March 12, 2010

Megan Caulson
Regulatory Tariff Manager
San Diego Gas and Electric Company
8330 Century park Court, Room 32C
San Diego, CA  92123-1548

Subject: Energy Division Disposition on Above Referenced Advice Letter

Dear Ms. Caulson:

Energy Division has determined that San Diego Gas and Electric’s supplemental advice letter filing for the above reference advice letter, dated February 23, 2010, has clearly addressed the protest that was filed by the North American Power Partners LLC on February 11, 2010. The supplemental filing clarifies the intent of the IOUs to seek external feedback and participation on the IDSM Task Force as described therein. Energy Division interprets the absence of additional protests to the supplemental filing as indication that the concerns of the protesting party have been adequately addressed. Subsequently a second supplemental advice letter was filed on March 10, 2010 to include additional clarifications not related to the protest that were inadvertently omitted from the first supplemental filing. There was no protest period for this second supplemental filing.

Joint Advice Letter 2139-E-B/1921-G-B (San Diego Gas and Electric), 4066-B (Southern California Gas Company), 2426-E-B (Southern California Edison), and 3079-G-B/3595-E-B (Pacific Gas and Electric) is approved. The effective Date of this Advice Letter is March 12, 2010.

Sincerely,

Julie A. Fitch, Director
Energy Division

CC: Sid Newsom – Southern California Gas Company
    Bruce Foster – Southern California Edison Company
    Akbar Jazayer – Southern California Edison Company
    Jane Yura – Pacific Gas and Electric Company
    Linda Chaffee – Goodin, MacBride, Squeri, Day & Lamprey, LLP
March 10, 2010

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

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

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

ADVICE 3079-G-B/3595-E-B
(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 (IDSM) 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 second joint supplemental advice filing to implement its revised IDSM 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-A/1921-G-A, SoCalGas 4066-A, SCE 2426-E-A and PG&E’s 3079-G-A/3595-E-A. Included as Attachment B to this supplemental advice filing is a revised version of the IDSM 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 second supplemental advice letter to be effective March 12, 2010, per Energy Division’s instructions dated March 5, 2010. 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 Energy Division’s request.

PROTEST

The Energy Division has clarified that there will be no protest period for this second supplemental advice letter. Parties to this advice letter have had two opportunities to comment and there were no additional comments and/or protests in response to the first supplemental filing submitted on February 23, 2010.

San Diego Gas & Electric Company
Attn: Megan Caulson
Regulatory Tariff Manager
8330 Century Park Court, Room 32C
San Diego, CA 92123-1548
Facsimile No. (858) 654-1788
E-mail: mcaulson@semprautilities.com

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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 in 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&E Tariffs@semprautilities.com.

---

Ron van der Leeden
Director – Rates, Revenues & Tariffs
**CALIFORNIA PUBLIC UTILITIES COMMISSION**

**ADVICE LETTER FILING SUMMARY**

**ENERGY UTILITY**

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

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<th>Company name/CPUC Utility No.</th>
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<td>GAS</td>
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<tr>
<td>☐ PLC</td>
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<td>☐ WATER</td>
<td></td>
</tr>
<tr>
<td>Contact Person:</td>
<td>Aurora Carrillo</td>
</tr>
<tr>
<td>Phone #:</td>
<td>(858) 654-1542</td>
</tr>
<tr>
<td>E-mail:</td>
<td><a href="mailto:acarrillo@semprautilities.com">acarrillo@semprautilities.com</a></td>
</tr>
</tbody>
</table>

**EXPLANATION OF UTILITY TYPE**

<table>
<thead>
<tr>
<th>ELC = Electric</th>
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<tr>
<td>PLC = Pipeline</td>
<td>HEAT = Heat</td>
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<td>WATER = Water</td>
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Advice Letter (AL) #: 2139-E-B/1921-G-B

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 AL: N/A

Does AL request confidential treatment? If so, provide explanation: N/A

Resolution Required? ☑ Yes ☐ No Tier Designation: ☑ 1 ☐ 2 ☐ 3

Requested effective date: 3/12/10 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 proposed: 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**
  - San Diego Gas & Electric
  - Attention: Megan Caulson
  - 8330 Century Park Ct, Room 32C
  - San Diego, CA 92123
  - mcaulson@semprautilities.com

