

December 19, 2008  
LEG 2008-0820

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

<b>DOCKET</b> <b>08-DR-1</b>
DATE <u>DEC 19 2008</u>
RECD. <u>DEC 19 2008</u>

Re: **Load Management Standards: Proposed Standards Comments**  
**Sacramento Municipal Utility District's Comments on Draft Committee**  
**Proposed Load Management Standards - Docket No. 08-DR-01**

The Sacramento Municipal Utility District (SMUD) hereby submits the enclosed comments regarding the Draft Committee Proposed Load Management Standards ("LMS"), including the District's suggested changes to the Committee's Proposed LMS.

If you have any questions regarding our comments, please do not hesitate to contact the undersigned at (916) 732-6121.

Sincerely,

/s/ Steve Cohn

Steve Cohn  
Chief Assistant General Counsel

Attachments

**STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION**

2008 Order Instituting Informational Proceeding )  
and Rulemaking on Load Management Standards )  
\_\_\_\_\_ )

Docket No. 08-DR-01

**COMMENTS OF THE  
SACRAMENTO MUNICIPAL UTILITY DISTRICT  
ON DRAFT COMMITTEE PROPOSED LM STANDARDS**

In accordance with the “Notice of Efficiency Committee Load Management Standards Workshop on Draft Proposed Standards,” the Sacramento Municipal Utility District (“SMUD”) respectfully submits these Comments on the Draft Committee Load Management Standards (“LMS”), including the District’s suggested changes to the Draft Committee Proposed LMS, which are attached.

**LMS-1: Advanced Metering Infrastructure**

SMUD generally supports the CEC staff’s proposed version of LMS-1: Advanced Metering Infrastructure (“AMI”). In fact, SMUD would be exempt from the proposed reporting requirements of this standard regardless of which version is adopted because SMUD has already conducted an AMI business case and has begun implementing an AMI program that meets the functionality requirements of this standard.

However, having undergone the process of developing an AMI business case, SMUD is very aware of the scope, size and cost of such an undertaking. For this reason, SMUD shares the concern voiced by the California Municipal Utilities

Association (“CMUA”) on behalf of the many small utilities that would find compliance with this requirement to be difficult, expensive and time consuming.

SMUD recommends that utilities with peak loads less than 200 MW in California be exempt from the standard. The 13 large and medium California publicly owned utilities (“POUs”) that have peak loads of 200 MW or greater account for 93% of estimated 2008 total POU load.<sup>1</sup> Requiring the remaining 24 small to very small POUs, as well as the small IOUs or IOUs with a small footprint in California, to comply with the proposed standard would impose an unnecessary hardship on these utilities, without any commensurate benefit to the utilities, their customers or the state as a whole.

In addition, six months is insufficient time for utilities to develop a business case. The IOUs required at least one year to develop their AMI business cases. It took SMUD six months of focused effort to update an existing business case. We recommend that utilities be afforded at least one year to develop business cases to ensure that they are comprehensive and supportable.

#### **LMS-2: Dynamic Electricity Rates**

Apart from the jurisdictional issues regarding rate design that were raised by CMUA, SMUD generally supports Chair Pfannenstiel’s proposed version of LMS-2: Dynamic Electricity Rates. SMUD believes this standard should be applicable to utilities that have fully implemented AMI systems to minimize the impact on any planned roll-out of AMI. Requiring utilities to offer time-dependent rates, along with usage and billing data to customers as they receive their AMI meters will change the scope of the AMI project and may delay roll-out.

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<sup>1</sup> Based on data in “Statewide Energy Efficiency Potential Estimates and Targets for California Utilities, Draft Staff Report,” Appendix A, CEC-200-2007-019-SD, August 2007.



SMUD believes that the standard should be flexible enough to allow for transitional rates. Many California utilities have inclining block rates, particularly for residential customers, but also in some cases for commercial customers. Customers whose usage typically places them in the higher tiers structurally benefit from moving to time-dependent rates, regardless of their actual shift or reduction in electricity use. Conversely, customers who remain in the lower tiers each month cannot benefit from moving to a time-dependent rate, no matter how much they shift load or conserve.

