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**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Examine the Commission's post-2005 Energy Efficiency Policies, Programs, Evaluation, Measurement and Verification, and Related Issues.

Rulemaking 06-04-010  
(Filed April 13, 2006)

Order Instituting Rulemaking Regarding Policies and Protocols for Demand Response Load Impact Estimates, Cost-Effectiveness Methodologies, Megawatt Goals and Alignment with California Independent System Operator Market Design Protocols.

Rulemaking 07-01-041  
(Filed January 25, 2007)

**JOINT ASSIGNED COMMISSIONERS' RULING  
PROVIDING GUIDANCE ON INTEGRATED DEMAND-SIDE  
MANAGEMENT IN 2009-2011 PORTFOLIO APPLICATIONS**

**1. Summary**

This Ruling provides procedural guidance to utilities on their upcoming energy efficiency (EE) portfolio filings and demand response (DR) program application filings regarding integrated demand-side management (IDSM) Marketing, Education & Outreach (ME&O), Zero Net Energy (ZNE) and other IDSM pilot projects, and operational improvements. Attached to this Ruling are Energy Division recommendations for specific IDSM projects. Also in this Assigned Commissioners' Ruling (ACR) we outline several IDSM approaches that we consider to be priorities for utility implementation in the 2009-2011 period. We then address several foundational and process issues related to these

upcoming application filings. This guidance augments guidance provided in previous rulings in the subject proceedings.

## **2. Background**

### **2.1. EE Strategic Planning Initiative**

Decision (D.) 07-10-032 required the investor-owned utilities (IOUs) to “integrate customer demand-side programs, such as energy efficiency, self generation, advanced metering, and demand response, in a coherent and efficient manner.”<sup>1</sup> The intent was for utilities and other program administrators to better coordinate across the entire range of demand-side management (DSM) programs so as to leverage opportunities to maximize energy savings offerings to customers.

The Commission directed utilities to integrate EE and other DSM programs. The integration of customer DSM programs was expected to achieve maximum savings while avoiding duplication of efforts, reducing transaction costs, and diminishing customer confusion.<sup>2</sup> The decision also committed the California Public Utilities Commission (CPUC) and utilities to engage a wide range of entities and institutions in developing and delivering integrated programs. To accomplish this, the Commission directed the IOUs to develop a “Comprehensive Strategic Plan for Consumer Demand-Side Options.”<sup>3</sup>

In discussing the need for comprehensive DSM, D.07-10-032 stated that:

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<sup>1</sup> D.07-10-032, p. 5.

<sup>2</sup> D.07-10-032, p. 6.

<sup>3</sup> D.07-10-032, p. 16.

...the Plan should present a strategy to integrate measures, programs, policies and actors at all key levels of energy efficiency program design and delivery. To do this, this portion of the Plan should: (1) address the full range of comprehensive consumer demand-side options, such as demand response, advanced meters, conservation and self-generation; (2) present a systems approach that encompasses all types of measures, programs and activities, including research and development, codes and standards, design, hardware, controls, installation, maintenance, and use behavior; and (3) include a process to engage collaboratively the expertise of market sector professionals and the leadership of key stakeholders.<sup>4</sup>

As discussed above, these efforts were intended to find EE opportunities in these programs and count those savings towards achievement of EE goals to the extent appropriate; the intention was not to combine the different programs.

The utilities were directed to review the lessons learned from existing integrated programs as part of the strategic planning process. Further, the utilities were directed to “explain strategies to engage the full range of players, even those who may not currently be integrated, in delivering EE savings.”<sup>5</sup> The CPUC additionally noted its expectation that integrating delivery of DSM programs and customer offerings may entail some initial incremental costs, but that more cohesive program offerings across multiple programs targeting the same market or audience would result in lower downstream costs in administration and marketing of individual programs.<sup>6</sup> The EE portfolio filings

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<sup>4</sup> D.07-10-032, p. 31.

<sup>5</sup> D.07-10-032, p. 32.

<sup>6</sup> D.07-10-032, p. 32.

are a key proceeding in which to reflect the lessons from this strategic planning process and integrate program delivery.

