



**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)

**RESPONSE OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) TO  
ASSIGNED COMMISSIONER'S RULING ON CUSTOMER PRIVACY AND SECURITY  
ISSUES**

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**I. INTRODUCTION**

Southern California Edison Company (SCE) respectfully files its response to the September 27, 2010 Assigned Commissioner's Ruling (ACR) requiring SCE and the other investor-owned electric utilities (IOUs) to describe their current practices for providing customers and their authorized third parties with access to energy usage data and pricing information, and the steps the IOUs have taken to protect such data for privacy reasons. The ACR also asks the IOUs and other parties to propose "a set of policies and procedures that will help protect the privacy of a customer's data, will help ensure its security and will permit access to the information by authorized third parties."<sup>1</sup>

In Section II of this response, SCE proposes a framework for addressing customer data privacy and security issues, and a set of policies and procedures for privacy, security and access to customer's energy usage data based on our assessment of the key issues. Section III sets forth SCE's proposal for providing pricing information to customers.

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<sup>1</sup> See ACR, p. 6, Section 3.6.

In Section IV and Attachment A, SCE responds to the specific questions posed in the ACR.

## **II. SCE'S PROPOSAL FOR CUSTOMER DATA PRIVACY, SECURITY AND ACCESS**

The ACR seeks proposals to specifically address customer data privacy and security customer and authorized third party access to that data.<sup>2</sup> To address customer data privacy and security customer and authorized third party access to that data, the Commission needs to assess five key issues, as follows.

### **A. The Commission Needs to Assess Five Key Issues in Addressing Customer Data Privacy and Security**

#### **1. The sufficiency of existing laws, decisions and regulations to reasonably protect customer data privacy and security**

The Commission should assess whether the existing legal and regulatory framework in California is sufficient to reasonably protect customer data privacy and security for data collected by the IOUs in the provision of utility services to customers, as well as for customer data obtained by third parties upon customer consent. To the extent the legal and regulatory framework in California is sufficient to reasonably protect customer data privacy and security, the Commission can reasonably rely on that framework, and would not need to develop a new and distinct set of requirements for protecting customer data collected by IOUs or obtained by customer-authorized third parties.

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<sup>2</sup> ACR, p. 6, Section 3.6.

2. **The extent to which IOU privacy policies should reflect Fair Information Practices (FIP) principles**

The Commission should assess whether the IOUs should follow privacy policies that reflect best practices in the area of data collection, use, dissemination, maintenance and retention. Many parties in this proceeding agree that FIP principles, particularly those developed by the Federal Trade Commission (FTC), reflect best practices in the area of data collection, use, dissemination, maintenance and retention, and should be incorporated into the IOUs' privacy policies.

3. **The extent to which the Commission can – or should attempt to – regulate the content of third party privacy policies and/or third party compliance with privacy and security laws**

This assessment implicates the Commission's jurisdiction over third parties that access customer data from the IOUs (*i.e.*, backhauled data, disclosed at the customer's written authorization to the IOU) or directly from the meter (through the Home Area Network (HAN), at the customer's permission). Some parties have suggested that the Commission should require the IOUs to monitor and enforce customer-authorized third party compliance with privacy laws and/or best practices, which would expose the IOUs and their ratepayers to substantial liability for third party misuse of customer data. Accordingly, the extent to which the Commission or the IOUs can – or should – monitor and enforce third party compliance with privacy laws or best practices must be addressed.

4. **The need and process for developing a tariff governing Open Automated Data Exchange (ADE) and authorizing incremental funding**

As discussed at the August 20, 2010 prehearing conference, as well as in various filings in this proceeding, the IOUs intend to provide customers and authorized third parties with access

to backhauled customer usage data through a national standards-based Open ADE process, which is expected to require the parties to the data exchange – namely, the IOU and the customer and/or the customer’s authorized third party – to meet certain technical functionalities and protocols and other obligations. Customers or third parties accessing data through Open ADE will have to fulfill certain obligations for obtaining the data. Accordingly, the Commission should assess whether the Open ADE program should be governed by means of IOU tariffs. If so, the Commission should authorize a process for developing the IOU tariffs, as well as a process for the IOUs to seek recovery of any incremental costs necessary to implement the Open ADE program in 2011.

**5. The sufficiency of the Commission’s Smart Grid Deployment Plan process to identify and address customer data privacy or security issues that may arise in the context of future Smart Grid investments**

The Commission’s decision on customer data privacy and security issues expected by year-end in this proceeding will appropriately focus on customer energy usage data collected by the IOU’s current Smart Grid investments – the AMI systems. To the extent future Smart Grid investments raise customer data privacy or security concerns, the Commission must assess whether the process adopted in D.10-06-047 for the Smart Grid deployment plans is sufficient to address and resolve those concerns.