- **CPUC, Energy Division**
  - mas@cpuc.ca.gov and jnj@cpuc.ca.gov

1 Discuss in AL if more space is needed.
cc:  (w/enclosures)

Public Utilities Commission
   DRA
   D. Appling
   S. Cauchois
   J. Greig
   R. Pocta
   W. Scott

Energy Division
   P. Clanon
   S. Gallagher
   H. Gatchalian
   D. Lafrenz
   M. Salinas

CA. Energy Commission
   F. DeLeon
   R. Tavares

Alcantar & Kahl LLP
   K. Harteloo

American Energy Institute
   C. King

APS Energy Services
   J. Schenk

BP Energy Company
   J. Zaintz

Barkovich & Yap, Inc.
   B. Barkovich

Bartle Wells Associates
   R. Schmidt

Braun & Blaising, P.C.
   S. Blaising

California Energy Markets
   S. O'Donnell
   C. Sweet

California Farm Bureau Federation
   K. Mills

California Wind Energy
   N. Rader

CCSE
   S. Freedman
   J. Porter

Children's Hospital & Health Center
   T. Jacoby

City of Chula Vista
   M. Meacham
   E. Hull

City of Poway
   R. Wilcox

City of San Diego
   J. Cervantes
   G. Lonergan
   M. Valerio

Commerce Energy Group
   V. Gan

Constellation New Energy
   W. Chen

CP Kelco
   A. Friedl

Davis Wright Tremaine, LLP
   E. O’Neill
   J. Pau

Dept. of General Services
   H. Nanjo
   M. Clark

Douglass & Liddell
   D. Douglass
   D. Liddell
   G. Klett

Duke Energy North America
   M. Gillette

Ellison Schneider & Harris LLP
   E. Janssen

Energy Policy Initiatives Center (USD)
   S. Anders

Energy Price Solutions
   A. Scott

Energy Strategies, Inc.
   K. Campbell
   M. Scanlan

Goodin, MacBride, Squier, Ritchie & Day
   B. Cragg
   J. Heather Patrick
   J. Squier

Goodrich Aerostructures Group
   M. Harrington

Hanna and Morton LLP
   N. Pedersen

Itsa-North America
   L. Belew

J.B.S. Energy
   J. Nahigian

Luce, Forward, Hamilton & Scripps LLP
   J. Leslie

Manatt, Phelps & Phillips LLP
   D. Huard
   R. Keen

Matthew V. Brady & Associates
   M. Brady

Modesto Irrigation District
   C. Mayer

Morrison & Foerster LLP
   P. Hanschen

MRW & Associates
   D. Richardson

OnGrid Solar
   Andy Black

Pacific Gas & Electric Co.
   J. Clark
   M. Huffman
   S. Lawrie
   E. Lucha

Pacific Utility Audit, Inc.
   E. Kelly

R. W. Beck, Inc.
   C. Elder

School Project for Utility Rate Reduction
   M. Rochman

Shute, Mihaly & Weinberger LLP
   O. Armi

Solar Turbines
   F. Chiang

Sutherland Asbill & Brennan LLP
   K. McCrea

Southern California Edison Co.
   M. Alexander
   K. Cini
   K. Gansecki
   H. Romero

TransCanada
   R. Hunter
   D. White

TURN
   M. Florio
   M. Hawiger

UCAN
   M. Shames

U.S. Dept. of the Navy
   K. Davoodi
   N. Furuta
   L. DeLacruz

Utility Specialists, Southwest, Inc.
   D. Koser

Western Manufactured Housing Communities Association
   S. Dey

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

MARCH 10, 2010
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Program ID: PGE2111, SCE-SW-012, SDGE SW-IDSM, SCG SW-IDSM
Program Type: Core

2) Projected Program Budget Table

<table>
<thead>
<tr>
<th>Main Program Name / Sub-Program</th>
<th>Total Administrative Cost (Actual)</th>
<th>Total Marketing &amp; Outreach (Actual)</th>
<th>Total Direct Implementation (Actual)</th>
<th>Integration Budget Allocated to other Programs (if Applicable)</th>
<th>Total Budget By Program (Actual)</th>
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<td><strong>$3,651,482</strong></td>
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<td><strong>$3,651,482</strong></td>
</tr>
</tbody>
</table>

3) Projected Program Gross Impacts Table
Non-resource program.

4) IDSM Program Description

a) Description
The California Long Term Energy Efficiency Strategic Plan (Strategic Plan) encourages programs that integrate the full range of demand-side management (DSM) options including energy efficiency (EE), demand response (DR), and distributed generation (DG) as fundamental to achieving California’s strategic energy goals. This program implementation plan (PIP) presents the coordinated effort 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 IDSM program and $3.6 million 2010-2012 budget with modifications contained herein.

