

From: Cherry, Brian K  
Sent: 8/20/2010 7:48:29 AM  
To: 'paul.clanon@cpuc.ca.gov' (paul.clanon@cpuc.ca.gov)  
Cc:  
Bcc:  
Subject: Re: IU- Smart Meters Are Accurate

4 percent is on the high side. Our similar figure is between 1.5 and 2 percent if I recall correctly.

**From:** Clanon, Paul <paul.clanon@cpuc.ca.gov>  
**To:** Cherry, Brian K  
**Sent:** Fri Aug 20 07:46:06 2010  
**Subject:** Re: IU- Smart Meters Are Accurate

I've heard this figure of 4% before, legacy meters that run slow. If it's true then installing smart meters does increase bills for someone on every block or two, and we do have a big problem.

On Aug 20, 2010, at 7:38 AM, "Cherry, Brian K" <[BKC7@PGE.COM](mailto:BKC7@PGE.COM)> wrote:

Interesting reading.

**From:** News Flash  
**Sent:** Fri Aug 20 06:35:39 2010  
**Subject:** IU- Smart Meters Are Accurate

An article from Intelligent Utility reports that The Public Utility Commission of Texas found that smart meters by different vendors, both installed and not-yet-installed, are 99.96 percent accurate. The California Public Utility Commission also has certified that smart meters' electro-magnetic radiation is at a safe level. PG&E Mentioned (Highlighted in red) Kim Griffin

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## Smart Meters Are Accurate

By Phil Carson

Intelligent Utility, August 18, 2010

You may have been riveted this week by news out of Canada that inaccurate meters are costing 150,000 Canadians pennies per month, but you might have missed the recent report by Navigant Consulting on the Texas smart meter brouhaha.

Complaints about too-high electric bills reached a crescendo this past spring,

when citizens in the Oncor, AEP Texas and CenterPoint service territories demanded a moratorium on smart meter installation. The Public Utility Commission of Texas (PUCT) declined to stop smart meter rollouts, but ordered an independent review of the meters' accuracy and related matters.

The study, issued July 30, found that smart meters by different vendors, both installed and not-yet-installed, are 99.96 percent accurate. The data and billing support systems work. Instead, last winter, cold by Texas standards, caused higher bills that led to smart meter complaints, the study concluded.

That gave Oncor, AEP Texas and CenterPoint some relief and vendors such as Itron and Landis+Gyr an opportunity to trumpet the news and reiterate their deployment milestones. Out of nearly 1.5 million meters installed across the three utilities, the study identified a little over 1,000 complaints, or 1/15th of one percent.

The upshot: the technology works. The downer: a small number of people can make an inordinately loud stink.

There's a possibility that a few bills jumped when older, slower meters were replaced with accurate ones—and that possibility, apparently, is being explored. Otherwise, this phenomenon now awaits sociological and anthropological analysis. I'd posit that a legacy of mistrust of one's utility, the recession, a lack of utility communication or customer attention and, yes, the weather, are factors.

That leaves California awaiting the results of an independent study of smart meter accuracy, after vociferous complaints put Bakersfield and Fresno back on the national map. Currently, a slew of Marin County towns have passed their own moratoriums on further smart meter deployment, claiming the meters' electro-magnetic radiation is harmful to human health.

(Few believe that Marin County citizens are overlooking their cell phones and Wi-Fi routers to demonize smart meters on health grounds; rather, my conversations point to score settling with Pacific Gas & Electric.)

The Marin pushback of past weeks led Pacific Gas & Electric CEO Peter Darbee last week to quote Intelligent Utility Daily's Kate Rowland to the California Public Utility Commission on the numerous federal agencies that have certified that smart meters' electro-magnetic radiation is at a safe level.

Returning to Texas, a quick review of the study results should provide readers with enough information that they can weigh in on what the pushback in Texas is all about.

Oncor had installed more than one million Landis+Gyr's Focus AXR-SD meters by the end of June and expects to deploy 3.4 million smart meters by the end of 2012. CenterPoint had installed more than 450,000 Itron Centron smart meters

and expects to install more than two million meters in the Houston metropolitan area by mid-2012. AEP Texas also installs the Landis+Gyr Focus AXR-SD meters, deploying more than 14,000 by the end of June in a rollout of 1.1 million by 2013.

Navigant Consulting was retained to answer four questions about these smart meters:

- Do they accurately measure and record electricity usage?
- Do they accurately communicate usage data through to the billing system?
- Is recorded usage higher among customers with smart meters than those with electromechanical meters?
- Do other factors cause the high number of complaints about smart metered bills?

Navigant oversaw independent tests of 5,627 meters; 2,706 already deployed and 2,400 yet-to-be-deployed. All but two, or 99.96 percent, met accuracy levels mandated by the PUCT.

Side-by-side tests of smart meters and electromechanical meters found that the former "consistently performed better" than the latter.

Interestingly, a historical accuracy test of 86,756 electromechanical meters found that 4 percent failed to meet standards set by the American National Standards Institute (ANSI) and 25 percent failed to meet performance criteria for smart meters set by the three utilities. (Some electromechanical meters slow down over time and, with a smart meter installed, the transition could be surprising.)

Analysis of electricity usage by customers with smart meters and those with the old, electromechanical meters, however, found no significant difference.

"The vast majority of the higher electricity bills [was] due primarily to ... the recent severe winter in Texas," the report stated. Some exceptions stemmed from estimated versus manual meter reads.