**B. SCE’s Assessment of the Five Key Issues Suggests that the Commission Should Focus on the IOUs’ Privacy Policies and on Tariff Rules and Requirements for Third Party Access to Customer Energy Usage Data**

SCE’s assessment of the five key issues suggests that the existing legal and regulatory is sufficiently robust to protect customer data privacy and security, and the process for Smart Grid deployment plans and funding is sufficient to address customer data privacy or security issues that may arise in the context of future Smart Grid investments. As such, to resolve the customer

data privacy and security issues by year-end, the Commission should focus on the IOUs' privacy policies to ensure they are consistent with best practices, and on tariff rules and requirements for third party access to IOU customer energy usage data.

**1. The Commission can rely on existing laws, decisions and regulations in California to protect consumer data privacy and security**

The comprehensive list of statutes, Commission decisions, and IOU tariff provisions that PG&E filed on behalf of the IOUs<sup>3</sup> demonstrates that California has a robust set of laws and regulatory requirements that govern customer data privacy, both for data collected by the IOUs in the provision of utility services, as well as for customer data obtained by third parties upon customer consent.

In particular, as to the IOUs' collection of customer data, the recently enacted Senate Bill 1476 codifies<sup>4</sup> specific privacy protections for IOU customer data in the context of advanced metering investments, including many longstanding protections the Commission has imposed on the IOUs, such as:

- prohibiting the IOUs from selling customer data;
- requiring the IOUs to obtain the customer's consent before disclosing specific customer energy usage data to a third parties;
- requiring the IOUs to offer customers the option to access to their energy usage data without having to agree to share their energy usage data or other personally identifiable information with a third party;
- prohibiting IOU contractors from using customer data for a secondary commercial purpose not related to the primary purpose of the contract in absence of the customer's consent; and
- requiring the IOUs to use reasonable security procedures and practices to protect a customer's unencrypted energy usage data from unauthorized access.

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<sup>3</sup> See Opening Responses of Pacific Gas and Electric Company to Assigned Commissioner's Ruling on Customer Privacy and Security Issues, dated October 15, 2010, at Attachment A.

<sup>4</sup> SB 1476 was enacted September 29, 2010, and codified at Chapter 5 (commencing with Section 8380) to Division 4.1 of the Public Utilities Code.

Other statutes and Commission decisions provide additional important privacy protections for customer data collected by the IOUs, including:

- restricting access by third parties to confidential customer information possessed by the IOUs unless the customer provides *written* permission;
- prohibiting law enforcement access except pursuant to legal process (*i.e.*, warrant or subpoena);
- permitting the disclosure of customer information to IOU affiliates and non-affiliates on a non-discriminatory basis and only upon prior affirmative customer written consent;
- directing the IOUs to notify the CPUC in writing ninety days prior to any contemplated change in policies regarding release or use of customer information; and
- directing the IOUs as part of their advanced metering infrastructure applications, to implement security measures to safeguard data collected by AMI meters and backhauled to the IOU, as well as data accessible at the meter through the HAN.<sup>5</sup>

The Commission has broad jurisdiction over the IOUs to enforce these privacy and security protections.

As for third parties that gain access to customer energy usage data from the IOU upon customer's written authorization or at the meter through the HAN, their use of customer data is governed mainly by statutes; in particular Sections 1798.81 *et seq.* of the California Civil Code (which also apply to the IOUs):

- requiring businesses to take reasonable steps to dispose of customer records containing personal information about California residents;
- requiring businesses that own or license personal information about California residents to maintain reasonable security procedures and practices;

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<sup>5</sup> As SCE explained in its August 13, 2010 Prehearing Conference Statement, SCE's AMI security contains system and architecture requirements and corresponding technology developed to protect customer privacy. Specifically, the ability to provide confidentiality is maintained through strong encryption and other defense-in-depth security measures across the end-to-end AMI solution. Additionally, the Smart Energy Profile 2.0 for the HAN includes security architecture explicitly designed to protect customer data confidentiality. Specifically, IOUs maintain customer confidentiality through encryption across the HAN and through other security mechanisms designed to authorized and authenticated devices that communicate with the AMI network through the HAN device registration process and during on-going operations.

- requiring businesses' contracts with third parties involving the disclosure of personal information to obligate the third parties to maintain reasonable security practices to protect the personal information from unauthorized access;
- requiring businesses to promptly disclose to California residents any breaches of security that resulted in unauthorized access to their personal information;
- requiring businesses disclosing personal information to third parties for use in direct marketing to provide customers, upon request, the names and addresses of third parties and the nature of their businesses.

