ALJ/KHY/lil **Date of Issuance 10/8/2014**

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

|  |  |
| --- | --- |
| Order Instituting Rulemaking to Create a Consistent Regulatory Framework for the Guidance, Planning, and Evaluation of Integrated Demand-Side Resource Programs. | FILED  PUBLIC UTILITIES COMMISSION  OCTOBER 2, 2014  SAN FRANCISCO, CALIFORNIA  RULEMAKING 14-10-003 |

ORDER INSTITUTING RULEMAKING TO CREATE A CONSISTENT REGULATORY FRAMEWORK FOR THE GUIDANCE, PLANNING, AND EVALUATION OF INTEGRATED DEMAND-SIDE RESOURCE PROGRAMS

# Summary

We open this rulemaking to consider the development and adoption of a regulatory framework to provide policy consistency for the direction and review of demand-side resource programs. We envision this framework to be a unified mechanism to authorize and direct the Commission-regulated electric and gas utilities to achieve demand reduction and load shaping using integrated demand-side management resources.

# Background

## Overview and Potential Benefits of Integrated Demand-Side Resource Programs

Public Utilities Code Section 454.5(b)(9)(c), the California Energy Action Plan, and past Commission decisions have established policies to procure all available cost-effective demand reduction and energy efficiency resources before procuring generation resources.[[1]](#footnote-2) Furthermore, Public Utilities Code Section 701.1(a) directs the Commission “to minimize the cost to society of the reliable energy services that are provided by natural gas and electricity, and to improve the environment and to encourage the diversity of energy sources through improvements in energy efficiency and renewable energy resources.”[[2]](#footnote-3) In order to fulfill these mandates, the Commission has directed the regulated electric and gas utilities to integrate demand-side program offerings to achieve maximum energy savings without duplicating efforts and while reducing transaction costs. Demand-side management resources include energy efficiency, demand response, distributed generation and storage, smart grid, water-energy measures, electric vehicle hardware, and innovative rate design.

In the past, guidance to integrate demand-side programs and portfolios has occurred mostly within the energy efficiency proceeding. However, there has not been an overarching process to plan for and procure all demand-side resources and technologies in an integrated and coordinated manner. Furthermore, State policy objectives, such as increased grid reliability, reduced greenhouse gas (GHG) emissions, and the promotion of Zero-Net Energy buildings,[[3]](#footnote-4) require the Commission to carefully coordinate our efforts in these areas.

Today, the regulated electric and gas utilities offer a host of demand management solutions, although several administrative aspects, including separate sources of funding and other inconsistent programmatic details, often makes the process cumbersome for participants. Additionally, each customer touch point can result in a significant amount of time and resources, and these separate touches may not take advantage of resource synergies or allow customers to optimize their energy management solutions across the different demand-side resources choices available to them.

To improve upon these past and current efforts, it is reasonable to review the integration of demand-side resources in a separate, standalone rulemaking. This should allow the Commission to more effectively coordinate certain electric vehicle, demand response, distributed generation, energy efficiency, distributed energy storage, marketing education and outreach, smart grid, rate design, and water-energy issues. Our intention is to consider how to best enable the utilities, other administrators, and electric market actors to offer a wide portfolio of demand modifying technologies that may be best tailored to the specific characteristics of individual customers. This proceeding will continue the established efforts to promote policy and program development to procure all available cost-effective demand reductions. We will also explore the current incentive structure for the management and shareholders of the electric and gas utilities to support demand reduction. We will seek to identify and reduce or eliminate existing barriers to providing customers with demand-side management solutions tailored to individual needs.

## Legislative Background

The Public Utilities Code grants the Commission broad authority over the public utilities that provide energy in California. In particular, Section 701 states that:

The commission may supervise and regulate every public utility in the State and may do all things, whether specifically designated in this part or in addition thereto, which are necessary and convenient in the exercise of such power and jurisdiction.

