> Continuation of Phase 2 Phase 3 - Will include a progress plan for collecting necessary pilot program data for evaluating cost effectiveness and developing cost-effectiveness guidelines. 	<ul style="list-style-type: none"> Phase 3 - Will include a progress plan for collecting necessary pilot program data for evaluating cost effectiveness and developing cost-effectiveness guidelines. 	<ul style="list-style-type: none"> Phase 4 will be ongoing and will focus on using the new tool to evaluate the cost effectiveness of the IDSM pilots, projects, programs and activities as identified by the IDSM Task Force, and will be tracked through regular reporting in the quarterly reports Will establish and test a cost-effectiveness methodology that can then be fully implemented in the next portfolio filing.
2. Development of proposed measurement and evaluation protocols for IDSM programs and projects.	Similar to the cost effectiveness methodology, final EM&V protocols for the 2010-2012 EE program cycle are pending and awaiting final decision, and protocols for DR are established and currently in place. The Task Force will coordinate with the IOU and ED EM&V resources to develop a proposal of appropriate metrics for assessing integration.	<ul style="list-style-type: none"> The Task Force will conduct a phased approach to developing appropriate EM&V protocols for IDSM programs and projects. Review filings / testimony, identify barriers 	<ul style="list-style-type: none"> Phase 1 - Will include preparation of the white paper on EM&V metrics, and will include a literature review on appropriate near-term resource and long-term market transformation metrics, attribution issues, policy concerns and other requirements, as necessary. 	<ul style="list-style-type: none"> Phase 2 - Will involve public review of the white paper. Phase 3 - Will include a progress plan for establishing EM&V protocols and developing EM&V guidelines 	<ul style="list-style-type: none"> Phase 3 - Will include a progress plan for establishing EM&V protocols and developing EM&V guidelines 	<ul style="list-style-type: none"> Phase 4 will be ongoing and will focus on applying the EM&V methodology to selected IDSM pilots, projects, programs and activities as identified by the IDSM Task Force and moving the integrated offering towards a common metric and tracked through regular reporting in the quarterly reports. Will establish and test EM&V methodologies that can be used in the next portfolio filing
3. Review IDSM enabling emerging technologies for potential inclusion in integrated programs.	The ET program will undertake a coordinated effort to support innovation in EE, DR, and renewable / self-generation. The IDSM Task Force will be tracking the results of the ET program's technology integration and helping to chart its future course. Working with the IOUs' ET programs' data sources, the Task Force will also track inclusion of integrated ET products into customer projects.	<ul style="list-style-type: none"> IOUs individually and the Task Force as a group 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. 	<ul style="list-style-type: none"> Task Force will develop a roadmap for incorporating integrated technologies into customer offerings including the identification of technology, possible plans for pilot program opportunities, and an approach to overcoming policy or program barriers that once prevented implementation. 	<ul style="list-style-type: none"> Tracking emerging technologies - Will be ongoing 	<ul style="list-style-type: none"> Tracking emerging technologies - Will be ongoing 	<ul style="list-style-type: none"> Tracking emerging technologies - Will be ongoing
4. Development of cross-utility standardized integrated audit tools using IOUs' developed audits as a starting point.	IOUs' will continue to offer the detailed integrated audits for customers with loads greater than 500 kW and integrated audits as appropriate. Similar level of audits will continue to be offered to medium and large customers. The IOUs are working to standardize a statewide audit and survey tools portfolio and customize audit recommendations based on customer profiles, operating characteristics, market sector potential and cost-effectiveness of the offering.	<ul style="list-style-type: none"> Stage 1 - IOUs will begin identifying system and software requirements Stage 2 - The IOUs will need to identify the specific detail requirements of the tool, necessitating extensive collaboration among the IOUs and various stakeholders. Enhancements will be made to existing tools 	<ul style="list-style-type: none"> Stage 3 - Each of the IOUs will have a detail audit tool development plan ready for initiation Continue assessing, building and enhancing tools 	<ul style="list-style-type: none"> Continue assessing, building and enhancing tools. Develop detailed plan for initiating development of PEAT (e.g., vendor solicitation, scope of audit, etc.) 	<ul style="list-style-type: none"> Continue assessing, building and enhancing tools PEAT development underway 	<ul style="list-style-type: none"> IOUs expect to have a beta integrated tool for Residential and Small Business that meets the needs of Appendix C by Q4 2011
5. Track integration pilot programs to estimate energy savings, develop best practices 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	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, but will track integrated program offerings and integrated projects with customers.	<ul style="list-style-type: none"> Task Force will develop tracking systems for integrated pilots, programs and activities. (Ongoing) Task Force will work with other Statewide teams to identify opportunities and projects to target where there are integrated offerings and projects underway. (Ongoing) 	<ul style="list-style-type: none"> Results of efforts will be included in quarterly tracking reports Regularly review various pilots, programs and activities. 	<ul style="list-style-type: none"> Results of efforts will be included in quarterly tracking reports Regularly review various pilots, programs and activities. 	<ul style="list-style-type: none"> Results of efforts will be included in quarterly tracking reports Regularly review various pilots, programs and activities. 	<ul style="list-style-type: none"> Results of efforts will be included in quarterly tracking reports Regularly review various pilots, programs and activities.
6. Develop Regular Reports on progress and recommendations to the Commission.	The Task Force will develop a communications strategy that will include regular meetings, reports, following an agreed upon template, on efforts to provide the tracking activities and plans going forward to the Commission.	<ul style="list-style-type: none"> Task Force will report out, as needed, in meetings and discussions with the Energy Division. Consistent with the IOU quarterly reporting requirements, each utility will provide a written report that will include updates on the status/progress on the eight IDSM activities. (Ongoing) 	<ul style="list-style-type: none"> Task Force will report out, as needed, in meetings and discussions with the Energy Division. Provide a written report that will include updates on the status/progress on the eight IDSM activities. (Ongoing) 	<ul style="list-style-type: none"> Task Force will report out in meetings and discussions with the Energy Division. Provide a written report that will include updates on the status/progress on the eight IDSM activities. 	<ul style="list-style-type: none"> Task Force will report out in meetings and discussions with the Energy Division. Provide a written report that will include updates on the status/progress on the eight IDSM activities. 	<ul style="list-style-type: none"> Task Force will report out in meetings and discussions with the Energy Division. Provide a written report that will include updates on the status/progress on the eight IDSM activities.
7. Facilitate internal utility IDSM strategies by establishing internal Integration Teams with staff from EE, DR, DG, marketing, and delivery channels.	IOUs have established or will be establishing internal Integrated Teams with representatives from staff of different groups across the companies, including EE, DR, LIEE, distributed generation (DG)/Solar, green programs, marketing and delivery channels. This strategic planning function will work across all EE and other DSM areas to ensure consistency and integration, and that the short and mid-term actions of the IOUs meet the long term goals of the Strategic Plan.	<ul style="list-style-type: none"> IOUs will set up internal Integration teams that meet at least monthly with IOU staff from EE, DR, DG, LIEE, Marketing and Delivery channels such as Service and Sales (account reps.) and Third Party / Government Partnership. 	<ul style="list-style-type: none"> Internal Integration teams continue to meet at least monthly 	<ul style="list-style-type: none"> Internal Integration teams continue to meet at least monthly 	<ul style="list-style-type: none"> Internal Integration teams continue to meet at least monthly 	<ul style="list-style-type: none"> Internal Integration teams continue to meet at least monthly
8. Provide feedback and recommendations for the IOUs integrated marketing campaigns including how the working group will ensure that demand response marketing programs approved as category 9 programs are coordinated with energy efficiency integrated marketing efforts.	Regular coordination meetings currently exist to review EE, DR, DG and LIEE results with internal marketing management and discuss course changes that might be needed. 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, LIEE 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.	<ul style="list-style-type: none"> Task Force will work in 2010 and on an ongoing basis with the larger statewide ME&O effort to ensure integrated messaging and coordination at a statewide level Task Force will conduct internal review of local utility marketing efforts where there are opportunities to integrate messages and campaigns. 	<ul style="list-style-type: none"> Task Force will share information on local integrated marketing, training and education efforts for all customer classes to develop best practices. Task Force will share local integrated marketing efforts and "success stories" in its quarterly reports 	<ul style="list-style-type: none"> The IOUs work with SW ME&O efforts and will share information with the Task Force on local IOU integrated marketing, training, and education efforts. (Ongoing) 	<ul style="list-style-type: none"> The IOUs work with SW ME&O efforts and will share information with the Task Force on local IOU integrated marketing, training, and education efforts. (Ongoing) 	<ul style="list-style-type: none"> The IOUs work with SW ME&O efforts and will share information with the Task Force on local IOU integrated marketing, training, and education efforts. (Ongoing)