California law also requires businesses that collect personal information over the internet to maintain and post specific privacy policies, including the categories of data collected and third parties provided access to that data.<sup>6</sup>

The extent of the Commission's jurisdiction to enforce these privacy laws as they apply to third parties authorized to access customer energy usage data has not been addressed by the Commission. However, California law provides customers with private rights of action to recover damages from businesses that fail to comply with these privacy laws, including civil penalties.<sup>7</sup> The FTC's FIPs explain that private remedies "help create strong incentives for entities to adopt and implement fair information practices and ensure compensation for individuals harmed by misuse of their personal information."<sup>8</sup> In pursuing remedies, customers in California can obtain assistance from state agencies such as the California Office of Privacy Protections, created in 2001 as part of the State and Consumer Services Agency (SCSA) to assist individuals with privacy-related concerns, among other duties.<sup>9</sup>

In short, the existing legal and regulatory framework in California is sufficiently robust to reasonably protect customer data privacy and security for data collected by the IOUs in the provision of utility services to customers, as well as for customer data obtained by third parties upon customer consent. As such, the Commission does not need to develop a new and distinct

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<sup>6</sup> See California Business and Professions Code Section 22575.

<sup>7</sup> See e.g., Civil Code Section 1798.84.

<sup>8</sup> See FTC FIPs, Section 5.b.

<sup>9</sup> See <http://www.privacy.ca.gov/>

set of requirements to protect customer data collected by IOUs or obtained by customer-authorized third parties. Rather, the Commission should rely on the existing legal and regulatory framework to protect customer data privacy and security in the context of the Smart Grid.

**2. The Commission can address customer data privacy and security by promoting the IOU's use of privacy policies that reflect widely accepted best practices**

The Commission can take additional steps to address customer data privacy and security by promoting the IOUs' use of the FTC's FIP principles in their privacy policies. The FTC's FIPS reflect widely-accepted best practices in the area of information privacy, using five core principles of privacy protection that promote transparency around data collection and maintenance: 1) Notice/Awareness; (2) Choice/Consent; (3) Access/Participation; (4) Integrity/Security; and (5) Enforcement/Redress. The content of the FTC FIP Principles are included in the record in this proceeding, and are readily available online.<sup>10</sup> SCE proposes that the Commission direct the IOUs to update their privacy policies as necessary to conform to the FTC FIPs.

**3. The Commission should not impose obligations on the IOUs to monitor or enforce customer-authorized third parties' compliance with privacy laws**

In SCE's view, the Commission could directly regulate the content of third party privacy policies and/or third party compliance with privacy laws pursuant to the consumer protection provisions of Assembly Bill (AB) 117, which provides protections to residential and small commercial customers who do business with entities that offer electrical services.<sup>11</sup> However, in SCE's experience, the Commission has been hesitant to expand these protections to services offered by third parties other than direct access providers.

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<sup>10</sup> See <http://www.ftc.gov/reports/privacy3/fairinfo.shtm>

<sup>11</sup> See Section 394 *et seq.* of the Public Utilities Code. The term "electrical service" is not defined in the Code, but could be read to include energy management services of third parties.

As for suggestions that the Commission should indirectly regulate third party compliance with privacy laws or best practices through the IOUs' tariffs, they involve unreasonable and substantial risk to the IOUs and their ratepayers, with little means of mitigating that risk. The IOUs have no reasonable means of monitoring or enforcing the compliance with privacy laws of third parties selected by customers, and should not be required to assume the liability associated with third party compliance with applicable privacy laws. The IOUs can educate customers about California privacy laws generally, and provide information on the agencies where customers can report suspected misuse of customer data.

It is important to note that SCE uses of the term "third party" to mean a party who is an agent of a customer, not an agent (*i.e.*, contractor) of SCE. SCE contractors that need access to customer data to provide services to or on behalf of SCE are contractually bound to abide by all applicable laws, including privacy and security laws, and confidentiality and non-disclosure obligations in their use and maintenance of customer data. Therefore, IOUs are (and should be) obligated to enforce their own contractors' compliance with applicable laws and contractual obligations for customer data privacy and security.

**4. Third party access to backhauled customer energy usage data should be implemented by means of a standardized Open ADE offering governed by IOU tariffs**

As previously stated, the IOUs intend to provide customers and authorized third parties with access to backhauled customer usage data through a national standards-based Open ADE process. Little attention has been paid in this proceeding as to how the Open ADE process is expected to work and how it should be administered by the IOUs.

In SCE's view, Open ADE should be an optional program for customers and/or their authorized third parties, governed by means of a tariff (*e.g.*, a Rule.) The tariff would set forth the rights and obligations of the data exchange parties – the IOUs, the customers and customer-authorized third parties, including:

- Eligibility and set-up – including necessary technical functionalities
- Customer authorization for third party access
- Third party registration
- Data transmittal
- Customer and third party indemnifications.