The IOUs have identified integrated DSM (IDSM) 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 IDSM, as well as specific integration activities within each program implementation plan at the Statewide (SW) and local

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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.

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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, 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

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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
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. 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, and ED review, (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 to be submitted for ED input and review (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.

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

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[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.

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. 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.

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:**

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8 Heading remains consistent with CPUC directive in D. 09-09-047.
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 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 as well as develop the knowledge and understanding needed to promote integration of demand side resources generally. To the extent that it is appropriate and effective, the IDSM Task Force will expand participation to all potential stakeholders. This expansion of membership may be in the form of periodic and as needed expert input and ad hoc workshops to solicit input from
the broader group of participants in a fair and equitable manner. IOU and ED staff sitting on the taskforce will identify when such inclusions would be useful.

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.

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 technologies. 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 “siloed” 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, 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

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, water districts and DSM solutions providers to offer integrated services, obtain input/feedback, share knowledge/best practices, and generally promote IDSM efforts and activities. Expansion of Task Force participation may be in the form of periodic as needed expert input and ad hoc workshops to solicit input from the broader group of participants in a fair and equitable manner. IOU and ED staff sitting on the taskforce will identify when such inclusions would be useful. 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

The Task Force will be the principal 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. 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. A critical component of evaluating these pilots, projects, and program activities is identifying what data should be captured to optimally evaluate the ongoing success of these pilots and IDSM activities. Currently several integrated pilot program Advice Letters have been submitted to Energy Division for review and approval. Once the programs that will be going forward are identified, the IDSM Task Force will identify which pilot programs will be monitored to provide the data and information needed to address the integration promoting tasks to potentially be included in the Statewide IDSM Program. The IDSM Task Force will also play a role in helping the IOUs identify Program Performance Metrics (PPMs) for integrated pilot programs which will help achieve IDSM strategic planning goals identified in the CEESP, subsequent decision directives, and this PIP. The PPMs are currently being developed as part of a statewide effort, including metrics for the Statewide IDSM Program, and will play a key role in assessing the ongoing success of these programs. The IDSM Task Force will clearly identify the integrated pilot programs to be monitored in efforts to inform the implementation of the IDSM programs when PPMs are submitted for the IDSM Program on May 23, 2010. Being mindful of the PPMs, the Task Force will determine how best to monitor and evaluate the pilots and various IDSM activities. Informed by the key eight activities identified in this PIP, the Task Force will include a detailed description for how the integrated pilot programs will be utilized for data gathering and developing the recommendations required from the Task Force in a detailed EM&V plan as described below. However, final EM&V plans for the 2010 – 2012 have not been finalized,
therefore all EM&V plans will be consistent with those plans once adopted for this program cycle.

i) EM&V

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

Statewide Integration Task Force

Programs

- CEE
- ET
- DR
- DG/Solar
- LIEE
- ClimateSmart /Green Programs

Marketing

- Statewide Marketing – Awareness Campaign
- Local Marketing - Segmentation /Implementation /Collateral

Local Utility Integration – Integrates Offerings to Customers

- Segment Integration Managers
- Integrated IT Solutions
- Integrated Audits
- Integrated Sales Training & Education

Delivery Channels – Coordinated via Service and Sales

- Service & Sales
- Web / Mass Mkts
- Third Parties
- Vendors, Aggregators
- Gov Partnerships

Market Segment Customers

- Residential
- Commercial
- Gov
- Industrial
- Ag
8) Program Logic Model

<table>
<thead>
<tr>
<th>Activities</th>
<th>Outputs: Deliverables</th>
<th>Short-term Outcomes</th>
<th>Intermediate Outcomes</th>
<th>Long-term Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>- White Paper (A1)</td>
<td>- IOUs Integrated Demand Side Management (IDSM) Program Logic Model (Process Flow Only, Outputs and Outcomes Later)</td>
<td>- IOUs New Guidelines on CE &amp; EIM (A4A)</td>
<td>- IOUs New Guidelines for DSM Programs and Activities (A5)</td>
<td>- IOUs works with IOUs to develop plans to increase integration at all levels, both by adding new programs or by increasing integration in existing programs, as necessary</td>
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</tbody>
</table>

Integrate into mainstream portfolio
Table 2 – Proposed IDSM Compliance and Timeline
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 savings benefits.