## **2.2. ME&O Integration and Coordination**

D.07-10-032 directed the utilities to coordinate ME&O efforts across utility territories and consumer demand-side options, in order to optimize the development and delivery of EE messages and reduce costs, while simultaneously increasing the impact of efficiency measures, information and offerings. Specifically, the Commission directed the utilities and third parties to expand their efforts to achieve the goals, among others, of (a) coordination of related marketing, education and outreach programs, such as incentives for solar and other distributed generation (DG) installations, DR programs, conservation and low-income programs; and, (b) coordination of providers with similar or related interests and services, such as local governments, community-based organizations, firms and municipal utilities.<sup>7</sup>

The utilities were directed to “undertake joint marketing of energy efficiency programs with other customer energy technologies, such as demand response and solar installations.”<sup>8</sup> Utilities were required to include a specific section in their 2009-2011 EE portfolio plan applications (EE Applications) that would outline plans and programs to implement these directives. The EE Applications are due on May 15, 2008.

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<sup>7</sup> D.07-10-032, p. 62.

<sup>8</sup> D.07-10-032, p. 62.

### **2.3. Initial Strategic Plan Proposals for Pilot Projects on Comprehensive Integration of DSM Options**

On February 8, 2008, joint utilities filed an initial draft California Energy Efficiency Strategic Plan, followed by a March 6, 2008 Supplement. Regarding integration, the draft Plan (with Supplement) states that the “best path to integration is to continue current efforts by the IOUs and pursue an expanded series of pilot projects as part of the 2009-2011 portfolio submissions to the CPUC.”<sup>9</sup> Today’s ACR provides additional guidance to the utilities towards the development of integrated DSM pilots aimed at meeting the Commission directives contained in D.07-10-032.

### **2.4. Previous Guidance on IDSM Coordination in the DR Applications**

In D.06-03-024, the Commission approved DR activities and budgets for Southern California Edison Company, San Diego Gas & Electric Company and Pacific Gas and Electric Company, and required these utilities to file applications by June 1, 2008 for approval of DR activities and budgets for 2009-2011 (DR Applications). A February 27, 2008 Administrative Law Judge’s (ALJ) Ruling in Rulemaking (R.) 07-01-041 provided specific guidance on the contents and format of the DR Applications, and noted that integration of DR and EE programs would be advanced through the coordination permitted by the similar filing schedules for EE and DR. In advancing this idea, the Ruling reviewed integration requirements from D.07-10-032, and required that information on proposals that coordinate EE and DR that are included in the EE applications:

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<sup>9</sup> D.07-10-032, p. 80.

should also be included in DR applications to enable a comprehensive review of all DR activities in one proceeding. The [DR] Applications should describe programs, activities and funding requests for combined or coordinated DR/EE activities, and should enumerate them separately from non-EE-related projects to ensure the total funding amount for these programs is clear and can be separated from DR-only activities.<sup>10</sup>

That ruling also instructs that the DR Applications:

should include the ME&O funds and activities that include DR components, whether the activities have been previously approved by the Commission or are being proposed by the utilities, and whether or not they also relate to EE or other DSM programs. The Applications should include specific proposals for implementing the coordinated approaches to marketing and outreach in the Strategic Plan. The Applications should describe the utilities' plans to leverage these funds to undertake joint marketing of DR programs with other DSM programs, especially EE. Total costs should be listed, but costs of DR-related activities not associated with other DSM programs should be listed separately to facilitate the removal of joint costs from consideration in the DR application if it is determined they will be approved in some other proceeding. The information provided should be consistent with ME&O information provided in the EE applications.<sup>11</sup>

These instructions were intended to facilitate review of coordinated activities in both proceedings while ensuring that associated costs would not be double-counted in the applications or resulting decisions. In addition to this general guidance, the February 27th Ruling noted that staff intended to hold a workshop on IDSM issues (held on March 7, 2008) and that if possible, additional

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<sup>10</sup> ALJ's Ruling in R.07-01-041 dated February 27, 2008, p. 7.

<sup>11</sup> ALJ's Ruling in R.07-01-041 dated February 27, 2008, p. 8.

guidance on coordination issues would be provided before the due date for the DR Applications. This Ruling constitutes that additional guidance.

### **2.5. March 7th Workshop on IDSM Options**

A workshop on improving the coordination and/or integration of DSM options was held on March 7, 2008. The workshop provided for discussion on the range of EE and DR integration requirements. As a result of the workshop, and subsequent Party's comments provided to Energy Division, we direct the utilities to continue development of IDSM approaches and, specifically, to include several types of IDSM approaches in their upcoming DR and EE Applications.