The Public Utilities Code also provides substantial guidance as to how the Commission should use this authority. Section 701.1 states:

(a) The Legislature finds and declares that, in addition to other ratepayer protection objectives, a principal goal of electric and natural gas utilities' resource planning and investment shall be to minimize the cost to society of the reliable energy services that are provided by natural gas and electricity, and to improve the environment and to encourage the diversity of energy sources through improvements in EE and development of renewable energy resources, such as wind, solar, biomass, and geothermal energy.

(b) The Legislature further finds and declares that, in addition to any appropriate investments in energy production, electrical and natural gas utilities should seek to exploit all practicable and cost‑effective conservation and improvements in the efficiency of energy use and distribution that offer equivalent or better system reliability, and which are not being exploited by any other entity.

Further, Assembly Bill (AB) 32 (Section 38500, Health & Safety Code) states:

(c) California has long been a national and international leader on energy conservation and environmental stewardship efforts, including the areas of air quality protections, energy efficiency requirements, renewable energy standards, natural resource conservation, and greenhouse gas emission standards for passenger vehicles. The program established by this division will continue this tradition of environmental leadership by placing California at the forefront of national and international efforts to reduce emissions of greenhouse gases.

Accordingly, in D.08-10-037[[4]](#footnote-5) implementing AB 32, the Commission stated:

The California Public Utilities Commission (Public Utilities Commission) and the California Energy Commission (Energy Commission) have undertaken this collaborative proceeding to develop and provide recommendations to ARB on measures and strategies for reducing GHG emissions in the electricity and natural gas sectors. This effort provides ARB with the benefit of the two Commissions’ collective knowledge of the electricity and natural gas sectors and experience implementing the programmatic measures that will be the cornerstones of emissions reductions: energy efficiency and mandates that increase California’s reliance on renewable energy sources.

Finally, the Public Utilities Code also directs corporations to first fulfill its unmet resource needs with energy efficiency and demand reduction programs:

454.5 (b)(9)(C) The electrical corporation shall first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible.

To fulfill AB 32 and other state energy policies mandates without duplication of efforts, the Commission recognizes the need to integrate planning and programs across energy technologies and activities which impact load on the customer-side of the meter. In 2009, Senate Bill (SB) 17 (Padilla) was approved in order to determine the requirements for a smart grid. SB 17 codified in Public Utilities Code Sections 8360(c-i) are all directly Integrated Demand-Side Management (IDSM) activities. (See Attachment B to this OrderInstituting Rulemaking (OIR).)

## Procedural Background

As previously stated, the Commission has sought to integrate demand-side energy solutions and technologies through utility program offerings since 2005. In D.05-09-043, the Commission set forth a process to ensure expanded use of integrated programs and tracking of program implementation. The decision approved utility proposals to include strategies to integrate energy efficiency with demand response and distributed generation in order to “determine the best combination of resources to meet the particular customer’s needs,” increase cost effectiveness, and avoid confusion to customers.[[5]](#footnote-6)

In D.07-10-032, the Commission first “required the utilities to integrate customer demand-side programs, such as energy efficiency, self-generation, advanced metering, and demand response.”[[6]](#footnote-7) Integration of demand-side management programs sought to achieve savings while avoiding duplication of efforts, reducing transaction costs, and diminishing customer confusion.[[7]](#footnote-8) The decision also committed the Commission and the utilities to engage a wide range of entities and institutions in developing and delivering integrated programs. D.07-10-032 also directed the utilities to develop a “Comprehensive Strategic Plan for Consumer Demand-Side Options” and include strategies:[[8]](#footnote-9)

… addressing the full range of comprehensive consumer demand‑side options, such as demand response, advanced meters, conservation and self-generation, 2) presenting 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) including a process to engage collaboratively the expertise of market sector professionals and the leadership of key stakeholders.[[9]](#footnote-10)