SCE envisions the Open ADE rule would govern the Open ADE program much like the direct access rule (Rule 22) governs the direct access program (*i.e.*, making the rights and obligations of the IOUs, customers and direct access providers clear). A tariff has several advantages over a standardized contract offering: it is less burdensome than administering bilateral contracts (even if the contracts are standard), and it mitigates the risk that third parties will seek to modify key terms of a “standard” contract.

Accordingly, SCE proposes that the Commission direct the IOUs to collaborate in drafting a tariff to govern the Open ADE program, and hold a workshop to review and discuss the draft. The IOU collaborative process could take several months, so work should begin promptly upon the issuance of a Commission decision. The Commission should also clarify the process for IOUs to seek recovery of any incremental costs associated with implementing Open ADE.

**5. The Commission’s Smart Grid Deployment Plan process is sufficient to identify and address customer data privacy or security issues that may arise in the context of future Smart Grid investments**

In SCE’s view, the Commission’s Smart Grid Deployment Plan process envisioned in D.10-06-047 is sufficient to allow the IOUs, as part of their Deployment Plans and/or subsequent Smart Grid funding requests, to identify and address customer data privacy or security concerns that may arise in context of future Smart Grid investments. In D.10-06-047, the Commission directed the IOUs to assess privacy and security issues for Smart Grid investments into their deployment plans, including the Deployment Baseline (Ordering

Paragraph (OP) 4), the discussion of interoperable architecture designed to protect customer data privacy (OP 6), in the Grid Security and Cyber Security Strategy (OP 10), and as part of the annual reports (OP 15).<sup>12</sup> Accordingly, a suitable framework for addressing customer data privacy and security for future Smart Grid investments has already been adopted. Therefore, SCE proposes that the Commission’s decision by year-end should focus on customer data privacy and security policies in the context of the IOUs’ AMI investments.

**C. SCE’s Proposed Set of Customer Data Privacy and Security Policies**

Based on the foregoing, SCE proposes the following set of customer data privacy and security policies for the California IOUs.

1. The IOUs must comply with all applicable privacy and security laws.
2. Each IOU must use reasonable security procedures and practices to protect a customer’s personally identifiable information,<sup>13</sup> including customer energy usage data, from unauthorized access while it is in the IOU’s possession.
3. IOU policies for the use and maintenance of customer data collected, acquired or developed by the IOU in the course of providing utility services should be readily available and understandable to IOU customers, consistent with widely accepted fair information practices (FIP) principles, and incorporated in the terms and conditions of retail service.
4. The IOUs may not sell customer data.
5. The IOUs may not disclose a customer’s personally identifiable information, including customer energy usage data, to a third party<sup>14</sup> in absence of the customer’s affirmative written authorization, which may be provided by electronic means.
6. Customers are entitled to reasonable access to their energy usage data without having to agree to share their energy usage data or other personally identifiable information with a third party.

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<sup>12</sup> See D.10-06-047, pp. 138-145.

<sup>13</sup> Personally identifiable information (PII) refers to information that can be used to uniquely identify, contact, or locate a customer or can be used with other sources to uniquely identify a customer.

<sup>14</sup> A “third party” refers to an agent of the customer (*i.e.*, a customer authorized third party), not an agent of the IOU (*i.e.*, an IOU contractor).

7. Customers should be allowed to authorize third parties of their choosing to have access to their energy usage data, and should be able to limit the scope and duration of authorized third-party access, as well as the option to terminate that access at any time.
8. Customers and their authorized third party agents should have reasonable access to the customer's energy usage data.
9. The IOUs are prohibited from disclosing a customer's personally identifiable information, including customer energy usage data, to law enforcement agencies or other authorized agents of the state or federal government in absence of the customer's affirmative written consent or legal process (*i.e.*, warrant or subpoena), unless such disclosure is otherwise required by law.
10. The IOUs have no responsibility for the privacy or security of a customer's energy usage data once it is disclosed to the customer's authorized third party pursuant to the customer's written authorization.
11. The IOUs have no responsibility for the privacy or security of a customer's energy usage data obtained by a customer-authorized third party through the Home Area Network.
12. The IOUs have no responsibility for monitoring or enforcing customer-authorized third parties' compliance with privacy or security laws or best practices.
13. IOUs should make educational materials available to their customers about California privacy laws generally, and provide information on the agencies where customers can report suspected misuse of customer data.
14. Third parties with customer authorization to receive customer energy usage data should have policies for the use and maintenance of such data that are readily available and understandable to customers, consistent with widely-accepted fair information practices (FIP) principles, and incorporated in the terms and conditions of their services.
15. Third parties with authorization to receive customer energy usage data have the responsibility to protect such data, including any liability that may result from unauthorized access.
16. Third parties with customer authorization to receive customer energy usage data should obtain explicit customer approval to use the data for purposes not expressly authorized by the customer.
17. The IOUs will be allowed to recover the costs reasonably incurred to implement the foregoing policies.

