

Sebastopol crowd decries PG&E's SmartMeters



By LORI A. CARTER
THE PRESS DEMOCRAT

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What was intended as a “balanced format” discussion about PG&E's SmartMeter installation in Sonoma County became a hate-fest against the utility Wednesday night when it pulled out at the last minute.

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Sonoma County Supervisor Efren Carrillo said PG&E had promised to send a representative to participate in the Sebastopol forum, sparked by residents' concerns about the SmartMeters' safety and accuracy.

But Carrillo said he received a text message Wednesday afternoon from PG&E saying it would not attend. Because the format was changed to include include an open exchange with the audience, he said the company representatives “no longer feel they can have a meaningful dialog with their customers.”

“I do find it rather insulting that they would not participate in this format,” he said, prompting jeers and hisses aimed at PG&E from the crowd of about 300.

Carrillo organized Wednesday's meeting after he received hundreds of complaints from West County residents about PG&E's replacement of the old, analog meters with the new meters that beam digital information via radio waves to the company for tracking and billing purposes.

Without PG&E on the stage at the Sebastopol Veteran's Building, two representatives from the Public Utilities Commission, which has jurisdiction over the utility, took the brunt of residents' distrust and venom.

Critics contend the radio waves cause a range of debilitating health problems ranging from chronic fatigue, headaches, insomnia, anxiety and depression to heart problems, high blood pressure and cancer.

When one of the panelists asked members of the audience if they opposed the new meters, nearly everyone raised their hands.

Judith Iam of Forestville said she was dismayed when the PUC's Marzia Zafar suggested that those with health and safety concerns write to the utility.

Zafar said the PUC has received about 600 complaints about the meters, fewer than 1 percent of the 5.5 million installed statewide. Most of those complaints, she said, involved meter inaccuracies not health concerns.

The PUC has appointed an independent investigator with no ties to PG&E to look into the complaints, she said.

“In response to this less than one percent, we've hired someone to look at it to make sure that it's accurate, that it's safe, that the complaints are addressed,” Zafar said. “It's like proven innocent until guilty. We can't presume that PG&E or the manufacturer or the SmartMeter is this terrible thing, unless we can look at it and someone has told us that something is wrong with it or something is right with it.

“What should we do?”

“Call for a moratorium on behalf of the public safety, of course,” said lam, who was backed by applause from the audience.

Sebastopol landlord Deborah Tavares said her tenants have health concerns about the meters here and at her properties in Southern California. Because of her complaints, PG&E put her properties on a “deferral list” for installation later.

She challenged the PUC to indemnify landlords against any health problems tenants may experience, since the agency has apparently determined that the meters aren't harmful.

“There is no evidence to prove or disprove that there are no health issues associated with these meters,” she said. “I don't want my tenants to get sick.”

The PUC representatives said they would look into such a letter and get back to Tavares within a week.

Carrillo said he has received no reply from PG&E or the PUC in response to his letter asking for a moratorium on meter replacements until Sonoma County residents' concerns are answered.

He said that PG&E also had asked its two scientific experts not to attend the forum.

PG&E plans to replace all 379,592 meters in Sonoma County with the SmartMeters. According to its website, it has replaced about 10 percent so far and intends to continue until all are replaced by mid-2012.

The company said the new meters are more convenient because no meter reader is needed to physically check the meter each month, residents can review their usage in real-time and the company can pinpoint power outages and restore power faster. END

<http://www.pressdemocrat.com/article/20100327/BUSINESS/3271040>

The Press Democrat

March 27, 2010

'Smart' meters have security holes

Experts find controversial utility meters subject to hacker attacks



Joshua Wright, a senior security analyst for InGuardians, poses for a portrait with his hacking tools in his office in East Providence, R.I., Friday, March 26, 2010. InGuardians, which was hired by three utility companies, found flaws in new "smart" meters being installed at homes and businesses across the U.S. (AP Photo/Gretchen Ertl)

By JORDAN ROBERTSON

ASSOCIATED PRESS

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SAN FRANCISCO -- Computer-security researchers say new "smart" meters that are designed to help deliver electricity more efficiently also have flaws that could let hackers tamper with the power grid in previously impossible ways.

At the very least, the vulnerabilities open the door for attackers to jack up strangers' power bills. These flaws also could get hackers a key step closer to exploiting one of the most dangerous capabilities of the new technology, which is the ability to remotely turn someone else's power on and off.

The attacks could be pulled off by stealing meters -- which can be situated outside of a home -- and reprogramming them. Or an attacker could sit near a home or business and wirelessly hack the meter from a

laptop, according to Joshua Wright, a senior security analyst with InGuardians Inc. The firm was hired by three utilities to study their smart meters' resistance to attack.

These utilities, which he would not name, have already done small deployments of smart meters and plan to roll the technology out to hundreds of thousands of power customers.

