

From: Clanon, Paul  
Sent: 4/18/2011 9:21:00 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, tough guy.

On Apr 18, 2011, at 9:19 PM, "Cherry, Brian K" <[BKC7@pge.com](mailto:BKC7@pge.com)> wrote:

Double nonfat latte with caramel sauce.

**From:** Clanon, Paul [<mailto:paul.clanon@cpuc.ca.gov>]  
**Sent:** Monday, April 18, 2011 08:50 PM  
**To:** Cherry, Brian K  
**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](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]

**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](mailto:nancy.ryan@cpuc.ca.gov)>,  
"Sullivan,  
Timothy  
J."  
<[timothy.sullivan@cpuc.ca.gov](mailto:timothy.sullivan@cpuc.ca.gov)>  
**Cc:**  
"Zafar,  
Marzia"  
<[marzia.zafar@cpuc.ca.gov](mailto:marzia.zafar@cpuc.ca.gov)>,  
"Villarreal,  
Christopher"  
<[christopher.villarreal@cpuc.ca.gov](mailto: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 not 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  
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