### **3. Priority IDSM Areas for the 2009-2011 Period**

While D.07-10-032 outlined the broad framework for utility advancement of IDSM, we provide here our key priorities for implementation in the 2009-2011 timeframe. We outline these in the following order as priorities for launch of IDSM activities:

1. Comprehensive and Coordinated Marketing, Packaging and Delivery (coordination): This includes outreach and education of customers, the discussion and presentation of program options in a unified fashion such that the number of contacts and utility engagement with customers is coordinated, preferably through single points of contact.
2. Operational Improvements (program delivery coordination to enable systems integration): This includes offering integrated audits and recommendations, and combining EE, DR, DG, and other applicable incentives in the same project.
3. Optimization (technology & systems integration): This includes equipment that enables multiple DSM options (EE, DR, etc.) and provides synergy across DSM program types (e.g., addressable electronic ballasts).

### **3.1. Zero Net Energy Programmatic Initiatives and EM&V Metrics**

The utilities jointly and individually should design and implement several zero net energy (ZNE) building pilot projects during the 2009-2011 period in order to advance rapidly towards the ZNE commercial and residential building programmatic initiatives adopted by the CPUC in D.07-10-032 and by the CEC in its 2007 Integrated Energy Policy Report (IEPR). These pilot programs should be part of a larger, more comprehensive approach to ZNE that is laid out clearly in both the Strategic Plan and program implementation in the 2009-2011 EE portfolio applications. In other words, the applications should include ZNE pilot projects but the EE applications are to also include other activities that are necessary in the 2009-2011 period to achieve the ZNE programmatic initiatives, as well as the HVAC programmatic initiative also adopted in D.07-10-032. Pilot projects are a necessary but certainly not only element in the 2009-2011 timeframe to achieve these initiatives. We expect the 2009-2011 EE applications to contain robust and ambitious efforts for achieving these initiatives, well beyond current program offerings.

Such pilot projects should take many forms, including one-off residential or commercial buildings or the design of ZNE (and “green”) residential communities, including urban infill and multi-unit residential projects, or ZNE commercial “campuses” or schools. The utilities shall give careful consideration to how these programs can be structured to reach low and moderate income communities. Following guidance provided earlier, design and implementation of such projects should be undertaken through processes that engage a wide array of potential partner organizations and agencies, including developers, architects and builders, municipalities and redevelopment agencies, the CEC

PIER program, professional building and trade associations, research institutions, state, federal, local and regional agencies, and the CPUC itself.

As part of this, we direct the utilities to include in these ZNE pilot projects a collaborative work plan that engages a range of partners in order to develop and test ZNE metric approaches that are additional to current policy and Evaluation, Measurement & Verification (EM&V) metrics. Participants in the Strategic Planning process identified that the CPUC and utilities need to advance concepts and methodologies for measuring energy savings on a “zero” net grid demand basis in order to advance progress towards CPUC and CEC adopted ZNE goals. Utilities should identify both proposed metrics and ways in which the knowledge and experience gained by the ZNE pilots will be transferred to other utility programs and utilities, the private sector, local and state building standards, and the state’s Green Building Initiative (Executive Order S-20-04).

### **3.2. Energy Division Recommendations**

Attached to this Ruling are additional recommendations of the Energy Division based on the March 7<sup>th</sup> Workshop and other input. These recommendations are consistent with the priorities discussed in Section 3, above. We strongly urge the utilities to incorporate these recommendations into their upcoming 2009-2011 EE and DR portfolio applications. All other parties will have the opportunity to comment on the utility applications once they are filed.

## **4. Guidance on Issues Identified at the March 7, 2008 Workshop**

### **4.1. Cost-Effectiveness**

From the March 7<sup>th</sup> Workshop, there are at least two approaches to determining the cost-effectiveness of IDSM pilot projects. These are: (1) the sequential analysis of the cost-effectiveness of a combined IDSM pilot or program package, starting with the most cost-effective measure; and (2) use of an

integrated cost-effectiveness test that assesses on a cumulative basis the combined cost-effectiveness of the entire IDSM pilot, program or set of measures.

Both approaches may have merit, as may other approaches. Therefore, we direct the utilities in their IDSM pilot project proposal for the 2009-2011 period to include an outline of a plan to develop and test different cost-effectiveness approaches for proposed pilot project implementation pathways, including, at minimum, the two approaches outlined above. Actual assessment or evaluation of different cost-effectiveness tests during and following 2009-2011 will be undertaken by independent third-party evaluators contracted and supervised by Commission staff.