Table 3 – IOUs' Audit / Survey Status

Integrated Demand Side Management

Table 3 IOUs' Audit/Survey Status

IOUs' Existing and New Energy Audit/Survey Tools

IOU	Target Audience	Sector/Audit Type	Description	Status/Enhancements	2010	2011	2012
Residential							
All	Residential	On-line Survey	On-line and Mail surveys will be coordinated statewide, and all surveys provide substantially the same questions and recommendations. Surveys provide benchmarking report, bill disaggregation by end uses and appliances, and recommends EE improvements	Existing. The analysis of the tools will be expanded to include water, applicable DR and Self-generation, including Solar calculator addressing benefits of EE and proper Solar system sizing	X	X	
All	Residential	Mail-in Survey			X	X	
SCE, PG&E, SDG&E	Residential	Telephone Survey			X	X	
Nonresidential							
All	Very small to medium customers (<200kW, <50,000 Therms)	Remote or Basic Surveys. Includes on-line, mail and phone surveys	These typically remote audits will offer customer recommendations in a report with estimated project costs and savings, and a roadmap for project implementation. Basic audits are also offered on-site in conjunction with marketing campaigns, targeted strategies and in response to specific customer requests.	Existing. Needs enhancements. The analysis of the tools will be expanded to include water, applicable DR and Self-generation, including Solar calculator addressing benefits of EE and proper Solar system sizing	X	X	
All	Small to Medium customers (<200kW, <50,000 Therms)	On-site survey	Basic audits offered on-site in conjunction with marketing campaigns, targeted strategies and in response to specific customer requests. Analysis are based on DEER or workpaper values and provide recommendations for energy conservation and efficiency measures and refer to specific rebate information.	Existing. The analysis of the tools will be expanded to include water, applicable DR and Self-generation, including Solar calculator addressing benefits of EE and proper Solar system sizing	X	X	
All	Medium to Large Customers (200kW-500kW, 50,000-250,000 Therms)	Integrated Energy Audits (IEA - Medium)	The IEA is an onsite audit performed by qualified IOU personnel and/or by qualified engineering contractors. Key deliverables include EE, DR and DG. Detailed description of recommended measures, energy savings, available rebates and incentives are provided separately and/or in summary charts.	Existing. Upgrade with typical water, industrial and agriculture measures as well as implementation of enhanced analysis of DR measures and programs, and DG systems	X	X	X
All	Large customers (>500 kW, >250,000 Therms) and medium complex facilities	Integrated Energy Audit (IEA - Large)	The IEA is on-site audit performed by qualified engineering contractor or IOU engineering personnel. Key deliverables include comprehensive analysis of EE, DR and information and technical feasibility for DG. Costs of implementation, energy savings, available incentives and implementation paybacks and ROI/IRR are provided in details and summary charts.	Existing. Incorporate water analysis	X		
Progressive Energy Audit Tool, New Development							
All	<u>Residential and Small to Medium Customers</u> , (<200 kW)	Progressive Energy Audit Tool ("PEAT")	IOUs are developing the tool for deployment in all IOU territories. This tool is intended to be flexible enough to be used in multiple delivery channels - on-line, mail and phone. It will be the primary tool to provide energy conservation, energy efficiency, demand response, and solar/self-generation and comparative information and analyses.	In Development*. The following are projected development stages:			
				Define IOU roles and responsibilities	Q1		
				Establish cross-IOU Task Force that will monitor and coordinate further developments	Q2		
				Conduct research for available or being developed analytics targeting comprehensive modules for behavior changes, interval meter data analysis and comparative reports	Q1-Q2		
				Develop business and functional requirements	Q3-Q4		
				Design integrated modules and interfaces		Q1	
				Build and testing		Q2-Q3	
				Completion and launch by IOUs		Q4	Q1-Q3

Integrated Demand Side Management

Notes:

* Preliminary estimate of the total budget for building and launching tools similar to PEAT is approximately \$5MM. Precise budget amounts will be revealed as IOUs complete research, initiate scopes of work, vendor solicitation, etc.

ATTACHMENT ~~B~~A
CALIFORNIA INVESTOR OWNED UTILITIES
2010-2012 ENERGY EFFICIENCY PORTFOLIO
PROGRAM IMPLEMENTATION PLAN
STATEWIDE PROGRAM

INTEGRATED DEMAND-SIDE MANAGEMENT

~~JANUARY 22~~FEBRUARY 23, 2010

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Integrated Demand Side Management

- 1) **Program Name:** Integrated Demand Side Management¹
Program ID: PGE2111, SCE-SW-012, SDGE SW-IDSMS, SCG SW-IDSMS
Program Type: 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			\$1,251,238		\$1,251,238
PG&E	Integrated DSM			\$1,200,000		\$1,200,000
SDGE	Integrated DSM			\$600,122		\$600,122
SoCal Gas	Integrated DSM			\$600,122		\$600,122
	TOTAL:			\$3,651,482		\$3,651,482

3) **Projected Program Gross Impacts Table**

Non-resource program.

4A) **IDSMS 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 that 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”) will make to integrate those DSM options in full collaboration with the Commission’s Energy Division in compliance with Decision (D.) 09-09-047 that approved the IOU Statewide IDSMS program and \$3.6 million 2010-2012 budget with modifications contained herein.

The IOUs have identified integrated DSM (IDSMS) as an important strategic DSM policy priority. In the IOUs’ 2009-2011 (now 2010-2012 portfolio) EE applications (A.08-07-021, et. al.), each IOU included separate exhibits on IDSMS, as well as specific integration activities within each program implementation plan at the Statewide (SW) and local

¹ The Program Performance Metrics identified for this pilot will be developed in coordination with the broader programs metrics development effort as described in D.09-09-047.

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Integrated Demand Side Management

program level as instructed by the Commission. In addition, each IOU has proposed a series of activities, pilots and other programs (Strategy 1.2)² in response to the Strategic Plan DSM Coordination and Integration Strategy. Through all these approaches, integrated DSM program implementation will be advanced in significant ways.

In addition to the IOUs' individual IDSM pilots, projects, programs, and activities, the IOUs will establish a Statewide Integration Task Force (Task Force). Responsibilities of the Task Force will encompass activities that promote, in a statewide-coordinated fashion, two specific IDSM strategies identified in the Strategic Plan. These include stakeholder coordination (Strategy 1.3)³ and new technologies (Strategy 1.4)⁴. The IOUs believe that Strategy 1.1—"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 PIP) 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.

The budget for DSM Coordination and Integration will provide cost coverage for the positions at each utility to lead internal task forces, represent the utilities at the statewide task force level, and facilitate support by subject matter experts within each utility. It will also fund and their associated expenses related to the deliverables of the Task Force and the coordination of the specific IOU integration activities.

The budget of \$3.65 million over three years will be allocated as follows:

PG&E:	\$1.2 million
SCE:	\$1.25 million
SDG&E:	\$0.6 million
SoCalGas:	\$0.6 million

The Program Performance Metrics identified for this pilot will be developed in coordination with the broader programs metrics development effort as described in D.09-09-047.

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b. Statement of Problem and Solutions to Overcome the Problem

There is a policy requirement and essential need to focus on integration of DSM activities and programs on a statewide and local level by customers, utilities, regulators and legislators.

² Strategic Plan, September 2008, p. 73, Strategy 1.2: Conduct integrated DSM delivery pilots in the Residential, Commercial, Industrial and Agricultural sectors.

³ *Id.*, Strategy 1.3: Develop integrated DSM programs across resources, including energy, water, and transportation.

⁴ *Id.*, Strategy 1.4: Promote development and support of new technologies that enable or facilitate DSM Coordination and Integration.

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The CPUC's Strategic Plan provides its vision that "energy efficiency, energy conservation, demand response, advanced metering, and distributed generation technologies are 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 addition, the State Legislature has proposed Assembly Bill AB51,⁵ requiring the Commission to integrate the DSM programs within its jurisdiction in order to enable offerings of integrated packages that will maximize savings and minimize costs to ratepayers.

In order to ensure that the medium and long term vision of IDSM is maintained and progresses operationally to meet the Strategic Plan, the IOUs, in collaboration with the Energy Division, propose the formation of the IDSM Statewide Task Force. The Task Force will meet regularly to identify and promulgate best practices, identify implementation and policy issues, design effective metrics to measure progress on IDSM, and report to the CPUC as described below.

