

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

Order Instituting Rulemaking to Consider
Smart Grid Technologies Pursuant to Federal
Legislation and on the Commission's own
Motion to Actively Guide Policy in
California's Development of a Smart Grid
System

Rulemaking, 08-12-009
(Filed December 18, 2008)

**COMMENTS OF OPOWER, INC. IN RESPONSE TO THE PROPOSED DECISION OF
PRESIDENT PEEVEY ADOPTING RULES TO PROTECT THE PRIVACY AND
SECURITY OF THE ELECTRICITY USAGE DATA OF THE CUSTOMERS OF
PACIFIC GAS AND ELECTRIC COMPANY, SOUTHERN CALIFORNIA EDISON
COMPANY, AND SAN DIEGO GAS & ELECTRIC COMPANY**

June 2, 2011

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SUBJECT INDEX

OPOWER recommends that the Commission adopt proposed technical changes to Rules 2 and 6, as discussed herein and identified in Appendix A.

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I. Introduction

Pursuant to the California Public Utility Commission ("Commission") Rules of Practice and Procedures, OPOWER, Inc. ("OPOWER") respectfully submits the following comments regarding the proposed decision ("PD") of President Peevey in this proceeding. OPOWER recognizes the thoughtfulness of the proposed decision, which in general strikes an appropriate balance between the need to protect consumer information and the need to encourage innovation that will allow consumers to take advantage of energy- and cost-saving technology. OPOWER writes to recommend technical changes to the proposed rules, which, as written, restrict uses of data the California Legislature intended to allow and thereby inadvertently pose a threat to robust operation and evaluation of energy efficiency programs. As drafted, the disclosure opt-out provisions of the Rules Regarding Privacy and Security Protections for Energy Usage Data¹ could have the consequence of hindering the deployment of effective, verifiable energy-

¹ PD, Attachment D.

efficiency programs, like OPOWER's, which have been endorsed by the California Legislature and this Commission.

II. Discussion

a. The Legislature and this Commission have endorsed behavior-based energy efficiency programs and experimental design.

The California Legislature endorsed behavior-based efficiency programs, as well as their Evaluation, Measurement and Verification (“EM&V”) through experimental design in Senate Bill 488 (Pavley).² In part in response to that law, this Commission, in Decision 10-04-029, concluded that behavior-based efficiency programs have a real capacity for significant and measurable energy savings and should be included as an efficiency resource. Commenting on Decision 10-04-029, which was approved by a 5-0 vote, Commissioner Dian M. Grueneich hailed the promise of behavior-based programs:

“As California pursues the strategies identified in the California Long Term Strategic Plan for Energy Efficiency, and seeks to make energy efficiency a way of life for Californians, it is essential that we create a regulatory environment in which potential game-changing efforts such as these innovative behavioral-based strategies can flourish. Today's decision does this.”³

As this Commission has noted, “the crux of the success of energy efficiency as California’s resource of first choice lies in evaluation, measurement and verification.”⁴ EM&V allows the Commission to measure the effectiveness of efficiency programs, to improve programs, and to evaluate Investor-owned Utility (IOU) performance in meeting savings goals established by the Commission. To properly serve its purpose, EM&V must not only be accurate, but must be cost-effective. In Decision 10-04-029, the Commission noted that “it is

² SB 488 was signed by the Governor and chaptered on October 11, 2009

³ CPUC Press Release, April 8, 2010. http://docs.cpuc.ca.gov/PUBLISHED/NEWS_RELEASE/116078.htm

⁴ D-10-04-029, p. 3.

within our energy efficiency program’s best interest to create a regulatory environment that encourages behavior change and conservation,” while further noting the importance of avoiding an “overly complex, costly, and controversial measurement system.”⁵

The answer endorsed by this Commission in Decision 10-04-029, consistent with the Legislature’s intent in SB 488, is EM&V using experimental design methodologies.

Experimental design, in which two populations are compared – a control group and a treatment group, statistically similar in all aspects save the enrollment of the treatment group in a given behavioral energy-efficiency program – allows the cost-effective evaluation of a program’s effectiveness and eliminates the risk that energy savings will be double-counted. In addition to being reliable and accurate, experimental design is cost-effective for utilities and their contractors because, with access to the entire set of user data, it is relatively inexpensive to construct the two statistically identical populations necessary for comparison.