#### **4.2. Attribution of Energy Savings**

Participants in the March 7, 2008 IDSM Workshop discussed the issue of accurately attributing the energy savings produced in integrated pilot projects or programs. We direct the utilities to include in their proposals for IDSM pilot projects in their 2009-2011 EE and DR Applications, a plan and/or methodology for implementation of pilots that will permit the identification and testing of different energy savings attribution methodologies potentially feasible for use in IDSM pilot projects or programs. Specifically, the pilot project should test the “stepwise attribution” approach outlined by Energy Division at the workshop. It may also test other approaches not yet identified. Again, the actual evaluation of such approaches will be conducted by independent third-party evaluators contracted and supervised by Commission staff.

#### **4.3. Funding Sources and Cost-Benefit Methodologies**

The March 7<sup>th</sup> Workshop participants also discussed the issue of (1) identifying appropriate funding sources for IDSM technologies and/or pilots/programs, and (2) identifying appropriate cost-benefit methods.

Utilities should assume in their IDSM pilot project planning the use of “placeholder approaches” that estimate the permanent EE benefits from proposed pilot projects, including the appropriate estimated avoided cost, and that then prorate the full costs and benefits into a proportional distribution of costs and benefits for the pilot, based on the order of the loading order. Utilities should draw on existing funding sources (i.e., EE, DR, California Solar Initiative), to fund the project. The pilots should be designed to test different cost-effectiveness and/or attribution approaches as outlined above. CPUC staff will contract and supervise the ex-post evaluation of the approach used in order to accurately ascertain on an ex-post basis the appropriate levels of energy savings to attribute to the previously designated funding sources.

A second approach that utilities may use is to estimate the EE savings produced in a given IDSM pilot project and to then apply those estimates across similar pilots on a consistent basis. IDSM pilot projects must be designed to test the accuracy of this approach. Commission staff will engage independent third-party evaluators to evaluate the approach used during and following the pilot project period.

Utilities should specify which of these approaches they will propose to utilize with each proposed IDSM pilot project for the 2009-2011 period, and include a discussion of the selected approach, as well as a defensible rationale for their choice, in both the EE and DR 2009-2011 Applications.

Regarding the development and implementation of universal IDSM audit tools, we direct the utilities to jointly propose a set of standard rules with a firm technical basis for the identification of funding sources and attribution of energy savings, for inclusion in 2009-2011 DR and EE Applications. Once approved,

CPUC staff will supervise independent third-party assessment of the adopted approaches during and following the 2009-2011 period.

#### **4.4. Free-Ridership**

EE programs have in place methodologies to estimate free-riders to utility programs. Free-riders are program participants who would have installed the measure or equipment in the absence of the program. Utilities are directed to use the existing EE free-ridership (net-to-gross) methodologies in IDSM pilot projects proposed for the 2009-2011 period. Free-ridership in the DR area is assessed on a case by case basis; this will continue to be the case for IDSM pilots involving a DR component for the 2009-2011 period.

In addition, we direct the utilities to include in their 2009-2011 IDSM pilot projects design and planning elements that they feel are needed to assess free-ridership specifically for IDSM pilots. The Commission will consider these proposals during the Application review process. If deemed necessary, the CPUC will consider authorizing the use of independent third-party evaluators contracted and supervised by the CPUC to assess the proposed free-ridership methodologies for IDSM pilots during and following the 2009-2011 period.

### **5. Coordination of DR and EE Application and Review Processes**

#### **5.1. Instructions for Submitting Coordinated IDSM Proposals**

We require that all programs involving the coordination and/or integration of EE and DR measures, funding, or programs must be included in both the DR and EE Applications for the 2009-2011 period. For ease of review, the utilities should develop a stand-alone document that is filed in both the EE and DR dockets, and referenced as needed in individual utility applications. IDSM programs involving the use of DR funds (or other programmatic funds, such as customer service and information or distributed generation funds),

should be clearly indicated in a separate section in the EE Applications due May 15, 2008; the February 27, 2008, ALJ's Ruling in R.07-01-041 similarly requires coordinated programs to be listed separately in the DR Applications. We will require testimony on programs applicable to both the DR and EE proceedings to be served in both proceedings, so as to avoid unnecessary duplication of effort.