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 important 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. Specific activities that the Task Force will focus on and associated timing (timelines are dependent on timely approval of this Advice Letter) include the following Eight Tasks as defined in D. 09-09-047 (see also Table 2 – "Proposed IDSM Compliance and Timeline" attached at the end of this document):

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:

At present, the Commission has approved the California Standard Practice Manual that serves as the reference document for ~~proposed approved~~ cost effectiveness tests and methodologies for EE programs. In addition, 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 ~~proposed~~ 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. The Task Force proposes to work with ~~Commission approved consultants the Energy Division~~

⁵ Assembly Bill No. 51, Amended in Assembly June 1, 2009, Amended in Assembly May 5, 2009, Amended in Assembly April 14, 2009, California legislature—2009–10 regular session; An act to amend Section 399.4 of the Public Utilities Code Relating to Energy.

(ED) and to coordinate a workshop to gather stakeholder feedback to address the issue of cost effectiveness under an integrated delivery of EE, DR, CSI and DG programs and to establish a consensus on a framework for developing an integrated cost effectiveness methodology.

The CPUC's Energy Efficiency cost effectiveness tests as embodied in the E3 calculator algorithms serve as the basis for the EE and CSI/DG cost effectiveness. The DR methodology has some differences. Given the CPUC attention afforded Energy Efficiency cost effectiveness it is efficient to use the E3 methodology as a starting point for developing an IDSM cost effectiveness tool that can be applied to integrated projects. Using the most up-to-date CPUC-approved input assumptions, the proposed methodology can then be applied to current integrated pilots, projects and activities that each of the utilities will be implementing. This will allow for the methodology to be refined in real time with "live" programs/projects.

A workshop process would be an efficient means to present the draft methodology for public input. After public input has been incorporated, the final methodology will be submitted to the Commission ED for approval review so that it can be implemented in the next program cycle.

b. Tasks and Timelines:

- The Task Force will launch a phased approach to developing appropriate integrated cost effectiveness protocols for IDSM programs and projects.
- Phase 1 will occur in Q1 and/or Q2 of 2010 and will include coordinating the plan development of an IDSM cost effectiveness framework with a goal for collaboration within that proposes to incorporate IDSM cost effectiveness framework into the CPUC DR and DG cost effectiveness proceedings. The timing of these two proceedings lends itself to useful and necessary collaboration, and thus the CPUC and IOUs should utilize this opportunity to develop a cost effectiveness tool (analogous to an IDSM cost effectiveness calculator) specifically for IDSM projects. Information obtained from this collaborative process will be synthesized for subsequent use in an IDSM cost effectiveness white paper, which will then be publicly vetted, through a joint IOU public workshop.
- Phase 2 will occur in Q2 or Q3 of 2010 and will involve public review of the IDSM cost effectiveness white paper. The workshop will be announced through the EE, DG, LIEE and DR service lists. The public review will include a webinar and/or workshop hosted by the joint IOU Task Force in collaboration with ED staff where questions and comments can be submitted. Post workshop written comments on the white paper will also be collected following the webinar. Public comments will be considered in revising the white paper and the revised version of the IDSM cost effectiveness white paper will be submitted to ED to help guide subsequent efforts for applying the cost effectiveness methodology to the IDSM pilot programs.

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- Phase 3 will occur in the second half of 2010 and will include a progress plan for collecting necessary pilot program data for evaluating cost effectiveness and developing cost-effectiveness guidelines.
- Phase 4 will be ongoing and will focus on using the new tool to evaluate the cost effectiveness of the IDSM pilots, projects, programs and activities as identified by the IDSM Task Force, and will be tracked through regular reporting in the quarterly reports described in Item 6, below.
- Finally, the IOUs expect to establish and test a cost-effectiveness methodology for IDSM pilots, projects, programs and activities that can then be fully implemented in the next portfolio filing.

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

a. Description:

Similar to the cost effectiveness methodology, final EM&V protocols for the 2010-2012 EE program cycle are pending and awaiting final decision, and protocols for DR are established and currently in place. However, in order to effectively evaluate IDSM programs, activities and pilots, specific protocols need to be developed so that all energy savings, demand reductions and CO2 reductions from various DSM customer activities are properly documented and appropriately attributed. The Task Force will coordinate with the 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. In addition, a public workshop will be held to solicit public input. After public input has been incorporated, the final proposed protocols will be submitted to the ~~Commission~~ ED for further consideration, discussion, and adoption.

b. Tasks and Timelines:

- The Task Force will conduct a phased approach to developing appropriate EM&V protocols for IDSM programs and projects. The approach will be similar to the cost effectiveness plan described above. In close collaboration with IOUs, ED EM&V resources will be leveraged to develop a white paper that will be publicly vetted;
- Phase 1 will occur in Q2 of 2010 and will include preparation of the white paper on EM&V metrics, and will include a literature review on appropriate near-term resource and long-term market transformation metrics, attribution issues, policy concerns and other requirements, as necessary. The Task Force will determine if it is appropriate to include this white paper as part of the aforementioned cost effectiveness white paper development;

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- Phase 2 will occur in Q3 of 2010 and will involve public review of the white paper. The workshop will be announced through the EE, DG, LIEE and DR service lists. The public review will include a webinar and/or workshop hosted by the joint IOU taskforce in collaboration with ED staff where questions and comments can be submitted. Post workshop written comments on the white paper will also be collected following the webinar. Public comments will be considered in revising the white paper and the revised version of the IDSM cost effectiveness white paper will be submitted to ED to help guide subsequent efforts.
- Phase 3 will occur in the second half of 2010 and will include a progress plan for establishing EM&V protocols and developing EM&V guidelines;
- Phase 4 will be ongoing and will focus on applying the EM&V methodology to selected IDSM pilots, projects, programs and activities as identified by the IDSM Task Force and moving the integrated offering towards a common metric and tracked through regular reporting in the quarterly reports described in Item 6, below.
- Finally, the IOUs expect to establish and test EM&V methodologies for IDSM pilots, projects, programs and activities that can be used in the next portfolio filing.

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 that review end uses and technologies that could 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 forums for the Task Force to review and vet proposed ET technologies that can be funded and integrated across DSM programs.

For example, the IOUs' ET programs all offer Technology Resource Incubator Outreach (TRIO) that pulls upstream technologies into the ET program. The TRIO program promotes technology integration and allows for prescreening to promote movement of those technologies through ET, and technology transfer groups, to mainstream DSM offerings.

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 also launch demonstration showcases and scaled field placement featuring integrated energy systems for proof-of-concept, technology and usability assessment, and market exposure, and public awareness. The IDSM Task Force will be tracking the results of the ET program's technology

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integration and helping to chart its future course. Working with the IOUs' ET programs' data sources, the Task Force will also track inclusion of integrated ET products into customer projects.

b. Tasks and Timelines:

- The IOUs individually and the Task Force as a group 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.
- By Q2 of 2010, the Task Force will develop a roadmap for incorporating integrated technologies into customer offerings including the identification of technology, possible plans for pilot program opportunities, and an approach to overcoming policy or program barriers that once prevented implementation.

4. Development of cross-utility standardized integrated audit tools using PG&E's developed audits as a starting point.

a. Description:

Program evaluation studies conducted for program cycles 2002, 2003, and 2004-2005 clearly identify energy surveys and customer site audits as one of the most powerful tools in creating awareness of energy conservation potential. This leads to implementation of identified EE measures and participation in rebate and incentive programs. The IOUs currently offer integrated audits to medium and large customers (generally with demands upwards of 200 kW). Integrated audits were described in the Commercial, Industrial and Agriculture Statewide PIPs as follows:

- Supports the Strategic Energy Action Plan by offering integrated audits that address full spectrum of energy solutions, including energy efficiency, demand response and distributed generation
- Shares costs and resources of energy efficiency and demand response programs to provide integrated recommendations to customers
- Incentives from both programs can help reduce payback cost and support advanced energy management decisions
- Demand response opportunities will be targeted in the larger facilities, particularly as part of monitoring-based retro-commissioning efforts, where controls to facilitate demand response efforts would be installed
- As required, utility distributed generation programs require that residential and nonresidential customers receive an energy audit before being eligible to receive solar funding

Table 3 ("IOUs' Audit/Survey Status") details the IOUs' existing and proposed energy audit and survey tools. Section 4B of this PIP describes the proposed

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Progressive Energy Audit Tool (formerly UEAT) as required by D.09-09-047 Ordering Paragraph. These audits tools provide customers with EE and DR recommendations and will also provide general feasibility assessments for DG. IOUs' will continue to offer the detailed integrated audits for customers with loads greater than 500 kW and integrated audits as appropriate. Similar level of audits will continue to be offered to medium and large customers. As the tool is developed, PEAT will incorporate energy savings estimates using the most up to date values provided in the Database for Energy Efficiency Resources (DEER).