### **III. SCE'S PROPOSAL FOR PROVIDING PRICING INFORMATION TO CUSTOMERS**

Given the current tiered rate structures in California, providing near real-time pricing data to residential customers may cause customer confusion, and could have the perverse effect of increasing overall electricity usage by customers. Providing near real-time pricing data to residential customers is not, at this time, practicable or meaningful in the context of the Commission's demand response and dynamic pricing policies. As such, the Commission should consider reasonable alternatives to providing customers with near real-time retail prices, at least until such time that the tiered rate structures are no longer in effect.

Near real-time presentment of tiered rates can be misleading and lead to customer confusion because the tiered residential rate structure, where prices are based on total usage during a customer's billing cycle rather than usage during any particular hour or portion of the billing cycle, presents unique challenges for real-time presentment of prices. SCE's current five-tier rate structure was adopted in 2001 as a means to provide conservation signals to residential customers by imposing an average rate on those customers that increases with their total energy consumption during the billing cycle. Providing near-real time pricing data to residential customers may cause customer confusion and have the perverse effect of increasing overall electricity consumption. For example, providing a \$0.12/kWh tier 1 price signal at the beginning of a billing cycle will send the wrong signal to customers whose consumption falls into the upper tiers shortly thereafter.

Furthermore, retail electricity customers pay retail prices, not wholesale prices, for their electricity. Hence, if a retail price to the customer at a particular instant is \$0.10/kWh and the wholesale price to the utility is \$0.50/kWh, the customer will consume based on the price they actually face (retail), not the price they do not face (wholesale). Similarly, consumers' driving habits are known to change when the retail price at the pump for gasoline changes, not when the wholesale price per barrel of oil changes.

Given the discussion above, SCE proposes the following set of pricing policies for Commission consideration.

**A. IOUs Should Provide Price Information that is Relevant and Actionable**

SCE fully supports providing customers with access to price information that is relevant and actionable. Market research indicates that customers are interested in tools that will help them manage their energy bills. This research also indicates that customers are primarily concerned with their monthly bill amount, and not necessarily the price paid at any given minute.<sup>15</sup> In particular, mass market customers need information about their (retail) costs based on the applicable tariff rate and the quantity to which the rate applies. Thus, SCE intends to provide bill-to-date and bill forecast information to its SmartConnect metered customers<sup>16</sup> in late 2010 on SCE.com My Account.

Bill-to-date functionality will use the electricity usage at any point during the billing period (provided by the Edison SmartConnect meter) to estimate the customer's bill at the end of its billing cycle.<sup>17</sup> Customers will also be able to enroll in optional alerts, which will notify them by voice, text, or email when they exceed their preset budget amount. In addition, SCE will provide event notifications<sup>18</sup> to customers informing them that Peak Time Rebate and Critical Peak Pricing<sup>19</sup> rates will be in effect. These capabilities will provide relevant, actionable information that consumers can use to manage their energy usage, and will avoid the potentially negative consequences of presenting near real-time pricing information for tiered rates. These customer tools are particularly important while AB1X restrictions are in place, because the tiered rate structures presented in near-time are misleading and may lead to customer confusion.

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<sup>15</sup> SCE.com SmartConnect Design Prototype Usability Testing, April 24, 2009.

<sup>16</sup> Bill-to-date and bill forecast information will be provided to customers on the standard residential and small commercial rates (i.e., customers on Schedule D and Schedule GS-1) who have a billing-ready Edison SmartConnect meter.

<sup>17</sup> The bill calculation will include the bill-to-date cumulative energy usage multiplied by the applicable rate.

<sup>18</sup> This option is available to customers on an opt-in basis.

<sup>19</sup> Peak Time Rebate is available to residential customers as part of the standard residential rate (Schedule D).