## **5.2. Coordination of IDSM Proposal Review and Approval**

We intend to propose Commission approval of appropriate programs that involve use of both DR and EE funds in the first decision to be taken up by the full Commission; it is likely that this will be the EE decision. However, we intend that Commission approval of integrated EE and DR programs will be conditioned upon approval of the same program in the second decision to consider applications (most likely DR). Any programs that are time sensitive and require a prompt launch in January 2009 should be clearly indicated in both the DR and EE applications.

## **6. Definitions of "Success"**

We direct the utilities to design IDSM pilot projects for the 2009-2011 period in a manner that maximizes savings in these areas: kilowatt-hour, kilowatt, financial, greenhouse gas emission reductions. All IDSM projects should be designed in this manner and, as stated earlier, all IDSM projects that involve DR and EE components must be included in both the DR and EE Applications. Additionally, utilities should include in their DR and EE Applications a description of how such IDSM pilots will be designed to avoid lost opportunities, as defined in the Energy Efficiency Policy Manual. IDSM projects may also be designed to minimize water use and advance a broader range of sustainability areas (toxics use reduction, etc.). Commission staff will

contract and supervise independent third-party evaluators to assess the success of utility pilot projects in the above listed areas during and following the 2009-2011 period.

**IT IS RULED that:**

1. Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company and Southern California Gas Company (collectively, Utilities) shall include integrated demand-side management (IDSMD) programs in their 2009-2011 energy efficiency (EE) and demand response (DR) portfolio applications, to be filed, respectively, on May 15, 2008 and June 1, 2008.

2. All programs involving the coordination and/or integration of EE and DR measures, funding, or programs must be included in both the EE and DR portfolio applications for the 2009-2011 period.

3. Utilities shall serve testimony on programs that will be applicable to both DR and EE to parties in both proceedings.

4. Any programs that are time sensitive and require a prompt launch in January 2009 should be clearly indicated in both EE and DR Applications.

5. IDSMD programs involving the use of DR funds should be clearly indicated in a separate section in the EE Applications due May 15, 2008.

6. Utilities shall include the information specified in this Ruling, including IDSMD marketing, education and outreach, pilot projects and operational improvements, in their 2009-2011 EE and DR portfolio applications.

7. Utilities shall strongly consider the recommendations of the Energy Division attached to this Ruling.

Dated April 11, 2008, at San Francisco, California.

/s/ DIAN M. GRUENEICH  
Assigned Commissioner  
Dian M. Grueneich

/s/ RACHELLE B. CHONG  
Assigned Commissioner  
Rachelle B. Chong

## ATTACHMENT

### Energy Division Recommendations - Joint EE and DR ACR

#### Energy Division Recommendations

##### 1. Coordinated IDSM Marketing, Education & Outreach

D.07-10-032 and DR ALJ ruling dated February 27, 2008 provided clear guidance on the priority the Commission gives to accelerating integrated ME&O. Measurable improvements in integrated ME&O on all DSM options and as provided for in the Energy Efficiency Policy Manual Version 4.0 is clearly a priority for utilities in the 2009-2011. We refer to this and additional priorities for the 2009-2011 period as “Phase I” activities, and provide several additional points of guidance here:

1.1. **Conservation.** Energy Division recommends that conservation messages are included in energy efficiency and integrated demand side management marketing, education and outreach messages and materials. This is consistent with the California Energy Action Plan (EAP) that lists “conservation and energy efficiency” as first in the loading order. Widely integrating conservation messaging into both energy efficiency and integrated DSM messages will advance overall Commission goals as indicated in the EAP and other decisions referenced above.

1.2. **Reporting Guidelines for coordinated ME&O.** Energy Division recommends that for *integrated* DSM marketing and collateral, utilities should, if the percent of the marketing material devoted to any one DSM option (EE, DR, DG, etc), exceeds 20%, identify in their 2009-2011 applications the different funding streams for the marketing materials (DR, EE, DG, etc.). If the percentage of the marketing collateral item devoted to a single DSM approach is deemed to be less than 20%, identification of a separate, dedicated funding stream for that option need not be identified.

