



BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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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 THE UTILITY REFORM NETWORK ON THE
PROPOSED DECISION OF PRESIDENT PEEVEY ADOPTING
RULES TO PROTECT THE PRIVACY OF CUSTOMER ELECTRIC
USAGE DATA



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**COMMENTS OF THE UTILITY REFORM NETWORK ON THE
PROPOSED DECISION OF PRESIDENT PEEVEY ADOPTING
RULES TO PROTECT THE PRIVACY OF CUSTOMER ELECTRIC
USAGE DATA**

Pursuant to Rule 14.3 the Utility Reform Network (“TURN”) submits these comments on the Proposed Decision of President Peevey (PD), mailed on May 6, 2011.¹ The PD primarily addresses issues concerning the protection of the privacy of detailed customer usage data that will be measured, recorded and transmitted by the new generation of digital Communicating Interval Meters (“CIM,” aka “smart meters”) installed on residential premises. However, the PD also addresses the provision of “electricity price information” to residential customers and the use of the home area network (“HAN”) functionality to transmit usage data.

TURN applauds the commitment to consumer privacy evidenced in the Proposed Decision. We support many of the key elements of the PD; though we recommend several modification both to better protect customers and to minimize unnecessary utility spending:²

¹ The PD is entitled “Decision Adopting Rules to Protect the Privacy an 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.”

² Due to several impending deadlines this week, TURN provides fairly limited comments on privacy issues. We have; however, reviewed drafts of comments by the Division of Ratepayer Advocates and the Utility Consumers Action Network, and believe those comments will provide many useful recommendations for the Commission to consider.

- The proposal to require compliance with privacy rules by third parties with “locked” devices should be combined with a registration process for any third party that sells or distributes devices that can obtain data through the HAN signal;
- The Commission should require PG&E and SCE to spend only a *de minimis* amount to implement third party access to backhaul data;
- The Commission should not authorize pilots for HAN device implementation, which should be performed by private companies and the national protocol certification process;
- The Commission should not authorize three duplicative pilots for the provision of ‘real-time’ price information to residential customers;

1. Data Privacy

a. Protection of Data Transfer to Third Parties - The Utilities Should Track HAN Registrations to Evaluate the “Locked” Category as a Practical Distinction

There is an aspect of the Proposed Decision that deserves special attention, as it provides the linchpin of consumer protection. The Proposed Decision finds that the Commission has jurisdiction and statutory directive to ensure that any entity contracting with the utility adheres to all the privacy rules and protections.³ The Proposed Decision instructs the utilities to file advice letters to

³ Citing to § 8380 of the PUC, which codifies SB 1476.

implement the policies that will be followed by utilities and their contracting agents.

Furthermore, the proposed decision appropriately finds that the Commission can require the utilities to adopt tariffs that contain the same privacy protections in situations where 1) the utility transfers “backhaul” data to a third party pursuant to customer authorization, and 2) the utility transfers data from the meter through the HAN signal to a proprietary “locked” device that communicates to a specific third party. Such a data transfer requires an authorization process by which the locked device is registered with a particular meter so as to read the HAN output from that, and only that, meter.⁴

TURN fully supports the Commission exercising its existing regulatory power to ensure that all third parties obtaining data directly from the meter follow the adopted rules to protect customer privacy.

The PD states that any third party with a “locked” device obtaining data directly from the HAN signal must agree to abide by the same privacy rules adopted for utilities and their contractors. TURN strongly supports this proposal; however, it is not clear whether the distinction between “locked” and non-locked devices will be practically useful. We are unaware whether the utilities have the

⁴ TURN notes that it is our understanding that this “authorization” process must occur for the HAN to communicate with *any* device – whether a proprietary consumer product, a chip in an appliance, or a USB card that allows transfer to a personal computer. It is not clear how the utility will distinguish a “locked” device in practice.

potential to distinguish a “locked” versus and “unlocked” device in the registration process.

For example, we could easily envision that a “Internet” company could freely distribute a USB device that would read the HAN signal for download to a computer. The company might provide this device for free, with the requirement that the consumer use a particular software product (web based or not) to analyze and present the data on their computer. The product might link to an existing web portal. Is this a “locked” device?

To address this problem, we recommend that the Commission 1) order the utilities to keep track of HAN “registrations” to determine whether it is a practical distinction, and 2) institute a registration process for all third parties that sell or distribute devices that receive the HAN output. The registration process should obtain information to determine whether the data is further transferred or remains accessible solely to the utility customer. Further technical workshops might be useful to address this issue during the implementation phase.

b. Sec. 5.4.2 - Customer Control of Data

This section addresses the release of private information pursuant to legal process. The PD modified recommended rule⁵ 4.c.6 to eliminate the mandatory

⁵ TURN uses the term “recommended rule” to identify the FIP rule originally proposed by CDT/EFF (and generally included in the beginning of each section of the PD), as opposed to the “adopted rule,” which is the modified rule proposed for adoption in the PD (and included at the end of each relevant section).

annual reporting requirement. Edison objected that such a reporting requirement was burdensome, and the PD speculates that since “no party has stated an explicit need for this particular report,” it is not necessary and would simply contribute to information overload.