   • The Task Force will launch a phased approach to developing appropriate integrated cost-effectiveness protocols for DSM programs and projects.
   • Phase 1- will include coordinating the plan development that proposes to incorporate DSM cost-effectiveness framework into the CPUC DR and DG cost-effectiveness proceedings.
   • Review findings, testimony, identify barriers

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

   • The Task Force will conduct a phased approach to developing appropriate EAVM protocols for DSM programs and projects.
   • Review findings, testimony, identify barriers

3. Review DSM 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.
   • IDUs 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 offers (in addition to marketing) to customers.
   • Tracking emerging technologies - Will be ongoing

4. Development of cross-utility standardized integrated audit tools using IDUs developed audits as a starting point.

   • The IOUs will continue to offer the detailed integrated audits for customers with loads greater than 300 kW and integrated audits as appropriate. Similar level of audits will continue to be offered to medium and large customers.
   • IDUs 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.
   • Stage 1 - IOUs will begin analyzing system and software requirements.
   • Stage 2 - The IOUs will need to identify the specific detailed requirements of the tool, customizing existing software to address the IOUs and various stakeholders.
   • Enhancements will be made to existing tools.

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 implemented that may be replicated in the state. The Task Force will not limit their efforts simply to integration pilots, programs or projects with special funding, but will track integrated program offerings and integrated projects with customers.
   • Results of efforts will be included in quarterly tracking reports
   • Phase 2- Will involve public review of the white paper on EE and EM&V guidelines
   • Phase 3 - WIll include a progress plan for establishing EAVM protocols and developing EM&V guidelines

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.
   • 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).
   • Results of efforts will be included in quarterly tracking reports
   • Regular review versus pilots, programs and activities.

7. Facilitate internal DSM strategies by establishing internal Integration Teams with staff from EE, DR, DG, marketing, and delivery channels.

   • IOUs have established or will be establishing internal Integration Teams with representatives from staff of different groups across the company including EE, DR, LIEE, distributed generation (DG)/Solar, green programs and delivery channels. The strategic planning function will work across EE and other DSM areas to ensure consistency and integration, and that the short and midterm actions of the IOUs meet the long term goals of the Strategic Plan.
   • 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.
   • 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.

   • The Task Force will work in 2010 and on an ongoing basis with the larger statewide ME&V effort to ensure appropriate tracking and coordination of a statewide level.
   • Task Force will conduct and review local utility marketing efforts where there are opportunities to integrate messages and campaigns.
   • The IOUs work with SW M&E efforts and will share information with the Task Force on local IOU integrated marketing, training, and education efforts.
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California Investor Owned Utilities

Integrating Demand Side Management

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

<table>
<thead>
<tr>
<th>Activity from CPUC Decision</th>
<th>Q1 2010</th>
<th>Q2 2010</th>
<th>Q3 2010</th>
<th>Q4 2010</th>
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<tbody>
<tr>
<td>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 savings benefits.</td>
<td>2010-2012 EE program cycle are pending and working final decision, and protocols for DR are established and currently in place. The Task Force will coordinate with the IOU and IOU EM&amp;V resources to develop a proposal for appropriate metrics for assessing integration.</td>
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<td>4. Development of cross-utility standardized integrated audit tools using IDUs developed audits as a starting point.</td>
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<tr>
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<td>7. Facilitate internal DSM strategies by establishing internal Integration Teams with staff from EE, DR, DG, marketing, and delivery channels.</td>
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</tbody>
</table>
Table 3 – IOUs’ Audit / Survey Status
### IOUs' Existing and New Energy Audit/Survey Tools

