

July 21, 2014

**VIA E-MAIL DOCKET@ENERGY.  
CA.GOV**California Energy Commission  
Dockets Office, MS-4  
Re: Docket No. 14-EUDP-01  
1516 Ninth Street  
Sacramento, CA 95814-5512Re: AB 1103 Order Instituting an Informational Proceeding: Comments of Pacific Gas and Electric Company**I. INTRODUCTION**

Pursuant to the direction provided by the Lead Commissioner of the California Energy Commission (CEC) at the July 2, 2014, public workshop in this proceeding, Pacific Gas and Electric Company (PG&E) provides its comments on the information presented at the workshop and recommendations on next steps in this informational proceeding.

As discussed in more detail below, PG&E appreciates the information and “lessons learned” on implementation of Assembly Bill (AB) 1103 building energy usage benchmarking that were provided at the workshop, as well as the information provided on building benchmarking programs in other jurisdictions. This information, as well as the evidentiary record and decisions in the California Public Utilities Commission’s (CPUC’s) Rulemaking 08-12-009, such as CPUC Decision No. 14-05-016 on access to customer energy usage data, provide a useful foundation for revisions to the AB 1103 program. Such reforms will enhance the energy usage data available to building owners, while protecting the confidentiality of utility customers.

PG&E agrees with the informal recommendations of various parties and the Lead Commissioner that the CEC’s next steps should be to initiate a formal public rulemaking. This rulemaking should consider revisions to data access protocols for the AB 1103 program to streamline and expand the access of building owners to aggregated building energy usage data that is anonymized sufficiently to protect against disclosure of confidential customer data unless the customer consents to the disclosure. More specifically, the rulemaking should consider potential empirically supportable solutions for aggregating and anonymizing customer data that would mitigate the risk of confidential customer-specific data being disclosed without the customers’ consent. If empirically sufficient solutions are not yet available, the rulemaking

should consider whether the process for obtaining customer consent to disclosure of energy usage data can be enhanced and streamlined. Alternatively, the rulemaking should consider whether amendments to AB 1103 should be considered by the California Legislature in order to structure building energy benchmarking programs in a different manner.

## **II. PG&E'S EXPERIENCE IN IMPLEMENTING BUILDING ENERGY BENCHMARKING PROGRAMS, INCLUDING AB 1103**

Since 2007, PG&E has partnered with ENERGY STAR ® Portfolio Manager to support customers with building benchmarking for both voluntary and mandated compliance purposes. PG&E sees benchmarking as an important tool for energy awareness and education, and a first step in fostering better building energy management.

PG&E is proud to be a national leader in facilitating building performance benchmarking, having helped customers benchmark close to 10,000 properties using Web Services – 40% of all buildings benchmarked using Web Services in the nation. PG&E does not inquire or distinguish the purpose of benchmarking when requested by a building owner or manager. PG&E provides support for not only voluntary benchmarking but also multiple mandatory benchmarking programs including AB 1103, the City and County of San Francisco's Existing Commercial Buildings ordinance, and benchmarking of school energy usage under Proposition 39. Based on analysis of property type and size, we estimate that approximately 200 buildings may have been benchmarked with PG&E support for AB 1103 in 2014.

<b>Year</b>	<b># Properties</b>
2011	3,500
2012	3,536
2013	1,397
2014 (YTD)	1,436
<b>Total</b>	<b>9,869</b>

In 2011, PG&E was among the first utilities to develop Web Services to speed and simplify benchmarking, by automatically transferring energy usage and billing data directly to ENERGY STAR ® Portfolio Manager. To facilitate these transactions, PG&E applies California privacy laws and CPUC decisions that require PG&E to obtain express and prior written or electronic consent for utility customers of record before releasing their energy usage data to a third party for a purpose other than utility service. Once authorized by the customer, PG&E automatically transfers up to three years of historical data and billing cycle data every month going forward.