These efforts informed the development of the Long-Term Energy Efficiency Strategic Plan adopted by the Commission in 2008, including a chapter dedicated to IDSM goals and objectives the utilities were to reference for program planning.[[10]](#footnote-11) The Strategic Plan led subsequently to the initiation of a statewide utility IDSM Taskforce to advance statewide strategies for promoting IDSM through utility programs. The OIR 13‑11‑005 pointed out that the 2008 Strategic plan required updating in light of new and ongoing statewide policy initiatives.[[11]](#footnote-12)

In October 2008, an Assigned Commissioner’s Ruling (ACR) in Application 08-07-021 provided additional direction. This ACR directed the utilities to include demand-side technologies eligible for inclusion in energy efficiency, low-income energy efficiency, demand response, Self-Generation Incentive Program, and California Solar Initiative programs in any designated “integrated program.” The ACR also stated that while an integrated program should promote all eligible technologies, the resulting combination of measures should be determined by the customer.[[12]](#footnote-13)

The Commission subsequently issued D.09-09-047, which established a statewide IDSM program and stated that this was “pivotal in promoting and achieving clearly defined goals and objectives for integrating demand-side technologies and program offerings across the utility portfolios.” The Decision identified eight tasks the utilities should accomplish in the 2010–2012 program cycle.[[13]](#footnote-14)

In D.12-05-015 the Commission acknowledged “the utilities have consistently identified the lack of shared funding among Demand-Side Management program areas as a barrier to achieving IDSM objectives.”[[14]](#footnote-15) D.12‑11-015 also directed the Utilities to utilize appropriate energy efficiency IDSM funds to “backstop” funding of IDSM tools to ensure that they provide customers with information that supports all demand‑side resources (i.e., marketing, emerging technologies, integrated audits, piloting of integrated projects, etc.), consistent with IDSM objectives.

In response, the Commission directed the regulated utilities to make their proposals and funding requests for IDSM activities in their energy efficiency applications.[[15]](#footnote-16) However, the utility energy efficiency program portfolio is required to meet specific cost-effectiveness requirements associated with energy efficiency program budgets and the regulated utilities have been hesitant to promote and fund other demand-side resources (such as distributed generation and storage) through the energy efficiency proceeding, rather than through their individual designated proceedings.

Overall, the statewide IDSM program has had limited success due to a number of factors. Pursuant to D.09-09-047, Commission Staff oversaw a third‑party evaluation of California Utilities’ 2010-2012 “attempts, successes, and challenges experienced during efforts to integrate their DSM programs: energy efficiency, demand response, distributive generation, and Automated Metering Infrastructure enabled tools and rates.”[[16]](#footnote-17) The report found that “the Integrated Pilots were not designed with integration as a primary objective” and recommended that the Utilities and California Public Utilities Commission (Commission) “work together to decrease the funding and regulatory barriers to integration.”[[17]](#footnote-18) Attachment A of the OIR includes the findings and recommendations from the IDSM Omnibus evaluation. The barriers highlighted in the report also characterize the need to establish a forum to integrate comprehensive load planning activities.

## Interagency Coordination

As the State of California operationalizes the guidance from AB 32, the need for coordination and unified direction among public agencies is increasing. For this reason, the Commission seeks active participation from the California Energy Commission, the California Air Resources Board, the California Independent System Operator, and local and regional governments.

# Preliminary Scoping Memo

The Commission will review certain demand-side management activities over this proceeding to create a comprehensive framework, potentially to be termed the Customer Energy Solutions Framework.