Moving to optional time-dependent rates that provide no price incentive to a large portion of utility customers to shift or reduce load, while providing a bill credit to another large portion of utility customers regardless of usage, will not achieve statewide demand response goals. Although there was discussion during the Rates Workshop in this proceeding regarding the bill effects on low users of moving from an inclining block rate to a time-dependent rate, no allowance is made in this standard for transitional rates that enable low users on inclining block rates to benefit under time-dependent rates.

SMUD proposes that utilities be allowed to provide transitional rates that combine usage tiers with time-dependent pricing for customers on inclining block rates for a period of time. This time period will permit utilities: (1) to restructure rates slowly so that low users can benefit under time-dependent pricing if they change energy using behaviors; and (2) to perform studies that measure the effects of rate and real-time usage information on subsequent energy use behaviors and bills.

The requirement that “rate offerings must include time-of-use rates, critical peak pricing rates, and real time pricing rates” is too specific and ignores the wide range of sizes, customer mixes, climates, and operational characteristics of California utilities that affect their customers’ ability to respond to the various time-dependent rate structures. SMUD

believes that requiring a menu of time-dependent rates for all customers is sufficient to achieve the proposed Standard's purpose while providing utilities the flexibility to construct time-dependent rates that are effective and make sense for each utility's unique operating environment.

In both principle and practice, SMUD supports marketing and educational programs that inform customers about rates, load management, conservation, and energy efficiency. However, the exact meaning of the word "extensive" in the standard language pertaining to these programs is unclear, and brings into question the effect this standard will have on marketing, outreach and education program budgets. SMUD believes that specifying both the required types of information and the content of the information, as is done in this Standard, is sufficient to bring about an increase in the level and quality of effort committed to customer education by California utilities. SMUD suggests deleting the word "extensive" from this standard because it is both ambiguous and unnecessary.

SMUD also suggests that the time period for enforcement of this Standard be 18 months, rather than six months. The time required to develop new rate structures in addition to the statutory requirements for public input to the POU rate process, make it nearly impossible for POUs to comply with the Standard's required time table.

### **LMS-3. Statewide Time-Differentiated Rate Broadcast**

SMUD supports the Commission's efforts to promote standard communication protocols and information models for the transmission of rate and reliability information. However, SMUD objects to the requirement that utilities with AMI capability must provide an "RDS broadcast signal" on the grounds that it is redundant to utility AMI-enabled systems. It would add unnecessary costs without

adding functionality or capability. SMUD recommends that utilities with AMI capability be exempt from the requirement to provide RDS signals.

#### **LMS-4: Home Energy Rating System Information**

SMUD supports the Commission's intent to ensure that all California utilities comply with new HERS II regulations that enable valuable energy efficiency assessments of existing residential buildings. SMUD is already planning to provide information to customers that will meet the requirements outlined in LMS-4.

SMUD's only concern is that these requirements will be burdensome to the smallest public and private utilities that lack the resources to develop the materials and information dissemination infrastructure needed to comply with the proposed requirements. This can be overcome by the Commission creating or assembling templates for printed collateral and/or a central web site providing this information so that utilities could leverage this information if they choose not to develop their own materials or if it would be too costly.

#### **LMS-5: Existing Building Peak Energy Efficiency Improvements**

SMUD supports the Commission's intent to ensure that all Californians have access to information that encourages them to improve the energy efficiency of their buildings and dwellings. SMUD is already providing, or planning to provide, all of the services and targeting strategies listed in LMS-5. SMUD believes that it is important to preserve the ability of the local utility to tailor such requirements to their unique customers and service area, so the requirements should maintain their current form in that they do not prescribe specific strategies.

Furthermore, small utilities, particularly those with a peak demand smaller than 200 MW, will find these requirements cost-prohibitive. For these utilities, the



Commission should grant a categorical exemption and/or provide resources that will enable them to meet the intent of these requirements at very low cost. For example, the Commission could designate existing online audit tools such as LBNL's "Home Energy Saver" as qualifying tools that small utilities could promote to their customers to meet the requirement to provide an on-line audit tool.