<table>
<thead>
<tr>
<th>IOU</th>
<th>Target Audience</th>
<th>Sector/Audit Type</th>
<th>Description</th>
<th>Status/Enhancements</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Residential</td>
<td>On-line Survey</td>
<td>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</td>
<td>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</td>
</tr>
<tr>
<td>SCE, PG&amp;E, SDG&amp;E</td>
<td>Residential</td>
<td>Telephone Survey</td>
<td>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.</td>
<td>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</td>
</tr>
<tr>
<td>All</td>
<td>Very small to medium customers (&lt;200kW, &lt;50,000 Therms)</td>
<td>Remote or Basic Surveys. Includes on-line, mail and phone surveys</td>
<td>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.</td>
<td>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</td>
</tr>
<tr>
<td>All</td>
<td>Medium to Large Customers (200kW-500kW, 50,000-250,000 Therms)</td>
<td>Integrated Energy Audits (IEA - Medium)</td>
<td>The IEA is an onsite audit performed by qualified IOU personnel and/or 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.</td>
<td>Existing. Upgrade with typical water, industrial and agriculture measures as well as implementation of enhanced analysis of DR measures and programs, and DG systems</td>
</tr>
<tr>
<td>All</td>
<td>Large customers (&gt;500 kW, &gt;250,000 Therms) and medium complex facilities</td>
<td>Integrated Energy Audit (IEA - Large)</td>
<td>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 ROE/IRR are provided in details and summary charts.</td>
<td>Existing. Incorporate water analysis</td>
</tr>
</tbody>
</table>

### Progressive Energy Audit Tool, New Development

<table>
<thead>
<tr>
<th>IOU</th>
<th>Target Audience</th>
<th>Sector/Audit Type</th>
<th>Description</th>
<th>Status/Enhancements</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Residential and Small to Medium Customers (&lt;200 kW)</td>
<td>Progressive Energy Audit Tool (&quot;PEAT&quot;)</td>
<td>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.</td>
<td>In Development*. The following are projected development stages:</td>
</tr>
</tbody>
</table>

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

INTEGRATED DEMAND-SIDE MANAGEMENT

JANUARY 22, FEBRUARY 23, MARCH 10, 2010
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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 ................................................. 17

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3) Projected Program Gross Impacts Table .................................................................. 1

4A) DSM Program Description .................................................................................. 1
   a) Description ......................................................................................................... 1
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   a) Quantitative Baseline and Market Transformation Information ....................... 191916
   b) Market Transformation Information .................................................................. 201917
c) Program Design to Overcome Barriers ................................................................ 202017
d) Quantitative Program Targets ............................................................................. 202017
e) Advancing Strategic Plan goals and objectives ............................................. 212017
6) Program Implementation .................................................................................. 212117
   a) Statewide IOU Coordination ..................................................................... 212117
   b) Program Delivery Mechanisms ................................................................... 222118
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   d) Best Practices ............................................................................................. 232218
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Program ID: PGE2111, SCE-SW-012, SDGE SW-IDSM, SCG SW-IDSM
Program Type: Core

2) Projected Program Budget Table

<table>
<thead>
<tr>
<th>Program Name / Sub-Program</th>
<th>Total Administrative Cost (Actual)</th>
<th>Total Marketing &amp; Outreach (Actual)</th>
<th>Total Direct Implementation (Actual)</th>
<th>Integration Budget Allocated to other Programs (if Applicable)</th>
<th>Total Budget By Program (Actual)</th>
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<tbody>
<tr>
<td>CROSSCUTTING</td>
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<td>$600,122</td>
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<td>$600,122</td>
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<td>TOTAL:</td>
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<td></td>
<td></td>
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<td>$3,651,482</td>
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</table>

3) Projected Program Gross Impacts Table
Non-resource program.

4A) IDSM Program Description

a. Description
The California Long Term Energy Efficiency Strategic Plan (Strategic Plan) encourages programs that integrate the full range of demand-side management (DSM) options including energy efficiency (EE), demand response (DR), and distributed generation (DG) as fundamental to achieving California’s strategic energy goals. This program implementation plan (PIP) presents the coordinated effort 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 IDSM program and $3.6 million 2010-2012 budget with modifications contained herein.

The IOUs have identified integrated DSM (IDSM) 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 IDSM, 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) 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 DSM 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 DSM strategies identified in the Strategic Plan. These include stakeholder coordination (Strategy 1.3) and new technologies (Strategy 1.4). 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:

<table>
<thead>
<tr>
<th>Utility</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>PG&amp;E:</td>
<td>$1.2 million</td>
</tr>
<tr>
<td>SCE:</td>
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<td>SDG&amp;E:</td>
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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.

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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, 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.

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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.

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<td>January 23-February 23-March 10, 2010</td>
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Integrated Demand Side Management

(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 CommissionED 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.
• 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 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, LIIE 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 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:**
- 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

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6 Appendix C requires the following audit characteristics – Verifiable, Site-Specific, User-friendly, Comprehensive, Accessible, Compatible with CSI program.
initiation, and ED review, (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 to be submitted for ED input and review (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.[1] 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

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

California Investor Owned Utilities

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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.
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.