Behavior-based energy-efficiency programs, with their ability to engage large numbers of customers, have the potential to deliver substantial energy savings if deployed at scale. For this reason, the Legislature was correct, in Senate Bill 1476 (Padilla) (“SB 1476”),⁶ to recognize the implementation of energy-efficiency programs as a primary utility purpose, for which a utility could contract and disclose personal consumption data without customers’ express permission. Realizing the savings potential of behavior-based efficiency depends upon the cost of deployment and EM&V remaining low. The Commission should avoid the adoption of rules that will make experimental design and behavior-based efficiency programs more expensive to implement and more difficult to evaluate.

⁵ D-10-04-029, p. 40.

⁶ SB 1476 was signed by the Governor and chaptered on September 29, 2010 as §§8380-81 of the California Public Utilities Code.

b. The Proposed Rules, as written, will make it difficult, if not impossible, to administer behavior-based efficiency in a cost-effective manner.

i. Proposed Rule 2 should be clarified to exclude contracted agents of the utility from providing independent notice to utility customers.

OPOWER requests that the Commission clarify the application of Rule 2, which requires that a covered entity provide written or electronic notice “when confirming a new customer account and at least twice a year,”⁷ advising customers of the entity’s privacy policy, to expressly exclude contracted agents of the utility. Many utility contractors come into possession of covered information in the course of carrying out their contracted duties, yet never form an independent customer relationship. Requiring that contracted agent like OPOWER send a notice independently from the utility to every individual whose data may be analyzed, or who may be included in a control group, would impose significant costs and may lead to substantial customer confusion.

SB 1476 anticipates that utilities will contract with third parties to carry out primary utility purposes, and indeed, as the PD notes, large utilities may contract with hundreds of different parties for these purposes.⁸ Moreover, in its discussion of the proposed rule, the Commission has noted that requiring utilities to name all contracted agents in their own notices would “prove burdensome, but the multiple notices that current operations would require may confuse consumers and lead to a barrage of communications.”⁹ For the same reasons that the Commission would not require utilities to list the name of each agent, the Commission’s Discussion or Rule 2 suggests that it does not intend that the agents themselves directly contact utility customers to provide notice – yet, the rule text as written appears to apply the notice

⁷ PD, p. 48

⁸ PD, p. 50

⁹ PD, p. 50.

requirement to all “covered entities.”¹⁰ Therefore, Rule 2 should clarify that utility-contractors who do not have an independent customer relationship with a particular customer have no independent duty to provide notice beyond the notice provided by the utility.

ii. Proposed Rule 6(c)(1), as written, would make experimental design costly to administer and difficult to implement

The Commission rightly identified energy efficiency programs as “primary purposes,”¹¹ as did the California Legislature in enacting SB 1476. SB 1476 allows a utility to disclose customer-specific electrical consumption data, without express customer consent, to a third party for “system, grid, or operational needs, or the implementation of demand response, energy management, or energy efficiency programs.” As currently written, however, Proposed Rule 6(c)(1) goes far beyond the intent of SB 1476 in allowing customers to “opt-out” of such disclosure “if the information is being disclosed for demand response, energy management or energy efficiency purposes.”

By allowing customers to opt-out of disclosure for a primary purpose, the Rule improperly treats the primary purposes of demand response, energy management and energy efficiency programs differently than the primary purposes of system, grid and operational needs. The legislature has deemed that all of these purposes are primary and a utility should be able to contract with a third party to accomplish them, as envisioned in SB 1476. Of particular concern, the rule, as written, endangers sound experimental design, crucial to the EM&V of behavior-based efficiency programs.

The use of experimental design to measure behavior-based efficiency rests on the fact that there is only one difference between the treatment and control groups: the treatment group

¹⁰ PD, p. 53.

¹¹ PD, p. 71

receives access to behavior-based tools, while the control group does not. In each case, the energy savings that result are credible precisely because the experimental design is clean. As written, rule 6(c)(1) threatens this critical feature of behavior-based efficiency because it allows customers to opt-out of not just participation in energy efficiency programs, but also the “disclosure” of information.