#### **LMS-6: Enabling Technology Adoption Program**

SMUD supports aspects of both the CEC Staff's and Chair Pfannenstiel's proposed versions of LMS-6: Enabling Technology Adoption. SMUD concurs with Chair Pfannenstiel's intent to provide information to demand response program participants about technology that can facilitate their response. But SMUD also agrees with Staff that to move such technology into the market will take more than information. It will take additional monetary incentive. New technologies in particular require rebates to buy down some of the perceived risk and higher cost of adoption. Mass market programs promoting PCD technologies will develop demand and bring down the market price for such devices. For these reasons, SMUD supports the Staff requirement that utilities offer PCD incentive programs. The requirement for incentives needs to be reviewed on a periodic basis, because incentives may not be needed in the future due to high market penetration of PCDs.

SMUD also agrees with Chair Pfannenstiel that it is not sufficient to make emerging technologies available. Customers have to be aware of the technologies and their features, and they need to have access to information and education on how to use the technologies.

SMUD is concerned that requiring an incentive program of smaller utilities, particularly those with peak loads under 200 MW, will prove cost burdensome, and therefore recommends that these utilities be exempt from the standard.

SMUD also believes that four months is not sufficient time to develop an incentive program that typically includes a market analysis, an implementation plan including marketing and delivery plans, a cost-benefit analysis and an evaluation plan. Therefore, SMUD recommends a minimum of six months for utilities to submit their PCD Program plans.

#### **LMS-7: Customer Access to Meter Data**

In general, SMUD supports the Commission's efforts to ensure customer access to meter data; however, SMUD does not support some of the specific requirements of this proposed standard. In particular, the requirement that all utilities conduct customer research to develop display and analytical tools that communicate rates and demand response options is: burdensome, not a cost-effective way to obtain research information, and not likely to produce sound research results. The standard has no requirements that utilities coordinate research efforts. Moreover, there are no controls over the rigor and design of the research, nor is there any requirement for sharing results. SMUD believes that processes and organizations already in place by the CEC to promote and coordinate such research, such as the Demand Response Research Center at LBNL, are far better equipped with grant funds and oversight capability to produce sound research than a regulatory mandate. Even though SMUD is one of a few utilities already in compliance with this requirement, we recommend that it be dropped from the standard.

The requirement that utilities provide historical billing consumption data up to and including 24 hours of the request would seem to require an AMI system.



Ordinarily utility billing systems produce monthly billing data through production runs within a few days following the close of a billing cycle and the reading of the meter. Requiring utilities to produce monthly data up to and including 24 hours of a request would require manual intervention in the form of a special meter read and bill calculation, unless the utility has an AMI system from which hourly usage and billing data can be extracted at any time. SMUD recommends changing the language to read “up to and including the last day of the last billing cycle prior to the request,” or changing the applicability to utilities that have an AMI system fully in place. This latter would be our preference.

SMUD appreciates this opportunity to comment on the proposed Standards and to suggest the attached changes to the Committee’s proposed Standards.

Respectfully submitted,

December 19, 2008

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# SMUD'S SUGGESTED CHANGES IN REDLINE FORMAT TO COMMITTEE'S DRAFT PROPOSED LOAD MANAGEMENT STANDARDS

## Chapter 8: Proposed Load Management Standards

By providing customers with the information, motivation, and tools necessary to make intelligent and cost-effective decisions about how they use energy, these standards will support the voluntary and permanent adoption of efficient energy consumption behaviors.

### Advanced Metering Infrastructure

#### LMS-1. Advanced Metering Infrastructure (AMI) Schedule

**Purpose:** To require all utilities to prepare a plan for deploying advanced meters to all customers within their service territory.

**Applicability:** The provisions of this section will apply to all California utilities except categorically exempt utilities.

