

From: Clanon, Paul  
Sent: 4/18/2011 8:50:28 PM  
To: Cherry, Brian K (/O=PG&E/OU=CORPORATE/CN=RECIPIENTS/CN=BKC7)  
Cc:  
Bcc:  
Subject: Re: New problem found with PG&E SMs !!

Ok. Peet's beverage of choice?

On Apr 18, 2011, at 8:48 PM, "Cherry, Brian K" <[BKC7@pge.com](mailto:BKC7@pge.com)> wrote:

I will take the bet.

**From:** Clanon, Paul [<mailto:paul.clanon@cpuc.ca.gov>]  
**Sent:** Monday, April 18, 2011 08:46 PM  
**To:** Cherry, Brian K  
**Subject:** Re: New problem found with PG&E SMs !!

Earlier this evening I asked Aloke to check.

On Apr 18, 2011, at 8:45 PM, "Cherry, Brian K" <[BKC7@pge.com](mailto:BKC7@pge.com)> wrote:

I might take that bet.

**From:** Clanon, Paul [<mailto:paul.clanon@cpuc.ca.gov>]  
**Sent:** Monday, April 18, 2011 08:33 PM  
**To:** Cherry, Brian K  
**Subject:** Re: New problem found with PG&E SMs !!

Wanna bet theirs are ok?

On Apr 18, 2011, at 7:36 PM, "Cherry, Brian K" <[BKC7@pge.com](mailto:BKC7@pge.com)> wrote:

I can only imagine. Perhaps there is small comfort in knowing Edison has meters there too ?

**From:** Clanon, Paul [<mailto:paul.clanon@cpuc.ca.gov>]  
**Sent:** Monday, April 18, 2011 07:35 PM  
**To:** Cherry, Brian K  
**Subject:** Re: New problem found with PG&E SMs !!

Want to hear my opinion on testing of equipment to be deployed in the Central Valley that fails

between 110 and 115 degrees?

On Apr 18, 2011, at 7:30 PM, "Cherry, Brian K"  
<[BKC7@pge.com](mailto:BKC7@pge.com)> wrote:

Perhaps but that is the absolute high estimate. I'm told it is closer to the low end. We will see....

**From:** Clanon, Paul  
[mailto:[paul.clanon@cpuc.ca.gov](mailto:paul.clanon@cpuc.ca.gov)]  
**Sent:** Monday, April 18, 2011 07:27 PM  
**To:** Cherry, Brian K  
**Subject:** Re: New problem found with PG&E SMs !!

Aloke thinks it might be 500,000.

On Apr 18, 2011, at 7:04 PM,  
"Cherry, Brian K"  
<[BKC7@pge.com](mailto:BKC7@pge.com)> wrote:

Yes. Sadly. So far we think it is a problem with a very limited set since error messages are thrown off. We are replacing those 1500 meters and testing each one along with the manufacturer. We believe these are first generation meters and that the number is limited.

**From:** Clanon, Paul  
[mailto:[paul.clanon@cpuc.ca.gov](mailto:paul.clanon@cpuc.ca.gov)]  
**Sent:** Monday, April 18, 2011 06:57 PM  
**To:** Cherry, Brian K  
**Subject:** Fwd: New problem found with PG&E SMs !!

You know any more  
about this?

Begin forwarded  
message:

