

From: Cherry, Brian K  
Sent: 9/7/2011 9:53:17 AM  
To: 'Clanon, Paul' (paul.clanon@cpuc.ca.gov)  
Cc:  
Bcc:  
Subject: RE: CPUC Newsclips for Tuesday, September 6

I was told that 4 kV (or other primary voltage at some kilo-volt level) touched the secondary lines that go to smart meters, which means that electrical contact lasted more than a few seconds pushing an energy level high enough to destroy meters. If this is true, both analog and solid state meters will be burnt, but the nature of the burns will be different. The analog meters will have one internal component (potential coil) burnt, which resulted in the analog meters stop working. From the appearance of the analog meters, no one can tell they have been burnt until field personnel check them. The smart meters will be burnt with visible signs of electrical smoke and damage to their electronic circuit boards and components.

This surge incident proved that the electrical surge damaged the meters but *did not start a fire nor continue to burn the meters leading to other fires.*

**From:** Clanon, Paul [mailto:paul.clanon@cpuc.ca.gov]  
**Sent:** Wednesday, September 07, 2011 9:51 AM  
**To:** Cherry, Brian K  
**Subject:** Fwd: CPUC Newsclips for Tuesday, September 6

Incident report from your guys below, maybe.

**From:** Stepanian, Raffy  
**Sent:** Tuesday, September 06, 2011 10:05 AM  
**To:** Halligan, Julie; Cooke, Michelle  
**Cc:** [Redacted]  
**Subject:** FW: CPUC Newsclips for Tuesday, September 6

FYI - Ray believes that this is the incident referred to in the article below. He is checking with Ken How to confirm.

**From:** [Redacted]  
**Sent:** Tuesday, September 06, 2011 10:02 AM  
**To:** Stepanian, Raffy  
**Subject:** RE: CPUC Newsclips for Tuesday, September 6

Yes, E20110826-01, and Ken is handling the incident. Below is the initial report:

Crew was called out to repair a damaged 4kV Overhead line @ 8/25/11, 10:13 p.m. After initial repairs were made the line was reenergized at 8/26/11, 4:03 a.m., at which time the line failed causing it to fall onto Hwy. 101 in East Palo Alto. The line failure also caused 150 Meters to fail. It was removed quickly from Hwy. 101 and further inspection revealed another location where the line was damaged. Repairs are under way on the line and the meters and will continue at least into the late morning.

Ray

**From:** Stepanian, Raffy  
**Sent:** Tuesday, September 06, 2011 9:55 AM  
**To:** [Redacted]  
**Subject:** FW: CPUC Newsclips for Tuesday, September 6

Was this reported to us?

**From:** Clanon, Paul  
**Sent:** Tuesday, September 06, 2011 9:18 AM  
**To:** Cooke, Michelle; Halligan, Julie; Stepanian, Raffy  
**Cc:** Lindh, Frank; Prosper, Terrie D.; Randolph, Edward F.  
**Subject:** Fwd: CPUC Newsclips for Tuesday, September 6

What power surge?

### ***Palo Alto Weekly - Power surge raises questions about SmartMeters***

East Palo Alto electricity surge burnt out digital meters

By Sue Dremann, Sept 5

When 80 PG&E SmartMeters caught on fire and burned out after a power surge in East Palo Alto on Aug. 25, the incident raised questions for some residents and utilities officials about the safety of the new digital devices.

The sustained electrical surge to more than 200 East Palo Alto homes and businesses lasted for about one hour and 20 minutes, until a PG&E crew shut off the power, according to a Menlo Park Fire Protection District incident report.

Some Palo Alto Utilities engineers said what happened in East Palo Alto illustrates why Palo Alto is moving cautiously before installing similar devices. Palo Alto utilities spokeswoman Debbie Katz said that surges have not burned out the city's analog meters.

City utilities officials are conducting a thorough investigation before investing in the

meters until glitches in the new technology are known and ways to remedy those glitches can be found, she said.

"The idea with SmartMeters is to make the customers' and the utility's life better, but this is a good example of how sometimes the old way is the good way," Katz said.

SmartMeters monitor customers' utility usage at least hourly, information that can be seen by the consumer, and it's also relayed daily to the utility company. The system allows consumers to adjust their power usage a boon for consumers by lowering costs and for the company, according to PG&E.

PG&E maintains the SmartMeters are "just as robust" as the analog meters. PG&E has replaced 8.4 million analog meters for electricity and gas with the digital versions since 2006 and plans to upgrade additional meters to 10 million total in 2012, company spokesman Greg Snapper said. Fewer than 2 million of PG&E's remaining meters are analog.

He said SmartMeters have not caused any fires.

"A voltage surge can damage any type of meter, whether it's an analog or a SmartMeter. Any time you get a power surge of significantly more energy than a meter would normally experience, a meter can be damaged," he said.

Snapper said the issue is not about the meters but about power surges. The sparks and smoke that East Palo Alto residents saw are related to things happening along the route the excess electricity is taking.

"In a power surge, the electricity takes the path of least resistance," he said. The meter is one of the things in that pathway, he said.

Katz said the advantage of the analog meter is that it doesn't have internal electronics. When a power surge hits a digital meter, the extra jolt of electricity can disrupt the flow of data or even shut down the meter, she said.

But "the analog says, 'OK, whatever,' and keeps going. The SmartMeter says, 'Oh I've got a headache and I can't think,'" she said.

Currently most meters in Palo Alto are analog, but about 3,000 to 4,000 are fitted with electronic receiver transmitters. Meter readers can read the data from a hand-held device at a distance and don't have to traipse through yards and gardens, she said.

The city's gas and water meters run on their own batteries, eliminating the need for electricity, and are not vulnerable to power surges, she said.

Snapper defended the SmartMeters' safety.

"PG&E's SmartMeters comply with the highest-grade utility standards for safety, accuracy and reliability. PG&E's electric SmartMeter devices comply with the CPUC's required standards that were adopted by the American National Standards Institute," he said.

A spokesman for the meter's manufacturer, Landis and Gyr, could not be reached, and General Electric, which also supplies SmartMeters for PG&E, did not return calls.

PG&E has protections on its lines against power surges, Snapper said. "The particular way (the East Palo Alto) surge occurred created power-quality issues for customers and we apologize," he said.

Mindy Spatt, communications director for The Utility Reform Network (TURN), said the utility-consumer advocacy group received many complaints about surges damaging appliances when the SmartMeters were first installed. In the best-case scenario, the event in East Palo Alto is an additional cause for concern, she said.

"In the collective memory of TURN, we have not seen similar incidents with analog meters," she said.

The California Public Utilities Commission (CPUC) authorized a \$1.7 billion budget in 2006 for PG&E's SmartMeter program. The upgrade was in response to the CPUC's 2002 direction for state utilities to find ways to decrease usage during high-demand periods.

In 2009 the CPUC authorized the utility to spend another \$466.7 million to upgrade the SmartMeter program, according to a CPUC report.

Begin forwarded message:

**From:** "Hall, Thomas A." <[thomas.hall@cpuc.ca.gov](mailto:thomas.hall@cpuc.ca.gov)>

**Date:** September 6, 2011 9:07:16 AM PDT

**To:** "Hall, Thomas A." <[thomas.hall@cpuc.ca.gov](mailto:thomas.hall@cpuc.ca.gov)>

**Subject:** CPUC Newsclips for Tuesday, September 6

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