**Effective Date:** Compliance with this article shall be enforceable 30 days after the Load Management Standards are filed with the Secretary of State.

1. Each utility shall establish a schedule for automated metering infrastructure (AMI) deployment, if feasible and cost-effective.
2. All utilities shall report to the California Energy Commission Executive Director within ~~six months~~ one year of (DATE when this becomes effective) on the feasibility and cost-effectiveness of installing an advanced metering infrastructure for their service territory.
3. If the report determines that AMI is neither feasible nor cost-effective at the time, the utility will conduct a follow-up feasibility study within two years of the initial study.
4. All utilities, specifically small publicly owned utilities, are encouraged to work in collaboration with other utilities – including both publicly owned and IOUs – and/or through other industry organizations to meet the reporting requirements of this section and to cooperatively develop AMI infrastructures to capture economies of scale and leverage with equipment vendors, with the goal of reducing costs to ratepayers.
5. All utilities shall develop a business case for the installation of AMI with the following minimum capabilities:
  - a. Support of a wide range of price responsive rates.
  - b. Compatible with utility system applications that promote and enhance system operating efficiency and improve service reliability, such as advanced metering infrastructure, outage management, reduction of theft and diversion, improved forecasting, workforce management, etc.
6. Exceptions
  - a. Utilities which have developed business cases and begun deployment of AMI systems are exempt from the reporting requirements of this section. They are still subject to the functionality requirements specified in the Section.

- b. Utilities with peak loads of 200 megawatts or less are categorically exempt from this standard.

## Dynamic Electricity Rates

### LMS-2, Dynamic Electric Rates.

**Purpose:** To promote rate designs that support the state's objectives of providing cost-based price signals to all consumers to reduce peak electricity consumption, improve system load factor, manage load during supply shortfalls, efficiently allocate costs among consumers, encourage energy efficiency, and reduce costs.

**Applicability:** This standard will apply to all utilities in California that have full AMI capability.

#### Provisions:

- (1) All utilities are recommended to~~must~~ offer a menu of time-differentiated rates to all customers who have advanced meters for consideration by their ratemaking authority. ~~The rate offerings must include time-of-use rates, critical peak pricing rates, and real-time pricing rates.~~
- (2) The California Public Utilities Commission or the local governing boards, as appropriate, will authorize, for each customer class, the applicable price level for these rate forms.
- (3) Utilities will provide ~~extensive~~ education and promotional material, including print and electronic information, to assist the customers in deciding (a) whether or not to elect a time-differentiated rate, (b) which rate would be most appropriate, and (c) how to best take advantage of the rate selected. The Energy Commission and the Public Utilities Commission must approve the investor-owned utilities' level of effort in this regard.
- (4) For all customers of POUs and non-residential customers of IOUs, at least one form of time-differentiated rate must be offered as the default rate for each customer class.
- (5) Once the constraints of ABIX are removed, dynamic rates will be implemented for the residential customers of the IOUs according to the CPUC implementation schedule as set forth in Decision 08-07-045.

**Effective Date:** Compliance with this article shall be enforceable ~~6~~18 months after the Load Management Standards are filed with the Secretary of State.



## Enabling Technology

### LMS-3. Statewide Time-Differentiated Rate Broadcast

**Purpose:** To establish a standard method for transmitting current rate and reliability information to customers.

**Applicability:** This article will apply to ~~(1)~~ all utilities in California, ~~and (2) except categorically exempt utilities.~~

**Effective Date:** Compliance with this article shall be enforceable upon the first day of availability of time-differentiated rates (or any other form of dynamic rate) to utility customers, and six months after the Load Management Standards are approved by the Secretary of State.

