## **CALIFORNIA ENERGY COMMISSION**

1516 Ninth Street Sacramento, California 95814 Main website: www.energy.ca.gov

Consumer Website: www.ConsumerEnergyCenter.org

Children's Website: www.energyguest.ca.gov



2008 Order Instituting Informational Proceeding and Rulemaking on Load Management Standards

Docket No. 08-DR-01

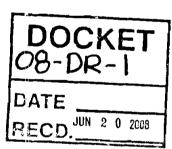
NOTICE OF EFFICIENCY COMMITTEE WORKSHOP

# Notice of Efficiency Committee Load Management Standards Workshop on Enabling Technologies

The California Energy Commission's Efficiency Committee will conduct a workshop on demand response and peak electricity management enabling technologies as part of its Load Management Standards proceeding. Chairman Jackalyne Pfannenstiel is the presiding member, and Commissioner Arthur H. Rosenfeld is the associate member. Other Commissioners may attend and participate in this workshop. In addition, Commissioners and officials from the California Public Utilities Commission (CPUC) and the California Independent System Operator (California ISO) have been invited to participate.

THURSDAY, JUNE 19, 2008

10 a.m.
CALIFORNIA ENERGY COMMISSION
1516 Ninth Street
First Floor, Hearing Room A
Sacramento, California
(Wheelchair Accessible)



Audio from this meeting will be broadcast over the Internet.

For details, please go to:

www.energy.ca.gov/webcast/

To participate in the meeting by phone, please call 888-469-0487 by 10 a.m. Passcode: LMSTD Call Leader: E. V. (AI) Garcia

If you are planning to attend this meeting, please be aware that drivers can expect traffic congestion and delays due to repair work on Interstate 5 in the downtown Sacramento area. Information on road closures and alternate routes is available at [http://www.fixi5.com/], or you can call 511 to get information in English and Spanish.

# **Purpose**

The Efficiency Committee is interested in receiving input on the potential use of the Energy Commission's load management authority to further the development and use of technologies that enable customers to voluntarily manage their electric load, and take advantage of potential time varying electric rates.

This workshop will include presentations from investor- and publicly-owned utilities, technical experts, and industry representatives on enabling technologies. The Efficiency Committee is interested in discussions of any of the following:

- Communications protocols, platforms, and systems that support enabling technologies, customer information, or time of use (TOU) and dynamic rates.
- Currently-available and near-term enabling technologies, and how these technologies could be applied in different customer sectors to achieve voluntary and cost effective load management.
- Open Home Area Network (Open HAN), customer rights and obligations, utility rights and obligations, and vendor rights and obligations.
- Energy storage and other load-shifting technologies.
- Automated demand response (Auto DR) protocols and technologies.

Possible load management standards concerning enabling technologies include, but are not limited to:

- Adopt reference designs and standards for enabling technologies.
- Adopt statewide protocols for communication systems for enabling technologies.
- Require utilities to participate in research programs to determine the next generation of enabling technologies and identify best practices for introducing them to customers.
- Require all utilities to offer enabling technologies on a voluntary basis to new and existing residential and small commercial customers.
- Require utilities to establish programs for consideration of end-use and grid storage equipment.
- Require utilities to offer technical assistance for automated demand response equipment and installation to large commercial and industrial customers.

# **Background**

On January 2, 2008, the Energy Commission approved an Order Instituting Informational and Rulemaking Proceeding (OII/OIR) on demand response equipment, rates, and protocols.<sup>1</sup> The purpose of the OII/OIR is to:

- (1) Assess which rates, tanffs, equipment, software, protocols, consumer information, and other measures would be most effective in achieving demand response.
- (2) Adopt regulations and take other appropriate actions to achieve a voluntary, price-responsive electricity market.<sup>2</sup>

The Energy Commission has longstanding authority to adopt cost-effective load management standards to reduce and shift peak demand (PRC 25403.5). Under the broad scope established, the Energy Commission "shall consider, but need not be limited to," the following load management techniques:

- (1) "Adjustments in rate structure to encourage the use of electrical energy at offpeak hours or to encourage control of daily electrical load."
- (2) "End use storage systems which store energy during off-peak periods for use during peak periods."
- (3) "Mechanical and automatic devices and systems for the control of daily and seasonal peak loads."

On March 3, 2008, the Efficiency Committee held a scoping workshop to obtain public input on the development and possible adoption of new load management standards. The workshop included presentations from the Energy Commission, CPUC, California ISO, utilities, researchers, and invited technical experts. Discussions included review of the Energy Commission's load management standards authority and demand response accomplishments. Participants discussed current plans and research on demand response technology advancements in California, other states, and other countries. The public and other interested parties also had an opportunity to address the Efficiency Committee.

Demand response refers to mechanisms to manage the demand from customers in response to supply conditions, for example, having electricity customers reduce their consumption at critical times or in response to market prices. Demand response is generally used to refer to mechanisms used to encourage consumers to reduce or shift demand, thereby reducing the peak demand for electricity.

In a price (demand) responsive electricity market, the price of electricity reflects either wholesale market or system operating conditions, and customers respond voluntarily by reducing consumption during higher-price periods. A fundamental element of price response is the allocation of procurement costs by time, resulting in rates that rise or fall with demand, providing incentives for customers to conserve during peak electricity usage periods or shift electricity demand from higher to lower-price periods.