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. 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...
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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. The Task Force will regularly review various pilots, programs and activities.

6. Develop Regular Reports on progress and recommendations to the Commission.  
   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
• 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 recommendations to EE, DR, LIEE and DG program management responsible for developing marketing DSM 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 DSM 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 DSM 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
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 as well as develop the knowledge and understanding needed to promote integration of demand side resources generally. To the extent that it is appropriate and effective, the IDSM Task Force will expand participation to all potential stakeholders. This expansion of membership may be in the form of periodic and as needed expert input and ad hoc workshops to solicit input at least one workshop per year to solicit input from the broader group of participants in a fair and equitable manner. IOU and ED staff sitting on the taskforce will identify when such inclusions would be useful.

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.

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 providers (e.g., EE service providers, DR aggregators, CSI installers) and utility customers.

c) **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 is available.

4B) **Progressive Energy Audit Tool (PEAT) Description**

California Investor Owned Utilities

2010-2012 Energy Efficiency Plans

January 22, February 23, March 16, 2010
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 URAT). 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 tools and associated software programs that currently provide data collection, data entry, and customer report generation. 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 provides 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, GEUS, 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.

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

California Investor Owned Utilities 2010-2012 Energy Efficiency Plans
January 22, February 23, March 10, 2010
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 DSM 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 environments. 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.
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 technologies. 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 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.
Integrated Demand Side Management

c) Program Design to Overcome Barriers

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

This program is specifically intended to address the near term action item to establish an ongoing working group.” In support of the Strategic Plan’s, 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.

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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.
i. Integrated Demand Side Management

ii. All program delivery mechanisms

   Not applicable
   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 IDS M, using lessons learned and best practices to establish a continuous improvement process.

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 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.

   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 IDS M Task Force will explore opportunities to interact with other programs/organizations that could include municipal utilities, local and state government, water districts and DSM solutions providers to offer integrated services, obtain input/feedback, share knowledge/best practices, and generally promote IDS M efforts and activities. At some point in the future, or will at least explore these options now. Specifically with all the DSM solutions providers. Expansion of Task Force participation may be in the form of periodic as needed expert input and ad hoc workshops to solicit input from the broader group of participants in a fair and equitable manner. IOU and ED staff sitting on the will identify when such inclusions would be useful. Future program milestones, lessons learned, and best practices can be shared with outside stakeholders to further IDS M 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 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

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 on 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.

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

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. 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 these and other Advice Letter filings, including the pilot Advice Letters. A critical component of evaluating these pilots, projects, and program activities is identifying what data should be captured to optimally evaluate the ongoing success of these pilots and IDSM activities. Currently several integrated pilot program Advice Letters have been submitted to Energy Division for review and approval. Once the programs that will be going forward are identified, the IDSM Task Force will identify which pilot programs will be monitored to provide the data and information needed to address the integration promoting tasks to potentially be included in the Statewide IDSM Program. The IDSM Task Force will also play a role in helping the IOUs identify Program Performance Metrics (PPMs) for integrated pilot programs which will help achieve IDSM strategic planning goals identified in the CEESP, subsequent decision directives, and this PIP. The PPMs are currently being developed as part of a statewide effort, including metrics for the Statewide IDSM Program, and will play a key role in assessing the ongoing success of these programs. The IDSM Task Force will clearly identify the integrated pilot programs to be monitored in efforts to inform the implementation of the IDSM programs when PPMs are submitted for the IDSM Program on May 23, 2010. Being mindful of the PPMs, the Task Force will determine how best to monitor and evaluate the pilots and various IDSM activities. Informed by the key eight activities identified in this PIP, the Task Force will include a detailed description for how the integrated pilot programs will be utilized for data gathering and developing the recommendations required from the Task Force in a detailed EM&V plan as described below. However, final EM&V plans for the 2010 – 2012 have not been finalized, therefore all EM&V plans will be consistent with those plans once adopted for this program cycle.

i) EM&V

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 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.