**From:**  
"Gupta,  
Aloke"  
<[aloke.gupta@cpuc.ca.gov](mailto:aloke.gupta@cpuc.ca.gov)>  
**Date:**  
April  
18,  
2011  
5:04:13  
PM  
PDT  
**To:**  
"Kaneshiro,  
Bruce"  
<[bruce.kaneshiro@cpuc.ca.gov](mailto:bruce.kaneshiro@cpuc.ca.gov)>,  
"Skala,  
Pete"  
<[pete.skala@cpuc.ca.gov](mailto:pete.skala@cpuc.ca.gov)>,  
"Sterkel,  
Merideth  
\"Molly\""  
<[merideth.sterkel@cpuc.ca.gov](mailto:merideth.sterkel@cpuc.ca.gov)>,  
"Fitch,  
Julie  
A."  
<[julie.fitch@cpuc.ca.gov](mailto:julie.fitch@cpuc.ca.gov)>,  
"Clanon,  
Paul"  
<[paul.clanon@cpuc.ca.gov](mailto:paul.clanon@cpuc.ca.gov)>,  
"Meeusen,  
Karl"  
<[karl.meeusen@cpuc.ca.gov](mailto:karl.meeusen@cpuc.ca.gov)>,  
"Brown,  
Carol  
A."  
<[carol.brown@cpuc.ca.gov](mailto:carol.brown@cpuc.ca.gov)>,  
"Ryan,  
Nancy"

<nancy.ryan@cpuc.ca.gov>,  
"Sullivan,  
Timothy  
J."  
<timothy.sullivan@cpuc.ca.gov>  
**Cc:**  
"Zafar,  
Marzia"  
<marzia.zafar@cpuc.ca.gov>,  
"Villarreal,  
Christopher"  
<christopher.villarreal@cpuc.ca.gov>  
**Subject:**  
New  
**problem  
found  
with  
PG&E  
SMs  
!!**

PG&E

has

just

alerted

me to

a new

problem

recently

discovered

with

their

smart

meters.

The

bad

news

is that

this is

the

worst

case

scenario

in

terms

of the

location

and

circumstances.

Problem:  
Apparently,  
a  
particular  
batch  
of  
SMs  
show  
a  
sensitivity  
to  
temperature,  
which  
ultimately  
can  
lead  
to  
inaccurate  
usage  
readings.  
The  
faulty  
reading  
occurs  
only  
in a  
narrow  
band  
of  
temperature  
(approx  
100 to  
115  
estimated).  
Below  
and  
above  
this,  
the  
meter  
functions  
properly.  
This  
was  
not  
discovered  
in  
testing  
because  
the  
ANSI  
requirements  
are at  
temperature  
points

outside  
this  
band.  
The  
meter  
does  
put  
out an  
error  
signal  
while  
this  
faulty  
condition  
is  
active,  
but  
the  
implication  
of that  
signal  
was  
not  
understood  
until  
now  
(essentially,  
it was  
ignored  
before).

Scope:  
The  
problem  
is with  
the  
L&G  
portion  
of the  
meter,  
not  
Silver  
Spring  
NIC.  
The  
affected  
batch  
is  
potentially  
upto  
500K  
meters.  
Problem  
has  
been  
found

in  
1500  
SMs  
so  
far.  
The  
faulty  
readings  
could  
potentially  
lead  
to  
about  
2%  
error  
in the  
monthly  
bill  
(the  
actual  
impact  
during  
the  
faulty  
condition  
could  
be  
8% or  
more).  
Because  
PG&E  
has a  
record  
of the  
error  
signal,  
it may  
be  
possible  
to  
retroactively  
reconstruct  
the  
correct  
bill.

Why  
is this  
Worst-  
Case  
Scenario:  
The  
affected  
meters  
are all  
in

Center  
Valley  
(at  
least,  
so  
far)!  
They  
are  
also  
Residential!!  
And  
the  
error  
leads  
to a  
HIGHER  
bill  
(albeit,  
around  
2%  
higher  
is  
currently  
estimated)!!!

What's  
Next:  
Much  
is still  
not  
known.  
I have  
asked  
PG&E  
to  
provide  
an  
update  
asap  
next  
week  
as  
more  
engineering  
and  
billing  
analysis  
is  
completed  
and  
corrective  
actions  
become  
clearer.

Aloke  
Gupta  
**California  
Public  
Utilities  
Commission**

O:  
415.703.5239  
[aloke.gupta@cpuc.ca.gov](mailto:aloke.gupta@cpuc.ca.gov)