We anticipate this proceeding will be informed by other proceedings at the Commission, including the following:

* Alternative Fueled Vehicles (Rulemaking (R.) 13-11-007)
* Demand Response (R.13-09-011)
* Distributed Generation (R.12-11-005)
* Energy Efficiency (R.13-11-005)
* Energy Storage (R.10-12-007)
* Smart Grid (R.08-12-009)
* Water-Energy Nexus (R.13-12-011)
* Energy Upgrade California Marketing Education & Outreach (currently without an open proceeding)
* Residential Rate Reform (R.12-06-013)

Many of the proceedings listed above are technology specific. This proceeding will be technology agnostic, seeking to enable the most effective sources of demand reduction to meet individual customer needs. We anticipate this may result in a major shift in the Commission’s demand-side management policy. Under this framework, the Commission may propose modifications to be applied to programs in the future in order to unify certain demand-side issues, such as:

* Goals and potential;
* Cost-effectiveness methods;
* Funding levels and sources;
* Marketing, education, and outreach;
* Long-term planning assumptions;
* Evaluation, measurement and verification;
* Data collection and public availability;
* Program implementation plans, likely streamlining the process; and
* Shareholder incentive mechanism.

Ongoing proceedings may use the framework to inform rules going forward and make modifications as appropriate. Further, this proceeding will coordinate closely with R.14-08-013, the Rulemaking Regarding Policies, Procedures and Rules for Development of Distribution Resources Plans Pursuant to Public Utilities Code Section 769.

This rulemaking will be conducted in accordance with Article 6 of the Commission's Rules of Practice and Procedure (Rules) regarding rulemaking. Furthermore, as required by Rule 7.3, this order includes a preliminary scoping memo as set forth below.

**Phase 1:  Consider the Development of an Integrated Customer Energy Solutions Framework**

This phase will consider the development of a regulatory framework, potentially termed the Customer Energy Solutions Framework, to provide policy consistency for the direction and review of demand-side resource programs. Phase 1 will consider the following:

* Policies to coordinate demand-side management goals and potential.
* Policies to unify demand-side management cost-effectiveness methods.
* Policies to unify the funding authorizations of all demand-side management technologies into one Customer Energy Solutions funding authorization.
* Further integrating the marketing, education, and outreach into the Customers Energy Solutions framework. Providing ongoing guidance for the statewide Energy Upgrade California marketing, education, and outreach efforts to ensure coordination with utility education and outreach in support of customer programs across and among different demand-side resources.
* How to best develop demand-side management assumptions for long-term resource planning in coordinate with the Long-Term Procurement Plan proceeding.
* Policies to streamline the evaluation, measurement, and verification across all demand-side management solutions.
* Policies that promote a more streamlined approach to the current energy efficiency program implementation plan and further consider developing a unified Customer Energy Solutions Plan.
* Determining the value of establishing a shareholder incentive mechanism across all demand-side management resources for any utility-specific programs that result from this proceeding.
* Identifying key policy and market barriers to adopting a coordinated demand-side management framework.
* Identifying any modifications to existing crosscutting policies needed to reduce or eliminate barriers to develop a coordinated demand-side management framework.
* Identifying new policies that the Commission can adopt to reduce or eliminate key identified barriers.
* Determining future goals for zero-net energy buildings.
* Identifying promising market segments for targeted load management pilot initiatives, including consideration of different market models for implementing Comprehensive Customer Energy Solutions.
* Identifying the proper role of the regulatory body, administrators, and implementers of resulting programs.
* Identify the most effective entities and regulatory structure to be administrators and implementers of resulting programs.
* Considering the inclusion of decisions on these issues in the next update of the Long Term Energy Efficiency Strategic Plan; considering such an update in this proceeding or the energy efficiency proceeding.
* Public Utilities Code Section 451 requires the Commission to take all actions necessary to promote the safety, health, comfort and convenience of utility patrons, employees, and the public.

**Phase 2:  Adopt a Mechanism to Direct the Creation of a Customer Energy Solutions Program**

Phase 2 will consider the adoption of a mechanism for the Commission‑regulated gas and electric utilities to fulfill any goals and requirements established during Phase 1. This phase may also require the electric and gas utilities to submit Customer Energy Solution Plans.