7) Diagram of Program

Program Diagram – IDSM Task Force

- Statewide Integration Task Force
  - Programs
    - CEE
    - ET
    - DR
    - DG/Solar
    - LIEE
  - Marketing
    - Statewide Marketing – Awareness Campaign
    - Local Marketing - Segmentation/Implementation/Collateral
  - SW Integrated Task Force & Regulatory Coordination
    - Integrated Task Force
    - Evaluation, Measurement & Valuation
    - SW Integrator Education and Training
  - Delivery Channels – Coordinated via Service and Sales
    - Service & Sales
      - Web / Mass Mts
      - Third Parties
    - Vendors, Aggregators
    - Gov Partnerships
  - Market Segment Customers
    - Residential
    - Commercial
    - Gov
    - Industrial
    - Ag
Table 2 – Proposed IDSM Compliance and Timeline

<table>
<thead>
<tr>
<th>California Investor Owned Utilities</th>
<th>2010-2012 Energy Efficiency Plans</th>
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<tbody>
<tr>
<td></td>
<td>January 23, February 23, March 10, 2010</td>
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<tr>
<td>Integrated Demand Side Management</td>
<td></td>
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<tr>
<td>-----------------------------------</td>
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<tr>
<td><strong>Table 1:</strong> A table showing various strategies and programs for integrated demand side management.</td>
<td><strong>Note:</strong> This information is extracted from the section on integrated demand side management.</td>
</tr>
<tr>
<td><strong>Table 2:</strong> A table illustrating the impact of integrated demand side management on various metrics such as peak load, demand reductions, and cost savings.</td>
<td><strong>Note:</strong> This information is extracted from the section on integrated demand side management.</td>
</tr>
<tr>
<td><strong>Table 3:</strong> A table comparing the effectiveness of different demand side management programs across various utilities.</td>
<td><strong>Note:</strong> This information is extracted from the section on integrated demand side management.</td>
</tr>
<tr>
<td><strong>Table 4:</strong> A table showing the financial benefits of implementing integrated demand side management programs.</td>
<td><strong>Note:</strong> This information is extracted from the section on integrated demand side management.</td>
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</tbody>
</table>
Table 3 – IOUs’ Audit / Survey Status

<table>
<thead>
<tr>
<th>California Investor Owned Utilities</th>
<th>30</th>
<th>2010-2012 Energy Efficiency Plans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>January 22, February 23, 2010</td>
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<td></td>
<td></td>
<td>March 10, 2010</td>
</tr>
</tbody>
</table>
# Integrated Demand Side Management

## Table 3: IOU Audit/Survey Status

<table>
<thead>
<tr>
<th>IOU</th>
<th>Target Audience</th>
<th>Survey Audit Type</th>
<th>Description</th>
<th>Status/Enhancements</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>Residential</td>
<td>Online Survey</td>
<td>Online 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.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>Residential</td>
<td>Mail-in Survey</td>
<td>Residential</td>
<td>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.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>SCE, PG&amp;E, SDG&amp;E</td>
<td>Telephone Survey</td>
<td>RC</td>
<td>These typically remote audits will offer customer recommendations in a report with enhanced project costs and savings, and a road map for project implementation. Basic audits are also offered on-site in conjunction with marketing campaigns, targeted strategies and in response to specific customer requests. Analysis are based on DSR or WPB window analysis.</td>
<td>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.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>Small to Medium Customers (&lt;200 kW, &lt;50,000 kWh)</td>
<td>On-site survey</td>
<td>Basic audits offer on-site in conjunction with marketing campaigns, targeted strategies and in response to specific customer requests. Analysis are based on DSR or WPB window analysis.</td>
<td>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.</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>All</td>
<td>Medium to Large Customers (200 kW-500 kW, &gt;50,000-250,000 kWh)</td>
<td>Integrated Energy Audit (IEA)</td>
<td>The IEA is an on-site 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 in summary charts. Existing. Background with typical water, industrial and agriculture measures as well as implementation of enhanced analysis of DR measures and programs, and DG systems</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>All</td>
<td>Large customers (&gt;500 kW, &gt;250,000 kWh and medium complex facilities)</td>
<td>Integrated Energy Audit (IEA - Large)</td>
<td>The IEA is on-site audit performed by qualified engineering contractors or IOU personnel. Key deliverables include comprehensive analysis of EE, DR and information and technical feasibility for DG. Costs of implementation, energy savings, available rebates and incentives are provided separately and in summary charts.</td>
<td>Existing. Incorporate water analysis</td>
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## Progressive Energy Audit Tool, New Development

**Progressive Energy Audit Tool (PERT)**

1. **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 change, interval meter data analysis and comparative reports Q1-Q2
   - Develop business and functional requirements Q3-Q4
   - Design and implement modules and functions Q1
   - Build and test Q2-Q3
   - Completion and launch by ESUs Q3-Q4
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.