This information will provide customers with relevant, actionable information that can help them manage their energy usage. TURN and Google also support the provision of such functionalities. TURN stated, “[n]otifying customers electronically (by robocall or email) within 24 hours of when their usage crosses into the next tier during the course of the month is exactly the kind of information... to empower customers to both save energy and money.”<sup>20</sup> Google also stated, “[a]utomated alerts delivered via email, phone, or text messaging can alert customers to when they may be transitioning to higher rate classes.”<sup>21</sup>

**B. Providing Day-Ahead Retail Pricing Signals is Preferable to Continuously Providing Near Real-Time Pricing Information**

Retail prices for electricity today are based on rates that are static rather than dynamic relative to real-time. Namely, the retail electricity price is known in advance by time period or consumption level, even for rates that are dynamic, such as critical peak pricing. Therefore, pricing signals could be provided on a day-ahead basis and could be accessed by customers in real-time on a day-of basis. Providing day-ahead retail pricing signals to customers (e.g., via the web) would be a more cost-effective option than continuously providing near real-time retail prices. Thus, SCE submits that the costs and benefits of providing near real-time pricing information outside of SCE’s current smart meter functionality should be fully assessed and understood prior to issuing any recommendations or legislative requirements.

\* \* \*

In addition to the above, the IOUs should assist customers by continuing to provide education and outreach on tiered rates, energy management, and conservation programs to

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<sup>20</sup> See TURN’s Opening Comments to February 8, 2010 Joint Administrative Law Judge and Assigned Commissioner Ruling, at p. 25.

<sup>21</sup> See Google’s Opening Comments to February 8, 2010 Joint Administrative Law Judge and Assigned Commissioner Ruling, at p. 3.

reduce bills.<sup>22</sup> The goals and intent of retail price presentment should be discussed in greater detail at the workshop, in the context of providing customers with useful information to manage their energy usage.

#### **IV. SCE'S RESPONSES TO THE ACR'S QUESTIONS**

SCE's responses to the ACR's specific questions are set forth in Attachment A hereto.

#### **V. CONCLUSION**

SCE appreciates the opportunity to submit this response, and we look forward to working with the Commission and stakeholders on these policy proposals at the upcoming workshops.

Respectfully submitted,

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<sup>22</sup> SCE's position is consistent with the key findings in the DOE Data Access and Privacy Report, "Consumer education and flexibility in both technology and pace of deployment will be critical to the long-term success of Smart Grid technologies." *See* p. 12.

**Attachment A**

**SCE'S RESPONSES TO THE ACR'S QUESTIONS**

## ATTACHMENT A

### SCE'S RESPONSES TO THE ACR'S QUESTIONS

**Question 1A: What customer energy usage data does the utility expect to generate or currently generates (including the frequency with which such data will be generated)?**

**SCE Response to Question 1A:**

Currently, SCE generates interval usage data for its large commercial and industrial (C&I) customers (200 kW or greater), and monthly cumulative usage data (current period and historical) for the vast majority of residential and small commercial customers (less than 200 kW). SCE also generates interval usage data for those residential and small commercial customers with interval data recorder (IDR) meters or Edison SmartConnect meters that have been cut-over to operations. In addition, other energy usage data is generated for those customers on tariffs that require determinants for billing purposes (*e.g.*, demand charges).

Beginning in late 2010, Edison SmartConnect meters will provide backhauled hourly (residential) or 15-minute interval usage data (small commercial and industrial < 200 kW) available on a next-day basis on SCE's web portal or through SCE's call center. This capability will also allow SCE to provide customers with cumulative bill-to-date usage, interval usage (provided on a day-after basis), historical usage, and demand information (if applicable).

Near real-time usage data (updated every 10 to 12 seconds) is expected to be available in the 2012 timeframe from the Home Area Network (HAN) to customer devices registered with SCE. Note that this information will not be backhauled to the IOU back office systems. Instead, this information will be available from the smart meter, located at the customer's premise, directly to the consumer's registered device. In addition, providing customers with near real-time usage data through the HAN is dependent on the ratification of the Smart Energy Profile version 2.0 (SEP 2.0), which is anticipated in 2011.

**Question 1B: Does the utility provide customers with access to that data today? If not, when is the target date for providing such access?**

**SCE Response to Question 1B:**

Backhauled interval data (*i.e.*, hourly or 15 minute intervals) may be accessed by customers on their monthly bill, on SCE.com, or through SCE's call center. Backhauled information is validated, edited and estimated to produce revenue-quality interval usage data, which will be made available on a next-day basis. Backhauled information is currently available to SCE's large C&I customer, and will be available to customers with an Edison SmartConnect meter beginning in late 2010.

Providing backhauled data on a more frequent basis than next-day is not necessary given the HAN functionality, and will require additional ratepayer investments in infrastructure that would significantly increase ratepayer costs. Many other utility smart metering programs follow a similar structure where near real-time information is provided directly to the customer wirelessly via the smart meter or local network device, and revenue-quality data is provided on a next day basis or even less frequently.<sup>23</sup>

SCE's smart meter program provides customers with reasonable access to their interval electricity usage in near real-time through the HAN and at least cost to ratepayers. Even low-income customers who do not have or cannot afford broadband internet service can access their interval electricity usage in near real time via relatively inexpensive HAN devices.<sup>24</sup> Such devices, some of which are already commercially available, are wireless and portable within the premise so that the consumer can see the effect on electricity usage of turning appliances on and off. The consumer can also program in the applicable electric rate structure to see not only interval usage data in near real-time, but how it translates to electricity costs in near real-time.