# Category of Proceeding and Need for Hearing

Rule 7.1(d) requires that an OIR preliminarily determine the category of the proceeding and the need for hearing. As a preliminary matter, we determine that Phase 1 of this proceeding is a “quasi-legislative” proceeding, as that term is defined in the Commission’s Rules of Practice and Procedure, Rule 1.3(d). We also determine that Phase 2 of this proceeding is a “ratesetting” proceeding, as defined by Rule 1.3(e). It is contemplated that this proceeding shall be conducted through written comments and workshops, without the need for evidentiary hearings.

Anyone who objects to the preliminary categorization of Phase 1 of this rulemaking as “quasi-legislative” preliminary categorization of Phase 2 as “ratesetting,” or to the preliminary hearing determination, must state their objections in opening comments to this rulemaking. If the person believes hearings are necessary, the comments must state: (a) the specific disputed fact for which hearing is sought; (b) justification for the hearing (e.g., why the fact is material); (c) what the party would seek to demonstrate through a hearing; and (d) anything else necessary for the purpose of making an informed ruling on the request for hearing. After considering any comments on the preliminary scoping memo, the assigned Commissioner will issue a Scoping Memo that, among other things, will make a final category determination; this determination is subject to appeal as specified in Rule 7.6(a).

# Preliminary Schedule

We establish the following preliminary schedule:

|  |  |
| --- | --- |
| **DATE** | **EVENT** |
| 20 days from the Issuance of this OIR | Deadline for Request to be on the Service List |
| 30 days from the Issuance of this OIR | Opening Comments Filed and Served |
| 45 days from the Issuance of this OIR | Reply Comments Filed and Served |
| TBD | Prehearing Conference (PHC) |
| TBD | Workshop on Phase I Issues |
| TBD | Issuance of Scoping Memo |
| Six Months from Issuance of the Scoping Memo | Proposed Decision on Phase I Issues |
| TBD | Proposals for Customer Energy Solutions Demonstrations Served |
| TBD | Workshop on Phase II Issues |
| 30 days from Phase II Workshop | Workshop Report Regarding Concepts for Customer Energy Solutions Demonstrations and Implementation Issued to Service List for Comment |
| 18 Months from Issuance of the Scoping Memo | Proposed Decision on Phase II Issues |

A PHC will be scheduled following the receipt of responses and replies to this OIR. The PHC will address the final determination of categorization, need for hearing, scope and scheduling issues for this proceeding. The Scoping Memo for this proceeding will make the final determinations for each of these aspects.

The assigned Commissioner and the assigned Administrative Law Judge may modify the schedule as necessary during the course of the proceeding. We anticipate this proceeding will be resolved within 18 months from the issuance of the Scoping Memo for this Rulemaking.

# Respondents

Pacific Gas and Electric Company, Southern California Edison Company and San Diego Gas & Electric Company shall be respondents in this proceeding. Respondents shall be placed on the service list automatically as parties, but within 20 days of issuance of this OIR, each respondent shall alert the Commission’s Process office of the name and address and e-mail information for its representative to receive service.

# Service of OIR

This OIR shall be served on all respondents and, in the interest of broad notice, on the official service lists for the following proceedings:

* Alternative Fueled Vehicles (R.13-11-007)
* Demand Response (R.13-09-011)
* Distributed Generation (R.12-11-005)
* Energy Efficiency (R.13-11-005)
* Energy Storage (R.10-12-007)
* Smart Grid (R.08-12-009)
* Water-Energy Nexus (R.13-12-011)
* Residential Rate Reform (R.12-06-013)

Service of the OIR does not confer party status or place a person who has received such service on the Official Service List for this proceeding.

# Filing and Service of Comments and Other Documents

Filing and service of comments and other documents in the proceeding are governed by the rules contained in Article 1 of the Commission’s Rules of Practice and Procedure. (See particularly Rules 1.5 through 1.10 and 1.13.)

# Addition to Official Service List

Addition to the official service list is governed by Rule 1.9(f). Respondents are parties to the proceeding (see Rule 1.4(d)) and will be immediately placed on the official service list.