In order to understand why allowing customers to opt-out of disclosure threatens experimental design for behavior based efficiency, it is important to consider how customers who opt-out are handled in present behavior-based efficiency implementations. Currently, residential customers may at any time choose not to receive comparative energy-use information. Should a customer choose to opt-out of an OPOWER program, all mailings and electronic communications to that home will cease. OPOWER works with its utility partners to ensure that information about such program opt-out is available and clear for residential customers. Disclosure of the customer’s energy usage, however, continues. This continued disclosure is critical for two reasons, one related to EM&V, and another critical to the cost effectiveness of behavior-based efficiency:

1. **Customers who opt-out are critical for EM&V.** In order to accurately measure the efficacy of behavior-based efficiency, it is critical to monitor the use of customers who do not respond to the program, as well as those who do. A person who opts-out of participation reduces the efficacy of the program because communications with that customer cease and, presumably, energy usage reverts to the norm. That lack of response, however, is critical to count into the overall measurement of the program. Without it, results will be affected by selection bias. Credible savings claims, and clean measurement, require that usage of customers who opt-out be tracked.
2. **Opting customers out of disclosure is costly to implement.** OPOWER’s service depends on the establishment of a regular, recurring data feed from the utility to OPOWER. While opting a customer out of participation can be easily automated, and implemented at little cost, opting a customer out

of disclosure requires regular changes to the data being fed to OPOWER by the utility. This in turn requires a steady commitment of OPOWER and utility information technology resources – a commitment that will drive up the cost of behavior-based efficiency and thus reduce its cost-effectiveness.

Thus, while OPOWER believes customers ought to be able to opt-out of the program, customers should not be able to opt-out of disclosure. Having access to complete information is important both to ensure robust and accurate EM&V, and allowing customers to opt out of disclosure would add costs to implementation that would ultimately limit the availability of this “potentially game changing” technology.

Furthermore, California’s Legislature and this Commission have recognized efficiency as a primary utility purpose and experimental design as the appropriate method of EM&V, and the Rules adopted by this Commission should preserve and encourage those goals, while still protecting privacy. OPOWER recommends the Commission either delete the opt-out language included in the current draft or adopt an opt-out rule that enables utility customers to opt-out of *participation* in demand response, energy management, or energy efficiency programs – but not *disclosure* of energy usage information by a utility to a contracted agent if that information is necessary to effectuate a primary purpose demand response, energy management, or energy efficiency program. We believe that SB 1476 and the Commission’s proposed rule already provide robust protections and accountability for contracted agents of utilities. The disclosure opt-out as proposed would have the unintended consequence of undermining one of the most innovative, effective, and measurable energy efficiency strategies available to California utilities.

III. Conclusion: The Commission should adopt rules that protect privacy while encouraging behavior-based efficiency programs and experimental design.

OPOWER respectfully proposes the attached technical revisions (see Attachment A) to the proposed rules. These revisions preserve the Commission's commitment to consumer privacy while simultaneously promoting the legislative priority of behavior-based efficiency gains and experimental design.

Dated: June 2, 2011

Respectfully submitted,

By: _____/s/_____

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ATTACHMENT A

Proposed Revisions

2. TRANSPARENCY (NOTICE)

(a) Generally. Covered entities shall provide customers with meaningful, clear, accurate, specific, and comprehensive notice regarding the collection, storage, use, and disclosure of covered information. [Third parties to whom covered information is disclosed in the context of providing a service to a covered entity for a primary purpose, and who have no independent customer relationship with a customer, need not provide separate notice to the customer beyond that provided by the disclosing entity.]

6. USE AND DISCLOSURE LIMITATION

(c) Disclosures to Third Parties.

EITHER

(1) Initial Disclosure by a Covered Entity. A covered entity may disclose covered information to a third party without customer consent when explicitly ordered to do so by the Commission or for a primary purpose being carried out under contract with and on behalf of the entity disclosing the data, provided that the covered entity disclosing the data shall, by contract, require the third party to agree to collect, store, use, and disclose the covered information under policies, practices and notification requirements no less protective than those under which the covered entity itself operates as required under this rule ~~and, if the information is being disclosed for demand response, energy management or energy efficiency purposes, the disclosing entity permits customers to opt out of such disclosure consistent with applicable program terms and conditions, unless otherwise directed by the Commission.~~

OR

(1) Initial Disclosure by a Covered Entity. A covered entity may disclose covered information to a third party without customer consent when explicitly ordered to do so by the Commission or for a primary purpose being carried out under contract with and on behalf of the entity disclosing the data, provided that the covered entity disclosing the data shall, by contract, require the third party to

agree to collect, store, use, and disclose the covered information under policies, practices and notification requirements no less protective than those under which the covered entity itself operates as required under this rule and, if the information is being disclosed for demand response, energy management or energy efficiency purposes, the disclosing entity permits customers to opt out of participation such demand response, energy management or energy efficiency programs, including terminating communications relating to such programs, consistent with applicable program terms and conditions, unless otherwise directed by the Commission.