TURN did not comment on this particular requirement, as we did not attempt to address each and every proposal that we supported. However, TURN explicitly addressed the need to ensure protection of data from disclosure during court proceedings absent warrants or subpoenas. In the case of subpoenas in civil proceedings, we strongly support the advance notice requirement in Section 4.c.2. As detailed in our prior pleadings, one of the identified potential abuses of granular customer information is in the context of civil divorce and custody proceedings.

We strongly recommend that at this point the Commission require reporting, though it could be on a biannual (every two years) rather than annual basis. Waiting to “request” the reports is a recipe that ensures nothing happens until significant problems arise.

c. Sec. 5.1 – Definition of Primary Purpose (Rule 1.d.4.)

The term primary purpose was expanded from the recommended rule to include the use of customer data to “*plan, implement or evaluate* demand response, energy management, or energy efficiency programs operated by, or on behalf or and under contract with, an electrical corporation.” Such an expansion allows the utility to transfer information without customer authorization to

contractors that might be “planning” or “evaluating” energy efficiency programs.

TURN does not necessarily oppose such an extension; however, we caution that the Commission must address the issue of equitable treatment of energy efficiency providers, or entities “planning” energy efficiency programs, who may not be under direct contract directly with the utility. In short, community choice aggregators and third party efficiency providers may desire such data to plan their own programs. This issue may require further evaluation, as we are concerned about the release of customer-specific detailed information to any party wishing to “plan” energy efficiency programs. At a minimum, such a party should contractually agree to adhere to the same privacy protections.

d. Sec. 5.7 – Data Security (Rule 8)

The proposed rules require notification to the Commission of major security breaches within two weeks and annual reporting to the Commission of all security breaches. The accompanying text states that “consistent with federal and state laws, covered entities must notify customers of security breaches.

TURN has not researched the applicable state and federal laws to determine whether they would cover any security breaches resulting in disclosure of meter data. TURN recommends that the Commission modify Rule 8 to specifically require that notification of security breaches be provided *to the affected customer* as well as to the Commission.

2. Provision of Price Information

The PD orders the utilities to provide customers retail price, wholesale price and usage data; and also to make available to customers bill-to-date information, bill forecast data, projected month-end tiered rate, tier alerts and a rate option calculator.

TURN strongly supports such use of the data output and communications capabilities of the CIM to maximize a consumer's ability to understand their bills and act to reduce monthly electricity bills, as well as to benefit from alternative optional rate choices.

The PD does not mandate specific technology choices and orders the utilities to "use standardized formatting" for providing this information to consumers and to "use as low-cost as possible means to provide pricing information." TURN likewise strongly agrees with this sentiment; though it is our belief that the hundreds of millions of dollars already authorized for expenditures related to customer outreach and education for dynamic pricing and demand response should be more than sufficient to actually provide this real and tangible benefit.

TURN has argued consistently that "wholesale price" data is not actionable (i.e., useful) to residential customers. The PD acknowledges this problem but supports the position of the ISO, which envisions "future developments" that might make wholesale prices useful for residential customers. TURN understands the "vision" that eventually utilities can send wholesale price signals directly through the meter to appliances that respond in

kind. Such “future developments” however, are speculative and not at all close at hand. The Commission must consider the time value of money, an aspect that is crucial to any standard business case analysis of net present value. In short, we can wait to provide wholesale prices for at least a few more years, so no need to start spending money right now.

The PD asserts that because the ISO “currently streams information continuously on its website stating several forms of the wholesale price of electricity,” it should therefore “not be expensive for SCE, SDG&E, or PG&E to use this streaming information to provide information to consumers concerning a measure of prices in the wholesale markets.”

TURN would not object to providing wholesale price information if the assumption in the PD regarding expense is correct.⁶ Given the lack of any near term benefit, however, the PD should be clarified to order that the utilities should *not* implement this option if it requires more than a *de minimis* (and one million dollars is a *de minimis* amount for utilities) amount of incremental spending.

⁶ Though we continue to caution that providing such data *may* actually be counterproductive, as it could create confusion. The ISO posits that “providing a meaningful signal correlated with the ISO wholesale price can help customers understand when their individual action can have the greatest impact on the grid.” TURN is extremely skeptical of this assertion. The vast majority of residential retail customers hardly understand the meaning of the retail “cents/kWh” price. We do not expect any significant number of customers will find the generation-only price per Megawatt-hour to be illustrative of anything related to grid conditions. Studies have showed that retail customers are interested in responding to alerts that are connected to reliability problems. But wholesale price changes do not necessarily reflect reliability issues.