1. Each utility shall adopt an open-protocol, Internet compatible, information model (Information Model) for communicating all time-differentiated rate and demand response event signals. This Information Model shall be based on the Open AutoDR (*date & version*) standard developed by the Lawrence Berkeley Laboratory Demand Response Research Center, and shall be submitted to the Executive Director for approval. This Information Model shall be incorporated as a required feature in all time-differentiated tariffs and in the rules and governance for all demand response options.
2. The utility shall keep its published rate information current and refreshed as often as necessary to provide customers with the ability to react in a timely manner to changes in rate and reliability status.
3. All utilities shall provide two modes of access to this published information, without additional charges:
  - a. Through an RDS (a.k.a., RBDS) broadcast signal from an OpenADR client residing at utility-approved radio stations.
  - b. Through direct access as an OpenADR client via the Internet.
4. Each utility may provide additional modes of access to the published information via other means using any non-proprietary communication protocol, and may charge for such additional services. Providing additional modes of access shall not relieve the utility of the obligation to provide information via RDS and Internet as specified above.
5. Exception: Utilities that have AMI capability and provide an AMI-enabled mode of access to published information are exempt from providing RDS access.

## Utility Programs

### LMS-4. Home Energy Rating System Information

**Purpose:** To require utilities to provide their customers with information about the Home Energy Rating System, designed to promote the use of in-home energy audits and subsequent cost effective energy efficiency improvements.

**Applicability:** This article will apply to all utilities in California.

**Effective Date:** Compliance with this article shall be enforceable 30 days after both these Load Management Standard and Home Energy Rating System standards are filed with the Secretary of State.

1. Each utility shall ~~provide~~ make the following information available to its customers, with the option to utilize Web resources or templates for written media to be provided by the Commission:
  - a. How to contact Home Energy Rating System providers.
  - b. The type of energy use information available through in-home audits.
  - c. How to calculate the benefits of energy improvements.
  - d. Costs and financial assistance for audits.
  - e. Availability of financing options for home energy improvements.

## LMS-5. Existing Building Peak Energy Efficiency Improvements

**Purpose:** To require utilities to develop and expand programs that encourage cost effective energy efficiency improvements in existing building stock within their service territory.

**Applicability:** This article ~~would~~ applies to all utilities in California unless: (1) they have already met the provisions through complying with the requirements of the California Public Utilities Commission or their local governing boards; or (2) they are categorically exempt; or (3) they are specifically exempted by the Executive Director of the Energy Commission.

**Effective Date:** Compliance with this article shall be enforceable 30 days after the Load Management Standards are filed with the Secretary of State.

1. Within six months of the effective date of these standards, each utility shall submit to the Executive Director a proposal for a Building Efficiency Information Gateway program. The program shall:
  - a. Target buildings with the greatest potential for energy savings.
  - b. Compile energy use data to identify those customers meeting specific targeting criteria.
  - c. Provide feedback on customer energy use through utility websites.
  - d. Provide online building energy audit information in a multi-level format that allows customers to explore their energy use patterns, options for saving energy, and comparisons to other customers. Additional levels of energy audits (for example, over the phone, in person) should be provided to targeted and/or interested customers.
  - e. Coordinate energy ratings with utility incentives programs.
  - f. Connect customers with energy efficiency upgrade financing programs administered by the utility or other institutions.
  - g. Provide customers with energy efficiency program marketing materials through bill stuffers, media campaigns, or other proven means.

~~g.7.~~ Exceptions: Utilities with peak loads of 200 megawatts or less are categorically exempt from this standard.



## LMS-6. Enabling Technology Adoption Program

**Purpose:** To require utilities to develop programs supporting customer adoption of enabling technologies. These programs should support consumer purchase of these devices in a traditional retail environment. These technologies should be capable of facilitating customer load reductions responding to dynamic prices using the Open Automated Demand Response communication standard internet protocol through the Statewide Time Differentiated Rate Broadcast and through additional communications channels, including the utility AMI systems. This standard creates a customer-driven market for programmable communicating devices (PCD's) such as programmable communicating thermostats, pool pump controls, plug-in switches that customers can use to automate any plug-in device, and customer owned home automation systems. This standard also supports automation of commercial and industrial customers and PCDs designed specifically for application outside the residential sector. The PCD reference design is included as an appendix to this standard.

**Applicability:** This article will apply to all utilities in California that install advanced meters except categorically exempt utilities.