Any person will be added to the “Information Only” category of the official service list upon request, for electronic service of all documents in the proceeding, and should do so promptly in order to ensure timely service of comments and other documents and correspondence in the proceeding. (See Rule 1.9(f).) The request must be sent to the Process Office by e-mail ([process\_office@cpuc.ca.gov](mailto:process_office@cpuc.ca.gov)) or letter (Process Office, California Public Utilities Commission, 505 Van Ness Avenue, San Francisco, California 94102). Please include the Docket Number of this rulemaking in the request.

Persons who file responsive comments thereby become parties to the proceeding (see Rule 1.4(a)(2)) and will be added to the “Parties” category of the official service list upon such filing. In order to assure service of comments and other documents and correspondence in advance of obtaining party status, persons should promptly request addition to the “Information Only” category as described above; they will be removed from that category upon obtaining party status.

# Subscription Service

Persons may monitor the proceeding by subscribing to receive electronic copies of documents in this proceeding that are published on the Commission’s website. There is no need to be on the official service list in order to use the subscription service. Instructions for enrolling in the subscription service are available on the Commission’s website at <http://subscribecpuc.cpuc.ca.gov/>.

# Public Advisor

Any person or entity interested in participating in this rulemaking who is unfamiliar with the Commission’s procedures should contact the Commission’s Public Advisor in San Francisco by telephone at (415) 703-2074 or (866) 849-8390, or by e-mail at [public.advisor@cpuc.ca.gov](mailto:public.advisor@cpuc.ca.gov). The TTY number is (866) 836-7825. Written Communication may be sent to Public Advisor, California Public Utilities Commission, 505 Van Ness Avenue, San Francisco, CA 94102.

# Intervenor Compensation

Any party that expects to request intervenor compensation for its participation in this OIR shall file its notice of intent to claim intervenor compensation in accordance with Rule 17.1 within 30 days of the filing of reply comments or of the PHC, whichever is later.

# *Ex Parte* Communications

*Ex parte* communications in this proceeding are subject to Article 8 of the Commission’s Rules of Practice and Procedure.

**IT IS ORDERED** that:

1. An Order Instituting Rulemaking is instituted on the Commission’s own motion to consider the development and adoption of a regulatory framework to provide policy consistency for the direction and review of integrated demand‑side resource programs.
2. Phase 1 of this rulemaking is preliminarily determined to be a quasi‑legislative proceeding, as that term is defined in the Commission’s Rules of Practice and Procedure, Rule 1.3(d), and it is preliminarily determined that no hearings are necessary.
3. Phase 2 of this rulemaking is preliminarily determined to be a ratesetting proceeding, as that term is defined in the Commission’s Rules of Practice and Procedure, Rule 1.3(e), and it is preliminarily determined that no hearings are necessary.
4. The preliminary schedule for this proceeding is as set forth in the body of this Order Instituting Rulemaking. The assigned Commissioner and the assigned Administrative Law Judge may modify the schedule as necessary.
5. The issues to be considered in this Order Instituting Rulemaking (OIR) are those set forth in Section 3 of this OIR.
6. Comments and reply comments must be filed 30 and 45 days respectively from the mailing of this Order Instituting Rulemaking, unless the assigned Commissioner or Administrative Law Judge modifies the schedule. Comments and reply comments shall conform to the requirements of the Commission’s Rules of Practice and Procedure.
7. Any persons objecting to the preliminary categorization of Phase 1 of this Order Instituting Rulemaking (OIR) as “quasi-legislative,” the preliminary categorization of Phase 2 of this OIR as “ratesetting,” or to the preliminary determination on the need for hearings, issues to be considered, or schedule shall state their objections in their opening comments of this OIR.
8. The Executive Director shall cause this Order Instituting Rulemaking to be served on the Respondents, all load-serving entities listed in the Commission’s official records, the California Energy Commission, the California Independent System Operator, and the service lists for Rulemaking (R.) 13-11-007 (Alternative Fueled Vehicles); R.13-09-011 (Demand Response); R.12-11-005 (Distributed Generation); R.13-11-005 (Energy Efficiency); R.10-12-007 (Energy Storage); R.08‑12-009 (Smart Grid); R.13-12-011 (Water-Energy Nexus); and R.12-06-013 (Residential Rate Reform). The temporary service list shall be used for service of all pleadings until a service list for this proceeding is established. A service list of this proceeding shall be created by the Commission’s Process Office and posted on the Commission’s website ([www.cpuc.ca.gov](http://www.cpuc.ca.gov/)) as soon as practical. Parties serving documents in this proceeding shall comply with Rule 1.10 regarding electronic service. Any documents served on the assigned Commissioner and Administrative Law Judge shall be both by email and by delivery or mailing a paper format copy of the document.
9. Any party that expects to claim intervener compensation for its participation in this Order Instituting Rulemaking shall file its notice of intent to claim intervener compensation in accordance with Rule 17.1 of the Commission’s Rules of Practice and Procedure, within 30 days of the filing of reply comments or of the prehearing conference, whichever is later.
10. All respondents shall be parties to this proceeding. Entities other than respondents shall comply with Rules 1.4(a) and Rule 1.4(b) to become parties in this proceeding.
11. *Ex parte* communications in this Rulemaking are governed by Rule 8.3(a) of the Commission’s Rules of Practice and Procedure.