A noteworthy consideration for aggregating whole building data is the cost/benefit analysis to implement this option. For example, our estimates indicate that aggregating data for buildings with 4 or more tenants (e.g., a "Rule of 4") would apply to only 15% of building

owners in PG&E territory, while 85% would be excluded.<sup>1</sup> Aggregating data for buildings with 15 or more separately metered customers of record/tenants would apply to only 2% of our buildings, and fewer with a “Rule of 15/15,” as has applied under CPUC privacy rules for nearly two decades.

PG&E continues to refine and improve our technical solutions, education, training and outreach to provide proactive support to customers as well as third party building owners and managers. These offerings include:

- All salesforce and account managers are trained on benchmarking and AB 1103 basics for education and outreach.
- Dedicated team of benchmarking specialists provides one-on-one phone and email support. This year, 400 hours of personalized assistance were allocated for building benchmarking.
- In-person training and education classes are professionally taught by Energy Efficiency Funding Group, Inc. at the Pacific Energy Center in San Francisco. Attendance rates for “Benchmarking Your Commercial Building” and “Benchmarking as a Business” exceed 50 people per class and receive consistent 5-star reviews.
- PG&E.com corporate website hosts How-to-Guides and benchmarking resources.
- In 2014, PG&E launched an online learning management system to offer a convenient training alternative, especially useful for hard to reach small- and medium-size businesses. The training is modular, based on specific needs, and includes an AB 1103 focused module.
- In 2014, PG&E released an online, electronic data release authorization form to speed and simplify building owner and tenant/customer of record consent.
- PG&E is actively participating in the U.S. Department of Energy’s Better Buildings Challenge Data Accelerator Project, and collaborating with Investor Owned Utilities (IOUs), city partners, and industry stakeholders to find practical long term solutions to data access for the purposes of building energy management. As the collective team evaluates various solutions to data access, we consider practicality and customer experience to be key priorities.

Like many utilities, PG&E has been working with commercial building owners and business customers for the past thirty years to pursue and actively support energy efficiency improvements. PG&E not only supports building benchmarking programs, we also incorporate benchmarking in several of our newest and most innovative program designs like the Whole Building Pay-for-Performance model.

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<sup>1</sup> The 10,000 properties benchmarked using PG&E Web Services were used as a proxy for market sizing estimation.

### **III. PG&E'S RECOMMENDATIONS FOR THE SCOPE OF AN AB 1103 RULEMAKING**

The information at the workshop indicated that a number of variables affecting the implementation of AB 1103 benchmarking should be considered in the new Rulemaking. The issues of interest to PG&E include: a) building owner access to the confidential energy usage data of separately-metered utility customers; b) the scope of commercial buildings to be covered by benchmarking; c) the usefulness and timeliness of the information and energy use ratings required to be disclosed under AB 1103; and d) whether building benchmarking programs need to be consistent across the state or can vary based on different building energy usage programs initiated by local cities and counties, as is the case in other states.

PG&E recommends that the scope of any AB 1103 rulemaking initiated by the CEC cover all these issues, because they are interrelated in evaluating a structure of the overall program that incents maximum participation and compliance by the maximum number of commercial building owners and utility customers. Utility customers of record who are separately metered and tenants of buildings seeking to be benchmarked have a variety of privacy and confidentiality expectations that need to be taken into account. Some customers and tenants closely collaborate with their landlords on building energy efficiency because it helps reduce their lease or utility payments; others consider their energy usage in their commercial space to be private, commercially confidential, and not disclosable for any public purpose. Still others may voluntarily enter into terms in their leases that provide advance approval for sharing of certain tenant-specific energy usage data. These various tenant/utility customer expectations should be explored and considered in the rulemaking.