~~It is expected that DR, EE and 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 the audit tool development and implementation, but 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 are working to standardize a statewide audit and survey tools portfolio and customize audit recommendations based on customer profiles, operating characteristics, market sector potential and cost-effectiveness of the offering. This process will consider more meaningful ways to implement the audit and survey tools for the customer as well as identify choices of potential measures in various DSM programs or technologies specific to a particular customer.

Development of standardized energy survey and audit tools will occur in the following areas:

Integration:

- Incorporate electricity/gas, energy efficiency, demand response and self-generation analysis in all tools and single customer report for each type of audit, as appropriate
- Incorporate water conservation analysis in association with electricity and gas savings
- Incorporate green house gas reduction calculators and/or conversion tables, as applicable
- Refer to or incorporate in audit tools applicable rate analysis modules as appropriate
- Incorporate IOUs' adopted and recommended emerging technologies, as appropriate
- Coordination with the nonresidential Continuous Energy Improvement (CEI) sub-program

Compliance:

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- Modify existing tools (as technically feasible) and incorporate in new tools necessary modules and analytics that meet requirements of Appendix C of the October 30, 2008 Assigned Commissioner and Administrative Judge's Ruling Requiring Supplemental Filings (Ruling) in A.08-07-021 et al, or other requirements addressed by regulatory proceedings
- Enhance existing audit tools to more explicitly demonstrate the cost benefits of energy efficiency prior to solar system installation and its sizing

Standard Resources:

IOUs will review and adopt a common set of external resources, engineering and energy management tools that provide customers with a consistent methodology of energy conservation and financial benefits, and lead customers to invest in recommended projects. Such tools may include, but are not limited to:

- DOE Best Practices Tools
- E-Quest,
- SPC Calculator,
- AirMaster,
- MotorMaster,
- Energy Star Portfolio Manager,
- DEER, and
- IOU work papers.

Advanced Technologies:

- Research and incorporate analytics that address customer behavior changes as a greater potential for overall energy usage reduction in certain markets. The analytics may include traditional benchmarking tools, such as ENERGY STAR®, as well as a new generation of tools and databases available on the market.
- Research and incorporate analytics that address economic benefits for IDSM implementation. Such tools may include calculation of lost opportunities if recommended measures are not implemented in a timely manner.
- Implementation of these technologies may become available as infrastructure is built at each IOU.

b. Tasks and Timelines:

- Q1 to Q2 2010, the IOUs will begin assessing tools that meet customer requirements and the requirements defined in Appendix C.⁶ This process will occur in several stages starting with identifying system and software requirements (which may include solicitation of a third party energy audit systems designer). Next, the IOUs will need to identify the specific detail requirements of the tool, necessitating extensive collaboration among the IOUs and various stakeholders. Each of the IOUs will have a detail audit tool development plan ready for

⁶ Appendix C requires the following audit characteristics –Verifiable, Site-Specific, User-friendly, Comprehensive, Accessible, Compatible with CSI program

initiation (including but not limited to contracting with a system designer) by end of Q2 2010.

- In Q2 2010 the IOUs will develop a detailed plan for initiating developments of the Progressive Energy Audit Tool (e.g., vendor solicitation, scope of audit, etc.). PEAT development will be underway in Q3 2010 (see Section 4B of this PIP for more on PEAT).
- IOUs expect to have a beta integrated tool for Residential and Small Business that meets the needs of Appendix C by Q4 2011
- In 2010, enhancements will be made to existing audit tools that will include solar requirements or be a useful tool for customers pursuing solar who need to size their solar equipment appropriately based on the EE/DR potential of the building or residence to minimize service gaps while the new tool is under development.
- Timeline for these enhancements are shown for each utility in Table 3.

Progressive Energy Audit Tool (PEAT) Description

a. Description:

Currently, PG&E, in collaboration with SCE, SDG&E, SCG and the IDSM Task Force, is developing an enhanced Web-based audit tool called the Progressive Energy Audit Tool (PEAT formerly UEAT). See Table 3 for timeline.

The PEAT will be 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.

PEAT will be accessible for residential and nonresidential customers with demand of less than 200 kW. The audit tool will be the principal conduit to provide IDSM information to customers and will replace several survey/audit products and associated software programs that currently provide data collection, data entry, and customer report generation.^[7] Additionally, the tool will be capable of generating customer reports that include specific information on the costs and benefits of IDSM programs.

Projected Design and Functionality

Evolution of new technologies and analytics available on the market and being developed by various firms and organizations provide great opportunity for developing new energy analysis applications. Utilization of these applications and data based on these technologies provides much greater opportunity for developing energy audit modules and generate more accurate information than traditional energy audit tools available on the market. The traditional approach has been a backbone concept for building PEAT as well. At the statewide IDSM Audit Tool and IDSM Task Force

[7] The CSI program is currently using these various audit tools for residential and small commercial applications.

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meetings on November 5, 2009 parties agreed that traditional audit tools may become obsolete when advanced technologies utilizing interval data from smart meters and Smart Grid applications are developed and become available.

PEAT will be developed within continuous customer engagement strategy and concept concentrating first on behavioral changes that may be quantified and recommended using customer energy usage profile, available baseline data (RASS, CEUS, etc.) along with publicly available information and internal/external databases. Such module may be developed using no or very minimal customer input. Customers will be presented with individual energy usage reports for various periods addressing trends and potential behavior changes and no/low cost improvements. The tool creates individual customer profiles and compares this profile data with similar buildings' energy usage and patterns. Rebate and incentive offerings and information on EE, DR and solar/distributed generation opportunities will also be presented to the customer via utility websites or mail.

As more information becomes available during ongoing communication with the customer, the tool will update the customer profile based on enhanced data analysis. The tool will also determine customer interest and implementation criteria, and will provide the top 2-4 specific customized and quantitative IDSM measure recommendations.

As interaction with the IOU continues, a number of residential and nonresidential customers may request more detailed and comprehensive analysis of their energy usage and potential improvements that they can make to reduce their energy costs and contribute to sustainable green environment. These customers are likely to be completely engaged and provide complete information on their usage patterns, including the type of appliances and equipment installed within their respective home or building. For such customers, the PEAT will complete their customer profile, generate energy balance opportunities, and provide a full spectrum of energy efficiency, demand response and solar/distributed generation recommendations.

Development and implementation of the PEAT will require utilization of a new generation of software engines and analytics – essentially a new approach to energy audit development. The IOUs will seek to engage industry/ market stakeholder research aiming investigation of such analytics available on the market including those that are being developed by nationwide organizations. Preliminary research performed by PG&E in 2009 indicated that there are many firms and institutions working on development of such tools but no tools are available for immediate deployment. Therefore, the entire development of PEAT should be performed in phases, evolving as new internally or externally developed tools become available for acquisition. Future timeline roll out of PEAT based on smart grid, smart meter roll out at IOUs, building customer interfaces and applications may extend the development beyond the three year program cycle.

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The IOUs plan to make technically feasible modifications to their current survey and audit tools as an interim solution until the launch of the new enhanced tools. These short term modifications will be designed to meet the requirements of audits in conjunction with solar projects under SB 1 and integrated program offerings.

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 the audit tool development and implementation, but no funding is provided by the Solar / DG programs.

b. Tasks and Timelines:

- IOUs expect to have an integrated tool for Residential and Small Business that meets the needs of the October 2008 Ruling, Appendix C built and tested by Q4 2011 and ready for full implementation by 2012
- See Table 3 for PEAT implementation plan
- As part of the quarterly reporting of IDSM activities, the IOUs will provide detailed status updates on the progress of the development and the respective budget detail.

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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, but will track integrated program offerings and integrated projects with customers.

Part of this effort will include utilizing new integrated audit tools being developed by IOU market sector programs that provide baseline data and information regarding 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 the 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 these offerings. 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 quarterly reports on IDSM activities to ED. Additionally, the proposed

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IDSMD cost effectiveness framework will be applied in real-time to the pilot programs within this funding cycle.

In addition to the formal Task Force, the IOUs may establish internal teams who will serve as the liaisons between the Task Force and the various, sector-specific integrated pilots, projects, programs, and activities. The internal teams will actively participate in discussions of the 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. IDSMD is a regular agenda item of management reviews within each IOU and information and lessons learned can be shared with the other IOUs.