1.3. **Launch Integrated ME&O with 2008 - 2011 AMI roll-out.** Energy Division recommends that utilities prioritize the presentation of clear, unified and coordinated DSM messages and educational materials during the AMI roll-out, starting in 2008 and extending through the deployment period. Towards this end, we recommend pursuit of the following milestones:

- utilities installing AMI in 2008 or 2009 have in place by fall 2008 a cohesive integrated DSM marketing plan to accompany their AMI deployment; and
- utilities that deploy upgraded AMI systems in 2009 or later, have in place prior to this upgrade deployment a cohesive integrated DSM marketing plan to accompany AMI deployment.

#### 1.4. Customer Interfaces - Integrated DSM ME&O on Utility Websites

1.4.1. Energy Division recommends that utilities review their customer interfaces on utility websites and optimize them to provide clear, user-friendly information on all DSM opportunities and programs. We recommend that the full range of IDSM opportunities and programs for customers are presented *by sector* (residential, commercial, industrial) and *subsector* (small commercial, restaurants, office buildings, etc.), with easy “click through” pathways to specific incentive, rebate, DR, DG and low income programs applicable to that sector.

1.4.2. Energy Division further recommends that utilities rapidly design and launch web-based interfaces that allow all customers to login and access customer-specific “customized” and “comparative” energy usage data. Energy Division recommends that customized energy usage data is based on customer billing records, data on home size, previous participation in utility rebate programs, etc. The presentation of comparative energy usage data, we believe, should in turn offer consumers the ability to gauge their energy usage in relation to a relevant peer group, such as other customers within a specific geographic range, or other customers with similarly-sized homes or commercial buildings. Energy Division recommends that utilities develop programs to present such customized and comparative energy usage data in password protected on-line programs, in concert with the presentation of specific, customer, sector and subsector tailored IDSM program opportunities, such as rebates and incentive programs (EE, DR, DG, CSI, etc). We additionally recommend that customized password-protected presentation of energy usage data and customer-tailored IDSM program participation options are linked to expanded use of standardized and integrated IDSM audits, as described below. Recent advances in computer software and applications now permit the on-line, customized presentation of a range of IDSM not previously available or

emphasized within the energy sector, and we recommend that utilities rapidly implement such approaches.

1.4.3. Energy Division also recommends that utilities should pursue implementation of such optimized IDSM customer web interfaces in a “Phase I of integrated DSM activities, to occur in the 2009-2010 period. Additionally, implementation of this aspect of integrated DSM opportunities and programs should be open to third party participation through RFPs.

**1.5. Customer Interfaces - Integrated DSM ME&O on Utility Bills.**  
Energy Division recommends that utilities rapidly advance their presentation of customized and comparative energy usage data -- and customized opportunities for participation in EE, DR, LIEE and IDSM programs - in mailed paper utility billing programs.

## **2. Coordinated Presentation of IDSM Options for Operational Improvements**

### **2.1. Availability of Standardized, Universal Integrated DSM Audit Tools to All Customers (Phase I)**

2.1.1. Energy Division recommends that utilities offer all customers access to universal IDSM audit tools that present customized cost-savings estimated on a range of IDSM options, presented in the order of the “loading order” as identified in the Energy Action Plan. Universal audit tools have the capacity to present to customers customized lists of measures and cost-savings opportunities based on customers’ varying rate schedules, and we recommend that utilities advance this methodology, as well as approaches that estimate out-of-pocket costs to customers of the range of IDSM measures, estimated rates-of-return and probable payback periods. Universal IDSM audit tools, now under development, have the capacity to provide as a matter of course customized cost-savings estimates to customers should they choose to install a range of recommended EE, DR, DG or LIEE measures, and Energy Division recommends that all utilities advance such tools as a priority for “Phase I” of the 2009-2011 period.

2.1.2. Energy Division recommends that the joint utilities collaborate together to rapidly advance the development and accessibility to *all* customers of universal audit tools with the features described above and repeated here: the provision of customized cost-savings estimates for the full range of IDSM options, presented in order of the “loading order;” information on incentive programs available (EE, DR, CSI, DG, etc); the estimated out of pocket expenses to customers of installing recommended IDSM measures, according to their rate schedules; the estimated rates-of-return and probable payback periods to customers should they install the recommended IDSM measures. Energy Division recommends that the utilities develop and implement such universal audit tools in a collaborative way that makes their use accessible to third party program implementers. Such tools should also be linked to benchmarking data, where available.

2.1.3. Energy Division recommends that once the universal IDSM audit tool has been developed, it is made available to customers on-line in password protected manner, as well as through phone and paper versions.

