



Independent Evaluation of PG&E Smart Meters Frequently Asked Questions

1. What company will conduct the independent evaluation of Pacific Gas and Electric Company's (PG&E) Smart Meters?

The CPUC has selected The Structure Group (www.thestructuregroup.com) to conduct the evaluation.

2. Why was Structure selected and what is the company's background and qualifications?

The Structure Group is a leading provider of consulting services and business solutions to utilities and energy market participants. Structure has assisted more than 120 utilities and energy companies on business transformation projects. Structure offers comprehensive consulting services and deep energy industry expertise through six consulting practices: Smart Grid, Competitive Market Solutions, Energy Trading and Risk Management, Energy Management and Control Systems, Utility Enterprise Asset Management, and Regulatory Compliance.

CPUC staff used several criteria in evaluating the companies that participated in its solicitation for the contract. Those criteria included knowledge and experience with Smart Metering technologies, the ability to formulate lines of inquiry, experience with designing solutions and investigation methods, and the ability to function as a prime contractor to oversee this project.

3. How many companies submitted bids?

There were 15 applications in response to our request for a consultant, including Structure's.

4. What is the cost of the contract and who will pay?

The contract value is approximately \$1.4 million and is structured to provide flexibility in adapting the scope of work, if necessary, to accommodate intermediate findings of the investigation by the consultant. CPUC is directly managing and funding the contract and it has ordered PG&E to reimburse the CPUC for the expense of the contract.

5. What is the scope of the independent evaluation?

Working under CPUC supervision, Structure will have access to PG&E's data and systems to conduct the Smart Meter evaluation, which will address the following areas:

- Whether PG&E's Smart Meter system is measuring and billing electric usage accurately, both now and since meter deployment began.
- Independent analysis of the high bill customer complaints. This analysis will leverage industry-accepted practices for estimating customer consumption, as well as account for changes in PG&E tariff rates. This will likely require interviewing a sample of customers whose usage patterns are not easily explained using conventional analyses such as comparing usage to weather data.



- Analysis of PG&E's Smart Meter Program's past and current operational and deployment processes, policies, and procedures, against the framework of industry best practices.

6. Will the independent investigation look at only the San Joaquin Valley areas or all of the PG&E service territory where Smart Meters have been installed; what is the timeframe?

The investigation will begin by focusing first on complaints from the San Joaquin Valley area, but will also evaluate the overall Smart Meter system, including sample testing of Smart Meters from other parts of PG&E's service territory. Structure will provide CPUC staff with weekly updates and interim preliminary reports that summarize the results of their evaluation at that time. The investigation is expected to be completed within four months although the timeframe may be shortened or lengthened depending on what Structure uncovers in the initial stages of the project.

7. What are the next steps after the contract is signed?

Working under the supervision of the CPUC, Structure will begin its investigation. At the conclusion of the investigation, Structure will file a report summarizing the findings. In addition, status reports will be delivered to the CPUC periodically, summarizing the progress and next steps.

8. Initially the CPUC indicated it would make a selection at the beginning of 2010. What was the process?

Being a state agency, the CPUC must adhere to certain government contracting requirements, some of which do not bend no matter how urgent the need may be. Specifically, we were required to conduct a solicitation, review all materials presented by all 15 bidders, select a short list of at least five companies or teams to interview, conduct those interviews with a panel of four staff members, and ultimately evaluate the presentations and cost proposals of each of the companies. At each step, we were required to document and justify our evaluation, according to a set of standardized rating criteria that had to be developed specifically for this project. We moved as quickly as possible during all these phases because we recognized the urgent need to begin this investigation, but we also felt it was very important not to shortcut the process, due to the importance of this investigation to the CPUC and to consumers. This evaluation will be a large endeavor for CPUC staff, and the cost of the project is not within the CPUC's current budget. Thus we were also required to take steps to request additional budget authority for this purpose even though the actual costs of the project will be paid for through reimbursement to the CPUC from PG&E.

9. Why wasn't a moratorium called on the installation of Smart Meters?

It is premature to put a moratorium on Smart Meter installations before we have the results of the independent investigation. There are millions of Smart Meters installed and operating around the globe with no complaints. In addition, a moratorium would involve costs to consumers for ramping down installation and re-starting at a later date that we cannot determine are warranted at this time.