In terms of the data access and aggregation issues, PG&E recommends that the CEC begin by considering the extensive evidence and technical recommendations on data aggregation and anonymization that were included in the CPUC's Phase III Energy Data Center proceeding in Docket R.08-12-009.<sup>2</sup> Based on the evidence and recommendations in that proceeding, the CPUC formally found as a matter of fact that:

*For commercial or agricultural customers, data stripped of identifying information and aggregated to a monthly time period and aggregated to the zip code geographic level, where a zip code has 15 or more commercial or agricultural customers and no single customer constitutes more than 15% of total*

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<sup>2</sup> CPUC Rulemaking 08-12-009 (Filed December 18, 2008) Phase III Energy Data Center, <http://delaps1.cpuc.ca.gov/CPUCProceedingLookup/?p=401:57:15302460930931::NO>. The workshop report which includes a discussion of various techniques for anonymizing and aggregating customer energy usage data can be found at <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M076/K995/76995999.PDF>.

*consumption, then that usage data is sufficiently aggregated to prohibit re-identification.*<sup>3</sup>

Similarly, the President's Council of Advisors on Science and Technology recently made the following finding regarding the availability of aggregation and anonymization techniques to protect the privacy of data:

*Anonymization of a data record might seem easy to implement. Unfortunately, it is increasingly easy to defeat anonymization by the very techniques that are being developed for many legitimate applications of big data. In general, as the size and diversity of available data grows, the likelihood of being able to re-identify individuals (that is, re-associate their records with their names) grows substantially. ... Anonymization remains somewhat useful as an added safeguard, but it is not robust against near-term future reidentification methods. PCAST does not see it as being a useful basis for policy.*<sup>4</sup>

Based on the information provided at the workshop and available from other jurisdictions, it does not appear that other utilities or local governments implementing building benchmarking programs have achieved a technical consensus on the "right" level of data aggregation to mitigate the risk of disclosure of customer-specific, private information. In preparation for the workshop, PG&E reviewed the requirements of several of the building benchmarking ordinances adopted outside of California, and it appears that many of those ordinances mandate that utility customers and building tenants disclose their customer-specific energy usage data directly to building owners, rather than protecting the data under customer privacy or confidentiality.<sup>5</sup> In contrast, California's framework for customer privacy includes a preference for consumer participation and notification of the various uses of specific customer data, consistent with the Fair Information Practices Principles (FIPs) endorsed by federal privacy agencies such as the Federal Trade Commission and Department of Homeland Security.<sup>6</sup>

With these factors in mind, PG&E recommends that the scope of the CEC rulemaking on building energy data aggregation issues also include the broader public policy questions of "How much privacy risk should be mitigated?" and "Who should decide the balance between privacy

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<sup>3</sup> CPUC Decision No. 14-05-016, Finding of Fact 17, p. 140, May 1, 2014.

<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M090/K845/90845985.PDF>

<sup>4</sup> Report to the President: Big Data and Privacy: A Technological Perspective," President's Council of Advisors on Science and Technology, May, 2014, pp. 38- 39,

[http://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/pcast\\_big\\_data\\_and\\_privacy\\_-\\_may\\_2014.pdf](http://www.whitehouse.gov/sites/default/files/microsites/ostp/PCAST/pcast_big_data_and_privacy_-_may_2014.pdf).

<sup>5</sup> See Attachment 1, which provides a summary of the legal requirements of building energy benchmarking ordinances in jurisdictions outside California.

<sup>6</sup> See CPUC Decision No. 11-07-056, July 28, 2011, mimeo at pp. 10- 21, endorsing and using the FIP principles for purposes of promulgating utility customer privacy rules. See also, Federal Trade Commission Report to Congress, May, 2000, <http://www.ftc.gov/sites/default/files/documents/reports/privacy-online-fair-information-practices-electronic-marketplace-federal-trade-commission-report/privacy2000.pdf>.

and public benefit?” Starting with these important public policy questions and then considering factual evidence on data aggregation techniques will help build a consensus on how to enhance and improve California’s building energy benchmarking programs for the benefit of all customers.

#### **IV. CONCLUSION**

PG&E looks forward to participating and supporting the CEC’s next steps on implementing AB 1103. Please contact me if you have any questions or wish to discuss matters further.