As the IOUs are conducting IDSMD 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 IDSMD 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.

b. Tasks and Timelines:

- In 2010 and ongoing, the Task Force will develop tracking systems for integrated pilots, programs and activities, in concert with the established pilot program performance metrics
- In 2010 and ongoing, the Task Force will work with other statewide teams to identify opportunities and projects to target where there are integrated offerings and projects underway.
- Results of these efforts will be included in quarterly tracking reports described in section 6, below.
- The Task Force will regularly review various pilots, programs and activities.

6. Develop Regular Reports on progress and recommendations to the Commission.⁸

a. Description:

The Task Force will develop a communications strategy that will include regular meetings, reports, following an agreed upon template, on efforts to provide the tracking activities and plans going forward to the CommissionED.

b. Tasks and Timelines:

- The Task Force will report out, as needed, in meetings and discussions with the Energy Division

⁸ Heading remains consistent with CPUC directive in D. 09-09-047.

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

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. At present the IOUs have all established internal DSM integration teams within EE, and have established or will be establishing internal Integrated Teams with representatives from staff of different groups across the companies, including EE, DR, Low Income Energy Efficiency (LIEE), distributed generation (DG)/Solar, green programs, marketing and delivery channels. A roster of all IOU ~~integration~~-Task Force members, including internal integration teams, will be provided to ED and resubmitted as members change. -This strategic planning function will work across all EE and other DSM areas to ensure consistency and integration, and that the short and mid-term actions of the IOUs meet the long term goals of the Strategic Plan. The Task Force may be staffed by people who are familiar with strategic planning efforts and leading the internal integration teams.

b. Tasks and Timelines:

The IOUs will set up internal Integration teams that meet at least monthly with IOU staff from EE, DR, DG, LIEE, Marketing and Delivery channels such as Service and Sales (account reps.) and Third Party / Government Partnerships. A roster of all IOU ~~integration~~-Task Force members, including internal integration teams, will be provided to ED and resubmitted as members change.

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 LIEE 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/LIEE) 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

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recommendations to EE, DR, LIEE 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 quarterly 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.

b. Tasks and Timelines:

- The Task Force will work in 2010 and on an ongoing basis with the larger 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 2010 and on an ongoing basis, the Task Force will conduct internal review of local utility marketing efforts where there are opportunities to integrate messages and campaigns, resources, and program offerings that promote demand side integration of DR, EE, and DG resources.
- Beginning no later than Q2 2010, the IOUs will share information with the Task Force on local IOU integrated marketing, training, and education efforts.

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 people 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. Depending on each utility's internal integration coordination process, statewide utility Task Force members are more likely to represent larger internal utility integrated teams. 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,

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WE&T, and New Construction. The Task Force will develop a roster of IOU representatives on the statewide IOU IDSM Task Force in Q1 of 2010.

The intent of the governance of the Task Force is not to be exclusive, but effective for the IOUs to integrate their approved programs in accordance with Commission's guidelines. To the extent that it is appropriate and effective, the IDSM Task Force will expand participation to all potential stakeholders through at least one workshops per year to solicit input from the broader group of participants in a fair and equitable manner.

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The Task Force will coordinate and work with Energy Division staff through monthly phone calls and quarterly 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.

2. Identify and describe progress through regular meetings and quarterly reports (described in prior sections of this PIP) to date and current programs related to:
 - Existing utility activities, efforts, programs and pilots,
 - IDSM best practices, and
 - IDSM metrics (including pilots) and cost effectiveness methodologies
3. Identify key issues affecting successful integration and develop a timeline and structure for prioritizing identified action items and reports consistent with descriptions in prior sections of this PIP.

The Task Force will identify key issues that affect the successful integration of DSM measures in utility programs. At a minimum, key issues include cost-effectiveness, both internal and external barriers to integration, 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. Task Force meetings can include a specific timeline and structure to track progress on identifying and deploying solutions.

4. 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.
5. Develop proposals for policy and program initiatives necessary to forward IDSM.
6. Establish program-funding protocols.

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- 7. Identify and recommend adoption of enabling/supporting policies for inclusion in appropriate DSM programs and report consistent with descriptions in prior sections of this PIP.
- 8. Identify and propose changes to inhibiting policies and metrics and report consistent with descriptions in prior sections of this PIP.

Tasks and Timelines

Most of the goals defined above will involve ongoing efforts of the Task Force. Timelines associated with the discrete tasks are described in earlier sections of this PIP and in Table 2.

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, ~~IDSM service~~ 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)

~~Task and timeline needed (?)~~

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.

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 ~~are~~ is available.

4B) Progressive Energy Audit Tool (PEAT) Description

a. Description:

~~Currently, PG&E, in collaboration with SCE, SDG&E, SCG and the IDSM Task Force, is developing an enhanced Web-based audit tool called the Progressive Energy Audit Tool (PEAT formerly UEAT). See Table 3 for timeline.~~

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The PEAT will be 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.

PEAT will be accessible for residential and nonresidential customers with demand of less than 200 kW. The audit tool will be the principal conduit to provide IDSM information to customers and will replace several survey/audit products and associated software programs that currently provide data collection, data entry, and customer report generation.^[9] Additionally, the tool will be capable of generating customer reports that include specific information on the costs and benefits of IDSM programs.

Projected Design and Functionality

Evolution of new technologies and analytics available on the market and being developed by various firms and organizations provide great opportunity for developing new energy analysis applications. Utilization of these applications and data based on these technologies provides much greater opportunity for developing energy audit modules and generate more accurate information than traditional energy audit tools available on the market. The traditional approach has been a backbone concept for building PEAT as well. At the statewide IDSM Audit Tool and IDSM Task Force meetings on November 5, 2009 parties agreed that traditional audit tools may become obsolete when advanced technologies utilizing interval data from smart meters and Smart Grid applications are developed and become available.

PEAT will be developed within continuous customer engagement strategy and concept concentrating first on behavioral changes that may be quantified and recommended using customer energy usage profile, available baseline data (RASS, CEUS, etc.) along with publicly available information and internal/external databases. Such module may be developed using no or very minimal customer input. Customers will be presented with individual energy usage reports for various periods addressing trends and potential behavior changes and no/low cost improvements. The tool creates individual customer profiles and compares this profile data with similar buildings' energy usage and patterns. Rebate and incentive offerings and information on DR and solar/distributed generation opportunities will also be presented to the customer via utility websites or mail.

As more information becomes available during ongoing communication with the customer, the tool will update the customer profile based on enhanced data analysis. The tool will also determine customer interest and implementation criteria, and will

[9] The CSI program is currently using these various audit tools for residential and small commercial applications.

provide the top 2-4 specific customized and quantitative IDSM measure recommendations.

As interaction with the IOU continues, a number of residential and nonresidential customers may request more detailed and comprehensive analysis of their energy usage and potential improvements that they can make to reduce their energy costs and contribute to sustainable green environment. These customers are likely to be completely engaged and provide complete information on their usage patterns, including the type of appliances and equipment installed within their respective home or building. For such customers, the PEAT will complete their customer profile, generate energy balance opportunities, and provide a full spectrum of energy efficiency, demand response and solar/distributed generation recommendations.

Development and implementation of the PEAT will require utilization of a new generation of software engines and analytics — essentially a new approach to energy audit development. The IOUs will seek to engage industry/ market stakeholder research aiming investigation of such analytics available on the market including those that are being developed by nationwide organizations. Preliminary research performed by PG&E in 2009 indicated that there are many firms and institutions working on development of such tools but no tools are available for immediate deployment. Therefore, the entire development of PEAT should be performed in phases, evolving as new internally or externally developed tools become available for acquisition. Future timeline roll out of PEAT based on smart grid, smart meter roll out at IOUs, building customer interfaces and applications may extend the development beyond the three year program cycle.

The IOUs plan to make technically feasible modifications to their current survey and audit tools as an interim solution until the launch of the new enhanced tools. These short term modifications will be designed to meet the requirements of audits in conjunction with solar projects under SB 1 and integrated program offerings.

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 the audit tool development and implementation, but no funding is provided by the Solar / DG programs.

b. Tasks and Timelines:

- IOUs expect to have an integrated tool for Residential and Small Business that meets the needs of the October 2008 Ruling, Appendix C built and tested by Q4 2011 and ready for full implementation by 2012
- See Table 3 for PEAT implementation plan
- As part of the quarterly reporting of IDSM activities, the IOUs will provide detailed status updates on the progress of the development and the respective budget detail.