**Question 1C: With whom do you propose to share that data?**

**SCE Response to Question 1C:**

SCE does not propose to share that data with any third party, unless required by law (i.e., law enforcement agencies pursuant to a warrant or subpoena). SCE may disclose customer energy usage data with its contractors that have a need to access such data to provide services to SCE and/or our customers, but only pursuant to contractual obligations that the contractor maintain the confidentiality and security of such data in accordance with all applicable laws, and not disclose the data to third parties except as required by law.

To the extent a customer wishes to authorize SCE to disclose its customer energy usage data to a third party of the customer's choosing, SCE will disclose the customer's backhauled usage data upon written authorization of the customer, contingent upon the Commission's adoption of data access rules. SCE is not backhauling the near real-time usage data provided via the HAN; therefore, the customer may elect to share that data with third parties directly.

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<sup>23</sup> SCE's position is consistent with the Department of Energy's (DOE) Report on Data Access and Privacy Issues Related to Smart Grid Technologies (Data Access and Privacy Report) issued on October 5, 2010, at p. 20.

<sup>24</sup> SCE's position is consistent with the key findings in the DOE Data Access and Privacy Report. "Deployment strategies must be flexible for utilities serving rural, low-income, minority or elderly customers, and consider the special circumstances of those customers, but should not presume that Smart Grid technologies are inappropriate or unhelpful to such customers", at p. 13.

**Question 1D: How do you currently use such data (including the relevance of such data to the intended uses), and how long will the data be maintained?**

**SCE Response to Question 1D:**

SCE uses backhauled usage data for billing purposes and to assist customers in selecting rates and programs to better understand and reduce their electricity consumption and costs. For example, the backhauled energy usage data will enable SCE to offer customers energy management tools, such as the web presentment of interval data, bill-to-date, bill forecast, and budget alert tools that are discussed in Section III of this response. SCE currently retains energy usage data for billing purposes for three years; we are currently assessing and developing data retention policies for interval usage data provided by Edison SmartConnect meters.

**Question 2A: What are the current privacy protections and data exchange rules that apply to this data?**

**SCE Response to Question 2A:**

A list of applicable laws, decisions and tariffs governing customer data privacy, security and access was filed in this proceeding by PG&E on behalf of the IOUs concurrently with this response, and is incorporated herein by this reference.

California IOUs already provide customer-authorized third parties with access to customer energy usage data upon written authorization of the customer pursuant to California law, Commission decisions, and IOU tariffs, particularly in the context of direct access (Rule 22), community choice aggregation (Rule 23 and Schedule CCA-Info), and third party demand response aggregation programs. The IOUs use the standardized Customer Information Service Request (CISR) form, on which the customer identifies their third party agent, specifies the duration and scope of the agency, authorizes the IOU to disclose its data to the third party, and the customer and their third party indemnify the IOU for the third party's use of the data once the IOU discloses it.

SCE is in the process of developing an Open ADE program, which would provide customers and third parties an option to receive customer energy usage data on a daily basis through a standards-based automated data exchange service.

**Question 2B: What privacy protections and data exchange rules does the utility propose that the Commission adopt?**

**SCE Response to Question 2B:**

SCE's proposed customer data privacy and security policies are set forth in Section II.C of this response.

In addition, SCE proposes that the Commission authorize the IOUs to offer a data exchange program that adheres to the Open ADE standard under development within the National Institute

of Standards and Technology (NIST) and North American Energy Standards Board (NAESB) framework, which includes system and architecture requirements developed to protect the confidentiality, integrity and availability of customer information in transit and at rest. The Commission should adopt the Open ADE standard, which is expected to be ratified by the NAESB and accepted by NIST by the end of 2010, to ensure that the IOU and third party systems are compatible and interoperable pursuant to national standards. Non-Open ADE solutions may require duplicative processing or rework, or give rise to inconsistencies with national standards.

**Question 3: Does the utility currently provide usage data to third parties? If so, what are the consumer protections and security provisions that apply to that information?**

**SCE Response to Question 3:**

Yes. As discussed in SCE's response to Question 2A, SCE provides customer-authorized third parties with access to customer energy usage data upon written authorization of the customer pursuant to California law, Commission decisions, and IOU tariffs, particularly in the context of direct access (Rule 22), community choice aggregation (Rule 23 and Schedule CCA-Info), and third party demand response aggregation programs.