2.1.4. Energy Division recommends that utilities develop or improve specialized, sector and subsector-based, on-line universal IDSM audit tools, for example in the agriculture sector and/or commercial sector. As part of integration efforts, Energy Division recommends that all utility account representatives for all sectors and subsectors are trained in the functioning and use of audit tools, and incorporate education about and use of the tools as a central feature in their account interactions.

2.1.5. Energy Division recommends the above advancements in universal IDSM audit tools as a second priority for utilities in “Phase I” of the 2009-2011 period.

## **2.2. Operational Improvements - Testing the Limits of the Development of Combined IDSM Incentive Packages through Targeted IDSM Pilot Projects**

IDSM pilot projects are generally smaller scale, aimed at a targeted set of customers, and do not occur through-out a utility service area, nor represent a statewide approach.

2.2.1. Energy Division recommends that utilities further define pilot projects as necessary in the EE and DR 2009-2011 Applications, and that they group all proposed IDSM pilot projects in a dedicated section of each Application. *New* IDSM pilot projects should be clearly distinguished from ongoing or resumed projects. As much as feasible, Energy Division recommends that utilities plan and launch integrated DSM *programs*, confining use of IDSM pilot projects to those that test or advance poorly understood and/or truly innovative approaches.

2.2.2. Energy Division recommends that utilities ensure coherence between potential IDSM pilot project areas identified in the Strategic Plan and those included in the 2009-2011 DR and EE Applications. Specifically, we recommend that IDSM priority pilot project areas in the Strategic Plan are also priority areas for pilot project development and testing during the 2009-2011 period. To ensure this, Energy Division recommends that the utilities jointly identify for development and testing those IDSM pilot projects that will most contribute to coherently and strategically advancing IDSM knowledge and experience. In the 2009-2011 DR and EE Applications, we recommend that utilities clearly indicate which IDSM pilot projects they feel are most needed to advance knowledge and experience, and why. Energy Division recommends that pilot projects are designed to address knowledge and experience needed in the full range of sectors and subsectors, specifically through Local Government Partnership IDSM pilot projects, and in the commercial, residential, agricultural and industrial areas.

2.2.3. Energy Division also recommends that utilities each locate at least one IDSM pilots in a transmission constrained area.

2.2.4. Energy Division recommends that the utilities engage third party implementers and potential local government partners in their development of IDSM pilot projects. Energy Division recommends that each utility EE and DR Application present a proposed statewide IDSM potential partner development and engagement process, as required in D.07-10-032, in a manner tailored to each utility's specific service area needs and issues. Energy Division recommends that each utility 2009-2011 DR and EE Application outline plans to offer opportunities to third party implementers for the development and implementation of IDSM pilot projects in the priority areas identified. In accordance with D.07-10-032, each 2009-2011 Application should also summarize 'lessons learned' from previous integration pilot projects.

2.2.5. Energy Division recommends that utilities prioritize for inclusion in the Strategic Plan, and include in their 2009-2011 Applications, a clear 2009-2011 road-map to develop an integrated IDSM technology development plan for the 2009-2020 period. Energy Division believes that this IDSM RD&D roadmap or plan should form a central part of enhanced emerging technology programs and research, development & distribution efforts emerging from the Strategic Planning process. Energy Division believes that such steps would support utility compliance with Commission directive D.07-10-032, for an IDSM “systems approach that encompasses all types of measures, programs and activities, including research and development, codes & standards, design, hardware, controls, installation, maintenance, and user behavior.”<sup>1</sup>

2.2.6. Finally, Energy Division recommends that the joint utilities participate in any emerging statewide coordination mechanisms to advance Zero Net Energy homes or commercial buildings. Energy Division believes that one component of such collaborative statewide efforts should be to advance understanding of evaluation, monitoring and verification (EM&V) issues as related to the development of zero net energy buildings.

**(END OF ATTACHMENT)**

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<sup>1</sup> D.07-10-032, p. 31.

**INFORMATION REGARDING SERVICE**

I have provided notification of filing to the electronic mail addresses on the attached service list.

Upon confirmation of this document's acceptance for filing, I will cause a Notice of Availability of the filed document to be served upon the service list to this proceeding by U.S. mail. The service list I will use to serve the Notice of Availability of the filed document is current as of today's date.

Dated April 11, 2008, at San Francisco, California.

/s/ JEANNIE CHANG

Jeannie Chang