The PD also orders the three utilities to “each initiate a pilot study within six months to explore useful and cost-effective ways to provide price information in real-time or near real-time,” and the PD explains that such information may be useful “following the deployment of HAN-enabled devices and for those customers on more dynamic tariffs.”

TURN questions the desirability of such a pilot. Its goals and parameters are not specified in the PD. Again, there is no apparent near term benefit. Even if it does turn out that “real time or near real-time” information has some utility in the future,⁷ there seems to be no reason for three duplicative pilot programs. TURN strongly recommends that only one utility conduct such a study. More importantly, the PD should order the utility to *first* determine whether sufficient research on this issue is not already being conducted by other entities, public or private. TURN is increasingly concerned that the utilities are duplicating research being conducted by research institutions or private entities, many of whom are already funded by ratepayer (ie. PIER) money or taxpayer funds.

3. Access to Utility Backhaul Data and HAN Pilots

a. Access to Backhaul Data – The Costs Should be Similar to SDG&E’s

⁷ As an aside, TURN notes that we absolutely understand the potential utility of a customer having near real-time access to their usage data as a means of understanding the impact of appliance/product use on electricity consumption. The link between price signals and meaningful behavior change seems quite speculative. Retail signals change infrequently, and wholesale signals change frequently but not by large increments. It belies common sense to imagine customers glued to their computer screens to divine tell-tale signals from such prices.

The PD orders PG&E and SCE to file a Tier 3 advice letter within six months to implement a program, similar to the one already implemented by SDG&E, by which an authorized third party could gain access to the “backhaul” usage data directly from the utility. Any such third party must agree to abide by the privacy policies adopted in this decision as a condition of access to the data.

TURN agrees that some third parties – like Google – are better than the utilities in “the presentment of actionable information to consumers.” We appreciate that the PD attempts to impose the privacy rules on such parties, though we caution that the only “stick” apparently available for any third party breach of these policies is the termination of the provision of the data.

Our primary concern remains the four letter word – “cost.” The utilities already have included in their implementation costs some amounts in order to enable customers to access the day-behind information on the customer-specific utility websites. The PD notes that SDG&E’s “implementation costs” to enable Google to provide the same information (but more visible if one uses Google as a home page) were minimal – under one million dollars. The detailed explanation of the transfer process offered by SDG&E reasonably leads one to the conclusion that the costs are primarily for software development, and should not vary greatly based solely on a larger customer number. In fact, we would hope that SCE and PG&E could use the systems and protocols already developed by SDG&E and Google. Thus, our concern would thus be greatly alleviated if the PD

were modified to order PG&E and SCE to likewise implement this functionality for under one million dollars.

b. The HAN Pilot Should Not be a Utility Function

The PD notes that SEP 2.0 has been delayed. As a result, the PD orders the IOUs to “develop and implement pilot projects within six months that connect HAN-enabled devices to Smart Meters.” The PD identifies several goals for these pilots, including “to determine the availability of HAN-enabled devices, the robustness of the utilities’ HAN,” and “to provide for a strategy to implement full activation of the HAN across the service territory as soon as feasible.”

TURN completely opposes this additional incursion of the utilities into the role that is supposed to be played by the competitive market. Not only does it unfairly socialize costs, but also it may harm the development of a truly “common interface” that allows plug-and-play capabilities.

The whole point of the national standards-setting process is to allow market participants to develop standards that provide for interoperability and allow multiple products to access the HAN signal. The directives in the PD effectively place the utility in charge of determining how the HAN signal will be made available to customers. This is a recipe for limiting open access.

More importantly – at least from TURN’s perspective as a consumer organization – the Commission has consistently promised us in the various decisions authorizing smart meter deployment that the costs of developing and innovating the devices that consumers could buy on their side of the meter will

be borne “by the market” and by those consumers choosing to buy products. Nevertheless, the Commission has already socialized large costs related to HAN development in Edison’s AMI decision. This represents yet another inappropriate socialization of those costs.

And on top of our cost concerns, we note lastly that the PD yet again appears to require three duplicative pilots, with very little specific guidance on the goals, outcomes and metrics for success. We note that any utility “request for proposals” for any such pilot would likely contain much more specific guidance than the two paragraphs offered in the PD.

TURN appreciates that the PD does order the utilities “to work with Commission staff to develop the pilot projects.” Nevertheless, TURN recommends that *if* the Commission pursues this pilot, it should order the utilities to develop one pilot project.

June 2, 2011

Respectfully submitted,

_____/S/_____
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CERTIFICATE OF SERVICE

I, Larry Wong, certify under penalty of perjury under the laws of the State of California that the following is true and correct:

On June 2, 2011, I served the attached:

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on all eligible parties on the attached list **R.08-12-009** by sending said document by electronic mail to each of the parties via electronic mail, as reflected on the attached Service List.

Executed this June 2, 2011, at San Francisco, California.

/S/
Larry Wong

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