As part of the list of applicable laws, decisions and tariffs governing customer data privacy, security and access was filed by PG&E on behalf of the IOUs, SCE included references to the customer data privacy and security provisions of SCE Rule 22 (Direct Access), Rule 23 and Schedule CCA-INFO (Community Choice Aggregation), which SCE incorporates herein by this reference. Third party demand response aggregators are provided customer energy usage data pursuant the customer's written authorization using the CISR form.

As noted previously, SCE does not currently provide backhauled interval usage data to residential or small commercial and industrial customers or customer-authorized third parties yet.

**Question 4: What policies does the utility follow in responding to requests or demands for disclosure of such data from law enforcement, other government agencies, and civil litigants, including what policies will the utility follow in providing consumers with notice when a request or demand is received?**

**SCE Response to Question 4:**

SCE discloses customer data to law enforcement agencies only upon the customer's affirmative written consent or pursuant to legal process (*i.e.*, a warrant or subpoena), unless otherwise required by law.

SCE discloses customer energy usage data and other personally identifiable information to the Commission upon request and under confidential protections pursuant to Section 583 of the California Public Utilities Code and General Order 66-C.

SCE does not notify customers that their energy usage data has been requested or disclosed to law enforcement agencies or the Commission.

**Question 5A: Does the utility provide the customer with access to pricing data associated with their usage? If so, what does the utility communicate and when and how is the price communicated?**

**SCE Response to Question 5A:**

Customer pricing data is readily available to SCE's customers on SCE.com on the customer's monthly bill, or through SCE's call center. These sources provide information on current and historical rates.

As discussed in Section III of this response, although pricing data is already readily available to customer, there are limitations to customer understanding of tiered rates. The current tiered rate structures are complicated and distort the intended affect of providing near real-time retail rates to customers. More specifically, providing near real-time pricing data to residential customers may cause customer confusion, and could even have the perverse effect of increasing overall electricity usage by customers (e.g., an inverted tier structure provides price signals that encourage electricity usage early in the billing cycle). Thus, while tiered rates are in effect, providing near real-time pricing data is not, at this time, practicable or meaningful to most customers. In fact, SCE's market research indicates customers are more interested in tools that will help them manage their electricity bills.

To facilitate this, beginning in late 2010, SCE plans to provide customers with Edison Smart Connect meters that have been cut-over to operations with bill-to-date and bill-forecast information, as well as optional alerts that notify customers when they are nearing their preset budget amount. In addition, customers on time-differentiated rates, such as critical peak pricing (CPP), or peak time rebate (PTR) programs, will receive day-ahead pricing signals. These are examples of actionable pricing information that will enable customers to save money and better manage their electricity bills.

Furthermore, SCE supports the California Independent System Operator's (CAISO) position expressed at the March 19, 2010 workshop that system conditions should be communicated to customers via pricing signals and by other means as an alternative to providing customers with near real-time wholesale price information. Retail prices are not directly tied to fluctuations in wholesale electric market prices, and as TURN has previously noted in this proceeding, customers are unlikely to have the capability to respond to wholesale prices as current tariffs are not based on wholesale prices.<sup>25</sup> IOUs already provide a proxy of wholesale prices through dynamic pricing and demand response programs. As an alternative to the presentment of near real-time wholesale prices, the Commission should consider allowing the IOUs and CAISO to

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<sup>25</sup> See TURN's Opening Comments February 8, 2010 Joint Administrative Law Judge and Assigned Commissioner Ruling, at p. 23.

work jointly in the demand response proceeding to further refine the pricing signals to develop a more effective correlation with wholesale prices.

**Question 5B: What price information does the utility believe would be most useful to a customer?**

**SCE Response to Question 5B:**

As stated in SCE's response to Question 5A, consumers should have access to timely, useful, and actionable information about their energy usage. This information should take the form of bill-to-date and bill-forecast information, as well as budget notification analysis tools.

**CERTIFICATE OF SERVICE**

I hereby certify that, pursuant to the Commission's Rules of Practice and Procedure, I have this day served a true copy of **RESPONSE OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) TO ASSIGNED COMMISSIONER'S RULING ON CUSTOMER PRIVACY AND SECURITY ISSUES** on all parties identified on the attached service list(s). Service was effected by one or more means indicated below:

Transmitting the copies via e-mail to all parties who have provided an e-mail address.  
First class mail will be used if electronic service cannot be effectuated.

Executed this **15th day of October, 2010**, at Rosemead, California.

/s/ Andrea Moreno  
\_\_\_\_\_  
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California Public  
Utilities Commission

CPUC Home

## CALIFORNIA PUBLIC UTILITIES COMMISSION

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