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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.

a) Quantitative Baseline and Market Transformation Information

The IOU Integration Task Force will track integrated projects and activities and will begin to identify areas where integrated projects are beginning to be part of a successful customer approach. An IOU-sponsored process evaluation will be designed and initiated in order to formalize tracking efforts and establish a basis for determining the efficacy of various integration approaches as well as provide feedback for cost effectiveness and EM&V protocol development proposals (based on the adopted EM&V plans for this program cycle).

b) Market Transformation Information

The Strategic Plan recognizes that the process of transformation is harder to define than its end state, and that new programs are needed to support the continuous transformation of markets around successive generations of new technologies¹⁰. The Task Force will work closely with the DSM program leads, Emerging Technologies group, marketing team, WE&T and EM&V team to identify projects and approaches and to develop models, outreach, and training that will ~~lead a~~contribute to the transformation of the market. The IOUs commit to supporting progress ~~in toward~~ achieving market transformation ~~in growing the approaches, programs and training options targeting integrated offerings in the areas affected by IOU DSM programs/presence. An objective of the Task Force will be to begin collecting a small set of DSM market transformation (MT) metrics that could serve as a starting point for a broader DSM market transformation assessment in the future. Over time, the baseline metrics will likely be expanded and refined as a result of program assessment studies, improved evaluation tools, increased market intelligence, etc. MT data the Task Force will collect should be collectively~~ decided upon by the Task Force, but examples of prospective data include reporting on increased DSM training initiatives (WE&T) offered in secondary or post-secondary education, and ET efforts aimed at increasing the adoption of EE measures in California or nationwide (and adoption rates where applicable). The PEAT will provide valuable MT baseline information. The Task Force will determine what types of metrics should be tracked relative to the triggers of the integrated audit tool.

c) Program Design to Overcome Barriers

As stated in the Strategic Plan, “Historically, demand side management (DSM) options for energy consumers have been “siloeed” 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

¹⁰ California Public Utilities Commission (2008) California Long Term Energy Efficiency Strategic Plan, p.5 Available at <http://www.californiaenergyefficiency.com/docs/EEStrategicPlan.pdf>

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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

Statewide Program Performance Metrics (PPM) are being developed and will be submitted in a separate joint utility Advice Letter requiring PPMs for all statewide programs.

e) Advancing Strategic Plan goals and objectives

~~This program is specifically intended to address the near term action item to establish an ongoing working group.¹¹ In support of the Strategic Plan’s,¹² the DSM Pilot programs the IOUs will be evaluating a number of components that will lead to successful DSM integration, consistent with the Strategic Plan strategies. For example, the IDSM Task Force will be working on adopting an integrated cost effectiveness tool, as well as EM&V protocols for integrated programs. These initiatives will help inform future program development and policy for targeting optimal integration opportunities. Additionally, the Task Force will establish both SW and internal IOU integration plans intended to develop a long-term, coordinated approach to effective DSM utilization. The Commission has approved various Emerging Technologies (ET) programs in both Energy Efficiency and Demand Response that review end uses and technologies that could promote IDSM. In support of the Strategic Plan, 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 forums for 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 energy savings opportunities.~~

6) Program Implementation

a) Statewide IOU Coordination

This is a statewide program.

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

~~Not applicable~~

¹¹ California Long Term Energy Efficiency Strategic Plan, Section 8, page 73.

¹² California Long Term Energy Efficiency Strategic Plan, Section 8.4 pp. 72-73.

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 important 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.

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iii. Marketing materials and message

~~Not applicable / see Marketing Plan section (c) below~~
The Task Force will not be providing direct marketing services, but the coordination of marketing will be an integral part of integrated offerings approaches included in each individual approach. In addition, as described in Task 8, above, 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 education efforts directing customers to utility local integration efforts and offerings.

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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.

~~This program does not interact, per se, with other programs or organizations; however, information from other organizations and programs will be used in the program. 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 offerprovide integrated services. -at some point in the future, or will at least explore these options now. Specifically with all the DSM solutions providers.~~ 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

Similar to item iv., above, the IDSM Task Force will coordinate with all IOU SW programs and will interact with other programs/ organizations, municipalities and DSM solutions providers to offerprovide integrated services. services at some point in the future, or will at least explore these options now. Future program milestones, lessons learned, and best practices can be shared with outside stakeholders to further IDSM activity outside of IOU programs.
~~Not applicable~~

b) Program Delivery Mechanisms

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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 included in each individual approach. In addition, as described in Task 8, above, 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 education efforts directing customers to utility local 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 an establishment of Integrated Best Practices.

e) Innovation

The context of this PIP and effort is entirely innovative in that this statewide effort has not been undertaken before by the IOUs. Innovative aspects of this program include coordination with the development of integrated audit tools, integrated cost effectiveness and EM&V approaches that cross over multiple proceedings. In addition, the 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. However, the individual utilities are currently working on integrated approaches locally to meet customer needs on a comprehensive, solutions-based level.

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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. 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

Integrated pilots that the utilities will be reviewing as part of this process are included in individual utility applications in their Integration PIPs and Chapters. As described in section 4.b.5, above and in Table 2, integrated pilots and activities will be identified and

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tracked beginning in Q1 of 2010 with timely approval of these and other Advice Letter filings, including the pilot Advice Letters.

i) EM&V

As described in prior sections of this PIP and in Table 2, the Task Force will coordinate with the IOU and ED EM&V resources to develop a proposal of appropriate metrics for assessing integration. 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. In addition, a public workshop will be held to solicit public input. After input has been incorporated, the final proposed protocols will be submitted to the Commission-ED for further consideration.

The Program Performance Metrics identified for this pilot will be developed in coordination with the broader programs metrics development effort as described in D.09-09-047.

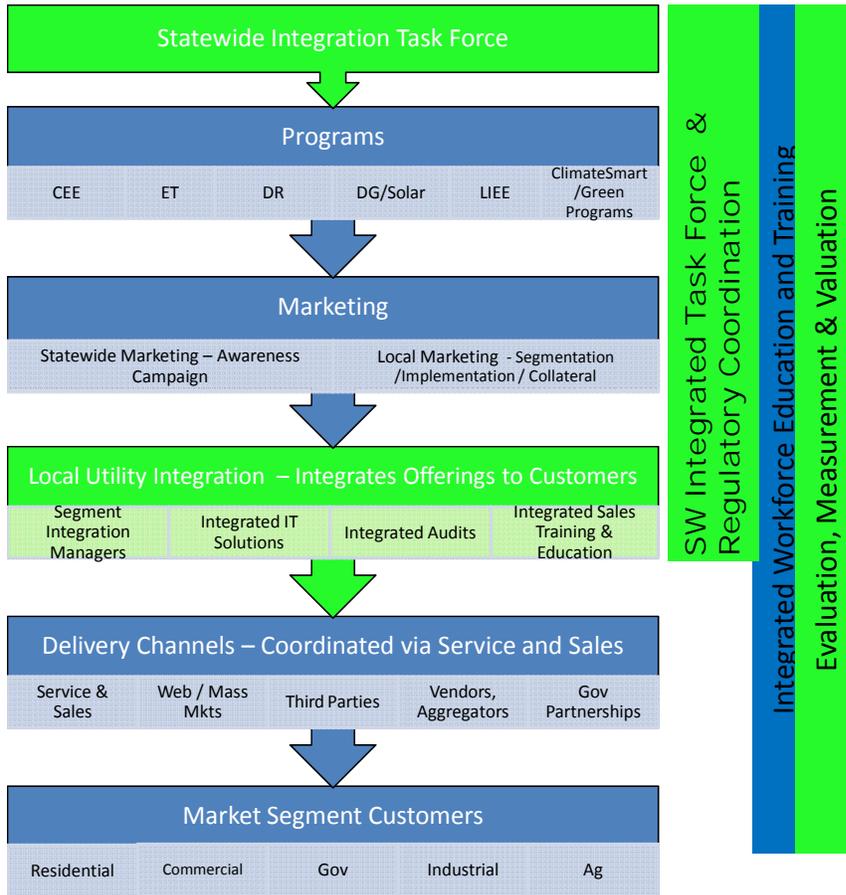
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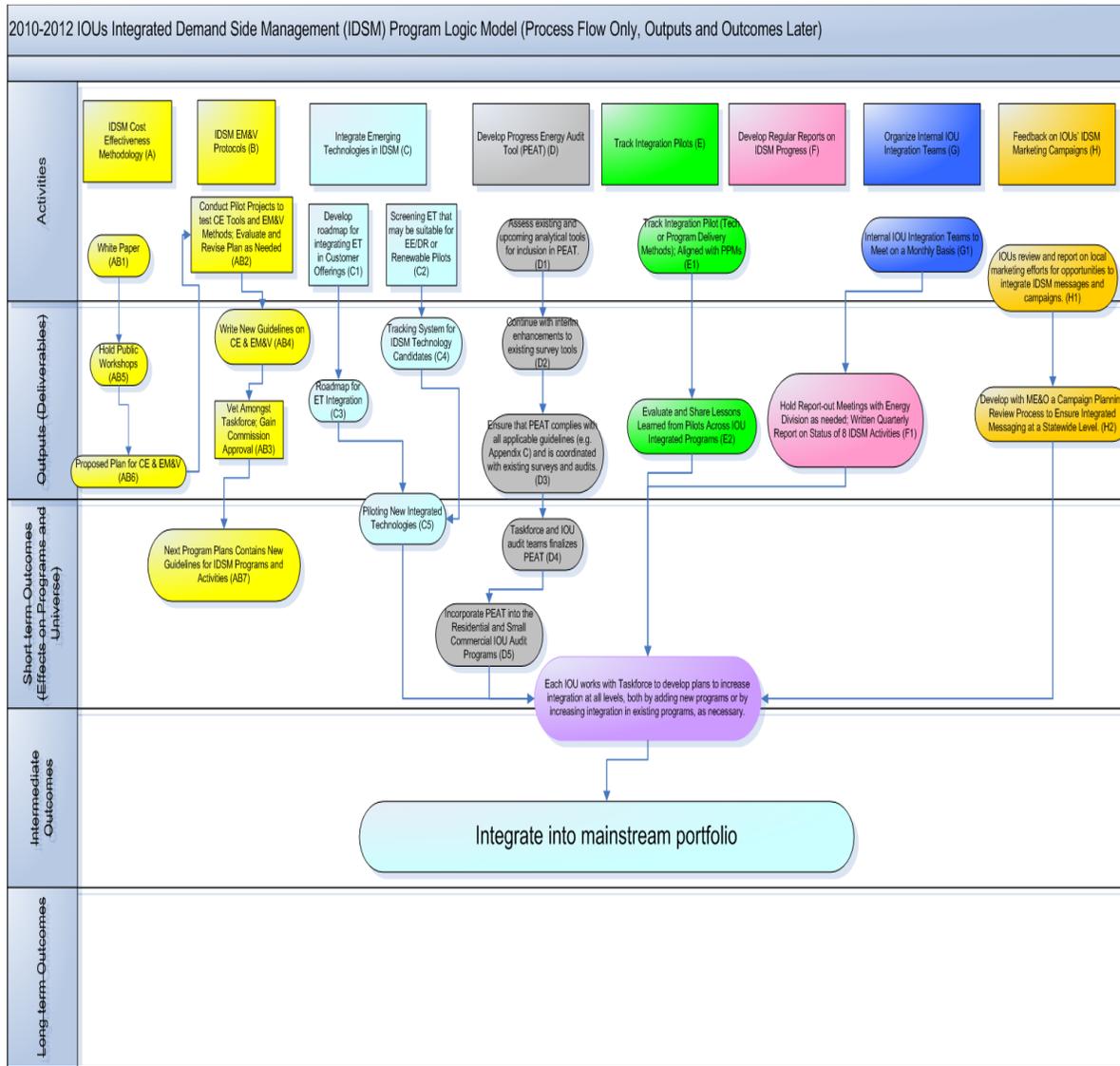
7) Diagram of Program