10. During the Smart Meter investigation PG&E customers may continue to receive bills they believe are incorrect. What should they do?

If consumers have billing concerns that they have not been able to work out with PG&E, they can call the CPUC's Consumer Affairs Branch at 1-800-649-7570.

11. When did you first call for an independent investigation?

Beginning the summer of 2009, there was a high degree of concern expressed by consumers and some members of the State Legislature over high electricity bills that occurred in the San Joaquin Valley area around same time that PG&E installed Smart Meters there. In response, on November 20, 2009, the CPUC voted to approve expedited contracting authority in order to obtain an independent third-party expert to evaluate those Smart Meters and PG&E's deployment of them. On December 7, 2009, the CPUC issued an open solicitation seeking companies qualified to conduct the evaluation.

12. Why did the CPUC approve Smart Meters for the state's utilities?

Smart Meters represent an integral part of the state's "demand response" efforts. Demand response programs allow consumers and businesses to reduce the use of their electricity during times of high energy demand. Smart Meters enable a utility to provide customers with more detailed information about their energy usage at different times of day, which in turn enables those customers to manage their energy use more proactively. Smart Meters are only a small part of an overall package of information and technologies that can be used to help consumers manage their energy use and reduce their bills; other technologies such as programmable and/or communicating thermostats, can work in conjunction with Smart Meters to help consumers control their energy use more automatically. Smart Meters benefits include:

- Allows for faster outage detection and restoration of service by a utility.
- Provides customers with greater control over their electricity use when coupled with time-based rates.
- Allows customers to make informed decisions by providing highly detailed information about electricity usage and costs.
- Helps the environment by reducing the need to build power plants, or avoiding the use of older, less efficient power plants as customers lower their electric demand.
- Increases privacy because electricity usage information can be relayed automatically to the utility for billing purposes without on-site visits by a utility to check the meter.
- Smart Meters are the first step toward creating a Smart Grid in California.

For more information on the benefits of Smart Meters, please visit www.cpuc.ca.gov/PUC/energy/Demand+Response/benefits.htm.

13. Have other utilities deployed Smart Meters and have there been complaints?

Smart Meters have been installed throughout California, the U.S., and internationally. According to the Edison Foundation, more than 8 million Smart Meters have been deployed by electric utilities in the U.S. and nearly 60 million should be in place by 2020. Smart Meters represent the biggest portion of Department of Energy Smart Grid stimulus funding. In California, the CPUC has authorized Southern California Edison to install approximately 5.3 million new Smart Meters, San Diego Gas and Electric Company (SDG&E) 1.4 million electric Smart Meters and 900,000 natural gas meters, and PG&E



approximately 5 million electric meters and 4.2 million natural gas meters. As these Smart Meters have been rolled out, the CPUC has received approximately 600 complaints in PG&E's service area since January 2009, approximately 10 complaints in Edison's service area, and 15 in SDG&E's service area.

14. Have residential rates recently increased in PG&E's service area?

Average residential PG&E rates increased by 12.7 percent since May 2008. However, because the rates for lower levels of consumption (tier 1 and tier 2) are capped, a 7.66 percent residential rate increase has resulted in much larger increases in tiers 3, 4, and 5. Rates for tiers 3, 4, and 5 increased by 15 percent, 21 percent, and 23 percent respectively, while there was no increase at all in tier 1 and 2 rates.

15. Can the CPUC raise the baseline in Bakersfield?

Baseline quantities are based on state law. In carrying out the requirements of this law, the CPUC determines baseline allowances for each climate zone based on 60 percent of average residential usage for combined gas and electric households, and 70 percent of average residential consumption for households with permanent electric heating. In PG&E's service territory, the CPUC has set the baseline amounts at the largest levels allowed by the law. This was done so that as much "essential" usage as possible would pay the lowest rates possible. Therefore, in order to increase the baseline quantity, a legislative solution would be necessary. However, it must also be noted that an increase in the baseline amount will result in an even larger amount of consumption paying an artificially low rates for tiers 1 and 2 and further exacerbating the rate increases in upper tiers.