There is no evidence the security flaws have been exploited, although Wright said a utility could have been hacked without knowing it. InGuardians said it is working with the utilities to fix the problems.

Power companies are aggressively rolling out the new meters. In the U.S. alone, more than 8 million smart meters have been deployed by electric utilities and nearly 60 million should be in place by 2020, according to a list of publicly announced projects kept by The Edison Foundation, an organization focused on the electric industry.

Unlike traditional electric meters that merely record power use -- and then must be read in person once a month by a meter reader -- smart meters measure consumption in real time. By being networked to computers in electric utilities, the new meters can signal people or their appliances to take certain actions, such as reducing power usage when electricity prices spike.

The Sebastopol City Council voted in February to ask PG&E to delay installing the meters after residents raised concerns that such technology may cause health problems, and Cotati is also examining the issue..

It is the interactivity that makes smart meters so attractive also makes them vulnerable to hackers, because each meter essentially is a computer connected to a vast network.

There are few public studies on the meters' resistance to attack, in part because the technology is new. Industry representatives say utilities are doing rigorous security testing that will make new power grids more secure than the patchwork system we have now, which is already under hacking attacks from adversaries believed to be working overseas.

"We know that automation will bring new vulnerabilities, and our task -- which we tackle on a daily basis -- is making sure the system is secure," said Ed Legge, spokesman for Edison Electric Institute, a trade organization for shareholder-owned electric companies.

But many security researchers say the technology is being deployed without enough security probing.

Wright said his firm found "egregious" errors, such as flaws in the meters and the technologies that utilities use to manage data from meters. "Even though these protocols were designed recently, they exhibit security failures we've known about for the past 10 years," Wright said.

He said InGuardians found vulnerabilities in products from all five of the meter makers the firm studied. He would not disclose those manufacturers.

One of the most alarming findings involved a weakness in a communications standard used by the new meters to talk to utilities' computers.

Wright found that hackers could exploit the weakness to break into meters remotely, which would be a key step for shutting down someone's power. Or someone could impersonate meters to the power company, to inflate

victims' bills or lower his own. A criminal could even sneak into the utilities' computer networks to steal data or stage bigger attacks on the grid.

Wright said similar vulnerabilities used to be common in wireless Internet networking equipment, but have vanished with an emphasis on better security.

For instance, the meters encrypt their data -- scrambling the information to hide it from outsiders. But the digital "keys" needed to unlock the encryption were stored on data-routing equipment known as access points that many meters relay data to.

Stealing the keys lets an attacker eavesdrop on all communication between meters and that access point, so the keys instead should be kept on computers deep inside the utilities' networks, where they would be safer.

"That lesson seems to be lost on these meter vendors," he said. That speaks to the "relative immaturity" of the meter technology, Wright added. End

<http://www.pressdemocrat.com/article/20100321/ARTICLES/3211084>

Cotati takes up Smart Meters

PRESS DEMOCRAT

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Cotati's City Council on Wednesday will take up the issue of PG&E's new Smart Meters — although it has no authority to delay or stop their installation.

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- [Sebastopol crowd decries PG&E's SmartMeters](#)
- ['Smart' meters have security holes](#)
- [Sebastopol residents lash out against PG&E plan for 'smart meters'](#)

PG&E says the meters are meant to save time and money through a "smart grid" that allows consumers to access their energy use data in real time as well as making it easier for the utility to measure their gas and electric usage.

But to detractors around the state, they have resulted in overstated kilowatt hours and higher energy bills.

Some meters already are being installed in the city, City Manager Dianne Thompson said.

The Sebastopol City Council voted in February to ask PGE to delay installing the meters after residents raised concerns that such technology may cause serious health problems, including cancer. End

<http://www.pressdemocrat.com/article/20100126/NEWS/100129626>

The Press Democrat

January 26, 2010

PG&E predicts more shutoffs with new meters

By ASSOCIATED PRESS

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SAN FRANCISCO — Pacific Gas and Electric Co. predicts more customers who are delinquent on their bills will have their power shut off once the utility completes the installation of new meters.



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A gas meter on a southwest Santa Rosa residence outfitted with a PG&E SmartMeter transponder.
PD FILE

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The so-called SmartMeters allow the company to cut power without sending a crew to a customer's home.

PG&E estimates in a recent government filing that 85 percent of customers eligible to have their power shut will be disconnected in 2011, when more of the meters are expected to be in place.

That would be nearly 380,000 customers, up from the 298,000 customers who had their power cut last year.

Critics say PG&E sees the new meters as a way to pressure delinquent customers to pay.

But PG&E spokesman David Eisenhower says customers with the new meters will still receive the same number of warnings before the power is cut.

Information from: San Francisco Chronicle, <http://www.sfgate.com/chronicleBuzz> up!