**Effective Date:** Compliance with this article shall be enforceable 30 days after the Load Management Standards are filed with the Secretary of State.

1. All utilities that have installed or plan to install advanced meters within their service area shall also offer a PCD Program to its customers. Within ~~four~~six months of the effective date of these standards, each utility shall submit to the Executive Director a proposal for a PCD Program. The program shall provide:
  - a. A plan for publicizing the PCD Program to building owners at the time the utility AMI can support billing from interval data.
  - b. A customer incentive covering a portion of the retail cost of "Appendix A: California PCD Reference Design" compliant PCDs for building owners where an advanced meter has been installed or is planned to be installed.
  - c. A customer incentive covering a portion of the wholesale cost of "Appendix A: California PCD Reference Design" compliant PCDs for building developers where advanced meters will be installed.
  - d. Utilities that offer time-differentiated rate or demand response programs must provide customers with easy to understand information about available technologies that will facilitate their response.
  - e. The technologies may take any form, such as programmable communicating thermostats, pool pump controls, appliance controls, whole-home automation systems, and will be readily available from retail sources. The PCD's shall follow the Reference Design summarized and cited in an appendix to this Standard.
  - f. As the availability of relevant technologies is expected to increase significantly following installation-of AMI and adoption of time-differentiated

rates, the utilities must make a good faith efforts to update their information offerings and to maintain, on their websites, current listings of the available technologies.

- g. Exceptions: Utilities with peak loads of 200 megawatts or less are categorically exempt from this standard.

## Utility Data Availability Requirements

### LMS-7. Customer Access to Meter Data

**Purpose:** To establish the legal standing of customers regarding data collected by utilities about electrical use and billing information.

**Applicability:** This article will apply to all utilities in California that have fully implemented an AMI system.

**Effective Date:** Compliance with this article shall be enforceable 30 days after the Load Management Standards are filed with the Secretary of State.

- ~~1. Utilities shall conduct customer research to develop forms of information display and analytical tools that effectively communicate time-varying rates to customers and allow them to formulate load shedding strategies.~~
1. Each utility shall provide each customer (and their designated third party representatives) with access to the customer's historical consumption data over the previous 12 calendar months. This shall include data up to and including the hour 24 hours prior to the request. Data shall be provided without additional charges.
  - a. Data shall be made available via a secure internet accessible web site.
  - b. The data shall be provided in a format that supports customer education and understanding of energy consumption patterns, the variable cost of energy, efficiency opportunities, and demand response programs.
  - c. Physical (paper) copies of consumption data shall be available to the customer and their designated third party representatives for a reasonable fee. The fee shall be no larger than necessary to cover the cost of handling and shipping the physical document.
  - d. Utilities shall not deny access to real time or near real time information to customers who pay the utility fee for access.
  - e. Utilities shall provide prompt service to those customers who desire access to real time or near real time information. For services requiring the scheduling of a site visit by utility service personnel, 30 calendar days from the date of request to completion of service is considered prompt. For services that do not require the scheduling of a site visit by utility service personnel, seven calendar days from the date of request to completion of service is considered prompt.
- ~~f. Consumers retain ownership of the access rights to any and all data collected by utilities. Specifically, the utilities must obtain permission from the customer before releasing data relating to that customer to any party outside of the utility.~~

# PROOF OF SERVICE

I declare that on December 19, 2008, I submitted *Sacramento Municipal Utility District's Comments on Draft Committee Proposed Load Management Standards – Docket No. 08-DR-01* by electronic-mail and deposited the original in the United States mail in Sacramento, California, with first class postage and addressed to the following:

*docket@energy.state.ca.us*

Portable Document File [ Steve Cohn - SMUD Comments on Draft Committee Proposed Load Management]

**California Energy Commission**

**Dockets Office, MS-4**

***Re: Docket No. 08-DR-01***

***“Load Management Standards: Proposed Standards Comments”***

**1516 Ninth Street**

**Sacramento, CA 95814-5512**

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Dated: December 19, 2008

/s/

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Jeannette Reynaga