

From: Clanon, Paul  
Sent: 3/29/2010 5:02:17 PM  
To: Cherry, Brian K (/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=BKC7);  
Dietz, Sidney (/O=PG&E/OU=Corporate/cn=Recipients/cn=SBD4)  
Cc:  
Bcc:  
Subject: RE: Fwd: do we have a good response for this.

Thanks, Sid.

**From:** Dietz, Sidney [mailto:SBD4@pge.com]  
**Sent:** Monday, March 29, 2010 3:41 PM  
**To:** Cherry, Brian K; Clanon, Paul  
**Subject:** RE: Fwd: do we have a good response for this.

Paul --

We are working on a formal response, but I wanted to give you a preview:

Dr. Wattenberg recently responded to our request for an in-person meeting to discuss SmartMeter, where he offered some ideas around meter testing that we are evaluating. We very much appreciate his taking the time to offer his insights and we look forward to continuing an ongoing dialogue with Dr. Wattenberg.

Concerning his comments on meter testing, PG&E believes there has been and continues to be a rigorous program.

**The meters are made by highly certified manufactures:**

- The meters are manufactured by an ISO 9001 company
- The meters meet ANSI standards
- The meters and manufacturing processes are certified by Measurement Canada which is a Canadian Government agency
- The meters and manufacturing processes are certified by LAPEM which is a Mexican Federal Commission of Electricity

The meters are calibrated and evaluated with monitoring and measurement equipment set in accordance with the National Institute of Standards and Technology

**The meters are tested before they are deployed:**

- Before any meter is sent out for installation, it is factory-tested
- PG&E then spot-tests some of the meters (using an industry protocol) before they are sent to the field, and there is an ongoing quality assurance process for all of our meters.
- PG&E has directly tested thousands of meters (4004 at last count) before they are installed. 100.0% of these meters have passed test. In addition to this, the vendors also spot check each and every shipment made to PG&E.

**PG&E field-tests meters after deployment:**

PG&E has directly tested thousands of meters (3179 at last count) in the field after installation. 99.9% of these meters have passed test (4 out of 3179).

**In addition, PG&E offered every customer who showed concern over the SmartMeter accuracy to have a specific meter accuracy test:**

- Approximately 2832 of these customers took the opportunity to have their meter tested, and 99.8% of those meters passed accuracy tests.

**We support the CPUC process for independent third-party meter testing as additional verification of SmartMeter devices for our customers' reassurance.**

As an attachment, I've included a data response that covers some of these same issues. Paul, let me know if you need more.

yours,

sid

<<Bakersfield\_DR\_DRA\_003-Q01.doc>>

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From: Cherry, Brian K  
Sent: Monday, March 29, 2010 10:59 AM  
To: 'paul.clanon@cpuc.ca.gov'; Dietz, Sidney  
Subject: Re: Fwd: do we have a good response for this.

Sid - please handle. Asap. Thx

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From: Clanon, Paul <paul.clanon@cpuc.ca.gov>  
To: Cherry, Brian K  
Sent: Mon Mar 29 10:26:53 2010  
Subject: Fwd: do we have a good response for this.

You guys have one?

Begin forwarded message:

From: "Randolph, Edward F." <edward.randolph@cpuc.ca.gov>  
Date: March 29, 2010 10:02:20 AM PDT  
To: "Clanon, Paul" <paul.clanon@cpuc.ca.gov>, "Fitch, Julie A." <julie.fitch@cpuc.ca.gov>, "Deal, Matthew" <matthew.deal@cpuc.ca.gov>, "Prosper, Terrie D." <terrie.prosper@cpuc.ca.gov>  
Subject: do we have a good response for this.

SF Chronicle - Field-test SmartMeters before more installed (OP-ED)

By Willard H. Wattenburg <<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2010/03/29/ED9K1CLR2H.DTL&type=printable>> , March 29

The president of the California Public Utilities Commission, Michael Peevey, told the Legislature this month that the commission - shockingly - did not do the most basic and essential field testing to investigate complaints about Pacific Gas and Electric Co.'s SmartMeters before ordering the utility to install them at millions of customers' homes and businesses.

The utility apparently relied on tests supposedly done by the meter suppliers. There are already hundreds of complaints from honest customers about how their power bills have soared after the SmartMeters were installed. These complaints cannot be ignored.

The Legislature is considering ordering a halt to installing more SmartMeters until adequate tests are done. The governor and the Legislature must take charge now and demand that the utility not install any more SmartMeters until independent field tests are done to test their accuracy.

The only way to restore the public trust is to have a laboratory with the experience and technology field test the meters under actual operating conditions at customer locations. There is a straightforward and inexpensive way to do this: Take a sample from all installed SmartMeters (at least 1 out of every 100 installations) by re-installing standard meters alongside the SmartMeters and comparing the electric-use readings from both. Field testing must be continued for at least a year to validate the SmartMeter readings during various times and under various environmental conditions. Then the meters must be monitored on a periodic basis thereafter.

During the 2001 energy crisis, the governor asked Lawrence Livermore National Laboratory to help find solutions. The extensive field experiments done by the laboratory scientists assisted the state and thus helped bring an end to the disastrous energy crisis.

Beyond the accuracy of the SmartMeters' energy-use readings, there is another serious uncertainty: The utilities plan to read and control the SmartMeters via radio. There is hardly any over-the-air communication scheme that has not been defeated by clever hackers. If communications are hacked, and the knowledge of how to do that becomes widespread, then hundreds of millions of not-so-smart meters in the country will have to be modified or replaced.

There must be thorough testing of the SmartMeter communication schemes by the most sophisticated cybersecurity laboratories in the country. This has the potential to become a national security matter, because hacking could disrupt the nation's power grids.

Willard H. (Bill) Wattenburg is a senior research scientist at the Research Foundation, California State University, Chico; and a scientific consultant for the University of California and many other institutions. He is also the host of the talk-radio show "The Open Line to the West Coast" on KGO radio in San Francisco.

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