After considering the information presented and discussed at the workshop, as well as the comments received, the Efficiency Committee published a Load Management Standards Efficiency Committee Scoping Order on April 25, 2008. This document can be found at: <a href="http://www.energy.ca.gov/load\_management/documents/2008-04-28">[http://www.energy.ca.gov/load\_management/documents/2008-04-28</a> SCOPING ORDER.PDF].

On April 29, 2008, the Efficiency Committee held a workshop on Smart Grid Activities and Technologies. The workshop included presentations from Energy Commission Public Interest Energy Research program, U.S. Department of Energy, California ISO, investor and publicly owned utilities, and invited technical experts. Discussions covered current utility smart grid development plans, and how state regulations could support and encourage responsible development of a smart grid.

On May 27, 2008, the Efficiency Committee held a workshop on Advanced Metering Infrastructure (AMI). The workshop included presentations from both investor-owned and publicly-owned utilities on their AMI business cases and rollout plans in addition to lessons learned in designing, developing, and deploying AMI. The discussion explored the relationship between AMI functionality and the capability of supporting different policy goals, and differences in functionality among current systems.

On June 10, 2008, the Efficiency Committee will hold a workshop on rate design, incentives, and market integration. This workshop will include an overview of cost-based ratemaking and general rate design. Presentations from the CPUC, investor-owned utilities, and publicly-owned utilities will cover current rate design policy supporting time of use (TOU) and dynamic rates. The Committee will also solicit input on rate design in support of load shifting and energy storage technologies, and how retail tariffs and programs can be integrated with wholesale markets and control area operations.

Information about each workshop, and the Energy Commission's Load Management Standards proceeding in general, can be found on the Load Management Standards proceeding web page: [http://www.energy.ca.gov/load\_management/index.html].

### Schedule

| June 3, 2008  | Comments due from public on May 27, 2008, workshop               |
|---------------|--|
| June 10, 2008 | Workshop on Rate Design, Incentives, and Market Integration      |
| June 17, 2008 | Comments due from public on June 10, 2008, workshop              |
| June 19, 2008 | Workshop on Enabling Technologies and Communications             |
| June 26, 2008 | Comments due from public on June 19, 2008, workshop              |
| July 10, 2008 | Workshop on Customer Education and Needs                         |
| July 17, 2008 | Comments due from public on July 10, 2008, workshop              |
|               | Staff report and recommendations for Load Management Standards   |
| Early August  | Clair report and recommendations for Load Management Clair dated |

<sup>\*</sup> Bold entries denote future workshop and hearing dates.

The schedule above shows the past workshop dates and the projected dates of upcoming Efficiency Committee Workshops on the Load Management Standards proceeding. Please note dates are subject to change. If so, changes will be appropriately noticed and posted on the Load Management Standards proceeding web page. Staff reports, workshop notices, presentations, written comments, and other proceeding documents will also be posted in the same location:

[http://www.energy.ca.gov/load management/index.html].

## **Written Comments**

Proposals or other written comments regarding load management enabling technologies submitted before the workshop are requested by 5:00 p.m. on Monday, June 16, 2008. Proposals or other written comments to be considered after the workshop must be submitted by 5:00 p.m. on Thursday, June 26, 2008. Please include the docket number "08-DR-01" and indicate "Load Management Standards: Enabling Technology" in the subject line and first paragraph of your comments. Please hand deliver or mail an original plus 10 paper copies to:

California Energy Commission Dockets Office, MS-4 Re: Docket No. 08-DR-01 1516 Ninth Street Sacramento, CA 95814-5512

The Energy Commission encourages comments by e-mail. Please include your name and your organization's name in the name of the file. Those submitting comments by electronic mail should provide them in either Microsoft Word format or Portable

Document format (PDF) to [docket@energy.state.ca.us]. One paper copy must also be sent to the Energy Commission's Docket Unit.

Participants may also provide an original and 10 copies at the beginning of the workshop. All written materials relating to this workshop will be filed with the Dockets Unit and become part of the public record in this proceeding.

# **Public Participation**

The Energy Commission's Public Adviser's Office provides the public assistance in participating in Energy Commission activities. If you want information on how to participate in this forum, please contact the Public Adviser's Office at (916) 654-4489 or toll free at (800) 822-6228, by FAX at (916) 654-4493, or by e-mail at <a href="mailto:pao@energy.state.ca.us">[pao@energy.state.ca.us</a>]. If you have a disability and require assistance to participate, please contact Lou Quiroz at (916) 654-5146 at least five days in advance.

Please direct all news media inquiries to the Media Office at (916) 654-4989, or by e-mail at [mediaoffice@energy.state.ca.us]. If you have questions on the technical subject matter of this forum, please call Gabriel D. Taylor, P.E., Load Management Standards Proceeding Project Manager, at (916) 654-4045 or [LoadManagementOIR@energy.state.ca.us].

JACKALYNE PFANNENSTIEL Chairman and Presiding Member

**Efficiency Committee** 

ARTHUR H. ROSENFELD

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Commissioner and Associate Member

**Efficiency Committee** 

Mail List Server: energypolicy (IEPR); appliances (Appliances); efficiencywg (Title-24); loadmanagement (Load Management); electricity (Electricity)

Note: California Energy Commission's formal name is State Energy Resources Conservation and Development Commission.