This order is effective today.

Dated October 2, 2014, at San Francisco, California.

MICHAEL R. PEEVEY

President

MICHEL PETER FLORIO

CATHERINE J.K. SANDOVAL

CARLA J. PETERMAN

MICHAEL PICKER

Commissioners

**Attachment A**

**Findings and Recommendations of the IDSM Omnibus Report**

**Positive Findings:**

Utility personnel have a good understanding of the concepts of IDSM.

Commercial and industrial account executives provide their customers with information necessary to facilitate the implementation of integrated projects.

PG&E and SDG&E have implemented an integrated residential audit tool that uses individual hourly load data.  SCE’s integrated residential audit tool is available and will soon incorporate individual hourly load data.

Within the residential sector, the Utilities are beginning to integrate EE programs with rate, cycling, and behavioral programs facilitated by the AMI installation.

**Negative Findings:**

The Integrated Pilots were not designed with integration as a primary objective.

Integrating EE and DR into a project often leads to a reduction in the anticipated DR impact for the project relative to DR without EE.  The reduced savings from integrated DR projects reduces the incentive to pursue DR integration with EE.

Undertaking an integrated project or adopting integrated technologies is often more expensive than implementing a technology with only EE or DR capabilities.

The different timing of EE, DR, and DG program cycles is a barrier to integration.

The definition of IDSM is not concrete nor is it comprehensive.  It is difficult for the utilities to achieve IDSM without a clear description of what it entails.

The current application process is a barrier to integration.  Completing multiple applications with differing review times and funding cycles discourages sites from completing integrated projects.

The limited funding available for DG is hampering the incorporation of DG into integrated projects and marketing.

**Recommendations:**

SCE, SDG&E, and SCG should coordinate with PG&E by reviewing PG&E’s training and incorporating aspects that are appropriate for their utilities.

The CPUC should provide the Utilities with a concise definition of IDSM.

The Utilities should work to develop a tracking system that will simplify the integration of program participation information.

The IDSM Task Force and integration groups within the utilities should include representatives from AMI enabled programs, including behavioral and rate based programs.

The Utilities and the CPUC should discuss the development of integration goals.

If the CPUC does not develop integration goals, the Utilities should develop internal integration goals for programs and/or types of DSM.

The CPUC should consider the development of a reliable DG funding source.

The Utilities and the CPUC should consider the development of a new incentive or financing mechanism for integrated projects and technologies.

The Utilities should work to develop programs and pilots with integration as a central objective.