Sincerely,

/s/

Madeline R. Silva

cc: D. Ashuckian by email ([dave.ashuckian@energy.ca.gov](mailto:dave.ashuckian@energy.ca.gov))  
D. Johnson by email ([daniel.johnson@energy.ca.gov](mailto:daniel.johnson@energy.ca.gov))

## Attachment 1:

Benchmarking Program	Customer/Tenant Privacy	Aggregation Standard	Requirements
California AB 1103	Tenant not required to disclose	CPUC: “15/15%” Rule for commercial customers (D.14-05-016) CEC: To be determined.	Public Resources Code Sec. 25402.10(b): “...[U]pon the written authorization or secure electronic authorization of a nonresidential building owner or operator, an electric or gas utility shall upload all of the energy consumption data for the account specified for a building ... in a manner that preserves the confidentiality of the customer.”
San Francisco	Tenant not required to disclose	None.	S.F. Environment Code, Ch. 20, Sec. 2003(e): “...[T]he owner of the building shall acquire energy usage data for all meters in the building solely for the purpose of benchmarking the energy performance of the building as a whole. Nothing in this Chapter shall require or in any way change the ability of a building owner to report or disclose energy usage of individual tenants.”
Washington State	Tenant not required to disclose	5 (Puget Sound Energy) 2 (Seattle City Light)	RCW.19.27A.170.(2): “...[U]pon the written authorization or secure electronic authorization of a nonresidential building owner or operator, a qualifying utility shall upload the energy consumption data for the accounts specified by the owner or operator of the building ... in a form that does not disclose personally identifying information.
Seattle	Tenant required to disclose	N/A	Title 22, Ch.22.920, Sec.22.920.050: “Each tenant located in a building subject to this chapter shall, within 30 days of a request by the building owner, provide in a form that does not disclose personally-identifying information, all information that cannot otherwise be acquired by the building owner and that is needed by the building owner to comply with the requirements of this chapter.”
New York	Tenant required to disclose	N/A	Admin. Code Sec. 28-309.4.1.2: “Such tenant shall report information relating to such tenant’s separately metered energy use for the previous calendar year....”
Chicago	Tenant required to disclose	N/A	Title 18, Ch.18-14-101.4: “Within 30 days of a request by the building owner, each tenant of a unit in a covered building shall provide all information that cannot otherwise be acquired by the building owner and that is necessary for the building owner to comply with the requirements of this chapter.”
Boston	Tenant required to disclose	N/A	Sec.7-2.2(g)(i),(ii): “Upon receiving such request, a tenant shall report information relating to the tenant’s separately metered energy and water use for the previous calendar year....”

Benchmarking Program	Customer/Tenant Privacy	Aggregation Standard	Requirements
Austin	Tenant not required to disclose	4/80% (Austin Energy)	Ch.6-7, Sec.6-7-31: No reference to tenant disclosure
Minneapolis	Tenant required to disclose	N/A	Title 3, Ch.47, Sec.47.190(f): “Each tenant located in a covered building...shall, within 30 days of a request by the building owner and in a form to be determined by the director, provide all information that cannot otherwise be acquired by the building owner and that is needed by the building owner to comply with the requirements of this section.”
Philadelphia	Tenant not required to disclose	Tenant consent required	Ch.9-3400, Sec. 9-3402(3): “...[T]he owner shall request from the tenant any information necessary for the owner to comply with the benchmarking requirement imposed under subsection (2)...The failure of any tenant to report the information required under subsection (3) to the owner shall not relieve the owner of the obligation to benchmark pursuant to this Section, provided that an owner shall not be required to report information a tenant has failed or refused to report and that is not otherwise lawfully available to the owner.”
Washington, DC	Tenant not required to disclose	5 (Pepco)	Sec.6-1451.03(a-1)(1): No reference to tenant disclosure
Montgomery County, MD	Tenant required to disclose	N/A	Ch.18A, Sec.18A-41(b): “Within 30 days after receiving a request for information from the building owner, each tenant...must provide the building owner with all information that the owner cannot otherwise acquire that is necessary to comply....”