Program Diagram – IDSM Task Force



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8) Program Logic Model



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Table 2 – Proposed IDSM Compliance and Timeline

California Investor Owned Utilities

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2010-2012 Energy Efficiency Plans

January 22 February 23, 2010

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Note: Timelines are dependent on the timely approval of this Advice Letter

Directive from CPUC Decision	IOU Strategy	Q1 2010	Q2 2010	Q3 2010	Q4 2010	2011-2012
1. Development of a proposed method to measure cost-effectiveness for integrated programs 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.	To effectively integrate DSM program design, a set of internally consistent cost-effectiveness methodologies need to be developed for integrated projects. The Task Force proposes to work with Commission approved consultants and to coordinate a workshop to gather stakeholder feedback to address the issue of cost effectiveness under an integrated delivery of EE, DR, CSI and DG programs and to establish a consensus on a framework for developing an integrated cost effectiveness methodology.	<ul style="list-style-type: none"> The Task Force will launch a phased approach to developing appropriate integrated cost effectiveness protocols for ISDM programs and projects. Phase 1 - Will include coordinating the plan development that proposes to incorporate ISDM cost effectiveness framework into the CPUC DR and DG cost effectiveness proceedings. Review filings / testimony, identify barriers 	<ul style="list-style-type: none"> Continuation of Phase 1 Phase 2 - Will involve public review of the cost effectiveness white paper 	<ul style="list-style-type: none"> Continuation of Phase 2 Phase 3 - Will include a progress plan for collecting necessary pilot program data for evaluating cost effectiveness and developing cost-effectiveness guidelines. 	<ul style="list-style-type: none"> Phase 3 - Will include a progress plan for collecting necessary pilot program data for evaluating cost effectiveness and developing cost-effectiveness guidelines. 	<ul style="list-style-type: none"> Phase 4 will be ongoing and will focus on using the new tool to evaluate the cost effectiveness of the ISDM pilots, projects, programs and activities as identified by the ISDM Task Force, and will be tracked through regular reporting in the quarterly reports Will establish and test a cost-effectiveness methodology that can then be fully implemented in the next portfolio filing.
2. Development of proposed measurement and evaluation protocols for ISDM programs and projects.	Similar to the cost effectiveness methodology, final EM&V protocols for the 2010-2012 EE program cycle are pending and awaiting final decision, and protocols for DR are established and currently in place. The Task Force will coordinate with the IOU and ED EM&V resources to develop a proposal of appropriate metrics for assessing integration.	<ul style="list-style-type: none"> The Task Force will conduct a phased approach to developing appropriate EM&V protocols for ISDM programs and projects. Review filings / testimony, identify barriers 	<ul style="list-style-type: none"> Phase 1 - Will include preparation of the white paper on EM&V metrics, and will include a literature review on appropriate near-term resource and long-term market transformation metrics, attribution issues, policy concerns and other requirements, as necessary. 	<ul style="list-style-type: none"> Phase 2 - Will involve public review of the white paper. Phase 3 - Will include a progress plan for establishing EM&V protocols and developing EM&V guidelines 	<ul style="list-style-type: none"> Phase 3 - Will include a progress plan for establishing EM&V protocols and developing EM&V guidelines 	<ul style="list-style-type: none"> Phase 4 will be ongoing and will focus on applying the EM&V methodology to selected ISDM pilots, projects, programs and activities as identified by the ISDM Task Force and moving the integrated offering towards a common metric and tracked through regular reporting in the quarterly reports Will establish and test EM&V methodologies that can be used in the next portfolio filing
3. Review ISDM enabling emerging technologies for potential inclusion in integrated programs.	The ET program will undertake a coordinated effort to support innovation in EE, DR, and renewable / self-generation. The ISDM Task Force will be tracking the results of the ET program's technology integration and helping to chart its future course. Working with the IOUs' ET programs' data sources, the Task Force will also track inclusion of integrated ET products into customer projects.	<ul style="list-style-type: none"> IOUs individually and the Task Force as a group 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. 	<ul style="list-style-type: none"> Task Force will develop a roadmap for incorporating integrated technologies into customer offerings including the identification of technology, possible plans for pilot program opportunities, and an approach to overcoming policy or program barriers that once prevented implementation. 	<ul style="list-style-type: none"> Tracking emerging technologies - Will be ongoing 	<ul style="list-style-type: none"> Tracking emerging technologies - Will be ongoing 	<ul style="list-style-type: none"> Tracking emerging technologies - Will be ongoing
4. Development of cross-utility standardized integrated audit tools using IOUs' developed audits as a starting point.	IOUs will continue to offer the detailed integrated audits for customers with loads greater than 500 kW and integrated audits as appropriate. Similar level of audits will continue to be offered to medium and large customers. The IOUs are working to standardize a statewide audit and survey tools portfolio and customer audit recommendations based on customer profiles, operating characteristics, market sector potential and cost-effectiveness of the offering.	<ul style="list-style-type: none"> Stage 1 - IOUs will begin identifying system and software requirements Stage 2 - The IOUs will need to identify the specific detail requirements of the tool, necessitating extensive collaboration among the IOUs and various stakeholders. Enhancements will be made to existing tools 	<ul style="list-style-type: none"> Stage 3 - Each of the IOUs will have a detail audit tool development plan ready for initiation Continue assessing, building and enhancing tools 	<ul style="list-style-type: none"> Continue assessing, building and enhancing tools. Develop detailed plan for initiating development of PEAT (e.g., vendor solicitation, scope of audit, etc.) 	<ul style="list-style-type: none"> Continue assessing, building and enhancing tools PEAT development underway 	<ul style="list-style-type: none"> IOUs expect to have a beta integrated tool for Residential and Small Business that meets the needs of Appendix C by Q4 2011
5. Track integration pilot programs to estimate energy savings, develop best practices 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	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, but will track integrated program offerings and integrated projects with customers.	<ul style="list-style-type: none"> Task Force will develop tracking systems for integrated pilots, programs and activities. (Ongoing) Task Force will work with other Statewide teams to identify opportunities and projects to target where there are integrated offerings and projects underway. (Ongoing) 	<ul style="list-style-type: none"> Results of efforts will be included in quarterly tracking reports Regularly review various pilots, programs and activities. 	<ul style="list-style-type: none"> Results of efforts will be included in quarterly tracking reports Regularly review various pilots, programs and activities. 	<ul style="list-style-type: none"> Results of efforts will be included in quarterly tracking reports Regularly review various pilots, programs and activities. 	<ul style="list-style-type: none"> Results of efforts will be included in quarterly tracking reports Regularly review various pilots, programs and activities.
6. Develop Regular Reports on progress and recommendations to the Commission.	The Task Force will develop a communications strategy that will include regular meetings, reports, following an agreed upon template, on efforts to provide the tracking activities and plans going forward to the Commission.	<ul style="list-style-type: none"> Task Force will report out, as needed, in meetings and discussions with the Energy Division. Consistent with the IOU quarterly reporting requirements, each utility will provide a written report that will include updates on the status/progress on the eight ISDM activities. (Ongoing) 	<ul style="list-style-type: none"> Task Force will report out, as needed, in meetings and discussions with the Energy Division. Provide a written report that will include updates on the status/progress on the eight ISDM activities. (Ongoing) 	<ul style="list-style-type: none"> Task Force will report out in meetings and discussions with the Energy Division. Provide a written report that will include updates on the status/progress on the eight ISDM activities 	<ul style="list-style-type: none"> Task Force will report out in meetings and discussions with the Energy Division. Provide a written report that will include updates on the status/progress on the eight ISDM activities. 	<ul style="list-style-type: none"> Task Force will report out in meetings and discussions with the Energy Division. Provide a written report that will include updates on the status/progress on the eight ISDM activities.
7. Facilitate internal utility ISDM strategies by establishing internal Integration Teams with staff from EE, DR, DG, marketing, and delivery channels.	IOUs have established or will be establishing internal Integrated Teams with representatives from staff of different groups across the companies, including EE, DR, LIEE, distributed generation (DG), Solar, green programs, marketing and delivery channels. This strategic planning function will work across all EE and other DSM areas to ensure consistency and integration, and that the short and mid-term actions of the IOUs meet the long term goals of the Strategic Plan.	<ul style="list-style-type: none"> IOUs will set up internal Integration teams that meet at least monthly with IOU staff from EE, DR, DG, LIEE, Marketing and Delivery channels such as Service and Sales (account reps.) and Third Party / Government Partnership. 	<ul style="list-style-type: none"> Internal Integration teams continue to meet at least monthly 	<ul style="list-style-type: none"> Internal Integration teams continue to meet at least monthly 	<ul style="list-style-type: none"> Internal Integration teams continue to meet at least monthly 	<ul style="list-style-type: none"> Internal Integration teams continue to meet at least monthly
8. Provide feedback and recommendations for the IOUs integrated marketing campaigns including how the working group will ensure that demand response marketing programs approved as category 9 programs are coordinated with energy efficiency integrated marketing efforts.	Regular coordination meetings currently exist to review EE, DR, DG and LIEE results with internal marketing management and discuss course changes that might be needed. 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, LIEE and DG program management responsible for developing marketing ISDM strategies for use in regular reviews and reports in addition to ad hoc contacts to plan and modify programs.	<ul style="list-style-type: none"> Task Force will work in 2010 and on an ongoing basis with the larger statewide ME&O effort to ensure integrated messaging and coordination at a statewide level Task Force will conduct internal review of local utility marketing efforts where there are opportunities to integrate messages and campaigns. 	<ul style="list-style-type: none"> Task Force will share information on local integrated marketing, training and education efforts for all customer classes to develop best practices. Task Force will share local integrated marketing efforts and its quarterly "success stories" in its quarterly reports 	<ul style="list-style-type: none"> The IOUs work with SW ME&O efforts and will share information with the Task Force on local IOU integrated marketing, training, and education efforts. (Ongoing) 	<ul style="list-style-type: none"> The IOUs work with SW ME&O efforts and will share information with the Task Force on local IOU integrated marketing, training, and education efforts. (Ongoing) 	<ul style="list-style-type: none"> The IOUs work with SW ME&O efforts and will share information with the Task Force on local IOU integrated marketing, training, and education efforts. (Ongoing)