The Utilities and the CPUC should discuss ways to limit the negative influence of different funding cycles and reservation periods on integrated projects.

The Utilities need to develop integrated programs designed to influence new construction design at its earliest phase.

The Utilities should develop integrated training and outreach for third party implementers.

**(End of Attachment A)**

**Attachment B**

***SB 17 (Padilla, 2009) PUC 8360-8369***

This code section is the foundation for all CPUC activities regarding “Smart Grid.” **PUC Section 8360(c-i)** are all directly related to IDSM activities:

(c) Deployment and integration of cost-effective distributed resources and generation, including renewable resources.

(d) Development and incorporation of cost-effective demand response, demand‑side resources, and energy-efficient resources.

(e) Deployment of cost-effective smart technologies, including real time, automated, interactive technologies that optimize the physical operation of appliances and consumer devices for metering, communications concerning grid operations and status, and distribution automation.

(f) Integration of cost-effective smart appliances and consumer devices.

(g) Deployment and integration of cost-effective advanced electricity storage and peak-shaving technologies, including plug‑in electric and hybrid electric vehicles, and thermal-storage air-conditioning.

(h) Provide consumers with timely information and control options.

(i) Develop standards for communication and interoperability of appliances and equipment connected to the electric grid, including the infrastructure serving the grid.

**(End of Attachment B)**

1. Public Utilities Code Section 454.5(b)(9)(c) states: “The electrical corporation will first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable, and feasible.” [↑](#footnote-ref-2)
2. Public Utilities Code Section 701.1(a). [↑](#footnote-ref-3)
3. Decision (D.) 07-10-032 adopted the goals that “New Residential Construction will reach ‘zero net energy’ (ZNE) performance (including clean, onsite distributed generation) for all new single and multi-family homes by 2020,” and, “New Commercial Construction will increasingly embrace zero net energy performance (including clean, distributed generation), reaching 100 percent penetration of new starts in 2030.” D.08-09-040, by adopting the California Energy Efficiency Strategic Plan, adopted its goal that, “50% of existing commercial buildings will be equivalent to zero net energy buildings by 2030 through achievement of deep levels of energy efficiency and clean distributed generation” (California Energy Efficiency Strategic Plan at 11, 31). The California Energy Commission has articulated the same new construction ZNE building goals in its 2007, 2009, 2011 and 2013 Integrated Energy Policy Reports. [↑](#footnote-ref-4)
4. D.08-10-037 at 3. [↑](#footnote-ref-5)
5. D.05-09-043 at 28, 71. [↑](#footnote-ref-6)
6. D.07-10-032 at 5. [↑](#footnote-ref-7)
7. D.07-10-032 at 6. [↑](#footnote-ref-8)
8. D.07-10-032 at 16. [↑](#footnote-ref-9)
9. D.07-10-032 at 31. [↑](#footnote-ref-10)
10. CPUC (2008). California Long-Term Energy Efficiency Strategic Plan. Available at: <http://www.cpuc.ca.gov/NR/rdonlyres/D4321448-208C-48F9-9F62-1BBB14A8D717/0/EEStrategicPlan.pdf>. [↑](#footnote-ref-11)
11. OIR 13-11-005, November 21, 2013, at 17. [↑](#footnote-ref-12)
12. October 30, 2008, ACR in Application 08-07-021 at 24. [↑](#footnote-ref-13)
13. D.09-09-047 went on to identify eight tasks the utilities should accomplish in the 2010-2012 program cycle. [↑](#footnote-ref-14)
14. D.12-05-015 at 317. [↑](#footnote-ref-15)
15. D.12-05-015 at 318. [↑](#footnote-ref-16)
16. ITRON (2012). 2010-2012 CPUC Omnibus IDSM Process Evaluation. Accessible at <http://www.calmac.org/publications/CPUC_IDSM_FinalReport.pdf> at ES-6. [↑](#footnote-ref-17)
17. *Ibid*. at 246. [↑](#footnote-ref-18)