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Table 3 IOUs' Audit/Survey Status

IOUs' Existing and New Energy Audit/Survey Tools							
IOU	Target Audience	Sector/Audit Type	Description	Status/Enhancements	2010	2011	2012
Residential							
All	Residential	On-line Survey	On-line and Mail surveys will be coordinated statewide, and all surveys provide substantially the same questions and recommendations. Surveys provide benchmarking report, bill disaggregation by end uses and appliances, and recommends EE improvements	Existing. The analysis of the tools will be expanded to include water, applicable DR and Self-generation, including Solar calculator addressing benefits of EE and proper Solar system sizing	X	X	
All	Residential	Mail-in Survey			X	X	
SCE, PG&E, SDG&E	Residential	Telephone Survey			X	X	
Nonresidential							
All	Very small to medium customers (<200kW, <50,000 Therms)	Remote or Basic Surveys. Includes on-line, mail and phone surveys	These typically remote audits will offer customer recommendations in a report with estimated project costs and savings, and a roadmap for project implementation. Basic audits are also offered on-site in conjunction with marketing campaigns, targeted strategies and in response to specific customer requests.	Existing. Needs enhancements. The analysis of the tools will be expanded to include water, applicable DR and Self-generation, including Solar calculator addressing benefits of EE and proper Solar system sizing	X	X	
All	Small to Medium customers (<200kW, <50,000 Therms)	On-site survey	Basic audits offered on-site in conjunction with marketing campaigns, targeted strategies and in response to specific customer requests. Analysis are based on DEER or workpaper values and provide recommendations for energy conservation and efficiency measures and refer to specific rebate information.	Existing. The analysis of the tools will be expanded to include water, applicable DR and Self-generation, including Solar calculator addressing benefits of EE and proper Solar system sizing	X	X	
All	Medium to Large Customers (200kW-500kW, 50,000-250,000 Therms))	Integrated Energy Audits (IEA - Medium)	The IEA is an onsite audit performed by qualified IOU personnel and/or by qualified engineering contractors. Key deliverables include EE, DR and DG. Detailed description of recommended measures, energy savings, available rebates and incentives are provided separately and/or in summary charts.	Existing. Upgrade with typical water, industrial and agriculture measures as well as implementation of enhanced analysis of DR measures and programs, and DG systems	X	X	X
All	Large customers (>500 kW, >250,000 Therms) and medium complex facilities	Integrated Energy Audit (IEA - Large)	The IEA is on-site audit performed by qualified engineering contractor or IOU engineering personnel. Key deliverables include comprehensive analysis of EE, DR and information and technical feasibility for DG. Costs of implementation, energy savings, available incentives and implementation paybacks and ROI/IRR are provided in details and summary charts.	Existing. Incorporate water analysis	X		
Progressive Energy Audit Tool, New Development							
All	Residential and Small to Medium Customers, (<200 kW)	Progressive Energy Audit Tool ("PEAT")	IOUs are developing the tool for deployment in all IOU territories. This tool is intended to be flexible enough to be used in multiple delivery channels - on line, mail and phone. It will be the primary tool to provide energy conservation, energy efficiency, demand response, and solar/self-generation and comparative information and analyses.	In Development*. The following are projected development stages:			
				Define IOU roles and responsibilities	Q1		
				Establish cross-IOU Task Force that will monitor and coordinate further developments	Q2		
				Conduct research for available or being developed analytics targeting comprehensive modules for behavior changes, interval meter data analysis and comparative reports	Q1-Q2		
				Develop business and functional requirements	Q3-Q4		
				Design integrated modules and interfaces		Q1	
				Build and testing		Q2-Q3	
			Completion and launch by IOUs		Q4	Q1-Q3	

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Notes:

* Preliminary estimate of the total budget for building and launching tools similar to PEAT is approximately \$5MM. Precise budget amounts will be revealed as IOUs complete research, initiate scopes of work, vendor solicitation, etc.